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**Subject: Carrier Corporation, Thompson Road Facility, Syracuse, New York
Corrective Action Order – Index No. CO 7-20051118-4
NYSDEC Site Registry #734043
Cleanup and Disposal of PCB Remediation Waste under 40 CFR §761.61**

Dear Ms. Blum,

On behalf of United Technologies Corporation (UTC), AECOM Technical Services, Inc. (AECOM) has prepared this revised letter and attachments to notify the New York State Department of Environmental Conservation (NYSDEC) Department of Environmental Remediation (DER) of UTC's intent to conduct an Interim Remedial Measure (IRM) at UTC's Carrier Corporation, Thompson Road Facility located in Syracuse, New York (Carrier Facility). The IRM will consist of the removal and off-site disposal of the Debris Pile reported as an Area of Concern (AOC) to NYSDEC on January 30, 2014 in the *AOC Assessment Report, Southeast Debris Pile* (Assessment Report) prepared by EnSafe, Inc.

The findings of the Assessment Report concluded that no samples collected for characterization of the Debris Pile exceeded hazardous waste criteria when analyzed by Toxicity Characteristic Leaching Procedure (TCLP). However, during the investigation activities, debris identified as potentially asbestos containing material were observed within a portion of the Debris Pile. One ACM sample was found to contain asbestos.

Following submittal of the Assessment Report, additional confirmation sampling was conducted to further characterize the presence of PCBs and further characterize the presence of ACM.

PCB analytical data from this confirmation sampling event was combined with the findings from the Assessment Report and submitted to the United States Environmental Protection Agency (USEPA), Region 2 and NYSDEC in a May 16, 2014 notification letter for conducting a PCB self-implementing cleanup of the Debris Pile at the Carrier Facility. The notification to USEPA included a Self-Implementing Cleanup and Disposal Plan (SIP) prepared in accordance with Title 40 of the Code of Federal Regulations, Part 761.61 (40 CFR §761.61), which is provided as an attachment to this letter. The SIP presents the site background, rationale, and describes the procedures for conducting the Self-Implementing Cleanup of the Debris Pile. On June 18, 2014, USEPA approved UTC's plan for cleanup and disposal under 40 CFR §§ 761.61 (a) and (c), which will address the presence of PCBs in the Debris Pile. As indicated above, samples collected from the Debris Pile in support of the Assessment Report and during the confirmation sampling event were analyzed by

TCLP for waste characterization purposes. ACM has been detected; however, the material is non-friable and organically bound.

This letter and its attachments constitute the IRM Work Plan for the removal and off-site disposal of the Debris Pile, which has been documented to contain PCBs and non-friable ACM. The following is a brief summary of the contents of the Debris Pile as presented in the SIP. The volume of the Debris Pile is estimated to be 39,000 cubic yards. Investigation of the Debris Pile resulted in the collection of 187 samples. Twenty-two soil samples contained PCB concentrations above 1 mg/kg, and three soil samples were above 10 mg/kg. Of the 187 samples, one sample exceeded the hazardous PCB threshold of 50 mg/kg. Based on results from the soil investigations, the Debris Pile has been separated into three designated areas (please see Figure 3 of the attached SIP). The delineation of the designated areas is summarized below:

- Area A: This area is comprised of the portion of the Debris Pile containing potential ACM and PCB concentrations less than 50 mg/kg. The volume of material in this area is estimated to be 4,900 cubic yards.
- Area B: This area is the largest designated area of the Debris Pile. It is comprised mostly of soil with PCB concentrations less than 50 mg/kg (all are <20 mg/kg). The volume of material in this area is estimated to be 33,675 cubic yards.
- Area C: This is the area of the Debris Pile with PCB concentrations greater than 50 mg/kg. Area C was conservatively estimated by extending its aerial boundary to the surrounding sampling locations with PCB concentrations less than 50 mg/kg. The data from in and around Area C indicates that the upper 4 feet is comprised of soil with PCB concentrations less than 20 mg/kg; therefore, the volume of material in this area consists of the bottom 4 feet and is estimated to be 425 cubic yards.

The remedial goals for the Debris Pile are as follows:

- Remove the Debris Pile in its entirety;
- Dispose of all excavated PCB waste materials at permitted off-site disposal facilities; and
- Comply with all applicable regulations, including but not limited to 40 CFR 761.61(a).

In addition to the tasks described within the attached SIP, IRM project activities will include:

- Implementation of the requirements of a site-specific health and safety plan,
- Surveying,
- Community Air Monitoring,
- ACM removal,
- Equipment decontamination, and
- Site restoration.

Health and Safety

Personnel performing work at the job site will be qualified for Hazardous Waste Operations and Emergency Response (HAZWOPER) duty in accordance with 29 CFR 1910.120, and will be provided with information on hazards specific to the project as conveyed in one or more Task Hazard Analyses (THAs) and a site-specific Health and Safety Plan (HASP). Personnel will meet the medical monitoring and training requirements specified in AECOM's North America Safety, Health and Environmental (SH&E) Standard Operating Procedures, and will complete UTC Contractor Environment, Health and Safety Training.

It is anticipated that the proposed work at the Debris Pile will be performed with Level D and Level C personal protective equipment (PPE), depending upon the task being performed. Field personnel will be instructed to maintain Level C equipment on-site, should it be needed. The attached HASP

provides a listing of the required PPE to be used by Task. A NIOSH certified disposable dust respirator for particles or a respirator with appropriate filtering elements for asbestos (half face or full face) will be required for certain activities. Should health and safety monitoring during field activities indicate a threat to field personnel or warrant an upgrade beyond Level C protection, work will stop and site conditions will be re-evaluated.

Prior to the commencement of daily activities, a tailgate meeting will be conducted by the Site Safety Officer (SSO) to review the site-specific health and safety requirements and applicable THAs. Attendance at the daily tailgate meeting is mandatory for all personnel performing work under this IRM, and will be documented on the attendance form. All safety training documentation is to be maintained in the project file by the SSO. All field personnel have the right and duty to stop work when, in their opinion, conditions are unsafe and to assist in correcting these conditions. Additional health and safety details are provided in the HASP.

Surveying

A New York State-licensed surveyor will provide initial benchmarks and stakeout for horizontal and vertical excavation. This initial survey will be used to confirm and maintain horizontal and vertical limits as the work proceeds. The licensed surveyor will return to the area to complete an as-built survey of the finished work.

Community Air Monitoring

As described in the attached SIP, particulate concentrations will be monitored at the upwind and downwind perimeter of the site on a continuous basis or as otherwise specified. Upwind concentrations will be measured to establish site-specific background concentrations. In the event of minimal wind or frequent changes in wind direction, multiple locations will be monitored (i.e., three monitoring locations surrounding the active work area).

Particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. Each particulate monitor will be calibrated daily with a filtered air sample. Each air monitoring instrument will be continuously downloaded and saved electronically to a dedicated computer located on-site.

The New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP) (attached) specified action level of 0.10 milligrams per cubic meter (mg/m^3) above background for particulate matter less than 10 micrometers in size (PM-10) will be used to determine whether modifications to given processes are required. If the downwind measurement of particulates less than 10 micrometers in size (PM-10) is greater than $0.10 \text{ mg}/\text{m}^3$ above the upwind background level, or if dust is observed leaving the project area, dust suppression techniques (i.e., misting surfaces with water, or covering open piles) will be implemented to reduce the generation of fugitive dust. Furthermore, if the action level of $0.15 \text{ mg}/\text{m}^3$ (above background) is exceeded, work activities will be ceased and site work activities will be re-evaluated.

The table below describes the action levels for perimeter particulate air monitoring and the associated responses to each level.

Action Levels for Perimeter Particulate Air Monitoring

Action Level	Response
Downwind particulate concentrations 0.10 mg/m ³ greater than upwind particulate monitor sustained over 15 minute average	Dust suppression techniques are employed
Downwind particulate concentrations 0.15 mg/m ³ greater than upwind particulate monitor sustained over 15 minute average	Work halted and dust suppression techniques evaluated. Work continues once dust suppression techniques are proven successful

Stormwater Pollution Prevention and Erosion and Sediment Control

While remediation work activities conducted under a NYSDEC-approved work plan do not need to obtain coverage under the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (No. GP-0-10-001) ("General Permit"), a Construction Stormwater Pollution Prevention Plan (SWPPP) was prepared for the Debris Pile (attached) that meets the "substantive requirements" of the General Permit. The SWPPP includes water quality and quantity control provisions, in addition to an Erosion and Sediment Control Plan.

The management of stormwater will be per project-specific implementation of methods described in both the New York State Standards and Specifications for Erosion and Sediment Control (August 2005) and the New York State Stormwater Management Design Manual (August 2010). The goals include minimizing erosion and sedimentation impacts from construction activity involving soil disturbance, meeting pollutant removal goals, reducing channel erosion, preventing overbank flooding, and helping to control extreme floods. A figure containing details of the various erosion and sediment control measures to be implemented during the work is also attached.

ACM Removal

The asbestos containing material identified is a non-friable organically bound material described as an asphalt coating on concrete. The quantity of this material is unknown; however, the approximate volume of soil, debris and ACM in Area A is 4,900 cubic yards. The ACM will be removed in accordance with New York State Industrial Code Rule 56 by an ACM-certified contractor, and any site-specific variances will be approved by the New York State Department of Labor (NYSDOL).

Equipment Decontamination

Sampling equipment will be decontaminated following §761.79 or Subpart S (double wash-double rinse procedure). All movable excavation equipment will be decontaminated in accordance with the procedures specified in §761.79(c)(2)(ii). Specifically, the nonporous surfaces of equipment that has contacted PCB wastes (e.g., excavator buckets) will be swabbed with a d-limonene-containing solution (terpene hydrocarbon). Decontamination liquids will be containerized and stored onsite pending the results of waste characterization sampling as described in the following section.

Site Restoration

Following all remedial activities, six inches of topsoil will be placed over the current footprint of the pile and seeded. Imported soils to be used as backfill will meet the requirements of 6 NYCRR Part 375-6.7(d) for industrial use properties.

Schedule

Work activities will begin immediately upon NYSDEC approval of this IRM WP. The removal of the Debris Pile is anticipated to occur over a five- to six-month period, with completion of confirmation sampling expected by December 2014.

Material with ACM and PCB concentrations less than 50 mg/kg (Areas A and B) will be disposed at Ontario County Landfill located in Stanley, New York. Material with PCB concentrations greater than 50 mg/kg will be disposed at EQ's Wayne Disposal facility located in Belleville, Michigan.

Certification

A written certification signed by a New York State Professional Engineer in accordance with DER-10 is attached.

If you have any questions, please feel free to contact me at (518) 951-2378.

Yours sincerely,

AECOM Technical Services, Inc.



Daniel Servetas, P.E.

cc: (hard copy and electronic copy)
Krista Anders – New York State Department of Health
Mark Sergott – New York State Department of Health

(electronic copy only)
John Wolski – United Technologies Corporation
Kathleen McFadden – United Technologies Corporation
Joe Basile – Carrier Corporation

Attachments:

May 2014 Self-Implementing Cleanup and Disposal Plan
Correspondence from EPA providing approval of the SIP
Health and Safety Plan
New York State Department of Health Generic Community Air Monitoring Plan and Fugitive Dust and Particulate Monitoring Requirements
Construction Stormwater Pollution Prevention Plan
Erosion and Sediment Control Details Figure
Written Certification Required Under DER-10 Section 1.5(b) 1

May 2014 Self-Implementing Cleanup and Disposal Plan

Due to the size of this document, it has been provided in Adobe PDF format on the enclosed CD.



Environment

Prepared For:
United Technologies Corp.
Shared Remediation Services
Farmington, CT

Prepared by:
AECOM
Latham, NY
May 2014
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SOUTHEAST DEBRIS/SOIL PILE UTC/CARRIER SITE THOMPSON ROAD, SYRACUSE, NY Self-Implementing Cleanup and Disposal Plan

Corrective Action Order - Index CO 7-20051118-4
NYSDEC Site Registry #734043



SOUTHEAST DEBRIS/SOIL PILE UTC/CARRIER SITE THOMPSON ROAD, SYRACUSE, NY Self-Implementing Cleanup & Disposal Plan

Corrective Action Order - Index CO 7-20051118-4
NYSDEC Site Registry #734043

Prepared for:



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Appendix A – Written Certification Required Under §761.61(a)(3)(i)(E)

Appendix B – Initial Investigation Data Summary Tables

Appendix C – Analytical Data Reports

Appendix D – Soil Boring Logs

1.0 Introduction

1.1 Self-Implementing Cleanup and Disposal Plan

On behalf of United Technologies Incorporated, AECOM Technical Services, Inc. (AECOM) has prepared this Self-Implementing Cleanup and Disposal Plan (SIP), which has been written to address stockpiled material placed on a 3.8-acre parcel of land identified as the Southeast Debris/Soil Pile (Debris Pile) located at the United Technologies Corporation (UTC)/Carrier facility on Thompson Road, Syracuse, New York (**Figure 1**). This SIP provides notice to United States Environmental Protection Agency (USEPA) of UTC's intention to perform self-implementing on-site cleanup and disposal of polychlorinated biphenyl (PCB) waste in accordance with the requirements of 40 CFR 761.61(a).

1.2 Site Background

The Carrier Thompson Road Facility is located in the northeast portion of Syracuse, New York, approximately one mile south of the New York State Thruway (**Figure 1**). The facility property is bordered by Sanders Creek to the north, Thompson Road to the west, Kinne Street to the east, and a residential area to the south. The property slopes slightly north toward Sanders Creek. The facility property covers approximately 175 acres and most is either paved or covered by former manufacturing and office buildings.

1.2.1 Facility History

The facility was purchased in the 1950s by Carrier. The Carrier Syracuse facility formerly produced a variety of products associated with the HVAC (heating, ventilation, air conditioning units) industry for home and commercial applications. Operations have included the manufacture and assembly of various components associated with these HVAC units. Carlyle compressors were also manufactured at the facility.

The RCRA Facility Assessment Report for the Carrier facility prepared by A.T. Kearney, Inc. (January 6, 1997) describes pre-1950 use of the property as follows: "Prior to the purchase of the facility by Carrier, the existing facility was owned and operated by the General Electric Corporation, which was built in 1942 for defense purposes; Defense Corporation, a government-owned World War II manufacturing facility; and Syracuse University. Prior to World War II, the property was utilized as farmland."

1.2.2 Historic PCB Usage

At this facility, PCB usage was incidental to the manufacturing of HVAC products. PCBs were not manufactured or incorporated into final products. PCBs were known to be present in transformers, ancillary equipment, cutting oils and hydraulic oils. PCB containing oils have been found at the Carrier facility both above and below 50 mg/kg. Some limited remediation has been performed associated with localized spills and small impacted areas to address PCB releases. Waste materials were disposed off-site in accordance with §761.61(b) regardless of PCB concentrations.

1.2.3 Debris Pile Background

According to facility personnel, the Debris Pile was used to stockpile soils and construction and demolition (C&D) debris generated from various onsite activities including facility expansion, remodeling and repair. The Debris Pile was first investigated according to the requirement of a Corrective Action Order (CAO, Index CO 7-20051118-4) late in 2013 and reported as an Area of Concern (AOC) to the New York State Department of Environmental Conservation (NYSDEC) on January 30, 2014. Results from the initial investigation were provided to NYSDEC in an AOC Assessment Report Southeast Debris Pile (Assessment Report, EnSafe, 2013) [Note: the Assessment Report was submitted to USEPA Region 2 on February 25, 2014.]. A confirmation sampling event was completed in April of 2014. The results of these sampling events form the basis of this SIP and are detailed below in accordance with the requirements of 40 CFR 761.61(a).

1.2.4 Local Geology

The local bedrock near the Carrier facility consists primarily of Silurian-age carbonates and shales. The Vernon Shale Member of the Salina Group underlies the area. The Vernon Shale is a red shale 600 to 800 feet thick. The top of the bedrock onsite is approximately 40 to 60 feet below ground surface (bgs).

Overlying the Vernon Shale are sandy silts, clayey silts, fine-grained sands, and clays. Descriptions of soils from installation of groundwater monitoring wells and piezometers at the facility indicate a relatively uniform lithologic section across the site.

Silts and clayey silts are the predominant soils throughout the site. These silts are generally stiff to very stiff; dense, and brittle. The silts are brown to brownish gray and commonly contain iron staining and yellow-red mottling throughout. Fine-grained sands and dense clays were frequently intermixed with the silts observed during drilling. These deposits are interpreted to represent lacustrine deposits.

During previous investigations, the upper 1 to 4 feet of most borings consisted of fill material including roots, rock fragments up to 1 inch in diameter, and loose, unconsolidated sands and gravels. In borings installed through asphalt, a gravel and sand base 1 to 2 feet thick was found below the asphalt. These borings were near buildings or in areas that had been filled during construction at the facility.

Beneath the fill, saturated silts and sands with minor amounts of clay become prevalent. In the northern area of the facility a peaty, organic-rich layer occurs. Till is encountered below the silts and sands over the entire facility. The till is encountered at depths ranging from approximately 29 to approximately 40 bgs.

1.2.5 Local Hydrogeology

Groundwater occurs at approximately 6 feet bgs in the southern portion of the facility to approximately 9 feet bgs near the northern property boundary. Groundwater is present in the "native" silty clays and silty sands, beneath the fill material and throughout the lacustrine and glacial till material encountered with depth. The saturated interval continues to the top of bedrock, which ranges from approximately 40 to 60 feet bgs across the facility.

1.3 Outline

This SIP has been prepared to provide notice to USEPA, in accordance with the requirements of 40 CFR 761, for the removal and disposal of PCB impacted waste. The sections below address the requirements for notification as described in 40 CFR 761.61(a)(3)(A through E).

- Section 2 – Nature of Contamination (761.61(a)(3)(A))
- Section 3 – Summary of Sampling Procedures (761.61(a)(3)(B))
- Section 4 – Location and Extent of Contaminated Area (761.61(a)(3)(C))
- Section 5 – Cleanup Plan (761.61(a)(3)(D))
- Section 6 – Written Certification (761.61(a)(3)(E))

1.4 Remediation Goals

The remedial goals for the Debris Pile are as follows:

- Remove the debris stockpile in its entirety;
- Dispose of all excavated PCB waste materials at permitted off-site disposal facilities;
- Achieve a cleanup goal of 25 mg/kg PCBs, and
- Comply with all applicable regulations, including but not limited to 40 CFR 761.61(a).

Note: the 25 mg/kg PCB cleanup goal is the appropriate USEPA cleanup value for a low occupancy area and the NYSDEC Restricted Use Soil Cleanup Objective for Protection of Public Health at an industrial use site. The site is located entirely within the gated and security controlled fence around the Carrier facility and away from current Carrier operations.

1.5 Certification

A written certification signed by UTC in accordance with §761.61(a)(3)(i)(E) is provided in **Appendix A**. This certification is signed by representatives of UTC, who are responsible for the oversight of the work described in this SIP.

2.0 Nature of Contamination

The Debris Pile is located in the southeast corner of the facility property and is measured to be approximately 250 feet (north to south) by 580 feet (east to west), and is 3.8 acres in size. The height of the Debris Pile ranges from 2 to 10 feet above the surrounding ground surface elevation. According to site personnel, the Debris Pile was established to stockpile soils and C&D debris generated from onsite activities including facility expansion, remodeling and repair. The material was presumed to be non-hazardous and was intended to be eventually disposed offsite. The criteria used to determine if materials should be placed in the Debris Pile was that it exhibited no visible evidence of contamination or odors. Materials were stockpiled at the Debris Pile starting in the late 1980s until the early 2000s. The Debris Pile is estimated to contain approximately 39,000 cubic yards or 50,000 tons of material. The Debris Pile was placed on existing grade and does not extend into the subsurface.

The initial site investigation was conducted in October 2013 by EnSafe Incorporated (Inc.), (the previous consultant). Based on this investigation, the Debris Pile was divided into two areas: Area 1 and Area 2. The largest portion of the pile was contained in Area 1 and consists of approximately 143,000 square feet of material overgrown with grass, shrubs and scrub trees. Observations from test pits dug during sampling activity indicated that the materials in Area 1 consist mainly of soil with incidental C&D debris. Area 2 was observed to be overlain with C&D debris including some materials that was identified as potential asbestos containing material (ACM). The existence of the potential ACM prohibited advancement of test pits or borings in Area 2. Some examples of materials observed in Area 2 include cinder block, asphalt, concrete slabs, wood-block flooring, and paint covered concrete.

AECOM conducted confirmation sampling of the Debris Stockpile in April 2014. During the confirmation sampling event, Area 2 was further assessed and a determination was made that the western third of Area 2 did not contain ACM, but rather consists of soil and debris similar to Area 1. **Figure 2** shows the Debris Pile as divided into Areas 1 and 2. The remaining portion of Area 2 containing potential ACM is indicated on the figure.

To date, no additional remedial investigation data is available for this portion of the Carrier facility. Once the Debris Pile has been removed, UTC will continue the assessment of this AOC to determine if the migration of hazardous waste including hazardous constituents has occurred. The Debris Pile contains diffuse, low level PCB impacts throughout. UTC does not expect offsite migration of PCBs from the Debris Pile because it is vegetated and there are erosion controls in place. Also, UTC does not expect leaching to occur from the Debris Pile because PCBs are hydrophobic, oily wastes have not been observed within the Debris Pile and there are no volatile organic chemicals in the Debris Pile that would mobilize PCBs by co-solvency.

3.0 Summary of Sampling Procedures

3.1 Initial Investigation

As indicated above, the initial investigation was conducted by EnSafe Inc. in order to characterize the materials in the Debris Pile according to the requirements of the CAO. In Area 1, *Visual Sample Plan (VSP), Version 6.5, 2013*, software was used to generate a systematic, statistically-based grid sampling approach to locate sampling points in the horizontal dimension. The input parameters were designed to achieve a 95% confidence level that a 38.5-foot diameter area impacted by hazardous materials and/or PCBs would be located. Utilization of the VSP software resulted in 100 grid sampling locations, which are depicted on **Figure 2**.

Prior to test pit excavation activities, each of the 100 grid points were located by a New York-licensed surveyor. Additionally, a topographic survey of the debris pile was conducted so that the depth of the pile at each grid location was known. To address the pile depth variability, and as described in *Guidance on Choosing a Sampling Design for Environmental Data Collection for Use in Developing a Quality Assurance Project Plan - EPA/240/R-02/005 Dec 2002*, a random number generator was used generate a number between 1 and 4, with each number corresponding to a specific sample depth at each sample location. Test pits were excavated and a single sample was collected, except at two locations where field observations warranted that a second sample be collected.

In Area 2, judgment sampling was used due to on the nature of the pile (i.e., the configuration of C&D materials was not conducive to drilling or excavating with equipment on-hand). The sampling locations were chosen based on material types observed. Some examples of materials observed included cinder block, asphalt, concrete slabs, wood-block flooring, and paint-covered concrete. Sixteen samples were collected from C&D rubble in this area (**Figure 2**).

Samples from both areas were analyzed to determine if the Debris Pile contained concentrations of contaminants that exceeded characteristically toxic criteria for hazardous waste or exceeded the Toxic Substance Control Act (TSCA) threshold of 50 milligrams per kilogram (mg/kg) for PCBs. Samples were analyzed for VOCs using United States Environmental Protection Agency (U.S. EPA) Method 8260C; for semi-volatile organic compounds (SVOCs) by U.S. EPA Method 8270D; for PCBs by U.S. EPA Method 3546/8082, for pesticides by U.S. EPA Method 8081B; for herbicides by U.S. EPA Method 8151; and for RCRA metals (total) by U.S. EPA Method 6010B.

If a sample exhibited contaminant concentrations that could theoretically exceed the "toxicity characteristic" limits when assessed by the "Rule of 20" whereby the total concentration results are divided by 20 and conservatively compared to the hazardous waste characteristics base on toxicity, then the waste was preliminarily considered hazardous waste by toxicity, unless analysis by the Toxicity Characteristic Leaching Procedure (TCLP) showed otherwise. Following receipt of total metals data, chromium and/or lead and/or mercury in 11 samples were reanalyzed using the TCLP (U.S. EPA Method 1311). No samples reanalyzed using TCLP methods exceeded the hazardous waste toxicity criteria. Furthermore, no samples exceeded 50 mg/kg PCBs requiring disposal in accordance with TSCA. A summary of analytical results for samples collected during the initial investigation and presented in the Assessment Report is included as **Appendix B** of this SIP. Details including the specific statistical tools utilized for developing the sampling plan as well as figures, a photo log, and analytical reports associated with initial investigation can be found in the Assessment Report.

3.2 Confirmation Sampling Event

A confirmation sampling event was conducted by AECOM in April 2014 based on the results of the initial investigation. As discussed above, no samples collected during the initial investigation exhibited contaminant concentrations that exceeded hazardous waste toxicity or TSCA criteria. Therefore, the purpose of the confirmation sampling event was to collect additional samples for waste characterization and to further evaluate areas exhibiting detectable concentrations of PCBs. The remainder of this section will focus on the sampling procedures utilized to confirm PCB concentrations within the Debris Pile.

Sample locations for the confirmation sampling event were chosen based on previous sampled locations exhibiting PCB concentrations greater than 1 mg/kg. The sample methodology selected for these locations was direct push using a Geoprobe rig to allow for continuous sampling from the top of the Debris Pile surface to the terminus of the boring as determined by the occurrence of the interface between the Debris Pile material and native soils. The rationale for selecting these locations and for sampling the entire depth of the pile was to ensure that detection exhibited during the initial investigation did not represent areas of elevated PCB concentrations. A total of 65 samples were collected utilizing a Geoprobe rig from a total of 20 sample locations. From each boring, sample cores were collected continuously in 2-foot intervals. One sample was collected from each 2-foot core and submitted for analysis utilizing USEPA method 3550B/8082 as required by 40 CFR 761.272.

Additional soil samples were also collected within the northwest corner of the Debris Pile following the determination that this area did not contain potential ACM. Consistent with other locations sampled during the confirmation sampling event, samples were collected continuously from 2-foot intervals throughout the entire depth of the pile.

Table 1 provides a summary of analytical results for samples collected during the confirmation sampling event. Analytical data reports and soil boring logs are included as **Appendices C and D** of this SIP.

4.0 Location and Extent of Contaminated Area

The location of the contaminated area is limited to the 39,000 cubic yard Debris Pile described above. UTC intends to remove the Debris Pile in its entirety from the Carrier site and will confirm removal of the contaminated material as described in Section 5.0.

During the course of the initial assessment and follow-up confirmation sampling, a total of 187 samples were collected and analyzed for PCBs. Based upon the characterization of the Debris Pile, it was divided into the two areas shown on **Figure 2**: Area 1, the bulk of the Debris Pile comprised of soil; and Area 2, the portion of the Debris Pile mixed with debris and potential ACM. Both portions of the Debris Pile contain PCBs in low concentration (less than 50 mg/kg), with the exception of a small section within Area 1 containing PCBs greater than 50 mg/kg (maximum value detected is 69.4 mg/kg). **Figure 2** includes the sample identification numbers for all sampling locations. A complete summary of analytical results is provided in **Table 1** and **Appendix B**.

Investigation of the Debris Pile resulted in the collection of 187 samples collected from different depths from approximately 39,000 cubic yards of soil and debris. Twenty-two soil samples contained PCB concentrations above 1 mg/kg, and three soil samples were above 10 mg/kg. Of the 187 samples, one sample exceeded the TSCA threshold of 50 mg/kg. Based on the results of the soil investigations, the Debris Pile has been separated into three designated areas. The delineation of the designated areas is summarized below:

- Area A: This area is comprised of the portion of the Debris Pile containing potential ACM and PCB concentrations less than 50 mg/kg. The volume of this area is estimated to be 4,900 cubic yards.
- Area B: This area is the largest designated area of the Debris Pile. It is comprised mostly of soil with PCB concentrations less than 50 mg/kg (all are <20 mg/kg). The volume of this area is estimated to be 33,675 cubic yards.
- Area C: This is the area of the Debris Pile with PCB concentrations greater than 50 mg/kg. Area C was conservatively estimated by extending its aerial boundary to the surrounding sampling locations with PCB concentrations less than 50 mg/kg. The data from in and around Area C indicates that the upper 4 feet is comprised of soil with PCB concentrations less than 20 mg/kg; therefore, the volume of this area consists of the bottom 4 feet and is estimated to be 425 cubic yards.

Figure 3 illustrates the three designated areas of the Debris Pile.

Statistical analyses were performed to substantiate that soils located within Area C represent only a discrete location that would not be representative of soil in other areas of the Debris Pile. **Figure 4** illustrates that the majority of the soil samples across the Debris Pile were found to contain PCBs at less than 1 mg/kg. Average PCB concentrations across the entire Debris Pile and with Area C removed are 0.93 mg/kg and 0.55 mg/kg, respectively. Rosner's Outlier Test was performed using ProUCL 5.0 to further characterize the concentrations of PCBs across the Debris Pile. The test resulted in one outlier (1% significance level), the 69.4 mg/kg that defines Area C. The likelihood of encountering PCB concentrations above 50 mg/kg outside of Area C is minimal. ProUCL 5.0 was also used to estimate upper confidence limits (UCLs) for PCBs outside of Area C. The suggested UCL to use was 1.18 mg/kg, based on the 95% Chebyshev UCL, which is well below the TSCA hazardous concentration of 50 mg/kg for PCBs in soils. The highest UCL for Areas A and B (1.98

mg/kg) was based on the 99% Chebyshev UCL and was still well below the TSCA threshold concentration of 50 mg/kg.

5.0 Site Cleanup Plan

Stockpiled material located within the Debris Pile will be removed in its entirety and transported offsite for disposal. The cleanup goal for the area under the Debris Pile is 25 mg/kg PCBs. Associated project activities include:

- Site preparation and controls;
- Solid Waste handling and disposal;
- Wastewater handling and disposal (if necessary);
- Community air monitoring;
- Confirmation sampling;
- Project documentation; and
- Scheduling

5.1 Site Preparation and Controls

A general staging area will be utilized during all work conducted under this SIP. The area will be used for material, equipment, and fuel storage. The area will be fenced and office trailers and other support facilities will be installed for use by AECOM, UTC, and agency officials. Erosion and Sediment (E&S) controls are currently in place surrounding the Debris/Soil and will be inspected and maintained throughout the project. Catch basins located down gradient of the Debris Pile have been covered with a geotextile layer and surrounded by hay-bales.

Odor causing constituents are not anticipated to be present within the Debris/Soil. Dust suppression activities will be used during all debris/soil removal activities and will include the use of a water truck and/or nearby fire hydrant. Any exposed soils (e.g., open excavations) will be wetted or covered with poly-sheeting or equivalent to prevent dust from leaving the Debris Pile.

5.2 Waste Handling and Disposal

All waste identified within the Debris Pile will be placed into appropriately lined and covered trucks for transportation to an appropriate disposal facility. Appropriate earth moving and dust suppression equipment will be utilized onsite. Soils will be separated onsite (≤ 50 mg/kg and > 50 mg/kg PCBs) for appropriate transportation and disposal. Should onsite storage be necessary, all wastes generated during remedial excavations will be placed directly into a lined storage container. Storage containers will be appropriately labeled and include the date of storage and ML mark indicating the presence of PCB-impacted wastes. All waste storage containers will be removed from the site within 30 days of loading.

A waste storage area will be created for the storage of waste containers prior to transport offsite. The waste storage area will be surrounded by temporary fencing and the fence will have an ML mark indicating the presence of PCB-impacted Wastes. All lined storage containers not actively in use will be staged within the waste storage area and covered with a tarp to prevent storm water from entering the container. A separate waste storage area will be created that meets the specifications of the first waste storage area and will be used for temporary storage of potentially hazardous soils.

Soil and debris containing ≤ 50 mg/kg PCBs will be transported to an appropriate landfill, per 40 CFR 761.61(a)(5)(v)(A). (The receiving facility has yet to be determined.) Soil and debris containing > 50 mg/kg PCBs will be transported to either a hazardous waste landfill permitted by EPA under section

3004 of RCRA, or by a State authorized under section 3006 of RCRA, or a PCB disposal facility approved under TSCA. Any personal protective equipment (PPE) or other waste generated during the removal of >50 mg/kg PCBs material will be disposed of with that soil and/or debris.

In the event any potential PCB laden debris (e.g., oil or transformer) is encountered, the material and surrounding soils will be segregated from the work area and containerized. Additional waste characterization sampling will be completed to determine PCB concentrations within the material, as well as other parameters as indicated. The material will be handled and disposed based on the waste characterization data and in compliance with 40 CFR 761.

5.3 Equipment Decontamination

Sampling equipment will be decontaminated following §761.79 or Subpart S (double wash-double rinse procedure). All movable excavation equipment will be decontaminated in accordance with the procedures specified in §761.79(c)(2)(ii). Specifically, the nonporous surfaces of equipment that has contacted PCB wastes (e.g., excavator buckets) will be swabbed with a d-limonene (terpene hydrocarbon) containing solution. Decontamination liquids will be containerized and stored onsite, pending characterization sampling, as described in the following section.

5.4 Wastewater Handling and Disposal (if necessary)

Potentially impacted wastewater will include decontamination water, construction water, and storm water collected as a result of construction activities on-site. The volume of collected wastewater is not anticipated to be large and, therefore, potentially impacted wastewater will be collected in 55-gallon steel drums or equivalent containers.

When a drum is full, it will be sampled and analyzed for PCBs to determine appropriate disposal methods. If a drum is analyzed and the aqueous waste within contains PCBs at a concentration >0.5 micrograms per liter ($\mu\text{g/L}$), it will be labeled with an ML mark and removed from the Debris Pile for appropriate management within 30 days of completion of remedial activities.

Aqueous wastes determined not to contain PCBs, or PCBs at concentrations <0.5 $\mu\text{g/L}$, will be labeled as non-hazardous waste and disposed of appropriately.

5.5 Community Air Monitoring

Particulate concentrations will be monitored at the upwind and downwind perimeter of the site on a continuous basis or as otherwise specified. Upwind concentrations will be measured to establish site-specific background concentrations. In the event of minimal wind or frequent changes in wind direction, multiple locations will be monitored (i.e., three monitoring locations surrounding the work area).

Particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. Each particulate monitor will be calibrated daily with a filtered air sample. Each air monitoring instrument will be continuously downloaded and saved electronically to a dedicated computer located on-site.

The NYSDOH Generic CAMP recommended action level of 0.10 mg/m^3 above background for particulate matter less than 10 micrometers in size (PM-10) will be used to determine whether modifications to given processes are required. If the downwind particulate measurement of

particulates less than 10 micrometers in size (PM-10) is greater than 0.10 mg/m³ above the upwind background level, or if dust is observed leaving the project area, dust suppression techniques (i.e., misting surfaces with water, or covering open piles) will be implemented to reduce the generation of fugitive dust. If the action level of 0.15 mg/m³ (above background) is exceeded, work activities will be ceased and site work activities will be re-evaluated.

The table below describes the action levels for perimeter particulate air monitoring and the associated responses to each level.

Action Levels for Perimeter Particulate Air Monitoring

Action Level	Response
Downwind particulate concentrations 0.10 mg/m ³ greater than upwind particulate monitor sustained over 15 minute average	Dust suppression techniques are employed
Downwind particulate concentrations 0.15 mg/m ³ greater than upwind particulate monitor sustained over 15 minute average	Work halted and dust suppression techniques evaluated. Work continues once dust suppression techniques are proven successful

5.6 Verification Sampling

Following removal of the Debris/Soil Pile, verification samples will be collected to verify the extent of PCB-impacted materials. One surface sample will be collected within each 25 foot x 25 foot section at the base of the former pile. This spacing is consistent with Subpart O requirements, modified for the larger size of the Debris Stockpile (3.8 acres). A surface sample will be collected from the 0- to 2-inch bgs interval at each of these locations. The soil samples will be analyzed using USEPA Method 3550B/8082, per 40 CFR 761.272. **Figure 5** provides the proposed confirmation sample locations.

All samples will be extracted within 14 days from sample collection, and extracts will be analyzed within 40 days of extraction. The nominal reporting detection limit for each Aroclor will be less than 0.33 mg/kg for all solid matrices unless dilutions are required due to PCB detection. The required laboratory turn-around-time for reporting will be 5 business days from receipt of samples. All sample concentrations will be reported on a dry weight basis in accordance with §761.274. The laboratory deliverables will include a Level 2 PDF report consisting of sample results and batch QC result information, and an EQuIS 4-file format EDD compliant with the AECOM specifications.

5.7 Project Documentation

Project files associated with the Debris Pile, collected previously and during construction activities, will be filed and made available to USEPA upon request. Potential files include:

- Daily Reports;
- Waste Manifests and Bills of Lading;
- Photographs;
- Sample collection procedures, logs, analyses, and results; and
- Site survey data.

5.8 Transport and Treatment/Disposal Certifications

Manifests and/or Bills of Lading for the transportation, treatment and disposal of waste materials and certifications of the disposal of the wastes, if necessary, will be obtained from the transporter and from the treatment/disposal facility. Copies of these forms will be included in the summary report and records will be maintained in accordance with the requirements as specified in 40 CFR 761 Subpart K (PCB Waste Disposal Records and Reports).

5.9 Remedial Summary Report

The Remedial Summary Report will be prepared upon completion of all remedial activities. This report will include, at a minimum, the following:

- Site description;
- A description of field procedures;
- Verification sample locations and analytical results (as required by the disposal facility);
- A photographic record of the field activities;
- Dust monitoring data;
- Waste transport and disposal information including tonnage sent to the disposal facility; and
- Copies of waste manifests, bills of lading, and certificates of disposal.

Any additional information required under the EPA Approval will also be incorporated into the summary report. The report will be submitted to the EPA within 60 days of completion of remedial activities.

5.10 Schedule

Site activities will begin immediately upon approval of this SIP from USEPA. The removal of the Debris/Soil Pile is anticipated to occur over a five- to six-month period, with completion of confirmation sampling expected by December 2014.

Tables

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-01-0-2	A1-SB-01-2-4	A1-SB-01-4-6	A1-SB-01-6-7	A1-SB-02-0-2	A1-SB-02-2-4	A1-SB-02-4-6	A1-SB-02-6-8	A1-SB-02-8-10	A1-SB-02-10-12	
Lab Sample ID:			MC30011-1	MC30011-2	MC30011-3	MC30011-4	MC30011-5	MC30011-6	MC30011-7	MC30011-8	MC30011-9	MC30011-10	
Date Sampled:			4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014
Date Analyzed:			4/25/2014	4/25/2014	4/25/2014	4/26/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Aroclors (SW846 8082A)													
Aroclor 1016	12674-11-2	µg/kg	ND (7.8)	ND (7.7)	ND (7.8)	ND (7.5)	ND (7.6)	ND (7.5)	ND (7.3)	ND (7.6)	ND (7.6)	ND (7.8)	
Aroclor 1221	11104-28-2	µg/kg	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)	ND (15)	
Aroclor 1232	11141-16-5	µg/kg	ND (15)	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (14)	ND (14)	ND (14)	ND (15)	
Aroclor 1242	53469-21-9	µg/kg	ND (16)	ND (16)	ND (16)	ND (15)	ND (16)	ND (15)	ND (15)	ND (15)	ND (15)	ND (16)	
Aroclor 1248	12672-29-6	µg/kg	ND (14)	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)	ND (13)	ND (13)	ND (13)	ND (14)	
Aroclor 1254	11097-69-1	µg/kg	27.1 ^a J	20.3 ^a J	97.3 ^a	ND (16)	ND (16)	43.5 ^a	49.9 ^a	151 ^a	380	155	
Aroclor 1260	11096-82-5	µg/kg	57.2	56.9	280	1700	624	126	109	310	99.5 ^a	70.9 ^a	
Total PCBs ^b	-	mg/kg	0.084	0.077	0.377	1.7	0.624	0.170	0.159	0.461	0.480	0.226	
General Chemistry													
Corrosivity as pH			-	-	7.8	-	-	-	-	7.5	-	-	
Cyanide Reactivity		mg/kg	-	-	1.7 U	-	-	-	-	1.7 U	-	-	
Ignitability (Flashpoint)		Deg. F	-	-	>230	-	-	-	-	>230	-	-	
Solids, Percent		%	88.4	86.9	87.5	91.8	91.8	92.6	91.5	90.4	87.8	88.8	
Sulfide Reactivity		mg/kg	-	-	57 U	-	-	-	-	55 U	-	-	

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-03-0-2	A1-SB-03-2-4	A1-SB-03-4-6	A1-SB-03-6-8	A1-SB-03-8-10	A1-SB-03-10-12	A1-SB-04-0-2	A1-SB-05-0-2	A1-SB-06-0-2	A1-SB-06-2-4	
Lab Sample ID:			MC30011-11	MC30011-12	MC30011-13	MC30011-14	MC30011-15	MC30011-16	MC30011-17	MC30011-18	MC30011-19	MC30011-20	
Date Sampled:			4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014
Date Analyzed:			4/25/2014	4/25/2014	4/25/2014	4/26/2014	4/26/2014	4/26/2014	4/26/2014	4/26/2014	4/26/2014	4/26/2014	4/26/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Aroclors (SW846 8082A)													
Aroclor 1016	12674-11-2	µg/kg	ND (7.2)	ND (7.3)	ND (7.3)	ND (7.4)	ND (7.9)	ND (7.3)	ND (7.2)	ND (7.8)	ND (7.8)	ND (7.4)	
Aroclor 1221	11104-28-2	µg/kg	ND (14)	ND (14)	ND (14)	ND (14)	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (14)	
Aroclor 1232	11141-16-5	µg/kg	ND (14)	ND (14)	ND (14)	ND (14)	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (14)	
Aroclor 1242	53469-21-9	µg/kg	ND (15)	ND (15)	ND (15)	ND (15)	ND (16)	ND (15)	ND (15)	ND (16)	ND (16)	ND (15)	
Aroclor 1248	12672-29-6	µg/kg	ND (13)	ND (13)	ND (13)	ND (13)	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (13)	
Aroclor 1254	11097-69-1	µg/kg	45.8 ^a	ND (15)	36.3 ^a	ND (16)	57.3 ^a	ND (15)	43.7 ^a	ND (16)	35.3 ^a	J 54.7 ^a	
Aroclor 1260	11096-82-5	µg/kg	64.3	37.4	74.2	1980	139	1270	148	1580	764	122	
Total PCBs ^b	-	mg/kg	0.110	0.037	0.111	1.98	0.196	1.27	0.192	1.58	0.799	0.177	
General Chemistry													
Corrosivity as pH			-	-	8.0	-	-	-	7.8	7.5	-	-	
Cyanide Reactivity		mg/kg	-	-	1.5	U	-	-	1.6	U 1.7	U	-	
Ignitability (Flashpoint)		Deg. F	-	-	>230	-	-	-	>230	>230	-	-	
Solids, Percent		%	93.3	95.3	93.2	91.1	86.5	93.4	93.4	86.4	86.6	91.3	
Sulfide Reactivity		mg/kg	-	-	54	U	-	-	54	U 58	U	-	

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-06-4-6	A1-SB-06-6-8	A1-SB-07-0-2	A1-SB-07-2-4	A1-SB-107-2-4	A1-SB-07-4-6	A1-SB-07-6-8	A1-SB-07-8-10	A1-SB-08-0-2	A1-SB-08-2-4				
Lab Sample ID:			MC30011-21	MC30011-22	MC30011-23	MC30011-24	MC30011-25	MC30011-26	MC30011-27	MC30011-28	MC30011-29	MC30011-30				
Date Sampled:			4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014			
Date Analyzed:			4/26/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/26/2014			
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Aroclors (SW846 8082A)																
Aroclor 1016	12674-11-2	µg/kg	ND (7.5)	ND (7.9)	ND (7.6)	ND (7.5)	ND (7.7)	ND (7.7)	ND (8.1)	ND (7.6)	ND (7.9)	ND (7.6)				
Aroclor 1221	11104-28-2	µg/kg	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (16)	ND (15)	ND (15)	ND (15)				
Aroclor 1232	11141-16-5	µg/kg	ND (14)	ND (15)	ND (14)	ND (14)	ND (14)	ND (15)	ND (15)	ND (14)	ND (15)	ND (14)				
Aroclor 1242	53469-21-9	µg/kg	ND (15)	ND (16)	ND (15)	ND (15)	ND (16)	ND (16)	ND (16)	ND (16)	ND (16)	ND (16)				
Aroclor 1248	12672-29-6	µg/kg	ND (13)	ND (14)	ND (13)	ND (13)	ND (13)	ND (13)	ND (14)	ND (13)	ND (14)	ND (13)				
Aroclor 1254	11097-69-1	µg/kg	ND (16)	ND (17)	16.5 ^a	J	ND (16)	16.4 ^a	J	ND (16)	ND (16)	18.4 ^a	J	36.0 ^a		
Aroclor 1260	11096-82-5	µg/kg	1770	15500	94.4		70.9	96.9		ND (14)	29.2	J	254	39.2		79.5
Total PCBs ^b	-	mg/kg	1.77	15.5	0.111		0.071	0.113		ND	0.029		0.254	0.058		0.116
General Chemistry																
Solids, Percent		%	90.5	84.6	91.3		91.7	91.5		87.7	83.1		90.3	88.3		90.2

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Confirmatory Sampling Data Summary
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 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-08-4-6	A1-SB-08-6-8	A1-SB-09-0-2	A1-SB-09-2-4	A1-SB-09-4-6	A1-SB-09-6-8	A1-SB-10-0-2	A1-SB-10-2-4	A1-SB-110-2-4	A1-SB-10-4-6
Lab Sample ID:			MC30011-31	MC30011-32	MC30011-33	MC30011-34	MC30011-35	MC30011-36	MC30076-1	MC30076-2	MC30076-3	MC30076-4
Date Sampled:			4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/23/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014
Date Analyzed:			4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Aroclors (SW846 8082A)												
Aroclor 1016	12674-11-2	µg/kg	ND (8.0)	ND (7.5)	ND (7.7)	ND (8.1)	ND (8.1)	ND (7.5)	ND (7.7)	ND (7.7)	ND (7.8)	ND (7.8)
Aroclor 1221	11104-28-2	µg/kg	ND (16)	ND (14)	ND (15)	ND (16)	ND (16)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)
Aroclor 1232	11141-16-5	µg/kg	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (15)
Aroclor 1242	53469-21-9	µg/kg	ND (16)	ND (15)	ND (16)	ND (17)	ND (16)	ND (15)	ND (16)	ND (16)	ND (16)	ND (16)
Aroclor 1248	12672-29-6	µg/kg	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (14)
Aroclor 1254	11097-69-1	µg/kg	ND (17)	ND (16)	287 ^a	28.5 ^a	J ND (17)	127 ^a	206	18.8	J 38.0	332
Aroclor 1260	11096-82-5	µg/kg	22.6	J 69400	555	65.7	15.5	J 592	96.2 ^a	18.1 ^a	J 28.9 ^a	J 233 ^a
Total PCBs ^p	-	mg/kg	0.023	69.4	0.842	0.094	0.016	0.719	0.302	0.037	0.067	0.565
General Chemistry												
Solids, Percent		%	85	89	88.2	85.2	83.5	91.9	87.4	89.1	86.1	86.4

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-10-6-7	A1-SB-11-0-2	A1-SB-11-2-4	A1-SB-111-2-4	A1-SB-11-4-6	A1-SB-11-6-7	A1-SB-12-0-2	A1-SB-12-2-4	A1-SB-12-4-6	A1-SB-13-0-2	
Lab Sample ID:			MC30076-5	MC30076-6	MC30076-7	MC30076-8	MC30076-9	MC30076-10	MC30076-11	MC30076-12	MC30076-13	MC30076-14	
Date Sampled:			4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014	4/24/2014
Date Analyzed:			4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014	4/29/2014	4/28/2014	4/28/2014	4/28/2014	4/28/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
Aroclors (SW846 8082A)													
Aroclor 1016	12674-11-2	µg/kg	ND (7.5)	ND (7.9)	ND (7.8)	ND (7.6)	ND (7.8)	ND (7.9)	ND (8.1)	ND (7.5)	ND (8.0)	ND (8.3)	
Aroclor 1221	11104-28-2	µg/kg	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (15)	ND (16)	ND (15)	ND (16)	ND (16)	
Aroclor 1232	11141-16-5	µg/kg	ND (14)	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)	ND (16)	
Aroclor 1242	53469-21-9	µg/kg	ND (15)	ND (16)	ND (16)	ND (16)	ND (16)	ND (16)	ND (16)	ND (15)	ND (16)	ND (17)	
Aroclor 1248	12672-29-6	µg/kg	ND (13)	ND (14)	ND (14)	ND (13)	ND (14)	ND (14)	ND (14)	ND (13)	ND (14)	ND (14)	
Aroclor 1254	11097-69-1	µg/kg	ND (16)	133 ^a	109 ^a	97.8 ^a	307	1220	383	406	41.3	48.0	
Aroclor 1260	11096-82-5	µg/kg	ND (13)	152	165	167	108 ^a	70.0 ^a	93.7 ^a	186 ^a	36.1 ^a	J 36.0 ^a J	
Total PCBs ^p	-	mg/kg	ND	0.285	0.274	0.265	0.415	1.29	0.477	0.592	0.077	0.084	
General Chemistry													
Solids, Percent		%	89.9	88.5	88.6	89.8	88.2	87	83.1	89.4	85.1	83.4	

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A1-SB-13-2-4	A1-SB-13-4-6	A2-SB-02-0-2	A2-SB-02-2-4	A2-SB-02-4-6	A2-SB-02-6-8	A2-SB-03-0-2	A2-SB-03-2-4	A2-SB-03-4-6	A2-SB-04-0-2
Lab Sample ID:			MC30076-15	MC30076-16	MC30120-1	MC30120-2	MC30120-3	MC30120-4	MC30120-5	MC30120-6	MC30120-7	MC30120-8
Date Sampled:			4/24/2014	4/24/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014
Date Analyzed:			4/28/2014	4/28/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Aroclors (SW846 8082A)												
Aroclor 1016	12674-11-2	µg/kg	ND (7.4)	ND (8.1)	ND (7.7)	ND (7.8)	ND (7.5)	ND (8.1)	ND (8.2)	ND (7.4)	ND (8.2)	ND (8.7)
Aroclor 1221	11104-28-2	µg/kg	ND (14)	ND (16)	ND (15)	ND (15)	ND (15)	ND (16)	ND (16)	ND (14)	ND (16)	ND (17)
Aroclor 1232	11141-16-5	µg/kg	ND (14)	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)	ND (15)	ND (14)	ND (15)	ND (16)
Aroclor 1242	53469-21-9	µg/kg	ND (15)	ND (16)	ND (16)	ND (16)	ND (15)	ND (17)	ND (17)	ND (15)	ND (17)	ND (18)
Aroclor 1248	12672-29-6	µg/kg	ND (13)	ND (14)	38.8 ^a	ND (14)	ND (13)	ND (14)	ND (14)	ND (13)	ND (14)	ND (15)
Aroclor 1254	11097-69-1	µg/kg	402	212	46.1	22.4 ^a J	19.2 ^a J	ND (17)	38.6 ^a J	ND (16)	ND (17)	316 ^a
Aroclor 1260	11096-82-5	µg/kg	99.5 ^a	171 ^a	18.1 ^a J	41.4	58.1	ND (14)	377	41.4	ND (14)	1050
Total PCBs ^b	-	mg/kg	0.502	0.383	0.103	0.064	0.077	ND	0.416	0.041	ND	1.366
General Chemistry												
Solids, Percent		%	91.6	84.5	85.3	86.7	89.2	85.6	84	91.3	82.9	77.1

Table 1
Confirmatory Sampling Data Summary
 UTC/Carrier
 Southeast Debris/Soil Pile
 Thompson Road, Syracuse, NY

Client Sample ID:	CAS#	Units	A2-SB-04-2-4	A2-SB-104-2-4	A2-SB-04-4-6	A2-SB-05-0-2	A2-SB-05-2-4	A2-SB-05-4-6	A2-SB-06-0-2	A2-SB-07-0-2	A2-SB-08-0-2
Lab Sample ID:			MC30120-9	MC30120-10	MC30120-11	MC30120-12	MC30120-13	MC30120-14	MC30120-17	MC30120-16	MC30120-15
Date Sampled:			4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014	4/25/2014
Date Analyzed:			4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/30/2014	4/29/2014	4/30/2014	4/30/2014
Matrix:			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Aroclors (SW846 8082A)											
Aroclor 1016	12674-11-2	µg/kg	ND (7.7)	ND (7.5)	ND (7.9)	ND (7.3)	ND (7.5)	ND (8.1)	ND (7.9)	ND (8.5)	ND (8.3)
Aroclor 1221	11104-28-2	µg/kg	ND (15)	ND (15)	ND (15)	ND (14)	ND (15)	ND (16)	ND (15)	ND (16)	ND (16)
Aroclor 1232	11141-16-5	µg/kg	ND (14)	ND (14)	ND (15)	ND (14)	ND (14)	ND (15)	ND (15)	ND (16)	ND (16)
Aroclor 1242	53469-21-9	µg/kg	ND (16)	ND (15)	ND (16)	ND (15)	ND (15)	ND (17)	ND (16)	ND (17)	ND (17)
Aroclor 1248	12672-29-6	µg/kg	ND (13)	ND (13)	ND (14)	ND (13)	ND (13)	ND (14)	ND (14)	ND (15)	ND (14)
Aroclor 1254	11097-69-1	µg/kg	16.9 ^a J	ND (16)	101 ^a	23.5 ^a J	ND (16)	20.9 ^a J	312 ^a	168 ^a	57.9 ^a
Aroclor 1260	11096-82-5	µg/kg	38.5	20.4 J	144	117	20.5 J	33.2 J	433	271	89.8
Total PCBs ^b	-	mg/kg	0.055	0.020	0.245	0.141	0.021	0.054	0.745	0.439	0.148
General Chemistry											
Solids, Percent		%	91	91.5	84.5	93.1	91.4	83.5	84.4	82.1	82.6

Notes:

^a Estimated value due to the presence of other Aroclor pattern.

^b Total PCBs value equals the total of detected Aroclors.

CAS# = Chemical Abstracts Service number

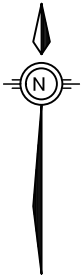
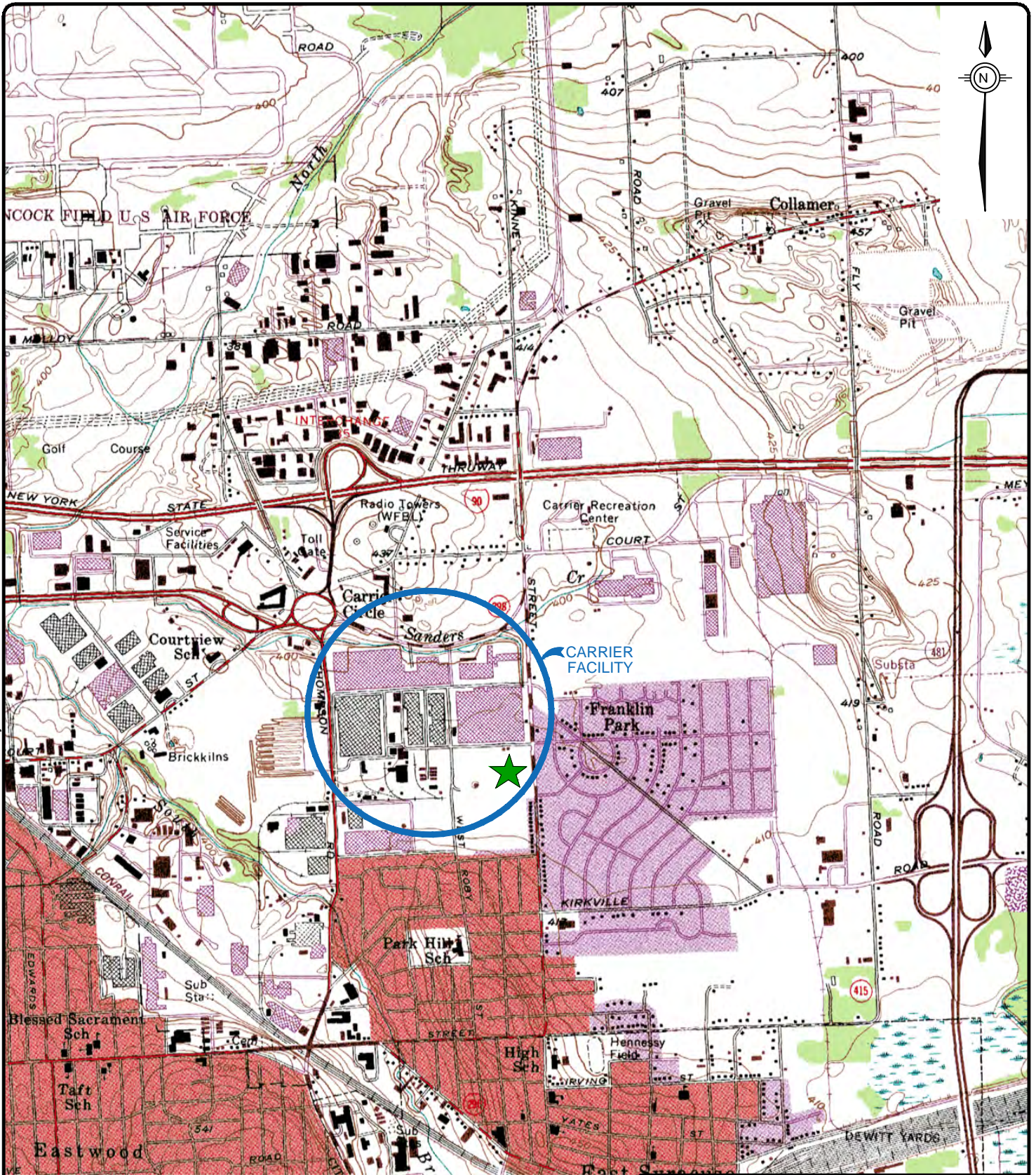
µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

Aroclors were analyzed via method SW846 8082A

Figures

File Name: I:\2014 PROJECTS BST114295 CARRIER VICINITY MAP.DWG Plotted By: WADE MAREK Plot Date: 1/15/2014 12:02:52 PM



LEGEND


 SITE LOCATION

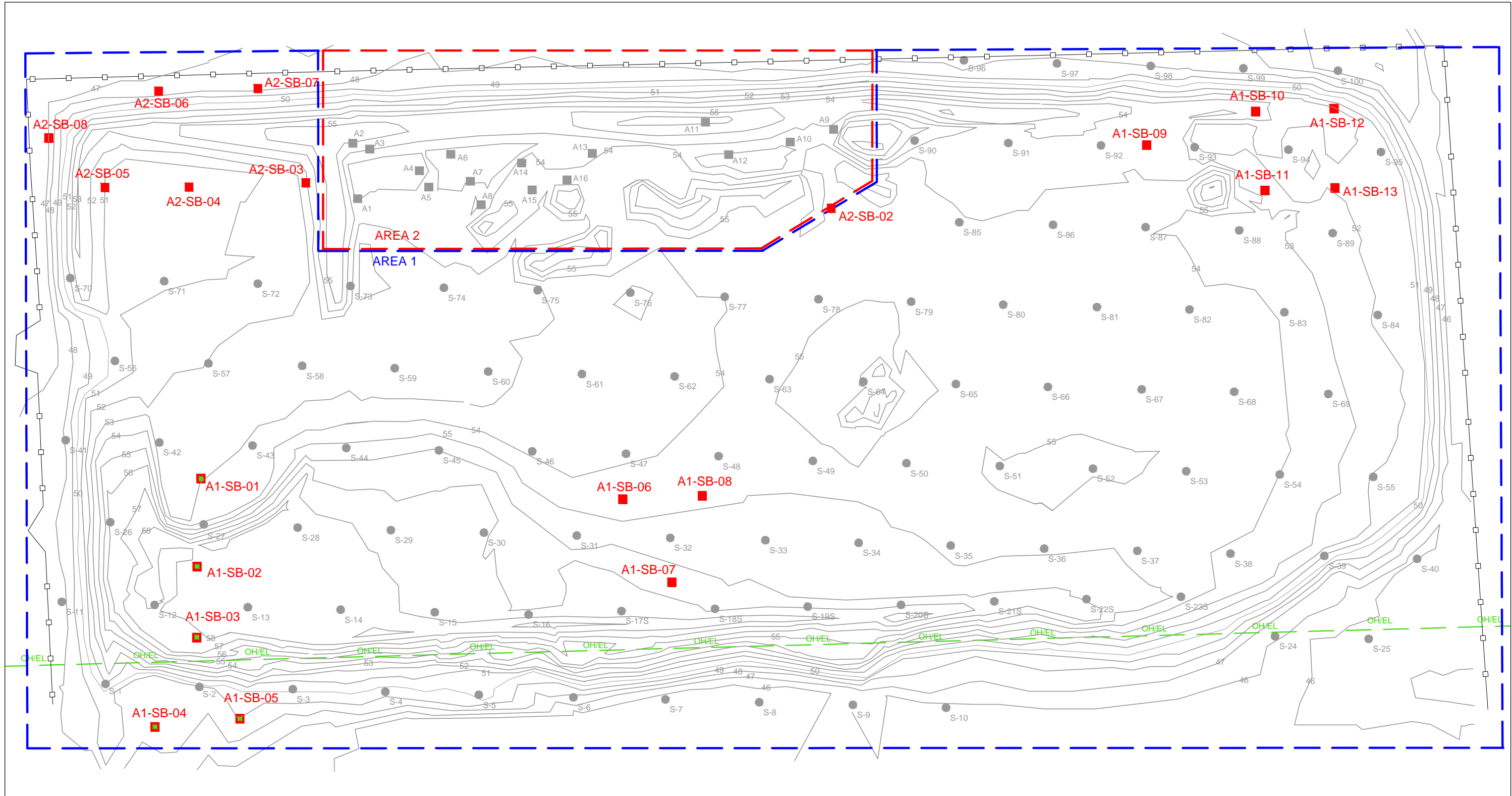
FIGURE 1
SITE LOCATION MAP
SE STOCKPILE
CARRIER FACILITY
SYRACUSE, NEW YORK

MAP SOURCE:
 U.S.G.S. 7.5 MINUTE QUADRANGLE
 SYRACUSE EAST, NY 1967
 PHOTO REVISED 1978



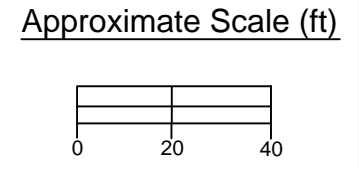
REQUESTED BY:	RT
DRAWN BY:	WM
DWG DATE:	01-15-13
DWG NO:	14295 Vicinity

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LEGEND

- CONTOUR INTERVAL
- OH/EL — UTILITY LINE
- A1-SB-06 CONFIRMATION SAMPLE LOCATION
- A1-SB-01 CONFIRMATION SAMPLE LOCATION WITH RCI ANALYSIS
- A2-SB-06 CONFIRMATION SAMPLE LOCATION
- A2-SB-07 CONFIRMATION SAMPLE LOCATION
- A2-SB-08 CONFIRMATION SAMPLE LOCATION
- A2-SB-05 CONFIRMATION SAMPLE LOCATION
- A2-SB-04 CONFIRMATION SAMPLE LOCATION
- A2-SB-03 CONFIRMATION SAMPLE LOCATION
- A2-SB-02 CONFIRMATION SAMPLE LOCATION
- A1-SB-01 CONFIRMATION SAMPLE LOCATION
- A1-SB-02 CONFIRMATION SAMPLE LOCATION
- A1-SB-03 CONFIRMATION SAMPLE LOCATION
- A1-SB-04 CONFIRMATION SAMPLE LOCATION
- A1-SB-05 CONFIRMATION SAMPLE LOCATION
- A1-SB-06 CONFIRMATION SAMPLE LOCATION
- A1-SB-07 CONFIRMATION SAMPLE LOCATION
- A1-SB-08 CONFIRMATION SAMPLE LOCATION
- A1-SB-09 CONFIRMATION SAMPLE LOCATION
- A1-SB-10 CONFIRMATION SAMPLE LOCATION
- A1-SB-11 CONFIRMATION SAMPLE LOCATION
- A1-SB-12 CONFIRMATION SAMPLE LOCATION
- A1-SB-13 CONFIRMATION SAMPLE LOCATION
- S-23S ● INITIAL INVESTIGATION TEST PIT LOCATION
- A15 ■ INITIAL INVESTIGATION-JUDGMENT SAMPLING
- EXISTING FENCE
- - - AREA 1 BOUNDARY
- - - AREA 2 BOUNDARY



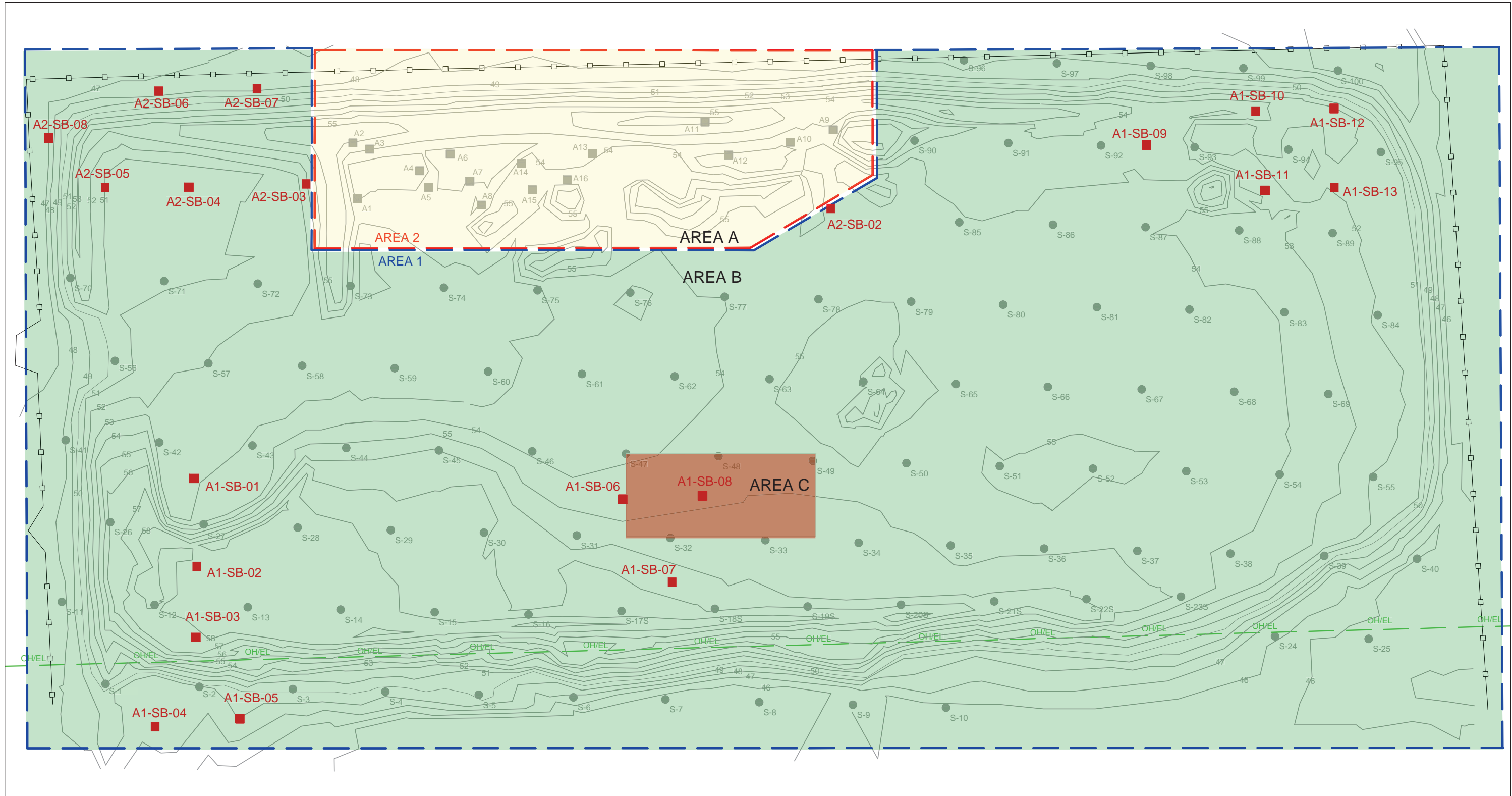
PROJ. NO: 60314591
 DATE: 5-9-2014
 DRAWN: CTN
 APPROVED: -

NOTES:
 1) DATUM BASE ON CARRIER CAMPUS DATUM
 2) ZERO BASE PLANE ELEVATION=EL. 42.0

SHEET TITLE: DEBRIS PILE LAYOUT
 PROJECT: SOUTHEAST DEBRIS/SOIL PILE
 UTC/CARRIER SITE
 THOMPSON ROAD, SYRACUSE, NY

DRAWING REFERENCE:
 1) Drawing based on FIGURE 2, "SE DEBRIS PILE TOPOGRAPHIC SURVEY", by ENSAFE., dated JANUARY 2014, including all reference therein.

FIGURE
 2

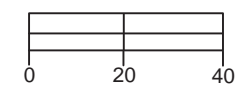


LEGEND

- | | | | |
|------------|---|-----------|---|
| — | CONTOUR INTERVAL | — OH/EL — | UTILITY LINE |
| A1-SB-06 ■ | CONFIRMATION SAMPLE LOCATION | — □ — | EXISTING FENCE |
| S-23S ● | INITIAL INVESTIGATION TEST PIT LOCATION | A-5 ■ | INITIAL INVESTIGATION-JUDGMENT SAMPLING |
| ■ | AREA C (PCBs DETECTED > 50 mg/kg) | ■ | AREA A (POTENTIAL ACM and PCBs DETECTED < 50 mg/kg) |
| — | AREA 1 BOUNDARY | ■ | AREA B (PCBs DETECTED < 50 mg/kg) |
| — | AREA 2 BOUNDARY | | |



Approximate Scale (ft)



PROJ. NO: 60314591
 DATE: 5-9-2014
 DRAWN: CTN
 APPROVED: -

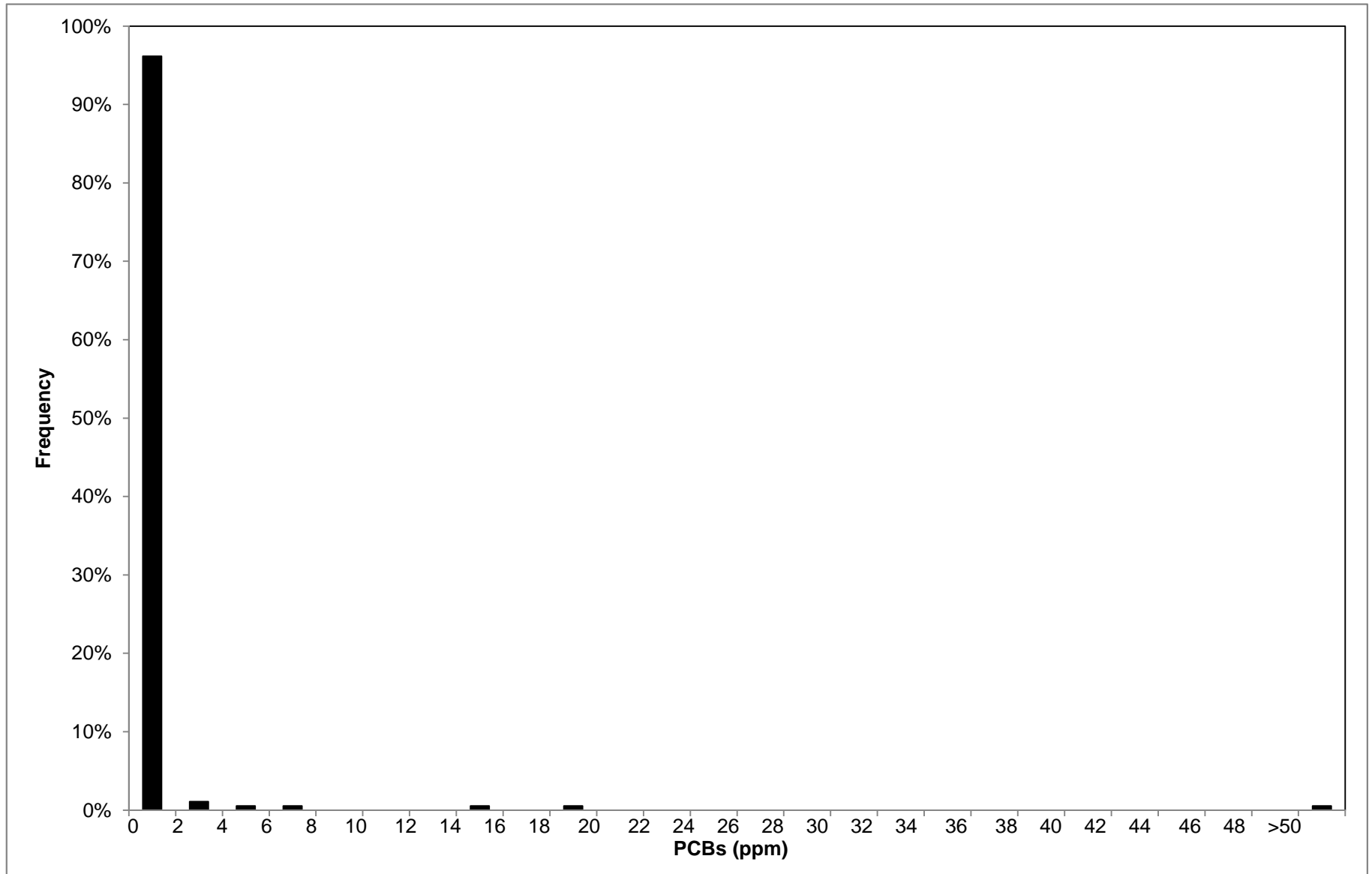
NOTES:
 1) DATUM BASE ON CARRIER CAMPUS DATUM
 2) ZERO BASE PLANE ELEVATION=EL. 42.0

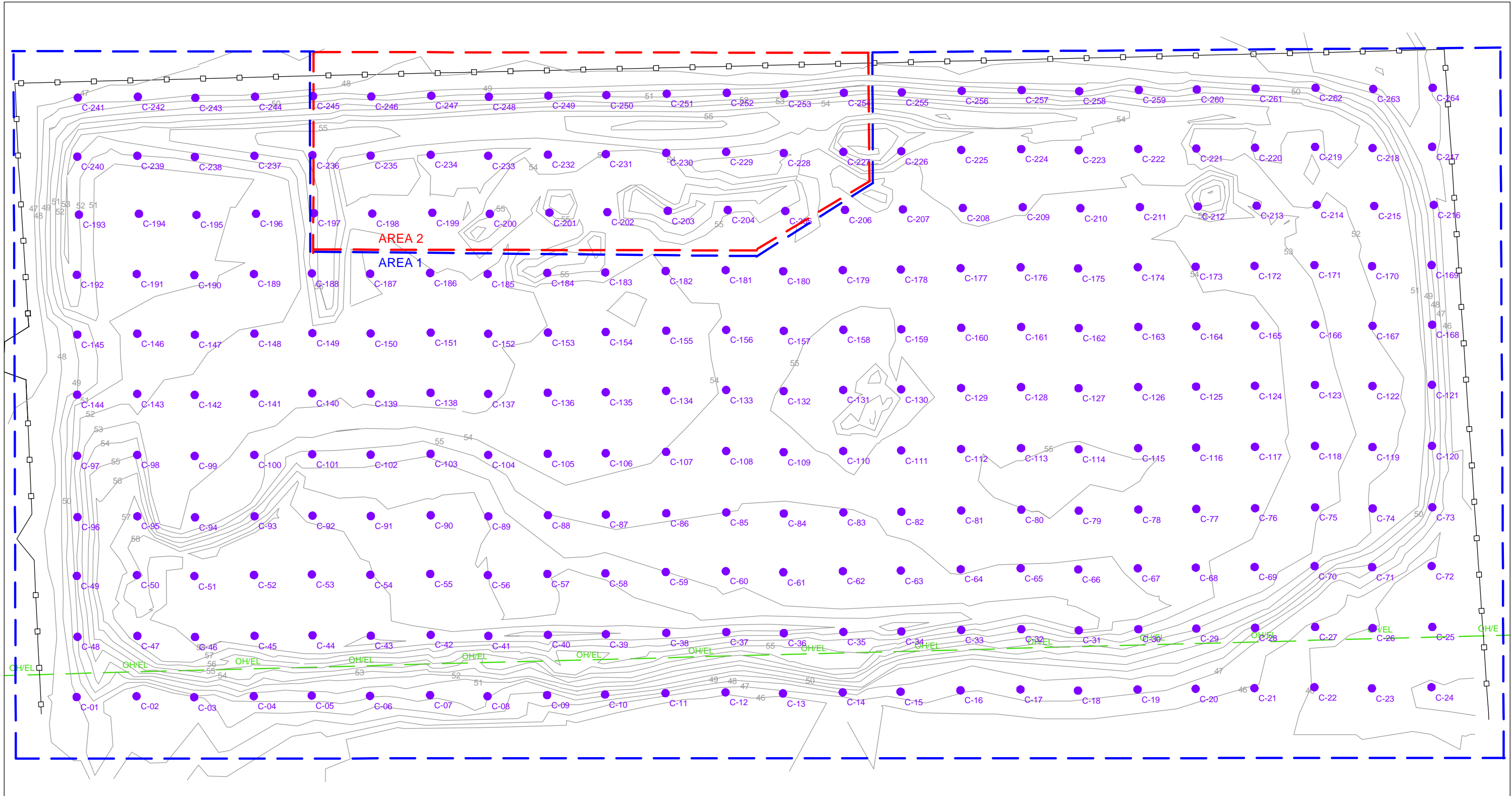
SHEET TITLE: DESIGNATED AREAS
 PROJECT: SOUTHEAST DEBRIS/SOIL PILE
 UTC/CARRIER SITE
 THOMPSON ROAD, SYRACUSE, NY

DRAWING REFERENCE:
 1) Drawing based on FIGURE 2, "SE DEBRIS PILE TOPOGRAPHIC SURVEY", by
 ENSAFE., dated JANUARY 2014, including all reference therein.



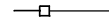



FIGURE
 3

Figure 4 - Histogram of PCB Concentration Distribution
Southeast Debris/Soil Pile
UTC/Carrier Site
Thompson Road, Syracuse, NY



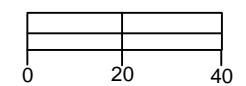


LEGEND

-  CONTOUR INTERVAL
-  C-150 PROPOSED CONFIRMATION SAMPLE LOCATION
-  EXISTING FENCE
-  OH/EL UTILITY LINE
-  AREA 2 BOUNDARY
-  AREA 1 BOUNDARY



Approximate Scale (ft)



PROJ. NO: 60314591
DATE: 5-9-2014
DRAWN: CTN
APPROVED: -

NOTES:
 1) DATUM BASE ON CARRIER CAMPUS DATUM
 2) ZERO BASE PLANE ELEVATION=EL. 42.0

SHEET TITLE: CONFIRMATION SAMPLING PLAN

PROJECT:
 SOUTHEAST DEBRIS/SOIL PILE
 UTC/CARRIER SITE
 THOMPSON ROAD, SYRACUSE, NY

DRAWING REFERENCE:
 1) Drawing based on FIGURE 2, "SE DEBRIS PILE TOPOGRAPHIC SURVEY", by ENSAFE., dated JANUARY 2014, including all reference therein.

FIGURE
5

Appendix A – Written Certification Required Under §761.61(a)(3)(i)(E)

United Technologies Corporation
9 Farm Springs Road
(847) 221-5503
Farmington, CT 06032



May 16, 2014

Vivian Chin
USEPA Region 2
2890 Woodbridge Avenue
Mail Code MS-105
Edison, NJ 08837-3679

**Subject: Written Certification as per §761.61(a)(3)(E)
Self-Implementing Cleanup and Disposal Plan
Southeast Debris/Soil Pile, UTC/Carrier Site
Thompson Road, Syracuse, New York**

Dear Ms. Chin,

I certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the Southeast Debris/Soil Pile located on the UTC/Carrier Site on Thompson Road in Syracuse, New York are on file at the AECOM offices located at 40 British American Boulevard, Latham, New York 12110, and are available for USEPA inspection.

If you have any questions, comments, or concerns you may contact Dan Servetas via phone at 518-951-2378 or via email at daniel.servetas@aecom.com.

Yours sincerely,

A handwritten signature in black ink that reads "John G. Wolski". The signature is written in a cursive style and is positioned above a vertical line.

John G. Wolski
Remediation Project Manager
United Technologies Corporation
john.wolski@utc.com

cc: Tara Blum (NYSDEC)
Kathleen McFadden (UTC)

Appendix B – Initial Investigation Data Summary Tables

Table D-1
SE Debris Pile — Catch Basin Sediment Sample Summary (partial report) *
Carrier Corporation, Syracuse, New York

Sample Location:				Cath Basin 1	Catch Basin 2	Catch Basin 3	Catch Basin 4
Sample ID:				SESPSCB01	SESPSCB02	SESPSCB03	SESPSCB04
Sample Date:				10/28/2013	10/28/2013	10/28/2013	10/28/2013
Matrix:				Sediment	Sediment	Sediment	Sediment
Method	CAS No.	Analyte	Units				
GC Semi-volatiles (SW846 8081B) - Pesticides/Herbicides							
SW8081B		Aldrin	ug/kg	ND	ND	ND	ND
SW8081B		alpha-BHC	ug/kg	ND	ND	ND	ND
SW8081B		beta-BHC	ug/kg	ND	ND	ND	ND
SW8081B		delta-BHC	ug/kg	ND	ND	ND	ND
SW8081B		gamma-BHC (Lindane)	ug/kg	ND	ND	ND	ND
SW8081B		alpha-Chlordane	ug/kg	ND	ND	ND	ND
SW8081B		gamma-Chlordane	ug/kg	ND	ND	ND	ND
SW8081B		Dieldrin	ug/kg	ND	ND	ND	ND
SW8081B		4,4'-DDD	ug/kg	ND	ND	ND	ND
SW8081B		4,4'-DDE	ug/kg	ND	ND	ND	ND
SW8081B		4,4'-DDT	ug/kg	1.2	ND	ND	ND
SW8081B		Endrin	ug/kg	ND	ND	ND	ND
SW8081B		Endosulfan sulfate	ug/kg	ND	ND	ND	ND
SW8081B		Endrin aldehyde	ug/kg	ND	ND	ND	ND
SW8081B		Endosulfan-I	ug/kg	ND	ND	ND	ND
SW8081B		Endosulfan-II	ug/kg	ND	ND	ND	ND
SW8081B		Heptachlor	ug/kg	ND	ND	ND	ND
SW8081B		Heptachlor epoxide	ug/kg	ND	ND	ND	ND
SW8081B		Methoxychlor	ug/kg	ND	ND	ND	ND
SW8081B		Endrin ketone	ug/kg	ND	ND	ND	ND
SW8081B		Toxaphene	ug/kg	ND	ND	ND	ND
GC Semi-volatiles (SW846 8082A) - PCBs							
SW8082A		Aroclor 1016	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1221	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1232	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1242	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1248	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1254	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1260	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1268	ug/kg	ND	ND	ND	ND
SW8082A		Aroclor 1262	ug/kg	ND	ND	ND	ND
Metals Analysis							
		Mercury	ug/kg	6.7 U	8.0 B	7.2 U	7.7 U

* The data presented in this table is preliminary only, and represents only a partial list analytes. While the 4 samples were collected, they were placed on a HOLD with the lab. The lab accidentally began analysis of the samples, and submitted the data summarized above. No final report was delivered to Carrier/UTC. Absence of a parameter is not intended to indicate a non detect, but rather it was not analyzed.

Table D-2
SE Debris Pile — TCLP List Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:							A1S92	A1S93	A1S94	A1S95	A1S96	A1S97	A1S98	A1S99	A1S100	A201	A202	A203	A204	A205	A206	A207	A208	A209	A210	A211	A212		
Sample ID:							SEPSA1S92	SEPSA1S93	SEPSA1S94	SEPSA1S95	SEPSA1S96	SEPSA1S97	SEPSA1S98	SEPSA1S99	SEPSA1S100	SEPSA201	SEPSA202	SEPSA203	SEPSA204	SEPSA205	SEPSA206	SEPSA207	SEPSA208	SEPSA209	SEPSA210	SEPSA211	SEPSA212		
Sample Date:							10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013
Matrix:							SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO		
Method	CAS No.	Analyte	TCLP Regulatory Level, mg/L	TCLP 20X @ 100% Solids (a)	TCLP 20X @ 50% Solids (b)	Units																							
Percent Solids - Method D2540/D4643																													
D2540	9999000-58-8	Solids				%	NA	NA	NA	NA	83.5	86.3	92	86.9	82.1	97.7	99.3	97.6	99.7	99.8	NA	NA	95.9	96.8	94.7	98.8	97		
D4643	9999000-58-8	Solids				%	80.7	87.8	80.7	85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Metals - Method SW6010																													
SW6010	7440-38-2	Arsenic	5.0	100	50	mg/kg	5.5	10.6	6.3	6.7	4.2	4.7	4.4	4.2	4	8.7	1.5	5.3	3.6	0.25	0.81	1.2	4.3	2.6	2.6	0.43	1.8		
SW6010	7440-39-3	Barium	100.0	2000	1000	mg/kg	64.6	93	71.2	72	68.7	59	47.8	68.9	70.2	33.6	215	43	99.5	13.9	350	17.7	34.1	19.3	39	9.8	34.2		
SW6010	7440-43-9	Cadmium	1.0	20	10	mg/kg	0.37	2.2	0.18	0.22	0.62	0.18	0.24	0.14	0.36	0.68	0.45	0.48	0.36	0.08	1.7	5.9	0.46	0.47	0.64	0.16	0.41		
SW6010	7440-47-3	Chromium	5.0	100	50	mg/kg	79.4	74.4	31.3	21.1	19.7	11.9	13.8	13.4	13.9	10.5	27.8	17.2	29.5	2.3	1.1	5.4	10.7	9.4	21.4	4.6	8.1		
SW6010	7439-92-1	Lead	5.0	100	50	mg/kg	36.2	215	20.5	23.7	9.4	10.4	16.1	10.1	13.7	10.6	5.1	2.8	9.7	0.76	344	11.1	7.8	8.9	7.2	5.6	6.4		
SW6010	7782-49-2	Selenium	1.0	20	10	mg/kg	0.35	0.32 U	0.35 U	0.5	0.26 U	0.26 U	0.27 U	0.26 U	0.5	1.1	0.97	1.3	0.51	0.37	0.45	0.72	1.2	1.6	1.2	0.56	1.3		
SW6010	7440-22-4	Silver	5.0	100	50	mg/kg	0.13 U	0.8	0.12 U	0.87	0.79	0.67	0.57	0.68	0.69	0.5 U	0.7	0.64	0.81	0.1 U	0.97	2.6	0.76	0.54 U	0.87	0.19	0.84		
Mercury - Method SW7471																													
SW7471	7439-97-6	Mercury	0.2	4	2	mg/kg	0.11	0.62	0.088	0.17	0.045	0.03	0.036	0.03	0.038	0.008	0.006	0.0082	0.013	0.0082	0.48	0.74	0.082	0.0056 U	0.02	0.0073	0.0086		
Organochlorine Pesticides - Method SW8081																													
SW8081	72-20-8	Endrin	0.02	0.4	0.2	mg/kg	0.00027 U	0.00023 U	0.00026 U	0.00025 U	0.00025 U	0.00025 U	0.00022 U	0.00024 U	0.00026 U	0.00021 U	0.00021 U	0.0002 U	0.0002 U	0.00021 U	0.0011 U	0.00098 U	0.00022 U	0.00021 U	0.00022 U	0.00022 U	0.00022 U	0.0002 U	
SW8081	58-89-9	gamma-BHC (Lindane)	0.4	8	4	mg/kg	0.0004 U	0.00035 U	0.00039 U	0.00038 U	0.00038 U	0.00038 U	0.00033 U	0.00037 U	0.00039 U	0.00031 U	0.00032 U	0.0003 U	0.00031 U	0.00032 U	0.0017 U	0.0015 U	0.00033 U	0.00031 U	0.00033 U	0.00033 U	0.00031 U		
SW8081	76-44-8	Heptachlor	0.008	0.16	0.08	mg/kg	0.0004 U	0.00035 U	0.00039 U	0.00038 U	0.00038 U	0.00037 U	0.00033 U	0.00036 U	0.00039 U	0.00031 U	0.00032 U	0.0003 U	0.0003 U	0.00032 U	0.0017 U	0.0015 U	0.00033 U	0.00031 U	0.00033 U	0.00032 U	0.00031 U		
SW8081	72-43-5	Methoxychlor	10	200	100	mg/kg	0.00081 U	0.00071 U	0.00078 U	0.00077 U	0.00076 U	0.00075 U	0.00067 U	0.00073 U	0.00078 U	0.00062 U	0.00064 U	0.00061 U	0.00061 U	0.00064 U	0.0034 U	0.003 U	0.00066 U	0.00062 U	0.00066 U	0.00065 U	0.00062 U		
SW8081	8001-35-2	Toxaphene	0.5	100	5	mg/kg	0.01 U	0.0091 U	0.01 U	0.0099 U	0.0098 U	0.0097 U	0.0086 U	0.0094 U	0.01 U	0.008 U	0.0082 U	0.0078 U	0.0078 U	0.0083 U	0.043 U	0.038 U	0.0085 U	0.008 U	0.0085 U	0.0084 U	0.008 U		
SW8081	5103-71-9	alpha-Chlordane	—	—	—	mg/kg	0.00031 U	0.00027 U	0.00029 U	0.00029 U	0.00029 U	0.00028 U	0.00025 U	0.00028 U	0.00029 U	0.00024 U	0.00024 U	0.00023 U	0.00023 U	0.00024 U	0.0013 U	0.0011 U	0.00025 U	0.00024 U	0.00025 U	0.00025 U	0.00023 U		
SW8081	5103-74-2	gamma-Chlordane	—	—	—	mg/kg	0.00057 U	0.0005 U	0.00055 U	0.00054 U	0.00054 U	0.00053 U	0.00047 U	0.00052 U	0.00055 U	0.00044 U	0.00045 U	0.00043 U	0.00043 U	0.00045 U	0.0024 U	0.0021 U	0.00047 U	0.00044 U	0.00046 U	0.00046 U	0.00044 U		
SW8081	57-74-9	Chlordane	0.03	0.6	0.3	mg/kg	0.00031 U	0.00027 U	0.00029 U	0.00029 U	0.00029 U	0.00028 U	0.00025 U	0.00028 U	0.00029 U	0.00024 U	0.00024 U	0.00023 U	0.00023 U	0.00024 U	0.0013 U	0.0011 U	0.00025 U	0.00024 U	0.00025 U	0.00025 U	0.00023 U		
Chlorinate Herbicides - Method SW8151																													
SW8151	93-72-1	2,4,5-TP (Silvex)	1.0	20	10	mg/kg	0.00064 U	0.0006 U	0.0007 U	0.00065 U	0.00066 U	0.00065 U	0.00058 U	0.00064 U	0.00068 U	0.00064 U	0.00058 U	0.0006 U	0.00053 U	0.00056 U	0.0012 U	0.0011 U	0.00054 U	0.00059 U	0.0006 U	0.00056 U	0.00055 U		
SW8151	94-75-7	2,4-D	10.0	200	100	mg/kg	0.0053 U	0.005 U	0.0058 U	0.0054 U	0.0055 U	0.0054 U	0.0048 U	0.0053 U	0.0056 U	0.0053 U	0.0048 U	0.0049 U	0.0044 U	0.0046 U	0.0095 U	0.0091 U	0.0045 U	0.0049 U	0.0049 U	0.0046 U	0.0046 U		
VOCs - Method SW8260																													
SW8260	75-35-4	1,1-Dichloroethene	0.7	14	7	mg/kg	0.00036 U	0.00036 U	0.00042 U	0.00037 U	0.00034 U	0.00033 U	0.00031 U	0.00033 U	0.00036 U	0.00029 U	0.015 U	0.00029 U	0.00029 U	0.00029 U	0.086 U	0.086 U	0.0003 U	0.015 U	0.0003 U	0.00032 U	0.00029 U		
SW8260	107-06-2	1,2-Dichloroethane	0.5	10	5	mg/kg	0.00041 U	0.00041 U	0.00047 U	0.00041 U	0.00038 U	0.00037 U	0.00035 U	0.00037 U	0.0004 U	0.00033 U	0.016 U	0.00033 U	0.00032 U	0.00032 U	0.096 U	0.096 U	0.00033 U	0.017 U	0.00034 U	0.00036 U	0.00032 U		
SW8260	106-46-7	1,4-Dichlorobenzene	7.5	150	75	mg/kg	0.00032 U	0.00032 U	0.00037 U	0.00032 U	0.00029 U	0.00029 U	0.00027 U	0.00029 U	0.00031 U	0.00026 U	0.013 U	0.00026 U	0.00025 U	0.00025 U	0.075 U	0.075 U	0.00026 U	0.013 U	0.00027 U	0.00028 U	0.00025 U		
SW8260	78-93-3	2-Butanone (MEK)	200.0	4000	2000	mg/kg	0.0056 U	0.0056 U	0.0065 U	0.0056 U	0.0052 U	0.0051 U	0.0048 U	0.0051 U	0.0055 U	0.0045 U	0.22 U	0.0045 U	0.0661	0.0044 U	1.3 U	1.3 U	0.0046 U	0.23 U	0.0046 U	0.0182	0.0044 U		
SW8260	71-43-2	Benzene	0.5	10	5	mg/kg	0.00016 U	0.00016 U	0.00019 U	0.00016 U	0.00015 U	0.00015 U	0.00014 U	0.00014 U	0.00016 U	0.00013 U	0.0253	0.00013 U	0.00013 U	0.00013 U	0.038 U	0.038 U	0.00013 U	0.0067 U	0.00071	0.0014	0.0017		
SW8260	56-23-5	Carbon tetrachloride	0.5	10	5	mg/kg	0.00032 U	0.00032 U	0.00037 U	0.00032 U	0.00029 U	0.00029 U	0.00027 U	0.00029 U	0.00031 U	0.00026 U	0.013 U	0.00026 U	0.00025 U	0.00025 U	0.075 U	0.075 U	0.00026 U	0.013 U	0.00027 U	0.00028 U	0.00025 U		
SW8260	108-90-7	Chlorobenzene	100.0	2000	1000	mg/kg	0.00025 U	0.00025 U	0.00029 U	0.00025 U	0.00023 U	0.00023 U	0.00021 U	0.00023 U	0.00024 U	0.0002 U	0.01 U	0.0002 U	0.0002 U	0.0002 U	0.059 U	0.059 U	0.00021 U	0.011 U	0.00021 U	0.00022 U	0.0002 U		
SW8260	67-66-3	Chloroform	6.0	120	60	mg/kg	0.00032 U	0.00032 U	0.00037 U	0.00032 U	0.0003 U	0.00029 U	0.00028 U	0.00029 U	0.00032 U	0.00026 U	0.013 U	0.00026 U	0.00025 U	0.00025 U	0.076 U	0.076 U	0.00026 U	0.014 U	0.00027 U	0.00029 U	0.00026 U		
SW8260	127-18-4	Tetrachloroethene	0.7	14	7	mg/kg	0.00052 U	0.00052 U	0.00068	0.0014	0.00048 U	0.00048 U	0.00045 U	0.00047 U	0.00051 U	0.00042 U	0.021 U	0.00042 U	0.00041 U	0.00041 U	0.12 U	0.12 U	0.00043 U	0.022 U	0.00043 U	0.00046 U	0.00041 U		
SW8260	79-01-6	Trichloroethene	0.5	10	5	mg/kg	0.00044 U	0.00044 U	0.00052 U	0.00045 U	0.00041 U	0.00064	0.0011	0.0004 U	0.00044 U	0.00036 U	0.018 U	0.00076	0.00035 U	0.00035 U	0.11 U	0.11 U	0.00036 U	0.019 U	0.00037 U	0.00039 U	0.00035 U		
SW8260	75-01-4	Vinyl chloride	0.2	4	2	mg/kg	0.00043 U	0.00043 U	0.0005 U	0.00044 U	0.0004 U	0.0004 U	0.00037 U	0.00039 U	0.00043 U	0.00035 U	0.017 U	0.00035 U	0.00034 U	0.00034 U	0.1 U	0.1 U	0.00036 U	0.018 U	0.00036 U	0.00038 U	0.00035 U		
SVOCs - Method SW8270																													
SW8270	95-95-4	2,4,5-Trichlorophenol	400.0	8000	4000	mg/kg	0.042 U	0.04 U	0.043 U	0.044 U	0.04 U	0.044 U	0.04 U	0.039 U	0.043 U	0.038 U	0.034 U	0.04 U	0.19 U	0.036 U	0.94 U	0.18 U	0.038 U	0.039 U	0.04 U	0.038 U	0.036 U		
SW8270	88-06-2	2,4,6-Trichlorophenol	2.0	40	20	mg/kg	0.034 U	0.032 U	0.035 U	0.036 U	0.032 U	0.035 U	0.033 U	0.031 U	0.035 U	0.031 U	0.028 U												

**Table D-2
SE Debris Pile — TCLP List Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:							A213	A214	A215	A216	CB01	CB02	CB03	CB04
Sample ID:							SESPSA213	SESPSA214	SESPSA215	SESPSA216	SESPSCB01	SESPSCB02	SESPSCB03	SESPSCB04
Sample Date:							10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013
Matrix:							SO	SO	SO	SO	SE	SE	SE	SE
Method	CAS No.	Analyte	TCLP Regulatory Level, mg/L	TCLP 20X @ 100% Solids (a)	TCLP 20X @ 50% SOLIDS (b)	Units								
Percent Solids - Method D2540/D4643														
D2540	9999000-58-8	Solids				%	97	99.7	98.7	99.9	81.3	98.7	82.1	80.4
D4643	9999000-58-8	Solids				%	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010														
SW6010	7440-38-2	Arsenic	5.0	100	50	mg/kg	4.4	2.6	1.2	1.1 U	NA	NA	NA	NA
SW6010	7440-39-3	Barium	100.0	2000	1000	mg/kg	41.8	108	6.9	45.1	NA	NA	NA	NA
SW6010	7440-43-9	Cadmium	1.0	20	10	mg/kg	0.2	0.28	0.08	0.16	NA	NA	NA	NA
SW6010	7440-47-3	Chromium	5.0	100	50	mg/kg	11.1	49.9	2.2	4.3	NA	NA	NA	NA
SW6010	7439-92-1	Lead	5.0	100	50	mg/kg	4.7	9.9	9.7	4.6	NA	NA	NA	NA
SW6010	7782-49-2	Selenium	1.0	20	10	mg/kg	0.5	0.29	2.3	2.5	NA	NA	NA	NA
SW6010	7440-22-4	Silver	5.0	100	50	mg/kg	0.22	0.73	0.51 U	0.51 U	NA	NA	NA	NA
Mercury - Method SW7471														
SW7471	7439-97-6	Mercury	0.2	4	2	mg/kg	0.0061 U	0.0081	0.006 U	0.0054 U	NA	NA	NA	NA
Organochlorine Pesticides - Method SW8081														
SW8081	72-20-8	Endrin	0.02	0.4	0.2	mg/kg	0.00022 U	0.00019 U	0.0002 U	0.0002 U	NA	NA	NA	NA
SW8081	58-89-9	gamma-BHC (Lindane)	0.4	8	4	mg/kg	0.00033 U	0.00029 U	0.0003 U	0.0003 U	NA	NA	NA	NA
SW8081	76-44-8	Heptachlor	0.008	0.16	0.08	mg/kg	0.00033 U	0.00029 U	0.0003 U	0.0003 U	NA	NA	NA	NA
SW8081	72-43-5	Methoxychlor	10	200	100	mg/kg	0.00067 U	0.00059 U	0.0006 U	0.00061 U	NA	NA	NA	NA
SW8081	8001-35-2	Toxaphene	0.5	10	5	mg/kg	0.0086 U	0.0076 U	0.0078 U	0.0078 U	NA	NA	NA	NA
SW8081	5103-71-9	alpha-Chlordane	—	—	—	mg/kg	0.00025 U	0.00022 U	0.00023 U	0.00023 U	NA	NA	NA	NA
SW8081	5103-74-2	gamma-Chlordane	—	—	—	mg/kg	0.00047 U	0.00041 U	0.00043 U	0.00043 U	NA	NA	NA	NA
SW8081	57-74-9	Chlordane	0.03	0.6	0.3	mg/kg	0.00025 U	0.00022 U	0.00023 U	0.00023 U	NA	NA	NA	NA
Chlorinate Herbicides - Method SW8151														
SW8151	93-72-1	2,4,5-TP (Silvex)	1.0	20	10	mg/kg	0.00059 U	0.00057 U	0.00052 U	0.00057 U	NA	NA	NA	NA
SW8151	94-75-7	2,4-D	10.0	200	100	mg/kg	0.0049 U	0.0047 U	0.0043 U	0.0047 U	NA	NA	NA	NA
VOCs - Method SW8260														
SW8260	75-35-4	1,1-Dichloroethene	0.7	14	7	mg/kg	0.00033 U	0.00029 U	0.00032 U	0.0003 U	NA	NA	NA	NA
SW8260	107-06-2	1,2-Dichloroethane	0.5	10	5	mg/kg	0.00037 U	0.00032 U	0.00035 U	0.00033 U	NA	NA	NA	NA
SW8260	106-46-7	1,4-Dichlorobenzene	7.5	150	75	mg/kg	0.00029 U	0.00025 U	0.00028 U	0.00026 U	NA	NA	NA	NA
SW8260	78-93-3	2-Butanone (MEK)	200.0	4000	2000	mg/kg	0.005 U	0.0279	0.0048 U	0.0046 U	NA	NA	NA	NA
SW8260	71-43-2	Benzene	0.5	10	5	mg/kg	0.00014 U	0.00025	0.00036	0.00029	NA	NA	NA	NA
SW8260	56-23-5	Carbon tetrachloride	0.5	10	5	mg/kg	0.00029 U	0.00025 U	0.00028 U	0.00026 U	NA	NA	NA	NA
SW8260	108-90-7	Chlorobenzene	100.0	2000	1000	mg/kg	0.00023 U	0.0002 U	0.00022 U	0.00021 U	NA	NA	NA	NA
SW8260	67-66-3	Chloroform	6.0	120	60	mg/kg	0.00029 U	0.00025 U	0.00028 U	0.00026 U	NA	NA	NA	NA
SW8260	127-18-4	Tetrachloroethene	0.7	14	7	mg/kg	0.00047 U	0.00041 U	0.00045 U	0.00043 U	NA	NA	NA	NA
SW8260	79-01-6	Trichloroethene	0.5	10	5	mg/kg	0.0004 U	0.00035 U	0.00039 U	0.00036 U	NA	NA	NA	NA
SW8260	75-01-4	Vinyl chloride	0.2	4	2	mg/kg	0.00039 U	0.00034 U	0.00038 U	0.00036 U	NA	NA	NA	NA
SVOCs - Method SW8270														
SW8270	95-95-4	2,4,5-Trichlorophenol	400.0	8000	4000	mg/kg	0.039 U	0.18 U	0.38 U	0.91 U	NA	NA	NA	NA
SW8270	88-06-2	2,4,6-Trichlorophenol	2.0	40	20	mg/kg	0.032 U	0.15 U	0.3 U	0.74 U	NA	NA	NA	NA
SW8270	121-14-2	2,4-Dinitrotoluene	0.13	2.6	1.3	mg/kg	0.015 U	0.068 U	0.14 U	0.34 U	NA	NA	NA	NA
SW8270	95-48-7	2-Methylphenol (o-Cresol)	200.0	4000	2000	mg/kg	0.039 U	0.18 U	0.37 U	0.89 U	NA	NA	NA	NA
SW8270	106-44-5	3&4 Methylphenol (m,p-Cresol)	200.0 (each cresol)	—	—	mg/kg	0.043 U	0.2 U	0.41 U	1 U	NA	NA	NA	NA
SW8270	118-74-1	Hexachlorobenzene	0.13	2.6	1.3	mg/kg	0.011 U	0.051 U	0.11 U	0.26 U	NA	NA	NA	NA
SW8270	87-68-3	Hexachlorobutadiene	0.5	10	5	mg/kg	0.0094 U	0.043 U	0.09 U	0.22 U	NA	NA	NA	NA
SW8270	67-72-1	Hexachloroethane	3.0	60	30	mg/kg	0.0094 U	0.043 U	0.09 U	0.22 U	NA	NA	NA	NA
SW8270	98-95-3	Nitrobenzene	2.0	40	20	mg/kg	0.0098 U	0.045 U	0.094 U	0.23 U	NA	NA	NA	NA
SW8270	87-86-5	Pentachlorophenol	100.0	2000	1000	mg/kg	0.058 U	0.27 U	0.55 U	1.3 U	NA	NA	NA	NA
SW8270	110-86-1	Pyridine	5.0	100	50	mg/kg	0.014 U	0.062 U	0.13 U	0.31 U	NA	NA	NA	NA

(a) Total constituent analysis was used. If the total analysis of the waste demonstrated that individual contaminants are not present in the waste, or that they are present, but at such low concentration that the appropriate regulatory thresholds could not possibly be exceeded, the TCLP need not be run. For each sample, the concentration of the analyte was compared to the TCLP Regulatory Level times 20 @ 100% solids, and if the sample concentration was less than the 20X concentration, the sample was determined to be non-hazardous for the toxicity characteristic.

(b) None of the samples collected sample was at 100%, and all were above 50% solids except sample S2, which was at 39.3% solids. Therefore, another comparison was made to TCLP Regulatory Level times 20 at 50% solids. If the sample passed at 50%, then it was determined that the sample was non-hazardous for the toxicity characteristic.

(c) A single comparison was made for the sample collected at S2, which had 39.3% solids. In this sample, the data was compared to a TCLP Regulatory Level times 20 @ 39.3% solids.

BOLD = detection

Highlight = concentration above TCLP Regulatory Limit x 20 @ 100% solids

Highlight = concentration above TCLP Regulatory Limit x 20 @ 50% solids

**Table D-3
SE Debris Pile — TCLP Analysis (of Metals +20X Hits Only) Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1RM1	A1S11	A1S15	A1S2	A1S3	A1S32B	A1S6	A1S7	A1S88	A1S93	A206
Sample ID:				SEPA1RM1R	SEPSA1S11R	SEPSA1S15R	SEPSA1S2R	SEPSA1S3R	SEPSA1S32BR	SEPSA1S6R	SEPSA1S7R	SEPSA1S88R	SEPSA1S93R	SEPSA206R
Sample Date:				11/01/2013	10/31/2013	10/31/2013	11/01/2013	11/01/2013	10/30/2013	11/01/2013	11/01/2013	10/29/2013	10/29/2013	10/28/2013
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units											
SW6010	7440-47-3	Chromium	mg/l	NA	NA	NA	0.0018 B	NA	0.0061 B	NA	NA	0.00092 U	NA	NA
SW6010	7439-92-1	Lead	mg/l	0.014 B	0.0032 B	NA	0.0024 U	0.008 B	NA	0.012 B	0.0072 B	0.024 B	0.027 B	0.27 B
SW7470	7439-97-6	Mercury	mg/l	NA	NA	0.0001 B	NA	NA	NA	NA	NA	NA	NA	NA

TCLP = Toxicity Characteristic Leaching Procedure

If a sample exhibited contaminant concentrations that could theoretically exceed the "toxicity characteristic" limits when assessed by the "Rule of 20" whereby the total concentration results are divided by 20 and conservatively compared to the "toxicity characteristic" limits, then the waste was preliminarily considered a "toxicity characteristic" hazardous waste, unless analysis via the Toxicity Characteristic Leaching Procedure (TCLP) shows otherwise. Following receipt of total metals data, chromium and/or lead and/or mercury in 11 samples were reanalyzed using the TCLP (U.S. EPA Method 1311).

A1RM1 = Suspected roofing material (RM) Sample collected from Area 1 at Location S64 (on surface).

SO = Soil

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1RM1	A1S1	A1S2	A1S3	A1S4	A1S5	A1S6	A1S7	A1S8
Sample ID:				SEPA1RM1	SEPSA1S1	SEPSA1S2	SEPSA1S3	SEPSA1S4	SEPSA1S5	SEPSA1S6	SEPSA1S7	SEPSA1S8
Sample Date:				11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
Percent Solids - Method D2540/D4643												
D2540	9999000-58-8	Solids	mg/kg	86.9	83	39.3	87.5	83.7	88.8	72.8	55	84.8
D4643	9999000-58-8	Solids	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010												
SW6010	7440-38-2	Arsenic	mg/kg	3.8	2.2	6.4	2.5	4.3	4.5	5	5.6	0.3
SW6010	7440-39-3	Barium	mg/kg	52.2	48.4	106	62.5	70.7	72	91.1	97	41.9
SW6010	7440-43-9	Cadmium	mg/kg	0.68	0.93	2	1.4	0.48	0.17	2.4	2.3	2
SW6010	7440-47-3	Chromium	mg/kg	32.7	20	50.4	41.5	16.6	12.9	24.9	26	10.3
SW6010	7439-92-1	Lead	mg/kg	125	40.7	115	91.8	26.2	14.1	102	95.1	43.4
SW6010	7782-49-2	Selenium	mg/kg	0.74	0.59	1.2	0.31 U	0.36	0.32 U	0.38 U	0.5	0.72
SW6010	7440-22-4	Silver	mg/kg	0.18	0.11 U	3.7	0.25	0.12 U	0.11 U	0.25	0.24	0.12 U
Mercury - Method SW7471												
SW7471	7439-97-6	Mercury	mg/kg	0.026	0.13	1.1	0.047	0.14	0.034	0.082	0.11	0.019
Organochlorine Pesticides - Method SW8081												
SW8081	72-54-8	4,4'-DDD	mg/kg	0.00041 U	0.00044 U	0.00091 U	0.00039 U	0.0004 U	0.00039 U	0.00047 U	0.0006 U	0.00043 U
SW8081	72-55-9	4,4'-DDE	mg/kg	0.0003 U	0.00032 U	0.00067 U	0.00029 U	0.0955	0.00029 U	0.00035 U	0.00044 U	0.00032 U
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00037 U	0.0004 U	0.00082 U	0.00035 U	0.0923	0.00035 U	0.00042 U	0.00054 U	0.00039 U
SW8081	309-00-2	Aldrin	mg/kg	0.00035 U	0.00037 U	0.00077 U	0.00033 U	0.00034 U	0.00033 U	0.00039 U	0.00051 U	0.00036 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00022 U	0.00024 U	0.0005 U	0.00021 U	0.00022 U	0.00021 U	0.00026 U	0.00033 U	0.00024 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00047 U	0.0005 U	0.001 U	0.00045 U	0.00046 U	0.00044 U	0.00053 U	0.00069 U	0.00049 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00037 U	0.0004 U	0.00082 U	0.00035 U	0.00036 U	0.00035 U	0.00042 U	0.00054 U	0.00039 U
SW8081	60-57-1	Dieldrin	mg/kg	0.00029 U	0.00031 U	0.00065 U	0.00028 U	0.00029 U	0.00028 U	0.00034 U	0.00043 U	0.00031 U
SW8081	959-98-8	Endosulfan I	mg/kg	0.00029 U	0.0003 U	0.00063 U	0.00027 U	0.00028 U	0.00027 U	0.00033 U	0.00042 U	0.0003 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00045 U	0.00048 U	0.001 U	0.00043 U	0.00044 U	0.00042 U	0.00051 U	0.00066 U	0.00047 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.00032 U	0.00035 U	0.00072 U	0.00031 U	0.00032 U	0.0003 U	0.00037 U	0.00047 U	0.00034 U
SW8081	72-20-8	Endrin	mg/kg	0.00024 U	0.00026 U	0.00054 U	0.00023 U	0.00024 U	0.00023 U	0.00028 U	0.00036 U	0.00025 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.00039 U	0.00042 U	0.00087 U	0.00037 U	0.00038 U	0.00037 U	0.00045 U	0.00058 U	0.00041 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.00031 U	0.00033 U	0.00068 U	0.00029 U	0.0003 U	0.00029 U	0.00035 U	0.00045 U	0.00032 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.00037 U	0.00039 U	0.00081 U	0.00035 U	0.00036 U	0.00035 U	0.00042 U	0.00054 U	0.00039 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00028 U	0.0003 U	0.00062 U	0.00026 U	0.00027 U	0.00026 U	0.00032 U	0.00041 U	0.00029 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.00052 U	0.00055 U	0.0011 U	0.00049 U	0.00051 U	0.00049 U	0.00059 U	0.00076 U	0.00054 U
SW8081	57-74-9	Chlordane	mg/kg	0.00028 U	0.0003 U	0.00062 U	0.00026 U	0.00027 U	0.00026 U	0.00032 U	0.00041 U	0.00029 U
SW8081	76-44-8	Heptachlor	mg/kg	0.00037 U	0.00039 U	0.00081 U	0.00035 U	0.00036 U	0.00034 U	0.00042 U	0.00054 U	0.00038 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00074 U	0.00079 U	0.0016 U	0.0007 U	0.00072 U	0.00069 U	0.00084 U	0.0011 U	0.00077 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.0095 U	0.01 U	0.021 U	0.009 U	0.0092 U	0.0089 U	0.011 U	0.014 U	0.0099 U
PCBs - Method SW8082												
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.0098 U	0.01 U	0.022 U	0.0093 U	0.0095 U	0.0092 U	0.011 U	0.014 U	0.01 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.023 U	0.024 U	0.05 U	0.022 U	0.022 U	0.021 U	0.026 U	0.033 U	0.024 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.019 U	0.02 U	0.042 U	0.018 U	0.019 U	0.018 U	0.022 U	0.028 U	0.02 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.012 U	0.013 U	0.026 U	0.011 U	0.012 U	0.011 U	0.014 U	0.018 U	0.013 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.011 U	0.012 U	0.025 U	0.011 U	0.011 U	0.011 U	0.013 U	0.017 U	0.012 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.018 U	0.019 U	0.039 U	0.017 U	0.017 U	0.017 U	0.104	0.026 U	0.018 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	0.012 U	1.53	7.97	0.476	0.342	0.15	0.228	0.0897	0.0639
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.012 U	0.013 U	0.026 U	0.011 U	0.012 U	0.011 U	0.014 U	0.018 U	0.013 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.011 U	0.012 U	0.024 U	0.011 U	0.011 U	0.01 U	0.013 U	0.016 U	0.012 U
Chlorinate Herbicides - Method SW8151												
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.0006 U	0.0007 U	0.0014 U	0.00065 U	0.00065 U	0.00059 U	0.00078 U	0.00099 U	0.00068 U
SW8151	94-75-7	2,4-D	mg/kg	0.005 U	0.0058 U	0.012 U	0.0054 U	0.0054 U	0.0049 U	0.0064 U	0.0082 U	0.0057 U
VOCs - Method SW8260												
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.00033 U	0.00038 U	0.00079 U	0.00036 U	0.00038 U	0.00034 U	0.0004 U	0.00056 U	0.00037 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00039 U	0.00046 U	0.00095 U	0.00043 U	0.00045 U	0.00041 U	0.00048 U	0.00066 U	0.00044 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.00094 U	0.0011 U	0.0023 U	0.001 U	0.0011 U	0.00098 U	0.0012 U	0.0016 U	0.0011 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.00036 U	0.00042 U	0.00087 U	0.0004 U	0.00042 U	0.00038 U	0.00044 U	0.00061 U	0.0004 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.00033 U	0.00038 U	0.00079 U	0.00036 U	0.00038 U	0.00034 U	0.0004 U	0.00056 U	0.00037 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00024 U	0.00028 U	0.00057 U	0.00026 U	0.00027 U	0.00025 U	0.00029 U	0.0004 U	0.00027 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00021 U	0.00024 U	0.0005 U	0.00023 U	0.00024 U	0.00022 U	0.00025 U	0.00035 U	0.00023 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0015 U	0.0018 U	0.0037 U	0.0017 U	0.0018 U	0.0016 U	0.0019 U	0.0026 U	0.0017 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00063 U	0.00073 U	0.0015 U	0.0007 U	0.00073 U	0.00066 U	0.00077 U	0.0011 U	0.0007 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00039 U	0.00045 U	0.00093 U	0.00043 U	0.00045 U	0.0004 U	0.00047 U	0.00065 U	0.00043 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.00037 U	0.00043 U	0.00089 U	0.00041 U	0.00043 U	0.00038 U	0.00045 U	0.00062 U	0.00041 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.0005 U	0.00058 U	0.0012 U	0.00055 U	0.00058 U	0.00052 U	0.00061 U	0.00084 U	0.00056 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00025 U	0.00029 U	0.0006 U	0.00028 U	0.00029 U	0.00026 U	0.00031 U	0.00042 U	0.00028 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00029 U	0.00034 U	0.00069 U	0.00032 U	0.00033 U	0.0003 U	0.00035 U	0.00049 U	0.00032 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.088 U	0.1 U	0.21 U	0.097 U	0.1 U	0.092 U	0.11 U	0.15 U	0.098 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0051 U	0.0059 U	0.012 U	0.0056 U	0.0058 U	0.0053 U	0.0062 U	0.0085 U	0.0056 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.002 U	0.0024 U	0.0049 U	0.0023 U	0.0024 U	0.0021 U	0.0025 U	0.0034 U	0.0023 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0015 U	0.0018 U	0.0037 U	0.0017 U	0.0018 U	0.0016 U	0.0019 U	0.0026 U	0.0017 U
SW8260	67-64-1	Acetone	mg/kg	0.0052 U	0.0061 U	0.013 U	0.0058 U	0.0061 U	0.0055 U	0.0064 U	0.0088 U	0.0058 U
SW8260	71-43-2	Benzene	mg/kg	0.00014 U	0.00017 U	0.00057 U	0.00028 U	0.00017 U	0.00015 U	0.00018 U	0.00024 U	0.00016 U
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00032 U	0.00038 U	0.00078 U	0.00036 U	0.00037 U	0.00034 U	0.00039 U	0.00054 U	0.00036 U
SW8260	75-25-2	Bromoform	mg/kg	0.0003 U	0.00035 U	0.00072 U	0.00033 U	0.00035 U	0.00031 U	0.00037 U	0.00051 U	0.00034 U
SW8260	74-83-9	Bromomethane	mg/kg	0.00055 U	0.00064 U	0.0013 U	0.00061 U	0.00064 U	0.00058 U	0.00067 U	0.00093 U	0.00062 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00016 U	0.00019 U	0.00039 U	0.00018 U	0.00019 U	0.00017 U	0.0002 U	0.00027 U	0.00018 U
SW8260	56-23-5	Carbon tetrachloride	mg/kg	0.00029 U	0.00034 U	0.00069 U	0.000					

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1RM1	A1S1	A1S2	A1S3	A1S4	A1S5	A1S6	A1S7	A1S8
Sample ID:				SEPA1RM1	SEPSA1S1	SEPSA1S2	SEPSA1S3	SEPSA1S4	SEPSA1S5	SEPSA1S6	SEPSA1S7	SEPSA1S8
Sample Date:				11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8260	75-00-3	Chloroethane	mg/kg	0.0011 U	0.0013 U	0.0028 U	0.0013 U	0.0013 U	0.0012 U	0.0014 U	0.0019 U	0.0013 U
SW8260	67-66-3	Chloroform	mg/kg	0.00029 U	0.00034 U	0.0007 U	0.00032 U	0.00034 U	0.0003 U	0.00036 U	0.00049 U	0.00033 U
SW8260	74-87-3	Chloromethane	mg/kg	0.00039 U	0.00046 U	0.00095 U	0.00044 U	0.00046 U	0.00041 U	0.00048 U	0.00066 U	0.00044 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.00024 U	0.00028 U	0.00057 U	0.00026 U	0.00027 U	0.00025 U	0.00029 U	0.0004 U	0.00027 U
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.00026 U	0.0003 U	0.00063 U	0.00029 U	0.0003 U	0.00027 U	0.00032 U	0.00044 U	0.00029 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.0003 U	0.00034 U	0.00071 U	0.00033 U	0.00034 U	0.00031 U	0.00036 U	0.0005 U	0.00033 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.00028 U	0.00032 U	0.00067 U	0.00031 U	0.00032 U	0.00029 U	0.00034 U	0.00047 U	0.00031 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.00041 U	0.00047 U	0.00098 U	0.00045 U	0.00047 U	0.00042 U	0.00049 U	0.00068 U	0.00045 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.00053	0.00023 U	0.0021	0.0006	0.00023 U	0.00037	0.00025 U	0.00034 U	0.00022 U
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.00017 U	0.0002 U	0.00041 U	0.00019 U	0.0002 U	0.00018 U	0.00021 U	0.00028 U	0.00019 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.0013	0.00065 U	0.0052	0.0015	0.00064 U	0.00076	0.00068 U	0.00094 U	0.00072
SW8260	79-20-9	Methyl acetate	mg/kg	0.0019 U	0.0022 U	0.0046 U	0.0021 U	0.0022 U	0.002 U	0.0023 U	0.0032 U	0.0021 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.00039 U	0.00046 U	0.00095 U	0.00044 U	0.00046 U	0.00041 U	0.00048 U	0.00066 U	0.00044 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.00019 U	0.00022 U	0.00045 U	0.00021 U	0.00022 U	0.0002 U	0.00023 U	0.00032 U	0.00021 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.002 U	0.0023 U	0.0047 U	0.0022 U	0.0023 U	0.002 U	0.0024 U	0.0033 U	0.0022 U
SW8260	95-47-6	o-Xylene	mg/kg	0.0011	0.00024 U	0.0043	0.0011	0.00035	0.00075	0.00025 U	0.00041	0.00084
SW8260	100-42-5	Styrene	mg/kg	0.00027 U	0.00031 U	0.00064 U	0.00029 U	0.00031 U	0.00028 U	0.00033 U	0.00045 U	0.0003 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.0024	0.00055 U	0.0026	0.00093	0.00054 U	0.00069	0.00057 U	0.00079 U	0.00099
SW8260	108-88-3	Toluene	mg/kg	0.00028	0.00019 U	0.0014	0.00051	0.00019 U	0.00051	0.0002 U	0.00027 U	0.00018 U
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.00049 U	0.00057 U	0.0012 U	0.00054 U	0.00056 U	0.00051 U	0.00059 U	0.00082 U	0.00054 U
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.00031 U	0.00036 U	0.00075 U	0.00034 U	0.00036 U	0.00032 U	0.00038 U	0.00052 U	0.00035 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.0004 U	0.00047 U	0.00097 U	0.0015	0.00093	0.0018	0.0013	0.00068 U	0.00045 U
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.00026 U	0.0003 U	0.00062 U	0.00029 U	0.0003 U	0.00027 U	0.00032 U	0.00044 U	0.00029 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.0005 U	0.00058 U	0.0012 U	0.00055 U	0.00058 U	0.00052 U	0.00061 U	0.00084 U	0.00056 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.00039 U	0.00046 U	0.00095 U	0.00043 U	0.00045 U	0.00041 U	0.00048 U	0.00066 U	0.00044 U
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.0024	0.00024 U	0.0095	0.0026	0.00073	0.0015	0.00025 U	0.0011	0.0016
SVOCs - Method SW8270												
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.045 U	0.011 U	0.023 U	0.011 U	0.011 U	0.01 U	0.013 U	0.016 U	0.012 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.033 U	0.0081 U	0.017 U	0.0079 U	0.0082 U	0.0076 U	0.0092 U	0.012 U	0.0087 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.044 U	0.011 U	0.022 U	0.011 U	0.011 U	0.01 U	0.012 U	0.016 U	0.012 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.15 U	0.037 U	0.078 U	0.036 U	0.038 U	0.035 U	0.043 U	0.054 U	0.04 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.17 U	0.042 U	0.088 U	0.041 U	0.043 U	0.039 U	0.048 U	0.061 U	0.045 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.14 U	0.034 U	0.071 U	0.033 U	0.035 U	0.032 U	0.039 U	0.049 U	0.037 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	0.24 U	0.058 U	0.12 U	0.057 U	0.06 U	0.055 U	0.067 U	0.084 U	0.063 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	0.624	0.061 U	0.13 U	0.059 U	0.062 U	0.057 U	0.07 U	0.088 U	0.066 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.18 U	0.044 U	0.092 U	0.043 U	0.045 U	0.042 U	0.05 U	0.064 U	0.048 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.064 U	0.016 U	0.033 U	0.015 U	0.016 U	0.015 U	0.018 U	0.023 U	0.017 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.056 U	0.014 U	0.029 U	0.013 U	0.014 U	0.013 U	0.016 U	0.02 U	0.015 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.045 U	0.011 U	0.023 U	0.011 U	0.011 U	0.011 U	0.013 U	0.016 U	0.012 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.15 U	0.037 U	0.076 U	0.036 U	0.037 U	0.034 U	0.042 U	0.053 U	0.04 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.18 U	0.044 U	0.092 U	0.043 U	0.045 U	0.042 U	0.05 U	0.064 U	0.048 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	4.51	0.02 U	0.601	0.02 U	0.021 U	0.019 U	0.023 U	0.029 U	0.022 U
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	0.17 U	0.041 U	0.086 U	0.04 U	0.042 U	0.039 U	0.047 U	0.06 U	0.045 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.065 U	0.016 U	0.033 U	0.016 U	0.016 U	0.015 U	0.018 U	0.023 U	0.017 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.16 U	0.038 U	0.08 U	0.038 U	0.039 U	0.036 U	0.044 U	0.056 U	0.042 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.037 U	0.0092 U	0.019 U	0.009 U	0.0094 U	0.0086 U	0.011 U	0.013 U	0.01 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.059 U	0.014 U	0.03 U	0.014 U	0.015 U	0.014 U	0.017 U	0.021 U	0.016 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.053 U	0.013 U	0.027 U	0.013 U	0.013 U	0.012 U	0.015 U	0.019 U	0.014 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.15 U	0.036 U	0.076 U	0.035 U	0.037 U	0.034 U	0.041 U	0.052 U	0.039 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.047 U	0.012 U	0.024 U	0.011 U	0.012 U	0.011 U	0.013 U	0.017 U	0.013 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.044 U	0.011 U	0.023 U	0.011 U	0.011 U	0.01 U	0.012 U	0.016 U	0.012 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	0.27	0.046 U	0.096 U	0.045 U	0.047 U	0.043 U	0.053 U	0.067 U	0.05 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.057 U	0.014 U	0.03 U	0.014 U	0.014 U	0.013 U	0.016 U	0.02 U	0.015 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	0.25 U	0.061 U	0.13 U	0.06 U	0.063 U	0.057 U	0.07 U	0.089 U	0.066 U
SW8270	83-32-9	Acenaphthene	mg/kg	49.1	0.0482	2.67	0.0555	0.0584	0.0341	0.0342	0.015 U	0.011 U
SW8270	208-96-8	Acenaphthylene	mg/kg	1.76	0.0269	0.156	0.0308	0.071	0.011 U	0.0176	0.017 U	0.013 U
SW8270	98-86-2	Acetophenone	mg/kg	0.026 U	0.0064 U	0.013 U	0.0062 U	0.0191	0.006 U	0.0073 U	0.0092 U	0.28
SW8270	120-12-7	Anthracene	mg/kg	65.4	0.111	3	0.118	0.231	0.0755	0.0911	0.018 U	0.0264
SW8270	1912-24-9	Atrazine	mg/kg	0.029 U	0.0071 U	0.015 U	0.007 U	0.0073 U	0.0067 U	0.0082 U	0.01 U	0.0077 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.034 U	0.0083 U	0.15	0.0081 U	0.0085 U	0.0078 U	0.0095 U	0.012 U	0.185
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	255	0.392	11.9	0.307	0.646	0.203	0.358	0.0954	0.116
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	221	0.395	10.4	0.319	0.673	0.195	0.361	0.105	0.136
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	305	0.525	14.4	0.407	0.845	0.238	0.435	0.138	0.176
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	127	0.294	5.58	0.235	0.457	0.123	0.261	0.0757	0.106
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	106	0.182	4.82	0.157	0.293	0.0875	0.172	0.0465	0.0648
SW8270	92-52-4	Biphenyl	mg/kg	1.22	0.0042 U	0.181	0.0041 U	0.0043 U	0.0039 U	0.0048 U	0.0061 U	0.0045 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.059 U	0.015 U	0.031 U	0.014 U	0.015 U	0.014 U	0.017 U	0.021 U	0.016 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.044 U	0.011 U	0.023 U	0.011 U	0.011 U	0.01 U	0.012 U	0.016 U	0.012 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	0.13 U	0.0959	1.07	0.153	0.101	0.03 U	0.242	0.046 U	0.221
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	2.39	0.109	0.206	0.02 U	0.021 U	0.02 U	0.024 U	0.03 U	0.023 U
SW8270	105-60-2	Caprolactam	mg/kg	0.046 U	0.011 U	0.024 U	0.011 U	0.012 U	0.011 U	0.013 U	0.017 U	0.012 U
SW8270	86-74-8	Carbazole	mg/kg	52.7	0.073	3.13	0.0634	0.0704	0.016 U	0.0597	0.024 U	0.018 U
SW8270	218-01-9	Chrysene	mg/kg	8.04	0.436	13.8	0.334	0.704	0.201	0.396	0.111	0.132
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.033 U	0.008 U	0.017 U	0.0079 U	0.0082 U	0.0076 U	0.0092 U	0.012 U	0.0087 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.071 U	0.018 U	0.037 U	0.017 U	0.018 U	0.017 U	0.02 U	0.026 U	0.019 U
SW8270	53-70-3	Dibenz(a,h)anthracene	mg/kg	42	0.0813	1.69	<					

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1RM1	A1S1	A1S2	A1S3	A1S4	A1S5	A1S6	A1S7	A1S8
Sample ID:				SEPA1RM1	SEPSA1S1	SEPSA1S2	SEPSA1S3	SEPSA1S4	SEPSA1S5	SEPSA1S6	SEPSA1S7	SEPSA1S8
Sample Date:				11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	14.4	0.0232	1.39	0.0287	0.0314	0.0185	0.0177	0.016 U	0.012 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.05 U	0.012 U	0.026 U	0.012 U	0.013 U	0.012 U	0.014 U	0.018 U	0.013 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.052 U	0.013 U	0.027 U	0.012 U	0.013 U	0.012 U	0.015 U	0.018 U	0.014 U
SW8270	206-44-0	Fluoranthene	mg/kg	517	0.921	28.6	0.721	1.34	0.494	0.753	0.197	0.254
SW8270	86-73-7	Fluorene	mg/kg	31	0.047	1.91	0.0517	0.0669	0.0345	0.0317	0.017 U	0.013 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.048 U	0.012 U	0.025 U	0.012 U	0.012 U	0.011 U	0.013 U	0.017 U	0.013 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.041 U	0.01 U	0.021 U	0.0098 U	0.01 U	0.0095 U	0.012 U	0.015 U	0.011 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.15 U	0.037 U	0.077 U	0.036 U	0.038 U	0.035 U	0.042 U	0.053 U	0.04 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.041 U	0.01 U	0.021 U	0.0098 U	0.01 U	0.0095 U	0.012 U	0.015 U	0.011 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	154	0.341	6.51	0.255	0.505	0.137	0.276	0.0848	0.108
SW8270	78-59-1	Isophorone	mg/kg	0.039 U	0.0097 U	0.02 U	0.0095 U	0.01 U	0.0092 U	0.011 U	0.014 U	0.011 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.036 U	0.0088 U	0.018 U	0.0086 U	0.009 U	0.0083 U	0.01 U	0.013 U	0.0096 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.088 U	0.022 U	0.045 U	0.021 U	0.022 U	0.02 U	0.025 U	0.031 U	0.023 U
SW8270	91-20-3	Naphthalene	mg/kg	2.83	0.0099 U	0.69	0.0202	0.01 U	0.0093 U	0.011 U	0.014 U	0.011 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.042 U	0.01 U	0.022 U	0.01 U	0.011 U	0.0098 U	0.012 U	0.015 U	0.011 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.25 U	0.062 U	0.13 U	0.061 U	0.063 U	0.058 U	0.071 U	0.09 U	0.067 U
SW8270	85-01-8	Phenanthrene	mg/kg	304	0.495	21.6	0.434	0.707	0.333	0.403	0.0777	0.113
SW8270	108-95-2	Phenol	mg/kg	0.15 U	0.038 U	0.08 U	0.037 U	0.039 U	0.036 U	0.043 U	0.055 U	0.041 U
SW8270	129-00-0	Pyrene	mg/kg	372	0.674	21.9	0.53	1.03	0.357	0.594	0.161	0.198
SW8270	110-86-1	Pyridine	mg/kg	0.059 U	0.014 U	0.03 U	0.014 U	0.015 U	0.014 U	0.017 U	0.021 U	0.016 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S9	A1S10	A1S11	A1S12	A1S13	A1S14	A1S15	A1S16	A1S17
Sample ID:				SEPSA1S9	SEPSA1S10	SEPSA1S11	SEPSA1S12	SEPSA1S13	SEPSA1S14	SEPSA1S15	SEPSA1S16	SEPSA1S17
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	11/01/2013	11/01/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
Percent Solids - Method D2540/D4643												
D2540	9999000-58-8	Solids	mg/kg	66.9	71.4	86.1	93	90	87.5	87.1	83.8	88
D4643	9999000-58-8	Solids	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010												
SW6010	7440-38-2	Arsenic	mg/kg	5.3	5	3.8	2.5	6.6	5	4.7	4.6	4
SW6010	7440-39-3	Barium	mg/kg	93.6	63.4	60.9	48.7	63.8	95.5	65	103	75.3
SW6010	7440-43-9	Cadmium	mg/kg	1.6	2.5	1	0.57	0.6	1.2	0.77	0.14	0.12
SW6010	7440-47-3	Chromium	mg/kg	19.2	14.2	15.9	9.1	13.9	20.5	16.2	14.6	14.7
SW6010	7439-92-1	Lead	mg/kg	32.7	33.8	94.1	13.1	19.1	44.9	29.9	11.9	12.1
SW6010	7782-49-2	Selenium	mg/kg	0.52	0.48	0.39	1	0.33	0.72	0.5	0.32 U	0.32 U
SW6010	7440-22-4	Silver	mg/kg	0.17	0.14 U	1.1	0.55 U	0.92	9.6	0.55	0.12 U	0.11 U
Mercury - Method SW7471												
SW7471	7439-97-6	Mercury	mg/kg	0.078	0.071	0.17	0.03	0.064	0.19	46.2	0.12	0.086
Organochlorine Pesticides - Method SW8081												
SW8081	72-54-8	4,4'-DDD	mg/kg	0.00051 U	0.00051 U	0.0012	0.0012	0.0031	0.0042	0.00037 U	0.00039 U	0.00041 U
SW8081	72-55-9	4,4'-DDE	mg/kg	0.00038 U	0.00038 U	0.00031 U	0.00027 U	0.00027 U	0.0003 U	0.00027 U	0.00029 U	0.0003 U
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00046 U	0.00046 U	0.00038 U	0.00034 U	0.00033 U	0.00037 U	0.00033 U	0.00035 U	0.00037 U
SW8081	309-00-2	Aldrin	mg/kg	0.00043 U	0.00043 U	0.00036 U	0.00031 U	0.0003 U	0.00034 U	0.00031 U	0.00033 U	0.00034 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00028 U	0.00028 U	0.00023 U	0.0002 U	0.0002 U	0.00022 U	0.0002 U	0.00021 U	0.00022 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00059 U	0.00058 U	0.00048 U	0.00042 U	0.00041 U	0.00047 U	0.00042 U	0.00045 U	0.00046 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00046 U	0.00046 U	0.00038 U	0.00034 U	0.00033 U	0.00037 U	0.00033 U	0.00035 U	0.00037 U
SW8081	60-57-1	Dieldrin	mg/kg	0.00037 U	0.00037 U	0.0003 U	0.00027 U	0.00026 U	0.00029 U	0.00026 U	0.00028 U	0.00029 U
SW8081	959-98-8	Endosulfan I	mg/kg	0.00036 U	0.00035 U	0.00029 U	0.00026 U	0.00025 U	0.00028 U	0.00025 U	0.00027 U	0.00028 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00056 U	0.00056 U	0.00046 U	0.00041 U	0.0004 U	0.00045 U	0.0004 U	0.00043 U	0.00044 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.0004 U	0.0004 U	0.00033 U	0.00029 U	0.00028 U	0.00032 U	0.00029 U	0.00031 U	0.00032 U
SW8081	72-20-8	Endrin	mg/kg	0.0003 U	0.0003 U	0.00025 U	0.00022 U	0.00021 U	0.00024 U	0.00022 U	0.00023 U	0.00024 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.00049 U	0.00049 U	0.0004 U	0.00036 U	0.00035 U	0.00039 U	0.00035 U	0.00037 U	0.00039 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.00038 U	0.00038 U	0.00032 U	0.00028 U	0.00027 U	0.0003 U	0.00027 U	0.00029 U	0.0003 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.00046 U	0.00046 U	0.00038 U	0.00033 U	0.00032 U	0.00037 U	0.00033 U	0.00035 U	0.00036 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00035 U	0.00035 U	0.00029 U	0.00025 U	0.00024 U	0.00028 U	0.00025 U	0.00026 U	0.00027 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.00065 U	0.00064 U	0.00053 U	0.00047 U	0.0031	0.00052 U	0.00046 U	0.00049 U	0.00051 U
SW8081	57-74-9	Chlordane	mg/kg	0.00035 U	0.00035 U	0.00029 U	0.00025 U	0.0031	0.00028 U	0.00025 U	0.00026 U	0.00027 U
SW8081	76-44-8	Heptachlor	mg/kg	0.00046 U	0.00045 U	0.00038 U	0.00033 U	0.00032 U	0.00036 U	0.00033 U	0.00035 U	0.00036 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00092 U	0.00091 U	0.00076 U	0.00067 U	0.00065 U	0.00073 U	0.00066 U	0.0007 U	0.00073 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.012 U	0.012 U	0.0098 U	0.0086 U	0.0083 U	0.0094 U	0.0085 U	0.009 U	0.0094 U
PCBs - Method SW8082												
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.012 U	0.012 U	0.01 U	0.0088 U	0.0086 U	0.0097 U	0.0087 U	0.0093 U	0.0097 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.028 U	0.028 U	0.023 U	0.02 U	0.02 U	0.022 U	0.02 U	0.022 U	0.022 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.024 U	0.024 U	0.02 U	0.017 U	0.017 U	0.019 U	0.017 U	0.018 U	0.019 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.015 U	0.015 U	0.012 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.012 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.014 U	0.014 U	0.012 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.022 U	0.022 U	0.018 U	0.016 U	0.015 U	0.017 U	0.016 U	0.017 U	0.017 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	0.015 U	0.132	0.341	0.127	0.707	1.16	0.84	1.52	1.21
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.015 U	0.015 U	0.012 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.012 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.014 U	0.014 U	0.011 U	0.01 U	0.0097 U	0.011 U	0.0099 U	0.011 U	0.011 U
Chlorinate Herbicides - Method SW8151												
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.00079 U	0.00074 U	0.00063 U	0.00062 U	0.00064 U	0.00062 U	0.00066 U	0.00066 U	0.00066 U
SW8151	94-75-7	2,4-D	mg/kg	0.0066 U	0.0061 U	0.0052 U	0.0051 U	0.0053 U	0.0052 U	0.0054 U	0.0054 U	0.0055 U
VOCs - Method SW8260												
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.00047 U	0.00036 U	0.00035 U	0.00034 U	0.00028 U	0.00033 U	0.00032 U	0.00038 U	0.00033 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00056 U	0.00043 U	0.00041 U	0.0004 U	0.00034 U	0.0004 U	0.00038 U	0.00045 U	0.0004 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.0013 U	0.001 U	0.00099 U	0.00096 U	0.00081 U	0.00096 U	0.00092 U	0.0011 U	0.00095 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.00051 U	0.00039 U	0.00038 U	0.00037 U	0.00031 U	0.00037 U	0.00035 U	0.00042 U	0.00036 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.00047 U	0.00036 U	0.00035 U	0.00034 U	0.00028 U	0.00033 U	0.00032 U	0.00038 U	0.00033 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00034 U	0.00026 U	0.00025 U	0.00024 U	0.00021 U	0.00024 U	0.00023 U	0.00027 U	0.00024 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00029 U	0.00023 U	0.00022 U	0.00021 U	0.00018 U	0.00021 U	0.0002 U	0.00024 U	0.00021 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0022 U	0.0017 U	0.0016 U	0.0016 U	0.0013 U	0.0016 U	0.0015 U	0.0018 U	0.0015 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00089 U	0.00069 U	0.00066 U	0.00064 U	0.00054 U	0.00064 U	0.00062 U	0.00073 U	0.00064 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00055 U	0.00042 U	0.00041 U	0.0004 U	0.00034 U	0.00039 U	0.00038 U	0.00045 U	0.00039 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.00052 U	0.0004 U	0.00039 U	0.00038 U	0.00032 U	0.00037 U	0.00036 U	0.00043 U	0.00037 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.00071 U	0.00055 U	0.00053 U	0.00051 U	0.00043 U	0.00051 U	0.00049 U	0.00058 U	0.00051 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00035 U	0.00027 U	0.00026 U	0.00025 U	0.00022 U	0.00025 U	0.00025 U	0.00029 U	0.00025 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00041 U	0.00031 U	0.0003 U	0.00029 U	0.00025 U	0.00029 U	0.00028 U	0.00033 U	0.00029 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.12 U	0.096 U	0.092 U	0.089 U	0.076 U	0.089 U	0.086 U	0.1 U	0.089 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0071 U	0.0055 U	0.0053 U	0.0051 U	0.0044 U	0.0051 U	0.005 U	0.0058 U	0.0051 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.0029 U	0.0022 U	0.0022 U	0.0021 U	0.0018 U	0.0021 U	0.002 U	0.0024 U	0.0021 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0021 U	0.0017 U	0.0016 U	0.0015 U	0.0013 U	0.0015 U	0.0015 U	0.0018 U	0.0015 U
SW8260	67-64-1	Acetone	mg/kg	0.0074 U	0.0057 U	0.0055 U	0.0053 U	0.0045 U	0.0053 U	0.0051 U	0.006 U	0.0053 U
SW8260	71-43-2	Benzene	mg/kg	0.0002 U	0.00016 U	0.00015 U	0.00015 U	0.00012 U	0.00015 U	0.00014 U	0.00017 U	0.00039
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00046 U	0.00035 U	0.00034 U	0.00033 U	0.00028 U	0.00033 U	0.00032 U	0.00037 U	0.00033 U
SW8260	75-25-2	Bromoform	mg/kg	0.00043 U	0.00033 U	0.00032 U	0.00031 U	0.00026 U	0.00031 U	0.00029 U	0.00035 U	0.0003 U
SW8260	74-83-9	Bromomethane	mg/kg	0.00078 U	0.0006 U	0.00058 U	0.00056 U	0.00048 U	0.00056 U	0.00054 U	0.00064 U	0.00056 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00023 U	0.00018 U	0.00017 U	0.00016 U	0.00014 U	0.00016 U	0.00016 U	0.00019 U	0.00016 U
SW8260	56-23-5	Carbon tetrach										

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S9	A1S10	A1S11	A1S12	A1S13	A1S14	A1S15	A1S16	A1S17
Sample ID:				SEPSA1S9	SEPSA1S10	SEPSA1S11	SEPSA1S12	SEPSA1S13	SEPSA1S14	SEPSA1S15	SEPSA1S16	SEPSA1S17
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	11/01/2013	11/01/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8260	75-00-3	Chloroethane	mg/kg	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.00099 U	0.0012 U	0.0011 U	0.0013 U	0.0012 U
SW8260	67-66-3	Chloroform	mg/kg	0.00041 U	0.00032 U	0.00031 U	0.0003 U	0.00025 U	0.0003 U	0.00029 U	0.00034 U	0.00029 U
SW8260	74-87-3	Chloromethane	mg/kg	0.00056 U	0.00043 U	0.00041 U	0.0004 U	0.00034 U	0.0004 U	0.00039 U	0.00045 U	0.0004 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.00034 U	0.00026 U	0.00025 U	0.00024 U	0.00035	0.00034	0.00023 U	0.00028	0.0051
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.00037 U	0.00028 U	0.00027 U	0.00027 U	0.00023 U	0.00026 U	0.00026 U	0.0003 U	0.00026 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.00042 U	0.00032 U	0.00031 U	0.0003 U	0.00025 U	0.0003 U	0.00029 U	0.00034 U	0.0003 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.00039 U	0.0003 U	0.00029 U	0.00028 U	0.00024 U	0.00028 U	0.00027 U	0.00032 U	0.00028 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.00057 U	0.00044 U	0.00043 U	0.00041 U	0.00035 U	0.00041 U	0.0004 U	0.00047 U	0.00041 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.00028 U	0.00022 U	0.00021 U	0.0002 U	0.00017 U	0.0002 U	0.0002 U	0.0003	0.00073
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.00024 U	0.00018 U	0.00018 U	0.00017 U	0.00015 U	0.00017 U	0.00017 U	0.00019 U	0.00017 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.00079 U	0.00061 U	0.00069	0.00057 U	0.00048 U	0.00056 U	0.00054 U	0.00081	0.0016
SW8260	79-20-9	Methyl acetate	mg/kg	0.0027 U	0.0021 U	0.002 U	0.002 U	0.0017 U	0.0019 U	0.0019 U	0.0022 U	0.0019 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.00056 U	0.00043 U	0.00041 U	0.0004 U	0.00034 U	0.0004 U	0.00039 U	0.00045 U	0.0004 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.00027 U	0.00021 U	0.0002 U	0.00019 U	0.00016 U	0.00019 U	0.00018 U	0.00022 U	0.00019 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.0028 U	0.0021 U	0.0021 U	0.002 U	0.0017 U	0.002 U	0.0019 U	0.0023 U	0.002 U
SW8260	95-47-6	o-Xylene	mg/kg	0.00029 U	0.00041	0.00026	0.00021 U	0.00018 U	0.00021 U	0.0002 U	0.00061	0.0013
SW8260	100-42-5	Styrene	mg/kg	0.00038 U	0.00029 U	0.00028 U	0.00027 U	0.00023 U	0.00027 U	0.00026 U	0.00031 U	0.00027 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.00067 U	0.00051 U	0.0005 U	0.00048 U	0.00041 U	0.00048 U	0.00046 U	0.00054 U	0.0009
SW8260	108-88-3	Toluene	mg/kg	0.00023 U	0.00018 U	0.00094	0.00052	0.00067	0.00054	0.0004	0.00038	0.00085
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.00069 U	0.00053 U	0.00051 U	0.00049 U	0.00042 U	0.00049 U	0.00048 U	0.00056 U	0.00069
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.00044 U	0.00034 U	0.00033 U	0.00032 U	0.00027 U	0.00031 U	0.0003 U	0.00036 U	0.00031 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.00057 U	0.00044 U	0.00042 U	0.0021	0.00054	0.00095	0.00048	0.0006	0.00041 U
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.00037 U	0.00028 U	0.00027 U	0.00026 U	0.00022 U	0.00026 U	0.00025 U	0.0003 U	0.00026 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.00071 U	0.00054 U	0.00053 U	0.00051 U	0.00043 U	0.00051 U	0.00049 U	0.00058 U	0.0005 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.00056 U	0.00043 U	0.00041 U	0.0004 U	0.00034 U	0.0004 U	0.00038 U	0.00045 U	0.0007
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.00029 U	0.00088	0.00095	0.00031	0.00047	0.00021 U	0.00023	0.0014	0.0028
SVOCs - Method SW8270												
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.014 U	0.013 U	0.011 U	0.049 U	0.01 U	0.011 U	0.01 U	0.011 U	0.01 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.01 U	0.0096 U	0.008 U	0.035 U	0.0076 U	0.0079 U	0.0075 U	0.0082 U	0.0075 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.013 U	0.013 U	0.011 U	0.047 U	0.01 U	0.011 U	0.01 U	0.011 U	0.01 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.047 U	0.044 U	0.037 U	0.16 U	0.035 U	0.037 U	0.035 U	0.038 U	0.035 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.053 U	0.05 U	0.042 U	0.18 U	0.04 U	0.041 U	0.039 U	0.042 U	0.039 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.043 U	0.041 U	0.034 U	0.15 U	0.032 U	0.033 U	0.032 U	0.034 U	0.032 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	0.073 U	0.069 U	0.058 U	0.26 U	0.055 U	0.057 U	0.054 U	0.059 U	0.054 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	0.076 U	0.072 U	0.061 U	0.27 U	0.057 U	0.06 U	0.057 U	0.061 U	0.057 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.055 U	0.053 U	0.044 U	0.19 U	0.042 U	0.043 U	0.041 U	0.045 U	0.041 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.02 U	0.019 U	0.016 U	0.069 U	0.015 U	0.016 U	0.015 U	0.016 U	0.015 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.017 U	0.016 U	0.014 U	0.06 U	0.013 U	0.014 U	0.013 U	0.014 U	0.013 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.014 U	0.013 U	0.011 U	0.049 U	0.011 U	0.011 U	0.01 U	0.011 U	0.01 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.046 U	0.044 U	0.036 U	0.16 U	0.034 U	0.036 U	0.034 U	0.037 U	0.034 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.055 U	0.053 U	0.044 U	0.19 U	0.042 U	0.043 U	0.041 U	0.045 U	0.041 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	0.025 U	0.024 U	0.02 U	0.088 U	0.0504	0.02 U	0.019 U	0.02 U	0.0325
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	0.052 U	0.049 U	0.041 U	0.18 U	0.039 U	0.04 U	0.038 U	0.042 U	0.038 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.02 U	0.019 U	0.016 U	0.07 U	0.015 U	0.016 U	0.015 U	0.016 U	0.015 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.048 U	0.046 U	0.038 U	0.17 U	0.036 U	0.038 U	0.036 U	0.039 U	0.036 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.012 U	0.011 U	0.0092 U	0.04 U	0.0087 U	0.009 U	0.0086 U	0.0093 U	0.0086 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.018 U	0.017 U	0.014 U	0.063 U	0.014 U	0.014 U	0.014 U	0.015 U	0.013 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.016 U	0.016 U	0.013 U	0.058 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.045 U	0.043 U	0.036 U	0.16 U	0.034 U	0.035 U	0.034 U	0.037 U	0.034 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.015 U	0.014 U	0.012 U	0.051 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.014 U	0.013 U	0.011 U	0.048 U	0.01 U	0.011 U	0.01 U	0.011 U	0.01 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	0.058 U	0.055 U	0.046 U	0.2 U	0.043 U	0.045 U	0.043 U	0.046 U	0.043 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.018 U	0.017 U	0.014 U	0.062 U	0.013 U	0.014 U	0.013 U	0.014 U	0.013 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	0.077 U	0.073 U	0.061 U	0.27 U	0.058 U	0.06 U	0.057 U	0.062 U	0.057 U
SW8270	83-32-9	Acenaphthene	mg/kg	0.013 U	0.012 U	0.0422	0.271	0.51	0.0693	0.0445	0.0436	0.197
SW8270	208-96-8	Acenaphthylene	mg/kg	0.015 U	0.014 U	0.0695	0.105	0.185	0.0465	0.0289	0.0153	0.0234
SW8270	98-86-2	Acetophenone	mg/kg	0.008 U	0.0076 U	0.0063 U	0.028 U	0.006 U	0.0062 U	0.0059 U	0.0064 U	0.0059 U
SW8270	120-12-7	Anthracene	mg/kg	0.0469	0.0331	0.129	0.969	1.93	0.174	0.107	0.11	0.304
SW8270	1912-24-9	Atrazine	mg/kg	0.009 U	0.0085 U	0.0071 U	0.031 U	0.0067 U	0.007 U	0.0067 U	0.0072 U	0.0066 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.01 U	0.0099 U	0.0083 U	0.036 U	0.0078 U	0.0082 U	0.0078 U	0.0084 U	0.0078 U
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	0.175	0.143	0.421	7.24	16.8	0.571	0.41	0.34	0.915
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	0.186	0.157	0.521	8.52	19.3	0.654	0.492	0.358	0.806
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	0.241	0.195	0.656	10.2	22.8	0.778	0.596	0.44	1.1
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	0.127	0.109	0.427	5.58	12.4	0.484	0.37	0.238	0.513
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	0.0818	0.0799	0.252	3.38	8.56	0.307	0.196	0.154	0.391
SW8270	92-52-4	Biphenyl	mg/kg	0.0053 U	0.005 U	0.0042 U	0.018 U	0.0227	0.0041 U	0.0039 U	0.0042 U	0.0039 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.018 U	0.017 U	0.015 U	0.064 U	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.014 U	0.013 U	0.011 U	0.048 U	0.01 U	0.011 U	0.01 U	0.011 U	0.01 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	0.0453	0.0495	0.0935	0.14 U	0.03 U	0.031 U	0.0365	0.032 U	0.0549
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	0.026 U	0.025 U	0.021 U	0.092 U	0.02 U	0.021 U	0.02 U	0.021 U	0.02 U
SW8270	105-60-2	Caprolactam	mg/kg	0.014 U	0.014 U	0.011 U	0.05 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U
SW8270	86-74-8	Carbazole	mg/kg	0.021 U	0.02 U	0.0626	0.847	1.75	0.0768	0.0569	0.017 U	0.217
SW8270	218-01-9	Chrysene	mg/kg	0.194	0.182	0.488	8.46	19.7	0.614	0.439	0.35	0.938
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.01 U	0.0096 U	0.008 U	0.035 U	0.0076 U	0.0079 U	0.0075 U	0.0081 U	0.0075 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.022 U	0.021 U	0.018 U	0.077 U	0.017 U	0.017 U	0.016 U	0.018 U	0.016 U
SW8270	53-70-3	Dibenz(a,h)anthracene	mg/kg	0.0272	0.							

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S9	A1S10	A1S11	A1S12	A1S13	A1S14	A1S15	A1S16	A1S17
Sample ID:				SEPSA1S9	SEPSA1S10	SEPSA1S11	SEPSA1S12	SEPSA1S13	SEPSA1S14	SEPSA1S15	SEPSA1S16	SEPSA1S17
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	11/01/2013	11/01/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.013 U	0.013 U	0.0223	0.0895	0.188	0.0304	0.0258	0.0236	0.0892
SW8270	84-66-2	Diethylphthalate	mg/kg	0.015 U	0.015 U	0.012 U	0.054 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.016 U	0.015 U	0.013 U	0.056 U	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.399	0.337	0.917	12.6	31.5	1.14	0.79	0.709	1.92
SW8270	86-73-7	Fluorene	mg/kg	0.015 U	0.014 U	0.0396	0.256	0.494	0.0606	0.0414	0.043	0.159
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.015 U	0.014 U	0.012 U	0.052 U	0.011 U	0.012 U	0.011 U	0.012 U	0.011 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.013 U	0.012 U	0.01 U	0.044 U	0.0095 U	0.0099 U	0.0094 U	0.01 U	0.0094 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.046 U	0.044 U	0.037 U	0.16 U	0.035 U	0.036 U	0.034 U	0.037 U	0.034 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.013 U	0.012 U	0.01 U	0.044 U	0.0095 U	0.0099 U	0.0094 U	0.01 U	0.0094 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.139	0.125	0.342	4.7	10.6	0.382	0.29	0.283	0.615
SW8270	78-59-1	Isophorone	mg/kg	0.012 U	0.012 U	0.0097 U	0.043 U	0.0092 U	0.0095 U	0.0091 U	0.0098 U	0.0091 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.011 U	0.011 U	0.0088 U	0.039 U	0.0083 U	0.0087 U	0.0082 U	0.0089 U	0.0082 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.027 U	0.026 U	0.022 U	0.095 U	0.02 U	0.021 U	0.02 U	0.022 U	0.02 U
SW8270	91-20-3	Naphthalene	mg/kg	0.012 U	0.012 U	0.0186	0.043 U	0.0707	0.027	0.0092 U	0.0143	0.0324
SW8270	98-95-3	Nitrobenzene	mg/kg	0.013 U	0.012 U	0.01 U	0.046 U	0.0099 U	0.01 U	0.0098 U	0.011 U	0.0097 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.078 U	0.074 U	0.062 U	0.27 U	0.058 U	0.061 U	0.058 U	0.063 U	0.058 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.196	0.158	0.487	4.97	9.28	0.589	0.399	0.407	1.3
SW8270	108-95-2	Phenol	mg/kg	0.048 U	0.045 U	0.038 U	0.17 U	0.036 U	0.037 U	0.035 U	0.038 U	0.035 U
SW8270	129-00-0	Pyrene	mg/kg	0.302	0.274	0.78	13	24.6	0.983	0.719	0.556	1.38
SW8270	110-86-1	Pyridine	mg/kg	0.018 U	0.017 U	0.014 U	0.063 U	0.014 U	0.014 U	0.014 U	0.015 U	0.013 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S18	A1S19	A1S20	A1S21	A1S22	A1S23	A1S24	A1S25	A1S26
Sample ID:				SEPSA1S18	SEPSA1S19	SEPSA1S20	SEPSA1S21	SEPSA1S22	SEPSA1S23	SEPSA1S24	SEPSA1S25	SEPSA1S26
Sample Date:				11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013	10/30/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
Percent Solids - Method D2540/D4643												
D2540	9999000-58-8	Solids	mg/kg	88.1	93.3	88.6	86.8	91.7	80.1	76.6	72.7	91.9
D4643	9999000-58-8	Solids	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010												
SW6010	7440-38-2	Arsenic	mg/kg	2.7	2.1	3.7	3.6	3.2	3.9	5.4	5.2	3.1
SW6010	7440-39-3	Barium	mg/kg	63.1	25.5	64.6	63.9	47.4	71.9	75.6	71.3	47.7
SW6010	7440-43-9	Cadmium	mg/kg	0.4	0.14	0.13	0.42	0.19	0.32	1.8	2.1	0.73
SW6010	7440-47-3	Chromium	mg/kg	14	10.8	12.3	11.3	11.2	15.2	19	17	11.2
SW6010	7439-92-1	Lead	mg/kg	27.6	13.7	12.5	8.5	15.5	15.3	37.5	30.2	21.5
SW6010	7782-49-2	Selenium	mg/kg	0.32 U	0.48	0.32 U	0.33 U	0.33	0.33 U	0.33 U	0.37 U	0.6
SW6010	7440-22-4	Silver	mg/kg	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.4	0.23	0.54 U
Mercury - Method SW7471												
SW7471	7439-97-6	Mercury	mg/kg	0.033	0.011	0.016	0.015	0.037	0.032	0.073	0.079	0.17
Organochlorine Pesticides - Method SW8081												
SW8081	72-54-8	4,4'-DDD	mg/kg	0.00041 U	0.00038 U	0.0004 U	0.00041 U	0.00039 U	0.00044 U	0.0011	0.0043	0.0021
SW8081	72-55-9	4,4'-DDE	mg/kg	0.0003 U	0.00028 U	0.00029 U	0.0003 U	0.00029 U	0.00033 U	0.0022	0.00036 U	0.00028 U
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00037 U	0.00035 U	0.00036 U	0.00037 U	0.00035 U	0.0004 U	0.0041	0.00044 U	0.00034 U
SW8081	309-00-2	Aldrin	mg/kg	0.00034 U	0.00032 U	0.00033 U	0.00035 U	0.00033 U	0.00037 U	0.0004 U	0.00041 U	0.00032 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00022 U	0.00021 U	0.00022 U	0.00023 U	0.00021 U	0.00024 U	0.00026 U	0.00027 U	0.00021 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00047 U	0.00044 U	0.00045 U	0.00047 U	0.00045 U	0.00051 U	0.00054 U	0.00056 U	0.00043 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00037 U	0.00035 U	0.00036 U	0.00037 U	0.00035 U	0.0004 U	0.00043 U	0.00044 U	0.00034 U
SW8081	60-57-1	Dieldrin	mg/kg	0.00029 U	0.00027 U	0.00028 U	0.00029 U	0.00028 U	0.00032 U	0.00034 U	0.00035 U	0.00027 U
SW8081	959-98-8	Endosulfan I	mg/kg	0.00028 U	0.00027 U	0.00027 U	0.00029 U	0.00027 U	0.00031 U	0.00033 U	0.00034 U	0.00026 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00045 U	0.00042 U	0.00043 U	0.00045 U	0.00043 U	0.00049 U	0.00052 U	0.00054 U	0.00042 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.00032 U	0.0003 U	0.00031 U	0.00032 U	0.00031 U	0.00035 U	0.00037 U	0.00038 U	0.0003 U
SW8081	72-20-8	Endrin	mg/kg	0.00024 U	0.00023 U	0.00023 U	0.00024 U	0.00023 U	0.00026 U	0.00028 U	0.00029 U	0.00022 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.00039 U	0.00037 U	0.00038 U	0.00039 U	0.00038 U	0.00042 U	0.00045 U	0.00047 U	0.00036 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.0003 U	0.00029 U	0.00029 U	0.00031 U	0.00029 U	0.00033 U	0.00035 U	0.00036 U	0.00028 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.00037 U	0.00034 U	0.00035 U	0.00037 U	0.00035 U	0.0004 U	0.00042 U	0.00044 U	0.00034 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00028 U	0.00026 U	0.00027 U	0.00028 U	0.00027 U	0.0003 U	0.00032 U	0.00033 U	0.00026 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.00052 U	0.00048 U	0.0005 U	0.00052 U	0.0005 U	0.00056 U	0.0006 U	0.00062 U	0.00048 U
SW8081	57-74-9	Chlordane	mg/kg	0.00028 U	0.00026 U	0.00027 U	0.00028 U	0.00027 U	0.0003 U	0.00032 U	0.00033 U	0.00026 U
SW8081	76-44-8	Heptachlor	mg/kg	0.00036 U	0.00034 U	0.00035 U	0.00037 U	0.00035 U	0.00039 U	0.00042 U	0.00043 U	0.00034 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00073 U	0.00069 U	0.00071 U	0.00074 U	0.0007 U	0.00079 U	0.00085 U	0.00087 U	0.00068 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.0094 U	0.0088 U	0.0091 U	0.0095 U	0.009 U	0.01 U	0.011 U	0.011 U	0.0087 U
PCBs - Method SW8082												
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.0097 U	0.0091 U	0.0094 U	0.0098 U	0.0093 U	0.011 U	0.011 U	0.012 U	0.009 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.022 U	0.021 U	0.022 U	0.023 U	0.022 U	0.024 U	0.026 U	0.027 U	0.021 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.019 U	0.018 U	0.018 U	0.019 U	0.018 U	0.021 U	0.022 U	0.023 U	0.018 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.013 U	0.014 U	0.014 U	0.011 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.012 U	0.013 U	0.014 U	0.011 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.017 U	0.016 U	0.017 U	0.018 U	0.017 U	0.019 U	0.02 U	0.021 U	0.016 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	0.126	0.011 U	0.012 U	0.012 U	0.0476	0.013 U	0.0971	0.015 U	0.359
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.013 U	0.014 U	0.014 U	0.011 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.011 U	0.01 U	0.011 U	0.011 U	0.011 U	0.012 U	0.013 U	0.013 U	0.01 U
Chlorinate Herbicides - Method SW8151												
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.0006 U	0.00058 U	0.00061 U	0.0006 U	0.00062 U	0.00069 U	0.00074 U	0.0008 U	0.00055 U
SW8151	94-75-7	2,4-D	mg/kg	0.005 U	0.0048 U	0.0051 U	0.0049 U	0.0052 U	0.0057 U	0.0061 U	0.0066 U	0.0046 U
VOCs - Method SW8260												
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.00036 U	0.00034 U	0.00036 U	0.00034 U	0.00035 U	0.00036 U	0.00042 U	0.00038 U	0.00032 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00043 U	0.00041 U	0.00043 U	0.0004 U	0.00041 U	0.00043 U	0.0005 U	0.00045 U	0.00038 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.001 U	0.00098 U	0.001 U	0.00097 U	0.00099 U	0.001 U	0.0012 U	0.0011 U	0.00091 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.0013	0.00037 U	0.00039 U	0.00037 U	0.00038 U	0.00039 U	0.00046 U	0.00042 U	0.00035 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.00036 U	0.00034 U	0.00036 U	0.00034 U	0.00035 U	0.00036 U	0.00042 U	0.00038 U	0.00032 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00026 U	0.00025 U	0.00026 U	0.00024 U	0.00025 U	0.00026 U	0.0003 U	0.00027 U	0.00023 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00023 U	0.00022 U	0.00023 U	0.00021 U	0.00022 U	0.00023 U	0.00026 U	0.00024 U	0.0002 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0017 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0017 U	0.0019 U	0.0018 U	0.0015 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00069 U	0.00065 U	0.00069 U	0.00064 U	0.00066 U	0.00068 U	0.00079 U	0.00072 U	0.00061 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00043 U	0.0004 U	0.00042 U	0.0004 U	0.00041 U	0.00042 U	0.00049 U	0.00045 U	0.00038 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.0004 U	0.00038 U	0.0004 U	0.00038 U	0.00039 U	0.0004 U	0.00047 U	0.00042 U	0.00036 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.00055 U	0.00052 U	0.00055 U	0.00051 U	0.00053 U	0.00054 U	0.00063 U	0.00058 U	0.00048 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00027 U	0.00026 U	0.00027 U	0.00026 U	0.00026 U	0.00027 U	0.00032 U	0.00029 U	0.00024 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00032 U	0.0003 U	0.00031 U	0.0003 U	0.0003 U	0.00031 U	0.00036 U	0.00033 U	0.00028 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.096 U	0.091 U	0.096 U	0.09 U	0.093 U	0.095 U	0.11 U	0.1 U	0.085 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0055 U	0.0052 U	0.0055 U	0.0052 U	0.0053 U	0.0055 U	0.0064 U	0.0058 U	0.0049 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.0022 U	0.0021 U	0.0022 U	0.0021 U	0.0022 U	0.0022 U	0.0026 U	0.0024 U	0.002 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0017 U	0.0016 U	0.0017 U	0.0016 U	0.0016 U	0.0016 U	0.0019 U	0.0017 U	0.0015 U
SW8260	67-64-1	Acetone	mg/kg	0.0058 U	0.0054 U	0.0057 U	0.0054 U	0.0055 U	0.0057 U	0.0066 U	0.006 U	0.0051 U
SW8260	71-43-2	Benzene	mg/kg	0.00028	0.00015 U	0.00016 U	0.00015 U	0.00015 U	0.00016 U	0.00018 U	0.00017 U	0.00014 U
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00035 U	0.00033 U	0.00035 U	0.00033 U	0.00034 U	0.00035 U	0.00041 U	0.00037 U	0.00031 U
SW8260	75-25-2	Bromoform	mg/kg	0.00033 U	0.00031 U	0.00033 U	0.00031 U	0.00032 U	0.00033 U	0.00038 U	0.00035 U	0.00029 U
SW8260	74-83-9	Bromomethane	mg/kg	0.00061 U	0.00057 U	0.0006 U	0.00057 U	0.00058 U	0.0006 U	0.0007 U	0.00064 U	0.00053 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00057	0.00017 U	0.00018 U	0.00017 U	0.00017 U	0.00018 U	0.0002 U	0.00019 U	0.00016 U
SW8260	56-23-5	Carbon										

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:			A1S18	A1S19	A1S20	A1S21	A1S22	A1S23	A1S24	A1S25	A1S26	
Sample ID:			SEPSA1S18	SEPSA1S19	SEPSA1S20	SEPSA1S21	SEPSA1S22	SEPSA1S23	SEPSA1S24	SEPSA1S25	SEPSA1S26	
Sample Date:			11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013	10/30/2013	10/31/2013	
Sample Type:			N	N	N	N	N	N	N	N	N	
Matrix:			SO	SO	SO	SO	SO	SO	SO	SO	SO	
Method	CAS No.	Analyte	Units									
SW8260	75-00-3	Chloroethane	mg/kg	0.0013 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0012 U	0.0014 U	0.0013 U	0.0011 U
SW8260	67-66-3	Chloroform	mg/kg	0.00032 U	0.0003 U	0.00032 U	0.0003 U	0.00031 U	0.00032 U	0.00037 U	0.00034 U	0.00028 U
SW8260	74-87-3	Chloromethane	mg/kg	0.00043 U	0.00041 U	0.00043 U	0.0004 U	0.00042 U	0.00043 U	0.0005 U	0.00045 U	0.00038 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.0035	0.00025 U	0.00026 U	0.00024 U	0.00025 U	0.00026 U	0.0003 U	0.00027 U	0.0027
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.00029 U	0.00027 U	0.00028 U	0.00027 U	0.00028 U	0.00028 U	0.00033 U	0.0003 U	0.00025 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.00032 U	0.00031 U	0.00032 U	0.0003 U	0.00031 U	0.00032 U	0.00037 U	0.00034 U	0.00029 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.00031 U	0.00029 U	0.0003 U	0.00028 U	0.00029 U	0.0003 U	0.00035 U	0.00032 U	0.00027 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.00045 U	0.00042 U	0.00044 U	0.00041 U	0.00043 U	0.00044 U	0.00051 U	0.00047 U	0.00039 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.00029	0.00021 U	0.00022 U	0.00028	0.00021 U	0.00022 U	0.00025 U	0.00023 U	0.00019 U
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.00019 U	0.00018 U	0.00018 U	0.00017 U	0.00018 U	0.00018 U	0.00021 U	0.00019 U	0.00016 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.00066	0.00058 U	0.00061 U	0.00057 U	0.00059 U	0.0006 U	0.0007 U	0.00064 U	0.00054 U
SW8260	79-20-9	Methyl acetate	mg/kg	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U	0.0021 U	0.0024 U	0.0022 U	0.0019 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.00043 U	0.00041 U	0.00043 U	0.0004 U	0.00042 U	0.00043 U	0.0005 U	0.00045 U	0.00038 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.00021 U	0.0002 U	0.00021 U	0.00019 U	0.0002 U	0.0002 U	0.00024 U	0.00022 U	0.00018 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.0021 U	0.002 U	0.0021 U	0.002 U	0.0021 U	0.0021 U	0.0025 U	0.0022 U	0.0019 U
SW8260	95-47-6	o-Xylene	mg/kg	0.00042	0.00021 U	0.00022 U	0.00033	0.00027	0.00022 U	0.00026 U	0.00024 U	0.0002 U
SW8260	100-42-5	Styrene	mg/kg	0.00029 U	0.00028 U	0.00029 U	0.00027 U	0.00028 U	0.00029 U	0.00034 U	0.00031 U	0.00026 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.00052 U	0.00049 U	0.00051 U	0.00048 U	0.0005 U	0.0011	0.00059 U	0.00054 U	0.00046 U
SW8260	108-88-3	Toluene	mg/kg	0.00047	0.00017 U	0.00018 U	0.00027	0.00017 U	0.00018 U	0.00021 U	0.00031	0.0007
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.00053 U	0.0005 U	0.00053 U	0.0005 U	0.00051 U	0.00053 U	0.00061 U	0.00056 U	0.00047 U
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.00034 U	0.00032 U	0.00034 U	0.00032 U	0.00033 U	0.00034 U	0.00039 U	0.00036 U	0.0003 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.0014	0.00042 U	0.00044 U	0.00041 U	0.00042 U	0.0022	0.00051 U	0.00046 U	0.0017
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.00028 U	0.00027 U	0.00028 U	0.00026 U	0.00027 U	0.00028 U	0.00033 U	0.0003 U	0.00025 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.00055 U	0.00052 U	0.00055 U	0.00051 U	0.00053 U	0.00054 U	0.00063 U	0.00058 U	0.00048 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.00043 U	0.00041 U	0.00043 U	0.0004 U	0.00041 U	0.00043 U	0.0005 U	0.00045 U	0.00038 U
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.0011	0.00021 U	0.00022 U	0.00083	0.00065	0.00022 U	0.00026 U	0.00031	0.00034
SVOCs - Method SW8270												
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.01 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U	0.013 U	0.013 U	0.01 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.0076 U	0.0073 U	0.0075 U	0.0079 U	0.0072 U	0.0082 U	0.0093 U	0.0094 U	0.0076 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.01 U	0.0097 U	0.01 U	0.01 U	0.0096 U	0.011 U	0.012 U	0.013 U	0.01 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.035 U	0.034 U	0.035 U	0.036 U	0.033 U	0.038 U	0.043 U	0.044 U	0.035 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.04 U	0.038 U	0.039 U	0.041 U	0.038 U	0.043 U	0.049 U	0.049 U	0.039 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.032 U	0.031 U	0.032 U	0.033 U	0.031 U	0.035 U	0.039 U	0.04 U	0.032 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	0.055 U	0.053 U	0.054 U	0.057 U	0.052 U	0.059 U	0.067 U	0.068 U	0.055 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	0.057 U	0.055 U	0.057 U	0.059 U	0.055 U	0.062 U	0.07 U	0.071 U	0.057 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.042 U	0.04 U	0.041 U	0.043 U	0.04 U	0.045 U	0.051 U	0.052 U	0.041 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.015 U	0.014 U	0.015 U	0.015 U	0.014 U	0.016 U	0.018 U	0.018 U	0.015 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.013 U	0.012 U	0.013 U	0.013 U	0.012 U	0.014 U	0.016 U	0.016 U	0.013 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.011 U	0.01 U	0.01 U	0.011 U	0.01 U	0.011 U	0.013 U	0.013 U	0.011 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.034 U	0.033 U	0.034 U	0.036 U	0.033 U	0.037 U	0.042 U	0.043 U	0.034 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.042 U	0.04 U	0.041 U	0.043 U	0.04 U	0.045 U	0.051 U	0.052 U	0.041 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	0.019 U	0.018 U	0.0281	0.02 U	0.018 U	0.0372	0.023 U	0.024 U	0.019 U
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	0.039 U	0.037 U	0.039 U	0.04 U	0.037 U	0.042 U	0.048 U	0.048 U	0.039 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.015 U	0.014 U	0.015 U	0.016 U	0.014 U	0.016 U	0.018 U	0.019 U	0.015 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.036 U	0.035 U	0.036 U	0.037 U	0.034 U	0.039 U	0.044 U	0.045 U	0.036 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.0087 U	0.0083 U	0.0086 U	0.009 U	0.0082 U	0.0094 U	0.011 U	0.011 U	0.0086 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.014 U	0.013 U	0.014 U	0.014 U	0.013 U	0.015 U	0.017 U	0.017 U	0.014 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.013 U	0.015 U	0.015 U	0.012 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.034 U	0.033 U	0.034 U	0.035 U	0.032 U	0.037 U	0.042 U	0.042 U	0.034 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.011 U	0.01 U	0.011 U	0.011 U	0.01 U	0.012 U	0.013 U	0.014 U	0.011 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.01 U	0.0099 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.013 U	0.013 U	0.01 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	0.043 U	0.042 U	0.043 U	0.045 U	0.041 U	0.047 U	0.053 U	0.054 U	0.043 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.013 U	0.013 U	0.013 U	0.014 U	0.013 U	0.014 U	0.016 U	0.017 U	0.013 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	0.058 U	0.055 U	0.057 U	0.06 U	0.055 U	0.062 U	0.071 U	0.072 U	0.057 U
SW8270	83-32-9	Acenaphthene	mg/kg	0.0693	0.0139	0.222	0.01 U	0.0164	0.214	0.107	0.0286	0.0515
SW8270	208-96-8	Acenaphthylene	mg/kg	0.021	0.01 U	0.0173	0.011 U	0.0455	0.0156	0.0316	0.046	0.0282
SW8270	98-86-2	Acetophenone	mg/kg	0.006 U	0.0058 U	0.0059 U	0.0062 U	0.0057 U	0.0065 U	0.0074 U	0.0074 U	0.006 U
SW8270	120-12-7	Anthracene	mg/kg	0.111	0.0303	0.312	0.012 U	0.0726	0.428	0.161	0.0613	0.123
SW8270	1912-24-9	Atrazine	mg/kg	0.0067 U	0.0065 U	0.0067 U	0.007 U	0.0064 U	0.0073 U	0.0082 U	0.0083 U	0.0067 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.0078 U	0.0075 U	0.0078 U	0.0081 U	0.0075 U	0.0085 U	0.0096 U	0.0097 U	0.0078 U
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	0.296	0.156	1.03	0.0172	0.157	0.978	0.651	0.225	0.489
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	0.278	0.172	0.889	0.0212	0.168	0.866	0.667	0.247	0.584
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	0.359	0.21	1.18	0.0224	0.211	1.07	0.871	0.3	0.714
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	0.169	0.138	0.548	0.0378	0.137	0.517	0.447	0.164	0.455
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	0.129	0.0767	0.464	0.013 U	0.0813	0.394	0.315	0.122	0.278
SW8270	92-52-4	Biphenyl	mg/kg	0.004 U	0.0038 U	0.0039 U	0.0041 U	0.0038 U	0.0043 U	0.0049 U	0.0049 U	0.0039 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.014 U	0.013 U	0.014 U	0.014 U	0.013 U	0.015 U	0.017 U	0.017 U	0.014 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.01 U	0.0099 U	0.01 U	0.011 U	0.0098 U	0.011 U	0.013 U	0.013 U	0.01 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	0.03 U	0.029 U	0.0358	0.031 U	0.029 U	0.033 U	0.0657	0.037 U	0.043
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.021 U	0.0537	0.025 U	0.02 U
SW8270	105-60-2	Caprolactam	mg/kg	0.011 U	0.01 U	0.011 U	0.011 U	0.01 U	0.012 U	0.013 U	0.013 U	0.011 U
SW8270	86-74-8	Carbazole	mg/kg	0.0672	0.0233	0.268	0.016 U	0.0188	0.228	0.129	0.0458	0.0828
SW8270	218-01-9	Chrysene	mg/kg	0.321	0.189	1.07	0.0189	0.173	0.974	0.712	0.268	0.55
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.0076 U	0.0073 U	0.0075 U	0.0078 U	0.0072 U	0.0082 U	0.0093 U	0.0094 U	0.0075 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.017 U	0.016 U	0.016 U	0.017 U	0.016 U	0.018			

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S18	A1S19	A1S20	A1S21	A1S22	A1S23	A1S24	A1S25	A1S26
Sample ID:				SEPSA1S18	SEPSA1S19	SEPSA1S20	SEPSA1S21	SEPSA1S22	SEPSA1S23	SEPSA1S24	SEPSA1S25	SEPSA1S26
Sample Date:				11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	11/01/2013	10/31/2013	10/30/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.0307	0.0097 U	0.0883	0.01 U	0.0096 U	0.121	0.0371	0.013 U	0.0242
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.013 U	0.014 U	0.014 U	0.012 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.013 U	0.015 U	0.015 U	0.012 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.624	0.299	2.15	0.0306	0.312	2.28	1.47	0.509	1.1
SW8270	86-73-7	Fluorene	mg/kg	0.0524	0.011 U	0.156	0.012 U	0.018	0.198	0.0686	0.0296	0.0508
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.012 U	0.014 U	0.014 U	0.011 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0095 U	0.0091 U	0.0094 U	0.0098 U	0.009 U	0.01 U	0.012 U	0.012 U	0.0095 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.035 U	0.033 U	0.034 U	0.036 U	0.033 U	0.038 U	0.043 U	0.043 U	0.035 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0095 U	0.0091 U	0.0094 U	0.0098 U	0.009 U	0.01 U	0.012 U	0.012 U	0.0095 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.184	0.124	0.624	0.012 U	0.131	0.628	0.39	0.139	0.372
SW8270	78-59-1	Isophorone	mg/kg	0.0092 U	0.0088 U	0.0091 U	0.0095 U	0.0087 U	0.0099 U	0.011 U	0.011 U	0.0091 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0083 U	0.008 U	0.0082 U	0.0086 U	0.0079 U	0.009 U	0.01 U	0.01 U	0.0083 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.02 U	0.02 U	0.02 U	0.021 U	0.019 U	0.022 U	0.025 U	0.025 U	0.02 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0203	0.0089 U	0.0216	0.0096 U	0.0089 U	0.0566	0.011 U	0.012 U	0.0093 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.0099 U	0.0095 U	0.0098 U	0.01 U	0.0094 U	0.011 U	0.012 U	0.012 U	0.0098 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.058 U	0.056 U	0.058 U	0.06 U	0.055 U	0.063 U	0.072 U	0.072 U	0.058 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.388	0.141	1.43	0.016 U	0.145	1.74	0.859	0.296	0.586
SW8270	108-95-2	Phenol	mg/kg	0.036 U	0.034 U	0.035 U	0.037 U	0.034 U	0.039 U	0.044 U	0.044 U	0.036 U
SW8270	129-00-0	Pyrene	mg/kg	0.496	0.262	1.54	0.0226	0.247	1.64	1.21	0.43	0.931
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.013 U	0.014 U	0.014 U	0.013 U	0.015 U	0.017 U	0.017 U	0.014 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S27	A1S28	A1S29	A1S30	A1S31	A1S32	A1S32B	A1S33	A1S34
Sample ID:				SEPSA1S27	SEPSA1S28	SEPSA1S29	SEPSA1S30	SEPSA1S31	SEPSA1S32	SEPSA1S32B	SEPSA1S33	SEPSA1S34
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
Percent Solids - Method D2540/D4643												
D2540	9999000-58-8	Solids	mg/kg	88.8	84.4	87.3	92.9	90.7	91.5	86.6	87.9	86.1
D4643	9999000-58-8	Solids	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010												
SW6010	7440-38-2	Arsenic	mg/kg	3.3	5.6	2.7	2.6	3.9	3.8	14.5	4.7	4
SW6010	7440-39-3	Barium	mg/kg	44.2	84.8	27.8	51.8	60	41	116	63.2	55.8
SW6010	7440-43-9	Cadmium	mg/kg	0.53	0.41	1.1	0.64	0.73	0.14	1.4	0.39	0.074
SW6010	7440-47-3	Chromium	mg/kg	8.8	17.6	13.9	10.4	49.7	9.3	171.00	32	14.2
SW6010	7439-92-1	Lead	mg/kg	8	13.5	33.7	19.4	21.8	15.7	81.7	21	11.3
SW6010	7782-49-2	Selenium	mg/kg	0.47	0.31 U	0.58	0.55	0.28 U	0.33 U	0.34	0.31 U	0.32 U
SW6010	7440-22-4	Silver	mg/kg	0.58 U	24.4	0.57 U	0.55 U	0.57	0.12 U	1.5	0.15	0.12 U
Mercury - Method SW7471												
SW7471	7439-97-6	Mercury	mg/kg	0.2	0.14	0.11	0.1	0.062	0.024	1.6	0.46	0.033
Organochlorine Pesticides - Method SW8081												
SW8081	72-54-8	4,4'-DDD	mg/kg	0.0004 U	0.00041 U	0.00041 U	0.00037 U	0.00039 U	0.0047	0.0004 U	0.00037 U	0.00039 U
SW8081	72-55-9	4,4'-DDE	mg/kg	0.00029 U	0.0003 U	0.0003 U	0.00027 U	0.00028 U	0.0066	0.0003 U	0.0056	0.0014
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00036 U	0.00037 U	0.00037 U	0.00033 U	0.0148	0.0058	0.00036 U	0.00033 U	0.00035 U
SW8081	309-00-2	Aldrin	mg/kg	0.00034 U	0.00034 U	0.00035 U	0.00031 U	0.00033 U	0.0003 U	0.00034 U	0.00031 U	0.00033 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00022 U	0.00022 U	0.00023 U	0.0002 U	0.00021 U	0.00019 U	0.00022 U	0.0002 U	0.00021 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00046 U	0.00047 U	0.00047 U	0.00042 U	0.00044 U	0.0004 U	0.00046 U	0.00042 U	0.00044 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00036 U	0.00037 U	0.00037 U	0.00033 U	0.00035 U	0.00032 U	0.00037 U	0.00033 U	0.00035 U
SW8081	60-57-1	Dieldrin	mg/kg	0.00029 U	0.00029 U	0.00029 U	0.00026 U	0.00028 U	0.00025 U	0.00029 U	0.00026 U	0.00028 U
SW8081	959-98-8	Endosulfan I	mg/kg	0.00028 U	0.00028 U	0.00029 U	0.00025 U	0.00027 U	0.00025 U	0.00028 U	0.00025 U	0.00027 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00044 U	0.00045 U	0.00045 U	0.0004 U	0.00042 U	0.00039 U	0.00044 U	0.0004 U	0.00043 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.00031 U	0.00032 U	0.00032 U	0.00029 U	0.0003 U	0.00028 U	0.00032 U	0.00029 U	0.00031 U
SW8081	72-20-8	Endrin	mg/kg	0.00024 U	0.00024 U	0.00024 U	0.00022 U	0.00023 U	0.00021 U	0.00024 U	0.00022 U	0.00023 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.00038 U	0.00039 U	0.00039 U	0.00035 U	0.00037 U	0.00034 U	0.00039 U	0.00035 U	0.00037 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.0003 U	0.00031 U	0.00031 U	0.00027 U	0.00029 U	0.00026 U	0.0003 U	0.00027 U	0.00029 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.00036 U	0.00037 U	0.00037 U	0.00033 U	0.00035 U	0.00032 U	0.00036 U	0.00033 U	0.00035 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00027 U	0.00028 U	0.00028 U	0.00025 U	0.00026 U	0.00024 U	0.00027 U	0.00025 U	0.00026 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.0005 U	0.00052 U	0.00052 U	0.00046 U	0.00049 U	0.00045 U	0.00051 U	0.00046 U	0.00049 U
SW8081	57-74-9	Chlordane	mg/kg	0.00027 U	0.00028 U	0.00028 U	0.00025 U	0.00026 U	0.00024 U	0.00027 U	0.00025 U	0.00026 U
SW8081	76-44-8	Heptachlor	mg/kg	0.00036 U	0.00037 U	0.00037 U	0.00033 U	0.00034 U	0.00031 U	0.00036 U	0.00033 U	0.00035 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00072 U	0.00073 U	0.00074 U	0.00065 U	0.00069 U	0.00063 U	0.00072 U	0.00066 U	0.0007 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.0092 U	0.0094 U	0.0095 U	0.0084 U	0.0089 U	0.0081 U	0.0093 U	0.0084 U	0.009 U
PCBs - Method SW8082												
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.0095 U	0.0097 U	0.0098 U	0.0087 U	0.0092 U	0.0087 U	0.0096 U	0.0087 U	0.0093 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.022 U	0.023 U	0.023 U	0.02 U	0.021 U	0.02 U	0.022 U	0.02 U	0.021 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.019 U	0.019 U	0.019 U	0.017 U	0.018 U	0.017 U	0.019 U	0.017 U	0.018 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.011 U	0.011 U	0.011 U	0.01 U	0.011 U	0.01 U	0.011 U	0.01 U	0.011 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.017 U	0.018 U	0.018 U	0.016 U	0.017 U	0.016 U	0.017 U	0.016 U	0.017 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	3.14	0.0592	0.106	0.319	0.012 U	0.011 U	18.6	1.71	0.012 U
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.011 U	0.011 U	0.011 U	0.0098 U	0.01 U	0.0099 U	0.011 U	0.0098 U	0.01 U
Chlorinate Herbicides - Method SW8151												
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.00065 U	0.00064 U	0.00066 U	0.00058 U	0.00055 U	0.0061 U	0.00065 U	0.00059 U	0.00064 U
SW8151	94-75-7	2,4-D	mg/kg	0.0054 U	0.0053 U	0.0054 U	0.0048 U	0.0046 U	0.051 U	0.0053 U	0.0049 U	0.0053 U
VOCs - Method SW8260												
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.00035 U	0.00038 U	0.00032 U	0.00031 U	0.00035 U	0.00034 U	0.00039 U	0.00036 U	0.00037 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00042 U	0.00045 U	0.00038 U	0.00037 U	0.00042 U	0.00041 U	0.00046 U	0.00043 U	0.00044 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.001 U	0.0011 U	0.0009 U	0.00088 U	0.001 U	0.00098 U	0.0011 U	0.001 U	0.0011 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.00038 U	0.00041 U	0.00035 U	0.00034 U	0.00038 U	0.00037 U	0.0041	0.00092	0.00041 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.00035 U	0.00038 U	0.00032 U	0.00031 U	0.00035 U	0.00034 U	0.00074	0.00036 U	0.00037 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00025 U	0.00027 U	0.00023 U	0.00022 U	0.00025 U	0.00025 U	0.00028 U	0.00026 U	0.00027 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00022 U	0.00024 U	0.0002 U	0.00019 U	0.00022 U	0.00022 U	0.00024 U	0.00023 U	0.00023 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0016 U	0.0018 U	0.0015 U	0.0014 U	0.0016 U	0.0016 U	0.0018 U	0.0017 U	0.0017 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00067 U	0.00072 U	0.0006 U	0.00059 U	0.00067 U	0.00065 U	0.00074 U	0.00069 U	0.00071 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00041 U	0.00044 U	0.00037 U	0.00036 U	0.00041 U	0.0004 U	0.00045 U	0.00043 U	0.00044 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.00039 U	0.00042 U	0.00035 U	0.00035 U	0.00039 U	0.00038 U	0.00043 U	0.00041 U	0.00041 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.00053 U	0.00057 U	0.00048 U	0.00047 U	0.00053 U	0.00052 U	0.00059 U	0.00055 U	0.00056 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00027 U	0.00029 U	0.00024 U	0.00023 U	0.00027 U	0.00026 U	0.00029 U	0.00028 U	0.00028 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00031 U	0.00033 U	0.00028 U	0.00027 U	0.00031 U	0.0003 U	0.00034 U	0.00032 U	0.00032 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.094 U	0.1 U	0.084 U	0.082 U	0.094 U	0.091 U	0.1 U	0.097 U	0.099 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0054 U	0.0058 U	0.0048 U	0.0047 U	0.0054 U	0.0052 U	0.0059 U	0.0056 U	0.0057 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.0022 U	0.0023 U	0.002 U	0.0019 U	0.0022 U	0.0021 U	0.0024 U	0.0023 U	0.0023 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0016 U	0.0017 U	0.0015 U	0.0014 U	0.0016 U	0.0016 U	0.0018 U	0.0017 U	0.0017 U
SW8260	67-64-1	Acetone	mg/kg	0.0056 U	0.018	0.005 U	0.0049 U	0.0056 U	0.0054 U	0.0721	0.0058 U	0.0059 U
SW8260	71-43-2	Benzene	mg/kg	0.00015 U	0.00017 U	0.00014 U	0.00014 U	0.00015 U	0.00015 U	0.0004	0.00016 U	0.00016 U
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00034 U	0.00037 U	0.00031 U	0.0003 U	0.00034 U	0.00033 U	0.00038 U	0.00036 U	0.00036 U
SW8260	75-25-2	Bromoform	mg/kg	0.00032 U	0.00034 U	0.00029 U	0.00028 U	0.00032 U	0.00031 U	0.00035 U	0.00033 U	0.00034 U
SW8260	74-83-9	Bromomethane	mg/kg	0.00059 U	0.00063 U	0.00053 U	0.00052 U	0.00059 U	0.00057 U	0.00065 U	0.00061 U	0.00062 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00017 U	0.0003	0.00016 U	0.00015 U	0.00017 U	0.00017 U	0.00054	0.0004	0.00018 U
SW8260	56-23-5	Carbon tetrachloride	mg/kg	0.00031 U	0.00033 U	0.00028 U	0.00027 U	0.00031 U	0.0003 U	0.00034 U	0.00032 U	0.00032 U
SW8260	108-90-7	Chlorobenzene	mg/kg	0.00024 U	0.00026 U	0.00022 U	0.00021 U	0.00024 U	0.00023 U	0.00026 U	0.00025 U	0.00025 U
SW8260	74-											

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S27	A1S28	A1S29	A1S30	A1S31	A1S32	A1S32B	A1S33	A1S34
Sample ID:				SEPSA1S27	SEPSA1S28	SEPSA1S29	SEPSA1S30	SEPSA1S31	SEPSA1S32	SEPSA1S32B	SEPSA1S33	SEPSA1S34
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8260	75-00-3	Chloroethane	mg/kg	0.0012 U	0.0013 U	0.0011 U	0.0011 U	0.0012 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U
SW8260	67-66-3	Chloroform	mg/kg	0.00031 U	0.00033 U	0.00028 U	0.00027 U	0.00031 U	0.0003 U	0.00034 U	0.00032 U	0.00033 U
SW8260	74-87-3	Chloromethane	mg/kg	0.00042 U	0.00045 U	0.00038 U	0.00037 U	0.00042 U	0.00041 U	0.00046 U	0.00043 U	0.00044 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.00048	0.13	0.00023 U	0.00045	0.00025 U	0.00025 U	0.101	0.0129	0.00027 U
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.00028 U	0.0003 U	0.00025 U	0.00024 U	0.00028 U	0.00027 U	0.0003 U	0.00029 U	0.00029 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.00031 U	0.00034 U	0.00028 U	0.00028 U	0.00031 U	0.00031 U	0.00035 U	0.00032 U	0.00033 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.0003 U	0.00032 U	0.00027 U	0.00026 U	0.0003 U	0.00029 U	0.00032 U	0.00031 U	0.00031 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.00043 U	0.00046 U	0.00039 U	0.00038 U	0.00043 U	0.00042 U	0.00047 U	0.00045 U	0.00046 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.00021 U	0.00023 U	0.00019 U	0.00019 U	0.00021 U	0.00021 U	0.0013	0.00022 U	0.00023 U
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.00018 U	0.00019 U	0.00016 U	0.00016 U	0.00018 U	0.00017 U	0.0002 U	0.00019 U	0.00019 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.00059 U	0.00064 U	0.00053 U	0.00052 U	0.00059 U	0.00057 U	0.0019	0.00061 U	0.00062 U
SW8260	79-20-9	Methyl acetate	mg/kg	0.002 U	0.0022 U	0.0018 U	0.0018 U	0.002 U	0.002 U	0.0022 U	0.0021 U	0.0022 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.00042 U	0.00045 U	0.00038 U	0.00037 U	0.00042 U	0.00041 U	0.00046 U	0.00043 U	0.00044 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.0002 U	0.00022 U	0.00018 U	0.00018 U	0.0002 U	0.00019 U	0.00078	0.00021 U	0.00021 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.0027	0.0022 U	0.0019 U	0.0018 U	0.0021 U	0.0023	0.0023 U	0.0037	0.0031
SW8260	95-47-6	o-Xylene	mg/kg	0.00022 U	0.00023 U	0.0002 U	0.00019 U	0.00022 U	0.00021 U	0.0024	0.00023 U	0.00023 U
SW8260	100-42-5	Styrene	mg/kg	0.00028 U	0.00031 U	0.00026 U	0.00025 U	0.00028 U	0.00028 U	0.00031 U	0.00029 U	0.0003 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.0005 U	0.00054 U	0.00045 U	0.00044 U	0.0005 U	0.00049 U	0.00055 U	0.00052 U	0.00053 U
SW8260	108-88-3	Toluene	mg/kg	0.0013	0.00078	0.00041	0.00034	0.00035	0.0011	0.0057	0.00092	0.00018 U
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.00052 U	0.0036	0.00047 U	0.00046 U	0.00052 U	0.0005 U	0.0368	0.0025	0.00055 U
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.00033 U	0.00036 U	0.0003 U	0.00029 U	0.00033 U	0.00032 U	0.00036 U	0.00034 U	0.00035 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.0018	1.72	0.00039 U	0.00045	0.00043 U	0.00042 U	0.0317	0.0031	0.00045 U
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.00028 U	0.0003 U	0.00025 U	0.00024 U	0.00028 U	0.00027 U	0.0003 U	0.00028 U	0.00029 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.00053 U	0.00057 U	0.00048 U	0.00047 U	0.00053 U	0.00052 U	0.00058 U	0.00055 U	0.00056 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.00042 U	0.00045 U	0.00038 U	0.00037 U	0.00042 U	0.00041 U	0.1	0.00093	0.00044 U
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.00058	0.00052	0.00028	0.00019 U	0.00022 U	0.00045	0.0042	0.00054	0.00023 U
SVOCs - Method SW8270												
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.011 U	0.011 U	0.011 U	0.052 U	0.01 U	0.049 U	0.012 U	0.011 U	0.011 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.0078 U	0.0079 U	0.0083 U	0.038 U	0.0073 U	0.036 U	0.0085 U	0.0081 U	0.008 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.01 U	0.01 U	0.011 U	0.051 U	0.0098 U	0.048 U	0.011 U	0.011 U	0.011 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.036 U	0.036 U	0.038 U	0.18 U	0.034 U	0.17 U	0.039 U	0.037 U	0.037 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.04 U	0.041 U	0.043 U	0.2 U	0.038 U	0.19 U	0.044 U	0.042 U	0.042 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.033 U	0.033 U	0.035 U	0.16 U	0.031 U	0.15 U	0.036 U	0.034 U	0.034 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	0.056 U	0.057 U	0.06 U	0.27 U	0.053 U	0.26 U	0.061 U	0.059 U	0.058 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	0.059 U	0.059 U	0.062 U	0.29 U	0.055 U	0.27 U	0.064 U	0.061 U	0.06 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.043 U	0.043 U	0.045 U	0.21 U	0.04 U	0.2 U	0.046 U	0.044 U	0.044 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.015 U	0.015 U	0.016 U	0.074 U	0.014 U	0.07 U	0.017 U	0.016 U	0.016 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.013 U	0.013 U	0.014 U	0.065 U	0.013 U	0.061 U	0.014 U	0.014 U	0.014 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.011 U	0.011 U	0.012 U	0.053 U	0.01 U	0.05 U	0.012 U	0.011 U	0.011 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.035 U	0.036 U	0.038 U	0.17 U	0.033 U	0.16 U	0.038 U	0.037 U	0.036 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.043 U	0.043 U	0.045 U	0.21 U	0.04 U	0.2 U	0.046 U	0.044 U	0.044 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	0.019 U	0.02 U	0.021 U	0.095 U	0.403	0.089 U	0.297	0.0425	0.02 U
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	0.04 U	0.04 U	0.042 U	0.19 U	0.0416	0.18 U	0.043 U	0.041 U	0.041 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.015 U	0.016 U	0.016 U	0.075 U	0.014 U	0.071 U	0.017 U	0.016 U	0.016 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.037 U	0.037 U	0.039 U	0.18 U	0.035 U	0.17 U	0.04 U	0.039 U	0.038 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.0089 U	0.009 U	0.0094 U	0.043 U	0.0084 U	0.041 U	0.0096 U	0.0092 U	0.0091 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.014 U	0.014 U	0.015 U	0.068 U	0.013 U	0.064 U	0.015 U	0.015 U	0.014 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.013 U	0.013 U	0.014 U	0.062 U	0.012 U	0.058 U	0.014 U	0.013 U	0.013 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.035 U	0.035 U	0.037 U	0.17 U	0.033 U	0.16 U	0.038 U	0.036 U	0.036 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.011 U	0.011 U	0.012 U	0.055 U	0.011 U	0.051 U	0.012 U	0.012 U	0.012 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.01 U	0.011 U	0.011 U	0.051 U	0.0099 U	0.048 U	0.011 U	0.011 U	0.011 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	0.044 U	0.045 U	0.047 U	0.22 U	0.042 U	0.2 U	0.048 U	0.046 U	0.046 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.014 U	0.014 U	0.015 U	0.066 U	0.013 U	0.062 U	0.015 U	0.014 U	0.014 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	0.059 U	0.06 U	0.063 U	0.29 U	0.056 U	0.27 U	0.064 U	0.061 U	0.061 U
SW8270	83-32-9	Acenaphthene	mg/kg	0.0416	0.022	0.0151	0.049 U	2.63	0.046 U	0.721	0.153	0.01 U
SW8270	208-96-8	Acenaphthylene	mg/kg	0.0315	0.011 U	0.0196	0.055 U	0.722	0.051 U	0.112	0.0182	0.012 U
SW8270	98-86-2	Acetophenone	mg/kg	0.0061 U	0.0062 U	0.0065 U	0.03 U	0.0058 U	0.028 U	0.0067 U	0.0064 U	0.0063 U
SW8270	120-12-7	Anthracene	mg/kg	0.0939	0.0531	0.0474	0.107	6.23	0.067	1.89	0.382	0.013 U
SW8270	1912-24-9	Atrazine	mg/kg	0.0069 U	0.0069 U	0.0073 U	0.034 U	0.0065 U	0.032 U	0.0075 U	0.0072 U	0.0071 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.008 U	0.0081 U	0.0086 U	0.039 U	0.0076 U	0.037 U	0.0087 U	0.0084 U	0.0083 U
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	0.461	0.135	0.191	0.258	21.2	0.252	3.12	0.74	0.0528
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	0.565	0.147	0.244	0.258	19.8	0.25	3.24	0.684	0.0549
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	0.68	0.183	0.317	0.341	23.9	0.306	4.19	0.79	0.0702
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	0.445	0.119	0.212	0.21	11.9	0.215	1.53	0.432	0.048
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	0.25	0.0664	0.11	0.0933	9.41	0.102	1.38	0.298	0.0243
SW8270	92-52-4	Biphenyl	mg/kg	0.004 U	0.0041 U	0.0043 U	0.02 U	0.113	0.019 U	0.095	0.0042 U	0.0042 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.014 U	0.014 U	0.015 U	0.069 U	0.013 U	0.065 U	0.015 U	0.015 U	0.015 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.01 U	0.011 U	0.011 U	0.051 U	0.0099 U	0.048 U	0.011 U	0.011 U	0.011 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	0.031 U	0.0449	0.0979	0.15 U	0.0919	0.14 U	2.66	0.043	0.032 U
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	0.02 U	0.02 U	0.0528	0.099 U	0.0747	0.093 U	0.022 U	0.021 U	0.021 U
SW8270	105-60-2	Caprolactam	mg/kg	0.011 U	0.011 U	0.012 U	0.054 U	0.01 U	0.05 U	0.012 U	0.011 U	0.011 U
SW8270	86-74-8	Carbazole	mg/kg	0.0824	0.0282	0.0327	0.079 U	3.17	0.074 U	0.613	0.139	0.017 U
SW8270	218-01-9	Chrysene	mg/kg	0.566	0.141	0.23	0.294	20.8	0.292	2.91	0.702	0.0596
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.0077 U	0.0078 U	0.0083 U	0.038 U	0.0073 U	0.036 U	0.0906	0.0081 U	0.008 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.017 U	0.017 U	0.018 U	0.083 U	0.016 U	0.078 U	0.018 U	0.018 U	0.018 U
SW8270	53-70-3	Dibenz(a,h)anthracene	mg/kg	0.1	0							

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S27	A1S28	A1S29	A1S30	A1S31	A1S32	A1S32B	A1S33	A1S34
Sample ID:				SEPSA1S27	SEPSA1S28	SEPSA1S29	SEPSA1S30	SEPSA1S31	SEPSA1S32	SEPSA1S32B	SEPSA1S33	SEPSA1S34
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.0211	0.0158	0.011 U	0.051 U	1.53	0.048 U	0.541	0.1	0.011 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.012 U	0.013 U	0.058 U	0.011 U	0.055 U	0.013 U	0.012 U	0.012 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.012 U	0.012 U	0.013 U	0.06 U	0.012 U	0.056 U	0.013 U	0.013 U	0.013 U
SW8270	206-44-0	Fluoranthene	mg/kg	1.01	0.302	0.421	0.445	44.8	0.5	8.65	1.72	0.101
SW8270	86-73-7	Fluorene	mg/kg	0.043	0.0232	0.017	0.056 U	2.75	0.053 U	1.01	0.176	0.012 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.011 U	0.012 U	0.056 U	0.011 U	0.052 U	0.012 U	0.012 U	0.012 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0097 U	0.0098 U	0.01 U	0.047 U	0.0091 U	0.045 U	0.011 U	0.01 U	0.01 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.036 U	0.036 U	0.038 U	0.17 U	0.034 U	0.16 U	0.039 U	0.037 U	0.037 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0097 U	0.0098 U	0.01 U	0.047 U	0.0091 U	0.045 U	0.011 U	0.01 U	0.01 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.342	0.0965	0.161	0.158	10.9	0.164	1.85	0.481	0.0422
SW8270	78-59-1	Isophorone	mg/kg	0.0094 U	0.0095 U	0.01 U	0.046 U	0.0089 U	0.043 U	0.01 U	0.0098 U	0.0097 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0085 U	0.0086 U	0.0091 U	0.042 U	0.008 U	0.039 U	0.0093 U	0.0089 U	0.0088 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.021 U	0.021 U	0.022 U	0.1 U	0.02 U	0.096 U	0.023 U	0.022 U	0.021 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0095 U	0.0096 U	0.01 U	0.046 U	0.297	0.044 U	0.288	0.0468	0.0098 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.01 U	0.01 U	0.011 U	0.049 U	0.0095 U	0.046 U	0.011 U	0.011 U	0.01 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.06 U	0.06 U	0.064 U	0.29 U	0.056 U	0.27 U	0.065 U	0.062 U	0.061 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.519	0.221	0.185	0.326	26.3	0.311	6.66	1.3	0.0541
SW8270	108-95-2	Phenol	mg/kg	0.037 U	0.037 U	0.039 U	0.18 U	0.035 U	0.17 U	0.04 U	0.038 U	0.038 U
SW8270	129-00-0	Pyrene	mg/kg	0.882	0.259	0.354	0.421	29.3	0.369	5.72	1.1	0.0728
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.014 U	0.015 U	0.068 U	0.013 U	0.064 U	0.015 U	0.015 U	0.014 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:			A1S35	A1S36	A1S37	A1S38	A1S39	A1S40	A1S41	A1S42	A1S43	
Sample ID:			SEPSA1S35	SEPSA1S36	SEPSA1S37	SEPSA1S38	SEPSA1S39	SEPSA1S40	SEPSA1S41	SEPSA1S42	SEPSA1S43	
Sample Date:			10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/31/2013	10/31/2013	10/31/2013	
Sample Type:			N	N	N	N	N	N	N	N	N	
Matrix:			SO	SO	SO	SO	SO	SO	SO	SO	SO	
Method	CAS No.	Analyte	Units									
Percent Solids - Method D2540/D4643												
D2540	9999000-58-8	Solids	mg/kg	85.9	83.7	87.6	88	89.7	77	86.5	87.7	84
D4643	9999000-58-8	Solids	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals - Method SW6010												
SW6010	7440-38-2	Arsenic	mg/kg	4.8	4.2	4.6	5.8	4.2	11.7	2.6	4.6	5
SW6010	7440-39-3	Barium	mg/kg	53.4	88.2	47	85.4	59.9	277	67.5	39.9	65.6
SW6010	7440-43-9	Cadmium	mg/kg	0.14	0.04 U	0.17	0.2	0.28	1.6	0.53	0.6	0.53
SW6010	7440-47-3	Chromium	mg/kg	14.3	12.9	15	13.9	13.6	19.8	8.8	13	16.6
SW6010	7439-92-1	Lead	mg/kg	14.8	7.8	19.7	20.7	27.4	26.1	12.9	31.2	15.2
SW6010	7782-49-2	Selenium	mg/kg	0.55	0.33 U	0.33 U	0.32 U	0.31 U	0.32 U	0.67	0.31 U	0.44
SW6010	7440-22-4	Silver	mg/kg	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.78	0.57 U	0.25	0.83
Mercury - Method SW7471												
SW7471	7439-97-6	Mercury	mg/kg	0.45	0.018	0.045	0.039	0.054	0.056	0.064	0.25	0.044
Organochlorine Pesticides - Method SW8081												
SW8081	72-54-8	4,4'-DDD	mg/kg	0.00042 U	0.00041 U	0.0101	0.00041 U	0.00038 U	0.0076	0.00087	0.00076	0.00042 U
SW8081	72-55-9	4,4'-DDE	mg/kg	0.0507	0.0003 U	0.0136	0.0098	0.0086	0.00034 U	0.0003 U	0.00029 U	0.00086
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00038 U	0.00037 U	0.0161	0.024	0.0366	0.00041 U	0.00037 U	0.00035 U	0.00038 U
SW8081	309-00-2	Aldrin	mg/kg	0.00035 U	0.00035 U	0.00034 U	0.00034 U	0.00032 U	0.00039 U	0.00034 U	0.00033 U	0.00036 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00023 U	0.00022 U	0.00022 U	0.00022 U	0.00021 U	0.00025 U	0.00022 U	0.00021 U	0.00023 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00048 U	0.00047 U	0.00046 U	0.00047 U	0.00043 U	0.00052 U	0.00046 U	0.00044 U	0.00048 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00038 U	0.00037 U	0.00036 U	0.00037 U	0.00034 U	0.00041 U	0.00037 U	0.00035 U	0.00038 U
SW8081	60-57-1	Dieldrin	mg/kg	0.0003 U	0.00029 U	0.00029 U	0.013	0.0494	0.00033 U	0.00029 U	0.00028 U	0.0021
SW8081	959-98-8	Endosulfan I	mg/kg	0.00029 U	0.00028 U	0.00028 U	0.00028 U	0.00026 U	0.00032 U	0.00028 U	0.00027 U	0.00029 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00046 U	0.00045 U	0.00044 U	0.00045 U	0.00041 U	0.0005 U	0.00044 U	0.00043 U	0.00046 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.00033 U	0.00032 U	0.00032 U	0.00032 U	0.0003 U	0.00036 U	0.00032 U	0.00031 U	0.00033 U
SW8081	72-20-8	Endrin	mg/kg	0.00025 U	0.00024 U	0.00024 U	0.00024 U	0.00022 U	0.00027 U	0.00024 U	0.00023 U	0.00025 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.0004 U	0.00039 U	0.00039 U	0.00039 U	0.00036 U	0.00044 U	0.00039 U	0.00037 U	0.0004 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.00031 U	0.00031 U	0.0003 U	0.0003 U	0.00028 U	0.00034 U	0.0003 U	0.00029 U	0.00031 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.00038 U	0.00037 U	0.00036 U	0.00037 U	0.00034 U	0.00041 U	0.00036 U	0.00035 U	0.00038 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00029 U	0.00028 U	0.00027 U	0.0031	0.00026 U	0.00031 U	0.00027 U	0.00026 U	0.00029 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.00053 U	0.00052 U	0.00051 U	0.0021	0.0063	0.00058 U	0.00051 U	0.00049 U	0.00053 U
SW8081	57-74-9	Chlordane	mg/kg	0.00029 U	0.00028 U	0.00027 U	0.0052	0.0063	0.00031 U	0.00027 U	0.00026 U	0.00029 U
SW8081	76-44-8	Heptachlor	mg/kg	0.00038 U	0.00037 U	0.00036 U	0.00036 U	0.00034 U	0.00041 U	0.00036 U	0.00035 U	0.00038 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00075 U	0.00074 U	0.00072 U	0.00073 U	0.00068 U	0.00082 U	0.00073 U	0.0007 U	0.00076 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.0097 U	0.0095 U	0.0093 U	0.0094 U	0.0087 U	0.011 U	0.0093 U	0.009 U	0.0097 U
PCBs - Method SW8082												
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.01 U	0.0098 U	0.0096 U	0.0097 U	0.009 U	0.011 U	0.0096 U	0.0093 U	0.01 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.023 U	0.023 U	0.022 U	0.022 U	0.021 U	0.025 U	0.022 U	0.021 U	0.023 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.021 U	0.019 U	0.018 U	0.02 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.013 U	0.012 U	0.011 U	0.012 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.013 U	0.011 U	0.011 U	0.012 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.018 U	0.018 U	0.017 U	0.017 U	0.016 U	0.02 U	0.017 U	0.017 U	0.018 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	0.458	0.012 U	0.14	0.191	0.011 U	0.014 U	0.11	0.223	0.06
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.013 U	0.012 U	0.011 U	0.012 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.011 U	0.011 U	0.011 U	0.011 U	0.01 U	0.012 U	0.011 U	0.01 U	0.011 U
Chlorinate Herbicides - Method SW8151												
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.00066 U	0.00068 U	0.00064 U	0.00059 U	0.00061 U	0.00071 U	0.00066 U	0.00058 U	0.00064 U
SW8151	94-75-7	2,4-D	mg/kg	0.0055 U	0.0057 U	0.0053 U	0.0049 U	0.005 U	0.0059 U	0.0055 U	0.0048 U	0.0053 U
VOCs - Method SW8260												
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.00037 U	0.00038 U	0.00031 U	0.0003 U	0.0003 U	0.00041 U	0.00036 U	0.00036 U	0.00037 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00044 U	0.00045 U	0.00037 U	0.00036 U	0.00035 U	0.00048 U	0.00043 U	0.00043 U	0.00044 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.0011 U	0.0011 U	0.00088 U	0.00086 U	0.00085 U	0.0012 U	0.001 U	0.001 U	0.0011 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.00041 U	0.00042 U	0.00034 U	0.00033 U	0.00032 U	0.00044 U	0.00039 U	0.0004 U	0.00041 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.00037 U	0.00038 U	0.00031 U	0.0003 U	0.0003 U	0.00041 U	0.00036 U	0.00036 U	0.00037 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00027 U	0.00027 U	0.00022 U	0.00022 U	0.00021 U	0.00029 U	0.00026 U	0.00026 U	0.00027 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00023 U	0.00024 U	0.00019 U	0.00019 U	0.00019 U	0.00026 U	0.00023 U	0.00023 U	0.00023 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0017 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0019 U	0.0017 U	0.0017 U	0.0017 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00071 U	0.00073 U	0.00059 U	0.00058 U	0.00057 U	0.00077 U	0.00069 U	0.00069 U	0.00071 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00044 U	0.00045 U	0.00036 U	0.00036 U	0.00035 U	0.00048 U	0.00042 U	0.00043 U	0.00044 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.00042 U	0.00043 U	0.00035 U	0.00034 U	0.00033 U	0.00045 U	0.0004 U	0.00041 U	0.00042 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.00056 U	0.00058 U	0.00047 U	0.00046 U	0.00045 U	0.00062 U	0.00055 U	0.00055 U	0.00056 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00028 U	0.00029 U	0.00023 U	0.00023 U	0.00023 U	0.00031 U	0.00027 U	0.00028 U	0.00028 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00032 U	0.00033 U	0.00027 U	0.00026 U	0.00026 U	0.00035 U	0.00032 U	0.00032 U	0.00032 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.099 U	0.1 U	0.082 U	0.08 U	0.079 U	0.11 U	0.096 U	0.097 U	0.099 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0057 U	0.0058 U	0.0047 U	0.0046 U	0.0045 U	0.0062 U	0.0055 U	0.0056 U	0.0057 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.0023 U	0.0024 U	0.0019 U	0.0019 U	0.0018 U	0.0025 U	0.0022 U	0.0023 U	0.0023 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0017 U	0.0018 U	0.0014 U	0.0014 U	0.0014 U	0.0019 U	0.0017 U	0.0017 U	0.0017 U
SW8260	67-64-1	Acetone	mg/kg	0.0059 U	0.0061 U	0.0049 U	0.0048 U	0.0047 U	0.0064 U	0.0057 U	0.0058 U	0.0059 U
SW8260	71-43-2	Benzene	mg/kg	0.00016 U	0.00017 U	0.00014 U	0.00013 U	0.00013 U	0.00018 U	0.00016 U	0.00016 U	0.00016 U
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00036 U	0.00037 U	0.0003 U	0.0003 U	0.00029 U	0.0004 U	0.00035 U	0.00036 U	0.00036 U
SW8260	75-25-2	Bromoform	mg/kg	0.00034 U	0.00035 U	0.00028 U	0.00028 U	0.00027 U	0.00037 U	0.00033 U	0.00033 U	0.00034 U
SW8260	74-83-9	Bromomethane	mg/kg	0.00062 U	0.00064 U	0.00052 U	0.00051 U	0.0005 U	0.00068 U	0.0006 U	0.00061 U	0.00062 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00018 U	0.00019 U	0.00015 U	0.00015 U	0.00015 U	0.0002 U	0.00018 U	0.00018 U	

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S35	A1S36	A1S37	A1S38	A1S39	A1S40	A1S41	A1S42	A1S43
Sample ID:				SEPSA1S35	SEPSA1S36	SEPSA1S37	SEPSA1S38	SEPSA1S39	SEPSA1S40	SEPSA1S41	SEPSA1S42	SEPSA1S43
Sample Date:				10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/31/2013	10/31/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.0382	0.011 U	0.0151	0.188	0.438	0.011 U	0.0159	0.0463	0.011 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.013 U	0.013 U	0.012 U	0.024 U	0.012 U	0.013 U	0.012 U	0.012 U	0.013 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.013 U	0.013 U	0.013 U	0.025 U	0.013 U	0.013 U	0.012 U	0.012 U	0.014 U
SW8270	206-44-0	Fluoranthene	mg/kg	1.13	0.017 U	0.407	2.85	9.39	0.322	2.33	1.96	0.317
SW8270	86-73-7	Fluorene	mg/kg	0.0682	0.013 U	0.0276	0.273	0.634	0.013 U	0.0401	0.102	0.013 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.012 U	0.012 U	0.012 U	0.023 U	0.012 U	0.012 U	0.011 U	0.011 U	0.013 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.011 U	0.011 U	0.01 U	0.02 U	0.01 U	0.011 U	0.0094 U	0.0096 U	0.011 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.039 U	0.039 U	0.037 U	0.073 U	0.037 U	0.039 U	0.034 U	0.035 U	0.039 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.011 U	0.011 U	0.01 U	0.02 U	0.01 U	0.011 U	0.0094 U	0.0096 U	0.011 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.334	0.013 U	0.125	0.642	2.02	0.0844	0.837	0.59	0.109
SW8270	78-59-1	Isophorone	mg/kg	0.01 U	0.01 U	0.0097 U	0.019 U	0.0096 U	0.01 U	0.0091 U	0.0093 U	0.01 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0093 U	0.0093 U	0.0088 U	0.017 U	0.0087 U	0.0093 U	0.0082 U	0.0085 U	0.0094 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.023 U	0.023 U	0.021 U	0.043 U	0.021 U	0.023 U	0.02 U	0.021 U	0.023 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0167	0.01 U	0.0098 U	0.156	0.176	0.01 U	0.0092 U	0.0095 U	0.011 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.011 U	0.011 U	0.01 U	0.021 U	0.01 U	0.011 U	0.0098 U	0.01 U	0.011 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.065 U	0.065 U	0.062 U	0.12 U	0.061 U	0.066 U	0.058 U	0.059 U	0.066 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.677	0.017 U	0.315	2.32	7.03	0.175	0.805	1.16	0.153
SW8270	108-95-2	Phenol	mg/kg	0.04 U	0.04 U	0.038 U	0.075 U	0.038 U	0.04 U	0.035 U	0.036 U	0.04 U
SW8270	129-00-0	Pyrene	mg/kg	0.785	0.015 U	0.375	1.81	6.36	0.282	2.19	1.73	0.276
SW8270	110-86-1	Pyridine	mg/kg	0.015 U	0.015 U	0.014 U	0.028 U	0.0175	0.015 U	0.014 U	0.014 U	0.015 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S44	A1S45	A1S46	A1S47	A1S48	A1S49	A1S50	A1S51	A1S52
Sample ID:				SEPSA1S44	SEPSA1S45	SEPSA1S46	SEPSA1S47	SEPSA1S48	SEPSA1S49	SEPSA1S50	SEPSA1S51	SEPSA1S52
Sample Date:				10/31/2013	10/31/2013	10/31/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.101	0.011 U	0.152	0.29	0.01 U	0.0468	7.32	0.0317	0.012 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.012 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.012 U	0.014 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.013 U	0.013 U	0.011 U	0.013 U	0.012 U	0.012 U	0.013 U	0.012 U	0.014 U
SW8270	206-44-0	Fluoranthene	mg/kg	5.99	0.423	5.3	9.33	0.277	0.698	177	0.991	0.172
SW8270	86-73-7	Fluorene	mg/kg	0.216	0.012 U	0.287	0.641	0.0181	0.0503	13.7	0.0552	0.013 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.012 U	0.012 U	0.01 U	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.013 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0099 U	0.0099 U	0.0086 U	0.01 U	0.0098 U	0.0099 U	0.01 U	0.0095 U	0.011 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.036 U	0.036 U	0.032 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	0.041 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0099 U	0.0099 U	0.0086 U	0.01 U	0.0098 U	0.0099 U	0.01 U	0.0095 U	0.011 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	1.75	0.172	1.49	2.74	0.076	0.23	43.5	0.285	0.0827
SW8270	78-59-1	Isophorone	mg/kg	0.0096 U	0.0096 U	0.0083 U	0.01 U	0.0095 U	0.0096 U	0.0099 U	0.0091 U	0.011 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0087 U	0.0087 U	0.0075 U	0.0091 U	0.0086 U	0.0087 U	0.009 U	0.0083 U	0.0098 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.021 U	0.021 U	0.018 U	0.022 U	0.021 U	0.021 U	0.022 U	0.02 U	0.024 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0395	0.0097 U	0.0415	0.198	0.0096 U	0.0229	3.14	0.0093 U	0.011 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.01 U	0.01 U	0.0089 U	0.011 U	0.01 U	0.01 U	0.011 U	0.0098 U	0.012 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.061 U	0.061 U	0.053 U	0.064 U	0.06 U	0.061 U	0.063 U	0.058 U	0.069 U
SW8270	85-01-8	Phenanthrene	mg/kg	2.38	0.123	2.99	5.68	0.188	0.392	130	0.615	0.0766
SW8270	108-95-2	Phenol	mg/kg	0.037 U	0.037 U	0.032 U	0.039 U	0.037 U	0.037 U	0.039 U	0.036 U	0.042 U
SW8270	129-00-0	Pyrene	mg/kg	5.9	0.416	4.65	6.3	0.197	0.504	122	0.723	0.14
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.014 U	0.0155	0.015 U	0.014 U	0.014 U	0.015 U	0.014 U	0.016 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S53	A1S54	A1S55	A1S56	A1S57	A1S58	A1S59	A1S60	A1S61
Sample ID:				SEPSA1S53	SEPSA1S54	SEPSA1S55	SEPSA1S56	SEPSA1S57	SEPSA1S58	SEPSA1S59	SEPSA1S60	SEPSA1S61
Sample Date:				10/30/2013	10/30/2013	10/30/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013	10/31/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.156	0.0604	7.11	0.01 U	0.011 U	0.0236	0.018	0.102	0.0431
SW8270	84-66-2	Diethylphthalate	mg/kg	0.022 U	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.013 U	0.013 U	0.012 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.023 U	0.012 U	0.012 U	0.012 U	0.013 U	0.012 U	0.013 U	0.013 U	0.013 U
SW8270	206-44-0	Fluoranthene	mg/kg	2.46	2.24	148	0.252	0.102	0.904	0.829	1.71	0.936
SW8270	86-73-7	Fluorene	mg/kg	0.127	0.0978	8.51	0.011 U	0.012 U	0.0631	0.0424	0.171	0.0759
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.021 U	0.011 U	0.011 U	0.011 U	0.012 U	0.011 U	0.012 U	0.012 U	0.012 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.018 U	0.0096 U	0.0097 U	0.0094 U	0.011 U	0.0096 U	0.01 U	0.01 U	0.01 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.067 U	0.035 U	0.035 U	0.035 U	0.039 U	0.035 U	0.038 U	0.038 U	0.037 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.018 U	0.0096 U	0.0097 U	0.0094 U	0.011 U	0.0096 U	0.01 U	0.01 U	0.01 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.606	0.654	31.7	0.0879	0.0285	0.263	0.193	0.393	0.228
SW8270	78-59-1	Isophorone	mg/kg	0.018 U	0.0093 U	0.0093 U	0.0091 U	0.01 U	0.0092 U	0.01 U	0.01 U	0.0098 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.016 U	0.0084 U	0.0085 U	0.0083 U	0.0093 U	0.0084 U	0.009 U	0.009 U	0.0089 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.039 U	0.021 U	0.021 U	0.02 U	0.023 U	0.021 U	0.022 U	0.022 U	0.022 U
SW8270	91-20-3	Naphthalene	mg/kg	0.018 U	0.0215	3.36	0.0093 U	0.01 U	0.0094 U	0.0203	0.0676	0.0282
SW8270	98-95-3	Nitrobenzene	mg/kg	0.019 U	0.0099 U	0.01 U	0.0098 U	0.011 U	0.0099 U	0.011 U	0.011 U	0.011 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.11 U	0.059 U	0.059 U	0.058 U	0.065 U	0.059 U	0.063 U	0.063 U	0.063 U
SW8270	85-01-8	Phenanthrene	mg/kg	1.11	1.14	118	0.123	0.0737	0.641	0.532	1.21	0.694
SW8270	108-95-2	Phenol	mg/kg	0.069 U	0.036 U	0.0753	0.036 U	0.04 U	0.036 U	0.039 U	0.039 U	0.038 U
SW8270	129-00-0	Pyrene	mg/kg	1.58	1.39	95.9	0.181	0.0938	0.843	0.765	1.43	0.714
SW8270	110-86-1	Pyridine	mg/kg	0.026 U	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.015 U	0.015 U	0.015 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S62	A1S63	A1S64	A1S65	A1S66	A1S67	A1S68	A1S69	A1S70
Sample ID:				SEPSA1S62	SEPSA1S63	SEPSA1S64	SEPSA1S65	SEPSA1S66	SEPSA1S67	SEPSA1S68	SEPSA1S69	SEPSA1S70
Sample Date:				10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/30/2013	10/29/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.253	1.46	6.8	1.55	0.0097 U	0.482	0.0241	0.0412	0.0098 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.013 U	0.012 U	0.012 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U	0.012 U	0.012 U
SW8270	206-44-0	Fluoranthene	mg/kg	8.04	24.8	132	60.4	0.551	21.6	0.746	3.34	0.547
SW8270	86-73-7	Fluorene	mg/kg	0.557	2.41	11.3	3.01	0.0251	0.66	0.0511	0.0807	0.0191
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.012 U	0.012 U	0.012 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0095 U	0.01 U	0.0099 U	0.01 U	0.0091 U	0.01 U	0.0093 U	0.0091 U	0.0092 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.035 U	0.038 U	0.036 U	0.037 U	0.033 U	0.037 U	0.034 U	0.033 U	0.034 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0095 U	0.01 U	0.0099 U	0.01 U	0.0091 U	0.01 U	0.0093 U	0.0091 U	0.0092 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	1.66	5.43	33.3	15.5	0.178	4.81	0.277	1.13	0.2
SW8270	78-59-1	Isophorone	mg/kg	0.0092 U	0.0099 U	0.0095 U	0.0098 U	0.0088 U	0.0096 U	0.009 U	0.0088 U	0.0089 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0084 U	0.009 U	0.0087 U	0.0089 U	0.008 U	0.0087 U	0.0081 U	0.008 U	0.0081 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.02 U	0.022 U	0.021 U	0.022 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U
SW8270	91-20-3	Naphthalene	mg/kg	0.113	0.391	1.49	0.676	0.009 U	0.206	0.0144	0.0234	0.009 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.0099 U	0.011 U	0.01 U	0.011 U	0.0095 U	0.01 U	0.0097 U	0.0095 U	0.0096 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.059 U	0.063 U	0.061 U	0.062 U	0.056 U	0.061 U	0.057 U	0.056 U	0.057 U
SW8270	85-01-8	Phenanthrene	mg/kg	5.4	18.2	96.6	39.1	0.346	15.3	0.383	1.26	0.246
SW8270	108-95-2	Phenol	mg/kg	0.036 U	0.039 U	0.037 U	0.038 U	0.034 U	0.038 U	0.035 U	0.034 U	0.035 U
SW8270	129-00-0	Pyrene	mg/kg	5.4	18.6	85.8	43.1	0.595	15.3	0.508	2.68	0.404
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.015 U	0.014 U	0.015 U	0.013 U	0.014 U	0.013 U	0.013 U	0.013 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S71	A1S72	A1S73	A1S74	A1S75	A1S76	A1S77	A1S78	A1S79
Sample ID:				SEPSA1S71	SEPSA1S72	SEPSA1S73	SEPSA1S74	SEPSA1S75	SEPSA1S76	SEPSA1S77	SEPSA1S78	SEPSA1S79
Sample Date:				10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.0097 U	0.011 U	0.0227	0.0573	0.024	0.0764	0.496	0.754	0.0275
SW8270	84-66-2	Diethylphthalate	mg/kg	0.011 U	0.013 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.011 U	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.012 U	0.011 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.341	0.0612	1.31	2.33	0.188	2.04	22.9	21.3	0.901
SW8270	86-73-7	Fluorene	mg/kg	0.0154	0.012 U	0.0525	0.0875	0.0276	0.127	0.927	1.36	0.055
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.011 U	0.011 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0091 U	0.01 U	0.0099 U	0.0099 U	0.01 U	0.01 U	0.0095 U	0.0092 U	0.0091 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.033 U	0.038 U	0.036 U	0.036 U	0.037 U	0.037 U	0.035 U	0.034 U	0.033 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0091 U	0.01 U	0.0099 U	0.0099 U	0.01 U	0.01 U	0.0095 U	0.0092 U	0.0091 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.142	0.0334	0.416	0.697	0.052	0.59	5.04	5.65	0.285
SW8270	78-59-1	Isophorone	mg/kg	0.0088 U	0.01 U	0.0096 U	0.0096 U	0.0097 U	0.0098 U	0.0092 U	0.0089 U	0.0088 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0079 U	0.0091 U	0.0087 U	0.0087 U	0.0088 U	0.0089 U	0.0084 U	0.008 U	0.008 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.019 U	0.022 U	0.021 U	0.021 U	0.021 U	0.022 U	0.02 U	0.02 U	0.019 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0089 U	0.01 U	0.0097 U	0.022	0.0801	0.0212	0.165	0.196	0.0089 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.0094 U	0.011 U	0.01 U	0.01 U	0.01 U	0.011 U	0.0099 U	0.0095 U	0.0094 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.056 U	0.064 U	0.061 U	0.061 U	0.061 U	0.062 U	0.059 U	0.056 U	0.056 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.159	0.0238	0.618	0.837	0.176	1.49	12.9	15.8	0.559
SW8270	108-95-2	Phenol	mg/kg	0.034 U	0.039 U	0.037 U	0.038 U	0.038 U	0.038 U	0.036 U	0.035 U	0.034 U
SW8270	129-00-0	Pyrene	mg/kg	0.249	0.0501	0.924	1.67	0.173	1.82	18	18.9	0.842
SW8270	110-86-1	Pyridine	mg/kg	0.013 U	0.015 U	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.013 U	0.013 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A1S80	A1S81	A1S82	A1S83	A1S84	A1S85	A1S86	A1S87	A1S88
Sample ID:				SEPSA1S80	SEPSA1S81	SEPSA1S82	SEPSA1S83	SEPSA1S84	SEPSA1S85	SEPSA1S86	SEPSA1S87	SEPSA1S88
Sample Date:				10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.011 U	0.157	0.01 U	0.011 U	0.01 U	0.0099 U	0.0519	0.01 U	0.0605
SW8270	84-66-2	Diethylphthalate	mg/kg	0.013 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.013 U	0.012 U	0.012 U	0.013 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.0243	3.15	0.152	0.189	0.0718	0.217	1.58	0.199	2.12
SW8270	86-73-7	Fluorene	mg/kg	0.012 U	0.21	0.011 U	0.012 U	0.012 U	0.011 U	0.114	0.011 U	0.0999
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.012 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.011 U	0.0095 U	0.0095 U	0.01 U	0.0098 U	0.0093 U	0.0098 U	0.0096 U	0.0091 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.039 U	0.035 U	0.035 U	0.037 U	0.036 U	0.034 U	0.036 U	0.035 U	0.033 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.011 U	0.0095 U	0.0095 U	0.01 U	0.0098 U	0.0093 U	0.0098 U	0.0096 U	0.0091 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.013 U	1.16	0.0419	0.0546	0.0226	0.109	0.569	0.0747	0.798
SW8270	78-59-1	Isophorone	mg/kg	0.01 U	0.0092 U	0.0092 U	0.0097 U	0.0095 U	0.009 U	0.0095 U	0.0093 U	0.0088 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0093 U	0.0084 U	0.0083 U	0.0088 U	0.0086 U	0.0082 U	0.0086 U	0.0084 U	0.0079 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.023 U	0.02 U	0.02 U	0.022 U	0.021 U	0.02 U	0.021 U	0.021 U	0.019 U
SW8270	91-20-3	Naphthalene	mg/kg	0.01 U	0.0813	0.0093 U	0.0098 U	0.0096 U	0.0091 U	0.0373	0.0094 U	0.0372
SW8270	98-95-3	Nitrobenzene	mg/kg	0.011 U	0.0099 U	0.0099 U	0.01 U	0.01 U	0.0097 U	0.01 U	0.01 U	0.0094 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.065 U	0.059 U	0.058 U	0.062 U	0.06 U	0.057 U	0.06 U	0.059 U	0.056 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.017 U	2.13	0.0956	0.114	0.0429	0.153	0.952	0.136	1.16
SW8270	108-95-2	Phenol	mg/kg	0.04 U	0.036 U	0.036 U	0.038 U	0.037 U	0.035 U	0.037 U	0.036 U	0.034 U
SW8270	129-00-0	Pyrene	mg/kg	0.0208	2.66	0.132	0.172	0.0672	0.232	1.45	0.183	1.73
SW8270	110-86-1	Pyridine	mg/kg	0.015 U	0.014 U	0.014 U	0.014 U	0.014 U	0.013 U	0.014 U	0.014 U	0.013 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S89	A1S90	A1S91	A1S92	A1S93	A1S94	A1S95	A1S96	A1S97
Sample ID:				SEPSA1S89	SEPSA1S90	SEPSA1S91	SEPSA1S92	SEPSA1S93	SEPSA1S94	SEPSA1S95	SEPSA1596	SEPSA1597
Sample Date:				10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/29/2013	10/28/2013	10/28/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.0436	0.011 U	0.01 U	0.0164	0.0325	0.0174	0.158	0.01 U	0.011 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	0.013 U	0.013 U	0.012 U	0.013 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U	0.013 U	0.013 U	0.012 U	0.013 U
SW8270	206-44-0	Fluoranthene	mg/kg	1.21	0.134	0.0343	0.527	0.875	0.534	4.23	0.213	0.186
SW8270	86-73-7	Fluorene	mg/kg	0.0657	0.012 U	0.011 U	0.0318	0.0465	0.027	0.192	0.011 U	0.012 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.012 U	0.011 U	0.012 U	0.011 U	0.012 U	0.012 U	0.011 U	0.012 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0097 U	0.01 U	0.0096 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.0095 U	0.01 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.036 U	0.037 U	0.035 U	0.037 U	0.035 U	0.038 U	0.039 U	0.035 U	0.038 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0097 U	0.01 U	0.0096 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.0095 U	0.01 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.322	0.0517	0.012 U	0.214	0.37	0.204	0.899	0.0654	0.0639
SW8270	78-59-1	Isophorone	mg/kg	0.0094 U	0.0098 U	0.0093 U	0.0098 U	0.0092 U	0.01 U	0.01 U	0.0092 U	0.01 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0085 U	0.0089 U	0.0084 U	0.0089 U	0.0083 U	0.0091 U	0.0092 U	0.0084 U	0.0092 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.021 U	0.022 U	0.021 U	0.022 U	0.02 U	0.022 U	0.023 U	0.02 U	0.022 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0096 U	0.01 U	0.0094 U	0.0099 U	0.0228	0.01 U	0.0772	0.0094 U	0.01 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.01 U	0.011 U	0.01 U	0.011 U	0.0099 U	0.011 U	0.011 U	0.0099 U	0.011 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.06 U	0.063 U	0.059 U	0.062 U	0.058 U	0.064 U	0.065 U	0.059 U	0.064 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.928	0.0819	0.0185	0.395	0.645	0.362	3.3	0.116	0.0907
SW8270	108-95-2	Phenol	mg/kg	0.037 U	0.038 U	0.036 U	0.038 U	0.036 U	0.039 U	0.04 U	0.036 U	0.04 U
SW8270	129-00-0	Pyrene	mg/kg	1.06	0.143	0.0362	0.554	0.872	0.564	3.29	0.173	0.137
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.015 U	0.014 U	0.015 U	0.014 U	0.015 U	0.015 U	0.014 U	0.015 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A1S98	A1S99	A1S100	A201	A202	A203	A204	A205	A206
Sample ID:				SESPSA1S98	SESPSA1S99	SESPSA1S100	SESPSA201	SESPSA202	SESPSA203	SESPSA204	SESPSA205	SESPSA206
Sample Date:				10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	0.01 U	0.0099 U	0.0186	0.0097 U	0.0087 U	0.01 U	0.405	0.0093 U	0.24 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.012 U	0.011 U	0.013 U	0.011 U	0.01 U	0.012 U	0.055 U	0.011 U	0.28 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.012 U	0.012 U	0.013 U	0.011 U	0.01 U	0.012 U	0.057 U	0.011 U	0.28 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.291	0.144	0.696	0.0277	0.013 U	0.0305	4.44	0.0339	107
SW8270	86-73-7	Fluorene	mg/kg	0.0173	0.011 U	0.0284	0.011 U	0.0096 U	0.011 U	0.12	0.01 U	0.484
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.011 U	0.011 U	0.012 U	0.011 U	0.0096 U	0.011 U	0.053 U	0.01 U	0.26 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.0096 U	0.0093 U	0.01 U	0.0091 U	0.0082 U	0.0095 U	0.045 U	0.0087 U	0.22 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.035 U	0.034 U	0.038 U	0.033 U	0.03 U	0.035 U	0.16 U	0.032 U	0.82 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.0096 U	0.0093 U	0.01 U	0.0091 U	0.0082 U	0.0095 U	0.045 U	0.0087 U	0.22 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.0791	0.0429	0.203	0.011 U	0.01 U	0.012 U	0.056 U	0.011 U	61.8
SW8270	78-59-1	Isophorone	mg/kg	0.0093 U	0.009 U	0.0099 U	0.0088 U	0.0079 U	0.0092 U	0.043 U	0.0084 U	0.22 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.0084 U	0.0081 U	0.009 U	0.008 U	0.0072 U	0.0083 U	0.039 U	0.0076 U	0.2 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.021 U	0.02 U	0.022 U	0.019 U	0.018 U	0.02 U	0.096 U	0.019 U	0.48 U
SW8270	91-20-3	Naphthalene	mg/kg	0.0095 U	0.0091 U	0.01 U	0.0089 U	0.0322	0.0172	0.0803	0.0085 U	0.22 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.01 U	0.0096 U	0.011 U	0.0094 U	0.0085 U	0.0099 U	0.047 U	0.009 U	0.23 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.059 U	0.057 U	0.063 U	0.056 U	0.05 U	0.058 U	0.28 U	0.054 U	1.4 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.192	0.0862	0.405	0.015 U	0.013 U	0.0303	3.28	0.0223	18.4
SW8270	108-95-2	Phenol	mg/kg	0.036 U	0.035 U	0.039 U	0.034 U	0.031 U	0.036 U	0.17 U	0.033 U	0.85 U
SW8270	129-00-0	Pyrene	mg/kg	0.213	0.109	0.499	0.0219	0.0493	0.0171	3.13	0.0256	72
SW8270	110-86-1	Pyridine	mg/kg	0.014 U	0.013 U	0.015 U	0.013 U	0.012 U	0.014 U	0.065 U	0.013 U	0.32 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A207	A208	A209	A210	A211	A212	A213	A214	A215
Sample ID:				SESPSA207	SESPSA208	SESPSA209	SESPSA210	SESPSA211	SESPSA212	SESPSA213	SESPSA214	SESPSA215
Sample Date:				10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8260	75-00-3	Chloroethane	mg/kg	0.3 U	0.001 U	0.053 U	0.0011 U	0.0011 U	0.001 U	0.0011 U	0.001 U	0.0011 U
SW8260	67-66-3	Chloroform	mg/kg	0.076 U	0.00026 U	0.014 U	0.00027 U	0.00029 U	0.00026 U	0.00029 U	0.00025 U	0.00028 U
SW8260	74-87-3	Chloromethane	mg/kg	0.1 U	0.00036 U	0.018 U	0.00036 U	0.00039 U	0.00035 U	0.00039 U	0.00034 U	0.00038 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.062 U	0.00022 U	0.011 U	0.00022 U	0.00023 U	0.00021 U	0.00024 U	0.00021 U	0.00023 U
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.068 U	0.00024 U	0.012 U	0.00024 U	0.00026 U	0.00023 U	0.00026 U	0.00023 U	0.00025 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.077 U	0.00027 U	0.014 U	0.00027 U	0.00029 U	0.00026 U	0.00029 U	0.00026 U	0.00028 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.073 U	0.00025 U	0.013 U	0.00026 U	0.00027 U	0.00024 U	0.00028 U	0.00024 U	0.00027 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.11 U	0.00037 U	0.019 U	0.00037 U	0.0004 U	0.00036 U	0.0004 U	0.00035 U	0.00039 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.053 U	0.00018 U	0.0093 U	0.00018 U	0.179	0.00052	0.0002 U	0.00073	0.00023
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.0615	0.00015 U	0.0078 U	0.00016 U	0.0013	0.00015 U	0.00017 U	0.0092	0.00016 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.15 U	0.0005 U	0.0493	0.00051 U	0.707	0.002	0.00055 U	0.0028	0.00064
SW8260	79-20-9	Methyl acetate	mg/kg	0.5 U	0.0017 U	67.8	0.0018 U	0.0019 U	0.0017 U	0.0019 U	0.0229	0.0018 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.1 U	0.00036 U	0.018 U	0.00036 U	0.005	0.00035 U	0.00039 U	0.00034 U	0.00038 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.049 U	0.00017 U	0.0087 U	0.00017 U	0.00026	0.00017 U	0.00019 U	0.00016 U	0.00018 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.51 U	0.0018 U	0.091 U	0.0018 U	0.0034	0.0017 U	0.0019 U	0.0055	0.0038
SW8260	95-47-6	o-Xylene	mg/kg	0.053 U	0.00019 U	0.0095 U	0.00019 U	0.194	0.00066	0.0002 U	0.004	0.0002 U
SW8260	100-42-5	Styrene	mg/kg	0.07 U	0.00024 U	0.012 U	0.00024 U	0.00026 U	0.00023 U	0.00027 U	0.00023 U	0.00026 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.12 U	0.00043 U	0.022 U	0.00043 U	0.00046 U	0.00041 U	0.00047 U	0.00041 U	0.00045 U
SW8260	108-88-3	Toluene	mg/kg	0.043 U	0.00047	0.0402	0.00071	0.0685	0.007	0.00037	0.0011	0.0018
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.13 U	0.00044 U	0.023 U	0.00045 U	0.00048 U	0.00043 U	0.00048 U	0.00042 U	0.00047 U
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.081 U	0.00028 U	0.014 U	0.00029 U	0.0003 U	0.00027 U	0.00031 U	0.00027 U	0.0003 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.11 U	0.00036 U	0.019 U	0.00037 U	0.00039 U	0.00035 U	0.0004 U	0.00035 U	0.00039 U
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.068 U	0.00023 U	0.012 U	0.00024 U	0.00025 U	0.00023 U	0.00026 U	0.00023 U	0.00025 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.13 U	0.00045 U	0.023 U	0.00046 U	0.00049 U	0.00044 U	0.0005 U	0.00044 U	0.00048 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.1 U	0.00036 U	0.018 U	0.00036 U	0.00038 U	0.00035 U	0.00039 U	0.00034 U	0.00038 U
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.053 U	0.00019 U	0.0493	0.00019 U	0.894	0.0026	0.00054	0.0068	0.00064
SVOCs - Method SW8270												
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.048 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0096 U	0.01 U	0.048 U	0.099 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.035 U	0.0074 U	0.0074 U	0.0076 U	0.0074 U	0.007 U	0.0076 U	0.035 U	0.072 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.046 U	0.0098 U	0.0099 U	0.01 U	0.0099 U	0.0093 U	0.01 U	0.046 U	0.096 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.16 U	0.034 U	0.034 U	0.035 U	0.034 U	0.032 U	0.035 U	0.16 U	0.33 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.18 U	0.038 U	0.039 U	0.04 U	0.038 U	0.036 U	0.039 U	0.18 U	0.38 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.15 U	0.031 U	0.031 U	0.032 U	0.031 U	0.029 U	0.032 U	0.15 U	0.3 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	0.25 U	0.053 U	0.053 U	0.055 U	0.053 U	0.05 U	0.055 U	0.25 U	0.52 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	2.58	0.056 U	0.056 U	0.057 U	0.139	0.052 U	0.057 U	0.26 U	0.54 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.19 U	0.04 U	0.041 U	0.042 U	0.04 U	0.038 U	0.041 U	0.19 U	0.39 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.068 U	0.014 U	0.015 U	0.015 U	0.015 U	0.014 U	0.015 U	0.068 U	0.14 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.06 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.059 U	0.12 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.048 U	0.01 U	0.01 U	0.011 U	0.01 U	0.0097 U	0.011 U	0.048 U	0.1 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.16 U	0.033 U	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.16 U	0.33 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.19 U	0.04 U	0.041 U	0.042 U	0.04 U	0.038 U	0.041 U	0.19 U	0.39 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	5.01	0.018 U	0.019 U	0.019 U	0.0437	0.017 U	0.019 U	0.087 U	0.18 U
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	1.93	0.038 U	0.038 U	0.039 U	0.038 U	0.036 U	0.039 U	0.18 U	0.37 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.069 U	0.015 U	0.015 U	0.015 U	0.015 U	0.014 U	0.015 U	0.068 U	0.14 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.17 U	0.035 U	0.035 U	0.036 U	0.035 U	0.033 U	0.036 U	0.16 U	0.34 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.04 U	0.0084 U	0.0084 U	0.0087 U	0.0084 U	0.0079 U	0.0086 U	0.039 U	0.082 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.063 U	0.013 U	0.013 U	0.014 U	0.013 U	0.012 U	0.014 U	0.062 U	0.13 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.057 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.012 U	0.056 U	0.12 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.16 U	0.033 U	0.033 U	0.034 U	0.033 U	0.031 U	0.034 U	0.16 U	0.32 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.05 U	0.011 U	0.011 U	0.011 U	0.011 U	0.01 U	0.011 U	0.05 U	0.1 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.047 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0094 U	0.01 U	0.047 U	0.097 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	3.78	0.042 U	0.042 U	0.043 U	0.042 U	0.04 U	0.043 U	0.2 U	0.41 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.061 U	0.013 U	0.013 U	0.013 U	0.013 U	0.012 U	0.013 U	0.061 U	0.13 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	0.26 U	0.056 U	0.056 U	0.058 U	0.056 U	0.053 U	0.057 U	0.26 U	0.55 U
SW8270	83-32-9	Acenaphthene	mg/kg	24.4	0.0096 U	0.0096 U	0.0099 U	0.0096 U	0.0091 U	0.0098 U	0.116	0.665
SW8270	208-96-8	Acenaphthylene	mg/kg	15.3	0.0677	0.011 U	0.011 U	0.011 U	0.01 U	0.011 U	0.05 U	2.64
SW8270	98-86-2	Acetophenone	mg/kg	0.028 U	0.0058 U	0.0058 U	0.006 U	0.0058 U	0.0055 U	0.006 U	0.027 U	0.057 U
SW8270	120-12-7	Anthracene	mg/kg	140	0.0473	0.0152	0.012 U	0.012 U	0.011 U	0.012 U	0.103	5.94
SW8270	1912-24-9	Atrazine	mg/kg	0.031 U	0.0065 U	0.0065 U	0.0067 U	0.0065 U	0.0062 U	0.0067 U	0.031 U	0.064 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.036 U	0.0076 U	0.0628	0.0078 U	9.83	0.194	0.0078 U	0.036 U	0.074 U
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	275	2.07	0.085	0.0224	0.0312	0.01 U	0.011 U	0.254	11
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	198	1.71	0.0829	0.0222	0.01 U	0.0095 U	0.01 U	0.047 U	10.3
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	274	3.27	0.119	0.0309	0.0423	0.01 U	0.011 U	0.134	13.3
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	130	1.34	0.0587	0.0157	0.012 U	0.012 U	0.013 U	0.058 U	6.51
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	98.6	1.21	0.0429	0.0159	0.012 U	0.012 U	0.013 U	0.058 U	4.45
SW8270	92-52-4	Biphenyl	mg/kg	4.82	0.0038 U	0.0039 U	0.004 U	0.0449	0.0036 U	0.0039 U	0.018 U	0.038 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.063 U	0.013 U	0.013 U	0.014 U	0.013 U	0.013 U	0.014 U	0.063 U	0.13 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.047 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0094 U	0.01 U	0.047 U	0.097 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	1.75	0.029 U	0.0618	0.0604	5.1	0.0854	0.0521	0.392	0.29 U
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	0.09 U	0.019 U	0.019 U	0.02 U	0.019 U	0.018 U	0.02 U	0.09 U	0.19 U
SW8270	105-60-2	Caprolactam	mg/kg	0.049 U	0.01 U	0.01 U	0.011 U	0.01 U	0.0098 U	0.011 U	0.049 U	0.1 U
SW8270	86-74-8	Carbazole	mg/kg	104	0.066	0.0164	0.016 U	0.015 U	0.014 U	0.016 U	0.072 U	1.38
SW8270	218-01-9	Chrysene	mg/kg	250	3.54	0.0938	0.0248	0.0589	0.011 U	0.011 U	0.403	11
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.035 U	0.0073 U	0.0074 U	0.0076 U	0.0074 U	0.0069 U	0.0075 U	0.034 U	0.072 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.076 U	0.016 U	0.016 U	0.017 U	0.469	0.015 U	0.017 U	0.076 U	0.16 U
SW8270	53-70-3	Dibenz(a,h)anthracene	mg/kg	33.6	0.378	0.0162	0.012 U	0.011 U	0.011 U	0.012 U	0.053 U	1.69

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A207	A208	A209	A210	A211	A212	A213	A214	A215
Sample ID:				SESPSA207	SESPSA208	SESPSA209	SESPSA210	SESPSA211	SESPSA212	SESPSA213	SESPSA214	SESPSA215
Sample Date:				10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013	10/28/2013
Sample Type:				N	N	N	N	N	N	N	N	N
Matrix:				SO	SO	SO	SO	SO	SO	SO	SO	SO
Method	CAS No.	Analyte	Units									
SW8270	132-64-9	Dibenzofuran	mg/kg	68.5	0.182	0.0099 U	0.01 U	0.0099 U	0.0093 U	0.01 U	0.578	1.3
SW8270	84-66-2	Diethylphthalate	mg/kg	0.053 U	0.011 U	0.011 U	0.012 U	0.011 U	0.011 U	0.012 U	0.053 U	0.11 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.055 U	0.012 U	0.012 U	0.012 U	0.012 U	0.011 U	0.012 U	0.055 U	0.11 U
SW8270	206-44-0	Fluoranthene	mg/kg	918	10.7	0.197	0.0468	0.184	0.014 U	0.015 U	3.29	41.4
SW8270	86-73-7	Fluorene	mg/kg	31.7	0.011 U	0.011 U	0.011 U	0.011 U	0.01 U	0.011 U	0.102	2.82
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.051 U	0.011 U	0.011 U	0.011 U	0.011 U	0.01 U	0.011 U	0.051 U	0.11 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.043 U	0.0092 U	0.0092 U	0.0095 U	0.0092 U	0.0087 U	0.0094 U	0.043 U	0.09 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.16 U	0.034 U	0.034 U	0.035 U	0.034 U	0.032 U	0.035 U	0.16 U	0.33 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.043 U	0.0092 U	0.0092 U	0.0095 U	0.0092 U	0.0087 U	0.0094 U	0.043 U	0.09 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	122	1.29	0.0557	0.012 U	0.012 U	0.011 U	0.012 U	0.054 U	5.85
SW8270	78-59-1	Isophorone	mg/kg	0.042 U	0.0089 U	0.0089 U	0.0092 U	0.0089 U	0.0084 U	0.0091 U	0.042 U	0.087 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.038 U	0.0081 U	0.0081 U	0.0083 U	0.0081 U	0.0076 U	0.0083 U	0.038 U	0.079 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.093 U	0.02 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U	0.093 U	0.19 U
SW8270	91-20-3	Naphthalene	mg/kg	8.93	0.009 U	0.0091 U	0.0093 U	0.0769	0.0085 U	0.0093 U	0.042 U	0.289
SW8270	98-95-3	Nitrobenzene	mg/kg	0.045 U	0.0096 U	0.0096 U	0.0098 U	0.0096 U	0.009 U	0.0098 U	0.045 U	0.094 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	0.27 U	0.057 U	0.057 U	0.058 U	0.057 U	0.053 U	0.058 U	0.27 U	0.55 U
SW8270	85-01-8	Phenanthrene	mg/kg	962	7.07	0.112	0.0285	0.015 U	0.014 U	0.015 U	4.61	15.5
SW8270	108-95-2	Phenol	mg/kg	0.708	0.035 U	0.035 U	0.036 U	0.035 U	0.033 U	0.036 U	0.16 U	0.34 U
SW8270	129-00-0	Pyrene	mg/kg	642	8.19	0.157	0.0379	0.164	0.012 U	0.013 U	2.26	24.9
SW8270	110-86-1	Pyridine	mg/kg	0.063 U	0.013 U	0.013 U	0.014 U	0.013 U	0.012 U	0.014 U	0.062 U	0.13 U

**Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York**

Sample Location:				A216
Sample ID:				SESPSA216
Sample Date:				10/28/2013
Sample Type:				N
Matrix:				SO
Method	CAS No.	Analyte	Units	
Percent Solids - Method D2540/D4643				
D2540	9999000-58-8	Solids	mg/kg	99.9
D4643	9999000-58-8	Solids	mg/kg	NA
Metals - Method SW6010				
SW6010	7440-38-2	Arsenic	mg/kg	1.1 U
SW6010	7440-39-3	Barium	mg/kg	45.1
SW6010	7440-43-9	Cadmium	mg/kg	0.16
SW6010	7440-47-3	Chromium	mg/kg	4.3
SW6010	7439-92-1	Lead	mg/kg	4.6
SW6010	7782-49-2	Selenium	mg/kg	2.5
SW6010	7440-22-4	Silver	mg/kg	0.51 U
Mercury - Method SW7471				
SW7471	7439-97-6	Mercury	mg/kg	0.0054 U
Organochlorine Pesticides - Method SW8081				
SW8081	72-54-8	4,4'-DDD	mg/kg	0.00034 U
SW8081	72-55-9	4,4'-DDE	mg/kg	0.00025 U
SW8081	50-29-3	4,4'-DDT	mg/kg	0.00031 U
SW8081	309-00-2	Aldrin	mg/kg	0.00029 U
SW8081	319-84-6	alpha-BHC	mg/kg	0.00019 U
SW8081	319-85-7	beta-BHC	mg/kg	0.00039 U
SW8081	319-86-8	delta-BHC	mg/kg	0.00031 U
SW8081	60-57-1	Dieldrin	mg/kg	0.00024 U
SW8081	959-98-8	Endosulfan I	mg/kg	0.00024 U
SW8081	33213-65-9	Endosulfan II	mg/kg	0.00037 U
SW8081	1031-07-8	Endosulfan sulfate	mg/kg	0.00027 U
SW8081	72-20-8	Endrin	mg/kg	0.0002 U
SW8081	7421-93-4	Endrin aldehyde	mg/kg	0.00033 U
SW8081	53494-70-5	Endrin ketone	mg/kg	0.00025 U
SW8081	58-89-9	gamma-BHC (Lindane)	mg/kg	0.0003 U
SW8081	5103-71-9	alpha-Chlordane	mg/kg	0.00023 U
SW8081	5103-74-2	gamma-Chlordane	mg/kg	0.00043 U
SW8081	57-74-9	Chlordane	mg/kg	0.00023 U
SW8081	76-44-8	Heptachlor	mg/kg	0.0003 U
SW8081	72-43-5	Methoxychlor	mg/kg	0.00061 U
SW8081	8001-35-2	Toxaphene	mg/kg	0.0078 U
PCBs - Method SW8082				
SW8082	12674-11-2	Aroclor 1016	mg/kg	0.0077 U
SW8082	11104-28-2	Aroclor 1221	mg/kg	0.018 U
SW8082	11141-16-5	Aroclor 1232	mg/kg	0.015 U
SW8082	53469-21-9	Aroclor 1242	mg/kg	0.0095 U
SW8082	12672-29-6	Aroclor 1248	mg/kg	0.0091 U
SW8082	11097-69-1	Aroclor 1254	mg/kg	0.014 U
SW8082	11096-82-5	Aroclor 1260	mg/kg	0.0098 U
SW8082	37324-23-5	Aroclor 1262	mg/kg	0.0095 U
SW8082	11100-14-4	Aroclor 1268	mg/kg	0.0088 U
Chlorinate Herbicides - Method SW8151				
SW8151	93-72-1	2,4,5-TP (Silvex)	mg/kg	0.00057 U
SW8151	94-75-7	2,4-D	mg/kg	0.0047 U
VOCs - Method SW8260				
SW8260	71-55-6	1,1,1-Trichloroethane	mg/kg	0.0003 U
SW8260	79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	0.00036 U
SW8260	79-00-5	1,1,2-Trichloroethane	mg/kg	0.00086 U
SW8260	75-34-3	1,1-Dichloroethane	mg/kg	0.00033 U
SW8260	75-35-4	1,1-Dichloroethene	mg/kg	0.0003 U
SW8260	87-61-6	1,2,3-Trichlorobenzene	mg/kg	0.00022 U
SW8260	120-82-1	1,2,4-Trichlorobenzene	mg/kg	0.00019 U
SW8260	96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	0.0014 U
SW8260	106-93-4	1,2-Dibromoethane	mg/kg	0.00057 U
SW8260	95-50-1	1,2-Dichlorobenzene	mg/kg	0.00035 U
SW8260	107-06-2	1,2-Dichloroethane	mg/kg	0.00033 U
SW8260	78-87-5	1,2-Dichloropropane	mg/kg	0.00045 U
SW8260	541-73-1	1,3-Dichlorobenzene	mg/kg	0.00023 U
SW8260	106-46-7	1,4-Dichlorobenzene	mg/kg	0.00026 U
SW8260	123-91-1	1,4-Dioxane	mg/kg	0.08 U
SW8260	78-93-3	2-Butanone (MEK)	mg/kg	0.0046 U
SW8260	591-78-6	2-Hexanone	mg/kg	0.0019 U
SW8260	108-10-1	4-Methyl-2-Pentanone (MIBK)	mg/kg	0.0014 U
SW8260	67-64-1	Acetone	mg/kg	0.0048 U
SW8260	71-43-2	Benzene	mg/kg	0.00029 U
SW8260	75-27-4	Bromodichloromethane	mg/kg	0.00029 U
SW8260	75-25-2	Bromoform	mg/kg	0.00027 U
SW8260	74-83-9	Bromomethane	mg/kg	0.0005 U
SW8260	75-15-0	Carbon disulfide	mg/kg	0.00015 U
SW8260	56-23-5	Carbon tetrachloride	mg/kg	0.00026 U
SW8260	108-90-7	Chlorobenzene	mg/kg	0.00021 U
SW8260	74-97-5	Chlorobromomethane	mg/kg	0.00054 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A216
Sample ID:				SESPSA216
Sample Date:				10/28/2013
Sample Type:				N
Matrix:				SO
Method	CAS No.	Analyte	Units	
SW8260	75-00-3	Chloroethane	mg/kg	0.001 U
SW8260	67-66-3	Chloroform	mg/kg	0.00026 U
SW8260	74-87-3	Chloromethane	mg/kg	0.00036 U
SW8260	156-59-2	cis-1,2-Dichloroethene	mg/kg	0.00022 U
SW8260	10061-01-5	cis-1,3-Dichloropropene	mg/kg	0.00024 U
SW8260	110-82-7	Cyclohexane	mg/kg	0.00027 U
SW8260	124-48-1	Dibromochloromethane	mg/kg	0.00025 U
SW8260	75-71-8	Dichlorodifluoromethane	mg/kg	0.00037 U
SW8260	100-41-4	Ethylbenzene	mg/kg	0.00018 U
SW8260	98-82-8	Isopropylbenzene	mg/kg	0.00015 U
SW8260	179601-23-1	m,p-Xylene	mg/kg	0.00055
SW8260	79-20-9	Methyl acetate	mg/kg	0.0017 U
SW8260	1634-04-4	Methyl tert-butyl ether	mg/kg	0.00036 U
SW8260	108-87-2	Methylcyclohexane	mg/kg	0.00017 U
SW8260	75-09-2	Methylene chloride	mg/kg	0.0051
SW8260	95-47-6	o-Xylene	mg/kg	0.00019 U
SW8260	100-42-5	Styrene	mg/kg	0.00024 U
SW8260	127-18-4	Tetrachloroethene	mg/kg	0.00043 U
SW8260	108-88-3	Toluene	mg/kg	0.0012
SW8260	156-60-5	trans-1,2-Dichloroethene	mg/kg	0.00044 U
SW8260	10061-02-6	trans-1,3-Dichloropropene	mg/kg	0.00028 U
SW8260	79-01-6	Trichloroethene	mg/kg	0.00036 U
SW8260	75-69-4	Trichlorofluoromethane	mg/kg	0.00023 U
SW8260	76-13-1	Trichlorotrifluoroethane (Freon 113)	mg/kg	0.00045 U
SW8260	75-01-4	Vinyl chloride	mg/kg	0.00036 U
SW8260	1330-20-7	Xylene (Total)	mg/kg	0.00055
SVOCs - Method SW8270				
SW8270	95-94-3	1,2,4,5-Tetrachlorobenzene	mg/kg	0.24 U
SW8270	106-46-7	1,4-Dichlorobenzene	mg/kg	0.17 U
SW8270	39638-32-9	2,2'-oxybis(2-chloropropane)	mg/kg	0.23 U
SW8270	58-90-2	2,3,4,6-Tetrachlorophenol	mg/kg	0.81 U
SW8270	95-95-4	2,4,5-Trichlorophenol	mg/kg	0.91 U
SW8270	88-06-2	2,4,6-Trichlorophenol	mg/kg	0.74 U
SW8270	120-83-2	2,4-Dichlorophenol	mg/kg	1.3 U
SW8270	105-67-9	2,4-Dimethylphenol	mg/kg	1.3 U
SW8270	51-28-5	2,4-Dinitrophenol	mg/kg	0.96 U
SW8270	121-14-2	2,4-Dinitrotoluene	mg/kg	0.34 U
SW8270	606-20-2	2,6-Dinitrotoluene	mg/kg	0.3 U
SW8270	91-58-7	2-Chloronaphthalene	mg/kg	0.24 U
SW8270	95-57-8	2-Chlorophenol	mg/kg	0.79 U
SW8270	534-52-1	2-Methyl-4,6-Dinitrophenol	mg/kg	0.96 U
SW8270	91-57-6	2-Methylnaphthalene	mg/kg	0.44 U
SW8270	95-48-7	2-Methylphenol (o-Cresol)	mg/kg	0.89 U
SW8270	88-74-4	2-Nitroaniline	mg/kg	0.35 U
SW8270	88-75-5	2-Nitrophenol	mg/kg	0.83 U
SW8270	91-94-1	3,3'-Dichlorobenzidine	mg/kg	0.2 U
SW8270	99-09-2	3-Nitroaniline	mg/kg	0.31 U
SW8270	101-55-3	4-Bromophenyl-phenylether	mg/kg	0.28 U
SW8270	59-50-7	4-Chloro-3-methylphenol	mg/kg	0.78 U
SW8270	106-47-8	4-Chloroaniline	mg/kg	0.25 U
SW8270	7005-72-3	4-Chlorophenylphenyl ether	mg/kg	0.24 U
SW8270	106-44-5	3&4 Methylphenol	mg/kg	1 U
SW8270	100-01-6	4-Nitroaniline	mg/kg	0.31 U
SW8270	100-02-7	4-Nitrophenol	mg/kg	1.3 U
SW8270	83-32-9	Acenaphthene	mg/kg	0.23 U
SW8270	208-96-8	Acenaphthylene	mg/kg	0.25 U
SW8270	98-86-2	Acetophenone	mg/kg	0.14 U
SW8270	120-12-7	Anthracene	mg/kg	0.27 U
SW8270	1912-24-9	Atrazine	mg/kg	0.15 U
SW8270	100-52-7	Benzaldehyde	mg/kg	0.18 U
SW8270	56-55-3	Benzo(a)anthracene	mg/kg	0.26 U
SW8270	50-32-8	Benzo(a)pyrene	mg/kg	0.24 U
SW8270	205-99-2	Benzo(b)fluoranthene	mg/kg	0.26 U
SW8270	191-24-2	Benzo(g,h,i)perylene	mg/kg	0.29 U
SW8270	207-08-9	Benzo(k)fluoranthene	mg/kg	0.29 U
SW8270	92-52-4	Biphenyl	mg/kg	0.091 U
SW8270	111-91-1	bis(2-Chloroethoxy)methane	mg/kg	0.32 U
SW8270	111-44-4	bis(2-Chloroethyl)ether	mg/kg	0.24 U
SW8270	117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	0.69 U
SW8270	85-68-7	Butylbenzylphthalate	mg/kg	0.45 U
SW8270	105-60-2	Caprolactam	mg/kg	0.25 U
SW8270	86-74-8	Carbazole	mg/kg	0.36 U
SW8270	218-01-9	Chrysene	mg/kg	0.471
SW8270	84-74-2	Di-n-butylphthalate	mg/kg	0.17 U
SW8270	117-84-0	Di-n-octylphthalate	mg/kg	0.38 U
SW8270	53-70-3	Dibenz(a,h)anthracene	mg/kg	0.27 U

Table D-4
SE Debris Pile – Totals Data Summary
Carrier Corporation, Syracuse, New York

Sample Location:				A216
Sample ID:				SESPSA216
Sample Date:				10/28/2013
Sample Type:				N
Matrix:				SO
Method	CAS No.	Analyte	Units	
SW8270	132-64-9	Dibenzofuran	mg/kg	0.23 U
SW8270	84-66-2	Diethylphthalate	mg/kg	0.27 U
SW8270	131-11-3	Dimethylphthalate	mg/kg	0.28 U
SW8270	206-44-0	Fluoranthene	mg/kg	0.35 U
SW8270	86-73-7	Fluorene	mg/kg	0.26 U
SW8270	118-74-1	Hexachlorobenzene	mg/kg	0.26 U
SW8270	87-68-3	Hexachlorobutadiene	mg/kg	0.22 U
SW8270	77-47-4	Hexachlorocyclopentadiene	mg/kg	0.8 U
SW8270	67-72-1	Hexachloroethane	mg/kg	0.22 U
SW8270	193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	0.27 U
SW8270	78-59-1	Isophorone	mg/kg	0.21 U
SW8270	621-64-7	N-Nitroso-di-n-propylamine	mg/kg	0.19 U
SW8270	86-30-6	N-Nitrosodiphenylamine	mg/kg	0.47 U
SW8270	91-20-3	Naphthalene	mg/kg	0.21 U
SW8270	98-95-3	Nitrobenzene	mg/kg	0.23 U
SW8270	87-86-5	Pentachlorophenol	mg/kg	1.3 U
SW8270	85-01-8	Phenanthrene	mg/kg	0.36 U
SW8270	108-95-2	Phenol	mg/kg	0.82 U
SW8270	129-00-0	Pyrene	mg/kg	0.3 U
SW8270	110-86-1	Pyridine	mg/kg	0.31 U

Appendix C – Analytical Data Reports

Technical Report for

AECOM

UTC - Debris Pile

Accutest Job Number: MC30011

Sampling Date: 04/23/14

Report to:

AECOM

Scott.mcdonough@aecom.com

ATTN: Scott McDonough

Total number of pages in report: 59



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220)
DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

AECOM

Job No: MC30011

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30011-1	04/23/14	10:02 PS	04/24/14	SO	Soil	A1-SB-01-0-2
MC30011-2	04/23/14	10:05 PS	04/24/14	SO	Soil	A1-SB-01-2-4
MC30011-3	04/23/14	10:07 PS	04/24/14	SO	Soil	A1-SB-01-4-6
MC30011-4	04/23/14	10:10 PS	04/24/14	SO	Soil	A1-SB-01-6-7
MC30011-5	04/23/14	10:26 PS	04/24/14	SO	Soil	A1-SB-02-0-2
MC30011-6	04/23/14	10:28 PS	04/24/14	SO	Soil	A1-SB-02-2-4
MC30011-7	04/23/14	10:31 PS	04/24/14	SO	Soil	A1-SB-02-4-6
MC30011-8	04/23/14	10:37 PS	04/24/14	SO	Soil	A1-SB-02-6-8
MC30011-9	04/23/14	10:41 PS	04/24/14	SO	Soil	A1-SB-02-8-10
MC30011-10	04/23/14	10:43 PS	04/24/14	SO	Soil	A1-SB-02-10-12
MC30011-11	04/23/14	10:50 PS	04/24/14	SO	Soil	A1-SB-03-0-2
MC30011-12	04/23/14	10:52 PS	04/24/14	SO	Soil	A1-SB-03-2-4
MC30011-13	04/23/14	10:54 PS	04/24/14	SO	Soil	A1-SB-03-4-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

AECOM

Job No: MC30011

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30011-14	04/23/14	10:56 PS	04/24/14	SO	Soil	A1-SB-03-6-8
MC30011-15	04/23/14	10:58 PS	04/24/14	SO	Soil	A1-SB-03-8-10
MC30011-16	04/23/14	11:00 PS	04/24/14	SO	Soil	A1-SB-03-10-12
MC30011-17	04/23/14	11:40 PS	04/24/14	SO	Soil	A1-SB-04-0-2
MC30011-18	04/23/14	11:30 PS	04/24/14	SO	Soil	A1-SB-05-0-2
MC30011-19	04/23/14	11:50 PS	04/24/14	SO	Soil	A1-SB-06-0-2
MC30011-20	04/23/14	11:55 PS	04/24/14	SO	Soil	A1-SB-06-2-4
MC30011-21	04/23/14	12:00 PS	04/24/14	SO	Soil	A1-SB-06-4-6
MC30011-22	04/23/14	12:05 PS	04/24/14	SO	Soil	A1-SB-06-6-8
MC30011-23	04/23/14	12:54 PS	04/24/14	SO	Soil	A1-SB-07-0-2
MC30011-24	04/23/14	13:02 PS	04/24/14	SO	Soil	A1-SB-07-2-4
MC30011-25	04/23/14	13:03 PS	04/24/14	SO	Soil	A1-SB-107-2-4
MC30011-26	04/23/14	13:05 PS	04/24/14	SO	Soil	A1-SB-07-4-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary

(continued)

AECOM

Job No: MC30011

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30011-27	04/23/14	13:06 PS	04/24/14	SO	Soil	A1-SB-07-6-8
MC30011-28	04/23/14	13:15 PS	04/24/14	SO	Soil	A1-SB-07-8-10
MC30011-29	04/23/14	13:17 PS	04/24/14	SO	Soil	A1-SB-08-0-2
MC30011-30	04/23/14	13:18 PS	04/24/14	SO	Soil	A1-SB-08-2-4
MC30011-30D	04/23/14	13:18 PS	04/24/14	SO	Soil Dup/MSD	A1-SB-08-2-4
MC30011-30S	04/23/14	13:18 PS	04/24/14	SO	Soil Matrix Spike	A1-SB-08-2-4
MC30011-31	04/23/14	13:20 PS	04/24/14	SO	Soil	A1-SB-08-4-6
MC30011-32	04/23/14	13:22 PS	04/24/14	SO	Soil	A1-SB-08-6-8
MC30011-33	04/23/14	13:39 PS	04/24/14	SO	Soil	A1-SB-09-0-2
MC30011-34	04/23/14	13:41 PS	04/24/14	SO	Soil	A1-SB-09-2-4
MC30011-35	04/23/14	13:43 PS	04/24/14	SO	Soil	A1-SB-09-4-6
MC30011-36	04/23/14	13:45 PS	04/24/14	SO	Soil	A1-SB-09-6-8

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM

Job No MC30011

Site: UTC - Debris Pile

Report Date 4/28/2014 5:54:17 PM

36 Sample(s) were collected on 04/23/2014 and were received at Accutest on 04/24/2014 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of MC30011. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082A

Matrix SO **Batch ID:** OP37767

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC30011-1MS, MC30011-1MSD were used as the QC samples indicated.
- MC30011-9,10 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- MC30011-1,2,3,6,7,8,11,13,15,17 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.

Matrix SO **Batch ID:** OP37777

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC30011-30MS, MC30011-30MSD were used as the QC samples indicated.
- Continuing calibration check standard GBK1211-ECC1207, signal #1 and GBK1212-CC1207, signal #1, file BK36971 for DCB exceed criteria. Target recovery satisfactory.
- Continuing calibration check standard GBK1211-CC1207, signal #1, file BK36954 for TCMX exceed criteria. Target recovery satisfactory.
- MC30011-19,20,23,25,29,30,33,34,36 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.
- MC30011-22,32 for Decachlorobipheny, Tetrachloro-m-xylene: Outside control limits due to dilution.
- Continuing calibration check standard GYZ7548-CC7547, signal #1, file YZ89422, YZ89440 and GBK1212-CC1207, signal #1, file BK36971 for DCB exceed criteria. Target recovery satisfactory.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO **Batch ID:** GN46617

- Sample(s) MC30011-18DUP were used as the QC samples for Solids, Percent.

Matrix SO **Batch ID:** GN46618

- Sample(s) MC30011-30DUP were used as the QC samples for Solids, Percent.

Wet Chemistry By Method SW846 1020

Matrix SO **Batch ID:** GN46653

- Sample(s) MC29993-1DUP were used as the QC samples for Ignitability (Flashpoint).

Wet Chemistry By Method SW846 CHAP7

Matrix SO	Batch ID: GN46631
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- Sample(s) MC29993-1DUP were used as the QC samples for Corrosivity as pH.

Matrix SO	Batch ID: GP17511
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- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC29993-1DUP, MC29993-1MS were used as the QC samples for Cyanide Reactivity.

Matrix SO	Batch ID: GP17512
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- All samples were distilled within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC29993-1DUP, MC29993-1MS were used as the QC samples for Sulfide Reactivity.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report (MC30011).

Summary of Hits

Job Number: MC30011
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/23/14



Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
MC30011-1	A1-SB-01-0-2					
		Aroclor 1254 ^a	27.1 J	37	16	ug/kg SW846 8082A
		Aroclor 1260	57.2	37	14	ug/kg SW846 8082A
MC30011-2	A1-SB-01-2-4					
		Aroclor 1254 ^a	20.3 J	36	16	ug/kg SW846 8082A
		Aroclor 1260	56.9	36	13	ug/kg SW846 8082A
MC30011-3	A1-SB-01-4-6					
		Aroclor 1254 ^a	97.3	37	16	ug/kg SW846 8082A
		Aroclor 1260	280	37	14	ug/kg SW846 8082A
		Corrosivity as pH	7.8			SW846 CHAP7
		Ignitability (Flashpoint)	> 230		Deg. F	SW846 1020
MC30011-4	A1-SB-01-6-7					
		Aroclor 1260	1700	180	66	ug/kg SW846 8082A
MC30011-5	A1-SB-02-0-2					
		Aroclor 1260	624	36	13	ug/kg SW846 8082A
MC30011-6	A1-SB-02-2-4					
		Aroclor 1254 ^a	43.5	36	16	ug/kg SW846 8082A
		Aroclor 1260	126	36	13	ug/kg SW846 8082A
MC30011-7	A1-SB-02-4-6					
		Aroclor 1254 ^a	49.9	35	16	ug/kg SW846 8082A
		Aroclor 1260	109	35	13	ug/kg SW846 8082A
MC30011-8	A1-SB-02-6-8					
		Aroclor 1254 ^a	151	36	16	ug/kg SW846 8082A
		Aroclor 1260	310	36	13	ug/kg SW846 8082A
		Corrosivity as pH	7.5			SW846 CHAP7
		Ignitability (Flashpoint)	> 230		Deg. F	SW846 1020
MC30011-9	A1-SB-02-8-10					
		Aroclor 1254	380	36	16	ug/kg SW846 8082A

Summary of Hits

Job Number: MC30011
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/23/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Aroclor 1260 ^a		99.5	36	13	ug/kg	SW846 8082A
MC30011-10	A1-SB-02-10-12					
Aroclor 1254		155	37	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		70.9	37	14	ug/kg	SW846 8082A
MC30011-11	A1-SB-03-0-2					
Aroclor 1254 ^a		45.8	34	15	ug/kg	SW846 8082A
Aroclor 1260		64.3	34	13	ug/kg	SW846 8082A
MC30011-12	A1-SB-03-2-4					
Aroclor 1260		37.4	35	13	ug/kg	SW846 8082A
MC30011-13	A1-SB-03-4-6					
Aroclor 1254 ^a		36.3	35	15	ug/kg	SW846 8082A
Aroclor 1260		74.2	35	13	ug/kg	SW846 8082A
Corrosivity as pH		8.0				SW846 CHAP7
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020
MC30011-14	A1-SB-03-6-8					
Aroclor 1260		1980	180	65	ug/kg	SW846 8082A
MC30011-15	A1-SB-03-8-10					
Aroclor 1254 ^a		57.3	37	17	ug/kg	SW846 8082A
Aroclor 1260		139	37	14	ug/kg	SW846 8082A
MC30011-16	A1-SB-03-10-12					
Aroclor 1260		1270	170	65	ug/kg	SW846 8082A
MC30011-17	A1-SB-04-0-2					
Aroclor 1254 ^a		43.7	34	15	ug/kg	SW846 8082A
Aroclor 1260		148	34	13	ug/kg	SW846 8082A
Corrosivity as pH		7.8				SW846 CHAP7
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020

Summary of Hits

Job Number: MC30011
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/23/14



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30011-18	A1-SB-05-0-2					
Aroclor 1260		1580	180	69	ug/kg	SW846 8082A
Corrosivity as pH		7.5				SW846 CHAP7
Ignitability (Flashpoint)		> 230			Deg. F	SW846 1020
MC30011-19	A1-SB-06-0-2					
Aroclor 1254 ^a		35.3 J	37	16	ug/kg	SW846 8082A
Aroclor 1260		764	180	69	ug/kg	SW846 8082A
MC30011-20	A1-SB-06-2-4					
Aroclor 1254 ^a		54.7	35	16	ug/kg	SW846 8082A
Aroclor 1260		122	35	13	ug/kg	SW846 8082A
MC30011-21	A1-SB-06-4-6					
Aroclor 1260		1770	180	66	ug/kg	SW846 8082A
MC30011-22	A1-SB-06-6-8					
Aroclor 1260		15500	3800	1400	ug/kg	SW846 8082A
MC30011-23	A1-SB-07-0-2					
Aroclor 1254 ^a		16.5 J	36	16	ug/kg	SW846 8082A
Aroclor 1260		94.4	36	13	ug/kg	SW846 8082A
MC30011-24	A1-SB-07-2-4					
Aroclor 1260		70.9	36	13	ug/kg	SW846 8082A
MC30011-25	A1-SB-107-2-4					
Aroclor 1254 ^a		16.4 J	36	16	ug/kg	SW846 8082A
Aroclor 1260		96.9	36	13	ug/kg	SW846 8082A
MC30011-26	A1-SB-07-4-6					
No hits reported in this sample.						
MC30011-27	A1-SB-07-6-8					
Aroclor 1260		29.2 J	38	14	ug/kg	SW846 8082A

Summary of Hits

Job Number: MC30011
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/23/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30011-28	A1-SB-07-8-10					
Aroclor 1260		254	36	13	ug/kg	SW846 8082A
MC30011-29	A1-SB-08-0-2					
Aroclor 1254 ^a		18.4 J	37	17	ug/kg	SW846 8082A
Aroclor 1260		39.2	37	14	ug/kg	SW846 8082A
MC30011-30	A1-SB-08-2-4					
Aroclor 1254 ^a		36.0	36	16	ug/kg	SW846 8082A
Aroclor 1260		79.5	36	13	ug/kg	SW846 8082A
MC30011-31	A1-SB-08-4-6					
Aroclor 1260		22.6 J	38	14	ug/kg	SW846 8082A
MC30011-32	A1-SB-08-6-8					
Aroclor 1260		69400	7100	2600	ug/kg	SW846 8082A
MC30011-33	A1-SB-09-0-2					
Aroclor 1254 ^a		287	37	16	ug/kg	SW846 8082A
Aroclor 1260		555	37	14	ug/kg	SW846 8082A
MC30011-34	A1-SB-09-2-4					
Aroclor 1254 ^a		28.5 J	38	17	ug/kg	SW846 8082A
Aroclor 1260		65.7	38	14	ug/kg	SW846 8082A
MC30011-35	A1-SB-09-4-6					
Aroclor 1260		15.5 J	38	14	ug/kg	SW846 8082A
MC30011-36	A1-SB-09-6-8					
Aroclor 1254 ^a		127	35	16	ug/kg	SW846 8082A
Aroclor 1260		592	35	13	ug/kg	SW846 8082A

(a) Estimated value due to the presence of other Aroclor pattern.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	A1-SB-01-0-2	Date Sampled:	04/23/14
Lab Sample ID:	MC30011-1	Date Received:	04/24/14
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89412.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	27.1	37	16	ug/kg	J
11096-82-5	Aroclor 1260	57.2	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		30-150%
877-09-8	Tetrachloro-m-xylene	79%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	78%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-01-2-4		
Lab Sample ID: MC30011-2		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.9
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89413.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	20.3	36	16	ug/kg	J
11096-82-5	Aroclor 1260	56.9	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		30-150%
877-09-8	Tetrachloro-m-xylene	65%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%
2051-24-3	Decachlorobiphenyl	72%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	A1-SB-01-4-6						
Lab Sample ID:	MC30011-3					Date Sampled:	04/23/14
Matrix:	SO - Soil					Date Received:	04/24/14
Method:	SW846 8082A SW846 3550B					Percent Solids:	87.5
Project:	UTC - Debris Pile						

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89414.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	97.3	37	16	ug/kg	
11096-82-5	Aroclor 1260	280	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-150%
877-09-8	Tetrachloro-m-xylene	71%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	73%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-01-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-3		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 87.5
Project: UTC - Debris Pile		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Corrosivity as pH	7.8				1	04/24/14	MA SW846 CHAP7
Cyanide Reactivity	1.7 U	1.7	1.7	mg/kg	1	04/26/14 12:30 BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230			Deg. F	1	04/26/14	MA SW846 1020
Solids, Percent	87.5			%	1	04/24/14	MA SM21 2540 B MOD.
Sulfide Reactivity	57 U	57	57	mg/kg	1	04/26/14	BF SW846 CHAP7

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.3
4

Report of Analysis

Client Sample ID: A1-SB-01-6-7	
Lab Sample ID: MC30011-4	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 91.8
Project: UTC - Debris Pile	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89415.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2	YZ89441.D	5	04/26/14	SZ	04/24/14	OP37767	GYZ7548

Run #	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2	15.3 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	1700 ^a	180	66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%	74%	30-150%
877-09-8	Tetrachloro-m-xylene	47%	56%	30-150%
2051-24-3	Decachlorobiphenyl	63%	70%	30-150%
2051-24-3	Decachlorobiphenyl	54%	61%	30-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

4.5
4

Client Sample ID: A1-SB-02-0-2		Date Sampled: 04/23/14
Lab Sample ID: MC30011-5		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.8
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89416.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	624	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		30-150%
877-09-8	Tetrachloro-m-xylene	73%		30-150%
2051-24-3	Decachlorobiphenyl	88%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-02-2-4		
Lab Sample ID: MC30011-6		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 92.6
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89417.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	43.5	36	16	ug/kg	
11096-82-5	Aroclor 1260	126	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		30-150%
877-09-8	Tetrachloro-m-xylene	73%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-02-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-7		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.5
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89418.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.3	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	49.9	35	16	ug/kg	
11096-82-5	Aroclor 1260	109	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-150%
877-09-8	Tetrachloro-m-xylene	63%		30-150%
2051-24-3	Decachlorobiphenyl	77%		30-150%
2051-24-3	Decachlorobiphenyl	64%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

Client Sample ID: A1-SB-02-6-8	
Lab Sample ID: MC30011-8	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 90.4
Project: UTC - Debris Pile	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89419.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	151	36	16	ug/kg	
11096-82-5	Aroclor 1260	310	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	85%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-02-6-8		Date Sampled: 04/23/14
Lab Sample ID: MC30011-8		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 90.4
Project: UTC - Debris Pile		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Corrosivity as pH	7.5				1	04/24/14	MA SW846 CHAP7
Cyanide Reactivity	1.7 U	1.7	1.7	mg/kg	1	04/26/14 12:30 BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230			Deg. F	1	04/26/14	MA SW846 1020
Solids, Percent	90.4			%	1	04/24/14	MA SM21 2540 B MOD.
Sulfide Reactivity	55 U	55	55	mg/kg	1	04/26/14	BF SW846 CHAP7

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.8
4

Report of Analysis

Client Sample ID: A1-SB-02-8-10		
Lab Sample ID: MC30011-9		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 87.8
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89420.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	380	36	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	99.5	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%		30-150%
877-09-8	Tetrachloro-m-xylene	68%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%
2051-24-3	Decachlorobiphenyl	64%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-02-10-12		Date Sampled: 04/23/14
Lab Sample ID: MC30011-10		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 88.8
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89421.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	155	37	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	70.9	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.10
4

Report of Analysis

Client Sample ID: A1-SB-03-0-2		
Lab Sample ID: MC30011-11		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 93.3
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89423.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	7.2	ug/kg	
11104-28-2	Aroclor 1221	ND	34	14	ug/kg	
11141-16-5	Aroclor 1232	ND	34	14	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	ND	34	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	45.8	34	15	ug/kg	
11096-82-5	Aroclor 1260	64.3	34	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		30-150%
877-09-8	Tetrachloro-m-xylene	66%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	78%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	A1-SB-03-2-4	Date Sampled:	04/23/14
Lab Sample ID:	MC30011-12	Date Received:	04/24/14
Matrix:	SO - Soil	Percent Solids:	95.3
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89424.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.3	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	15	ug/kg	
11096-82-5	Aroclor 1260	37.4	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	93%		30-150%
877-09-8	Tetrachloro-m-xylene	76%		30-150%
2051-24-3	Decachlorobiphenyl	93%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-03-4-6		
Lab Sample ID: MC30011-13		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 93.2
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89425.D	1	04/25/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.3	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	36.3	35	15	ug/kg	
11096-82-5	Aroclor 1260	74.2	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	75%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-03-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-13		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 93.2
Project: UTC - Debris Pile		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Corrosivity as pH	8.0				1	04/24/14	MA SW846 CHAP7
Cyanide Reactivity	1.5 U	1.5	1.5	mg/kg	1	04/26/14 12:30 BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230			Deg. F	1	04/26/14	MA SW846 1020
Solids, Percent	93.2			%	1	04/24/14	MA SM21 2540 B MOD.
Sulfide Reactivity	54 U	54	54	mg/kg	1	04/26/14	BF SW846 CHAP7

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.13
4

Report of Analysis

Client Sample ID: A1-SB-03-6-8		
Lab Sample ID: MC30011-14		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 91.1
Project: UTC - Debris Pile		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89426.D	1	04/26/14	SZ	04/24/14	OP37767	GYZ7548
Run #2	YZ89442.D	5	04/26/14	SZ	04/24/14	OP37767	GYZ7548

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.4	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	1980 ^a	180	65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	100%	123%	30-150%
877-09-8	Tetrachloro-m-xylene	74%	80%	30-150%
2051-24-3	Decachlorobiphenyl	89%	101%	30-150%
2051-24-3	Decachlorobiphenyl	74%	90%	30-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-03-8-10		
Lab Sample ID: MC30011-15		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.5
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89427.D	1	04/26/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	57.3	37	17	ug/kg	
11096-82-5	Aroclor 1260	139	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-150%
877-09-8	Tetrachloro-m-xylene	70%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-03-10-12	
Lab Sample ID: MC30011-16	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 93.4
Project: UTC - Debris Pile	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89428.D	1	04/26/14	SZ	04/24/14	OP37767	GYZ7548
Run #2	YZ89443.D	5	04/26/14	SZ	04/24/14	OP37767	GYZ7548

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2	15.4 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.3	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	15	ug/kg	
11096-82-5	Aroclor 1260	1270 ^a	170	65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	105%	119%	30-150%
877-09-8	Tetrachloro-m-xylene	76%	76%	30-150%
2051-24-3	Decachlorobiphenyl	89%	89%	30-150%
2051-24-3	Decachlorobiphenyl	76%	78%	30-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-04-0-2	
Lab Sample ID: MC30011-17	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 93.4
Project: UTC - Debris Pile	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89429.D	1	04/26/14	SZ	04/24/14	OP37767	GYZ7548
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	34	7.2	ug/kg	
11104-28-2	Aroclor 1221	ND	34	14	ug/kg	
11141-16-5	Aroclor 1232	ND	34	14	ug/kg	
53469-21-9	Aroclor 1242	ND	34	15	ug/kg	
12672-29-6	Aroclor 1248	ND	34	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	43.7	34	15	ug/kg	
11096-82-5	Aroclor 1260	148	34	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		30-150%
877-09-8	Tetrachloro-m-xylene	76%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-04-0-2 Lab Sample ID: MC30011-17 Matrix: SO - Soil Project: UTC - Debris Pile	Date Sampled: 04/23/14 Date Received: 04/24/14 Percent Solids: 93.4
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General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Corrosivity as pH	7.8				1	04/24/14	MA SW846 CHAP7
Cyanide Reactivity	1.6 U	1.6	1.6	mg/kg	1	04/26/14 12:30 BF	SW846 CHAP7
Ignitability (Flashpoint)	> 230			Deg. F	1	04/26/14	MA SW846 1020
Solids, Percent	93.4			%	1	04/24/14	MA SM21 2540 B MOD.
Sulfide Reactivity	54 U	54	54	mg/kg	1	04/26/14	BF SW846 CHAP7

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.17
4

Report of Analysis

Client Sample ID: A1-SB-05-0-2		
Lab Sample ID: MC30011-18		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.4
Project: UTC - Debris Pile		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89430.D	1	04/26/14	SZ	04/24/14	OP37767	GYZ7548
Run #2	YZ89444.D	5	04/26/14	SZ	04/24/14	OP37767	GYZ7548

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	ND	37	16	ug/kg	
11096-82-5	Aroclor 1260	1580 ^a	180	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%	88%	30-150%
877-09-8	Tetrachloro-m-xylene	80%	73%	30-150%
2051-24-3	Decachlorobiphenyl	88%	87%	30-150%
2051-24-3	Decachlorobiphenyl	75%	78%	30-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-05-0-2	Date Sampled: 04/23/14
Lab Sample ID: MC30011-18	Date Received: 04/24/14
Matrix: SO - Soil	Percent Solids: 86.4
Project: UTC - Debris Pile	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By Method
Corrosivity as pH	7.5				1	04/24/14	MA SW846 CHAP7
Cyanide Reactivity	1.7 U	1.7	1.7	mg/kg	1	04/26/14 12:30	BF SW846 CHAP7
Ignitability (Flashpoint)	> 230			Deg. F	1	04/26/14	MA SW846 1020
Solids, Percent	86.4			%	1	04/24/14	MA SM21 2540 B MOD.
Sulfide Reactivity	58 U	58	58	mg/kg	1	04/26/14	BF SW846 CHAP7

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.18
4

Report of Analysis

Client Sample ID: A1-SB-06-0-2		
Lab Sample ID: MC30011-19		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.6
Project: UTC - Debris Pile		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89437.D	1	04/26/14	SZ	04/24/14	OP37777	GYZ7548
Run #2	YZ89445.D	5	04/26/14	SZ	04/24/14	OP37777	GYZ7548

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2	15.6 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	35.3	37	16	ug/kg	J
11096-82-5	Aroclor 1260	764 ^b	180	69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%	110%	30-150%
877-09-8	Tetrachloro-m-xylene	73%	78%	30-150%
2051-24-3	Decachlorobiphenyl	87%	105%	30-150%
2051-24-3	Decachlorobiphenyl	73%	94%	30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-06-2-4		Date Sampled: 04/23/14
Lab Sample ID: MC30011-20		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.3
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89438.D	1	04/26/14	SZ	04/24/14	OP37777	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.4	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	54.7	35	16	ug/kg	
11096-82-5	Aroclor 1260	122	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		30-150%
877-09-8	Tetrachloro-m-xylene	75%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	65%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-06-4-6	
Lab Sample ID: MC30011-21	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 90.5
Project: UTC - Debris Pile	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89439.D	1	04/26/14	SZ	04/24/14	OP37777	GYZ7548
Run #2	YZ89446.D	5	04/26/14	SZ	04/24/14	OP37777	GYZ7548

	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2	15.5 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	1770 ^a	180	66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%	88%	30-150%
877-09-8	Tetrachloro-m-xylene	71%	76%	30-150%
2051-24-3	Decachlorobiphenyl	77%	96%	30-150%
2051-24-3	Decachlorobiphenyl	65%	84%	30-150%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-06-6-8	
Lab Sample ID: MC30011-22	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 84.6
Project: UTC - Debris Pile	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36972.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2	BK36964.D	100	04/27/14	NK	04/25/14	OP37777	GBK1211

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	38	15	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	ND	38	17	ug/kg	
11096-82-5	Aroclor 1260	15500 ^a	3800	1400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%	0% ^b	30-150%
877-09-8	Tetrachloro-m-xylene	91%	0% ^b	30-150%
2051-24-3	Decachlorobiphenyl	96%	0% ^b	30-150%
2051-24-3	Decachlorobiphenyl	125%	0% ^b	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-07-0-2	Date Sampled: 04/23/14
Lab Sample ID: MC30011-23	Date Received: 04/24/14
Matrix: SO - Soil	Percent Solids: 91.3
Method: SW846 8082A SW846 3550B	
Project: UTC - Debris Pile	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36973.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	16.5	36	16	ug/kg	J
11096-82-5	Aroclor 1260	94.4	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		30-150%
877-09-8	Tetrachloro-m-xylene	107%		30-150%
2051-24-3	Decachlorobiphenyl	113%		30-150%
2051-24-3	Decachlorobiphenyl	148%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.23
4

Report of Analysis

Client Sample ID: A1-SB-07-2-4		Date Sampled: 04/23/14
Lab Sample ID: MC30011-24		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.7
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36974.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	70.9	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		30-150%
877-09-8	Tetrachloro-m-xylene	85%		30-150%
2051-24-3	Decachlorobiphenyl	88%		30-150%
2051-24-3	Decachlorobiphenyl	115%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.24
4

Report of Analysis

Client Sample ID: A1-SB-107-2-4		Date Sampled: 04/23/14
Lab Sample ID: MC30011-25		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.5
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36975.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	16.4	36	16	ug/kg	J
11096-82-5	Aroclor 1260	96.9	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		30-150%
877-09-8	Tetrachloro-m-xylene	82%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%
2051-24-3	Decachlorobiphenyl	116%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-07-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-26		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 87.7
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36976.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	13	ug/kg	
11097-69-1	Aroclor 1254	ND	37	16	ug/kg	
11096-82-5	Aroclor 1260	ND	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		30-150%
877-09-8	Tetrachloro-m-xylene	81%		30-150%
2051-24-3	Decachlorobiphenyl	90%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.26
4

Report of Analysis

Client Sample ID: A1-SB-07-6-8		Date Sampled: 04/23/14
Lab Sample ID: MC30011-27		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 83.1
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36977.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	ND	38	17	ug/kg	
11096-82-5	Aroclor 1260	29.2	38	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		30-150%
877-09-8	Tetrachloro-m-xylene	74%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.27
4

Report of Analysis

Client Sample ID: A1-SB-07-8-10		
Lab Sample ID: MC30011-28		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 90.3
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36978.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	254	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	85%		30-150%
877-09-8	Tetrachloro-m-xylene	77%		30-150%
2051-24-3	Decachlorobiphenyl	87%		30-150%
2051-24-3	Decachlorobiphenyl	106%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-08-0-2		Date Sampled: 04/23/14
Lab Sample ID: MC30011-29		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 88.3
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36979.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	18.4	37	17	ug/kg	J
11096-82-5	Aroclor 1260	39.2	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		30-150%
877-09-8	Tetrachloro-m-xylene	75%		30-150%
2051-24-3	Decachlorobiphenyl	91%		30-150%
2051-24-3	Decachlorobiphenyl	112%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.29
4

Report of Analysis

Client Sample ID: A1-SB-08-2-4		Date Sampled: 04/23/14
Lab Sample ID: MC30011-30		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 90.2
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89436.D	1	04/26/14	SZ	04/24/14	OP37777	GYZ7548
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	36.0	36	16	ug/kg	
11096-82-5	Aroclor 1260	79.5	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		30-150%
877-09-8	Tetrachloro-m-xylene	73%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	64%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.30
4

Report of Analysis

Client Sample ID: A1-SB-08-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-31		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 85.0
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK36980.D	1	04/28/14	NK	04/25/14	OP37777	GBK1212
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.0	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	ND	38	17	ug/kg	
11096-82-5	Aroclor 1260	22.6	38	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		30-150%
877-09-8	Tetrachloro-m-xylene	71%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	103%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.31
4

Report of Analysis

Client Sample ID:	A1-SB-08-6-8	Date Sampled:	04/23/14
Lab Sample ID:	MC30011-32	Date Received:	04/24/14
Matrix:	SO - Soil	Percent Solids:	89.0
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89481.D	1	04/28/14	SZ	04/25/14	OP37777	GYZ7550
Run #2	YZ89482.D	200	04/28/14	SZ	04/25/14	OP37777	GYZ7550

	Initial Weight	Final Volume
Run #1	15.9 g	10.0 ml
Run #2	15.9 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	69400 ^a	7100	2600	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%	0% ^b	30-150%
877-09-8	Tetrachloro-m-xylene	71%	0% ^b	30-150%
2051-24-3	Decachlorobiphenyl	106%	0% ^b	30-150%
2051-24-3	Decachlorobiphenyl	82%	0% ^b	30-150%

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-09-0-2	
Lab Sample ID: MC30011-33	Date Sampled: 04/23/14
Matrix: SO - Soil	Date Received: 04/24/14
Method: SW846 8082A SW846 3550B	Percent Solids: 88.2
Project: UTC - Debris Pile	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89477.D	1	04/28/14	SZ	04/25/14	OP37777	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	14	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	287	37	16	ug/kg	
11096-82-5	Aroclor 1260	555	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		30-150%
877-09-8	Tetrachloro-m-xylene	60%		30-150%
2051-24-3	Decachlorobiphenyl	89%		30-150%
2051-24-3	Decachlorobiphenyl	74%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-09-2-4		
Lab Sample ID: MC30011-34		Date Sampled: 04/23/14
Matrix: SO - Soil		Date Received: 04/24/14
Method: SW846 8082A SW846 3550B		Percent Solids: 85.2
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89478.D	1	04/28/14	SZ	04/25/14	OP37777	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	17	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	28.5	38	17	ug/kg	J
11096-82-5	Aroclor 1260	65.7	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	80%		30-150%
2051-24-3	Decachlorobiphenyl	111%		30-150%
2051-24-3	Decachlorobiphenyl	92%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: A1-SB-09-4-6		Date Sampled: 04/23/14
Lab Sample ID: MC30011-35		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 83.5
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89479.D	1	04/28/14	SZ	04/25/14	OP37777	GYZ7550
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	ND	38	17	ug/kg	
11096-82-5	Aroclor 1260	15.5	38	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		30-150%
877-09-8	Tetrachloro-m-xylene	65%		30-150%
2051-24-3	Decachlorobiphenyl	101%		30-150%
2051-24-3	Decachlorobiphenyl	81%		30-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.35
4

Report of Analysis

Client Sample ID: A1-SB-09-6-8		Date Sampled: 04/23/14
Lab Sample ID: MC30011-36		Date Received: 04/24/14
Matrix: SO - Soil		Percent Solids: 91.9
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89480.D	1	04/28/14	SZ	04/25/14	OP37777	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	35	15	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	127	35	16	ug/kg	
11096-82-5	Aroclor 1260	592	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		30-150%
877-09-8	Tetrachloro-m-xylene	73%		30-150%
2051-24-3	Decachlorobiphenyl	109%		30-150%
2051-24-3	Decachlorobiphenyl	82%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.36
4

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information										FED-EX Tracking #	E-tittle Order Control #	
Company Name AELCOM		Project Name UTC DEBRIS PILE										Accutest Quote #	Accutest Job # MC30011	
Street Address 5015 CAMPUS WOOD DR		Billing Information (if different from Report to)										Requested Analysis (see TEST CODE sheet)		Matrix Codes
City, State, Zip E. SYRACUSE NY 13057		Company Name										PCB METHOD 3550B REACT/COOL/IGM.		DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SD - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank
Project Contact SCOTT Mc DONOUGH		Street Address												
Phone # 518-951-2391		City, State, Zip												
E-mail		Attention:												
Project Manager PAT SWAIN		PO#												
Sampler(s) Name(s) PAT SWAIN		Phone # 315-569-5719		Project Manager		Attention:				PO#		LAB USE ONLY		
Accutest Sample #		Field ID / Point of Collection		MECH/ID1 Val #		Collection		Matrix		Number of preserved Bottles		Result		
						Date		Time		Sampled by		Matrix		
1		A1-SB-01-0-2				4/23/14		1002		PS		50		
2		A1-SB-01-2-4						1005						
3		A1-SB-01-4-6						1007						
4		A1-SB-01-6-7						1010						
5		A1-SB-02-0-2						1026						
6		A1-SB-02-2-4						1028						
7		A1-SB-02-4-6						1031						
8		A1-SB-02-6-8						1037						
9		A1-SB-02-8-10						1041						
10		A1-SB-02-10-12						1043						
11		A1-SB-03-0-2						1050						
12		A1-SB-03-2-4						1052						
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		Commercial "A" (Level 1)		Commercial "B" (Level 2)		FULLT1 (Level 3+4)		CT RCP		MA MCP		
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> CT RCP <input type="checkbox"/> MA MCP		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other		Commercial "A" = Results Only Commercial "B" = Results + QC Summary		RUSH!		Comments / Special Instructions		
Emergency & Rush TIA data available VIA Lablink														
Relinquished by Sampler:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:		
3		4/23/14 1035		F. Olgett		4/24/14 9:15		F. Olgett		4		Index		
Relinquished by:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:		
5				5										
Custody Seal #		Intact		Not Intact		Preserved where applicable		On Ice		Cooler Temp.		10°C		

ACCUTEST
SYRACUSE-SC

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes				
Company Name AECOM		Project Name LTC DEBRIS PILE		FED-EX Tracking #												Bottle Order Control # mc30011				
Street Address 5015 CAMARWOOD DR		Street:		Account #												Invoice Job #				
City State Zip E. SYRACUSE NY 13057		City:		Billing Information (If different from Report to)												Company Name				
Project Contact SCOTT McDONOUGH		Project#		Street Address												City				
Phone # 518-951-2391		Client PO#		City State Zip												State				
Sampler(s) Name(s) PAT Swann		Project Manager		Attention:												PO#				
Field ID / Point of Collection		MEOHDI Val #		Collection		Number of preserved Bottles												LAB USE ONLY		
				Date	Time	Sampled by	Matrix	# of bottles	HCl	NH3	NH4	HSBDA	NO3	NO2	Di Water	MEDH	ENDORE	Residue		
13	A1-SB-03-4-6			4/23/14	1054	PS	SO	2											X	X
14	A1-SB-03-6-8				1056			1											X	
15	A1-SB-03-8-10				1058			1											X	
16	A1-SB-03-10-12				1100			1											X	
17	A1-SB-04-0-2				1140			2											X	X
18	A1-SB-05-0-2				1130			2											X	X
19	A1-SB-06-0-2				1150			1											X	
20	A1-SB-06-2-4				1155			1											X	
21	A1-SB-06-4-6				1200			1											X	
22	A1-SB-06-6-8				1205			1											X	
23	A1-SB-07-0-2				1254			1											X	
24	A1-SB-07-2-4			4	1302			1											X	
Turnaround Time (Business days)				Approved By (Accutest PM): / Date:				Commercial "A" (Level 1)				NYASP Category A				Comments / Special Instructions				
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY								<input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> CT RCP <input type="checkbox"/> MA MCP				<input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format <input type="checkbox"/> Other								
Emergency & Rush T/A data available VIA Lablink.				Commercial "A" = Results Only Commercial "B" = Results + QC Summary								RUSH!								
Relinquished by:		Date Time:		Received By:		Date Time:		Relinquished By:		Date Time:		Received By:		Date Time:		Received By:				
SCOTT McDONOUGH		4/23/14 15:35		1				SCOTT McDONOUGH		4/23/14 15:35		2		FEDEX						
3		4-24-14 9:15		3				4				4								
Relinquished by:		Date Time:		Received By:		Date Time:		Custody Seal #		Preserved where applicable		On Ice		Cooler Temp.						
										<input type="checkbox"/> Intact <input type="checkbox"/> Not intact		<input type="checkbox"/>		10C						

5.1
5

MC30011: Chain of Custody

Page 2 of 5

ACCUTEST
SYRACUSE-SC

Requested Analysis (see TEST CODE sheet) Matrix Codes
DW - Drinking Water
GW - Ground Water
WV - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank
LAB USE ONLY

Client / Reporting Information Project Information
Company Name: AECOM Project Name: UTC DEBRIS PILE
Street Address: 5015 CAMARWOOD DR
City: E. SYRACUSE NY 13057
Project Contact: SCOTT MCDONOUGH
Phone #: 518-951-2391
Sampler(s) Name(s): PAT SWAN
Field ID / Point of Collection: AI-SB-09-4-6, AI-SB-09-6-8

Data Deliverable Information

Collection	MECH/DI Vial #	Date	Time	Sampled by	Matrix	# of bottles	Number of preserved bottles												
							HCl	NO3	NO2	H2SO4	NO3	DI Water	NO3	ENCORE	BlueLine				

Turnaround Time (Business days) Approved By (Accutest PM) / Date: **RUSH!**
 Std. 10 Business Days
 Std. 5 Business Days (By Contract only)
 5 Day RUSH
 3 Day EMERGENCY
 2 Day EMERGENCY
 1 Day EMERGENCY
Emergency & Rush T/A data available VIA Lablink

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date/Time:	Received By:	Date/Time:
1 [Signature]	4/23/14 15:35	2 [Signature]	
3 FEDEX	4-24-14 9:15	4	
5		5	

Method 7522.6

5.1
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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC30011 **Client:** AECOM **Immediate Client Services Action Required:** No
Date / Time Received: 4/24/2014 **Delivery Method:** _____ **Client Service Action Required at Login:** No
Project: UTC DEBRIS PILE **No. Coolers:** 1 **Airbill #'s:** _____

<u>Cooler Security</u>	<u>Y or N</u>	<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Cooler temp verification:	Infrared gun
3. Cooler media:	Ice (bag)

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

5.1
5

Technical Report for

AECOM

UTC - Debris Pile

Accutest Job Number: MC30076

Sampling Date: 04/24/14

Report to:

AECOM

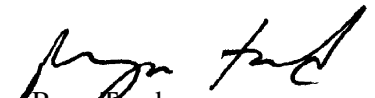
Scott.mcdonough@aecom.com

ATTN: Scott McDonough

Total number of pages in report: **370**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

AECOM

Job No: MC30076

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30076-1	04/24/14	10:08 PS	04/25/14	SO	Soil	A1-SB-10-0-2
MC30076-2	04/24/14	10:10 PS	04/25/14	SO	Soil	A1-SB-10-2-4
MC30076-3	04/24/14	10:11 PS	04/25/14	SO	Soil	A1-SB-110-2-4
MC30076-4	04/24/14	10:12 PS	04/25/14	SO	Soil	A1-SB-10-4-6
MC30076-4D	04/24/14	10:12 PS	04/25/14	SO	Soil Dup/MSD	A1-SB-10-4-6
MC30076-4S	04/24/14	10:12 PS	04/25/14	SO	Soil Matrix Spike	A1-SB-10-4-6
MC30076-5	04/24/14	10:15 PS	04/25/14	SO	Soil	A1-SB-10-6-7
MC30076-6	04/24/14	10:38 PS	04/25/14	SO	Soil	A1-SB-11-0-2
MC30076-7	04/24/14	10:40 PS	04/25/14	SO	Soil	A1-SB-11-2-4
MC30076-8	04/24/14	10:41 PS	04/25/14	SO	Soil	A1-SB-111-2-4
MC30076-9	04/24/14	10:42 PS	04/25/14	SO	Soil	A1-SB-11-4-6
MC30076-9D	04/24/14	10:42 PS	04/25/14	SO	Soil Dup/MSD	A1-SB-11-4-6
MC30076-9S	04/24/14	10:42 PS	04/25/14	SO	Soil Matrix Spike	A1-SB-11-4-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

AECOM

Job No: MC30076

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30076-10	04/24/14	10:45 PS	04/25/14	SO	Soil	A1-SB-11-6-7
MC30076-11	04/24/14	10:52 PS	04/25/14	SO	Soil	A1-SB-12-0-2
MC30076-12	04/24/14	10:54 PS	04/25/14	SO	Soil	A1-SB-12-2-4
MC30076-13	04/24/14	10:55 PS	04/25/14	SO	Soil	A1-SB-12-4-6
MC30076-14	04/24/14	11:05 PS	04/25/14	SO	Soil	A1-SB-13-0-2
MC30076-15	04/24/14	11:07 PS	04/25/14	SO	Soil	A1-SB-13-2-4
MC30076-16	04/24/14	11:10 PS	04/25/14	SO	Soil	A1-SB-13-4-6

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM

Job No MC30076

Site: UTC - Debris Pile

Report Date 4/29/2014 2:06:09 PM

16 Sample(s) were collected on 04/24/2014 and were received at Accutest on 04/25/2014 properly preserved, at 1 Deg. C and intact. These Samples received an Accutest job number of MC30076. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082A

Matrix SO	Batch ID: OP37808
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- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC30076-4MS, MC30076-4MSD, MC30076-9MS, MC30076-9MSD were used as the QC samples indicated.
- MC30076-4MSD Recovery(s) for Aroclor 1260 are outside control limits. Outside criteria due to presence of other Aroclors.
- RPD(s) for MC30076-4MSD for Aroclor 1254, Aroclor 1260 are outside control limits for sample OP37808-MSD. High RPD due to possible matrix interference and/or sample non-homogeneity.
- MC30076-6,7,8 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.
- MC30076-1,2,3,4,9,10,11,12,13,14,15,16 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix SO	Batch ID: GN46647
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- Sample(s) MC30076-4DUP were used as the QC samples for Solids, Percent.

Matrix SO	Batch ID: GN46648
------------------	--------------------------

- Sample(s) MC30076-9DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC30076).

Summary of Hits

Job Number: MC30076
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/24/14



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30076-1	A1-SB-10-0-2					
Aroclor 1254		206	37	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		96.2	37	14	ug/kg	SW846 8082A
MC30076-2	A1-SB-10-2-4					
Aroclor 1254		18.8 J	37	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		18.1 J	37	14	ug/kg	SW846 8082A
MC30076-3	A1-SB-110-2-4					
Aroclor 1254		38.0	37	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		28.9 J	37	14	ug/kg	SW846 8082A
MC30076-4	A1-SB-10-4-6					
Aroclor 1254		332	37	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		233	37	14	ug/kg	SW846 8082A
MC30076-5	A1-SB-10-6-7					
No hits reported in this sample.						
MC30076-6	A1-SB-11-0-2					
Aroclor 1254 ^a		133	37	17	ug/kg	SW846 8082A
Aroclor 1260		152	37	14	ug/kg	SW846 8082A
MC30076-7	A1-SB-11-2-4					
Aroclor 1254 ^a		109	37	17	ug/kg	SW846 8082A
Aroclor 1260		165	37	14	ug/kg	SW846 8082A
MC30076-8	A1-SB-111-2-4					
Aroclor 1254 ^a		97.8	36	16	ug/kg	SW846 8082A
Aroclor 1260		167	36	13	ug/kg	SW846 8082A
MC30076-9	A1-SB-11-4-6					
Aroclor 1254		307	37	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		108	37	14	ug/kg	SW846 8082A

Summary of Hits

Job Number: MC30076
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/24/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30076-10	A1-SB-11-6-7					
Aroclor 1254		1220	190	84	ug/kg	SW846 8082A
Aroclor 1260 ^a		70.0	38	14	ug/kg	SW846 8082A
MC30076-11	A1-SB-12-0-2					
Aroclor 1254		383	38	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		93.7	38	14	ug/kg	SW846 8082A
MC30076-12	A1-SB-12-2-4					
Aroclor 1254		406	35	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		186	35	13	ug/kg	SW846 8082A
MC30076-13	A1-SB-12-4-6					
Aroclor 1254		41.3	38	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		36.1 J	38	14	ug/kg	SW846 8082A
MC30076-14	A1-SB-13-0-2					
Aroclor 1254		48.0	39	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		36.0 J	39	15	ug/kg	SW846 8082A
MC30076-15	A1-SB-13-2-4					
Aroclor 1254		402	35	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		99.5	35	13	ug/kg	SW846 8082A
MC30076-16	A1-SB-13-4-6					
Aroclor 1254		212	38	17	ug/kg	SW846 8082A
Aroclor 1260 ^a		171	38	14	ug/kg	SW846 8082A

(a) Estimated value due to the presence of other Aroclor pattern.

Sample Results

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Client Sample ID: A1-SB-10-0-2		
Lab Sample ID: MC30076-1		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 87.4
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89490.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	14	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	13	ug/kg	
11097-69-1	Aroclor 1254	206	37	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	96.2	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		30-150%
877-09-8	Tetrachloro-m-xylene	63%		30-150%
2051-24-3	Decachlorobiphenyl	72%		30-150%
2051-24-3	Decachlorobiphenyl	60%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A1-SB-10-2-4		
Lab Sample ID: MC30076-2		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 89.1
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89491.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	18.8	37	16	ug/kg	J
11096-82-5	Aroclor 1260 ^a	18.1	37	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	69%		30-150%
877-09-8	Tetrachloro-m-xylene	51%		30-150%
2051-24-3	Decachlorobiphenyl	65%		30-150%
2051-24-3	Decachlorobiphenyl	56%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-110-2-4		
Lab Sample ID: MC30076-3		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.1
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89492.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	38.0	37	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	28.9	37	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%		30-150%
877-09-8	Tetrachloro-m-xylene	51%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%
2051-24-3	Decachlorobiphenyl	56%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-10-4-6	
Lab Sample ID: MC30076-4	Date Sampled: 04/24/14
Matrix: SO - Soil	Date Received: 04/25/14
Method: SW846 8082A SW846 3550B	Percent Solids: 86.4
Project: UTC - Debris Pile	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89493.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	332	37	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	233	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		30-150%
877-09-8	Tetrachloro-m-xylene	58%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-10-6-7		
Lab Sample ID: MC30076-5		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 89.9
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89494.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254	ND	36	16	ug/kg	
11096-82-5	Aroclor 1260	ND	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	80%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

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Client Sample ID:	A1-SB-11-0-2	Date Sampled:	04/24/14
Lab Sample ID:	MC30076-6	Date Received:	04/25/14
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89495.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	133	37	17	ug/kg	
11096-82-5	Aroclor 1260	152	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		30-150%
877-09-8	Tetrachloro-m-xylene	61%		30-150%
2051-24-3	Decachlorobiphenyl	77%		30-150%
2051-24-3	Decachlorobiphenyl	61%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-11-2-4		
Lab Sample ID: MC30076-7		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 88.6
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89496.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	109	37	17	ug/kg	
11096-82-5	Aroclor 1260	165	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		30-150%
877-09-8	Tetrachloro-m-xylene	70%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	67%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-111-2-4		
Lab Sample ID: MC30076-8		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 89.8
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89497.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.6	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	97.8	36	16	ug/kg	
11096-82-5	Aroclor 1260	167	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		30-150%
877-09-8	Tetrachloro-m-xylene	63%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%
2051-24-3	Decachlorobiphenyl	61%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID: A1-SB-11-4-6		
Lab Sample ID: MC30076-9		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 88.2
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89499.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254	307	37	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	108	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		30-150%
877-09-8	Tetrachloro-m-xylene	56%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%
2051-24-3	Decachlorobiphenyl	57%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-11-6-7		Date Sampled: 04/24/14
Lab Sample ID: MC30076-10		Date Received: 04/25/14
Matrix: SO - Soil		Percent Solids: 87.0
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89500.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2	YZ89526.D	5	04/29/14	SZ	04/26/14	OP37808	GYZ7550

Run #	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2	15.3 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	38	15	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	1220 ^a	190	84	ug/kg	
11096-82-5	Aroclor 1260 ^b	70.0	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	74%	74%	30-150%
877-09-8	Tetrachloro-m-xylene	67%	60%	30-150%
2051-24-3	Decachlorobiphenyl	73%	92%	30-150%
2051-24-3	Decachlorobiphenyl	62%	75%	30-150%

(a) Result is from Run# 2

(b) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.10
4

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-12-0-2		
Lab Sample ID: MC30076-11		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 83.1
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89501.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	383	38	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	93.7	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	83%		30-150%
877-09-8	Tetrachloro-m-xylene	72%		30-150%
2051-24-3	Decachlorobiphenyl	86%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-12-2-4		
Lab Sample ID: MC30076-12		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 89.4
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89502.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	35	15	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	406	35	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	186	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		30-150%
877-09-8	Tetrachloro-m-xylene	53%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%
2051-24-3	Decachlorobiphenyl	57%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-12-4-6		Date Sampled: 04/24/14
Lab Sample ID: MC30076-13		Date Received: 04/25/14
Matrix: SO - Soil		Percent Solids: 85.1
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89503.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.0	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	41.3	38	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	36.1	38	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		30-150%
877-09-8	Tetrachloro-m-xylene	64%		30-150%
2051-24-3	Decachlorobiphenyl	79%		30-150%
2051-24-3	Decachlorobiphenyl	66%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-13-0-2		
Lab Sample ID: MC30076-14		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 83.4
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89504.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	8.3	ug/kg	
11104-28-2	Aroclor 1221	ND	39	16	ug/kg	
11141-16-5	Aroclor 1232	ND	39	16	ug/kg	
53469-21-9	Aroclor 1242	ND	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	14	ug/kg	
11097-69-1	Aroclor 1254	48.0	39	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	36.0	39	15	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		30-150%
877-09-8	Tetrachloro-m-xylene	61%		30-150%
2051-24-3	Decachlorobiphenyl	83%		30-150%
2051-24-3	Decachlorobiphenyl	70%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-13-2-4		
Lab Sample ID: MC30076-15		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 91.6
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89505.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.4	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	402	35	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	99.5	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		30-150%
877-09-8	Tetrachloro-m-xylene	55%		30-150%
2051-24-3	Decachlorobiphenyl	75%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A1-SB-13-4-6		
Lab Sample ID: MC30076-16		Date Sampled: 04/24/14
Matrix: SO - Soil		Date Received: 04/25/14
Method: SW846 8082A SW846 3550B		Percent Solids: 84.5
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ89506.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	212	38	17	ug/kg	
11096-82-5	Aroclor 1260 ^a	171	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		30-150%
877-09-8	Tetrachloro-m-xylene	69%		30-150%
2051-24-3	Decachlorobiphenyl	88%		30-150%
2051-24-3	Decachlorobiphenyl	73%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

Client / Reporting Information Company Name: AECOM Street Address: 5015 Cambridge DR City: C. SYRACUSE NY State: 13057 Project Contact: SCOTT McDONOUGH E-mail: Phone #: 518-951-2391 Fax #: Sampler(s) Name(s): PAT SWAIN Phone #: 315-569-5719		Project Information Project Name: UTC DEBRIS PILE Street: Billing Information (If different from Report to) Company Name: Street Address: City: State: Zip: Attention: POB:		Requested Analysis (see TEST CODE sheet) Matrix Codes: DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OT - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank		Matrix Codes: LAB USE ONLY	
Collection Field ID / Point of Collection MEQWDI Vial # Date Time Sampled by Matrix # of bottles HCl NADH INDO HSDM NONE DI Water MECH ENCORE Biofilms		Data Deliverable Information <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> CT RCP <input type="checkbox"/> EDD Format <input type="checkbox"/> MA MCP <input type="checkbox"/> Other Commercial "A" = Results Only Commercial "B" = Results + QC Summary		Comments / Special Instructions 9B		Turnaround Time (Business days) <input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY Emergency & Rush T/A data available VIA Lablink	
Relinquished by Sampler: 1 Date Time: 4/24/14 1445 Received By: 2 Date Time:		Relinquished by: 3 Date Time: 4-25-14 930 Received By: 4 Date Time:		Relinquished by: 5 Date Time:		Custody Seal # <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact Preserved where applicable On Ice <input type="checkbox"/> Cooler Temp: 20.9-7.0°C	

MC30076: Chain of Custody
Page 1 of 3

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)												Matrix Codes																																	
Company Name AECOM		Project Name LTC DEBRIS PILE		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> PCB-1 Method 35226 </div> <div> <table border="1"> <tr><td>DW - Drinking Water</td><td></td></tr> <tr><td>GW - Ground Water</td><td></td></tr> <tr><td>WW - Water</td><td></td></tr> <tr><td>SW - Surface Water</td><td></td></tr> <tr><td>SO - Soil</td><td></td></tr> <tr><td>SL - Sludge</td><td></td></tr> <tr><td>SED - Sediment</td><td></td></tr> <tr><td>OI - Oil</td><td></td></tr> <tr><td>LIQ - Other Liquid</td><td></td></tr> <tr><td>IR - Air</td><td></td></tr> <tr><td>SOL - Other Solid</td><td></td></tr> <tr><td>WP - Wipe</td><td></td></tr> <tr><td>FB-Field Blank</td><td></td></tr> <tr><td>EB- Equipment Blank</td><td></td></tr> <tr><td>RB- Rinse Blank</td><td></td></tr> <tr><td>TB-Trip Blank</td><td></td></tr> </table> </div> </div>												DW - Drinking Water		GW - Ground Water		WW - Water		SW - Surface Water		SO - Soil		SL - Sludge		SED - Sediment		OI - Oil		LIQ - Other Liquid		IR - Air		SOL - Other Solid		WP - Wipe		FB-Field Blank		EB- Equipment Blank		RB- Rinse Blank		TB-Trip Blank		Matrix Codes	
DW - Drinking Water																																																	
GW - Ground Water																																																	
WW - Water																																																	
SW - Surface Water																																																	
SO - Soil																																																	
SL - Sludge																																																	
SED - Sediment																																																	
OI - Oil																																																	
LIQ - Other Liquid																																																	
IR - Air																																																	
SOL - Other Solid																																																	
WP - Wipe																																																	
FB-Field Blank																																																	
EB- Equipment Blank																																																	
RB- Rinse Blank																																																	
TB-Trip Blank																																																	
Street Address 5015 CAMARWOOD DR		Street:																																															
City, State, Zip E. SYRACUSE NY 13057		Billing Information (if different from Report to)																																															
Project Contact SCOTT MCDONOUGH		Company Name																																															
Phone # 315-951-2391		Street Address																																															
Fax #		City, State, Zip																																															
Sample(s) Name(s) PAT SWAIN 315-569-5719		Client PO#																																															
Phone #		City, State, Zip																																															
Sample(s) Name(s)		Project Manager																																															
Attention:		PO#																																															
Field ID / Point of Collection		MECH/ID / Mat #		Collection		Sampled by		Matrix		# of bottles		Number of preserved Bottles										LAB USE ONLY																											
-9SB A1-SB-11-4-6 MS/MSD				4/24/14 1042		PS SD				1												X																											
-10 A1-SB-11-6-7				1045						1												X																											
-11 A1-SB-12-0-2				1052						1												X																											
-12 A1-SB-12-2-4				1054						1												X																											
-13 A1-SB-12-4-6				1055						1												X																											
14 A1-SB-13-0-2				1105						1												X																											
-15 A1-SB-13-2-4				1107						1												X																											
-16 A1-SB-13-4-6				1110						1												X																											
Turnaround Time (Business days)				Approved By (Accutest PM): / Date:				Data Deliverable Information				Comments / Special Instructions																																					
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY				RUSH!				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> CT RCP <input type="checkbox"/> EDD Format <input type="checkbox"/> MA MCP <input type="checkbox"/> Other _____																																									
Emergency & Rush T/A data available VIA Lablink								Commercial "A" = Results Only Commercial "B" = Results + QC Summary																																									
Sample Custody must be documented before each time samples change possession, including courier delivery.																																																	
Relinquished by Sampler:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:																																					
<i>[Signature]</i>		4/24/14 1445		<i>[Signature]</i>		2		<i>[Signature]</i>		2																																							
Relinquished by Sampler:		Date/Time:		Received By:		Date/Time:		Relinquished By:		Date/Time:		Received By:																																					
PEDX		4-25-14 8:30		<i>[Signature]</i>		3		<i>[Signature]</i>		4																																							
Relinquished by:		Date/Time:		Received By:		Date/Time:		Custody Seal #		<input type="checkbox"/> Intact Preserved where applicable <input type="checkbox"/> On Ice Cooler Temp.																																							
5				5						<input checked="" type="checkbox"/> 0,4-1,0°C																																							

5.1
5

MC30076: Chain of Custody

Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC30076 **Client:** AECOM **Immediate Client Services Action Required:** No
Date / Time Received: 4/25/2014 **Delivery Method:** _____ **Client Service Action Required at Login:** No
Project: UTC DEBRIS **No. Coolers:** 2 **Airbill #'s:** _____

Cooler Security Y or N Y or N
 1. Custody Seals Present: 3. COC Present:
 2. Custody Seals Intact: 4. Smpl Dates/Time OK

Cooler Temperature Y or N
 1. Temp criteria achieved:
 2. Cooler temp verification: _____ Infared gun
 3. Cooler media: _____ Ice (bag)

Quality Control Preservation Y or N N/A
 1. Trip Blank present / cooler:
 2. Trip Blank listed on COC:
 3. Samples preserved properly:
 4. VOCs headspace free:

Sample Integrity - Documentation Y or N
 1. Sample labels present on bottles:
 2. Container labeling complete:
 3. Sample container label / COC agree:

Sample Integrity - Condition Y or N
 1. Sample recvd within HT:
 2. All containers accounted for:
 3. Condition of sample: _____ Intact

Sample Integrity - Instructions Y or N N/A
 1. Analysis requested is clear:
 2. Bottles received for unspecified tests:
 3. Sufficient volume recvd for analysis:
 4. Compositing instructions clear:
 5. Filtering instructions clear:

Comments

5.1
5

Internal Sample Tracking Chronicle

AECOM

Job No: MC30076

UTC - Debris Pile

5.2
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30076-1 Collected: 24-APR-14 10:08 By: PS Received: 25-APR-14 By: A1-SB-10-0-2						
MC30076-1	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-1	SW846 8082A	28-APR-14 14:55	SZ	26-APR-14	FC	P8082PCB
MC30076-2 Collected: 24-APR-14 10:10 By: PS Received: 25-APR-14 By: A1-SB-10-2-4						
MC30076-2	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-2	SW846 8082A	28-APR-14 15:15	SZ	26-APR-14	FC	P8082PCB
MC30076-3 Collected: 24-APR-14 10:11 By: PS Received: 25-APR-14 By: A1-SB-110-2-4						
MC30076-3	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-3	SW846 8082A	28-APR-14 15:35	SZ	26-APR-14	FC	P8082PCB
MC30076-4 Collected: 24-APR-14 10:12 By: PS Received: 25-APR-14 By: A1-SB-10-4-6						
MC30076-4	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-4	SW846 8082A	28-APR-14 15:55	SZ	26-APR-14	FC	P8082PCB
MC30076-5 Collected: 24-APR-14 10:15 By: PS Received: 25-APR-14 By: A1-SB-10-6-7						
MC30076-5	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-5	SW846 8082A	28-APR-14 16:15	SZ	26-APR-14	FC	P8082PCB
MC30076-6 Collected: 24-APR-14 10:38 By: PS Received: 25-APR-14 By: A1-SB-11-0-2						
MC30076-6	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-6	SW846 8082A	28-APR-14 16:34	SZ	26-APR-14	FC	P8082PCB
MC30076-7 Collected: 24-APR-14 10:40 By: PS Received: 25-APR-14 By: A1-SB-11-2-4						
MC30076-7	SM21 2540 B MOD.	25-APR-14	MA			%SOL

Internal Sample Tracking Chronicle

AECOM

Job No: MC30076

UTC - Debris Pile

5.2
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30076-7	SW846 8082A	28-APR-14 16:54	SZ	26-APR-14	FC	P8082PCB
MC30076-8 Collected: 24-APR-14 10:41 By: PS Received: 25-APR-14 By: A1-SB-111-2-4						
MC30076-8	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-8	SW846 8082A	28-APR-14 17:14	SZ	26-APR-14	FC	P8082PCB
MC30076-9 Collected: 24-APR-14 10:42 By: PS Received: 25-APR-14 By: A1-SB-11-4-6						
MC30076-9	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-9	SW846 8082A	28-APR-14 18:09	SZ	26-APR-14	FC	P8082PCB
MC30076-10 Collected: 24-APR-14 10:45 By: PS Received: 25-APR-14 By: A1-SB-11-6-7						
MC30076-10	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-10	SW846 8082A	28-APR-14 18:29	SZ	26-APR-14	FC	P8082PCB
MC30076-10	SW846 8082A	29-APR-14 07:11	SZ	26-APR-14	FC	P8082PCB
MC30076-11 Collected: 24-APR-14 10:52 By: PS Received: 25-APR-14 By: A1-SB-12-0-2						
MC30076-11	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-11	SW846 8082A	28-APR-14 18:49	SZ	26-APR-14	FC	P8082PCB
MC30076-12 Collected: 24-APR-14 10:54 By: PS Received: 25-APR-14 By: A1-SB-12-2-4						
MC30076-12	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-12	SW846 8082A	28-APR-14 19:09	SZ	26-APR-14	FC	P8082PCB
MC30076-13 Collected: 24-APR-14 10:55 By: PS Received: 25-APR-14 By: A1-SB-12-4-6						
MC30076-13	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-13	SW846 8082A	28-APR-14 19:29	SZ	26-APR-14	FC	P8082PCB

Internal Sample Tracking Chronicle

AECOM

Job No: MC30076

UTC - Debris Pile

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30076-14 Collected: 24-APR-14 11:05 By: PS Received: 25-APR-14 By: A1-SB-13-0-2						
MC30076-14	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-14	SW846 8082A	28-APR-14 19:48	SZ	26-APR-14	FC	P8082PCB
MC30076-15 Collected: 24-APR-14 11:07 By: PS Received: 25-APR-14 By: A1-SB-13-2-4						
MC30076-15	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-15	SW846 8082A	28-APR-14 20:08	SZ	26-APR-14	FC	P8082PCB
MC30076-16 Collected: 24-APR-14 11:10 By: PS Received: 25-APR-14 By: A1-SB-13-4-6						
MC30076-16	SM21 2540 B MOD.	25-APR-14	MA			%SOL
MC30076-16	SW846 8082A	28-APR-14 20:28	SZ	26-APR-14	FC	P8082PCB

5.2
5

Accutest Internal Chain of Custody

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile
Received: 04/25/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC30076-1.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-1.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-1.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-1.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-2.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-2.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-2.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-2.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-3.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-3.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-3.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-3.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-4.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-4.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-4.2	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-4.2	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-4.2	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-4.2	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-4.3	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-4.3	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-5.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-5.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-5.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-5.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-6.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-6.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-6.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-6.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-7.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-7.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-7.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-7.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-8.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-8.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-8.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage

5.3
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Accutest Internal Chain of Custody

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile
Received: 04/25/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC30076-8.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-9.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-9.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-9.2	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-9.2	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-9.3	Walk In Ref #9	Mohammad Adib	04/25/14 15:03	Retrieve from Storage
MC30076-9.3	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-9.3	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-9.3	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-10.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-10.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-10.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-10.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-11.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-11.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-11.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-11.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-12.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-12.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-12.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-12.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-13.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-13.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-13.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-13.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-14.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-14.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-14.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-14.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-15.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage
MC30076-15.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-15.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-15.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage
MC30076-16.1	Walk In Ref #9	Mohammad Adib	04/25/14 15:02	Retrieve from Storage

5.3
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Accutest Internal Chain of Custody

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile
Received: 04/25/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC30076-16.1	Mohammad Adib	Walk In Ref #9	04/25/14 18:22	Return to Storage
MC30076-16.1	Walk In Ref #9	Nicole Estey	04/26/14 13:37	Retrieve from Storage
MC30076-16.1	Nicole Estey	Walk In Ref #9	04/26/14 20:49	Return to Storage

5.3
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GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37808-MB	YZ89483.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30076-1, MC30076-2, MC30076-3, MC30076-4, MC30076-5, MC30076-6, MC30076-7, MC30076-8, MC30076-9, MC30076-10, MC30076-11, MC30076-12, MC30076-13, MC30076-14, MC30076-15, MC30076-16

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	6.9	ug/kg	
11104-28-2	Aroclor 1221	ND	33	13	ug/kg	
11141-16-5	Aroclor 1232	ND	33	13	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	12	ug/kg	
11097-69-1	Aroclor 1254	ND	33	15	ug/kg	
11096-82-5	Aroclor 1260	ND	33	12	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	81%	30-150%
877-09-8	Tetrachloro-m-xylene	66%	30-150%
2051-24-3	Decachlorobiphenyl	81%	30-150%
2051-24-3	Decachlorobiphenyl	69%	30-150%

Blank Spike Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37808-BS	YZ89484.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30076-1, MC30076-2, MC30076-3, MC30076-4, MC30076-5, MC30076-6, MC30076-7, MC30076-8, MC30076-9, MC30076-10, MC30076-11, MC30076-12, MC30076-13, MC30076-14, MC30076-15, MC30076-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	259	217	84	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	259	228	88	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	71%	30-150%
877-09-8	Tetrachloro-m-xylene	59%	30-150%
2051-24-3	Decachlorobiphenyl	82%	30-150%
2051-24-3	Decachlorobiphenyl	69%	30-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37808-MS	YZ89485.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
OP37808-MSD	YZ89486.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
MC30076-4	YZ89493.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30076-1, MC30076-2, MC30076-3, MC30076-4, MC30076-5, MC30076-6, MC30076-7, MC30076-8, MC30076-10, MC30076-11, MC30076-12, MC30076-13, MC30076-14, MC30076-15, MC30076-16

CAS No.	Compound	MC30076-4 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	303	241	80	298	233	78	3	40-140/50
11104-28-2	Aroclor 1221	ND		ND			ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND			ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND			ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND			ND		nc	40-140/50
11097-69-1	Aroclor 1254	332		303			766		87* a	40-140/50
11096-82-5	Aroclor 1260	233	303	445	67	298	791	184* b	56* a	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	MC30076-4	Limits
877-09-8	Tetrachloro-m-xylene	74%	54%	75%	30-150%
877-09-8	Tetrachloro-m-xylene	63%	47%	58%	30-150%
2051-24-3	Decachlorobiphenyl	78%	67%	79%	30-150%
2051-24-3	Decachlorobiphenyl	64%	54%	63%	30-150%

(a) High RPD due to possible matrix interference and/or sample non-homogeneity.
(b) Outside criteria due to presence of other Aroclors.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37808-MS1	YZ89488.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
OP37808-MSD1	YZ89489.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550
MC30076-9	YZ89499.D	1	04/28/14	SZ	04/26/14	OP37808	GYZ7550

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30076-9

CAS No.	Compound	MC30076-9 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	292	253	87	291	226	78	11	40-140/50
11104-28-2	Aroclor 1221	ND		ND			ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND		ND			ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND		ND			ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND		ND			ND		nc	40-140/50
11097-69-1	Aroclor 1254	307		229			374		48	40-140/50
11096-82-5	Aroclor 1260	108	292	376	92	291	451	118	18	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	MC30076-9	Limits
877-09-8	Tetrachloro-m-xylene	76%	68%	71%	30-150%
877-09-8	Tetrachloro-m-xylene	62%	55%	56%	30-150%
2051-24-3	Decachlorobiphenyl	76%	68%	69%	30-150%
2051-24-3	Decachlorobiphenyl	61%	56%	57%	30-150%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Method: SW846 8082A	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
MC30076-1	YZ89490.D	79	63	72	60
MC30076-2	YZ89491.D	69	51	65	56
MC30076-3	YZ89492.D	59	51	67	56
MC30076-4	YZ89493.D	75	58	79	63
MC30076-5	YZ89494.D	80	69	80	67
MC30076-6	YZ89495.D	81	61	77	61
MC30076-7	YZ89496.D	78	70	83	67
MC30076-8	YZ89497.D	77	63	75	61
MC30076-9	YZ89499.D	71	56	69	57
MC30076-10	YZ89526.D	74	60	92	75
MC30076-10	YZ89500.D	74	67	73	62
MC30076-11	YZ89501.D	83	72	86	71
MC30076-12	YZ89502.D	68	53	68	57
MC30076-13	YZ89503.D	78	64	79	66
MC30076-14	YZ89504.D	76	61	83	70
MC30076-15	YZ89505.D	66	55	75	63
MC30076-16	YZ89506.D	82	69	88	73
OP37808-BS	YZ89484.D	71	59	82	69
OP37808-MB	YZ89483.D	81	66	81	69
OP37808-MS	YZ89485.D	74	63	78	64
OP37808-MS1	YZ89488.D	76	62	76	61
OP37808-MSD	YZ89486.D	54	47	67	54
OP37808-MSD1	YZ89489.D	68	55	68	56

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

30-150%
 30-150%

(a) Recovery from GC signal #1
 (b) Recovery from GC signal #2

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GC Surrogate Retention Time Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GYZ7550-CC7547	Injection Date: 04/28/14
Lab File ID: YZ89476.D	Injection Time: 09:11
Instrument ID: GCYZ	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.52	2.18	9.70	9.63

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
ZZZZZZ	YZ89477.D	04/28/14	09:47	2.52	2.18	9.70	9.63
ZZZZZZ	YZ89478.D	04/28/14	10:07	2.50	2.17	9.68	9.62
ZZZZZZ	YZ89479.D	04/28/14	10:27	2.50	2.17	9.68	9.62
ZZZZZZ	YZ89480.D	04/28/14	10:46	2.50	2.17	9.68	9.62
ZZZZZZ	YZ89481.D	04/28/14	11:06	2.51	2.18	9.68	9.62
ZZZZZZ	YZ89482.D	04/28/14	11:41	0.00	0.00	0.00	0.00
OP37808-MB	YZ89483.D	04/28/14	12:17	2.52	2.18	9.70	9.63
OP37808-BS	YZ89484.D	04/28/14	12:37	2.51	2.18	9.68	9.62
OP37808-MS	YZ89485.D	04/28/14	12:57	2.50	2.18	9.68	9.62
OP37808-MSD	YZ89486.D	04/28/14	13:17	2.51	2.18	9.68	9.62

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GYZ7550-CC7547	Injection Date: 04/28/14
Lab File ID: YZ89487.D	Injection Time: 13:37
Instrument ID: GCYZ	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.50	2.17	9.68	9.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
OP37808-MS1	YZ89488.D	04/28/14	14:16	2.52	2.18	9.70	9.63
OP37808-MSD1	YZ89489.D	04/28/14	14:35	2.51	2.18	9.68	9.62
MC30076-1	YZ89490.D	04/28/14	14:55	2.50	2.17	9.68	9.62
MC30076-2	YZ89491.D	04/28/14	15:15	2.50	2.18	9.68	9.62
MC30076-3	YZ89492.D	04/28/14	15:35	2.51	2.18	9.68	9.62
MC30076-4	YZ89493.D	04/28/14	15:55	2.50	2.18	9.68	9.62
MC30076-5	YZ89494.D	04/28/14	16:15	2.50	2.17	9.68	9.62
MC30076-6	YZ89495.D	04/28/14	16:34	2.51	2.18	9.68	9.62
MC30076-7	YZ89496.D	04/28/14	16:54	2.50	2.18	9.68	9.62
MC30076-8	YZ89497.D	04/28/14	17:14	2.51	2.18	9.68	9.62

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GYZ7550-CC7547	Injection Date: 04/28/14
Lab File ID: YZ89498.D	Injection Time: 17:34
Instrument ID: GCYZ	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.51	2.18	9.68	9.62

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
MC30076-9	YZ89499.D	04/28/14	18:09	2.52	2.18	9.70	9.63
MC30076-10	YZ89500.D	04/28/14	18:29	2.51	2.18	9.68	9.62
MC30076-11	YZ89501.D	04/28/14	18:49	2.50	2.17	9.68	9.62
MC30076-12	YZ89502.D	04/28/14	19:09	2.51	2.18	9.68	9.62
MC30076-13	YZ89503.D	04/28/14	19:29	2.50	2.17	9.68	9.62
MC30076-14	YZ89504.D	04/28/14	19:48	2.50	2.17	9.67	9.62
MC30076-15	YZ89505.D	04/28/14	20:08	2.50	2.17	9.67	9.61
MC30076-16	YZ89506.D	04/28/14	20:28	2.50	2.17	9.68	9.62
OP37800-MB	YZ89507.D	04/28/14	20:48	2.50	2.18	9.67	9.62
OP37800-BS	YZ89508.D	04/28/14	21:08	2.50	2.17	9.67	9.61

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GYZ7550-CC7547	Injection Date: 04/29/14
Lab File ID: YZ89525.D	Injection Time: 02:45
Instrument ID: GCYZ	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.51	2.18	9.67	9.61

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
MC30076-10	YZ89526.D	04/29/14	07:11	2.51	2.18	9.68	9.62
GYZ7550-ECC754	YZ89527.D	04/29/14	07:30	2.50	2.17	9.67	9.61

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7547-ICC7547
Lab FileID: YZ89370.D

Response Factor Report GCYZ

Method : C:\msdchem\1\METHODS\PC140424a.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Fri Apr 25 11:43:33 2014
 Response via : Initial Calibration

Calibration Files

1 =yz89372.D 2 =yz89371.D 3 =yz89370.D 4 =yz89369.D
 5 =yz89368.D 6 =yz89367.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) s TCMX	3.754	3.754	3.621	3.675	3.720	4.090	3.769	E5 4.39
2) AR1016-A	5.663	5.510	5.805	5.827	5.616	5.490	5.652	E3 2.52
3) AR1016-B	1.424	1.428	1.462	1.474	1.543	1.523	1.476	E4 3.31
4) AR1016-C	2.667	2.549	2.531	2.615	2.783	2.922	2.678	E4 5.61
5) AR1016-D	1.878	1.804	1.836	1.842	1.914	1.832	1.851	E4 2.11
6) AR1016-E	1.216	1.125	1.157	1.193	1.224	1.197	1.185	E4 3.19
7) AR1260-A	1.738	1.654	1.733	1.745	1.829	2.104	1.801	E4 8.80
8) AR1260-B	2.503	2.312	2.488	2.556	2.666	2.767	2.549	E4 6.16
9) AR1260-C	5.515	5.155	5.381	5.523	5.705	6.041	5.553	E4 5.41
10) AR1260-D	3.685	3.442	3.608	3.779	3.827	4.040	3.730	E4 5.46
11) AR1260-E	3.679	3.400	3.688	3.914	3.910	4.374	3.828	E4 8.56
12) AR1260-F	8.957	8.234	9.082	9.608	9.574	9.469	9.154	E3 5.72
13) s DCB	3.124	2.886	3.062	3.223	3.434	4.013	3.291	E5 12.09
14) AR1221-A			2.739				2.739	E3 0.00
15) AR1221-B			4.312				4.312	E3 0.00
16) AR1221-C			1.060				1.060	E4 0.00
17) AR1232-A			6.930				6.930	E3 0.00
18) AR1232-B			6.320				6.320	E3 0.00
19) AR1232-C			1.249				1.249	E4 0.00
20) AR1232-D			8.688				8.688	E3 0.00
21) AR1232-E			1.111				1.111	E4 0.00
22) AR1242-A			4.688				4.688	E3 0.00
23) AR1242-B			1.151				1.151	E4 0.00
24) AR1242-C			2.209				2.209	E4 0.00
25) AR1242-D			1.644				1.644	E4 0.00
26) AR1242-E			2.086				2.086	E4 0.00
27) AR1248-A			6.109				6.109	E3 0.00
28) AR1248-B			1.382				1.382	E4 0.00
29) AR1248-C			2.157				2.157	E4 0.00
30) AR1248-D			2.831				2.831	E4 0.00
31) AR1248-E			3.120				3.120	E4 0.00
32) AR1254-A			2.246				2.246	E4 0.00
33) AR1254-B			2.996				2.996	E4 0.00
34) AR1254-C			4.395				4.395	E4 0.00
35) AR1254-D			1.490				1.490	E4 0.00
36) AR1254-E			1.982				1.982	E4 0.00
37) AR1262-A			1.393				1.393	E4 0.00
38) AR1262-B			2.715				2.715	E4 0.00
39) AR1262-C			5.292				5.292	E4 0.00
40) AR1262-D			5.215				5.215	E4 0.00
41) AR1262-E			1.428				1.428	E4 0.00
42) AR1268-A			1.087				1.087	E4 0.00
43) AR1268-B			1.117				1.117	E4 0.00
44) AR1268-C			1.054				1.054	E5 0.00
45) AR1268-D			4.597				4.597	E4 0.00
46) AR1268-E			1.242				1.242	E5 0.00

6.6.1
6

Initial Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7547-ICC7547
Lab FileID: YZ89370.D

Signal #2

1)	s	TCMX	7.227	7.512	6.606	7.435	7.038	7.787	7.268	E4	5.67
2)		AR1016-A	1.281	1.212	1.188	1.199	1.421	2.266	1.428	E3	29.40
----- Quadratic regression -----											
Response Ratio = 59271.41653 + 890.32819 *A + 0.33111 *A^2											
3)		AR1016-B	2.449	2.401	2.510	2.707	2.799	2.960	2.638	E3	8.35
4)		AR1016-C	4.474	4.211	4.196	4.285	4.306	4.711	4.364	E3	4.51
5)		AR1016-D	1.799	1.891	1.838	1.852	2.029	1.899	1.885	E3	4.22
6)		AR1016-E	2.149	2.128	2.061	2.192	2.243	2.387	2.193	E3	5.13
7)		AR1260-A	3.097	3.023	3.006	3.152	3.255	3.527	3.177	E3	6.11
8)		AR1260-B	3.543	3.383	3.505	3.678	3.709	3.876	3.616	E3	4.82
9)		AR1260-C	8.917	8.409	8.526	8.908	9.251	9.855	8.978	E3	5.85
10)		AR1260-D	6.212	5.719	6.087	6.334	6.333	6.833	6.253	E3	5.82
11)		AR1260-E	5.992	5.479	5.883	6.270	6.351	6.661	6.106	E3	6.76
12)		AR1260-F	1.472	1.337	1.466	1.547	1.538	1.690	1.508	E3	7.73
13)	s	DCB	5.615	5.273	5.460	5.706	5.811	6.959	5.804	E4	10.28
14)		AR1221-A			4.428				4.428	E2	0.00
15)		AR1221-B			5.462				5.462	E2	0.00
16)		AR1221-C			1.607				1.607	E3	0.00
17)		AR1232-A			1.293				1.293	E3	0.00
18)		AR1232-B			1.332				1.332	E3	0.00
19)		AR1232-C			2.102				2.102	E3	0.00
20)		AR1232-D			1.541				1.541	E3	0.00
21)		AR1232-E			2.123				2.123	E3	0.00
22)		AR1242-A			9.285				9.285	E2	0.00
23)		AR1242-B			2.004				2.004	E3	0.00
24)		AR1242-C			3.629				3.629	E3	0.00
25)		AR1242-D			2.893				2.893	E3	0.00
26)		AR1242-E			3.523				3.523	E3	0.00
27)		AR1248-A			1.089				1.089	E3	0.00
28)		AR1248-B			2.161				2.161	E3	0.00
29)		AR1248-C			4.062				4.062	E3	0.00
30)		AR1248-D			5.637				5.637	E3	0.00
31)		AR1248-E			3.483				3.483	E3	0.00
32)		AR1254-A			3.153				3.153	E3	0.00
33)		AR1254-B			4.666				4.666	E3	0.00
34)		AR1254-C			7.534				7.534	E3	0.00
35)		AR1254-D			3.805				3.805	E3	0.00
36)		AR1254-E			3.492				3.492	E3	0.00
37)		AR1262-A			2.533				2.533	E3	0.00
38)		AR1262-B			2.668				2.668	E3	0.00
39)		AR1262-C			8.502				8.502	E3	0.00
40)		AR1262-D			8.342				8.342	E3	0.00
41)		AR1262-E			2.499				2.499	E3	0.00
42)		AR1268-A			1.680				1.680	E3	0.00
43)		AR1268-B			2.292				2.292	E3	0.00
44)		AR1268-C			1.772				1.772	E4	0.00
45)		AR1268-D			7.406				7.406	E3	0.00
46)		AR1268-E			2.192				2.192	E4	0.00

(#) = Out of Range

Initial Calibration Verification

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7547-ICV7547
 Lab FileID: YZ89377.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...4a\yz89377.D\ECD1A.CH Vial: 86
 Signal #2 : C:\msdchem\1\DATA\YZ140424a\yz89377.D\ECD2B.CH
 Acq On : 24 Apr 2014 11:23 pm Operator: sofyaz
 Sample : icv7547-500,a1660 Inst : GCYZ
 Misc : op37598,gyz7547,1000,,,5,,W Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140424a.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Fri Apr 25 11:43:33 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 85% Max. R.T. Dev 0.50min
 Max. RRF Dev : 15% Max. Rel. Area : 115%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	379.681 E3	-0.7	105	0.00	2.47-	2.53
2	AR1016-A	5.652	5.602 E3	0.9	97	0.00	2.79-	2.85
3	AR1016-B	14.757	14.623 E3	0.9	100	0.00	3.13-	3.19
4	AR1016-C	26.777	26.760 E3	0.1	106	0.00	3.60-	3.66
5	AR1016-D	18.510	18.673 E3	-0.9	102	0.00	3.74-	3.80
6	AR1016-E	11.851	11.735 E3	1.0	101	0.00	4.19-	4.25
7	AR1260-A	18.005	18.256 E3	-1.4	105	0.00	5.71-	5.77
8	AR1260-B	25.487	25.894 E3	-1.6	104	0.00	6.10-	6.16
9	AR1260-C	55.533	56.413 E3	-1.6	105	0.00	6.49-	6.55
10	AR1260-D	37.301	36.446 E3	2.3	101	0.00	7.48-	7.54
11	AR1260-E	38.275	38.715 E3	-1.1	105	0.00	7.91-	7.97
12	AR1260-F	9.154	9.876 E3	-7.9	109	0.00	8.88-	8.94
13 s	DCB	329.052	336.700 E3	-2.3	110	0.00	9.64-	9.70
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Initial Calibration Verification

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7547-ICV7547
 Lab FileID: YZ89377.D

42 AR1268-A -----NA-----
 43 AR1268-B -----NA-----
 44 AR1268-C -----NA-----
 45 AR1268-D -----NA-----
 46 AR1268-E -----NA-----

***** Signal #2 *****

1 s	TCMX	72.677	74.533	E3	-2.6	113	0.00	2.14-	2.20
		----- True	Calc.			% Drift	-----		
2	AR1016-A	500.000	491.988		1.6	97	0.00	2.54-	2.60
		----- AvgRF	CCRF			% Dev	-----		
3	AR1016-B	2.638	2.522	E3	4.4	100	0.00	2.89-	2.95
4	AR1016-C	4.364	4.349	E3	0.3	104	0.00	3.31-	3.37
5	AR1016-D	1.885	1.856	E3	1.5	101	0.00	3.45-	3.51
6	AR1016-E	2.193	2.163	E3	1.4	105	0.00	3.94-	4.00
7	AR1260-A	3.177	3.239	E3	-2.0	108	0.00	5.48-	5.54
8	AR1260-B	3.616	3.697	E3	-2.2	105	0.00	5.76-	5.82
9	AR1260-C	8.978	8.877	E3	1.1	104	0.00	6.39-	6.45
10	AR1260-D	6.253	6.226	E3	0.4	102	0.00	7.19-	7.25
11	AR1260-E	6.106	6.257	E3	-2.5	106	0.00	7.75-	7.81
12	AR1260-F	1.508	1.568	E3	-4.0	107	0.00	8.65-	8.71
13 s	DCB	58.039	58.599	E3	-1.0	107	0.00	9.58-	9.64
14	AR1221-A								
15	AR1221-B								
16	AR1221-C								
17	AR1232-A								
18	AR1232-B								
19	AR1232-C								
20	AR1232-D								
21	AR1232-E								
22	AR1242-A								
23	AR1242-B								
24	AR1242-C								
25	AR1242-D								
26	AR1242-E								
27	AR1248-A								
28	AR1248-B								
29	AR1248-C								
30	AR1248-D								
31	AR1248-E								
32	AR1254-A								
33	AR1254-B								
34	AR1254-C								
35	AR1254-D								
36	AR1254-E								
37	AR1262-A								
38	AR1262-B								
39	AR1262-C								
40	AR1262-D								
41	AR1262-E								
42	AR1268-A								
43	AR1268-B								
44	AR1268-C								
45	AR1268-D								
46	AR1268-E								

6.6.2

6

Initial Calibration Verification

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7547-ICV7547
Lab FileID: YZ89377.D

(#) = Out of Range
yz89370.D PC140424a.M

SPCC's out = 0 CCC's out = 0
Fri Apr 25 13:57:02 2014

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89476.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89476.D\ECD1A.CH Vial: 100
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89476.D\ECD2B.CH
 Acq On : 28 Apr 2014 9:11 am Operator: sofyaz
 Sample : cc7547-750,a1660 Inst : GCYZ
 Misc : op37777,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	394.688 E3	-4.7	105	0.01	2.49-	2.55
2	AR1016-A	5.652	5.966 E3	-5.6	108	0.01	2.81-	2.87
3	AR1016-B	14.757	14.315 E3	3.0	100	0.02	3.16-	3.22
4	AR1016-C	26.777	27.747 E3	-3.6	109	0.01	3.63-	3.69
5	AR1016-D	18.510	18.404 E3	0.6	102	0.01	3.77-	3.83
6	AR1016-E	11.851	12.051 E3	-1.7	107	0.02	4.22-	4.28
7	AR1260-A	18.005	17.042 E3	5.3	103	0.02	5.74-	5.80
8	AR1260-B	25.487	25.844 E3	-1.4	112	0.01	6.13-	6.19
9	AR1260-C	55.533	57.941 E3	-4.3	112	0.01	6.52-	6.58
10	AR1260-D	37.301	43.762 E3	-17.3	127#	0.01	7.51-	7.57
11	AR1260-E	38.275	41.403 E3	-8.2	122#	0.00	7.94-	8.00
12	AR1260-F	9.154	10.410 E3	-13.7	126#	0.00	8.91-	8.97
13 s	DCB	329.052	347.041 E3	-5.5	120#	0.00	9.67-	9.73
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89476.D

42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----
***** Signal #2 *****									
1	s	TCMX	72.677	62.617	E3	13.8	83	0.00	2.15- 2.21
----- True Calc. % Drift -----									
2		AR1016-A	750.000	600.188		20.0	78	0.00	2.55- 2.61
----- AvgRF CCRF % Dev -----									
3		AR1016-B	2.638	1.951	E3	26.0#	81	0.00	2.89- 2.95
4		AR1016-C	4.364	4.215	E3	3.4	100	0.00	3.32- 3.38
5		AR1016-D	1.885	1.768	E3	6.2	93	0.00	3.46- 3.52
6		AR1016-E	2.193	1.923	E3	12.3	90	0.00	3.95- 4.01
7		AR1260-A	3.177	2.626	E3	17.3	87	0.00	5.49- 5.55
8		AR1260-B	3.616	3.144	E3	13.1	93	0.00	5.77- 5.83
9		AR1260-C	8.978	7.683	E3	14.4	91	0.00	6.28- 6.34
10		AR1260-D	6.253	5.709	E3	8.7	100	0.00	7.21- 7.27
11		AR1260-E	6.106	5.480	E3	10.3	100	0.00	7.77- 7.83
12		AR1260-F	1.508	1.406	E3	6.8	105	0.00	8.67- 8.73
13	s	DCB	58.039	49.067	E3	15.5	93	0.00	9.60- 9.66
14		AR1221-A							-----NA-----
15		AR1221-B							-----NA-----
16		AR1221-C							-----NA-----
17		AR1232-A							-----NA-----
18		AR1232-B							-----NA-----
19		AR1232-C							-----NA-----
20		AR1232-D							-----NA-----
21		AR1232-E							-----NA-----
22		AR1242-A							-----NA-----
23		AR1242-B							-----NA-----
24		AR1242-C							-----NA-----
25		AR1242-D							-----NA-----
26		AR1242-E							-----NA-----
27		AR1248-A							-----NA-----
28		AR1248-B							-----NA-----
29		AR1248-C							-----NA-----
30		AR1248-D							-----NA-----
31		AR1248-E							-----NA-----
32		AR1254-A							-----NA-----
33		AR1254-B							-----NA-----
34		AR1254-C							-----NA-----
35		AR1254-D							-----NA-----
36		AR1254-E							-----NA-----
37		AR1262-A							-----NA-----
38		AR1262-B							-----NA-----
39		AR1262-C							-----NA-----
40		AR1262-D							-----NA-----
41		AR1262-E							-----NA-----
42		AR1268-A							-----NA-----
43		AR1268-B							-----NA-----
44		AR1268-C							-----NA-----
45		AR1268-D							-----NA-----
46		AR1268-E							-----NA-----

6.6.3

6

Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
Lab FileID: YZ89476.D

(#) = Out of Range
yz89371.D PC140428.M

SPCC's out = 0 CCC's out = 0
Mon Apr 28 15:44:25 2014

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89487.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89487.D\ECD1A.CH Vial: 100
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89487.D\ECD2B.CH
 Acq On : 28 Apr 2014 1:37 pm Operator: sofyaz
 Sample : cc7547-750,a1660 Inst : GCYZ
 Misc : op37808,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	364.095 E3	3.4	97	0.00	2.47-	2.54
2	AR1016-A	5.652	5.505 E3	2.6	100	0.00	2.80-	2.86
3	AR1016-B	14.757	13.031 E3	11.7	91	0.00	3.14-	3.20
4	AR1016-C	26.777	25.180 E3	6.0	99	0.00	3.61-	3.67
5	AR1016-D	18.510	16.811 E3	9.2	93	0.00	3.75-	3.81
6	AR1016-E	11.851	10.772 E3	9.1	96	0.00	4.20-	4.26
7	AR1260-A	18.005	14.973 E3	16.8	91	0.00	5.72-	5.78
8	AR1260-B	25.487	22.594 E3	11.4	98	0.00	6.10-	6.16
9	AR1260-C	55.533	52.951 E3	4.6	103	0.00	6.50-	6.56
10	AR1260-D	37.301	36.688 E3	1.6	107	-0.01	7.48-	7.54
11	AR1260-E	38.275	37.394 E3	2.3	110	-0.01	7.92-	7.98
12	AR1260-F	9.154	9.074 E3	0.9	110	-0.02	8.89-	8.95
13 s	DCB	329.052	313.113 E3	4.8	109	-0.02	9.65-	9.71
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89487.D

42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----
***** Signal #2 *****									
1 s	TCMX	72.677	59.104 E3	18.7	79#	0.00	2.14-	2.21	
----- True Calc. % Drift -----									
2	AR1016-A	750.000	640.791	14.6	84	0.00	2.54-	2.60	
----- AvgRF CCRF % Dev -----									
3	AR1016-B	2.638	1.880 E3	28.7#	78#	0.00	2.89-	2.95	
4	AR1016-C	4.364	4.242 E3	2.8	101	0.00	3.32-	3.38	
5	AR1016-D	1.885	1.873 E3	0.6	99	0.00	3.45-	3.51	
6	AR1016-E	2.193	1.900 E3	13.4	89	0.00	3.94-	4.00	
7	AR1260-A	3.177	2.619 E3	17.6	87	0.00	5.48-	5.54	
8	AR1260-B	3.616	3.120 E3	13.7	92	0.00	5.76-	5.82	
9	AR1260-C	8.978	7.392 E3	17.7	88	0.00	6.27-	6.33	
10	AR1260-D	6.253	5.522 E3	11.7	97	-0.01	7.20-	7.26	
11	AR1260-E	6.106	5.167 E3	15.4	94	-0.01	7.76-	7.82	
12	AR1260-F	1.508	1.322 E3	12.3	99	-0.01	8.66-	8.72	
13 s	DCB	58.039	46.309 E3	20.2#	88	-0.01	9.59-	9.65	
14	AR1221-A								-----NA-----
15	AR1221-B								-----NA-----
16	AR1221-C								-----NA-----
17	AR1232-A								-----NA-----
18	AR1232-B								-----NA-----
19	AR1232-C								-----NA-----
20	AR1232-D								-----NA-----
21	AR1232-E								-----NA-----
22	AR1242-A								-----NA-----
23	AR1242-B								-----NA-----
24	AR1242-C								-----NA-----
25	AR1242-D								-----NA-----
26	AR1242-E								-----NA-----
27	AR1248-A								-----NA-----
28	AR1248-B								-----NA-----
29	AR1248-C								-----NA-----
30	AR1248-D								-----NA-----
31	AR1248-E								-----NA-----
32	AR1254-A								-----NA-----
33	AR1254-B								-----NA-----
34	AR1254-C								-----NA-----
35	AR1254-D								-----NA-----
36	AR1254-E								-----NA-----
37	AR1262-A								-----NA-----
38	AR1262-B								-----NA-----
39	AR1262-C								-----NA-----
40	AR1262-D								-----NA-----
41	AR1262-E								-----NA-----
42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----

Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
Lab FileID: YZ89487.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
yz89371.D PC140428.M Tue Apr 29 06:42:05 2014

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89498.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89498.D\ECD1A.CH Vial: 100
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89498.D\ECD2B.CH
 Acq On : 28 Apr 2014 5:34 pm Operator: sofyaz
 Sample : cc7547-750,a1660 Inst : GCYZ
 Misc : op37808,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	353.234 E3	6.3	94	0.00	2.48	2.54
2	AR1016-A	5.652	5.228 E3	7.5	95	0.00	2.80	2.86
3	AR1016-B	14.757	11.950 E3	19.0	84	0.00	3.14	3.20
4	AR1016-C	26.777	23.571 E3	12.0	92	0.00	3.61	3.67
5	AR1016-D	18.510	15.266 E3	17.5	85	0.00	3.75	3.81
6	AR1016-E	11.851	9.511 E3	19.7	85	0.00	4.20	4.26
7	AR1260-A	18.005	14.440 E3	19.8	87	0.00	5.72	5.78
8	AR1260-B	25.487	21.521 E3	15.6	93	-0.01	6.10	6.16
9	AR1260-C	55.533	47.147 E3	15.1	91	-0.01	6.50	6.56
10	AR1260-D	37.301	36.869 E3	1.2	107	-0.01	7.49	7.55
11	AR1260-E	38.275	34.351 E3	10.3	101	-0.01	7.92	7.98
12	AR1260-F	9.154	8.532 E3	6.8	104	-0.02	8.89	8.95
13 s	DCB	329.052	292.461 E3	11.1	101	-0.02	9.65	9.71
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89498.D

42	AR1268-A							-----NA-----
43	AR1268-B							-----NA-----
44	AR1268-C							-----NA-----
45	AR1268-D							-----NA-----
46	AR1268-E							-----NA-----
***** Signal #2 *****								
1	s	TCMX	72.677	57.183	E3	21.3#	76#	0.00 2.15- 2.21
			----- True	Calc.			% Drift	-----
2		AR1016-A	750.000	656.404		12.5	86	0.00 2.54- 2.60
			----- AvgRF	CCRF			% Dev	-----
3		AR1016-B	2.638	1.976	E3	25.1#	82	0.00 2.89- 2.95
4		AR1016-C	4.364	4.096	E3	6.1	97	0.00 3.32- 3.38
5		AR1016-D	1.885	1.723	E3	8.6	91	0.00 3.45- 3.51
6		AR1016-E	2.193	1.885	E3	14.0	89	0.00 3.94- 4.00
7		AR1260-A	3.177	2.465	E3	22.4#	82	0.00 5.48- 5.54
8		AR1260-B	3.616	2.987	E3	17.4	88	0.00 5.76- 5.82
9		AR1260-C	8.978	7.160	E3	20.2#	85	0.00 6.27- 6.33
10		AR1260-D	6.253	5.178	E3	17.2	91	-0.01 7.20- 7.26
11		AR1260-E	6.106	4.856	E3	20.5#	89	-0.01 7.76- 7.82
12		AR1260-F	1.508	1.212	E3	19.6	91	-0.01 8.66- 8.72
13	s	DCB	58.039	43.787	E3	24.6#	83	-0.02 9.59- 9.65
14		AR1221-A						-----NA-----
15		AR1221-B						-----NA-----
16		AR1221-C						-----NA-----
17		AR1232-A						-----NA-----
18		AR1232-B						-----NA-----
19		AR1232-C						-----NA-----
20		AR1232-D						-----NA-----
21		AR1232-E						-----NA-----
22		AR1242-A						-----NA-----
23		AR1242-B						-----NA-----
24		AR1242-C						-----NA-----
25		AR1242-D						-----NA-----
26		AR1242-E						-----NA-----
27		AR1248-A						-----NA-----
28		AR1248-B						-----NA-----
29		AR1248-C						-----NA-----
30		AR1248-D						-----NA-----
31		AR1248-E						-----NA-----
32		AR1254-A						-----NA-----
33		AR1254-B						-----NA-----
34		AR1254-C						-----NA-----
35		AR1254-D						-----NA-----
36		AR1254-E						-----NA-----
37		AR1262-A						-----NA-----
38		AR1262-B						-----NA-----
39		AR1262-C						-----NA-----
40		AR1262-D						-----NA-----
41		AR1262-E						-----NA-----
42		AR1268-A						-----NA-----
43		AR1268-B						-----NA-----
44		AR1268-C						-----NA-----
45		AR1268-D						-----NA-----
46		AR1268-E						-----NA-----

6.6.5

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Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
Lab FileID: YZ89498.D

(#) = Out of Range
yz89371.D PC140428.M

SPCC's out = 0 CCC's out = 0
Tue Apr 29 06:45:05 2014

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89509.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89509.D\ECD1A.CH Vial: 99
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89509.D\ECD2B.CH
 Acq On : 28 Apr 2014 9:28 pm Operator: sofyaz
 Sample : cc7547-500,a1660 Inst : GCYZ
 Misc : op37808,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	379.522 E3	-0.7	105	0.00	2.47-	2.53
2	AR1016-A	5.652	5.522 E3	2.3	95	0.00	2.79-	2.85
3	AR1016-B	14.757	14.506 E3	1.7	99	0.00	3.14-	3.20
4	AR1016-C	26.777	29.026 E3	-8.4	115	0.00	3.61-	3.67
5	AR1016-D	18.510	19.354 E3	-4.6	105	0.00	3.75-	3.81
6	AR1016-E	11.851	11.958 E3	-0.9	103	0.00	4.19-	4.25
7	AR1260-A	18.005	17.532 E3	2.6	101	-0.01	5.72-	5.78
8	AR1260-B	25.487	27.094 E3	-6.3	109	-0.01	6.10-	6.16
9	AR1260-C	55.533	59.619 E3	-7.4	111	-0.01	6.49-	6.55
10	AR1260-D	37.301	45.414 E3	-21.8#	126#	-0.02	7.48-	7.54
11	AR1260-E	38.275	42.045 E3	-9.8	114	-0.02	7.91-	7.97
12	AR1260-F	9.154	10.334 E3	-12.9	114	-0.02	8.89-	8.95
13 s	DCB	329.052	334.354 E3	-1.6	109	-0.02	9.64-	9.70
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89509.D

42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----
***** Signal #2 *****									
1 s	TCMX	72.677	60.671 E3	16.5	92	0.00	2.14-	2.20	
----- True Calc. % Drift -----									
2	AR1016-A	500.000	457.769	8.4	90	0.00	2.54-	2.60	
----- AvgRF CCRF % Dev -----									
3	AR1016-B	2.638	2.181 E3	17.3	87	0.00	2.89-	2.95	
4	AR1016-C	4.364	4.434 E3	-1.6	106	0.00	3.32-	3.38	
5	AR1016-D	1.885	1.940 E3	-2.9	106	0.00	3.45-	3.51	
6	AR1016-E	2.193	2.031 E3	7.4	99	0.00	3.94-	4.00	
7	AR1260-A	3.177	2.779 E3	12.5	92	-0.01	5.48-	5.54	
8	AR1260-B	3.616	3.337 E3	7.7	95	-0.01	5.76-	5.82	
9	AR1260-C	8.978	8.458 E3	5.8	99	-0.01	6.26-	6.32	
10	AR1260-D	6.253	6.033 E3	3.5	99	-0.01	7.20-	7.26	
11	AR1260-E	6.106	5.792 E3	5.1	98	-0.01	7.76-	7.82	
12	AR1260-F	1.508	1.496 E3	0.8	102	-0.02	8.66-	8.72	
13 s	DCB	58.039	50.066 E3	13.7	92	-0.02	9.59-	9.65	
14	AR1221-A								-----NA-----
15	AR1221-B								-----NA-----
16	AR1221-C								-----NA-----
17	AR1232-A								-----NA-----
18	AR1232-B								-----NA-----
19	AR1232-C								-----NA-----
20	AR1232-D								-----NA-----
21	AR1232-E								-----NA-----
22	AR1242-A								-----NA-----
23	AR1242-B								-----NA-----
24	AR1242-C								-----NA-----
25	AR1242-D								-----NA-----
26	AR1242-E								-----NA-----
27	AR1248-A								-----NA-----
28	AR1248-B								-----NA-----
29	AR1248-C								-----NA-----
30	AR1248-D								-----NA-----
31	AR1248-E								-----NA-----
32	AR1254-A								-----NA-----
33	AR1254-B								-----NA-----
34	AR1254-C								-----NA-----
35	AR1254-D								-----NA-----
36	AR1254-E								-----NA-----
37	AR1262-A								-----NA-----
38	AR1262-B								-----NA-----
39	AR1262-C								-----NA-----
40	AR1262-D								-----NA-----
41	AR1262-E								-----NA-----
42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----

6.6.6

6

Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
Lab FileID: YZ89509.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
yz89440.D PC140428.M Tue Apr 29 11:23:50 2014

6.6.6

6

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89525.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89525.D\ECD1A.CH Vial: 98
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89525.D\ECD2B.CH
 Acq On : 29 Apr 2014 2:45 am Operator: sofyaz
 Sample : cc7547-750,a1660 Inst : GCYZ
 Misc : op37808,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	381.983 E3	-1.3	102	0.00	2.48-	2.54
2	AR1016-A	5.652	5.601 E3	0.9	102	0.00	2.80-	2.86
3	AR1016-B	14.757	13.522 E3	8.4	95	0.00	3.14-	3.20
4	AR1016-C	26.777	28.953 E3	-8.1	114	0.00	3.61-	3.67
5	AR1016-D	18.510	18.383 E3	0.7	102	0.00	3.75-	3.81
6	AR1016-E	11.851	11.414 E3	3.7	101	0.00	4.20-	4.26
7	AR1260-A	18.005	17.811 E3	1.1	108	-0.01	5.72-	5.78
8	AR1260-B	25.487	26.502 E3	-4.0	115	-0.01	6.10-	6.16
9	AR1260-C	55.533	60.124 E3	-8.3	117	-0.01	6.49-	6.55
10	AR1260-D	37.301	46.672 E3	-25.1#	136#	-0.02	7.48-	7.54
11	AR1260-E	38.275	45.701 E3	-19.4	134#	-0.02	7.91-	7.97
12	AR1260-F	9.154	11.617 E3	-26.9#	141#	-0.02	8.88-	8.94
13 s	DCB	329.052	391.682 E3	-19.0	136#	-0.02	9.64-	9.70
14	AR1221-A			-----NA-----				
15	AR1221-B			-----NA-----				
16	AR1221-C			-----NA-----				
17	AR1232-A			-----NA-----				
18	AR1232-B			-----NA-----				
19	AR1232-C			-----NA-----				
20	AR1232-D			-----NA-----				
21	AR1232-E			-----NA-----				
22	AR1242-A			-----NA-----				
23	AR1242-B			-----NA-----				
24	AR1242-C			-----NA-----				
25	AR1242-D			-----NA-----				
26	AR1242-E			-----NA-----				
27	AR1248-A			-----NA-----				
28	AR1248-B			-----NA-----				
29	AR1248-C			-----NA-----				
30	AR1248-D			-----NA-----				
31	AR1248-E			-----NA-----				
32	AR1254-A			-----NA-----				
33	AR1254-B			-----NA-----				
34	AR1254-C			-----NA-----				
35	AR1254-D			-----NA-----				
36	AR1254-E			-----NA-----				
37	AR1262-A			-----NA-----				
38	AR1262-B			-----NA-----				
39	AR1262-C			-----NA-----				
40	AR1262-D			-----NA-----				
41	AR1262-E			-----NA-----				

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
 Lab FileID: YZ89525.D

42	AR1268-A								-----NA-----
43	AR1268-B								-----NA-----
44	AR1268-C								-----NA-----
45	AR1268-D								-----NA-----
46	AR1268-E								-----NA-----
***** Signal #2 *****									
1	s	TCMX	72.677	68.344	E3	6.0	91	0.00	2.15- 2.21
----- True Calc. % Drift -----									
2		AR1016-A	750.000	683.963		8.8	91	0.00	2.54- 2.60
----- AvgRF CCRF % Dev -----									
3		AR1016-B	2.638	2.065	E3	21.7#	86	0.00	2.89- 2.95
4		AR1016-C	4.364	4.126	E3	5.5	98	0.00	3.32- 3.38
5		AR1016-D	1.885	1.725	E3	8.5	91	0.00	3.45- 3.51
6		AR1016-E	2.193	1.962	E3	10.5	92	0.00	3.94- 4.00
7		AR1260-A	3.177	2.714	E3	14.6	90	-0.01	5.48- 5.54
8		AR1260-B	3.616	3.273	E3	9.5	97	-0.01	5.76- 5.82
9		AR1260-C	8.978	8.319	E3	7.3	99	-0.01	6.26- 6.32
10		AR1260-D	6.253	6.125	E3	2.0	107	-0.02	7.20- 7.26
11		AR1260-E	6.106	5.982	E3	2.0	109	-0.02	7.75- 7.81
12		AR1260-F	1.508	1.555	E3	-3.1	116	-0.02	8.66- 8.72
13	s	DCB	58.039	56.053	E3	3.4	106	-0.02	9.58- 9.64
14		AR1221-A							-----NA-----
15		AR1221-B							-----NA-----
16		AR1221-C							-----NA-----
17		AR1232-A							-----NA-----
18		AR1232-B							-----NA-----
19		AR1232-C							-----NA-----
20		AR1232-D							-----NA-----
21		AR1232-E							-----NA-----
22		AR1242-A							-----NA-----
23		AR1242-B							-----NA-----
24		AR1242-C							-----NA-----
25		AR1242-D							-----NA-----
26		AR1242-E							-----NA-----
27		AR1248-A							-----NA-----
28		AR1248-B							-----NA-----
29		AR1248-C							-----NA-----
30		AR1248-D							-----NA-----
31		AR1248-E							-----NA-----
32		AR1254-A							-----NA-----
33		AR1254-B							-----NA-----
34		AR1254-C							-----NA-----
35		AR1254-D							-----NA-----
36		AR1254-E							-----NA-----
37		AR1262-A							-----NA-----
38		AR1262-B							-----NA-----
39		AR1262-C							-----NA-----
40		AR1262-D							-----NA-----
41		AR1262-E							-----NA-----
42		AR1268-A							-----NA-----
43		AR1268-B							-----NA-----
44		AR1268-C							-----NA-----
45		AR1268-D							-----NA-----
46		AR1268-E							-----NA-----

6.6.7

6

Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-CC7547
Lab FileID: YZ89525.D

(#) = Out of Range SPCC's out = 0 CCC's out = 0
yz89371.D PC140428.M Tue Apr 29 06:59:06 2014

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-ECC7547
 Lab FileID: YZ89527.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\YZ...28\yz89527.D\ECD1A.CH Vial: 100
 Signal #2 : C:\msdchem\1\DATA\YZ140428\yz89527.D\ECD2B.CH
 Acq On : 29 Apr 2014 7:30 am Operator: sofyaz
 Sample : ecc7547-500,a1660 Inst : GCYZ
 Misc : op37808,gyz7550,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: RTEINT.P IntFile Signal #2: RTEINT.P

Method : C:\msdchem\1\METHODS\PC140428.M (RTE Integrator)
 Title : p8082pcb-onPest2/Pest on GC20
 Last Update : Sun Apr 27 07:19:04 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	376.901	356.611 E3	5.4	98	0.00	2.47-	2.53
2	AR1016-A	5.652	6.110 E3	-8.1	105	0.00	2.79-	2.85
3	AR1016-B	14.757	13.300 E3	9.9	91	0.00	3.13-	3.19
4	AR1016-C	26.777	26.252 E3	2.0	104	0.00	3.60-	3.66
5	AR1016-D	18.510	18.462 E3	0.3	101	0.00	3.74-	3.80
6	AR1016-E	11.851	11.887 E3	-0.3	103	0.00	4.19-	4.25
7	AR1260-A	18.005	17.105 E3	5.0	99	-0.01	5.71-	5.77
8	AR1260-B	25.487	24.948 E3	2.1	100	-0.01	6.10-	6.16
9	AR1260-C	55.533	57.543 E3	-3.6	107	-0.01	6.49-	6.55
10	AR1260-D	37.301	42.433 E3	-13.8	118	-0.02	7.48-	7.54
11	AR1260-E	38.275	40.136 E3	-4.9	109	-0.02	7.91-	7.97
12	AR1260-F	9.154	10.138 E3	-10.7	112	-0.02	8.88-	8.94
13 s	DCB	329.052	335.785 E3	-2.0	110	-0.02	9.64-	9.70
14	AR1221-A						-----NA-----	
15	AR1221-B						-----NA-----	
16	AR1221-C						-----NA-----	
17	AR1232-A						-----NA-----	
18	AR1232-B						-----NA-----	
19	AR1232-C						-----NA-----	
20	AR1232-D						-----NA-----	
21	AR1232-E						-----NA-----	
22	AR1242-A						-----NA-----	
23	AR1242-B						-----NA-----	
24	AR1242-C						-----NA-----	
25	AR1242-D						-----NA-----	
26	AR1242-E						-----NA-----	
27	AR1248-A						-----NA-----	
28	AR1248-B						-----NA-----	
29	AR1248-C						-----NA-----	
30	AR1248-D						-----NA-----	
31	AR1248-E						-----NA-----	
32	AR1254-A						-----NA-----	
33	AR1254-B						-----NA-----	
34	AR1254-C						-----NA-----	
35	AR1254-D						-----NA-----	
36	AR1254-E						-----NA-----	
37	AR1262-A						-----NA-----	
38	AR1262-B						-----NA-----	
39	AR1262-C						-----NA-----	
40	AR1262-D						-----NA-----	
41	AR1262-E						-----NA-----	

Continuing Calibration Summary

Job Number: MC30076
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GYZ7550-ECC7547
 Lab FileID: YZ89527.D

42 AR1268-A -----NA-----
 43 AR1268-B -----NA-----
 44 AR1268-C -----NA-----
 45 AR1268-D -----NA-----
 46 AR1268-E -----NA-----

***** Signal #2 *****

1 s TCMX 72.677 52.547 E3 27.7# 80# 0.00 2.14- 2.20

2 AR1016-A ----- True Calc. % Drift -----
 500.000 402.110 19.6 79 0.00 2.54- 2.60

----- AvgRF CCRF % Dev -----
 3 AR1016-B 2.638 1.946 E3 26.2# 78# 0.00 2.89- 2.95
 4 AR1016-C 4.364 3.808 E3 12.7 91 0.00 3.32- 3.38
 5 AR1016-D 1.885 1.542 E3 18.2 84 0.00 3.45- 3.51
 6 AR1016-E 2.193 1.806 E3 17.6 88 0.00 3.94- 4.00
 7 AR1260-A 3.177 2.492 E3 21.6# 83 -0.01 5.48- 5.54
 8 AR1260-B 3.616 2.975 E3 17.7 85 -0.01 5.76- 5.82
 9 AR1260-C 8.978 7.297 E3 18.7 86 -0.01 6.26- 6.32
 10 AR1260-D 6.253 5.384 E3 13.9 88 -0.02 7.19- 7.25
 11 AR1260-E 6.106 5.209 E3 14.7 89 -0.02 7.75- 7.81
 12 AR1260-F 1.508 1.363 E3 9.6 93 -0.02 8.66- 8.72
 13 s DCB 58.039 47.007 E3 19.0 86 -0.02 9.58- 9.64

14 AR1221-A -----NA-----
 15 AR1221-B -----NA-----
 16 AR1221-C -----NA-----
 17 AR1232-A -----NA-----
 18 AR1232-B -----NA-----
 19 AR1232-C -----NA-----
 20 AR1232-D -----NA-----
 21 AR1232-E -----NA-----
 22 AR1242-A -----NA-----
 23 AR1242-B -----NA-----
 24 AR1242-C -----NA-----
 25 AR1242-D -----NA-----
 26 AR1242-E -----NA-----
 27 AR1248-A -----NA-----
 28 AR1248-B -----NA-----
 29 AR1248-C -----NA-----
 30 AR1248-D -----NA-----
 31 AR1248-E -----NA-----
 32 AR1254-A -----NA-----
 33 AR1254-B -----NA-----
 34 AR1254-C -----NA-----
 35 AR1254-D -----NA-----
 36 AR1254-E -----NA-----
 37 AR1262-A -----NA-----
 38 AR1262-B -----NA-----
 39 AR1262-C -----NA-----
 40 AR1262-D -----NA-----
 41 AR1262-E -----NA-----
 42 AR1268-A -----NA-----
 43 AR1268-B -----NA-----
 44 AR1268-C -----NA-----
 45 AR1268-D -----NA-----
 46 AR1268-E -----NA-----

6.68

6

Continuing Calibration Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GYZ7550-ECC7547
Lab FileID: YZ89527.D

(#) = Out of Range
yz89440.D PC140428.M

SPCC's out = 0 CCC's out = 0
Tue Apr 29 08:17:04 2014

GC Semi-volatiles

Raw Data

7

Manual Integrations
APPROVED
 (compounds with "m" flag)
Andri Piluri
04/29/14 12:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89490.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:55 pm
 Operator : sofyaz
 Sample : mc30076-1
 Misc : op37808,gyz7550,15.61,,,10,,,s
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:28:17 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.174	11905818	1840890	31.589m	25.330
Spiked Amount	40.000 Range	42 - 132	Recovery	=	78.97%	63.32%
13) s DCB	9.679f	9.618f	9477479	1396709	28.802m	24.065m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	72.00%	60.16%
Target Compounds						
10) AR1260-D	7.514	7.229	4941868	864399	132.485m	138.233
11) AR1260-E	7.946	7.789	5571550	762181	145.565m	124.821m
12) AR1260-F	8.921f	8.693	1060334	156086	115.832	103.482m
32) AR1254-A	4.671	4.444	5196038	724956	231.328m	229.917m
33) AR1254-B	4.989	4.671	8866789	1280080	295.959m	274.350m
34) AR1254-C	5.506	5.254	13861223	2337220	315.417m	310.234m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

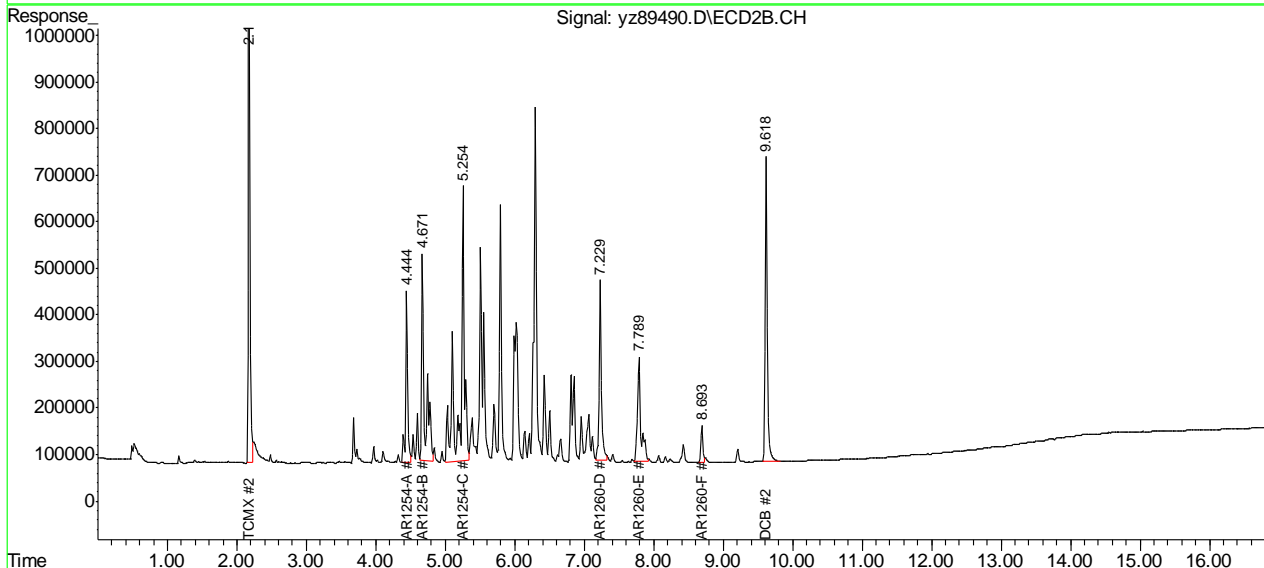
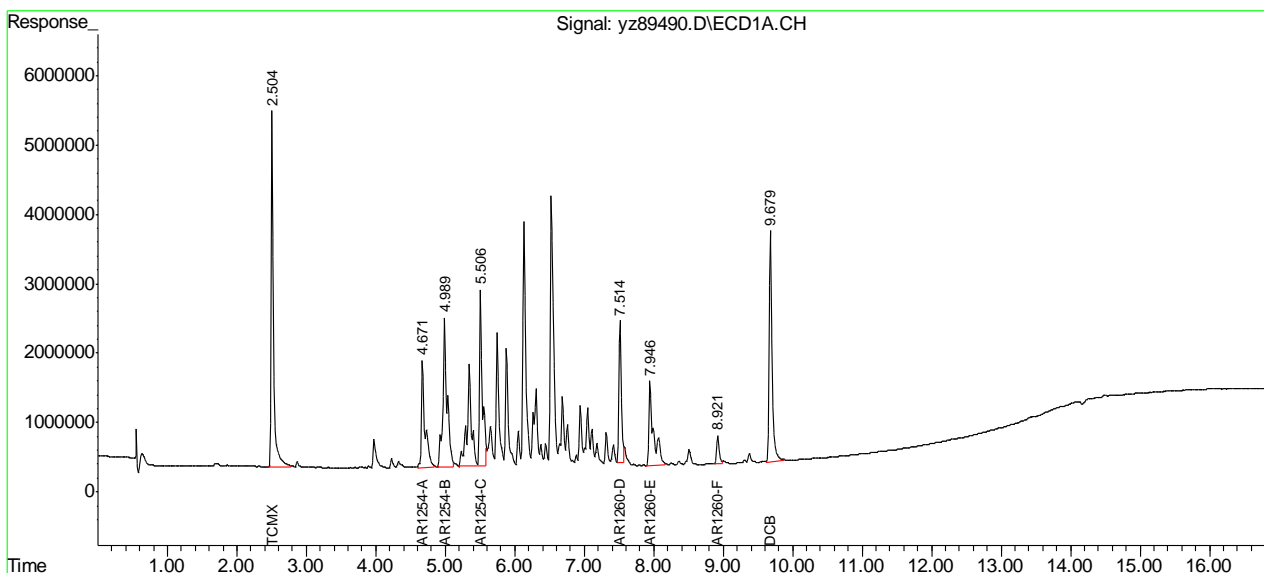
7.1.1
 7

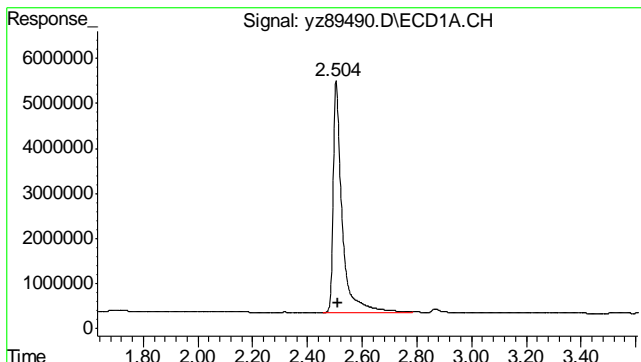
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89490.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:55 pm
 Operator : sofyaz
 Sample : mc30076-1
 Misc : op37808,gyz7550,15.61,,,10,,s
 ALS Vial : 13 Sample Multiplier: 1

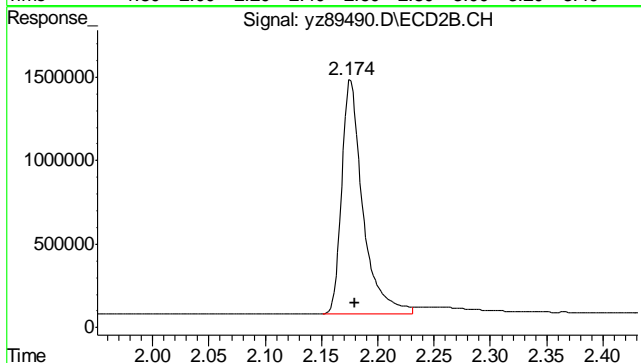
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:28:17 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

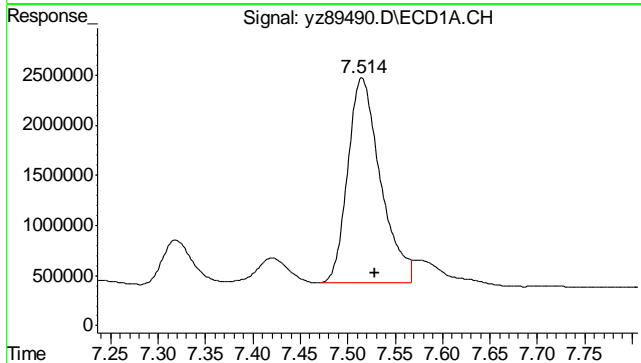




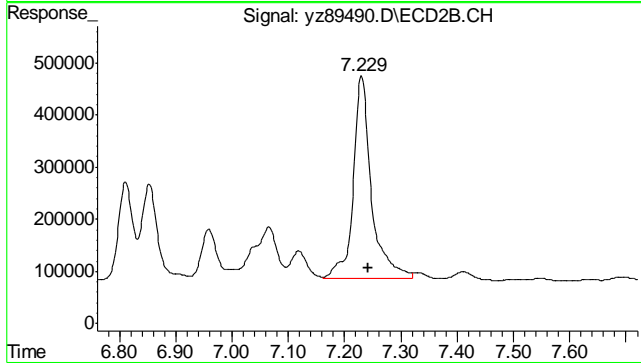
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 11905818
 Conc: 31.59 ppb m



#1 TCMX
 R.T.: 2.174 min
 Delta R.T.: -0.006 min
 Response: 1840890
 Conc: 25.33 ppb

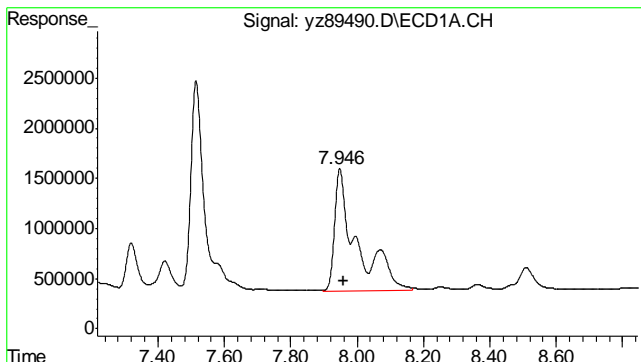


#10 AR1260-D
 R.T.: 7.514 min
 Delta R.T.: -0.014 min
 Response: 4941868
 Conc: 132.49 ppb m

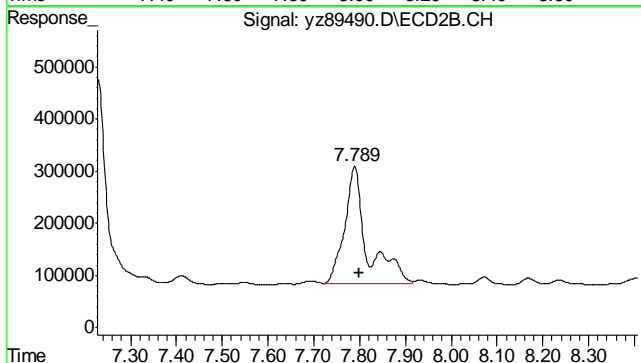


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.012 min
 Response: 864399
 Conc: 138.23 ppb

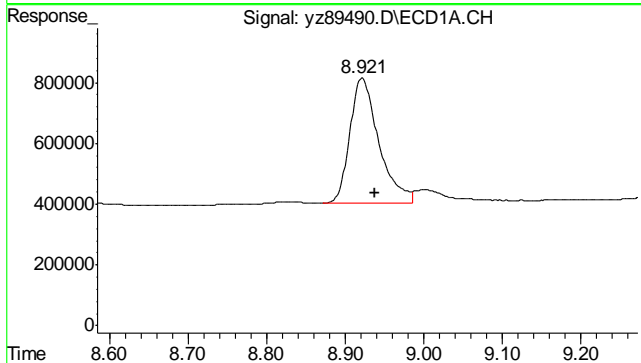
7.1.1
 7



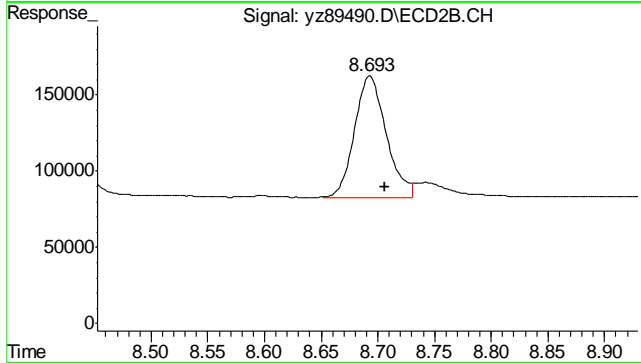
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 5571550
 Conc: 145.56 ppb m



#11 AR1260-E
 R.T.: 7.789 min
 Delta R.T.: -0.009 min
 Response: 762181
 Conc: 124.82 ppb m

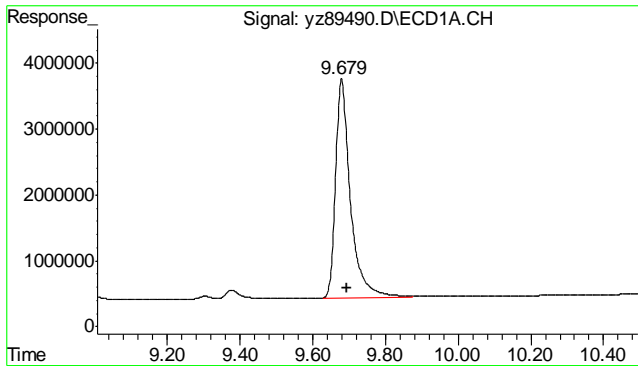


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 1060334
 Conc: 115.83

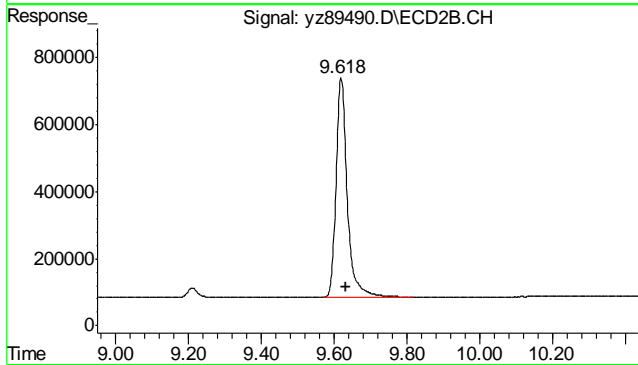


#12 AR1260-F
 R.T.: 8.693 min
 Delta R.T.: -0.014 min
 Response: 156086
 Conc: 103.48 m

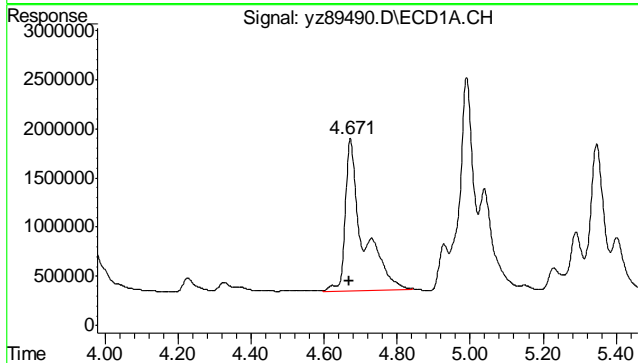
7.1.1
 7



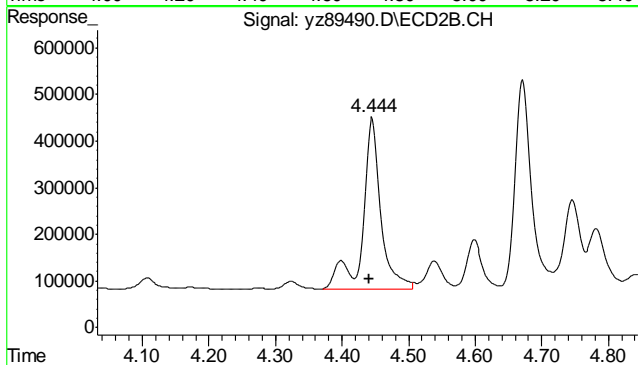
#13 DCB
 R.T.: 9.679 min
 Delta R.T.: -0.016 min
 Response: 9477479
 Conc: 28.80 ppb m



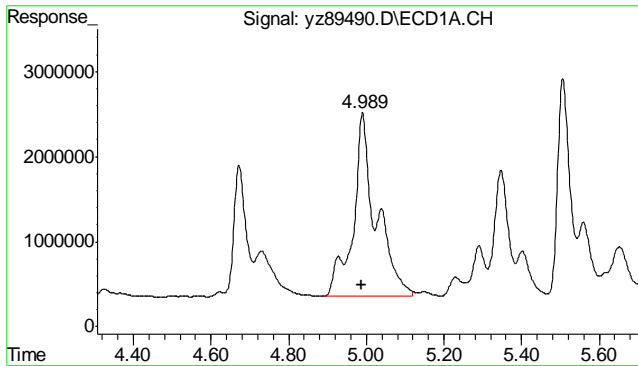
#13 DCB
 R.T.: 9.618 min
 Delta R.T.: -0.016 min
 Response: 1396709
 Conc: 24.07 ppb m



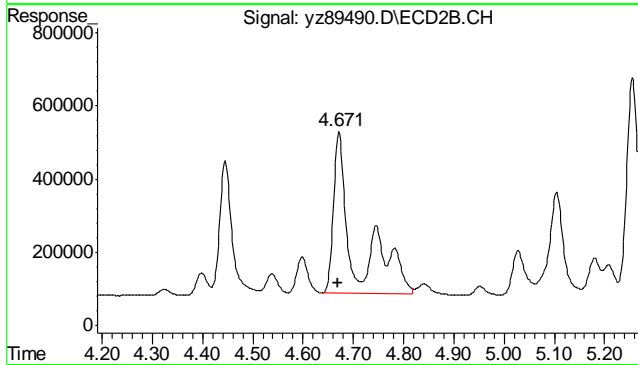
#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.000 min
 Response: 5196038
 Conc: 231.33 ppb m



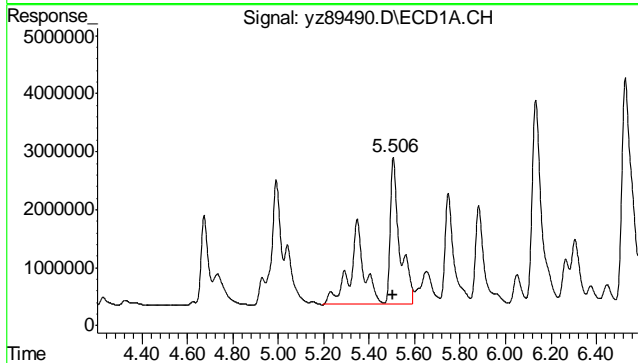
#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.003 min
 Response: 724956
 Conc: 229.92 ppb m



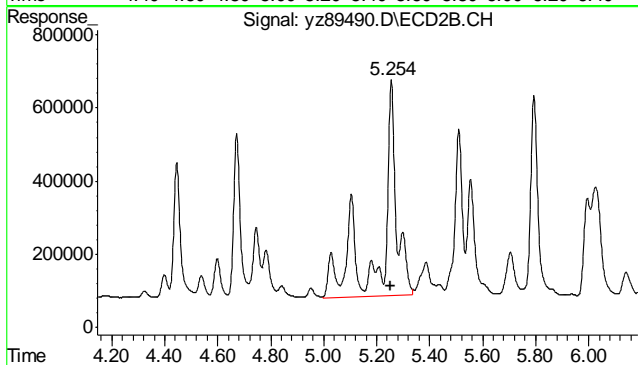
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.000 min
 Response: 8866789
 Conc: 295.96 ppb m



#33 AR1254-B
 R.T.: 4.671 min
 Delta R.T.: 0.003 min
 Response: 1280080
 Conc: 274.35 ppb m



#34 AR1254-C
 R.T.: 5.506 min
 Delta R.T.: 0.003 min
 Response: 13861223
 Conc: 315.42 ppb m



#34 AR1254-C
 R.T.: 5.254 min
 Delta R.T.: 0.003 min
 Response: 2337220
 Conc: 310.23 ppb m

7.1.1
7

Manual Integrations
APPROVED
 (compounds with "m" flag)
Andri Piluri
04/29/14 12:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89491.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 3:15 pm
 Operator : sofyaz
 Sample : mc30076-2
 Misc : op37808,gyz7550,15.27,,,10,,s
 ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:32:24 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.505	2.176	10328925	1468706	27.405	20.209 #
Spiked Amount	40.000 Range	42 - 132	Recovery	=	68.51%	50.52%
13) s DCB	9.678f	9.618f	8547498	1289187	25.976m	22.213m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	64.94%	55.53%
Target Compounds						
10) AR1260-D	7.515	7.229	964069	161506	25.845	25.828
11) AR1260-E	7.944f	7.788	1008025	151520	26.336m	24.814m
12) AR1260-F	8.919f	8.691f	199828	33000	21.829m	21.878m
32) AR1254-A	4.671	4.444	424249	64138	18.888m	20.341m
33) AR1254-B	4.988	4.671	690427	102895	23.045m	22.053m
34) AR1254-C	5.746f	5.255	1525080	194983	34.704m	25.881m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

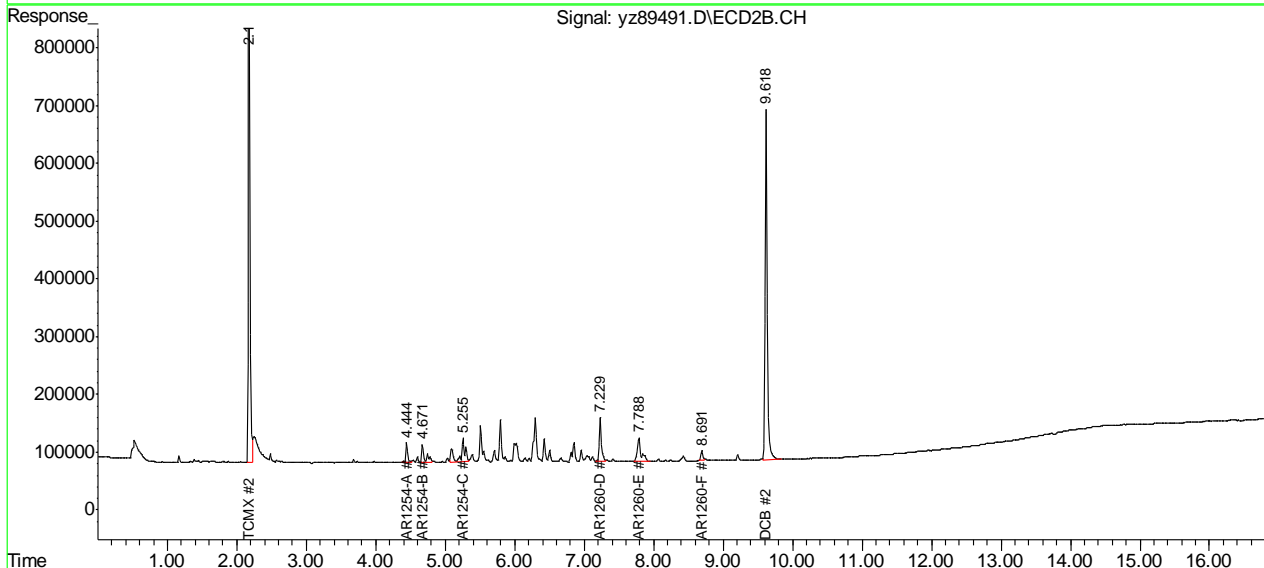
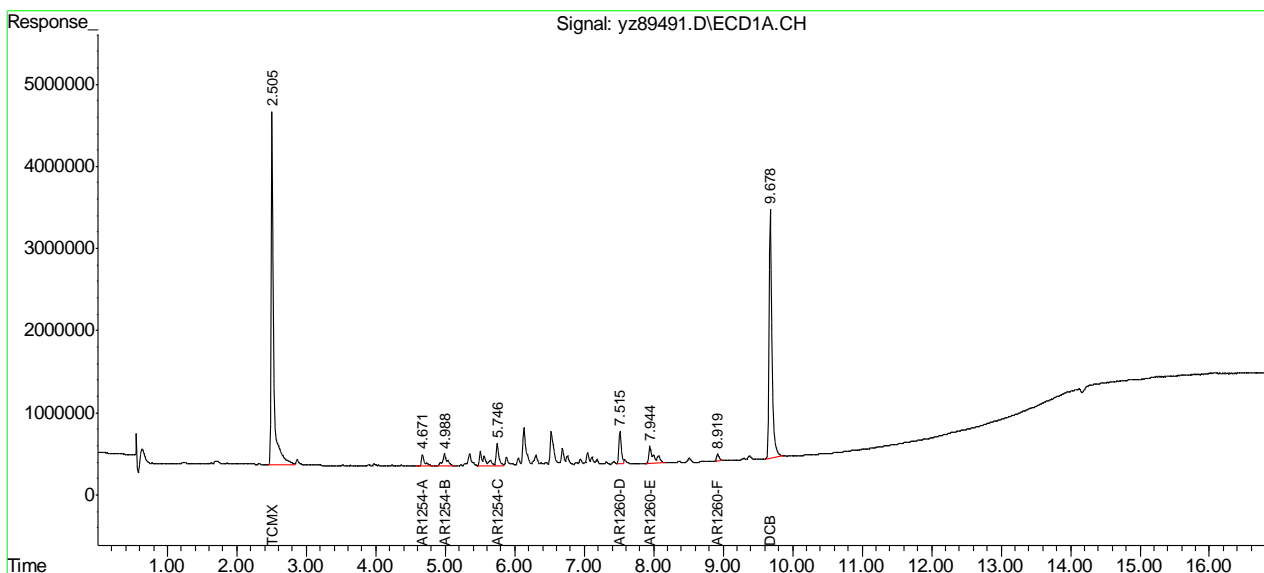
7.1.2
 7

Quantitation Report (QT Reviewed)

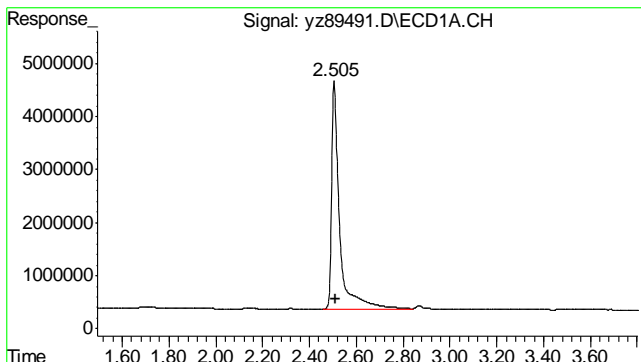
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89491.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 3:15 pm
 Operator : sofyaz
 Sample : mc30076-2
 Misc : op37808,gyz7550,15.27,,,10,,,s
 ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:32:24 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

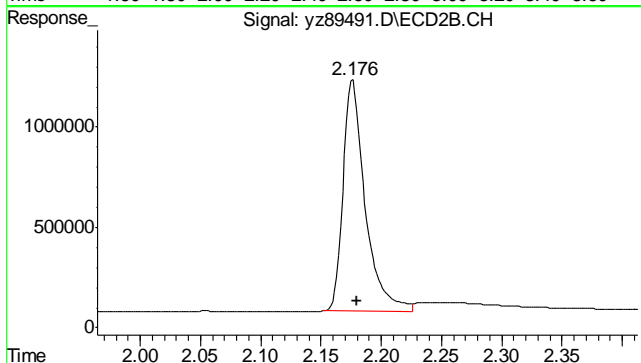
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



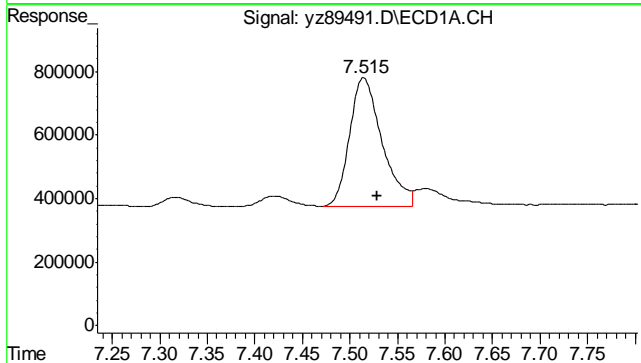
7.1.2
 7



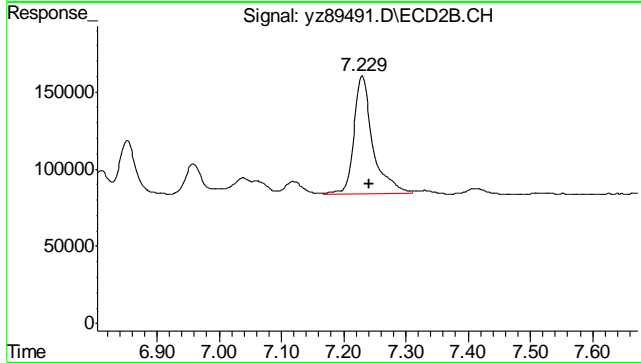
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 10328925
 Conc: 27.40 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1468706
 Conc: 20.21 ppb

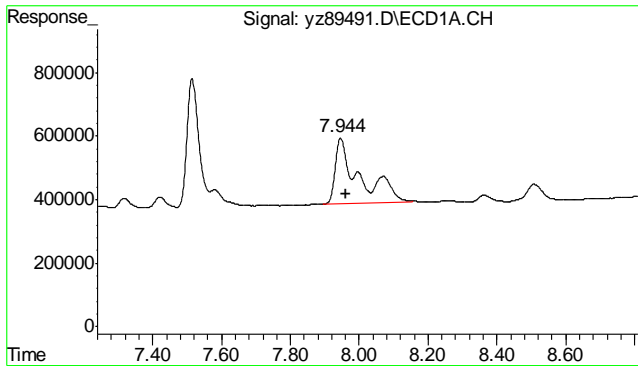


#10 AR1260-D
 R.T.: 7.515 min
 Delta R.T.: -0.014 min
 Response: 964069
 Conc: 25.85 ppb

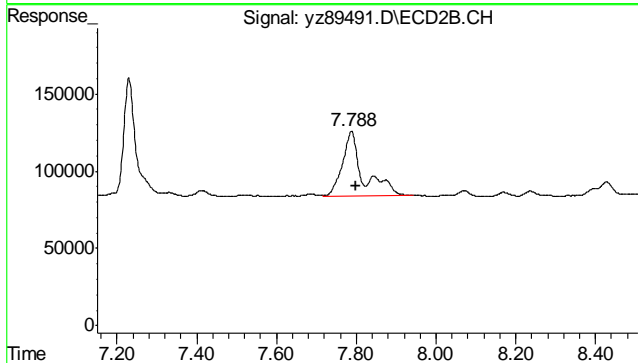


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.012 min
 Response: 161506
 Conc: 25.83 ppb

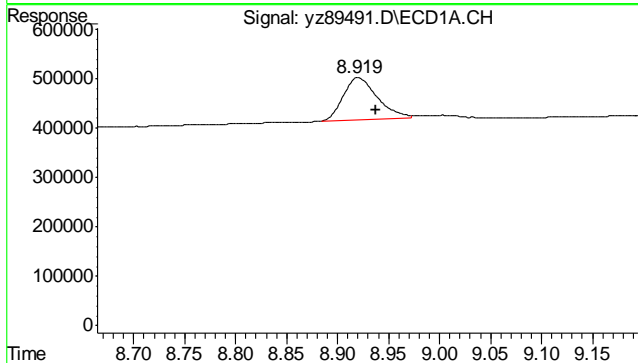
7.12
 7



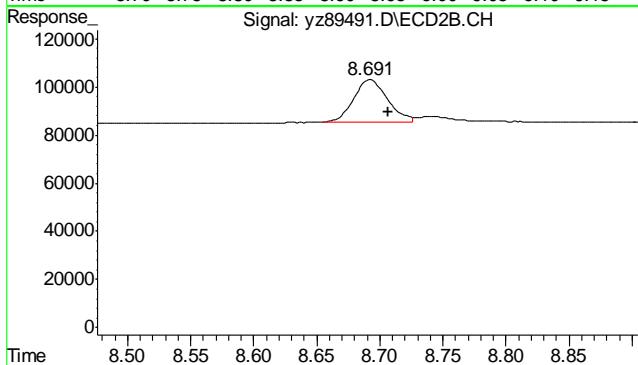
#11 AR1260-E
 R.T.: 7.944 min
 Delta R.T.: -0.015 min
 Response: 1008025
 Conc: 26.34 ppb m



#11 AR1260-E
 R.T.: 7.788 min
 Delta R.T.: -0.010 min
 Response: 151520
 Conc: 24.81 ppb m

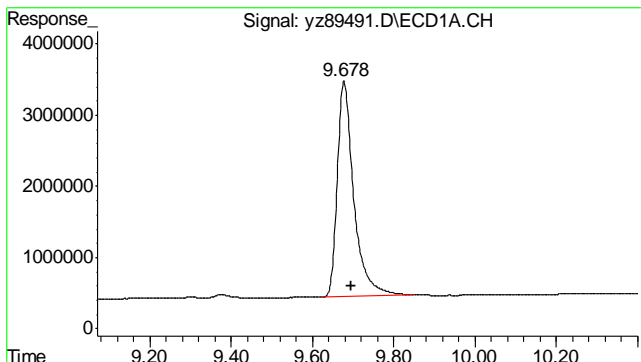


#12 AR1260-F
 R.T.: 8.919 min
 Delta R.T.: -0.019 min
 Response: 199828
 Conc: 21.83 m

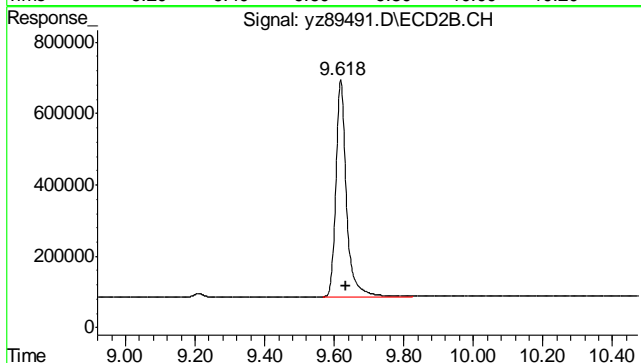


#12 AR1260-F
 R.T.: 8.691 min
 Delta R.T.: -0.015 min
 Response: 33000
 Conc: 21.88 m

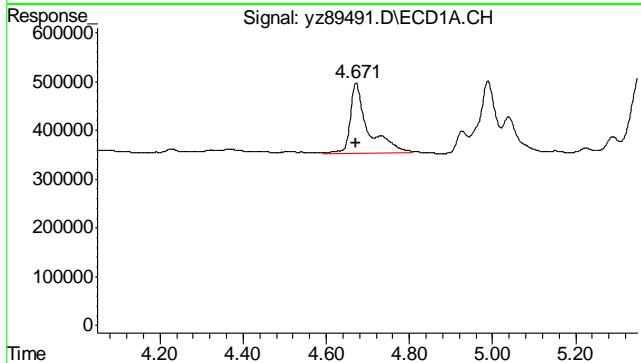
7.12
7



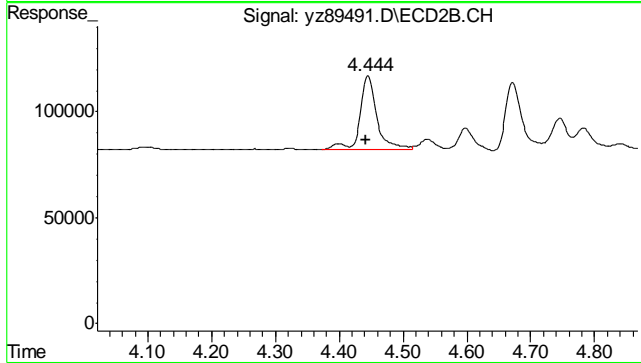
#13 DCB
 R.T.: 9.678 min
 Delta R.T.: -0.017 min
 Response: 8547498
 Conc: 25.98 ppb m



#13 DCB
 R.T.: 9.618 min
 Delta R.T.: -0.015 min
 Response: 1289187
 Conc: 22.21 ppb m

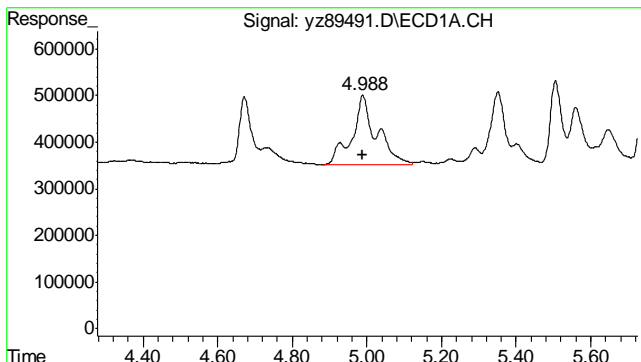


#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.001 min
 Response: 424249
 Conc: 18.89 ppb m

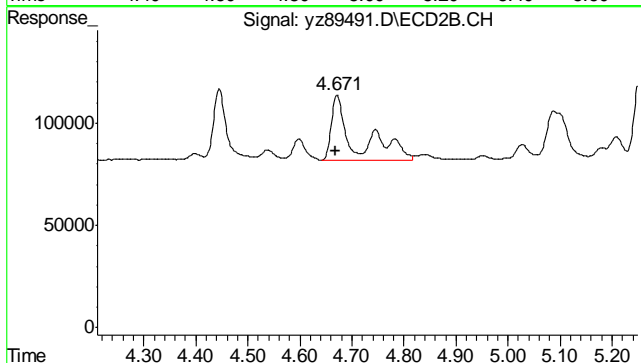


#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.003 min
 Response: 64138
 Conc: 20.34 ppb m

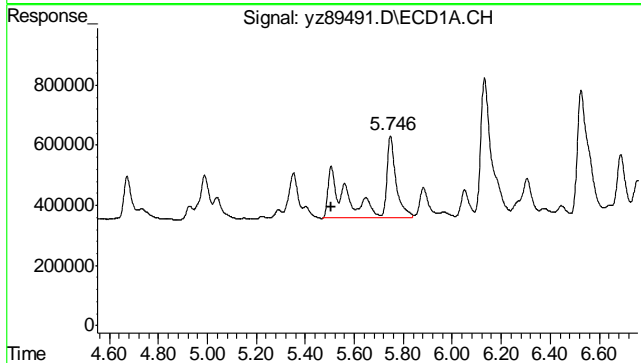
7.12
7



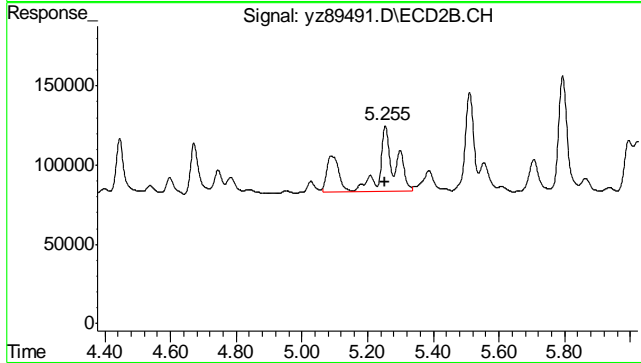
#33 AR1254-B
 R.T.: 4.988 min
 Delta R.T.: 0.000 min
 Response: 690427
 Conc: 23.05 ppb m



#33 AR1254-B
 R.T.: 4.671 min
 Delta R.T.: 0.003 min
 Response: 102895
 Conc: 22.05 ppb m



#34 AR1254-C
 R.T.: 5.746 min
 Delta R.T.: 0.243 min
 Response: 1525080
 Conc: 34.70 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.003 min
 Response: 194983
 Conc: 25.88 ppb m

7.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89492.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 3:35 pm
 Operator : sofyaz
 Sample : mc30076-3
 Misc : op37808,gyz7550,15.68,,,10,,s
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:59:20 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.507	2.177	8957656	1484819	23.767	20.430
Spiked Amount	40.000 Range	42 - 132	Recovery	=	59.42%	51.08%
13) s DCB	9.677f	9.617f	8865687	1293854	26.943m	22.293m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	67.36%	55.73%
Target Compounds						
10) AR1260-D	7.512f	7.229	1484934	230714	39.809	36.895m
11) AR1260-E	7.945	7.787	1506767	221358	39.367m	36.251m
12) AR1260-F	8.920f	8.690f	346850	50416	37.890	33.425
32) AR1254-A	4.672	4.445	1017987	146359	45.321m	46.417m
33) AR1254-B	4.989	4.670	1527243	219241	50.977m	46.988m
34) AR1254-C	5.505	5.254	2537356	431639	57.738m	57.294m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

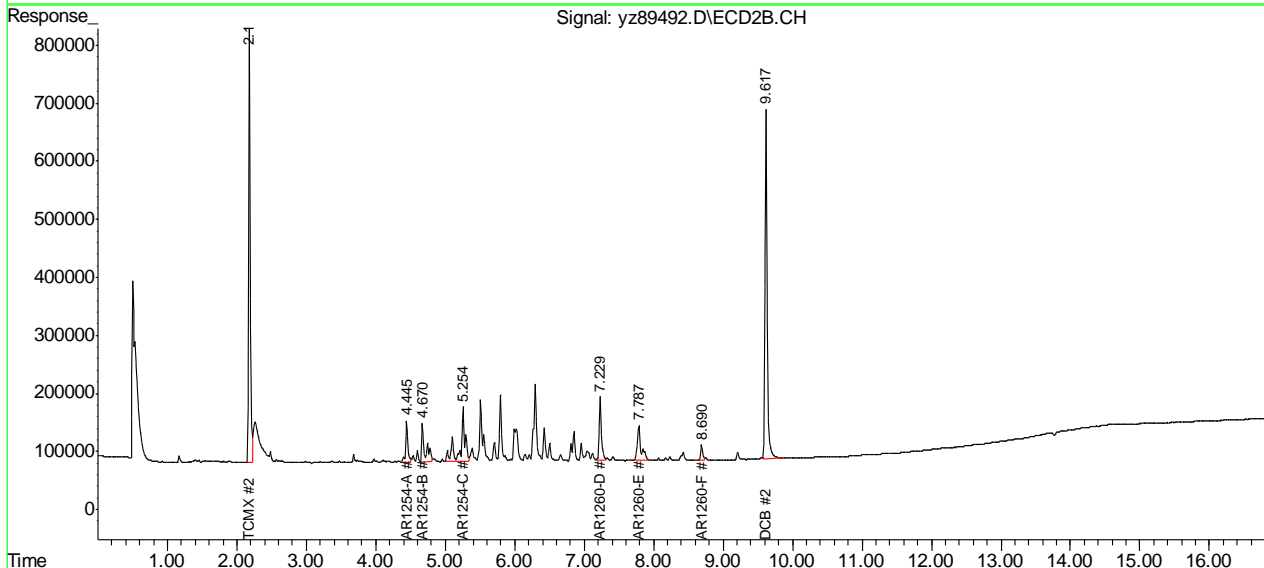
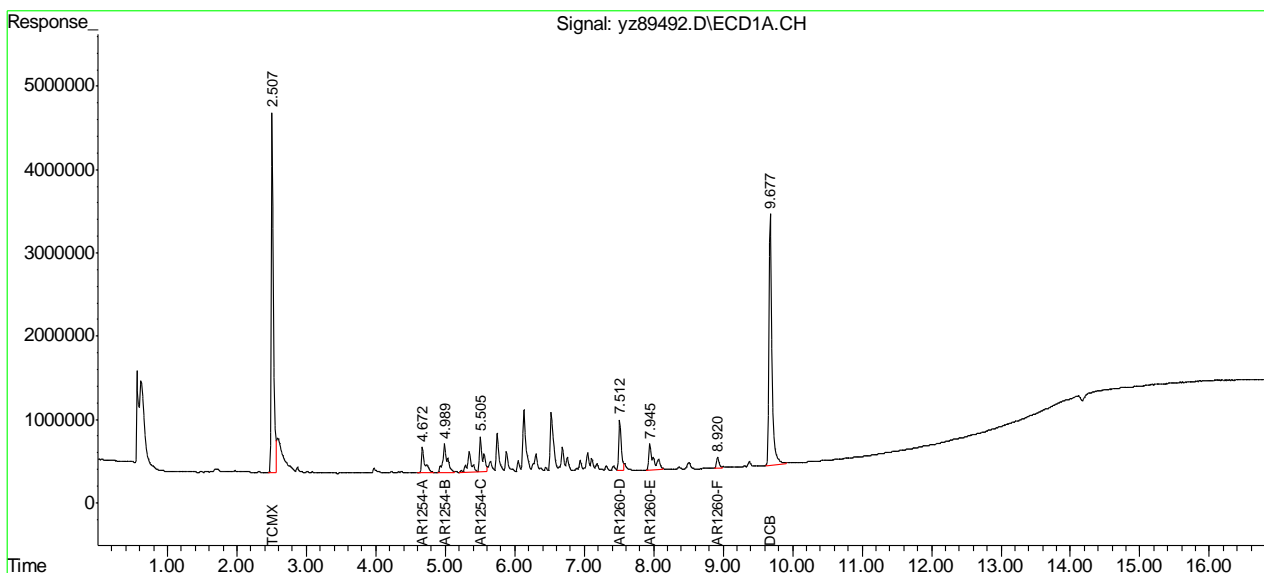
7.1.3
 7

Quantitation Report (QT Reviewed)

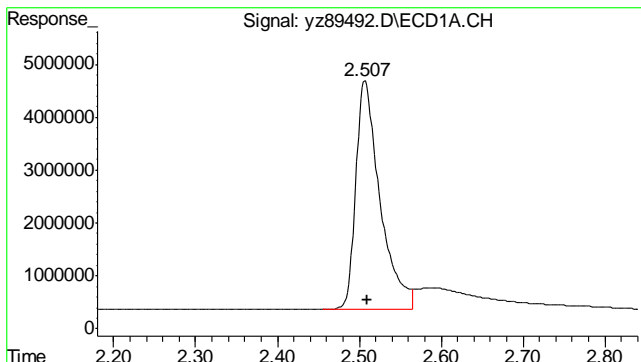
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89492.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 3:35 pm
 Operator : sofyaz
 Sample : mc30076-3
 Misc : op37808,gyz7550,15.68,,,10,,,s
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:59:20 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

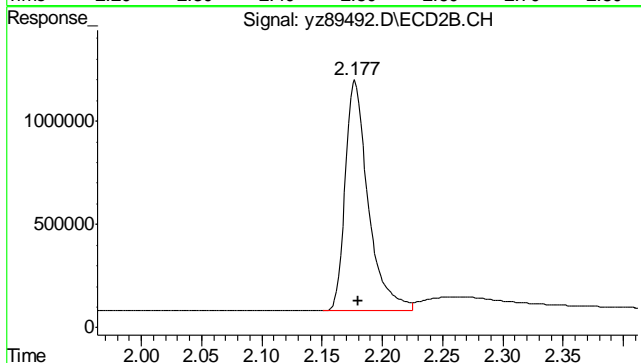
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



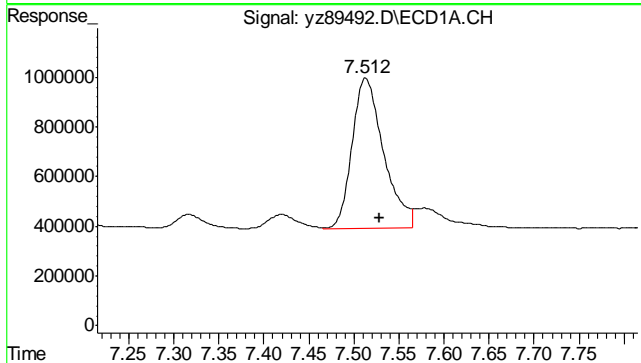
7.1.3
 7



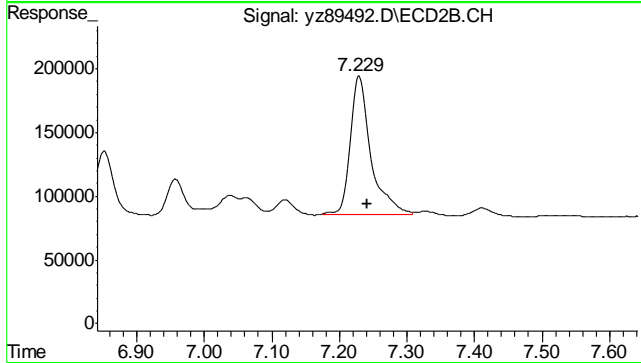
#1 TCMX
 R.T.: 2.507 min
 Delta R.T.: -0.003 min
 Response: 8957656
 Conc: 23.77 ppb



#1 TCMX
 R.T.: 2.177 min
 Delta R.T.: -0.003 min
 Response: 1484819
 Conc: 20.43 ppb

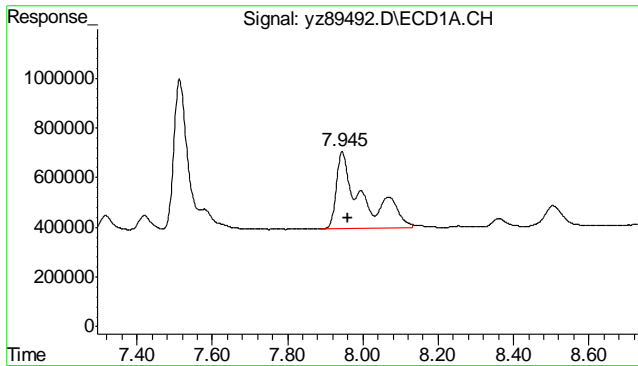


#10 AR1260-D
 R.T.: 7.512 min
 Delta R.T.: -0.016 min
 Response: 1484934
 Conc: 39.81 ppb

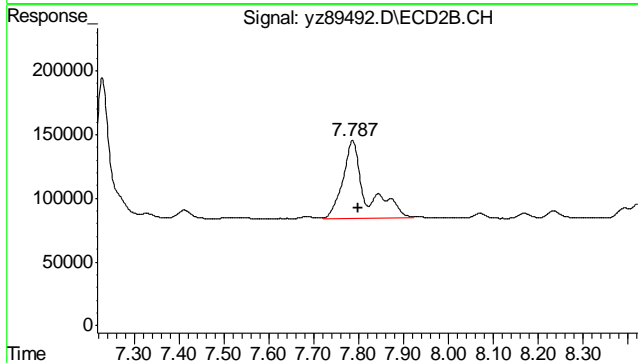


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.013 min
 Response: 230714
 Conc: 36.90 ppb m

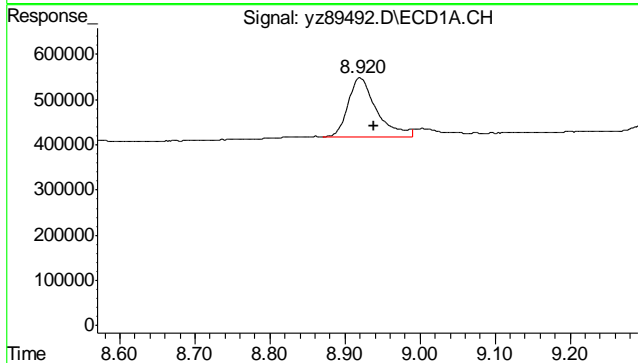
7.1.3
 7



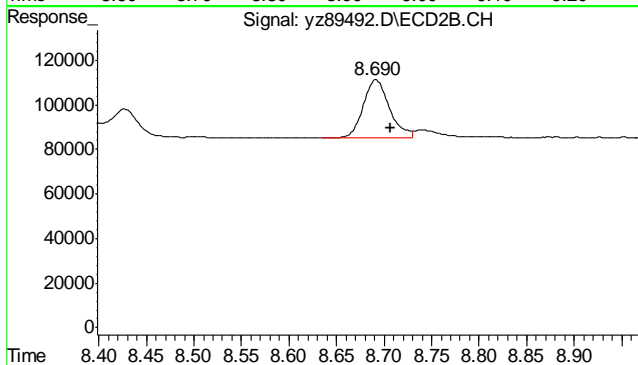
#11 AR1260-E
 R.T.: 7.945 min
 Delta R.T.: -0.015 min
 Response: 1506767
 Conc: 39.37 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.011 min
 Response: 221358
 Conc: 36.25 ppb m

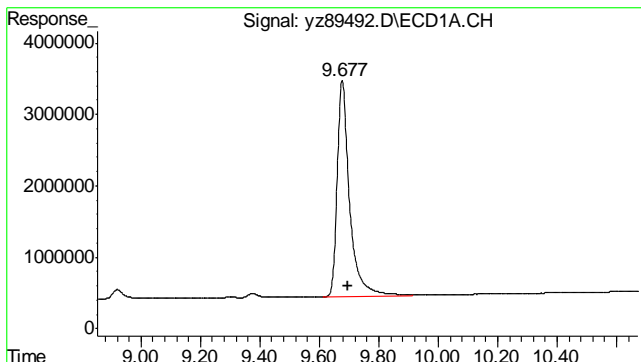


#12 AR1260-F
 R.T.: 8.920 min
 Delta R.T.: -0.018 min
 Response: 346850
 Conc: 37.89

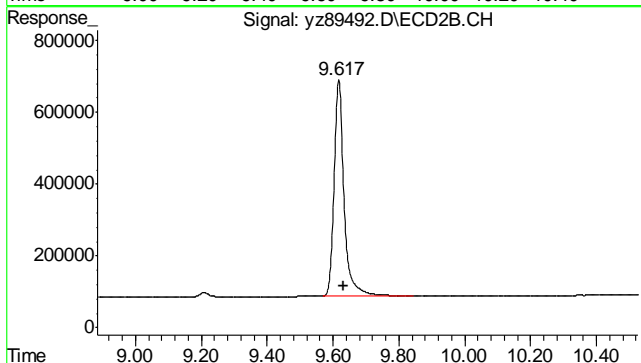


#12 AR1260-F
 R.T.: 8.690 min
 Delta R.T.: -0.016 min
 Response: 50416
 Conc: 33.42

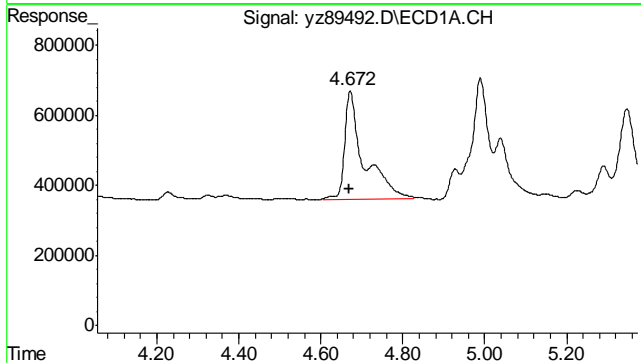
7.1.3
7



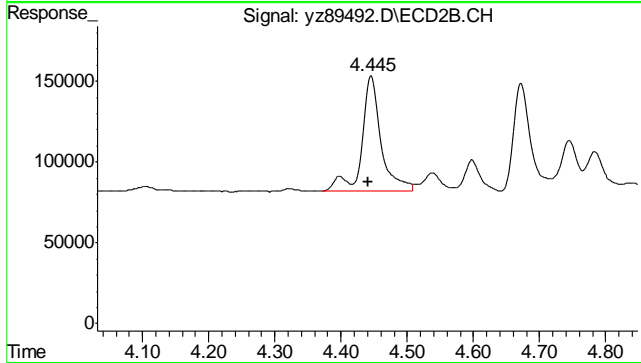
#13 DCB
 R.T.: 9.677 min
 Delta R.T.: -0.018 min
 Response: 8865687
 Conc: 26.94 ppb m



#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 1293854
 Conc: 22.29 ppb m

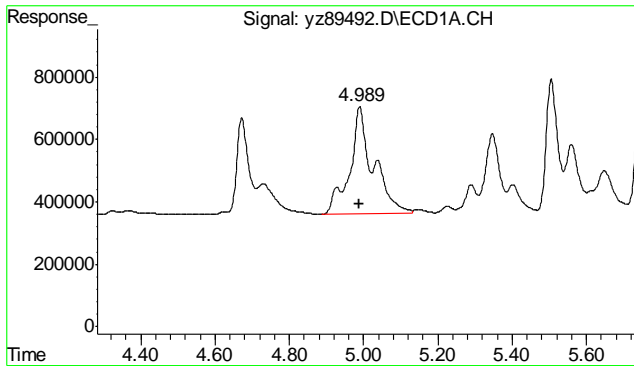


#32 AR1254-A
 R.T.: 4.672 min
 Delta R.T.: 0.002 min
 Response: 1017987
 Conc: 45.32 ppb m

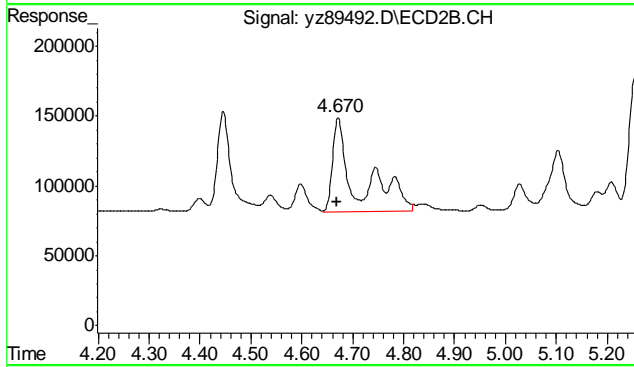


#32 AR1254-A
 R.T.: 4.445 min
 Delta R.T.: 0.003 min
 Response: 146359
 Conc: 46.42 ppb m

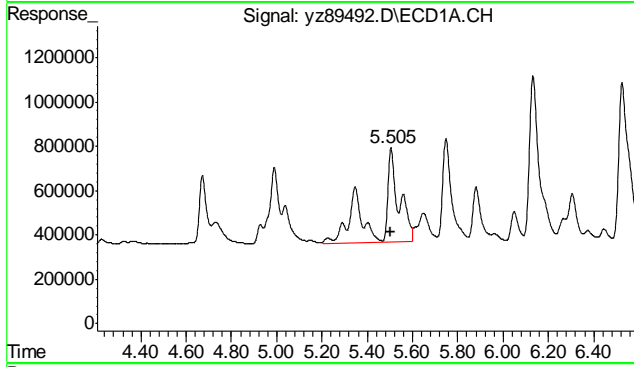
7.1.3
7



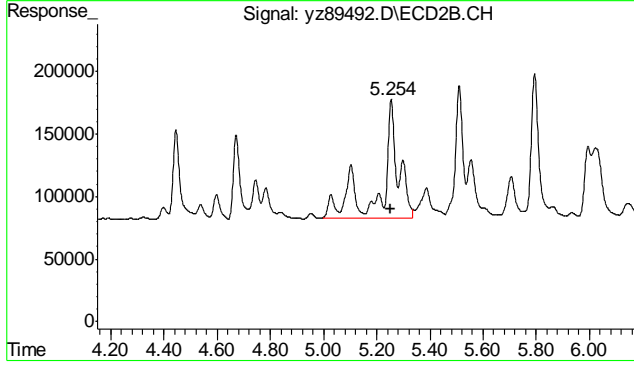
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.000 min
 Response: 1527243
 Conc: 50.98 ppb m



#33 AR1254-B
 R.T.: 4.670 min
 Delta R.T.: 0.002 min
 Response: 219241
 Conc: 46.99 ppb m



#34 AR1254-C
 R.T.: 5.505 min
 Delta R.T.: 0.002 min
 Response: 2537356
 Conc: 57.74 ppb m



#34 AR1254-C
 R.T.: 5.254 min
 Delta R.T.: 0.002 min
 Response: 431639
 Conc: 57.29 ppb m

7.1.3
7

Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
Data File : yz89493.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Apr 2014 3:55 pm
Operator : sofyaz
Sample : mc30076-4
Misc : op37808,gyz7550,15.59,,,10,,s
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
Integration File signal 2: RTEINT.P
Quant Time: Apr 29 09:41:26 2014
Quant Method : C:\msdchem\1\METHODS\PC140428.M
Quant Title : p8082pcb-onPest2/Pest on GC20
QLast Update : Sun Apr 27 07:19:04 2014
Response via : Initial Calibration
Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.504	2.176	11240657	1694573	29.824	23.316m
Spiked Amount	40.000 Range	42 - 132	Recovery =	74.56%	58.29%	
13) s DCB	9.677f	9.617f	10366235	1452615	31.503	25.028
Spiked Amount	40.000 Range	30 - 150	Recovery =	78.76%	62.57%	
Target Compounds						
10) AR1260-D	7.514	7.229	11650192	1740589	312.327	278.352
11) AR1260-E	7.946	7.787	11988370	1671116	313.214m	273.675m
12) AR1260-F	8.921f	8.691f	2903113	394884	317.138	261.799
32) AR1254-A	4.672	4.446	8290553	1065601	369.096m	337.952m
33) AR1254-B	4.989	4.671	13452085	1844363	449.008m	395.288m
34) AR1254-C	5.506	5.256	23068971	3488351	524.942m	463.031m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

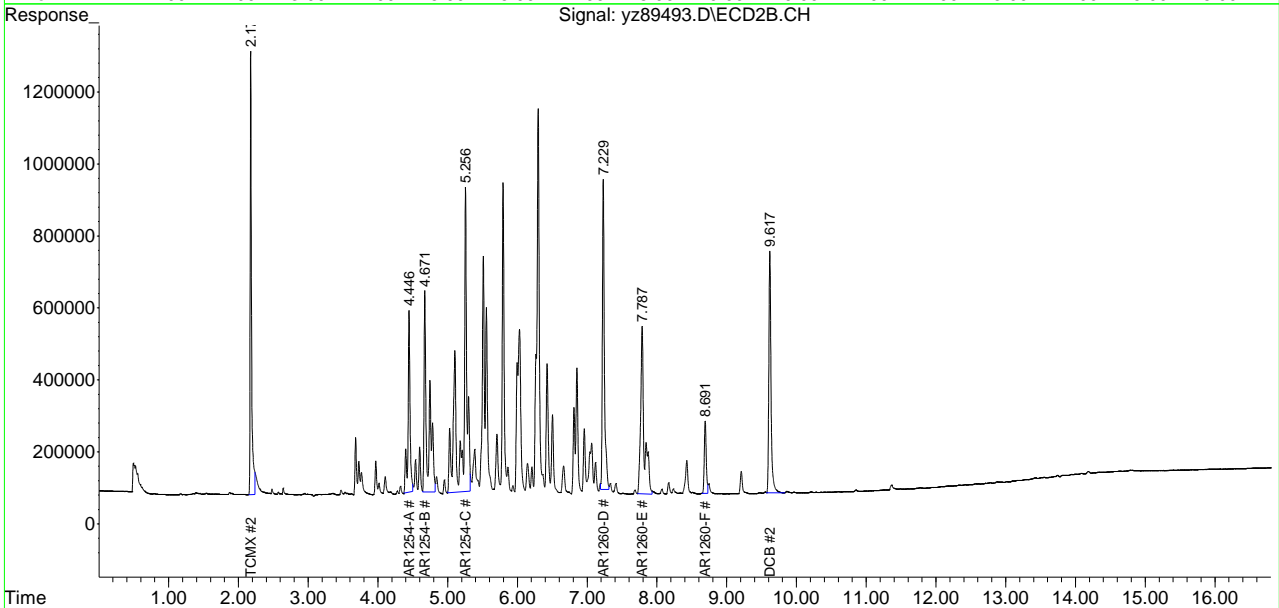
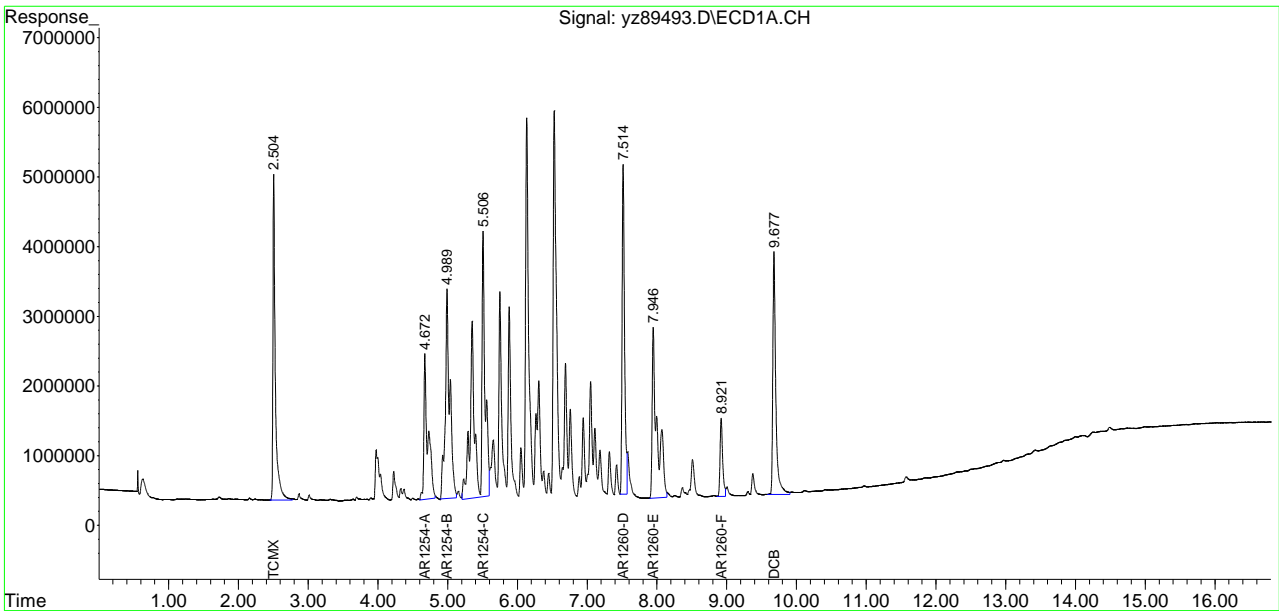
7.1.4
7

Quantitation Report (QT Reviewed)

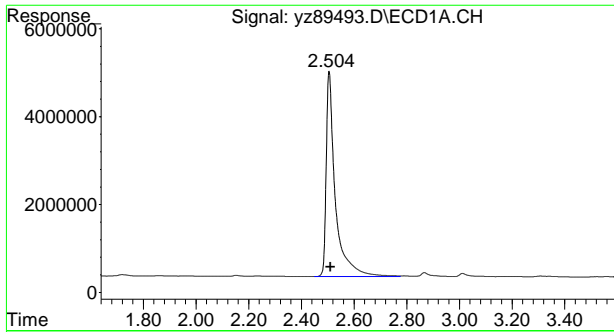
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89493.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 3:55 pm
 Operator : sofyaz
 Sample : mc30076-4
 Misc : op37808,gyz7550,15.59,,,10,,s
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:41:26 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

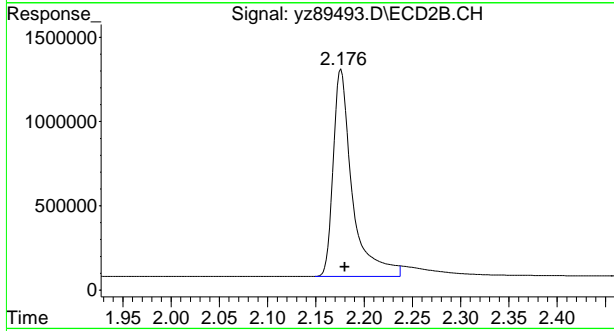
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



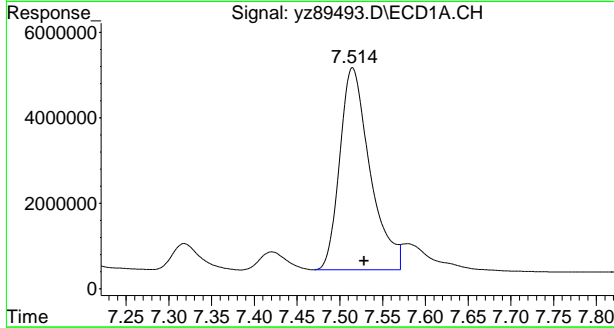
7.1.4
 7



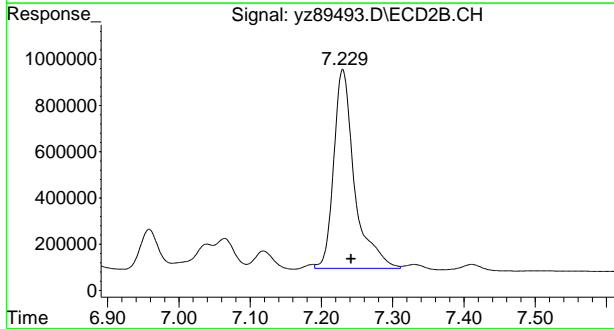
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 11240657
 Conc: 29.82 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1694573
 Conc: 23.32 ppb m

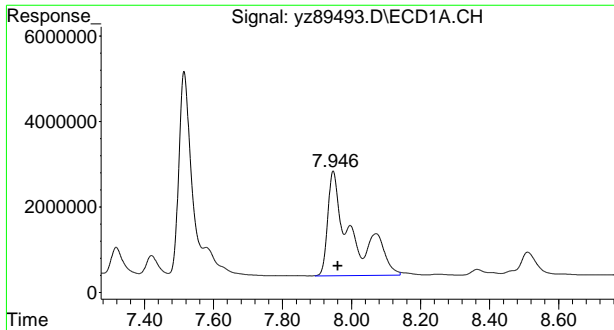


#10 AR1260-D
 R.T.: 7.514 min
 Delta R.T.: -0.014 min
 Response: 11650192
 Conc: 312.33 ppb

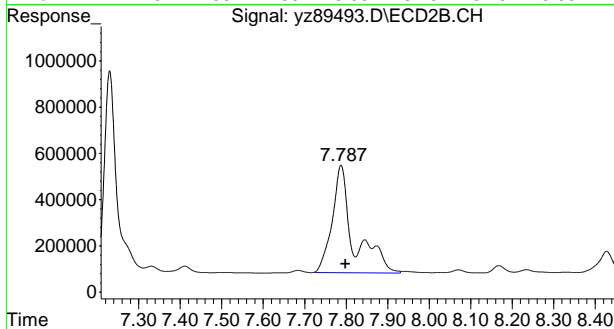


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.013 min
 Response: 1740589
 Conc: 278.35 ppb

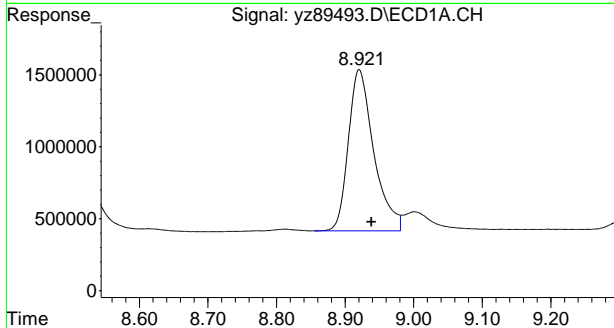
7.14
 7



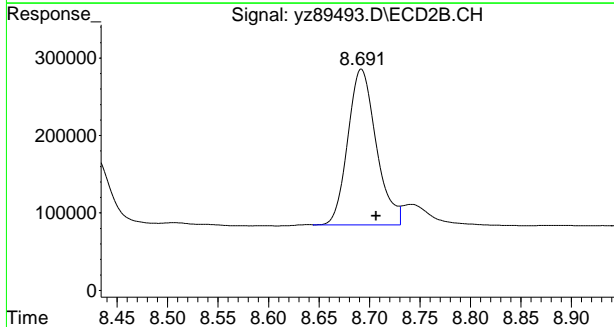
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 11988370
 Conc: 313.21 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.011 min
 Response: 1671116
 Conc: 273.68 ppb m

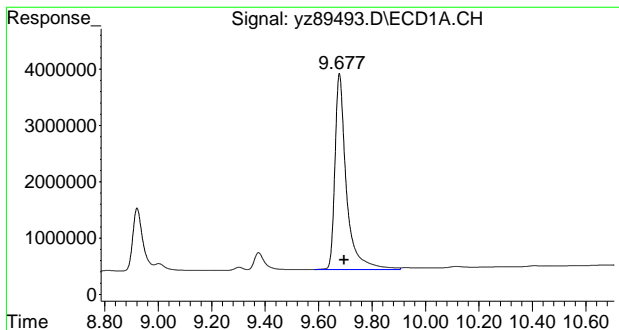


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.018 min
 Response: 2903113
 Conc: 317.14

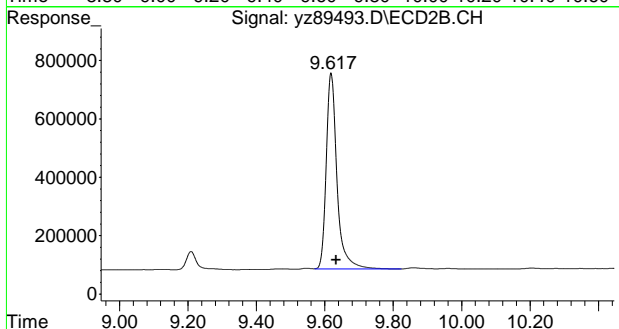


#12 AR1260-F
 R.T.: 8.691 min
 Delta R.T.: -0.016 min
 Response: 394884
 Conc: 261.80

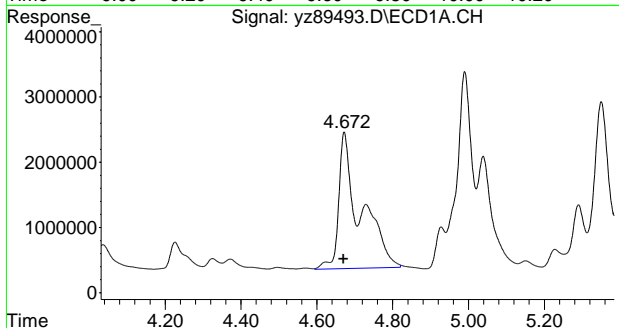
7.14
 7



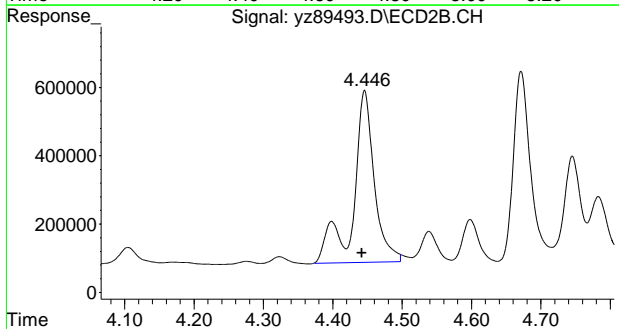
#13 DCB
 R.T.: 9.677 min
 Delta R.T.: -0.018 min
 Response: 10366235
 Conc: 31.50 ppb



#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 1452615
 Conc: 25.03 ppb

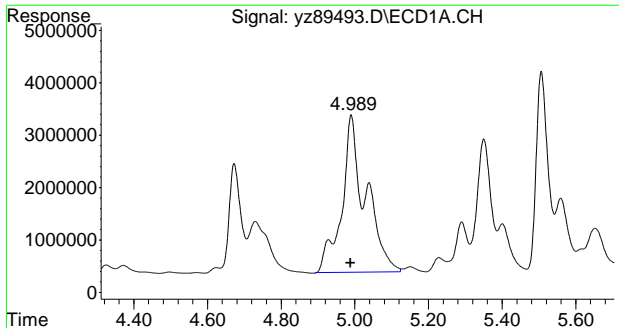


#32 AR1254-A
 R.T.: 4.672 min
 Delta R.T.: 0.002 min
 Response: 8290553
 Conc: 369.10 ppb m

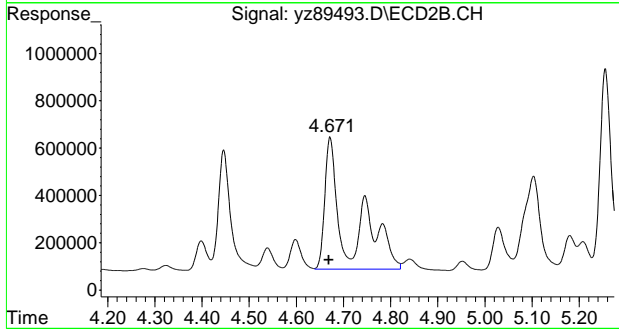


#32 AR1254-A
 R.T.: 4.446 min
 Delta R.T.: 0.004 min
 Response: 1065601
 Conc: 337.95 ppb m

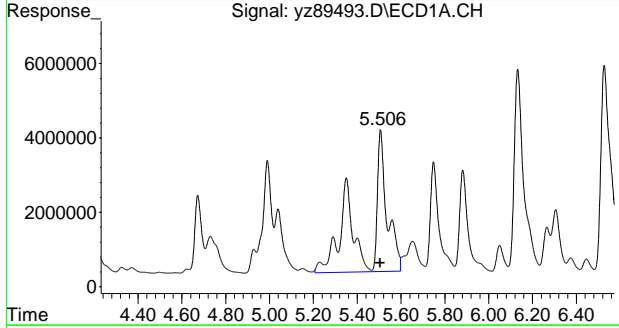
7.1.4
 7



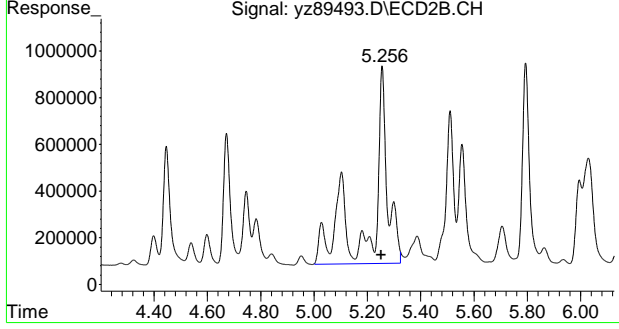
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.000 min
 Response: 13452085
 Conc: 449.01 ppb m



#33 AR1254-B
 R.T.: 4.671 min
 Delta R.T.: 0.002 min
 Response: 1844363
 Conc: 395.29 ppb m



#34 AR1254-C
 R.T.: 5.506 min
 Delta R.T.: 0.002 min
 Response: 23068971
 Conc: 524.94 ppb m



#34 AR1254-C
 R.T.: 5.256 min
 Delta R.T.: 0.004 min
 Response: 3488351
 Conc: 463.03 ppb m

7.1.4
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89494.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:15 pm
 Operator : sofyaz
 Sample : mc30076-5
 Misc : op37808,gyz7550,15.55,,,10,,s
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:38:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.505	2.175	12019319	2018632	31.890	27.775
Spiked Amount	40.000	Range	42 - 132	Recovery =	79.72%	69.44%
13) s DCB	9.676f	9.618f	10523735	1548948	31.982m	26.688
Spiked Amount	40.000	Range	30 - 150	Recovery =	79.95%	66.72%
Target Compounds						
10) AR1260-D	7.511f	7.228	344649	64714	9.240	10.349m
11) AR1260-E	7.945f	7.783f	408405	60995	10.670m	9.989m
12) AR1260-F	8.920f	8.691f	74050	13111	8.089m	8.692m
32) AR1254-A	4.671	4.443	118985	19127	5.297m	6.066m
33) AR1254-B	4.990	4.668	152602	31738	5.094m	6.802m#
34) AR1254-C	5.503	5.255	290715	57677	6.615m	7.656m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

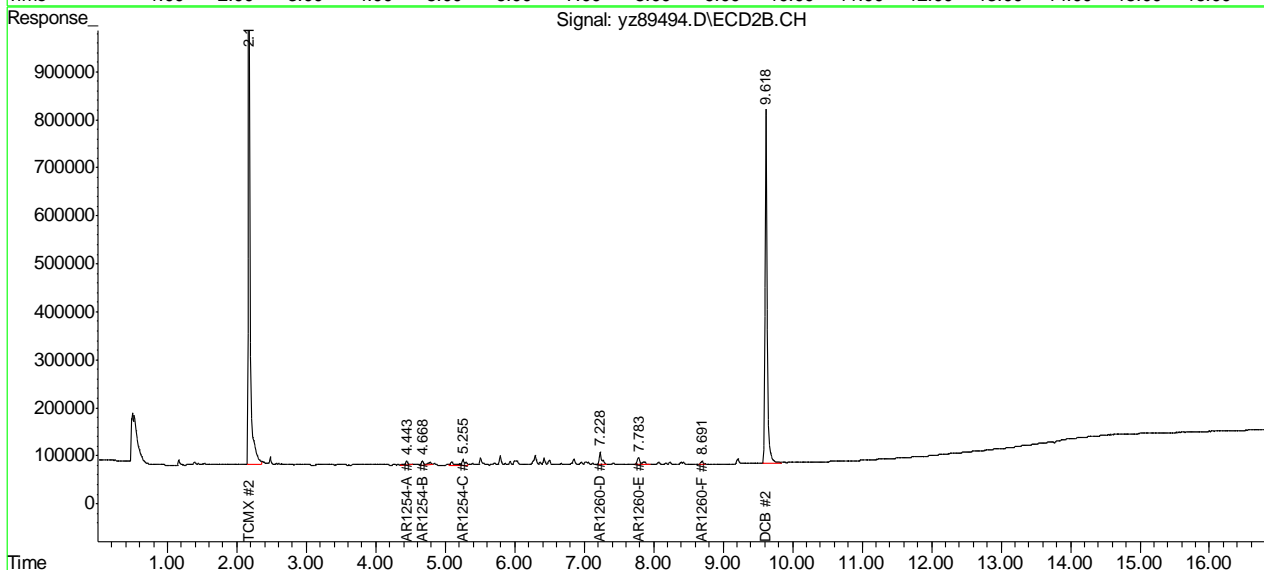
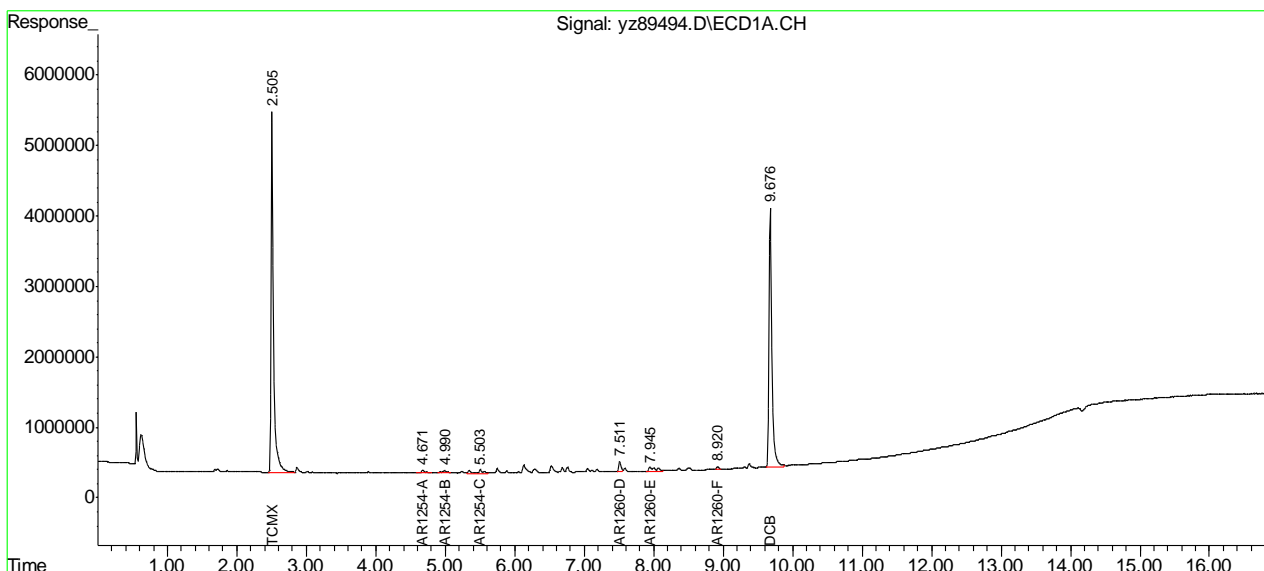
7.1.5
7

Quantitation Report (QT Reviewed)

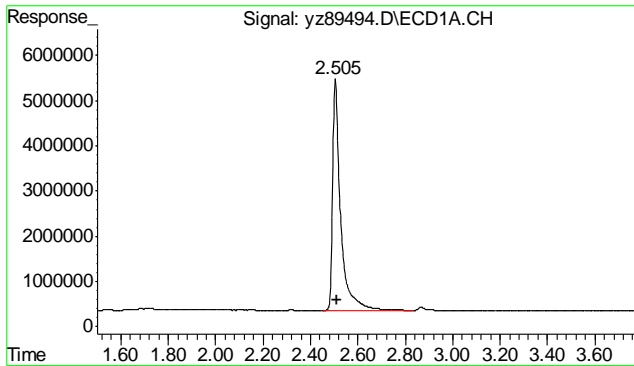
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89494.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:15 pm
 Operator : sofyaz
 Sample : mc30076-5
 Misc : op37808,gyz7550,15.55,,,10,,,s
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:38:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

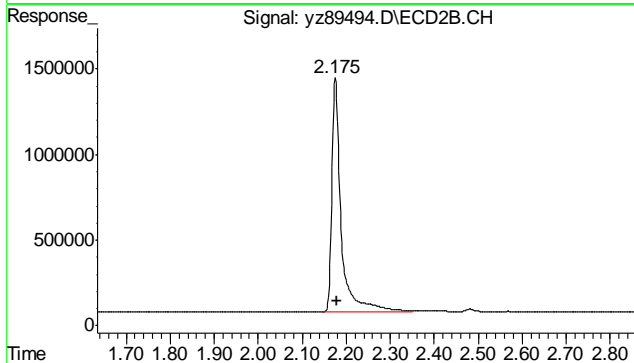
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



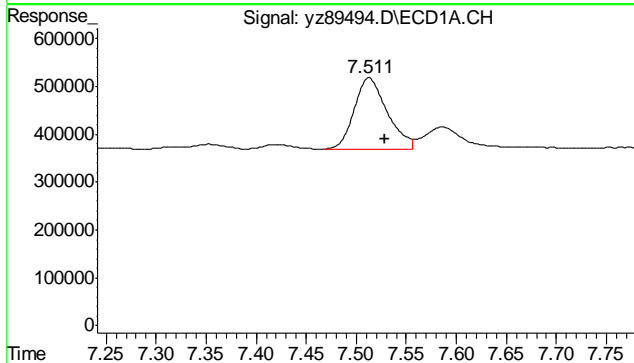
7.15
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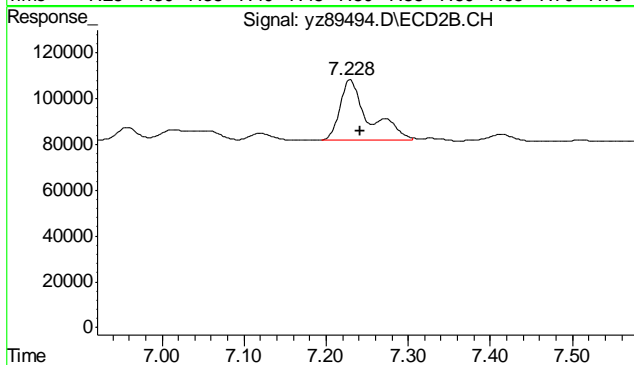
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 12019319
 Conc: 31.89 ppb



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 2018632
 Conc: 27.78 ppb

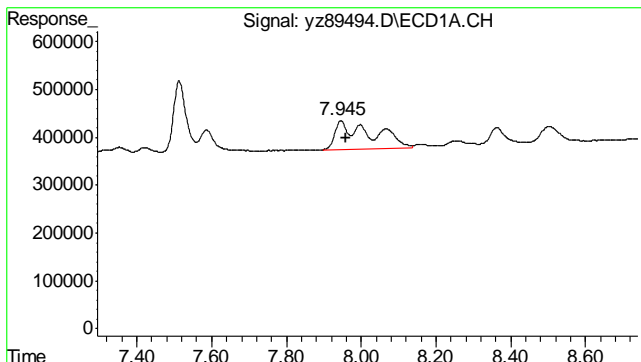


#10 AR1260-D
 R.T.: 7.511 min
 Delta R.T.: -0.017 min
 Response: 344649
 Conc: 9.24 ppb

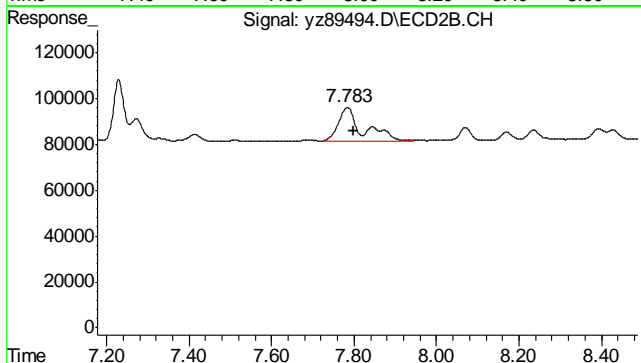


#10 AR1260-D
 R.T.: 7.228 min
 Delta R.T.: -0.014 min
 Response: 64714
 Conc: 10.35 ppb m

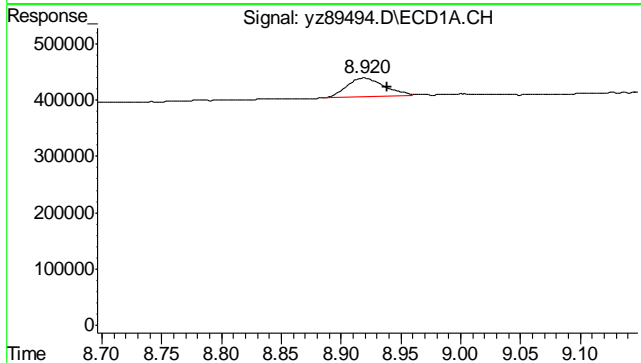
7.15
 7



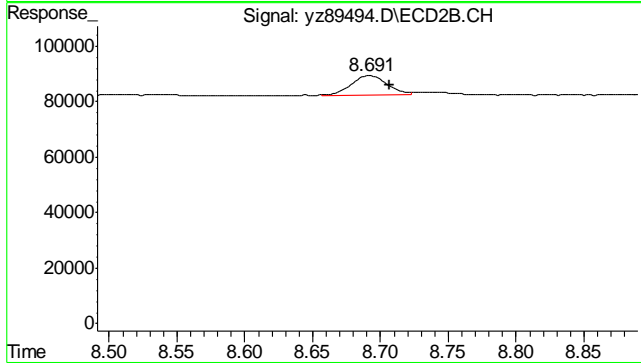
#11 AR1260-E
 R.T.: 7.945 min
 Delta R.T.: -0.015 min
 Response: 408405
 Conc: 10.67 ppb m



#11 AR1260-E
 R.T.: 7.783 min
 Delta R.T.: -0.015 min
 Response: 60995
 Conc: 9.99 ppb m

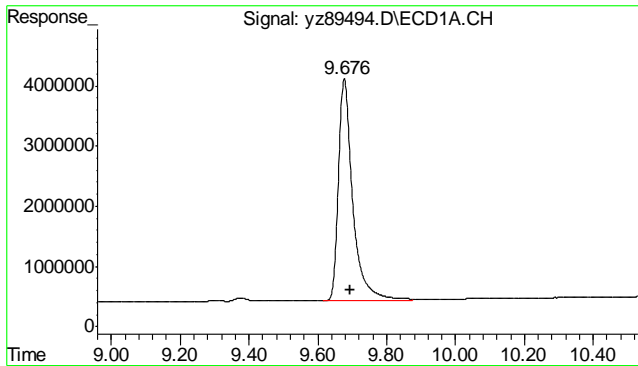


#12 AR1260-F
 R.T.: 8.920 min
 Delta R.T.: -0.019 min
 Response: 74050
 Conc: 8.09 m

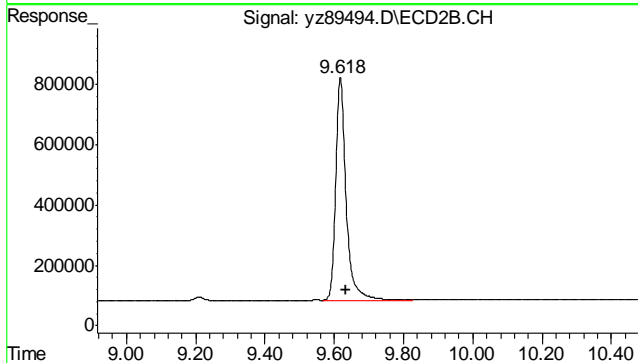


#12 AR1260-F
 R.T.: 8.691 min
 Delta R.T.: -0.015 min
 Response: 13111
 Conc: 8.69 m

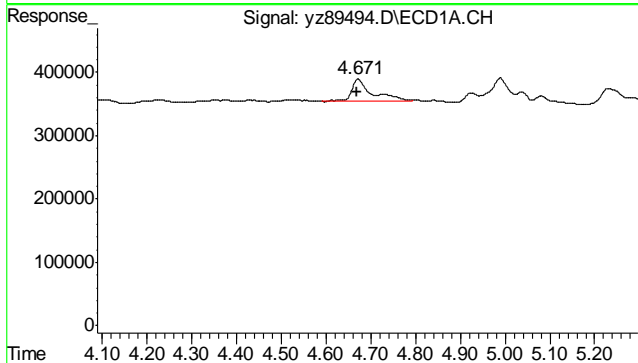
7.15
7



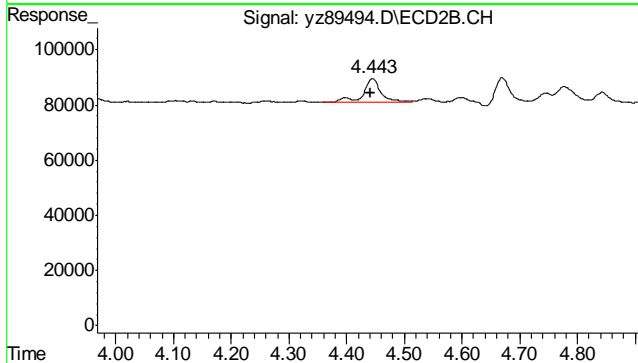
#13 DCB
 R.T.: 9.676 min
 Delta R.T.: -0.019 min
 Response: 10523735
 Conc: 31.98 ppb m



#13 DCB
 R.T.: 9.618 min
 Delta R.T.: -0.015 min
 Response: 1548948
 Conc: 26.69 ppb

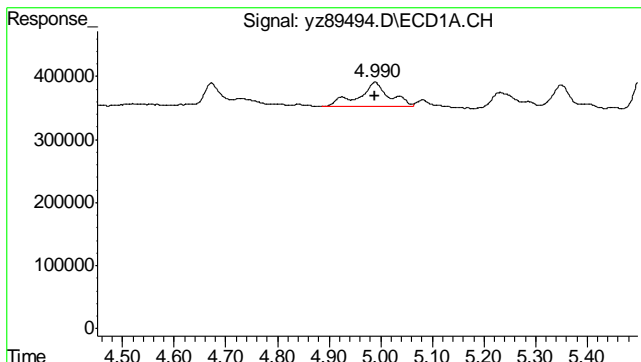


#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.001 min
 Response: 118985
 Conc: 5.30 ppb m

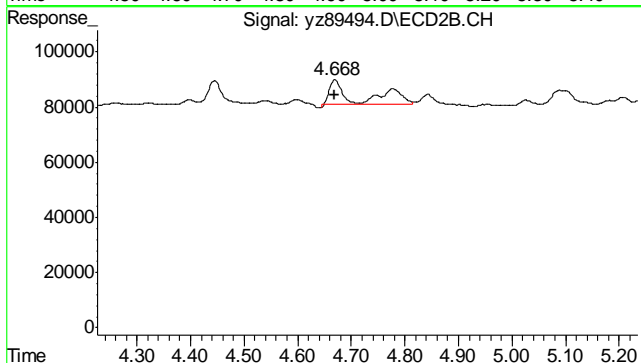


#32 AR1254-A
 R.T.: 4.443 min
 Delta R.T.: 0.001 min
 Response: 19127
 Conc: 6.07 ppb m

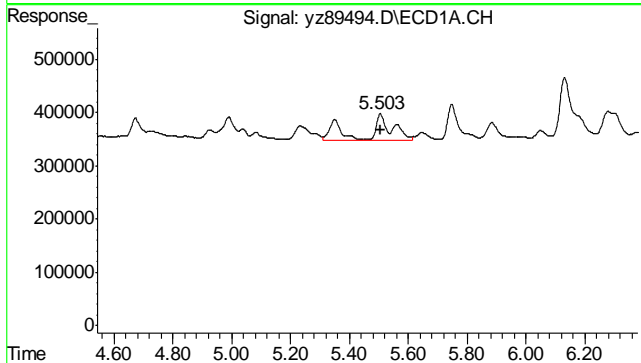
7.15
7



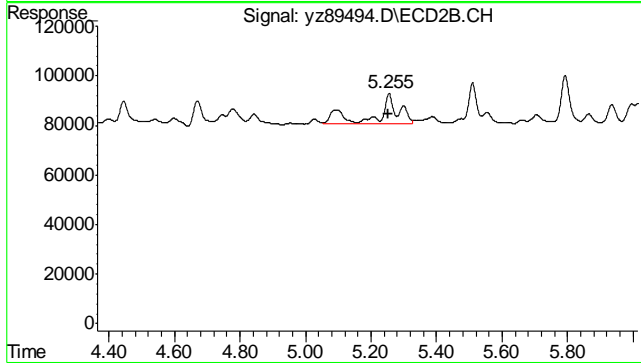
#33 AR1254-B
 R.T.: 4.990 min
 Delta R.T.: 0.001 min
 Response: 152602
 Conc: 5.09 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: 0.000 min
 Response: 31738
 Conc: 6.80 ppb m



#34 AR1254-C
 R.T.: 5.503 min
 Delta R.T.: 0.000 min
 Response: 290715
 Conc: 6.62 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.003 min
 Response: 57677
 Conc: 7.66 ppb m

7.15
7

Manual Integrations
APPROVED
 (compounds with "m" flag)
Andri Piluri
04/29/14 12:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89495.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:34 pm
 Operator : sofyaz
 Sample : mc30076-6
 Misc : op37808,gyz7550,15.16,,,10,,s
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:02:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.506	2.176	12146518	1780376	32.227m	24.497
Spiked Amount	40.000 Range	42 - 132	Recovery	=	80.57%	61.24%
13) s DCB	9.678f	9.620	10163022	1411353	30.886	24.318
Spiked Amount	40.000 Range	30 - 150	Recovery	=	77.22%	60.80%
Target Compounds						
10) AR1260-D	7.515	7.229	7617746	1006548	204.222m	160.966
11) AR1260-E	7.946	7.786	7592391	960387	198.362m	157.281m
12) AR1260-F	8.921f	8.693	1922859	267225	210.054	177.164m
32) AR1254-A	4.671	4.444	2683422	425919	119.466m	135.079m
33) AR1254-B	4.989	4.668	4364014	1094038	145.663m	234.477m#
34) AR1254-C	5.506	5.255	11814626	1344890	268.846m	178.516m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

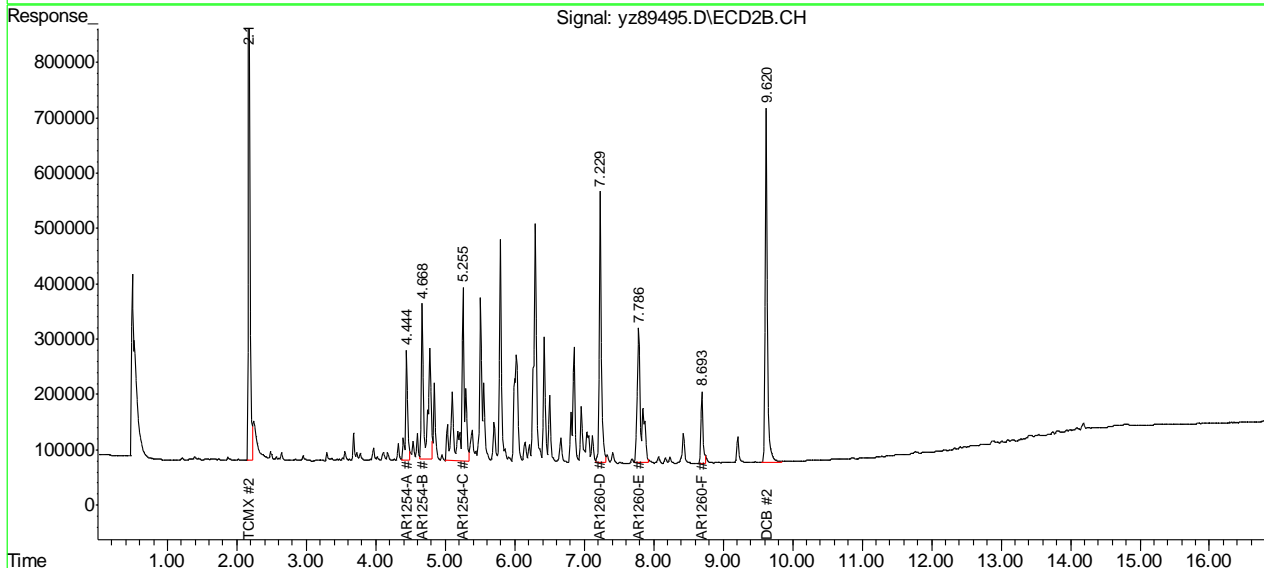
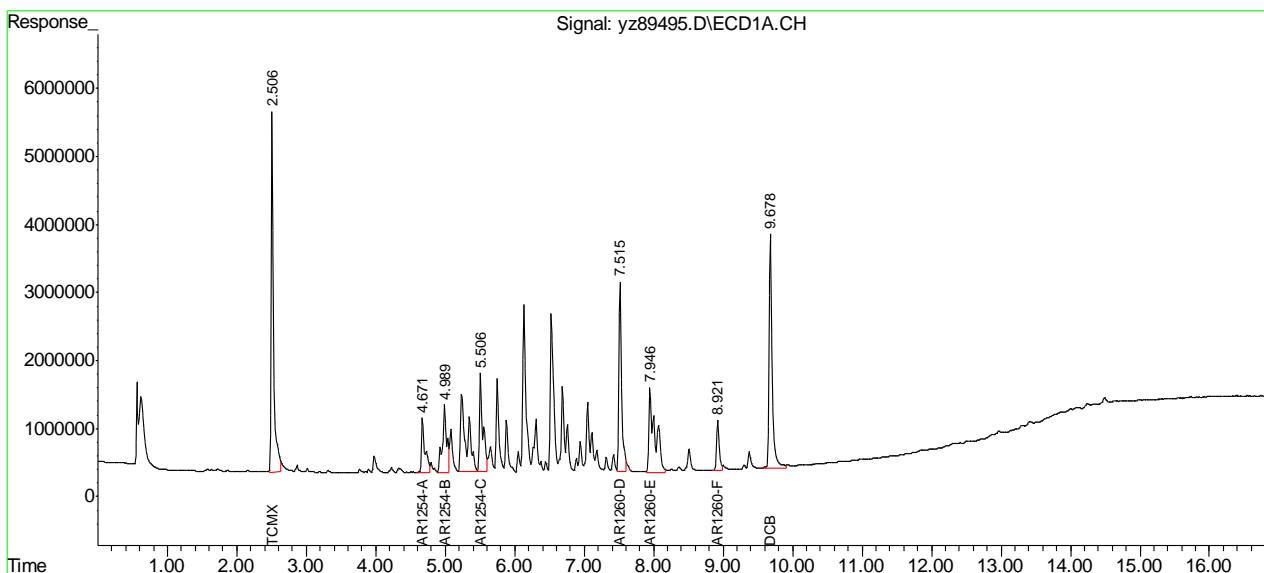
7.1.6
7

Quantitation Report (QT Reviewed)

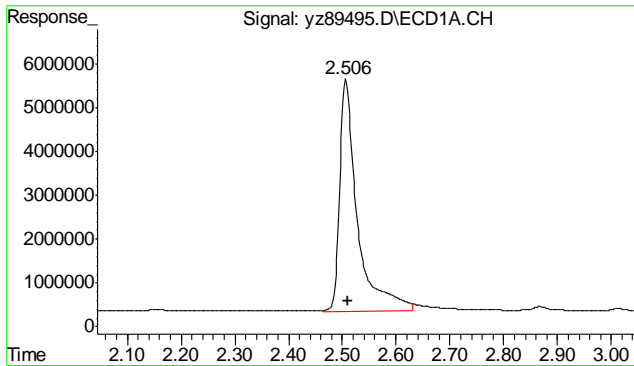
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89495.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:34 pm
 Operator : sofyaz
 Sample : mc30076-6
 Misc : op37808,gyz7550,15.16,,,10,,s
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:02:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

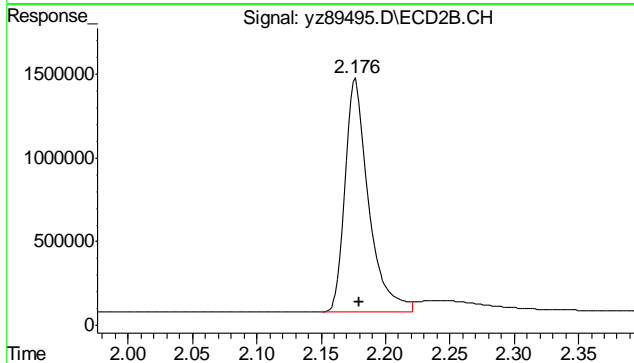
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



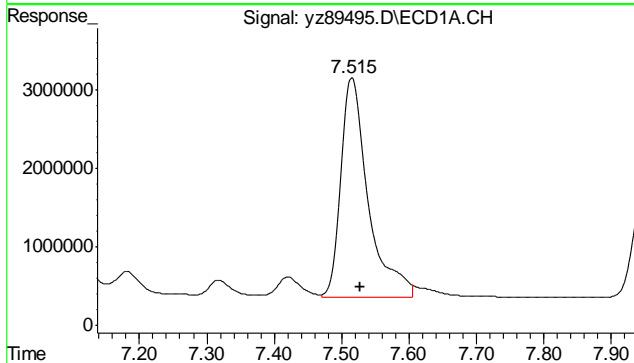
7.1.6
 7



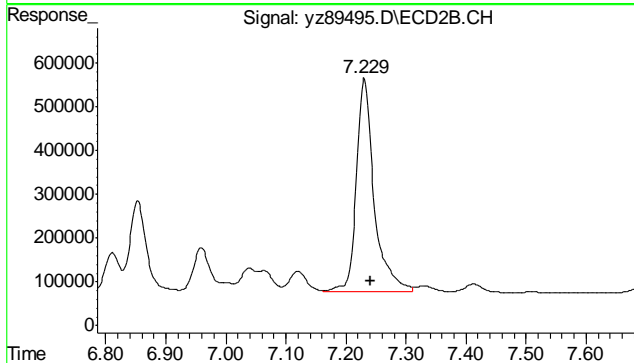
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 12146518
 Conc: 32.23 ppb m



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1780376
 Conc: 24.50 ppb

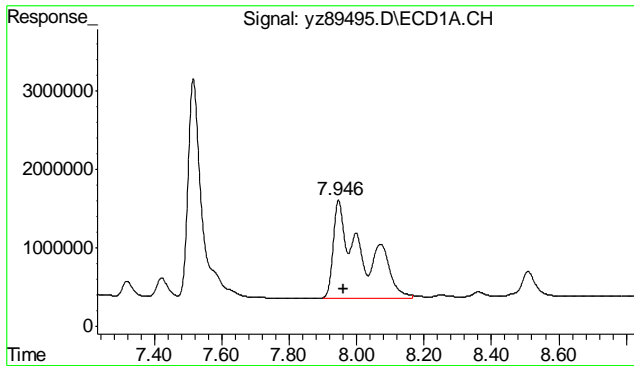


#10 AR1260-D
 R.T.: 7.515 min
 Delta R.T.: -0.014 min
 Response: 7617746
 Conc: 204.22 ppb m

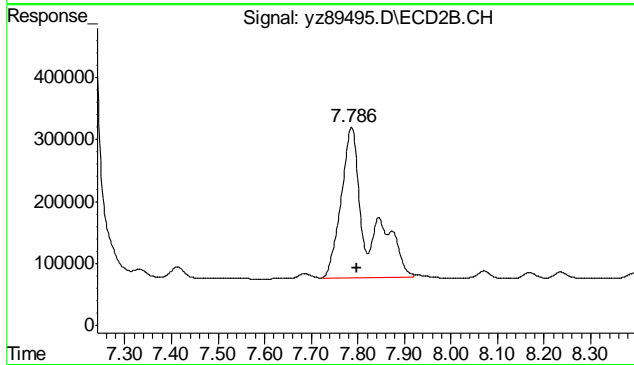


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.012 min
 Response: 1006548
 Conc: 160.97 ppb

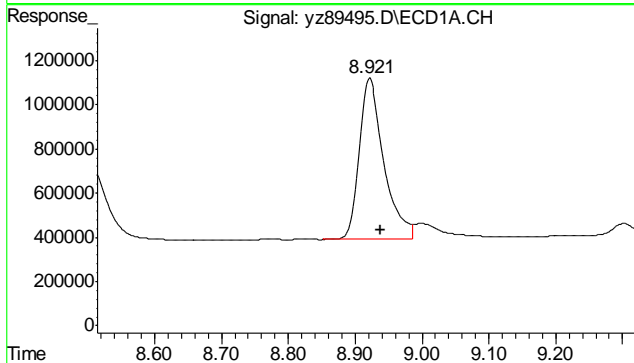
7.1.6
 7



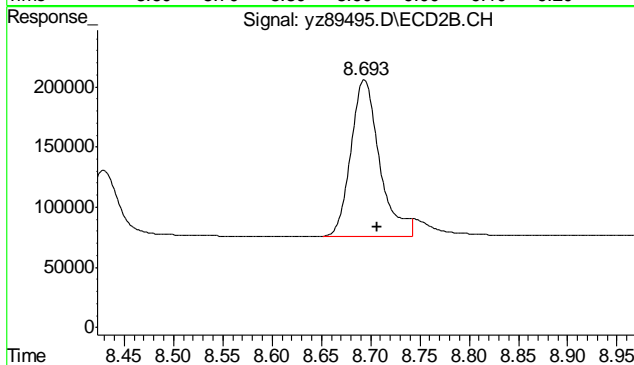
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 7592391
 Conc: 198.36 ppb m



#11 AR1260-E
 R.T.: 7.786 min
 Delta R.T.: -0.012 min
 Response: 960387
 Conc: 157.28 ppb m

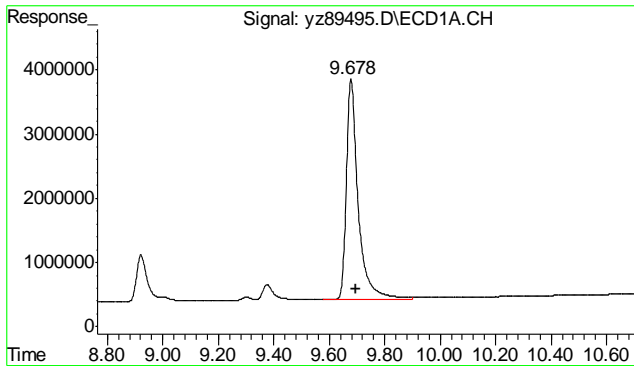


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 1922859
 Conc: 210.05

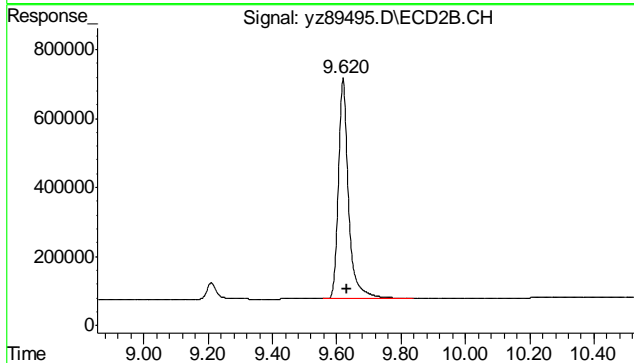


#12 AR1260-F
 R.T.: 8.693 min
 Delta R.T.: -0.014 min
 Response: 267225
 Conc: 177.16 m

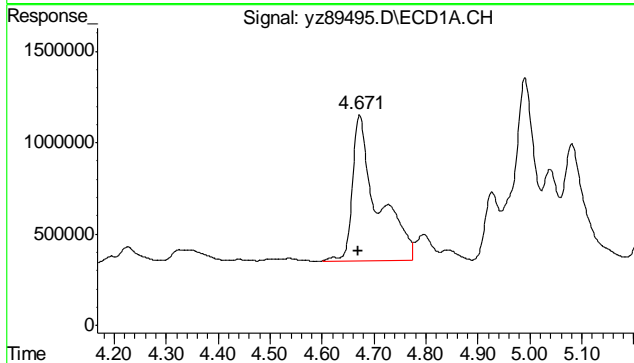
7.1.6
 7



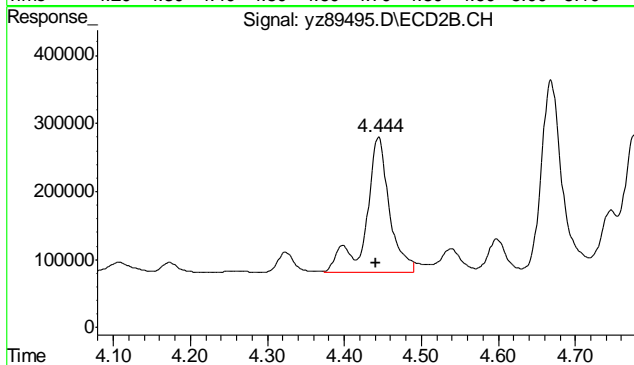
#13 DCB
 R.T.: 9.678 min
 Delta R.T.: -0.017 min
 Response: 10163022
 Conc: 30.89 ppb



#13 DCB
 R.T.: 9.620 min
 Delta R.T.: -0.014 min
 Response: 1411353
 Conc: 24.32 ppb

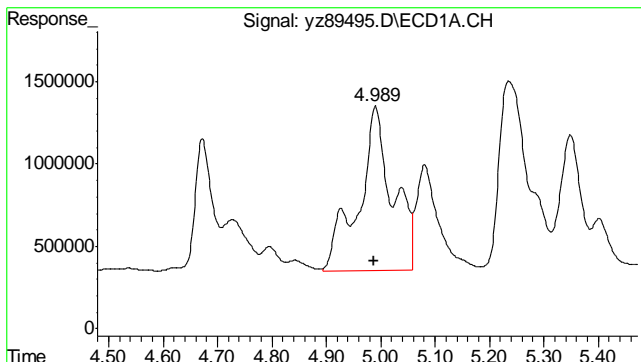


#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.001 min
 Response: 2683422
 Conc: 119.47 ppb m

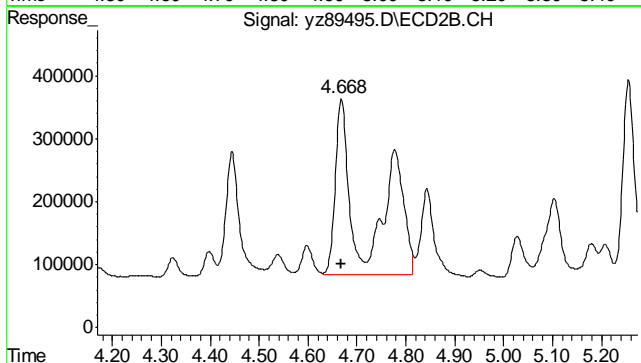


#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.003 min
 Response: 425919
 Conc: 135.08 ppb m

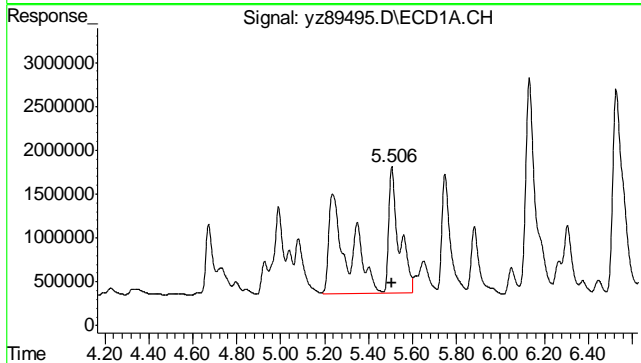
7.1.6
7



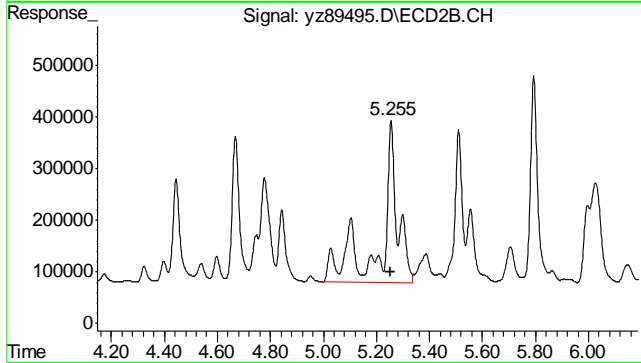
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.001 min
 Response: 4364014
 Conc: 145.66 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: 0.000 min
 Response: 1094038
 Conc: 234.48 ppb m



#34 AR1254-C
 R.T.: 5.506 min
 Delta R.T.: 0.003 min
 Response: 11814626
 Conc: 268.85 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.003 min
 Response: 1344890
 Conc: 178.52 ppb m

7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89496.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:54 pm
 Operator : sofyaz
 Sample : mc30076-7
 Misc : op37808,gyz7550,15.18,,,10,,s
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:55:28 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.505	2.176	11820401	2043889	31.362	28.123
Spiked Amount	40.000	Range	42 - 132	Recovery	= 78.40%	70.31%
13) s DCB	9.678f	9.620	10878011	1552353	33.059	26.747
Spiked Amount	40.000	Range	30 - 150	Recovery	= 82.65%	66.87%
Target Compounds						
10) AR1260-D	7.515	7.230	7984554	1232087	214.056m	197.034
11) AR1260-E	7.946	7.788	8472564	1144962	221.358m	187.508m
12) AR1260-F	8.921f	8.691f	2118056	304070	231.378	201.592m
32) AR1254-A	4.673	4.445	2438997	411652	108.584m	130.554m
33) AR1254-B	4.991	4.668	3844073	1146725	128.309m	245.769m#
34) AR1254-C	5.748f	5.255	8937904	1254320	203.385m	166.494m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

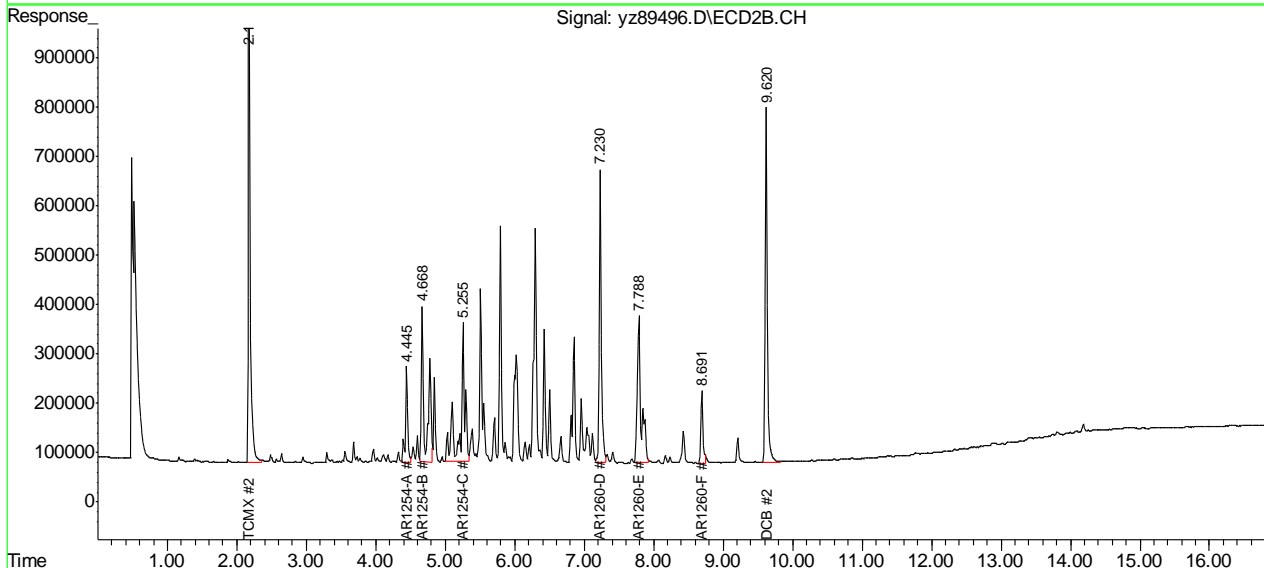
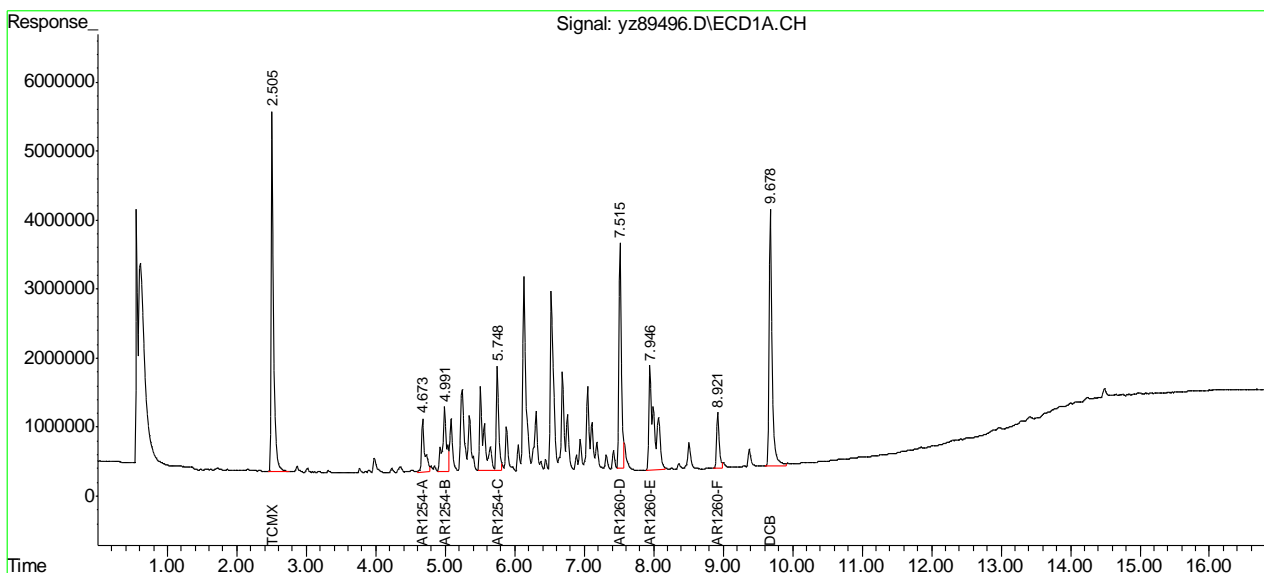
7.17
 7

Quantitation Report (QT Reviewed)

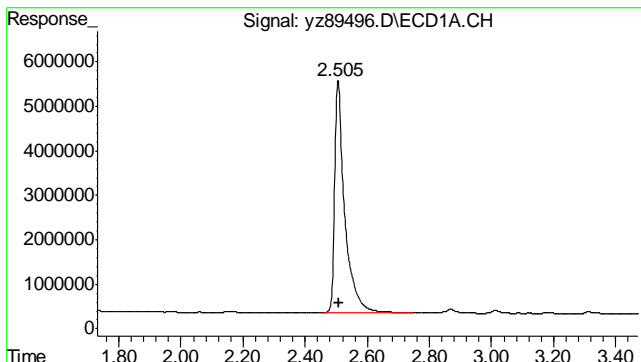
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89496.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 4:54 pm
 Operator : sofyaz
 Sample : mc30076-7
 Misc : op37808,gyz7550,15.18,,,10,,s
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:55:28 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

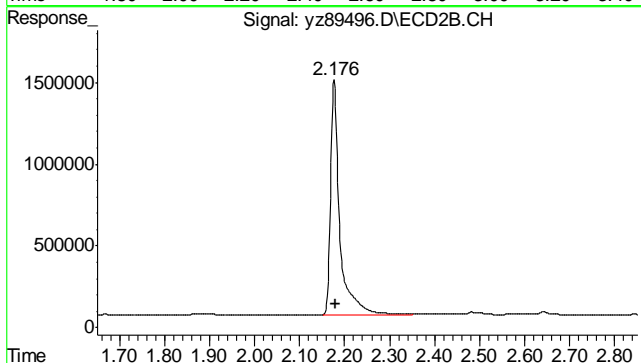
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



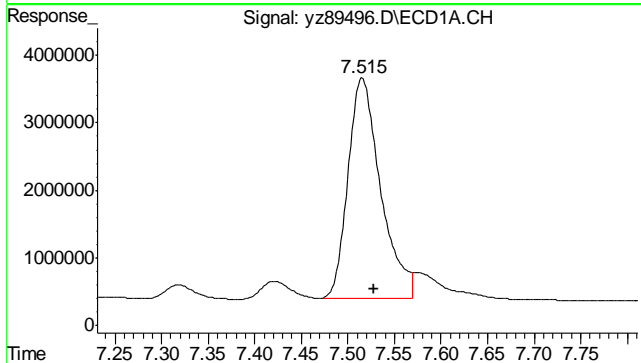
7.1.7



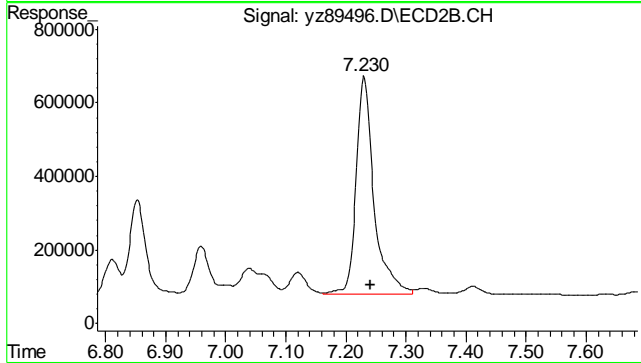
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 11820401
 Conc: 31.36 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 2043889
 Conc: 28.12 ppb

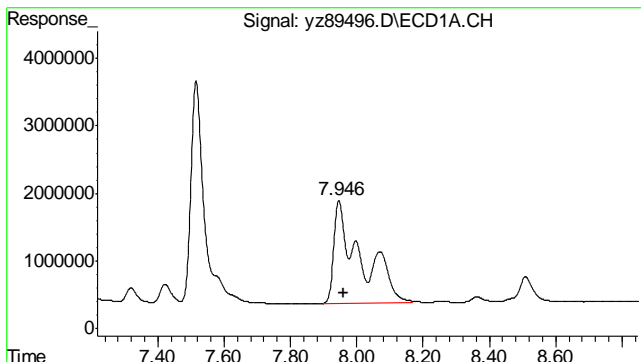


#10 AR1260-D
 R.T.: 7.515 min
 Delta R.T.: -0.014 min
 Response: 7984554
 Conc: 214.06 ppb m

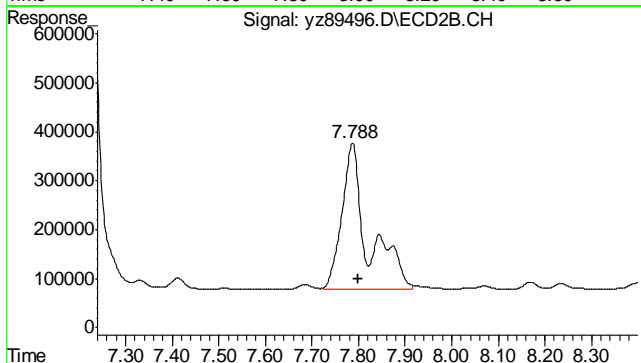


#10 AR1260-D
 R.T.: 7.230 min
 Delta R.T.: -0.012 min
 Response: 1232087
 Conc: 197.03 ppb

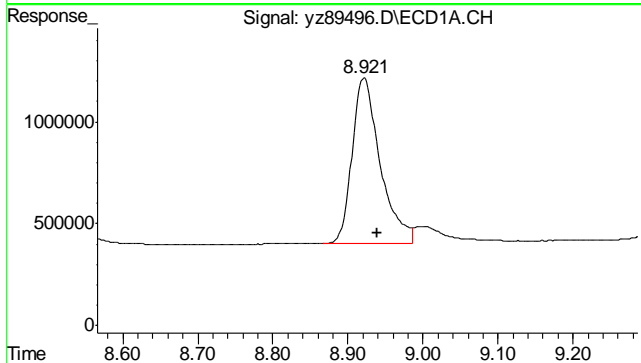
7.17
 7



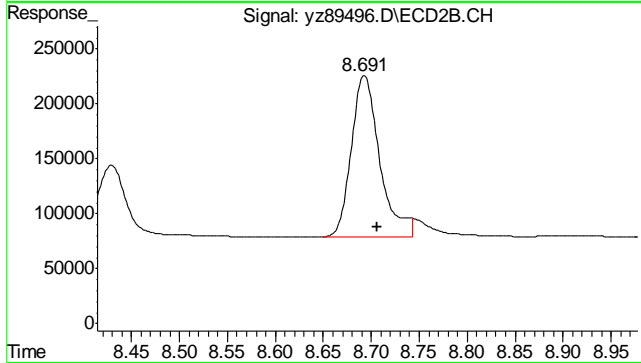
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 8472564
 Conc: 221.36 ppb m



#11 AR1260-E
 R.T.: 7.788 min
 Delta R.T.: -0.010 min
 Response: 1144962
 Conc: 187.51 ppb m

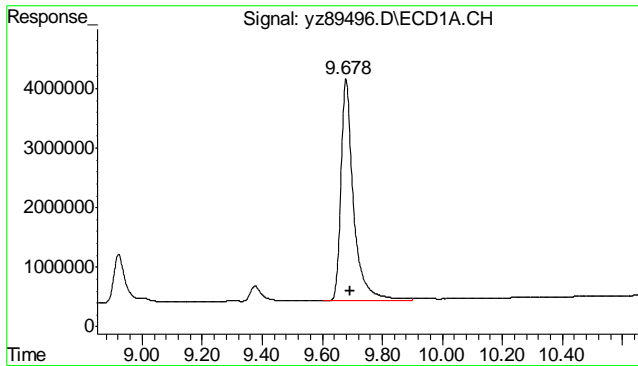


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 2118056
 Conc: 231.38

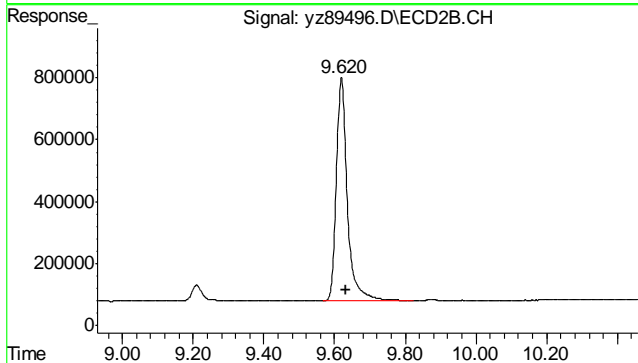


#12 AR1260-F
 R.T.: 8.691 min
 Delta R.T.: -0.015 min
 Response: 304070
 Conc: 201.59 m

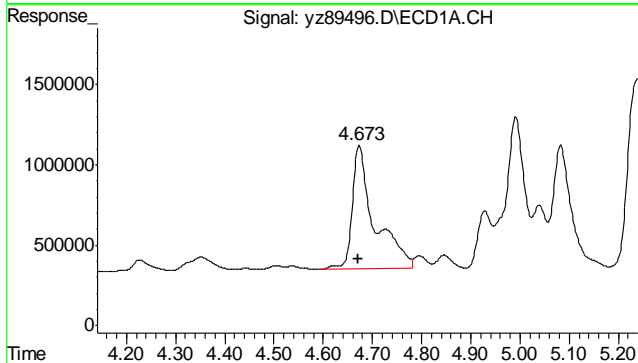
7.17
7



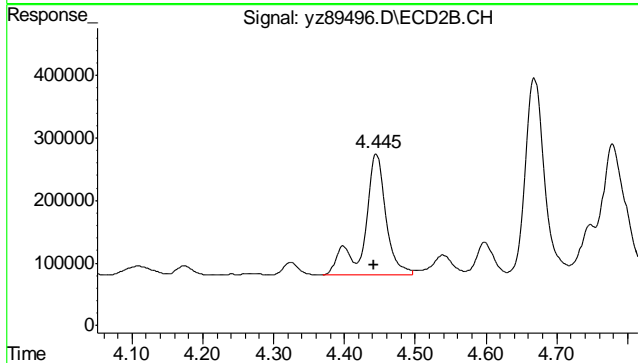
#13 DCB
 R.T.: 9.678 min
 Delta R.T.: -0.017 min
 Response: 10878011
 Conc: 33.06 ppb



#13 DCB
 R.T.: 9.620 min
 Delta R.T.: -0.014 min
 Response: 1552353
 Conc: 26.75 ppb

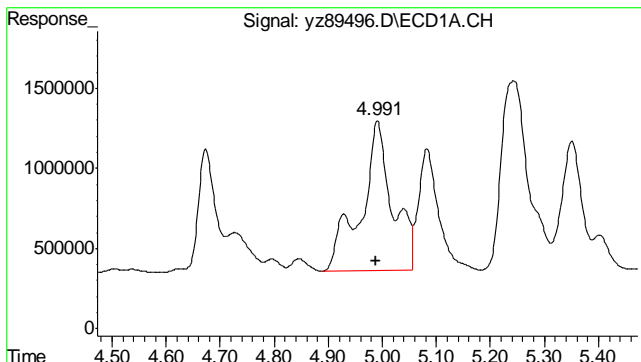


#32 AR1254-A
 R.T.: 4.673 min
 Delta R.T.: 0.003 min
 Response: 2438997
 Conc: 108.58 ppb m

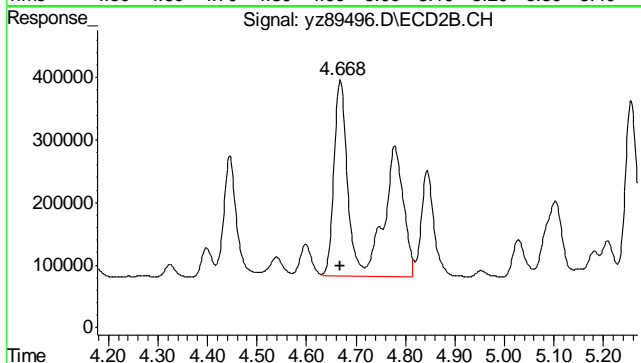


#32 AR1254-A
 R.T.: 4.445 min
 Delta R.T.: 0.003 min
 Response: 411652
 Conc: 130.55 ppb m

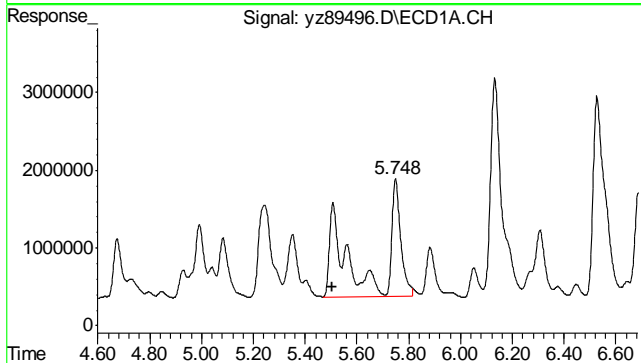
7.17
7



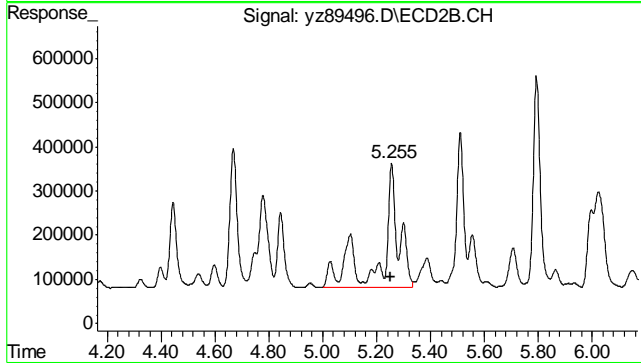
#33 AR1254-B
 R.T.: 4.991 min
 Delta R.T.: 0.003 min
 Response: 3844073
 Conc: 128.31 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: 0.000 min
 Response: 1146725
 Conc: 245.77 ppb m



#34 AR1254-C
 R.T.: 5.748 min
 Delta R.T.: 0.244 min
 Response: 8937904
 Conc: 203.39 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.003 min
 Response: 1254320
 Conc: 166.49 ppb m

7.17
7

Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89497.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 5:14 pm
 Operator : sofyaz
 Sample : mc30076-8
 Misc : op37808,gyz7550,15.38,,,10,,s
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:42:35 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.507	2.177	11600088	1824994	30.778	25.111m
	Spiked Amount	40.000 Range	42 - 132	Recovery =	76.94%	62.78%	
13)	s DCB	9.680	9.620	9859737	1408562	29.964m	24.269m
	Spiked Amount	40.000 Range	30 - 150	Recovery =	74.91%	60.67%	
Target Compounds							
10)	AR1260-D	7.517	7.230	8297490	1295621	222.445m	207.194
11)	AR1260-E	7.948	7.788	8816714	1192118	230.350m	195.231m
12)	AR1260-F	8.923	8.693	2183643	315214	238.543	208.980m
32)	AR1254-A	4.673	4.445	2718508	444289	121.028m	140.905m
33)	AR1254-B	4.992	4.670	4471550	1136107	149.253m	243.493m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

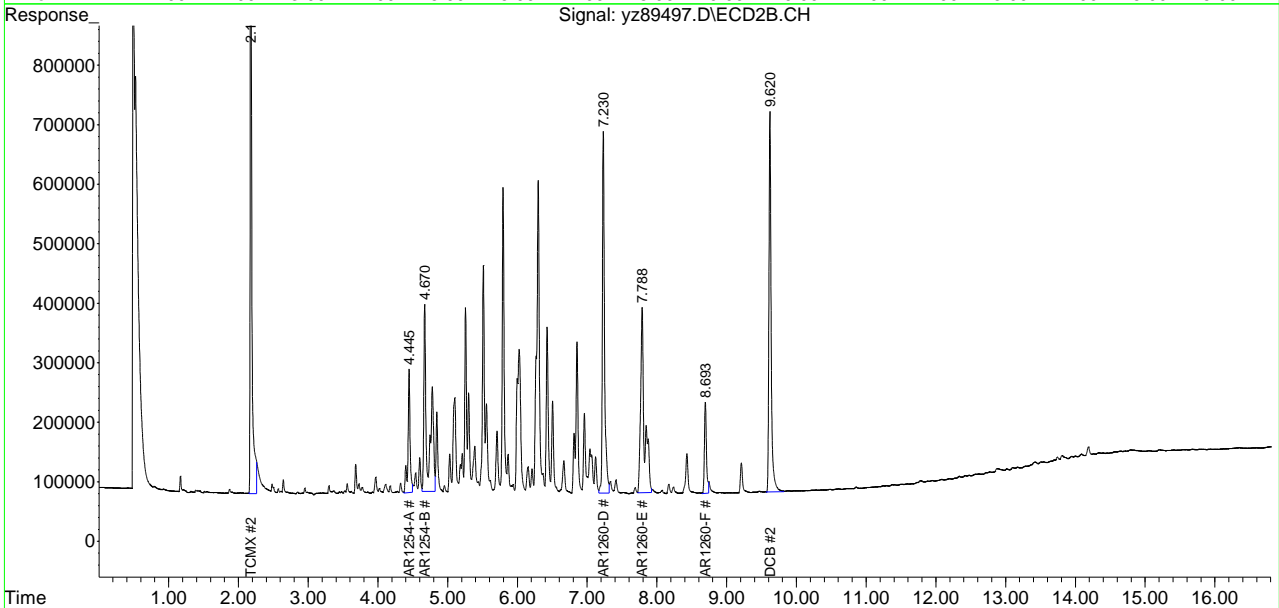
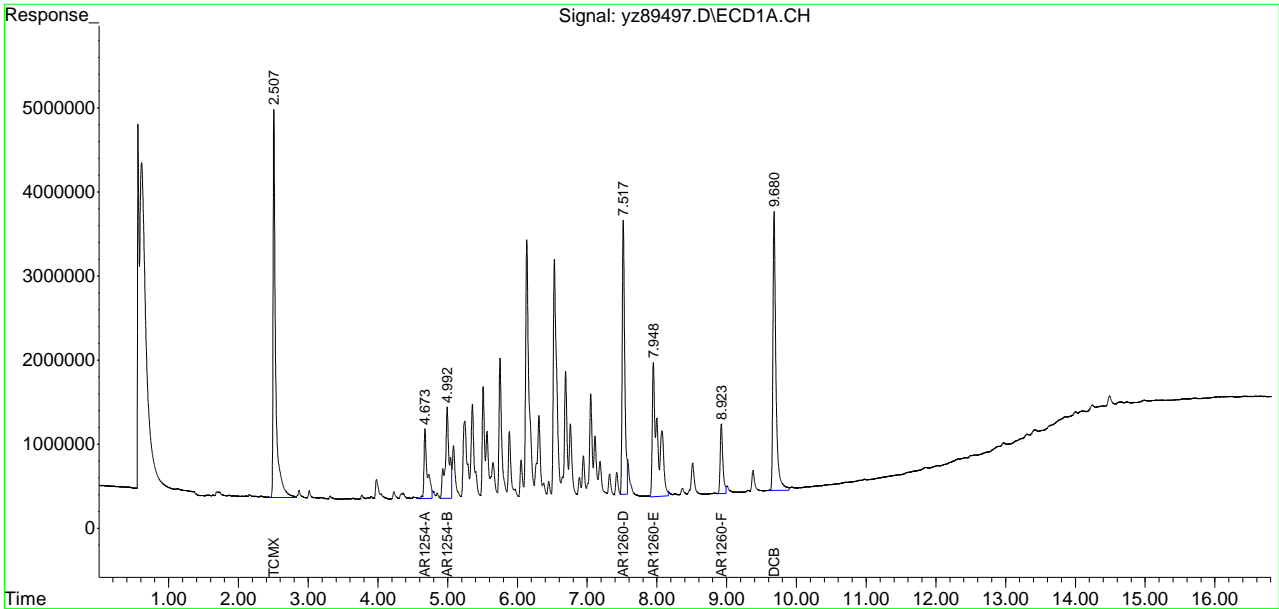
7.1.8
7

Quantitation Report (QT Reviewed)

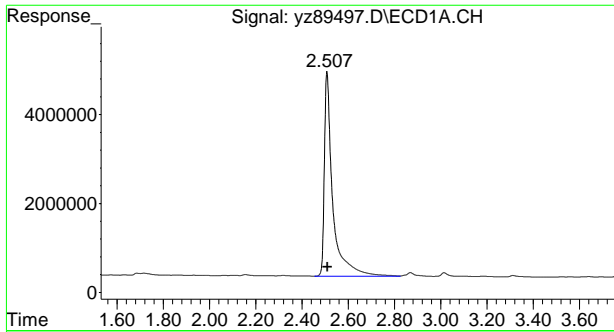
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89497.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 5:14 pm
 Operator : sofyaz
 Sample : mc30076-8
 Misc : op37808,gyz7550,15.38,,,10,,s
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:42:35 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

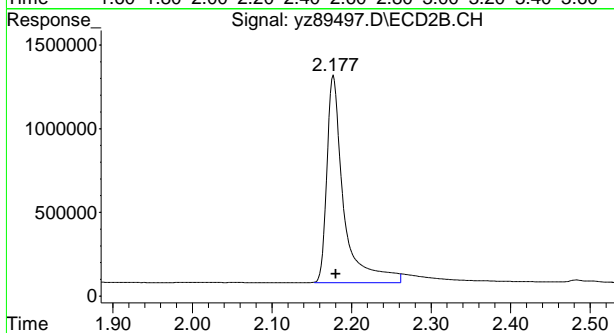
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



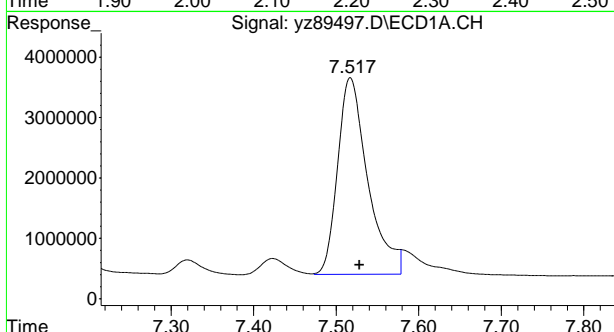
718
 7



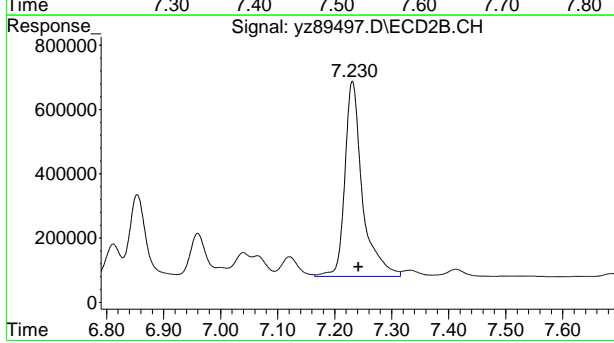
#1 TCMX
 R.T.: 2.507 min
 Delta R.T.: -0.003 min
 Response: 11600088
 Conc: 30.78 ppb



#1 TCMX
 R.T.: 2.177 min
 Delta R.T.: -0.003 min
 Response: 1824994
 Conc: 25.11 ppb m

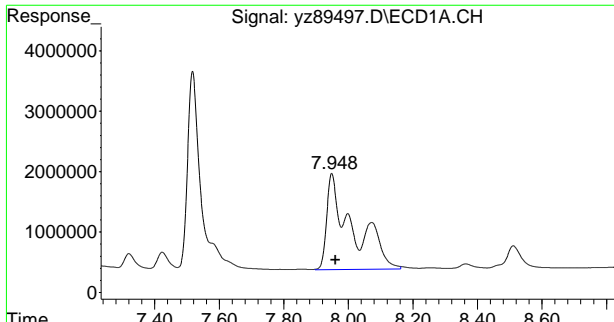


#10 AR1260-D
 R.T.: 7.517 min
 Delta R.T.: -0.012 min
 Response: 8297490
 Conc: 222.45 ppb m

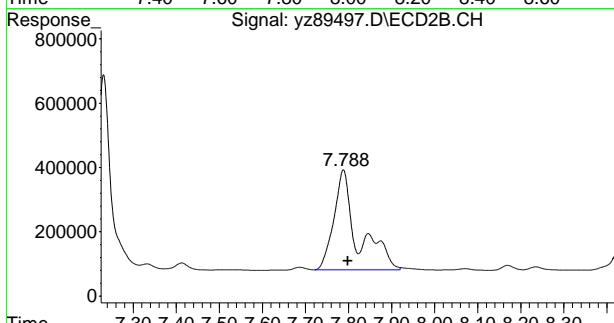


#10 AR1260-D
 R.T.: 7.230 min
 Delta R.T.: -0.012 min
 Response: 1295621
 Conc: 207.19 ppb

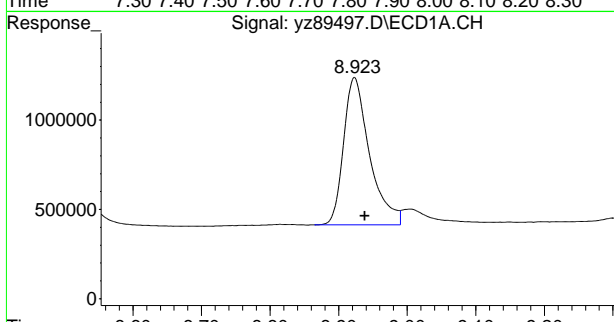
7.1.8
7



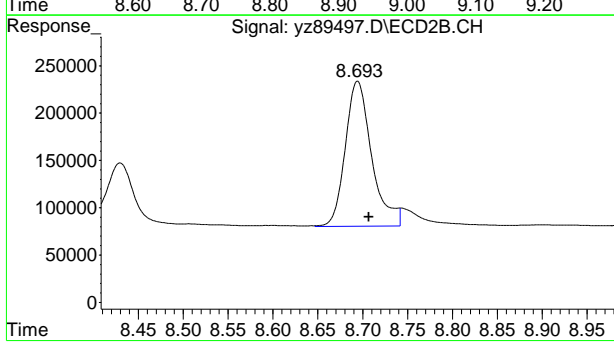
#11 AR1260-E
 R.T.: 7.948 min
 Delta R.T.: -0.012 min
 Response: 8816714
 Conc: 230.35 ppb m



#11 AR1260-E
 R.T.: 7.788 min
 Delta R.T.: -0.010 min
 Response: 1192118
 Conc: 195.23 ppb m

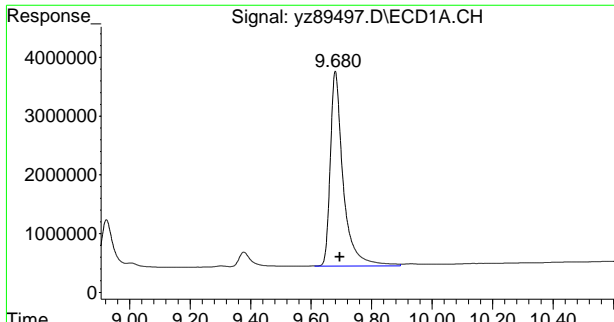


#12 AR1260-F
 R.T.: 8.923 min
 Delta R.T.: -0.015 min
 Response: 2183643
 Conc: 238.54

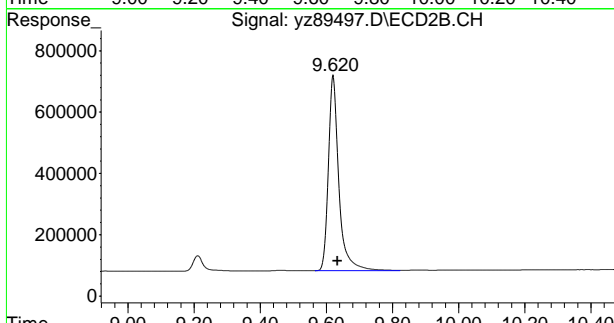


#12 AR1260-F
 R.T.: 8.693 min
 Delta R.T.: -0.013 min
 Response: 315214
 Conc: 208.98 m

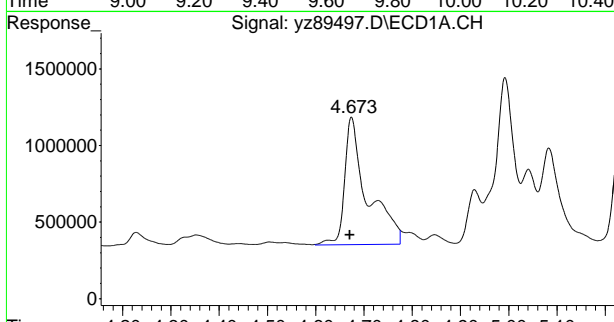
7.1.8
7



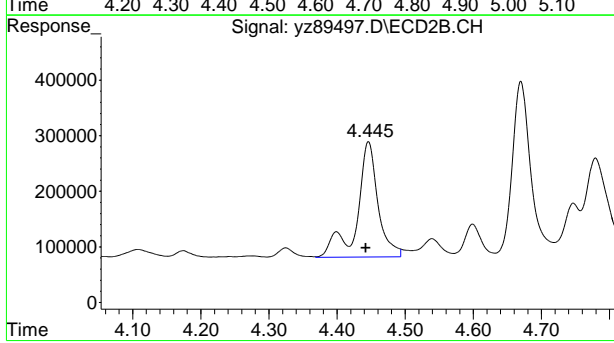
#13 DCB
 R.T.: 9.680 min
 Delta R.T.: -0.015 min
 Response: 9859737
 Conc: 29.96 ppb m



#13 DCB
 R.T.: 9.620 min
 Delta R.T.: -0.013 min
 Response: 1408562
 Conc: 24.27 ppb m

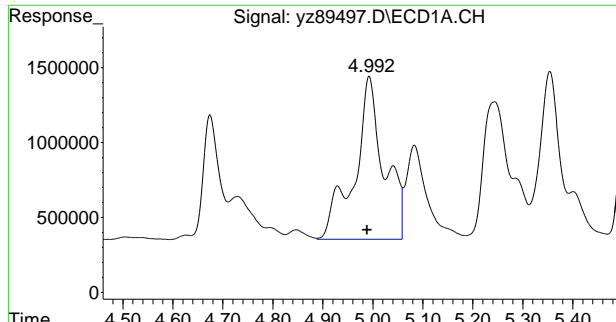


#32 AR1254-A
 R.T.: 4.673 min
 Delta R.T.: 0.003 min
 Response: 2718508
 Conc: 121.03 ppb m

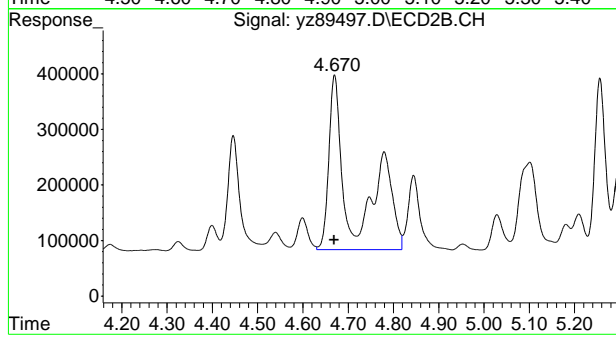


#32 AR1254-A
 R.T.: 4.445 min
 Delta R.T.: 0.003 min
 Response: 444289
 Conc: 140.90 ppb m

7.1.8
7



#33 AR1254-B
R.T.: 4.992 min
Delta R.T.: 0.003 min
Response: 4471550
Conc: 149.25 ppb m



#33 AR1254-B
R.T.: 4.670 min
Delta R.T.: 0.002 min
Response: 1136107
Conc: 243.49 ppb m

7.1.8
7

Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89499.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:09 pm
 Operator : sofyaz
 Sample : mc30076-9
 Misc : op37808,gyz7550,15.34,,,10,,s
 ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:43:25 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.524	2.181	10691554	1617991	28.367m	22.263
	Spiked Amount	40.000 Range	42 - 132	Recovery =	70.92%		55.66%
13)	s DCB	9.703	9.629	9095612	1333807	27.642m	22.981
	Spiked Amount	40.000 Range	30 - 150	Recovery =	69.10%		57.45%
Target Compounds							
10)	AR1260-D	7.543	7.241	5513130	867674	147.800m	138.757
11)	AR1260-E	7.974	7.799	5835820	809631	152.469m	132.592m
12)	AR1260-F	8.946	8.704	1277822	175696	139.590	116.483m
32)	AR1254-A	4.699f	4.456	7860278	1090715	349.940m	345.917m
33)	AR1254-B	5.018f	4.681	13164743	1749707	439.417m	375.001m
34)	AR1254-C	5.534f	5.266	21269565	3310406	483.996m	439.412m
35)	AR1254-D	5.911f	5.521f	5804493	1741671	389.531m	457.677m
36)	AR1254-E	0.000	6.308	0	1713090	N.D.	490.637 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

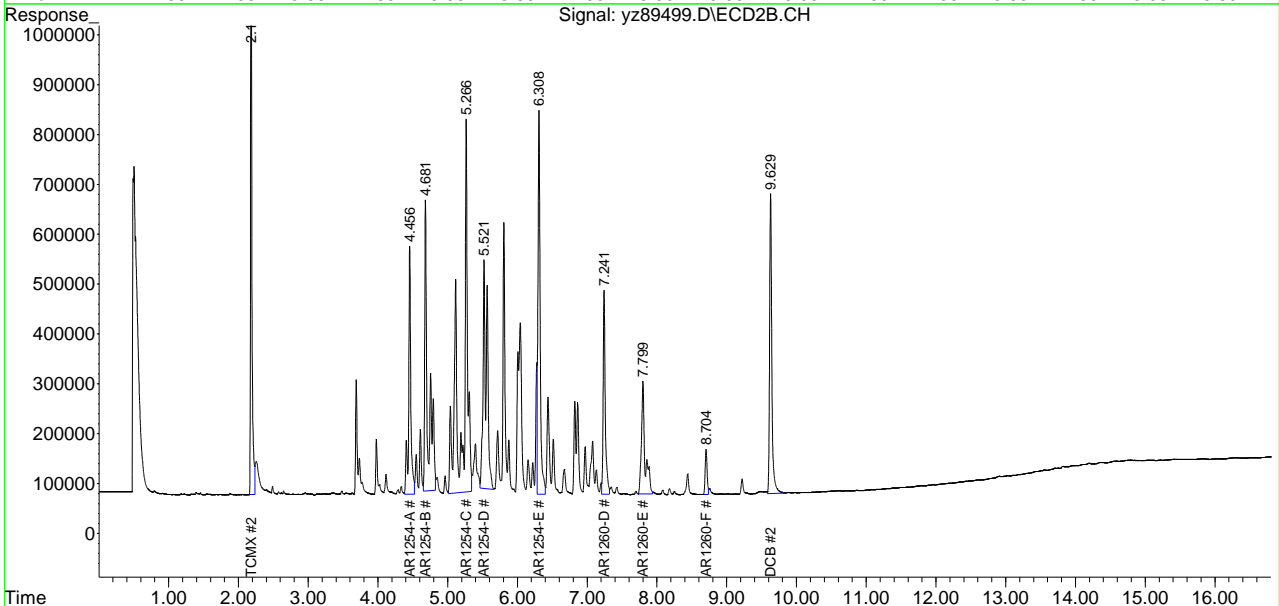
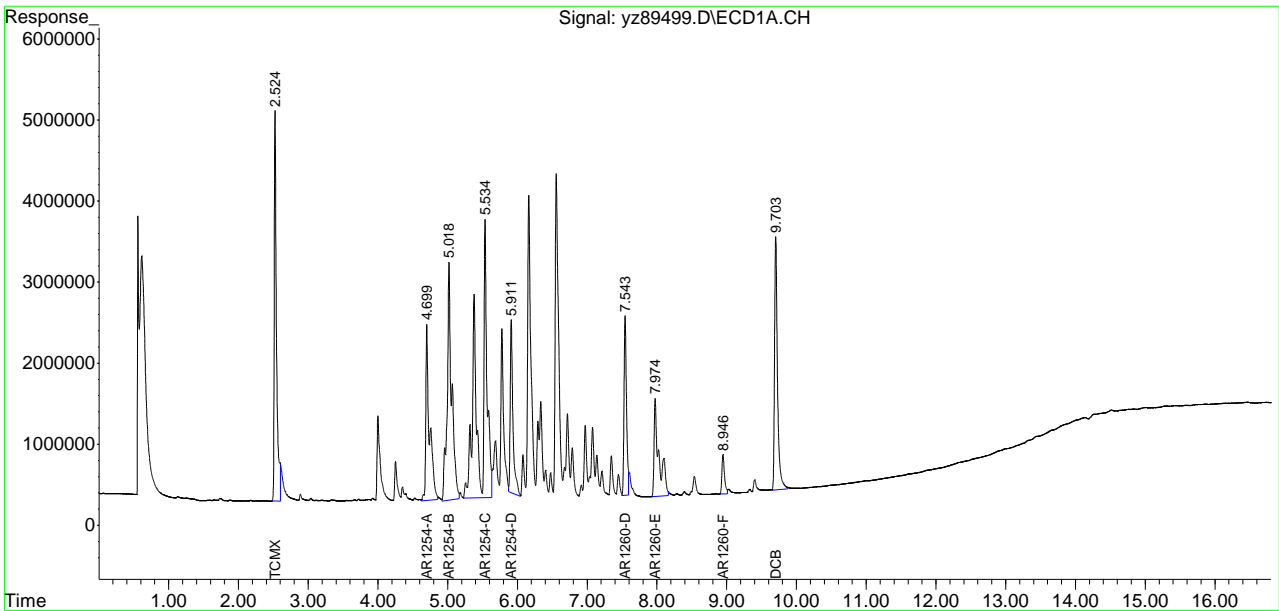
7.1.9
7

Quantitation Report (QT Reviewed)

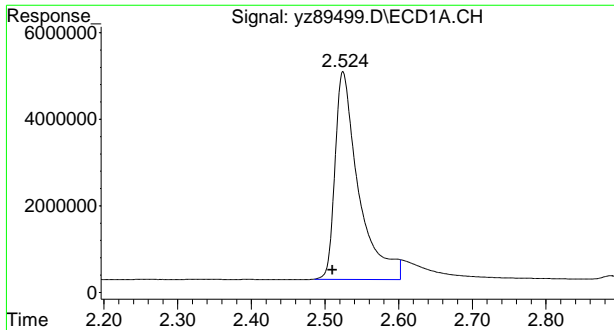
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89499.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:09 pm
 Operator : sofyaz
 Sample : mc30076-9
 Misc : op37808,gyz7550,15.34,,,10,,s
 ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:43:25 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

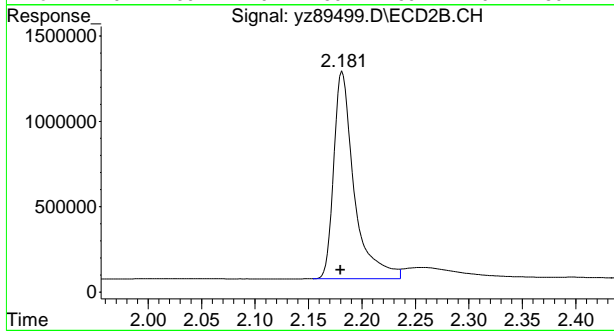
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



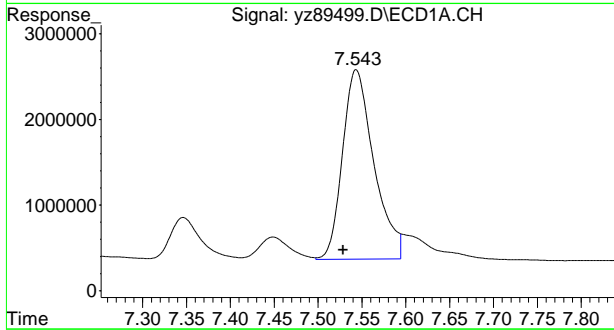
6.1.7



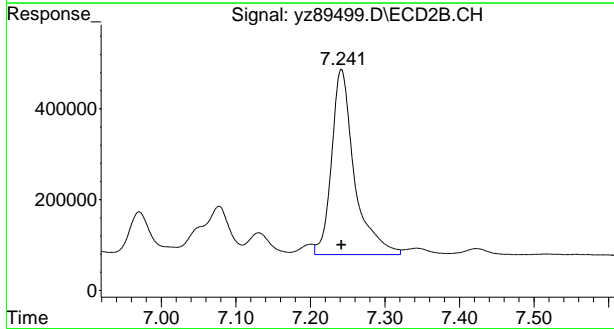
#1 TCMX
 R.T.: 2.524 min
 Delta R.T.: 0.014 min
 Response: 10691554
 Conc: 28.37 ppb m



#1 TCMX
 R.T.: 2.181 min
 Delta R.T.: 0.000 min
 Response: 1617991
 Conc: 22.26 ppb

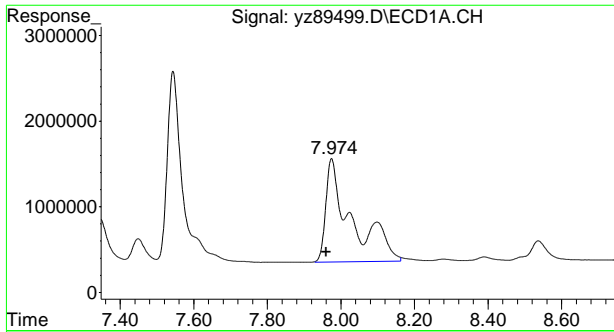


#10 AR1260-D
 R.T.: 7.543 min
 Delta R.T.: 0.014 min
 Response: 5513130
 Conc: 147.80 ppb m

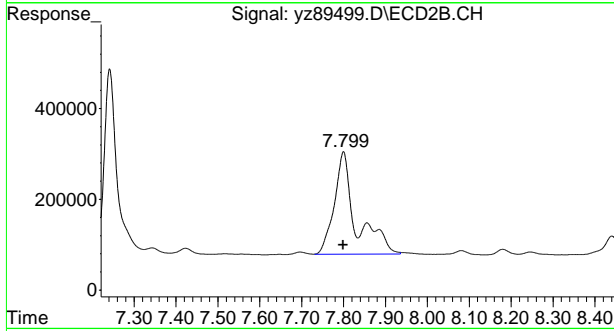


#10 AR1260-D
 R.T.: 7.241 min
 Delta R.T.: 0.000 min
 Response: 867674
 Conc: 138.76 ppb

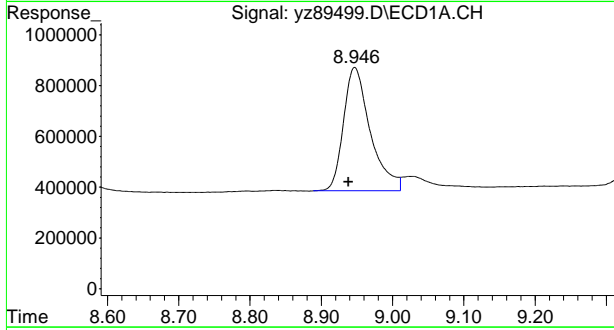
7.1.9
 7



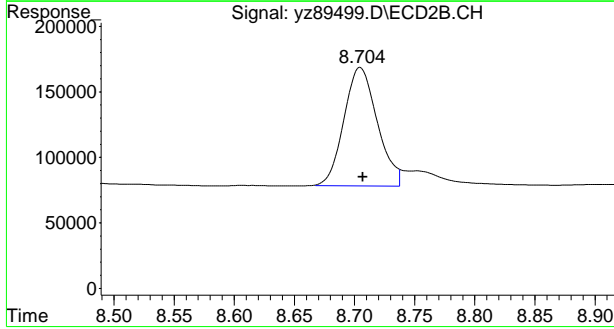
#11 AR1260-E
 R.T.: 7.974 min
 Delta R.T.: 0.014 min
 Response: 5835820
 Conc: 152.47 ppb m



#11 AR1260-E
 R.T.: 7.799 min
 Delta R.T.: 0.000 min
 Response: 809631
 Conc: 132.59 ppb m

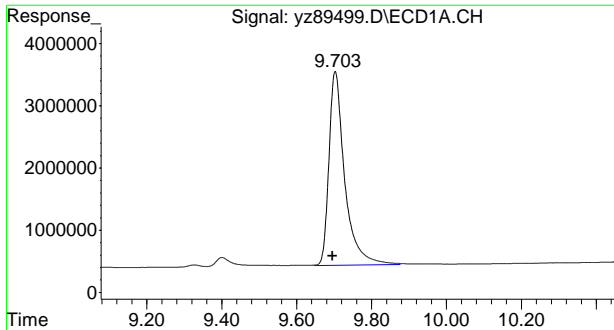


#12 AR1260-F
 R.T.: 8.946 min
 Delta R.T.: 0.008 min
 Response: 1277822
 Conc: 139.59

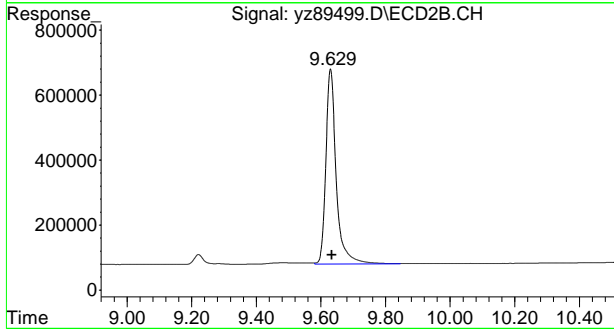


#12 AR1260-F
 R.T.: 8.704 min
 Delta R.T.: -0.002 min
 Response: 175696
 Conc: 116.48 m

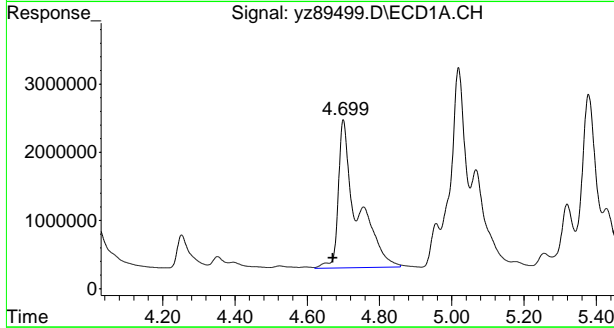
7.1.9
 7



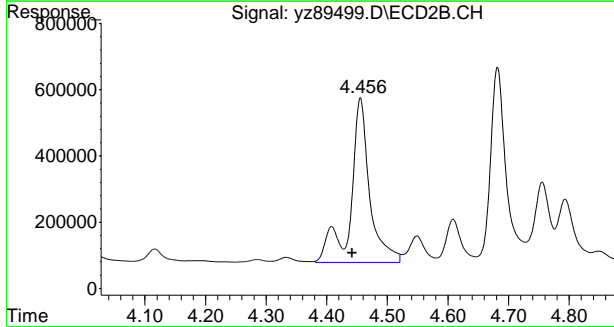
#13 DCB
 R.T.: 9.703 min
 Delta R.T.: 0.008 min
 Response: 9095612
 Conc: 27.64 ppb m



#13 DCB
 R.T.: 9.629 min
 Delta R.T.: -0.004 min
 Response: 1333807
 Conc: 22.98 ppb

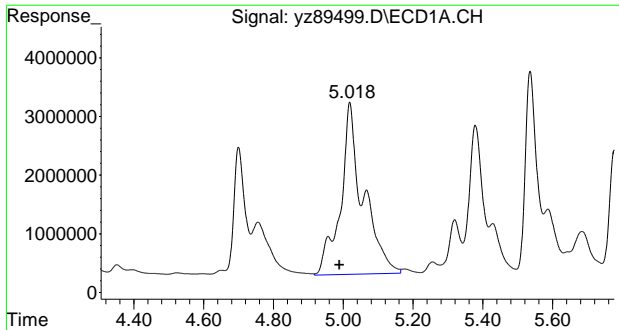


#32 AR1254-A
 R.T.: 4.699 min
 Delta R.T.: 0.029 min
 Response: 7860278
 Conc: 349.94 ppb m

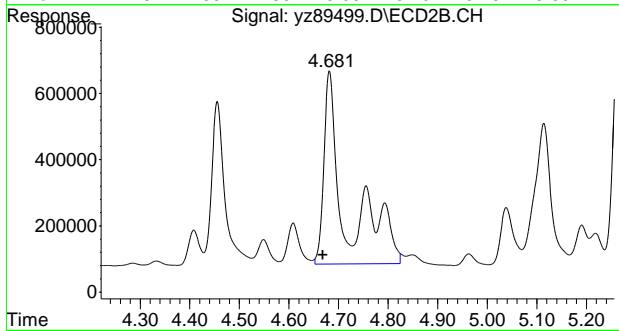


#32 AR1254-A
 R.T.: 4.456 min
 Delta R.T.: 0.014 min
 Response: 1090715
 Conc: 345.92 ppb m

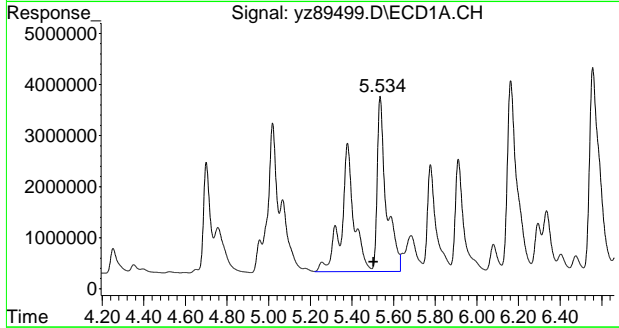
7.1.9
7



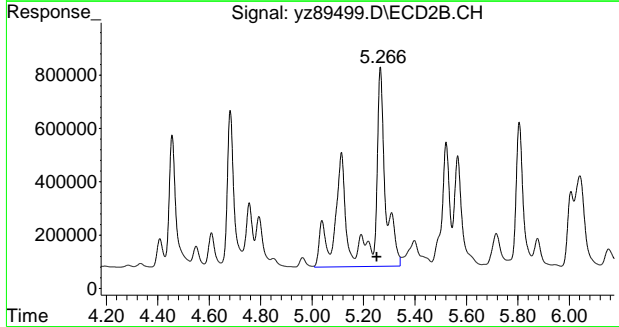
#33 AR1254-B
 R.T.: 5.018 min
 Delta R.T.: 0.029 min
 Response: 13164743
 Conc: 439.42 ppb m



#33 AR1254-B
 R.T.: 4.681 min
 Delta R.T.: 0.012 min
 Response: 1749707
 Conc: 375.00 ppb m

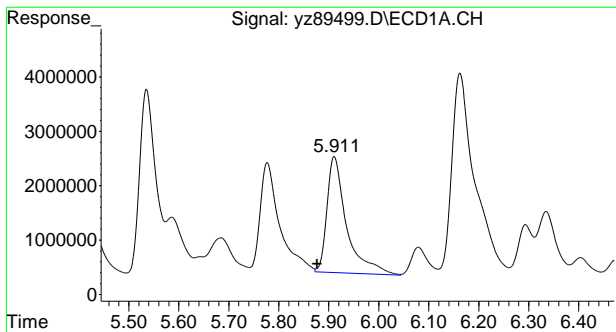


#34 AR1254-C
 R.T.: 5.534 min
 Delta R.T.: 0.031 min
 Response: 21269565
 Conc: 484.00 ppb m

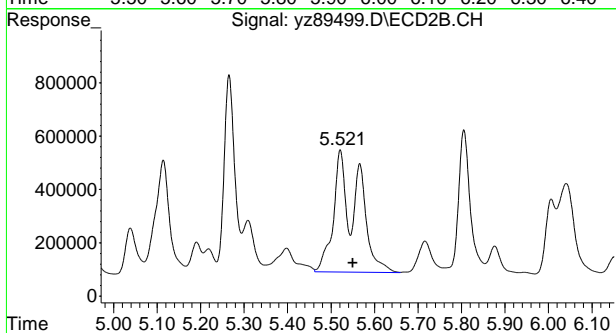


#34 AR1254-C
 R.T.: 5.266 min
 Delta R.T.: 0.014 min
 Response: 3310406
 Conc: 439.41 ppb m

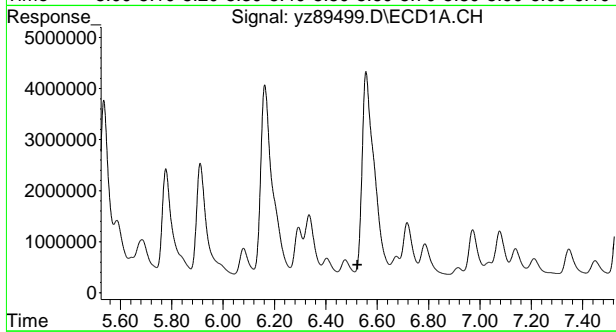
7.1.9
7



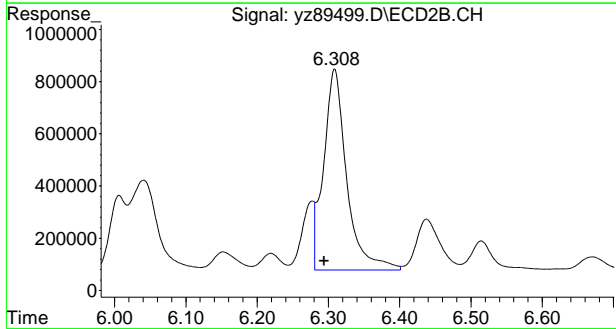
#35 AR1254-D
 R.T.: 5.911 min
 Delta R.T.: 0.034 min
 Response: 5804493
 Conc: 389.53 ppb m



#35 AR1254-D
 R.T.: 5.521 min
 Delta R.T.: -0.029 min
 Response: 1741671
 Conc: 457.68 ppb m



#36 AR1254-E
 R.T.: 0.000 min
 Exp R.T.: 6.523 min
 Response: 0
 Conc: N.D.



#36 AR1254-E
 R.T.: 6.308 min
 Delta R.T.: 0.014 min
 Response: 1713090
 Conc: 490.64 ppb

7.1.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89500.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:29 pm
 Operator : sofyaz
 Sample : mc30076-10
 Misc : op37808,gyz7550,15.29,,,10,,s
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:41:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.506	2.176	11095769	1941750	29.439	26.717
Spiked Amount	40.000 Range	42 - 132	Recovery	=	73.60%	66.79%
13) s DCB	9.679f	9.618f	9588076	1438281	29.139m	24.781
Spiked Amount	40.000 Range	30 - 150	Recovery	=	72.85%	61.95%
Target Compounds						
12) AR1260-F	8.921f	8.693	852155	123875	93.090m	82.126m
32) AR1254-A	4.673	4.446	26580443	3671928	1183.362m	1164.539m
33) AR1254-B	4.991	4.671	42186305	5994150	1408.108m	1284.680m
34) AR1254-C	5.508	5.254	62881031	10537626	1430.880m	1398.727m
35) AR1254-D	5.883	5.554	19869391	5672830	1333.404m	1490.709m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.1.10
7

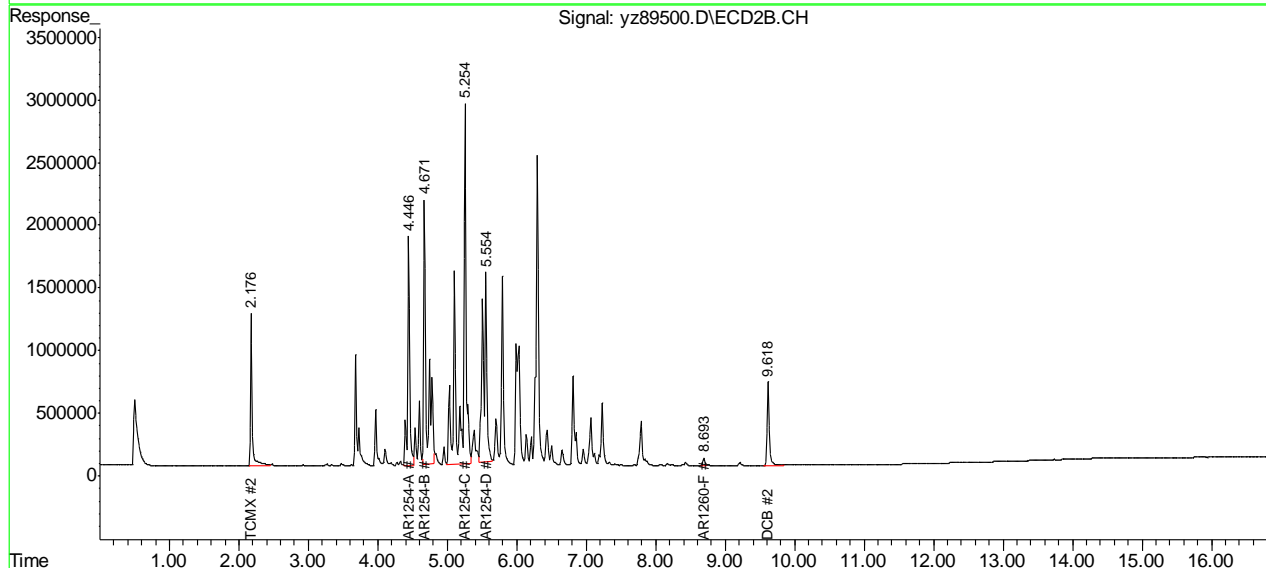
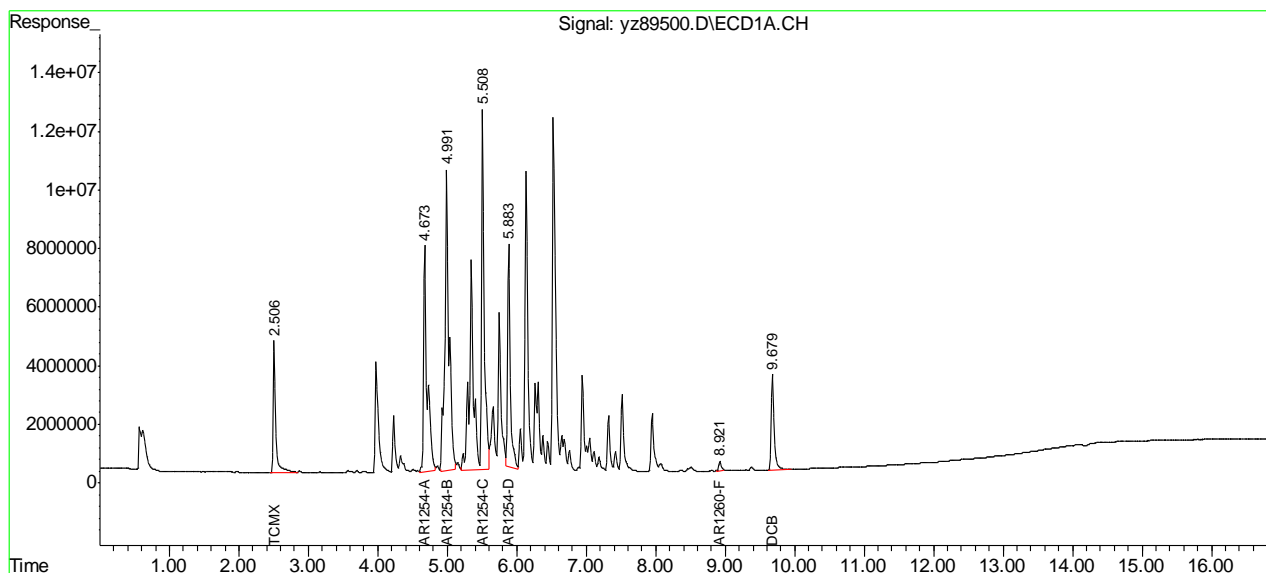
Quantitation Report (QT Reviewed)

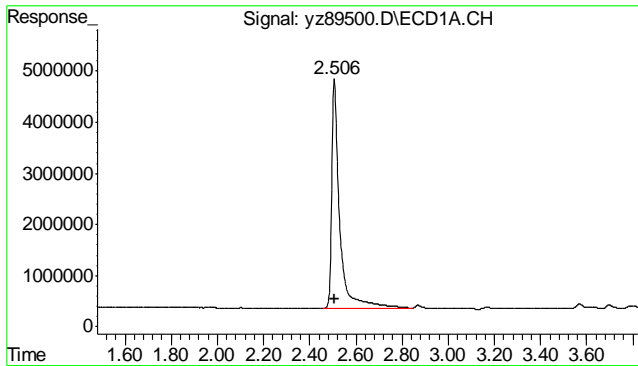
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89500.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:29 pm
 Operator : sofyaz
 Sample : mc30076-10
 Misc : op37808,gyz7550,15.29,,,10,,s
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:41:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

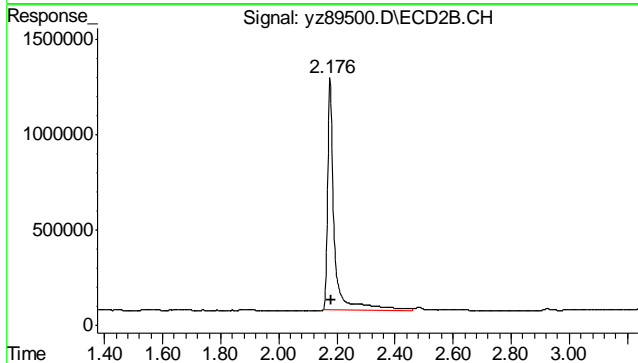
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

7.1.10
7

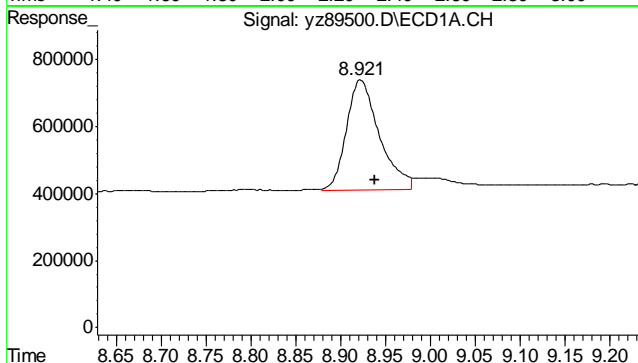




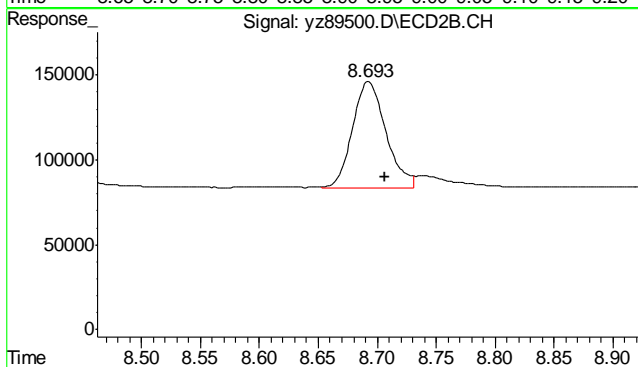
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 11095769
 Conc: 29.44 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1941750
 Conc: 26.72 ppb

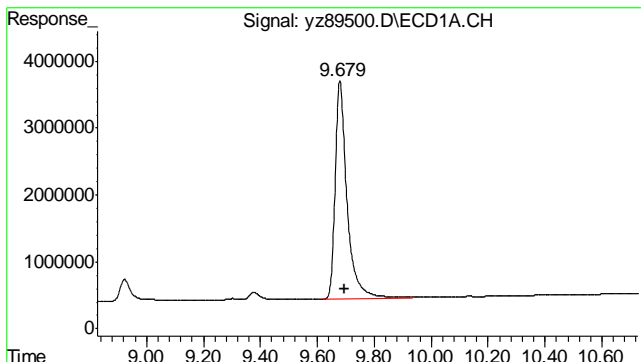


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 852155
 Conc: 93.09 m

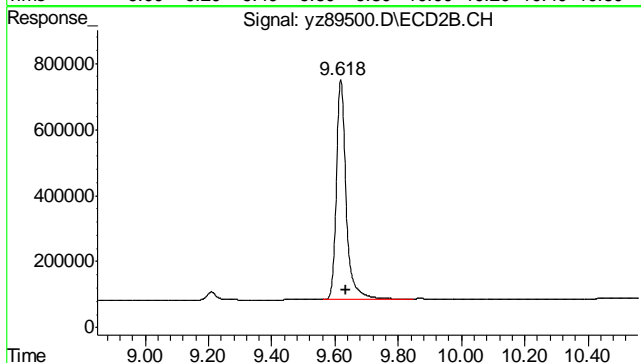


#12 AR1260-F
 R.T.: 8.693 min
 Delta R.T.: -0.014 min
 Response: 123875
 Conc: 82.13 m

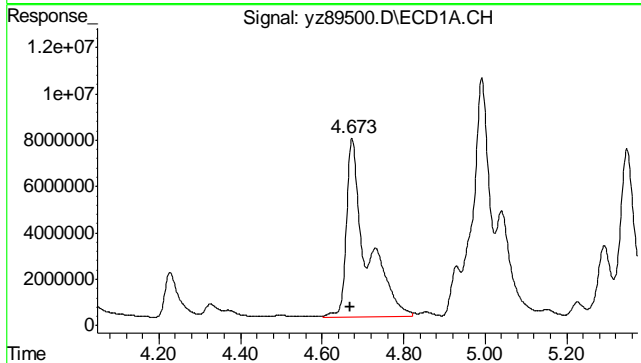
7.1.10
 7



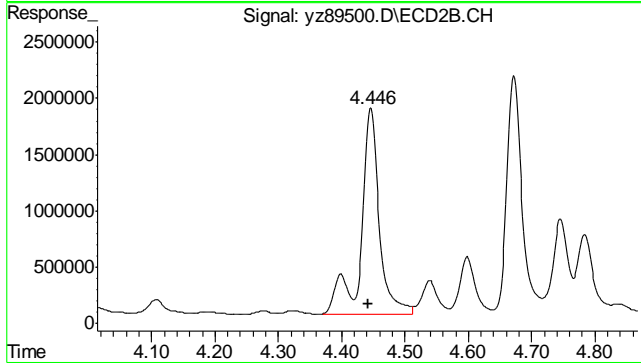
#13 DCB
 R.T.: 9.679 min
 Delta R.T.: -0.016 min
 Response: 9588076
 Conc: 29.14 ppb m



#13 DCB
 R.T.: 9.618 min
 Delta R.T.: -0.016 min
 Response: 1438281
 Conc: 24.78 ppb

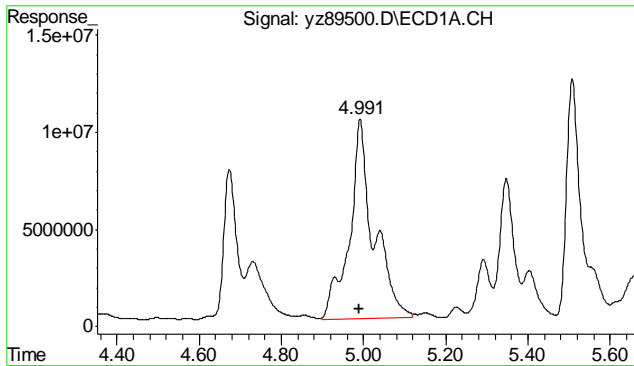


#32 AR1254-A
 R.T.: 4.673 min
 Delta R.T.: 0.003 min
 Response: 26580443
 Conc: 1183.36 ppb m

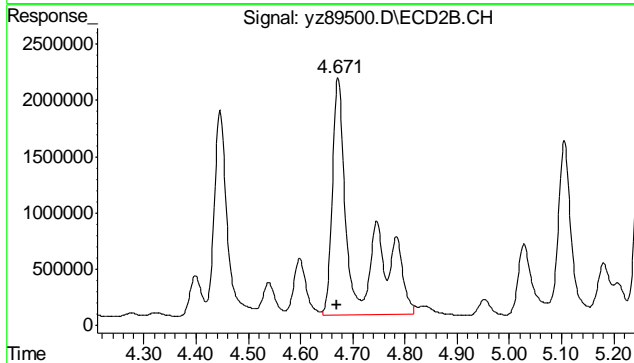


#32 AR1254-A
 R.T.: 4.446 min
 Delta R.T.: 0.004 min
 Response: 3671928
 Conc: 1164.54 ppb m

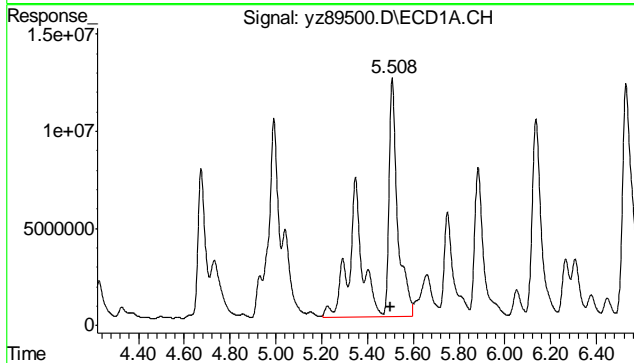
7.1.10
7



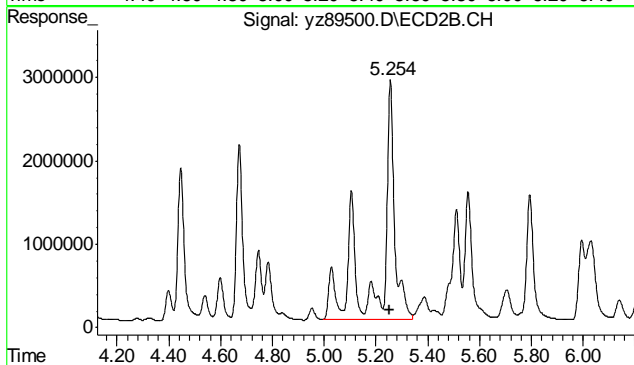
#33 AR1254-B
 R.T.: 4.991 min
 Delta R.T.: 0.003 min
 Response: 42186305
 Conc: 1408.11 ppb m



#33 AR1254-B
 R.T.: 4.671 min
 Delta R.T.: 0.003 min
 Response: 5994150
 Conc: 1284.68 ppb m

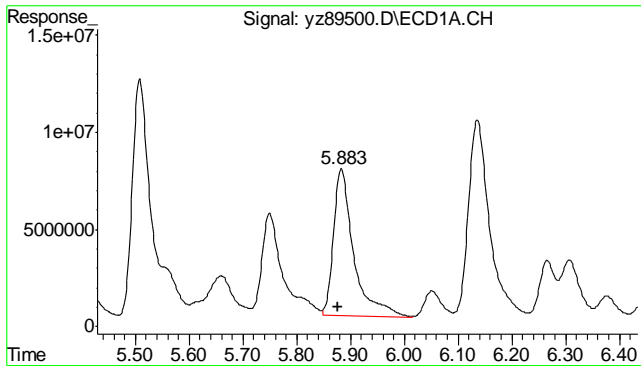


#34 AR1254-C
 R.T.: 5.508 min
 Delta R.T.: 0.004 min
 Response: 62881031
 Conc: 1430.88 ppb m

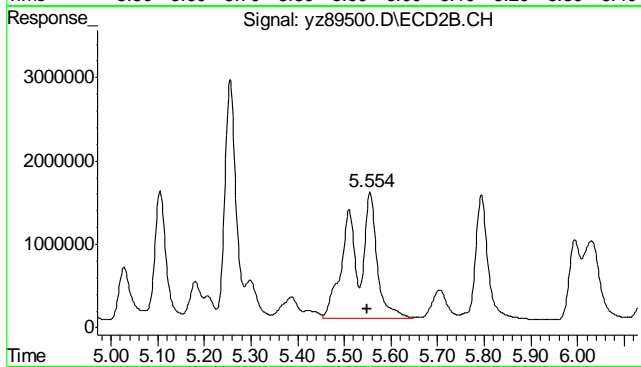


#34 AR1254-C
 R.T.: 5.254 min
 Delta R.T.: 0.003 min
 Response: 10537626
 Conc: 1398.73 ppb m

7.1.10
7



#35 AR1254-D
R.T.: 5.883 min
Delta R.T.: 0.006 min
Response: 19869391
Conc: 1333.40 ppb m



#35 AR1254-D
R.T.: 5.554 min
Delta R.T.: 0.004 min
Response: 5672830
Conc: 1490.71 ppb m

7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89526.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 7:11 am
 Operator : sofyaz
 Sample : mc30076-10,1:5
 Misc : op37808,gyz7550,15.29,,,10,5,s
 ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:42:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.514	2.176	2216252	347843	5.880	4.786
Spiked Amount	40.000 Range	42 - 132	Recovery	=	14.70%#	11.97%#
13) s DCB	9.682	9.617f	2427595	350035	7.378m	6.031m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	18.45%#	15.08%#
Target Compounds						
32) AR1254-A	4.684	4.447	6117966	785207	272.372m	249.026m
33) AR1254-B	5.002	4.672	10282210	1851837	343.203m	396.890m
34) AR1254-C	5.517	5.257	15246314	2286990	346.935m	303.567m
35) AR1254-D	5.892f	5.557	4950331	1264157	332.209m	332.196m

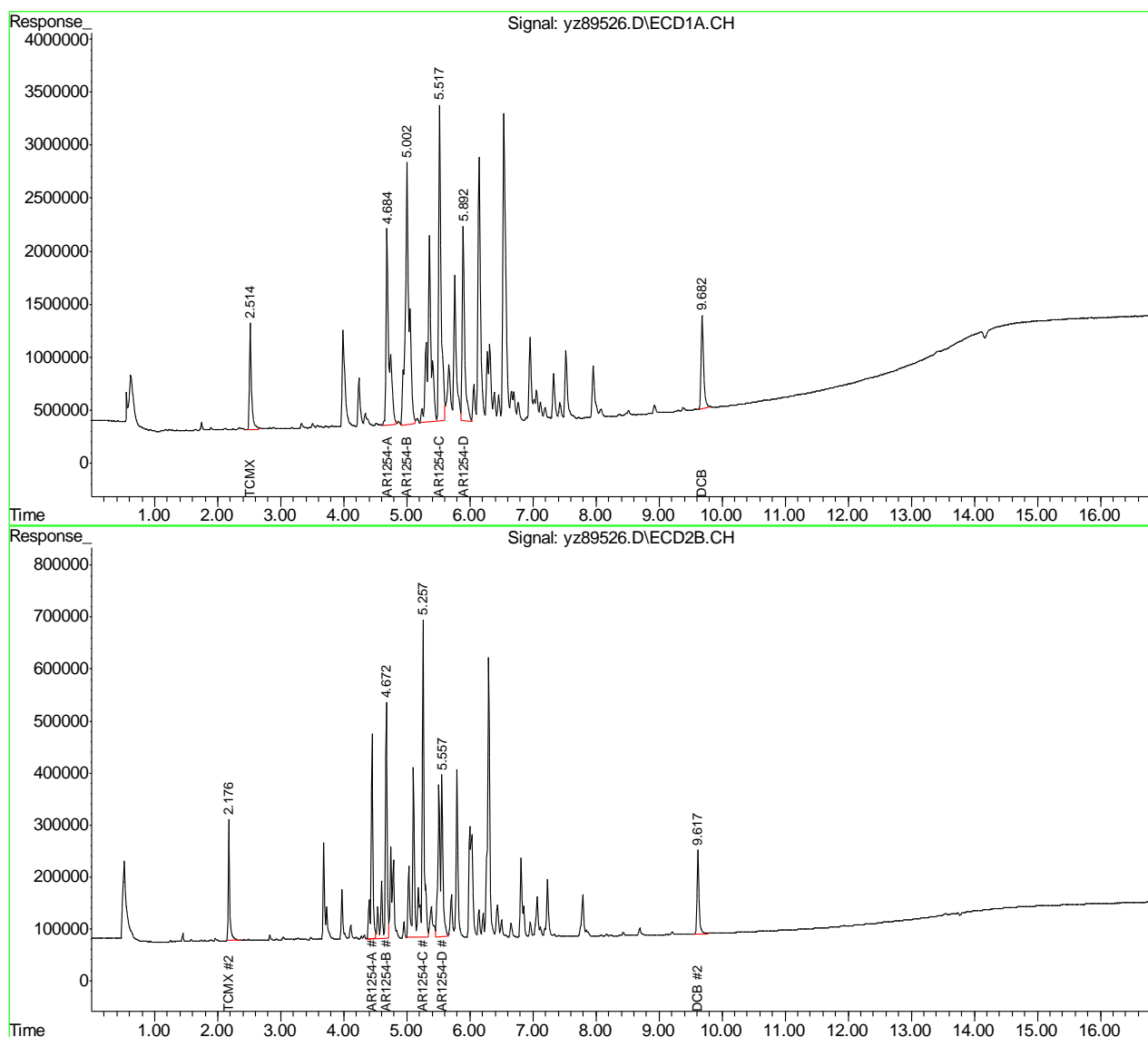
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

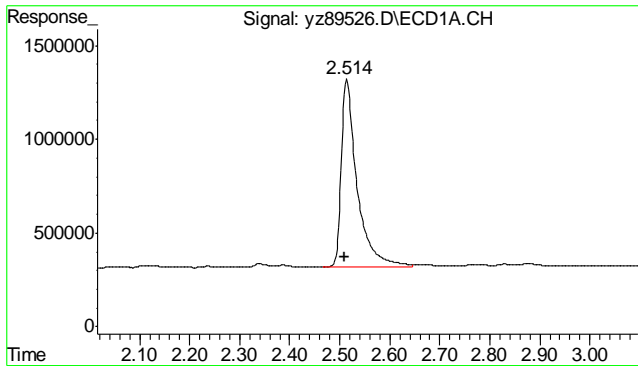
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89526.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 7:11 am
 Operator : sofyaz
 Sample : mc30076-10,1:5
 Misc : op37808,gyz7550,15.29,,,10,5,s
 ALS Vial : 45 Sample Multiplier: 1

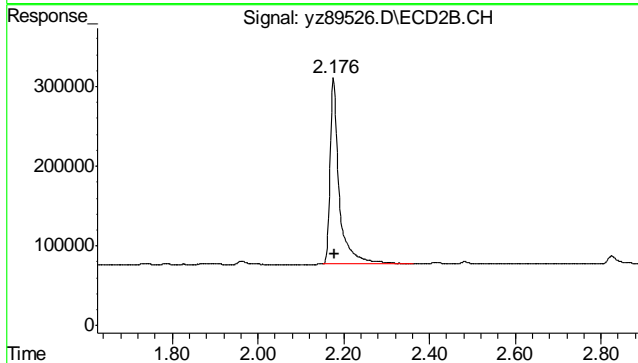
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:42:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

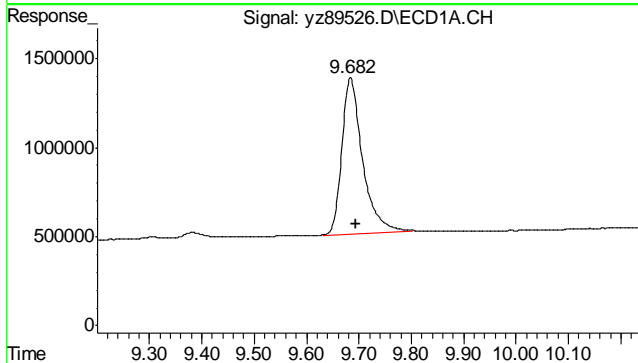




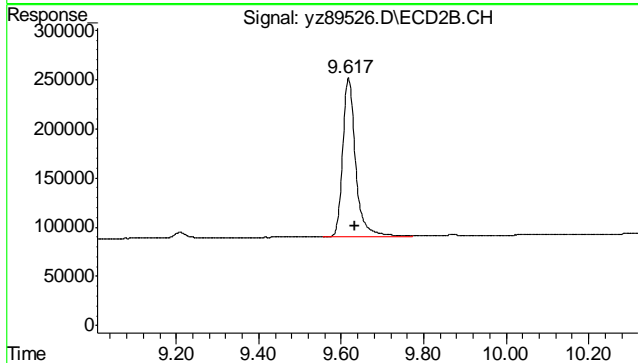
#1 TCMX
 R.T.: 2.514 min
 Delta R.T.: 0.004 min
 Response: 2216252
 Conc: 5.88 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 347843
 Conc: 4.79 ppb

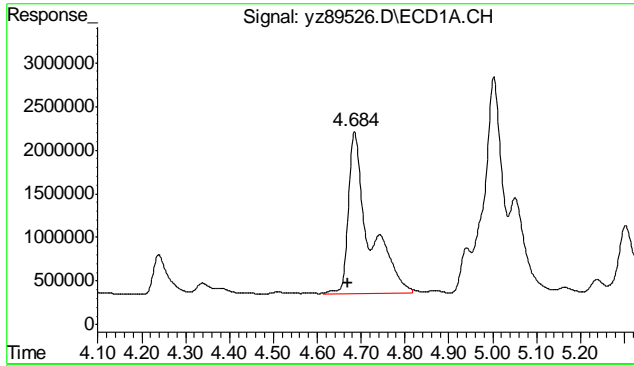


#13 DCB
 R.T.: 9.682 min
 Delta R.T.: -0.012 min
 Response: 2427595
 Conc: 7.38 ppb m

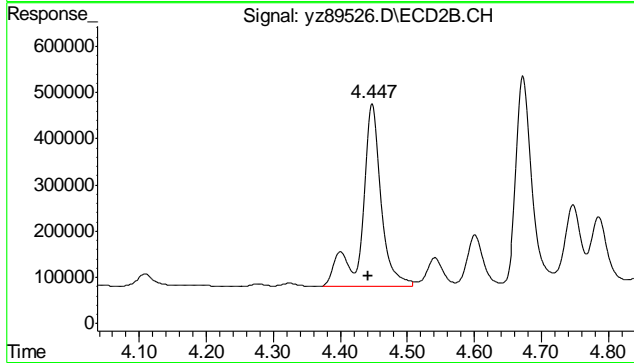


#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 350035
 Conc: 6.03 ppb m

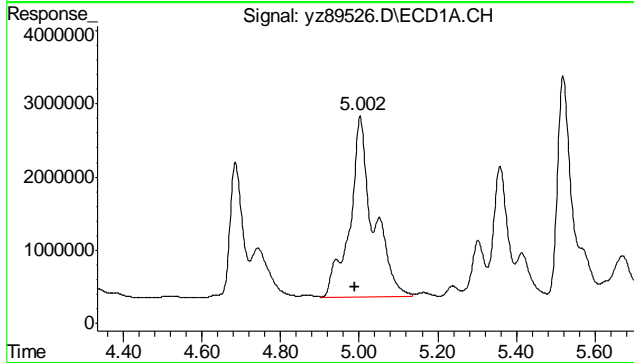
7.1.11
 7



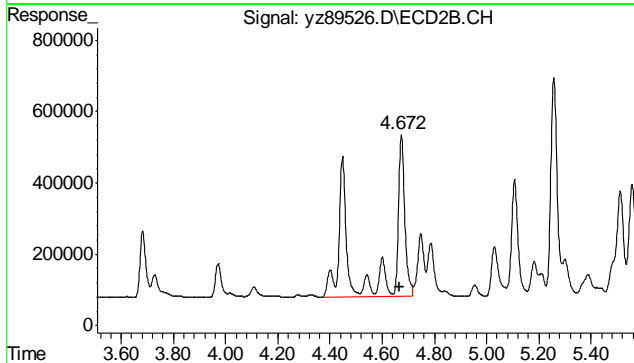
#32 AR1254-A
 R.T.: 4.684 min
 Delta R.T.: 0.014 min
 Response: 6117966
 Conc: 272.37 ppb m



#32 AR1254-A
 R.T.: 4.447 min
 Delta R.T.: 0.006 min
 Response: 785207
 Conc: 249.03 ppb m

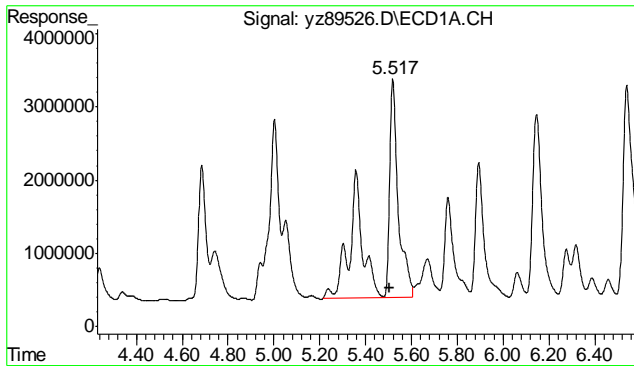


#33 AR1254-B
 R.T.: 5.002 min
 Delta R.T.: 0.014 min
 Response: 10282210
 Conc: 343.20 ppb m

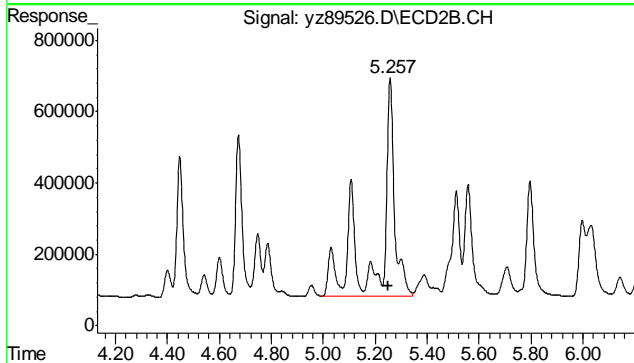


#33 AR1254-B
 R.T.: 4.672 min
 Delta R.T.: 0.004 min
 Response: 1851837
 Conc: 396.89 ppb m

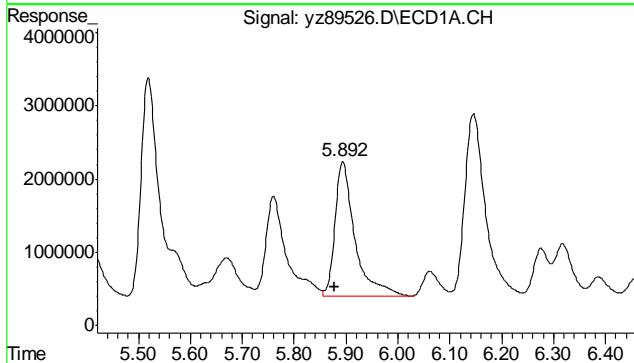
7.1.11
7



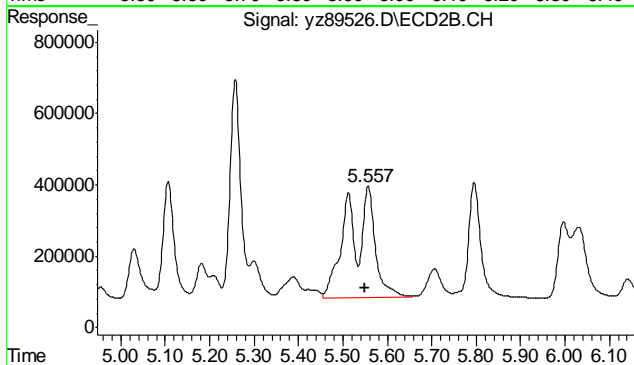
#34 AR1254-C
 R.T.: 5.517 min
 Delta R.T.: 0.014 min
 Response: 15246314
 Conc: 346.94 ppb m



#34 AR1254-C
 R.T.: 5.257 min
 Delta R.T.: 0.006 min
 Response: 2286990
 Conc: 303.57 ppb m



#35 AR1254-D
 R.T.: 5.892 min
 Delta R.T.: 0.016 min
 Response: 4950331
 Conc: 332.21 ppb m



#35 AR1254-D
 R.T.: 5.557 min
 Delta R.T.: 0.007 min
 Response: 1264157
 Conc: 332.20 ppb m

7.1.11
7

Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89501.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:49 pm
 Operator : sofyaz
 Sample : mc30076-11
 Misc : op37808,gyz7550,15.74,,,10,,s
 ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:44:38 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.505	2.175	12467855	2098694	33.080m	28.877
Spiked Amount	40.000 Range	42 - 132	Recovery =	82.70%	72.19%	
13) s DCB	9.676f	9.616f	11271894	1655811	34.256m	28.530m
Spiked Amount	40.000 Range	30 - 150	Recovery =	85.64%	71.33%	
Target Compounds						
12) AR1260-F	8.920f	8.691f	1121577	167231	122.522	110.870
32) AR1254-A	4.671	4.445	9666667	1306188	430.360m	414.253m
33) AR1254-B	4.990	4.670	15871816	2186737	529.775m	468.667m
34) AR1254-C	5.505	5.253	24868236	4169994	565.885m	553.510m
35) AR1254-D	5.881	5.508f	7099332	2424370	476.425m	637.077m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

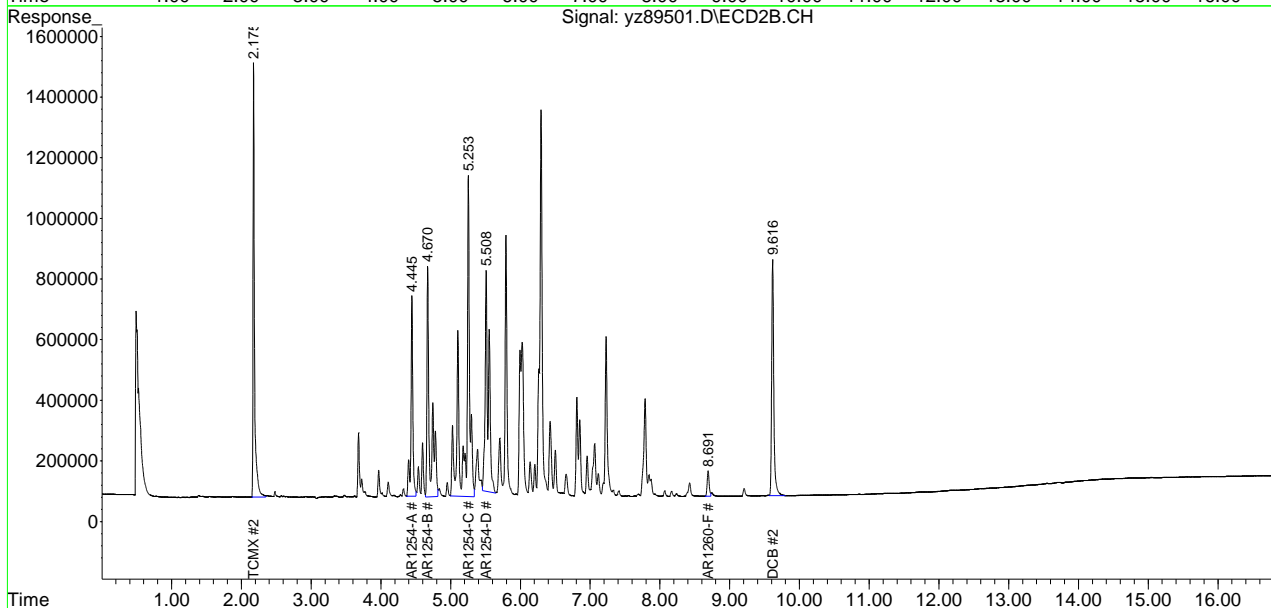
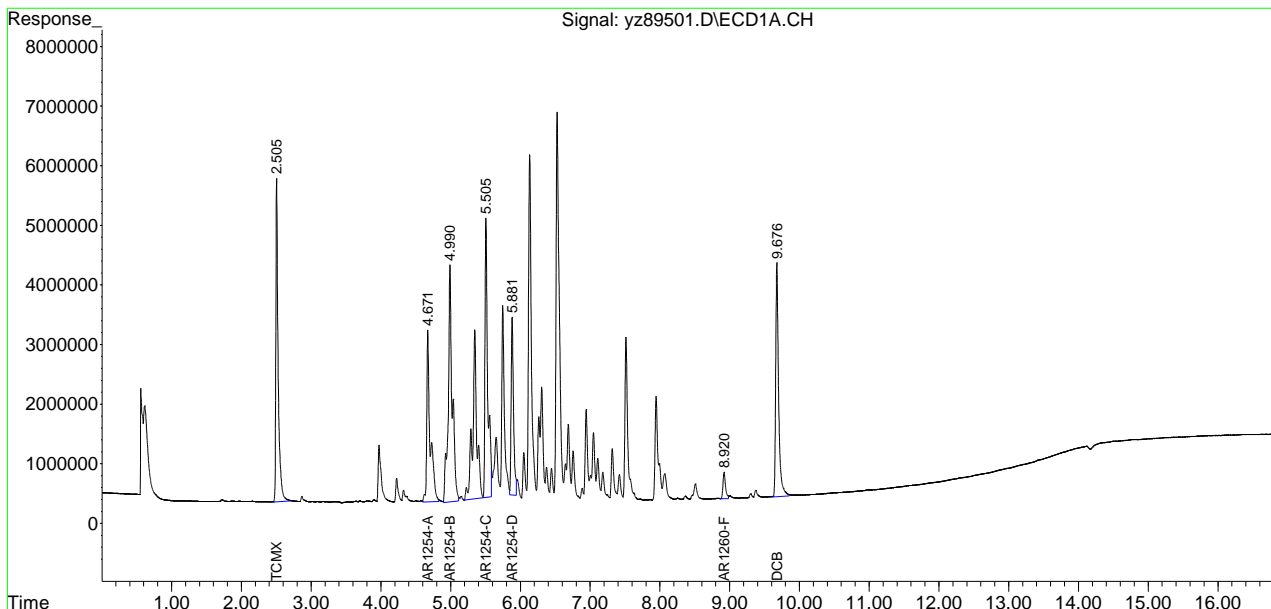
7.1.12
7

Quantitation Report (QT Reviewed)

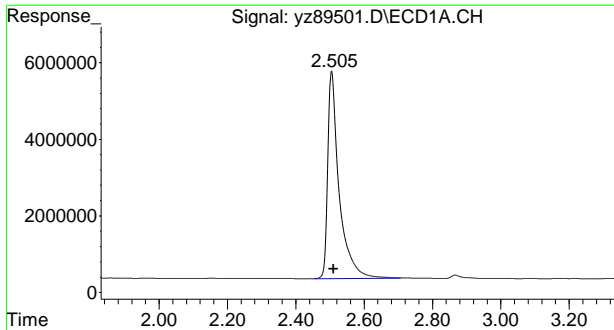
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89501.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 6:49 pm
 Operator : sofyaz
 Sample : mc30076-11
 Misc : op37808,gyz7550,15.74,,,10,,s
 ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:44:38 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

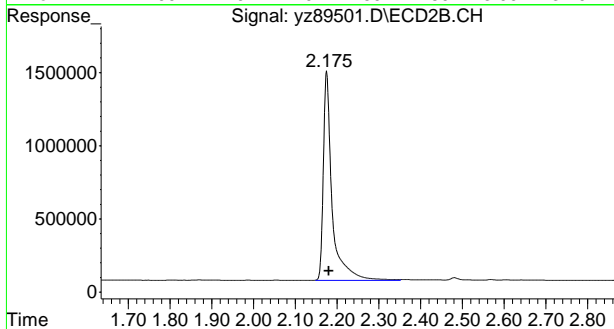
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



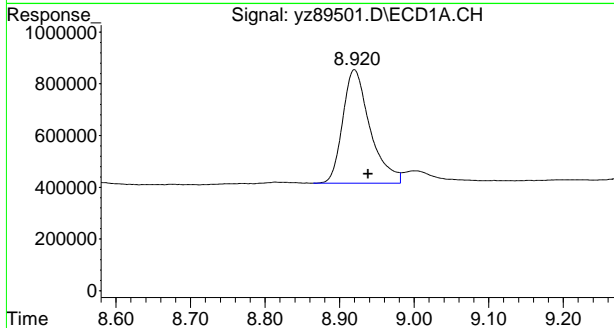
7.1.12
 7



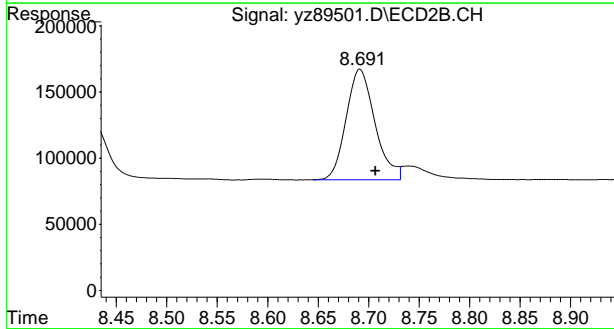
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 12467855
 Conc: 33.08 ppb m



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 2098694
 Conc: 28.88 ppb

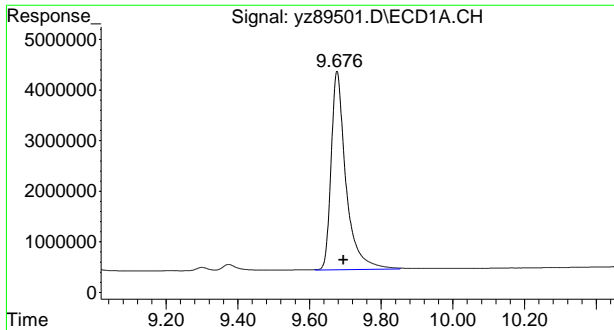


#12 AR1260-F
 R.T.: 8.920 min
 Delta R.T.: -0.018 min
 Response: 1121577
 Conc: 122.52

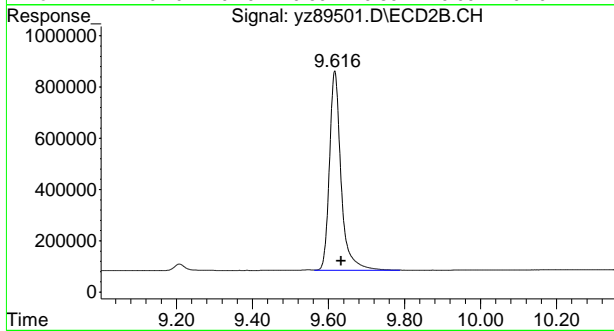


#12 AR1260-F
 R.T.: 8.691 min
 Delta R.T.: -0.015 min
 Response: 167231
 Conc: 110.87

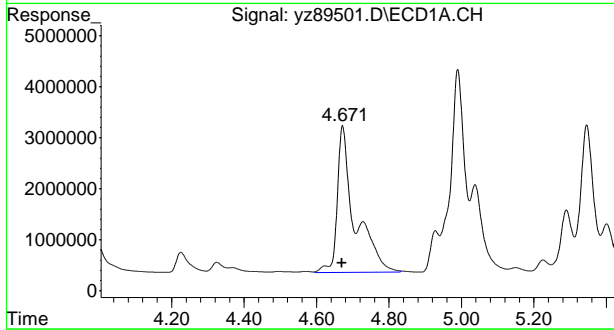
7.1.12
 7



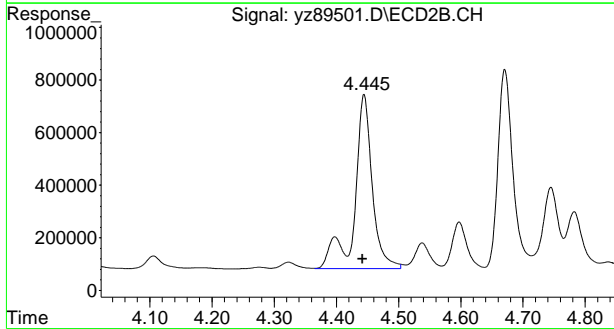
#13 DCB
 R.T.: 9.676 min
 Delta R.T.: -0.018 min
 Response: 11271894
 Conc: 34.26 ppb m



#13 DCB
 R.T.: 9.616 min
 Delta R.T.: -0.017 min
 Response: 1655811
 Conc: 28.53 ppb m

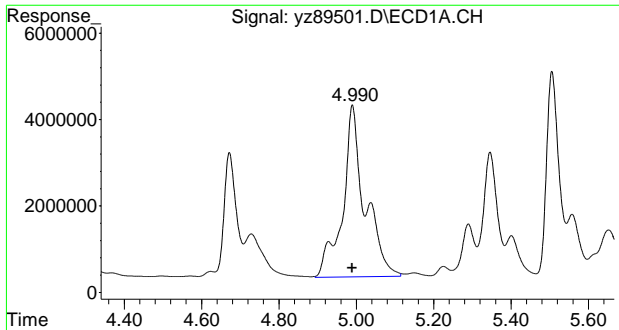


#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.001 min
 Response: 9666667
 Conc: 430.36 ppb m

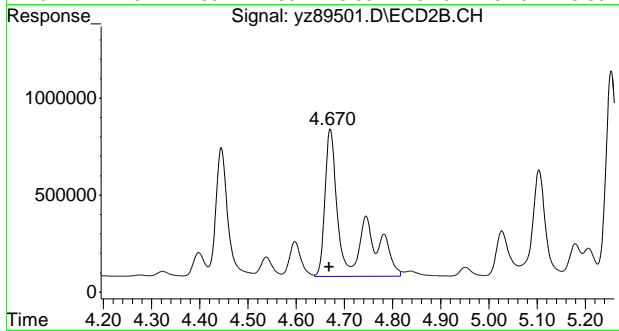


#32 AR1254-A
 R.T.: 4.445 min
 Delta R.T.: 0.003 min
 Response: 1306188
 Conc: 414.25 ppb m

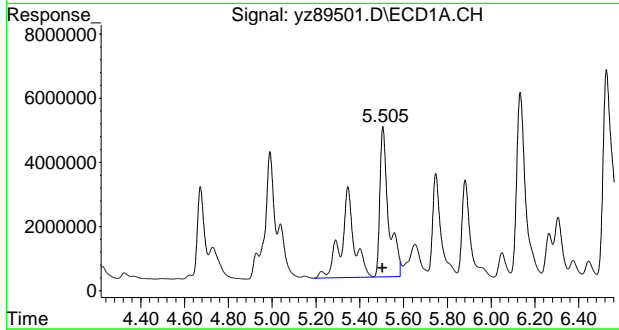
7.1.12
 7



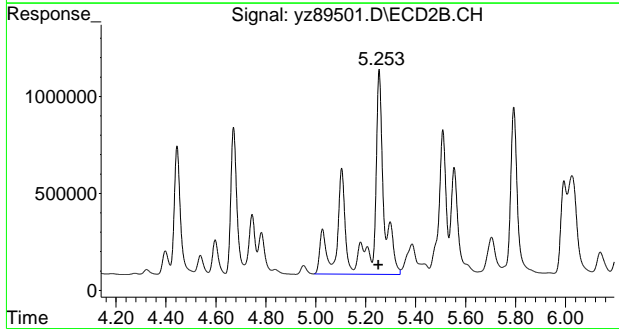
#33 AR1254-B
 R.T.: 4.990 min
 Delta R.T.: 0.001 min
 Response: 15871816
 Conc: 529.77 ppb m



#33 AR1254-B
 R.T.: 4.670 min
 Delta R.T.: 0.001 min
 Response: 2186737
 Conc: 468.67 ppb m

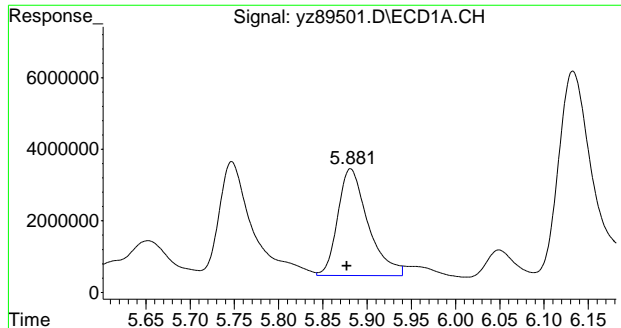


#34 AR1254-C
 R.T.: 5.505 min
 Delta R.T.: 0.001 min
 Response: 24868236
 Conc: 565.89 ppb m



#34 AR1254-C
 R.T.: 5.253 min
 Delta R.T.: 0.001 min
 Response: 4169994
 Conc: 553.51 ppb m

7.1.12
7



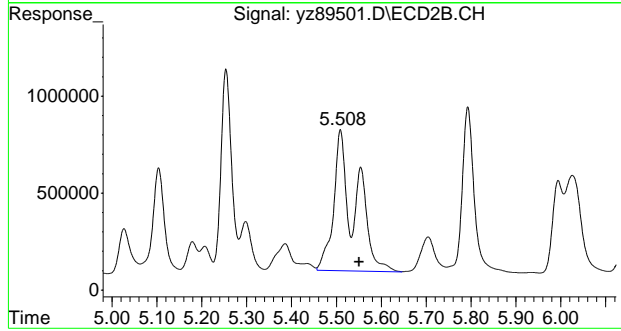
#35 AR1254-D

R.T.: 5.881 min

Delta R.T.: 0.005 min

Response: 7099332

Conc: 476.43 ppb m



#35 AR1254-D

R.T.: 5.508 min

Delta R.T.: -0.042 min

Response: 2424370

Conc: 637.08 ppb m

7.1.12
7

Manual Integrations
APPROVED
 (compounds with "m" flag)
Andri Piluri
04/29/14 12:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89502.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:09 pm
 Operator : sofyaz
 Sample : mc30076-12
 Misc : op37808,gyz7550,15.77,,,10,,s
 ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:29:02 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.505	2.175	10219989	1546776	27.116m	21.283
Spiked Amount	40.000 Range	42 - 132	Recovery	=	67.79%	53.21%
13) s DCB	9.675f	9.617f	8920482	1334431	27.110m	22.992m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	67.77%	57.48%
Target Compounds						
10) AR1260-D	7.512f	7.229	10547625	1503975	282.768m	240.513m
11) AR1260-E	7.944f	7.785	10354900	1452705	270.537m	237.906m
12) AR1260-F	8.919f	8.690f	2118533	305700	231.430	202.672
32) AR1254-A	4.670	4.444	10737692	1469828	478.042m	466.151m
33) AR1254-B	4.989	4.669	17694697	2453651	590.619m	525.872m
34) AR1254-C	5.504	5.254	28524045	4356113	649.075m	578.215m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.1.13
7

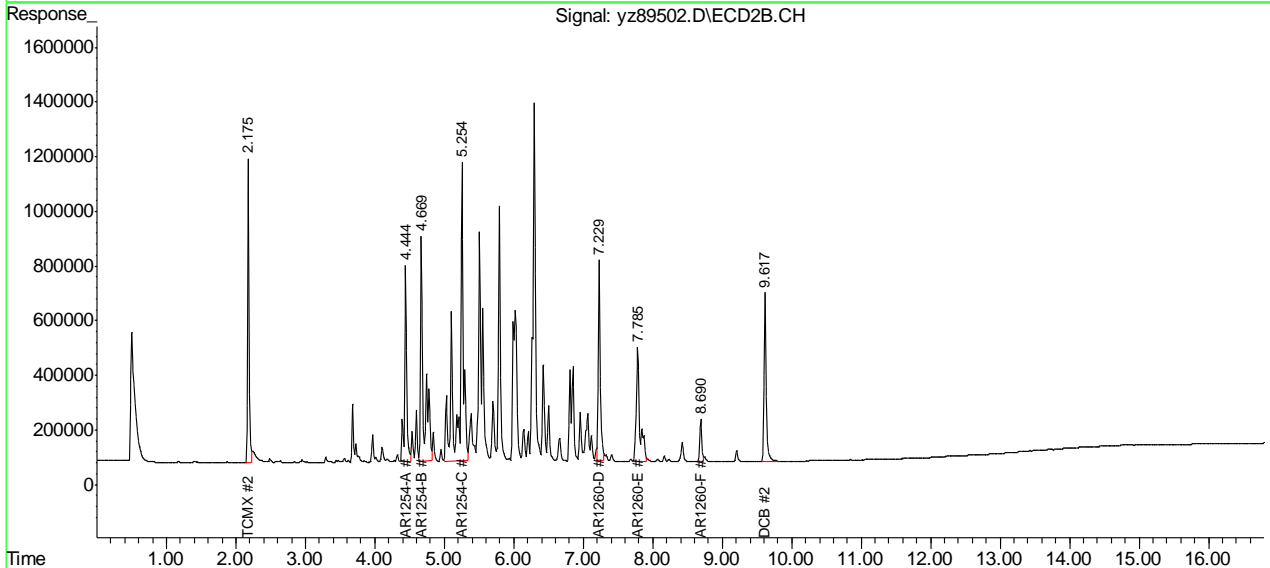
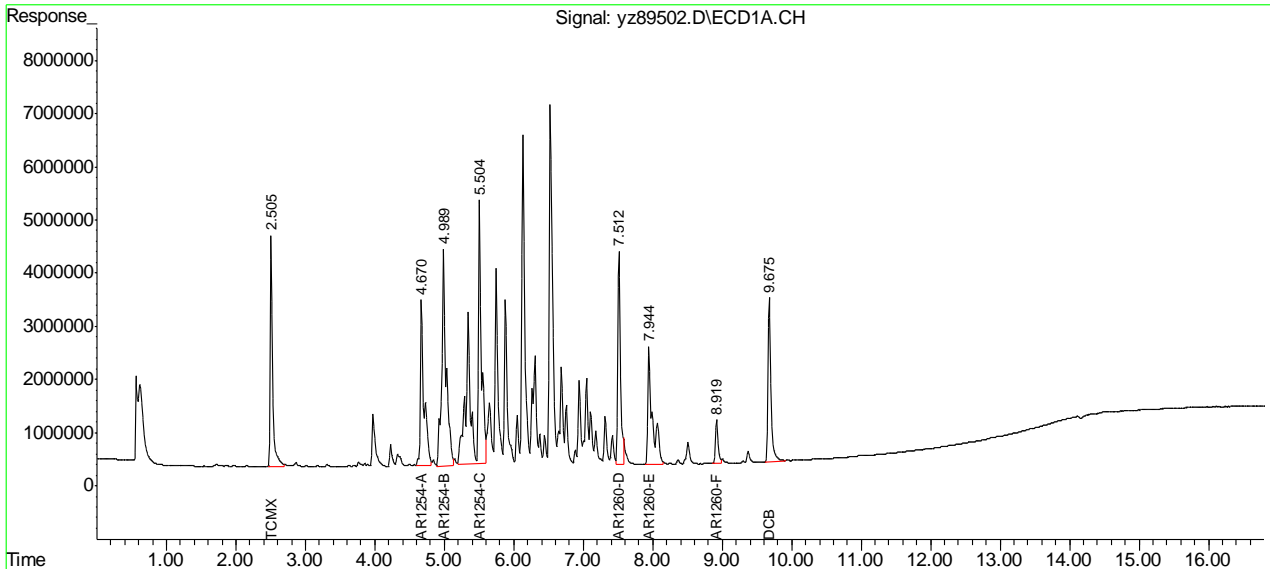
Quantitation Report (QT Reviewed)

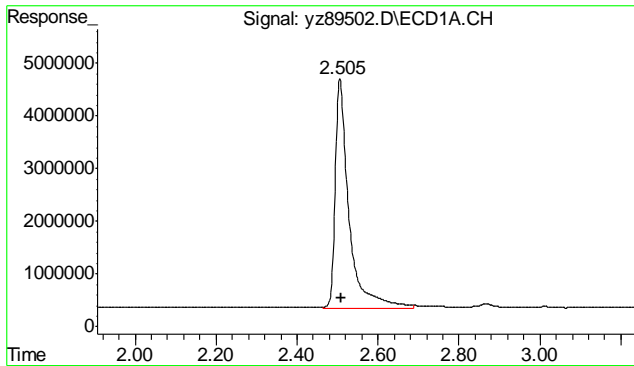
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89502.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:09 pm
 Operator : sofyaz
 Sample : mc30076-12
 Misc : op37808,gyz7550,15.77,,,10,,s
 ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:29:02 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

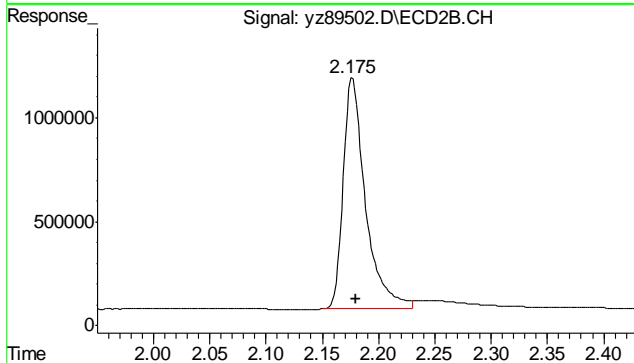
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

7.1.13
7

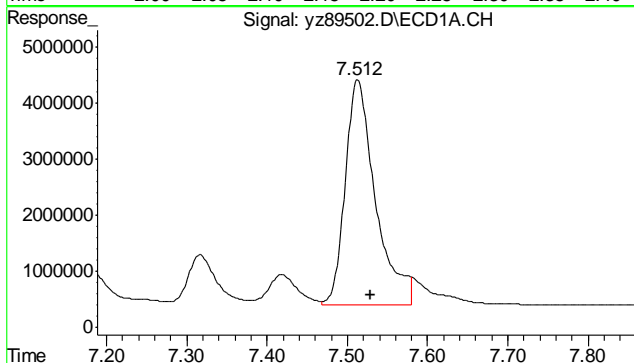




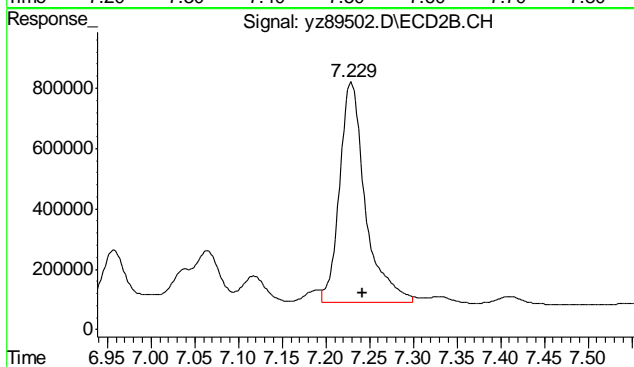
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 10219989
 Conc: 27.12 ppb m



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 1546776
 Conc: 21.28 ppb

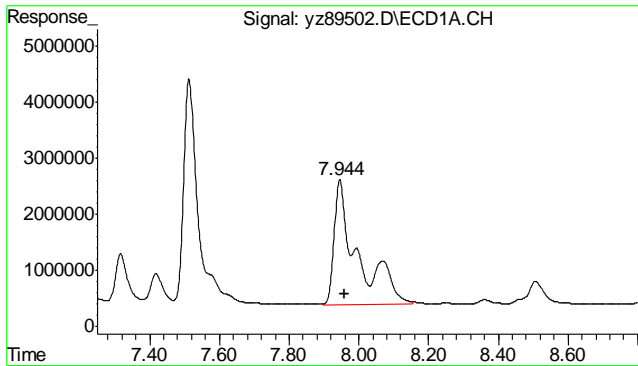


#10 AR1260-D
 R.T.: 7.512 min
 Delta R.T.: -0.016 min
 Response: 10547625
 Conc: 282.77 ppb m

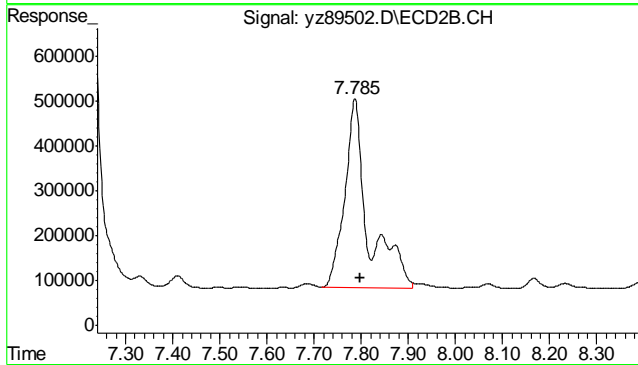


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.013 min
 Response: 1503975
 Conc: 240.51 ppb m

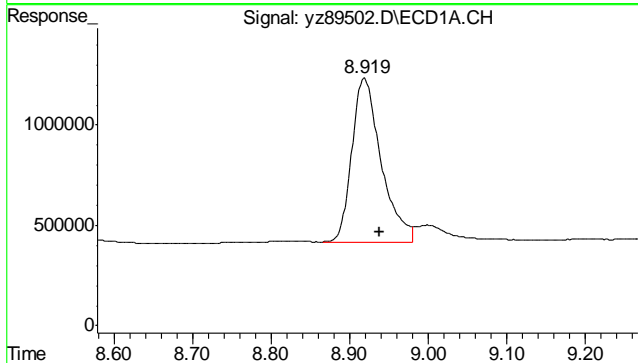
7.1.13
7



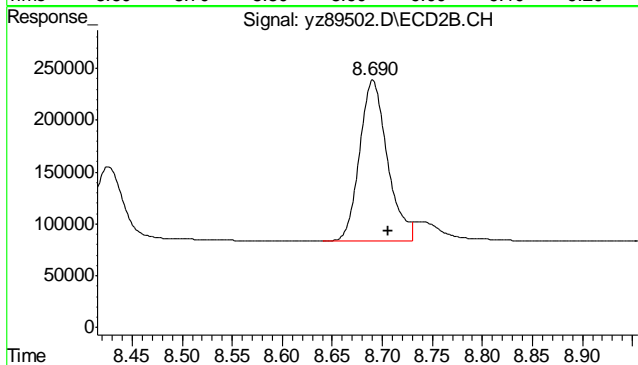
#11 AR1260-E
 R.T.: 7.944 min
 Delta R.T.: -0.016 min
 Response: 10354900
 Conc: 270.54 ppb m



#11 AR1260-E
 R.T.: 7.785 min
 Delta R.T.: -0.013 min
 Response: 1452705
 Conc: 237.91 ppb m

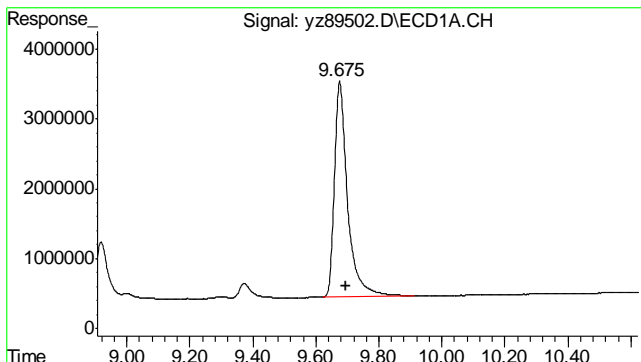


#12 AR1260-F
 R.T.: 8.919 min
 Delta R.T.: -0.020 min
 Response: 2118533
 Conc: 231.43

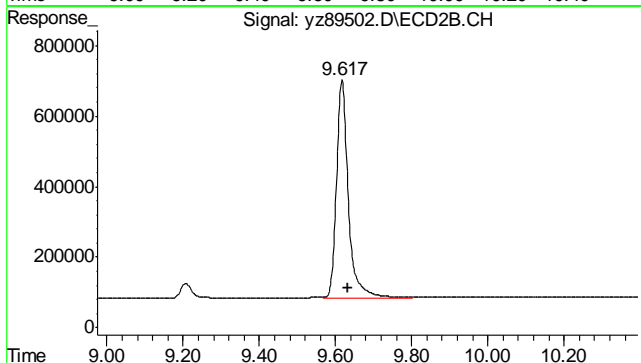


#12 AR1260-F
 R.T.: 8.690 min
 Delta R.T.: -0.016 min
 Response: 305700
 Conc: 202.67

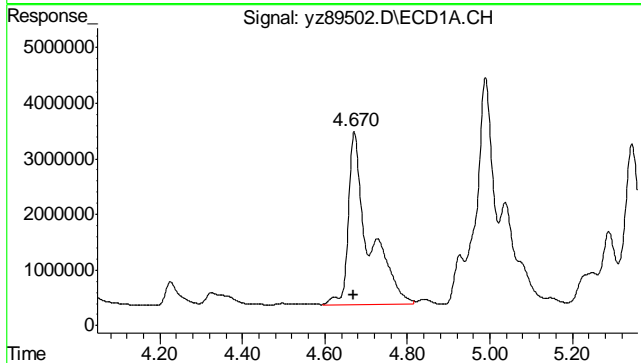
7.1.13
 7



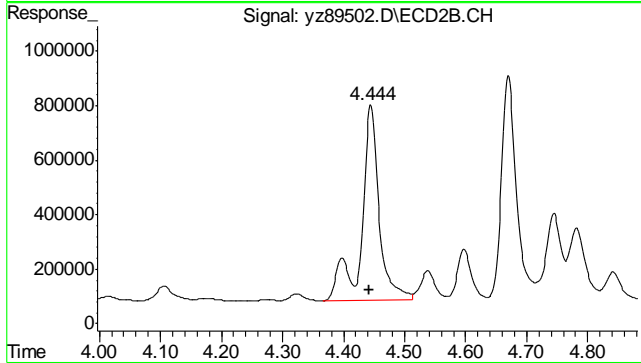
#13 DCB
 R.T.: 9.675 min
 Delta R.T.: -0.020 min
 Response: 8920482
 Conc: 27.11 ppb m



#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 1334431
 Conc: 22.99 ppb m

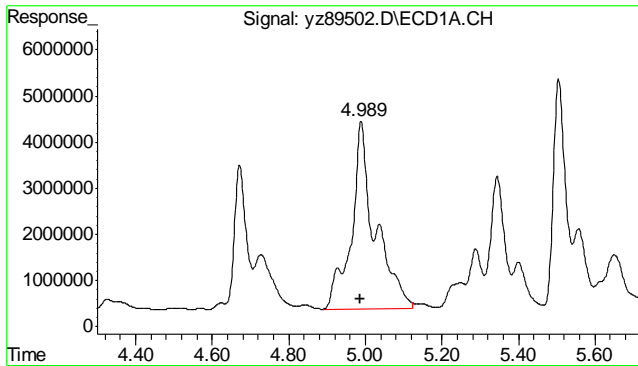


#32 AR1254-A
 R.T.: 4.670 min
 Delta R.T.: 0.000 min
 Response: 10737692
 Conc: 478.04 ppb m

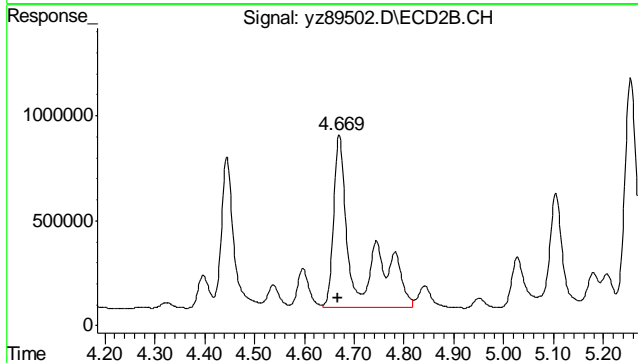


#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.002 min
 Response: 1469828
 Conc: 466.15 ppb m

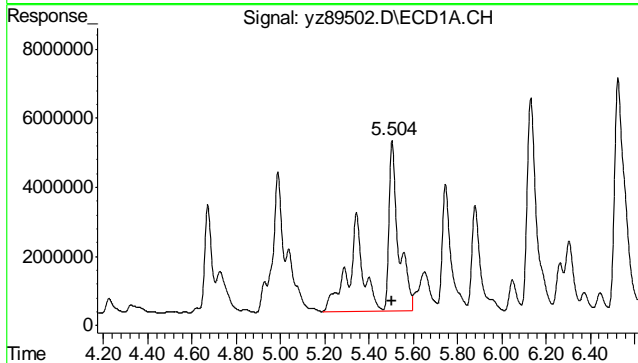
7.1.13
7



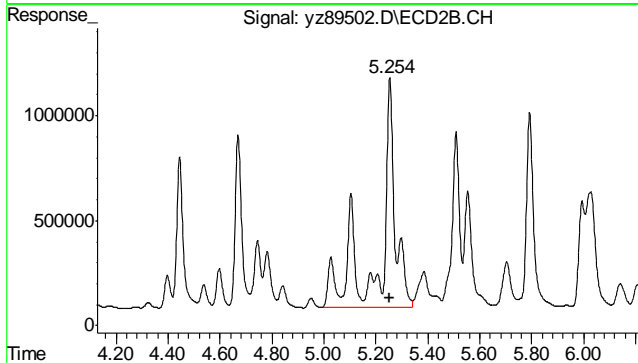
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.000 min
 Response: 17694697
 Conc: 590.62 ppb m



#33 AR1254-B
 R.T.: 4.669 min
 Delta R.T.: 0.000 min
 Response: 2453651
 Conc: 525.87 ppb m



#34 AR1254-C
 R.T.: 5.504 min
 Delta R.T.: 0.000 min
 Response: 28524045
 Conc: 649.07 ppb m



#34 AR1254-C
 R.T.: 5.254 min
 Delta R.T.: 0.002 min
 Response: 4356113
 Conc: 578.22 ppb m

7.1.13
7

Manual Integrations
APPROVED
 (compounds with "m" flag)
Andri Piluri
04/29/14 12:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89503.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:29 pm
 Operator : sofyaz
 Sample : mc30076-13
 Misc : op37808,gyz7550,15.42,,,10,,,s
 ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:46:23 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.503	2.174	11793065	1849770	31.290	25.452m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	78.22%	63.63%
13) s DCB	9.676f	9.616f	10424237	1528530	31.680m	26.336m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	79.20%	65.84%
Target Compounds						
10) AR1260-D	7.513f	7.228	1703500	279750	45.669	44.737
11) AR1260-E	7.943f	7.786	1863099	267456	48.676m	43.801m
12) AR1260-F	8.918f	8.689f	437393	65186	47.781	43.217
32) AR1254-A	4.669	4.444	1044375	151456	46.496m	48.034m
33) AR1254-B	4.988	4.669	1561939	255635	52.135m	54.788m
34) AR1254-C	5.504	5.253	2807046	459291	63.875m	60.965m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.1.14
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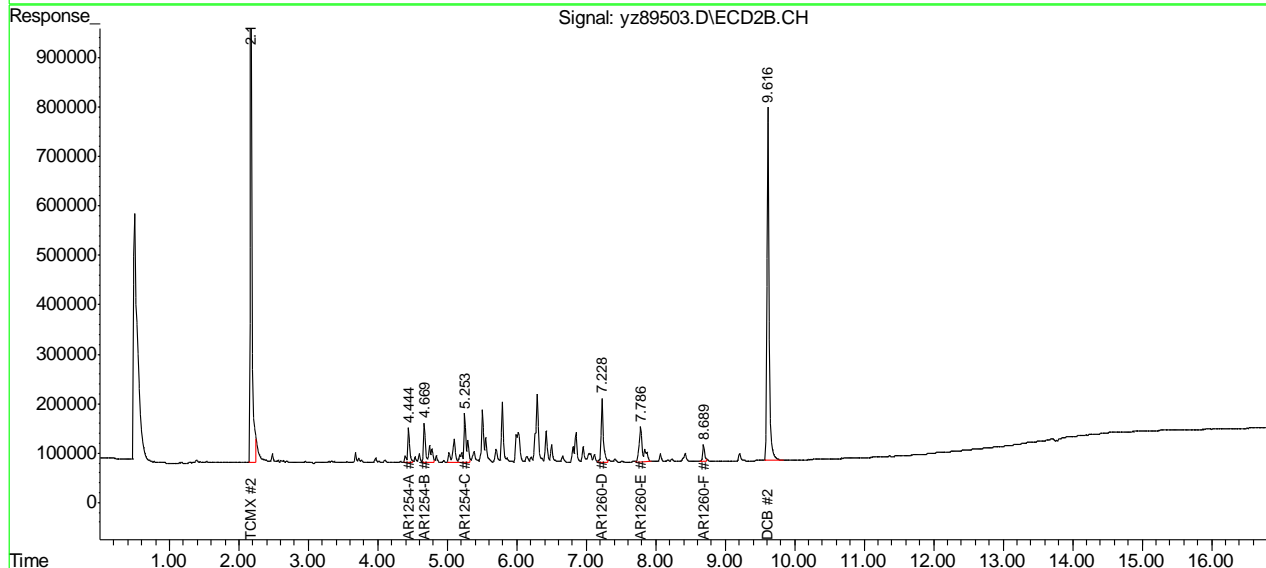
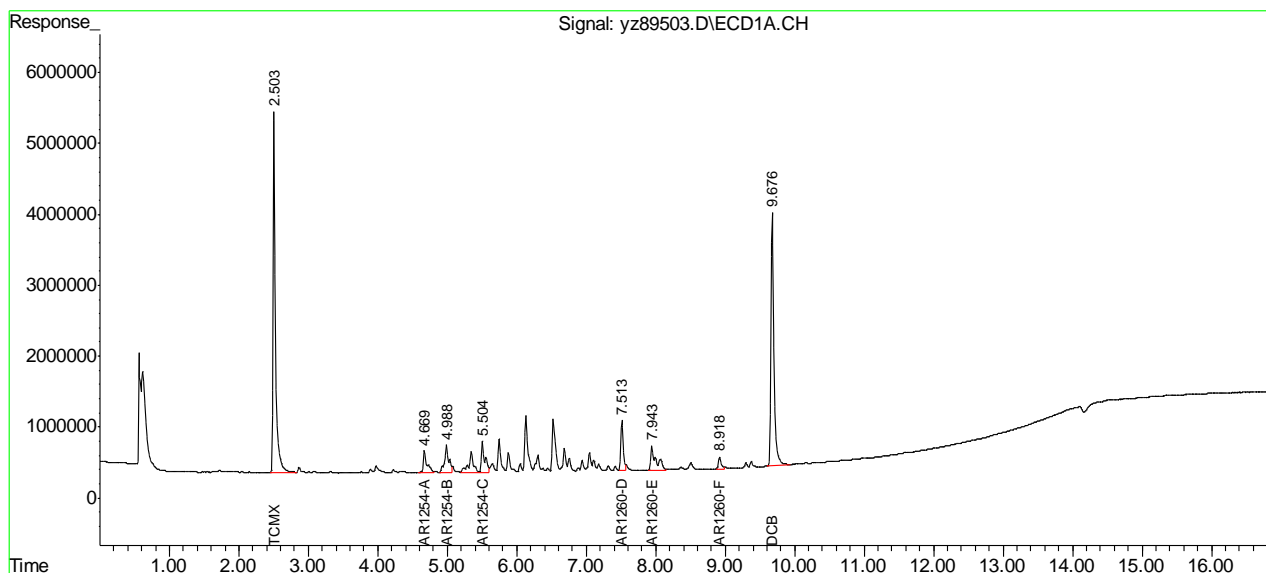
Quantitation Report (QT Reviewed)

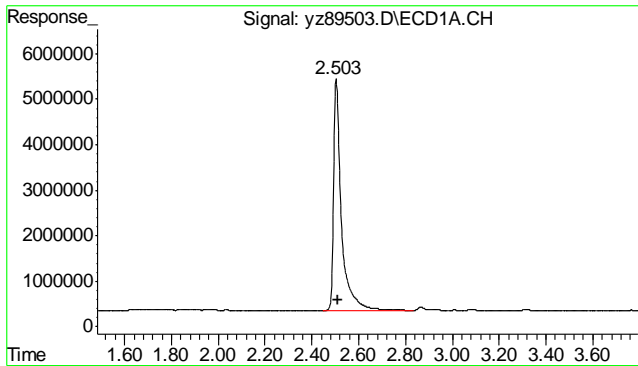
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89503.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:29 pm
 Operator : sofyaz
 Sample : mc30076-13
 Misc : op37808,gyz7550,15.42,,,10,,s
 ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:46:23 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

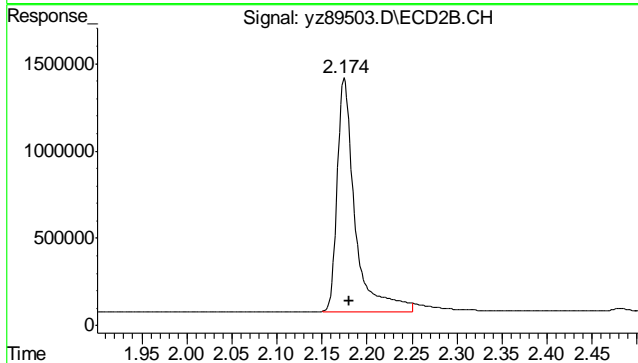
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase: pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

7.1.14
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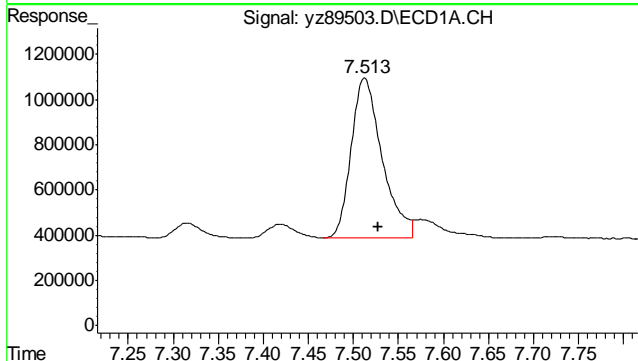




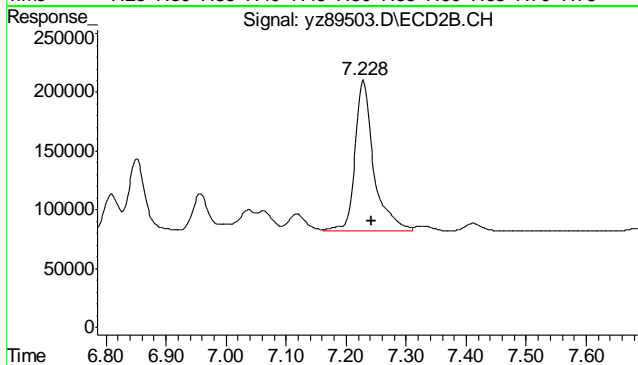
#1 TCMX
 R.T.: 2.503 min
 Delta R.T.: -0.007 min
 Response: 11793065
 Conc: 31.29 ppb



#1 TCMX
 R.T.: 2.174 min
 Delta R.T.: -0.006 min
 Response: 1849770
 Conc: 25.45 ppb m

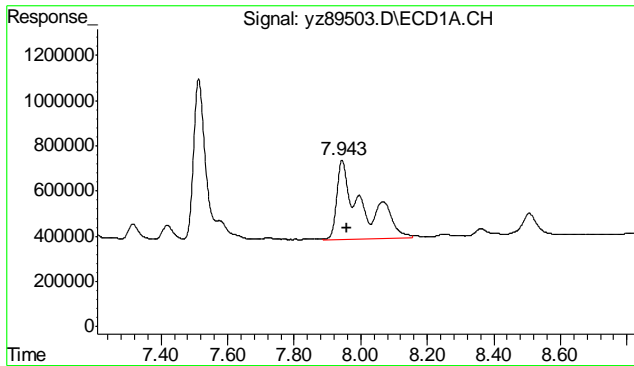


#10 AR1260-D
 R.T.: 7.513 min
 Delta R.T.: -0.016 min
 Response: 1703500
 Conc: 45.67 ppb

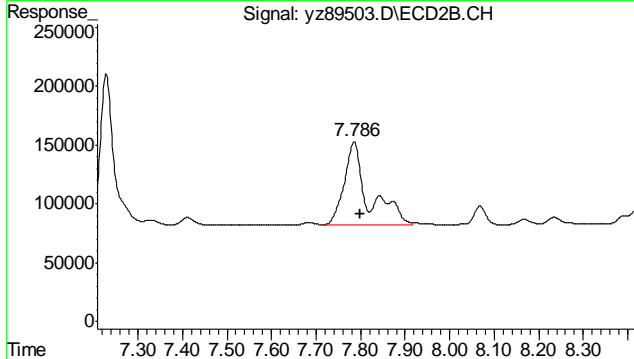


#10 AR1260-D
 R.T.: 7.228 min
 Delta R.T.: -0.014 min
 Response: 279750
 Conc: 44.74 ppb

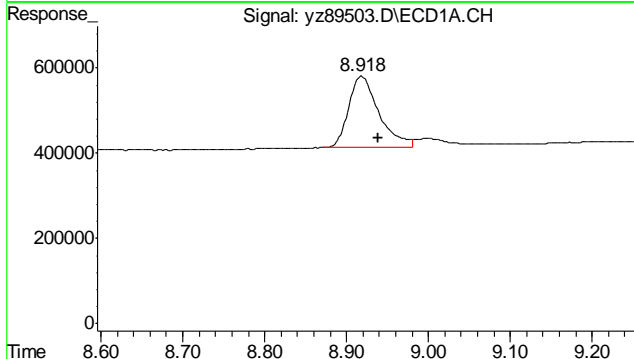
7.1.14
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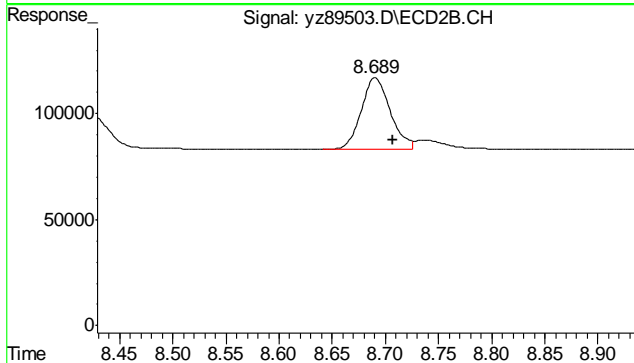
#11 AR1260-E
 R.T.: 7.943 min
 Delta R.T.: -0.017 min
 Response: 1863099
 Conc: 48.68 ppb m



#11 AR1260-E
 R.T.: 7.786 min
 Delta R.T.: -0.012 min
 Response: 267456
 Conc: 43.80 ppb m

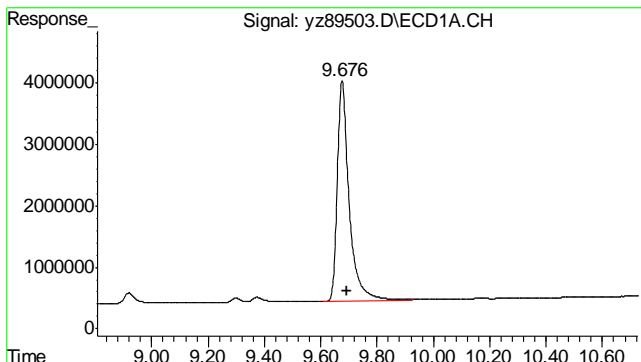


#12 AR1260-F
 R.T.: 8.918 min
 Delta R.T.: -0.021 min
 Response: 437393
 Conc: 47.78

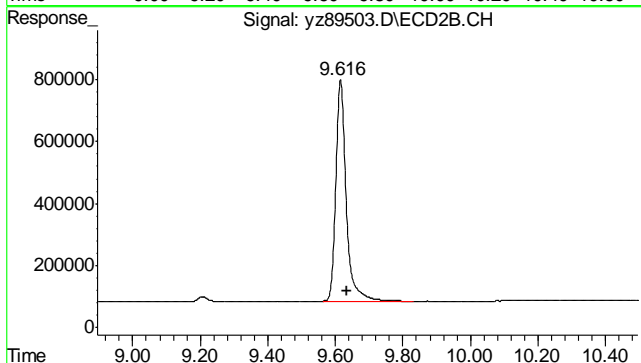


#12 AR1260-F
 R.T.: 8.689 min
 Delta R.T.: -0.017 min
 Response: 65186
 Conc: 43.22

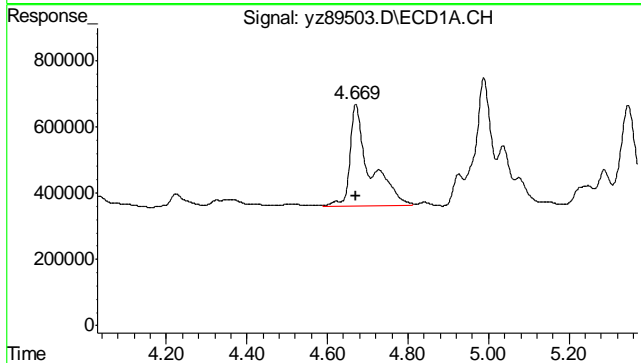
7.1.14
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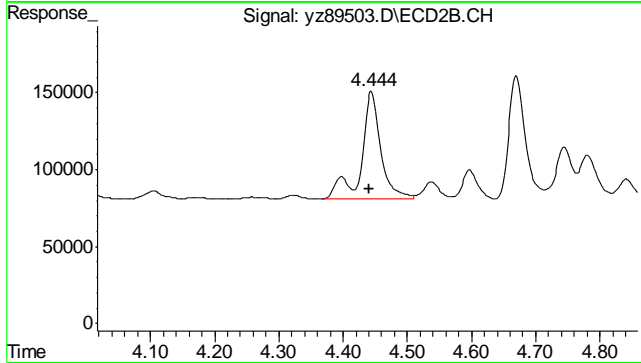
#13 DCB
 R.T.: 9.676 min
 Delta R.T.: -0.019 min
 Response: 10424237
 Conc: 31.68 ppb m



#13 DCB
 R.T.: 9.616 min
 Delta R.T.: -0.017 min
 Response: 1528530
 Conc: 26.34 ppb m

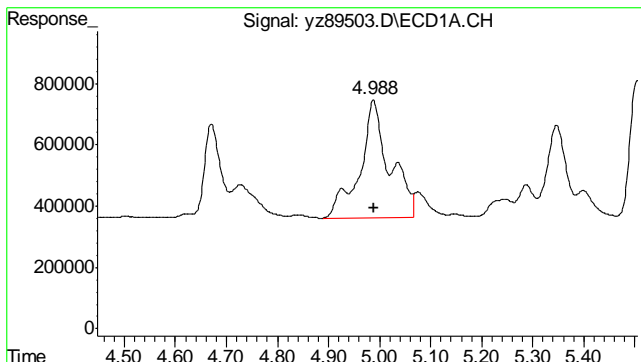


#32 AR1254-A
 R.T.: 4.669 min
 Delta R.T.: 0.000 min
 Response: 1044375
 Conc: 46.50 ppb m

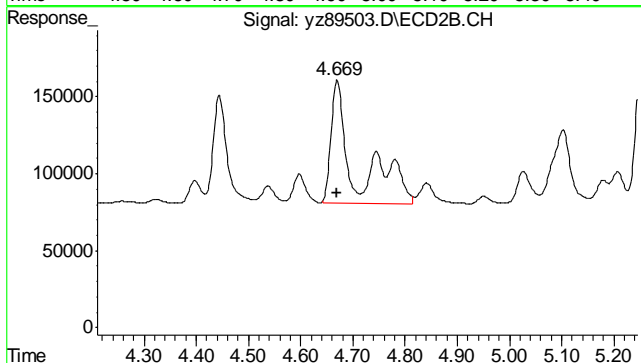


#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.002 min
 Response: 151456
 Conc: 48.03 ppb m

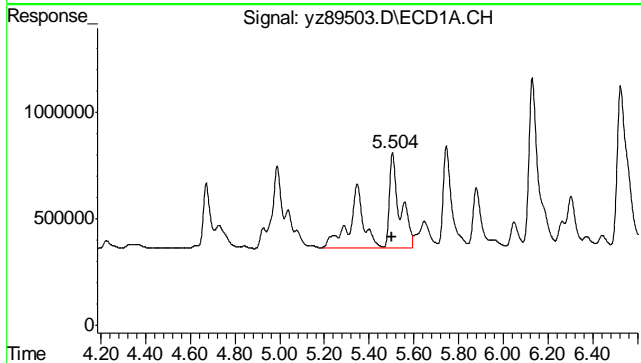
7.1.14
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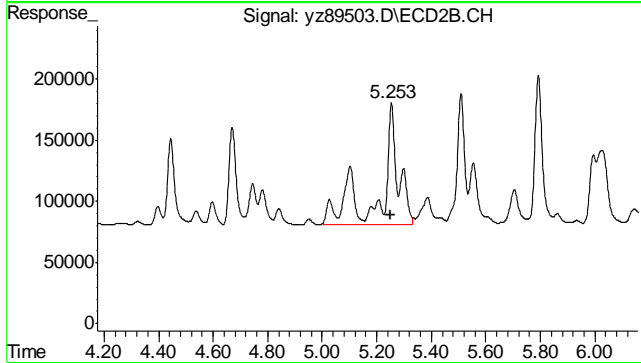
#33 AR1254-B
 R.T.: 4.988 min
 Delta R.T.: 0.000 min
 Response: 1561939
 Conc: 52.13 ppb m



#33 AR1254-B
 R.T.: 4.669 min
 Delta R.T.: 0.000 min
 Response: 255635
 Conc: 54.79 ppb m



#34 AR1254-C
 R.T.: 5.504 min
 Delta R.T.: 0.000 min
 Response: 2807046
 Conc: 63.88 ppb m



#34 AR1254-C
 R.T.: 5.253 min
 Delta R.T.: 0.000 min
 Response: 459291
 Conc: 60.96 ppb m

7.1.14
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Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89504.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:48 pm
 Operator : sofyaz
 Sample : mc30076-14
 Misc : op37808,gyz7550,15.27,,,10,,s
 ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:45:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.174	11460408	1762889	30.407m	24.256m
Spiked Amount	40.000 Range	42 - 132	Recovery =	76.02%	60.64%	
13) s DCB	9.674f	9.616f	10934787	1633310	33.231m	28.142m
Spiked Amount	40.000 Range	30 - 150	Recovery =	83.08%	70.36%	
Target Compounds						
10) AR1260-D	7.511f	7.229	1870874	287962	50.156m	46.050
11) AR1260-E	7.942f	7.787	1909524	277208	49.889m	45.398m
12) AR1260-F	8.917f	8.691f	342937	55510	37.463m	36.802m
32) AR1254-A	4.669	4.442	1158980	182201	51.598m	57.784m
33) AR1254-B	4.987	4.669	2088978	367627	69.727m	78.791m
35) AR1254-D	5.879	5.509f	926440	346416	62.172m	91.031m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

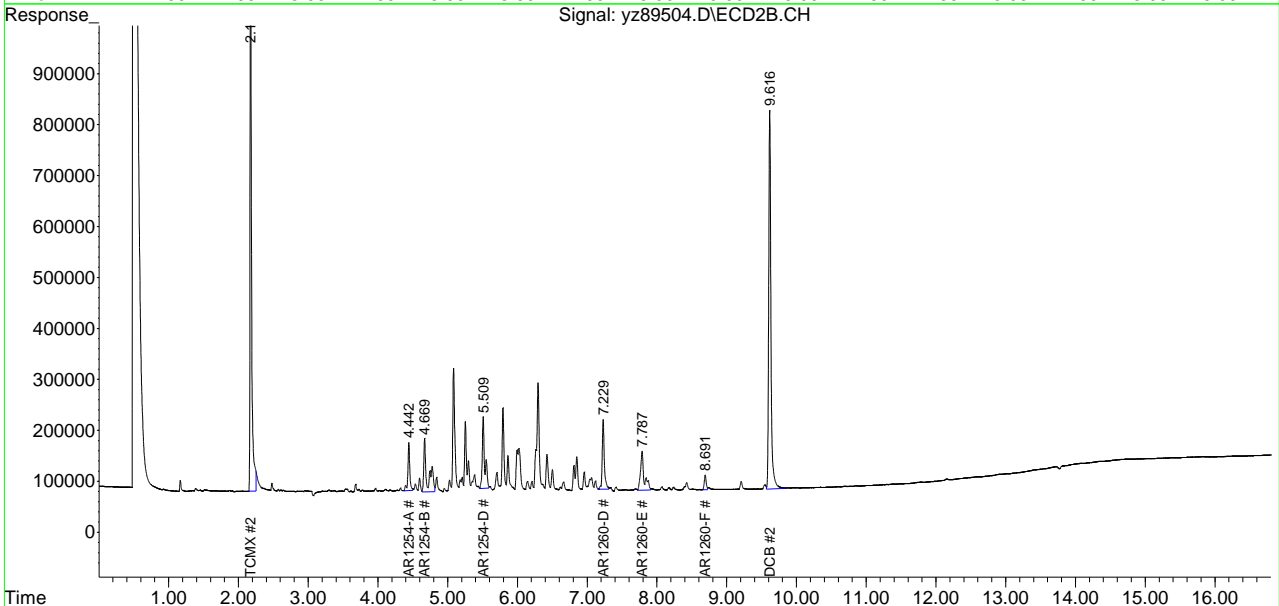
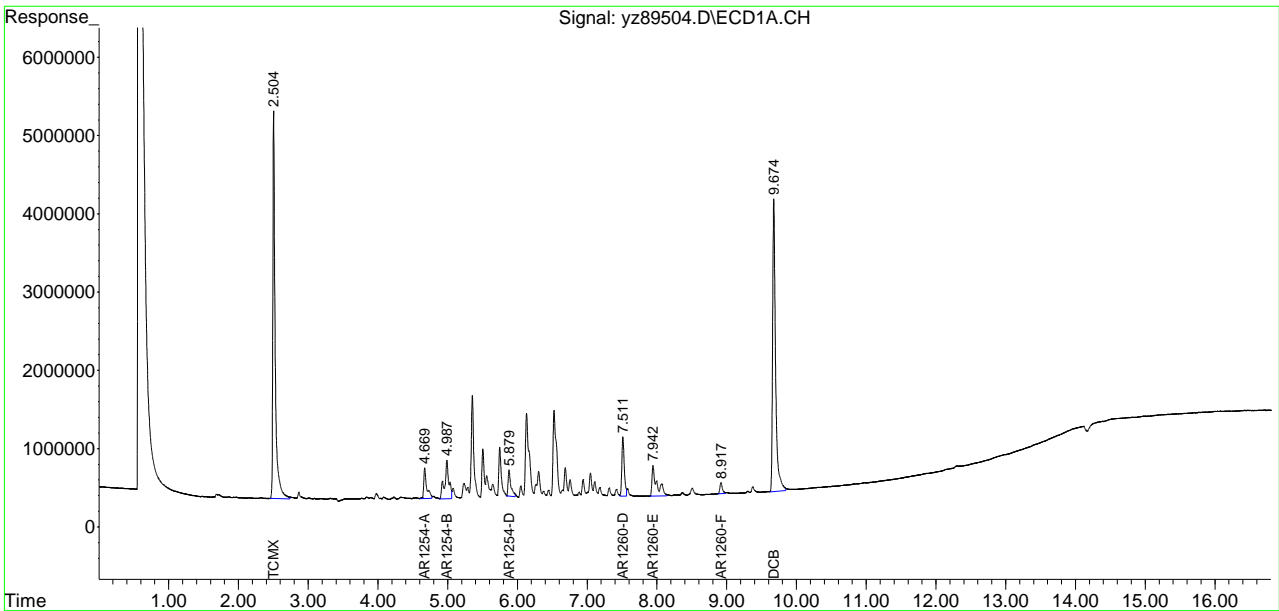
7.1.15
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Quantitation Report (QT Reviewed)

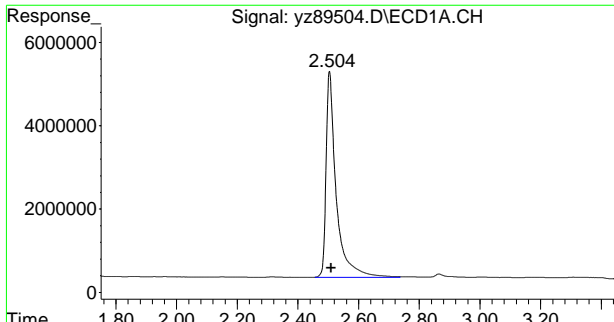
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89504.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 7:48 pm
 Operator : sofyaz
 Sample : mc30076-14
 Misc : op37808,gyz7550,15.27,,,10,,s
 ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:45:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

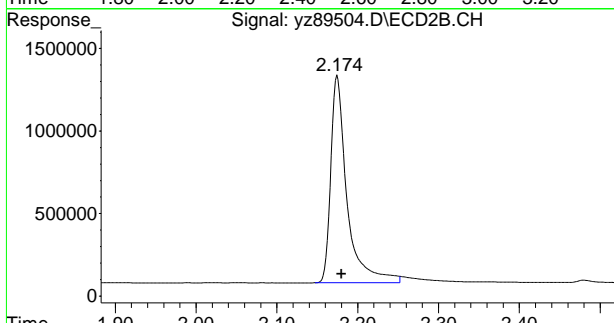
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



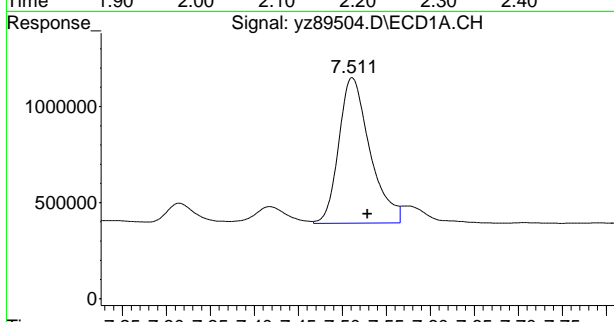
7.1.15
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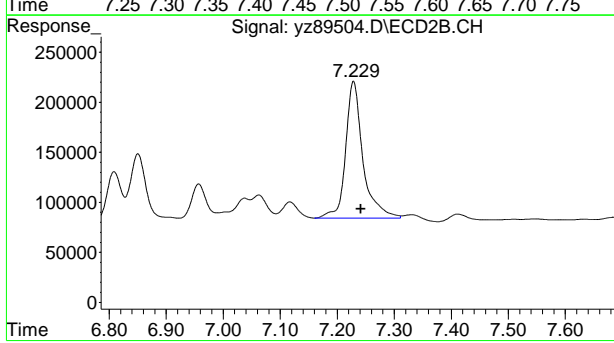
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 11460408
 Conc: 30.41 ppb m



#1 TCMX
 R.T.: 2.174 min
 Delta R.T.: -0.006 min
 Response: 1762889
 Conc: 24.26 ppb m

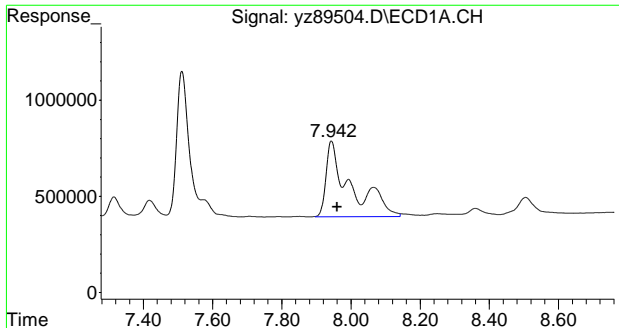


#10 AR1260-D
 R.T.: 7.511 min
 Delta R.T.: -0.018 min
 Response: 1870874
 Conc: 50.16 ppb m

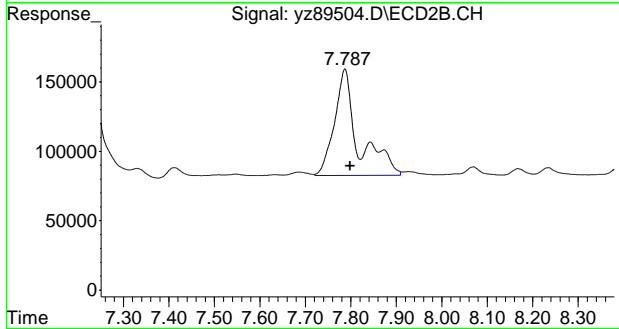


#10 AR1260-D
 R.T.: 7.229 min
 Delta R.T.: -0.013 min
 Response: 287962
 Conc: 46.05 ppb

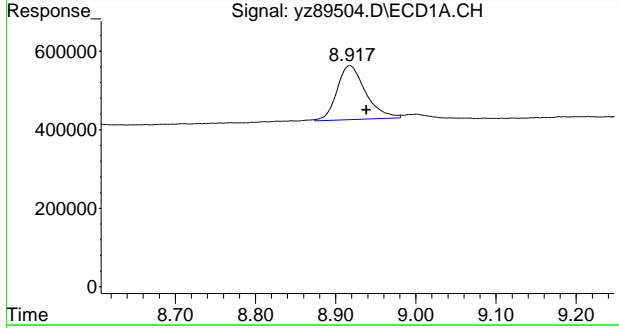
7.1.15
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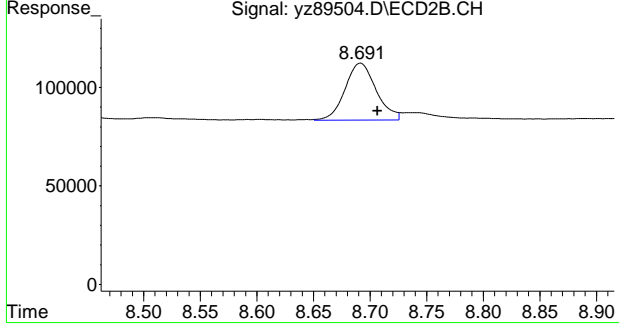
#11 AR1260-E
R.T.: 7.942 min
Delta R.T.: -0.018 min
Response: 1909524
Conc: 49.89 ppb m



#11 AR1260-E
R.T.: 7.787 min
Delta R.T.: -0.011 min
Response: 277208
Conc: 45.40 ppb m

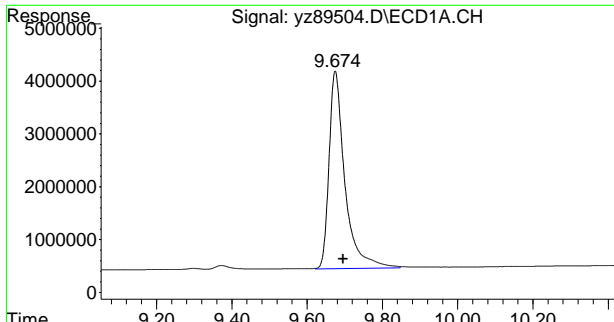


#12 AR1260-F
R.T.: 8.917 min
Delta R.T.: -0.021 min
Response: 342937
Conc: 37.46 m

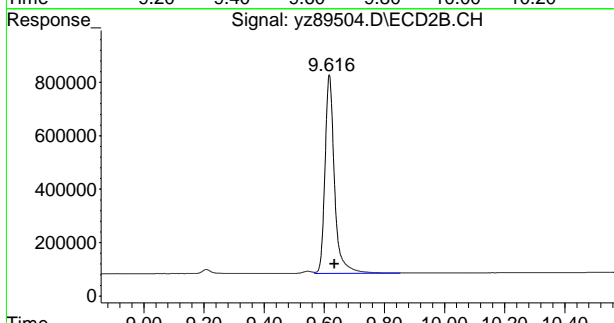


#12 AR1260-F
R.T.: 8.691 min
Delta R.T.: -0.016 min
Response: 55510
Conc: 36.80 m

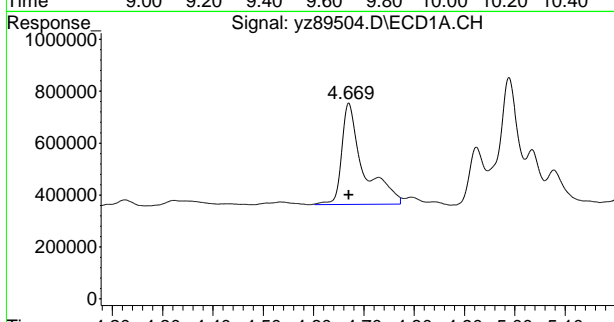
7.1.15
7



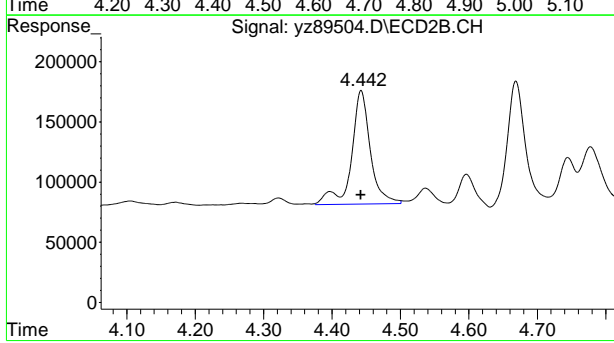
#13 DCB
 R.T.: 9.674 min
 Delta R.T.: -0.021 min
 Response: 10934787
 Conc: 33.23 ppb m



#13 DCB
 R.T.: 9.616 min
 Delta R.T.: -0.018 min
 Response: 1633310
 Conc: 28.14 ppb m

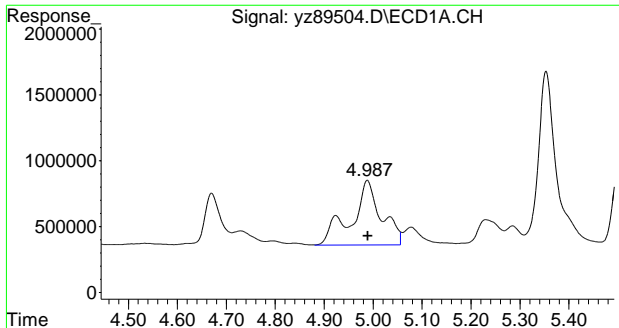


#32 AR1254-A
 R.T.: 4.669 min
 Delta R.T.: -0.001 min
 Response: 1158980
 Conc: 51.60 ppb m

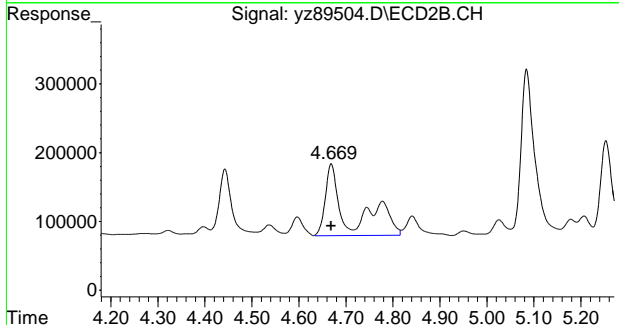


#32 AR1254-A
 R.T.: 4.442 min
 Delta R.T.: 0.000 min
 Response: 182201
 Conc: 57.78 ppb m

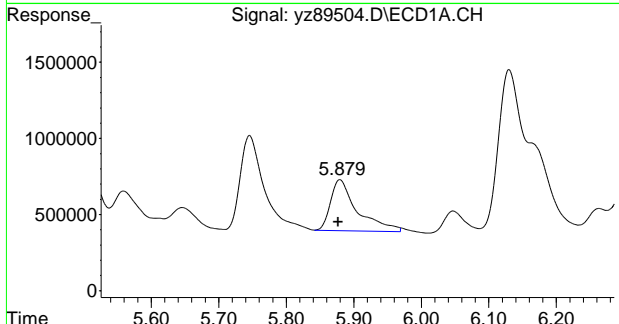
7.1.15
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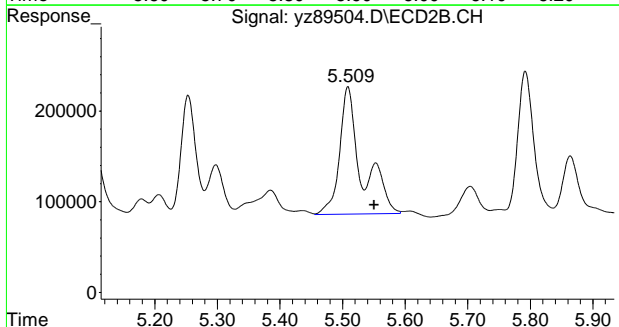
#33 AR1254-B
 R.T.: 4.987 min
 Delta R.T.: -0.001 min
 Response: 2088978
 Conc: 69.73 ppb m



#33 AR1254-B
 R.T.: 4.669 min
 Delta R.T.: 0.000 min
 Response: 367627
 Conc: 78.79 ppb m



#35 AR1254-D
 R.T.: 5.879 min
 Delta R.T.: 0.002 min
 Response: 926440
 Conc: 62.17 ppb m



#35 AR1254-D
 R.T.: 5.509 min
 Delta R.T.: -0.041 min
 Response: 346416
 Conc: 91.03 ppb m

7.1.15
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Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89505.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 8:08 pm
 Operator : sofyaz
 Sample : mc30076-15
 Misc : op37808,gyz7550,15.52,,,10,,s
 ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:46:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.505	2.175	9914831	1610574	26.306	22.161
	Spiked Amount	40.000 Range	42 - 132	Recovery =		65.77%	55.40%
13)	s DCB	9.675f	9.615f	9844503	1451505	29.918m	25.009
	Spiked Amount	40.000 Range	30 - 150	Recovery =		74.80%	62.52%
Target Compounds							
12)	AR1260-F	8.918f	8.690f	1295435	186742	141.514	123.806
32)	AR1254-A	4.670	4.443	6606551	926860	294.124m	293.950m
33)	AR1254-B	4.988	4.668	13526655	2040701	451.497m	437.368m
34)	AR1254-C	5.503	5.253	32172551	4966907	732.098m	659.290m
35)	AR1254-D	5.878	5.553	12012325	3307351	806.128m	869.107m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

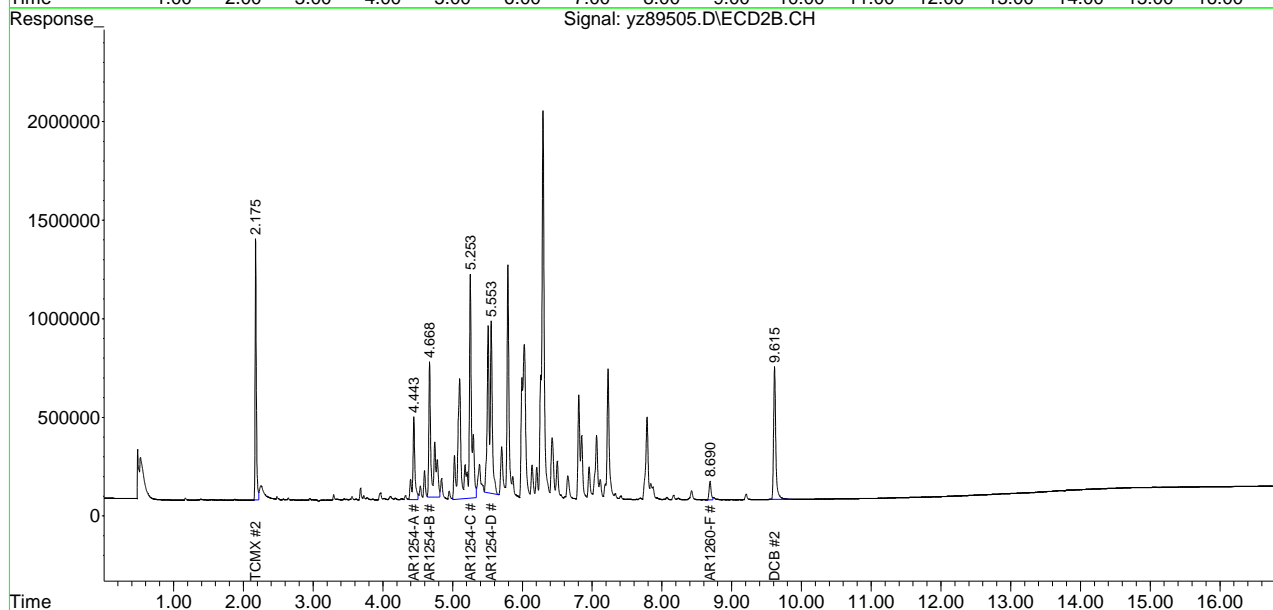
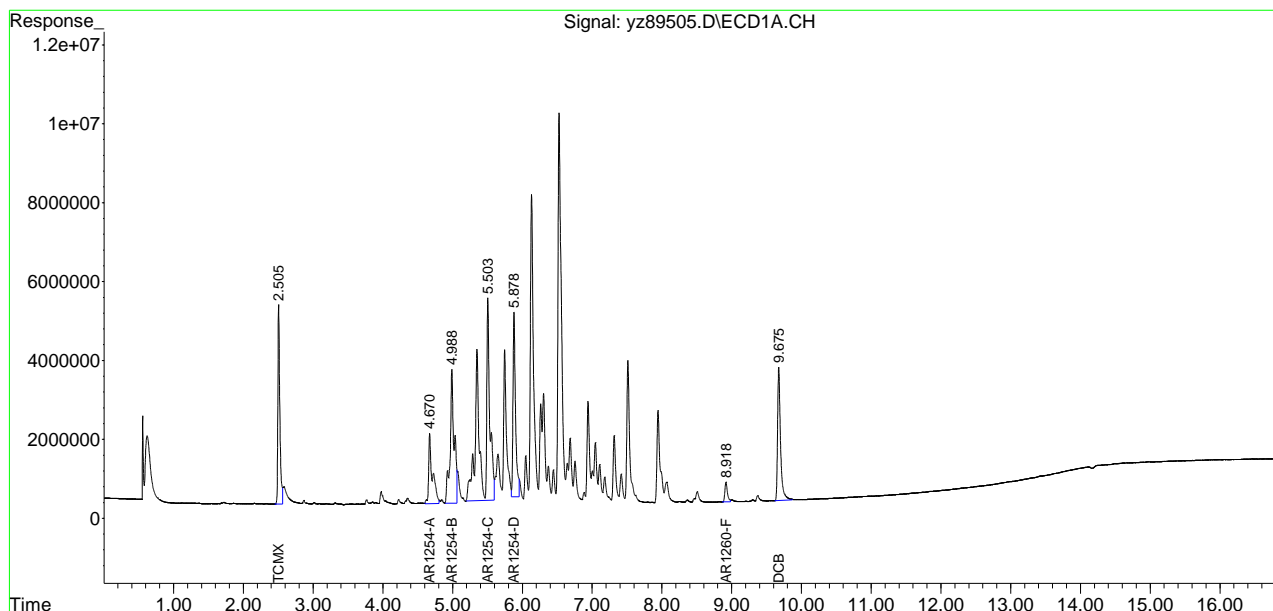
7.1.16
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Quantitation Report (QT Reviewed)

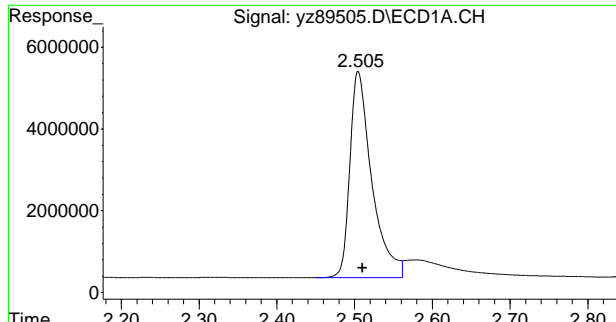
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89505.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 8:08 pm
 Operator : sofyaz
 Sample : mc30076-15
 Misc : op37808,gyz7550,15.52,,,10,,s
 ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:46:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

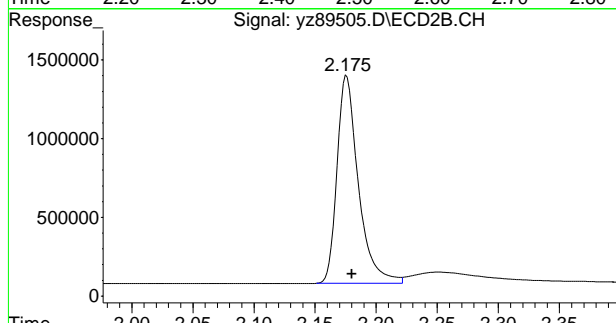
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



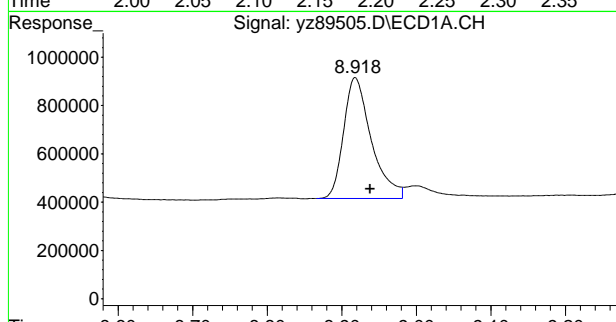
7.1.16
 7



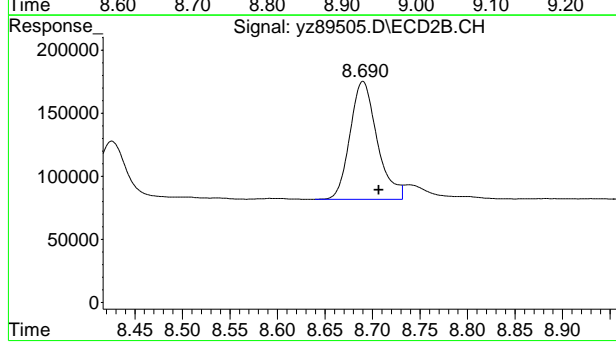
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 9914831
 Conc: 26.31 ppb



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 1610574
 Conc: 22.16 ppb

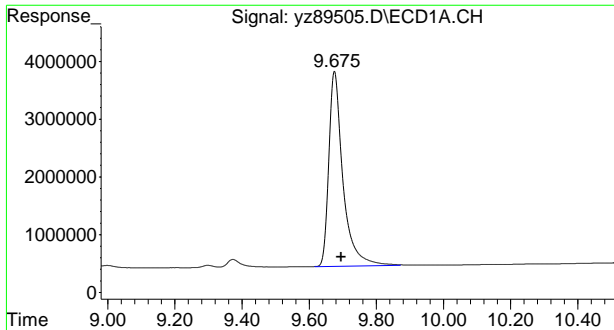


#12 AR1260-F
 R.T.: 8.918 min
 Delta R.T.: -0.020 min
 Response: 1295435
 Conc: 141.51

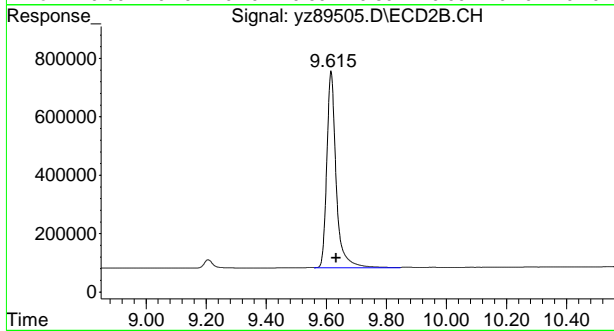


#12 AR1260-F
 R.T.: 8.690 min
 Delta R.T.: -0.017 min
 Response: 186742
 Conc: 123.81

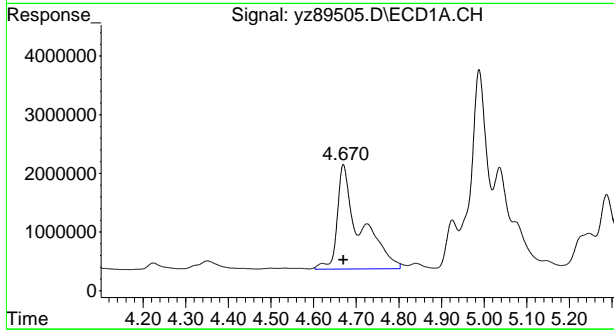
7.1.16
 7



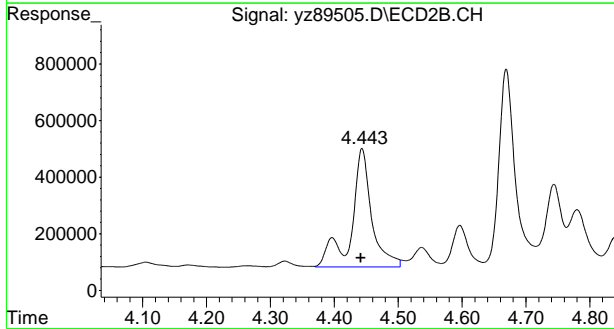
#13 DCB
 R.T.: 9.675 min
 Delta R.T.: -0.020 min
 Response: 9844503
 Conc: 29.92 ppb m



#13 DCB
 R.T.: 9.615 min
 Delta R.T.: -0.019 min
 Response: 1451505
 Conc: 25.01 ppb

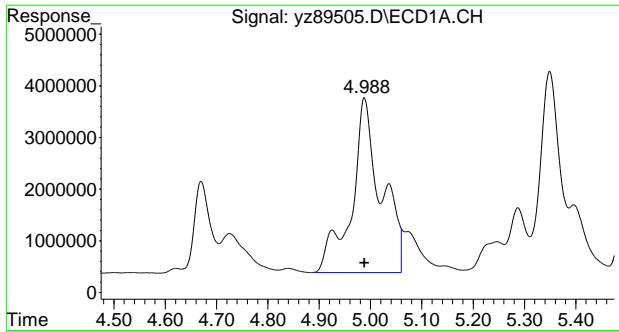


#32 AR1254-A
 R.T.: 4.670 min
 Delta R.T.: 0.000 min
 Response: 6606551
 Conc: 294.12 ppb m

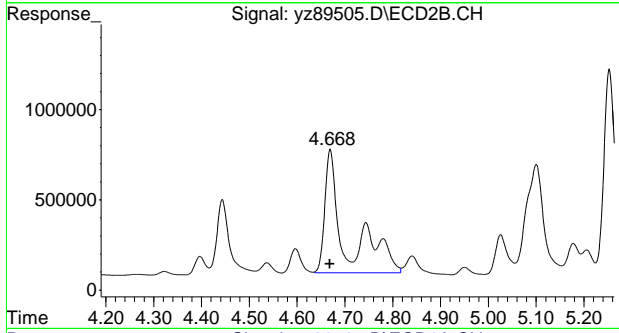


#32 AR1254-A
 R.T.: 4.443 min
 Delta R.T.: 0.001 min
 Response: 926860
 Conc: 293.95 ppb m

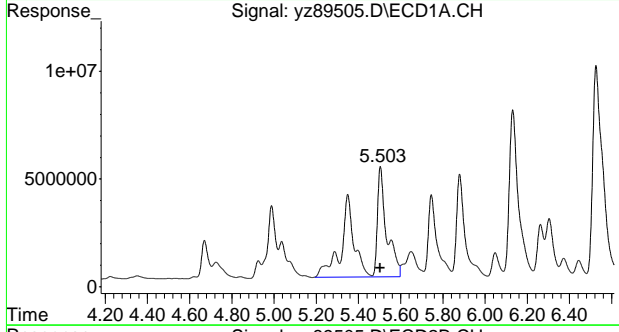
7.1.16
 7



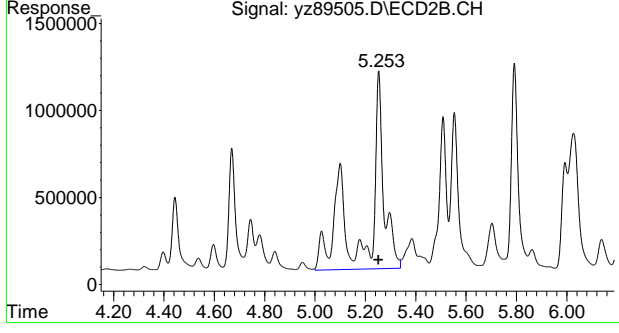
#33 AR1254-B
 R.T.: 4.988 min
 Delta R.T.: 0.000 min
 Response: 13526655
 Conc: 451.50 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: 0.000 min
 Response: 2040701
 Conc: 437.37 ppb m

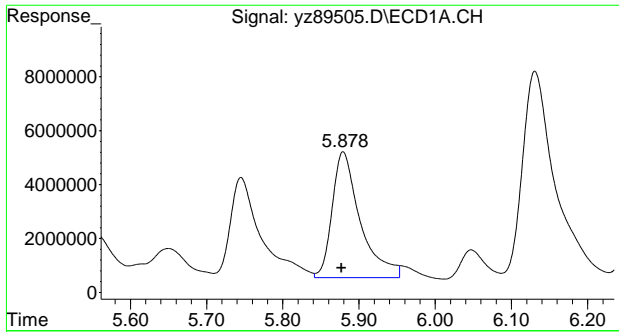


#34 AR1254-C
 R.T.: 5.503 min
 Delta R.T.: 0.000 min
 Response: 32172551
 Conc: 732.10 ppb m



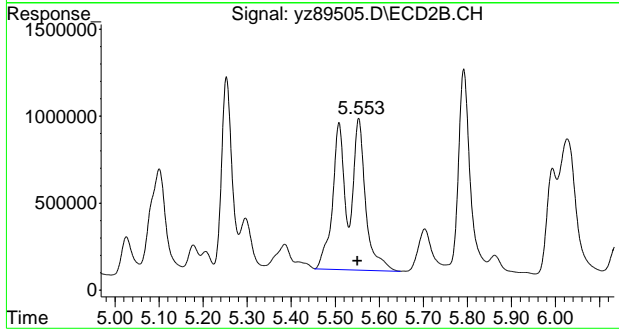
#34 AR1254-C
 R.T.: 5.253 min
 Delta R.T.: 0.001 min
 Response: 4966907
 Conc: 659.29 ppb m

7.1.16
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#35 AR1254-D

R.T.: 5.878 min
Delta R.T.: 0.001 min
Response: 12012325
Conc: 806.13 ppb m



#35 AR1254-D

R.T.: 5.553 min
Delta R.T.: 0.003 min
Response: 3307351
Conc: 869.11 ppb m

7.1.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89506.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 8:28 pm
 Operator : sofyaz
 Sample : mc30076-16
 Misc : op37808,gyz7550,15.49,,,10,,s
 ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:08:05 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.174	12293078	2000561	32.616	27.527m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	81.54%	68.82%
13) s DCB	9.676f	9.616f	11622933	1688777	35.323m	29.098m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	88.31%	72.74%
Target Compounds						
10) AR1260-D	7.513f	7.228	8348705	1205175	223.818m	192.730m
11) AR1260-E	7.944f	7.786	8532104	1183327	222.914m	193.791m
12) AR1260-F	8.918f	8.689f	2039761	282637	222.825	187.382
32) AR1254-A	4.671	4.444	4652032	707175	207.109m	224.278m
33) AR1254-B	4.989	4.668	7244090	1435413	241.796m	307.641m#
34) AR1254-C	5.504	5.254	16790288	2337884	382.069m	310.322m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

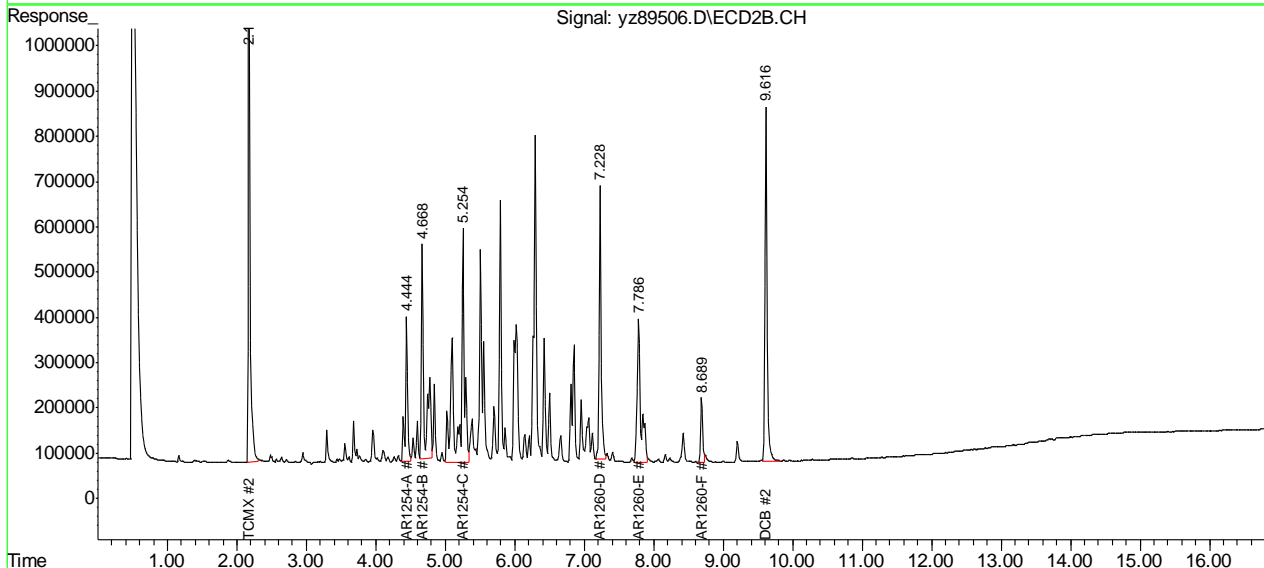
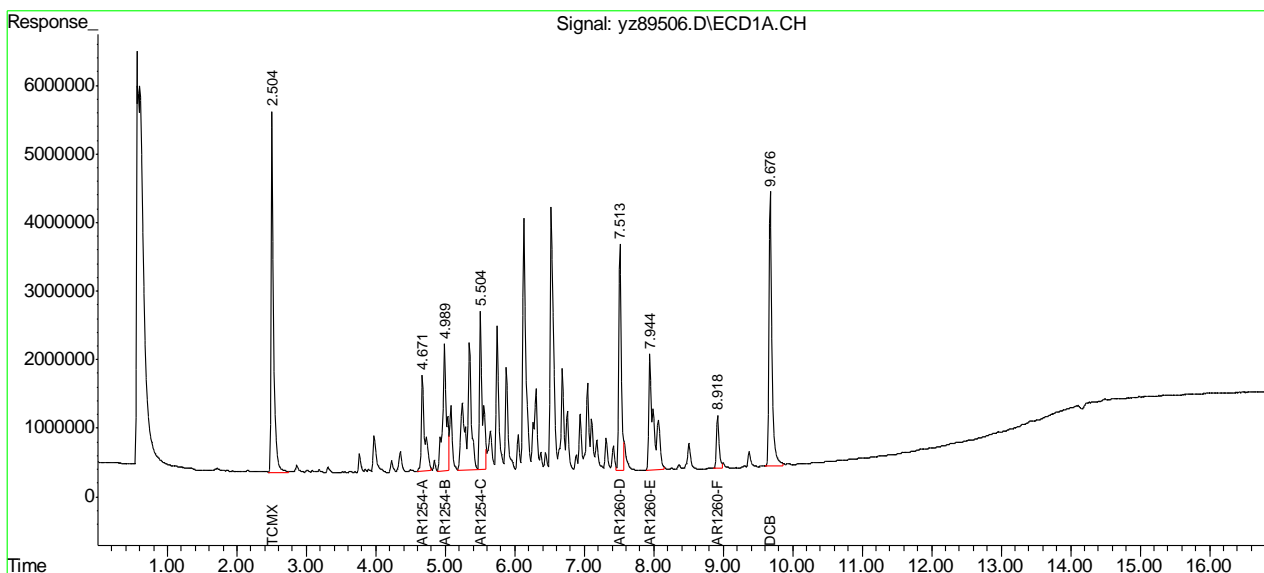
7.1.17
7

Quantitation Report (QT Reviewed)

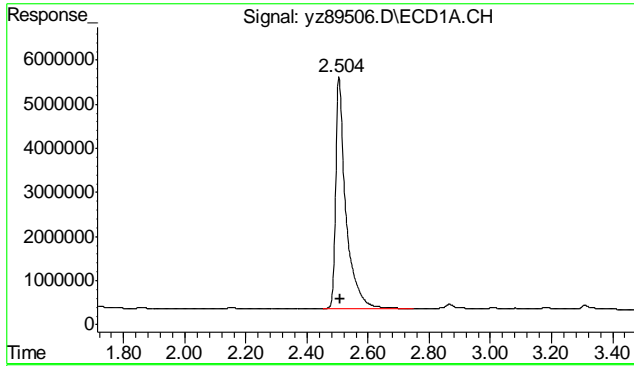
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89506.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 8:28 pm
 Operator : sofyaz
 Sample : mc30076-16
 Misc : op37808,gyz7550,15.49,,,10,,s
 ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:08:05 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

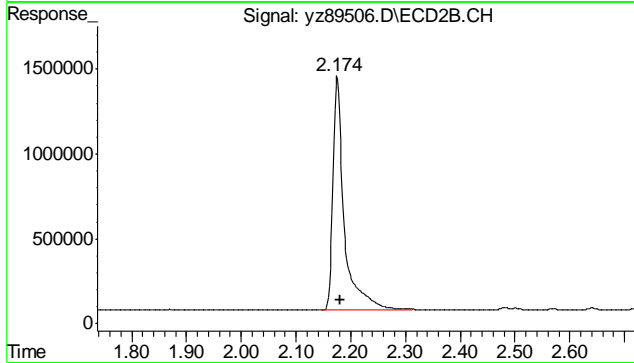
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



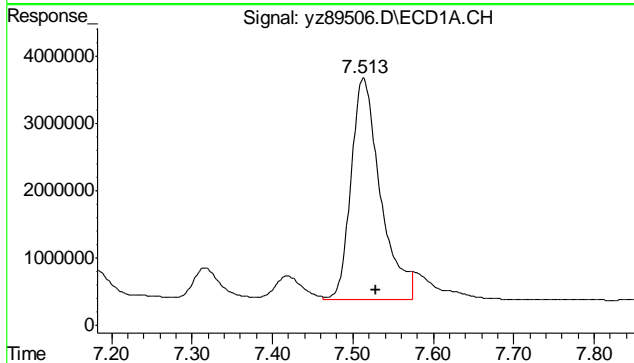
7.1.11
 7



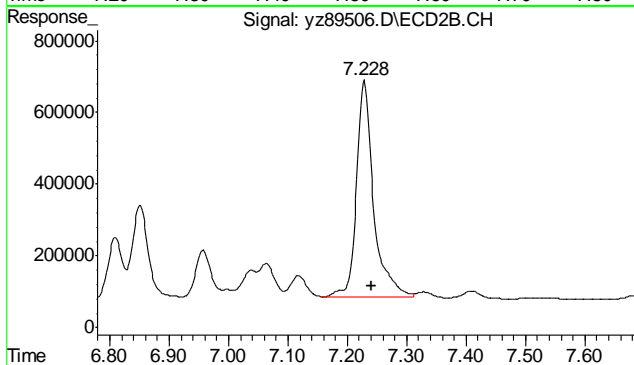
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 12293078
 Conc: 32.62 ppb



#1 TCMX
 R.T.: 2.174 min
 Delta R.T.: -0.006 min
 Response: 2000561
 Conc: 27.53 ppb m

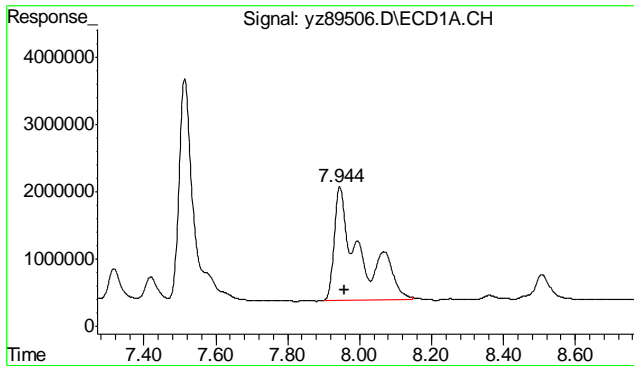


#10 AR1260-D
 R.T.: 7.513 min
 Delta R.T.: -0.016 min
 Response: 8348705
 Conc: 223.82 ppb m

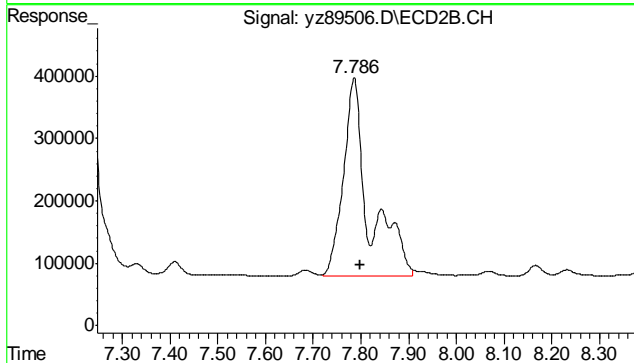


#10 AR1260-D
 R.T.: 7.228 min
 Delta R.T.: -0.014 min
 Response: 1205175
 Conc: 192.73 ppb m

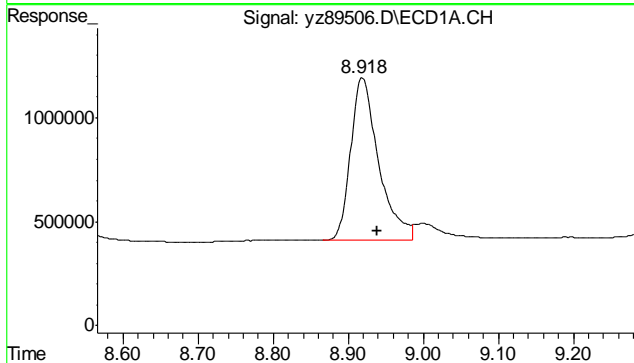
7.1.17
 7



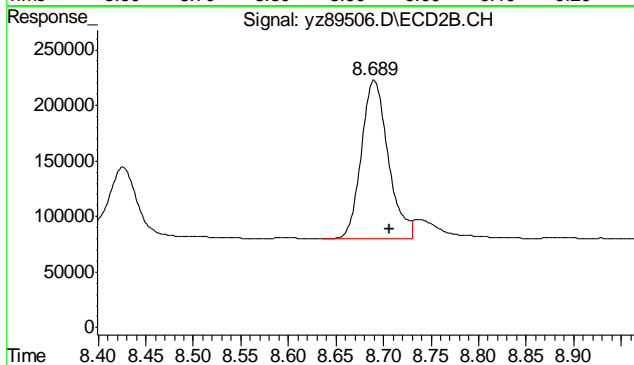
#11 AR1260-E
 R.T.: 7.944 min
 Delta R.T.: -0.016 min
 Response: 8532104
 Conc: 222.91 ppb m



#11 AR1260-E
 R.T.: 7.786 min
 Delta R.T.: -0.012 min
 Response: 1183327
 Conc: 193.79 ppb m

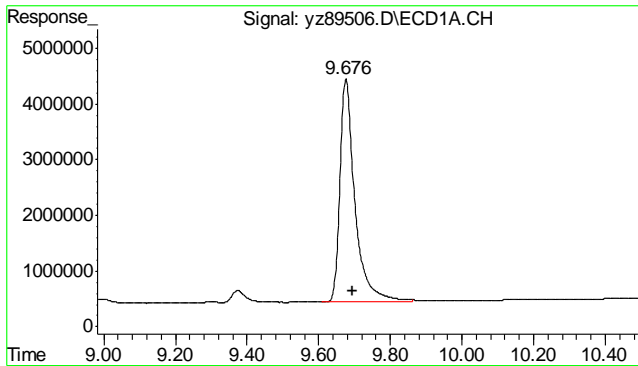


#12 AR1260-F
 R.T.: 8.918 min
 Delta R.T.: -0.021 min
 Response: 2039761
 Conc: 222.82

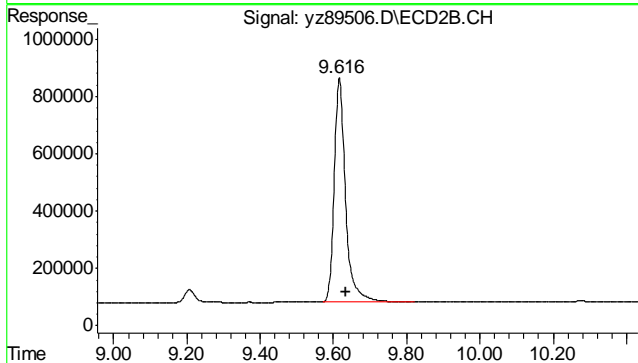


#12 AR1260-F
 R.T.: 8.689 min
 Delta R.T.: -0.017 min
 Response: 282637
 Conc: 187.38

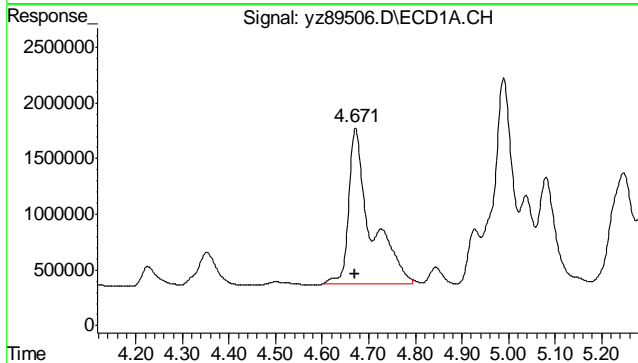
7.1.17
 7



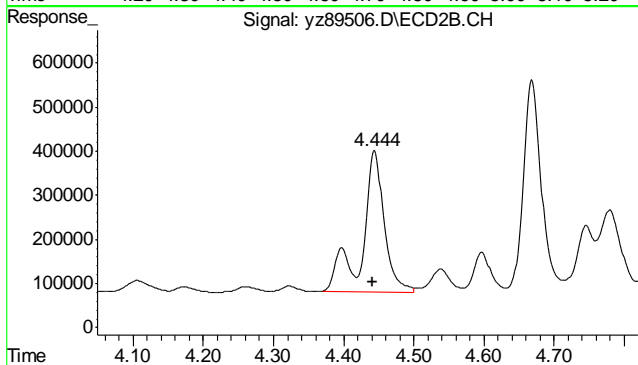
#13 DCB
 R.T.: 9.676 min
 Delta R.T.: -0.019 min
 Response: 11622933
 Conc: 35.32 ppb m



#13 DCB
 R.T.: 9.616 min
 Delta R.T.: -0.017 min
 Response: 1688777
 Conc: 29.10 ppb m

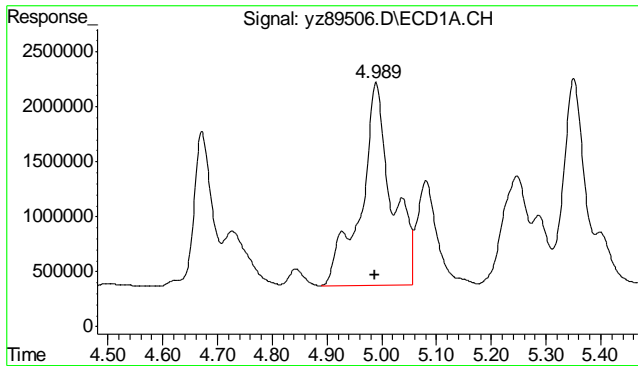


#32 AR1254-A
 R.T.: 4.671 min
 Delta R.T.: 0.000 min
 Response: 4652032
 Conc: 207.11 ppb m

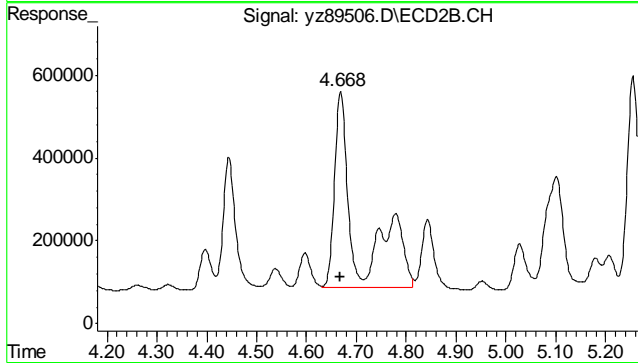


#32 AR1254-A
 R.T.: 4.444 min
 Delta R.T.: 0.002 min
 Response: 707175
 Conc: 224.28 ppb m

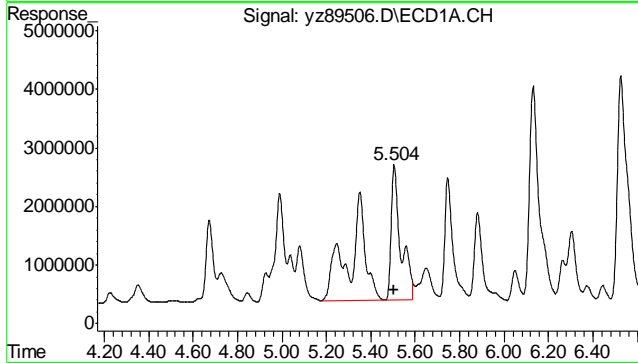
7.1.17
 7



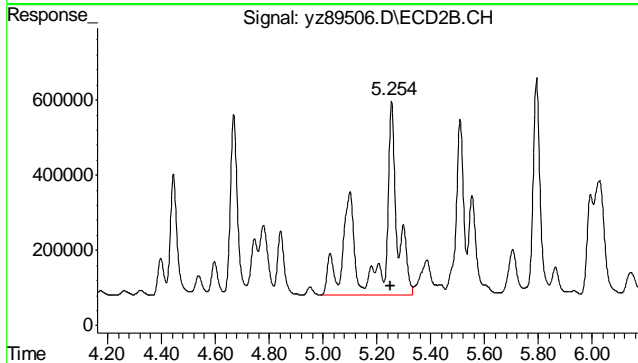
#33 AR1254-B
 R.T.: 4.989 min
 Delta R.T.: 0.000 min
 Response: 7244090
 Conc: 241.80 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: 0.000 min
 Response: 1435413
 Conc: 307.64 ppb m



#34 AR1254-C
 R.T.: 5.504 min
 Delta R.T.: 0.000 min
 Response: 16790288
 Conc: 382.07 ppb m



#34 AR1254-C
 R.T.: 5.254 min
 Delta R.T.: 0.002 min
 Response: 2337884
 Conc: 310.32 ppb m

7.1.17
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89483.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:17 pm
 Operator : sofyaz
 Sample : OP37808-mb
 Misc : op37808,gyz7550,15.30,,,10,,s
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 08:32:49 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.524	2.181	12190231	1926646	32.343	26.510
Spiked Amount	40.000 Range	42 - 132	Recovery	=	80.86%	66.28%
13) s DCB	9.704	9.629	10609516	1602571	32.243m	27.612m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	80.61%	69.03%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

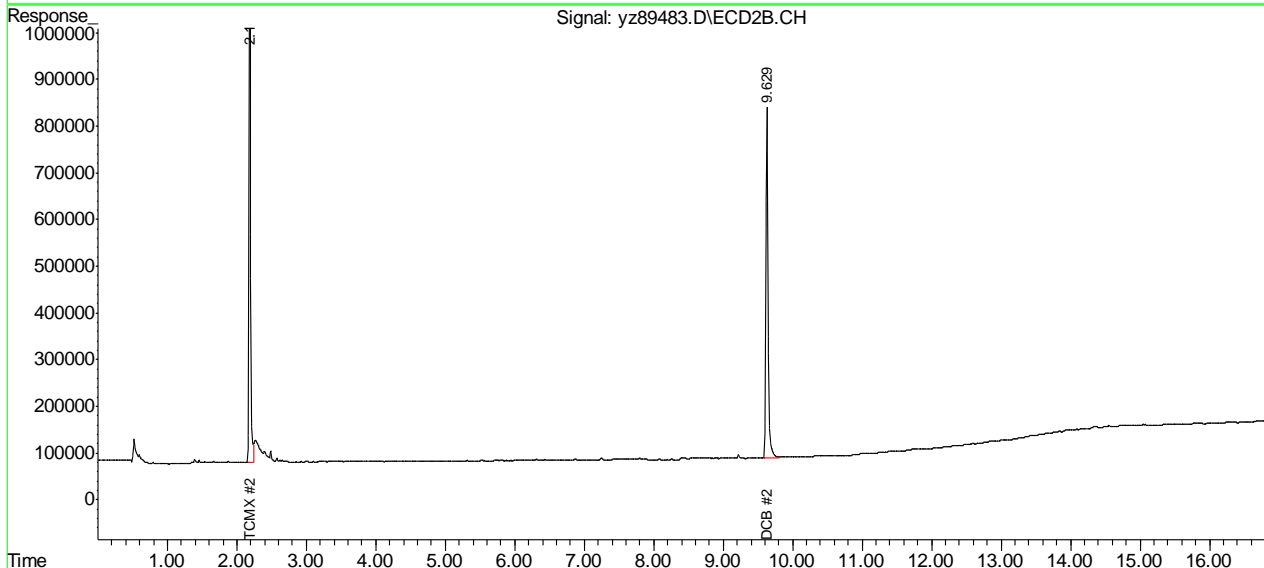
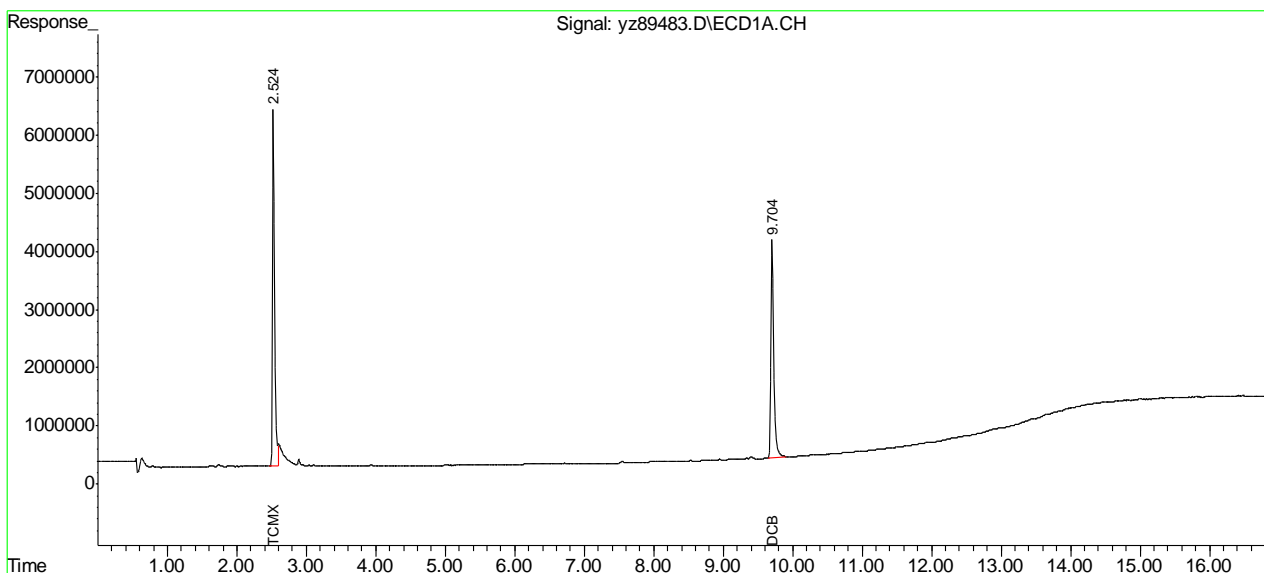
7.2.1
7

Quantitation Report (QT Reviewed)

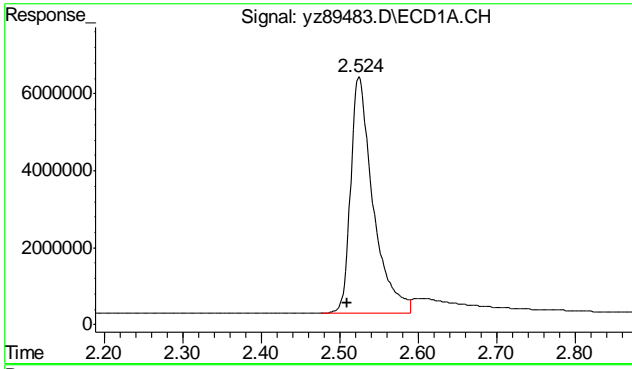
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89483.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:17 pm
 Operator : sofyaz
 Sample : OP37808-mb
 Misc : op37808,gyz7550,15.30,,,10,,s
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 08:32:49 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

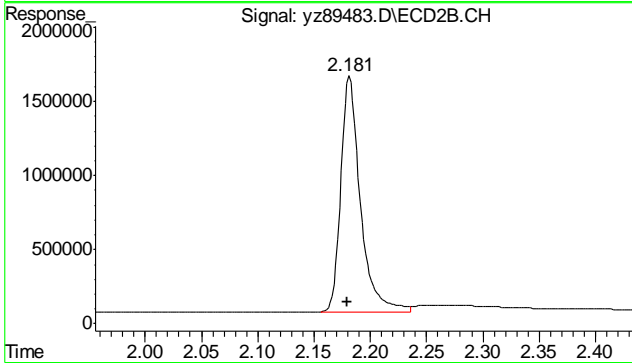
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



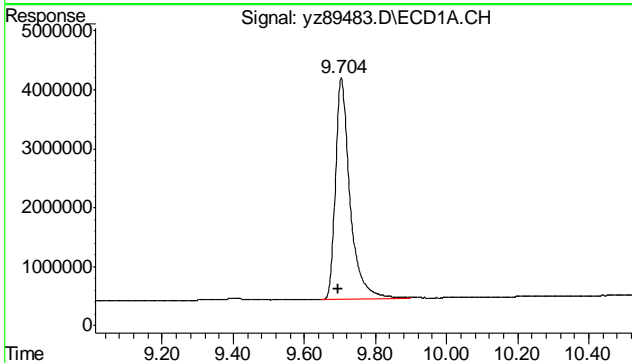
7.2.1
 7



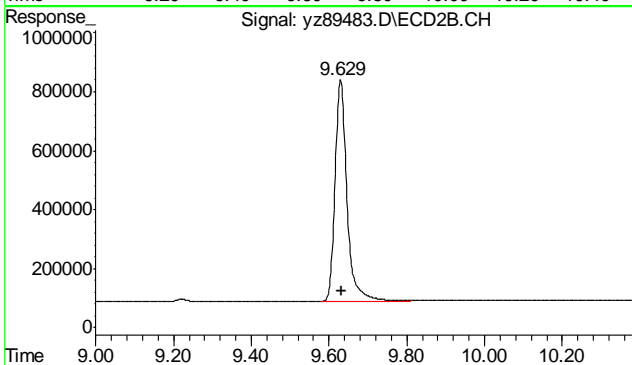
#1 TCMX
 R.T.: 2.524 min
 Delta R.T.: 0.014 min
 Response: 12190231
 Conc: 32.34 ppb



#1 TCMX
 R.T.: 2.181 min
 Delta R.T.: 0.000 min
 Response: 1926646
 Conc: 26.51 ppb



#13 DCB
 R.T.: 9.704 min
 Delta R.T.: 0.009 min
 Response: 10609516
 Conc: 32.24 ppb m



#13 DCB
 R.T.: 9.629 min
 Delta R.T.: -0.004 min
 Response: 1602571
 Conc: 27.61 ppb m

7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89484.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:37 pm
 Operator : sofyaz
 Sample : OP37808-bs
 Misc : op37808,gyz7550,15.44,,,10,,s
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:39:37 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.506	2.176	10654493	1720701	28.269m	23.676
Spiked Amount	40.000 Range	42 - 132	Recovery =	70.67%	59.19%	
13) s DCB	9.681	9.619	10761971	1596711	32.706m	27.511m
Spiked Amount	40.000 Range	30 - 150	Recovery =	81.77%	68.78%	
Target Compounds						
2) AR1016-A	2.827	2.572	1918504	352363	339.461m	296.501m
3) AR1016-B	3.169	2.919	4720037	721084	319.854m	273.387
4) AR1016-C	3.639	3.349	9657964	1395488	360.686m	319.806m
5) AR1016-D	3.779	3.481	6067685	574158	327.810m	304.659m
6) AR1016-E	4.229	3.969	3882931	690876	327.637m	314.978m
7) AR1260-A	5.751	5.511	5972607	936099	331.716	294.677
8) AR1260-B	6.134	5.794	8673361	1116564	340.311	308.799
9) AR1260-C	6.529	6.297	19005886	2723190	342.244m	303.327m
10) AR1260-D	7.517	7.231	14508998	1974422	388.968m	315.747
11) AR1260-E	7.949	7.787	13418614	1887694	350.581m	309.144m
12) AR1260-F	8.924	8.692	3278509	496640	358.146	329.261m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

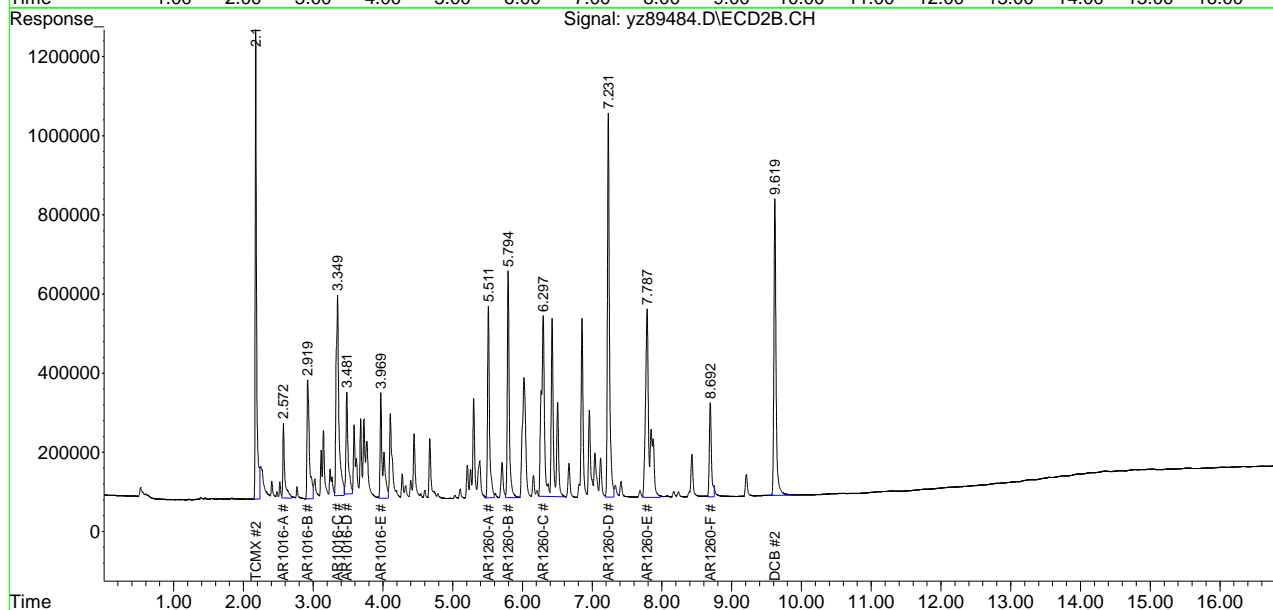
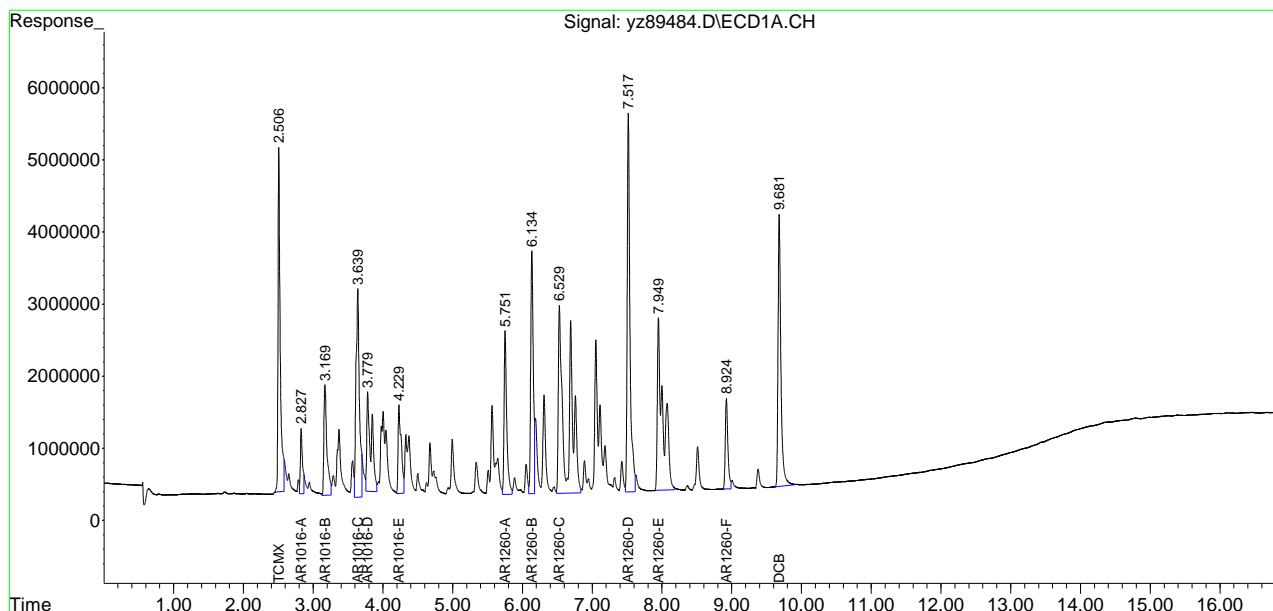
7.3.1
7

Quantitation Report (QT Reviewed)

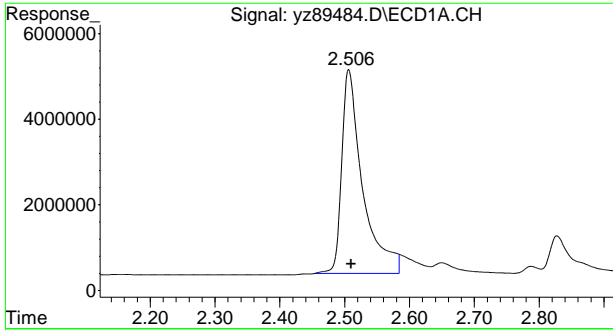
Data Path : Y:\1\DATA\YZ140428\
 Data File : yz89484.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:37 pm
 Operator : sofyaz
 Sample : OP37808-bs
 Misc : op37808,gyz7550,15.44,,,10,,s
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 12:39:37 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

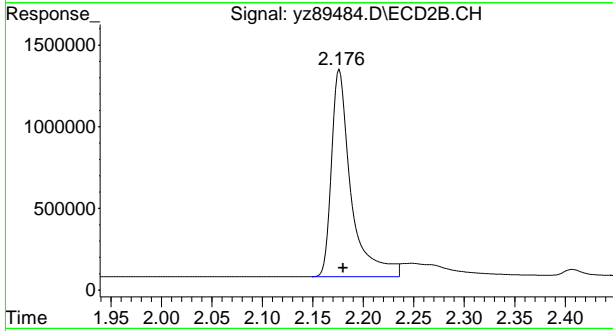
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



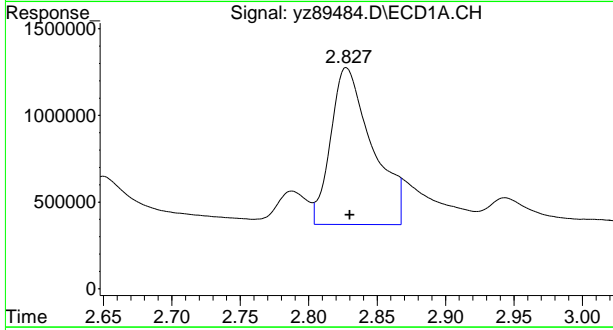
731
 7



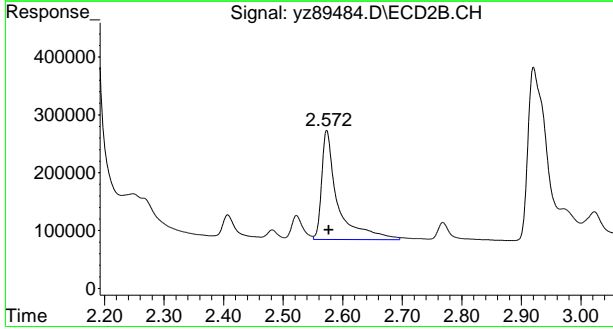
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 10654493
 Conc: 28.27 ppb m



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1720701
 Conc: 23.68 ppb

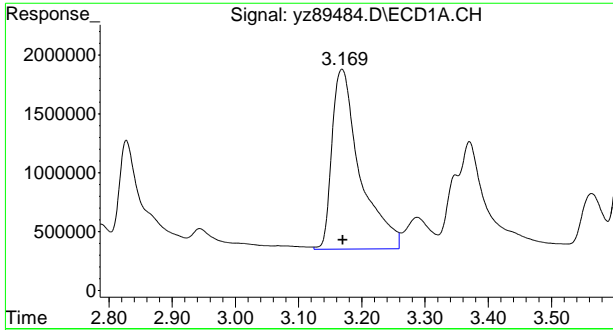


#2 AR1016-A
 R.T.: 2.827 min
 Delta R.T.: -0.002 min
 Response: 1918504
 Conc: 339.46 ppb m

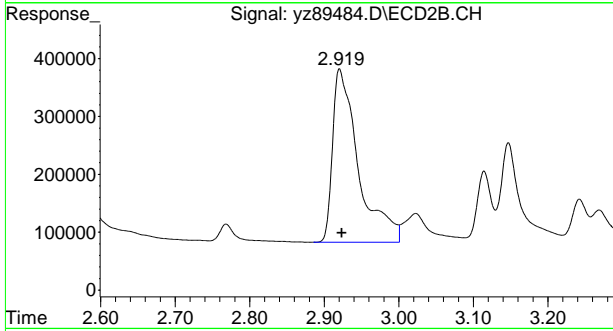


#2 AR1016-A
 R.T.: 2.572 min
 Delta R.T.: -0.004 min
 Response: 352363
 Conc: 296.50 ppb m

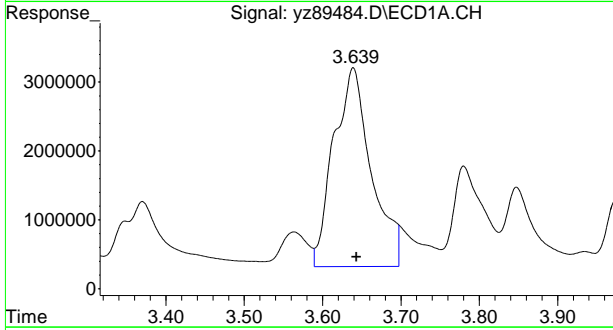
7.3.1
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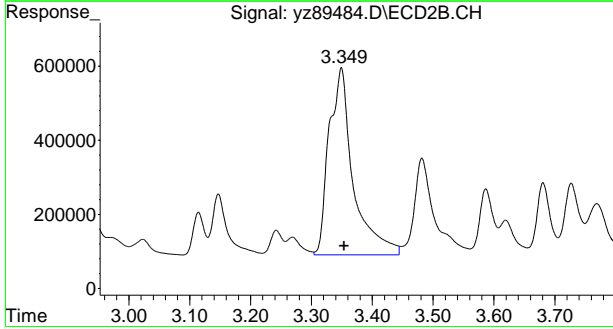
#3 AR1016-B
 R.T.: 3.169 min
 Delta R.T.: 0.000 min
 Response: 4720037
 Conc: 319.85 ppb m



#3 AR1016-B
 R.T.: 2.919 min
 Delta R.T.: -0.004 min
 Response: 721084
 Conc: 273.39 ppb

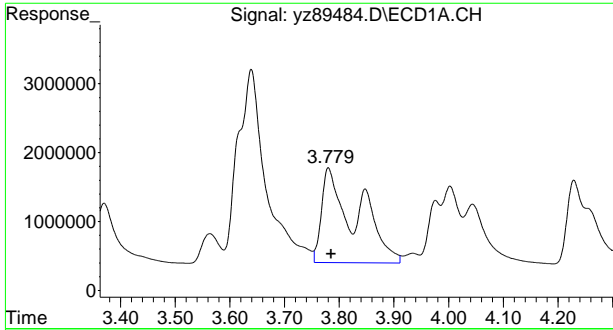


#4 AR1016-C
 R.T.: 3.639 min
 Delta R.T.: -0.004 min
 Response: 9657964
 Conc: 360.69 ppb m

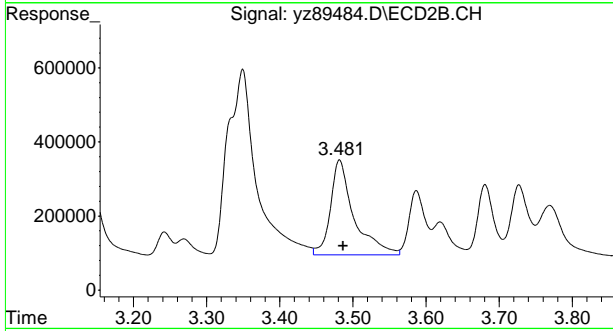


#4 AR1016-C
 R.T.: 3.349 min
 Delta R.T.: -0.004 min
 Response: 1395488
 Conc: 319.81 ppb m

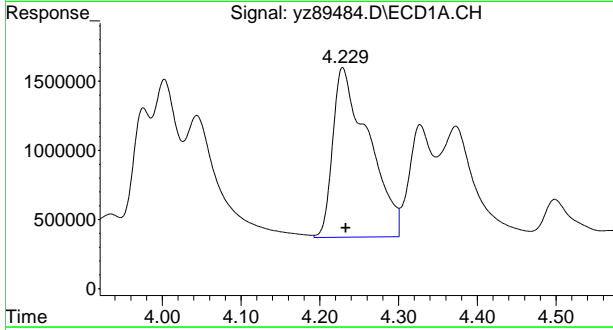
7.3.1
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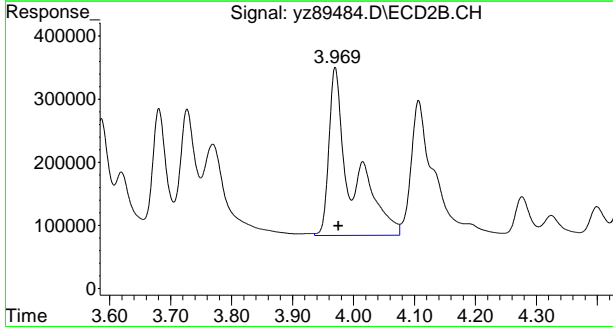
#5 AR1016-D
 R.T.: 3.779 min
 Delta R.T.: -0.006 min
 Response: 6067685
 Conc: 327.81 m



#5 AR1016-D
 R.T.: 3.481 min
 Delta R.T.: -0.006 min
 Response: 574158
 Conc: 304.66 m

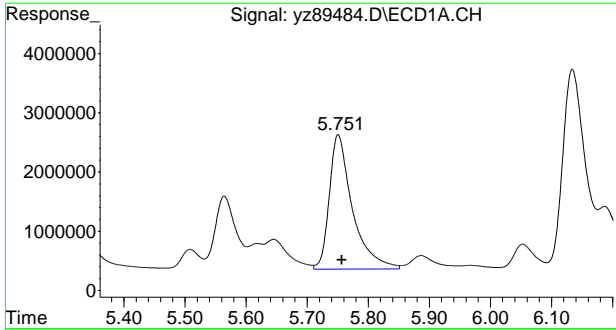


#6 AR1016-E
 R.T.: 4.229 min
 Delta R.T.: -0.004 min
 Response: 3882931
 Conc: 327.64 m

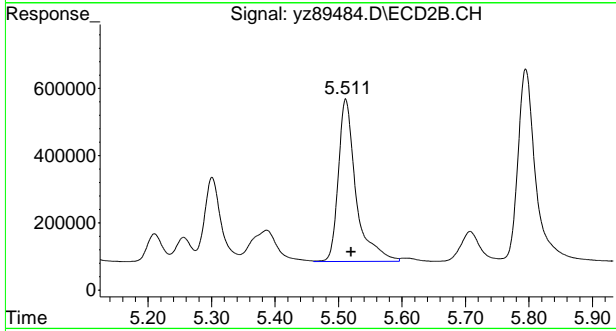


#6 AR1016-E
 R.T.: 3.969 min
 Delta R.T.: -0.006 min
 Response: 690876
 Conc: 314.98 m

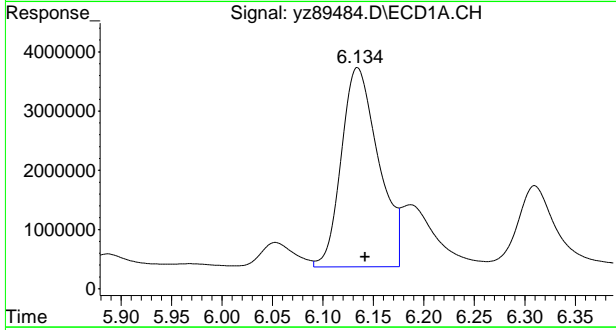
7.3.1
7



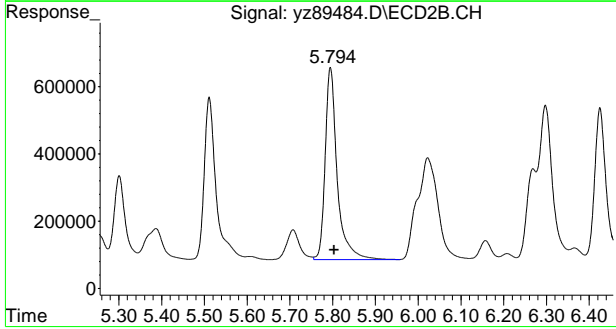
#7 AR1260-A
 R.T.: 5.751 min
 Delta R.T.: -0.006 min
 Response: 5972607
 Conc: 331.72 ppb



#7 AR1260-A
 R.T.: 5.511 min
 Delta R.T.: -0.009 min
 Response: 936099
 Conc: 294.68 ppb

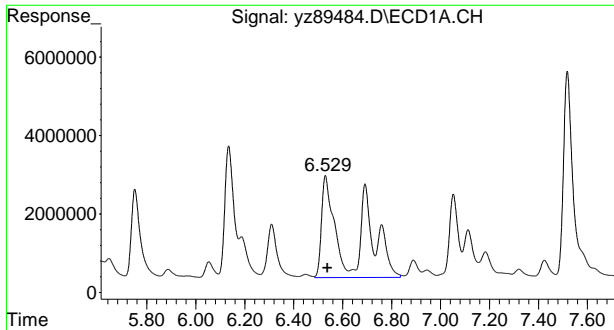


#8 AR1260-B
 R.T.: 6.134 min
 Delta R.T.: -0.007 min
 Response: 8673361
 Conc: 340.31 ppb

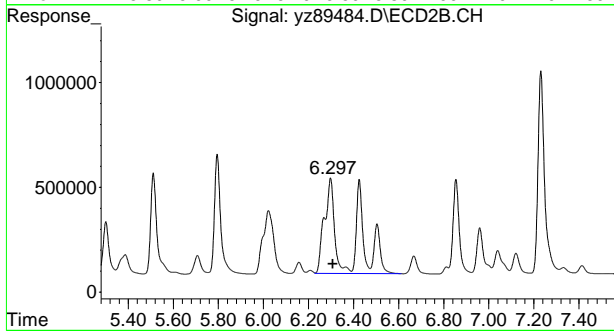


#8 AR1260-B
 R.T.: 5.794 min
 Delta R.T.: -0.009 min
 Response: 1116564
 Conc: 308.80 ppb

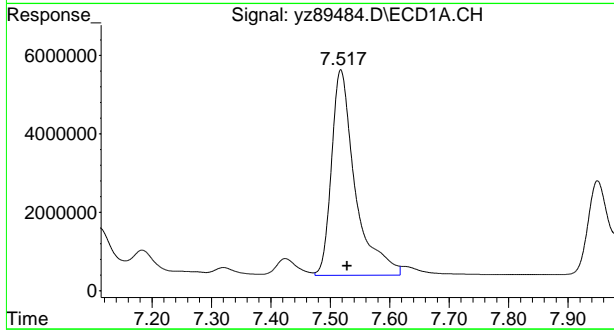
7.3.1
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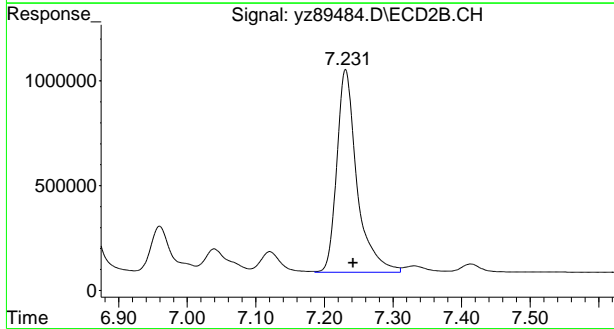
#9 AR1260-C
 R.T.: 6.529 min
 Delta R.T.: -0.007 min
 Response: 19005886
 Conc: 342.24 ppb m



#9 AR1260-C
 R.T.: 6.297 min
 Delta R.T.: -0.009 min
 Response: 2723190
 Conc: 303.33 ppb m

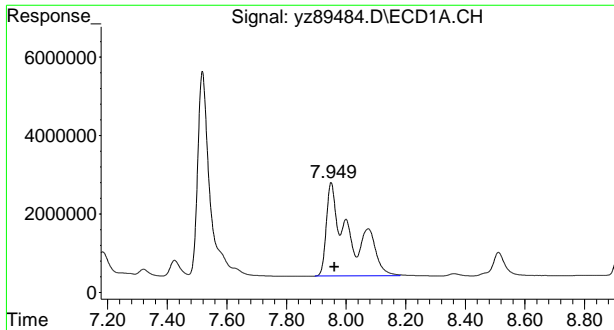


#10 AR1260-D
 R.T.: 7.517 min
 Delta R.T.: -0.011 min
 Response: 14508998
 Conc: 388.97 ppb m

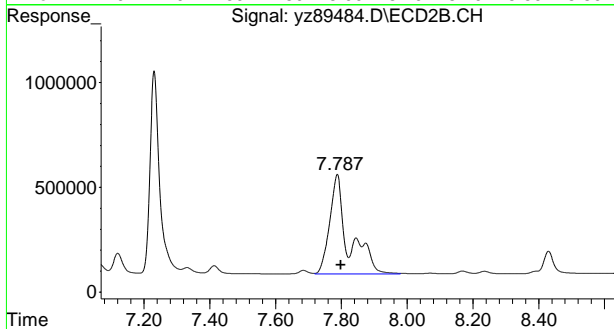


#10 AR1260-D
 R.T.: 7.231 min
 Delta R.T.: -0.011 min
 Response: 1974422
 Conc: 315.75 ppb

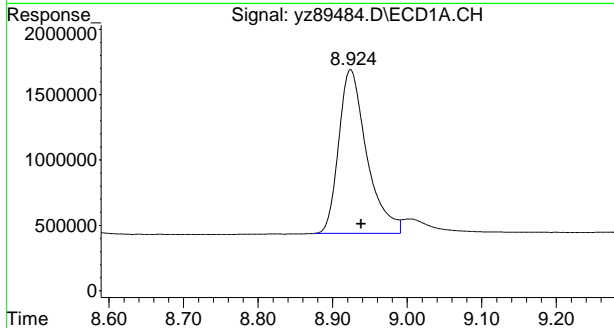
7.3.1
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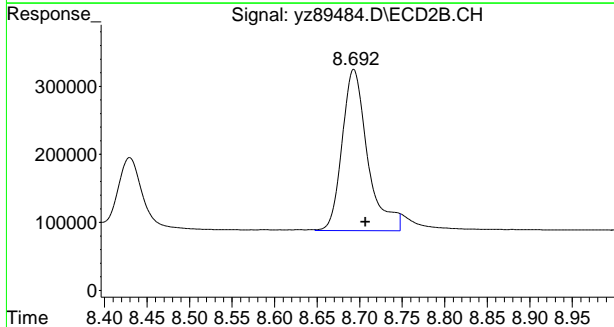
#11 AR1260-E
 R.T.: 7.949 min
 Delta R.T.: -0.011 min
 Response: 13418614
 Conc: 350.58 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.011 min
 Response: 1887694
 Conc: 309.14 ppb m

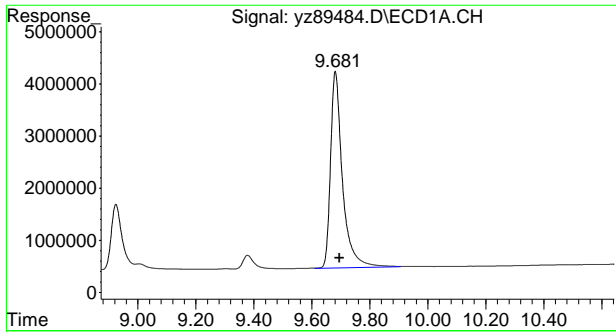


#12 AR1260-F
 R.T.: 8.924 min
 Delta R.T.: -0.014 min
 Response: 3278509
 Conc: 358.15



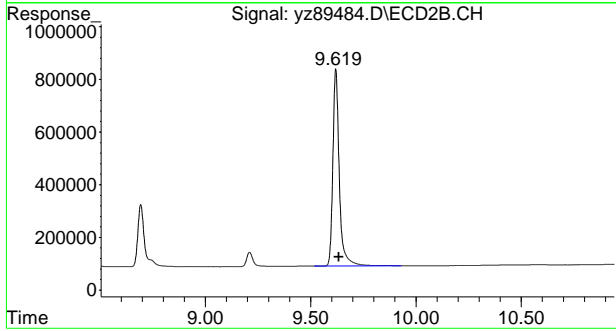
#12 AR1260-F
 R.T.: 8.692 min
 Delta R.T.: -0.014 min
 Response: 496640
 Conc: 329.26 m

7.3.1
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#13 DCB

R.T.: 9.681 min
Delta R.T.: -0.014 min
Response: 10761971
Conc: 32.71 ppb m



#13 DCB

R.T.: 9.619 min
Delta R.T.: -0.014 min
Response: 1596711
Conc: 27.51 ppb m

7.3.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89485.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:57 pm
 Operator : sofyaz
 Sample : OP37808-ms
 Misc : op37808,gyz7550,15.28,,,10,,s
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:13:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.175	11096424	1827286	29.441	25.142
Spiked Amount	40.000	Range	42 - 132	Recovery	= 73.60%	62.85%
13) s DCB	9.679f	9.617f	10316113	1481917	31.351m	25.533
Spiked Amount	40.000	Range	30 - 150	Recovery	= 78.38%	63.83%
Target Compounds						
2) AR1016-A	2.825	2.572	1852200	308555	327.729m	255.679m
3) AR1016-B	3.165	2.919	4205574	688891	284.992	261.182m
4) AR1016-C	3.637	3.347	8859729	1351025	330.876m	309.617m
5) AR1016-D	3.777	3.480	5403950	559119	291.951m	296.679m
6) AR1016-E	4.227	3.969	4245541	735994	358.234	335.548m
7) AR1260-A	5.749	5.510	9403412	2076449	522.262	653.651m#
8) AR1260-B	6.132	5.794	18825850	1864815	738.658m	515.737m#
9) AR1260-C	6.527	6.297	33560003	4677974	604.323m	521.063m
10) AR1260-D	7.515	7.230	21328911	3004971	571.801m	480.551
11) AR1260-E	7.947	7.787	20226875	2775947	528.457m	454.611m
12) AR1260-F	8.920f	8.692	5116377	704183	558.916	466.858
32) AR1254-A	4.672	4.445	7394953	956285	329.223m	303.283m
33) AR1254-B	4.990	4.670	9880598	1315006	329.798m	281.835m
34) AR1254-C	5.749f	5.510f	23761282	3965489	540.696m	526.365m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

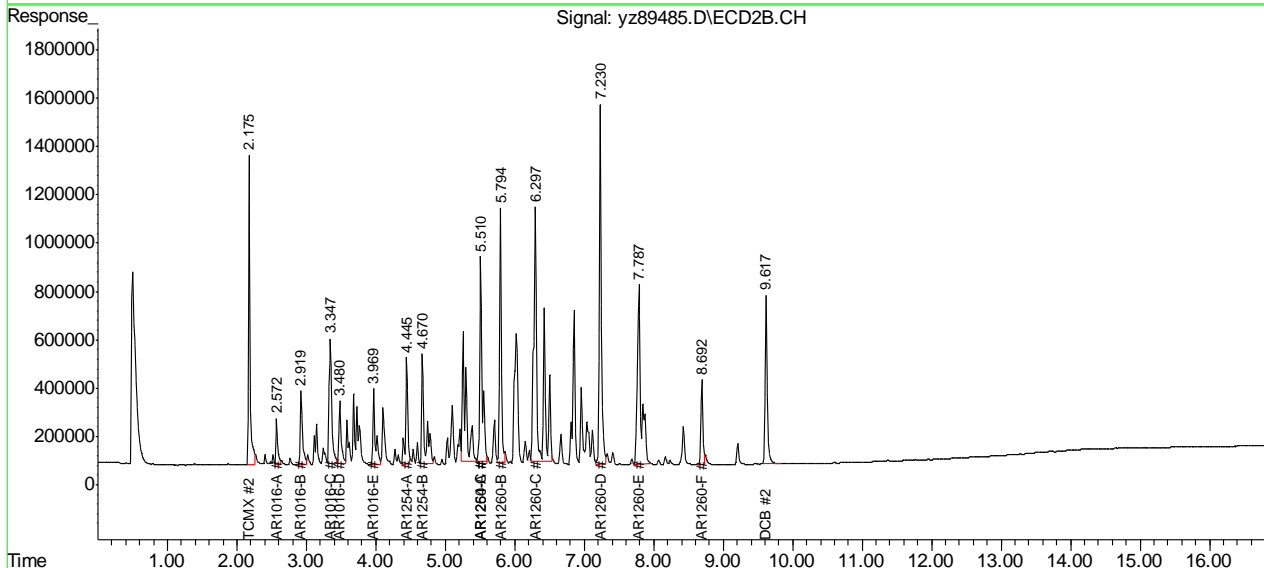
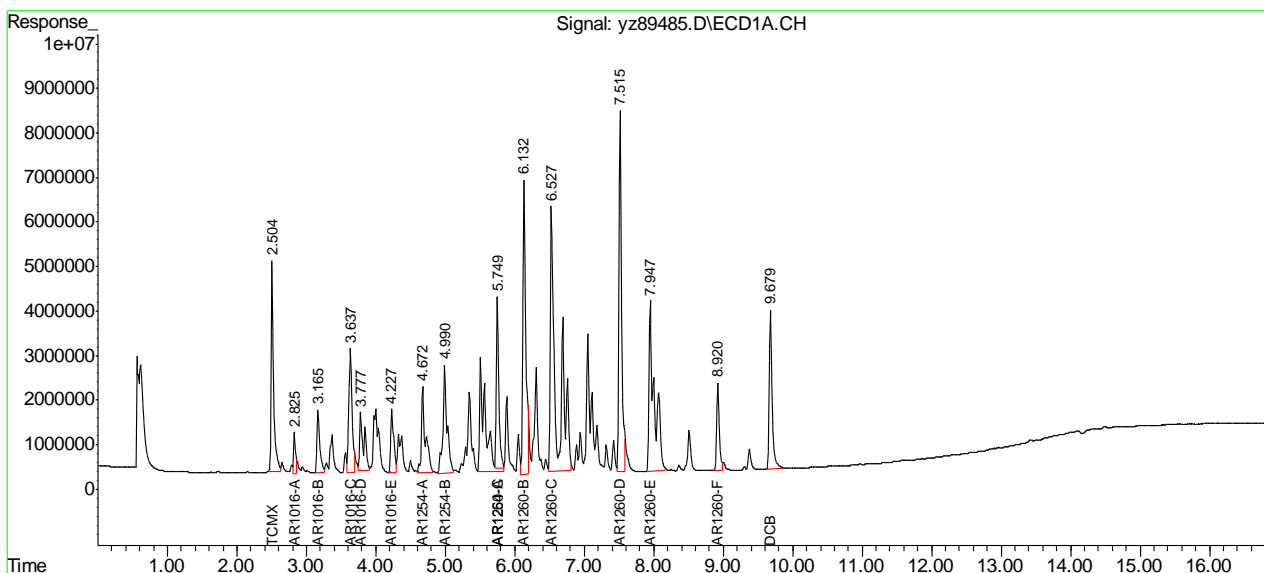
7.4.1
 7

Quantitation Report (QT Reviewed)

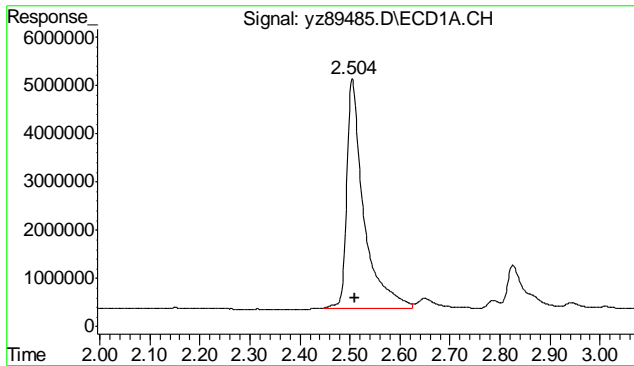
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89485.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 12:57 pm
 Operator : sofyaz
 Sample : OP37808-ms
 Misc : op37808,gyz7550,15.28,,,10,,s
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:13:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

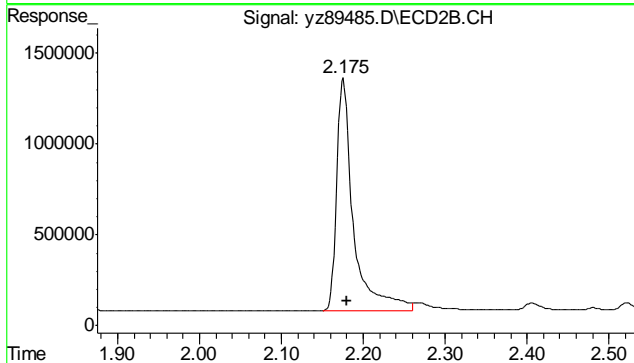
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



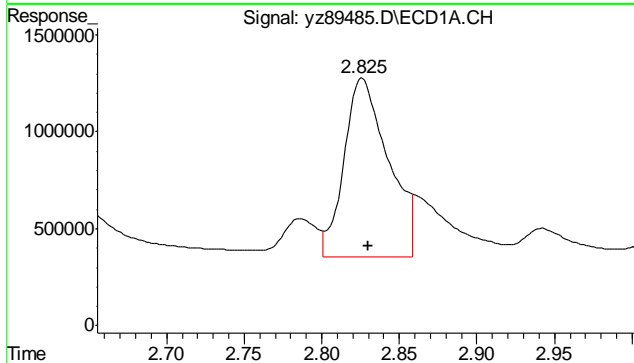
7.4.1
 7



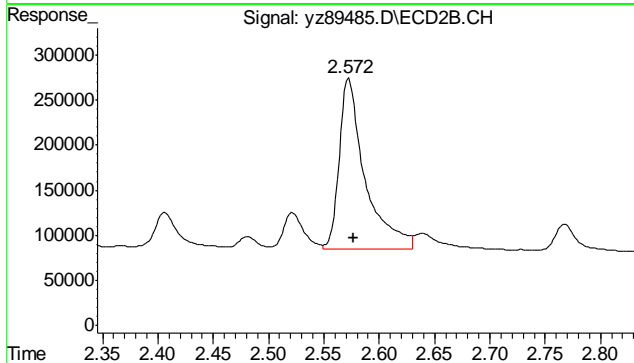
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 11096424
 Conc: 29.44 ppb



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 1827286
 Conc: 25.14 ppb

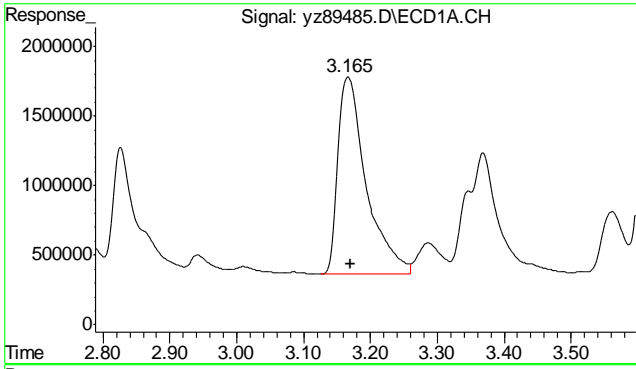


#2 AR1016-A
 R.T.: 2.825 min
 Delta R.T.: -0.005 min
 Response: 1852200
 Conc: 327.73 ppb m

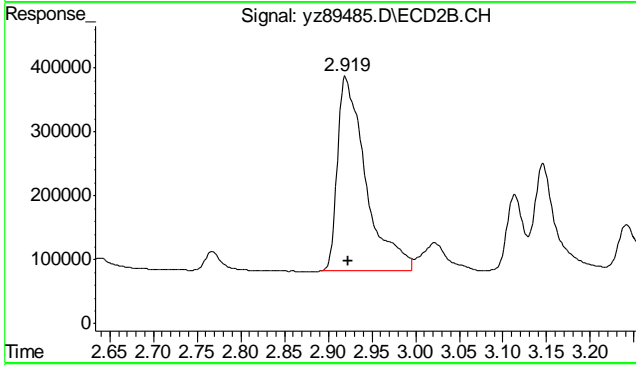


#2 AR1016-A
 R.T.: 2.572 min
 Delta R.T.: -0.005 min
 Response: 308555
 Conc: 255.68 ppb m

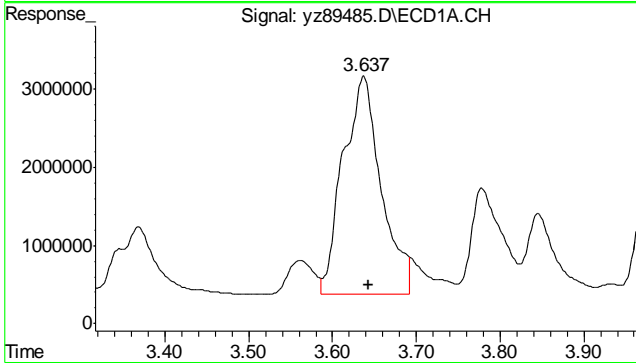
7.4.1
7



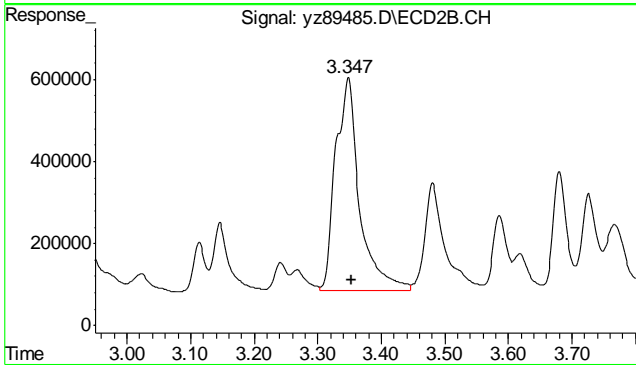
#3 AR1016-B
 R.T.: 3.165 min
 Delta R.T.: -0.005 min
 Response: 4205574
 Conc: 284.99 ppb



#3 AR1016-B
 R.T.: 2.919 min
 Delta R.T.: -0.005 min
 Response: 688891
 Conc: 261.18 ppb m



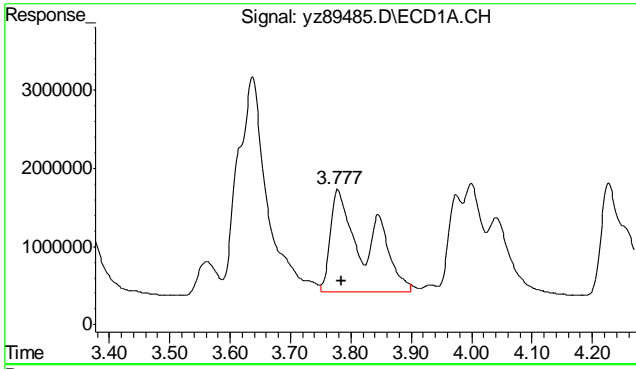
#4 AR1016-C
 R.T.: 3.637 min
 Delta R.T.: -0.006 min
 Response: 8859729
 Conc: 330.88 ppb m



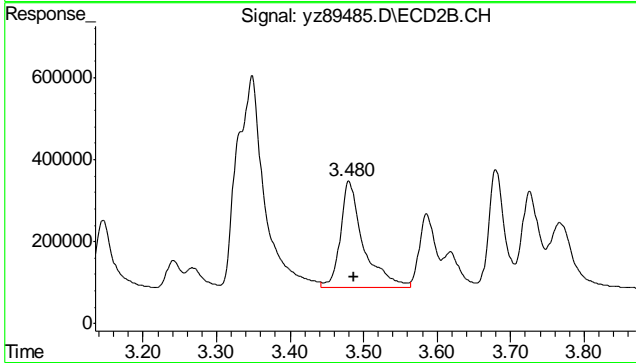
#4 AR1016-C
 R.T.: 3.347 min
 Delta R.T.: -0.006 min
 Response: 1351025
 Conc: 309.62 ppb m

7.4.1

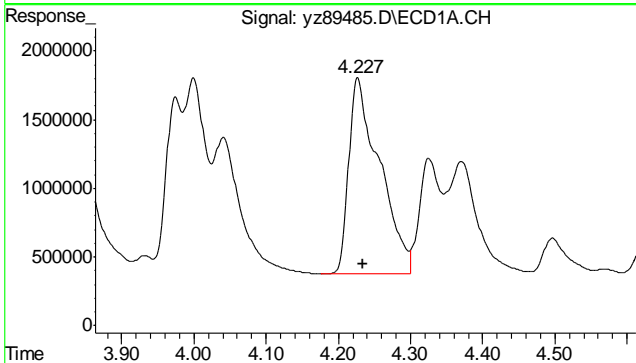
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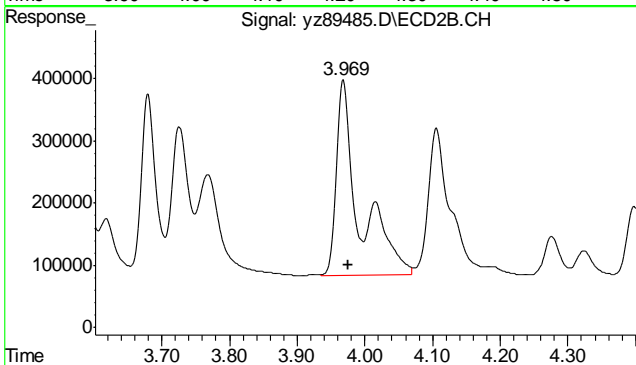
#5 AR1016-D
 R.T.: 3.777 min
 Delta R.T.: -0.008 min
 Response: 5403950
 Conc: 291.95 m



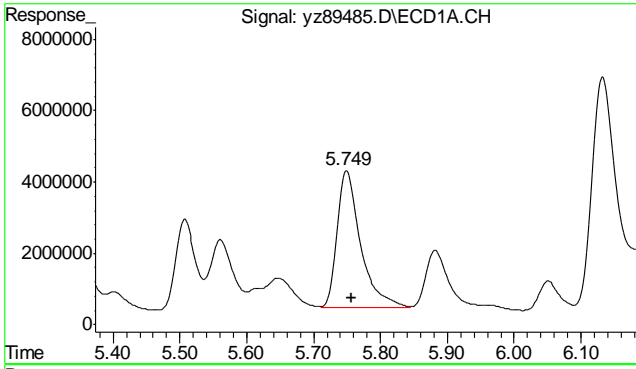
#5 AR1016-D
 R.T.: 3.480 min
 Delta R.T.: -0.006 min
 Response: 559119
 Conc: 296.68 m



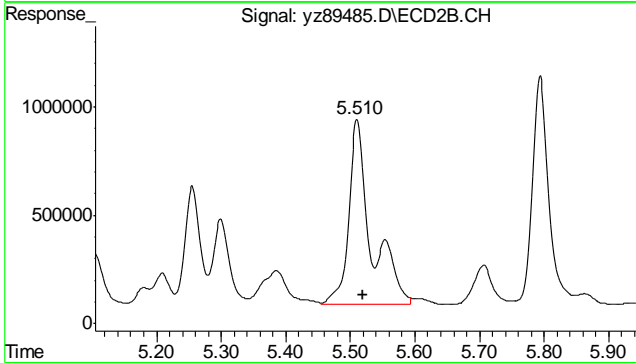
#6 AR1016-E
 R.T.: 4.227 min
 Delta R.T.: -0.006 min
 Response: 4245541
 Conc: 358.23



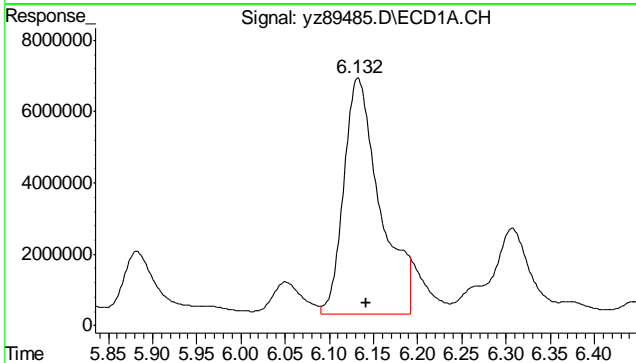
#6 AR1016-E
 R.T.: 3.969 min
 Delta R.T.: -0.006 min
 Response: 735994
 Conc: 335.55 m



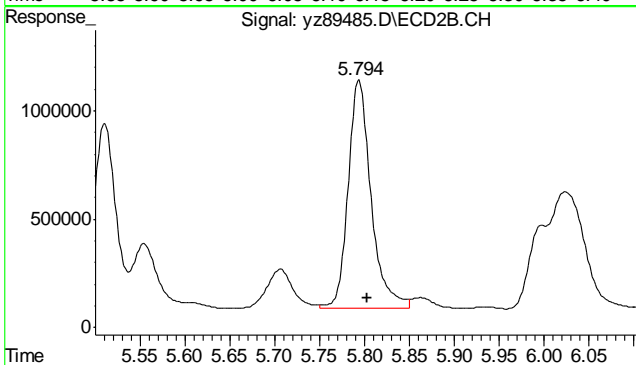
#7 AR1260-A
 R.T.: 5.749 min
 Delta R.T.: -0.008 min
 Response: 9403412
 Conc: 522.26 ppb



#7 AR1260-A
 R.T.: 5.510 min
 Delta R.T.: -0.010 min
 Response: 2076449
 Conc: 653.65 ppb m



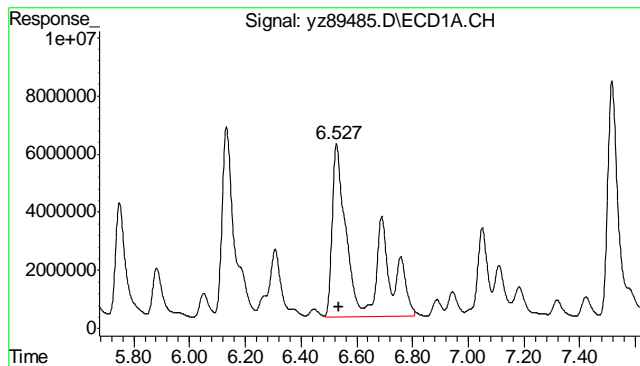
#8 AR1260-B
 R.T.: 6.132 min
 Delta R.T.: -0.010 min
 Response: 18825850
 Conc: 738.66 ppb m



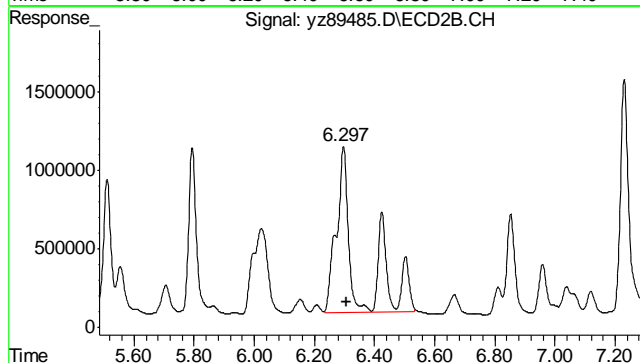
#8 AR1260-B
 R.T.: 5.794 min
 Delta R.T.: -0.010 min
 Response: 1864815
 Conc: 515.74 ppb m

7.4.1

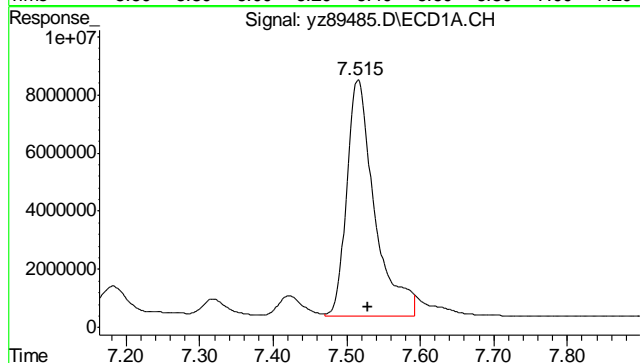
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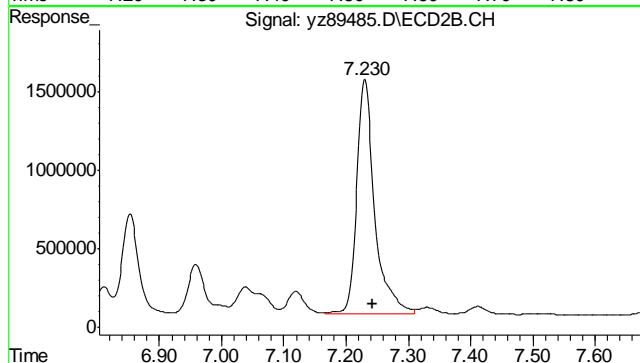
#9 AR1260-C
 R.T.: 6.527 min
 Delta R.T.: -0.010 min
 Response: 33560003
 Conc: 604.32 ppb m



#9 AR1260-C
 R.T.: 6.297 min
 Delta R.T.: -0.010 min
 Response: 4677974
 Conc: 521.06 ppb m

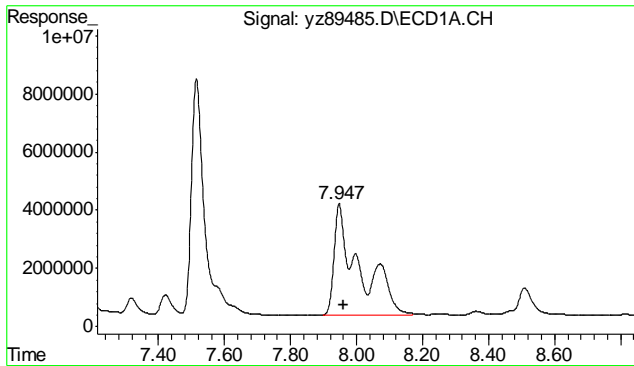


#10 AR1260-D
 R.T.: 7.515 min
 Delta R.T.: -0.013 min
 Response: 21328911
 Conc: 571.80 ppb m

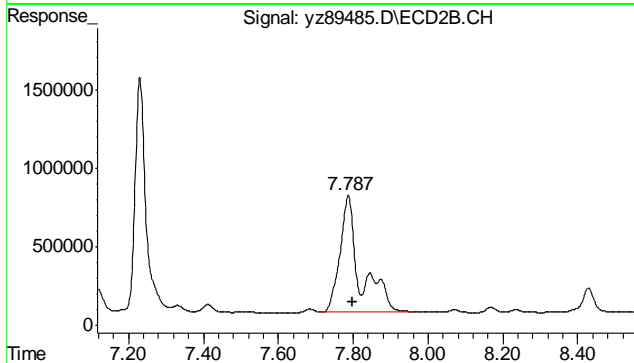


#10 AR1260-D
 R.T.: 7.230 min
 Delta R.T.: -0.011 min
 Response: 3004971
 Conc: 480.55 ppb

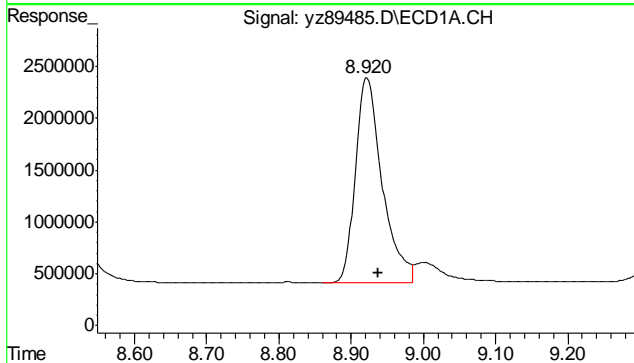
7.4.1
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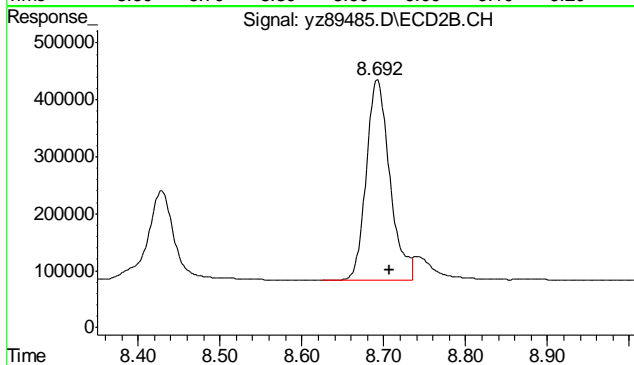
#11 AR1260-E
 R.T.: 7.947 min
 Delta R.T.: -0.013 min
 Response: 20226875
 Conc: 528.46 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.011 min
 Response: 2775947
 Conc: 454.61 ppb m

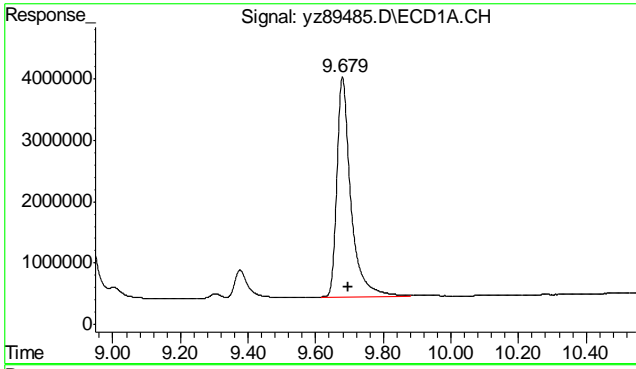


#12 AR1260-F
 R.T.: 8.920 min
 Delta R.T.: -0.018 min
 Response: 5116377
 Conc: 558.92

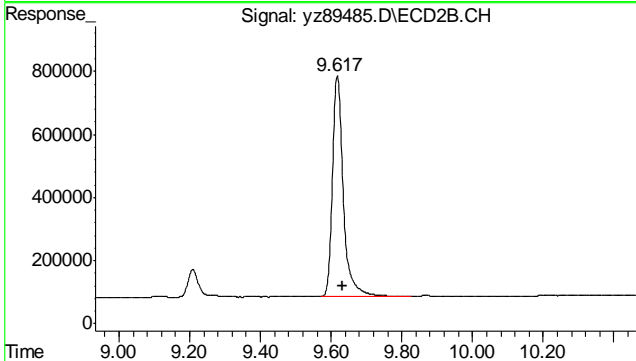


#12 AR1260-F
 R.T.: 8.692 min
 Delta R.T.: -0.015 min
 Response: 704183
 Conc: 466.86

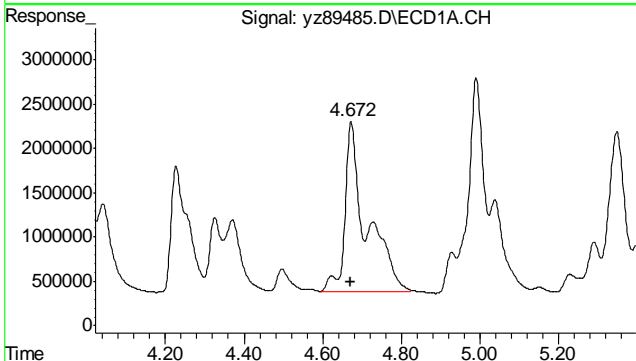
7.4.1
 7



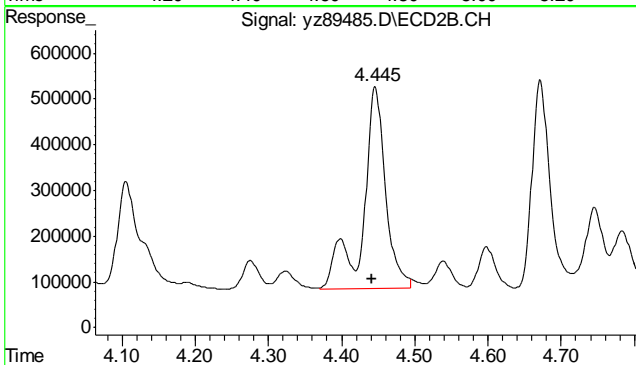
#13 DCB
 R.T.: 9.679 min
 Delta R.T.: -0.016 min
 Response: 10316113
 Conc: 31.35 ppb m



#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 1481917
 Conc: 25.53 ppb

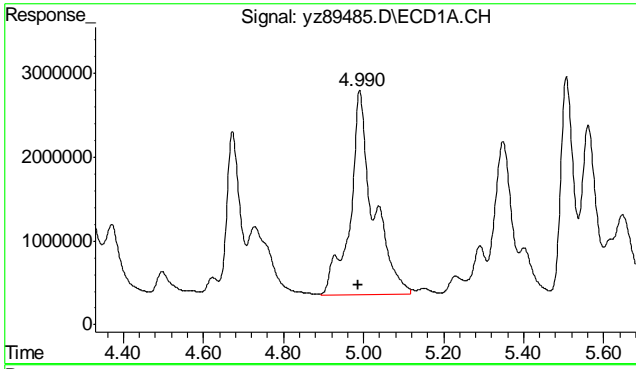


#32 AR1254-A
 R.T.: 4.672 min
 Delta R.T.: 0.002 min
 Response: 7394953
 Conc: 329.22 ppb m

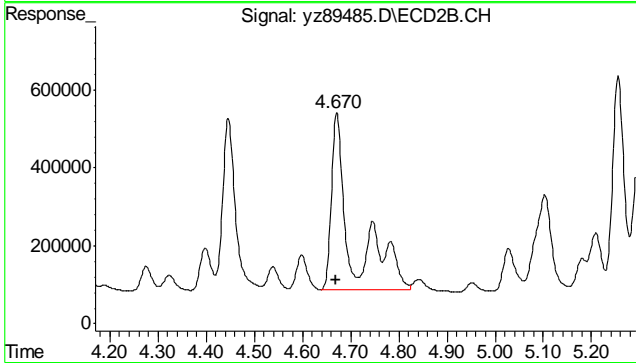


#32 AR1254-A
 R.T.: 4.445 min
 Delta R.T.: 0.004 min
 Response: 956285
 Conc: 303.28 ppb m

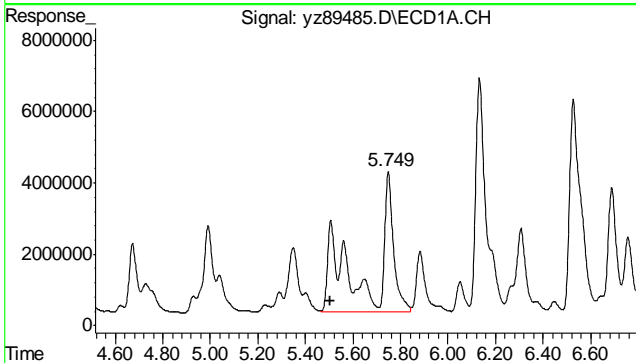
7.4.1
7



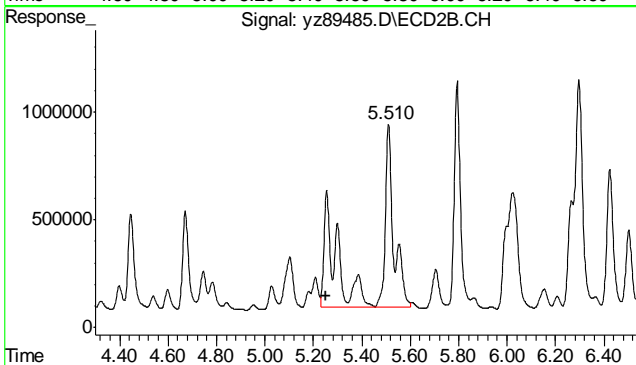
#33 AR1254-B
 R.T.: 4.990 min
 Delta R.T.: 0.002 min
 Response: 9880598
 Conc: 329.80 ppb m



#33 AR1254-B
 R.T.: 4.670 min
 Delta R.T.: 0.002 min
 Response: 1315006
 Conc: 281.84 ppb m



#34 AR1254-C
 R.T.: 5.749 min
 Delta R.T.: 0.245 min
 Response: 23761282
 Conc: 540.70 ppb m



#34 AR1254-C
 R.T.: 5.510 min
 Delta R.T.: 0.259 min
 Response: 3965489
 Conc: 526.37 ppb m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89486.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 1:17 pm
 Operator : sofyaz
 Sample : OP37808-msd
 Misc : op37808,gyz7550,15.51,,,10,,s
 ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:16:52 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.506	2.176	8206514	1354506	21.774	18.637
Spiked Amount	40.000 Range	42 - 132	Recovery	=	54.44%	46.59%
13) s DCB	9.678f	9.620	8792184	1245233	26.720m	21.455
Spiked Amount	40.000 Range	30 - 150	Recovery	=	66.80%	53.64%
Target Compounds						
2) AR1016-A	2.828	2.575	1688572	241109	298.777m	190.711m#
3) AR1016-B	3.168	2.921	3777669	575023	255.994	218.010m
4) AR1016-C	3.638	3.350	7062609	1249752	263.760m	286.408
5) AR1016-D	3.778	3.480	5157628	517763	278.644m	274.734m
6) AR1016-E	4.226	3.970	5499290	991640	464.024	452.100m
7) AR1260-A	5.748	5.511	20128966	4677362	1117.955	1472.400m#
8) AR1260-B	6.133	5.793	39994795	4003534	1569.250	1107.225m#
9) AR1260-C	6.528	6.298	65486555	8982578	1179.233m	1000.538m
10) AR1260-D	7.516	7.231	32691979	4583655	876.430m	733.011m
11) AR1260-E	7.946	7.790	30804946	4287268	804.825m	702.117m
12) AR1260-F	8.921f	8.693	7423665	1004189	810.966	665.755
32) AR1254-A	4.673	4.446	22167760	2543095	986.909m	806.534m
33) AR1254-B	4.990	4.671	30820494	4148570	1028.736m	889.131m
34) AR1254-C	5.506	5.255	46711766	7671701	1062.942m	1018.315m

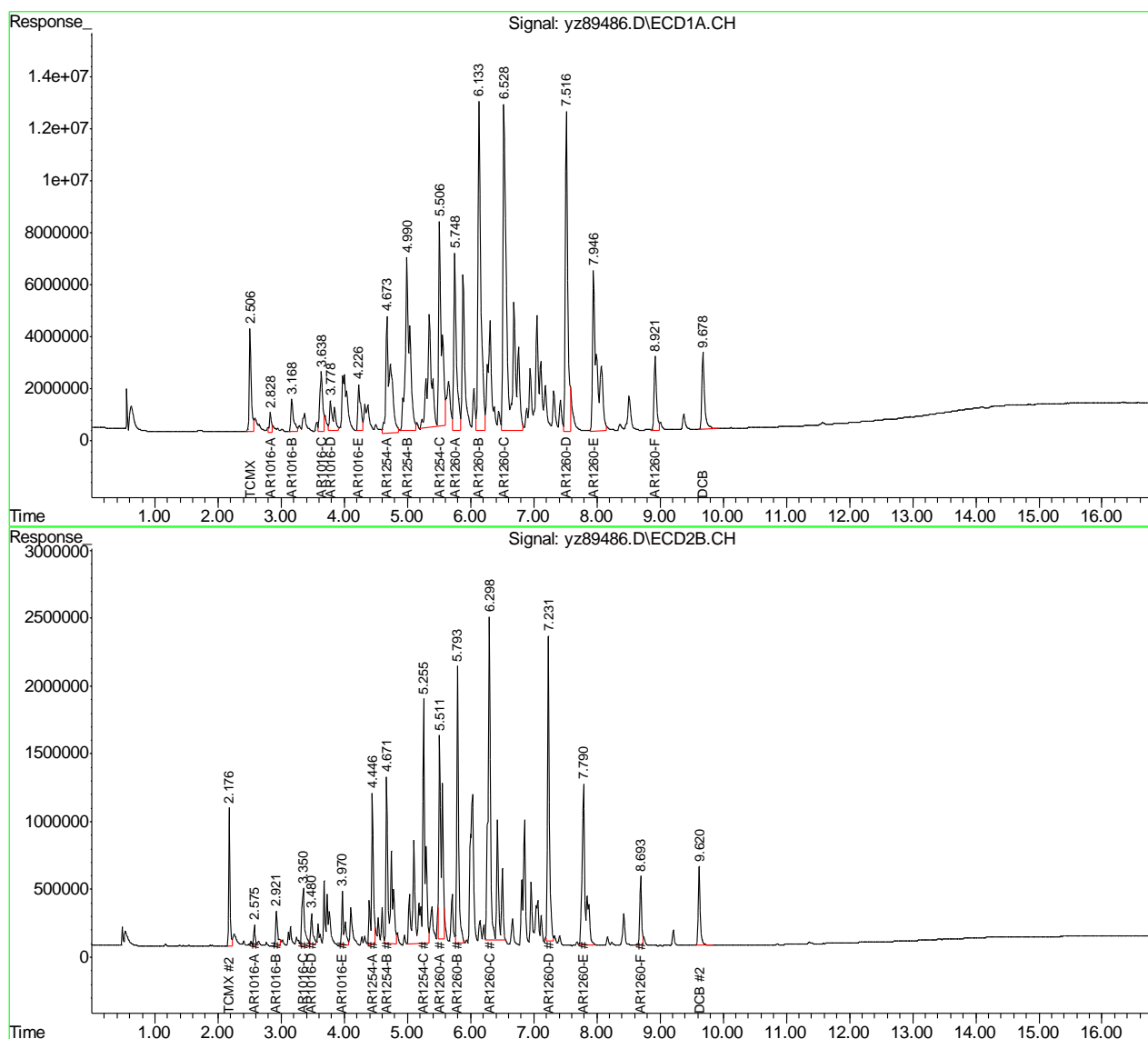
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

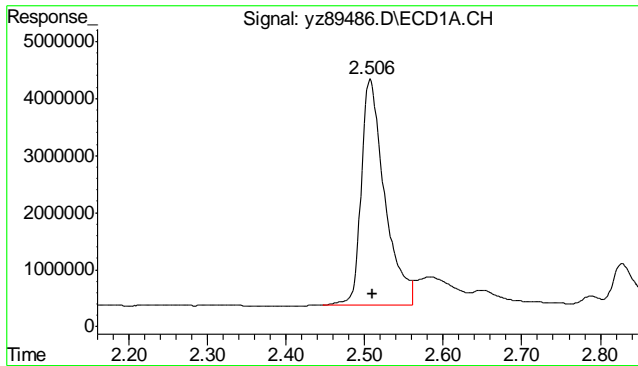
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89486.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 1:17 pm
 Operator : sofyaz
 Sample : OP37808-msd
 Misc : op37808,gyz7550,15.51,,,10,,s
 ALS Vial : 10 Sample Multiplier: 1

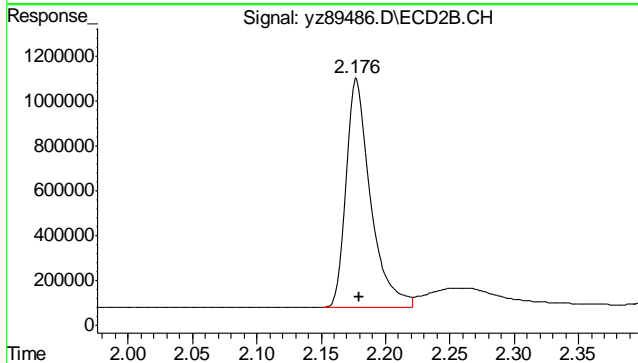
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:16:52 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

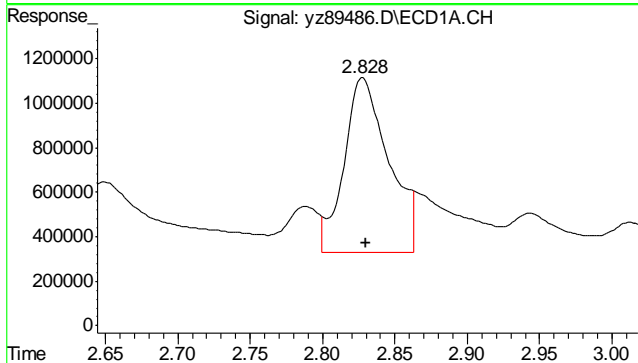




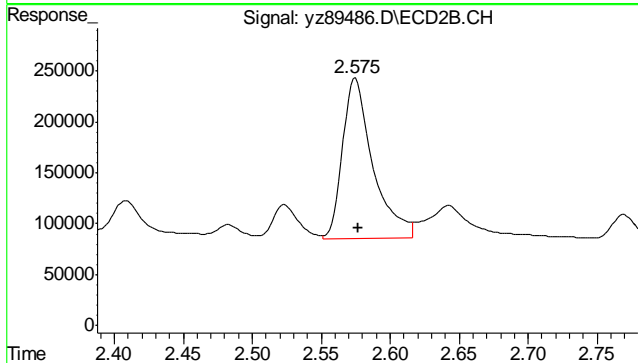
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 8206514
 Conc: 21.77 ppb



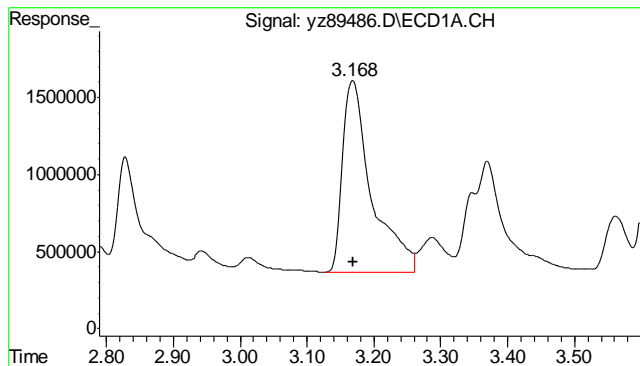
#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1354506
 Conc: 18.64 ppb



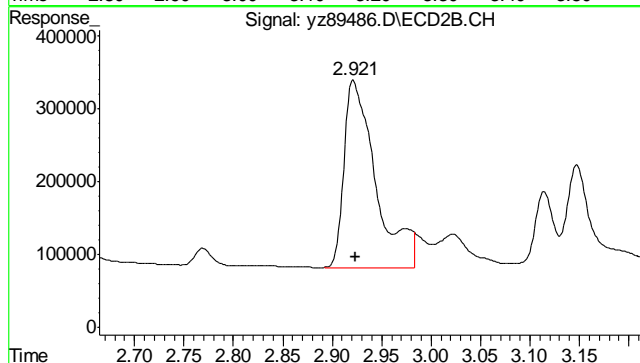
#2 AR1016-A
 R.T.: 2.828 min
 Delta R.T.: -0.002 min
 Response: 1688572
 Conc: 298.78 ppb m



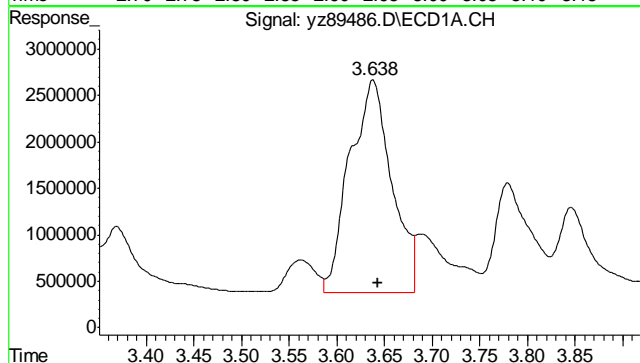
#2 AR1016-A
 R.T.: 2.575 min
 Delta R.T.: -0.002 min
 Response: 241109
 Conc: 190.71 ppb m



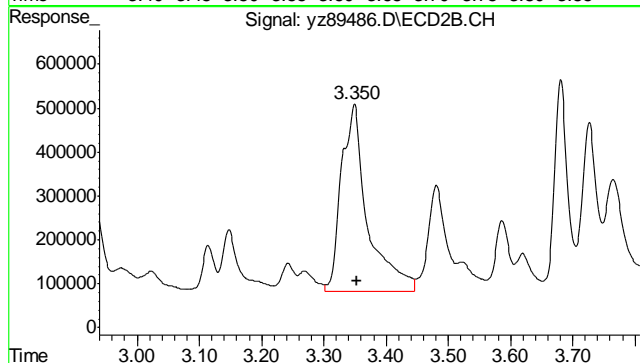
#3 AR1016-B
 R.T.: 3.168 min
 Delta R.T.: -0.002 min
 Response: 3777669
 Conc: 255.99 ppb



#3 AR1016-B
 R.T.: 2.921 min
 Delta R.T.: -0.002 min
 Response: 575023
 Conc: 218.01 ppb m

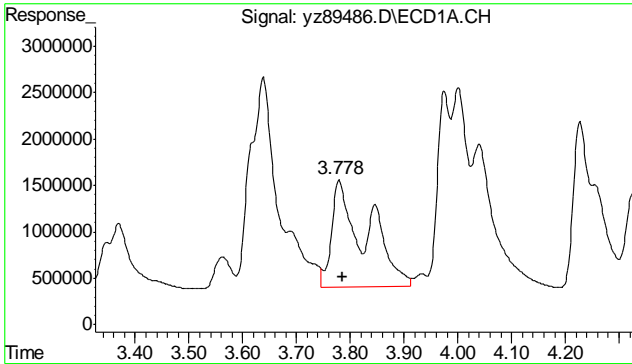


#4 AR1016-C
 R.T.: 3.638 min
 Delta R.T.: -0.005 min
 Response: 7062609
 Conc: 263.76 ppb m

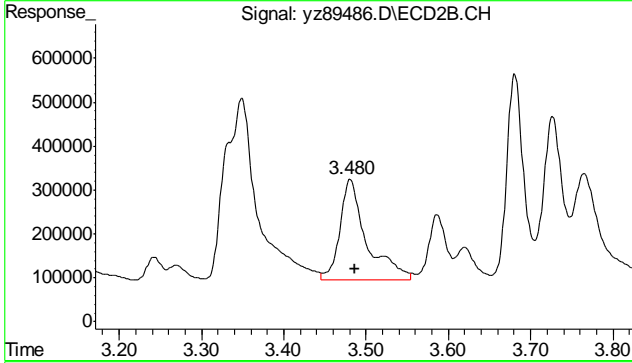


#4 AR1016-C
 R.T.: 3.350 min
 Delta R.T.: -0.004 min
 Response: 1249752
 Conc: 286.41 ppb

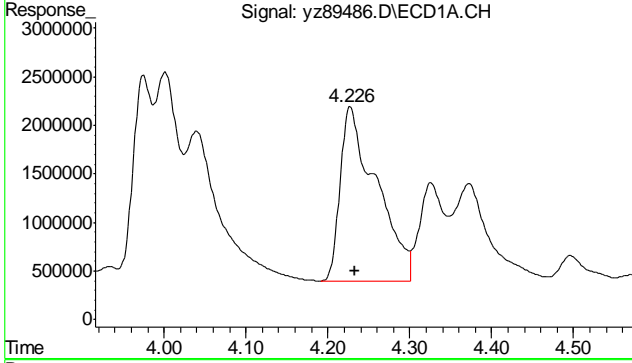
7.4.2
7



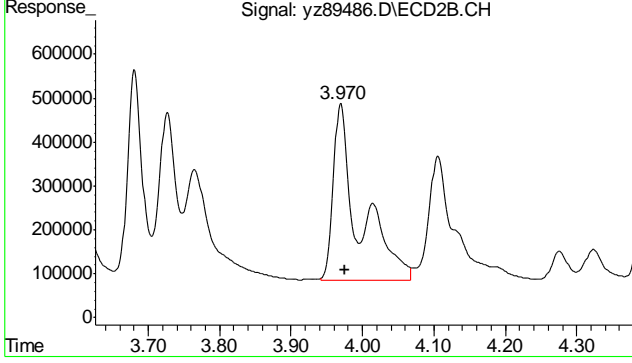
#5 AR1016-D
 R.T.: 3.778 min
 Delta R.T.: -0.007 min
 Response: 5157628
 Conc: 278.64 m



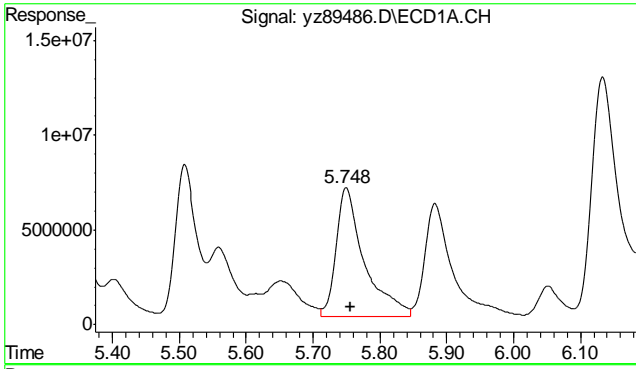
#5 AR1016-D
 R.T.: 3.480 min
 Delta R.T.: -0.007 min
 Response: 517763
 Conc: 274.73 m



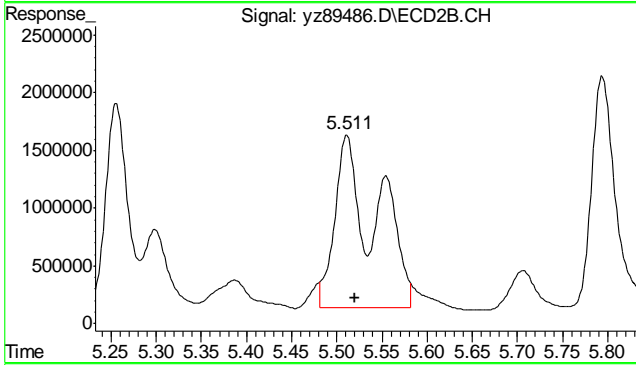
#6 AR1016-E
 R.T.: 4.226 min
 Delta R.T.: -0.007 min
 Response: 5499290
 Conc: 464.02



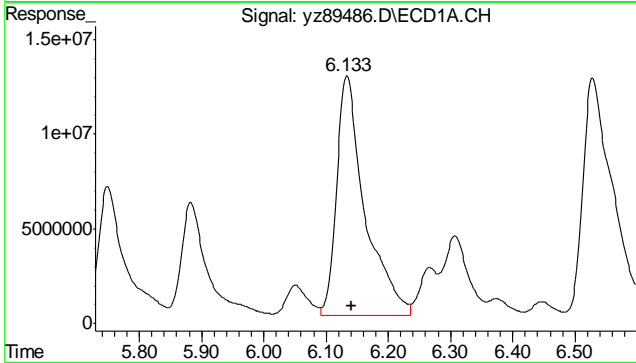
#6 AR1016-E
 R.T.: 3.970 min
 Delta R.T.: -0.005 min
 Response: 991640
 Conc: 452.10 m



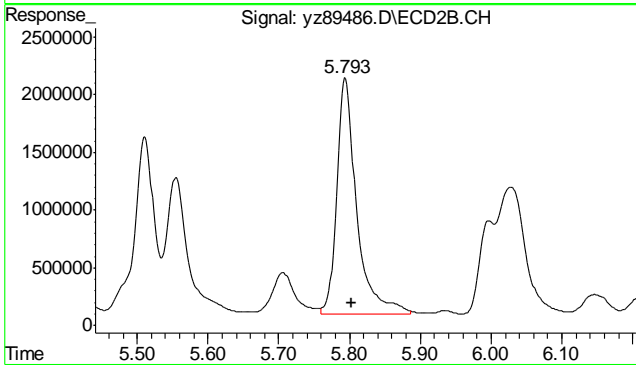
#7 AR1260-A
 R.T.: 5.748 min
 Delta R.T.: -0.009 min
 Response: 20128966
 Conc: 1117.96 ppb



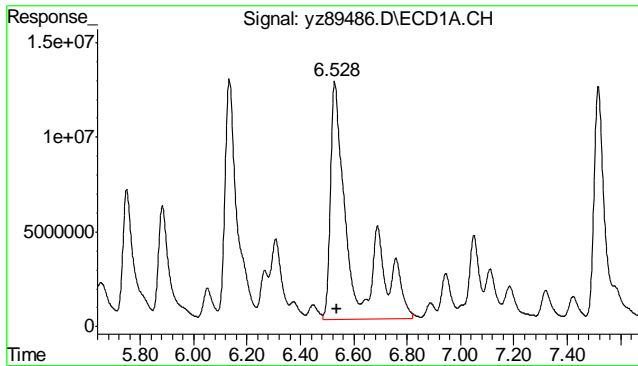
#7 AR1260-A
 R.T.: 5.511 min
 Delta R.T.: -0.009 min
 Response: 4677362
 Conc: 1472.40 ppb m



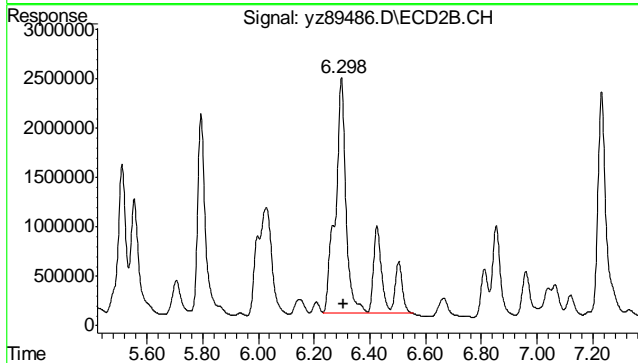
#8 AR1260-B
 R.T.: 6.133 min
 Delta R.T.: -0.009 min
 Response: 39994795
 Conc: 1569.25 ppb



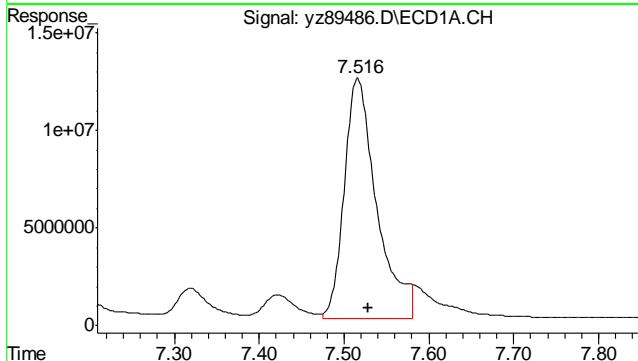
#8 AR1260-B
 R.T.: 5.793 min
 Delta R.T.: -0.010 min
 Response: 4003534
 Conc: 1107.23 ppb m



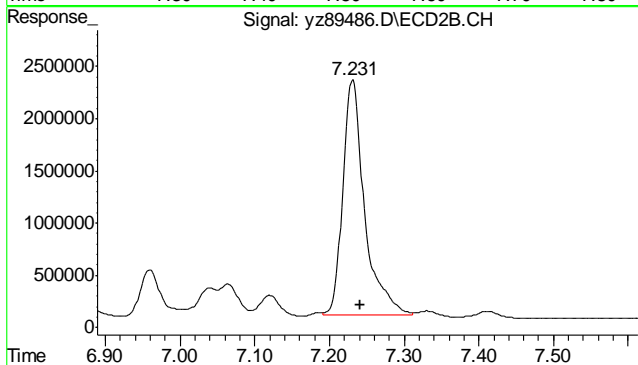
#9 AR1260-C
 R.T.: 6.528 min
 Delta R.T.: -0.009 min
 Response: 65486555
 Conc: 1179.23 ppb m



#9 AR1260-C
 R.T.: 6.298 min
 Delta R.T.: -0.009 min
 Response: 8982578
 Conc: 1000.54 ppb m

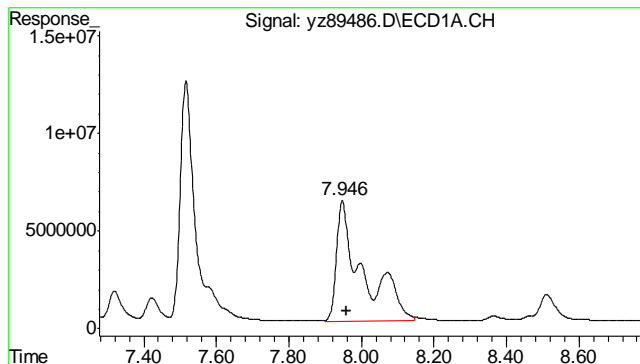


#10 AR1260-D
 R.T.: 7.516 min
 Delta R.T.: -0.012 min
 Response: 32691979
 Conc: 876.43 ppb m

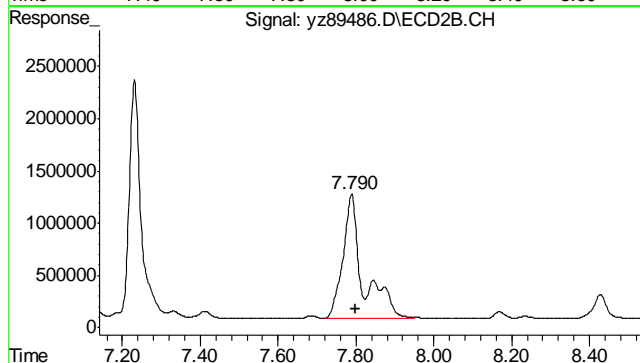


#10 AR1260-D
 R.T.: 7.231 min
 Delta R.T.: -0.010 min
 Response: 4583655
 Conc: 733.01 ppb m

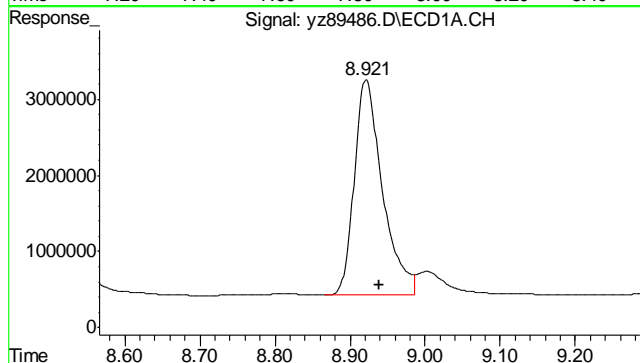
7.4.2
 7



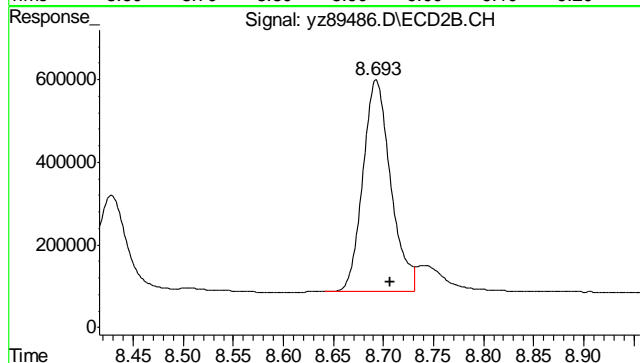
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 30804946
 Conc: 804.82 ppb m



#11 AR1260-E
 R.T.: 7.790 min
 Delta R.T.: -0.009 min
 Response: 4287268
 Conc: 702.12 ppb m

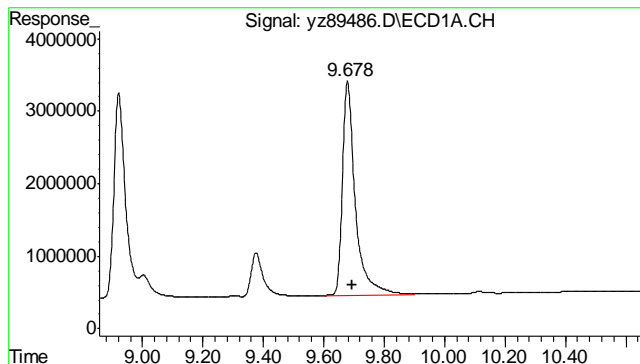


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 7423665
 Conc: 810.97

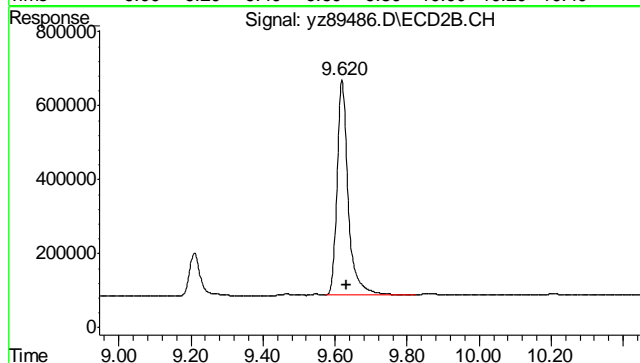


#12 AR1260-F
 R.T.: 8.693 min
 Delta R.T.: -0.014 min
 Response: 1004189
 Conc: 665.76

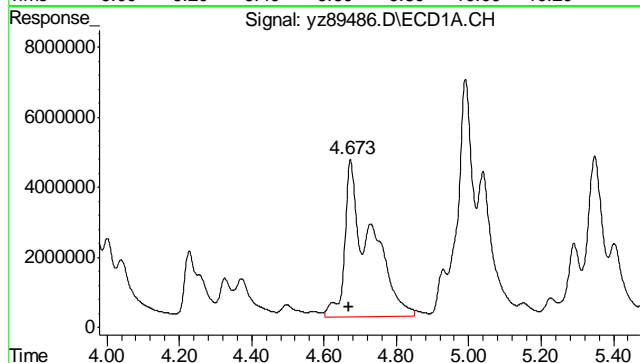
7.4.2
 7



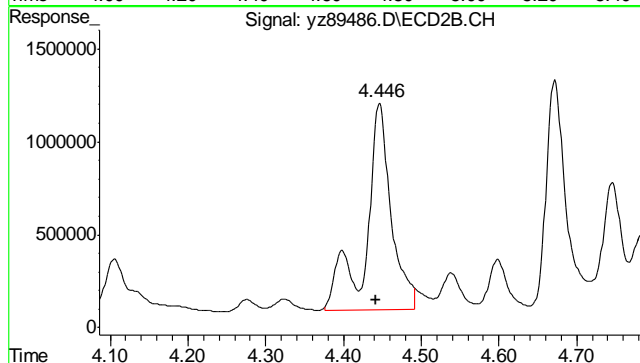
#13 DCB
 R.T.: 9.678 min
 Delta R.T.: -0.017 min
 Response: 8792184
 Conc: 26.72 ppb m



#13 DCB
 R.T.: 9.620 min
 Delta R.T.: -0.014 min
 Response: 1245233
 Conc: 21.46 ppb

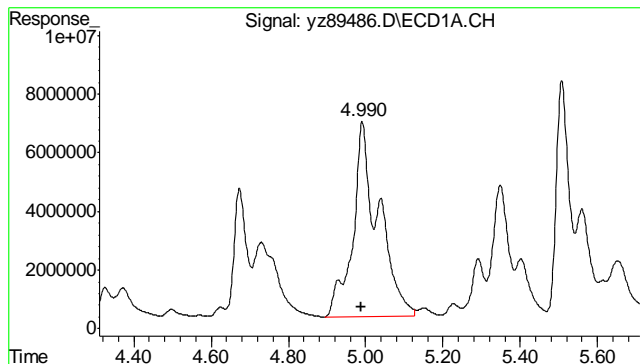


#32 AR1254-A
 R.T.: 4.673 min
 Delta R.T.: 0.003 min
 Response: 22167760
 Conc: 986.91 ppb m

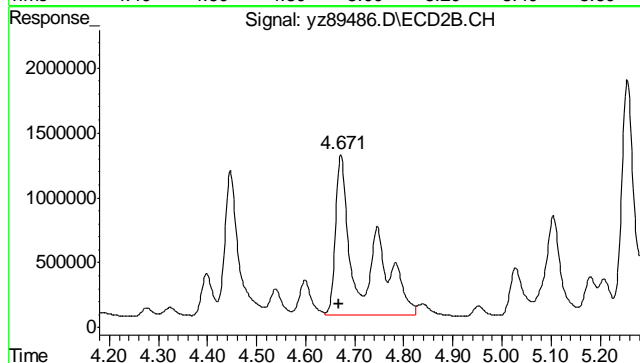


#32 AR1254-A
 R.T.: 4.446 min
 Delta R.T.: 0.004 min
 Response: 2543095
 Conc: 806.53 ppb m

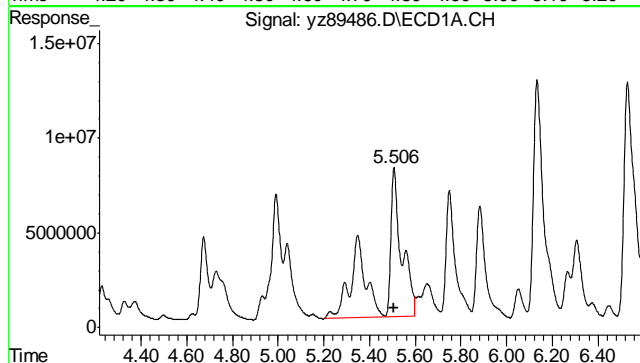
7.4.2
 7



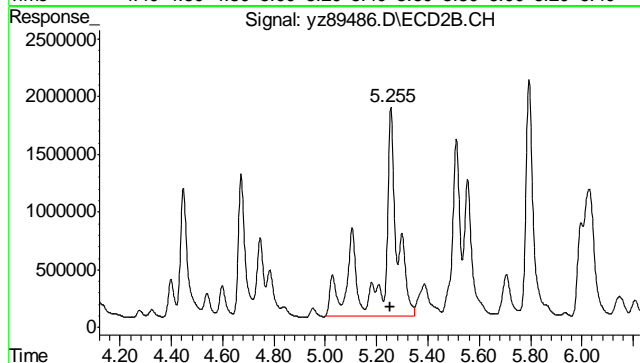
#33 AR1254-B
 R.T.: 4.990 min
 Delta R.T.: 0.001 min
 Response: 30820494
 Conc: 1028.74 ppb m



#33 AR1254-B
 R.T.: 4.671 min
 Delta R.T.: 0.003 min
 Response: 4148570
 Conc: 889.13 ppb m



#34 AR1254-C
 R.T.: 5.506 min
 Delta R.T.: 0.003 min
 Response: 46711766
 Conc: 1062.94 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.003 min
 Response: 7671701
 Conc: 1018.31 ppb m

7.4.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89488.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:16 pm
 Operator : sofyaz
 Sample : OP37808-ms1
 Misc : op37808,gyz7550,15.51,,,10,,s
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:35:54 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.524	2.180	11437514	1815089	30.346	24.975
Spiked Amount	40.000 Range	42 - 132	Recovery	=	75.87%	62.44%
13) s DCB	9.704	9.630	10013828	1425753	30.432m	24.566m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	76.08%	61.41%
Target Compounds						
2) AR1016-A	2.847f	2.579	2129438	326310	376.784m	272.348 #
3) AR1016-B	3.189f	2.927	4639665	656520	314.408	248.909
4) AR1016-C	3.662f	3.357	9212980	1419784	344.068m	325.374m
5) AR1016-D	3.804f	3.489	6208305	578688	335.407m	307.062m
6) AR1016-E	4.254f	3.979	4226036	724122	356.588	330.136m
7) AR1260-A	5.777f	5.522	8482583	1701636	471.119	535.663m
8) AR1260-B	6.162f	5.805	16398155	1614157	643.404m	446.414 #
9) AR1260-C	6.557f	6.309	29601089	4069806	533.034m	453.322m
10) AR1260-D	7.544f	7.242	18607688	2535444	498.848m	405.464
11) AR1260-E	7.975f	7.800	17902645	2408198	467.733m	394.385m
12) AR1260-F	8.947	8.704	4351787	611640	475.392	405.504m
32) AR1254-A	4.700f	4.455	6191887	801373	275.663m	254.153m
33) AR1254-B	5.019f	4.682	8568813	1057916	286.013m	226.735m
34) AR1254-C	5.535f	5.265	16567628	2099988	377.002m	278.745m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.4.3
 7

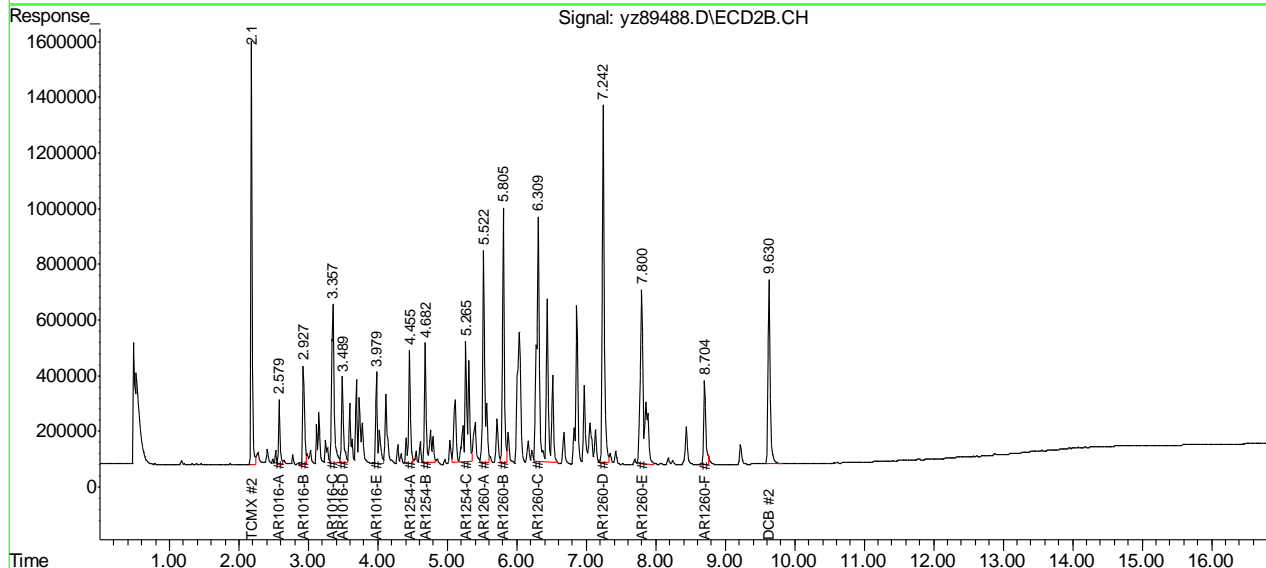
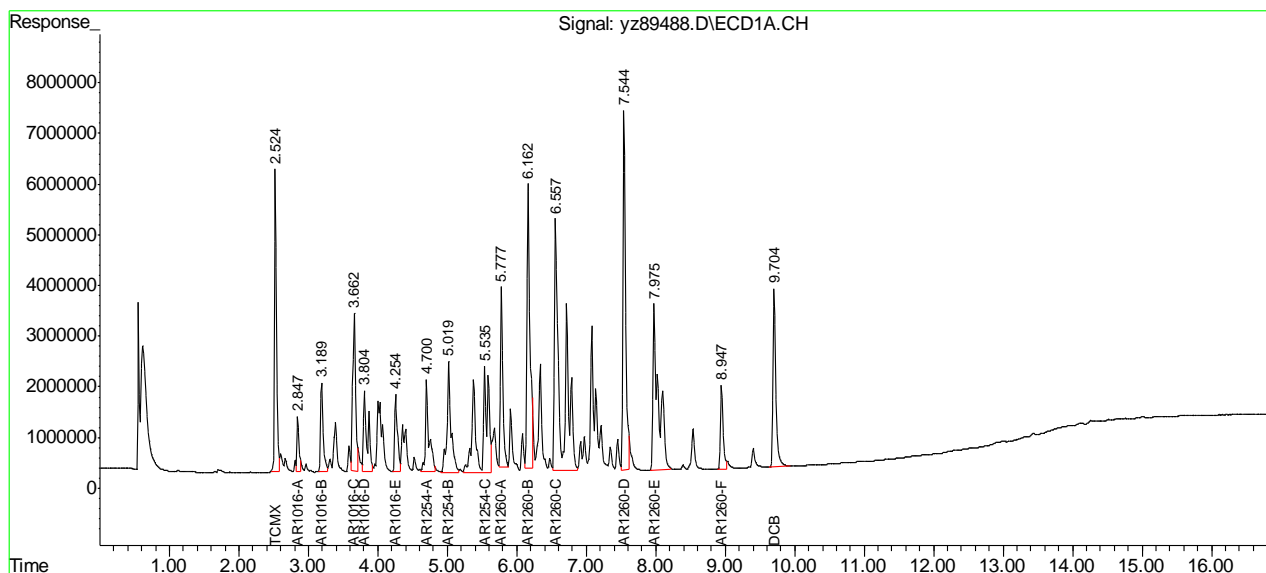
Quantitation Report (QT Reviewed)

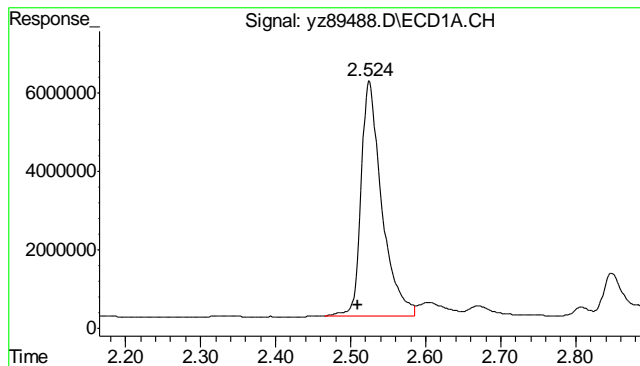
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89488.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:16 pm
 Operator : sofyaz
 Sample : OP37808-ms1
 Misc : op37808,gyz7550,15.51,,,10,,s
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 10:35:54 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

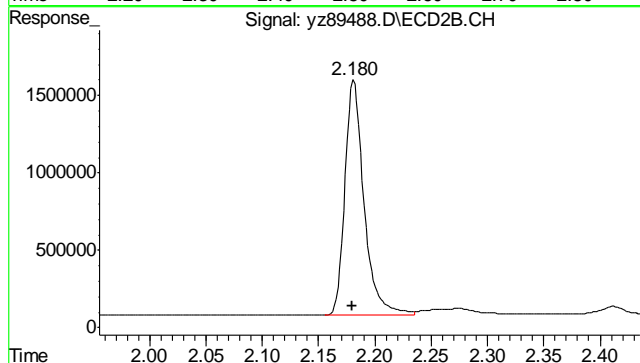
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

7.4.3
7

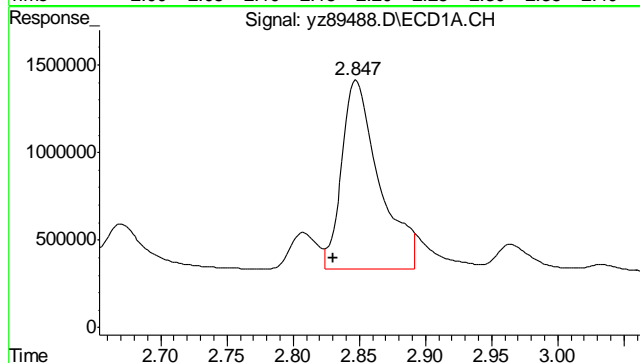




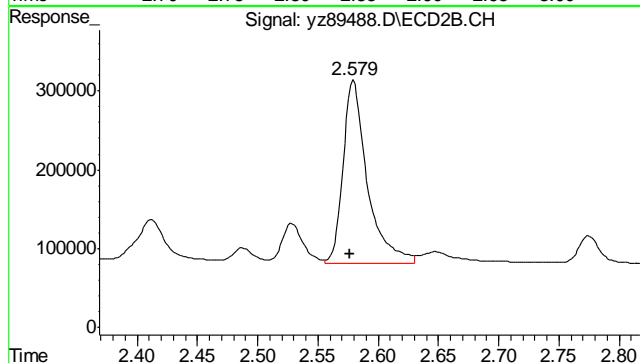
#1 TCMX
 R.T.: 2.524 min
 Delta R.T.: 0.014 min
 Response: 11437514
 Conc: 30.35 ppb



#1 TCMX
 R.T.: 2.180 min
 Delta R.T.: 0.000 min
 Response: 1815089
 Conc: 24.97 ppb

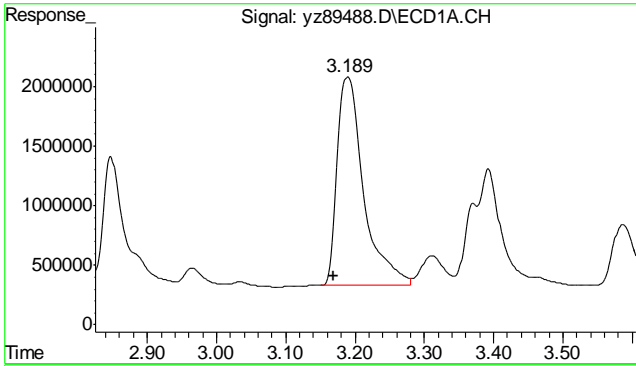


#2 AR1016-A
 R.T.: 2.847 min
 Delta R.T.: 0.017 min
 Response: 2129438
 Conc: 376.78 ppb m

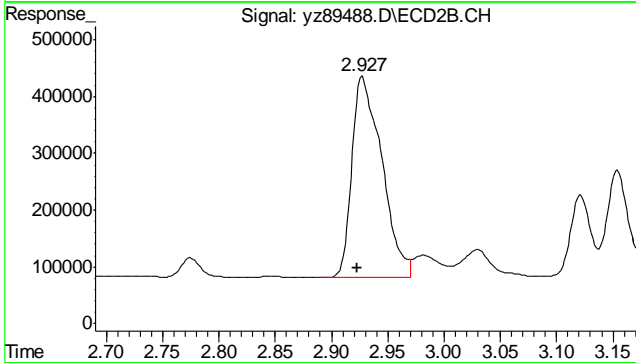


#2 AR1016-A
 R.T.: 2.579 min
 Delta R.T.: 0.002 min
 Response: 326310
 Conc: 272.35 ppb

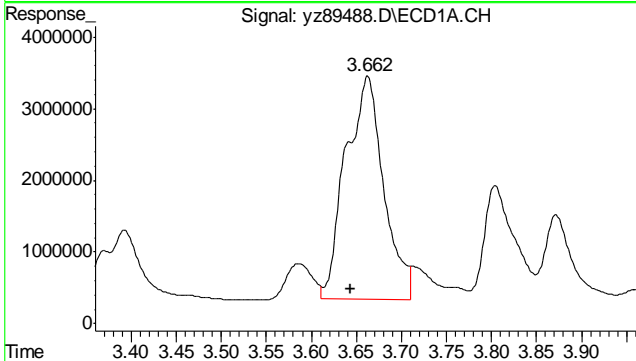
7.4.3
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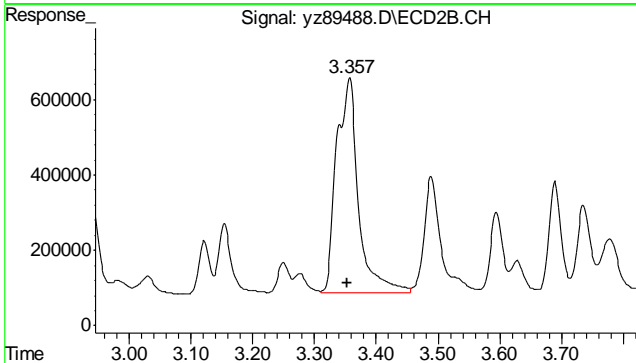
#3 AR1016-B
 R.T.: 3.189 min
 Delta R.T.: 0.019 min
 Response: 4639665
 Conc: 314.41 ppb



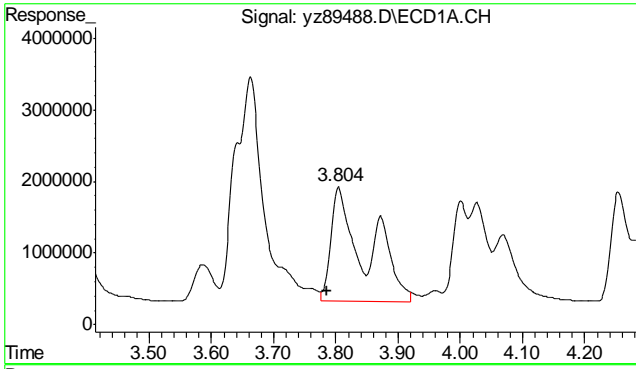
#3 AR1016-B
 R.T.: 2.927 min
 Delta R.T.: 0.004 min
 Response: 656520
 Conc: 248.91 ppb



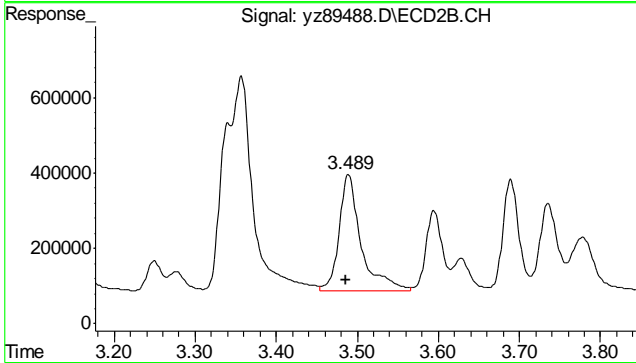
#4 AR1016-C
 R.T.: 3.662 min
 Delta R.T.: 0.019 min
 Response: 9212980
 Conc: 344.07 ppb m



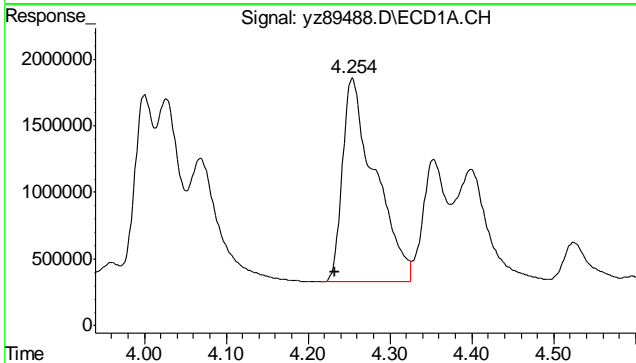
#4 AR1016-C
 R.T.: 3.357 min
 Delta R.T.: 0.004 min
 Response: 1419784
 Conc: 325.37 ppb m



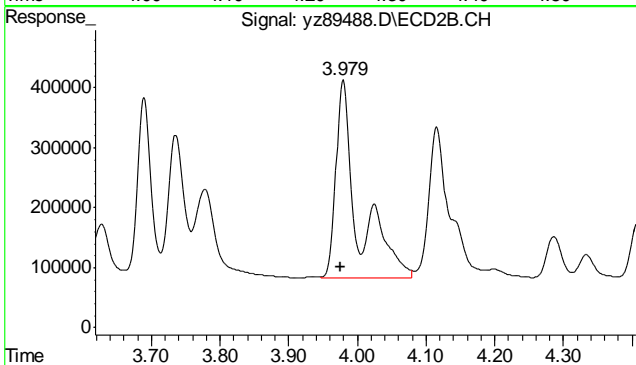
#5 AR1016-D
 R.T.: 3.804 min
 Delta R.T.: 0.019 min
 Response: 6208305
 Conc: 335.41 m



#5 AR1016-D
 R.T.: 3.489 min
 Delta R.T.: 0.002 min
 Response: 578688
 Conc: 307.06 m

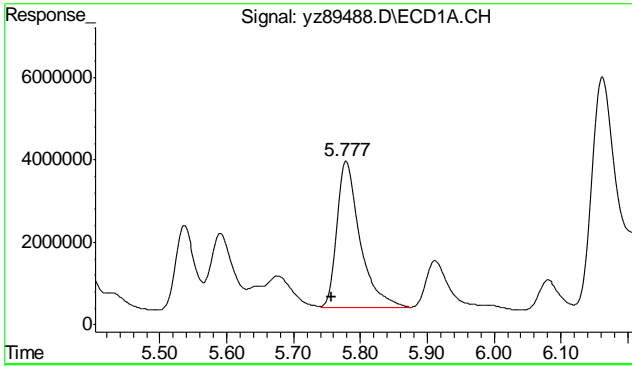


#6 AR1016-E
 R.T.: 4.254 min
 Delta R.T.: 0.020 min
 Response: 4226036
 Conc: 356.59

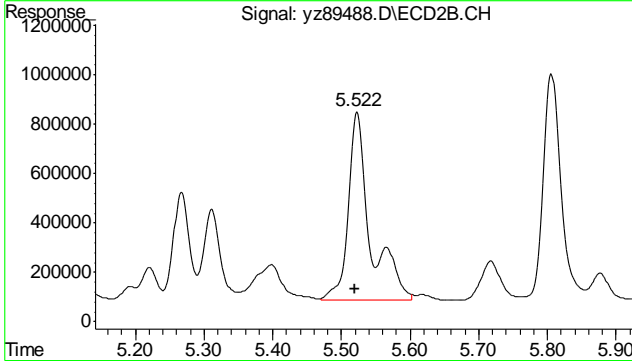


#6 AR1016-E
 R.T.: 3.979 min
 Delta R.T.: 0.004 min
 Response: 724122
 Conc: 330.14 m

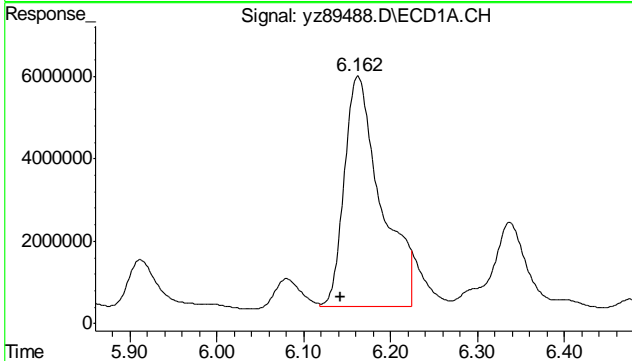
7.4.3
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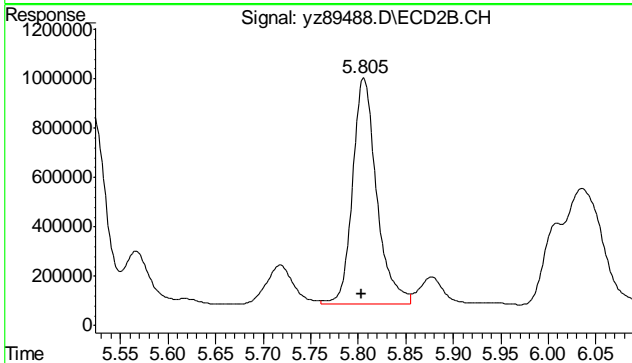
#7 AR1260-A
 R.T.: 5.777 min
 Delta R.T.: 0.020 min
 Response: 8482583
 Conc: 471.12 ppb



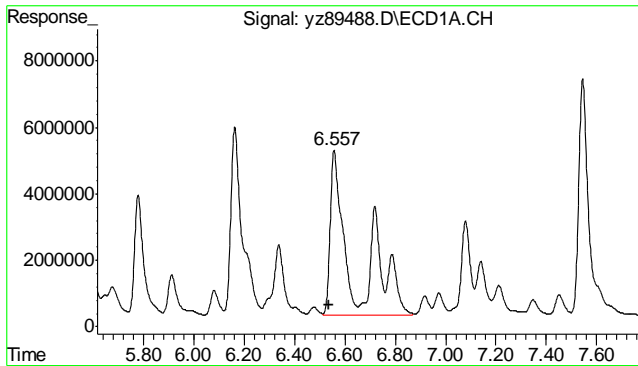
#7 AR1260-A
 R.T.: 5.522 min
 Delta R.T.: 0.002 min
 Response: 1701636
 Conc: 535.66 ppb m



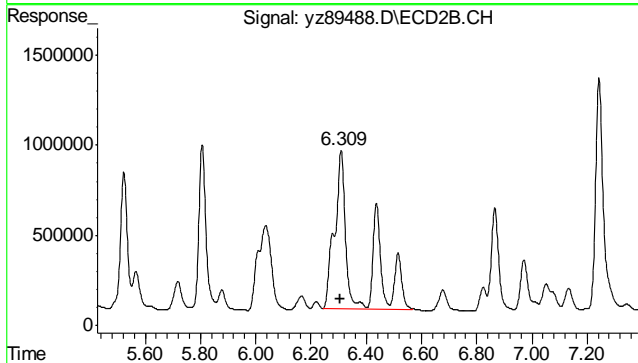
#8 AR1260-B
 R.T.: 6.162 min
 Delta R.T.: 0.020 min
 Response: 16398155
 Conc: 643.40 ppb m



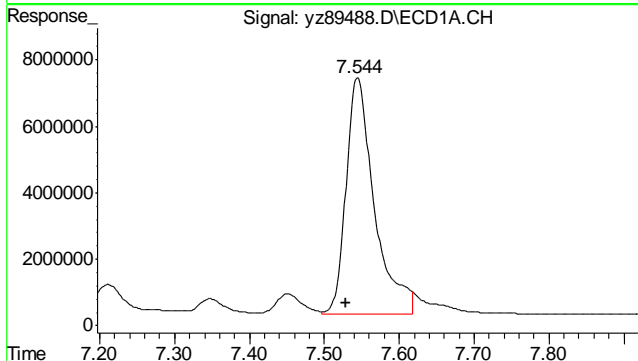
#8 AR1260-B
 R.T.: 5.805 min
 Delta R.T.: 0.002 min
 Response: 1614157
 Conc: 446.41 ppb



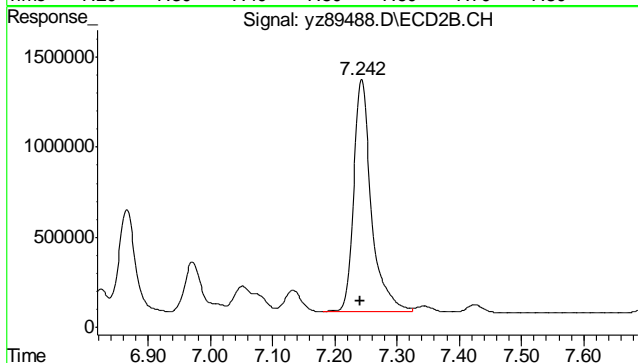
#9 AR1260-C
 R.T.: 6.557 min
 Delta R.T.: 0.020 min
 Response: 29601089
 Conc: 533.03 ppb m



#9 AR1260-C
 R.T.: 6.309 min
 Delta R.T.: 0.002 min
 Response: 4069806
 Conc: 453.32 ppb m

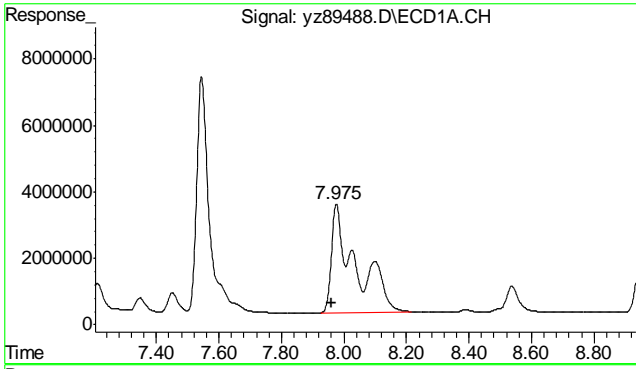


#10 AR1260-D
 R.T.: 7.544 min
 Delta R.T.: 0.015 min
 Response: 18607688
 Conc: 498.85 ppb m

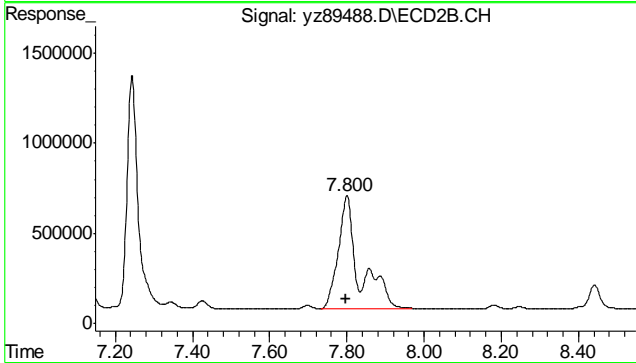


#10 AR1260-D
 R.T.: 7.242 min
 Delta R.T.: 0.000 min
 Response: 2535444
 Conc: 405.46 ppb

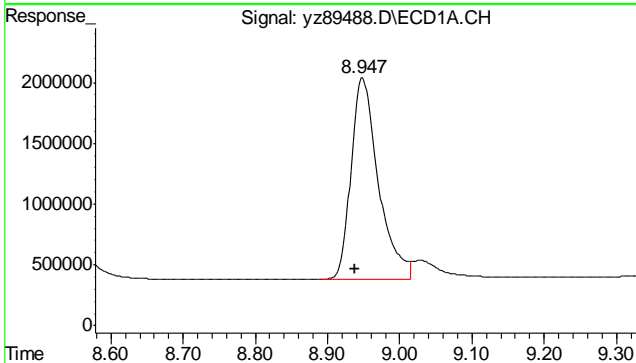
7.4.3
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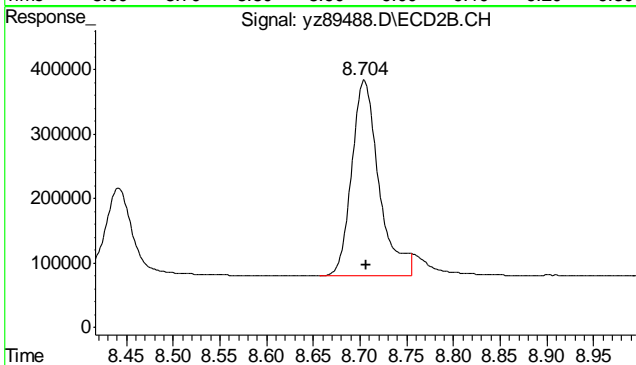
#11 AR1260-E
 R.T.: 7.975 min
 Delta R.T.: 0.015 min
 Response: 17902645
 Conc: 467.73 ppb m



#11 AR1260-E
 R.T.: 7.800 min
 Delta R.T.: 0.002 min
 Response: 2408198
 Conc: 394.39 ppb m

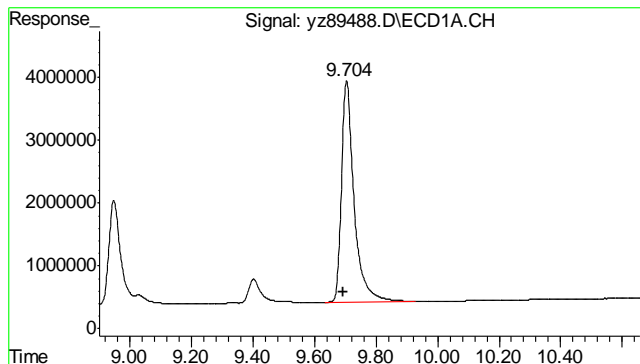


#12 AR1260-F
 R.T.: 8.947 min
 Delta R.T.: 0.009 min
 Response: 4351787
 Conc: 475.39

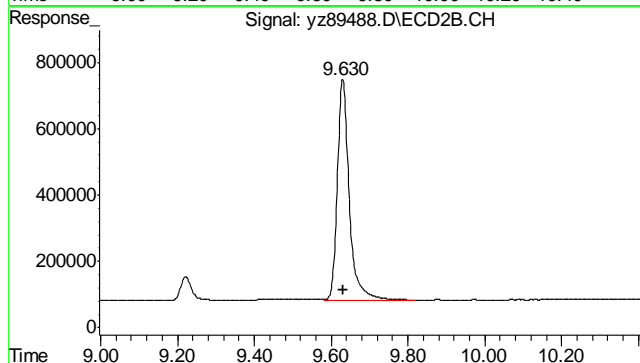


#12 AR1260-F
 R.T.: 8.704 min
 Delta R.T.: -0.003 min
 Response: 611640
 Conc: 405.50 m

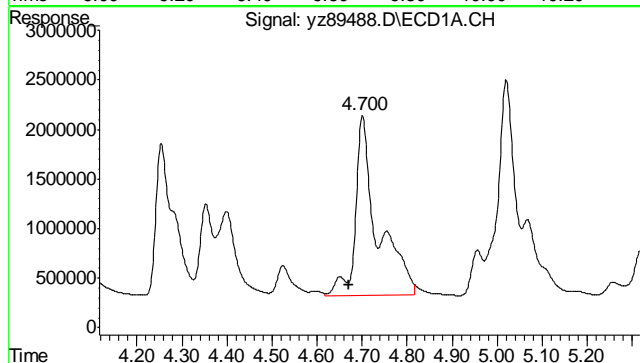
7.4.3
7



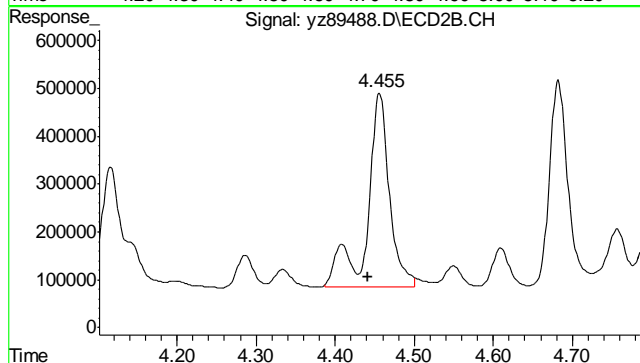
#13 DCB
 R.T.: 9.704 min
 Delta R.T.: 0.009 min
 Response: 10013828
 Conc: 30.43 ppb m



#13 DCB
 R.T.: 9.630 min
 Delta R.T.: -0.003 min
 Response: 1425753
 Conc: 24.57 ppb m

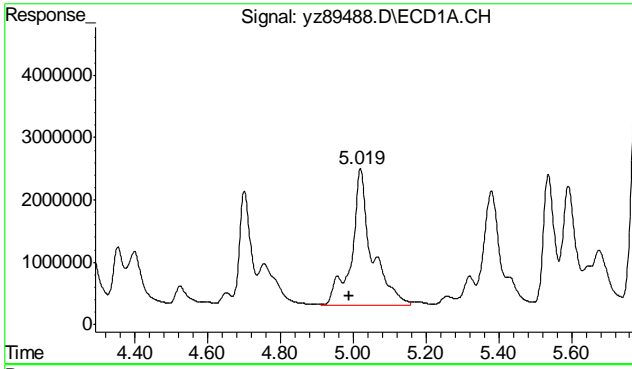


#32 AR1254-A
 R.T.: 4.700 min
 Delta R.T.: 0.030 min
 Response: 6191887
 Conc: 275.66 ppb m

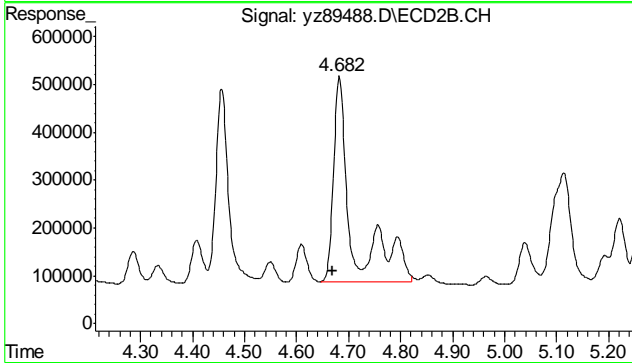


#32 AR1254-A
 R.T.: 4.455 min
 Delta R.T.: 0.014 min
 Response: 801373
 Conc: 254.15 ppb m

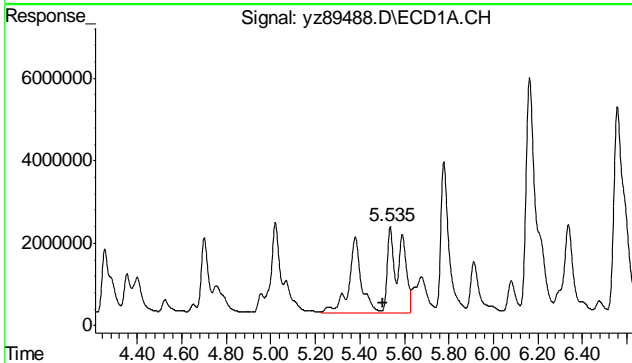
7.4.3
7



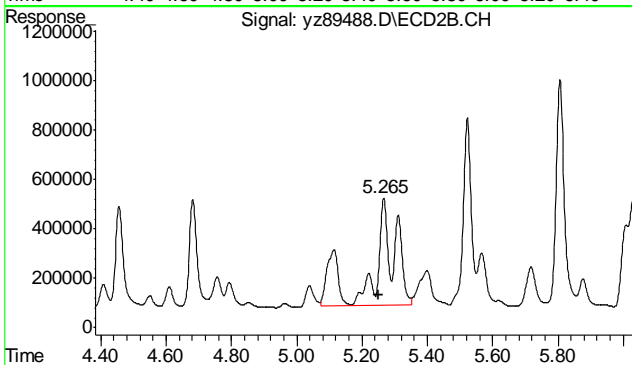
#33 AR1254-B
 R.T.: 5.019 min
 Delta R.T.: 0.030 min
 Response: 8568813
 Conc: 286.01 ppb m



#33 AR1254-B
 R.T.: 4.682 min
 Delta R.T.: 0.014 min
 Response: 1057916
 Conc: 226.73 ppb m



#34 AR1254-C
 R.T.: 5.535 min
 Delta R.T.: 0.032 min
 Response: 16567628
 Conc: 377.00 ppb m



#34 AR1254-C
 R.T.: 5.265 min
 Delta R.T.: 0.014 min
 Response: 2099988
 Conc: 278.75 ppb m

7.4.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89489.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:35 pm
 Operator : sofyaz
 Sample : OP37808-msd1
 Misc : op37808,gyz7550,15.58,,,10,,s
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:22:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.507	2.176	10299614	1585246	27.327	21.812
Spiked Amount	40.000 Range	42 - 132	Recovery	=	68.32%	54.53%
13) s DCB	9.681	9.619	9014769	1291940	27.396m	22.260
Spiked Amount	40.000 Range	30 - 150	Recovery	=	68.49%	55.65%
Target Compounds						
2) AR1016-A	2.829	2.574	1790678	278200	316.844m	226.772m#
3) AR1016-B	3.169	2.921	4000081	596048	271.066	225.982
4) AR1016-C	3.639	3.349	8307791	1287463	310.263m	295.050m
5) AR1016-D	3.781	3.481	5475143	522458	295.798m	277.226m
6) AR1016-E	4.229	3.970	4269190	760906	360.229	346.906m
7) AR1260-A	5.750	5.511	11081792	2640563	615.479	831.230m#
8) AR1260-B	6.136	5.795	23346756	2353461	916.042	650.878m#
9) AR1260-C	6.531	6.299	40277454	5829605	725.286m	649.339m
10) AR1260-D	7.519	7.232	19503246	2703312	522.857m	432.310
11) AR1260-E	7.950	7.790	18640757	2495785	487.017m	408.729m
12) AR1260-F	8.925	8.695	4124899	578805	450.607	383.735m
32) AR1254-A	4.674	4.447	10413815	1298629	463.623m	411.856m
33) AR1254-B	4.994	4.672	14862618	1897132	496.089m	406.598m
34) AR1254-C	5.509	5.255	25646386	4076177	583.592m	541.057m

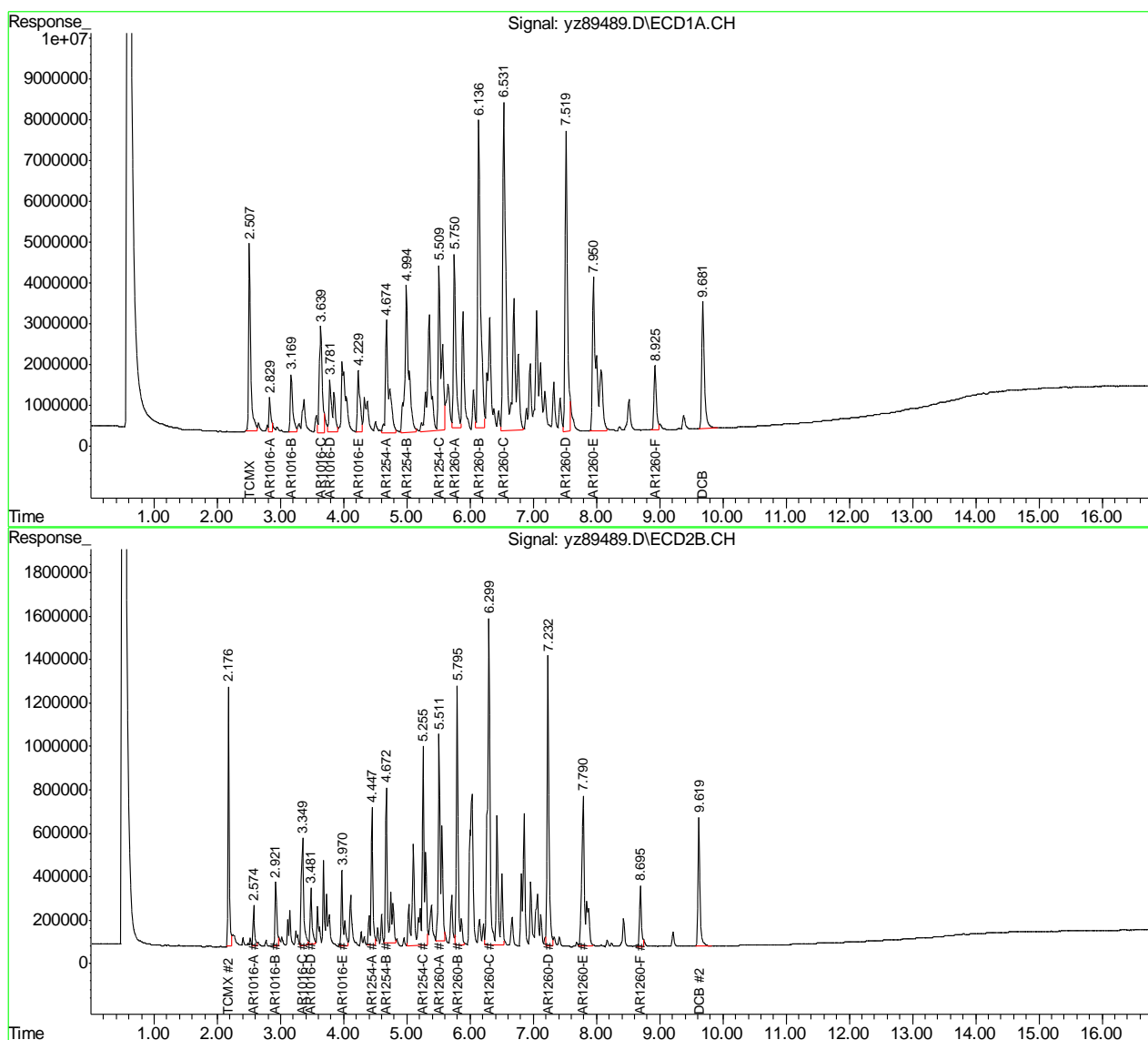
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

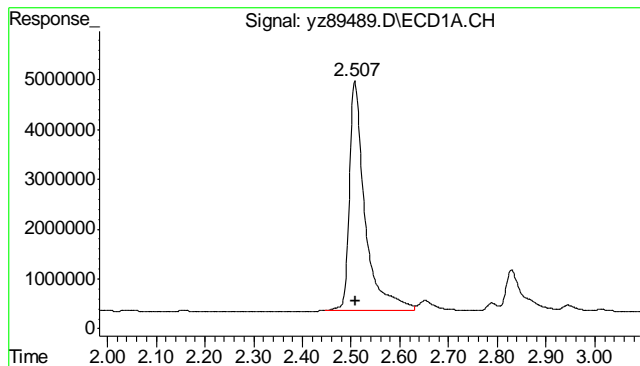
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89489.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 2:35 pm
 Operator : sofyaz
 Sample : OP37808-msd1
 Misc : op37808,gyz7550,15.58,,,10,,s
 ALS Vial : 12 Sample Multiplier: 1

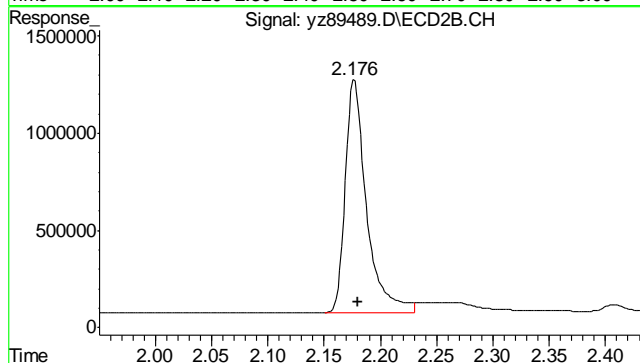
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 09:22:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

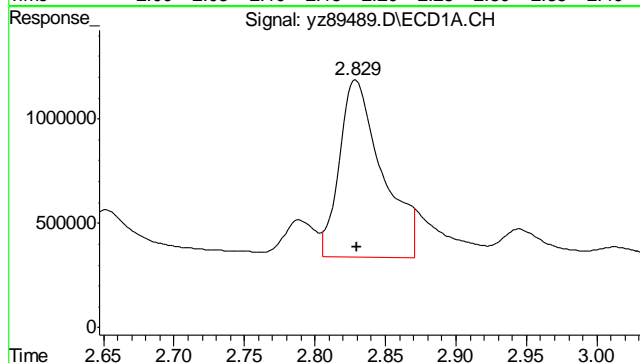




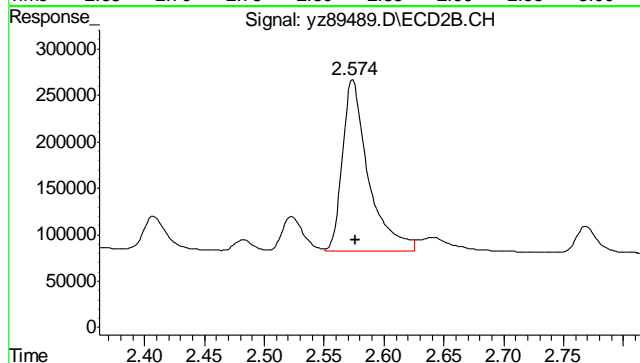
#1 TCMX
 R.T.: 2.507 min
 Delta R.T.: -0.003 min
 Response: 10299614
 Conc: 27.33 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 1585246
 Conc: 21.81 ppb

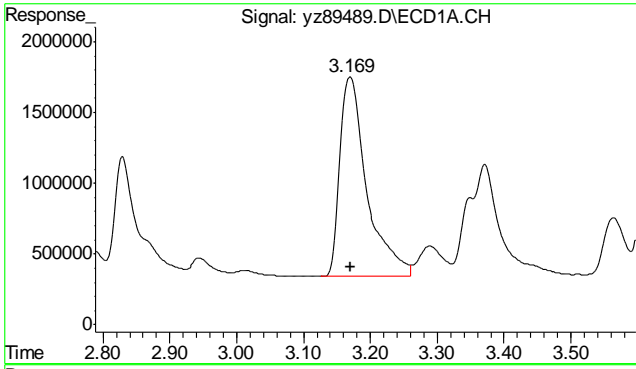


#2 AR1016-A
 R.T.: 2.829 min
 Delta R.T.: -0.001 min
 Response: 1790678
 Conc: 316.84 ppb m

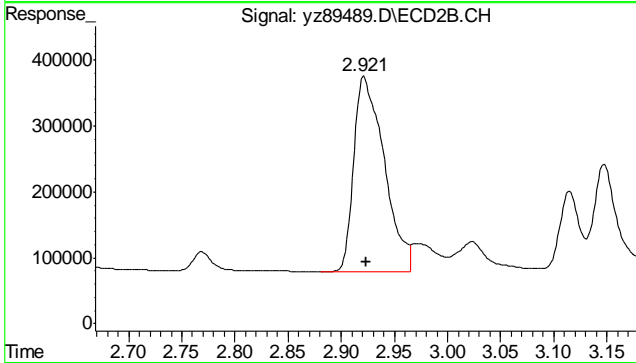


#2 AR1016-A
 R.T.: 2.574 min
 Delta R.T.: -0.003 min
 Response: 278200
 Conc: 226.77 ppb m

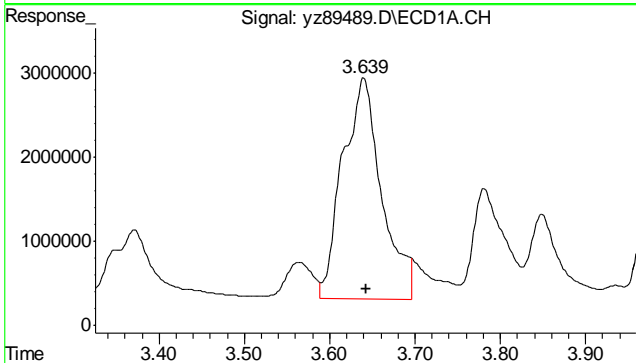
7.4.4
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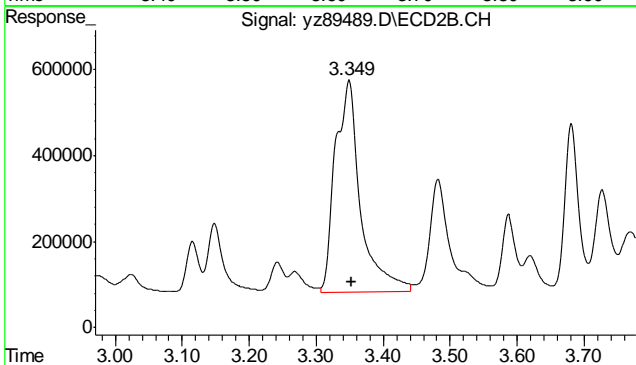
#3 AR1016-B
 R.T.: 3.169 min
 Delta R.T.: -0.001 min
 Response: 4000081
 Conc: 271.07 ppb



#3 AR1016-B
 R.T.: 2.921 min
 Delta R.T.: -0.003 min
 Response: 596048
 Conc: 225.98 ppb



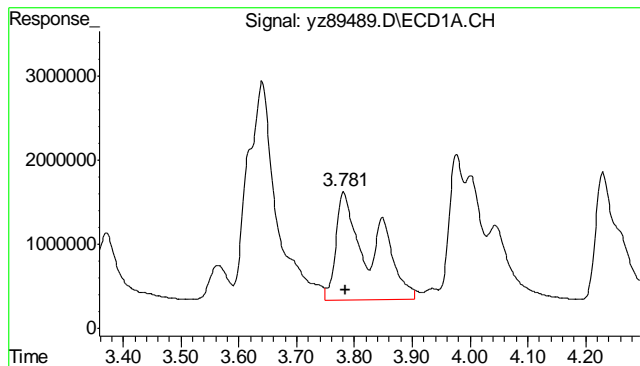
#4 AR1016-C
 R.T.: 3.639 min
 Delta R.T.: -0.004 min
 Response: 8307791
 Conc: 310.26 ppb m



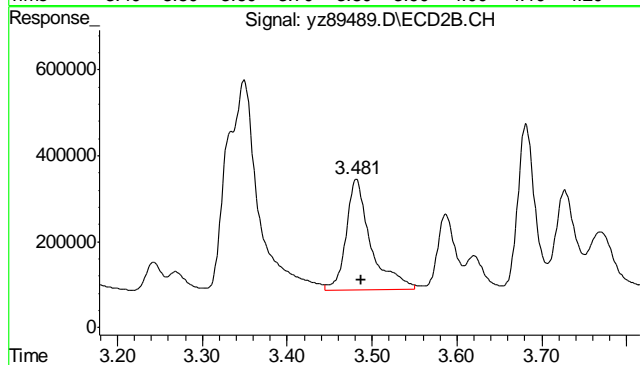
#4 AR1016-C
 R.T.: 3.349 min
 Delta R.T.: -0.004 min
 Response: 1287463
 Conc: 295.05 ppb m

7.4.4

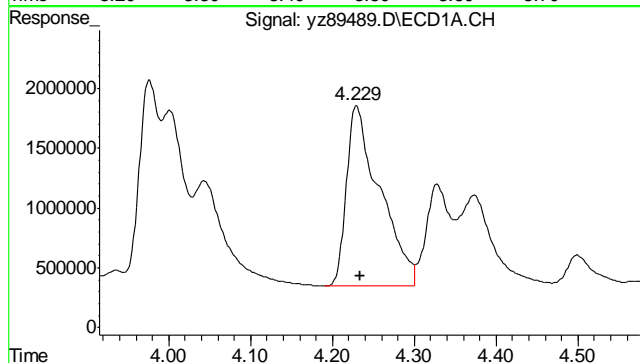
7



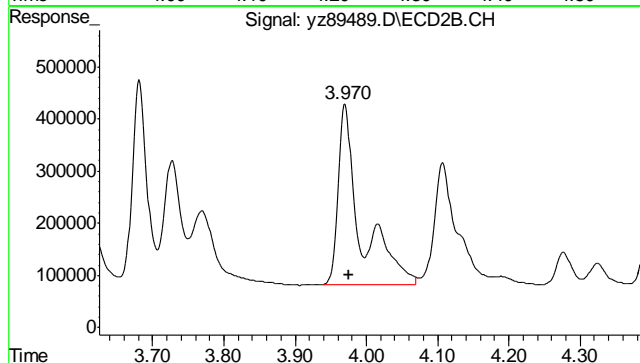
#5 AR1016-D
 R.T.: 3.781 min
 Delta R.T.: -0.004 min
 Response: 5475143
 Conc: 295.80 m



#5 AR1016-D
 R.T.: 3.481 min
 Delta R.T.: -0.006 min
 Response: 522458
 Conc: 277.23 m

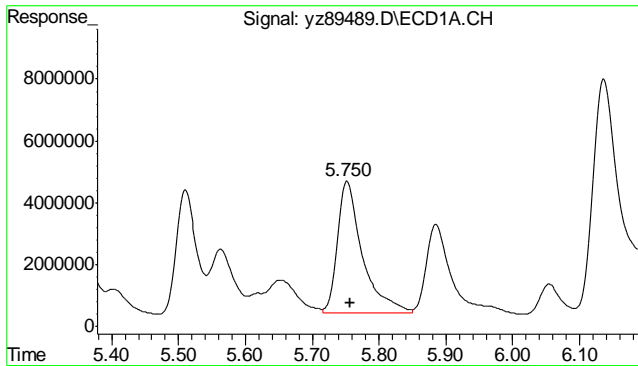


#6 AR1016-E
 R.T.: 4.229 min
 Delta R.T.: -0.004 min
 Response: 4269190
 Conc: 360.23

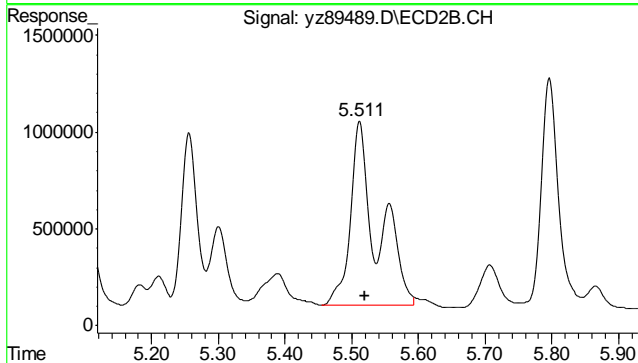


#6 AR1016-E
 R.T.: 3.970 min
 Delta R.T.: -0.004 min
 Response: 760906
 Conc: 346.91 m

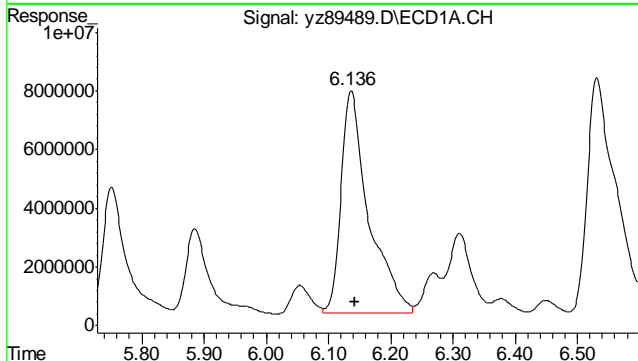
7.4.4
 7



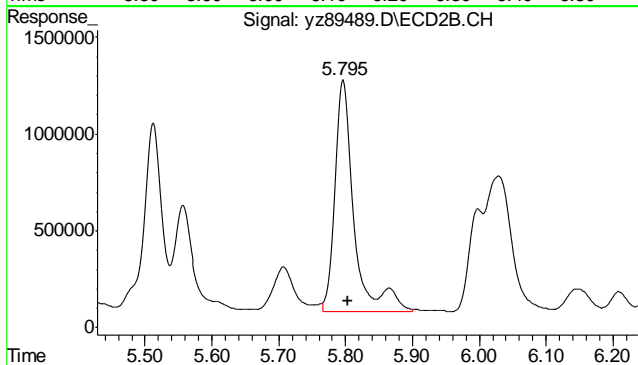
#7 AR1260-A
 R.T.: 5.750 min
 Delta R.T.: -0.006 min
 Response: 11081792
 Conc: 615.48 ppb



#7 AR1260-A
 R.T.: 5.511 min
 Delta R.T.: -0.009 min
 Response: 2640563
 Conc: 831.23 ppb m

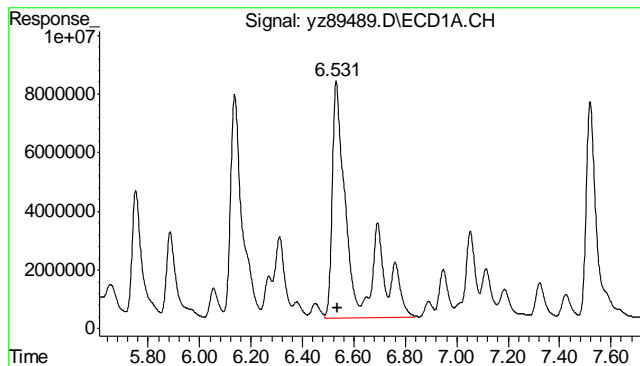


#8 AR1260-B
 R.T.: 6.136 min
 Delta R.T.: -0.006 min
 Response: 23346756
 Conc: 916.04 ppb

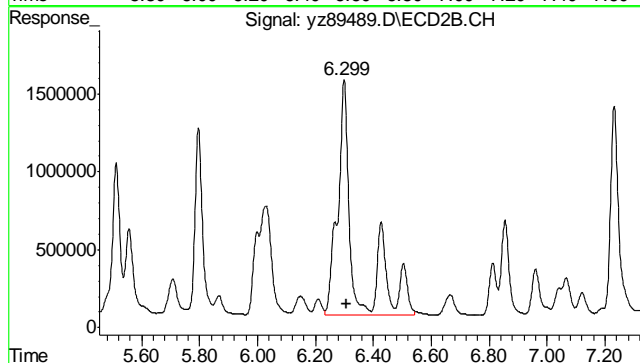


#8 AR1260-B
 R.T.: 5.795 min
 Delta R.T.: -0.008 min
 Response: 2353461
 Conc: 650.88 ppb m

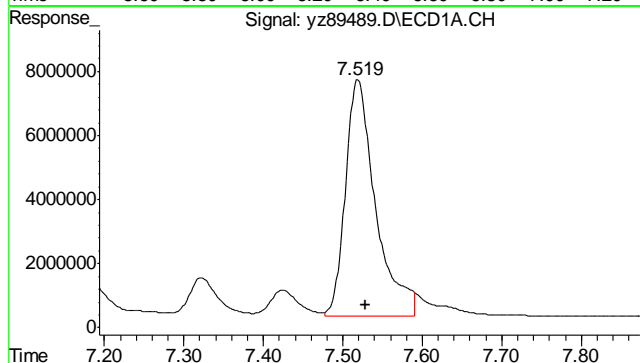
7.4.4
 7



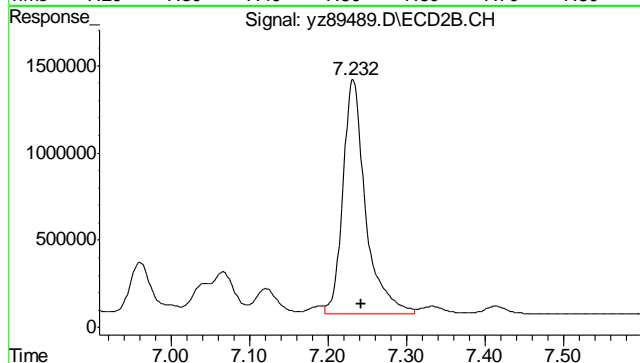
#9 AR1260-C
 R.T.: 6.531 min
 Delta R.T.: -0.006 min
 Response: 40277454
 Conc: 725.29 ppb m



#9 AR1260-C
 R.T.: 6.299 min
 Delta R.T.: -0.008 min
 Response: 5829605
 Conc: 649.34 ppb m

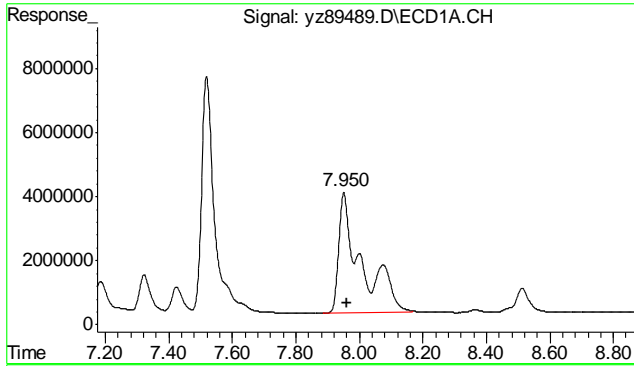


#10 AR1260-D
 R.T.: 7.519 min
 Delta R.T.: -0.009 min
 Response: 19503246
 Conc: 522.86 ppb m

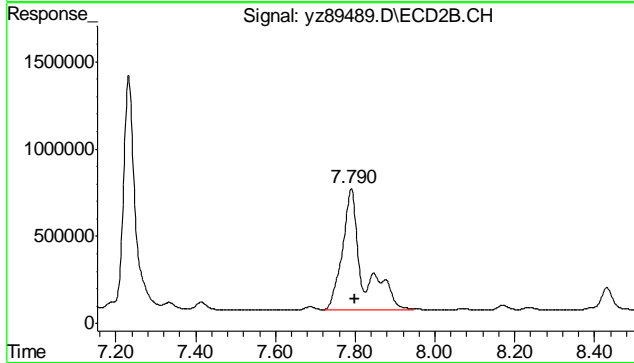


#10 AR1260-D
 R.T.: 7.232 min
 Delta R.T.: -0.009 min
 Response: 2703312
 Conc: 432.31 ppb

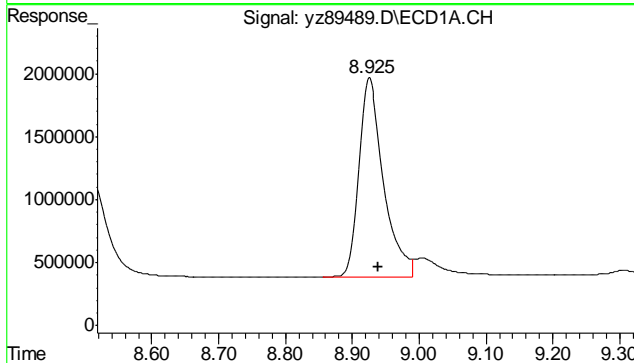
7.4.4
 7



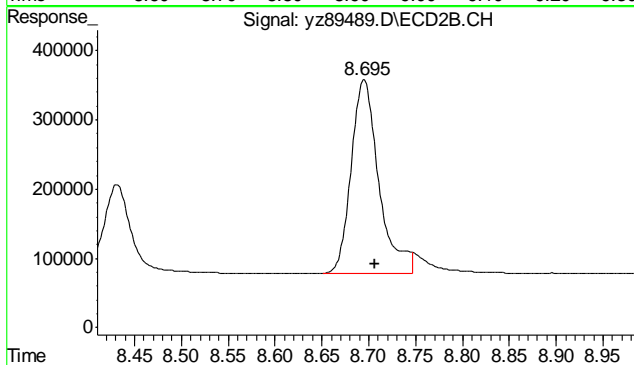
#11 AR1260-E
 R.T.: 7.950 min
 Delta R.T.: -0.009 min
 Response: 18640757
 Conc: 487.02 ppb m



#11 AR1260-E
 R.T.: 7.790 min
 Delta R.T.: -0.008 min
 Response: 2495785
 Conc: 408.73 ppb m



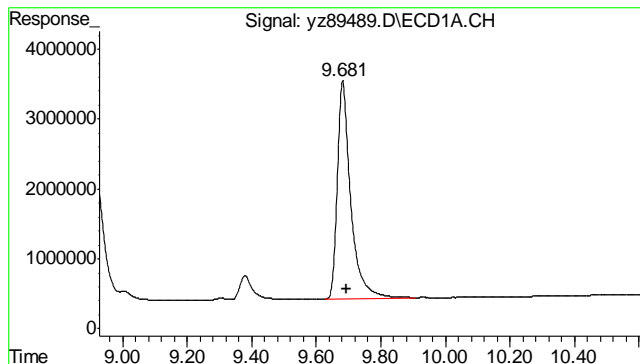
#12 AR1260-F
 R.T.: 8.925 min
 Delta R.T.: -0.013 min
 Response: 4124899
 Conc: 450.61



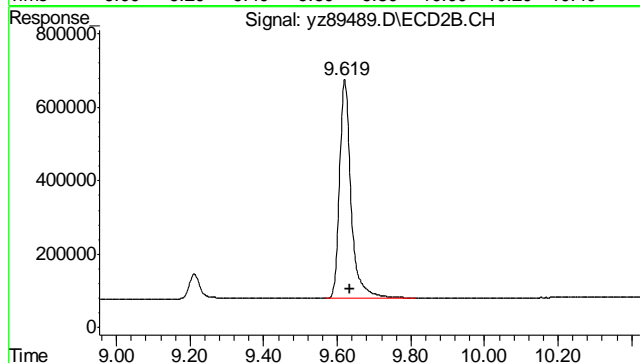
#12 AR1260-F
 R.T.: 8.695 min
 Delta R.T.: -0.011 min
 Response: 578805
 Conc: 383.74 m

7.4.4

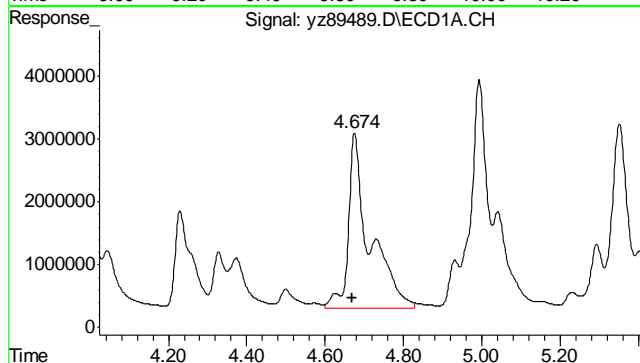
7



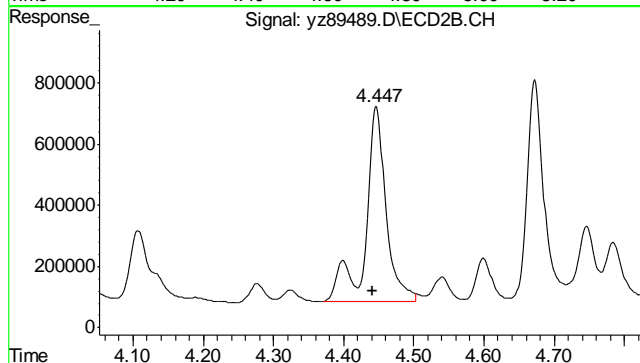
#13 DCB
 R.T.: 9.681 min
 Delta R.T.: -0.014 min
 Response: 9014769
 Conc: 27.40 ppb m



#13 DCB
 R.T.: 9.619 min
 Delta R.T.: -0.014 min
 Response: 1291940
 Conc: 22.26 ppb

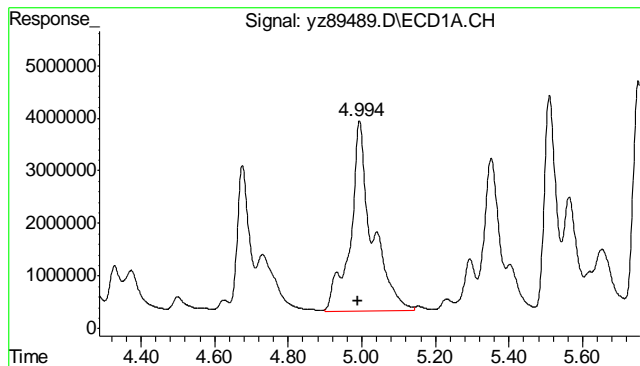


#32 AR1254-A
 R.T.: 4.674 min
 Delta R.T.: 0.004 min
 Response: 10413815
 Conc: 463.62 ppb m

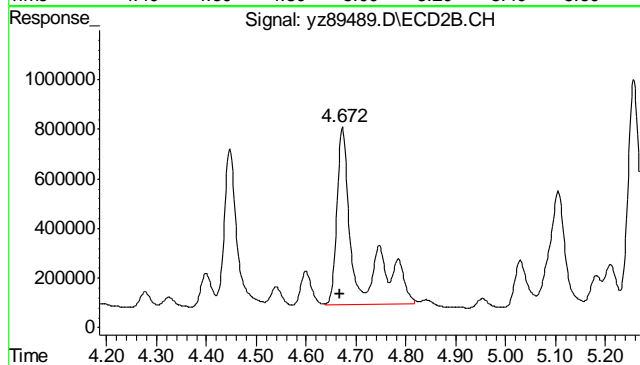


#32 AR1254-A
 R.T.: 4.447 min
 Delta R.T.: 0.005 min
 Response: 1298629
 Conc: 411.86 ppb m

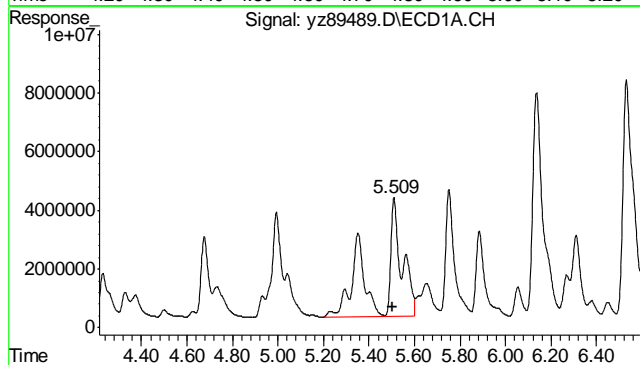
7.4.4
 7



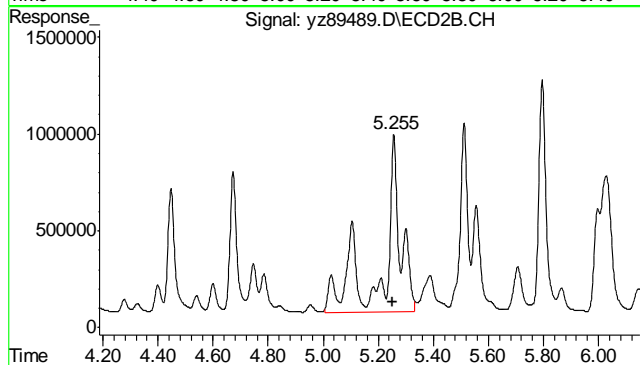
#33 AR1254-B
 R.T.: 4.994 min
 Delta R.T.: 0.005 min
 Response: 14862618
 Conc: 496.09 ppb m



#33 AR1254-B
 R.T.: 4.672 min
 Delta R.T.: 0.004 min
 Response: 1897132
 Conc: 406.60 ppb m



#34 AR1254-C
 R.T.: 5.509 min
 Delta R.T.: 0.005 min
 Response: 25646386
 Conc: 583.59 ppb m



#34 AR1254-C
 R.T.: 5.255 min
 Delta R.T.: 0.004 min
 Response: 4076177
 Conc: 541.06 ppb m

7.4.4
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89367.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:04 pm
 Operator : sofyaz
 Sample : ic7547-50,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 76 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:05:08 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:52:52 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502	2.172	3272164	622994	8.970	8.874m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	22.43%#	22.19%#
13) s DCB	9.675	9.612	3210447	556728	10.215m	9.972m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	25.54%#	24.93%#
Target Compounds						
2) AR1016-A	2.823	2.567	274511	113322	47.201m	94.950 #
3) AR1016-B	3.165	2.918	761314	147991	51.846	56.733
4) AR1016-C	3.633	3.345	1460754	235531	56.779m	55.546
5) AR1016-D	3.775	3.477	916089	94944	49.811m	51.465m
6) AR1016-E	4.225	3.968	598442	119328	50.939	56.106m
7) AR1260-A	5.745	5.507	1051903	176344	60.487m	57.272m
8) AR1260-B	6.127	5.788	1383423	193820	54.859	53.961m
9) AR1260-C	6.523	6.418	3020624	492772	55.403m	56.529m
10) AR1260-D	7.510	7.223	2019947	341648	54.693m	55.011
11) AR1260-E	7.942	7.780	2187187	333056	57.548m	54.808m
12) AR1260-F	8.915	8.683	473454	84505	50.665m	56.096m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

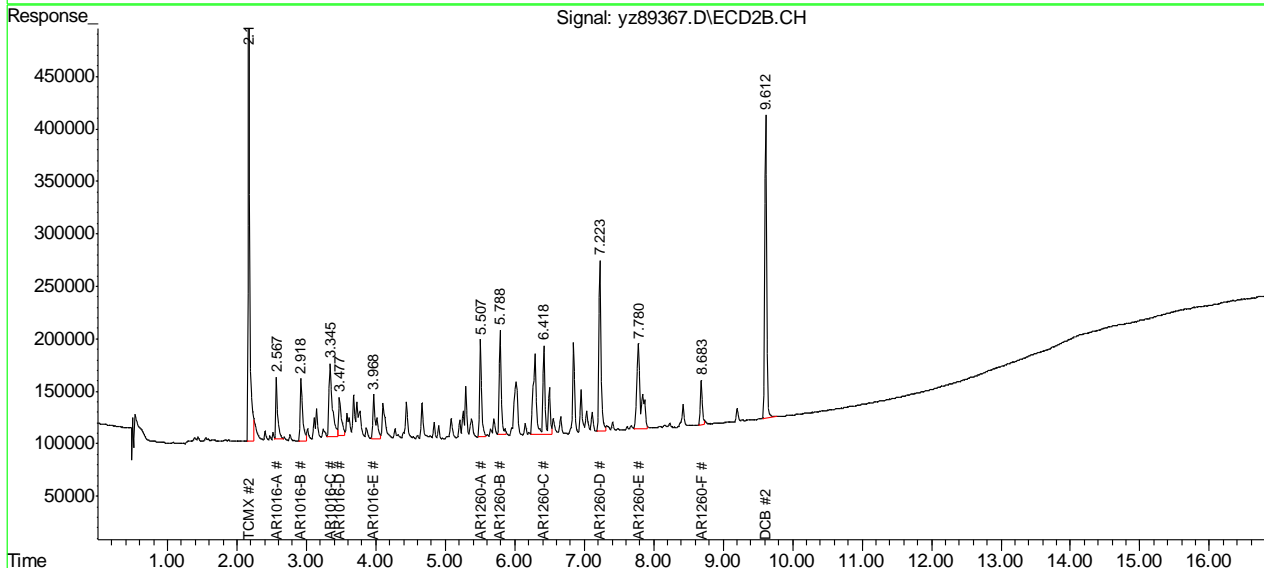
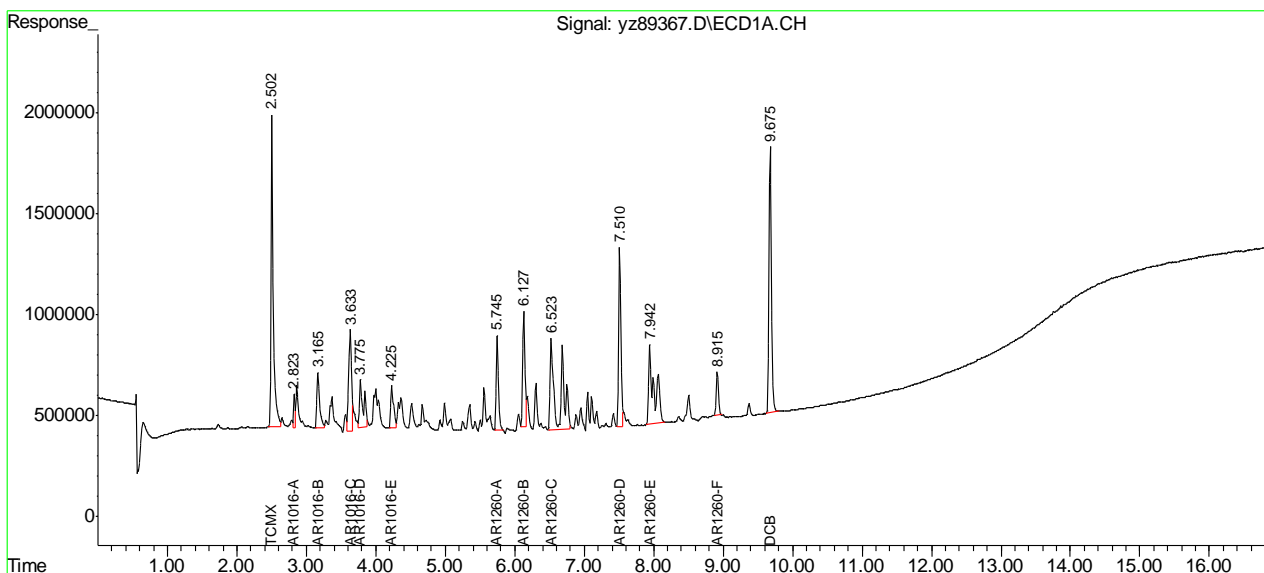
7.5.1
 7

Quantitation Report (QT Reviewed)

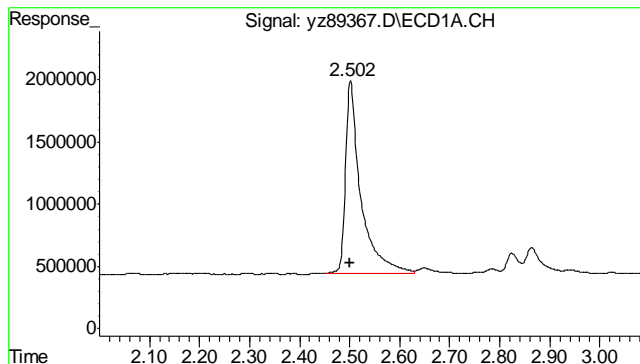
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89367.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:04 pm
 Operator : sofyaz
 Sample : ic7547-50,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 76 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:05:08 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:52:52 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

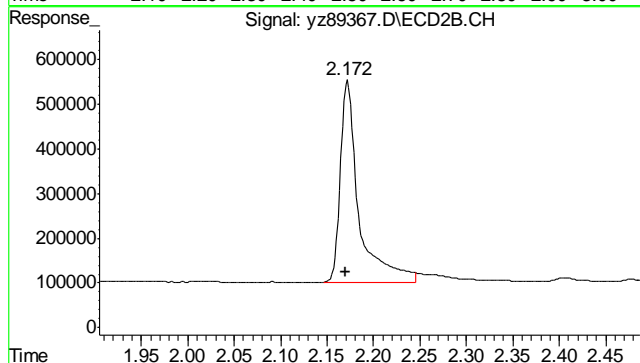
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



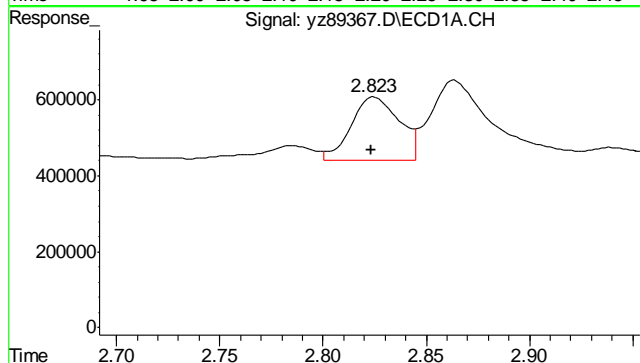
7.5.1
 7



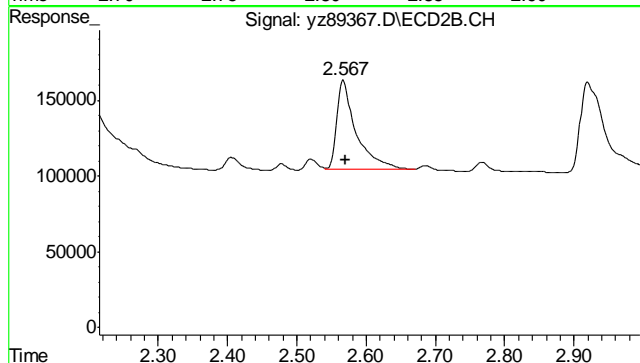
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: 0.000 min
 Response: 3272164
 Conc: 8.97 ppb



#1 TCMX
 R.T.: 2.172 min
 Delta R.T.: 0.002 min
 Response: 622994
 Conc: 8.87 ppb m

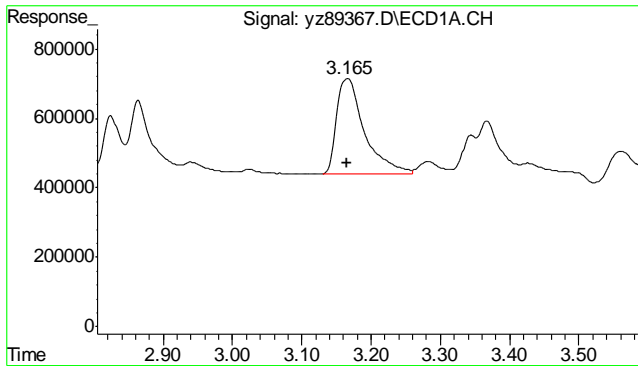


#2 AR1016-A
 R.T.: 2.823 min
 Delta R.T.: 0.000 min
 Response: 274511
 Conc: 47.20 ppb m

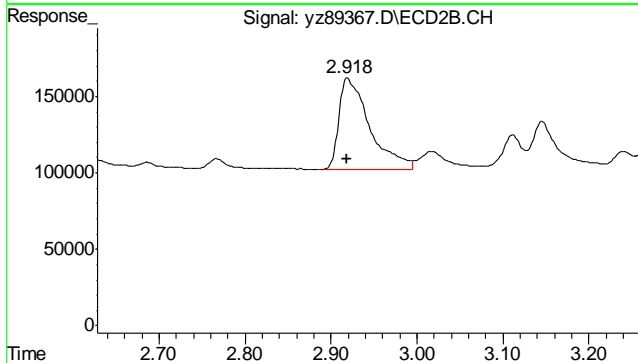


#2 AR1016-A
 R.T.: 2.567 min
 Delta R.T.: -0.003 min
 Response: 113322
 Conc: 94.95 ppb

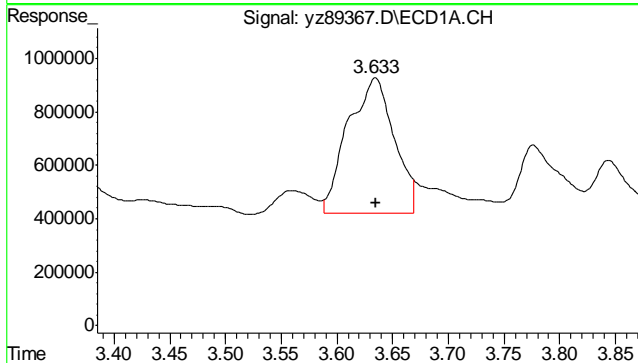
7.5.1
 7



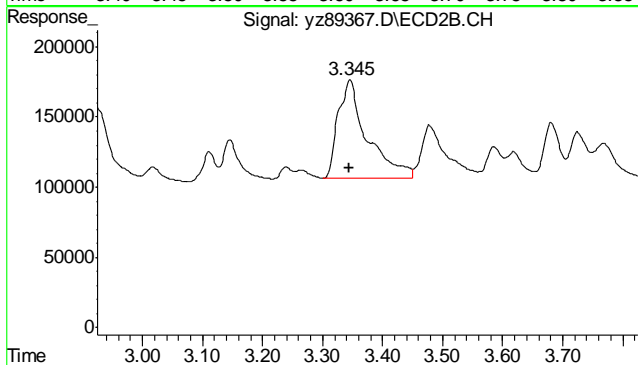
#3 AR1016-B
 R.T.: 3.165 min
 Delta R.T.: 0.000 min
 Response: 761314
 Conc: 51.85 ppb



#3 AR1016-B
 R.T.: 2.918 min
 Delta R.T.: 0.000 min
 Response: 147991
 Conc: 56.73 ppb

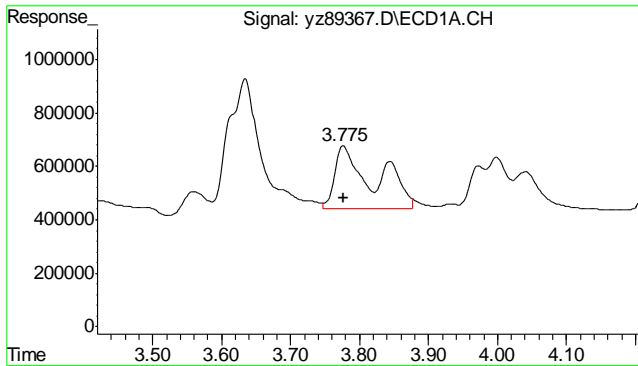


#4 AR1016-C
 R.T.: 3.633 min
 Delta R.T.: -0.002 min
 Response: 1460754
 Conc: 56.78 ppb m

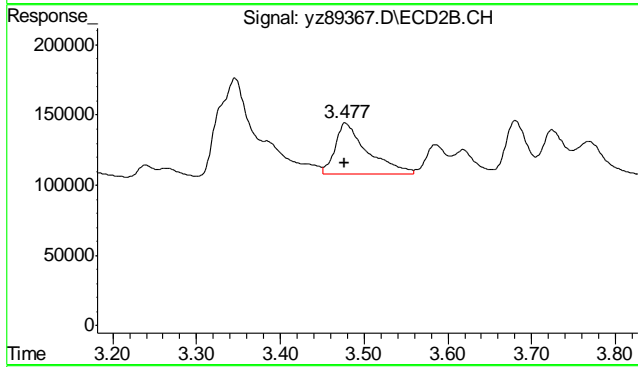


#4 AR1016-C
 R.T.: 3.345 min
 Delta R.T.: 0.000 min
 Response: 23531
 Conc: 55.55 ppb

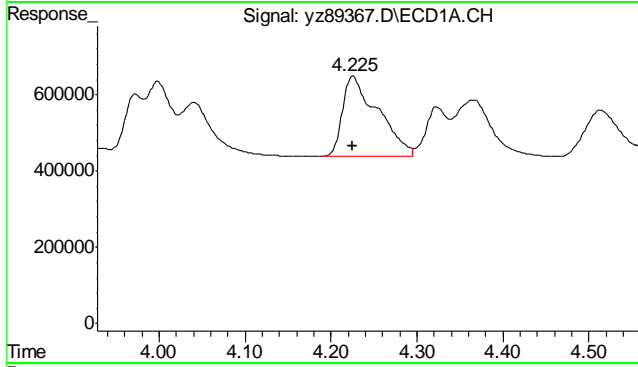
7.5.1
7



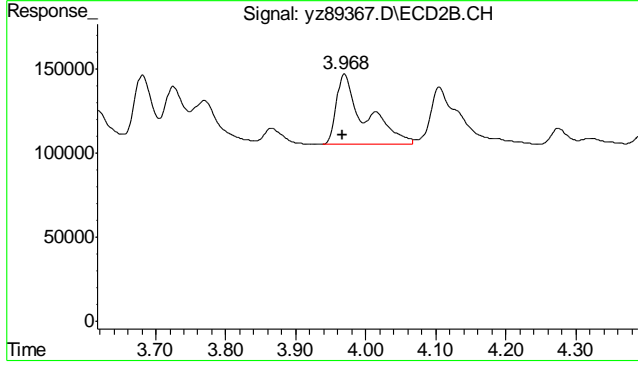
#5 AR1016-D
 R.T.: 3.775 min
 Delta R.T.: -0.002 min
 Response: 916089
 Conc: 49.81 m



#5 AR1016-D
 R.T.: 3.477 min
 Delta R.T.: 0.000 min
 Response: 94944
 Conc: 51.46 m

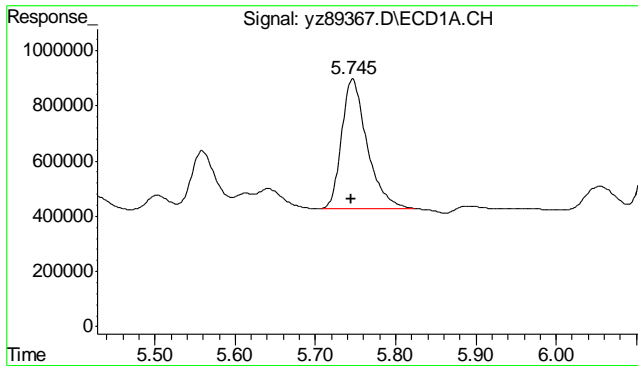


#6 AR1016-E
 R.T.: 4.225 min
 Delta R.T.: 0.000 min
 Response: 598442
 Conc: 50.94

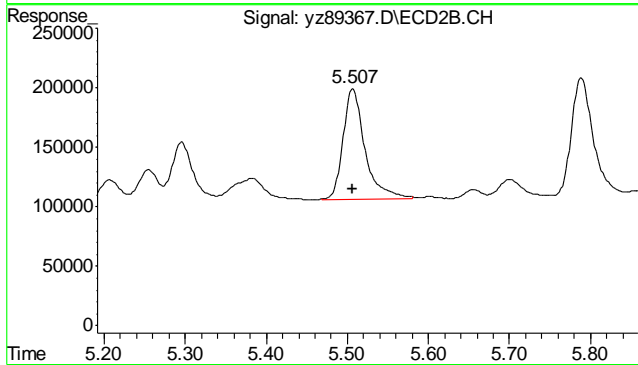


#6 AR1016-E
 R.T.: 3.968 min
 Delta R.T.: 0.002 min
 Response: 119328
 Conc: 56.11 m

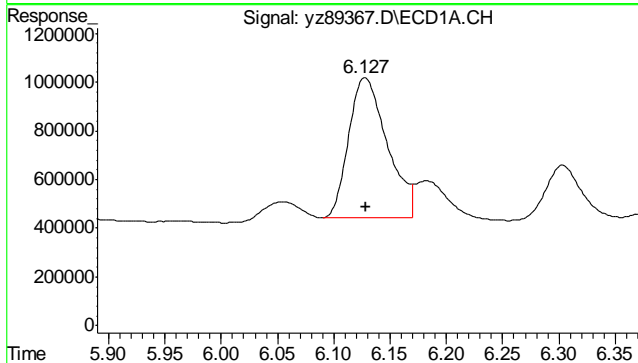
7.5.1
7



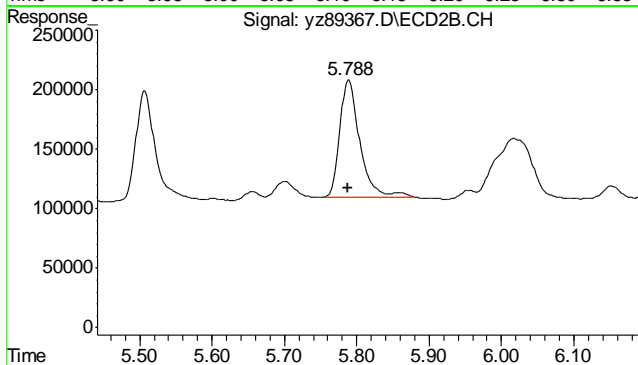
#7 AR1260-A
 R.T.: 5.745 min
 Delta R.T.: 0.000 min
 Response: 1051903
 Conc: 60.49 ppb m



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: 0.000 min
 Response: 176344
 Conc: 57.27 ppb m

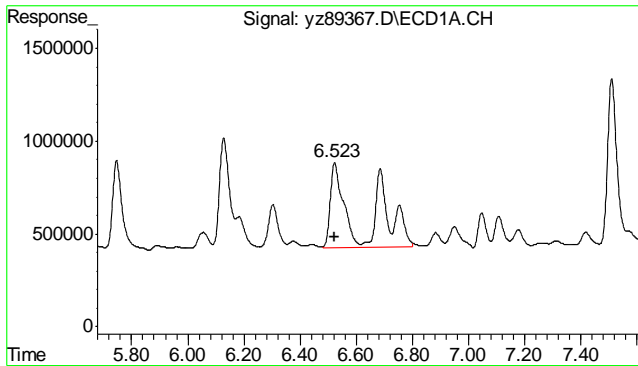


#8 AR1260-B
 R.T.: 6.127 min
 Delta R.T.: -0.002 min
 Response: 1383423
 Conc: 54.86 ppb

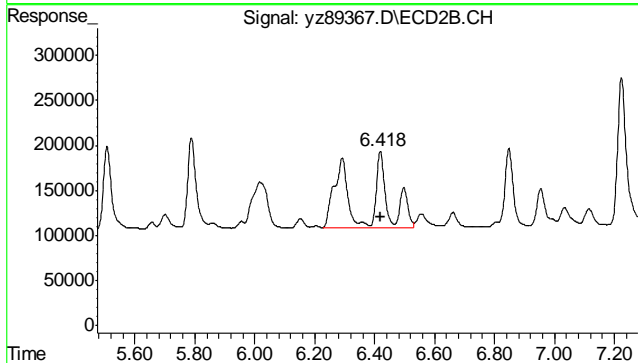


#8 AR1260-B
 R.T.: 5.788 min
 Delta R.T.: 0.000 min
 Response: 193820
 Conc: 53.96 ppb m

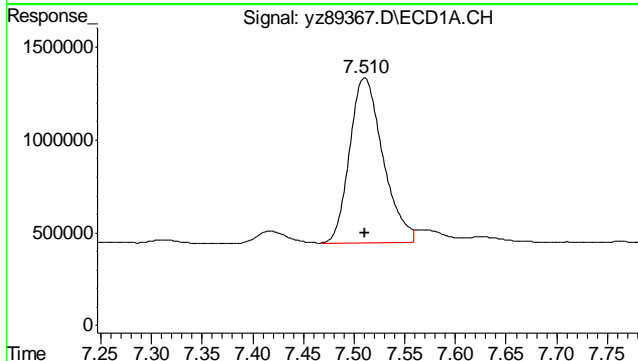
7.5.1
7



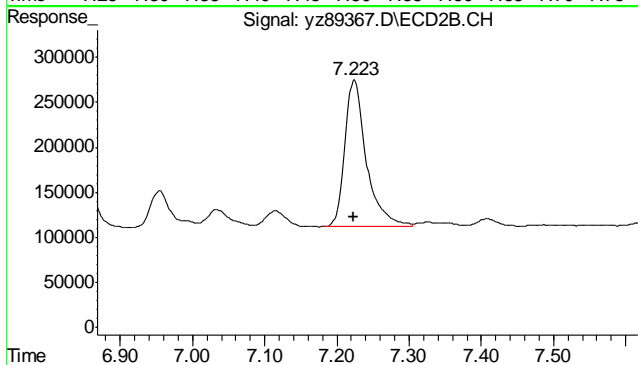
#9 AR1260-C
 R.T.: 6.523 min
 Delta R.T.: 0.002 min
 Response: 3020624
 Conc: 55.40 ppb m



#9 AR1260-C
 R.T.: 6.418 min
 Delta R.T.: 0.000 min
 Response: 492772
 Conc: 56.53 ppb m

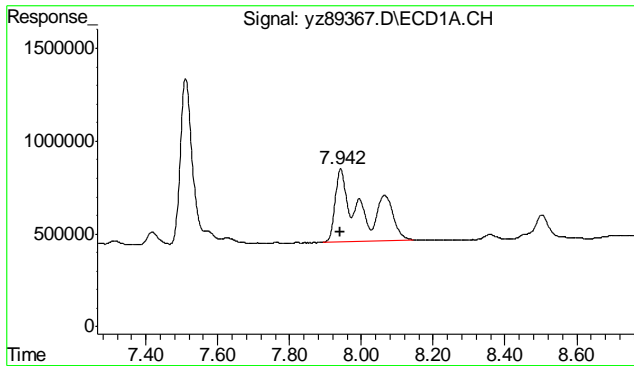


#10 AR1260-D
 R.T.: 7.510 min
 Delta R.T.: 0.000 min
 Response: 2019947
 Conc: 54.69 ppb m

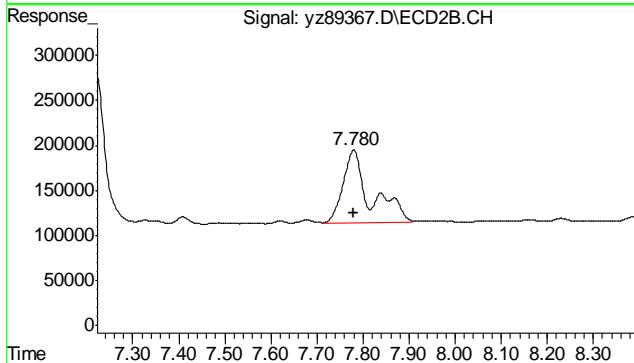


#10 AR1260-D
 R.T.: 7.223 min
 Delta R.T.: 0.000 min
 Response: 341648
 Conc: 55.01 ppb

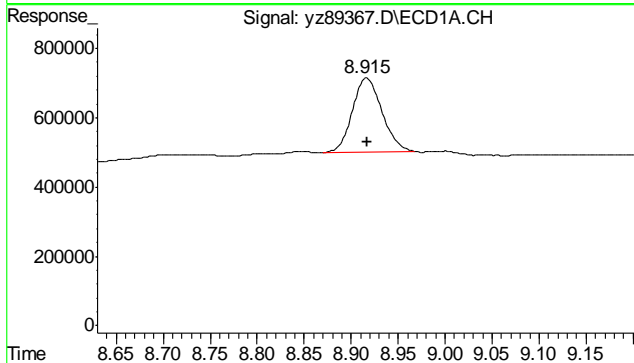
7.5.1
7



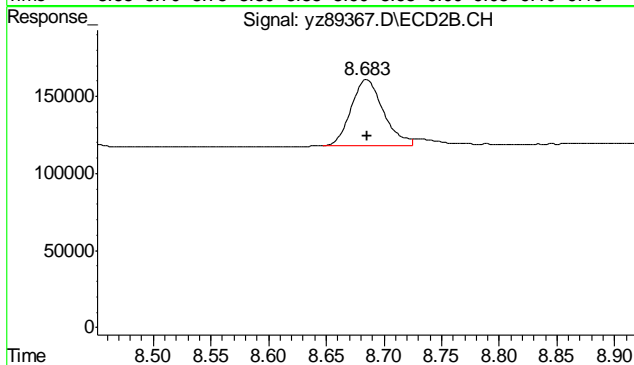
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: 0.000 min
 Response: 2187187
 Conc: 57.55 ppb m



#11 AR1260-E
 R.T.: 7.780 min
 Delta R.T.: 0.000 min
 Response: 333056
 Conc: 54.81 ppb m

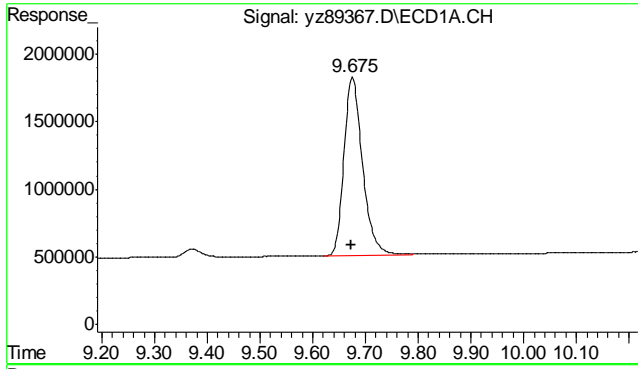


#12 AR1260-F
 R.T.: 8.915 min
 Delta R.T.: -0.002 min
 Response: 473454
 Conc: 50.66 m

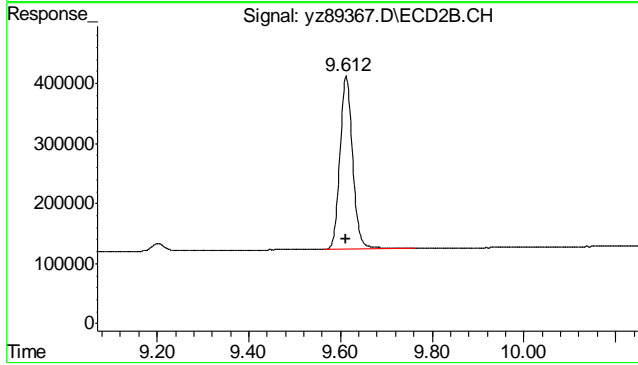


#12 AR1260-F
 R.T.: 8.683 min
 Delta R.T.: -0.002 min
 Response: 84505
 Conc: 56.10 m

7.5.1
 7



#13 DCB
 R.T.: 9.675 min
 Delta R.T.: 0.002 min
 Response: 3210447
 Conc: 10.21 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: 0.000 min
 Response: 556728
 Conc: 9.97 ppb m

7.5.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89368.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:24 pm
 Operator : sofyaz
 Sample : ic7547-100,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 77 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:58:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:52:52 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.500	2.170	5952213	1126138	16.317m	16.041m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	40.79%#	40.10%#
13) s DCB	9.675	9.612	5494745	929699	17.483m	16.653m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	43.71%	41.63%
Target Compounds						
2) AR1016-A	2.823	2.570	561562	142084	96.559m	119.049
3) AR1016-B	3.163	2.918	1543239	279898	105.097m	107.301
4) AR1016-C	3.633	3.345	2783315	430579	108.187m	101.545m
5) AR1016-D	3.775	3.477	1914076	202875	104.075m	109.969m
6) AR1016-E	4.223	3.967	1224055	224280	104.191m	105.452m
7) AR1260-A	5.745	5.505	1828516	325514	105.143	105.719m
8) AR1260-B	6.127	5.787	2666152	370857	105.725	103.250
9) AR1260-C	6.522	6.418	5704677	925103	104.634m	106.124m
10) AR1260-D	7.510	7.223	3826933	633314	103.619m	101.974
11) AR1260-E	7.942	7.778	3909992	635149	102.878m	104.521m
12) AR1260-F	8.915	8.685	957421	153833	102.454	102.118m

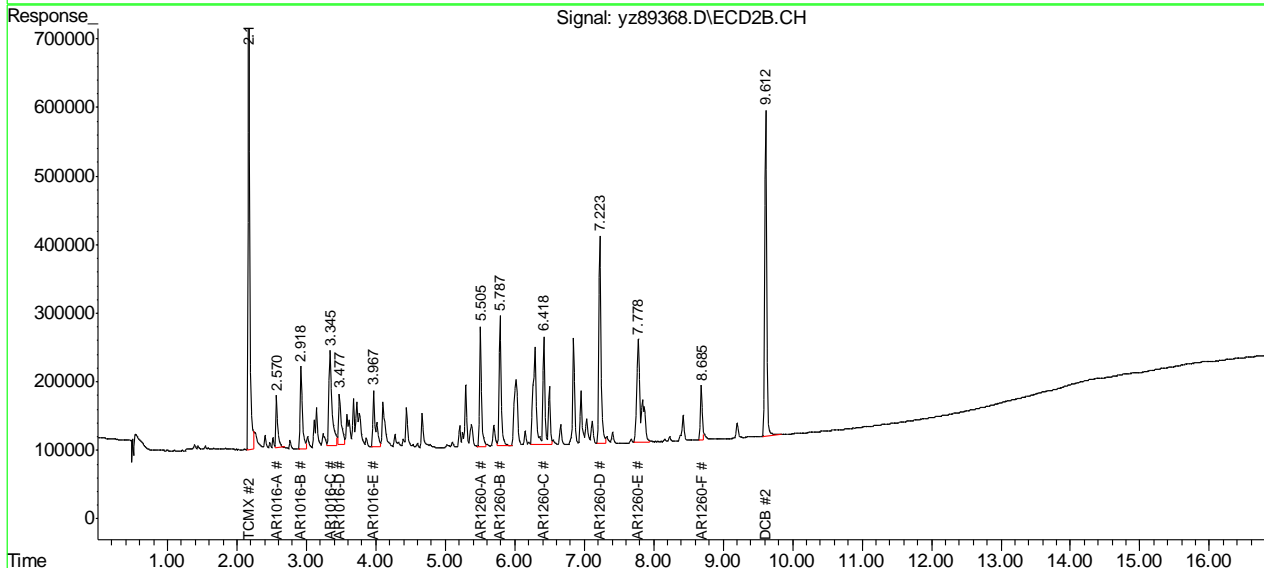
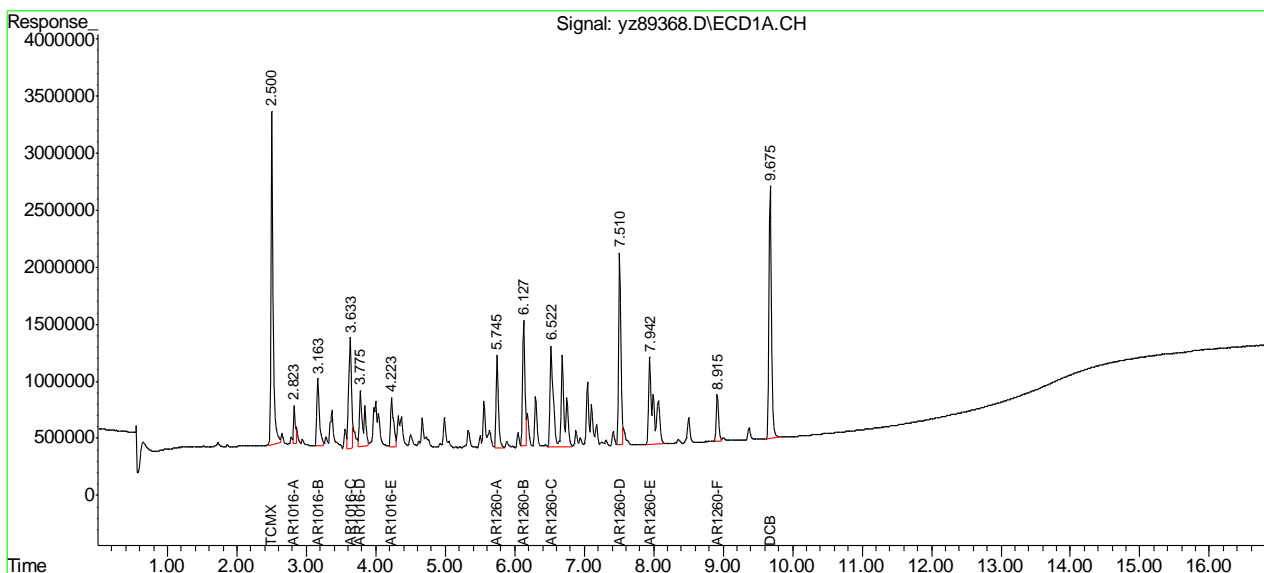
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

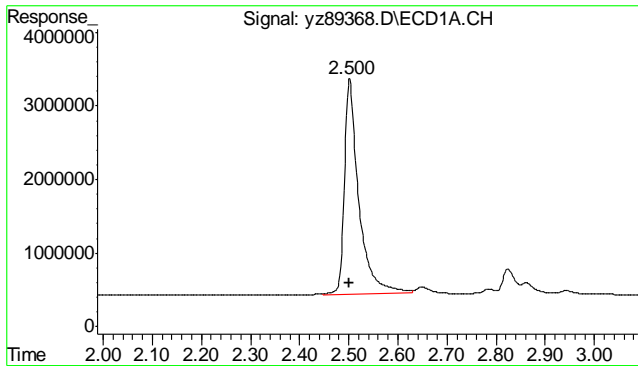
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89368.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:24 pm
 Operator : sofyaz
 Sample : ic7547-100,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 77 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:58:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:52:52 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

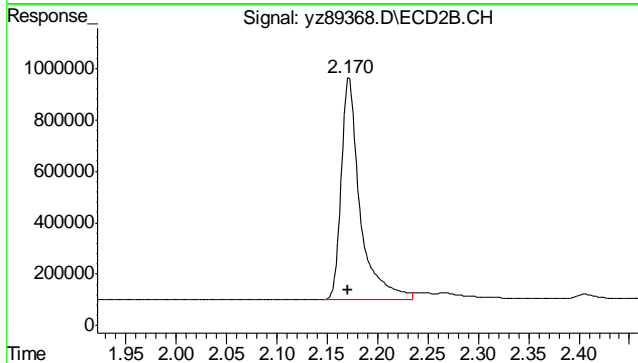
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



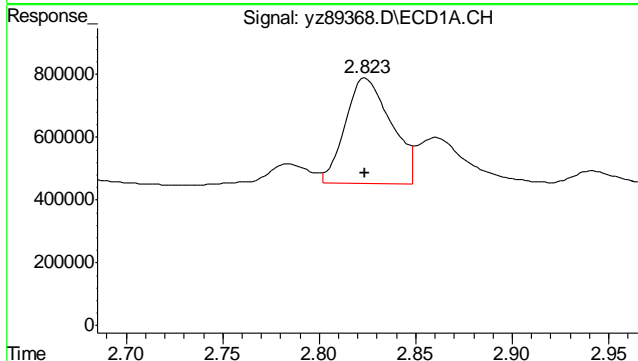
7.5.2
 7



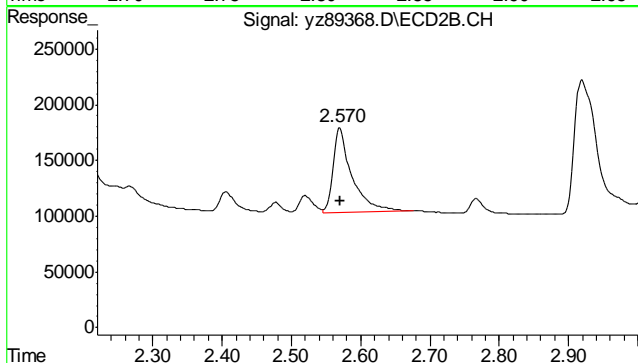
#1 TCMX
 R.T.: 2.500 min
 Delta R.T.: -0.002 min
 Response: 5952213
 Conc: 16.32 ppb m



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: 0.000 min
 Response: 1126138
 Conc: 16.04 ppb m

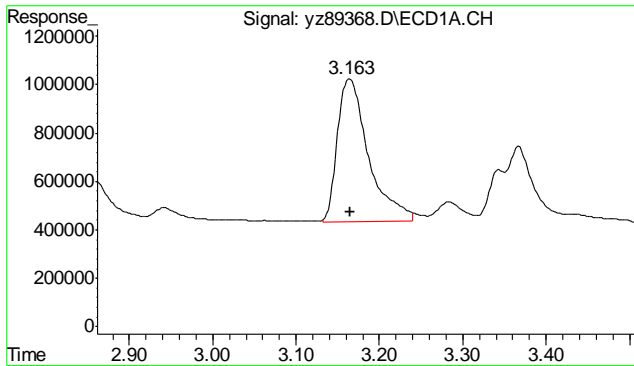


#2 AR1016-A
 R.T.: 2.823 min
 Delta R.T.: 0.000 min
 Response: 561562
 Conc: 96.56 ppb m

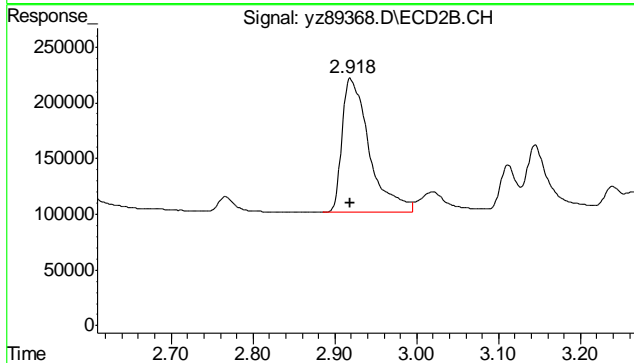


#2 AR1016-A
 R.T.: 2.570 min
 Delta R.T.: 0.000 min
 Response: 142084
 Conc: 119.05 ppb

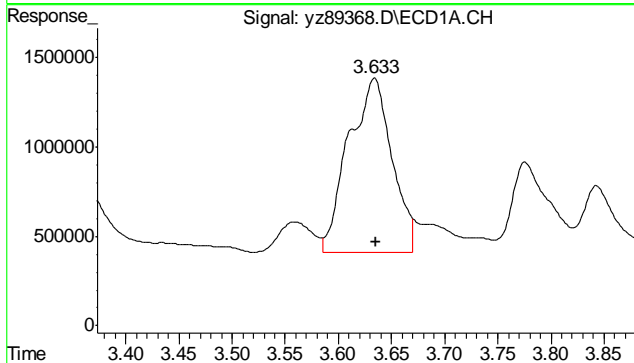
7.5.2
 7



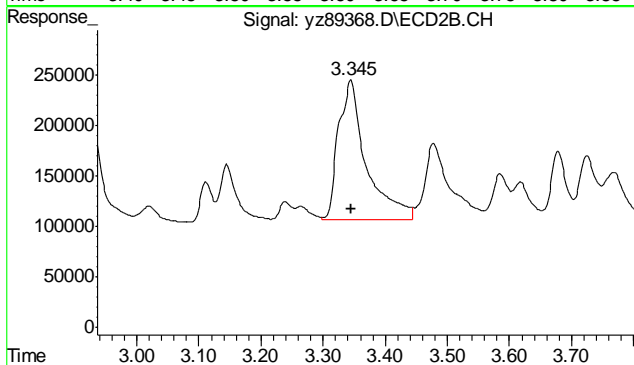
#3 AR1016-B
 R.T.: 3.163 min
 Delta R.T.: -0.002 min
 Response: 1543239
 Conc: 105.10 ppb m



#3 AR1016-B
 R.T.: 2.918 min
 Delta R.T.: 0.000 min
 Response: 279898
 Conc: 107.30 ppb

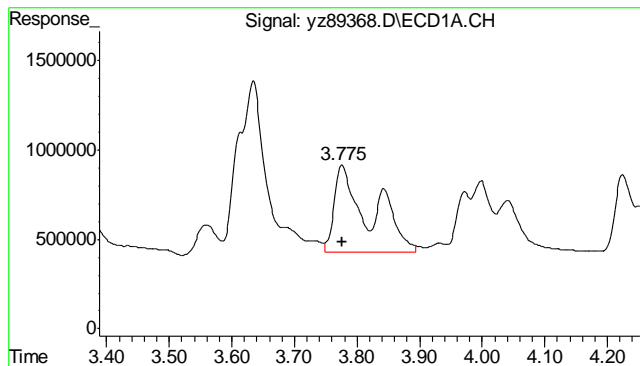


#4 AR1016-C
 R.T.: 3.633 min
 Delta R.T.: -0.002 min
 Response: 2783315
 Conc: 108.19 ppb m

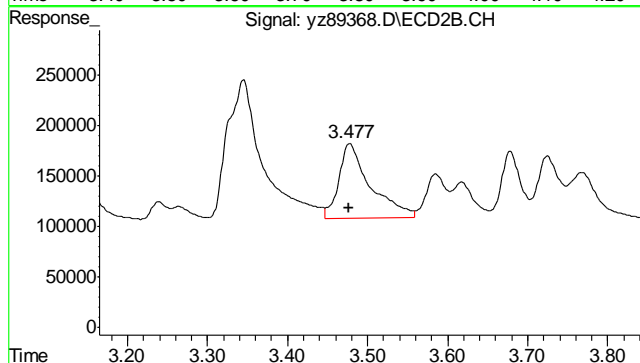


#4 AR1016-C
 R.T.: 3.345 min
 Delta R.T.: 0.000 min
 Response: 430579
 Conc: 101.54 ppb m

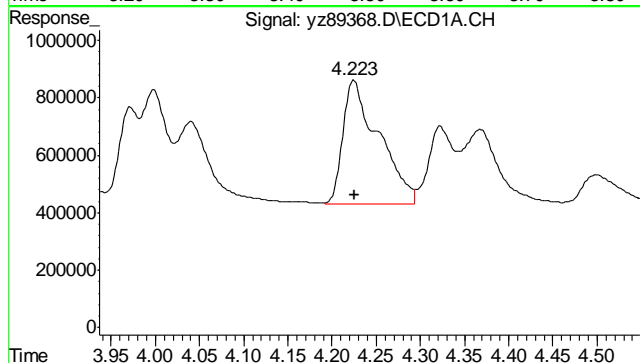
7.5.2
7



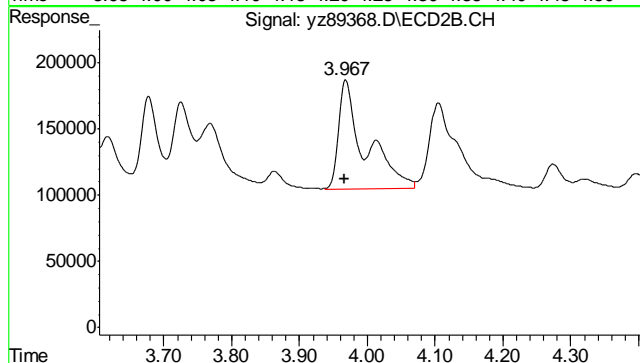
#5 AR1016-D
 R.T.: 3.775 min
 Delta R.T.: -0.002 min
 Response: 1914076
 Conc: 104.08 m



#5 AR1016-D
 R.T.: 3.477 min
 Delta R.T.: 0.000 min
 Response: 202875
 Conc: 109.97 m

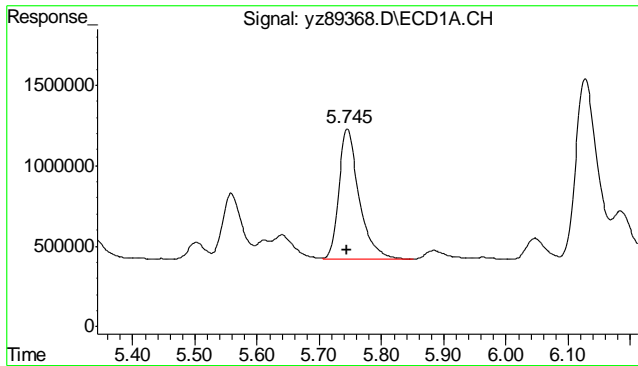


#6 AR1016-E
 R.T.: 4.223 min
 Delta R.T.: -0.002 min
 Response: 1224055
 Conc: 104.19 m

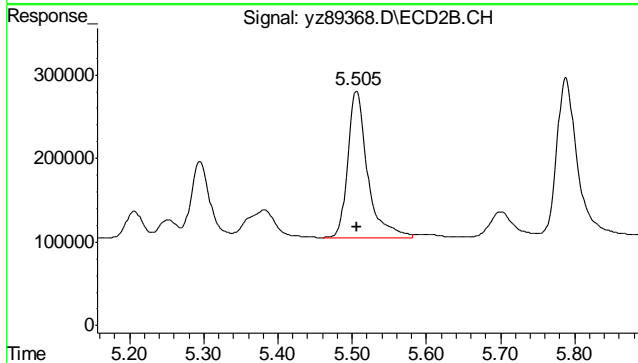


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: 0.000 min
 Response: 224280
 Conc: 105.45 m

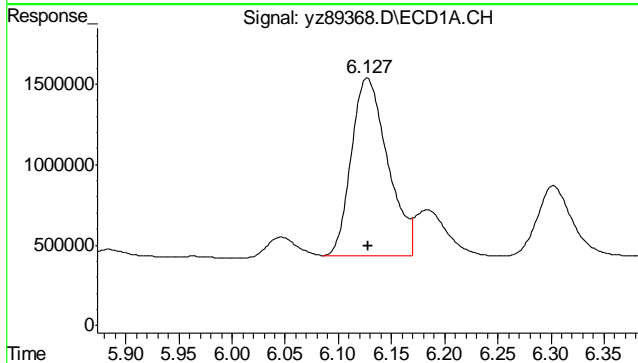
7.5.2
 7



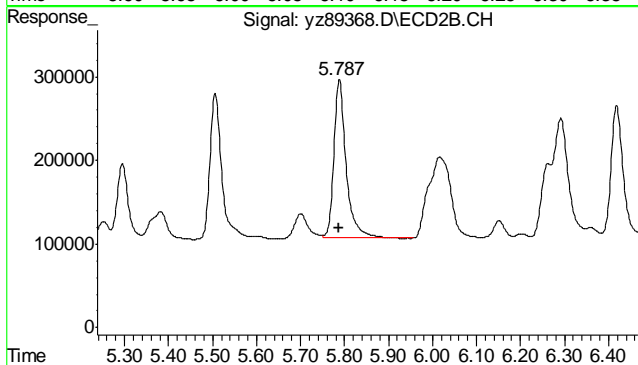
#7 AR1260-A
 R.T.: 5.745 min
 Delta R.T.: 0.000 min
 Response: 1828516
 Conc: 105.14 ppb



#7 AR1260-A
 R.T.: 5.505 min
 Delta R.T.: -0.002 min
 Response: 325514
 Conc: 105.72 ppb m

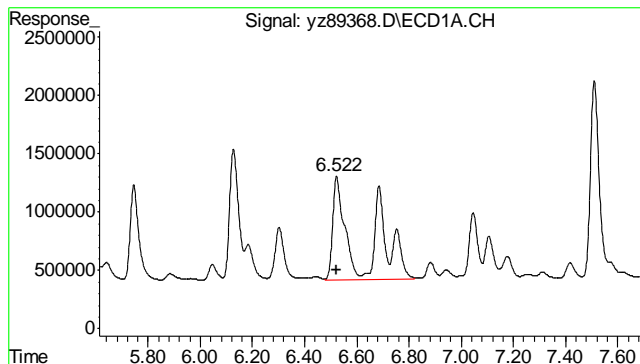


#8 AR1260-B
 R.T.: 6.127 min
 Delta R.T.: -0.002 min
 Response: 2666152
 Conc: 105.72 ppb

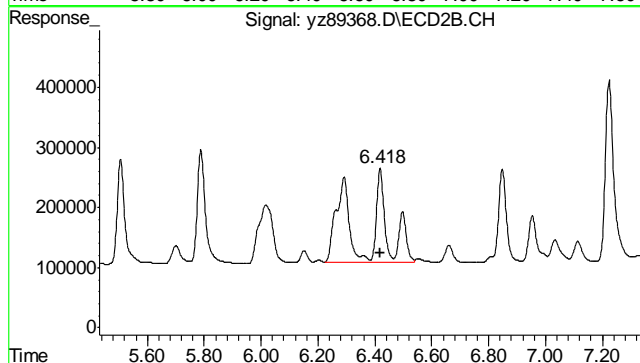


#8 AR1260-B
 R.T.: 5.787 min
 Delta R.T.: -0.002 min
 Response: 370857
 Conc: 103.25 ppb

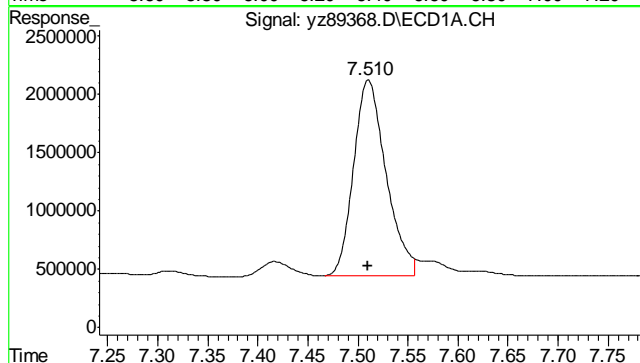
7.52
7



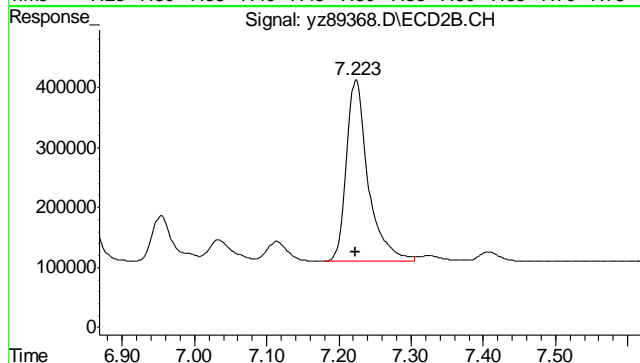
#9 AR1260-C
 R.T.: 6.522 min
 Delta R.T.: 0.000 min
 Response: 5704677
 Conc: 104.63 ppb m



#9 AR1260-C
 R.T.: 6.418 min
 Delta R.T.: 0.000 min
 Response: 925103
 Conc: 106.12 ppb m

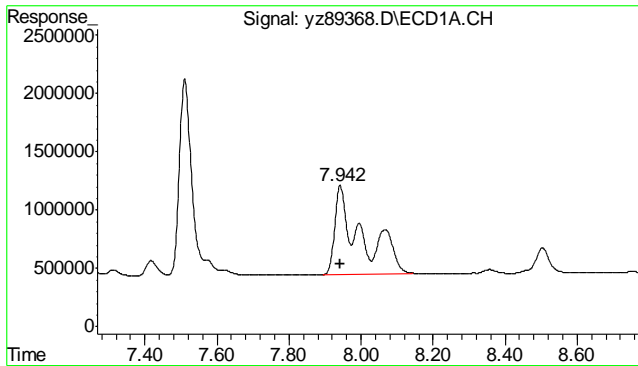


#10 AR1260-D
 R.T.: 7.510 min
 Delta R.T.: 0.000 min
 Response: 3826933
 Conc: 103.62 ppb m

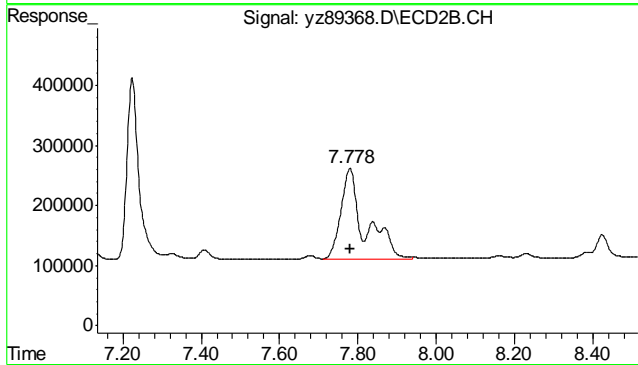


#10 AR1260-D
 R.T.: 7.223 min
 Delta R.T.: 0.000 min
 Response: 633314
 Conc: 101.97 ppb

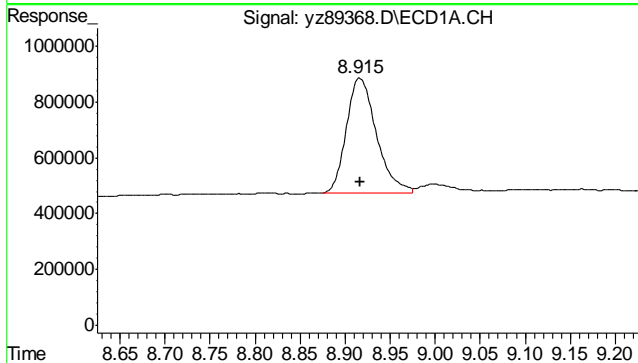
7.52
 7



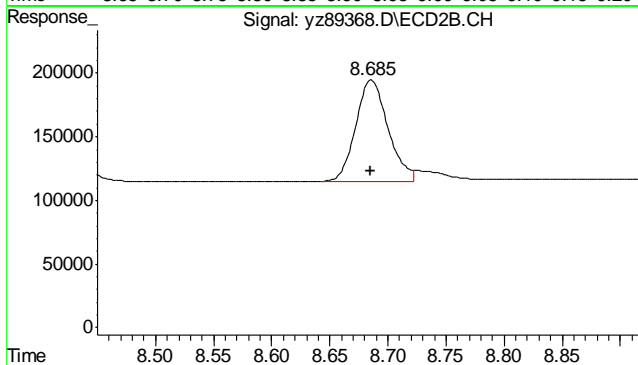
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: 0.000 min
 Response: 390992
 Conc: 102.88 ppb m



#11 AR1260-E
 R.T.: 7.778 min
 Delta R.T.: -0.002 min
 Response: 635149
 Conc: 104.52 ppb m

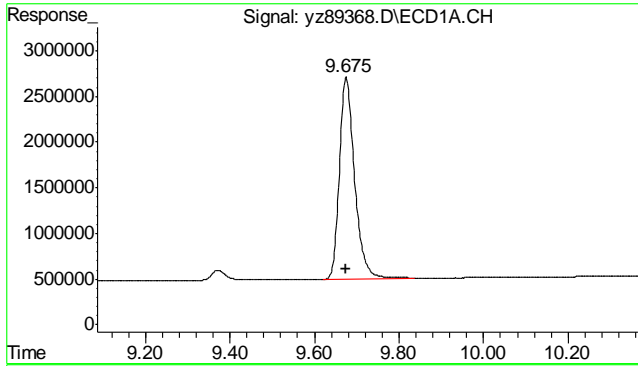


#12 AR1260-F
 R.T.: 8.915 min
 Delta R.T.: -0.002 min
 Response: 957421
 Conc: 102.45

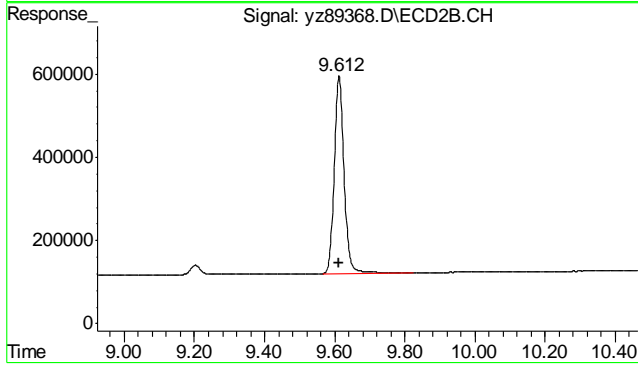


#12 AR1260-F
 R.T.: 8.685 min
 Delta R.T.: 0.000 min
 Response: 153833
 Conc: 102.12 m

7.5.2
 7



#13 DCB
 R.T.: 9.675 min
 Delta R.T.: 0.002 min
 Response: 5494745
 Conc: 17.48 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: 0.000 min
 Response: 929699
 Conc: 16.65 ppb m

7.5.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89369.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:44 pm
 Operator : sofyaz
 Sample : ic7547-250,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 78 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:52:33 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:44:29 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502	2.170	14699101	2973919	40.596m	45.016m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	101.49%	112.54%
13) s DCB	9.673	9.612	12893710	2282244	42.104m	41.800m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	105.26%	104.50%
Target Compounds						
2) AR1016-A	2.823	2.570	1456681	299657	250.947m	252.163m
3) AR1016-B	3.165	2.918	3685824	676743	252.027m	269.607m
4) AR1016-C	3.635	3.345	6537077	1071165	258.327m	255.288
5) AR1016-D	3.777	3.477	4604870	462882	250.768m	251.819m
6) AR1016-E	4.225	3.967	2982681	548074	257.891m	265.876m
7) AR1260-A	5.745	5.507	4362655	787935	251.729	262.087m
8) AR1260-B	6.128	5.788	6389406	919542	256.829	262.315
9) AR1260-C	6.522	6.418	13808585	2227115	256.633m	261.215m
10) AR1260-D	7.510	7.223	9446346	1583416	261.816m	260.111
11) AR1260-E	7.942	7.780	9783905	1567590	265.316m	266.453m
12) AR1260-F	8.917	8.685	2401920	386803	264.469	263.914m

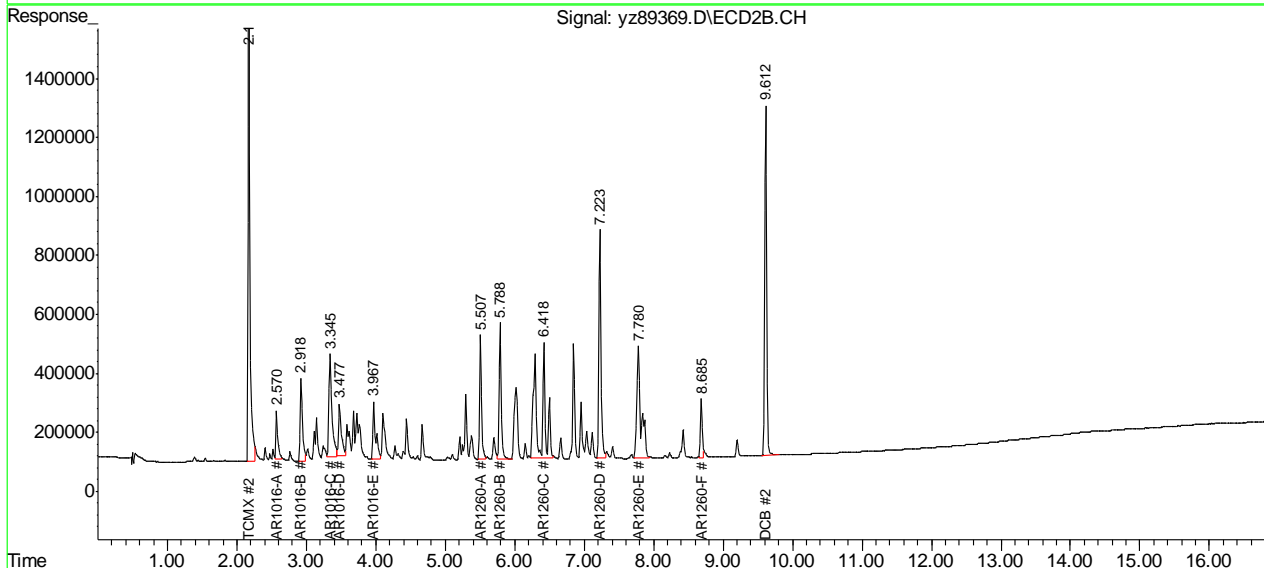
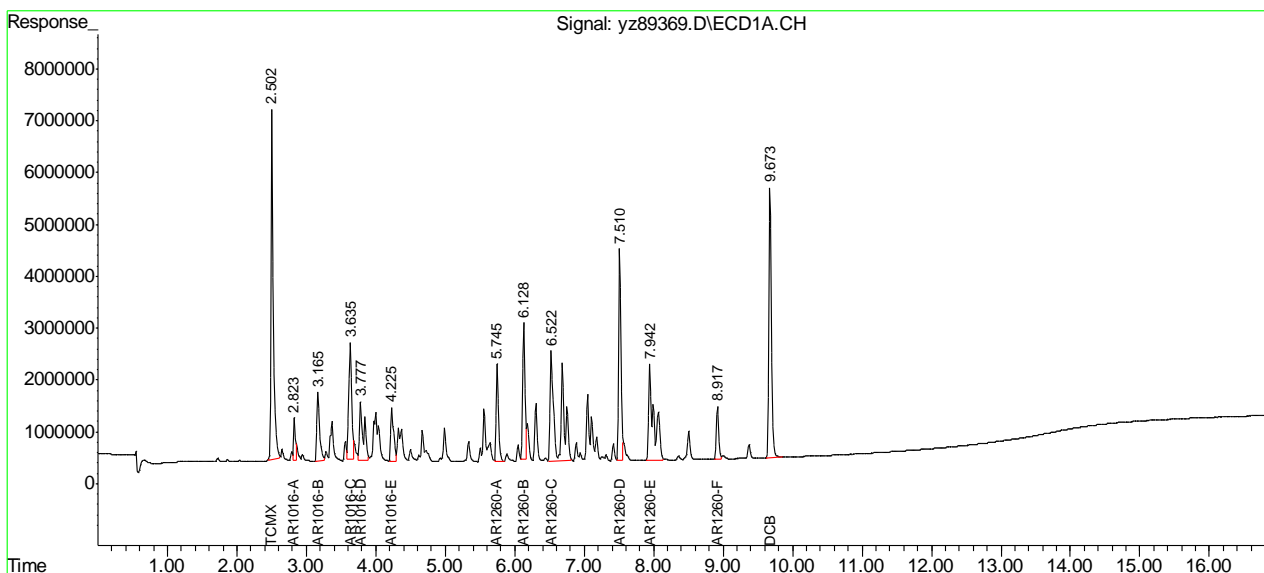
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

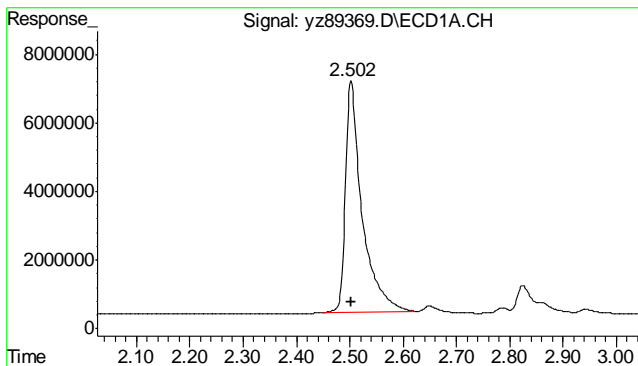
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89369.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 8:44 pm
 Operator : sofyaz
 Sample : ic7547-250,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 78 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:52:33 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:44:29 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

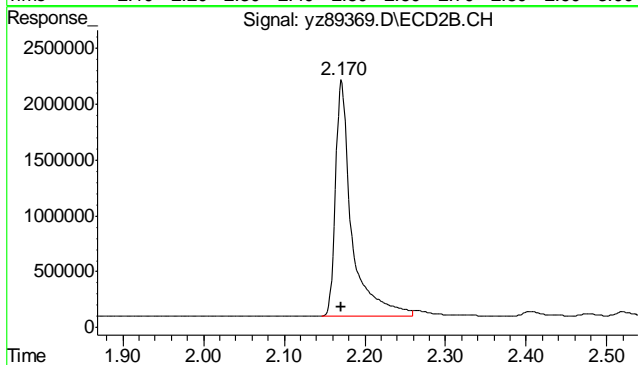
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



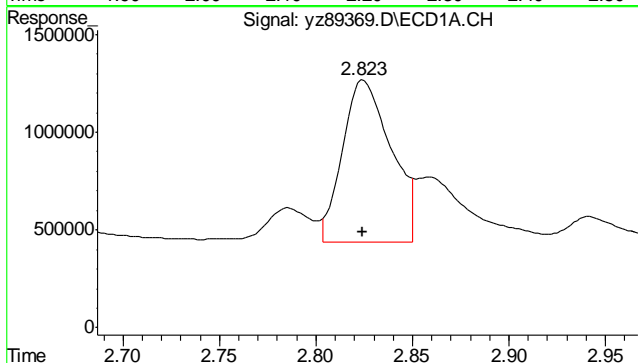
7.5.3
 7



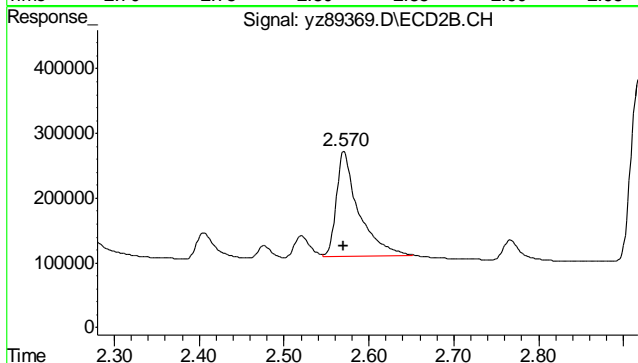
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: 0.000 min
 Response: 14699101
 Conc: 40.60 ppb m



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: 0.000 min
 Response: 2973919
 Conc: 45.02 ppb m

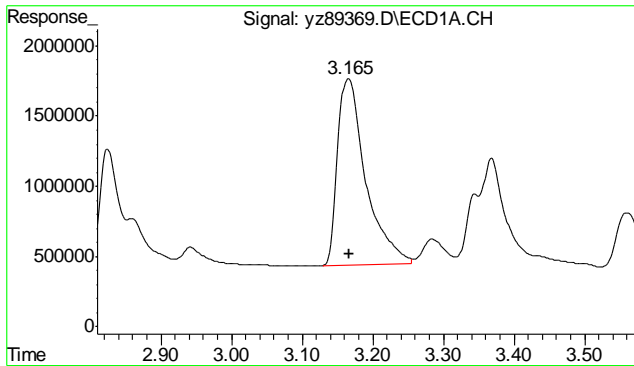


#2 AR1016-A
 R.T.: 2.823 min
 Delta R.T.: 0.000 min
 Response: 1456681
 Conc: 250.95 ppb m

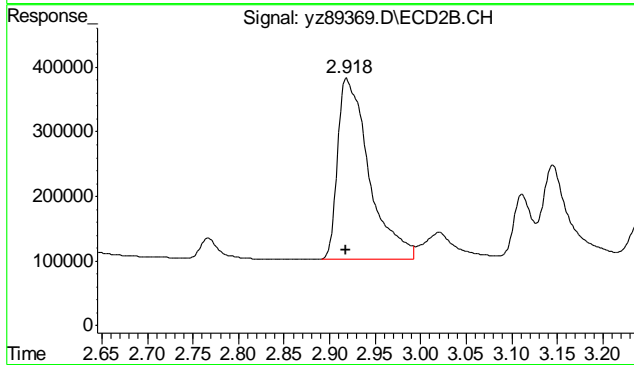


#2 AR1016-A
 R.T.: 2.570 min
 Delta R.T.: 0.000 min
 Response: 299657
 Conc: 252.16 ppb m

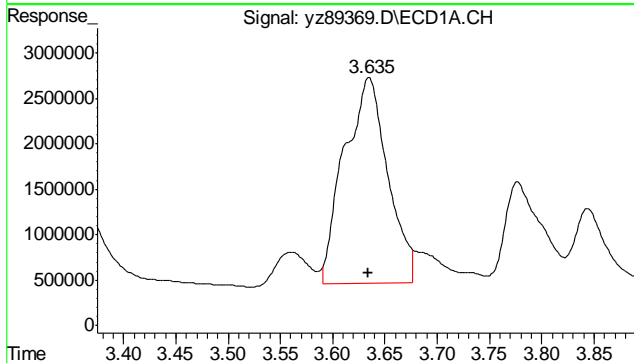
7.5.3
 7



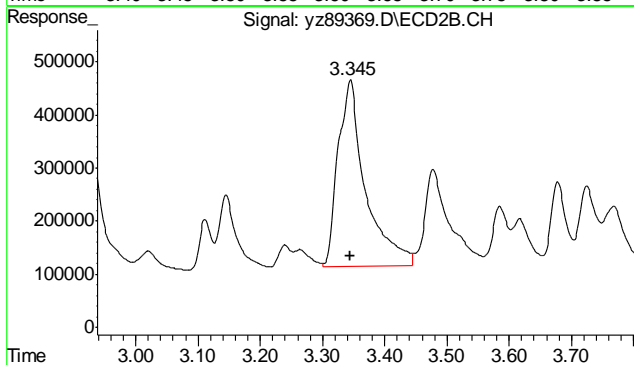
#3 AR1016-B
 R.T.: 3.165 min
 Delta R.T.: 0.000 min
 Response: 3685824
 Conc: 252.03 ppb m



#3 AR1016-B
 R.T.: 2.918 min
 Delta R.T.: 0.001 min
 Response: 676743
 Conc: 269.61 ppb m

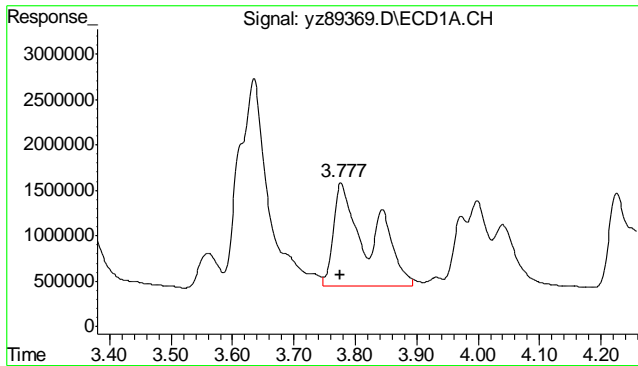


#4 AR1016-C
 R.T.: 3.635 min
 Delta R.T.: 0.001 min
 Response: 6537077
 Conc: 258.33 ppb m

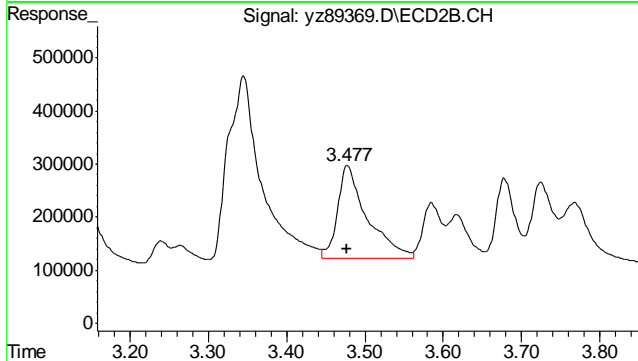


#4 AR1016-C
 R.T.: 3.345 min
 Delta R.T.: 0.001 min
 Response: 1071165
 Conc: 255.29 ppb

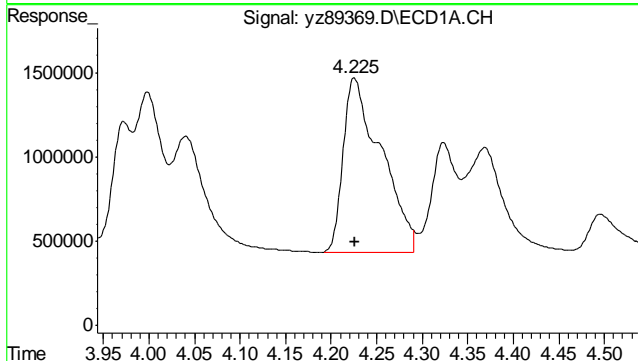
7.5.3
 7



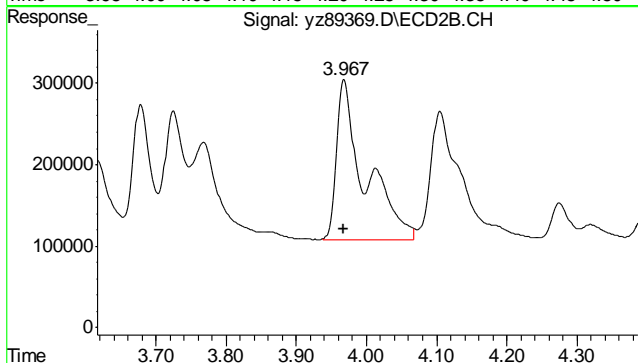
#5 AR1016-D
 R.T.: 3.777 min
 Delta R.T.: 0.001 min
 Response: 4604870
 Conc: 250.77 m



#5 AR1016-D
 R.T.: 3.477 min
 Delta R.T.: 0.000 min
 Response: 462882
 Conc: 251.82 m

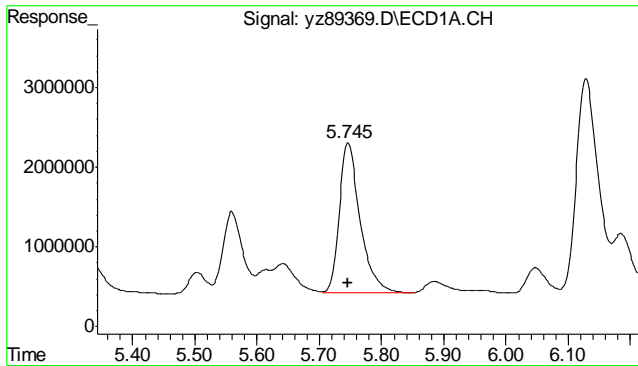


#6 AR1016-E
 R.T.: 4.225 min
 Delta R.T.: 0.000 min
 Response: 2982681
 Conc: 257.89 m

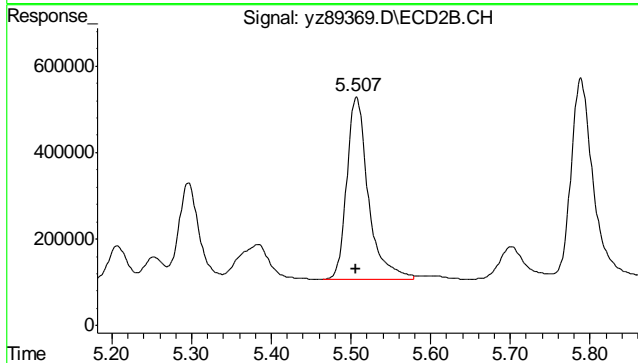


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: 0.000 min
 Response: 548074
 Conc: 265.88 m

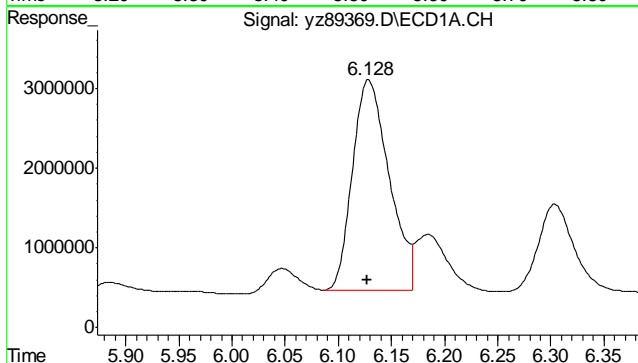
7.5.3
7



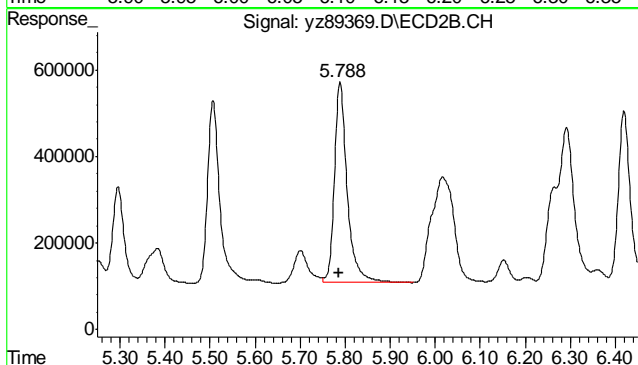
#7 AR1260-A
 R.T.: 5.745 min
 Delta R.T.: 0.000 min
 Response: 4362655
 Conc: 251.73 ppb



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: 0.001 min
 Response: 787935
 Conc: 262.09 ppb m

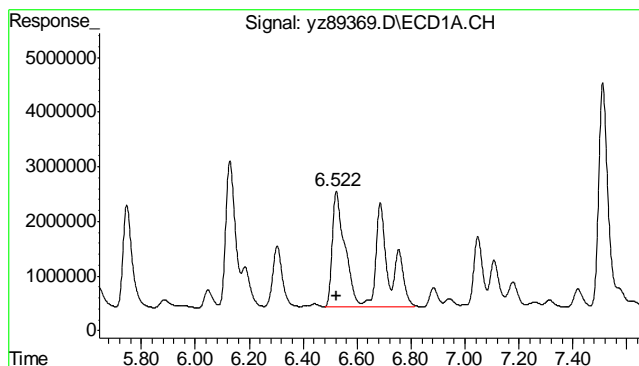


#8 AR1260-B
 R.T.: 6.128 min
 Delta R.T.: 0.001 min
 Response: 6389406
 Conc: 256.83 ppb



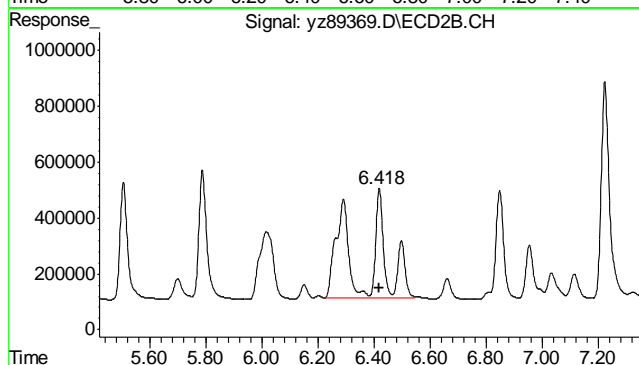
#8 AR1260-B
 R.T.: 5.788 min
 Delta R.T.: 0.001 min
 Response: 919542
 Conc: 262.31 ppb

7.5.3
7



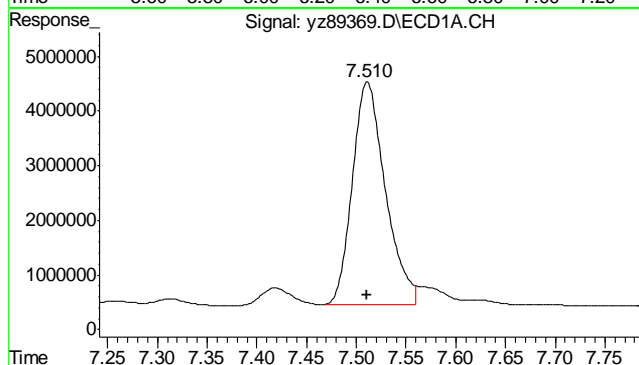
#9 AR1260-C

R.T.: 6.522 min
 Delta R.T.: 0.000 min
 Response: 13808585
 Conc: 256.63 ppb m



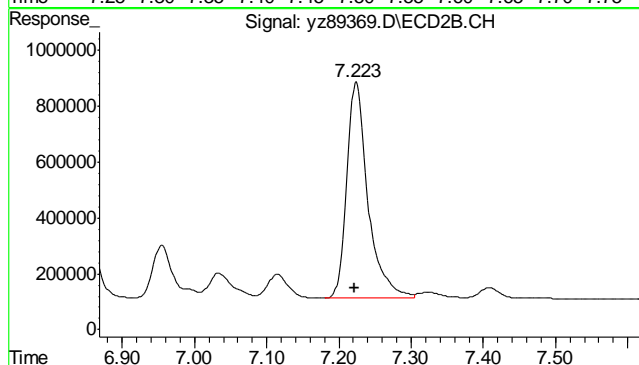
#9 AR1260-C

R.T.: 6.418 min
 Delta R.T.: 0.001 min
 Response: 2227115
 Conc: 261.22 ppb m



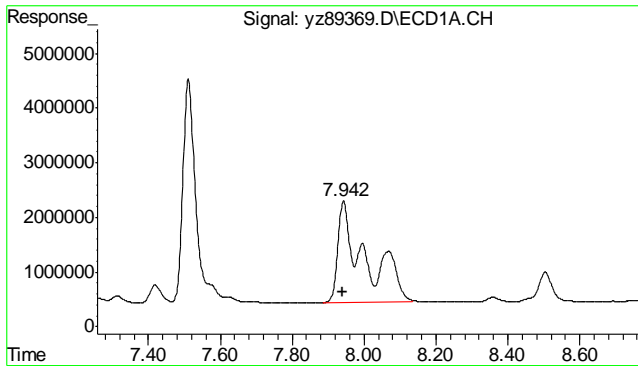
#10 AR1260-D

R.T.: 7.510 min
 Delta R.T.: 0.000 min
 Response: 9446346
 Conc: 261.82 ppb m

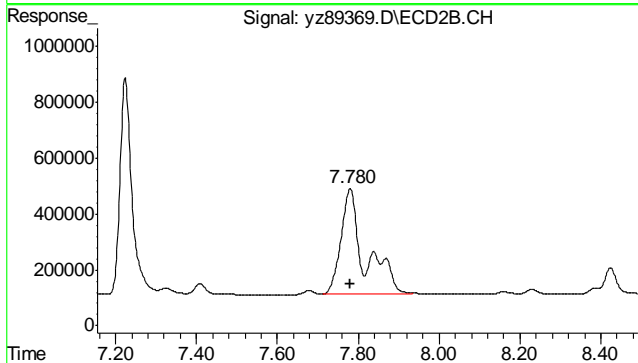


#10 AR1260-D

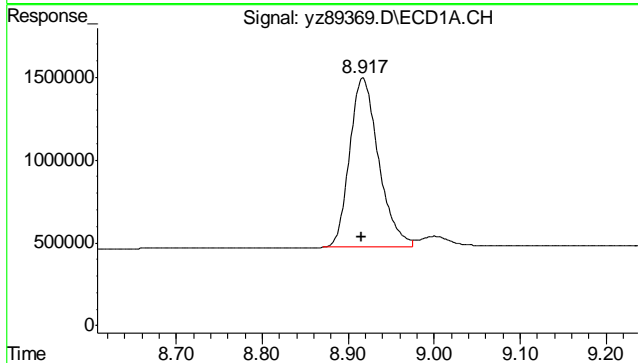
R.T.: 7.223 min
 Delta R.T.: 0.001 min
 Response: 1583416
 Conc: 260.11 ppb m



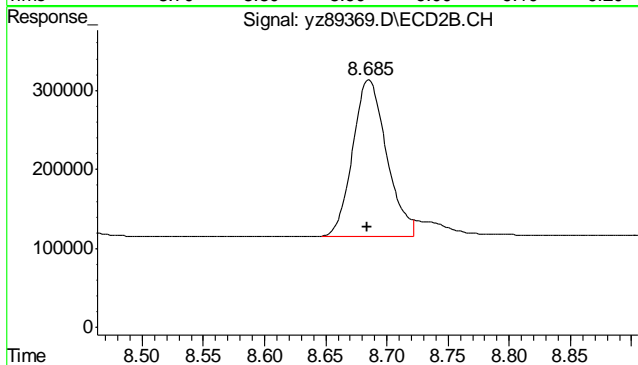
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: 0.001 min
 Response: 9783905
 Conc: 265.32 ppb m



#11 AR1260-E
 R.T.: 7.780 min
 Delta R.T.: 0.000 min
 Response: 1567590
 Conc: 266.45 ppb m

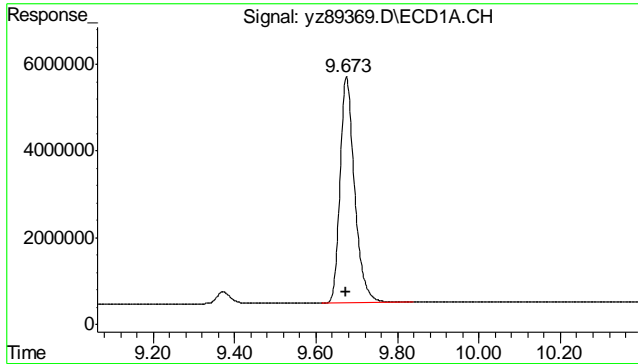


#12 AR1260-F
 R.T.: 8.917 min
 Delta R.T.: 0.001 min
 Response: 2401920
 Conc: 264.47

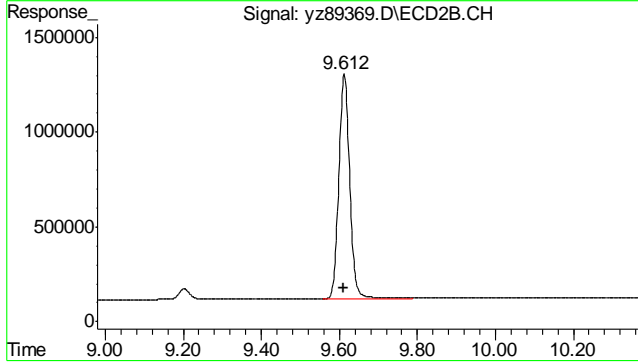


#12 AR1260-F
 R.T.: 8.685 min
 Delta R.T.: 0.001 min
 Response: 386803
 Conc: 263.91 m

7.5.3
 7



#13 DCB
 R.T.: 9.673 min
 Delta R.T.: 0.000 min
 Response: 12893710
 Conc: 42.10 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: 0.001 min
 Response: 2282244
 Conc: 41.80 ppb m

7.5.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89370.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:04 pm
 Operator : sofyaz
 Sample : icc7547-500,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 79 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:44:11 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:37:44 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502	2.171	17379868	3171027	49.984m	47.723
Spiked Amount	40.000 Range	42 - 132	Recovery	=	124.96%	119.31%
13) s DCB	9.674	9.611	14699158	2620776	47.732m	48.103m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	119.33%	120.26%
Target Compounds						
2) AR1016-A	2.824	2.571	2902372	594173	503.861m	494.926m
3) AR1016-B	3.166	2.917	7312368	1255056	492.971m	502.549
4) AR1016-C	3.634	3.344	12652724	2097953	499.913m	501.607m
5) AR1016-D	3.776	3.477	9181534	919078	509.565m	498.310m
6) AR1016-E	4.226	3.967	5782841	1030696	499.170m	498.086m
7) AR1260-A	5.746	5.506	8665385	1503193	494.034m	491.412
8) AR1260-B	6.127	5.787	12439005	1752747	494.527m	505.823
9) AR1260-C	6.522	6.417	26903321	4262987	500.592m	489.638m
10) AR1260-D	7.511	7.222	18040038	3043727	499.312m	502.966
11) AR1260-E	7.941	7.781	18438237	2941590	496.915m	499.358m
12) AR1260-F	8.916	8.684	4541024	732819	500.000	501.469m

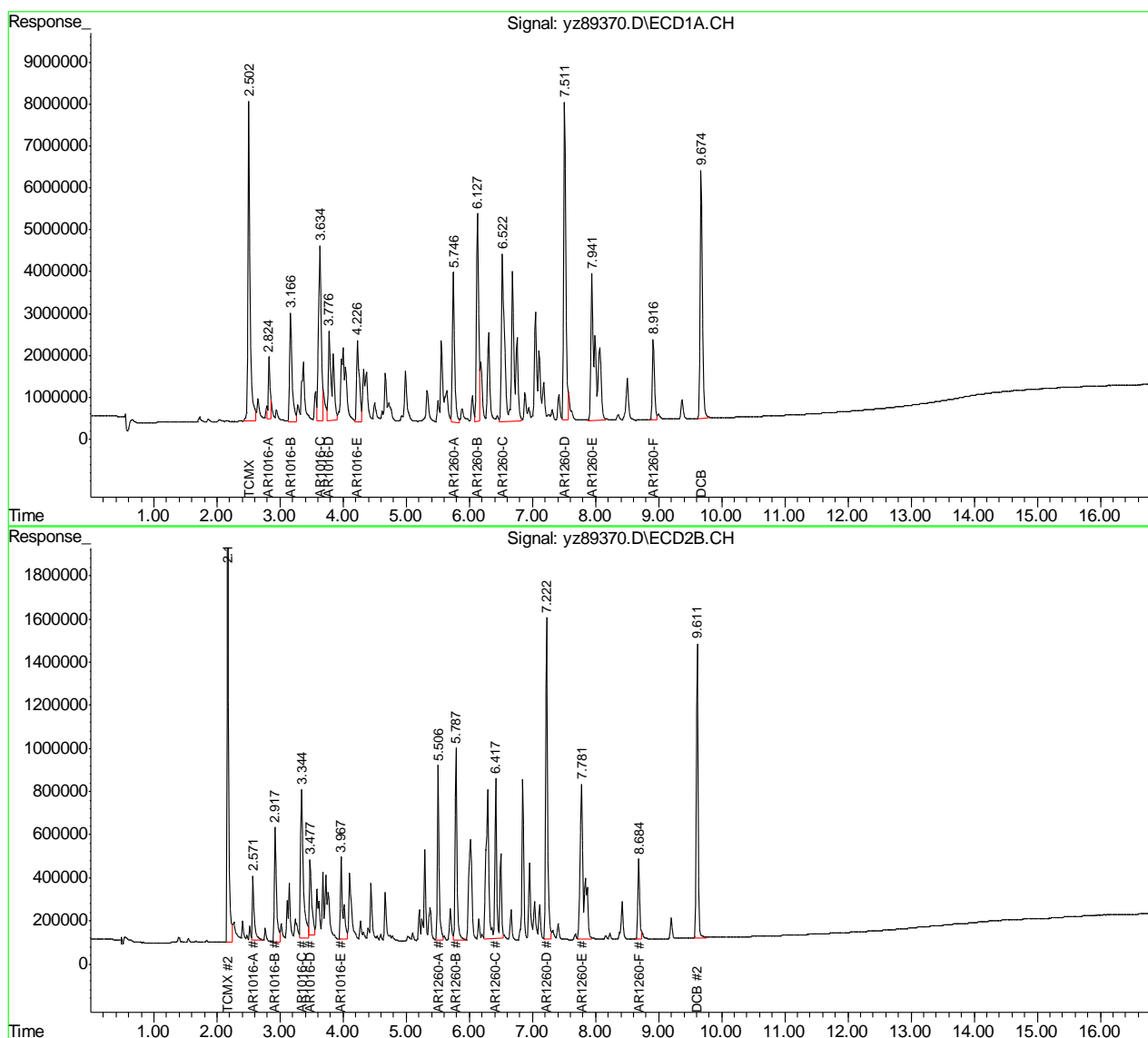
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

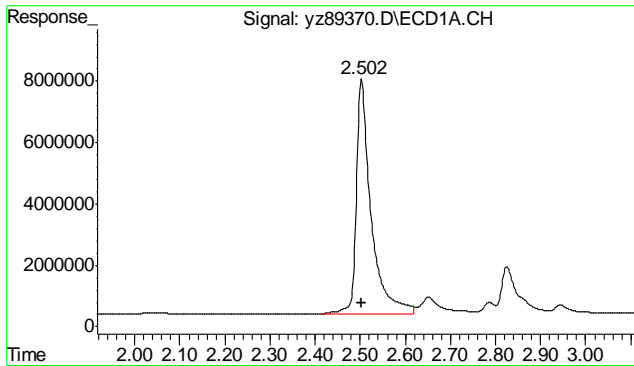
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89370.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:04 pm
 Operator : sofyaz
 Sample : icc7547-500,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 79 Sample Multiplier: 1

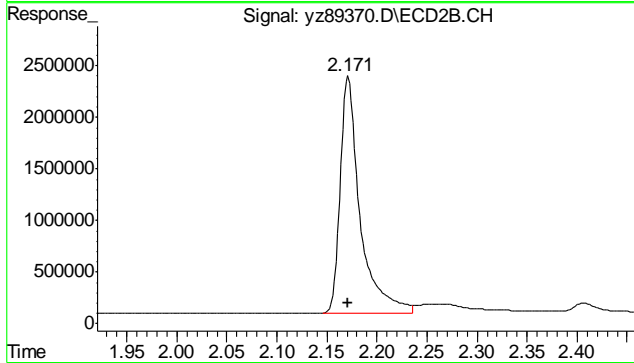
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 10:44:11 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 10:37:44 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

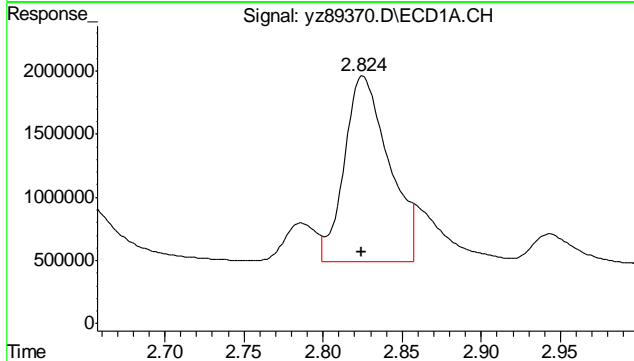




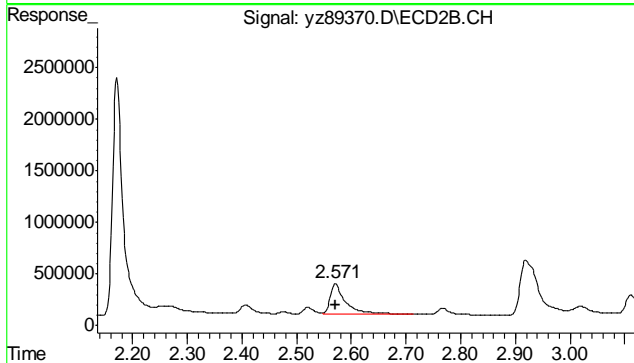
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: 0.000 min
 Response: 17379868
 Conc: 49.98 ppb m



#1 TCMX
 R.T.: 2.171 min
 Delta R.T.: 0.000 min
 Response: 3171027
 Conc: 47.72 ppb

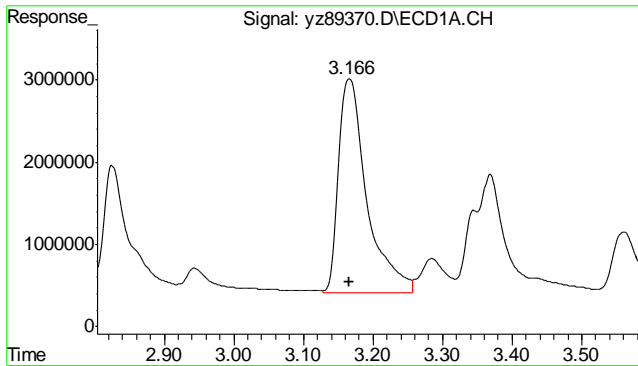


#2 AR1016-A
 R.T.: 2.824 min
 Delta R.T.: 0.000 min
 Response: 2902372
 Conc: 503.86 ppb m

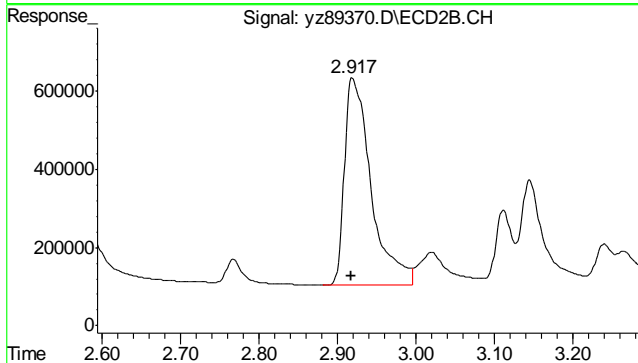


#2 AR1016-A
 R.T.: 2.571 min
 Delta R.T.: 0.000 min
 Response: 594173
 Conc: 494.93 ppb m

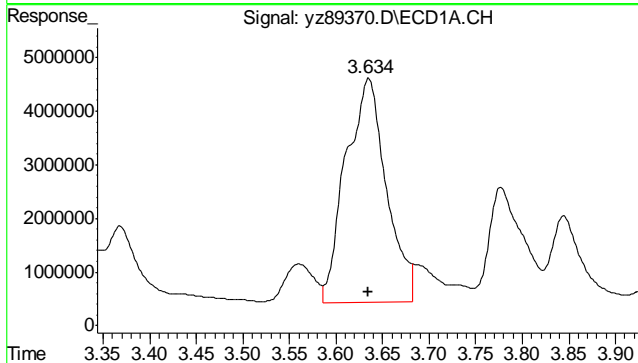
7.5.4
 7



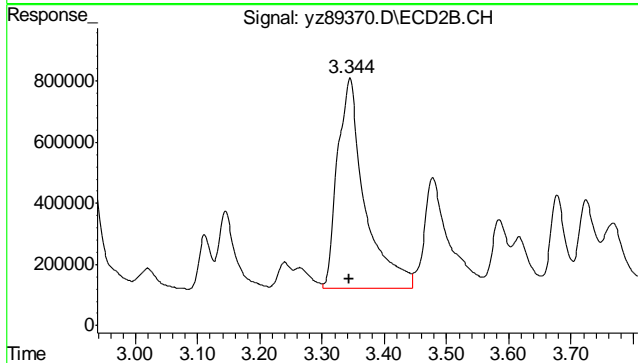
#3 AR1016-B
 R.T.: 3.166 min
 Delta R.T.: 0.000 min
 Response: 7312368
 Conc: 492.97 ppb m



#3 AR1016-B
 R.T.: 2.917 min
 Delta R.T.: 0.000 min
 Response: 1255056
 Conc: 502.55 ppb

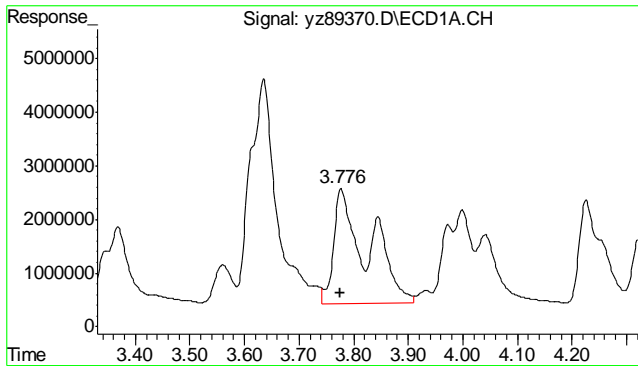


#4 AR1016-C
 R.T.: 3.634 min
 Delta R.T.: 0.000 min
 Response: 12652724
 Conc: 499.91 ppb m

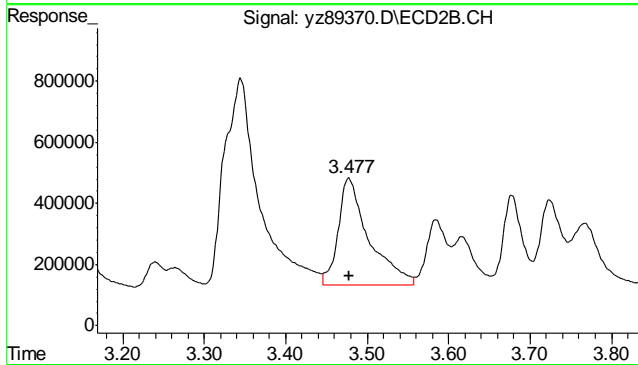


#4 AR1016-C
 R.T.: 3.344 min
 Delta R.T.: 0.000 min
 Response: 2097953
 Conc: 501.61 ppb m

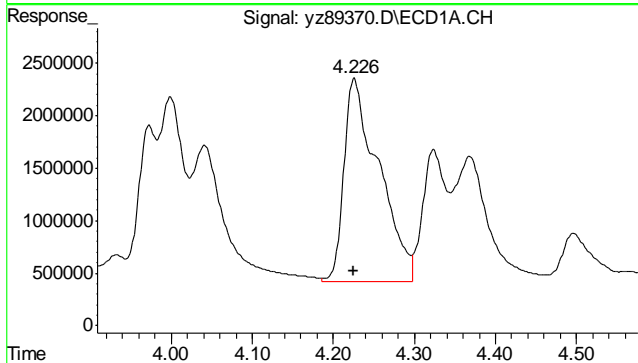
7.54
7



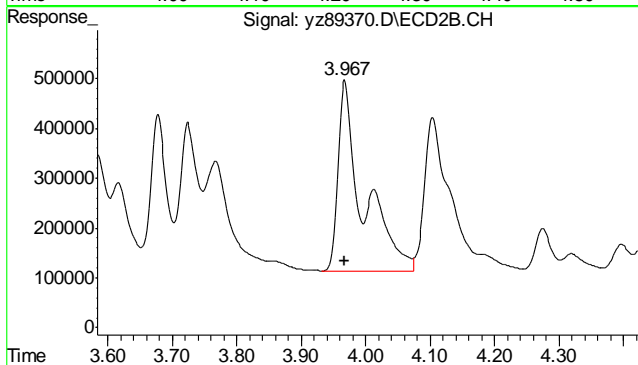
#5 AR1016-D
 R.T.: 3.776 min
 Delta R.T.: 0.000 min
 Response: 9181534
 Conc: 509.56 m



#5 AR1016-D
 R.T.: 3.477 min
 Delta R.T.: 0.000 min
 Response: 919078
 Conc: 498.31 m

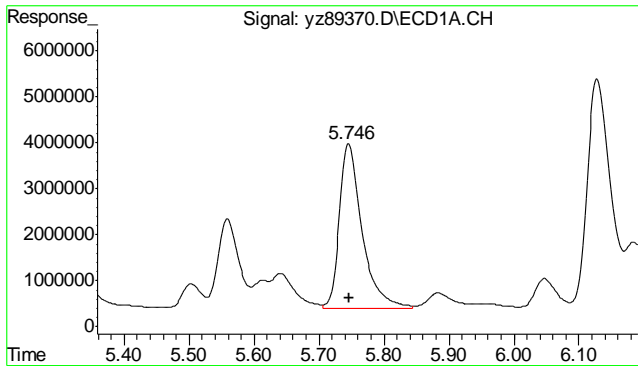


#6 AR1016-E
 R.T.: 4.226 min
 Delta R.T.: 0.000 min
 Response: 5782841
 Conc: 499.17 m

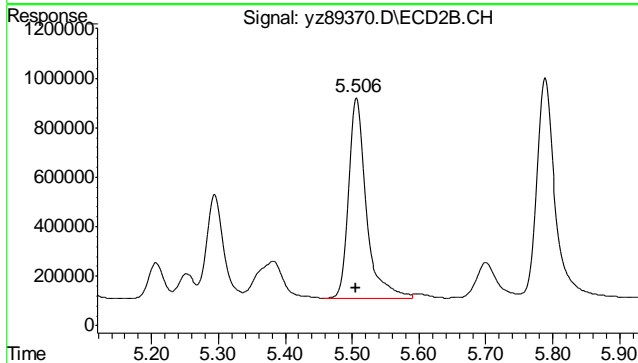


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: 0.000 min
 Response: 1030696
 Conc: 498.09 m

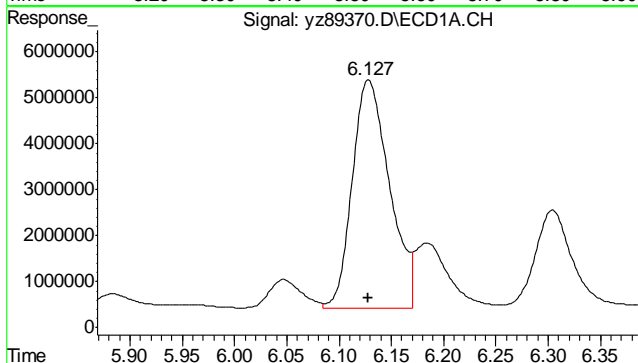
7.5.4
 7



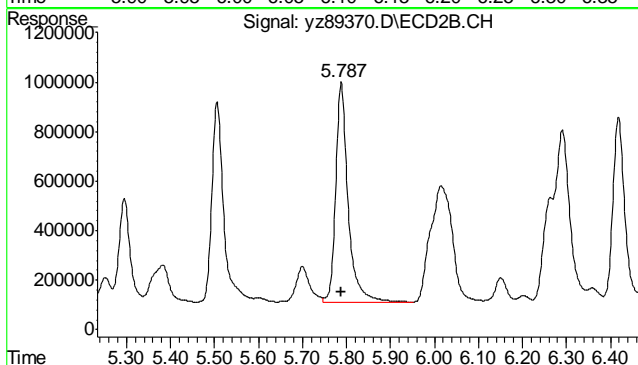
#7 AR1260-A
 R.T.: 5.746 min
 Delta R.T.: 0.000 min
 Response: 8665385
 Conc: 494.03 ppb m



#7 AR1260-A
 R.T.: 5.506 min
 Delta R.T.: 0.000 min
 Response: 1503193
 Conc: 491.41 ppb

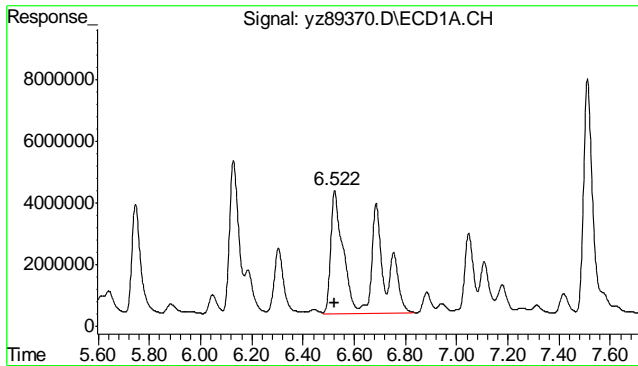


#8 AR1260-B
 R.T.: 6.127 min
 Delta R.T.: 0.000 min
 Response: 12439005
 Conc: 494.53 ppb m

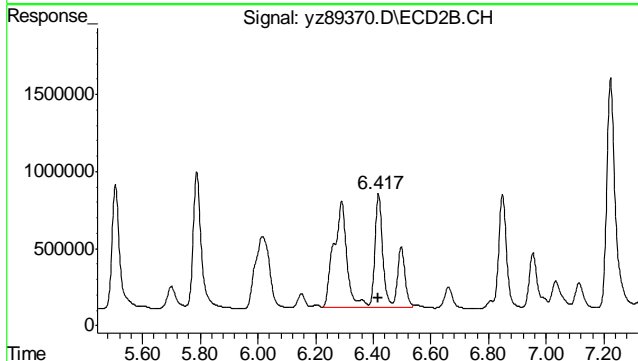


#8 AR1260-B
 R.T.: 5.787 min
 Delta R.T.: 0.000 min
 Response: 1752747
 Conc: 505.82 ppb

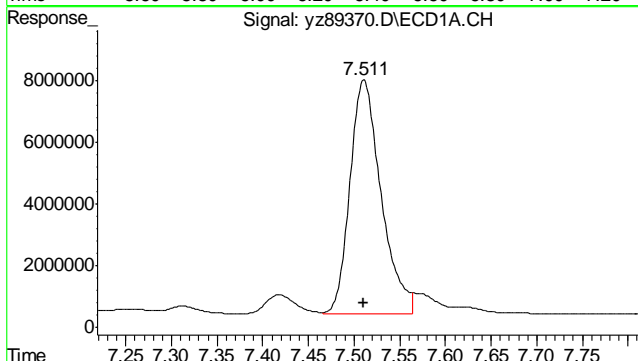
7.5.4
 7



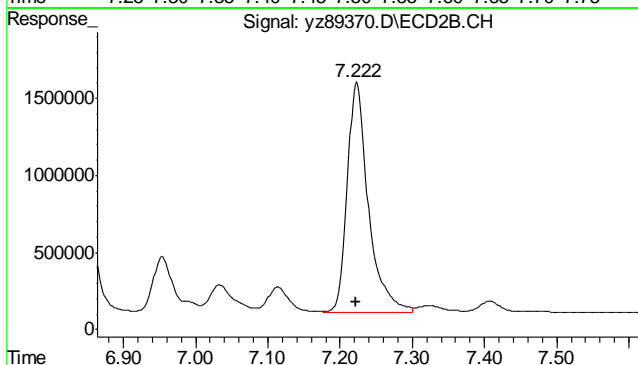
#9 AR1260-C
 R.T.: 6.522 min
 Delta R.T.: 0.000 min
 Response: 26903321
 Conc: 500.59 ppb m



#9 AR1260-C
 R.T.: 6.417 min
 Delta R.T.: 0.000 min
 Response: 4262987
 Conc: 489.64 ppb m

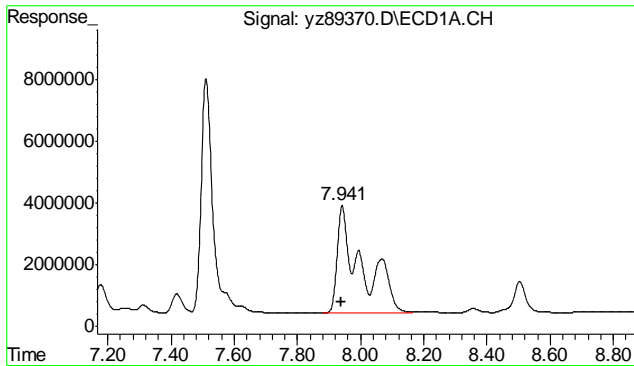


#10 AR1260-D
 R.T.: 7.511 min
 Delta R.T.: 0.000 min
 Response: 18040038
 Conc: 499.31 ppb m

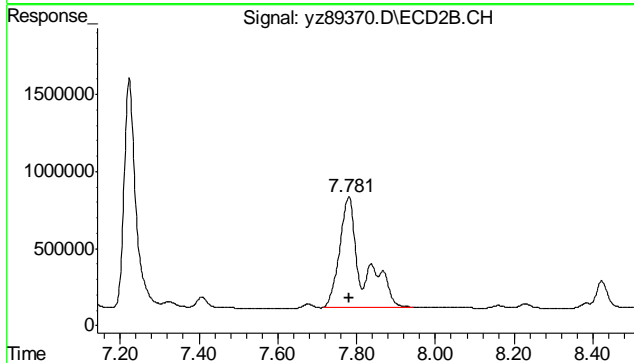


#10 AR1260-D
 R.T.: 7.222 min
 Delta R.T.: 0.000 min
 Response: 3043727
 Conc: 502.97 ppb

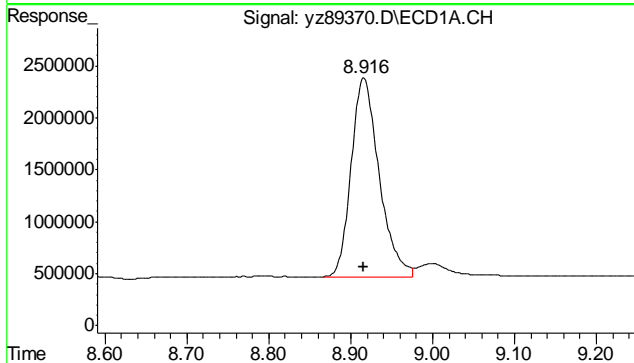
7.54
7



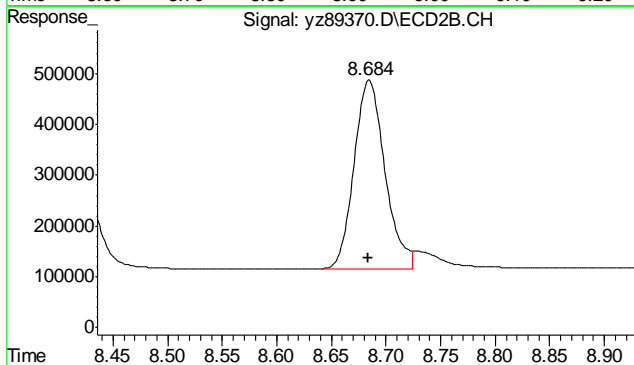
#11 AR1260-E
 R.T.: 7.941 min
 Delta R.T.: 0.000 min
 Response: 18438237
 Conc: 496.92 ppb m



#11 AR1260-E
 R.T.: 7.781 min
 Delta R.T.: 0.000 min
 Response: 2941590
 Conc: 499.36 ppb m

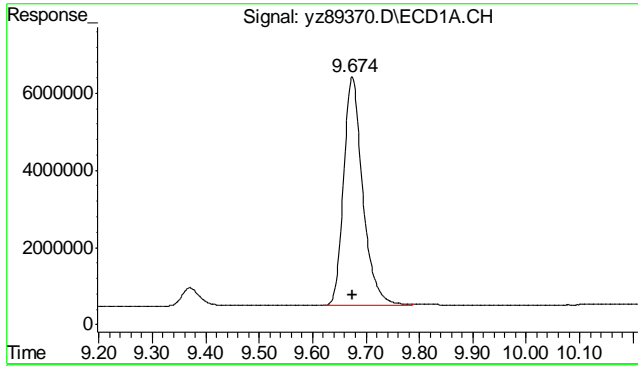


#12 AR1260-F
 R.T.: 8.916 min
 Delta R.T.: 0.000 min
 Response: 4541024
 Conc: 500.00

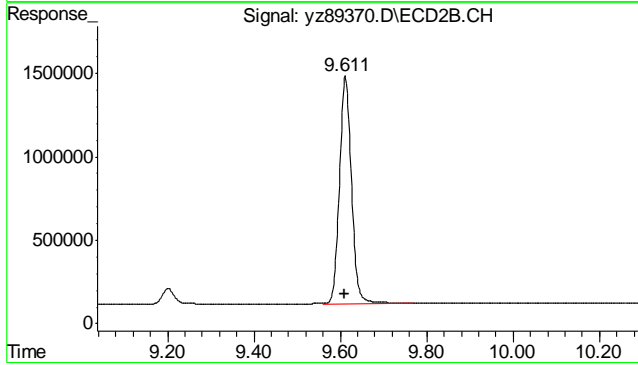


#12 AR1260-F
 R.T.: 8.684 min
 Delta R.T.: 0.000 min
 Response: 732819
 Conc: 501.47 m

7.54
7



#13 DCB
 R.T.: 9.674 min
 Delta R.T.: 0.000 min
 Response: 14699158
 Conc: 47.73 ppb m



#13 DCB
 R.T.: 9.611 min
 Delta R.T.: 0.000 min
 Response: 2620776
 Conc: 48.10 ppb m

7.5.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89371.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:24 pm
 Operator : sofyaz
 Sample : ic7547-750,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 80 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:13:48 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:05:31 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.172	21024770	4206952	55.673m	58.294m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	139.18%#	145.73%#
13) s DCB	9.674	9.612	16160000	2952993	47.069m	49.350m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	117.67%	123.38%
Target Compounds						
2) AR1016-A	2.825	2.572	4132337	909245	726.970m	598.753m
3) AR1016-B	3.167	2.919	10708292	1800476	713.569	656.157
4) AR1016-C	3.635	3.345	19119251	3157953	704.844m	721.943m
5) AR1016-D	3.777	3.479	13526872	1418412	728.769m	744.836m
6) AR1016-E	4.225	3.969	8434266	1596260	707.190	718.789m
7) AR1260-A	5.747	5.507	12406970	2267418	669.700	700.894m
8) AR1260-B	6.129	5.789	17343119	2537522	662.168	687.273
9) AR1260-C	6.524	6.419	38660796	6306538	682.751m	690.354m
10) AR1260-D	7.512	7.224	25816249	4289575	676.998m	670.581
11) AR1260-E	7.942	7.780	25502688	4109295	642.160m	653.146m
12) AR1260-F	8.917	8.685	6175645	1002898	654.667	642.751m

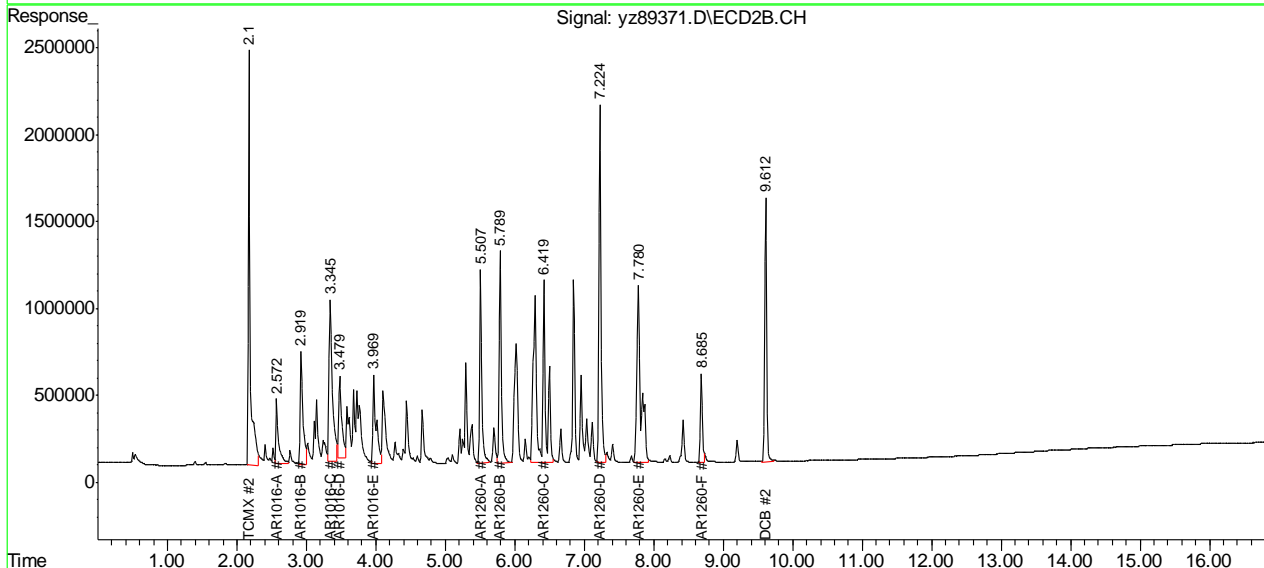
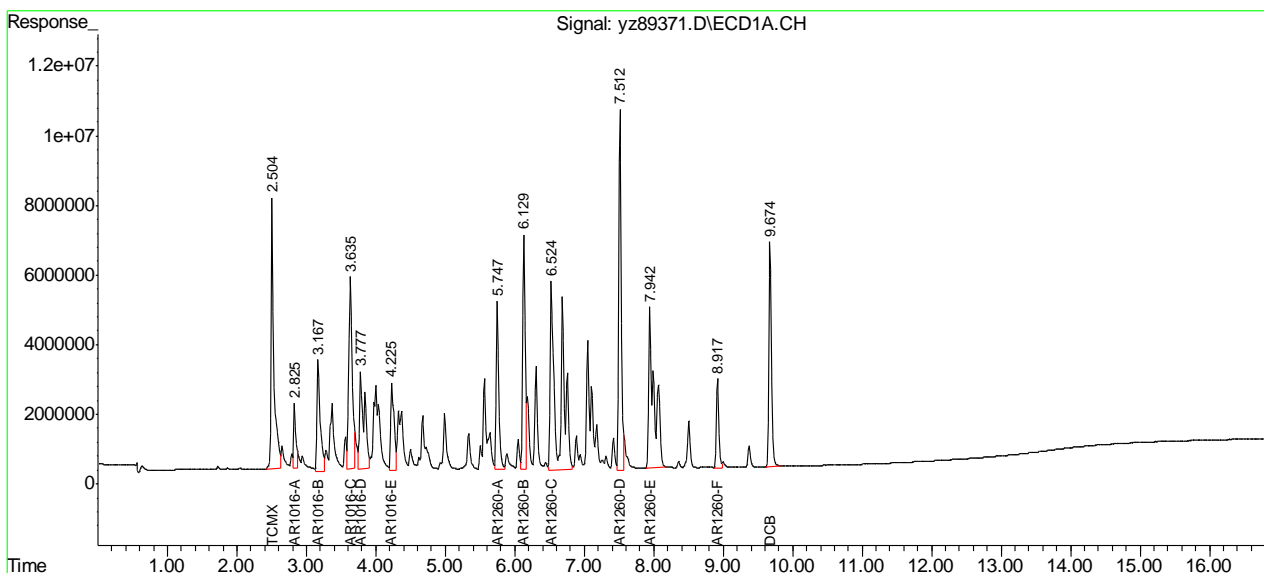
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

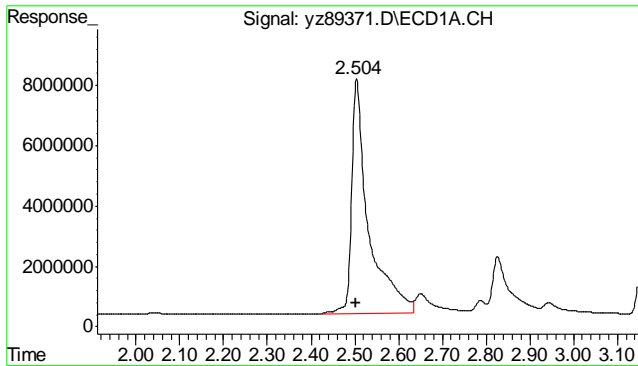
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89371.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:24 pm
 Operator : sofyaz
 Sample : ic7547-750,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 80 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:13:48 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:05:31 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

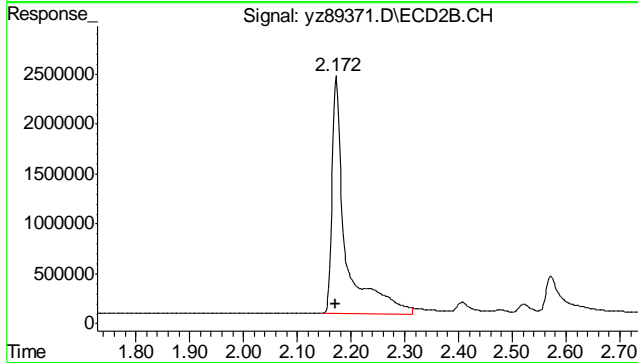
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



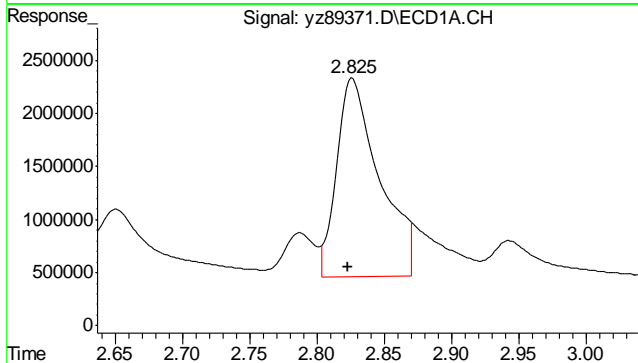
755
 7



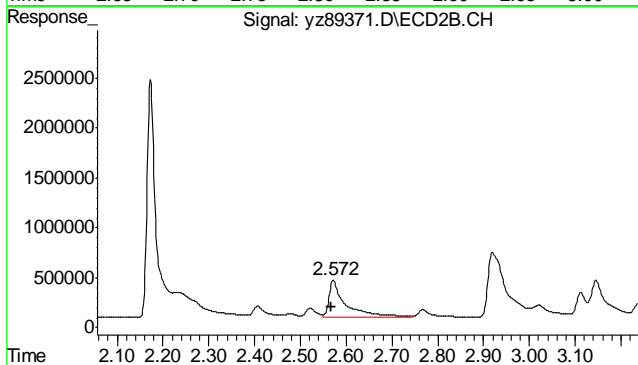
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: 0.002 min
 Response: 21024770
 Conc: 55.67 ppb m



#1 TCMX
 R.T.: 2.172 min
 Delta R.T.: 0.000 min
 Response: 4206952
 Conc: 58.29 ppb m

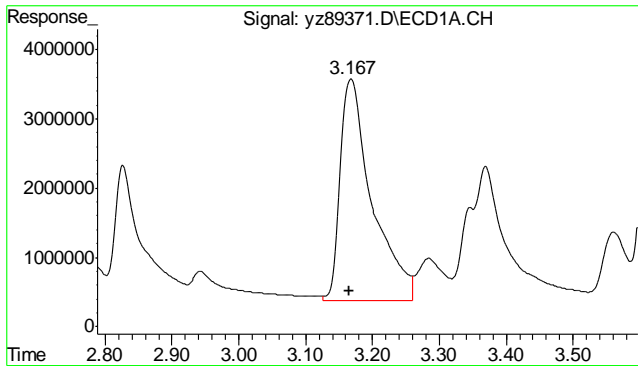


#2 AR1016-A
 R.T.: 2.825 min
 Delta R.T.: 0.002 min
 Response: 4132337
 Conc: 726.97 ppb m

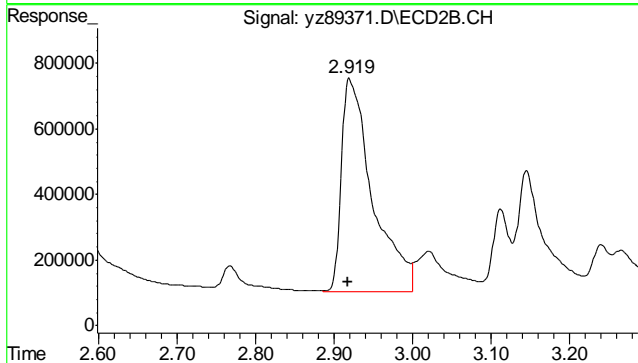


#2 AR1016-A
 R.T.: 2.572 min
 Delta R.T.: 0.005 min
 Response: 909245
 Conc: 598.75 ppb m

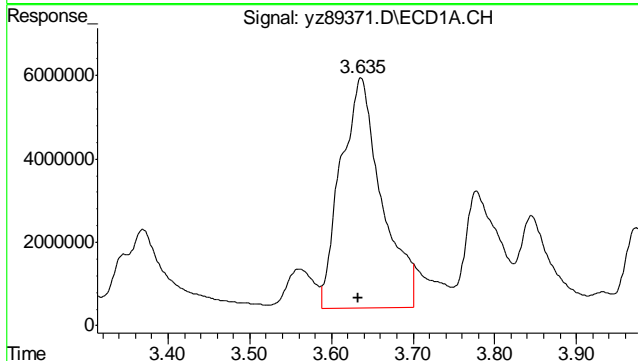
7.5.5
 7



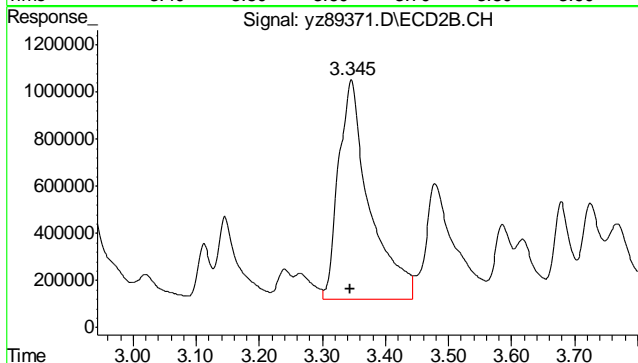
#3 AR1016-B
 R.T.: 3.167 min
 Delta R.T.: 0.002 min
 Response: 10708292
 Conc: 713.57 ppb



#3 AR1016-B
 R.T.: 2.919 min
 Delta R.T.: 0.000 min
 Response: 1800476
 Conc: 656.16 ppb

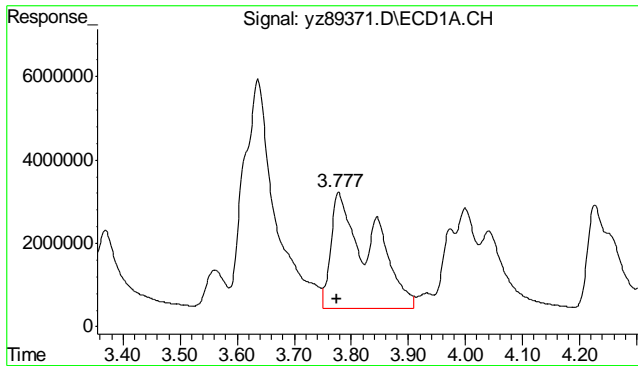


#4 AR1016-C
 R.T.: 3.635 min
 Delta R.T.: 0.002 min
 Response: 19119251
 Conc: 704.84 ppb m

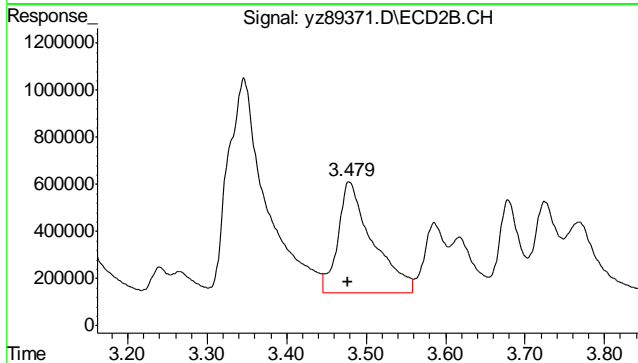


#4 AR1016-C
 R.T.: 3.345 min
 Delta R.T.: 0.000 min
 Response: 3157953
 Conc: 721.94 ppb m

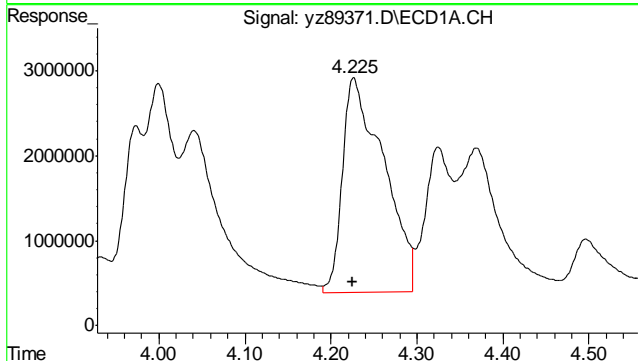
7.5.5
7



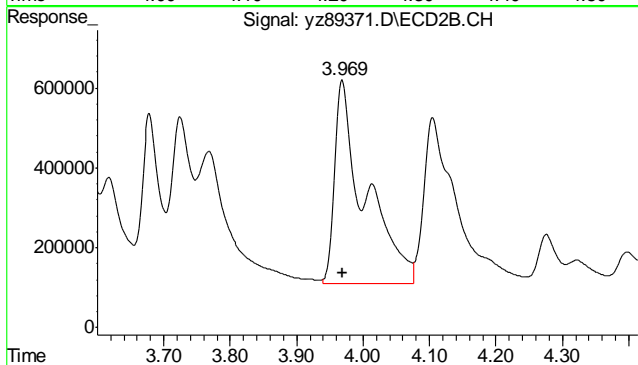
#5 AR1016-D
 R.T.: 3.777 min
 Delta R.T.: 0.002 min
 Response: 13526872
 Conc: 728.77 m



#5 AR1016-D
 R.T.: 3.479 min
 Delta R.T.: 0.002 min
 Response: 1418412
 Conc: 744.84 m

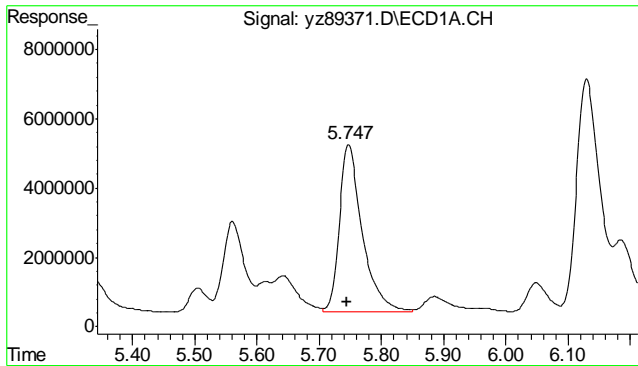


#6 AR1016-E
 R.T.: 4.225 min
 Delta R.T.: 0.000 min
 Response: 8434266
 Conc: 707.19

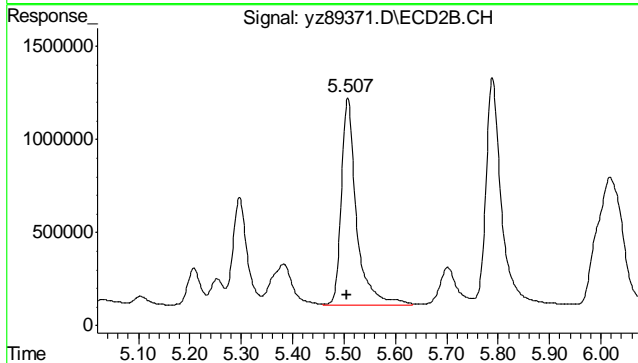


#6 AR1016-E
 R.T.: 3.969 min
 Delta R.T.: 0.000 min
 Response: 1596260
 Conc: 718.79 m

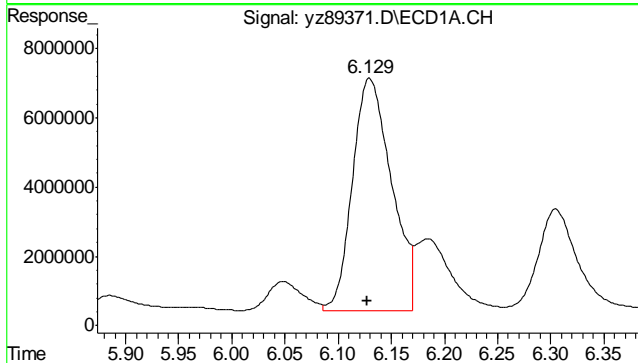
7.5.5
7



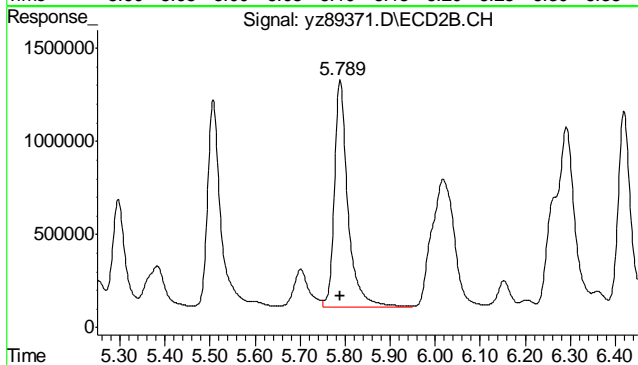
#7 AR1260-A
 R.T.: 5.747 min
 Delta R.T.: 0.002 min
 Response: 12406970
 Conc: 669.70 ppb



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: 0.000 min
 Response: 2267418
 Conc: 700.89 ppb m

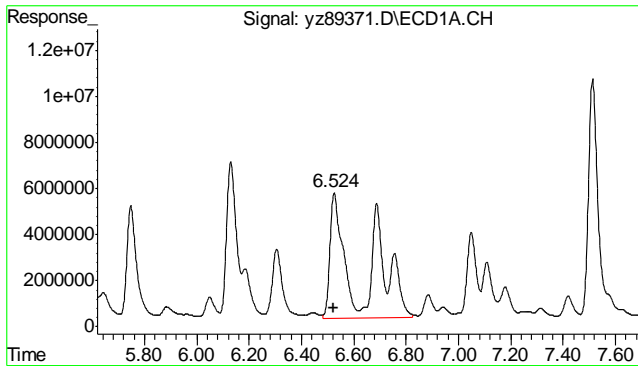


#8 AR1260-B
 R.T.: 6.129 min
 Delta R.T.: 0.002 min
 Response: 17343119
 Conc: 662.17 ppb

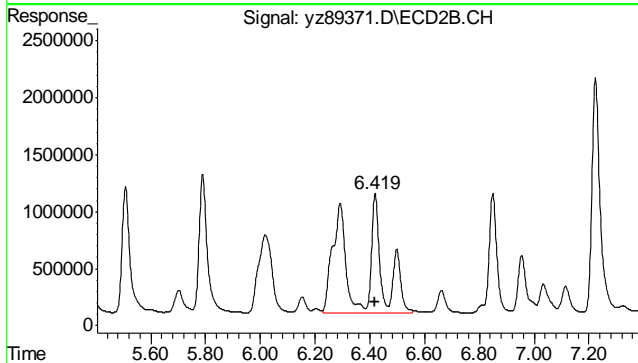


#8 AR1260-B
 R.T.: 5.789 min
 Delta R.T.: 0.000 min
 Response: 2537522
 Conc: 687.27 ppb

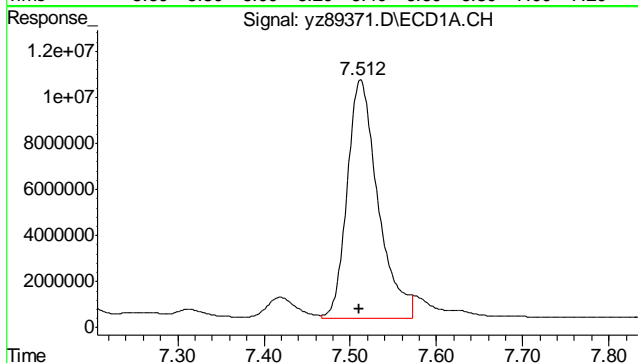
7.5.5
7



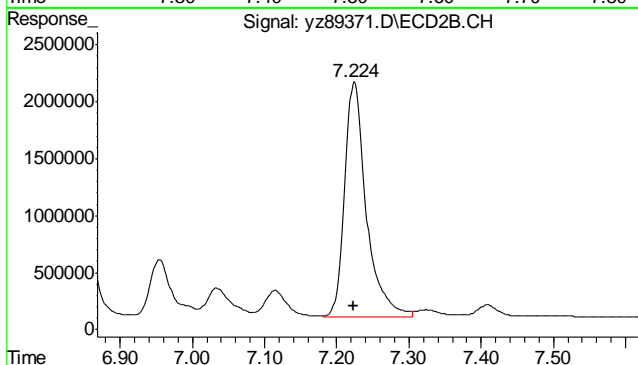
#9 AR1260-C
 R.T.: 6.524 min
 Delta R.T.: 0.000 min
 Response: 38660796
 Conc: 682.75 ppb m



#9 AR1260-C
 R.T.: 6.419 min
 Delta R.T.: 0.000 min
 Response: 6306538
 Conc: 690.35 ppb m

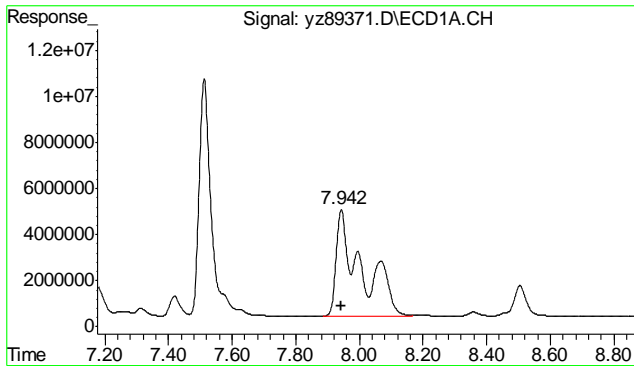


#10 AR1260-D
 R.T.: 7.512 min
 Delta R.T.: 0.002 min
 Response: 25816249
 Conc: 677.00 ppb m

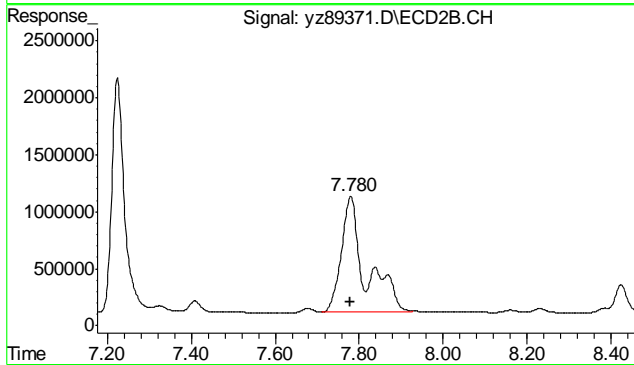


#10 AR1260-D
 R.T.: 7.224 min
 Delta R.T.: 0.000 min
 Response: 4289575
 Conc: 670.58 ppb

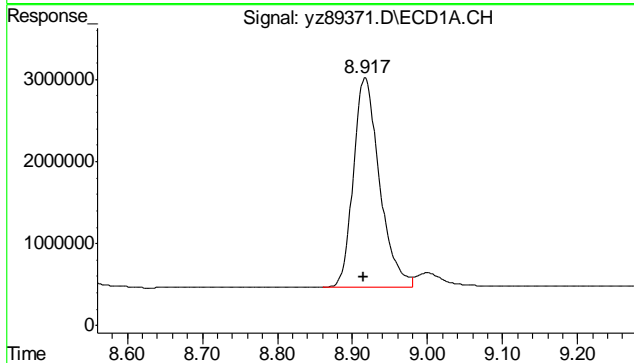
7.5.5
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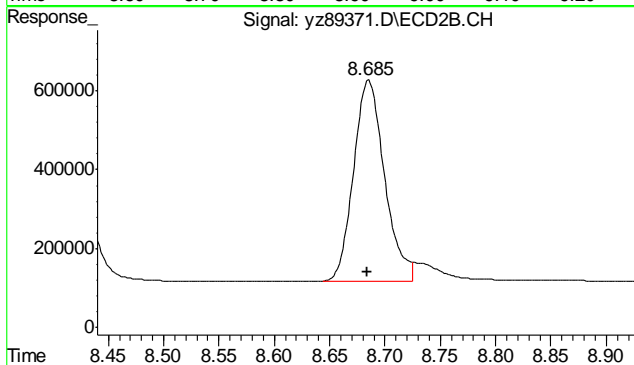
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: 0.000 min
 Response: 25502688
 Conc: 642.16 ppb m



#11 AR1260-E
 R.T.: 7.780 min
 Delta R.T.: 0.000 min
 Response: 4109295
 Conc: 653.15 ppb m

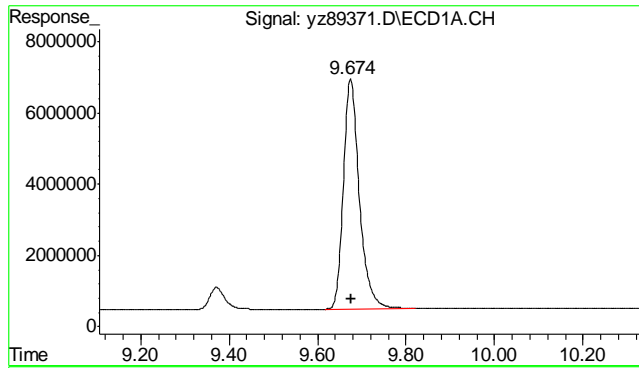


#12 AR1260-F
 R.T.: 8.917 min
 Delta R.T.: 0.002 min
 Response: 6175645
 Conc: 654.67



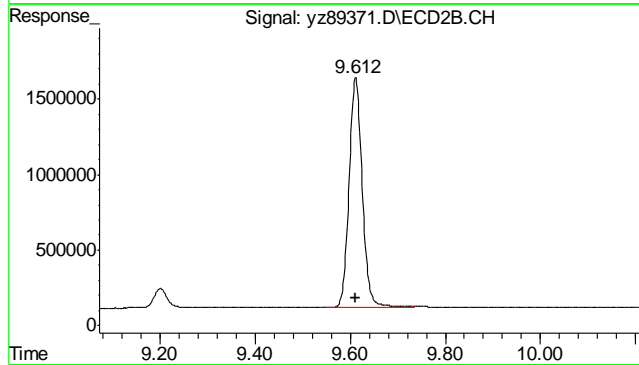
#12 AR1260-F
 R.T.: 8.685 min
 Delta R.T.: 0.002 min
 Response: 1002898
 Conc: 642.75 m

7.5.5
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#13 DCB

R.T.: 9.674 min
Delta R.T.: -0.002 min
Response: 16160000
Conc: 47.07 ppb m



#13 DCB

R.T.: 9.612 min
Delta R.T.: 0.000 min
Response: 2952993
Conc: 49.35 ppb m

7.5.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89372.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:44 pm
 Operator : sofyaz
 Sample : ic7547-1000,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 81 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:19:54 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:14:06 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.501	2.171	30029667	5781742	79.611m	79.465m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	199.03%#	198.66%#
13) s DCB	9.673	9.611	24994810	4491701	75.201m	76.890m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	188.00%#	192.22%#
Target Compounds						
2) AR1016-A	2.824	2.571	5662588	1281483	1002.331m	879.345m
3) AR1016-B	3.166	2.918	14236600	2449049	957.991m	915.428m
4) AR1016-C	3.634	3.344	26665407	4473673	995.020m	1030.440m
5) AR1016-D	3.776	3.478	18777636	1799036	1017.417m	946.012m
6) AR1016-E	4.226	3.968	12156404	2149049	1031.052	975.830m
7) AR1260-A	5.746	5.506	17383742	3096784	958.868	969.966m
8) AR1260-B	6.128	5.788	25029598	3542963	978.561	975.916m
9) AR1260-C	6.523	6.418	55151236	8916857	991.758m	991.872m
10) AR1260-D	7.511	7.223	36852426	6212456	985.594m	992.194m
11) AR1260-E	7.941	7.779	36792764	5992010	953.876m	977.642m
12) AR1260-F	8.916	8.684	8957408	1471595	974.326	970.904m

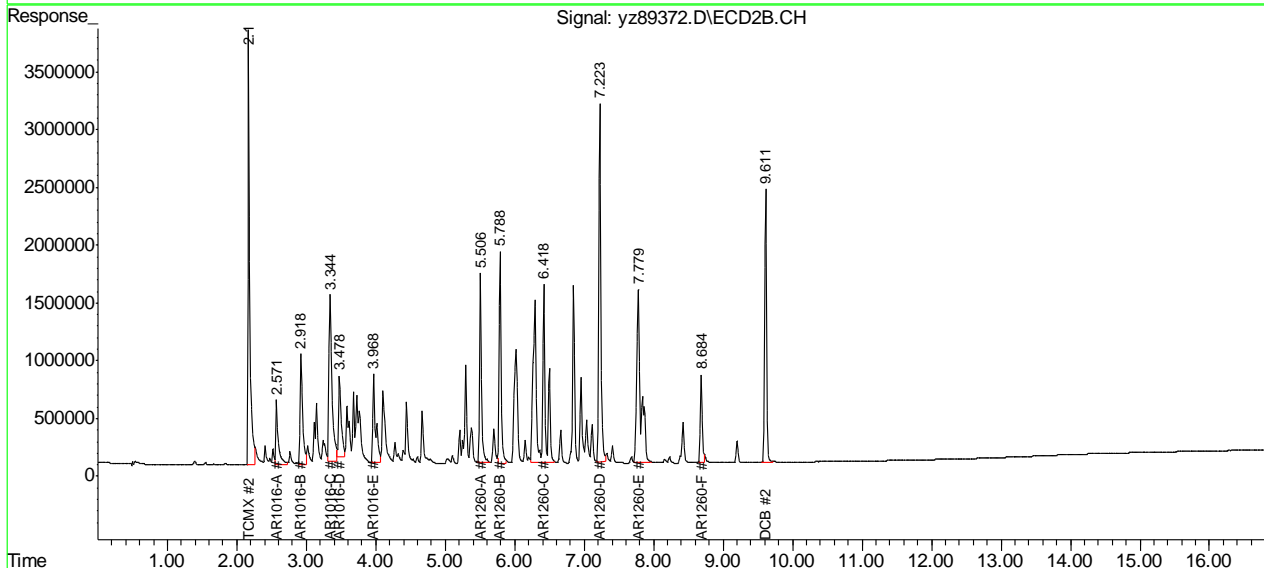
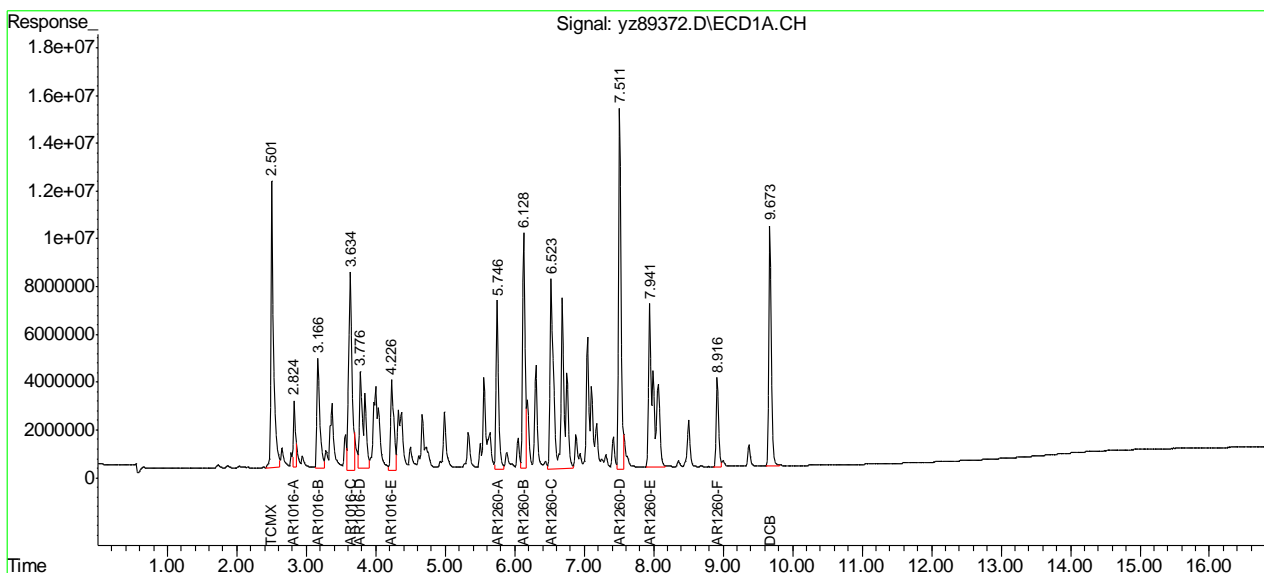
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

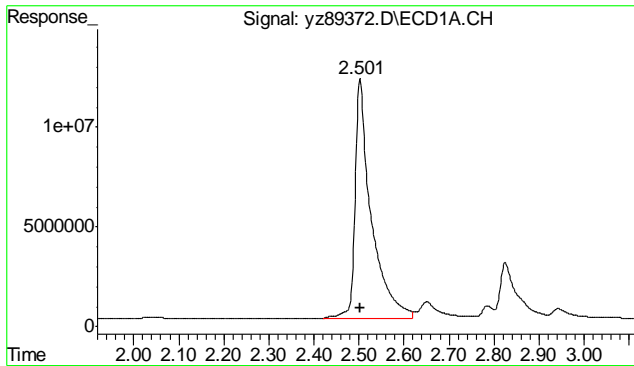
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89372.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 9:44 pm
 Operator : sofyaz
 Sample : ic7547-1000,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 81 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:19:54 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:14:06 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

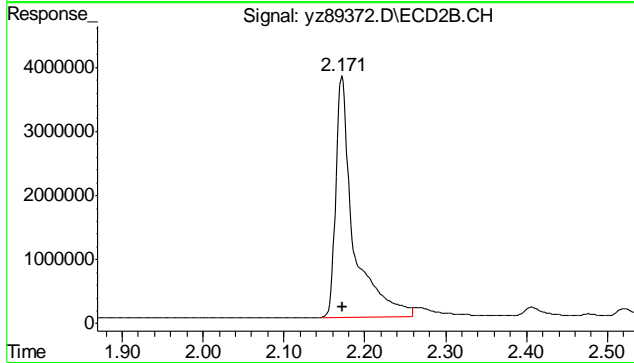
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



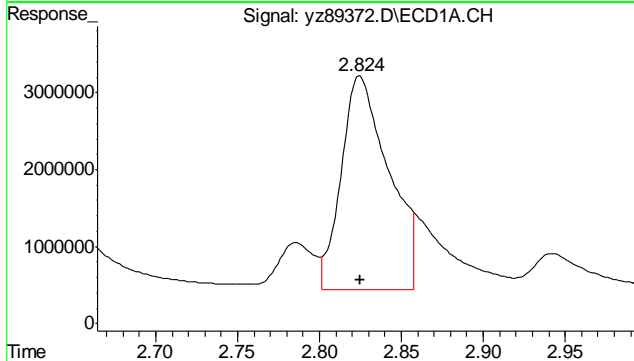
7.5.6
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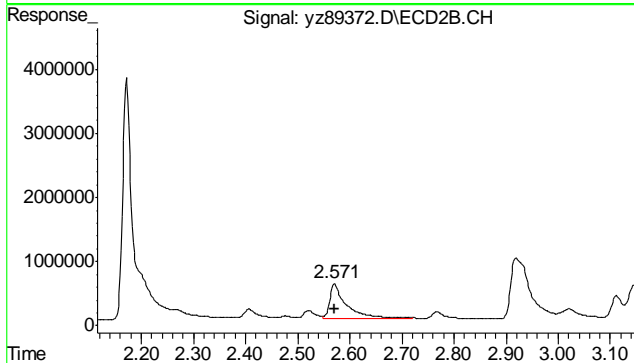
#1 TCMX
 R.T.: 2.501 min
 Delta R.T.: -0.002 min
 Response: 30029667
 Conc: 79.61 ppb m



#1 TCMX
 R.T.: 2.171 min
 Delta R.T.: 0.000 min
 Response: 5781742
 Conc: 79.46 ppb m

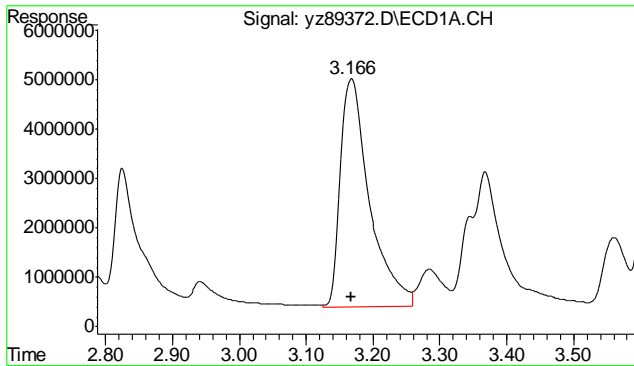


#2 AR1016-A
 R.T.: 2.824 min
 Delta R.T.: 0.000 min
 Response: 5662588
 Conc: 1002.33 ppb m

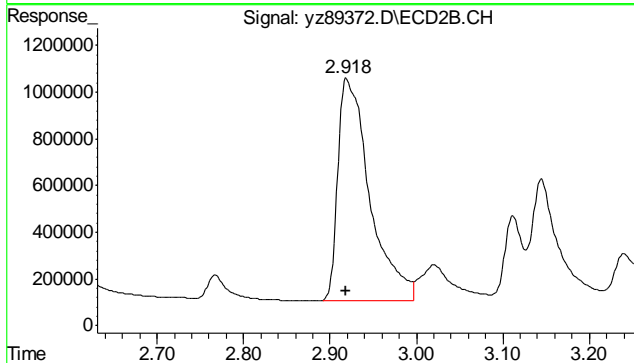


#2 AR1016-A
 R.T.: 2.571 min
 Delta R.T.: 0.000 min
 Response: 1281483
 Conc: 879.34 ppb m

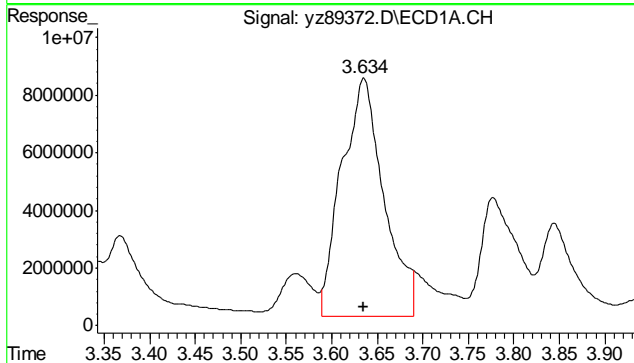
7.5.6
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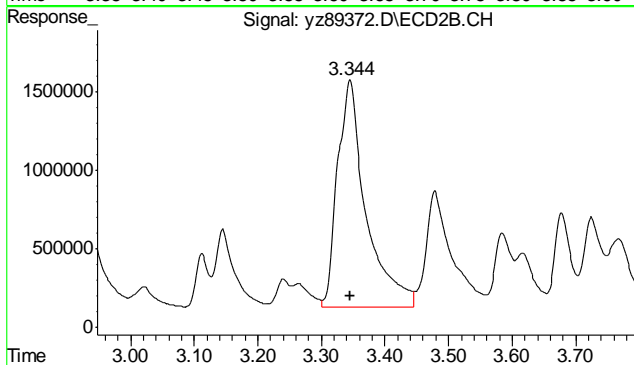
#3 AR1016-B
 R.T.: 3.166 min
 Delta R.T.: 0.000 min
 Response: 14236600
 Conc: 957.99 ppb m



#3 AR1016-B
 R.T.: 2.918 min
 Delta R.T.: 0.000 min
 Response: 2449049
 Conc: 915.43 ppb m

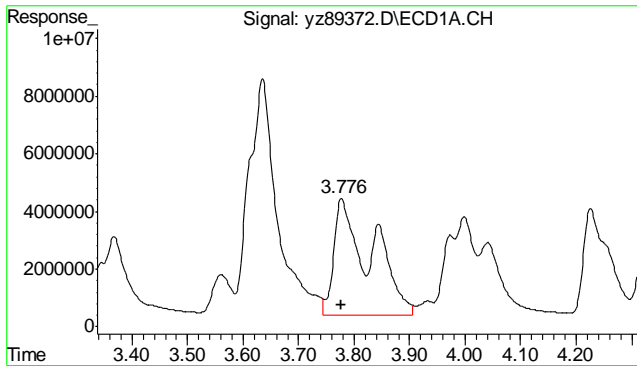


#4 AR1016-C
 R.T.: 3.634 min
 Delta R.T.: 0.000 min
 Response: 26665407
 Conc: 995.02 ppb m

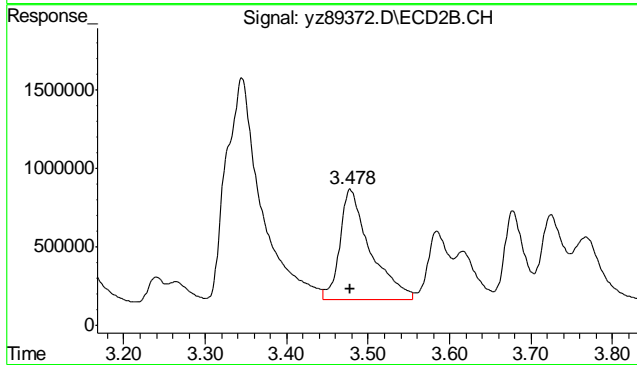


#4 AR1016-C
 R.T.: 3.344 min
 Delta R.T.: 0.000 min
 Response: 4473673
 Conc: 1030.44 ppb m

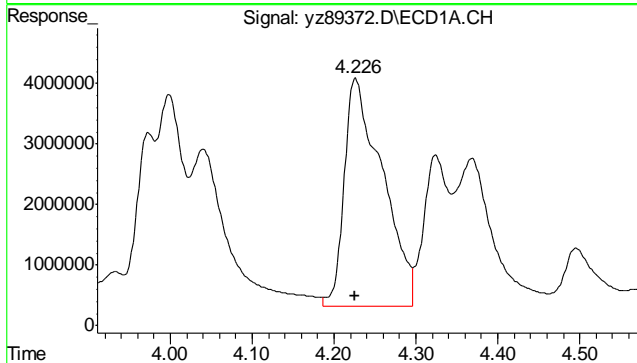
7.5.6
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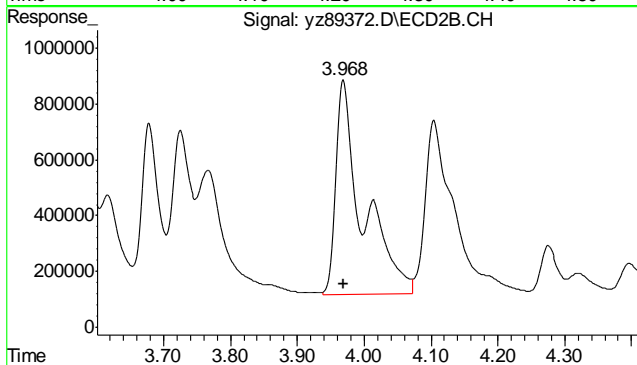
#5 AR1016-D
 R.T.: 3.776 min
 Delta R.T.: 0.000 min
 Response: 18777636
 Conc: 1017.42 m



#5 AR1016-D
 R.T.: 3.478 min
 Delta R.T.: 0.000 min
 Response: 1799036
 Conc: 946.01 m

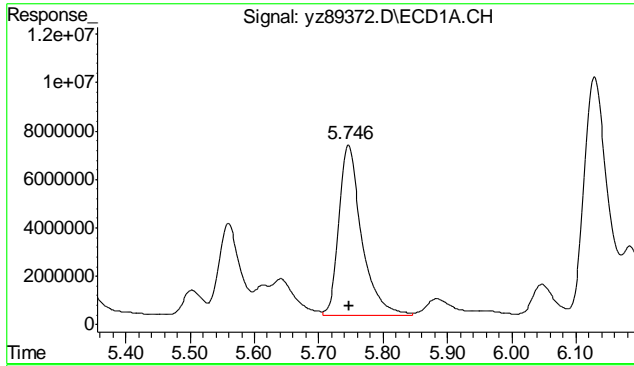


#6 AR1016-E
 R.T.: 4.226 min
 Delta R.T.: 0.000 min
 Response: 12156404
 Conc: 1031.05

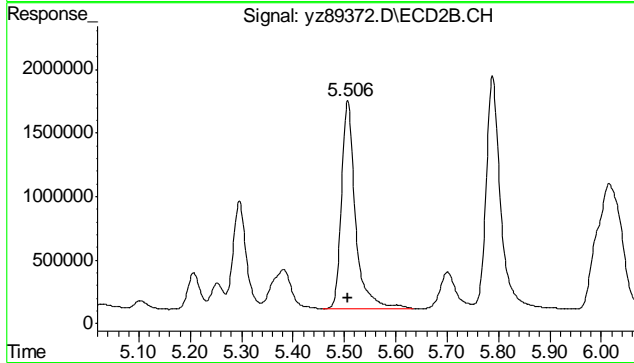


#6 AR1016-E
 R.T.: 3.968 min
 Delta R.T.: 0.000 min
 Response: 2149049
 Conc: 975.83 m

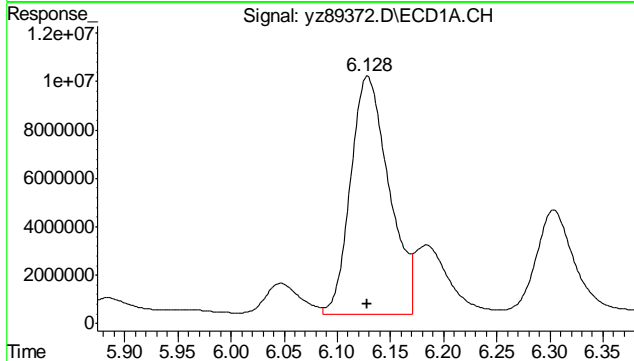
7.5.6
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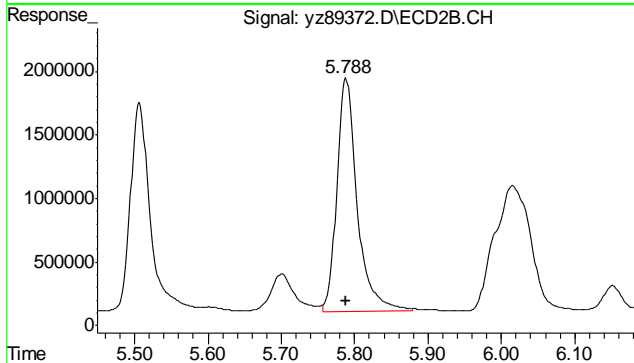
#7 AR1260-A
 R.T.: 5.746 min
 Delta R.T.: 0.000 min
 Response: 17383742
 Conc: 958.87 ppb



#7 AR1260-A
 R.T.: 5.506 min
 Delta R.T.: 0.000 min
 Response: 3096784
 Conc: 969.97 ppb m

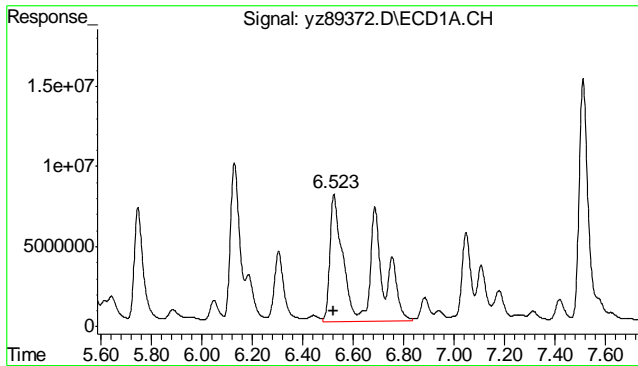


#8 AR1260-B
 R.T.: 6.128 min
 Delta R.T.: 0.000 min
 Response: 25029598
 Conc: 978.56 ppb

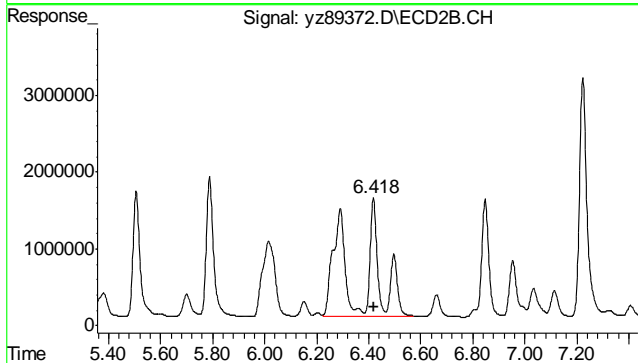


#8 AR1260-B
 R.T.: 5.788 min
 Delta R.T.: 0.000 min
 Response: 3542963
 Conc: 975.92 ppb m

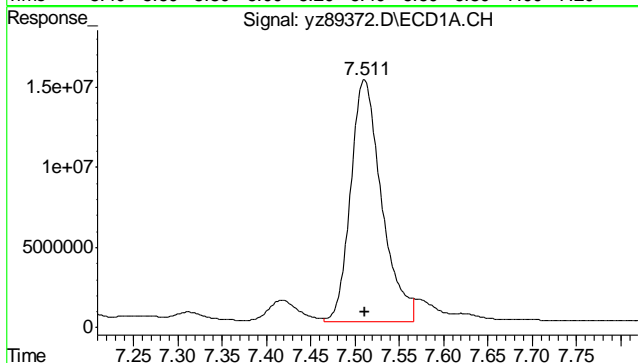
7.5.6
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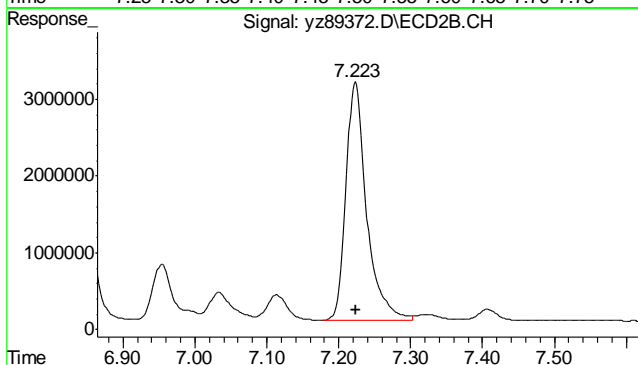
#9 AR1260-C
 R.T.: 6.523 min
 Delta R.T.: 0.000 min
 Response: 55151236
 Conc: 991.76 ppb m



#9 AR1260-C
 R.T.: 6.418 min
 Delta R.T.: 0.000 min
 Response: 8916857
 Conc: 991.87 ppb m

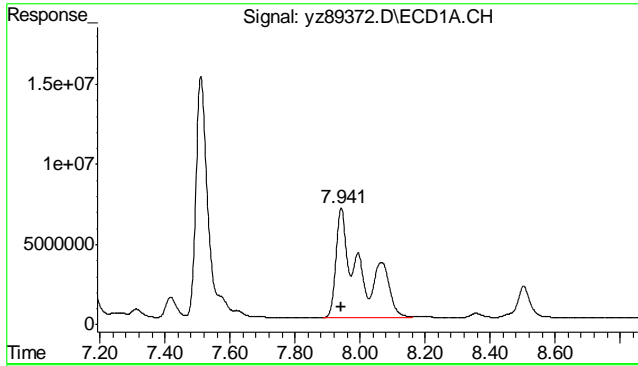


#10 AR1260-D
 R.T.: 7.511 min
 Delta R.T.: 0.000 min
 Response: 36852426
 Conc: 985.59 ppb m

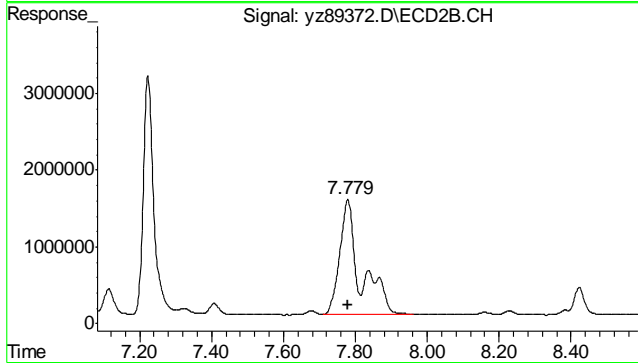


#10 AR1260-D
 R.T.: 7.223 min
 Delta R.T.: 0.000 min
 Response: 6212456
 Conc: 992.19 ppb m

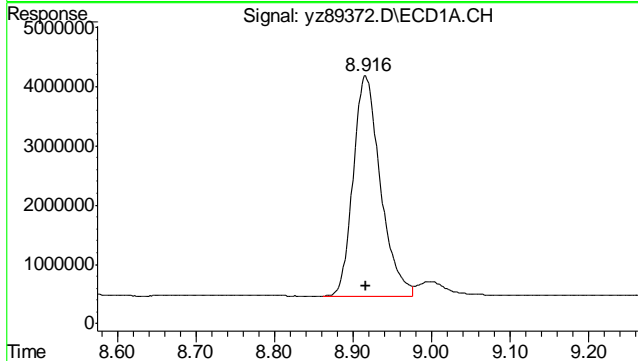
7.5.6
7



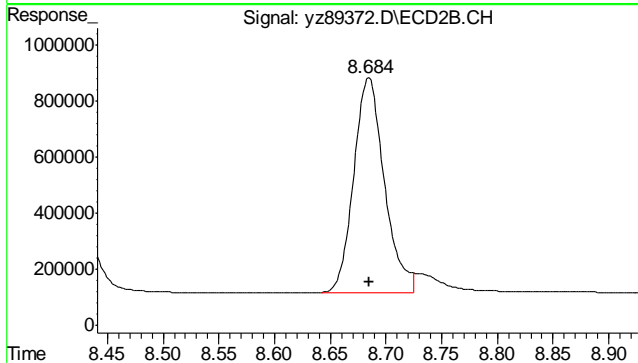
#11 AR1260-E
 R.T.: 7.941 min
 Delta R.T.: 0.000 min
 Response: 36792764
 Conc: 953.88 ppb m



#11 AR1260-E
 R.T.: 7.779 min
 Delta R.T.: 0.000 min
 Response: 5992010
 Conc: 977.64 ppb m

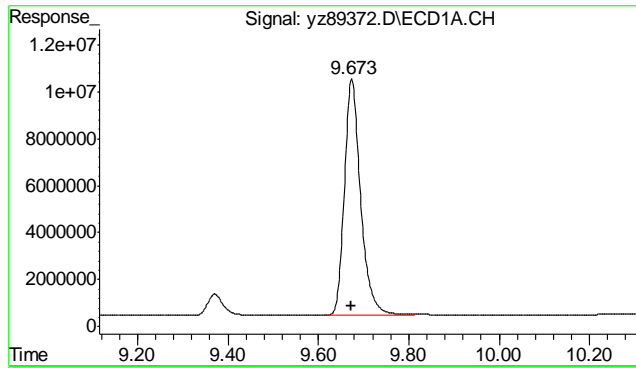


#12 AR1260-F
 R.T.: 8.916 min
 Delta R.T.: 0.000 min
 Response: 8957408
 Conc: 974.33



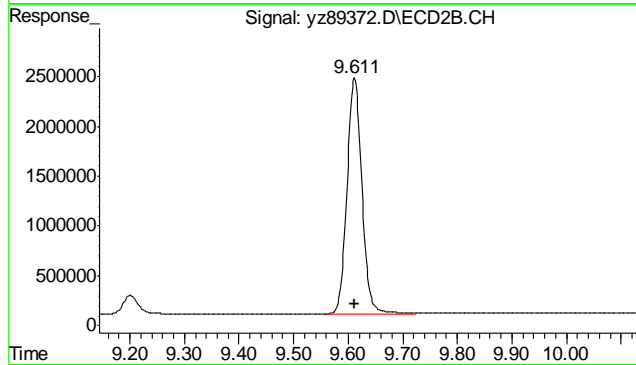
#12 AR1260-F
 R.T.: 8.684 min
 Delta R.T.: 0.000 min
 Response: 1471595
 Conc: 970.90 m

7.5.6
 7



#13 DCB

R.T.: 9.673 min
Delta R.T.: 0.000 min
Response: 24994810
Conc: 75.20 ppb m



#13 DCB

R.T.: 9.611 min
Delta R.T.: 0.000 min
Response: 4491701
Conc: 76.89 ppb m

7.5.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89373.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:04 pm
 Operator : sofyaz
 Sample : ic7547-500,a21/54
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 82 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:25:57 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502f	2.170f	17326301	3495428	43.279	22.624m#
Spiked Amount	40.000 Range	42 - 132	Recovery	=	108.20%	56.56%
13) s DCB	9.673f	9.612f	14050994	2463887	45.270m	27.826m#
Spiked Amount	40.000 Range	30 - 150	Recovery	=	113.18%	69.56%
Target Compounds						
14) AR1221-A	2.033f	1.823f	1369541	221388	549.093m	274.809m#
15) AR1221-B	2.648f	2.403f	2155976	273092	596.578	235.371m#
16) AR1221-C	2.823f	2.570f	5300524	803538	601.246	304.367m#
32) AR1254-A	4.670f	4.442f	11230902	1576558	463.142m	270.641m#
33) AR1254-B	4.988f	4.668f	14979781	2332935	456.751m	266.389m#
34) AR1254-C	5.503f	5.252f	21972859	3766862	460.533m	271.217m#
35) AR1254-D	5.877f	5.550f	7450627	1902729	447.060	278.903m#
36) AR1254-E	6.523f	6.293f	9909997	1745781	455.912	284.538m#

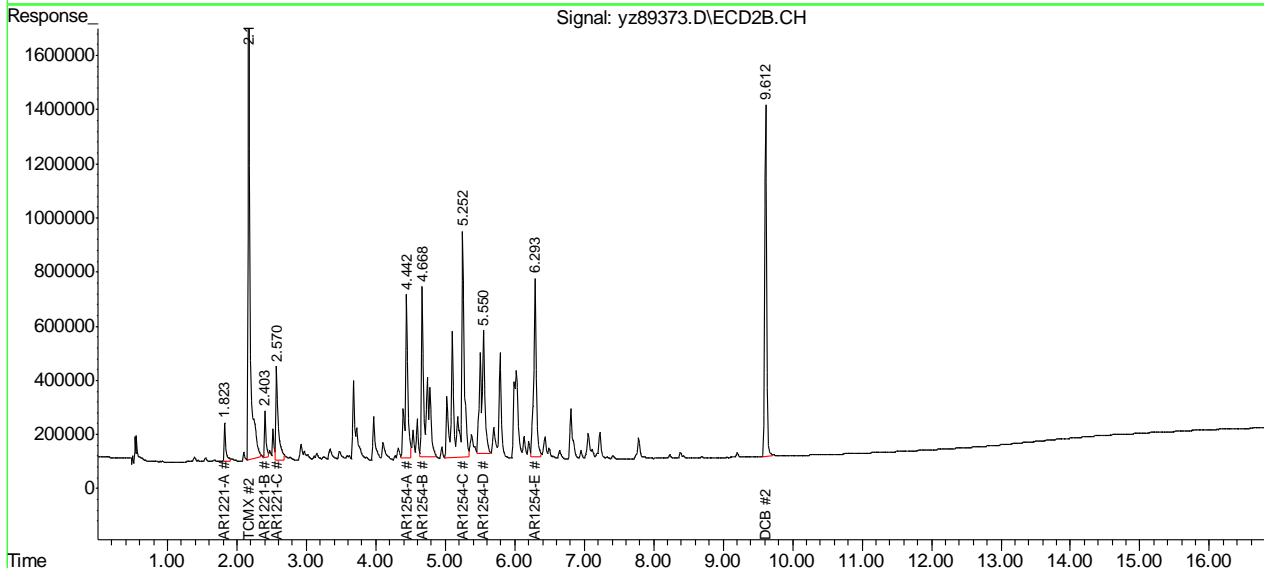
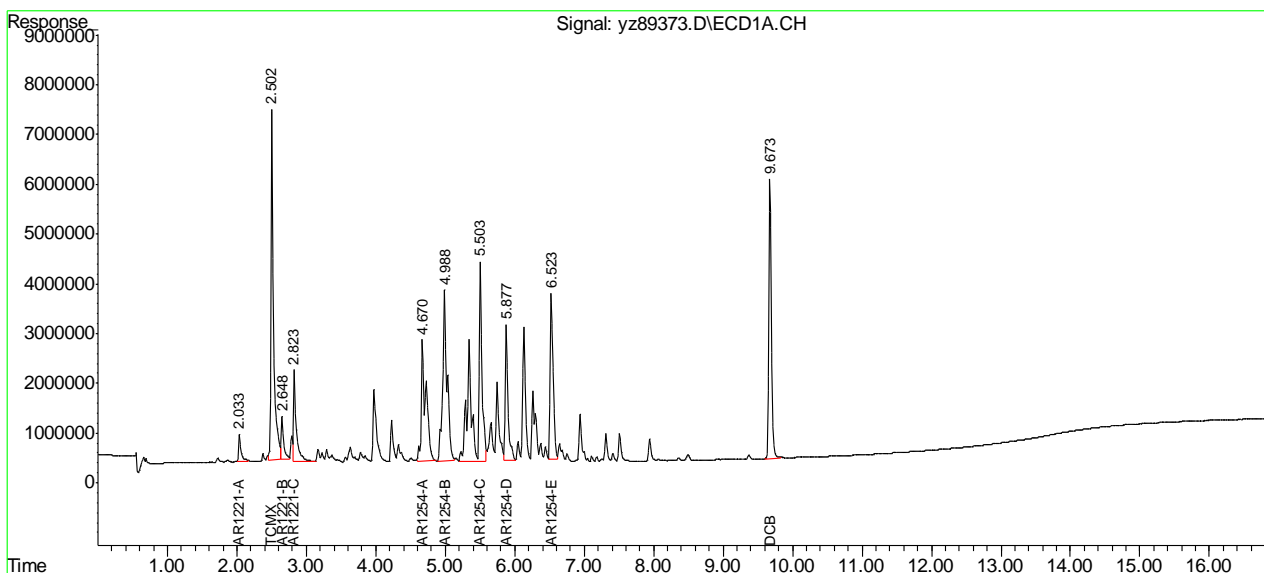
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

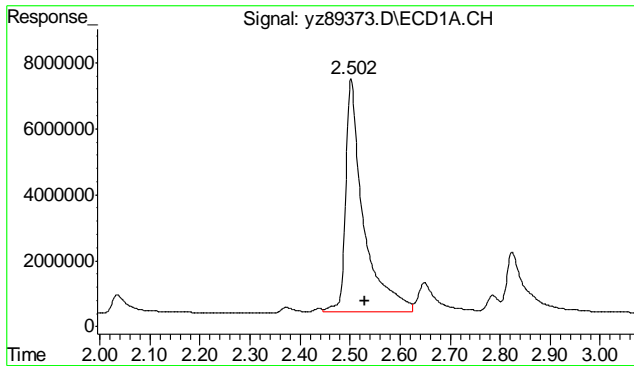
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89373.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:04 pm
 Operator : sofyaz
 Sample : ic7547-500,a21/54
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 82 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:25:57 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

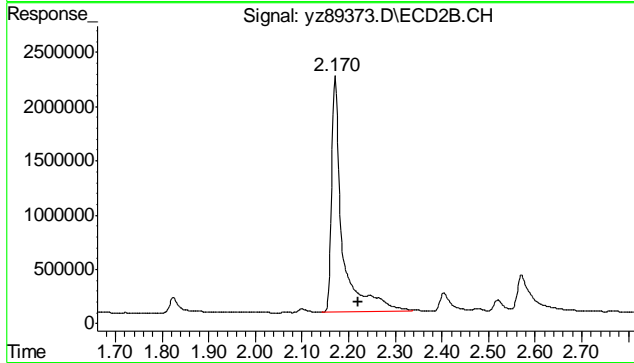
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



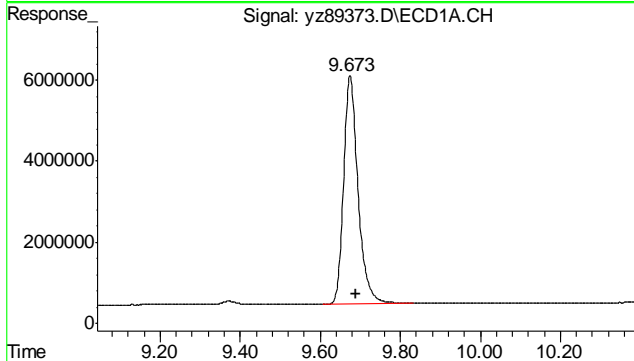
7.5.7
 7



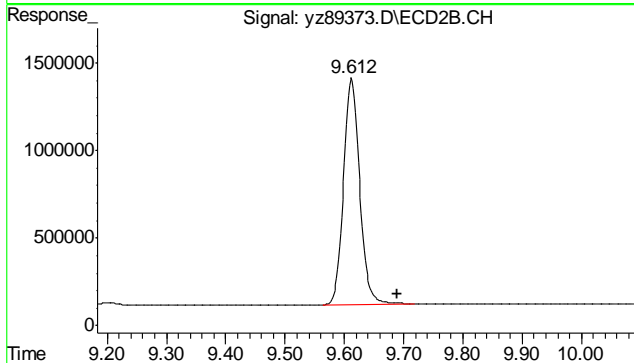
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: -0.028 min
 Response: 17326301
 Conc: 43.28 ppb



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: -0.050 min
 Response: 3495428
 Conc: 22.62 ppb m

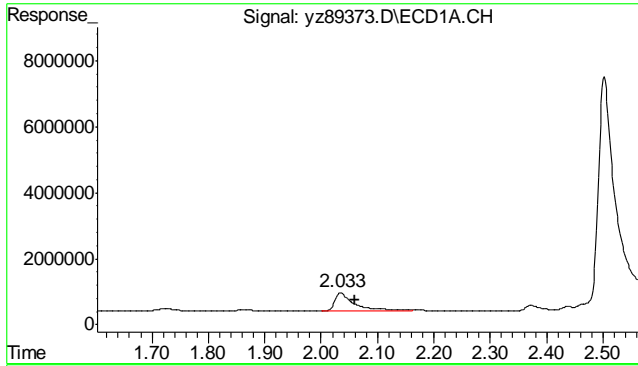


#13 DCB
 R.T.: 9.673 min
 Delta R.T.: -0.017 min
 Response: 14050994
 Conc: 45.27 ppb m

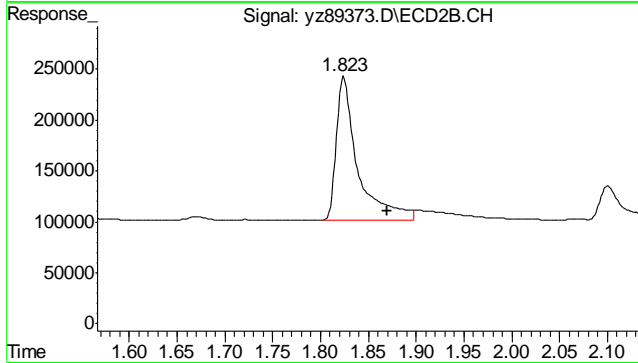


#13 DCB
 R.T.: 9.612 min
 Delta R.T.: -0.078 min
 Response: 2463887
 Conc: 27.83 ppb m

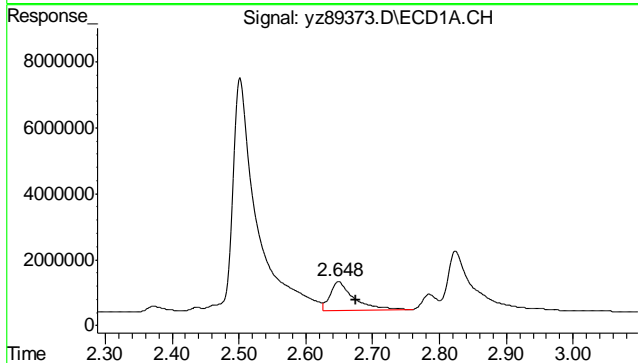
7.57
 7



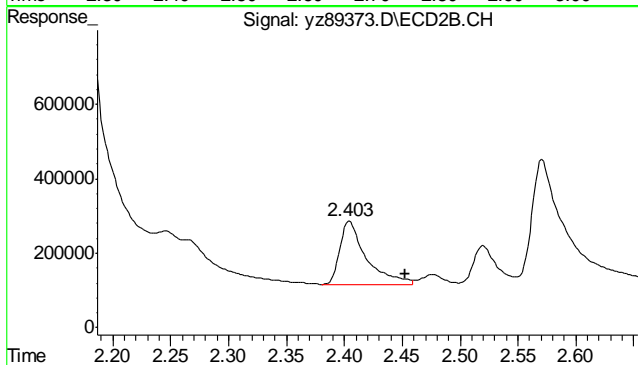
#14 AR1221-A
 R.T.: 2.033 min
 Delta R.T.: -0.026 min
 Response: 1369541
 Conc: 549.09 m



#14 AR1221-A
 R.T.: 1.823 min
 Delta R.T.: -0.046 min
 Response: 221388
 Conc: 274.81 m



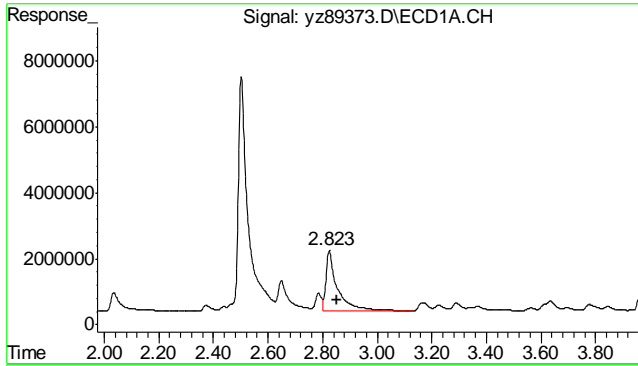
#15 AR1221-B
 R.T.: 2.648 min
 Delta R.T.: -0.026 min
 Response: 2155976
 Conc: 596.58



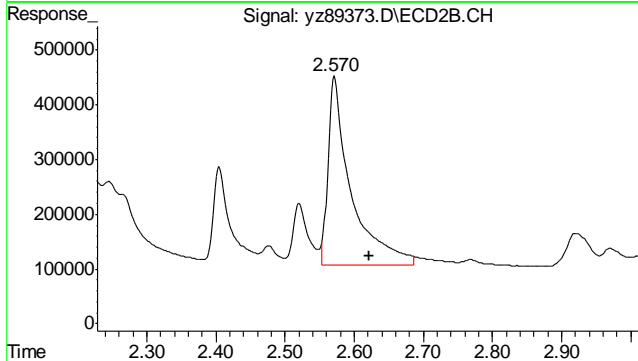
#15 AR1221-B
 R.T.: 2.403 min
 Delta R.T.: -0.049 min
 Response: 273092
 Conc: 235.37 m

7.57

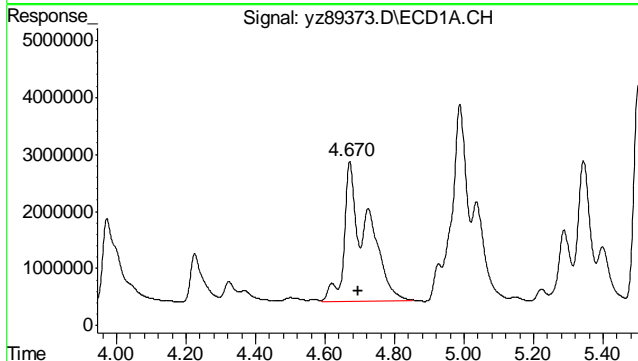
7



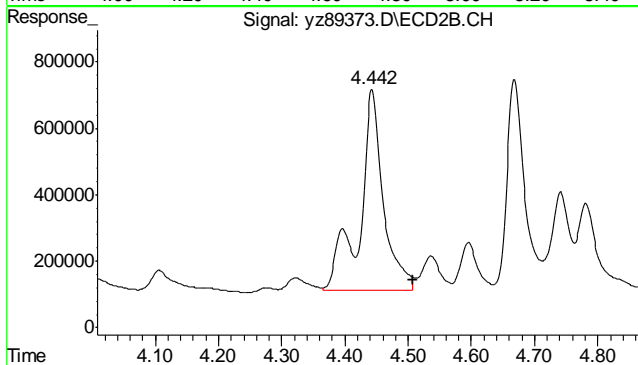
#16 AR1221-C
 R.T.: 2.823 min
 Delta R.T.: -0.028 min
 Response: 5300524
 Conc: 601.25



#16 AR1221-C
 R.T.: 2.570 min
 Delta R.T.: -0.051 min
 Response: 803538
 Conc: 304.37 m

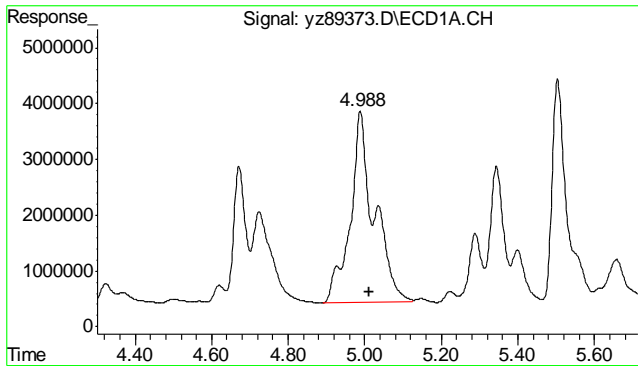


#32 AR1254-A
 R.T.: 4.670 min
 Delta R.T.: -0.026 min
 Response: 11230902
 Conc: 463.14 ppb m

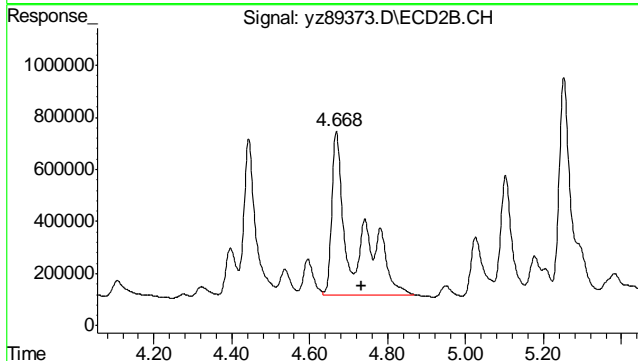


#32 AR1254-A
 R.T.: 4.442 min
 Delta R.T.: -0.066 min
 Response: 1576558
 Conc: 270.64 ppb m

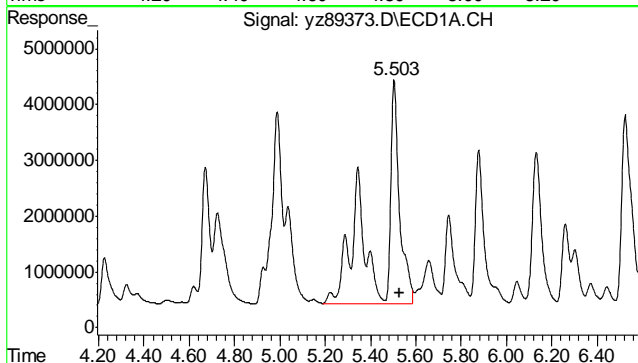
7.57
7



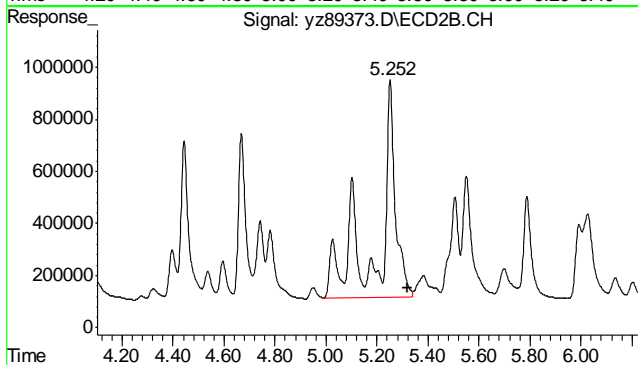
#33 AR1254-B
 R.T.: 4.988 min
 Delta R.T.: -0.024 min
 Response: 14979781
 Conc: 456.75 ppb m



#33 AR1254-B
 R.T.: 4.668 min
 Delta R.T.: -0.064 min
 Response: 2332935
 Conc: 266.39 ppb m

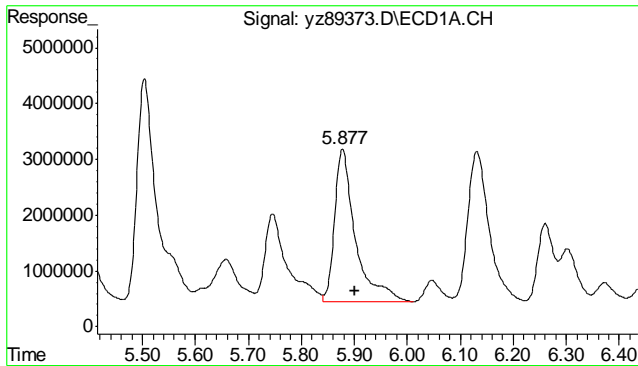


#34 AR1254-C
 R.T.: 5.503 min
 Delta R.T.: -0.024 min
 Response: 21972859
 Conc: 460.53 ppb m

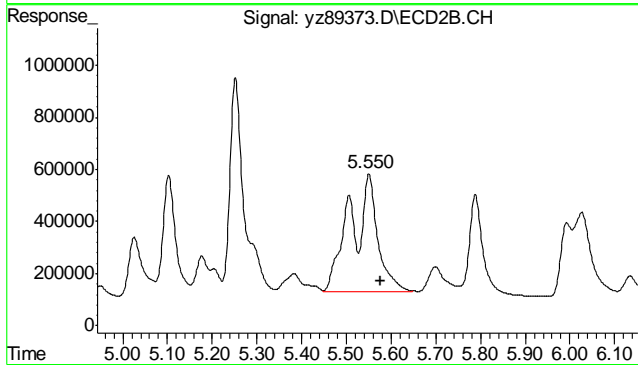


#34 AR1254-C
 R.T.: 5.252 min
 Delta R.T.: -0.069 min
 Response: 3766862
 Conc: 271.22 ppb m

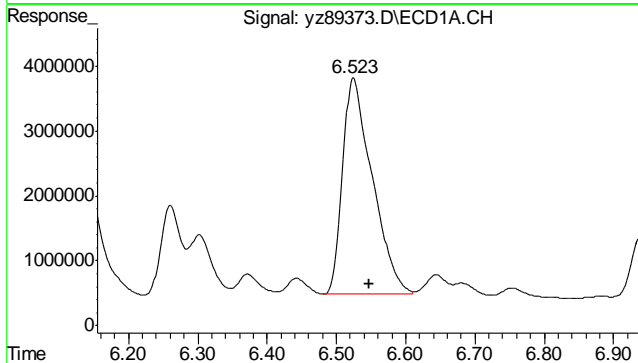
7.57
7



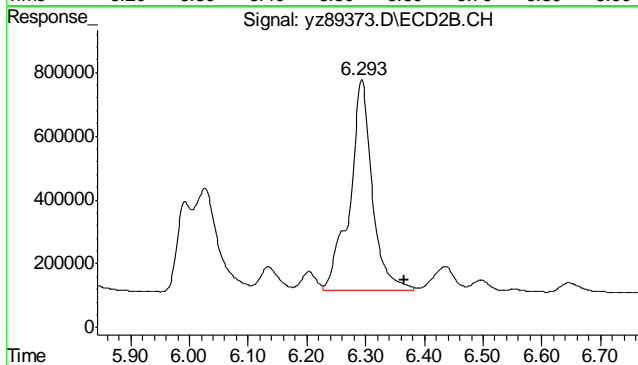
#35 AR1254-D
 R.T.: 5.877 min
 Delta R.T.: -0.024 min
 Response: 7450627
 Conc: 447.06 ppb



#35 AR1254-D
 R.T.: 5.550 min
 Delta R.T.: -0.026 min
 Response: 1902729
 Conc: 278.90 ppb m



#36 AR1254-E
 R.T.: 6.523 min
 Delta R.T.: -0.024 min
 Response: 9909997
 Conc: 455.91 ppb



#36 AR1254-E
 R.T.: 6.293 min
 Delta R.T.: -0.073 min
 Response: 1745781
 Conc: 284.54 ppb m

7.57
7

Manual Integrations
APPROVED
 (compounds with "m" flag)

Andri Piluri
 04/28/14 13:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89374.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:23 pm
 Operator : sofyaz
 Sample : ic7547-500,a32/62
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 83 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:33:34 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.500f	2.170f	18587549	3815726	46.430m	24.697m#
Spiked Amount	40.000 Range	42 - 132	Recovery	=	116.07%	61.74%
13) s DCB	9.672f	9.610f	15461427	2771893	49.814m	31.305m#
Spiked Amount	40.000 Range	30 - 150	Recovery	=	124.54%	78.26%
Target Compounds						
17) AR1232-A	2.824f	2.569f	3465173	646585	769.267m	350.820m#
18) AR1232-B	3.164f	2.917f	3159858	666144	536.528m	405.318m
19) AR1232-C	3.634f	3.344f	6242599	1051119	587.741m	373.312m#
20) AR1232-D	3.997f	3.677f	4343805	770594	519.635m	257.289m#
21) AR1232-E	4.755f	4.445f	5553817	1061439	571.235m	416.661m#
37) AR1262-A	5.744f	5.505f	6962677	1266708	559.922m	4105.304m#
38) AR1262-B	6.125f	5.787f	13575204	1334057	571.341m	3012.667m#
39) AR1262-C	6.684f	6.417f	26458402	4251158	571.317m	342.024m#
40) AR1262-D	7.994f	7.769f	26077092	4170971	630.631m	388.103m#
41) AR1262-E	8.915f	8.684f	7139912	1249257	731.305m	423.667m#

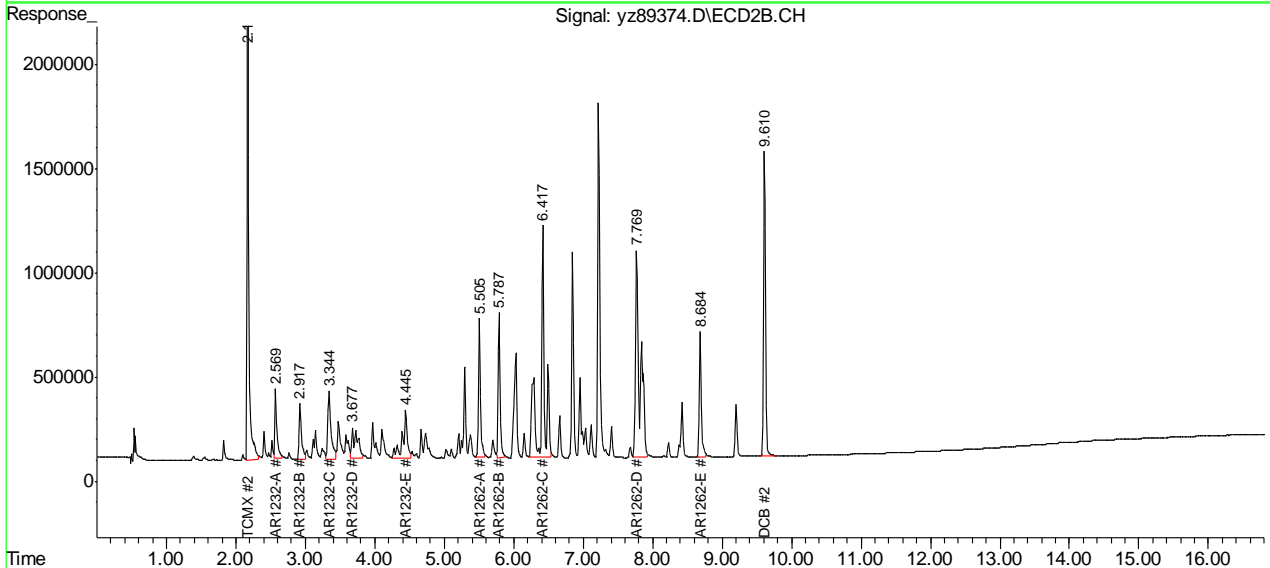
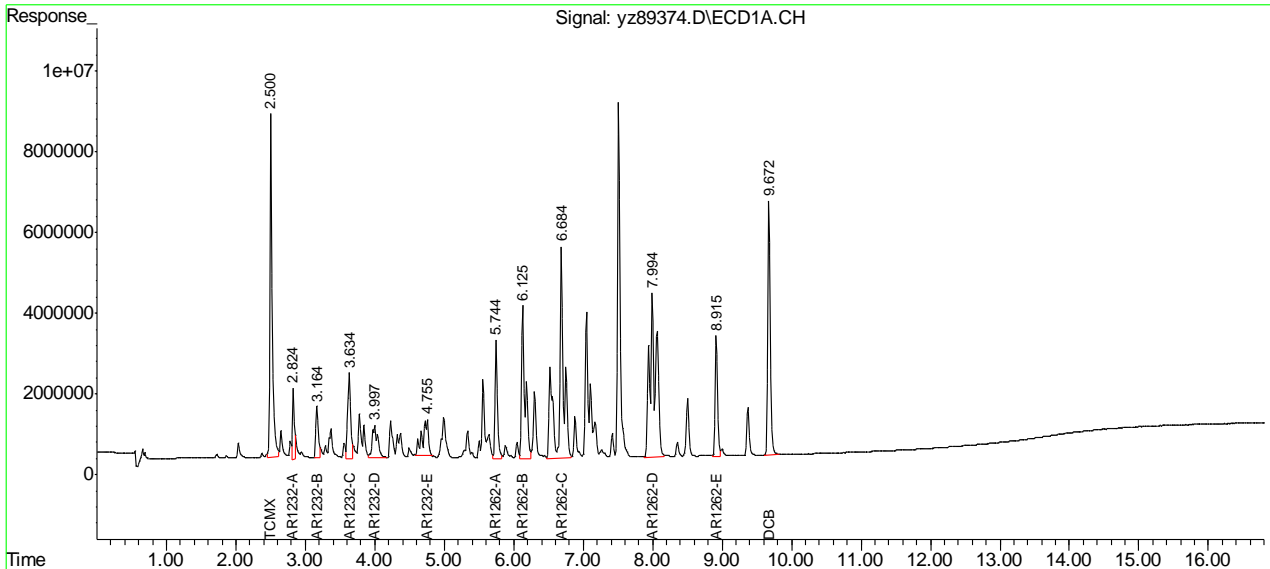
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

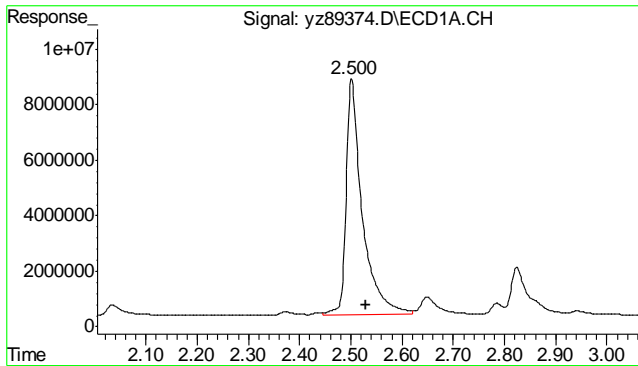
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89374.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:23 pm
 Operator : sofyaz
 Sample : ic7547-500,a32/62
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 83 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:33:34 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

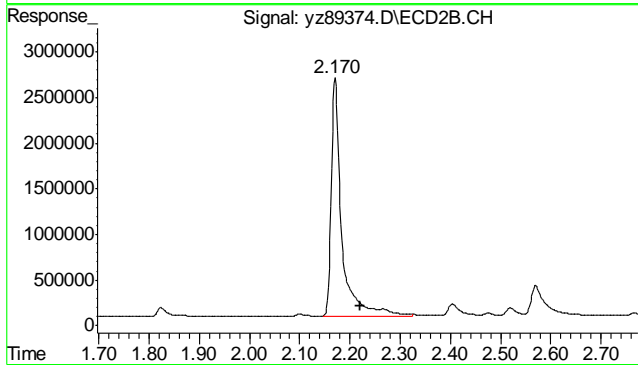
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



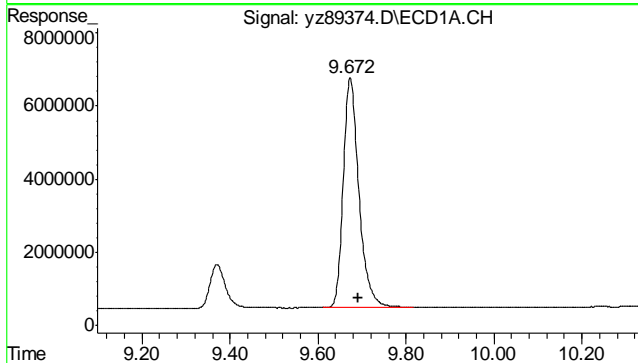
7.5.8



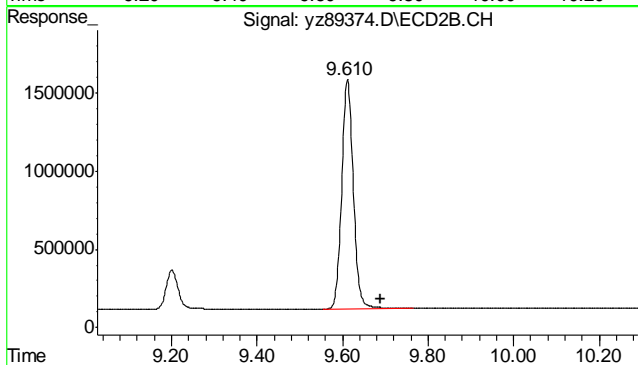
#1 TCMX
 R.T.: 2.500 min
 Delta R.T.: -0.030 min
 Response: 18587549
 Conc: 46.43 ppb m



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: -0.050 min
 Response: 3815726
 Conc: 24.70 ppb m

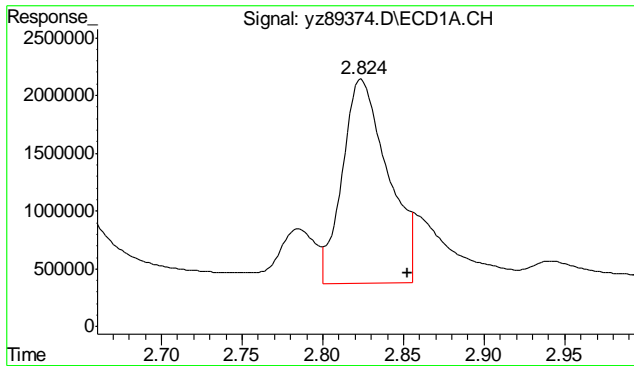


#13 DCB
 R.T.: 9.672 min
 Delta R.T.: -0.018 min
 Response: 15461427
 Conc: 49.81 ppb m

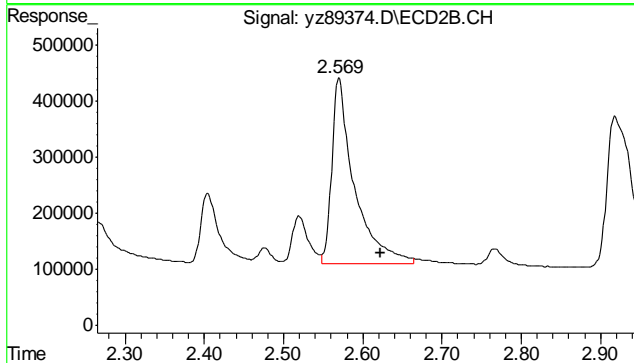


#13 DCB
 R.T.: 9.610 min
 Delta R.T.: -0.080 min
 Response: 2771893
 Conc: 31.30 ppb m

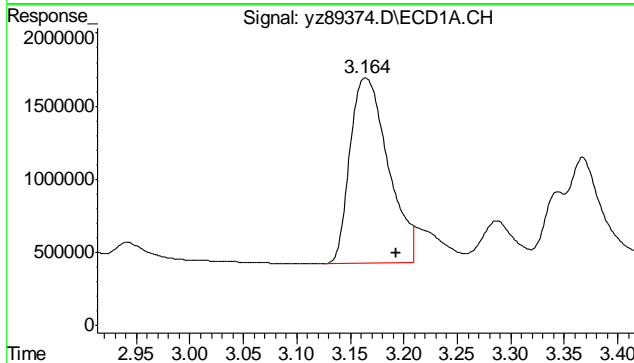
7.5.8
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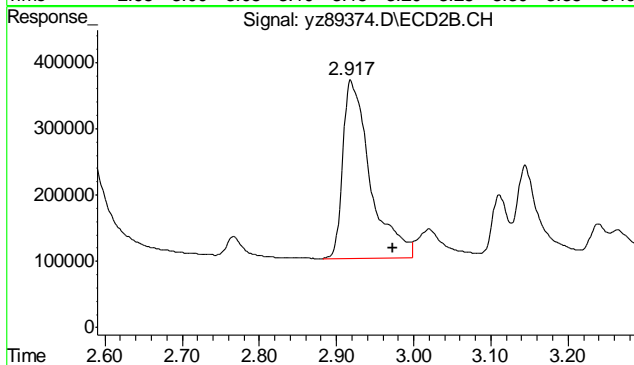
#17 AR1232-A
 R.T.: 2.824 min
 Delta R.T.: -0.029 min
 Response: 3465173
 Conc: 769.27 m



#17 AR1232-A
 R.T.: 2.569 min
 Delta R.T.: -0.054 min
 Response: 646585
 Conc: 350.82 m

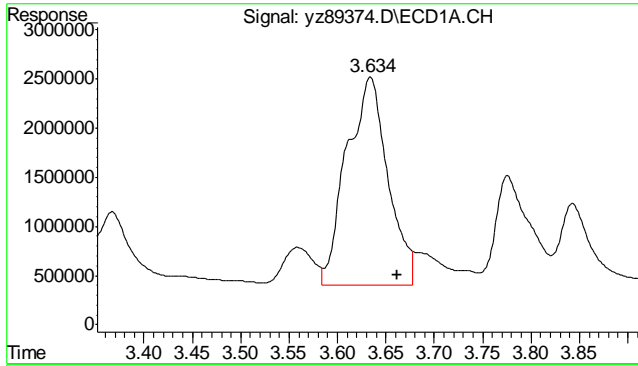


#18 AR1232-B
 R.T.: 3.164 min
 Delta R.T.: -0.029 min
 Response: 3159858
 Conc: 536.53 m

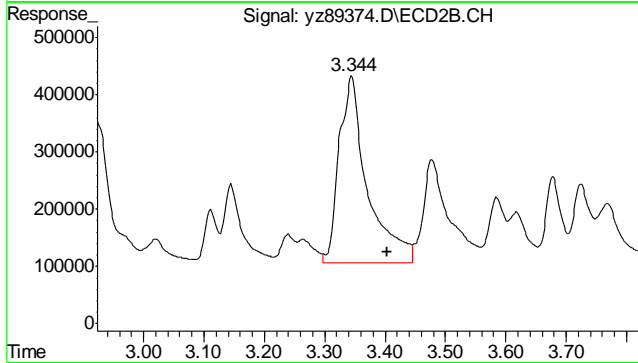


#18 AR1232-B
 R.T.: 2.917 min
 Delta R.T.: -0.055 min
 Response: 666144
 Conc: 405.32 m

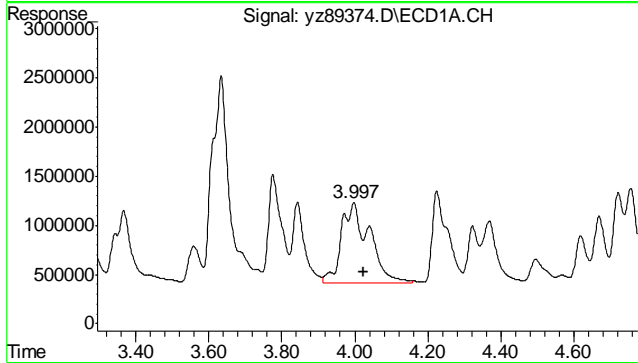
7.5.8
7



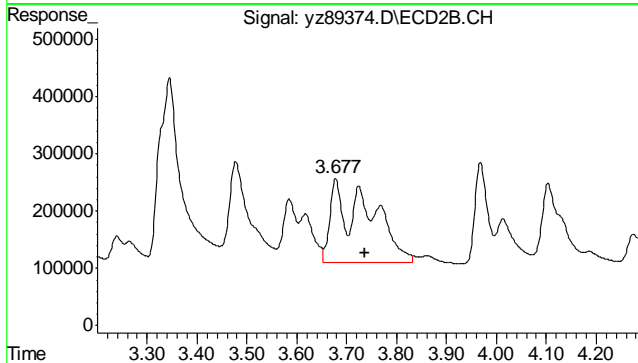
#19 AR1232-C
 R.T.: 3.634 min
 Delta R.T.: -0.029 min
 Response: 6242599
 Conc: 587.74 m



#19 AR1232-C
 R.T.: 3.344 min
 Delta R.T.: -0.060 min
 Response: 1051119
 Conc: 373.31 m



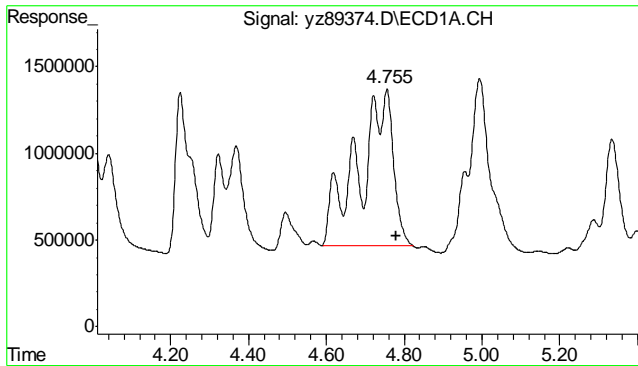
#20 AR1232-D
 R.T.: 3.997 min
 Delta R.T.: -0.029 min
 Response: 4343805
 Conc: 519.64 m



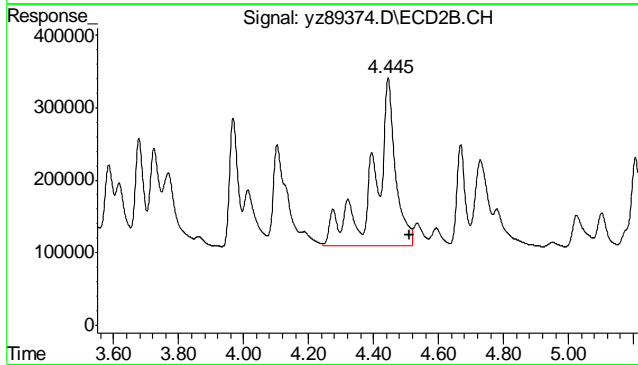
#20 AR1232-D
 R.T.: 3.677 min
 Delta R.T.: -0.060 min
 Response: 770594
 Conc: 257.29 m

7.5.8

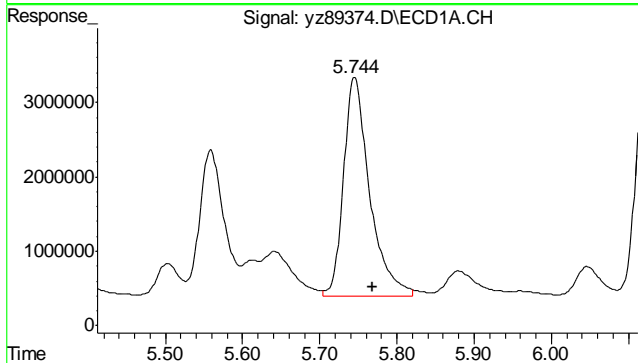
7



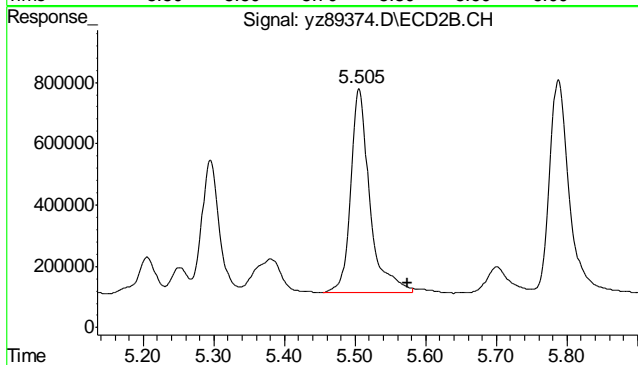
#21 AR1232-E
 R.T.: 4.755 min
 Delta R.T.: -0.025 min
 Response: 5553817
 Conc: 571.23 m



#21 AR1232-E
 R.T.: 4.445 min
 Delta R.T.: -0.065 min
 Response: 1061439
 Conc: 416.66 m

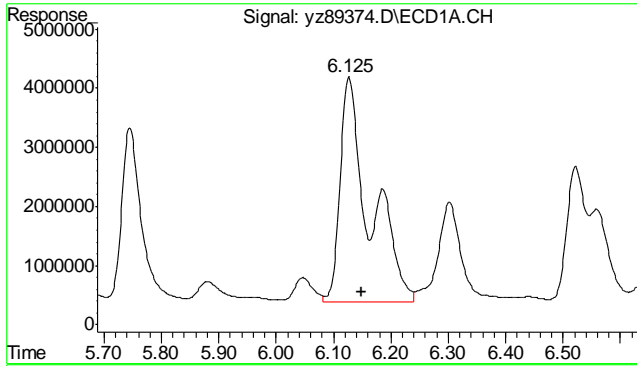


#37 AR1262-A
 R.T.: 5.744 min
 Delta R.T.: -0.025 min
 Response: 6962677
 Conc: 559.92 ppb m

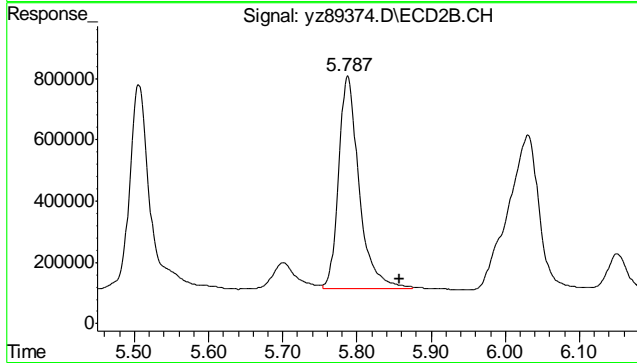


#37 AR1262-A
 R.T.: 5.505 min
 Delta R.T.: -0.068 min
 Response: 1266708
 Conc: 4105.30 ppb m

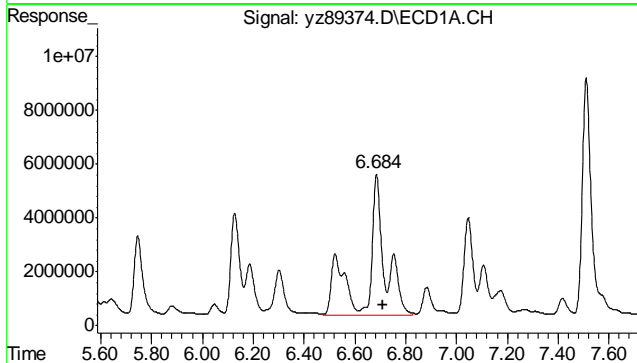
7.5.8
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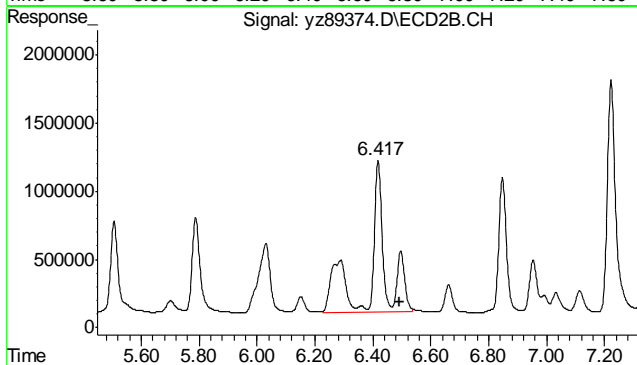
#38 AR1262-B
 R.T.: 6.125 min
 Delta R.T.: -0.024 min
 Response: 13575204
 Conc: 571.34 ppb m



#38 AR1262-B
 R.T.: 5.787 min
 Delta R.T.: -0.070 min
 Response: 1334057
 Conc: 3012.67 ppb m

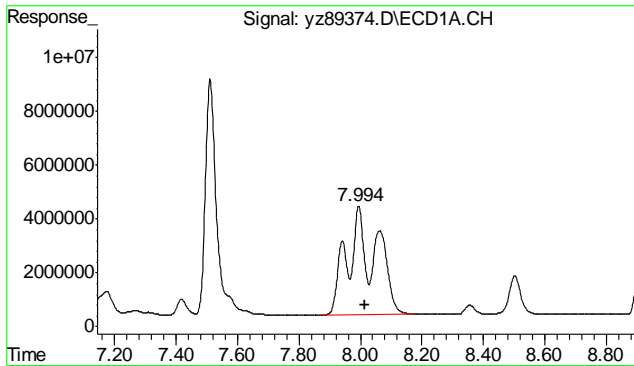


#39 AR1262-C
 R.T.: 6.684 min
 Delta R.T.: -0.025 min
 Response: 26458402
 Conc: 571.32 ppb m

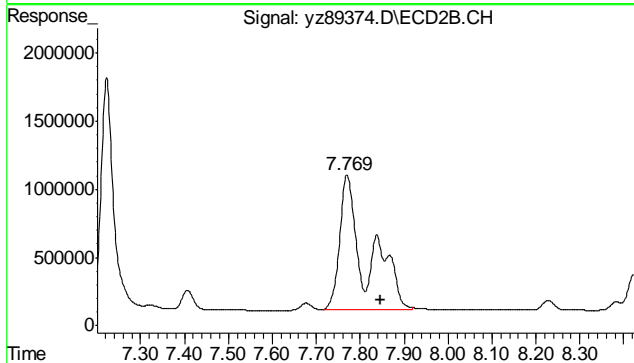


#39 AR1262-C
 R.T.: 6.417 min
 Delta R.T.: -0.074 min
 Response: 4251158
 Conc: 342.02 ppb m

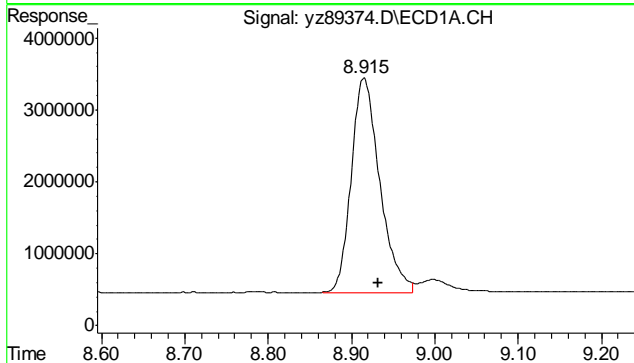
7.5.8
 7



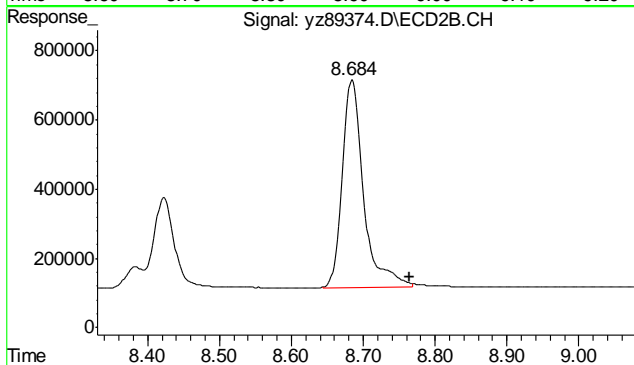
#40 AR1262-D
 R.T.: 7.994 min
 Delta R.T.: -0.022 min
 Response: 26077092
 Conc: 630.63 ppb m



#40 AR1262-D
 R.T.: 7.769 min
 Delta R.T.: -0.077 min
 Response: 4170971
 Conc: 388.10 ppb m



#41 AR1262-E
 R.T.: 8.915 min
 Delta R.T.: -0.017 min
 Response: 7139912
 Conc: 731.30 ppb m



#41 AR1262-E
 R.T.: 8.684 min
 Delta R.T.: -0.080 min
 Response: 1249257
 Conc: 423.67 ppb m

7.5.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89375.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:43 pm
 Operator : sofyaz
 Sample : ic7547-500,a42/62
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 84 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:39:01 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502f	2.170f	18550441	3524747	46.337m	22.814m#
Spiked Amount	40.000 Range	42 - 132	Recovery	=	115.84%	57.04%
13) s DCB	9.674f	9.612f	28655218	5070380	92.322m	57.263m#
Spiked Amount	40.000 Range	30 - 150	Recovery	=	230.81%#	143.16%
Target Compounds						
22) AR1242-A	2.824f	2.570f	2344201	464269	538.597m	325.470m#
23) AR1242-B	3.164f	2.917f	5753119	1002242	541.726m	309.958m#
24) AR1242-C	3.634f	3.344f	11045199	1814407	543.018m	319.290m#
25) AR1242-D	3.997f	3.677f	8220068	1446737	526.646m	252.886m#
26) AR1242-E	4.755f	4.447f	10430774	1761708	554.928m	303.693m#
42) AR1268-A	6.684f	6.419f	5432697	840152	454.569	297.571m#
43) AR1268-B	7.035f	6.849f	5583614	1146090	380.274	286.762m
44) AR1268-C	7.995f	7.765f	52708538	8860395	536.130m	315.276m#
45) AR1268-D	8.355f	8.227f	22985915	3703119	535.755	303.985m#
46) AR1268-E	9.372f	9.200f	62102578	10960066	619.376m	357.882m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

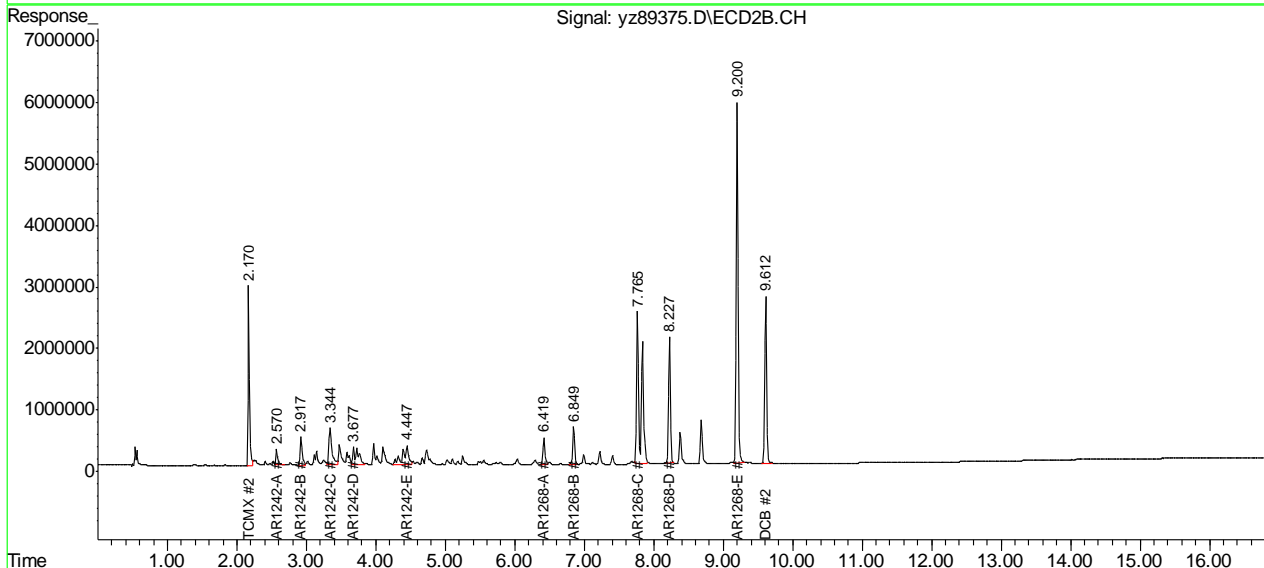
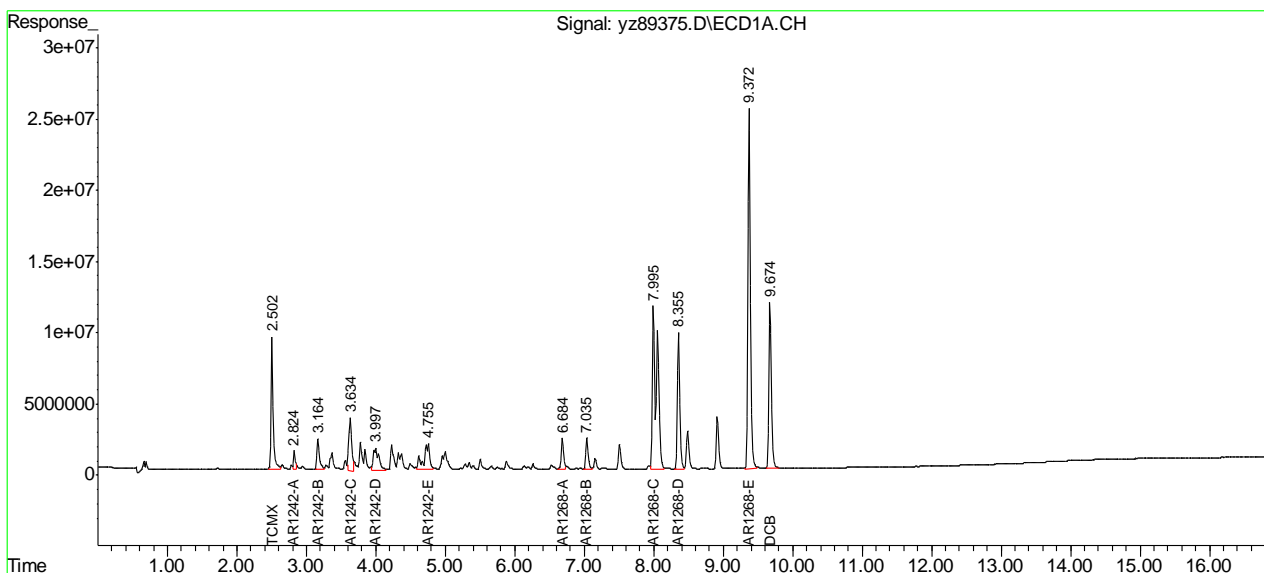
7.5.9
 7

Quantitation Report (QT Reviewed)

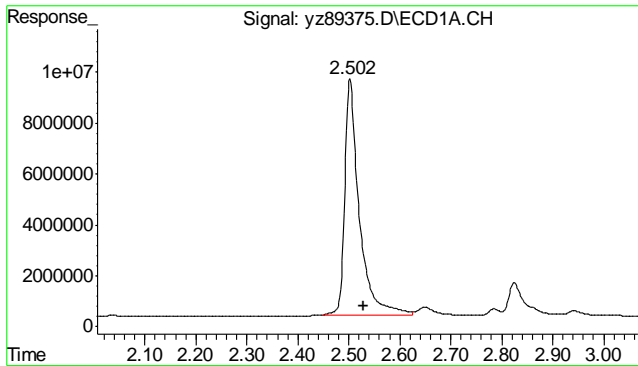
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89375.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 10:43 pm
 Operator : sofyaz
 Sample : ic7547-500,a42/62
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 84 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:39:01 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Thu Apr 24 09:47:39 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

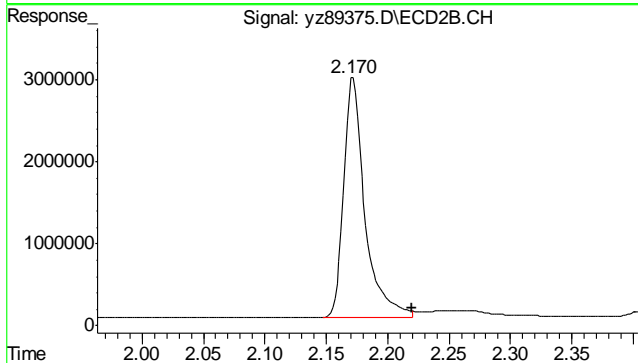
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase: pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



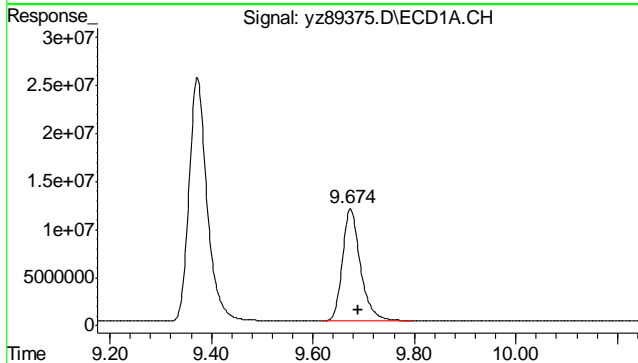
7.5.9
 7



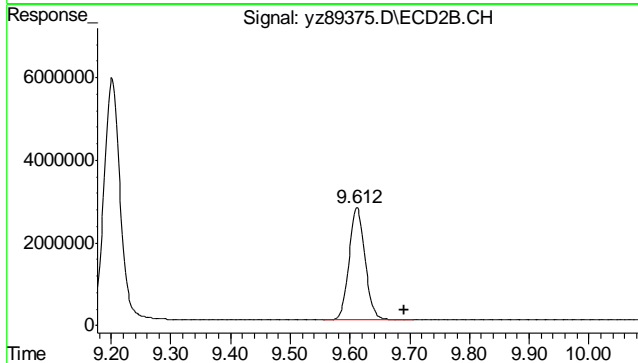
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: -0.028 min
 Response: 18550441
 Conc: 46.34 ppb m



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: -0.050 min
 Response: 3524747
 Conc: 22.81 ppb m

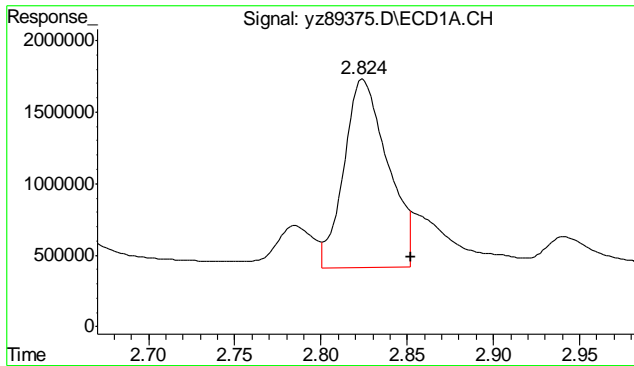


#13 DCB
 R.T.: 9.674 min
 Delta R.T.: -0.016 min
 Response: 28655218
 Conc: 92.32 ppb m

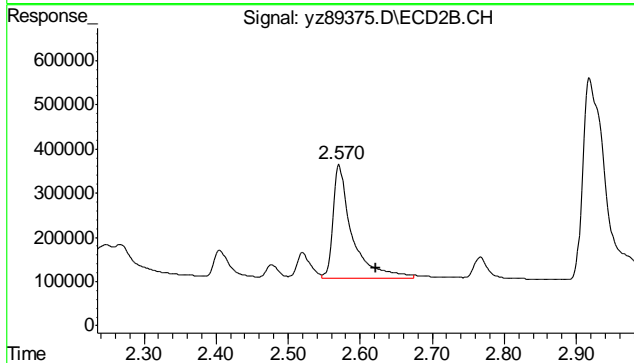


#13 DCB
 R.T.: 9.612 min
 Delta R.T.: -0.078 min
 Response: 5070380
 Conc: 57.26 ppb m

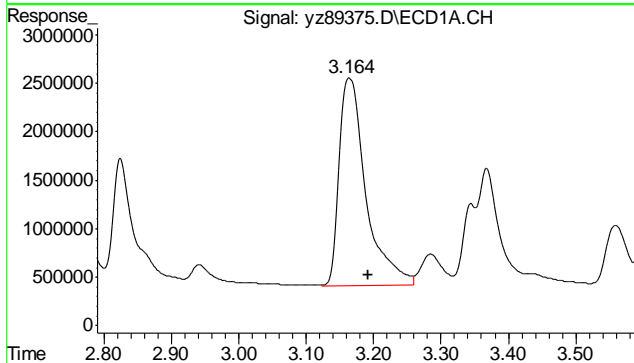
7.5.9
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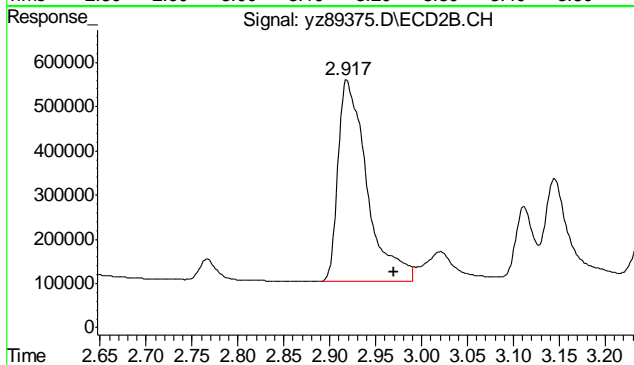
#22 AR1242-A
 R.T.: 2.824 min
 Delta R.T.: -0.028 min
 Response: 2344201
 Conc: 538.60 m



#22 AR1242-A
 R.T.: 2.570 min
 Delta R.T.: -0.052 min
 Response: 464269
 Conc: 325.47 m

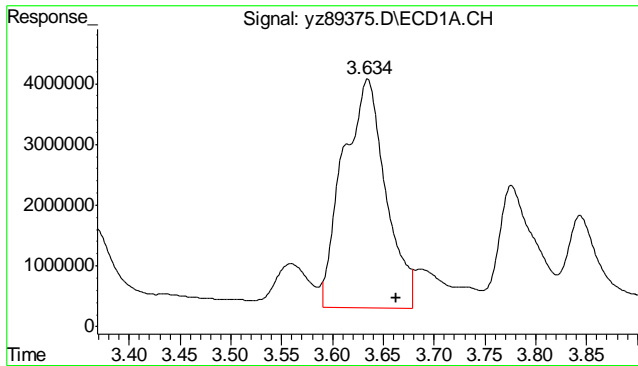


#23 AR1242-B
 R.T.: 3.164 min
 Delta R.T.: -0.028 min
 Response: 5753119
 Conc: 541.73 m

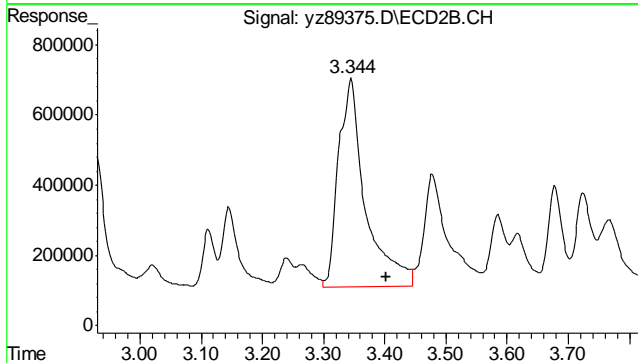


#23 AR1242-B
 R.T.: 2.917 min
 Delta R.T.: -0.053 min
 Response: 1002242
 Conc: 309.96 m

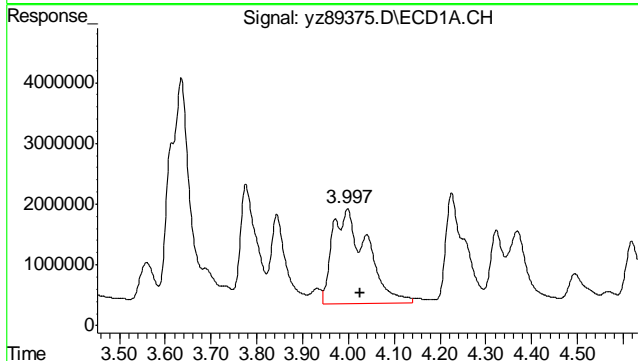
7.5.9
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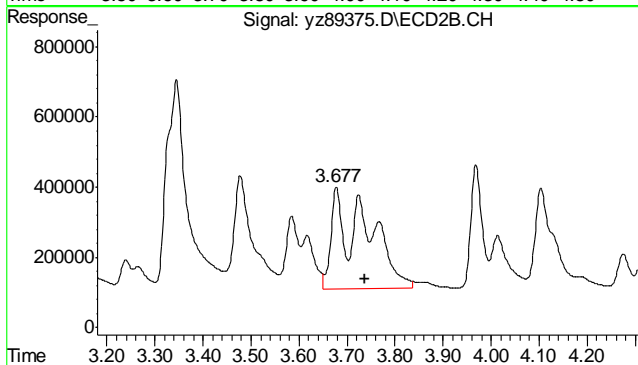
#24 AR1242-C
 R.T.: 3.634 min
 Delta R.T.: -0.028 min
 Response: 11045199
 Conc: 543.02 m



#24 AR1242-C
 R.T.: 3.344 min
 Delta R.T.: -0.058 min
 Response: 1814407
 Conc: 319.29 m

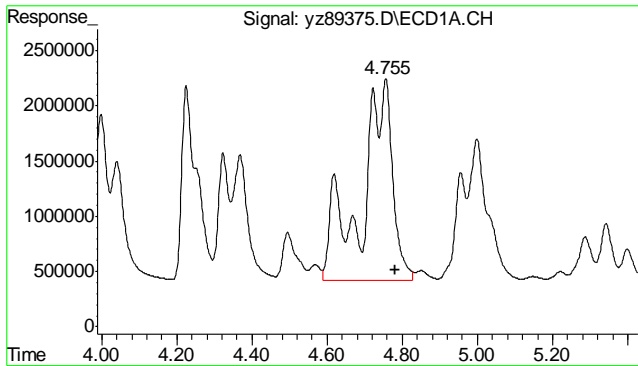


#25 AR1242-D
 R.T.: 3.997 min
 Delta R.T.: -0.028 min
 Response: 8220068
 Conc: 526.65 m

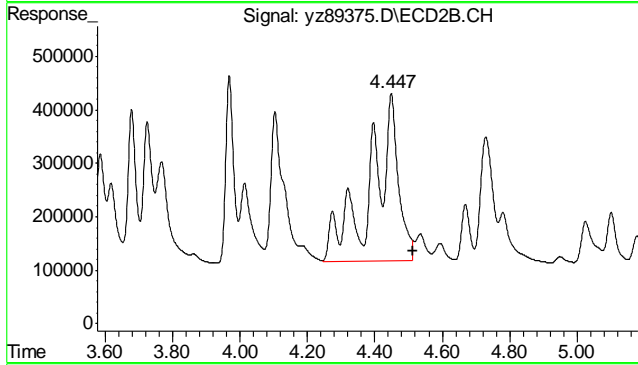


#25 AR1242-D
 R.T.: 3.677 min
 Delta R.T.: -0.060 min
 Response: 1446737
 Conc: 252.89 m

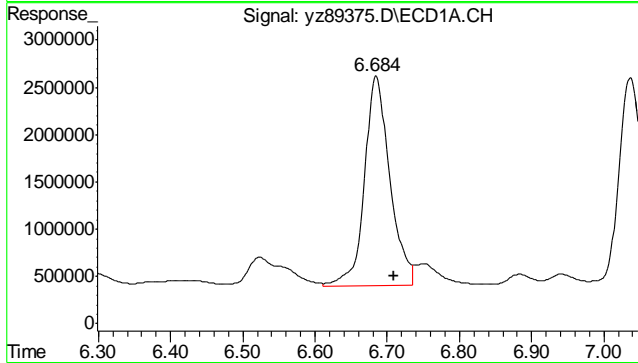
7.5.9
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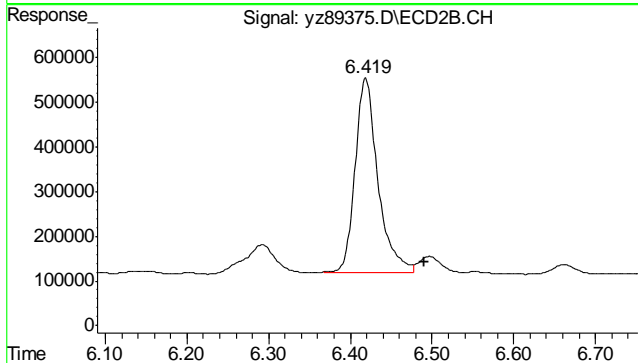
#26 AR1242-E
 R.T.: 4.755 min
 Delta R.T.: -0.027 min
 Response: 10430774
 Conc: 554.93 m



#26 AR1242-E
 R.T.: 4.447 min
 Delta R.T.: -0.065 min
 Response: 1761708
 Conc: 303.69 m

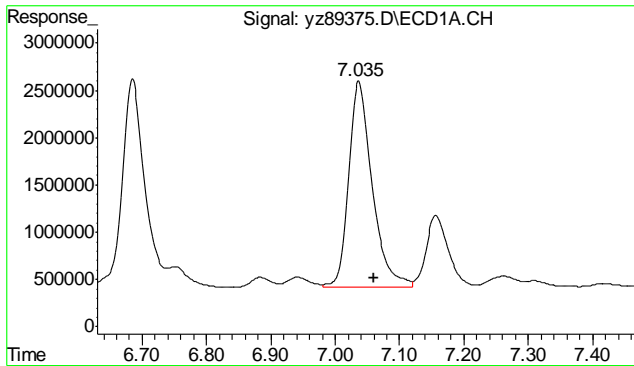


#42 AR1268-A
 R.T.: 6.684 min
 Delta R.T.: -0.025 min
 Response: 5432697
 Conc: 454.57 ppb

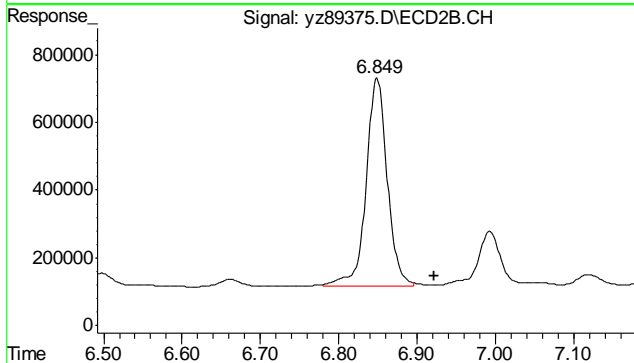


#42 AR1268-A
 R.T.: 6.419 min
 Delta R.T.: -0.072 min
 Response: 840152
 Conc: 297.57 ppb m

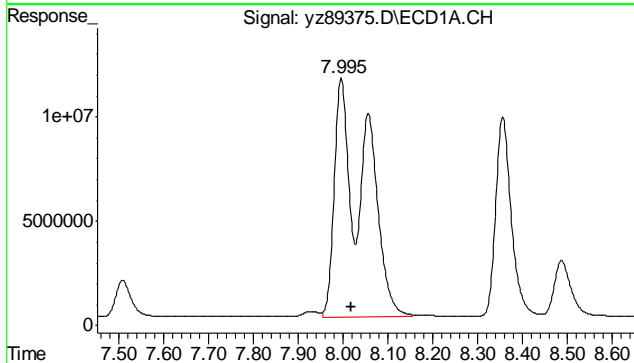
7.5.9
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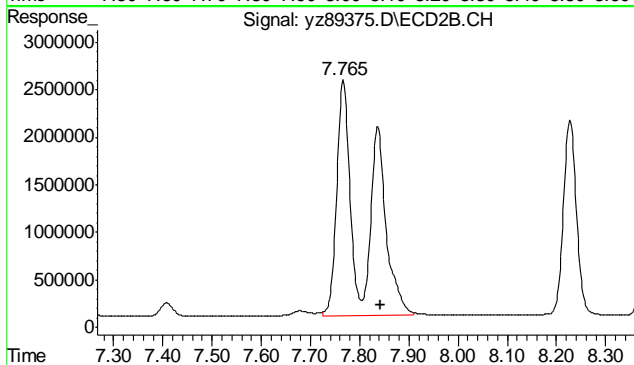
#43 AR1268-B
 R.T.: 7.035 min
 Delta R.T.: -0.025 min
 Response: 5583614
 Conc: 380.27 ppb



#43 AR1268-B
 R.T.: 6.849 min
 Delta R.T.: -0.073 min
 Response: 1146090
 Conc: 286.76 ppb m

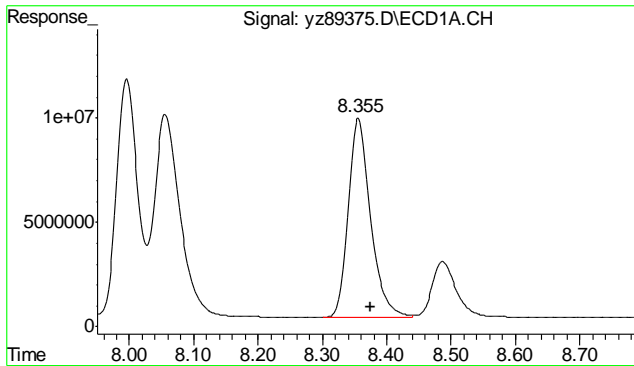


#44 AR1268-C
 R.T.: 7.995 min
 Delta R.T.: -0.022 min
 Response: 52708538
 Conc: 536.13 ppb m

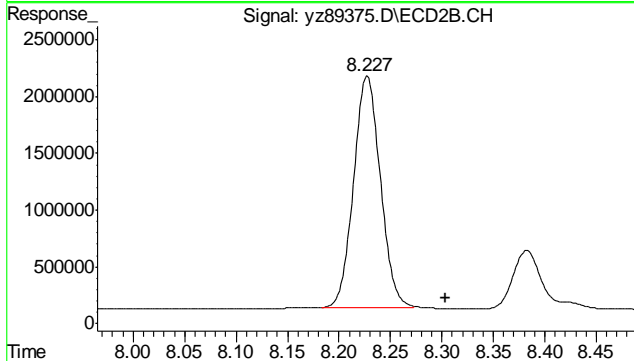


#44 AR1268-C
 R.T.: 7.765 min
 Delta R.T.: -0.077 min
 Response: 8860395
 Conc: 315.28 ppb m

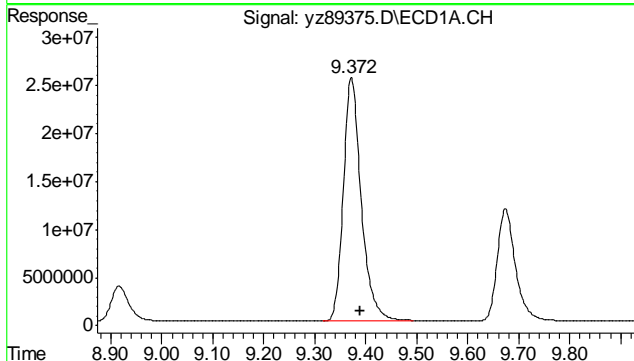
7.5.9
7



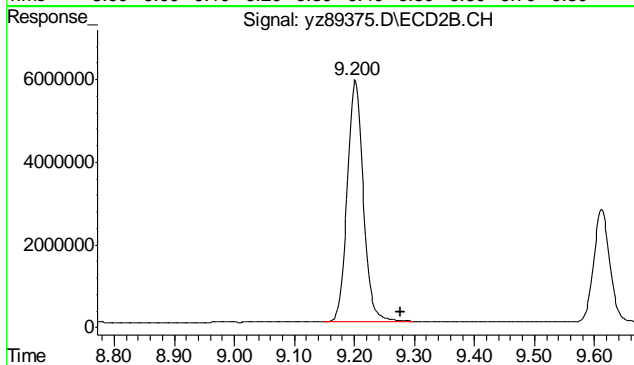
#45 AR1268-D
 R.T.: 8.355 min
 Delta R.T.: -0.020 min
 Response: 22985915
 Conc: 535.75 ppb



#45 AR1268-D
 R.T.: 8.227 min
 Delta R.T.: -0.077 min
 Response: 3703119
 Conc: 303.98 ppb m



#46 AR1268-E
 R.T.: 9.372 min
 Delta R.T.: -0.017 min
 Response: 62102578
 Conc: 619.38 ppb m



#46 AR1268-E
 R.T.: 9.200 min
 Delta R.T.: -0.077 min
 Response: 10960066
 Conc: 357.88 ppb m

7.5.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89377.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 11:23 pm
 Operator : sofyaz
 Sample : icv7547-500,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 86 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:48:14 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:43:33 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.502	2.170	18224688	3577564	48.354m	49.225
Spiked Amount	40.000 Range	42 - 132	Recovery	=	120.88%	123.06%
13) s DCB	9.673	9.612	16161584	2812741	49.116m	48.463m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	122.79%	121.16%
Target Compounds						
2) AR1016-A	2.823	2.570	2800978	577448	495.607m	491.988m
3) AR1016-B	3.163	2.918	7311691	1261228	495.478m	478.174
4) AR1016-C	3.635	3.345	13379823	2174658	499.683m	498.370m
5) AR1016-D	3.775	3.477	9336347	927960	504.401m	492.392m
6) AR1016-E	4.225	3.967	5867344	1081410	495.080m	493.027m
7) AR1260-A	5.745	5.507	9127990	1619355	506.965	509.761
8) AR1260-B	6.128	5.788	12947120	1848391	507.998	511.195
9) AR1260-C	6.522	6.418	28206601	4438547	507.923m	494.394m
10) AR1260-D	7.510	7.223	18223006	3112868	488.535m	497.805
11) AR1260-E	7.942	7.778	19357403	3128434	505.741m	512.337m
12) AR1260-F	8.915	8.683	4938175	784223	539.449	519.923m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

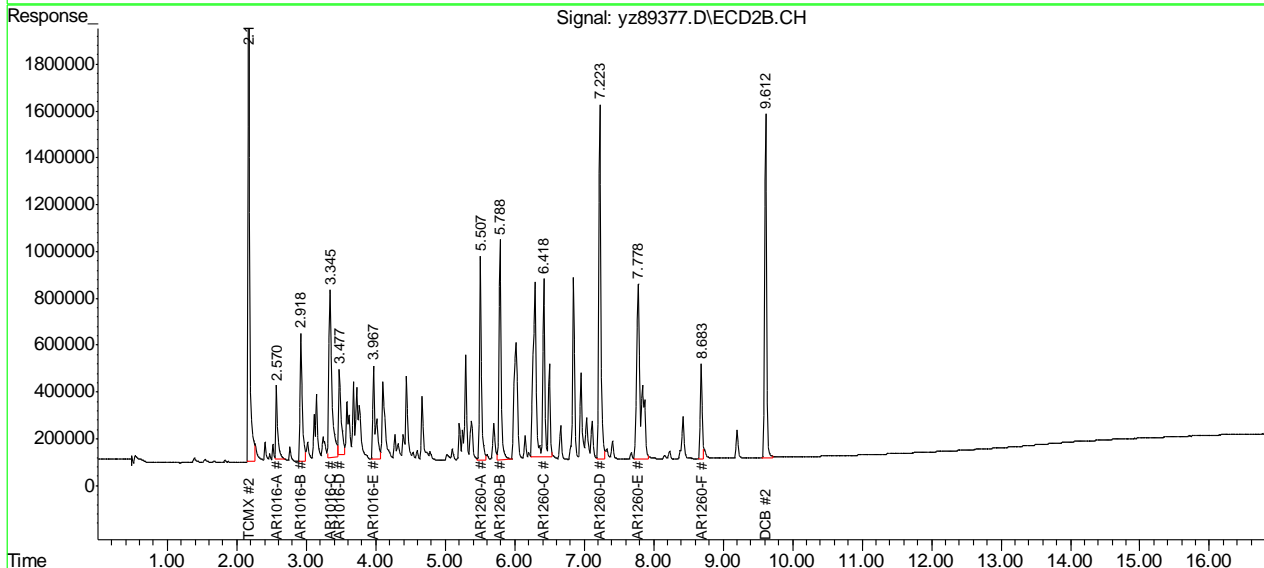
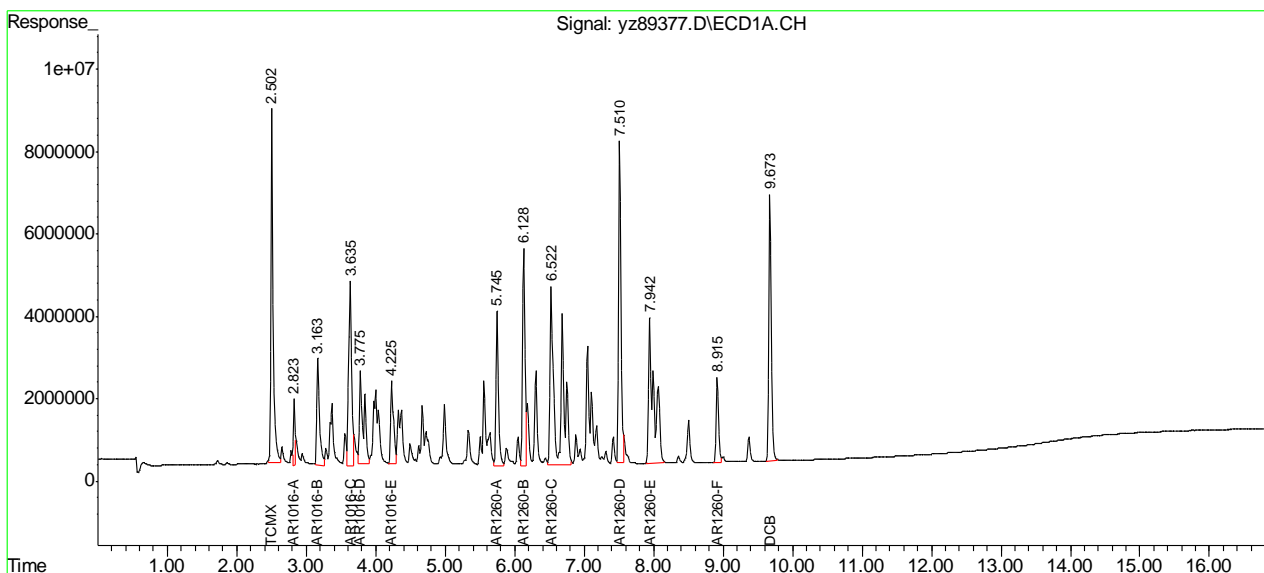
7.5.10
7

Quantitation Report (QT Reviewed)

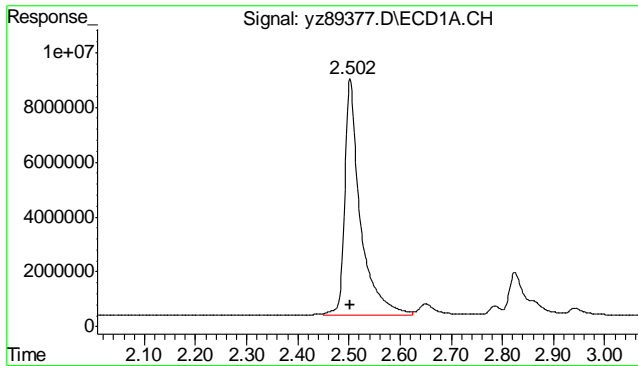
Data Path : C:\msdchem\1\DATA\YZ140424a\
 Data File : yz89377.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 24 Apr 2014 11:23 pm
 Operator : sofyaz
 Sample : icv7547-500,a1660
 Misc : op37598,gyz7547,1000,,,5,,W
 ALS Vial : 86 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 25 11:48:14 2014
 Quant Method : C:\msdchem\1\METHODS\PC140424a.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Fri Apr 25 11:43:33 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

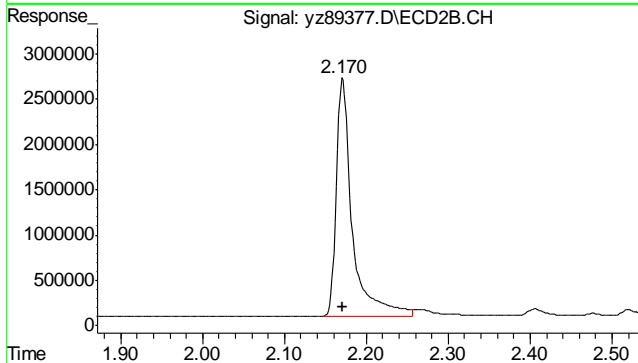
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



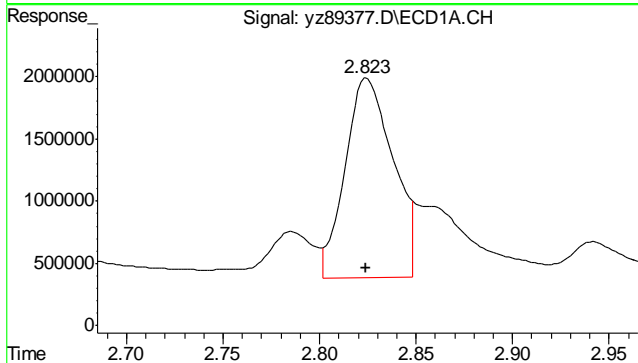
7.5.10
 7



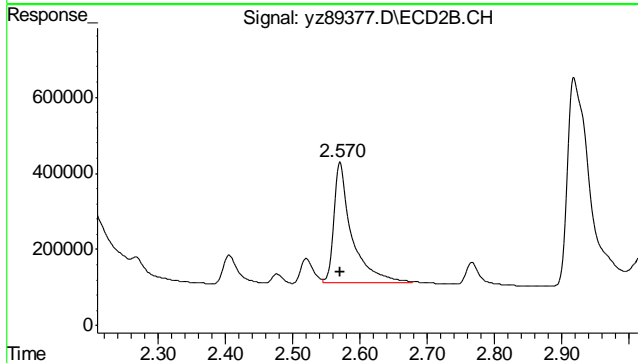
#1 TCMX
 R.T.: 2.502 min
 Delta R.T.: 0.000 min
 Response: 18224688
 Conc: 48.35 ppb m



#1 TCMX
 R.T.: 2.170 min
 Delta R.T.: 0.000 min
 Response: 3577564
 Conc: 49.23 ppb

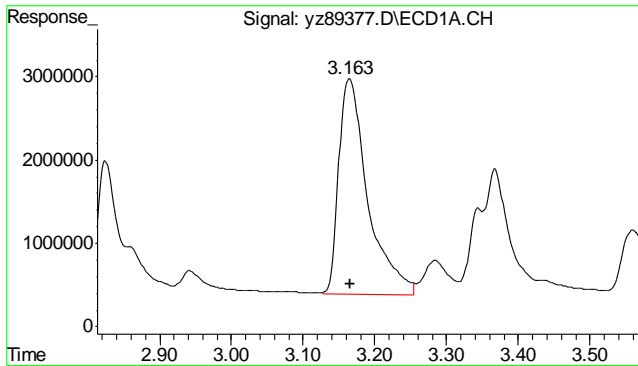


#2 AR1016-A
 R.T.: 2.823 min
 Delta R.T.: 0.000 min
 Response: 2800978
 Conc: 495.61 ppb m

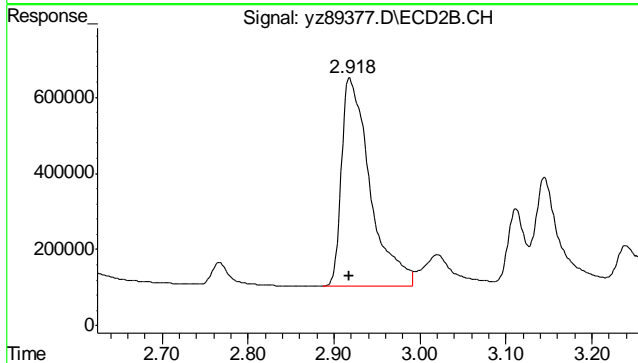


#2 AR1016-A
 R.T.: 2.570 min
 Delta R.T.: 0.000 min
 Response: 577448
 Conc: 491.99 ppb m

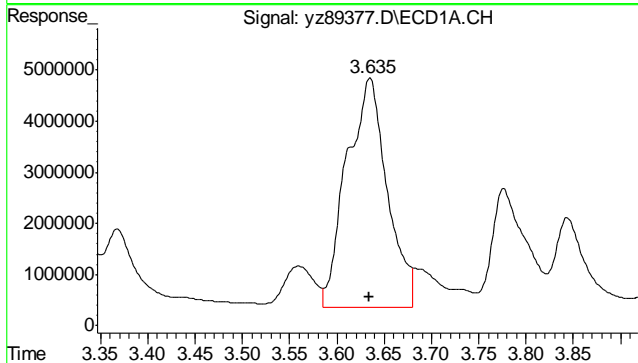
7.5.10
 7



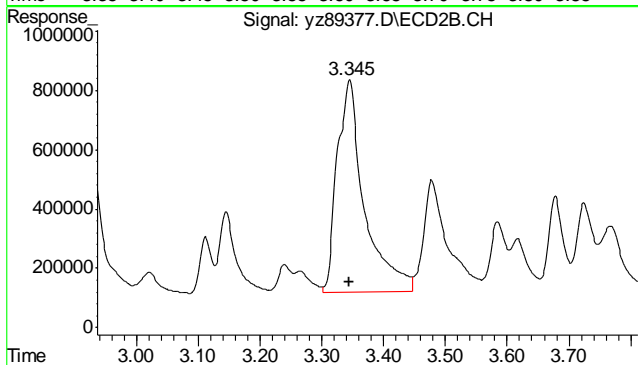
#3 AR1016-B
 R.T.: 3.163 min
 Delta R.T.: -0.002 min
 Response: 7311691
 Conc: 495.48 ppb m



#3 AR1016-B
 R.T.: 2.918 min
 Delta R.T.: 0.000 min
 Response: 1261228
 Conc: 478.17 ppb

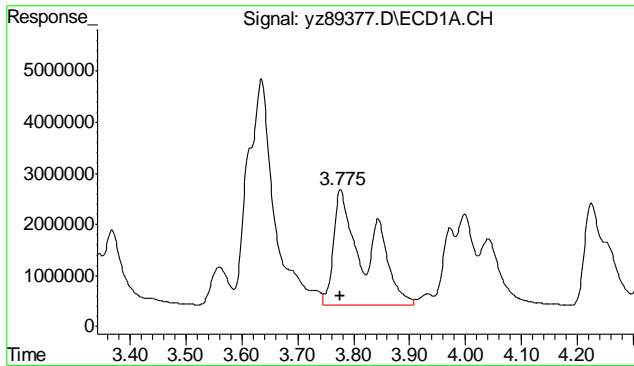


#4 AR1016-C
 R.T.: 3.635 min
 Delta R.T.: 0.000 min
 Response: 13379823
 Conc: 499.68 ppb m

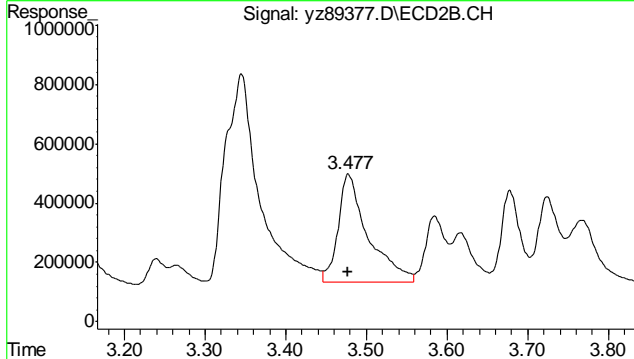


#4 AR1016-C
 R.T.: 3.345 min
 Delta R.T.: 0.000 min
 Response: 2174658
 Conc: 498.37 ppb m

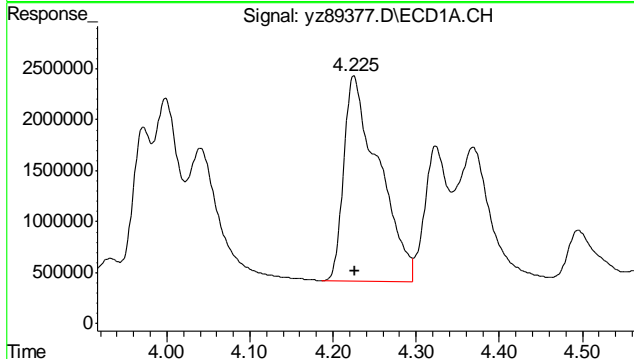
7.5.10
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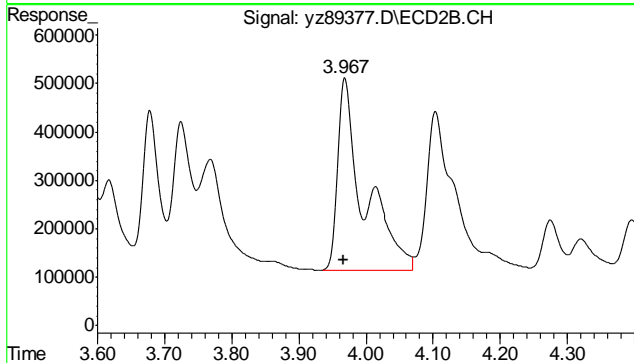
#5 AR1016-D
 R.T.: 3.775 min
 Delta R.T.: 0.000 min
 Response: 9336347
 Conc: 504.40 m



#5 AR1016-D
 R.T.: 3.477 min
 Delta R.T.: 0.000 min
 Response: 927960
 Conc: 492.39 m

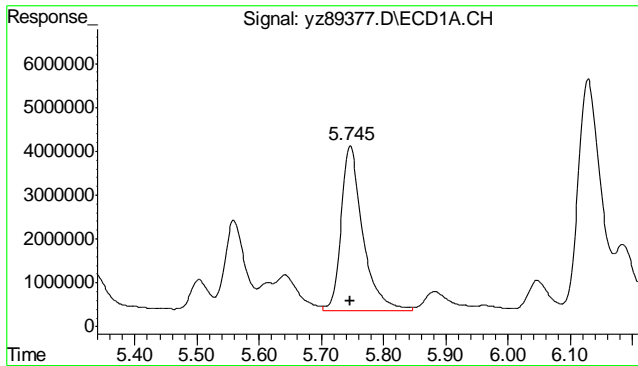


#6 AR1016-E
 R.T.: 4.225 min
 Delta R.T.: 0.000 min
 Response: 5867344
 Conc: 495.08 m

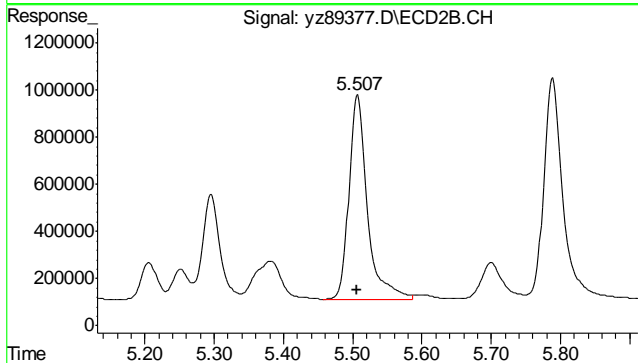


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: 0.000 min
 Response: 1081410
 Conc: 493.03 m

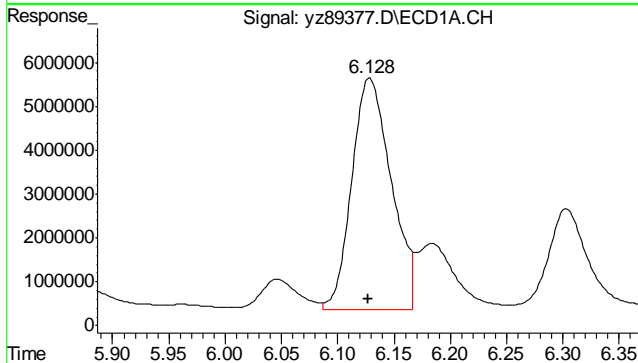
7.5.10
 7



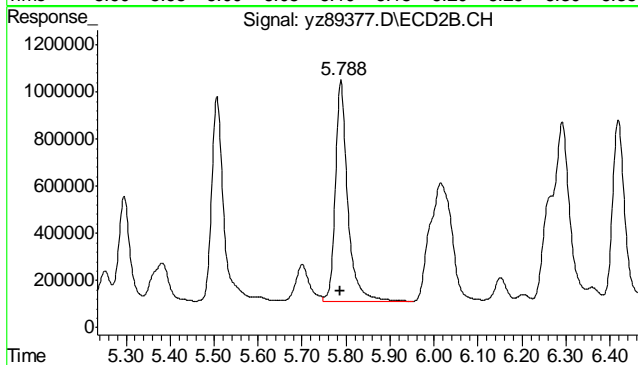
#7 AR1260-A
 R.T.: 5.745 min
 Delta R.T.: 0.000 min
 Response: 9127990
 Conc: 506.97 ppb



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: 0.000 min
 Response: 1619355
 Conc: 509.76 ppb

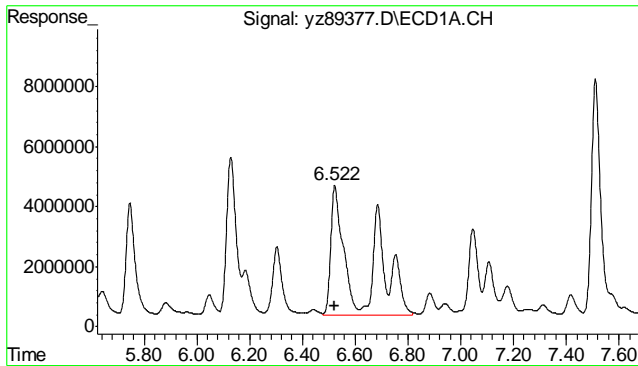


#8 AR1260-B
 R.T.: 6.128 min
 Delta R.T.: 0.000 min
 Response: 12947120
 Conc: 508.00 ppb

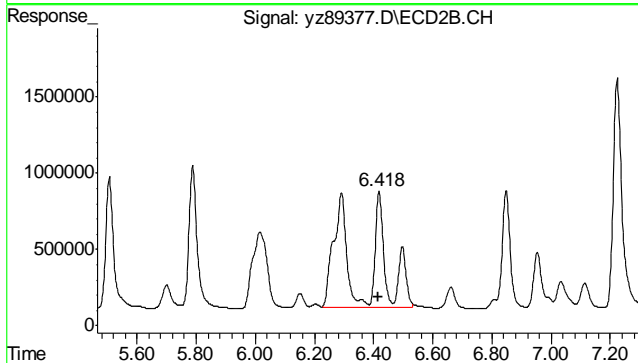


#8 AR1260-B
 R.T.: 5.788 min
 Delta R.T.: 0.000 min
 Response: 1848391
 Conc: 511.19 ppb

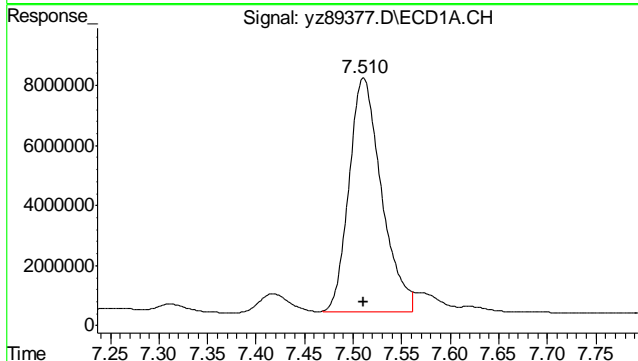
7.5.10
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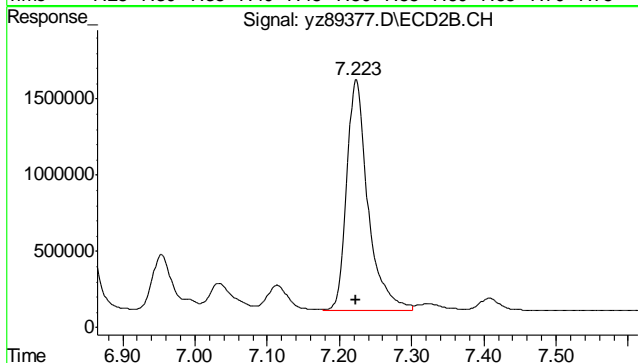
#9 AR1260-C
 R.T.: 6.522 min
 Delta R.T.: 0.000 min
 Response: 28206601
 Conc: 507.92 ppb m



#9 AR1260-C
 R.T.: 6.418 min
 Delta R.T.: 0.000 min
 Response: 4438547
 Conc: 494.39 ppb m

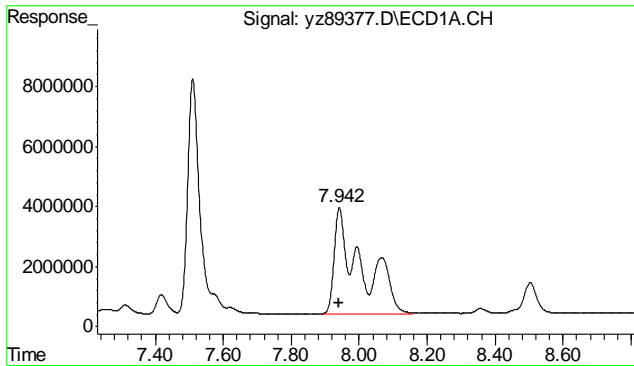


#10 AR1260-D
 R.T.: 7.510 min
 Delta R.T.: 0.000 min
 Response: 18223006
 Conc: 488.54 ppb m

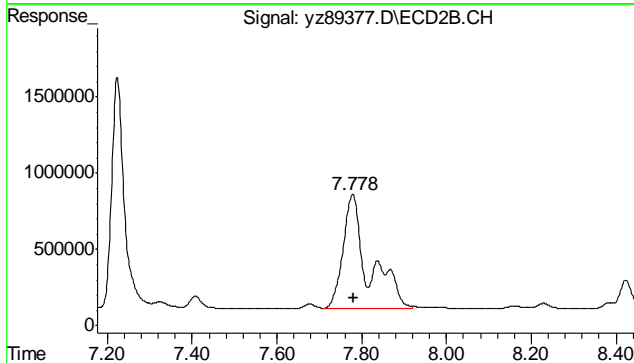


#10 AR1260-D
 R.T.: 7.223 min
 Delta R.T.: 0.000 min
 Response: 3112868
 Conc: 497.81 ppb

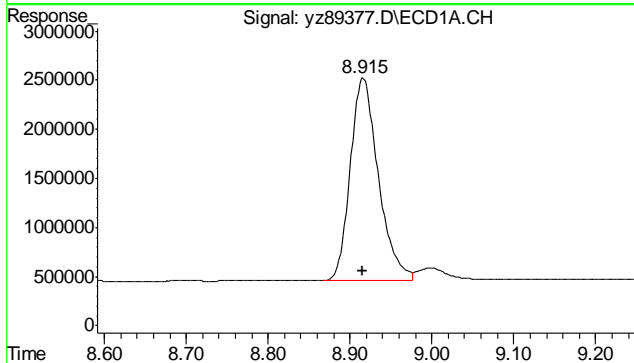
7.5.10
 7



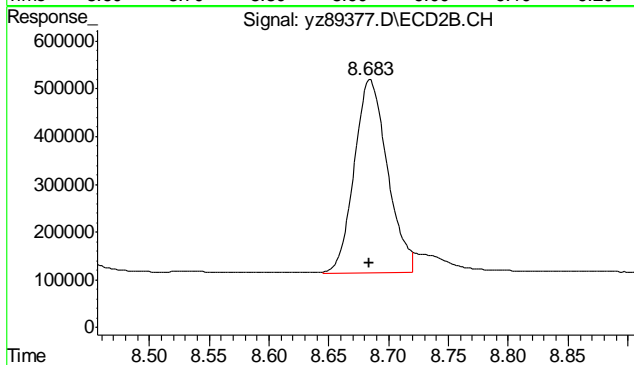
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: 0.000 min
 Response: 19357403
 Conc: 505.74 ppb m



#11 AR1260-E
 R.T.: 7.778 min
 Delta R.T.: -0.002 min
 Response: 3128434
 Conc: 512.34 ppb m

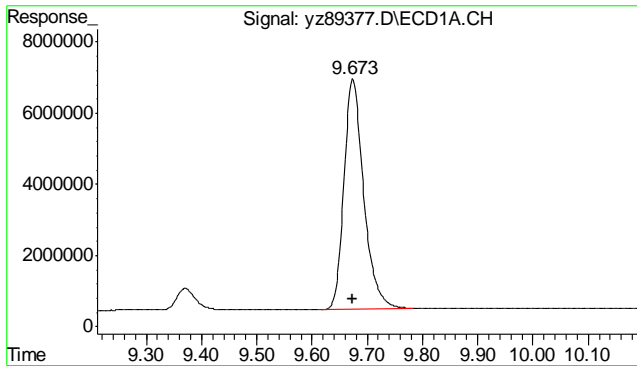


#12 AR1260-F
 R.T.: 8.915 min
 Delta R.T.: 0.000 min
 Response: 4938175
 Conc: 539.45

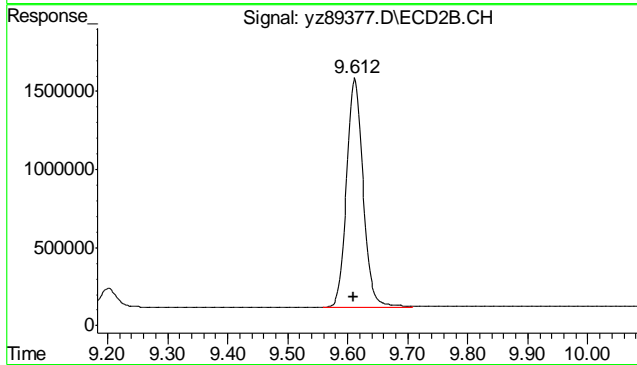


#12 AR1260-F
 R.T.: 8.683 min
 Delta R.T.: 0.000 min
 Response: 784223
 Conc: 519.92 m

7.5.10
7



#13 DCB
 R.T.: 9.673 min
 Delta R.T.: 0.000 min
 Response: 16161584
 Conc: 49.12 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: 0.000 min
 Response: 2812741
 Conc: 48.46 ppb m

7.5.10
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89476.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 9:11 am
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37777,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 28 09:36:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.521	2.180	22102506	3506559	58.643	48.248
Spiked Amount	40.000 Range	42 - 132	Recovery	=	146.61%#	120.62%
13) s DCB	9.700	9.626	19434291	2747766	59.062m	47.344m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	147.66%	118.36%
Target Compounds						
2) AR1016-A	2.845	2.576	4474225	712909	791.672m	600.188
3) AR1016-B	3.186f	2.925	10735917	1463325	727.522	554.795
4) AR1016-C	3.658	3.355	20810587	3161498	777.192m	724.526
5) AR1016-D	3.800	3.486	13802688	1325699	745.698m	703.440m
6) AR1016-E	4.250f	3.976	9038161	1442573	762.629	657.686m
7) AR1260-A	5.773f	5.520	12781306	1969283	709.869	619.916
8) AR1260-B	6.156	5.803	19382789	2357703	760.510	652.051
9) AR1260-C	6.551	6.306	43455761	5762096	782.519m	641.820m
10) AR1260-D	7.540	7.240	32821606	4281776	879.905m	684.735
11) AR1260-E	7.970	7.796	31052289	4110027	811.287m	673.090m
12) AR1260-F	8.943	8.701	7807143	1054189	852.857	698.904m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

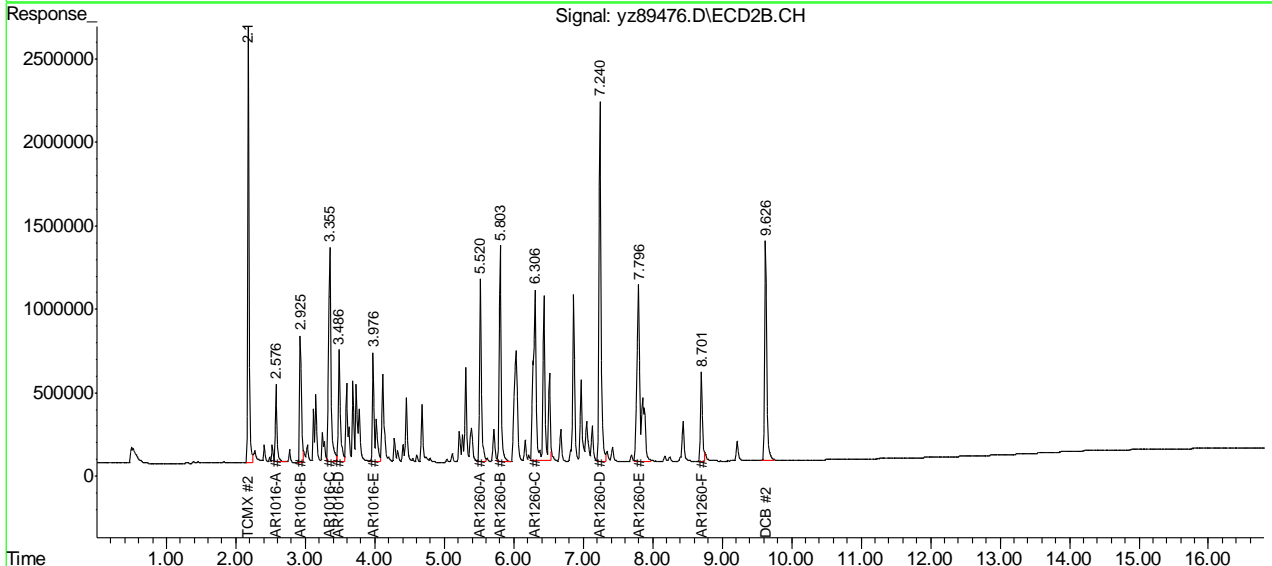
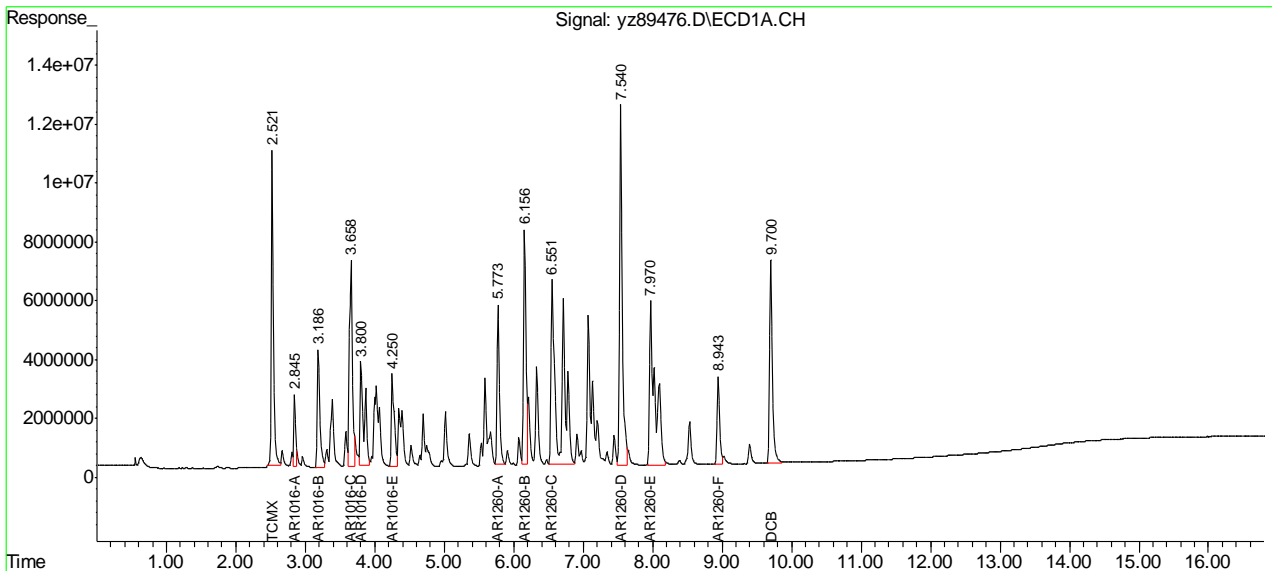
7.5.11
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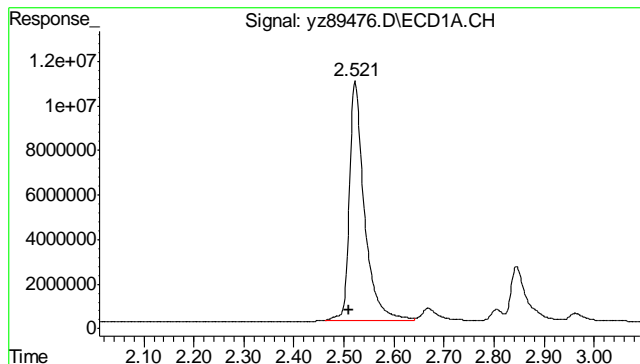
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89476.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 9:11 am
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37777,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

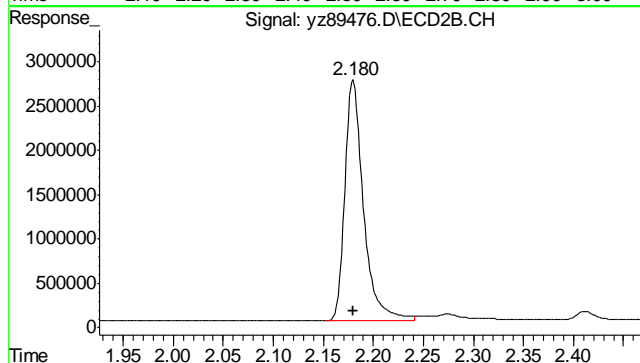
Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 28 09:36:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

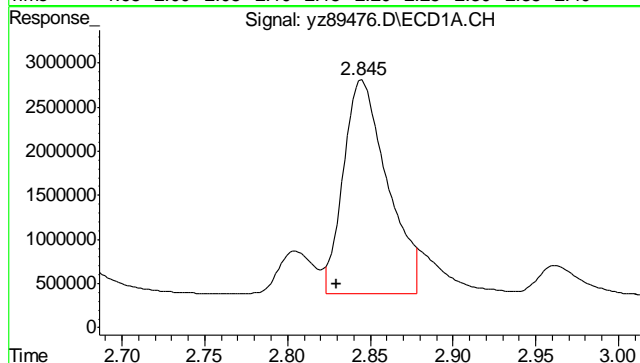




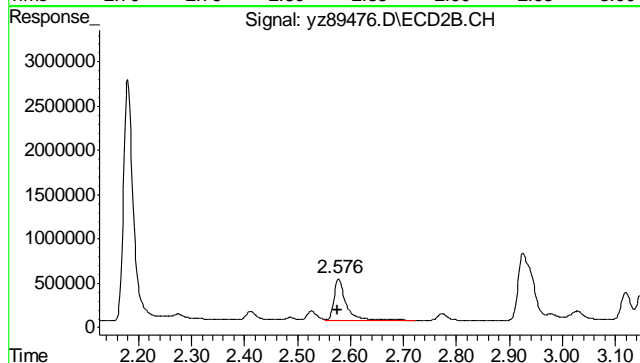
#1 TCMX
 R.T.: 2.521 min
 Delta R.T.: 0.011 min
 Response: 22102506
 Conc: 58.64 ppb



#1 TCMX
 R.T.: 2.180 min
 Delta R.T.: 0.000 min
 Response: 3506559
 Conc: 48.25 ppb

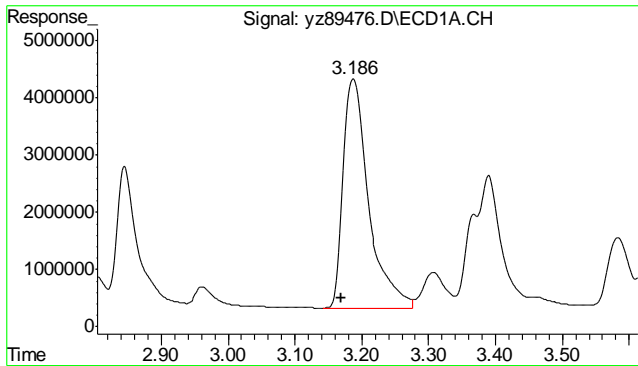


#2 AR1016-A
 R.T.: 2.845 min
 Delta R.T.: 0.015 min
 Response: 4474225
 Conc: 791.67 ppb m

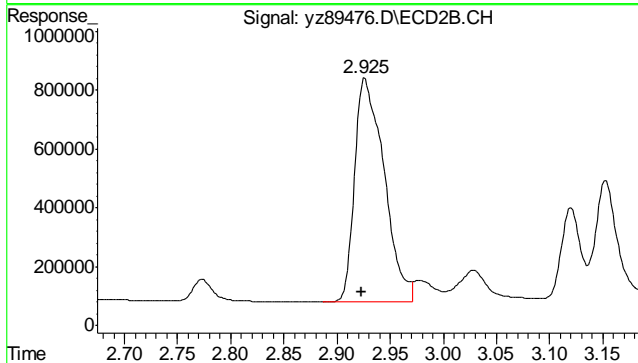


#2 AR1016-A
 R.T.: 2.576 min
 Delta R.T.: 0.000 min
 Response: 712909
 Conc: 600.19 ppb

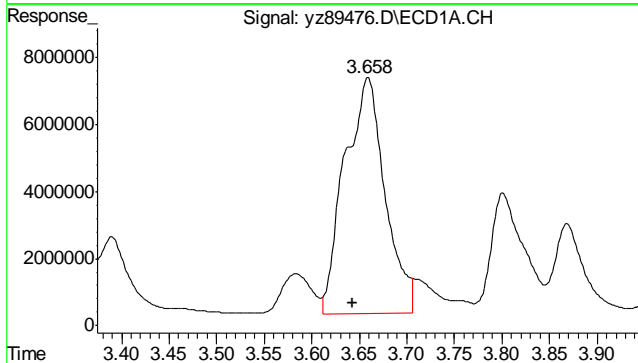
7.5.11
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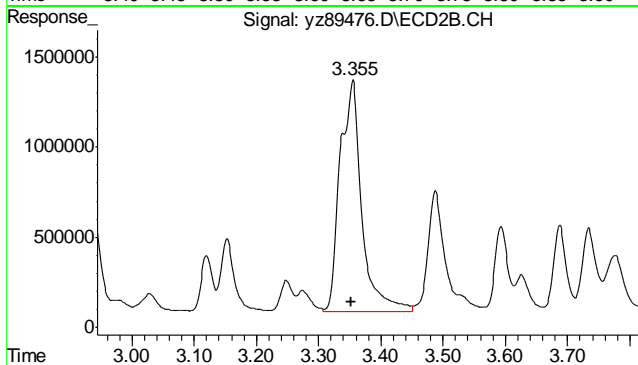
#3 AR1016-B
 R.T.: 3.186 min
 Delta R.T.: 0.016 min
 Response: 10735917
 Conc: 727.52 ppb



#3 AR1016-B
 R.T.: 2.925 min
 Delta R.T.: 0.001 min
 Response: 1463325
 Conc: 554.80 ppb

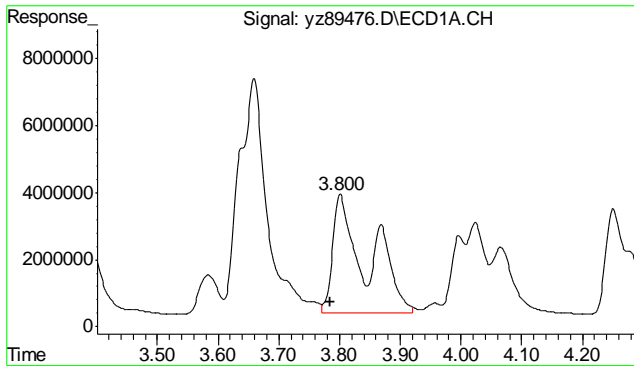


#4 AR1016-C
 R.T.: 3.658 min
 Delta R.T.: 0.015 min
 Response: 20810587
 Conc: 777.19 ppb m

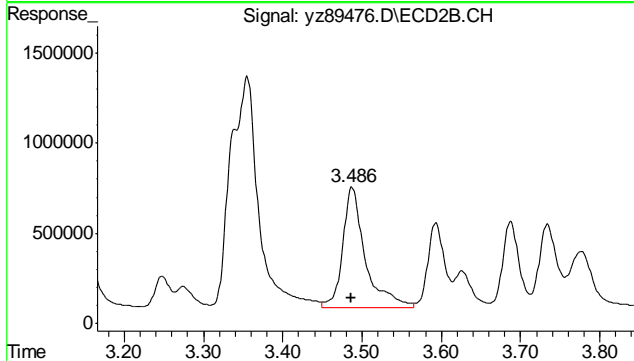


#4 AR1016-C
 R.T.: 3.355 min
 Delta R.T.: 0.001 min
 Response: 3161498
 Conc: 724.53 ppb

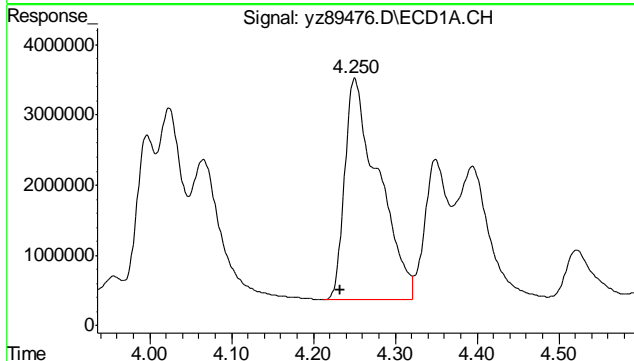
7.5.11
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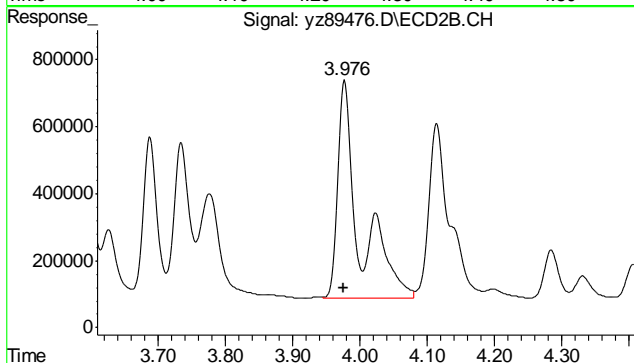
#5 AR1016-D
 R.T.: 3.800 min
 Delta R.T.: 0.015 min
 Response: 13802688
 Conc: 745.70 m



#5 AR1016-D
 R.T.: 3.486 min
 Delta R.T.: 0.000 min
 Response: 1325699
 Conc: 703.44 m

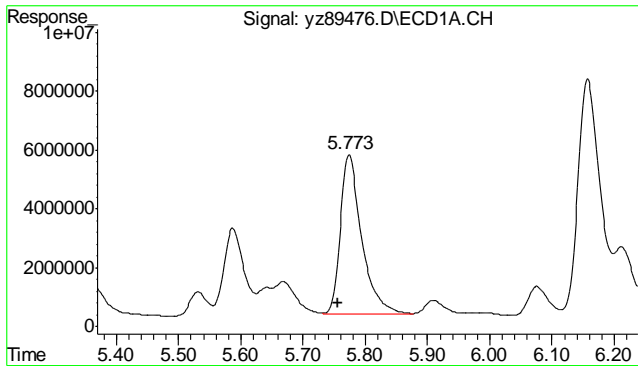


#6 AR1016-E
 R.T.: 4.250 min
 Delta R.T.: 0.016 min
 Response: 9038161
 Conc: 762.63

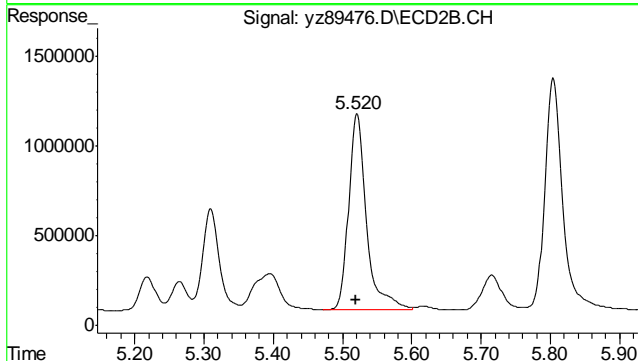


#6 AR1016-E
 R.T.: 3.976 min
 Delta R.T.: 0.001 min
 Response: 1442573
 Conc: 657.69 m

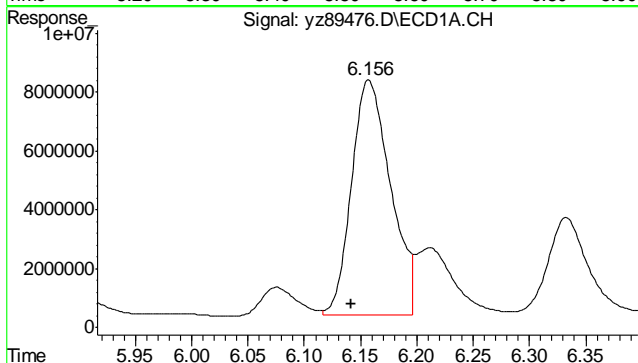
7.5.11
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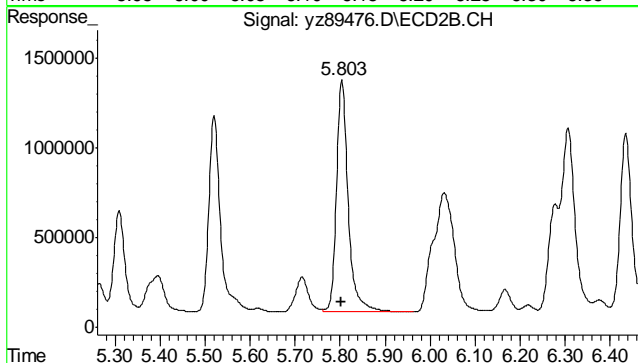
#7 AR1260-A
 R.T.: 5.773 min
 Delta R.T.: 0.016 min
 Response: 12781306
 Conc: 709.87 ppb



#7 AR1260-A
 R.T.: 5.520 min
 Delta R.T.: 0.000 min
 Response: 1969283
 Conc: 619.92 ppb

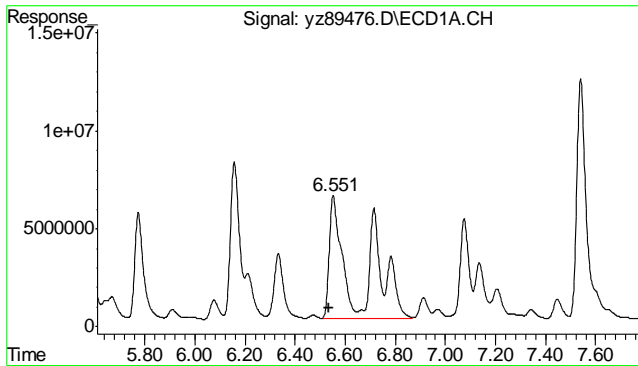


#8 AR1260-B
 R.T.: 6.156 min
 Delta R.T.: 0.015 min
 Response: 19382789
 Conc: 760.51 ppb

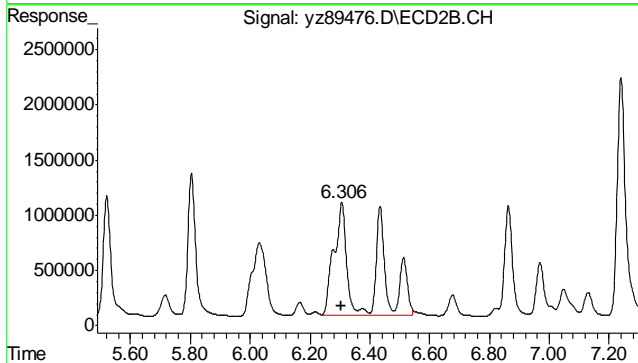


#8 AR1260-B
 R.T.: 5.803 min
 Delta R.T.: 0.000 min
 Response: 2357703
 Conc: 652.05 ppb

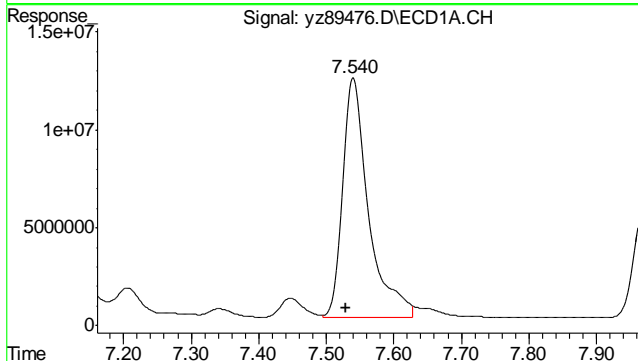
7.5.11
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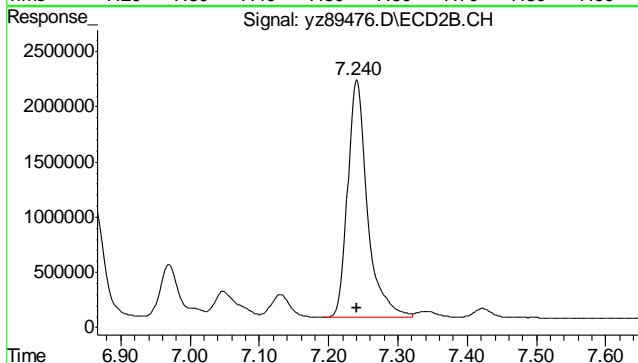
#9 AR1260-C
 R.T.: 6.551 min
 Delta R.T.: 0.015 min
 Response: 43455761
 Conc: 782.52 ppb m



#9 AR1260-C
 R.T.: 6.306 min
 Delta R.T.: 0.000 min
 Response: 5762096
 Conc: 641.82 ppb m

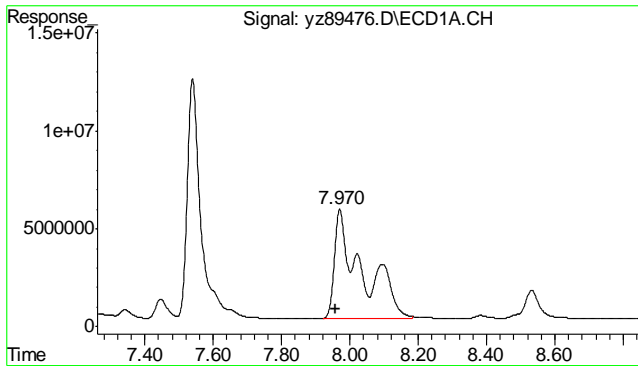


#10 AR1260-D
 R.T.: 7.540 min
 Delta R.T.: 0.011 min
 Response: 32821606
 Conc: 879.91 ppb m

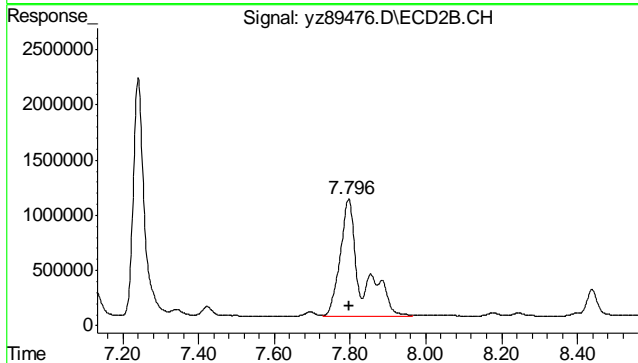


#10 AR1260-D
 R.T.: 7.240 min
 Delta R.T.: -0.002 min
 Response: 4281776
 Conc: 684.74 ppb

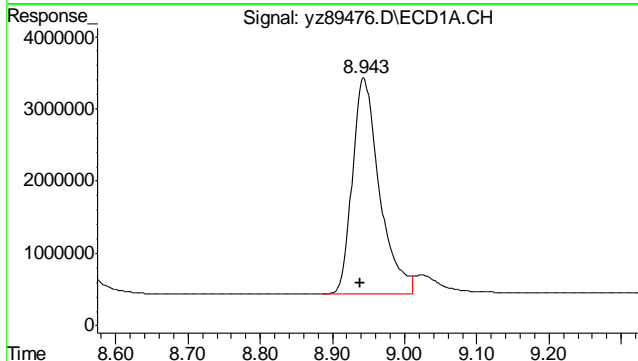
7.5.11
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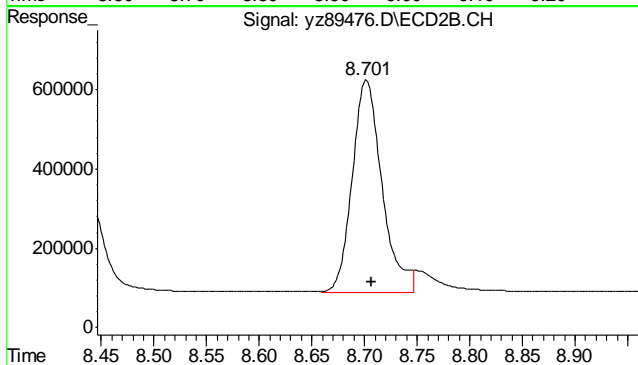
#11 AR1260-E
 R.T.: 7.970 min
 Delta R.T.: 0.010 min
 Response: 31052289
 Conc: 811.29 ppb m



#11 AR1260-E
 R.T.: 7.796 min
 Delta R.T.: -0.002 min
 Response: 4110027
 Conc: 673.09 ppb m

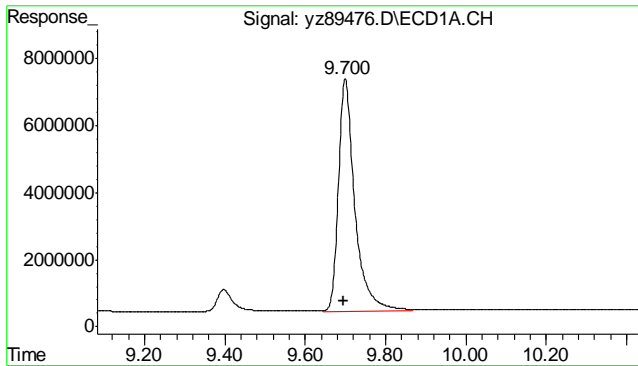


#12 AR1260-F
 R.T.: 8.943 min
 Delta R.T.: 0.005 min
 Response: 7807143
 Conc: 852.86

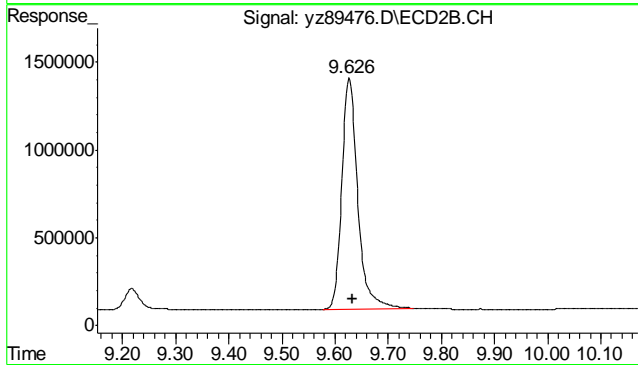


#12 AR1260-F
 R.T.: 8.701 min
 Delta R.T.: -0.005 min
 Response: 1054189
 Conc: 698.90 m

7.5.11
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#13 DCB
 R.T.: 9.700 min
 Delta R.T.: 0.005 min
 Response: 19434291
 Conc: 59.06 ppb m



#13 DCB
 R.T.: 9.626 min
 Delta R.T.: -0.007 min
 Response: 2747766
 Conc: 47.34 ppb m

7.5.11

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89487.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 1:37 pm
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 28 15:41:01 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.505	2.175	20389313	3309851	54.097	45.542
Spiked Amount	40.000 Range	42 - 132	Recovery	=	135.24%#	113.85%
13) s DCB	9.678f	9.618	17534335	2593306	53.288m	44.683m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	133.22%	111.71%
Target Compounds						
2) AR1016-A	2.827	2.573	4128523	765743	730.503m	640.791m
3) AR1016-B	3.167	2.920	9773141	1409839	662.279	534.517
4) AR1016-C	3.637	3.348	18885336	3181280	705.292m	729.059
5) AR1016-D	3.778	3.480	12608543	1405029	681.184m	745.534
6) AR1016-E	4.227	3.968	8079192	1425020	681.713	649.683m
7) AR1260-A	5.748	5.510	11229600	1963905	623.688	618.223
8) AR1260-B	6.132	5.793	16945672	2339884	664.887	647.123
9) AR1260-C	6.527	6.297	39713502	5543833	715.131m	617.508m
10) AR1260-D	7.515	7.230	27515654	4141207	737.659m	662.256
11) AR1260-E	7.947	7.787	28045524	3875304	732.731m	634.650m
12) AR1260-F	8.920f	8.692	6805437	991828	743.430	657.560m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

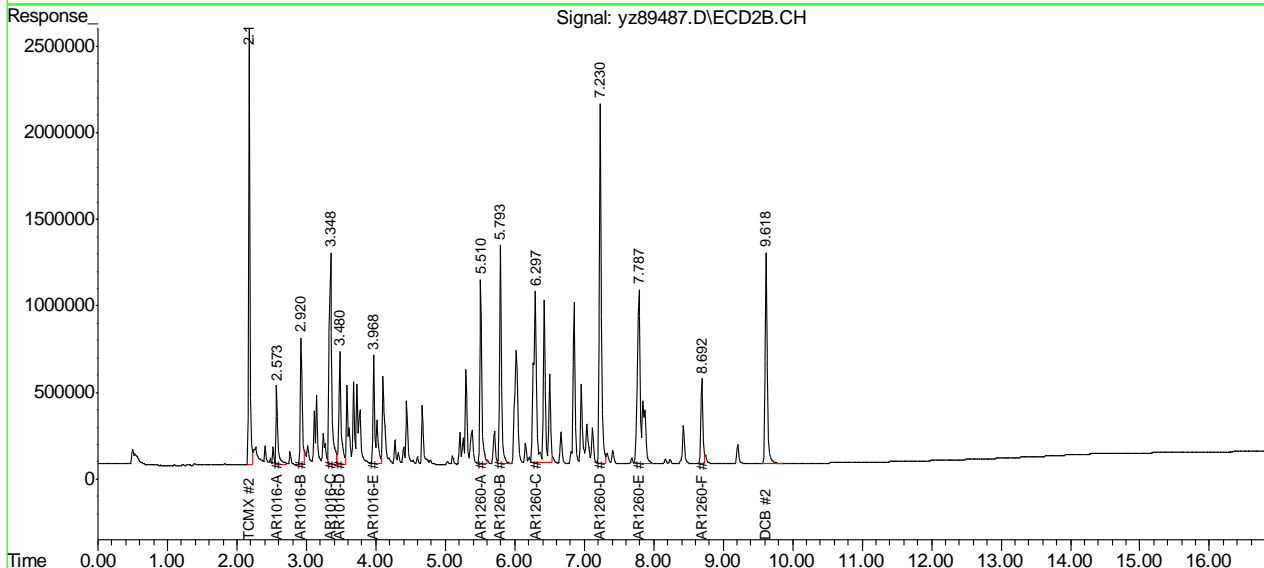
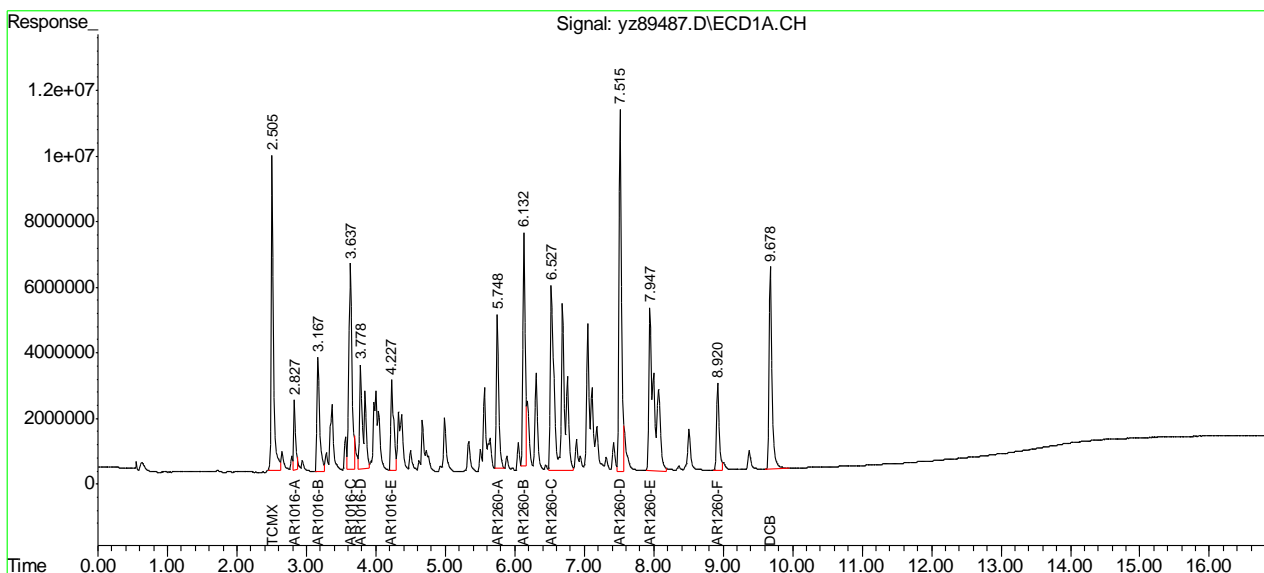
7.5.12
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Quantitation Report (QT Reviewed)

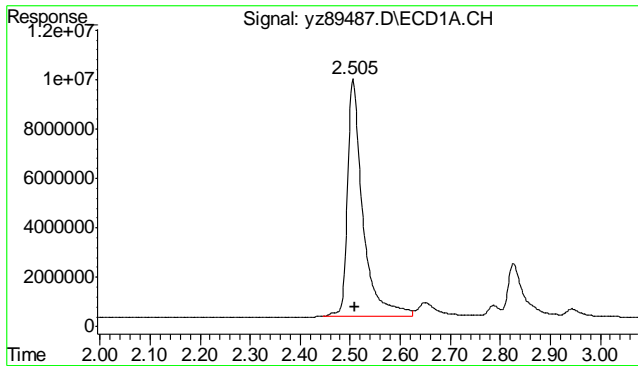
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89487.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 1:37 pm
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 28 15:41:01 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

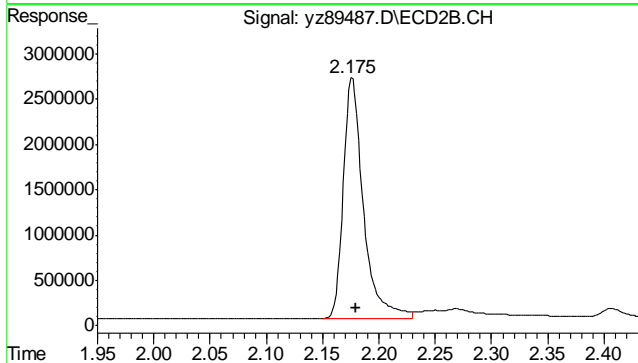
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



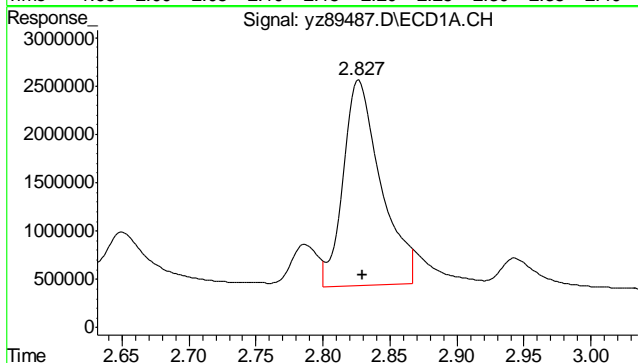
7.5.12
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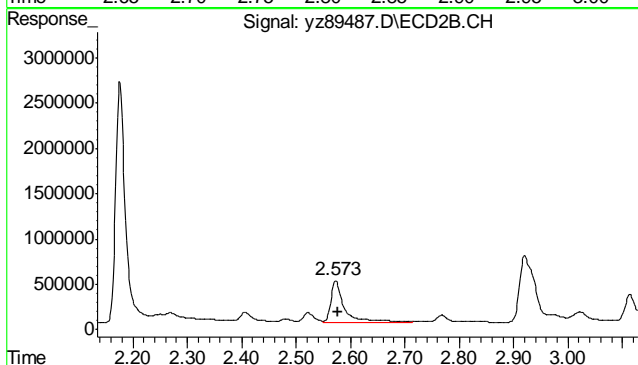
#1 TCMX
 R.T.: 2.505 min
 Delta R.T.: -0.005 min
 Response: 20389313
 Conc: 54.10 ppb



#1 TCMX
 R.T.: 2.175 min
 Delta R.T.: -0.005 min
 Response: 3309851
 Conc: 45.54 ppb

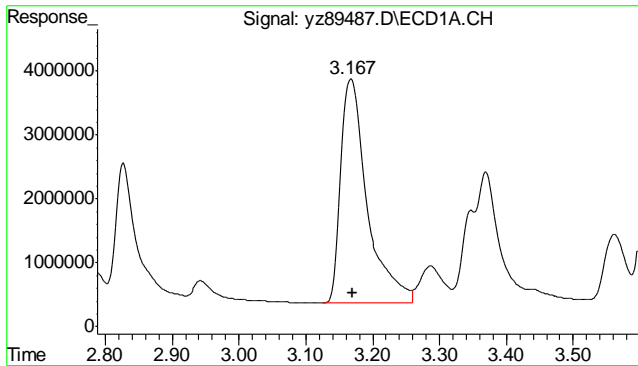


#2 AR1016-A
 R.T.: 2.827 min
 Delta R.T.: -0.003 min
 Response: 4128523
 Conc: 730.50 ppb m

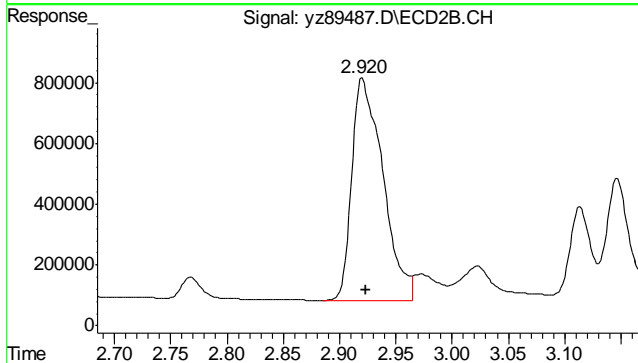


#2 AR1016-A
 R.T.: 2.573 min
 Delta R.T.: -0.003 min
 Response: 765743
 Conc: 640.79 ppb m

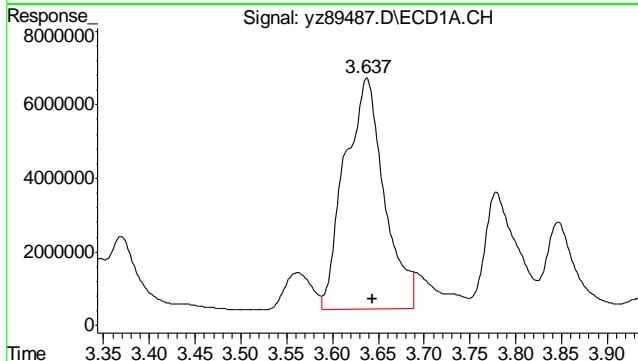
7.5.12
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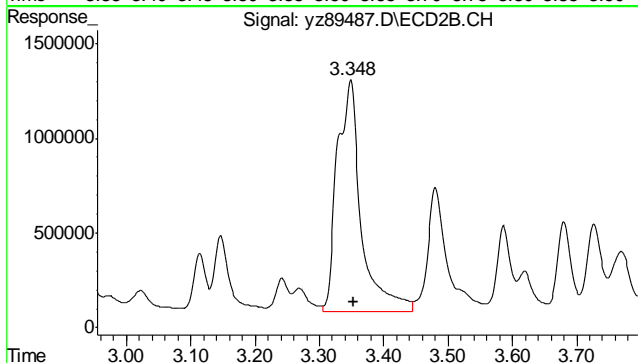
#3 AR1016-B
 R.T.: 3.167 min
 Delta R.T.: -0.003 min
 Response: 9773141
 Conc: 662.28 ppb



#3 AR1016-B
 R.T.: 2.920 min
 Delta R.T.: -0.003 min
 Response: 1409839
 Conc: 534.52 ppb

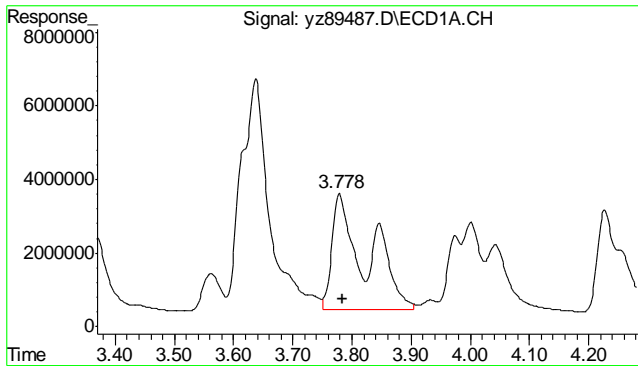


#4 AR1016-C
 R.T.: 3.637 min
 Delta R.T.: -0.007 min
 Response: 18885336
 Conc: 705.29 ppb m

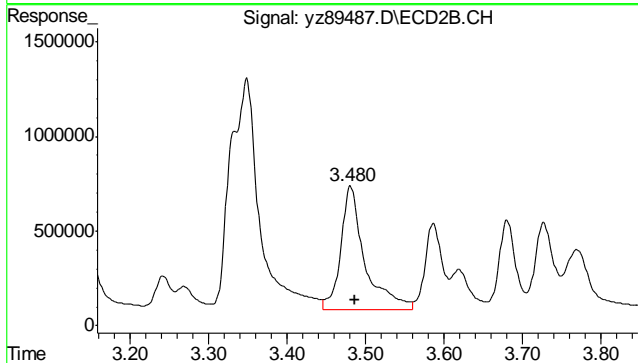


#4 AR1016-C
 R.T.: 3.348 min
 Delta R.T.: -0.005 min
 Response: 3181280
 Conc: 729.06 ppb

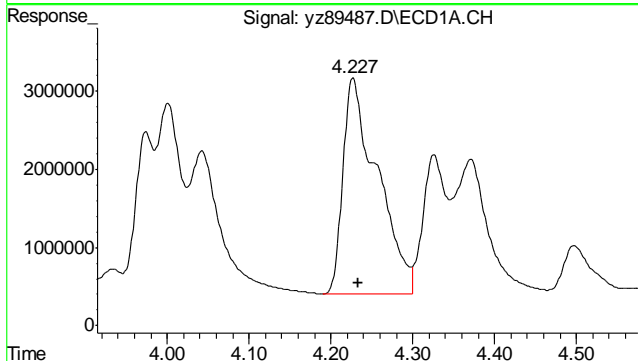
7.5.12
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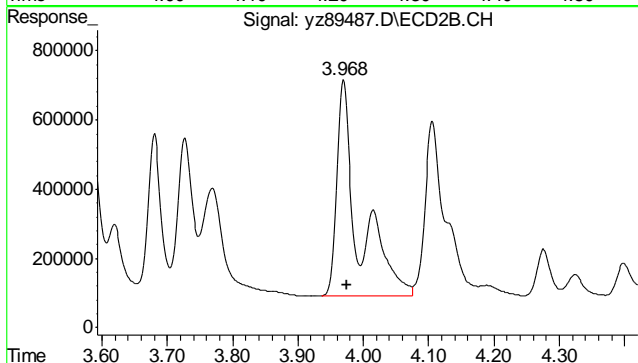
#5 AR1016-D
 R.T.: 3.778 min
 Delta R.T.: -0.007 min
 Response: 12608543
 Conc: 681.18 m



#5 AR1016-D
 R.T.: 3.480 min
 Delta R.T.: -0.007 min
 Response: 1405029
 Conc: 745.53

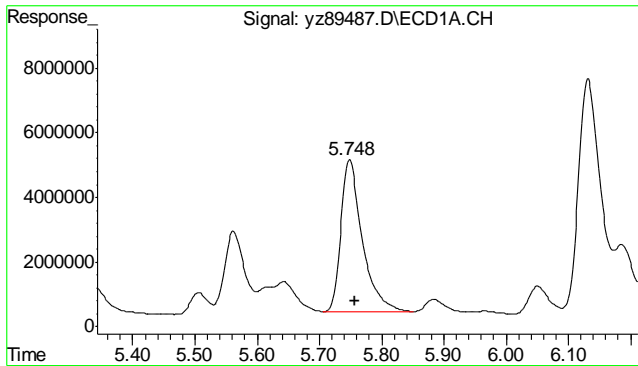


#6 AR1016-E
 R.T.: 4.227 min
 Delta R.T.: -0.007 min
 Response: 8079192
 Conc: 681.71

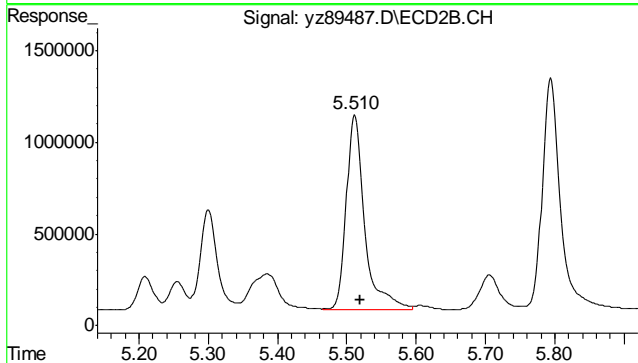


#6 AR1016-E
 R.T.: 3.968 min
 Delta R.T.: -0.007 min
 Response: 1425020
 Conc: 649.68 m

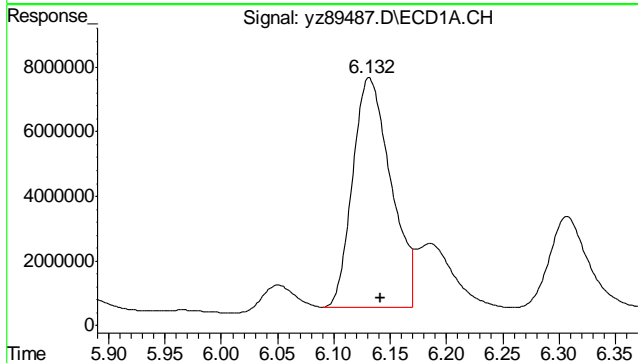
7.5.12
7



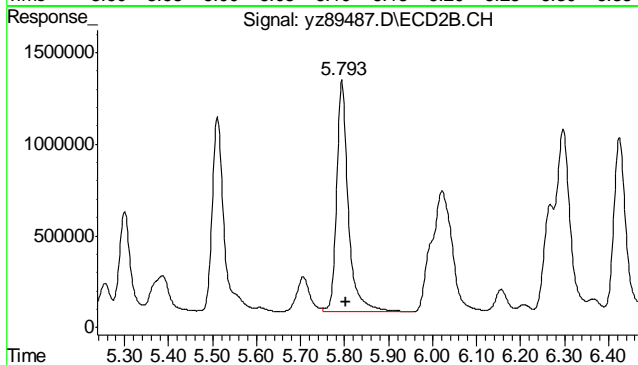
#7 AR1260-A
 R.T.: 5.748 min
 Delta R.T.: -0.008 min
 Response: 11229600
 Conc: 623.69 ppb



#7 AR1260-A
 R.T.: 5.510 min
 Delta R.T.: -0.010 min
 Response: 1963905
 Conc: 618.22 ppb

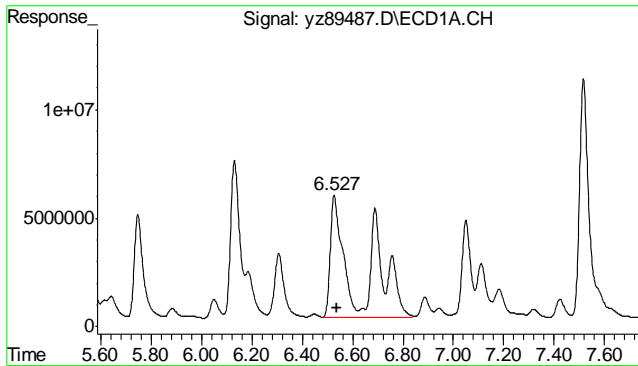


#8 AR1260-B
 R.T.: 6.132 min
 Delta R.T.: -0.010 min
 Response: 16945672
 Conc: 664.89 ppb

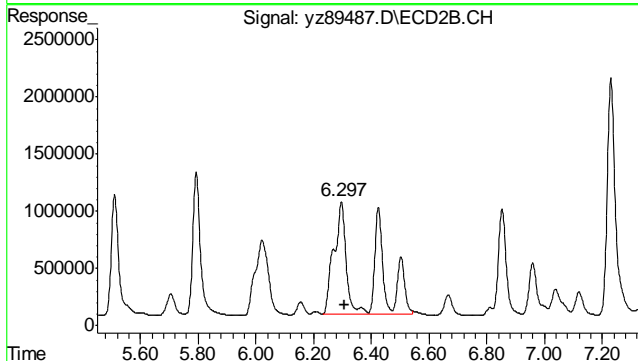


#8 AR1260-B
 R.T.: 5.793 min
 Delta R.T.: -0.010 min
 Response: 2339884
 Conc: 647.12 ppb

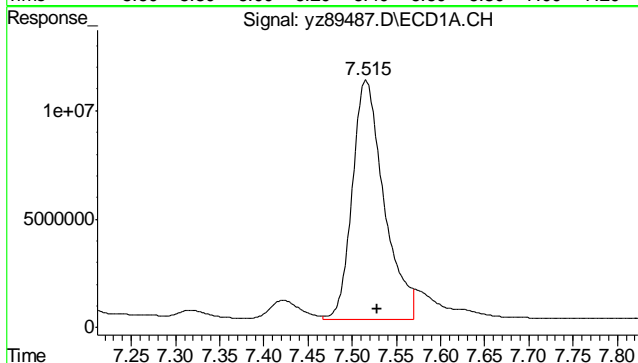
7.5.12
7



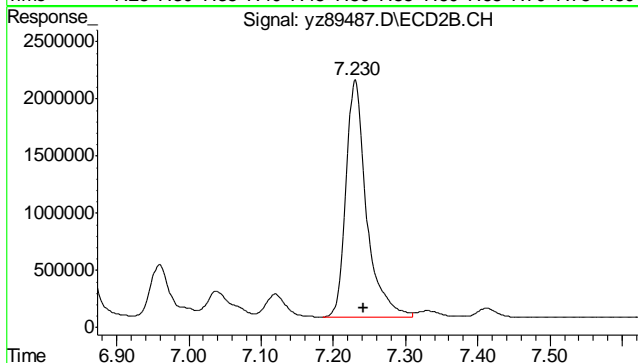
#9 AR1260-C
 R.T.: 6.527 min
 Delta R.T.: -0.010 min
 Response: 39713502
 Conc: 715.13 ppb m



#9 AR1260-C
 R.T.: 6.297 min
 Delta R.T.: -0.010 min
 Response: 5543833
 Conc: 617.51 ppb m

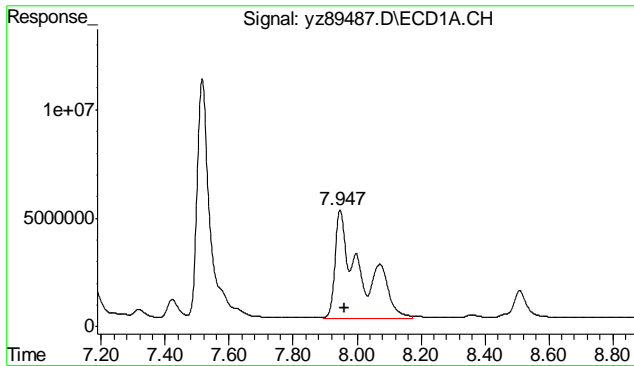


#10 AR1260-D
 R.T.: 7.515 min
 Delta R.T.: -0.013 min
 Response: 27515654
 Conc: 737.66 ppb m

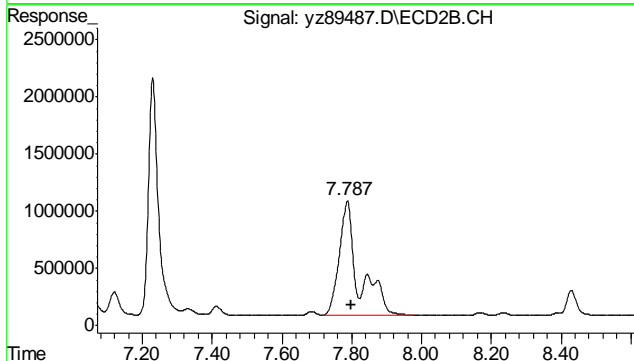


#10 AR1260-D
 R.T.: 7.230 min
 Delta R.T.: -0.012 min
 Response: 4141207
 Conc: 662.26 ppb m

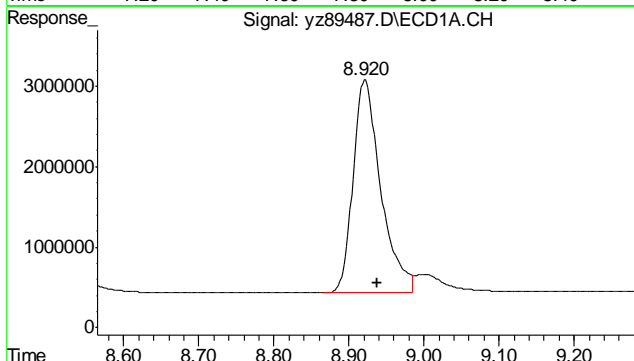
7.5.12
7



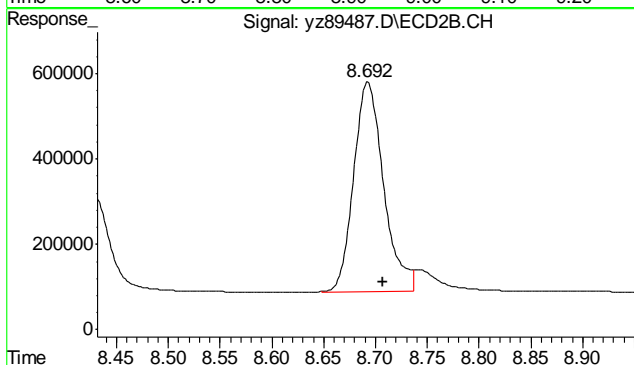
#11 AR1260-E
 R.T.: 7.947 min
 Delta R.T.: -0.013 min
 Response: 28045524
 Conc: 732.73 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.012 min
 Response: 3875304
 Conc: 634.65 ppb m

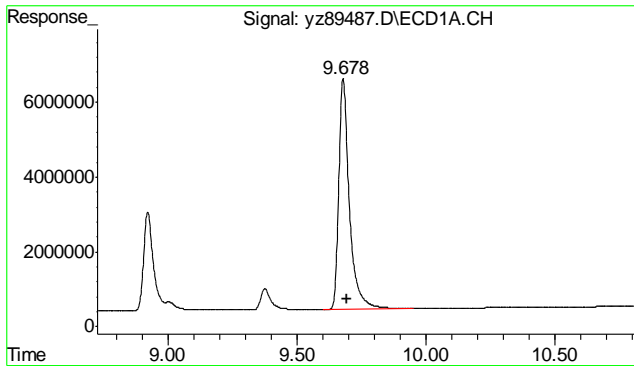


#12 AR1260-F
 R.T.: 8.920 min
 Delta R.T.: -0.018 min
 Response: 6805437
 Conc: 743.43

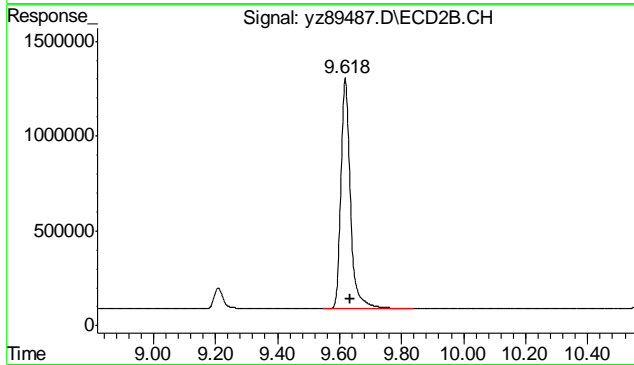


#12 AR1260-F
 R.T.: 8.692 min
 Delta R.T.: -0.015 min
 Response: 991828
 Conc: 657.56 m

7.5.12
 7



#13 DCB
 R.T.: 9.678 min
 Delta R.T.: -0.017 min
 Response: 17534335
 Conc: 53.29 ppb m



#13 DCB
 R.T.: 9.618 min
 Delta R.T.: -0.015 min
 Response: 2593306
 Conc: 44.68 ppb m

7.5.12
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89498.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 5:34 pm
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 06:45:00 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.506	2.177	19781091	3202275	52.484	44.061m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	131.21%	110.15%
13) s DCB	9.677f	9.617f	16377805	2452059	49.773m	42.249m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	124.43%	105.62%
Target Compounds						
2) AR1016-A	2.827	2.574	3921333	786349	693.843m	656.404
3) AR1016-B	3.167	2.921	8962832	1481936	607.368	561.851m
4) AR1016-C	3.637	3.349	17677916	3072370	660.200m	704.100m
5) AR1016-D	3.779	3.481	11449384	1292106	618.559m	685.615m
6) AR1016-E	4.227	3.969	7133059	1413936	601.879	644.630m
7) AR1260-A	5.747	5.511	10830089	1848391	601.499m	581.860m
8) AR1260-B	6.131	5.794	16140675	2240544	633.301m	619.649
9) AR1260-C	6.526	6.297	35360462	5370097	636.745m	598.156m
10) AR1260-D	7.516	7.231	27651392	3883521	741.298m	621.047m
11) AR1260-E	7.946	7.787	25763188	3642143	673.101m	596.466m
12) AR1260-F	8.921f	8.692	6399305	908994	699.064	602.643m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

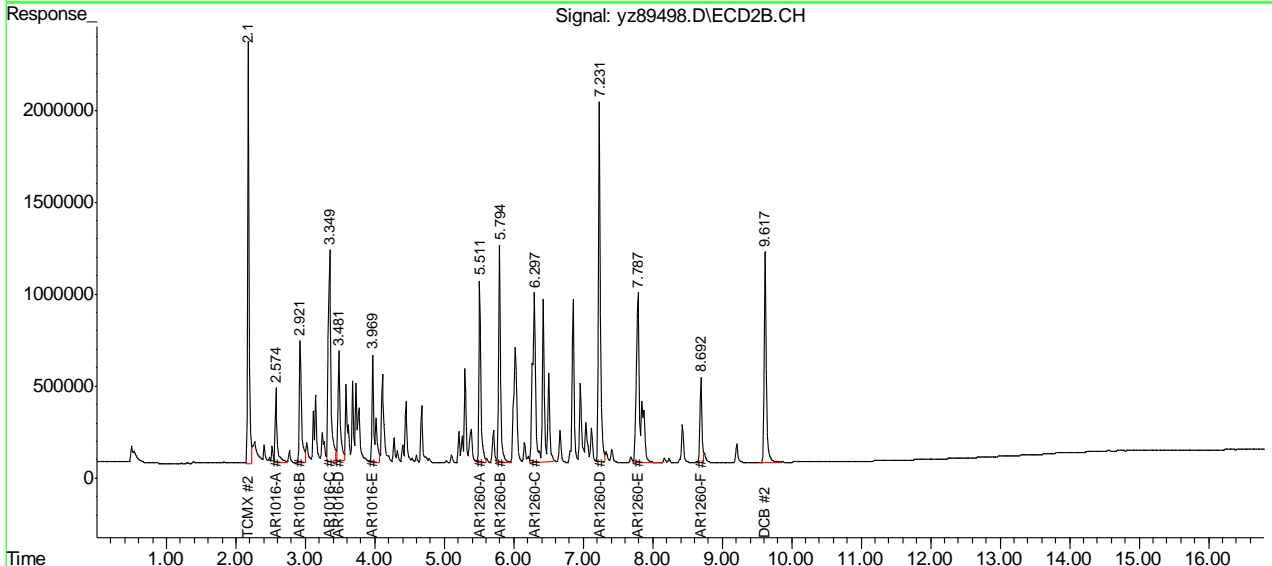
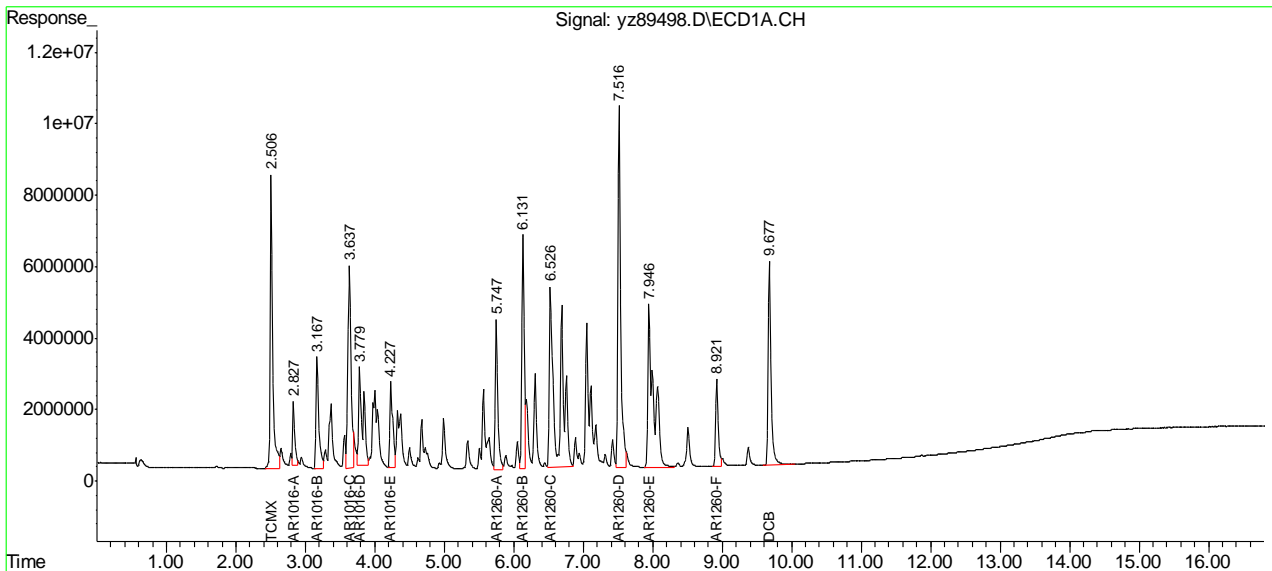
7.5.13
7

Quantitation Report (QT Reviewed)

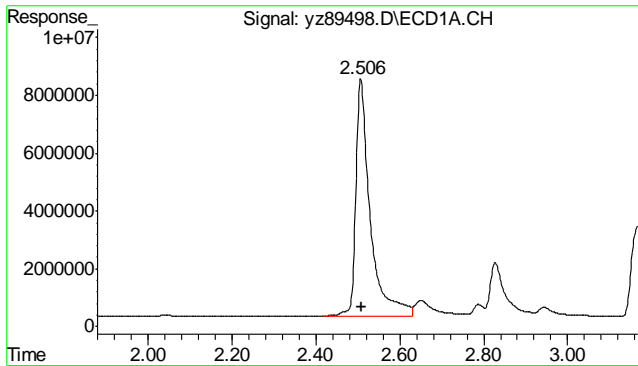
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89498.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 5:34 pm
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 06:45:00 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

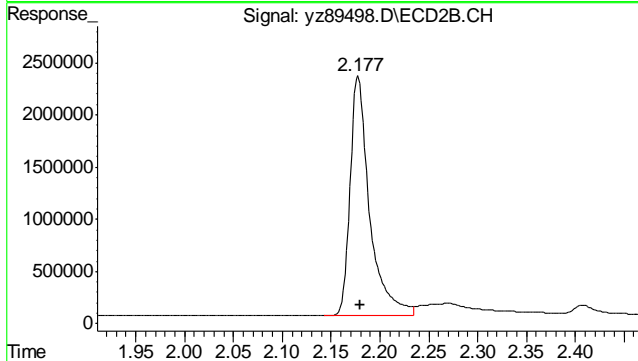
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



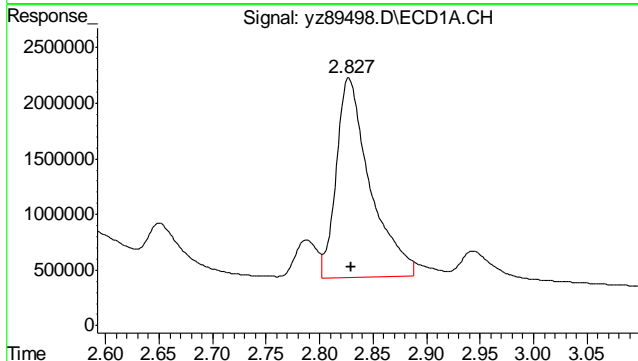
7.5.13
 7



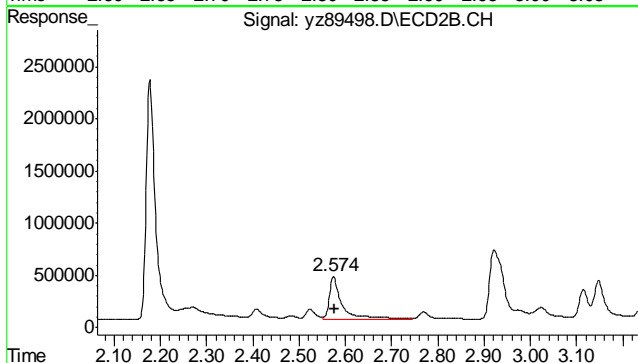
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 19781091
 Conc: 52.48 ppb



#1 TCMX
 R.T.: 2.177 min
 Delta R.T.: -0.002 min
 Response: 3202275
 Conc: 44.06 ppb m

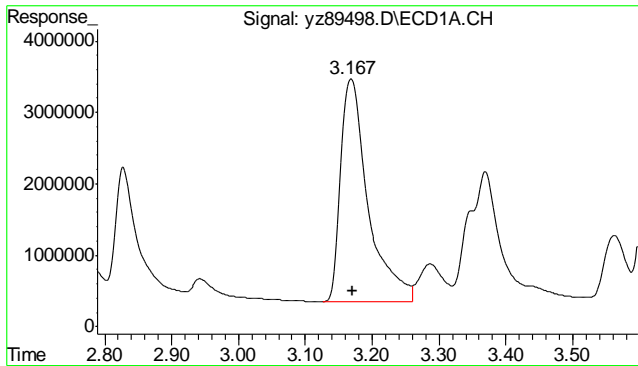


#2 AR1016-A
 R.T.: 2.827 min
 Delta R.T.: -0.002 min
 Response: 3921333
 Conc: 693.84 ppb m

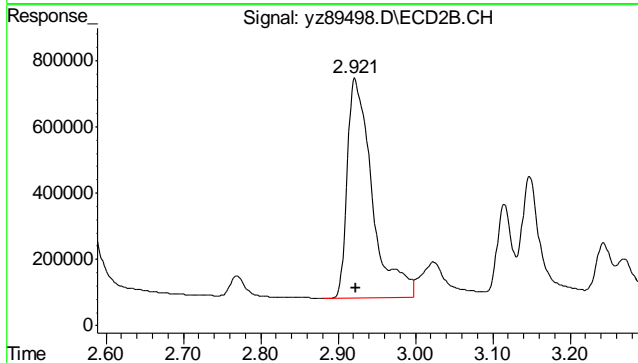


#2 AR1016-A
 R.T.: 2.574 min
 Delta R.T.: -0.002 min
 Response: 786349
 Conc: 656.40 ppb

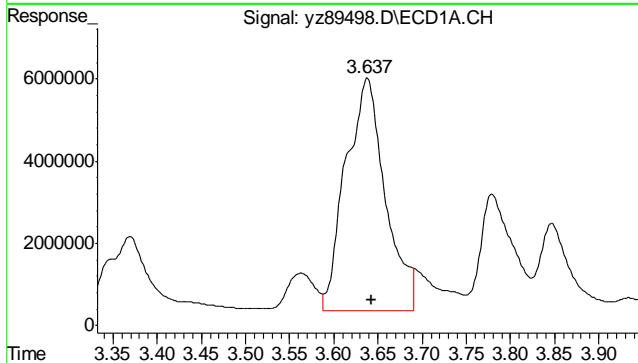
7.5.13
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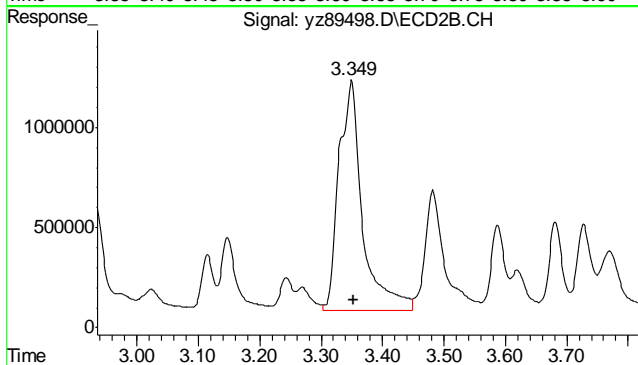
#3 AR1016-B
 R.T.: 3.167 min
 Delta R.T.: -0.002 min
 Response: 8962832
 Conc: 607.37 ppb



#3 AR1016-B
 R.T.: 2.921 min
 Delta R.T.: -0.002 min
 Response: 1481936
 Conc: 561.85 ppb m

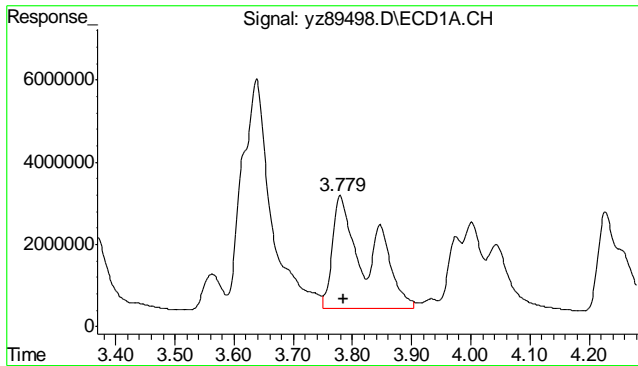


#4 AR1016-C
 R.T.: 3.637 min
 Delta R.T.: -0.006 min
 Response: 17677916
 Conc: 660.20 ppb m

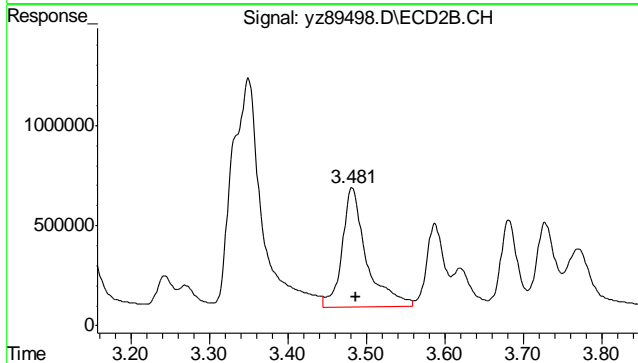


#4 AR1016-C
 R.T.: 3.349 min
 Delta R.T.: -0.004 min
 Response: 3072370
 Conc: 704.10 ppb m

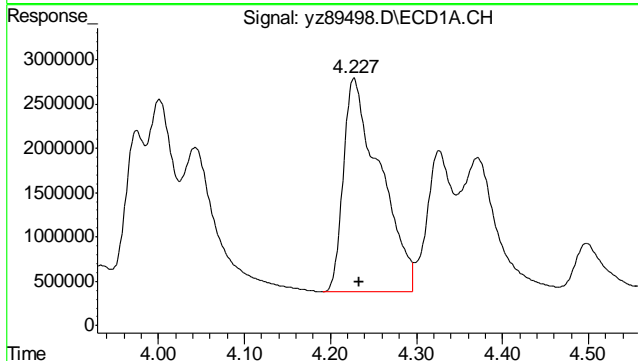
7.5.13
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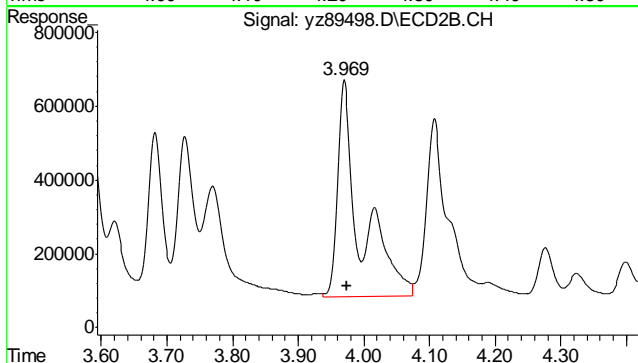
#5 AR1016-D
 R.T.: 3.779 min
 Delta R.T.: -0.006 min
 Response: 11449384
 Conc: 618.56 m



#5 AR1016-D
 R.T.: 3.481 min
 Delta R.T.: -0.006 min
 Response: 1292106
 Conc: 685.61 m

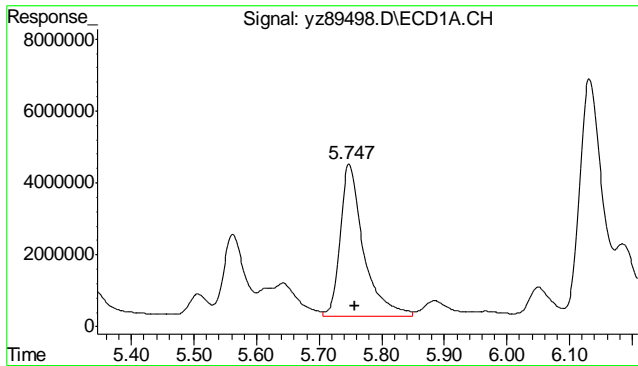


#6 AR1016-E
 R.T.: 4.227 min
 Delta R.T.: -0.006 min
 Response: 7133059
 Conc: 601.88

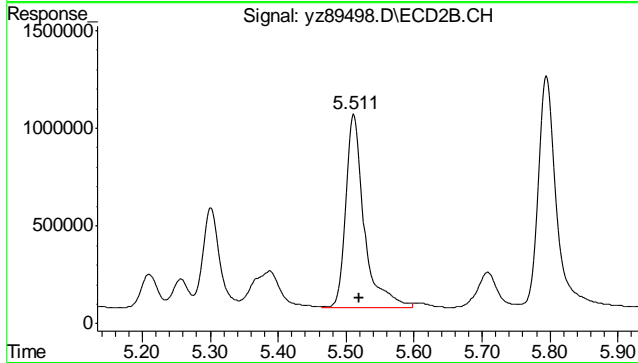


#6 AR1016-E
 R.T.: 3.969 min
 Delta R.T.: -0.006 min
 Response: 1413936
 Conc: 644.63 m

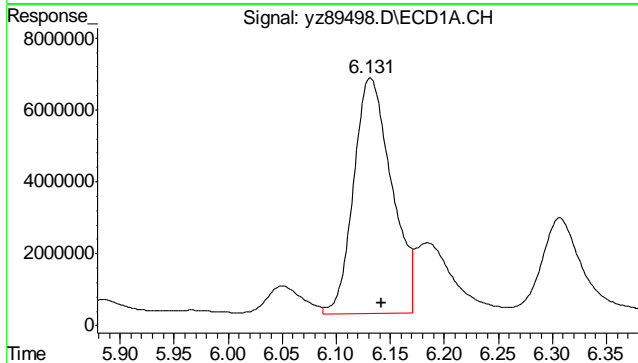
7.5.13
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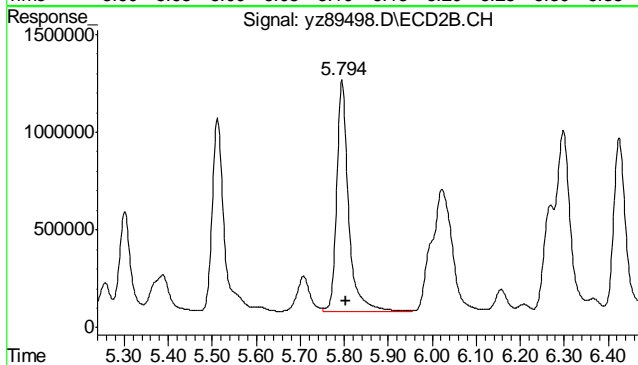
#7 AR1260-A
 R.T.: 5.747 min
 Delta R.T.: -0.009 min
 Response: 10830089
 Conc: 601.50 ppb m



#7 AR1260-A
 R.T.: 5.511 min
 Delta R.T.: -0.009 min
 Response: 1848391
 Conc: 581.86 ppb m

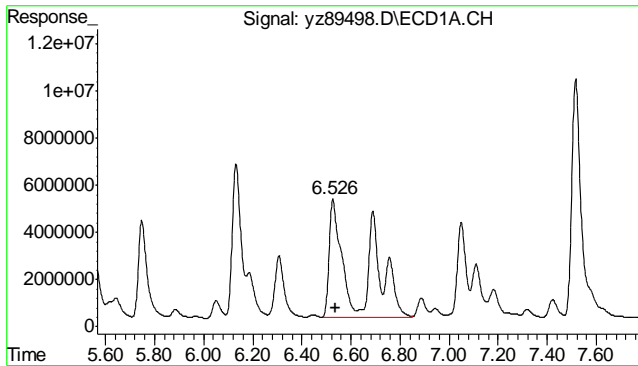


#8 AR1260-B
 R.T.: 6.131 min
 Delta R.T.: -0.011 min
 Response: 16140675
 Conc: 633.30 ppb m

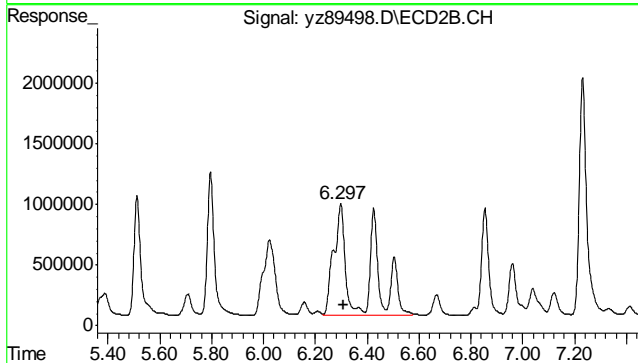


#8 AR1260-B
 R.T.: 5.794 min
 Delta R.T.: -0.009 min
 Response: 2240544
 Conc: 619.65 ppb

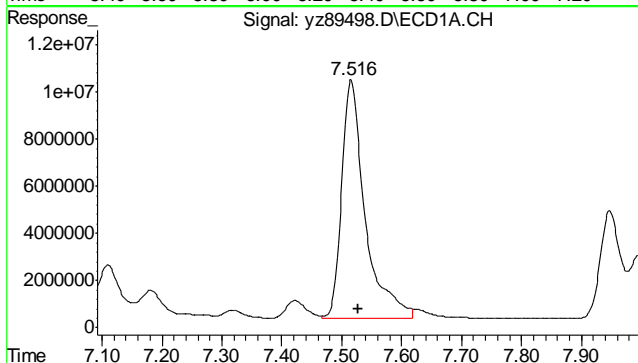
7.5.13
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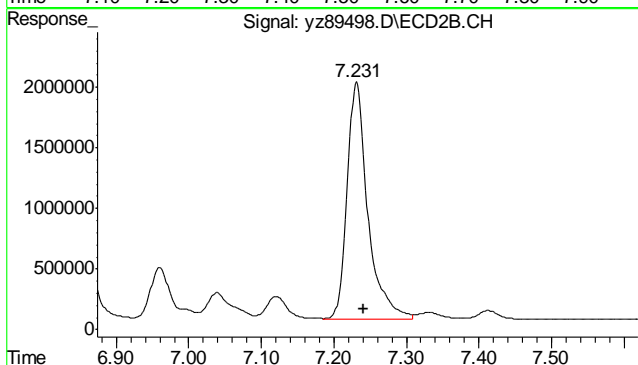
#9 AR1260-C
 R.T.: 6.526 min
 Delta R.T.: -0.011 min
 Response: 35360462
 Conc: 636.74 ppb m



#9 AR1260-C
 R.T.: 6.297 min
 Delta R.T.: -0.009 min
 Response: 5370097
 Conc: 598.16 ppb m

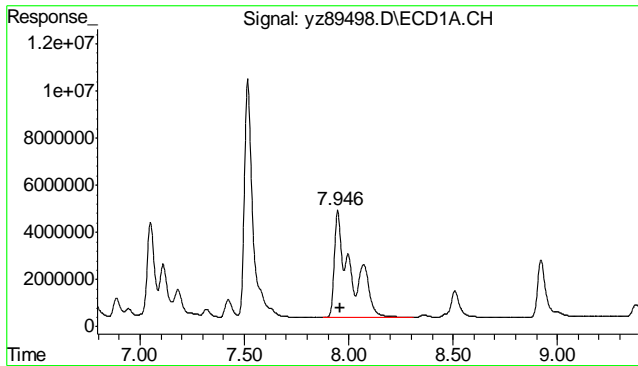


#10 AR1260-D
 R.T.: 7.516 min
 Delta R.T.: -0.012 min
 Response: 27651392
 Conc: 741.30 ppb m

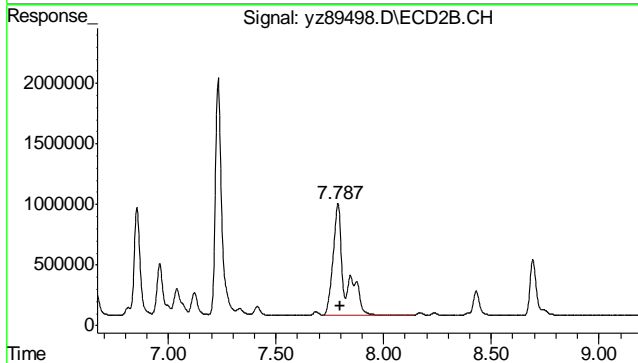


#10 AR1260-D
 R.T.: 7.231 min
 Delta R.T.: -0.011 min
 Response: 3883521
 Conc: 621.05 ppb m

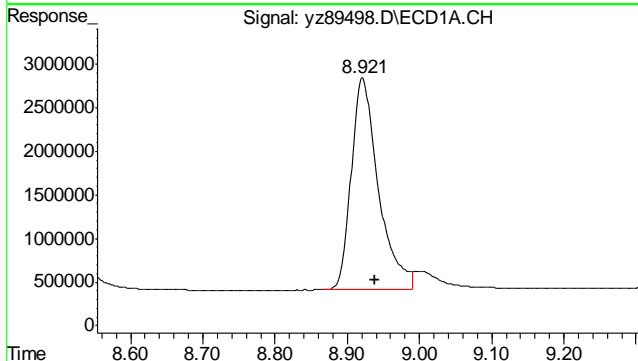
7.5.13
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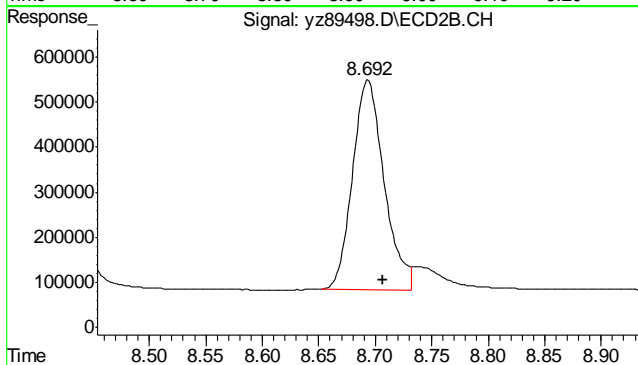
#11 AR1260-E
 R.T.: 7.946 min
 Delta R.T.: -0.014 min
 Response: 25763188
 Conc: 673.10 ppb m



#11 AR1260-E
 R.T.: 7.787 min
 Delta R.T.: -0.011 min
 Response: 3642143
 Conc: 596.47 ppb m

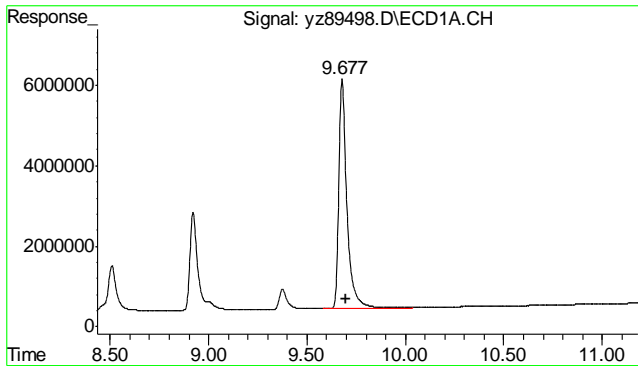


#12 AR1260-F
 R.T.: 8.921 min
 Delta R.T.: -0.017 min
 Response: 6399305
 Conc: 699.06

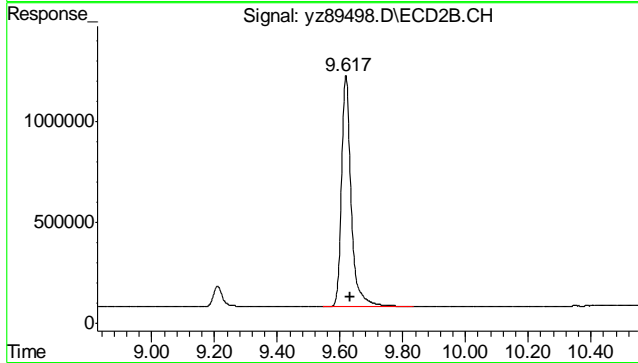


#12 AR1260-F
 R.T.: 8.692 min
 Delta R.T.: -0.014 min
 Response: 908994
 Conc: 602.64 m

7.5.13
 7



#13 DCB
 R.T.: 9.677 min
 Delta R.T.: -0.017 min
 Response: 16377805
 Conc: 49.77 ppb m



#13 DCB
 R.T.: 9.617 min
 Delta R.T.: -0.016 min
 Response: 2452059
 Conc: 42.25 ppb m

7.5.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89509.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 9:28 pm
 Operator : sofyaz
 Sample : cc7547-500,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:23:35 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.504	2.174	18217079	2912227	48.334m	40.071m
Spiked Amount	40.000 Range	42 - 132	Recovery	=	120.84%	100.18%
13) s DCB	9.674f	9.616f	16048990	2403158	48.773m	41.406m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	121.93%	103.52%
Target Compounds						
2) AR1016-A	2.824	2.573	2761069	536221	488.545m	457.769m
3) AR1016-B	3.166	2.919	7253102	1090528	491.508m	413.456
4) AR1016-C	3.636	3.348	14513137	2216857	542.008m	508.041
5) AR1016-D	3.776	3.479	9676914	969850	522.801m	514.620
6) AR1016-E	4.224	3.968	5978818	1015538	504.486m	462.996m
7) AR1260-A	5.746	5.509	8766045	1389551	486.863m	437.421
8) AR1260-B	6.129	5.793	13547165	1668266	531.541	461.379
9) AR1260-C	6.524	6.294	29809697	4229049	536.791m	471.059m
10) AR1260-D	7.513f	7.228	22707165	3016294	608.750m	482.361
11) AR1260-E	7.944f	7.786	21022338	2895896	549.240m	474.255m
12) AR1260-F	8.918f	8.689f	5166961	748049	564.442m	495.940m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

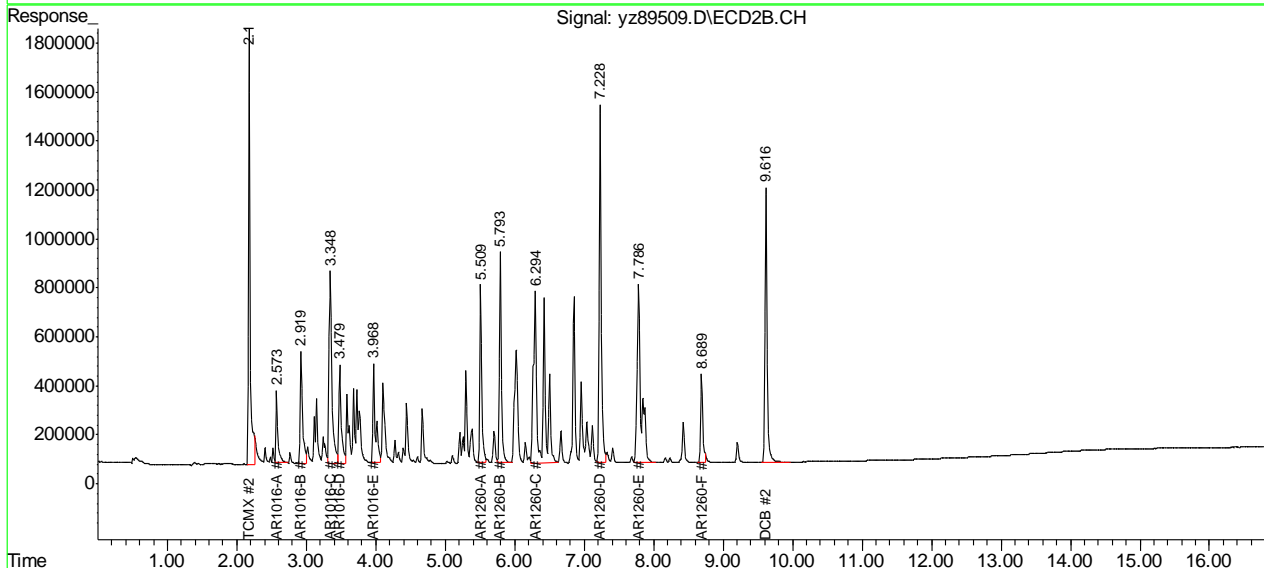
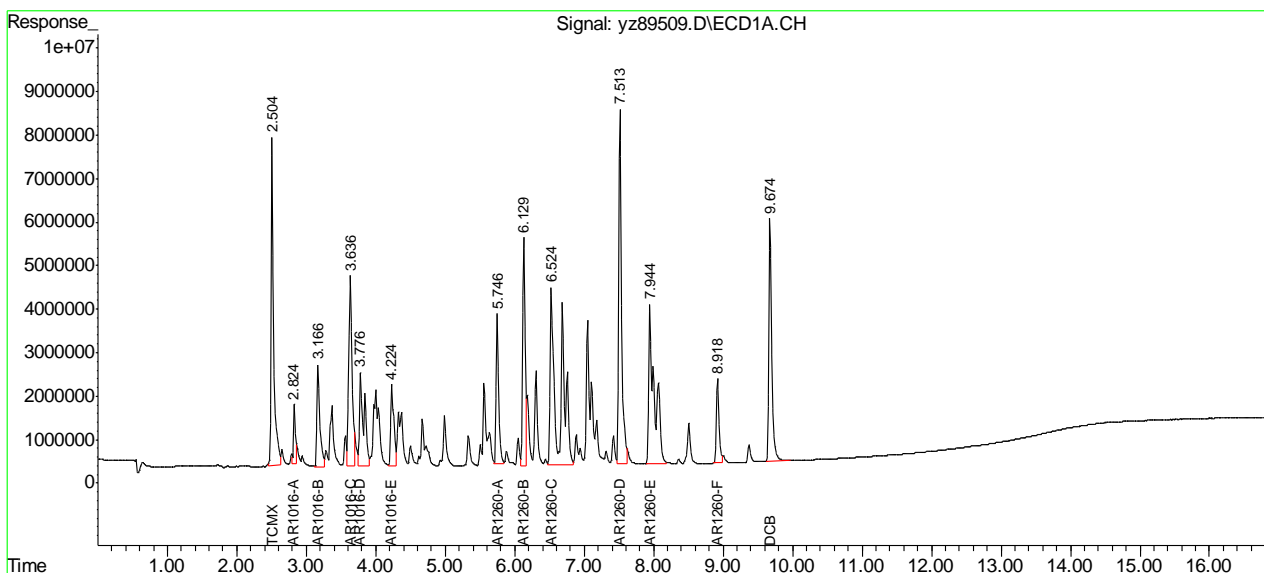
7.5.14
7

Quantitation Report (QT Reviewed)

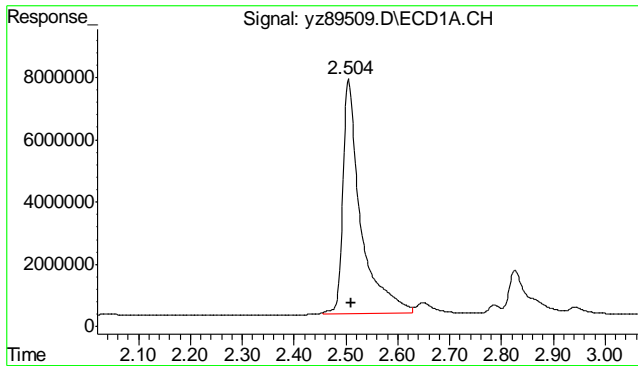
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89509.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 28 Apr 2014 9:28 pm
 Operator : sofyaz
 Sample : cc7547-500,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 11:23:35 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

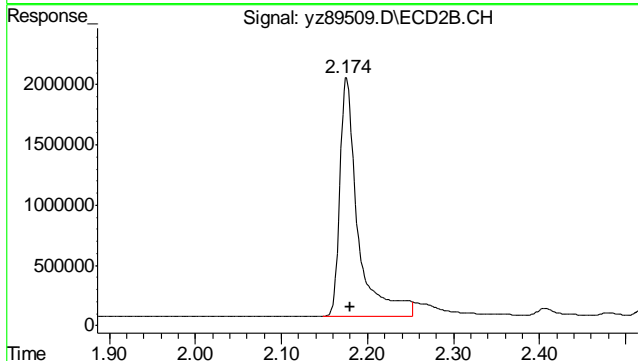
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



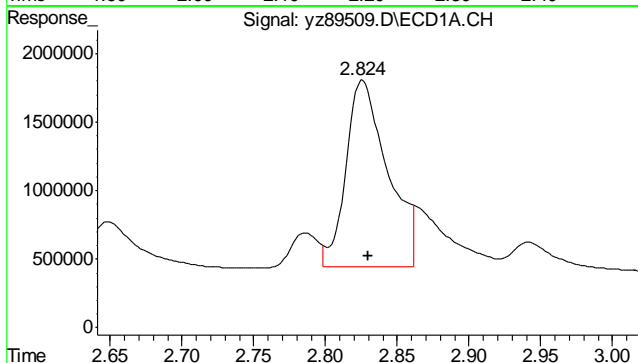
7.5.14
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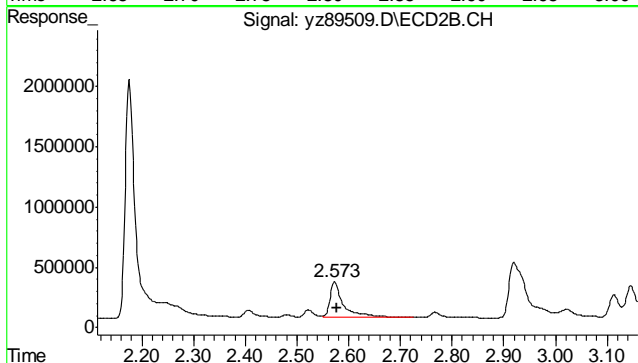
#1 TCMX
 R.T.: 2.504 min
 Delta R.T.: -0.006 min
 Response: 18217079
 Conc: 48.33 ppb m



#1 TCMX
 R.T.: 2.174 min
 Delta R.T.: -0.006 min
 Response: 2912227
 Conc: 40.07 ppb m

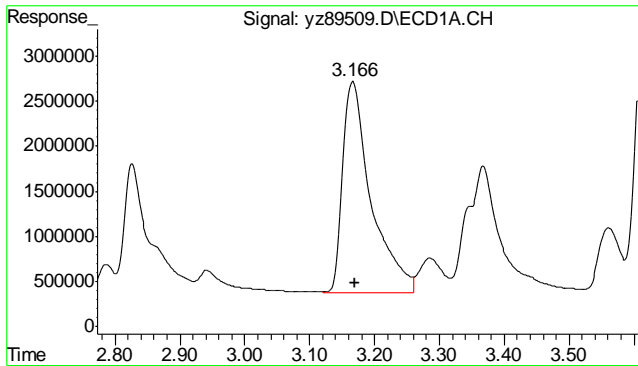


#2 AR1016-A
 R.T.: 2.824 min
 Delta R.T.: -0.006 min
 Response: 2761069
 Conc: 488.55 ppb m

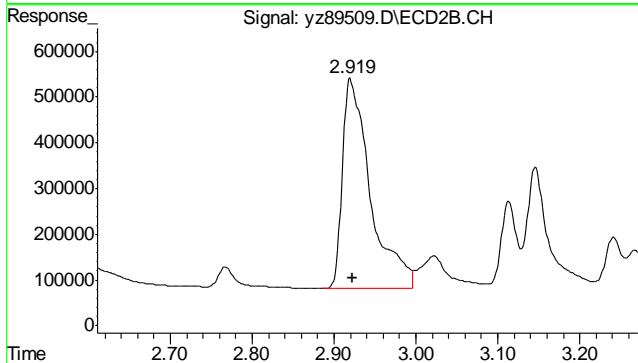


#2 AR1016-A
 R.T.: 2.573 min
 Delta R.T.: -0.004 min
 Response: 536221
 Conc: 457.77 ppb m

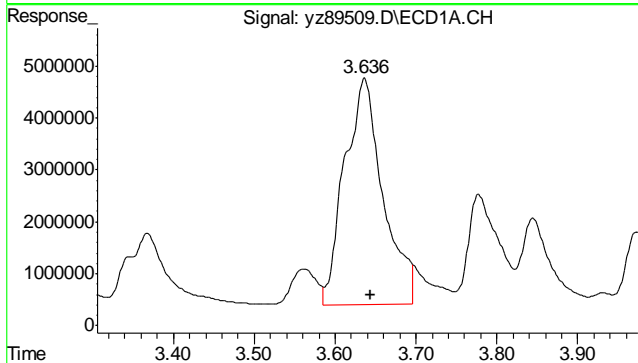
7.5.14
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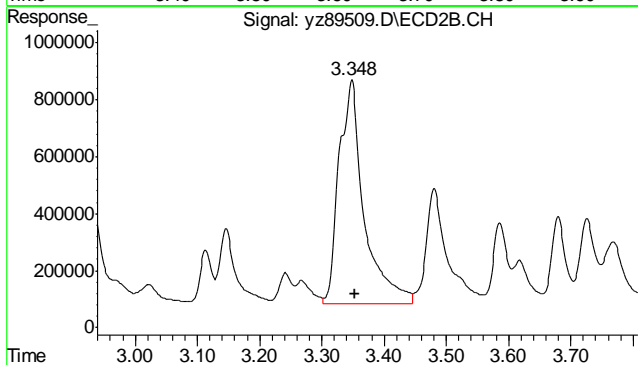
#3 AR1016-B
 R.T.: 3.166 min
 Delta R.T.: -0.004 min
 Response: 7253102
 Conc: 491.51 ppb m



#3 AR1016-B
 R.T.: 2.919 min
 Delta R.T.: -0.004 min
 Response: 1090528
 Conc: 413.46 ppb

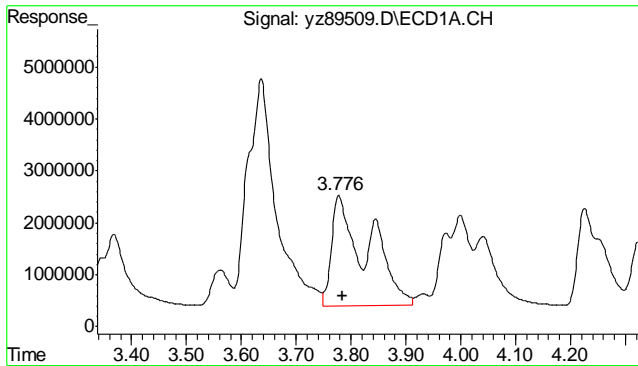


#4 AR1016-C
 R.T.: 3.636 min
 Delta R.T.: -0.007 min
 Response: 14513137
 Conc: 542.01 ppb m

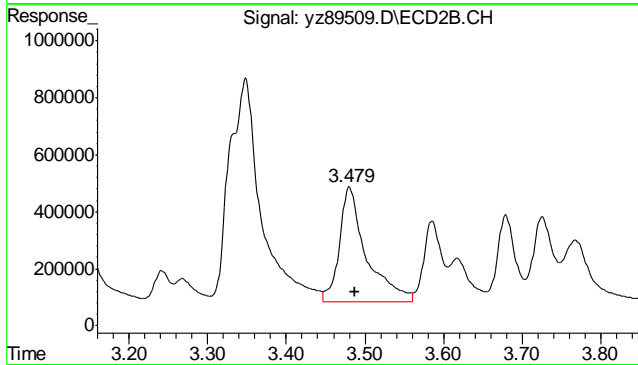


#4 AR1016-C
 R.T.: 3.348 min
 Delta R.T.: -0.006 min
 Response: 2216857
 Conc: 508.04 ppb

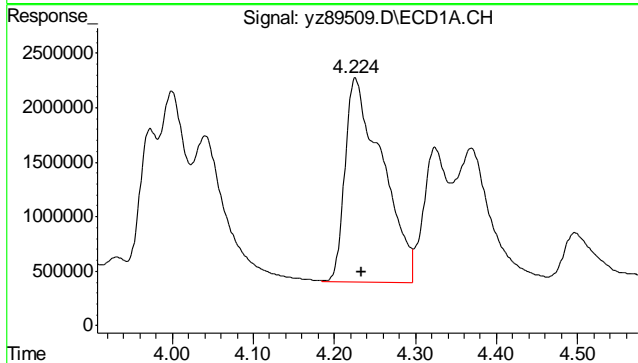
7.5.14
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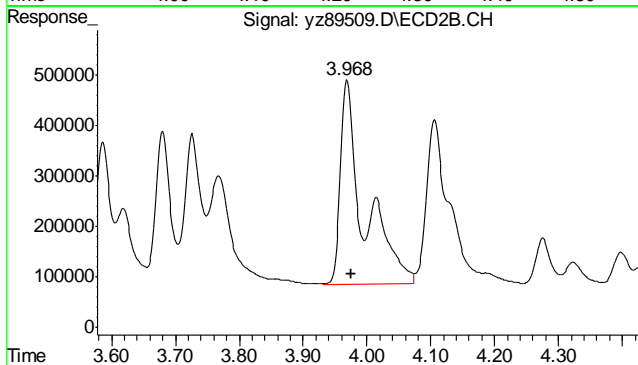
#5 AR1016-D
 R.T.: 3.776 min
 Delta R.T.: -0.009 min
 Response: 9676914
 Conc: 522.80 m



#5 AR1016-D
 R.T.: 3.479 min
 Delta R.T.: -0.007 min
 Response: 969850
 Conc: 514.62

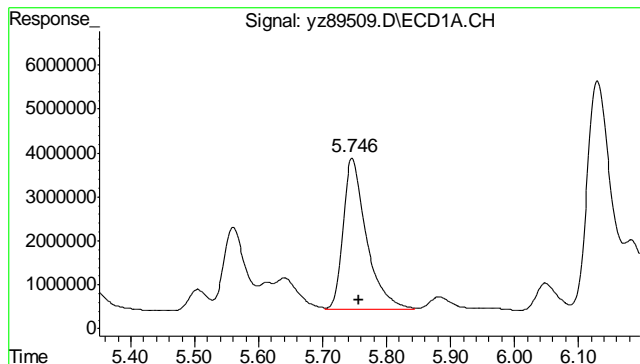


#6 AR1016-E
 R.T.: 4.224 min
 Delta R.T.: -0.009 min
 Response: 5978818
 Conc: 504.49 m

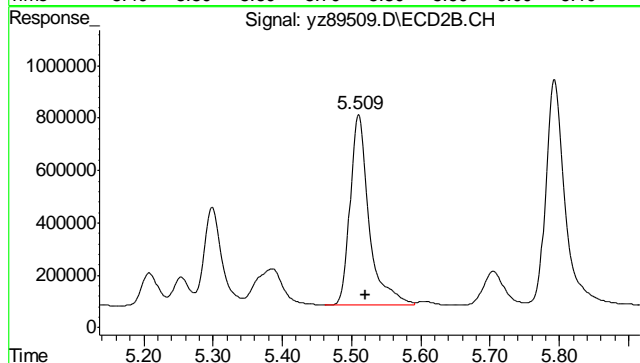


#6 AR1016-E
 R.T.: 3.968 min
 Delta R.T.: -0.007 min
 Response: 101538
 Conc: 463.00 m

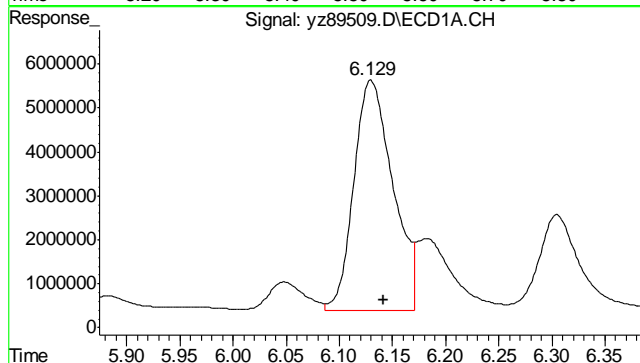
7.5.14
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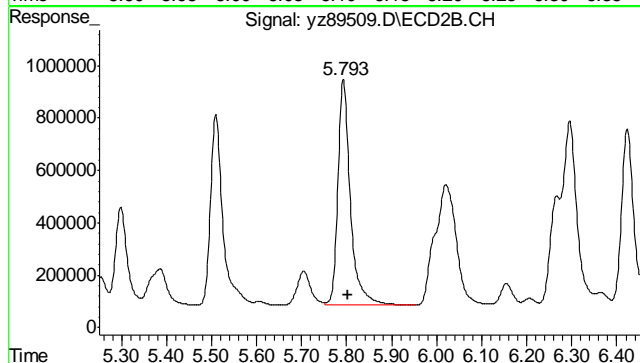
#7 AR1260-A
 R.T.: 5.746 min
 Delta R.T.: -0.011 min
 Response: 8766045
 Conc: 486.86 ppb m



#7 AR1260-A
 R.T.: 5.509 min
 Delta R.T.: -0.011 min
 Response: 1389551
 Conc: 437.42 ppb

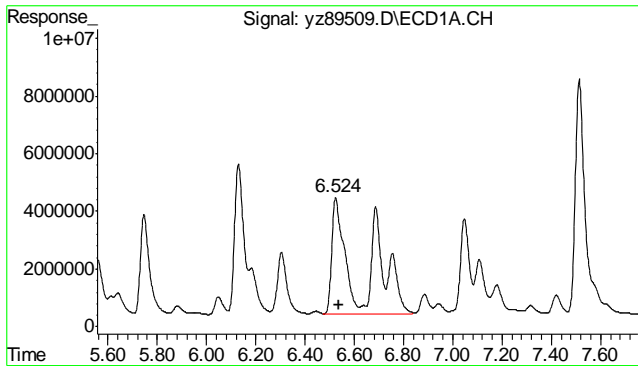


#8 AR1260-B
 R.T.: 6.129 min
 Delta R.T.: -0.012 min
 Response: 13547165
 Conc: 531.54 ppb

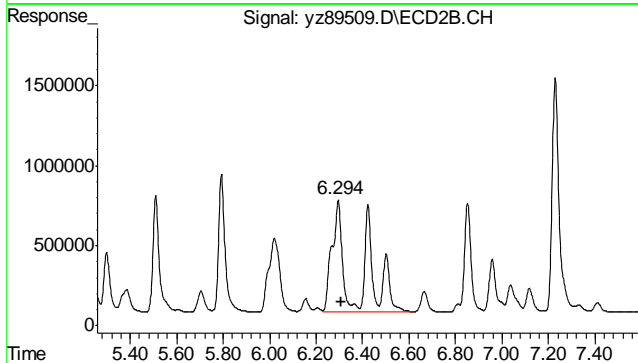


#8 AR1260-B
 R.T.: 5.793 min
 Delta R.T.: -0.011 min
 Response: 1668266
 Conc: 461.38 ppb

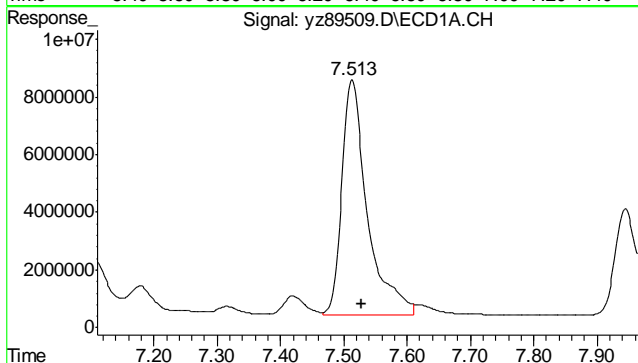
7.5.14
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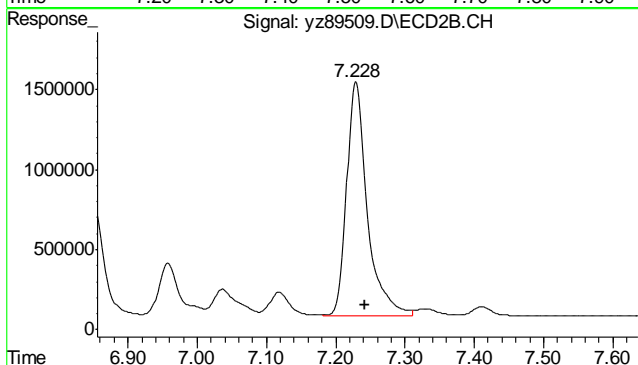
#9 AR1260-C
 R.T.: 6.524 min
 Delta R.T.: -0.012 min
 Response: 29809697
 Conc: 536.79 ppb m



#9 AR1260-C
 R.T.: 6.294 min
 Delta R.T.: -0.012 min
 Response: 4229049
 Conc: 471.06 ppb m

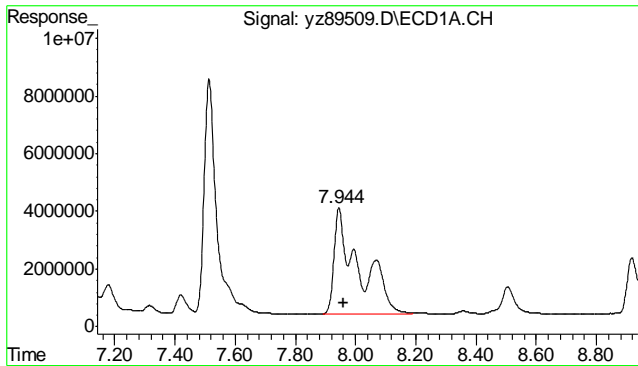


#10 AR1260-D
 R.T.: 7.513 min
 Delta R.T.: -0.016 min
 Response: 22707165
 Conc: 608.75 ppb m

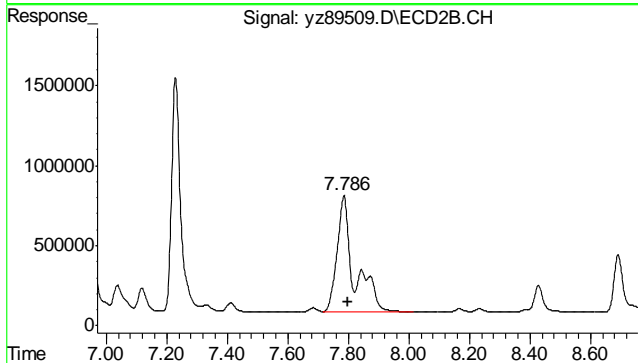


#10 AR1260-D
 R.T.: 7.228 min
 Delta R.T.: -0.014 min
 Response: 3016294
 Conc: 482.36 ppb

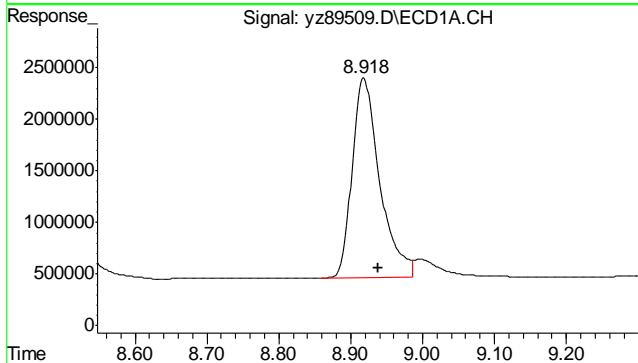
7.5.14
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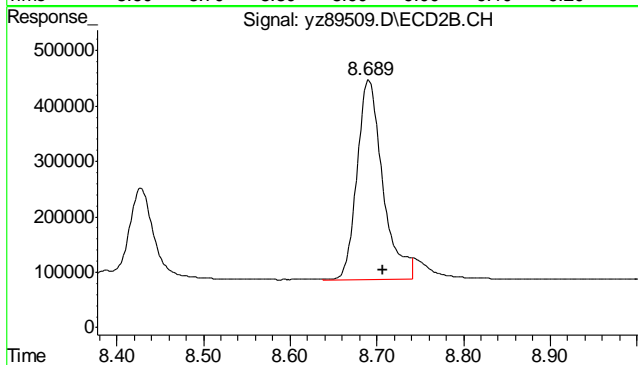
#11 AR1260-E
 R.T.: 7.944 min
 Delta R.T.: -0.016 min
 Response: 21022338
 Conc: 549.24 ppb m



#11 AR1260-E
 R.T.: 7.786 min
 Delta R.T.: -0.012 min
 Response: 2895896
 Conc: 474.25 ppb m

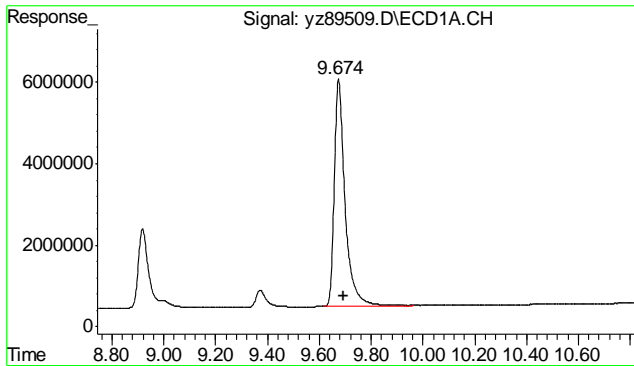


#12 AR1260-F
 R.T.: 8.918 min
 Delta R.T.: -0.021 min
 Response: 5166961
 Conc: 564.44 m

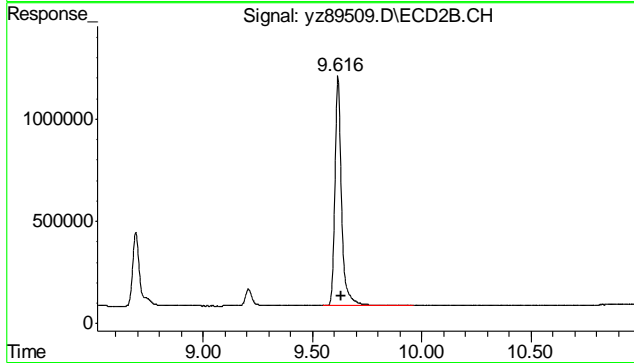


#12 AR1260-F
 R.T.: 8.689 min
 Delta R.T.: -0.017 min
 Response: 748049
 Conc: 495.94 m

7.5.14
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#13 DCB
 R.T.: 9.674 min
 Delta R.T.: -0.021 min
 Response: 16048990
 Conc: 48.77 ppb m



#13 DCB
 R.T.: 9.616 min
 Delta R.T.: -0.017 min
 Response: 2403158
 Conc: 41.41 ppb m

7.5.14
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89525.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 2:45 am
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 98 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 06:51:10 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.506	2.176	21391033	3827265	56.755	52.661
Spiked Amount	40.000 Range	42 - 132	Recovery	=	141.89%#	131.65%
13) s DCB	9.671f	9.612f	21934207	3138960	66.659m	54.084m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	166.65%#	135.21%
Target Compounds						
2) AR1016-A	2.826	2.572	4200754	823117	743.284m	683.963
3) AR1016-B	3.167	2.919	10141835	1548797	687.263	587.201
4) AR1016-C	3.636	3.347	21714850	3094583	810.963m	709.191m
5) AR1016-D	3.777	3.479	13787550	1293618	744.880m	686.417m
6) AR1016-E	4.226	3.967	8560423	1471299	722.318	670.782m
7) AR1260-A	5.746	5.507	13358141	2035360	741.906m	640.717m
8) AR1260-B	6.127	5.791	19876698	2455057	779.889m	678.975
9) AR1260-C	6.522	6.294	45092860	6238893	811.998m	694.929m
10) AR1260-D	7.509f	7.226f	35003786	4593793	938.407m	734.633
11) AR1260-E	7.941f	7.782f	34275541	4486479	895.499m	734.741m
12) AR1260-F	8.914f	8.687f	8713038	1166258	951.818	773.204m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

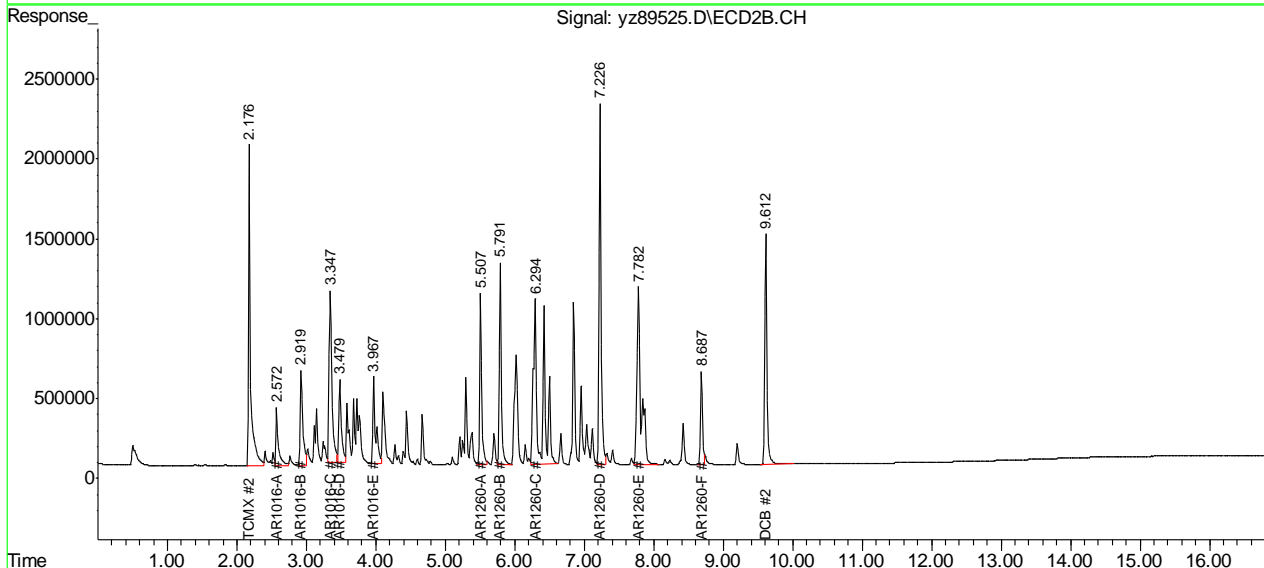
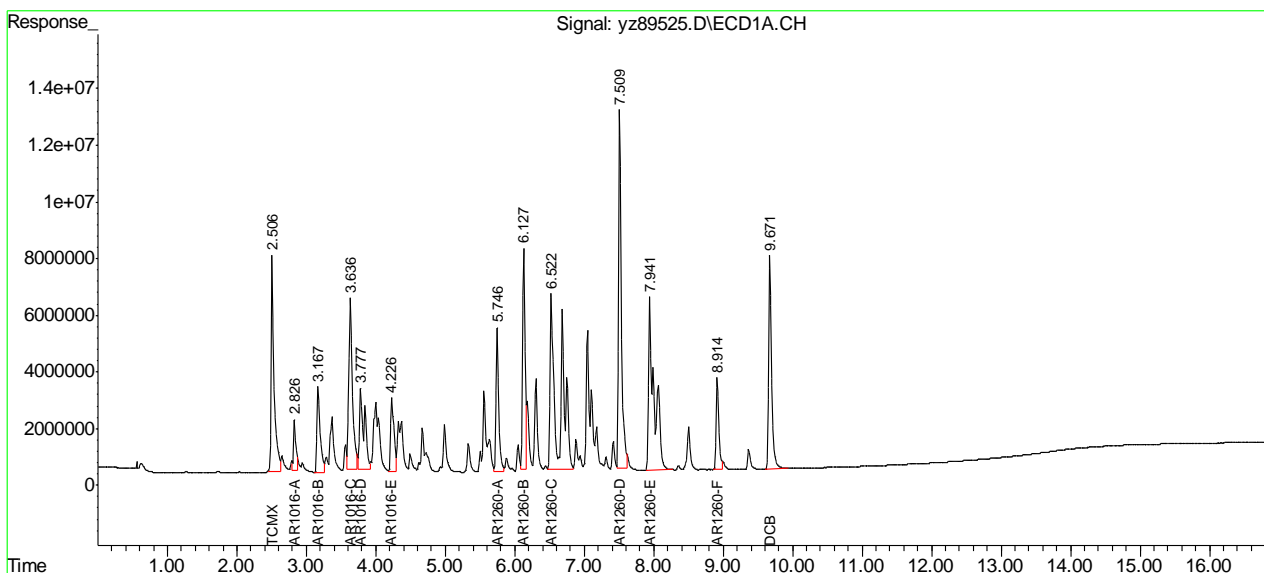
7.5.15
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Quantitation Report (QT Reviewed)

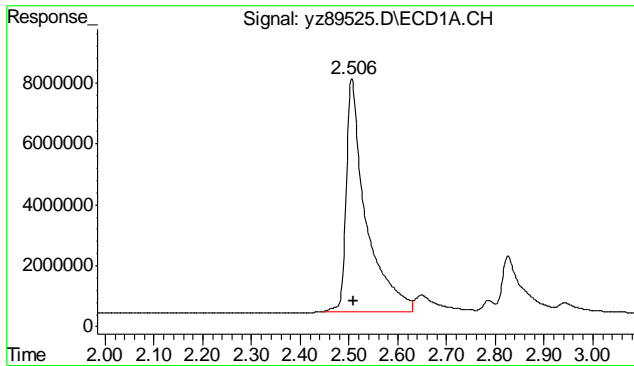
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89525.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 2:45 am
 Operator : sofyaz
 Sample : cc7547-750,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 98 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 06:51:10 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

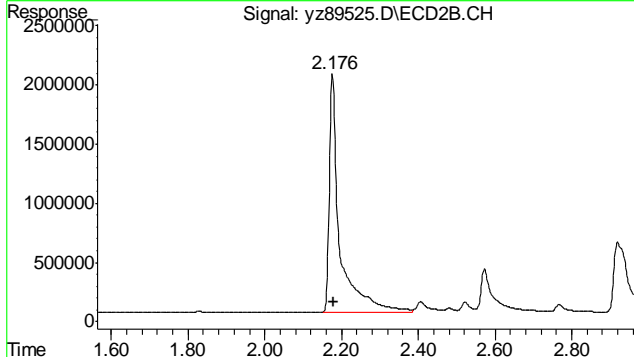
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



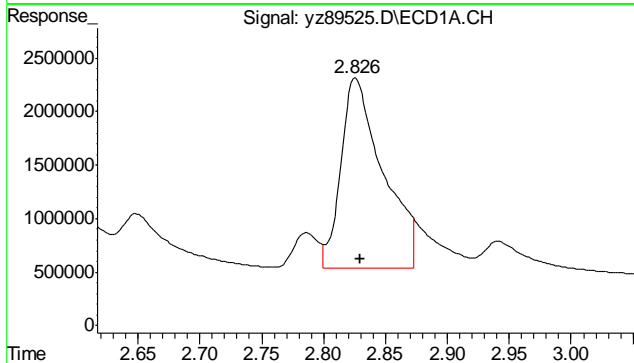
7.5.15
 7



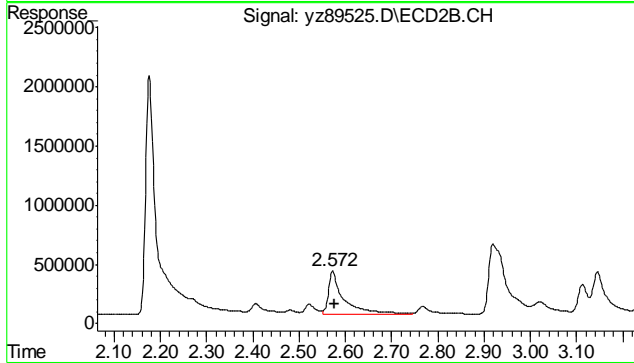
#1 TCMX
 R.T.: 2.506 min
 Delta R.T.: -0.004 min
 Response: 21391033
 Conc: 56.76 ppb



#1 TCMX
 R.T.: 2.176 min
 Delta R.T.: -0.004 min
 Response: 3827265
 Conc: 52.66 ppb

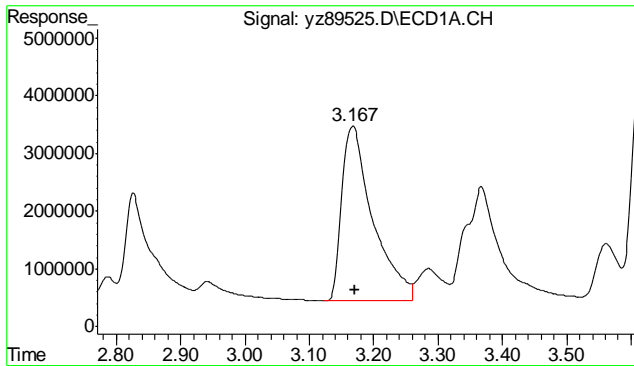


#2 AR1016-A
 R.T.: 2.826 min
 Delta R.T.: -0.004 min
 Response: 4200754
 Conc: 743.28 ppb m

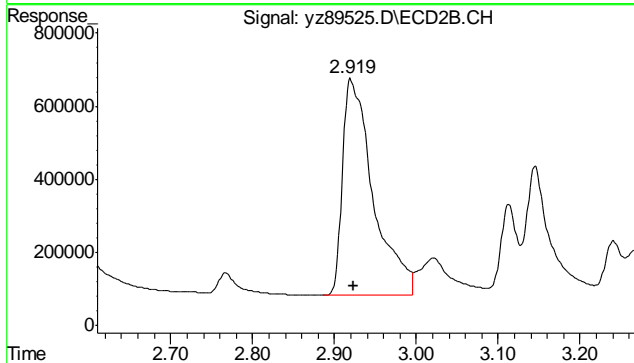


#2 AR1016-A
 R.T.: 2.572 min
 Delta R.T.: -0.004 min
 Response: 823117
 Conc: 683.96 ppb

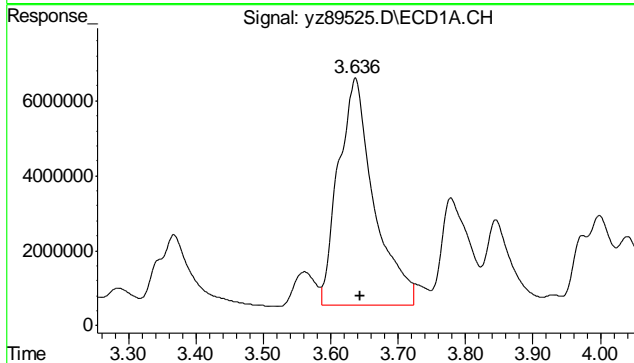
7.5.15
 7



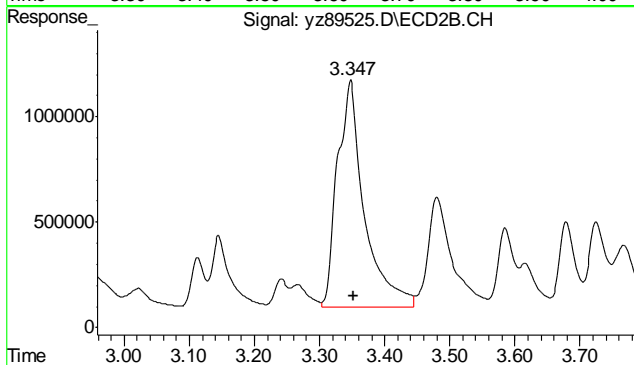
#3 AR1016-B
 R.T.: 3.167 min
 Delta R.T.: -0.003 min
 Response: 10141835
 Conc: 687.26 ppb



#3 AR1016-B
 R.T.: 2.919 min
 Delta R.T.: -0.004 min
 Response: 1548797
 Conc: 587.20 ppb

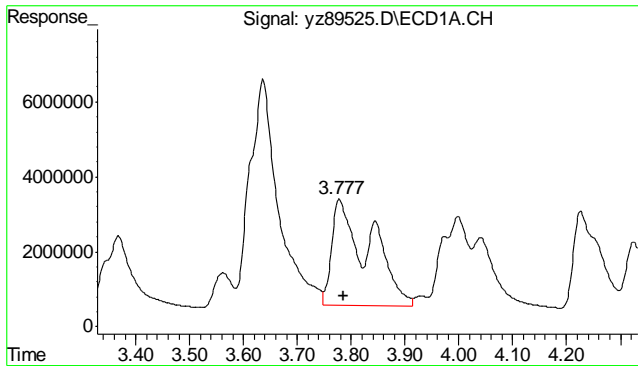


#4 AR1016-C
 R.T.: 3.636 min
 Delta R.T.: -0.008 min
 Response: 21714850
 Conc: 810.96 ppb m

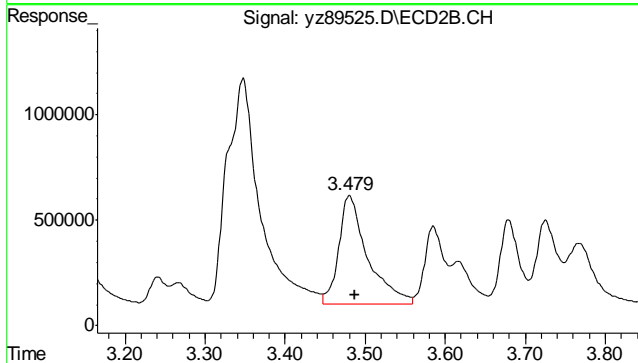


#4 AR1016-C
 R.T.: 3.347 min
 Delta R.T.: -0.006 min
 Response: 3094583
 Conc: 709.19 ppb m

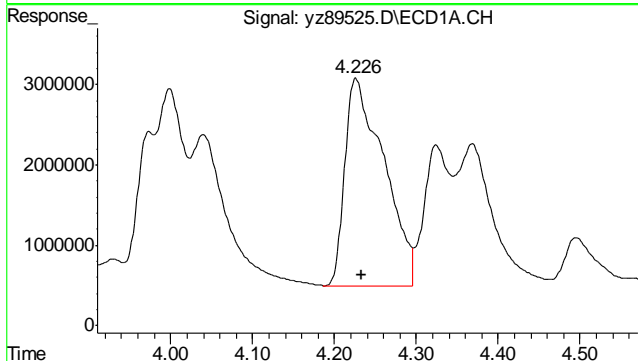
7.5.15
 7



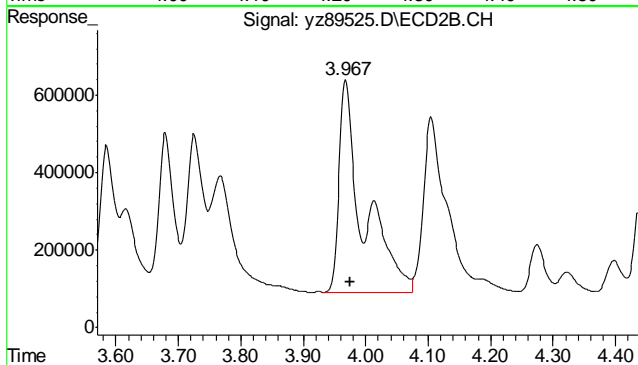
#5 AR1016-D
 R.T.: 3.777 min
 Delta R.T.: -0.008 min
 Response: 13787550
 Conc: 744.88 m



#5 AR1016-D
 R.T.: 3.479 min
 Delta R.T.: -0.008 min
 Response: 1293618
 Conc: 686.42 m

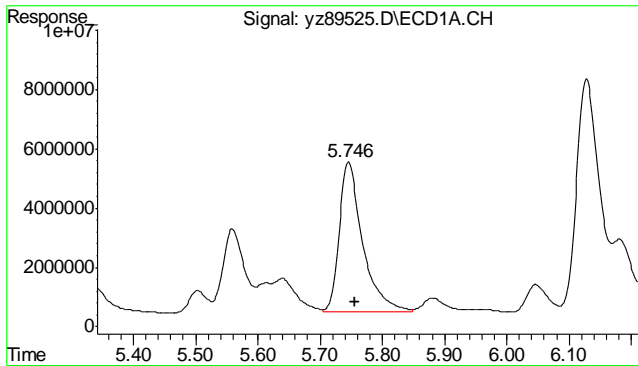


#6 AR1016-E
 R.T.: 4.226 min
 Delta R.T.: -0.008 min
 Response: 8560423
 Conc: 722.32

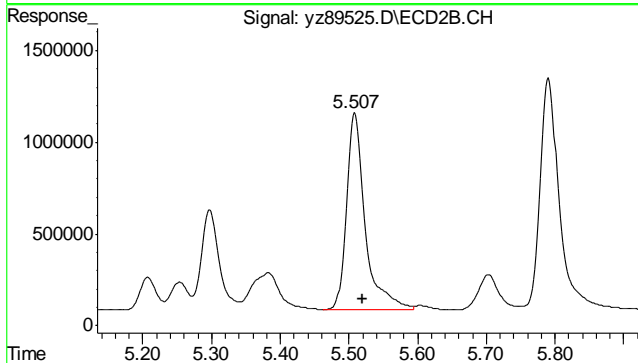


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: -0.008 min
 Response: 1471299
 Conc: 670.78 m

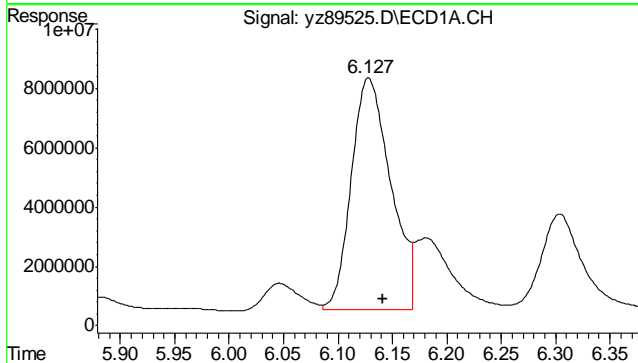
7.5.15
 7



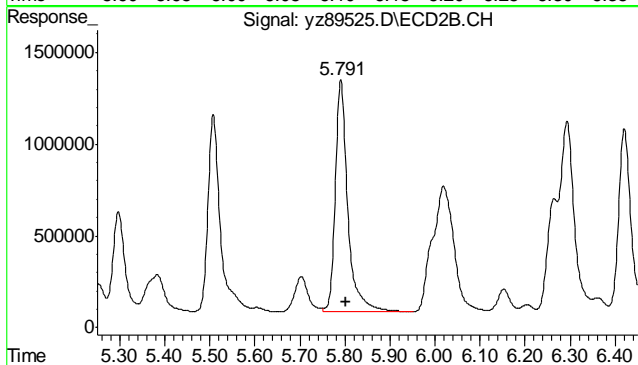
#7 AR1260-A
 R.T.: 5.746 min
 Delta R.T.: -0.011 min
 Response: 13358141
 Conc: 741.91 ppb m



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: -0.013 min
 Response: 2035360
 Conc: 640.72 ppb m

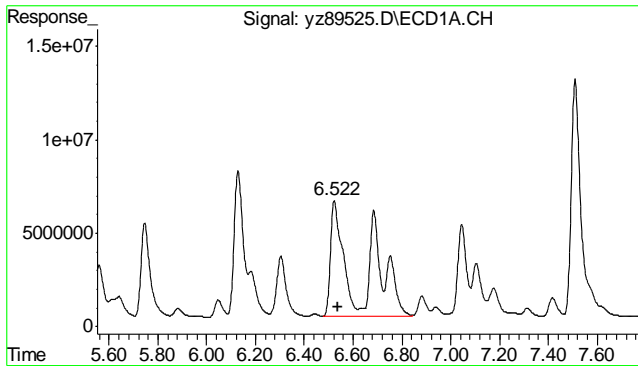


#8 AR1260-B
 R.T.: 6.127 min
 Delta R.T.: -0.014 min
 Response: 19876698
 Conc: 779.89 ppb m

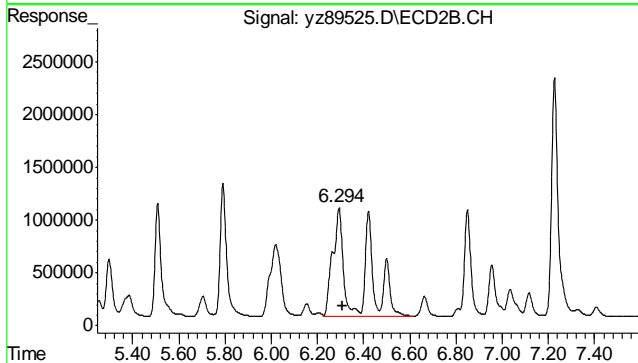


#8 AR1260-B
 R.T.: 5.791 min
 Delta R.T.: -0.013 min
 Response: 2455057
 Conc: 678.98 ppb

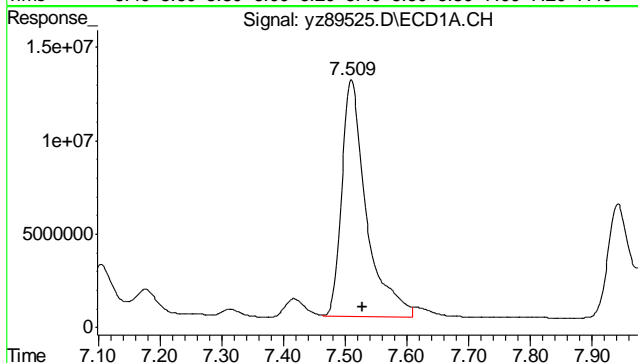
7.5.15
 7



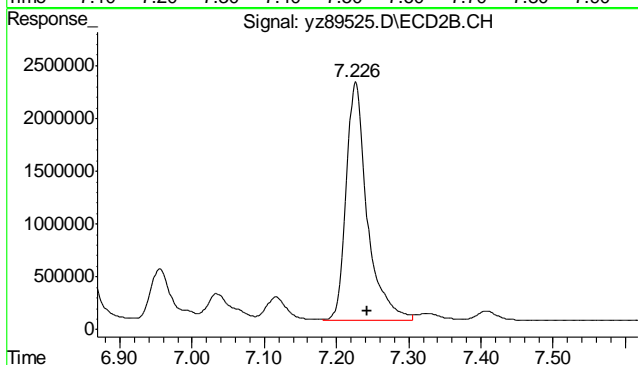
#9 AR1260-C
 R.T.: 6.522 min
 Delta R.T.: -0.014 min
 Response: 45092860
 Conc: 812.00 ppb m



#9 AR1260-C
 R.T.: 6.294 min
 Delta R.T.: -0.013 min
 Response: 6238893
 Conc: 694.93 ppb m

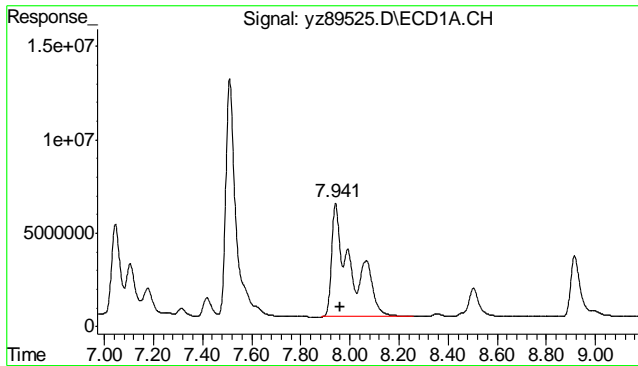


#10 AR1260-D
 R.T.: 7.509 min
 Delta R.T.: -0.019 min
 Response: 35003786
 Conc: 938.41 ppb m

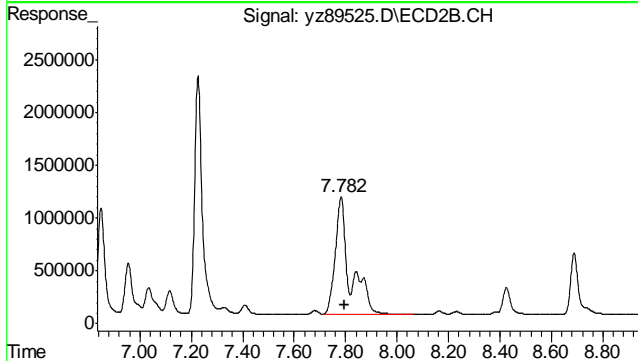


#10 AR1260-D
 R.T.: 7.226 min
 Delta R.T.: -0.016 min
 Response: 4593793
 Conc: 734.63 ppb

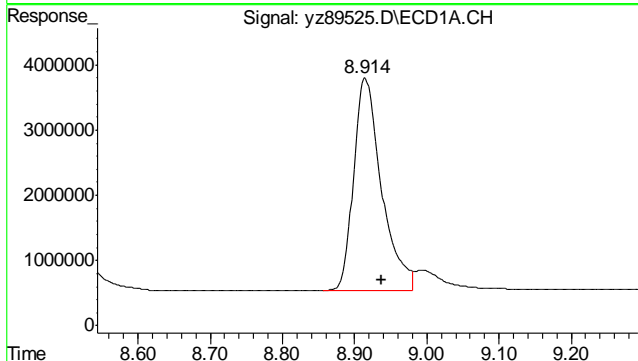
7.5.15
 7



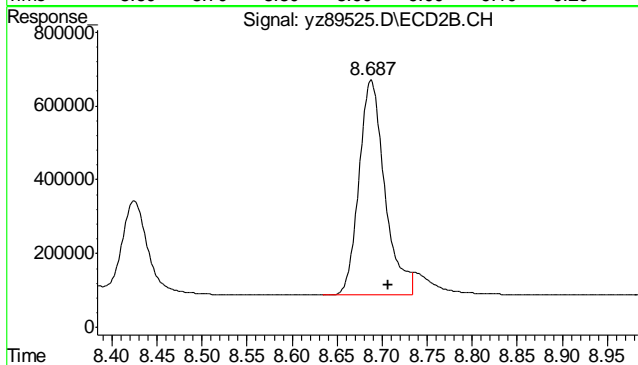
#11 AR1260-E
 R.T.: 7.941 min
 Delta R.T.: -0.019 min
 Response: 34275541
 Conc: 895.50 ppb m



#11 AR1260-E
 R.T.: 7.782 min
 Delta R.T.: -0.016 min
 Response: 4486479
 Conc: 734.74 ppb m

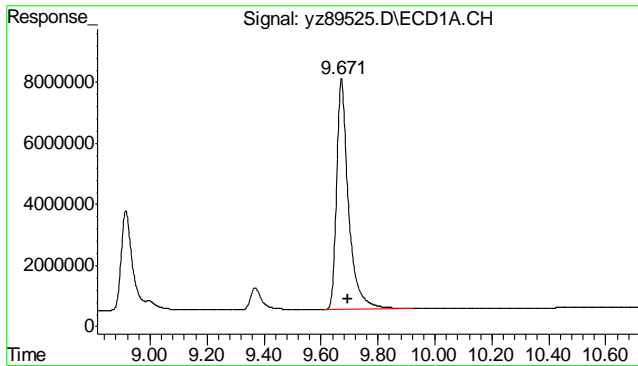


#12 AR1260-F
 R.T.: 8.914 min
 Delta R.T.: -0.024 min
 Response: 8713038
 Conc: 951.82

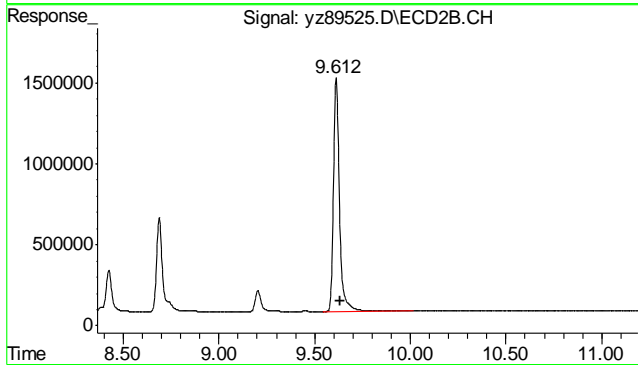


#12 AR1260-F
 R.T.: 8.687 min
 Delta R.T.: -0.019 min
 Response: 1166258
 Conc: 773.20 m

7.5.15
7



#13 DCB
 R.T.: 9.671 min
 Delta R.T.: -0.024 min
 Response: 21934207
 Conc: 66.66 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: -0.021 min
 Response: 3138960
 Conc: 54.08 ppb m

7.5.15
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89527.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 7:30 am
 Operator : sofyaz
 Sample : ecc7547-500,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 08:15:32 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.503	2.173	17117331	2522238	45.416m	34.705
Spiked Amount	40.000 Range	42 - 132	Recovery	=	113.54%	86.76%
13) s DCB	9.672f	9.612f	16117682	2256352	48.982m	38.877m
Spiked Amount	40.000 Range	30 - 150	Recovery	=	122.46%	97.19%
Target Compounds						
2) AR1016-A	2.823	2.570	3054815	470819	540.521m	402.110m#
3) AR1016-B	3.165	2.917	6650040	973087	450.641m	368.930
4) AR1016-C	3.635	3.347	13125773	1904099	490.195m	436.365m
5) AR1016-D	3.775	3.478	9230974	770798	498.708m	408.999m
6) AR1016-E	4.223	3.967	5943267	902970	501.486	411.675m
7) AR1260-A	5.743	5.507	8552488	1246018	475.002	392.238
8) AR1260-B	6.127	5.790	12473833	1487620	489.428	411.419
9) AR1260-C	6.522	6.292	28771381	3648410	518.093m	406.384m
10) AR1260-D	7.510f	7.225f	21216381	2692032	568.784m	430.506
11) AR1260-E	7.942f	7.782f	20067796	2604574	524.301m	426.546m
12) AR1260-F	8.915f	8.687f	5069103	681501	553.752	451.820m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

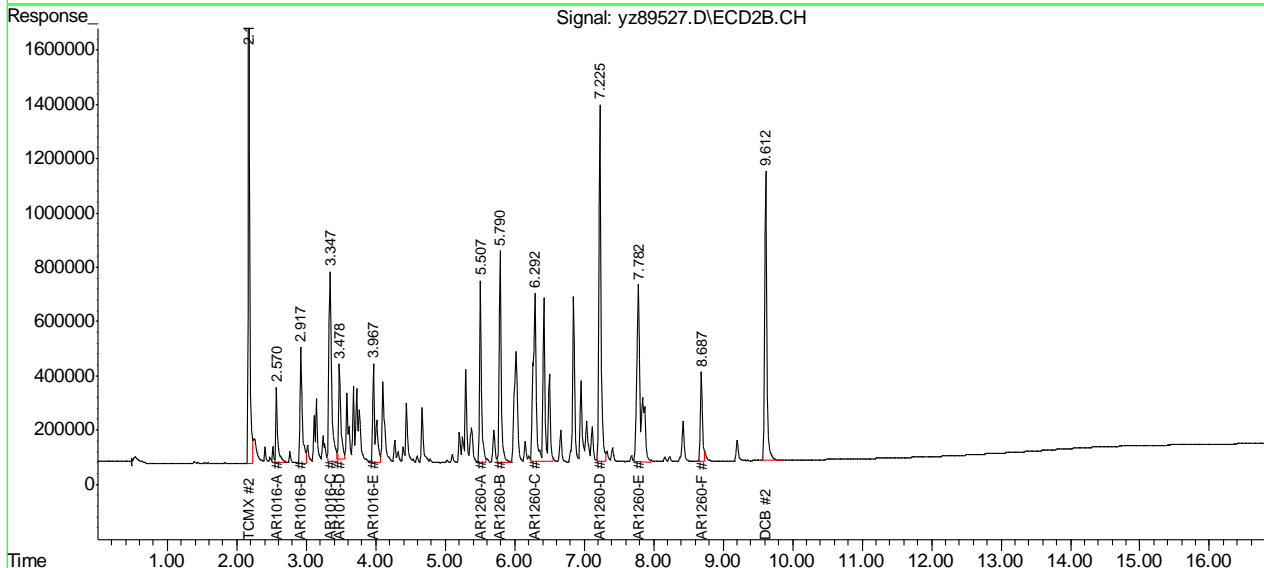
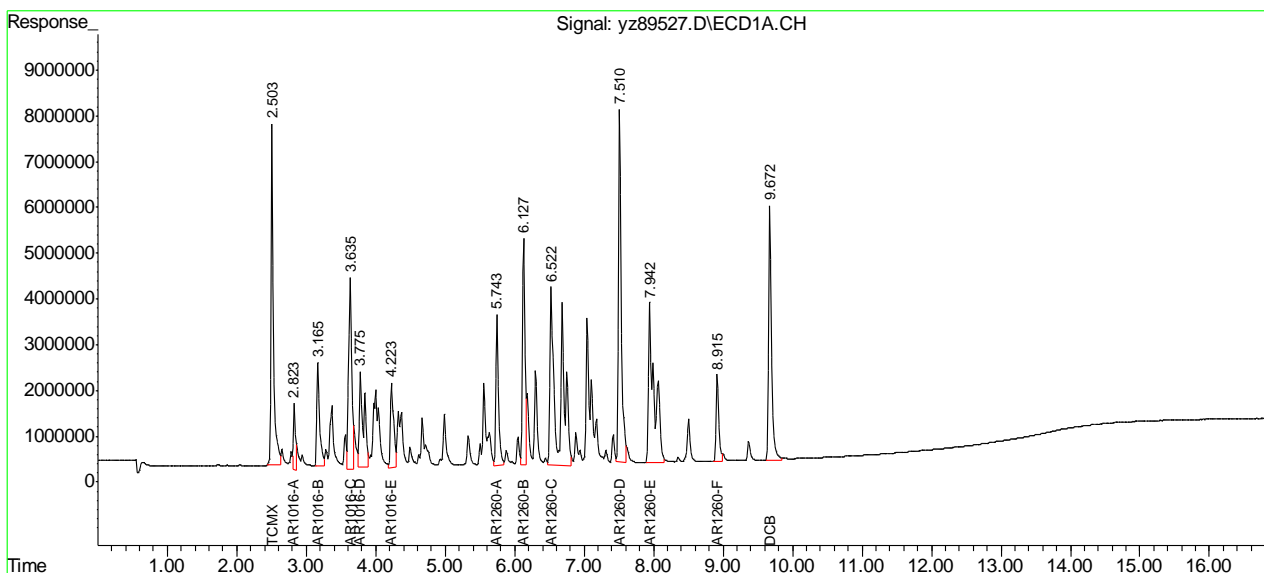
7.5.16
7

Quantitation Report (QT Reviewed)

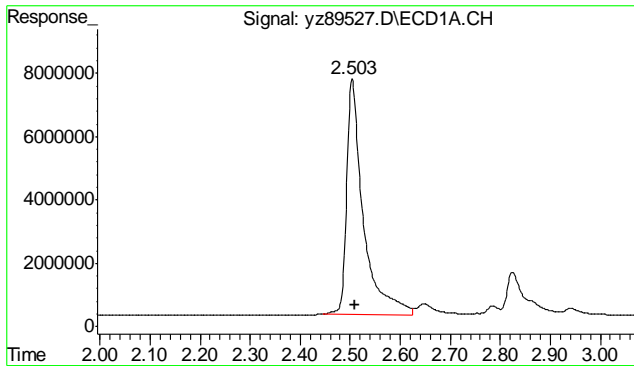
Data Path : C:\msdchem\1\DATA\YZ140428\
 Data File : yz89527.D
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
 Acq On : 29 Apr 2014 7:30 am
 Operator : sofyaz
 Sample : ecc7547-500,a1660
 Misc : op37808,gyz7550,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: RTEINT.P
 Integration File signal 2: RTEINT.P
 Quant Time: Apr 29 08:15:32 2014
 Quant Method : C:\msdchem\1\METHODS\PC140428.M
 Quant Title : p8082pcb-onPest2/Pest on GC20
 QLast Update : Sun Apr 27 07:19:04 2014
 Response via : Initial Calibration
 Integrator: RTE 6890 Scale Mode: Small noise peaks clipped

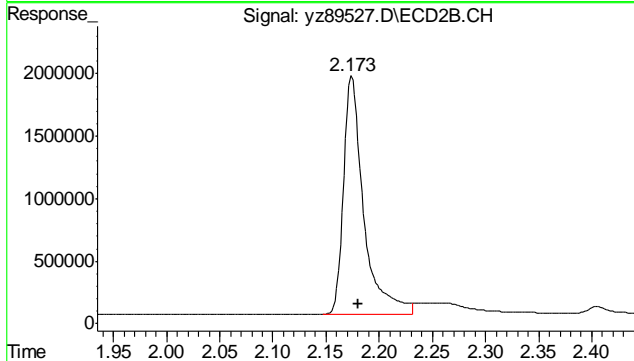
Volume Inj. : 1 ul only on GC20
 Signal #1 Phase : pest2 front Signal #2 Phase: pest rear
 Signal #1 Info : 0.32 mm ID Signal #2 Info : 0.32 mm ID



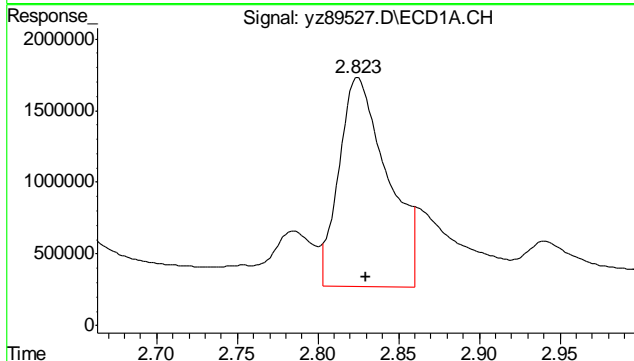
7.5.16
 7



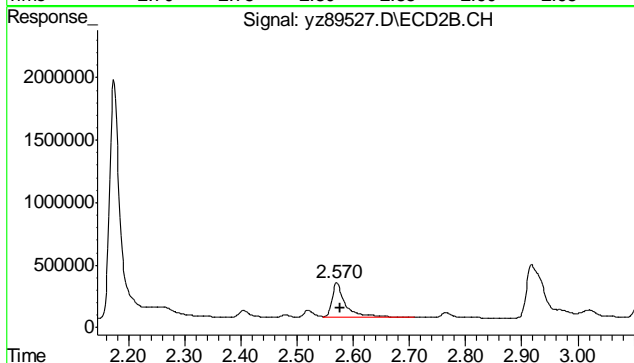
#1 TCMX
 R.T.: 2.503 min
 Delta R.T.: -0.007 min
 Response: 17117331
 Conc: 45.42 ppb m



#1 TCMX
 R.T.: 2.173 min
 Delta R.T.: -0.007 min
 Response: 2522238
 Conc: 34.70 ppb

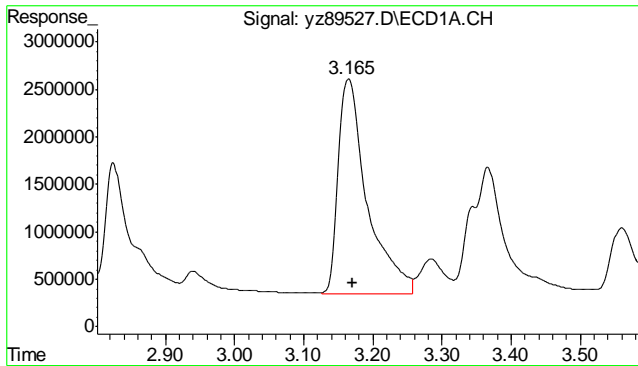


#2 AR1016-A
 R.T.: 2.823 min
 Delta R.T.: -0.007 min
 Response: 3054815
 Conc: 540.52 ppb m

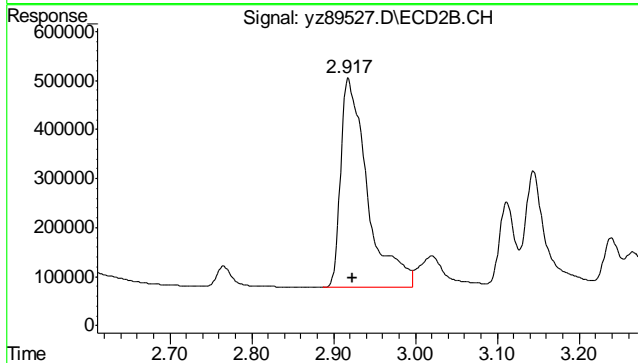


#2 AR1016-A
 R.T.: 2.570 min
 Delta R.T.: -0.007 min
 Response: 470819
 Conc: 402.11 ppb m

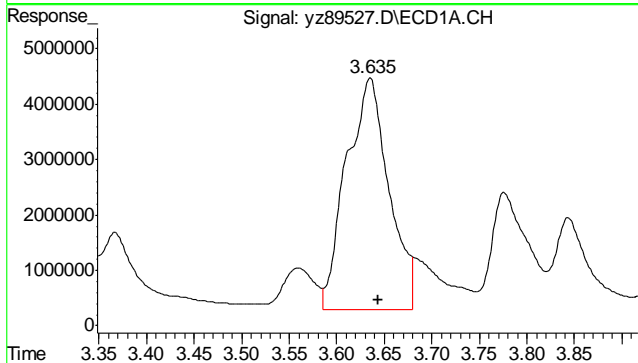
7.5.16
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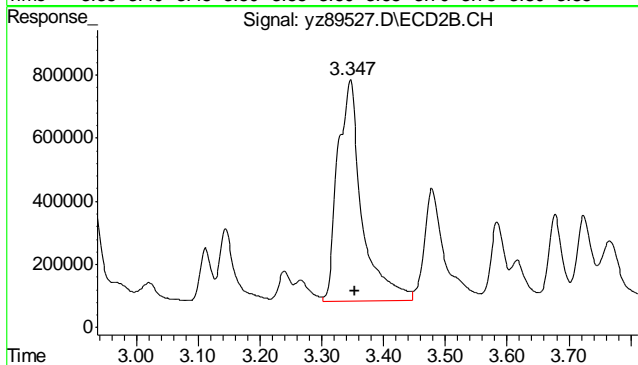
#3 AR1016-B
 R.T.: 3.165 min
 Delta R.T.: -0.005 min
 Response: 6650040
 Conc: 450.64 ppb m



#3 AR1016-B
 R.T.: 2.917 min
 Delta R.T.: -0.007 min
 Response: 973087
 Conc: 368.93 ppb

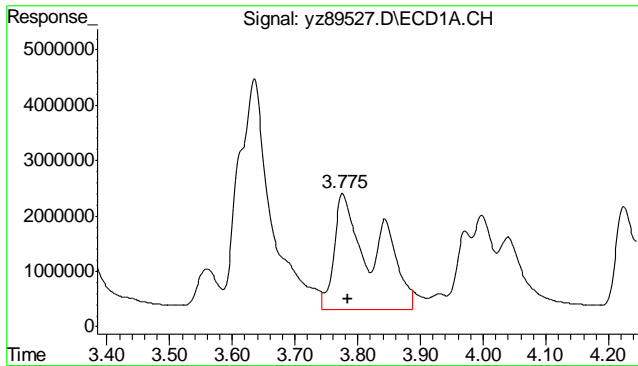


#4 AR1016-C
 R.T.: 3.635 min
 Delta R.T.: -0.008 min
 Response: 13125773
 Conc: 490.20 ppb m

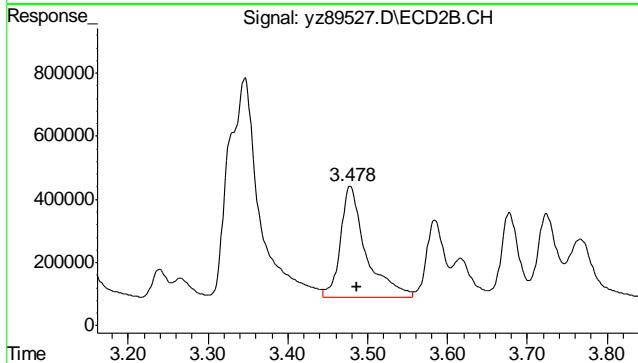


#4 AR1016-C
 R.T.: 3.347 min
 Delta R.T.: -0.007 min
 Response: 1904099
 Conc: 436.37 ppb m

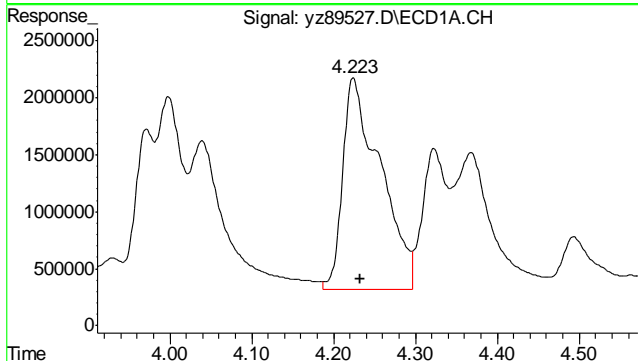
7.5.16
 7



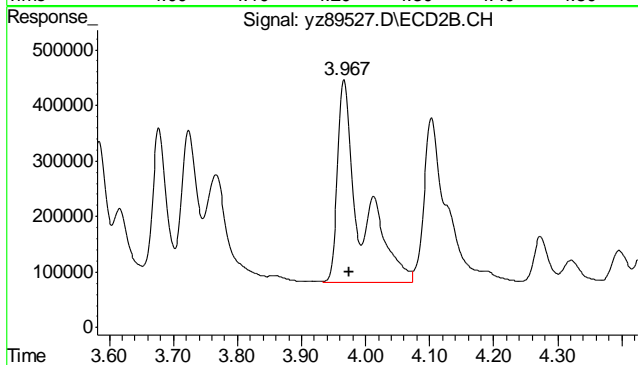
#5 AR1016-D
 R.T.: 3.775 min
 Delta R.T.: -0.010 min
 Response: 9230974
 Conc: 498.71 m



#5 AR1016-D
 R.T.: 3.478 min
 Delta R.T.: -0.008 min
 Response: 770798
 Conc: 409.00 m

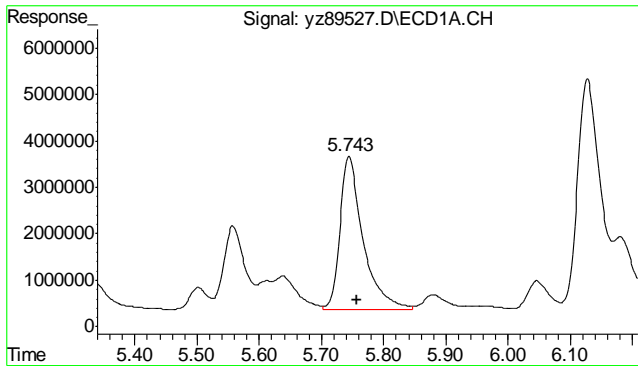


#6 AR1016-E
 R.T.: 4.223 min
 Delta R.T.: -0.010 min
 Response: 5943267
 Conc: 501.49

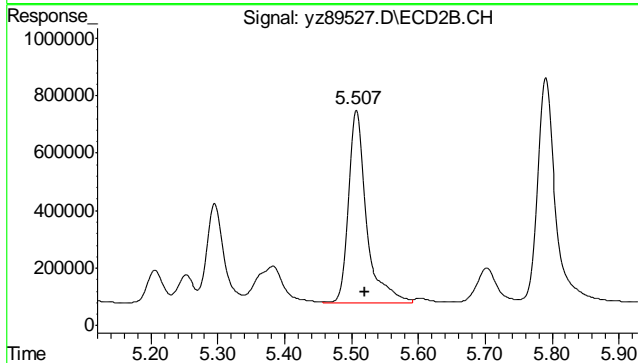


#6 AR1016-E
 R.T.: 3.967 min
 Delta R.T.: -0.008 min
 Response: 902970
 Conc: 411.67 m

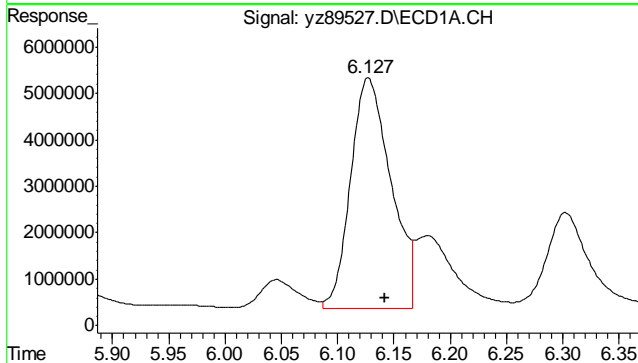
7.5.16
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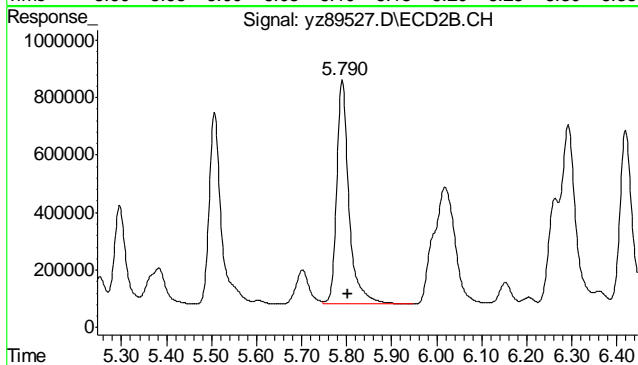
#7 AR1260-A
 R.T.: 5.743 min
 Delta R.T.: -0.013 min
 Response: 8552488
 Conc: 475.00 ppb



#7 AR1260-A
 R.T.: 5.507 min
 Delta R.T.: -0.013 min
 Response: 1246018
 Conc: 392.24 ppb

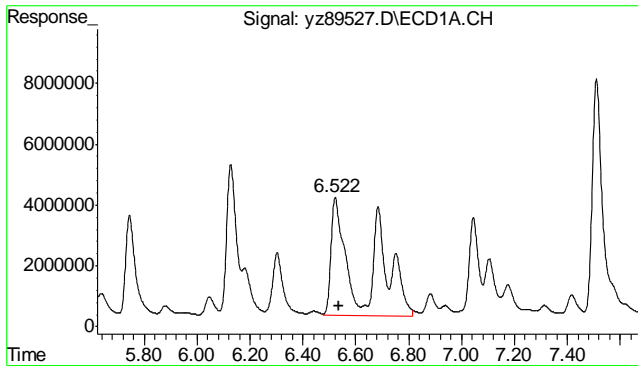


#8 AR1260-B
 R.T.: 6.127 min
 Delta R.T.: -0.015 min
 Response: 12473833
 Conc: 489.43 ppb

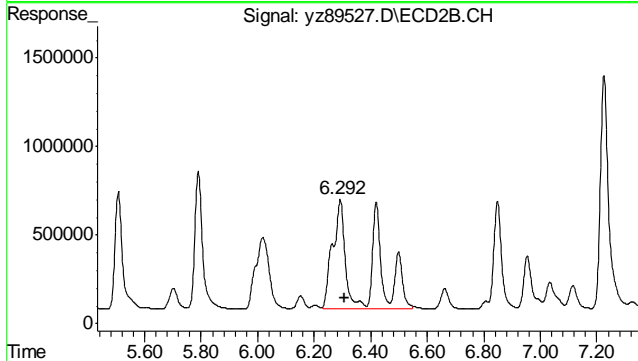


#8 AR1260-B
 R.T.: 5.790 min
 Delta R.T.: -0.013 min
 Response: 1487620
 Conc: 411.42 ppb

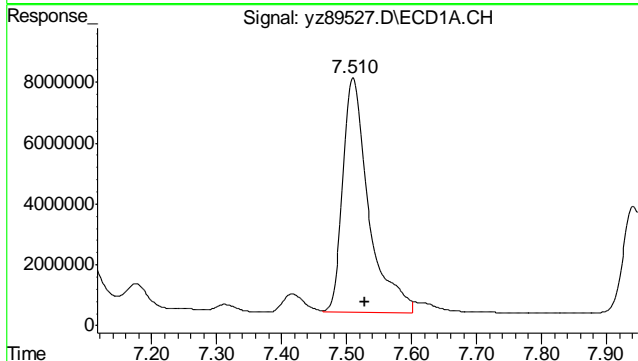
7.5.16
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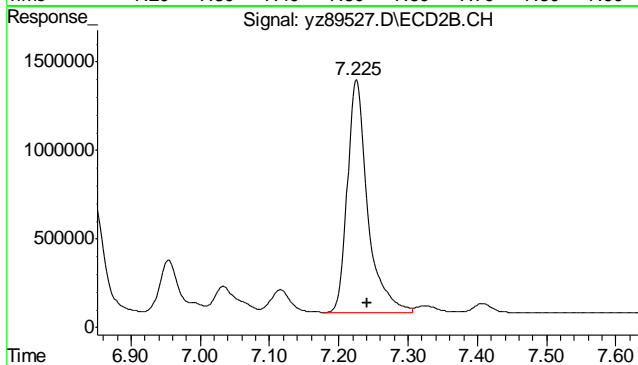
#9 AR1260-C
 R.T.: 6.522 min
 Delta R.T.: -0.015 min
 Response: 28771381
 Conc: 518.09 ppb m



#9 AR1260-C
 R.T.: 6.292 min
 Delta R.T.: -0.015 min
 Response: 3648410
 Conc: 406.38 ppb m

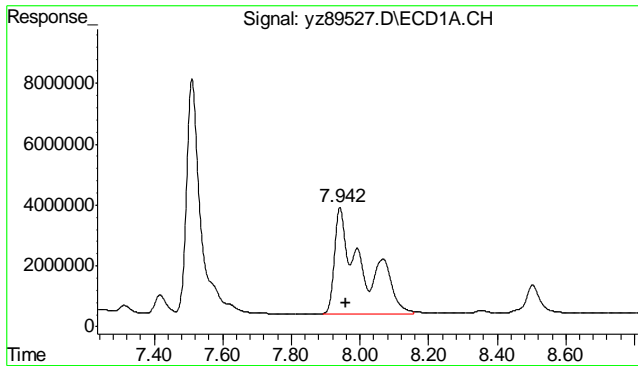


#10 AR1260-D
 R.T.: 7.510 min
 Delta R.T.: -0.018 min
 Response: 21216381
 Conc: 568.78 ppb m

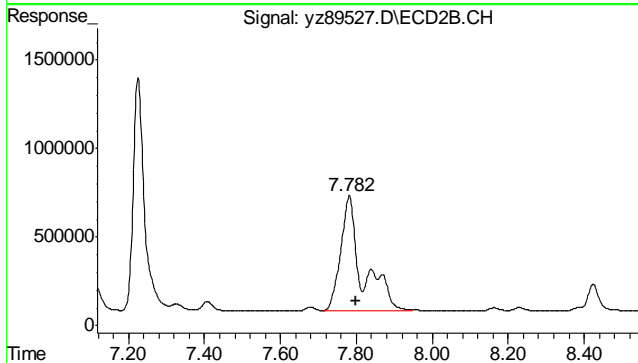


#10 AR1260-D
 R.T.: 7.225 min
 Delta R.T.: -0.017 min
 Response: 2692032
 Conc: 430.51 ppb

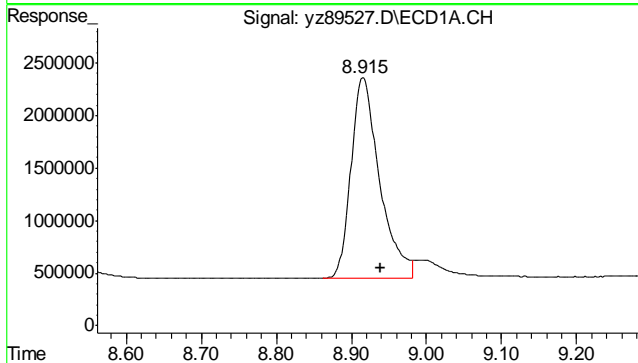
7.5.16
 7



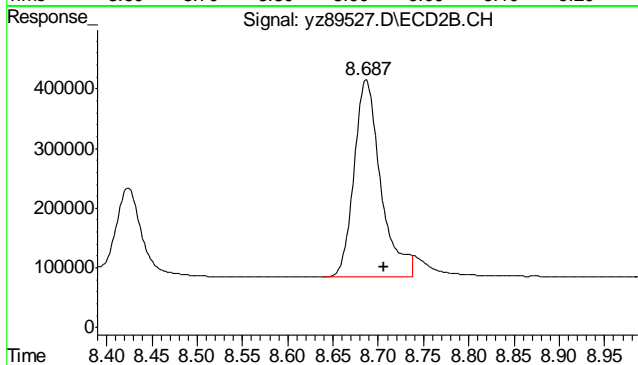
#11 AR1260-E
 R.T.: 7.942 min
 Delta R.T.: -0.018 min
 Response: 20067796
 Conc: 524.30 ppb m



#11 AR1260-E
 R.T.: 7.782 min
 Delta R.T.: -0.017 min
 Response: 2604574
 Conc: 426.55 ppb m

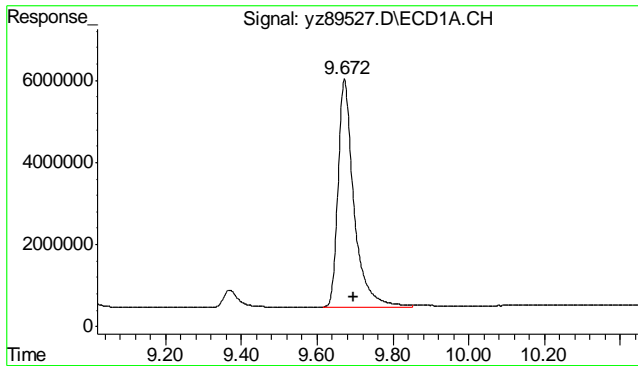


#12 AR1260-F
 R.T.: 8.915 min
 Delta R.T.: -0.023 min
 Response: 5069103
 Conc: 553.75

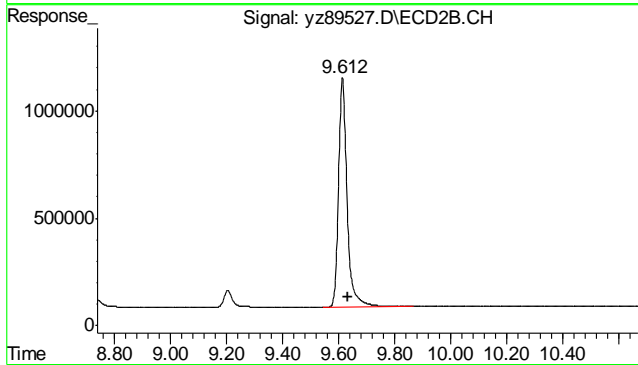


#12 AR1260-F
 R.T.: 8.687 min
 Delta R.T.: -0.020 min
 Response: 681501
 Conc: 451.82 m

7.5.16
 7



#13 DCB
 R.T.: 9.672 min
 Delta R.T.: -0.023 min
 Response: 16117682
 Conc: 48.98 ppb m



#13 DCB
 R.T.: 9.612 min
 Delta R.T.: -0.022 min
 Response: 2256352
 Conc: 38.88 ppb m

7.5.16
 7

GC Analysis Log - Extractables

Run Date: 04-24-2014

Analyst Signature: SZ

Standard Data

Lot #	Description	Conc
GS17457	A1660	500 ug/l

Column Information: Front: RTX-CL Pest 1
 Rear: RTX-CL Pest 2

Sequence File: 140424 A. 800
 Quantitation Methods: PC140424A.M

Instrument Run Batches: GVZ 7547

Data Acquisition Methods: GC20 PCB Inj. Vol: 1 µl
 Inj. Vol: 1 µl

Date of ICAL: ✓ ICAL Verified ✓ Sample positions verified against sequence: ✓

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
25	YZ89359	Hex	NA	8082	NA	NA	
100	CC7546-500	CC7546-500					test → no go need ICM
99	61-63	CC-1000					Prime
75	64-66						Hexane
76	YZ89367	IC7547-50					A1660 L6 } GS17460
77	68	-100					-L5 } -59
78	69	IC7547-250					-L4 } -58
79	70	IC7547-500					-L3 } -57
80	71	-750					L2 } ICM -56
81	72	-1000					A1660 L1 } -55
82	73	-500					a 21/54 } -61
83	74	-500					a 32/62 } -62
84	75	-500					a 42/68 } -63
85	76	IC7547-500					a 48 } -64
86	77	ICV 7547-500					ICV 1660 OK GS17465
87	78	PIBUL					
	79						
	80						
	81						
	82						
	83						
	84						
	85						
	86						
	87						
87	88	PIBUL					
79	YZ89389	CC7547-800	NA	8082	NA	NA	OK

MTX = Matrix: Designate W for water, S for soil, O for oil. Dilution Solvent: NA Lot#: NA

7.6.1
 7

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GC Analysis Log - Extractables

Run Date: 4-28-2014

Analyst Signature: SZ

Standard Data

Lot #	Description	Conc
6817457	A1660	500
6817456	A1660	750
/		

Column Information: Front: RTX-CL Pest 1
 Rear: RTX-CL Pest 2
 Sequence File: 140428-SCA
 Quantitation Methods: 140428.M
 Instrument Run Batches: 642 7550
 Data Acquisition Methods: GC20 PCB Inj. Vol: 1 µl
 Inj. Vol: 1 µl

Date of ICAL: 4/24/14 ICAL Verified Sample positions verified against sequence:

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
87	4289474	IBLIL	NA	8082A	NA	NA	
98	-75	CC7547-500	↓		↓		old vial - 2
100	-76	CC7547-750	NA		NA		fresh OK, OK R(Ave)
1	-77	MC3001-33	OP3777		S		OK, OK DCBLR
2	-78	-34	↓				✓
3	-79	-35	↓				✓
4	-80	-36	↓				✓
5	-81	↓ -32	↓			NA	✓
6	-82	MC3001-32	OP3777		S	200X	✓
7	-83	OP37808-NB	37808		S	NA	✓
8	-84	-BS	↓				✓
9	-85	-MS	↓				✓ SY 60 30076-4MS/MSD
10	✓ -86	OP37808-MSD	↓		S	↓	✓
100	4289487	CC7547-750	NA		NA	NA	FOR R-OK(Ave) DCBLR
11	-88	OP37808-MS1	37808		S		✓ 60 1/2 9MS/MSD
12	-89	↓ MSB1					✓ 60 1/2 9MS/MSD
13	-90	MC30076-1					SY/60
14	-91	2					↓
15	-92	3					↓
16	-93	4					60 LAL 5418
17	-94	5					SY/60 ↓
18	-95	6					↓
19	-96	↓ -7	↓				↓
20	-97	MC30076-8	37808		S		↓
100	✓ -98	CC7547-750	NA		NA		OIL F
21	4289499	MC30076-9	37808	✓	S	↓	SY/60
22	4289500	MC30076-10	↓	8082A	S	NA	RR at 5X SY 60

MTX = Matrix: Designate W for water, S for soil, O for oil. Dilution Solvent: Baker Lot#: 3347

Review: _____

7.6.2
7

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GC Analysis Log - Extractables

Run Date: 4-28-2014

Analyst Signature: SZ

Standard Data

Lot #	Description	Conc

Column Information: Front: RTX-CL Pest
 Rear: RTX-CL Pest
 Sequence File: _____
 Quantitation Methods: _____
 Instrument Run Batches: _____
 Data Acquisition Methods: _____
 Inj. Vol: _____
 Inj. Vol: _____

Date of ICAL: 4/24/14 ICAL Verified Sample positions verified against sequence:

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
23	YZ89501	MC30076-11	0P37808	8062A	S	NA	✓ SM/60
24	02	-12					✓
25	03	-13					✓
26	04	-14					✓
27	05	SM/60 15					✓
28	06	MC30076-18	0P37808				✓ ✓
29	07	0P37800-14A	0P37800				✓
30	08	-B3			S		✓
99	09	CE7547-500	NA		NA		OK, OK
31	10	MC30064-4	0P37800		S		✓ ✓ 65
32	11	-5					✓
33	12	-9					✓
34	13	-10					✓ SM/60 ext
35	14	-11					✓ 65
36	15	-15					✓
37	16	-16					✓
38	17	-20					✓
39	18	-21					✓
40	19	MC30064-25	0P37800		S		✓ ✓
99	20	CE7547-500	NA		NA		OIL
41	21	MC30064-26	37800		S		SM/60 ext ↓ RL
42	22	-30					✓
43	23	-31					✓
44	24	-35			S		✓
98	25	CE7547-750	NA		NA	NA	AVL ✓
45	✓ 26	MC30076-10	37808		S	5X	✓ SM/60
99	YZ89527	CE7547-500	NA	8062A	NA	NA	OIL ✓ AVER

MTX = Matrix: Designate W for water, S for soil, O for oil. Dilution Solvent: Baker Lot#: 3341

7.6.2
7

Approximate Gram weight equals +/- 0.5g

Extracted by: ne
Spike Witness: _____
Concentrated by: FE 4/27/2014
Fractionated by: _____

Date/Time: 4.26.2014 14:00
Date/Time: _____
Batch: OP37808
Matrix: Soil/Solid; Sand Lot: _____

Extraction Method: ASE #1 ASE #2 ASE #3 ASE #4 Sonicate
Soxhlet: SW 3540C SW 3545A SW 3545A SW 3545A SW 3545A SW 3550B

Analysis Method: PCB/PAH
Waste Dilution: SW3580 Micro. SW 3546

Sample	Bottle No.	ASE Position	Initial Weight (g)	Final Volume (ml)	**Cleanup/Comments (3660B, 3630, 3665 other)	Received by: Date:
1 OP37808 MB	n/a	n/a	15.30	100ul		
2 ↓ AS	↓		15.44			4/28/14 SZ
3 MC 36076 4ms	1		15.28		damp clay / Small Rocks	
4 -4ms			15.51		↓	
5 -4ms			15.51		↓	
6 -4ms			15.58		↓	
7 -1			15.61		↓	
8 -2			15.27		↓ 1 Big Rocks	
9 -3			15.68		↓ 1 Rocks	
10 -4			15.59		↓ damp clay / Small Rocks	
11 -5			15.55		↓	
12 -6			15.16		↓ Hard clay / Rocks	
13 -7			15.18		↓ damp clay / Small Rocks	
14 -8			15.38		↓	
15 -9			15.34		↓	
16 -10			15.29		↓	
17 -11			15.74		↓ Soil	
18 -12			15.77		↓ damp soil / Hard clay / Rocks	
19 -13			15.42		↓ damp clay	
20 -14			15.27		↓ Soil / Rocks	
21 -15			15.52		↓	
22 ↓ -16 ↓	↓	↓	15.49		↓ damp clay / Rocks	4/28/14 SZ
23						
24						
25						

Fraction	Bottle #	Lot #	Concentration	Volume	H2SO4 Lot # J-T Baker 52478
Surrogate: PCB	1	PO 7163	40 ug/ml	100ul	Ether: _____
Surrogate:					MeCl2: _____
					Hexane: <u>65260</u>
					MeCl2/Acetone: _____
Spike: PCB	1	PO 7124	40.0 ug/ml	100ul	Acetone: _____
Spike:					Acetonitrile: _____
Spike:					Na Sulfate Lot #: <u>B-850</u>
Spike:					Silica Lot #: _____
Spike:					SPE MFG/Lot #: _____
Hexane Frac. Volume:	NA	NA	NA		Copper: <u>ALD NE CA 144071E</u>
Soxhlet Start/Stop Date/Time:					Hydromatrix: _____
					Florisil: _____
					Sand Lot #: _____

Balance ID: ACC-8
Filter Paper Lot # _____ Filtered By _____
Water Bath Temp: 40°C Water Bath ID: _____
Laboratory Percent Humidity: _____

*Note volume of extract: N = Normal
L = Low

Reviewed by: _____ Tray #: LC-12
** Circle as applicable: 3660B = Cu cleanup; 3630 = Silica gel cleanup; 3665 = Acid cleanup; 3620 = Florisil
**For Soxhlet extraction document date/time started and finished

OP001-17 (08/08/13)
50

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30076-1 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-10-0-2

Wet Weight (Total)	29.468	g
Tare Weight	19.577	g
Dry Weight (Total)	28.225	g
Solids, Percent	87.4	%

Sample: MC30076-2 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-10-2-4

Wet Weight (Total)	36.355	g
Tare Weight	25.653	g
Dry Weight (Total)	35.188	g
Solids, Percent	89.1	%

Sample: MC30076-3 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-110-2-4

Wet Weight (Total)	36.757	g
Tare Weight	26.918	g
Dry Weight (Total)	35.393	g
Solids, Percent	86.1	%

Sample: MC30076-4 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-10-4-6

Wet Weight (Total)	38.671	g
Tare Weight	27.755	g
Dry Weight (Total)	37.188	g
Solids, Percent	86.4	%

Sample: MC30076-5 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-10-6-7

Wet Weight (Total)	26.07	g
Tare Weight	16.962	g
Dry Weight (Total)	25.154	g
Solids, Percent	89.9	%

Sample: MC30076-6 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-11-0-2

Wet Weight (Total)	39.318	g
Tare Weight	30.947	g
Dry Weight (Total)	38.355	g
Solids, Percent	88.5	%

8.1
8

Percent Solids Raw Data Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30076-7 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-11-2-4

Wet Weight (Total)	36.153	g
Tare Weight	26.911	g
Dry Weight (Total)	35.097	g
Solids, Percent	88.6	%

Sample: MC30076-8 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-111-2-4

Wet Weight (Total)	27.62	g
Tare Weight	18.355	g
Dry Weight (Total)	26.673	g
Solids, Percent	89.8	%

Sample: MC30076-9 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-11-4-6

Wet Weight (Total)	33.673	g
Tare Weight	24.407	g
Dry Weight (Total)	32.581	g
Solids, Percent	88.2	%

Sample: MC30076-10 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-11-6-7

Wet Weight (Total)	39.829	g
Tare Weight	29.463	g
Dry Weight (Total)	38.479	g
Solids, Percent	87	%

Sample: MC30076-11 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-12-0-2

Wet Weight (Total)	33.185	g
Tare Weight	24.343	g
Dry Weight (Total)	31.695	g
Solids, Percent	83.1	%

Sample: MC30076-12 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-12-2-4

Wet Weight (Total)	27.66	g
Tare Weight	18.274	g
Dry Weight (Total)	26.661	g
Solids, Percent	89.4	%

8.1
8

Percent Solids Raw Data Summary

Job Number: MC30076
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30076-13 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-12-4-6

Wet Weight (Total)	33.032	g
Tare Weight	24.256	g
Dry Weight (Total)	31.721	g
Solids, Percent	85.1	%

Sample: MC30076-14 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-13-0-2

Wet Weight (Total)	40.724	g
Tare Weight	30.661	g
Dry Weight (Total)	39.058	g
Solids, Percent	83.4	%

Sample: MC30076-15 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-13-2-4

Wet Weight (Total)	37.173	g
Tare Weight	26.487	g
Dry Weight (Total)	36.271	g
Solids, Percent	91.6	%

Sample: MC30076-16 **Analyzed:** 25-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A1-SB-13-4-6

Wet Weight (Total)	37.279	g
Tare Weight	26.883	g
Dry Weight (Total)	35.671	g
Solids, Percent	84.5	%

8.1
8

Technical Report for

AECOM

UTC - Debris Pile

Accutest Job Number: MC30120

Sampling Date: 04/25/14

Report to:

Lindsay.Mitchell@aecom.com

Total number of pages in report: **355**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



Reza Fand
Lab Director

Client Service contact: Matthew Morrell 508-481-6200

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Sample Summary

AECOM

Job No: MC30120

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30120-1	04/25/14	09:20 PS	04/26/14	SO	Soil	A2-SB-02-0-2
MC30120-2	04/25/14	09:30 PS	04/26/14	SO	Soil	A2-SB-02-2-4
MC30120-3	04/25/14	09:35 PS	04/26/14	SO	Soil	A2-SB-02-4-6
MC30120-4	04/25/14	09:40 PS	04/26/14	SO	Soil	A2-SB-02-6-8
MC30120-5	04/25/14	09:45 PS	04/26/14	SO	Soil	A2-SB-03-0-2
MC30120-6	04/25/14	09:48 PS	04/26/14	SO	Soil	A2-SB-03-2-4
MC30120-7	04/25/14	10:00 PS	04/26/14	SO	Soil	A2-SB-03-4-6
MC30120-8	04/25/14	10:05 PS	04/26/14	SO	Soil	A2-SB-04-0-2
MC30120-9	04/25/14	10:06 PS	04/26/14	SO	Soil	A2-SB-04-2-4
MC30120-10	04/25/14	10:08 PS	04/26/14	SO	Soil	A2-SB-104-2-4
MC30120-11	04/25/14	10:10 PS	04/26/14	SO	Soil	A2-SB-04-4-6
MC30120-12	04/25/14	10:18 PS	04/26/14	SO	Soil	A2-SB-05-0-2
MC30120-13	04/25/14	10:20 PS	04/26/14	SO	Soil	A2-SB-05-2-4

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Sample Summary

(continued)

AECOM

Job No: MC30120

UTC - Debris Pile

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
MC30120-14	04/25/14	10:22 PS	04/26/14	SO	Soil	A2-SB-05-4-6
MC30120-14D	04/25/14	10:22 PS	04/26/14	SO	Soil Dup/MSD	A2-SB-05-4-6
MC30120-14S	04/25/14	10:22 PS	04/26/14	SO	Soil Matrix Spike	A2-SB-05-4-6
MC30120-15	04/25/14	13:20 PS	04/26/14	SO	Soil	A2-SB-08-0-2
MC30120-16	04/25/14	13:25 PS	04/26/14	SO	Soil	A2-SB-07-0-2
MC30120-17	04/25/14	13:30 PS	04/26/14	SO	Soil	A2-SB-06-0-2

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM

Job No MC30120

Site: UTC - Debris Pile

Report Date 4/30/2014 3:55:19 PM

17 Sample(s) were collected on 04/25/2014 and were received at Accutest on 04/26/2014 properly preserved, at 0.5 Deg. C and intact. These Samples received an Accutest job number of MC30120. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GC By Method SW846 8082A

Matrix: SO

Batch ID: OP37822

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) MC30120-14MS, MC30120-14MSD were used as the QC samples indicated.
- MC30120-2,3,5,8,9,11,12,14,15,16,17 for Aroclor 1254: Estimated value due to the presence of other Aroclor pattern.
- MC30120-1 for Aroclor 1260: Estimated value due to the presence of other Aroclor pattern.
- MC30120-1 for Aroclor 1248: Estimated value due to the presence of other Aroclor pattern.
- Continuing calibration check standard GBK1213-CC1213 (signal #1), file BK37088 for AR1016, AR1260, DCB exceed 20% Difference. Associated samples were reanalyzed for confirmations.

Wet Chemistry By Method SM21 2540 B MOD.

Matrix: SO

Batch ID: GN46666

- Sample(s) MC30120-14DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC30120).

Summary of Hits

Job Number: MC30120
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/25/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30120-1	A2-SB-02-0-2					
Aroclor 1248 ^a		38.8	37	13	ug/kg	SW846 8082A
Aroclor 1254		46.1	37	16	ug/kg	SW846 8082A
Aroclor 1260 ^a		18.1 J	37	14	ug/kg	SW846 8082A
MC30120-2	A2-SB-02-2-4					
Aroclor 1254 ^a		22.4 J	37	16	ug/kg	SW846 8082A
Aroclor 1260		41.4	37	14	ug/kg	SW846 8082A
MC30120-3	A2-SB-02-4-6					
Aroclor 1254 ^a		19.2 J	36	16	ug/kg	SW846 8082A
Aroclor 1260		58.1	36	13	ug/kg	SW846 8082A
MC30120-4	A2-SB-02-6-8					
No hits reported in this sample.						
MC30120-5	A2-SB-03-0-2					
Aroclor 1254 ^a		38.6 J	39	17	ug/kg	SW846 8082A
Aroclor 1260		377	39	14	ug/kg	SW846 8082A
MC30120-6	A2-SB-03-2-4					
Aroclor 1260		41.4	35	13	ug/kg	SW846 8082A
MC30120-7	A2-SB-03-4-6					
No hits reported in this sample.						
MC30120-8	A2-SB-04-0-2					
Aroclor 1254 ^a		316	41	18	ug/kg	SW846 8082A
Aroclor 1260		1050	210	77	ug/kg	SW846 8082A
MC30120-9	A2-SB-04-2-4					
Aroclor 1254 ^a		16.9 J	36	16	ug/kg	SW846 8082A
Aroclor 1260		38.5	36	13	ug/kg	SW846 8082A

Summary of Hits

Job Number: MC30120
Account: AECOM
Project: UTC - Debris Pile
Collected: 04/25/14



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC30120-10	A2-SB-104-2-4					
Aroclor 1260		20.4 J	35	13	ug/kg	SW846 8082A
MC30120-11	A2-SB-04-4-6					
Aroclor 1254 ^a		101	38	17	ug/kg	SW846 8082A
Aroclor 1260		144	38	14	ug/kg	SW846 8082A
MC30120-12	A2-SB-05-0-2					
Aroclor 1254 ^a		23.5 J	35	16	ug/kg	SW846 8082A
Aroclor 1260		117	35	13	ug/kg	SW846 8082A
MC30120-13	A2-SB-05-2-4					
Aroclor 1260		20.5 J	35	13	ug/kg	SW846 8082A
MC30120-14	A2-SB-05-4-6					
Aroclor 1254 ^a		20.9 J	39	17	ug/kg	SW846 8082A
Aroclor 1260		33.2 J	39	14	ug/kg	SW846 8082A
MC30120-15	A2-SB-08-0-2					
Aroclor 1254 ^a		57.9	39	18	ug/kg	SW846 8082A
Aroclor 1260		89.8	39	15	ug/kg	SW846 8082A
MC30120-16	A2-SB-07-0-2					
Aroclor 1254 ^a		168	40	18	ug/kg	SW846 8082A
Aroclor 1260		271	40	15	ug/kg	SW846 8082A
MC30120-17	A2-SB-06-0-2					
Aroclor 1254 ^a		312	38	17	ug/kg	SW846 8082A
Aroclor 1260		433	38	14	ug/kg	SW846 8082A

(a) Estimated value due to the presence of other Aroclor pattern.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	A2-SB-02-0-2	Date Sampled:	04/25/14
Lab Sample ID:	MC30120-1	Date Received:	04/26/14
Matrix:	SO - Soil	Percent Solids:	85.3
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37134.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	16.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248 ^a	38.8	37	13	ug/kg	
11097-69-1	Aroclor 1254	46.1	37	16	ug/kg	
11096-82-5	Aroclor 1260 ^a	18.1	37	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	43%		30-150%
877-09-8	Tetrachloro-m-xylene	52%		30-150%
2051-24-3	Decachlorobiphenyl	45%		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A2-SB-02-2-4		
Lab Sample ID: MC30120-2		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 86.7
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37135.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	37	7.8	ug/kg	
11104-28-2	Aroclor 1221	ND	37	15	ug/kg	
11141-16-5	Aroclor 1232	ND	37	15	ug/kg	
53469-21-9	Aroclor 1242	ND	37	16	ug/kg	
12672-29-6	Aroclor 1248	ND	37	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	22.4	37	16	ug/kg	J
11096-82-5	Aroclor 1260	41.4	37	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		30-150%
877-09-8	Tetrachloro-m-xylene	61%		30-150%
2051-24-3	Decachlorobiphenyl	51%		30-150%
2051-24-3	Decachlorobiphenyl	66%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID: A2-SB-02-4-6		
Lab Sample ID: MC30120-3		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 89.2
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37136.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	15	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	19.2	36	16	ug/kg	J
11096-82-5	Aroclor 1260	58.1	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%		30-150%
877-09-8	Tetrachloro-m-xylene	61%		30-150%
2051-24-3	Decachlorobiphenyl	54%		30-150%
2051-24-3	Decachlorobiphenyl	68%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Page 1 of 1

Client Sample ID:	A2-SB-02-6-8	Date Sampled:	04/25/14
Lab Sample ID:	MC30120-4	Date Received:	04/26/14
Matrix:	SO - Soil	Percent Solids:	85.6
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37137.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	38	16	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	17	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254	ND	38	17	ug/kg	
11096-82-5	Aroclor 1260	ND	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	60%		30-150%
877-09-8	Tetrachloro-m-xylene	57%		30-150%
2051-24-3	Decachlorobiphenyl	53%		30-150%
2051-24-3	Decachlorobiphenyl	63%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-03-0-2		
Lab Sample ID: MC30120-5		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 84.0
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37138.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	8.2	ug/kg	
11104-28-2	Aroclor 1221	ND	39	16	ug/kg	
11141-16-5	Aroclor 1232	ND	39	15	ug/kg	
53469-21-9	Aroclor 1242	ND	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	38.6	39	17	ug/kg	J
11096-82-5	Aroclor 1260	377	39	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%		30-150%
877-09-8	Tetrachloro-m-xylene	57%		30-150%
2051-24-3	Decachlorobiphenyl	47%		30-150%
2051-24-3	Decachlorobiphenyl	62%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-03-2-4		
Lab Sample ID: MC30120-6		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 91.3
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37139.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.4	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	41.4	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	48%		30-150%
877-09-8	Tetrachloro-m-xylene	54%		30-150%
2051-24-3	Decachlorobiphenyl	44%		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-03-4-6		
Lab Sample ID: MC30120-7		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 82.9
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37140.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	8.2	ug/kg	
11104-28-2	Aroclor 1221	ND	39	16	ug/kg	
11141-16-5	Aroclor 1232	ND	39	15	ug/kg	
53469-21-9	Aroclor 1242	ND	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	14	ug/kg	
11097-69-1	Aroclor 1254	ND	39	17	ug/kg	
11096-82-5	Aroclor 1260	ND	39	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%		30-150%
877-09-8	Tetrachloro-m-xylene	50%		30-150%
2051-24-3	Decachlorobiphenyl	37%		30-150%
2051-24-3	Decachlorobiphenyl	48%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	A2-SB-04-0-2	Date Sampled:	04/25/14
Lab Sample ID:	MC30120-8	Date Received:	04/26/14
Matrix:	SO - Soil	Percent Solids:	77.1
Method:	SW846 8082A SW846 3550B		
Project:	UTC - Debris Pile		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37141.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2	BK37142.D	5	04/30/14	NK	04/28/14	OP37822	GBK1213

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2	15.7 g	10.0 ml

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	41	8.7	ug/kg	
11104-28-2	Aroclor 1221	ND	41	17	ug/kg	
11141-16-5	Aroclor 1232	ND	41	16	ug/kg	
53469-21-9	Aroclor 1242	ND	41	18	ug/kg	
12672-29-6	Aroclor 1248	ND	41	15	ug/kg	
11097-69-1	Aroclor 1254 ^a	316	41	18	ug/kg	
11096-82-5	Aroclor 1260	1050 ^b	210	77	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	46%	46%	30-150%
877-09-8	Tetrachloro-m-xylene	47%	40%	30-150%
2051-24-3	Decachlorobiphenyl	42%	44%	30-150%
2051-24-3	Decachlorobiphenyl	56%	52%	30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-04-2-4		
Lab Sample ID: MC30120-9		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 91.0
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37144.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	36	7.7	ug/kg	
11104-28-2	Aroclor 1221	ND	36	15	ug/kg	
11141-16-5	Aroclor 1232	ND	36	14	ug/kg	
53469-21-9	Aroclor 1242	ND	36	16	ug/kg	
12672-29-6	Aroclor 1248	ND	36	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	16.9	36	16	ug/kg	J
11096-82-5	Aroclor 1260	38.5	36	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	51%		30-150%
877-09-8	Tetrachloro-m-xylene	55%		30-150%
2051-24-3	Decachlorobiphenyl	49%		30-150%
2051-24-3	Decachlorobiphenyl	62%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-104-2-4		Date Sampled: 04/25/14
Lab Sample ID: MC30120-10		Date Received: 04/26/14
Matrix: SO - Soil		Percent Solids: 91.5
Method: SW846 8082A SW846 3550B		
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37145.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	35	15	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	20.4	35	13	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	56%		30-150%
877-09-8	Tetrachloro-m-xylene	59%		30-150%
2051-24-3	Decachlorobiphenyl	51%		30-150%
2051-24-3	Decachlorobiphenyl	65%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-04-4-6		
Lab Sample ID: MC30120-11		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 84.5
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37146.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	38	15	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	101	38	17	ug/kg	
11096-82-5	Aroclor 1260	144	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	57%		30-150%
877-09-8	Tetrachloro-m-xylene	57%		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%
2051-24-3	Decachlorobiphenyl	77%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-05-0-2		
Lab Sample ID: MC30120-12		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 93.1
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37147.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.3	ug/kg	
11104-28-2	Aroclor 1221	ND	35	14	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254 ^a	23.5	35	16	ug/kg	J
11096-82-5	Aroclor 1260	117	35	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	52%		30-150%
877-09-8	Tetrachloro-m-xylene	60%		30-150%
2051-24-3	Decachlorobiphenyl	58%		30-150%
2051-24-3	Decachlorobiphenyl	76%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-05-2-4		
Lab Sample ID: MC30120-13		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 91.4
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37148.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	35	7.5	ug/kg	
11104-28-2	Aroclor 1221	ND	35	15	ug/kg	
11141-16-5	Aroclor 1232	ND	35	14	ug/kg	
53469-21-9	Aroclor 1242	ND	35	15	ug/kg	
12672-29-6	Aroclor 1248	ND	35	13	ug/kg	
11097-69-1	Aroclor 1254	ND	35	16	ug/kg	
11096-82-5	Aroclor 1260	20.5	35	13	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	51%		30-150%
877-09-8	Tetrachloro-m-xylene	54%		30-150%
2051-24-3	Decachlorobiphenyl	44%		30-150%
2051-24-3	Decachlorobiphenyl	59%		30-150%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-05-4-6		
Lab Sample ID: MC30120-14		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 83.5
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37133.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.5 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	8.1	ug/kg	
11104-28-2	Aroclor 1221	ND	39	16	ug/kg	
11141-16-5	Aroclor 1232	ND	39	15	ug/kg	
53469-21-9	Aroclor 1242	ND	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	20.9	39	17	ug/kg	J
11096-82-5	Aroclor 1260	33.2	39	14	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		30-150%
877-09-8	Tetrachloro-m-xylene	67%		30-150%
2051-24-3	Decachlorobiphenyl	50%		30-150%
2051-24-3	Decachlorobiphenyl	64%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-08-0-2		
Lab Sample ID: MC30120-15		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 82.6
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37149.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	39	8.3	ug/kg	
11104-28-2	Aroclor 1221	ND	39	16	ug/kg	
11141-16-5	Aroclor 1232	ND	39	16	ug/kg	
53469-21-9	Aroclor 1242	ND	39	17	ug/kg	
12672-29-6	Aroclor 1248	ND	39	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	57.9	39	18	ug/kg	
11096-82-5	Aroclor 1260	89.8	39	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	58%		30-150%
877-09-8	Tetrachloro-m-xylene	55%		30-150%
2051-24-3	Decachlorobiphenyl	46%		30-150%
2051-24-3	Decachlorobiphenyl	60%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-07-0-2		
Lab Sample ID: MC30120-16		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 82.1
Project: UTC - Debris Pile		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37150.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	40	8.5	ug/kg	
11104-28-2	Aroclor 1221	ND	40	16	ug/kg	
11141-16-5	Aroclor 1232	ND	40	16	ug/kg	
53469-21-9	Aroclor 1242	ND	40	17	ug/kg	
12672-29-6	Aroclor 1248	ND	40	15	ug/kg	
11097-69-1	Aroclor 1254 ^a	168	40	18	ug/kg	
11096-82-5	Aroclor 1260	271	40	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	63%		30-150%
877-09-8	Tetrachloro-m-xylene	60%		30-150%
2051-24-3	Decachlorobiphenyl	52%		30-150%
2051-24-3	Decachlorobiphenyl	69%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: A2-SB-06-0-2		
Lab Sample ID: MC30120-17		Date Sampled: 04/25/14
Matrix: SO - Soil		Date Received: 04/26/14
Method: SW846 8082A SW846 3550B		Percent Solids: 84.4
Project: UTC - Debris Pile		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK37100.D	1	04/29/14	NK	04/28/14	OP37822	GBK1213
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	38	7.9	ug/kg	
11104-28-2	Aroclor 1221	ND	38	15	ug/kg	
11141-16-5	Aroclor 1232	ND	38	15	ug/kg	
53469-21-9	Aroclor 1242	ND	38	16	ug/kg	
12672-29-6	Aroclor 1248	ND	38	14	ug/kg	
11097-69-1	Aroclor 1254 ^a	312	38	17	ug/kg	
11096-82-5	Aroclor 1260	433	38	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	73%		30-150%
877-09-8	Tetrachloro-m-xylene	66%		30-150%
2051-24-3	Decachlorobiphenyl	54%		30-150%
2051-24-3	Decachlorobiphenyl	71%		30-150%

(a) Estimated value due to the presence of other Aroclor pattern.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

FED-EX Tracking # _____ Bill of Order Control # _____
Accutest Quote # _____ Accutest Job # **MC30120**

Client / Reporting Information			Project Information										Requested Analysis (see TEST CODE sheet)										Matrix Codes								
Company Name AECOM			Project Name UTC DEBRIS PILE										<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> YCB'S METHOD 3550b </div>										DIV - Drinking Water GW - Ground Water Wt - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank								
Street Address 5015 CAMPUSWOOD DR			Street: UTC DEBRIS PILE																												
City, State, Zip ESYRACUSE NY 13057			Billing Information (if different from Report to)																												
Project Contact SCOTT MCDONOUGH			Company Name																												
Phone # 518-951-2391			Project#			Street Address			City			State			Zip			LAB USE ONLY													
Sampler(s) Name(s) PAT SWAIN			Phone # 315 569 5719			Project Manager			Attention:			PO#																			
Accutest Sample #	Field ID / Point of Collection	MEQ(HD) vial #	Date	Time	Sampled by	Matrix	# of bottles	HCl	NH ₄ H	NH ₄ Cl	H ₂ SO ₄	H ₂ SO ₄	NONE	DI WATER	MEDI	EMCORE	Residue														
-1	A2-SB-02-0-2		9/25/14	0920	PS	SO	1										X														
-2	A2-SB-02-2-1			0930			1										X														
-3	A2-SB-02-4-6			0935			1										X														
-4	A2-SB-02-6-8			0940			1										X														
-5	A2-SB-03-0-2			0945			1										X														
-6	A2-SB-03-2-4			0948			1										X														
-7	A2-SB-03-4-6			1600			1										X														
-8	A2-SB-04-0-2			1005			1										X														
-9	A2-SB-04-2-4			1006			1										X														
-10	A2-SB-104-2-4			1008			1										X														
-11	A2-SB-04-4-6			1010			1										X														
-12	A2-SB-05-0-2			1018			1										X														
Turnaround Time (Business days)										Approved By (Accutest PM): / Date:										Data Deliverable Information										Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY										<div style="font-size: 2em; font-weight: bold; text-align: center;">RUSH!</div>										<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> CT RCP <input type="checkbox"/> EDD Format <input type="checkbox"/> MA MCP <input type="checkbox"/> Other _____											
Emergency & Rush TIA data available VIA Lablink																				Commercial "A" = Results Only Commercial "B" = Results + QC Summary											
Relinquished by Sampler:										Date Time:										Received By:										Date Time:	
1										9/25/14 800										1											
Relinquished by Sampler:										Date Time:										Received By:										Date Time:	
3										9/26/14 1015										3										will done	
Relinquished by:										Date Time:										Received By:										Date Time:	
5																				5											
Custody Seal #										<input type="checkbox"/> Intact										Preserved where applicable										<input type="checkbox"/> On Ice	Cooler Temp. 0.5°C

ACCUTEST
SYRACUSE-SC

FED-EX Tracking #		Bottle Order Control #																			
Accutest Quote #		Accutest Job # MC30120																			
Client / Reporting Information				Project Information								Requested Analysis (see TEST CODE sheet)								Matrix Codes	
Company Name ACCUM				Project Name WTC DEBRIS PILE								READ'S METHOD 510.6								DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank	
Street Address SOILS CONSULTING LLC				Billing Information (If different from Report to)																	
City E. SYRACUSE NY 13207				City																	
Project Contact SCOTT MCDONAGH				Street Address																	
Phone # 518-951-2391				City																	
Sampler(s) Name(s) PAT SWAN				Project Manager								Attention:		PO#							
Accutest Sample #	Field ID / Point of Collection	MEQ/ID/Vial #	Collection			Matrix	# of bottles	Number of preserved bottles							ENCORE	Bottle #	LAB USE ONLY				
			Date	Time	Sampled by			HCL	NH4OH	HNO3	H2SO4	HNO2	NONE	DI Water				MEDIA			
-13	A2-SB-05-2-4		4/28/14	1020	PS SO	1									X						
-14	A2-SB-05-4-6		↓	1022	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
-14P	A2-SB-05-4-6MS			1022	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
-15	A2-SB-05-4-6MS/MSD		↓	1022	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
-15	A2-SB-08-0-2		↓	1320	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
-16	A2-SB-07-0-2		↓	1325	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
-17	A2-SB-06-0-2		↓	1330	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	X						
Turnaround Time (Business days)		Approved By (Accutest PM): / Date:		RUSH!												Comments / Special Instructions					
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> Std. 5 Business Days (By Contract only) <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input checked="" type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY				<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> NYASP Category A <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> NYASP Category B <input type="checkbox"/> FULLT1 (Level 3+4) <input type="checkbox"/> State Forms <input type="checkbox"/> CT RCP <input type="checkbox"/> EDD Format <input type="checkbox"/> MA MCP <input type="checkbox"/> Other _____																	
Emergency & Rush T/A data available VIA Lablink Sample Custody must be documented below each time samples change possession, including courier delivery.																					
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:																
<i>[Signature]</i>	4/28/14/1300	<i>[Signature]</i>	<i>[Signature]</i>			2	<i>[Signature]</i>														
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:																
<i>[Signature]</i>	4/28/14	<i>[Signature]</i>	<i>[Signature]</i>			3	<i>[Signature]</i>														
Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact	Preserved where applicable	On Ice	Cooler Temp.														
<i>[Signature]</i>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.5														

**ACCUTEST
SYRACUSE-SC**

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC30120 **Client:** AECOM **Immediate Client Services Action Required:** No
Date / Time Received: 4/26/2014 **Delivery Method:** _____ **Client Service Action Required at Login:** No
Project: UTC DEBRIS PILE **No. Coolers:** 1 **Airbill #'s:** _____

<u>Cooler Security</u>	<u>Y or N</u>	<u>Y or N</u>
1. Custody Seals Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>	3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/> <input type="checkbox"/>	4. Smpl Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>
1. Temp criteria achieved:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Cooler temp verification:	Infared gun
3. Cooler media:	Ice (bag)

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Condition of sample:			Intact

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Bottles received for unspecified tests:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>

Comments

5.1
5

Internal Sample Tracking Chronicle

AECOM

Job No: MC30120

UTC - Debris Pile

5.2
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30120-1 Collected: 25-APR-14 09:20 By: PS Received: 26-APR-14 By: A2-SB-02-0-2						
MC30120-1	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-1	SW846 8082A	30-APR-14 09:05	NK	28-APR-14	MT	P8082PCB
MC30120-2 Collected: 25-APR-14 09:30 By: PS Received: 26-APR-14 By: A2-SB-02-2-4						
MC30120-2	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-2	SW846 8082A	30-APR-14 09:21	NK	28-APR-14	MT	P8082PCB
MC30120-3 Collected: 25-APR-14 09:35 By: PS Received: 26-APR-14 By: A2-SB-02-4-6						
MC30120-3	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-3	SW846 8082A	30-APR-14 09:37	NK	28-APR-14	MT	P8082PCB
MC30120-4 Collected: 25-APR-14 09:40 By: PS Received: 26-APR-14 By: A2-SB-02-6-8						
MC30120-4	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-4	SW846 8082A	30-APR-14 09:53	NK	28-APR-14	MT	P8082PCB
MC30120-5 Collected: 25-APR-14 09:45 By: PS Received: 26-APR-14 By: A2-SB-03-0-2						
MC30120-5	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-5	SW846 8082A	30-APR-14 10:09	NK	28-APR-14	MT	P8082PCB
MC30120-6 Collected: 25-APR-14 09:48 By: PS Received: 26-APR-14 By: A2-SB-03-2-4						
MC30120-6	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-6	SW846 8082A	30-APR-14 10:25	NK	28-APR-14	MT	P8082PCB
MC30120-7 Collected: 25-APR-14 10:00 By: PS Received: 26-APR-14 By: A2-SB-03-4-6						
MC30120-7	SM21 2540 B MOD.	28-APR-14	MA			%SOL

Internal Sample Tracking Chronicle

AECOM

Job No: MC30120

UTC - Debris Pile

5.2
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30120-7	SW846 8082A	30-APR-14 10:41	NK	28-APR-14	MT	P8082PCB
MC30120-8 Collected: 25-APR-14 10:05 By: PS Received: 26-APR-14 By: A2-SB-04-0-2						
MC30120-8	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-8	SW846 8082A	30-APR-14 10:57	NK	28-APR-14	MT	P8082PCB
MC30120-8	SW846 8082A	30-APR-14 11:13	NK	28-APR-14	MT	P8082PCB
MC30120-9 Collected: 25-APR-14 10:06 By: PS Received: 26-APR-14 By: A2-SB-04-2-4						
MC30120-9	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-9	SW846 8082A	30-APR-14 11:48	NK	28-APR-14	MT	P8082PCB
MC30120-10 Collected: 25-APR-14 10:08 By: PS Received: 26-APR-14 By: A2-SB-104-2-4						
MC30120-10	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-10	SW846 8082A	30-APR-14 12:04	NK	28-APR-14	MT	P8082PCB
MC30120-11 Collected: 25-APR-14 10:10 By: PS Received: 26-APR-14 By: A2-SB-04-4-6						
MC30120-11	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-11	SW846 8082A	30-APR-14 12:20	NK	28-APR-14	MT	P8082PCB
MC30120-12 Collected: 25-APR-14 10:18 By: PS Received: 26-APR-14 By: A2-SB-05-0-2						
MC30120-12	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-12	SW846 8082A	30-APR-14 12:36	NK	28-APR-14	MT	P8082PCB
MC30120-13 Collected: 25-APR-14 10:20 By: PS Received: 26-APR-14 By: A2-SB-05-2-4						
MC30120-13	SM21 2540 B MOD.	28-APR-14	MA			% SOL
MC30120-13	SW846 8082A	30-APR-14 12:52	NK	28-APR-14	MT	P8082PCB

Internal Sample Tracking Chronicle

AECOM

Job No: MC30120

UTC - Debris Pile

5.2
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC30120-14 Collected: 25-APR-14 10:22 By: PS Received: 26-APR-14 By: A2-SB-05-4-6						
MC30120-14	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-14	SW846 8082A	30-APR-14 08:49	NK	28-APR-14	MT	P8082PCB
MC30120-15 Collected: 25-APR-14 13:20 By: PS Received: 26-APR-14 By: A2-SB-08-0-2						
MC30120-15	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-15	SW846 8082A	30-APR-14 13:08	NK	28-APR-14	MT	P8082PCB
MC30120-16 Collected: 25-APR-14 13:25 By: PS Received: 26-APR-14 By: A2-SB-07-0-2						
MC30120-16	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-16	SW846 8082A	30-APR-14 13:24	NK	28-APR-14	MT	P8082PCB
MC30120-17 Collected: 25-APR-14 13:30 By: PS Received: 26-APR-14 By: A2-SB-06-0-2						
MC30120-17	SM21 2540 B MOD.	28-APR-14	MA			%SOL
MC30120-17	SW846 8082A	29-APR-14 23:58	NK	28-APR-14	MT	P8082PCB

Accutest Internal Chain of Custody

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile
Received: 04/26/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC30120-1.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-1.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-1.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-1.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-2.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-2.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-2.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-2.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-3.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-3.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-3.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-3.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-4.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-4.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-4.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-4.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-5.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-5.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-5.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-5.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-6.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-6.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-6.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-6.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-7.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-7.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-7.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-7.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-8.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-8.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-8.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-8.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-9.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-9.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-9.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-9.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage

5.3
5

Accutest Internal Chain of Custody

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile
Received: 04/26/14

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
MC30120-10.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-10.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-10.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-10.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-11.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-11.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-11.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-11.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-12.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-12.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-12.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-12.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-13.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-13.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-13.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-13.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-14.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-14.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-14.2	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-14.2	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-15.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-15.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-15.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-15.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-16.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-16.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-16.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-16.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage
MC30120-17.1	Walk In Ref #9	Meredith Tarr	04/28/14 08:40	Retrieve from Storage
MC30120-17.1	Meredith Tarr	Walk In Ref #9	04/28/14 08:41	Return to Storage
MC30120-17.1	Walk In Ref #9	Mohammad Adib	04/28/14 09:25	Retrieve from Storage
MC30120-17.1	Mohammad Adib	Walk In Ref #9	04/28/14 10:01	Return to Storage

5.3
5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37822-MB	BK37078.D	1	04/29/14	NK	04/28/14	OP37822	GBK1213

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30120-1, MC30120-2, MC30120-3, MC30120-4, MC30120-5, MC30120-6, MC30120-7, MC30120-8, MC30120-9, MC30120-10, MC30120-11, MC30120-12, MC30120-13, MC30120-14, MC30120-15, MC30120-16, MC30120-17

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	33	7.0	ug/kg	
11104-28-2	Aroclor 1221	ND	33	14	ug/kg	
11141-16-5	Aroclor 1232	ND	33	13	ug/kg	
53469-21-9	Aroclor 1242	ND	33	14	ug/kg	
12672-29-6	Aroclor 1248	ND	33	12	ug/kg	
11097-69-1	Aroclor 1254	ND	33	15	ug/kg	
11096-82-5	Aroclor 1260	ND	33	12	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	60%	30-150%
877-09-8	Tetrachloro-m-xylene	62%	30-150%
2051-24-3	Decachlorobiphenyl	63%	30-150%
2051-24-3	Decachlorobiphenyl	67%	30-150%

Blank Spike Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37822-BS	BK37079.D	1	04/29/14	NK	04/28/14	OP37822	GBK1213

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30120-1, MC30120-2, MC30120-3, MC30120-4, MC30120-5, MC30120-6, MC30120-7, MC30120-8, MC30120-9, MC30120-10, MC30120-11, MC30120-12, MC30120-13, MC30120-14, MC30120-15, MC30120-16, MC30120-17

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	260	208	80	40-140
11104-28-2	Aroclor 1221		ND		40-140
11141-16-5	Aroclor 1232		ND		40-140
53469-21-9	Aroclor 1242		ND		40-140
12672-29-6	Aroclor 1248		ND		40-140
11097-69-1	Aroclor 1254		ND		40-140
11096-82-5	Aroclor 1260	260	209	81	40-140

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	73%	30-150%
877-09-8	Tetrachloro-m-xylene	77%	30-150%
2051-24-3	Decachlorobiphenyl	77%	30-150%
2051-24-3	Decachlorobiphenyl	84%	30-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP37822-MS	BK37080.D	1	04/29/14	NK	04/28/14	OP37822	GBK1213
OP37822-MSD	BK37081.D	1	04/29/14	NK	04/28/14	OP37822	GBK1213
MC30120-14	BK37133.D	1	04/30/14	NK	04/28/14	OP37822	GBK1213

The QC reported here applies to the following samples:

Method: SW846 8082A

MC30120-1, MC30120-2, MC30120-3, MC30120-4, MC30120-5, MC30120-6, MC30120-7, MC30120-8, MC30120-9, MC30120-10, MC30120-11, MC30120-12, MC30120-13, MC30120-14, MC30120-15, MC30120-16, MC30120-17

CAS No.	Compound	MC30120-14 Spike		MS	MS	Spike	MSD	MSD	RPD	Limits	
		ug/kg	Q ug/kg	ug/kg	%	ug/kg	ug/kg	%		Rec/RPD	
12674-11-2	Aroclor 1016	ND		319	255	80	319	228	71	11	40-140/50
11104-28-2	Aroclor 1221	ND			ND			ND		nc	40-140/50
11141-16-5	Aroclor 1232	ND			ND			ND		nc	40-140/50
53469-21-9	Aroclor 1242	ND			ND			ND		nc	40-140/50
12672-29-6	Aroclor 1248	ND			ND			ND		nc	40-140/50
11097-69-1	Aroclor 1254	20.9	J		81.2			72.2		12	40-140/50
11096-82-5	Aroclor 1260	33.2	J	319	248	67	319	209	55	17	40-140/50

CAS No.	Surrogate Recoveries	MS	MSD	MC30120-14 Limits	
877-09-8	Tetrachloro-m-xylene	74%	74%	64%	30-150%
877-09-8	Tetrachloro-m-xylene	80%	82%	67%	30-150%
2051-24-3	Decachlorobiphenyl	58%	54%	50%	30-150%
2051-24-3	Decachlorobiphenyl	73%	73%	64%	30-150%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Method: SW846 8082A	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S1 ^b	S2 ^a	S2 ^b
MC30120-1	BK37134.D	43	52	45	59
MC30120-2	BK37135.D	58	61	51	66
MC30120-3	BK37136.D	59	61	54	68
MC30120-4	BK37137.D	60	57	53	63
MC30120-5	BK37138.D	52	57	47	62
MC30120-6	BK37139.D	48	54	44	59
MC30120-7	BK37140.D	52	50	37	48
MC30120-8	BK37141.D	46	47	42	56
MC30120-8	BK37142.D	46	40	44	52
MC30120-9	BK37144.D	51	55	49	62
MC30120-10	BK37145.D	56	59	51	65
MC30120-11	BK37146.D	57	57	59	77
MC30120-12	BK37147.D	52	60	58	76
MC30120-13	BK37148.D	51	54	44	59
MC30120-14	BK37133.D	64	67	50	64
MC30120-15	BK37149.D	58	55	46	60
MC30120-16	BK37150.D	63	60	52	69
MC30120-17	BK37100.D	73	66	54	71
OP37822-BS	BK37079.D	73	77	77	84
OP37822-MB	BK37078.D	60	62	63	67
OP37822-MS	BK37080.D	74	80	58	73
OP37822-MSD	BK37081.D	74	82	54	73

Surrogate Compounds

Recovery Limits

S1 = Tetrachloro-m-xylene

30-150%

S2 = Decachlorobiphenyl

30-150%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GBK1213-ICC1213	Injection Date: 04/29/14
Lab File ID: BK37070.D	Injection Time: 15:57
Instrument ID: GCBK	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.21	2.07	8.80	9.08

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
OP37822-MB	BK37078.D	04/29/14	18:07	2.22	2.07	8.81	9.08
OP37822-BS	BK37079.D	04/29/14	18:23	2.21	2.07	8.80	9.08
OP37822-MS	BK37080.D	04/29/14	18:39	2.21	2.08	8.80	9.08
OP37822-MSD	BK37081.D	04/29/14	18:55	2.21	2.08	8.80	9.08

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GBK1213-CC1213	Injection Date: 04/30/14
Lab File ID: BK37132.D	Injection Time: 08:30
Instrument ID: GCBK	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.22	2.08	8.82	9.10

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
MC30120-14	BK37133.D	04/30/14	08:49	2.23	2.08	8.83	9.10
MC30120-1	BK37134.D	04/30/14	09:05	2.22	2.08	8.82	9.10
MC30120-2	BK37135.D	04/30/14	09:21	2.22	2.08	8.82	9.10
MC30120-3	BK37136.D	04/30/14	09:37	2.22	2.08	8.82	9.10
MC30120-4	BK37137.D	04/30/14	09:53	2.22	2.08	8.82	9.10
MC30120-5	BK37138.D	04/30/14	10:09	2.22	2.08	8.82	9.10
MC30120-6	BK37139.D	04/30/14	10:25	2.22	2.08	8.82	9.10
MC30120-7	BK37140.D	04/30/14	10:41	2.22	2.08	8.82	9.10
MC30120-8	BK37141.D	04/30/14	10:57	2.22	2.08	8.82	9.10
MC30120-8	BK37142.D	04/30/14	11:13	2.22	2.08	8.82	9.10

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Check Std: GBK1213-CC1213	Injection Date: 04/30/14
Lab File ID: BK37143.D	Injection Time: 11:29
Instrument ID: GCBK	Method: SW846 8082A

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	2.22	2.08	8.82	9.10

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
MC30120-9	BK37144.D	04/30/14	11:48	2.23	2.08	8.83	9.10
MC30120-10	BK37145.D	04/30/14	12:04	2.22	2.08	8.82	9.10
MC30120-11	BK37146.D	04/30/14	12:20	2.22	2.08	8.82	9.10
MC30120-12	BK37147.D	04/30/14	12:36	2.22	2.08	8.83	9.11
MC30120-13	BK37148.D	04/30/14	12:52	2.22	2.08	8.83	9.11
MC30120-15	BK37149.D	04/30/14	13:08	2.22	2.08	8.83	9.11
MC30120-16	BK37150.D	04/30/14	13:24	2.22	2.08	8.83	9.11
ZZZZZZ	BK37151.D	04/30/14	13:40	2.22	2.08	8.82	9.10
ZZZZZZ	BK37152.D	04/30/14	13:56	2.22	2.08	8.82	9.10
ZZZZZZ	BK37153.D	04/30/14	14:12	2.22	2.08	8.82	9.10

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GBK1213-ICC1213
Lab FileID: BK37070.D

Response Factor Report GCBK

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration

Calibration Files

1 =BK37072.d 2 =BK37071.d 3 =BK37070.d 4 =BK37069.d
 5 =BK37068.d 6 =BK37067.d

Compound	1	2	3	4	5	6	Avg	%RSD
1) s TCMX	1.491	1.512	1.380	1.508	1.482	1.571	1.491	E8 4.21
2) AR1016-A	1.998	2.192	2.020	2.284	2.383	2.435	2.219	E6 8.23
3) AR1016-B	4.569	4.715	4.654	5.277	5.627	5.648	5.082	E6 9.79
4) AR1016-C	1.010	1.032	0.985	1.092	1.106	1.157	1.064	E7 6.14
5) AR1016-D	6.905	6.942	6.669	7.341	7.345	7.336	7.090	E6 4.10
6) AR1016-E	4.333	4.409	4.364	4.880	5.032	5.050	4.678	E6 7.37
7) AR1260-A	6.559	6.597	6.331	7.015	7.213	8.024	6.957	E6 8.84
8) AR1260-B	0.988	1.008	0.957	1.064	1.082	1.129	1.038	E7 6.24
9) AR1260-C	2.045	2.073	1.949	2.191	2.177	2.231	2.111	E7 5.07
10) AR1260-D	1.457	1.471	1.386	1.544	1.513	1.503	1.479	E7 3.72
11) AR1260-E	1.363	1.380	1.342	1.517	1.514	1.533	1.441	E7 6.13
12) AR1260-F	3.384	3.499	3.359	3.894	3.712	3.711	3.593	E6 5.91
13) s DCB	1.109	1.158	1.060	1.206	1.151	1.298	1.164	E8 7.07
14) AR1221-A			8.004				8.004	E5 0.00
15) AR1221-B			1.475				1.475	E6 0.00
16) AR1221-C			3.408				3.408	E6 0.00
17) AR1232-A			2.303				2.303	E6 0.00
18) AR1232-B			2.558				2.558	E6 0.00
19) AR1232-C			5.095				5.095	E6 0.00
20) AR1232-D			3.196				3.196	E6 0.00
21) AR1232-E			5.093				5.093	E6 0.00
22) AR1242-A			1.701				1.701	E6 0.00
23) AR1242-B			3.960				3.960	E6 0.00
24) AR1242-C			8.481				8.481	E6 0.00
25) AR1242-D			5.386				5.386	E6 0.00
26) AR1242-E			7.908				7.908	E6 0.00
27) AR1248-A			2.196				2.196	E6 0.00
28) AR1248-B			5.613				5.613	E6 0.00
29) AR1248-C			8.307				8.307	E6 0.00
30) AR1248-D			1.117				1.117	E7 0.00
31) AR1248-E			1.358				1.358	E7 0.00
32) AR1254-A			9.498				9.498	E6 0.00
33) AR1254-B			1.254				1.254	E7 0.00
34) AR1254-C			1.897				1.897	E7 0.00
35) AR1254-D			6.167				6.167	E6 0.00
36) AR1254-E			9.228				9.228	E6 0.00
37) AR1262-A			5.609				5.609	E6 0.00
38) AR1262-B			7.527				7.527	E6 0.00
39) AR1262-C			2.024				2.024	E7 0.00
40) AR1262-D			2.023				2.023	E7 0.00
41) AR1262-E			5.758				5.758	E6 0.00
42) AR1268-A			3.955				3.955	E6 0.00
43) AR1268-B			5.574				5.574	E6 0.00
44) AR1268-C			4.153				4.153	E7 0.00
45) AR1268-D			1.694				1.694	E7 0.00
46) AR1268-E			4.108				4.108	E7 0.00

Initial Calibration Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: GBK1213-ICC1213
Lab FileID: BK37070.D

Signal #2

1)	s	TCMX	8.667	8.694	7.871	8.344	8.084	8.308	8.328	E7	3.86
2)		AR1016-A	1.471	1.404	1.395	1.560	1.700	1.674	1.534	E6	8.65
3)		AR1016-B	2.951	3.001	2.810	3.143	3.194	3.208	3.051	E6	5.17
4)		AR1016-C	5.830	5.991	5.751	6.047	5.794	5.648	5.843	E6	2.57
5)		AR1016-D	2.368	2.496	2.313	2.543	2.513	2.346	2.430	E6	4.06
6)		AR1016-E	2.708	2.762	2.565	2.807	2.792	2.687	2.721	E6	3.28
7)		AR1260-A	3.820	3.882	3.679	4.100	4.108	4.119	3.951	E6	4.68
8)		AR1260-B	4.400	4.435	4.206	4.635	4.614	4.535	4.471	E6	3.57
9)		AR1260-C	1.088	1.107	1.043	1.141	1.111	1.107	1.100	E7	2.96
10)		AR1260-D	7.538	7.626	7.088	7.877	7.315	7.053	7.416	E6	4.35
11)		AR1260-E	6.995	7.019	6.653	7.269	6.693	6.822	6.908	E6	3.36
12)		AR1260-F	1.721	1.749	1.632	1.780	1.587	1.539	1.668	E6	5.78
13)	s	DCB	5.182	5.378	4.845	5.420	4.910	5.342	5.179	E7	4.80
14)		AR1221-A			6.616				6.616	E5	0.00
15)		AR1221-B			7.375				7.375	E5	0.00
16)		AR1221-C			2.099				2.099	E6	0.00
17)		AR1232-A			1.698				1.698	E6	0.00
18)		AR1232-B			1.636				1.636	E6	0.00
19)		AR1232-C			2.801				2.801	E6	0.00
20)		AR1232-D			1.746				1.746	E6	0.00
21)		AR1232-E			2.854				2.854	E6	0.00
22)		AR1242-A			1.173				1.173	E6	0.00
23)		AR1242-B			2.486				2.486	E6	0.00
24)		AR1242-C			4.997				4.997	E6	0.00
25)		AR1242-D			3.344				3.344	E6	0.00
26)		AR1242-E			4.735				4.735	E6	0.00
27)		AR1248-A			1.332				1.332	E6	0.00
28)		AR1248-B			3.176				3.176	E6	0.00
29)		AR1248-C			5.083				5.083	E6	0.00
30)		AR1248-D			6.378				6.378	E6	0.00
31)		AR1248-E			8.038				8.038	E6	0.00
32)		AR1254-A			4.458				4.458	E6	0.00
33)		AR1254-B			6.537				6.537	E6	0.00
34)		AR1254-C			1.056				1.056	E7	0.00
35)		AR1254-D			5.919				5.919	E6	0.00
36)		AR1254-E			5.090				5.090	E6	0.00
37)		AR1262-A			3.454				3.454	E6	0.00
38)		AR1262-B			3.566				3.566	E6	0.00
39)		AR1262-C			1.092				1.092	E7	0.00
40)		AR1262-D			1.007				1.007	E7	0.00
41)		AR1262-E			2.965				2.965	E6	0.00
42)		AR1268-A			2.263				2.263	E6	0.00
43)		AR1268-B			3.136				3.136	E6	0.00
44)		AR1268-C			2.120				2.120	E7	0.00
45)		AR1268-D			8.201				8.201	E6	0.00
46)		AR1268-E			2.221				2.221	E7	0.00

(#) = Out of Range

PC140429.M

Tue Apr 29 18:03:38 2014

6.6.1

6

Initial Calibration Verification

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-ICV1213
 Lab FileID: BK37077.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37077.d\ECD1A.ch Vial: 61
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37077.d\ECD2B.ch
 Acq On : 29 Apr 2014 5:49 pm Operator: nickk
 Sample : icv1213-500,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	131.748 E6	11.6	95	0.00	2.11-	2.31
2	AR1016-A	2.219	1.996 E6	10.0	99	0.00	2.37-	2.57
3	AR1016-B	5.082	4.427 E6	12.9	95	0.00	2.65-	2.85
4	AR1016-C	10.637	9.695 E6	8.9	98	0.00	3.04-	3.24
5	AR1016-D	7.090	6.690 E6	5.6	100	0.00	3.23-	3.29
6	AR1016-E	4.678	4.199 E6	10.2	96	0.00	3.62-	3.68
7	AR1260-A	6.957	5.983 E6	14.0	95	0.00	4.92-	5.12
8	AR1260-B	10.381	9.581 E6	7.7	100	0.00	5.27-	5.47
9	AR1260-C	21.110	19.168 E6	9.2	98	0.00	5.64-	5.84
10	AR1260-D	14.793	13.170 E6	11.0	95	0.00	6.59-	6.79
11	AR1260-E	14.415	13.079 E6	9.3	97	0.00	7.01-	7.21
12	AR1260-F	3.593	3.376 E6	6.0	101	0.00	7.96-	8.16
13 s	DCB	116.378	108.661 E6	6.6	103	0.00	8.70-	8.90
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Initial Calibration Verification

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-ICV1213
 Lab FileID: BK37077.D

42 AR1268-A -----NA-----
 43 AR1268-B -----NA-----
 44 AR1268-C -----NA-----
 45 AR1268-D -----NA-----
 46 AR1268-E -----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	84.755	E6	-1.8	108	0.00	1.97-	2.17
2		AR1016-A	1.534	1.459	E6	4.9	105	0.00	2.30-	2.50
3		AR1016-B	3.051	2.895	E6	5.1	103	0.00	2.61-	2.81
4		AR1016-C	5.843	5.813	E6	0.5	101	0.00	2.97-	3.17
5		AR1016-D	2.430	2.307	E6	5.1	100	0.00	3.16-	3.22
6		AR1016-E	2.721	2.707	E6	0.5	106	0.00	3.60-	3.66
7		AR1260-A	3.951	3.850	E6	2.6	105	0.00	4.96-	5.16
8		AR1260-B	4.471	4.292	E6	4.0	102	0.00	5.24-	5.44
9		AR1260-C	10.997	10.688	E6	2.8	102	0.00	5.71-	5.91
10		AR1260-D	7.416	6.969	E6	6.0	98	0.00	6.63-	6.83
11		AR1260-E	6.908	6.694	E6	3.1	101	0.00	7.17-	7.37
12		AR1260-F	1.668	1.755	E6	-5.2	108	0.00	8.07-	8.27
13	s	DCB	51.795	51.610	E6	0.4	107	0.00	8.98-	9.18
14		AR1221-A							-----NA-----	
15		AR1221-B							-----NA-----	
16		AR1221-C							-----NA-----	
17		AR1232-A							-----NA-----	
18		AR1232-B							-----NA-----	
19		AR1232-C							-----NA-----	
20		AR1232-D							-----NA-----	
21		AR1232-E							-----NA-----	
22		AR1242-A							-----NA-----	
23		AR1242-B							-----NA-----	
24		AR1242-C							-----NA-----	
25		AR1242-D							-----NA-----	
26		AR1242-E							-----NA-----	
27		AR1248-A							-----NA-----	
28		AR1248-B							-----NA-----	
29		AR1248-C							-----NA-----	
30		AR1248-D							-----NA-----	
31		AR1248-E							-----NA-----	
32		AR1254-A							-----NA-----	
33		AR1254-B							-----NA-----	
34		AR1254-C							-----NA-----	
35		AR1254-D							-----NA-----	
36		AR1254-E							-----NA-----	
37		AR1262-A							-----NA-----	
38		AR1262-B							-----NA-----	
39		AR1262-C							-----NA-----	
40		AR1262-D							-----NA-----	
41		AR1262-E							-----NA-----	
42		AR1268-A							-----NA-----	
43		AR1268-B							-----NA-----	
44		AR1268-C							-----NA-----	
45		AR1268-D							-----NA-----	
46		AR1268-E							-----NA-----	

(#) = Out of Range
 BK37070.d PC140429.M

SPCC's out = 0 CCC's out = 0
 Tue Apr 29 18:05:57 2014

6.6.2
 6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37088.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37088.d\ECD1A.ch Vial: 55
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37088.d\ECD2B.ch
 Acq On : 29 Apr 2014 8:47 pm Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	125.472 E6	15.8	83	0.00	2.12-	2.32
2	AR1016-A	2.219	1.439 E6	35.2#	66#	0.00	2.37-	2.57
3	AR1016-B	5.082	3.386 E6	33.4#	72#	0.00	2.65-	2.85
4	AR1016-C	10.637	7.126 E6	33.0#	69#	0.00	3.04-	3.24
5	AR1016-D	7.090	4.955 E6	30.1#	71#	0.00	3.23-	3.29
6	AR1016-E	4.678	2.945 E6	37.0#	67#	0.00	3.62-	3.68
7	AR1260-A	6.957	4.000 E6	42.5#	61#	0.00	4.92-	5.12
8	AR1260-B	10.381	6.487 E6	37.5#	64#	0.00	5.28-	5.48
9	AR1260-C	21.110	12.859 E6	39.1#	62#	0.00	5.65-	5.85
10	AR1260-D	14.793	8.624 E6	41.7#	59#	0.00	6.59-	6.79
11	AR1260-E	14.415	7.577 E6	47.4#	55#	0.00	7.01-	7.21
12	AR1260-F	3.593	1.848 E6	48.6#	53#	0.00	7.96-	8.16
13 s	DCB	116.378	63.819 E6	45.2#	55#	0.00	8.71-	8.91
14	AR1221-A			-----NA-----				
15	AR1221-B			-----NA-----				
16	AR1221-C			-----NA-----				
17	AR1232-A			-----NA-----				
18	AR1232-B			-----NA-----				
19	AR1232-C			-----NA-----				
20	AR1232-D			-----NA-----				
21	AR1232-E			-----NA-----				
22	AR1242-A			-----NA-----				
23	AR1242-B			-----NA-----				
24	AR1242-C			-----NA-----				
25	AR1242-D			-----NA-----				
26	AR1242-E			-----NA-----				
27	AR1248-A			-----NA-----				
28	AR1248-B			-----NA-----				
29	AR1248-C			-----NA-----				
30	AR1248-D			-----NA-----				
31	AR1248-E			-----NA-----				
32	AR1254-A			-----NA-----				
33	AR1254-B			-----NA-----				
34	AR1254-C			-----NA-----				
35	AR1254-D			-----NA-----				
36	AR1254-E			-----NA-----				
37	AR1262-A			-----NA-----				
38	AR1262-B			-----NA-----				
39	AR1262-C			-----NA-----				
40	AR1262-D			-----NA-----				
41	AR1262-E			-----NA-----				

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37088.D

42	AR1268-A	-----NA-----
43	AR1268-B	-----NA-----
44	AR1268-C	-----NA-----
45	AR1268-D	-----NA-----
46	AR1268-E	-----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	70.369	E6	15.5	81	0.00	1.98-	2.18
2		AR1016-A	1.534	1.139	E6	25.7#	81	0.00	2.31-	2.51
3		AR1016-B	3.051	2.250	E6	26.3#	75#	0.00	2.61-	2.81
4		AR1016-C	5.843	4.566	E6	21.9#	76#	0.00	2.97-	3.17
5		AR1016-D	2.430	1.886	E6	22.4#	76#	0.00	3.16-	3.22
6		AR1016-E	2.721	2.069	E6	24.0#	75#	0.00	3.60-	3.66
7		AR1260-A	3.951	2.776	E6	29.7#	71#	0.00	4.97-	5.17
8		AR1260-B	4.471	3.123	E6	30.1#	70#	0.00	5.24-	5.44
9		AR1260-C	10.997	7.541	E6	31.4#	68#	0.00	5.72-	5.92
10		AR1260-D	7.416	5.438	E6	26.7#	71#	0.00	6.63-	6.83
11		AR1260-E	6.908	4.807	E6	30.4#	68#	0.00	7.17-	7.37
12		AR1260-F	1.668	1.139	E6	31.7#	65#	0.00	8.07-	8.27
13	s	DCB	51.795	37.400	E6	27.8#	70#	0.00	8.99-	9.19
14		AR1221-A				-----NA-----				
15		AR1221-B				-----NA-----				
16		AR1221-C				-----NA-----				
17		AR1232-A				-----NA-----				
18		AR1232-B				-----NA-----				
19		AR1232-C				-----NA-----				
20		AR1232-D				-----NA-----				
21		AR1232-E				-----NA-----				
22		AR1242-A				-----NA-----				
23		AR1242-B				-----NA-----				
24		AR1242-C				-----NA-----				
25		AR1242-D				-----NA-----				
26		AR1242-E				-----NA-----				
27		AR1248-A				-----NA-----				
28		AR1248-B				-----NA-----				
29		AR1248-C				-----NA-----				
30		AR1248-D				-----NA-----				
31		AR1248-E				-----NA-----				
32		AR1254-A				-----NA-----				
33		AR1254-B				-----NA-----				
34		AR1254-C				-----NA-----				
35		AR1254-D				-----NA-----				
36		AR1254-E				-----NA-----				
37		AR1262-A				-----NA-----				
38		AR1262-B				-----NA-----				
39		AR1262-C				-----NA-----				
40		AR1262-D				-----NA-----				
41		AR1262-E				-----NA-----				
42		AR1268-A				-----NA-----				
43		AR1268-B				-----NA-----				
44		AR1268-C				-----NA-----				
45		AR1268-D				-----NA-----				
46		AR1268-E				-----NA-----				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 BK37071.d PC140429.M Wed Apr 30 07:41:43 2014

6.6.3
6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37099.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37099.d\ECD1A.ch Vial: 100
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37099.d\ECD2B.ch
 Acq On : 29 Apr 2014 11:42 pm Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	149.619 E6	-0.4	99	0.00	2.12-	2.32
2	AR1016-A	2.219	2.087 E6	5.9	95	0.00	2.38-	2.58
3	AR1016-B	5.082	4.608 E6	9.3	98	0.00	2.65-	2.85
4	AR1016-C	10.637	10.290 E6	3.3	100	0.00	3.05-	3.25
5	AR1016-D	7.090	6.744 E6	4.9	97	0.00	3.23-	3.29
6	AR1016-E	4.678	4.263 E6	8.9	97	0.00	3.62-	3.68
7	AR1260-A	6.957	5.559 E6	20.1#	84	0.00	4.92-	5.12
8	AR1260-B	10.381	8.667 E6	16.5	86	0.00	5.28-	5.48
9	AR1260-C	21.110	16.681 E6	21.0#	80	0.00	5.65-	5.85
10	AR1260-D	14.793	11.596 E6	21.6#	79#	0.00	6.60-	6.80
11	AR1260-E	14.415	10.592 E6	26.5#	77#	0.01	7.01-	7.21
12	AR1260-F	3.593	2.516 E6	30.0#	72#	0.01	7.97-	8.17
13 s	DCB	116.378	84.875 E6	27.1#	73#	0.01	8.71-	8.91
14	AR1221-A			-----NA-----				
15	AR1221-B			-----NA-----				
16	AR1221-C			-----NA-----				
17	AR1232-A			-----NA-----				
18	AR1232-B			-----NA-----				
19	AR1232-C			-----NA-----				
20	AR1232-D			-----NA-----				
21	AR1232-E			-----NA-----				
22	AR1242-A			-----NA-----				
23	AR1242-B			-----NA-----				
24	AR1242-C			-----NA-----				
25	AR1242-D			-----NA-----				
26	AR1242-E			-----NA-----				
27	AR1248-A			-----NA-----				
28	AR1248-B			-----NA-----				
29	AR1248-C			-----NA-----				
30	AR1248-D			-----NA-----				
31	AR1248-E			-----NA-----				
32	AR1254-A			-----NA-----				
33	AR1254-B			-----NA-----				
34	AR1254-C			-----NA-----				
35	AR1254-D			-----NA-----				
36	AR1254-E			-----NA-----				
37	AR1262-A			-----NA-----				
38	AR1262-B			-----NA-----				
39	AR1262-C			-----NA-----				
40	AR1262-D			-----NA-----				
41	AR1262-E			-----NA-----				

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37099.D

42	AR1268-A	-----NA-----
43	AR1268-B	-----NA-----
44	AR1268-C	-----NA-----
45	AR1268-D	-----NA-----
46	AR1268-E	-----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	76.273	E6	8.4	88	0.00	1.98- 2.18
2		AR1016-A	1.534	1.236	E6	19.4	88	0.00	2.31- 2.51
3		AR1016-B	3.051	2.576	E6	15.6	86	0.00	2.61- 2.81
4		AR1016-C	5.843	5.344	E6	8.5	89	0.00	2.98- 3.18
5		AR1016-D	2.430	2.142	E6	11.9	86	0.00	3.17- 3.23
6		AR1016-E	2.721	2.429	E6	10.7	88	0.00	3.60- 3.66
7		AR1260-A	3.951	3.426	E6	13.3	88	0.00	4.97- 5.17
8		AR1260-B	4.471	3.951	E6	11.6	89	0.00	5.25- 5.45
9		AR1260-C	10.997	9.746	E6	11.4	88	0.00	5.72- 5.92
10		AR1260-D	7.416	7.024	E6	5.3	92	0.01	6.64- 6.84
11		AR1260-E	6.908	6.226	E6	9.9	89	0.01	7.18- 7.38
12		AR1260-F	1.668	1.488	E6	10.8	85	0.01	8.08- 8.28
13	s	DCB	51.795	49.153	E6	5.1	91	0.01	8.99- 9.19
14		AR1221-A							-----NA-----
15		AR1221-B							-----NA-----
16		AR1221-C							-----NA-----
17		AR1232-A							-----NA-----
18		AR1232-B							-----NA-----
19		AR1232-C							-----NA-----
20		AR1232-D							-----NA-----
21		AR1232-E							-----NA-----
22		AR1242-A							-----NA-----
23		AR1242-B							-----NA-----
24		AR1242-C							-----NA-----
25		AR1242-D							-----NA-----
26		AR1242-E							-----NA-----
27		AR1248-A							-----NA-----
28		AR1248-B							-----NA-----
29		AR1248-C							-----NA-----
30		AR1248-D							-----NA-----
31		AR1248-E							-----NA-----
32		AR1254-A							-----NA-----
33		AR1254-B							-----NA-----
34		AR1254-C							-----NA-----
35		AR1254-D							-----NA-----
36		AR1254-E							-----NA-----
37		AR1262-A							-----NA-----
38		AR1262-B							-----NA-----
39		AR1262-C							-----NA-----
40		AR1262-D							-----NA-----
41		AR1262-E							-----NA-----
42		AR1268-A							-----NA-----
43		AR1268-B							-----NA-----
44		AR1268-C							-----NA-----
45		AR1268-D							-----NA-----
46		AR1268-E							-----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 BK37071.d PC140429.M Wed Apr 30 07:38:16 2014

6.6.4
6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37110.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37110.d\ECD1A.ch Vial: 100
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37110.d\ECD2B.ch
 Acq On : 30 Apr 2014 2:38 am Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	159.484 E6	-7.0	105	0.00	2.12-	2.32
2	AR1016-A	2.219	2.199 E6	0.9	100	0.00	2.38-	2.58
3	AR1016-B	5.082	5.091 E6	-0.2	108	0.00	2.65-	2.85
4	AR1016-C	10.637	11.659 E6	-9.6	113	0.00	3.05-	3.25
5	AR1016-D	7.090	7.550 E6	-6.5	109	0.00	3.24-	3.30
6	AR1016-E	4.678	4.939 E6	-5.6	112	0.00	3.62-	3.68
7	AR1260-A	6.957	7.225 E6	-3.9	110	0.00	4.93-	5.13
8	AR1260-B	10.381	11.689 E6	-12.6	116	0.01	5.28-	5.48
9	AR1260-C	21.110	23.710 E6	-12.3	114	0.01	5.66-	5.86
10	AR1260-D	14.793	17.570 E6	-18.8	119	0.01	6.60-	6.80
11	AR1260-E	14.415	16.007 E6	-11.0	116	0.01	7.02-	7.22
12	AR1260-F	3.593	3.728 E6	-3.8	107	0.01	7.97-	8.17
13 s	DCB	116.378	116.243 E6	0.1	100	0.02	8.72-	8.92
14	AR1221-A			-----NA-----				
15	AR1221-B			-----NA-----				
16	AR1221-C			-----NA-----				
17	AR1232-A			-----NA-----				
18	AR1232-B			-----NA-----				
19	AR1232-C			-----NA-----				
20	AR1232-D			-----NA-----				
21	AR1232-E			-----NA-----				
22	AR1242-A			-----NA-----				
23	AR1242-B			-----NA-----				
24	AR1242-C			-----NA-----				
25	AR1242-D			-----NA-----				
26	AR1242-E			-----NA-----				
27	AR1248-A			-----NA-----				
28	AR1248-B			-----NA-----				
29	AR1248-C			-----NA-----				
30	AR1248-D			-----NA-----				
31	AR1248-E			-----NA-----				
32	AR1254-A			-----NA-----				
33	AR1254-B			-----NA-----				
34	AR1254-C			-----NA-----				
35	AR1254-D			-----NA-----				
36	AR1254-E			-----NA-----				
37	AR1262-A			-----NA-----				
38	AR1262-B			-----NA-----				
39	AR1262-C			-----NA-----				
40	AR1262-D			-----NA-----				
41	AR1262-E			-----NA-----				

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37110.D

42	AR1268-A	-----NA-----
43	AR1268-B	-----NA-----
44	AR1268-C	-----NA-----
45	AR1268-D	-----NA-----
46	AR1268-E	-----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	87.764	E6	-5.4	101	0.00	1.98-	2.18
2		AR1016-A	1.534	1.433	E6	6.6	102	0.00	2.31-	2.51
3		AR1016-B	3.051	3.003	E6	1.6	100	0.00	2.61-	2.81
4		AR1016-C	5.843	6.221	E6	-6.5	104	0.00	2.98-	3.18
5		AR1016-D	2.430	2.515	E6	-3.5	101	0.00	3.17-	3.23
6		AR1016-E	2.721	2.839	E6	-4.3	103	0.00	3.60-	3.66
7		AR1260-A	3.951	4.080	E6	-3.3	105	0.01	4.97-	5.17
8		AR1260-B	4.471	4.754	E6	-6.3	107	0.01	5.25-	5.45
9		AR1260-C	10.997	11.929	E6	-8.5	108	0.01	5.72-	5.92
10		AR1260-D	7.416	8.584	E6	-15.7	113	0.01	6.64-	6.84
11		AR1260-E	6.908	8.031	E6	-16.3	114	0.01	7.18-	7.38
12		AR1260-F	1.668	1.973	E6	-18.3	113	0.01	8.08-	8.28
13	s	DCB	51.795	60.286	E6	-16.4	112	0.01	9.00-	9.20
14		AR1221-A							-----NA-----	
15		AR1221-B							-----NA-----	
16		AR1221-C							-----NA-----	
17		AR1232-A							-----NA-----	
18		AR1232-B							-----NA-----	
19		AR1232-C							-----NA-----	
20		AR1232-D							-----NA-----	
21		AR1232-E							-----NA-----	
22		AR1242-A							-----NA-----	
23		AR1242-B							-----NA-----	
24		AR1242-C							-----NA-----	
25		AR1242-D							-----NA-----	
26		AR1242-E							-----NA-----	
27		AR1248-A							-----NA-----	
28		AR1248-B							-----NA-----	
29		AR1248-C							-----NA-----	
30		AR1248-D							-----NA-----	
31		AR1248-E							-----NA-----	
32		AR1254-A							-----NA-----	
33		AR1254-B							-----NA-----	
34		AR1254-C							-----NA-----	
35		AR1254-D							-----NA-----	
36		AR1254-E							-----NA-----	
37		AR1262-A							-----NA-----	
38		AR1262-B							-----NA-----	
39		AR1262-C							-----NA-----	
40		AR1262-D							-----NA-----	
41		AR1262-E							-----NA-----	
42		AR1268-A							-----NA-----	
43		AR1268-B							-----NA-----	
44		AR1268-C							-----NA-----	
45		AR1268-D							-----NA-----	
46		AR1268-E							-----NA-----	

(#) = Out of Range
 BK37071.d PC140429.M SPCC's out = 0 CCC's out = 0
 Wed Apr 30 07:34:41 2014

6.6.5
 6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37132.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37132.d\ECD1A.ch Vial: 99
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37132.d\ECD2B.ch
 Acq On : 30 Apr 2014 8:30 am Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	149.188 E6	-0.1	99	0.00	2.12-	2.32
2	AR1016-A	2.219	2.008 E6	9.5	92	0.00	2.38-	2.58
3	AR1016-B	5.082	4.677 E6	8.0	99	0.00	2.65-	2.85
4	AR1016-C	10.637	10.622 E6	0.1	103	0.00	3.05-	3.25
5	AR1016-D	7.090	6.862 E6	3.2	99	0.00	3.24-	3.30
6	AR1016-E	4.678	4.461 E6	4.6	101	0.00	3.62-	3.68
7	AR1260-A	6.957	6.786 E6	2.5	103	0.00	4.93-	5.13
8	AR1260-B	10.381	10.394 E6	-0.1	103	0.01	5.28-	5.48
9	AR1260-C	21.110	21.128 E6	-0.1	102	0.01	5.66-	5.86
10	AR1260-D	14.793	15.535 E6	-5.0	106	0.01	6.60-	6.80
11	AR1260-E	14.415	14.623 E6	-1.4	106	0.01	7.02-	7.22
12	AR1260-F	3.593	3.700 E6	-3.0	106	0.01	7.97-	8.17
13 s	DCB	116.378	119.891 E6	-3.0	103	0.01	8.72-	8.92
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37132.D

42 AR1268-A -----NA-----
 43 AR1268-B -----NA-----
 44 AR1268-C -----NA-----
 45 AR1268-D -----NA-----
 46 AR1268-E -----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	83.032	E6	0.3	96	0.00	1.98-	2.18
2		AR1016-A	1.534	1.371	E6	10.6	98	0.00	2.31-	2.51
3		AR1016-B	3.051	2.808	E6	8.0	94	0.00	2.61-	2.81
4		AR1016-C	5.843	5.755	E6	1.5	96	0.00	2.98-	3.18
5		AR1016-D	2.430	2.331	E6	4.1	93	0.00	3.17-	3.23
6		AR1016-E	2.721	2.613	E6	4.0	95	0.00	3.60-	3.66
7		AR1260-A	3.951	3.789	E6	4.1	98	0.00	4.97-	5.17
8		AR1260-B	4.471	4.381	E6	2.0	99	0.01	5.25-	5.45
9		AR1260-C	10.997	10.799	E6	1.8	98	0.01	5.72-	5.92
10		AR1260-D	7.416	7.854	E6	-5.9	103	0.01	6.64-	6.84
11		AR1260-E	6.908	7.327	E6	-6.1	104	0.01	7.18-	7.38
12		AR1260-F	1.668	1.867	E6	-11.9	107	0.01	8.08-	8.28
13	s	DCB	51.795	59.050	E6	-14.0	110	0.01	9.00-	9.20
14		AR1221-A							-----	NA-----
15		AR1221-B							-----	NA-----
16		AR1221-C							-----	NA-----
17		AR1232-A							-----	NA-----
18		AR1232-B							-----	NA-----
19		AR1232-C							-----	NA-----
20		AR1232-D							-----	NA-----
21		AR1232-E							-----	NA-----
22		AR1242-A							-----	NA-----
23		AR1242-B							-----	NA-----
24		AR1242-C							-----	NA-----
25		AR1242-D							-----	NA-----
26		AR1242-E							-----	NA-----
27		AR1248-A							-----	NA-----
28		AR1248-B							-----	NA-----
29		AR1248-C							-----	NA-----
30		AR1248-D							-----	NA-----
31		AR1248-E							-----	NA-----
32		AR1254-A							-----	NA-----
33		AR1254-B							-----	NA-----
34		AR1254-C							-----	NA-----
35		AR1254-D							-----	NA-----
36		AR1254-E							-----	NA-----
37		AR1262-A							-----	NA-----
38		AR1262-B							-----	NA-----
39		AR1262-C							-----	NA-----
40		AR1262-D							-----	NA-----
41		AR1262-E							-----	NA-----
42		AR1268-A							-----	NA-----
43		AR1268-B							-----	NA-----
44		AR1268-C							-----	NA-----
45		AR1268-D							-----	NA-----
46		AR1268-E							-----	NA-----

(#) = Out of Range
 BK37071.d PC140429.M

SPCC's out = 0 CCC's out = 0
 Wed Apr 30 08:47:27 2014

6.6.6
6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37143.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37143.d\ECD1A.ch Vial: 99
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37143.d\ECD2B.ch
 Acq On : 30 Apr 2014 11:29 am Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	146.732 E6	1.6	97	0.00	2.12-	2.32
2	AR1016-A	2.219	1.993 E6	10.2	91	0.00	2.38-	2.58
3	AR1016-B	5.082	4.616 E6	9.2	98	0.00	2.66-	2.86
4	AR1016-C	10.637	10.015 E6	5.8	97	0.00	3.05-	3.25
5	AR1016-D	7.090	6.657 E6	6.1	96	0.00	3.24-	3.30
6	AR1016-E	4.678	4.100 E6	12.4	93	0.00	3.63-	3.69
7	AR1260-A	6.957	5.378 E6	22.7#	82	0.01	4.93-	5.13
8	AR1260-B	10.381	8.408 E6	19.0	83	0.02	5.29-	5.49
9	AR1260-C	21.110	17.088 E6	19.1	82	0.02	5.66-	5.86
10	AR1260-D	14.793	11.778 E6	20.4#	80	0.02	6.61-	6.81
11	AR1260-E	14.415	10.925 E6	24.2#	79#	0.02	7.02-	7.22
12	AR1260-F	3.593	2.617 E6	27.2#	75#	0.02	7.98-	8.18
13 s	DCB	116.378	87.636 E6	24.7#	76#	0.02	8.72-	8.92
14	AR1221-A			-----NA-----				
15	AR1221-B			-----NA-----				
16	AR1221-C			-----NA-----				
17	AR1232-A			-----NA-----				
18	AR1232-B			-----NA-----				
19	AR1232-C			-----NA-----				
20	AR1232-D			-----NA-----				
21	AR1232-E			-----NA-----				
22	AR1242-A			-----NA-----				
23	AR1242-B			-----NA-----				
24	AR1242-C			-----NA-----				
25	AR1242-D			-----NA-----				
26	AR1242-E			-----NA-----				
27	AR1248-A			-----NA-----				
28	AR1248-B			-----NA-----				
29	AR1248-C			-----NA-----				
30	AR1248-D			-----NA-----				
31	AR1248-E			-----NA-----				
32	AR1254-A			-----NA-----				
33	AR1254-B			-----NA-----				
34	AR1254-C			-----NA-----				
35	AR1254-D			-----NA-----				
36	AR1254-E			-----NA-----				
37	AR1262-A			-----NA-----				
38	AR1262-B			-----NA-----				
39	AR1262-C			-----NA-----				
40	AR1262-D			-----NA-----				
41	AR1262-E			-----NA-----				

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37143.D

42	AR1268-A	-----NA-----
43	AR1268-B	-----NA-----
44	AR1268-C	-----NA-----
45	AR1268-D	-----NA-----
46	AR1268-E	-----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	76.393	E6	8.3	88	0.00	1.98-	2.18
2		AR1016-A	1.534	1.240	E6	19.2	88	0.00	2.31-	2.51
3		AR1016-B	3.051	2.565	E6	15.9	85	0.00	2.62-	2.82
4		AR1016-C	5.843	5.278	E6	9.7	88	0.00	2.98-	3.18
5		AR1016-D	2.430	2.114	E6	13.0	85	0.00	3.17-	3.23
6		AR1016-E	2.721	2.381	E6	12.5	86	0.00	3.61-	3.67
7		AR1260-A	3.951	3.375	E6	14.6	87	0.01	4.98-	5.18
8		AR1260-B	4.471	3.896	E6	12.9	88	0.01	5.25-	5.45
9		AR1260-C	10.997	9.512	E6	13.5	86	0.01	5.73-	5.93
10		AR1260-D	7.416	6.903	E6	6.9	91	0.02	6.64-	6.84
11		AR1260-E	6.908	6.124	E6	11.3	87	0.02	7.18-	7.38
12		AR1260-F	1.668	1.507	E6	9.7	86	0.02	8.08-	8.28
13	s	DCB	51.795	49.258	E6	4.9	92	0.02	9.00-	9.20
14		AR1221-A							-----NA-----	
15		AR1221-B							-----NA-----	
16		AR1221-C							-----NA-----	
17		AR1232-A							-----NA-----	
18		AR1232-B							-----NA-----	
19		AR1232-C							-----NA-----	
20		AR1232-D							-----NA-----	
21		AR1232-E							-----NA-----	
22		AR1242-A							-----NA-----	
23		AR1242-B							-----NA-----	
24		AR1242-C							-----NA-----	
25		AR1242-D							-----NA-----	
26		AR1242-E							-----NA-----	
27		AR1248-A							-----NA-----	
28		AR1248-B							-----NA-----	
29		AR1248-C							-----NA-----	
30		AR1248-D							-----NA-----	
31		AR1248-E							-----NA-----	
32		AR1254-A							-----NA-----	
33		AR1254-B							-----NA-----	
34		AR1254-C							-----NA-----	
35		AR1254-D							-----NA-----	
36		AR1254-E							-----NA-----	
37		AR1262-A							-----NA-----	
38		AR1262-B							-----NA-----	
39		AR1262-C							-----NA-----	
40		AR1262-D							-----NA-----	
41		AR1262-E							-----NA-----	
42		AR1268-A							-----NA-----	
43		AR1268-B							-----NA-----	
44		AR1268-C							-----NA-----	
45		AR1268-D							-----NA-----	
46		AR1268-E							-----NA-----	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 BK37071.d PC140429.M Wed Apr 30 11:46:29 2014

6.6.7
6

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37154.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\BK...29\BK37154.d\ECD1A.ch Vial: 99
 Signal #2 : C:\msdchem\1\DATA\BK140429\BK37154.d\ECD2B.ch
 Acq On : 30 Apr 2014 2:28 pm Operator: nickk
 Sample : cc1213-750,a16/60 Inst : GCBK
 Misc : op37822,gbk1213,15,,,10,,s Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\msdchem\1\METHODS\PC140429.M (ChemStation Integrator)
 Title : PCB,rtx-clpest front,rtx-clpest2-rear
 Last Update : Tue Apr 29 17:49:50 2014
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 80% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 120%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 s	TCMX	149.072	145.118 E6	2.7	96	0.00	2.12-	2.32
2	AR1016-A	2.219	1.972 E6	11.1	90	0.00	2.38-	2.58
3	AR1016-B	5.082	4.562 E6	10.2	97	0.00	2.66-	2.86
4	AR1016-C	10.637	10.490 E6	1.4	102	0.01	3.05-	3.25
5	AR1016-D	7.090	6.919 E6	2.4	100	0.01	3.24-	3.30
6	AR1016-E	4.678	4.429 E6	5.3	100	0.01	3.63-	3.69
7	AR1260-A	6.957	5.987 E6	13.9	91	0.02	4.93-	5.13
8	AR1260-B	10.381	9.653 E6	7.0	96	0.02	5.29-	5.49
9	AR1260-C	21.110	17.774 E6	15.8	86	0.02	5.66-	5.86
10	AR1260-D	14.793	12.978 E6	12.3	88	0.02	6.61-	6.81
11	AR1260-E	14.415	11.847 E6	17.8	86	0.02	7.03-	7.23
12	AR1260-F	3.593	2.836 E6	21.1#	81	0.02	7.98-	8.18
13 s	DCB	116.378	93.287 E6	19.8	81	0.02	8.72-	8.92
14	AR1221-A							
15	AR1221-B							
16	AR1221-C							
17	AR1232-A							
18	AR1232-B							
19	AR1232-C							
20	AR1232-D							
21	AR1232-E							
22	AR1242-A							
23	AR1242-B							
24	AR1242-C							
25	AR1242-D							
26	AR1242-E							
27	AR1248-A							
28	AR1248-B							
29	AR1248-C							
30	AR1248-D							
31	AR1248-E							
32	AR1254-A							
33	AR1254-B							
34	AR1254-C							
35	AR1254-D							
36	AR1254-E							
37	AR1262-A							
38	AR1262-B							
39	AR1262-C							
40	AR1262-D							
41	AR1262-E							

Continuing Calibration Summary

Job Number: MC30120
 Account: AECOMNYS AECOM
 Project: UTC - Debris Pile

Sample: GBK1213-CC1213
 Lab FileID: BK37154.D

42	AR1268-A	-----NA-----
43	AR1268-B	-----NA-----
44	AR1268-C	-----NA-----
45	AR1268-D	-----NA-----
46	AR1268-E	-----NA-----

***** Signal #2 *****

1	s	TCMX	83.280	78.460	E6	5.8	90	0.00	1.98- 2.18
2		AR1016-A	1.534	1.258	E6	18.0	90	0.00	2.31- 2.51
3		AR1016-B	3.051	2.574	E6	15.6	86	0.00	2.62- 2.82
4		AR1016-C	5.843	5.380	E6	7.9	90	0.01	2.98- 3.18
5		AR1016-D	2.430	2.163	E6	11.0	87	0.01	3.17- 3.23
6		AR1016-E	2.721	2.421	E6	11.0	88	0.01	3.61- 3.67
7		AR1260-A	3.951	3.467	E6	12.3	89	0.02	4.98- 5.18
8		AR1260-B	4.471	4.088	E6	8.6	92	0.02	5.25- 5.45
9		AR1260-C	10.997	9.953	E6	9.5	90	0.02	5.73- 5.93
10		AR1260-D	7.416	7.151	E6	3.6	94	0.02	6.65- 6.85
11		AR1260-E	6.908	6.471	E6	6.3	92	0.02	7.19- 7.39
12		AR1260-F	1.668	1.619	E6	2.9	93	0.02	8.09- 8.29
13	s	DCB	51.795	51.633	E6	0.3	96	0.02	9.00- 9.20
14		AR1221-A							-----NA-----
15		AR1221-B							-----NA-----
16		AR1221-C							-----NA-----
17		AR1232-A							-----NA-----
18		AR1232-B							-----NA-----
19		AR1232-C							-----NA-----
20		AR1232-D							-----NA-----
21		AR1232-E							-----NA-----
22		AR1242-A							-----NA-----
23		AR1242-B							-----NA-----
24		AR1242-C							-----NA-----
25		AR1242-D							-----NA-----
26		AR1242-E							-----NA-----
27		AR1248-A							-----NA-----
28		AR1248-B							-----NA-----
29		AR1248-C							-----NA-----
30		AR1248-D							-----NA-----
31		AR1248-E							-----NA-----
32		AR1254-A							-----NA-----
33		AR1254-B							-----NA-----
34		AR1254-C							-----NA-----
35		AR1254-D							-----NA-----
36		AR1254-E							-----NA-----
37		AR1262-A							-----NA-----
38		AR1262-B							-----NA-----
39		AR1262-C							-----NA-----
40		AR1262-D							-----NA-----
41		AR1262-E							-----NA-----
42		AR1268-A							-----NA-----
43		AR1268-B							-----NA-----
44		AR1268-C							-----NA-----
45		AR1268-D							-----NA-----
46		AR1268-E							-----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0
 BK37071.d PC140429.M Wed Apr 30 14:52:28 2014

6.6.8
6

GC Semi-volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37134.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:05 am
 Operator : nickk
 Sample : mc30120-1,op37822
 Misc : op37822,gbk1213,15.97,,,10,,s
 ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:39:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.219	2.080	2563.9E6	1718.2E6	17.199m	20.632m
Spiked Amount	40.000		Recovery	=	43.00%	51.58%
13) s DCB	8.819	9.098	2095.9E6	1229.1E6	18.009	23.731 #
Spiked Amount	40.000		Recovery	=	45.02%	59.33%
Target Compounds						
10) AR1260-D	6.706	6.740	333.2E6	202.1E6	22.526	27.253
11) AR1260-E	7.119	7.279	329.3E6	170.3E6	22.844m	24.657m
12) AR1260-F	8.075	8.179	79255799	36732852	22.058	22.024
27) AR1248-A	2.760	2.727f	101.6E6	51269553	46.262	38.502m
28) AR1248-B	3.150f	3.079f	278.0E6	139.1E6	49.529	43.807m
29) AR1248-C	3.438	3.377	665.8E6	386.6E6	80.144m	76.059m
34) AR1254-C	4.671f	4.674f	1214.9E6	785.3E6	64.053m	74.382m
35) AR1254-D	5.150	5.072f	245.9E6	299.3E6	39.867m	50.572m#
36) AR1254-E	5.758	5.826	508.6E6	322.2E6	55.118m	63.304m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

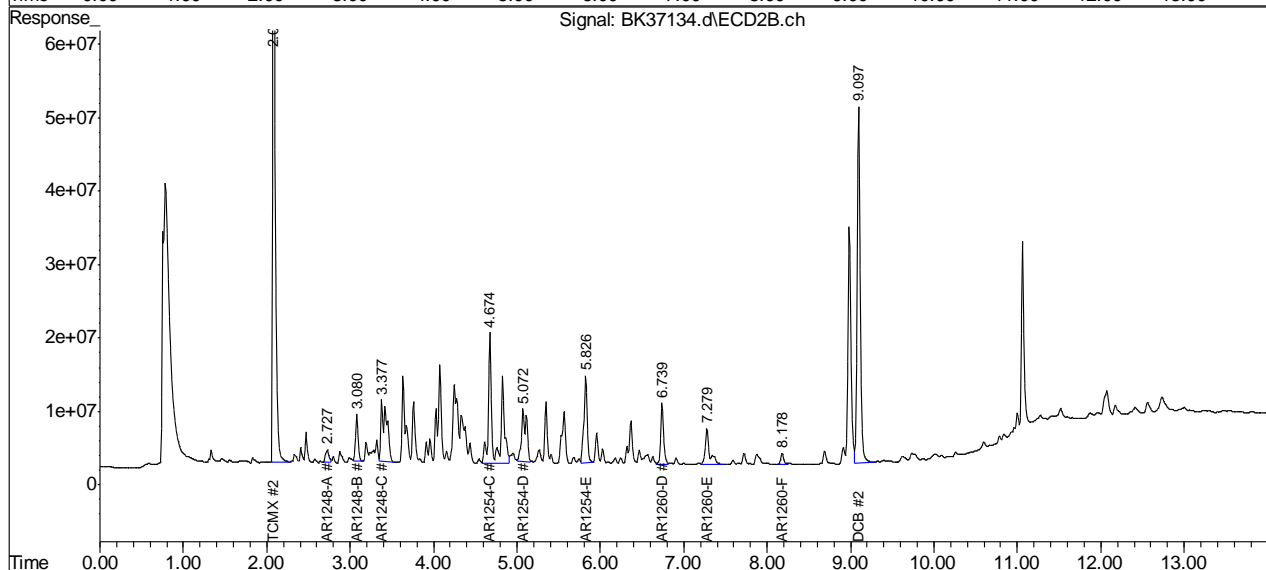
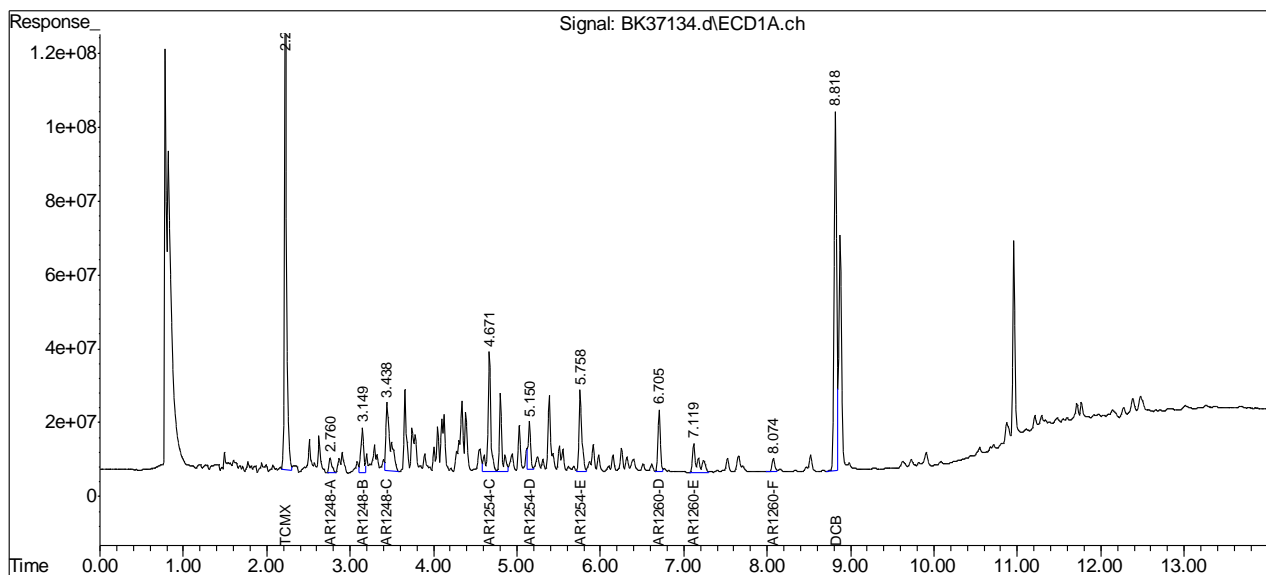
7.1.1
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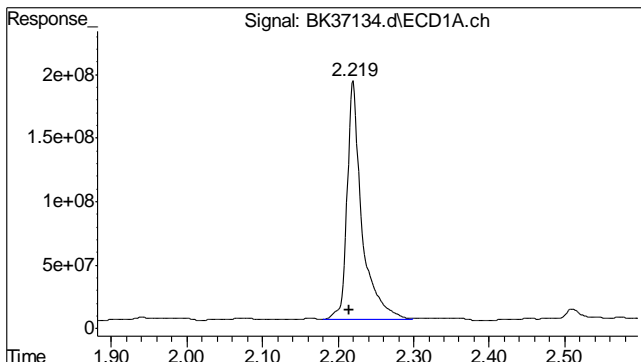
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37134.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:05 am
 Operator : nickk
 Sample : mc30120-1,op37822
 Misc : op37822,gbk1213,15.97,,,10,,,s
 ALS Vial : 6 Sample Multiplier: 1

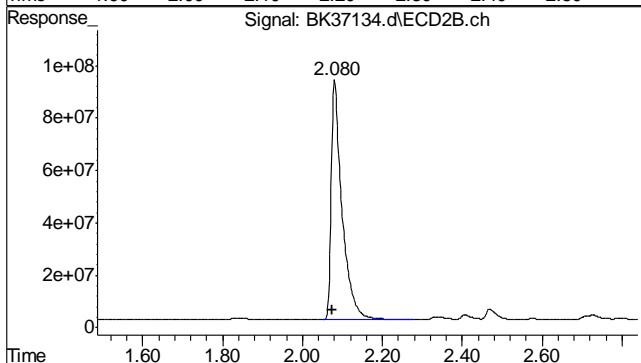
Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:39:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

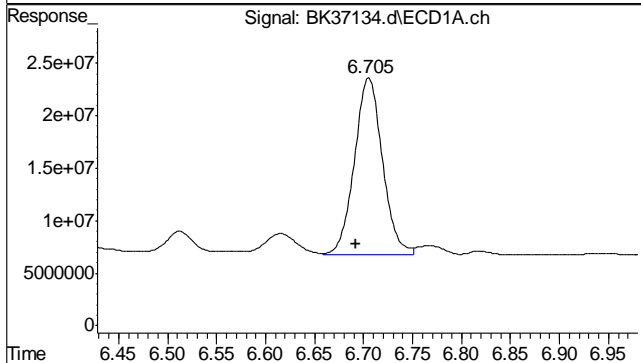




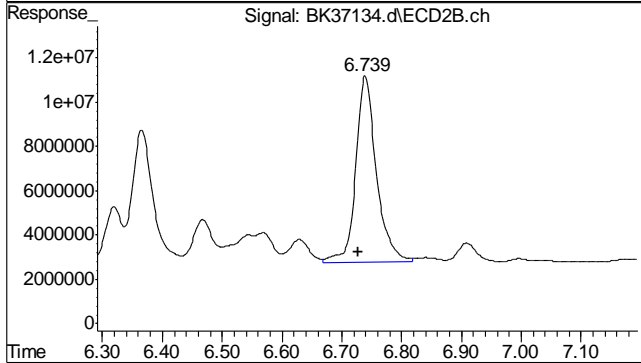
#1 TCMX
 R.T.: 2.219 min
 Delta R.T.: 0.005 min
 Response: 2563898285
 Conc: 17.20 ppb m



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 1718207226
 Conc: 20.63 ppb m

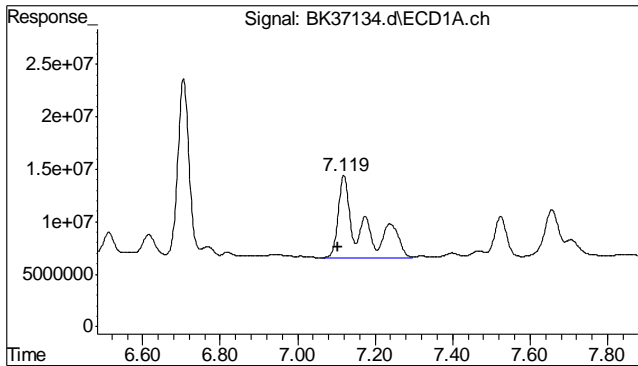


#10 AR1260-D
 R.T.: 6.706 min
 Delta R.T.: 0.014 min
 Response: 333231259
 Conc: 22.53 ppb

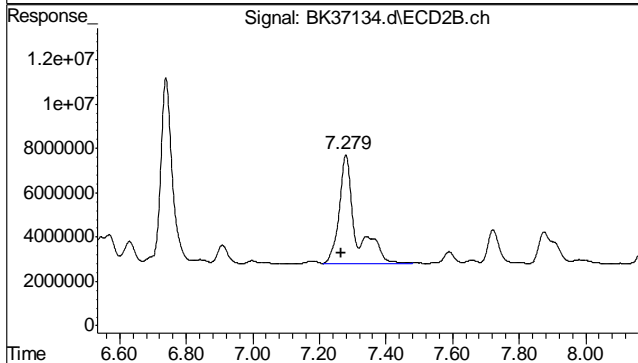


#10 AR1260-D
 R.T.: 6.740 min
 Delta R.T.: 0.013 min
 Response: 202113777
 Conc: 27.25 ppb

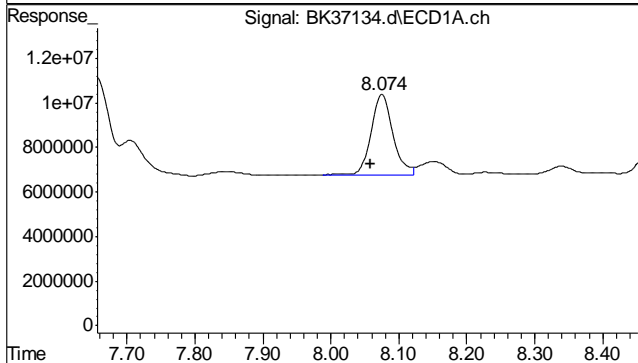
7.1.1
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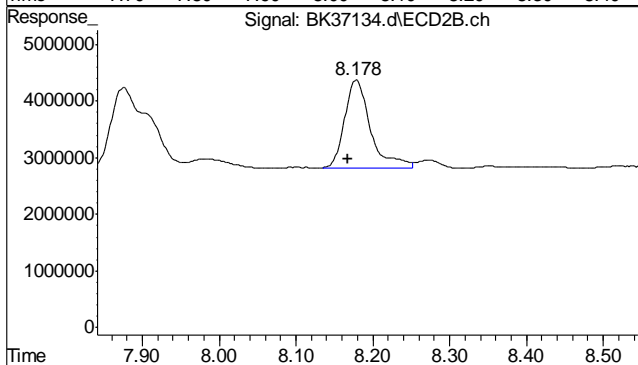
#11 AR1260-E
 R.T.: 7.119 min
 Delta R.T.: 0.014 min
 Response: 329292548
 Conc: 22.84 ppb m



#11 AR1260-E
 R.T.: 7.279 min
 Delta R.T.: 0.012 min
 Response: 170339819
 Conc: 24.66 ppb m

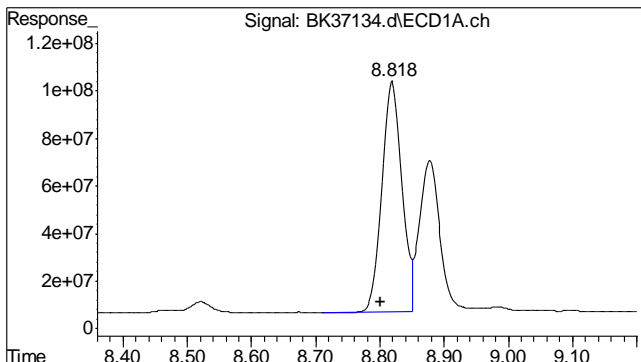


#12 AR1260-F
 R.T.: 8.075 min
 Delta R.T.: 0.016 min
 Response: 79255799
 Conc: 22.06

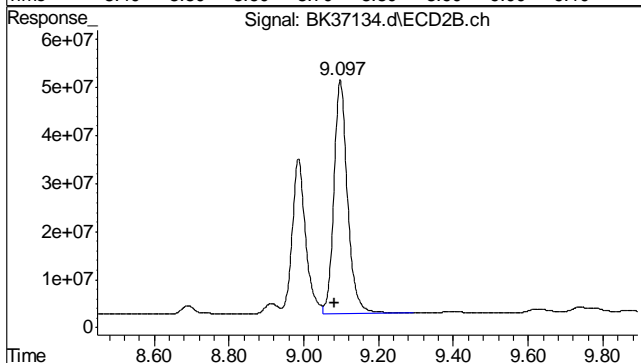


#12 AR1260-F
 R.T.: 8.179 min
 Delta R.T.: 0.011 min
 Response: 36732852
 Conc: 22.02

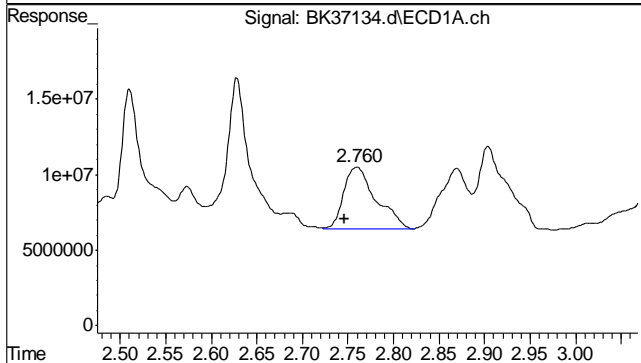
7.1.1



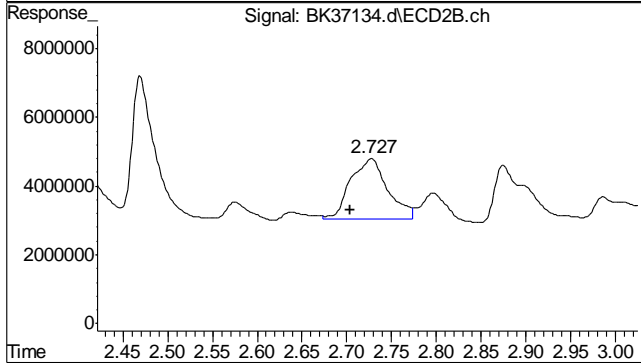
#13 DCB
 R.T.: 8.819 min
 Delta R.T.: 0.018 min
 Response: 2095865679
 Conc: 18.01 ppb



#13 DCB
 R.T.: 9.098 min
 Delta R.T.: 0.016 min
 Response: 1229111052
 Conc: 23.73 ppb

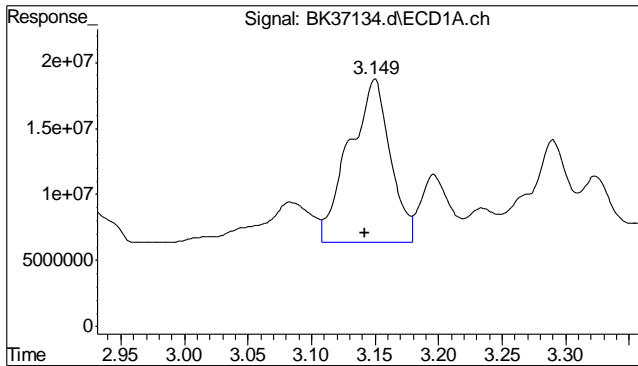


#27 AR1248-A
 R.T.: 2.760 min
 Delta R.T.: 0.014 min
 Response: 101577354
 Conc: 46.26 ppb

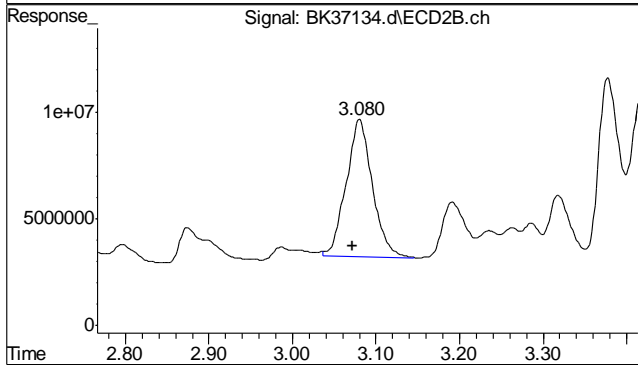


#27 AR1248-A
 R.T.: 2.727 min
 Delta R.T.: 0.023 min
 Response: 51269553
 Conc: 38.50 ppb m

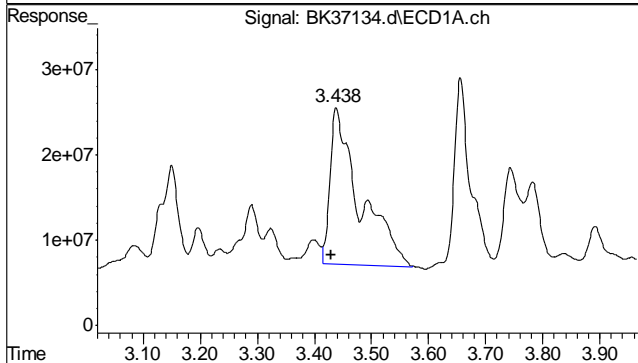
7.1.1
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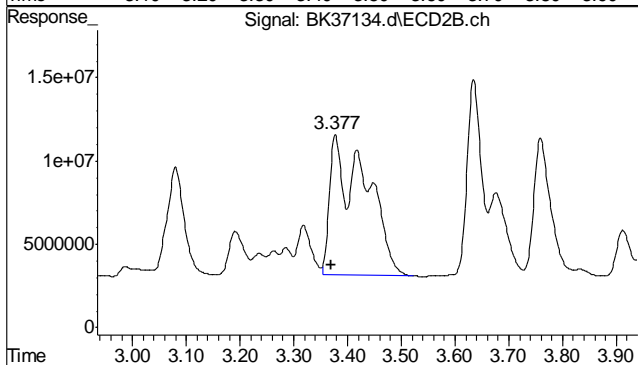
#28 AR1248-B
 R.T.: 3.150 min
 Delta R.T.: 0.008 min
 Response: 278010523
 Conc: 49.53 ppb



#28 AR1248-B
 R.T.: 3.079 min
 Delta R.T.: 0.008 min
 Response: 139135120
 Conc: 43.81 ppb m

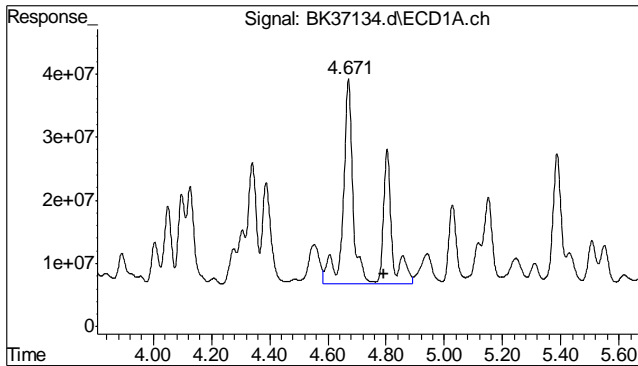


#29 AR1248-C
 R.T.: 3.438 min
 Delta R.T.: 0.009 min
 Response: 665795422
 Conc: 80.14 ppb m

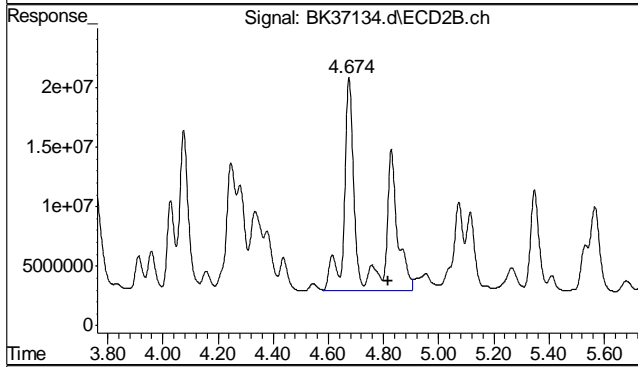


#29 AR1248-C
 R.T.: 3.377 min
 Delta R.T.: 0.008 min
 Response: 386577070
 Conc: 76.06 ppb m

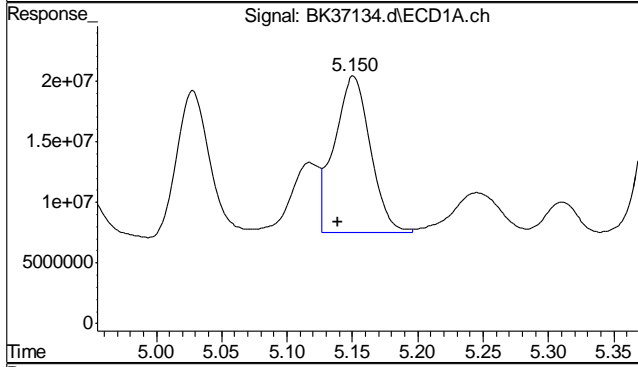
7.1.1
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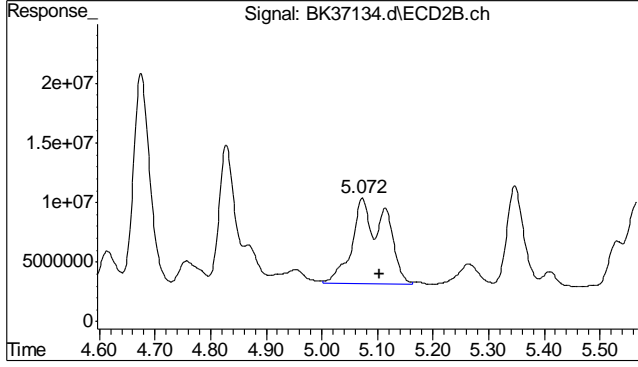
#34 AR1254-C
 R.T.: 4.671 min
 Delta R.T.: -0.122 min
 Response: 1214884604
 Conc: 64.05 ppb m



#34 AR1254-C
 R.T.: 4.674 min
 Delta R.T.: -0.144 min
 Response: 785255576
 Conc: 74.38 ppb m

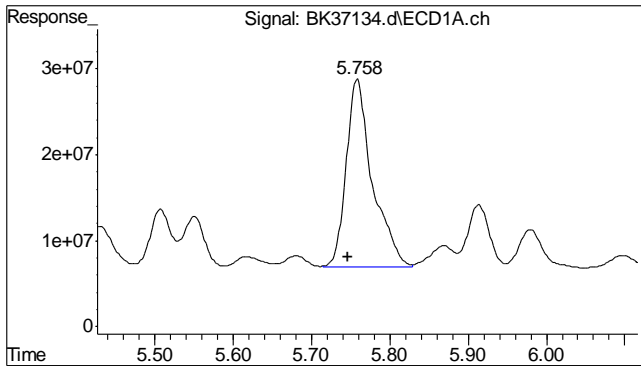


#35 AR1254-D
 R.T.: 5.150 min
 Delta R.T.: 0.011 min
 Response: 245857167
 Conc: 39.87 ppb m



#35 AR1254-D
 R.T.: 5.072 min
 Delta R.T.: -0.031 min
 Response: 299318986
 Conc: 50.57 ppb m

7.1.1
7



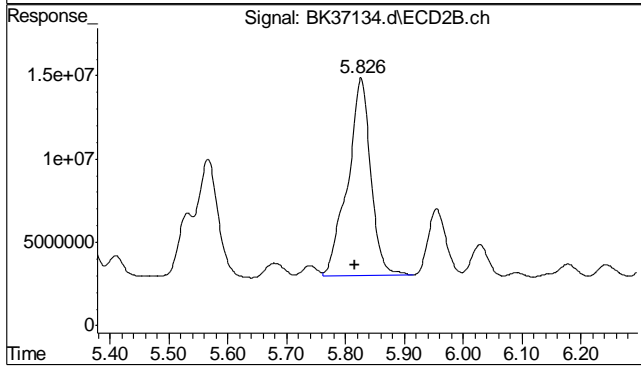
#36 AR1254-E

R.T.: 5.758 min

Delta R.T.: 0.011 min

Response: 508649067

Conc: 55.12 ppb m



#36 AR1254-E

R.T.: 5.826 min

Delta R.T.: 0.010 min

Response: 322187977

Conc: 63.30 ppb m

7.1.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37135.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:21 am
 Operator : nickk
 Sample : mc30120-2,op37822
 Misc : op37822,gbk1213,15.69,,,10,,s
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:41:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.218	2.079	3444.2E6	2020.8E6	23.104m	24.266m
	Spiked Amount	40.000		Recovery	=	57.76%	60.66%
13)	s DCB	8.817	9.097	2369.7E6	1358.6E6	20.363	26.230 #
	Spiked Amount	40.000		Recovery	=	50.91%	65.58%
Target Compounds							
10)	AR1260-D	6.704	6.739	742.9E6	418.4E6	50.223	56.418
11)	AR1260-E	7.118	7.279	762.1E6	385.7E6	52.869m	55.825m
12)	AR1260-F	8.073	8.179	187.8E6	94823015	52.281	56.853m
32)	AR1254-A	4.048	4.070	280.0E6	127.4E6	29.475m	28.583m
33)	AR1254-B	4.335	4.282	324.6E6	128.1E6	25.894m	19.598m
34)	AR1254-C	4.801	4.827	713.5E6	458.3E6	37.617m	43.414m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

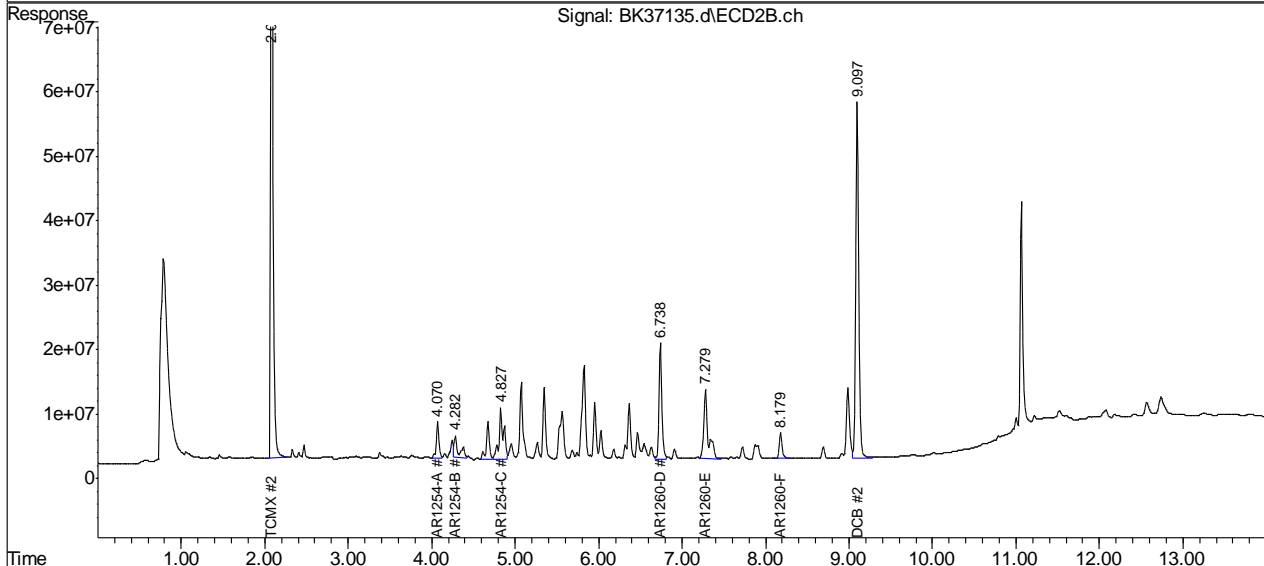
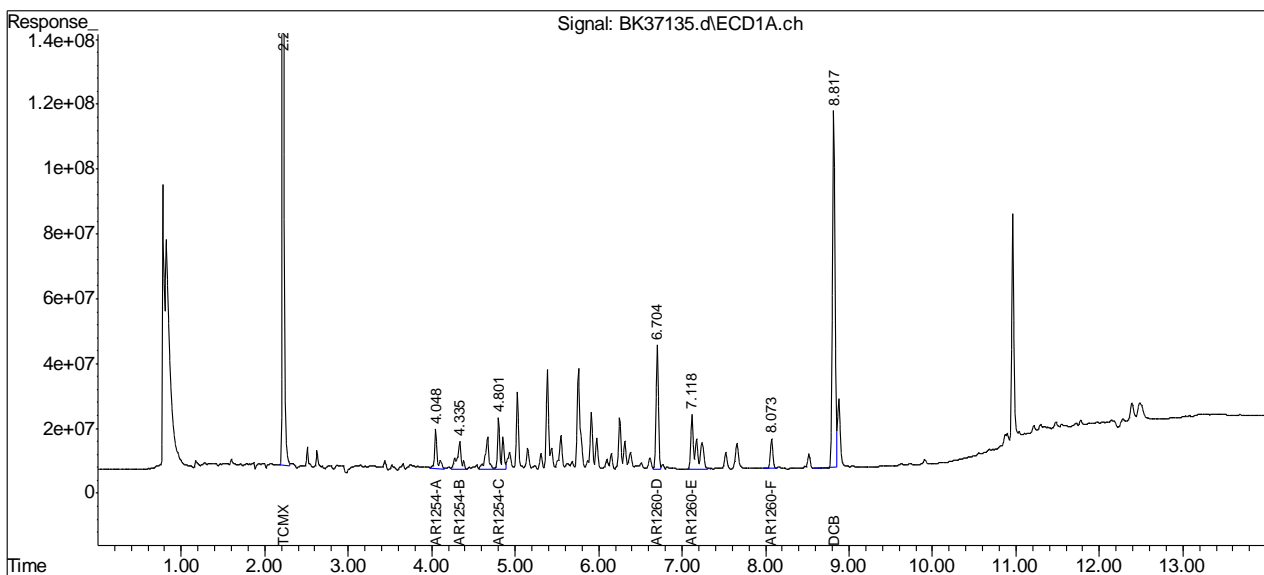
7.12
7

Quantitation Report (QT Reviewed)

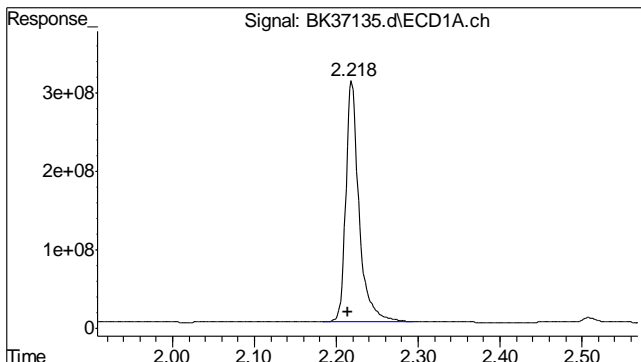
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37135.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:21 am
 Operator : nickk
 Sample : mc30120-2,op37822
 Misc : op37822,gbk1213,15.69,,,10,,,s
 ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:41:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

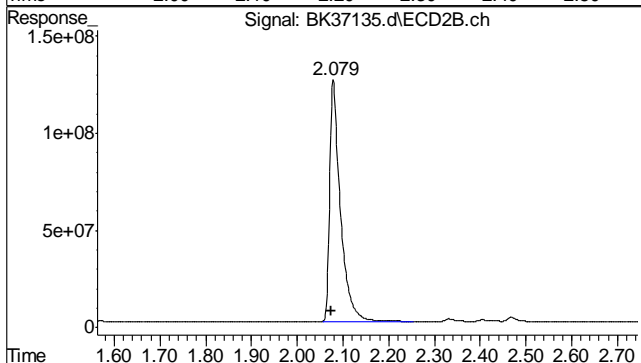
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



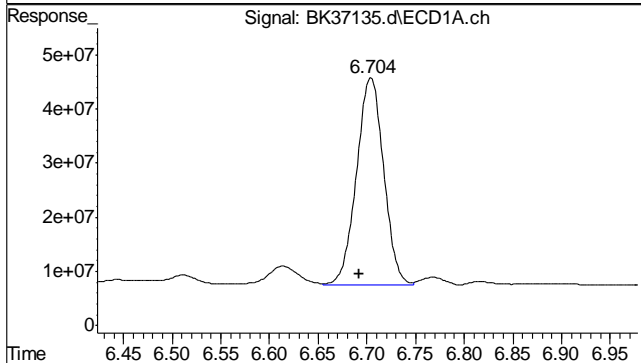
7.1.2
 7



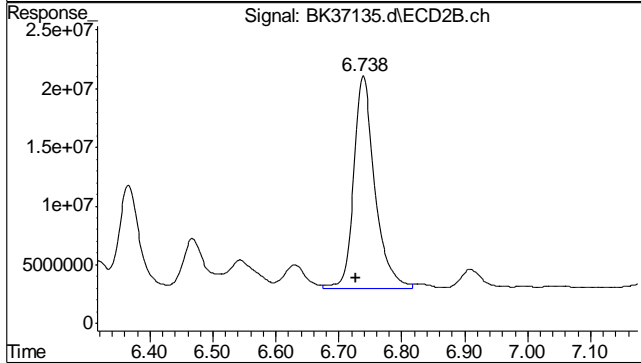
#1 TCMX
 R.T.: 2.218 min
 Delta R.T.: 0.004 min
 Response: 3444181112
 Conc: 23.10 ppb m



#1 TCMX
 R.T.: 2.079 min
 Delta R.T.: 0.004 min
 Response: 2020847402
 Conc: 24.27 ppb m

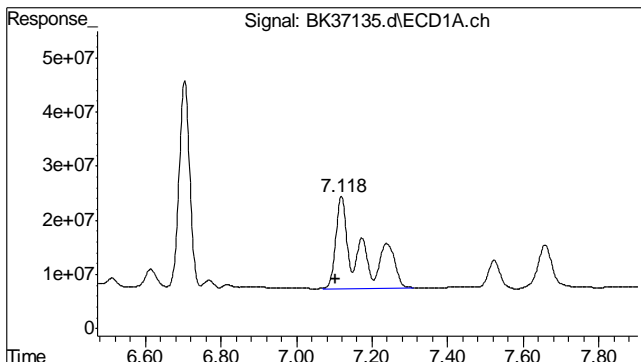


#10 AR1260-D
 R.T.: 6.704 min
 Delta R.T.: 0.012 min
 Response: 742944735
 Conc: 50.22 ppb

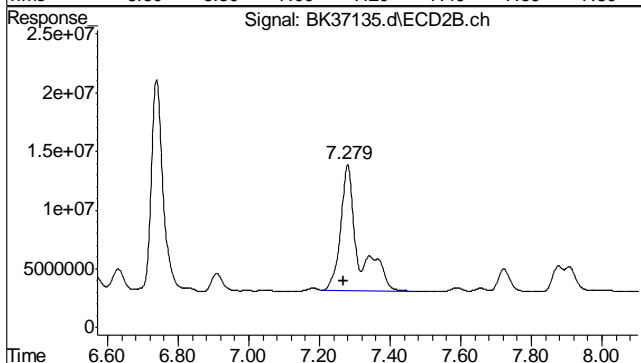


#10 AR1260-D
 R.T.: 6.739 min
 Delta R.T.: 0.012 min
 Response: 418409003
 Conc: 56.42 ppb

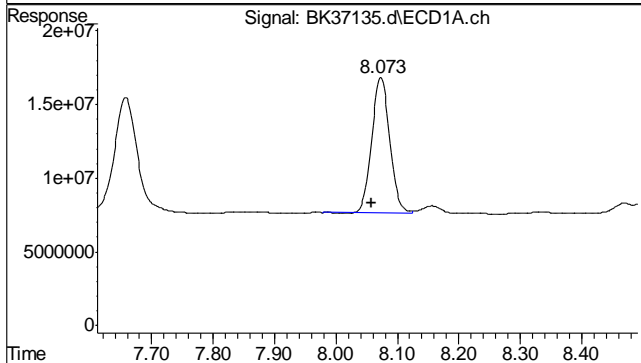
7.12
7



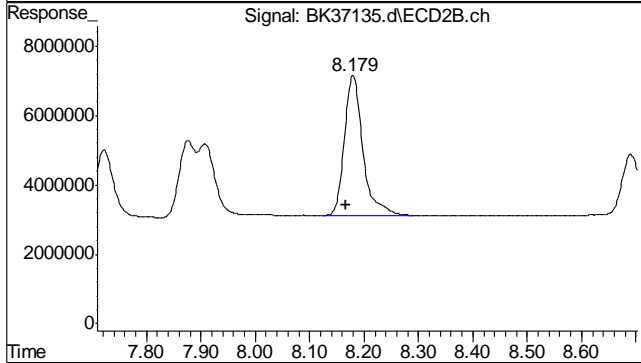
#11 AR1260-E
 R.T.: 7.118 min
 Delta R.T.: 0.014 min
 Response: 762093277
 Conc: 52.87 ppb m



#11 AR1260-E
 R.T.: 7.279 min
 Delta R.T.: 0.012 min
 Response: 385662651
 Conc: 55.83 ppb m

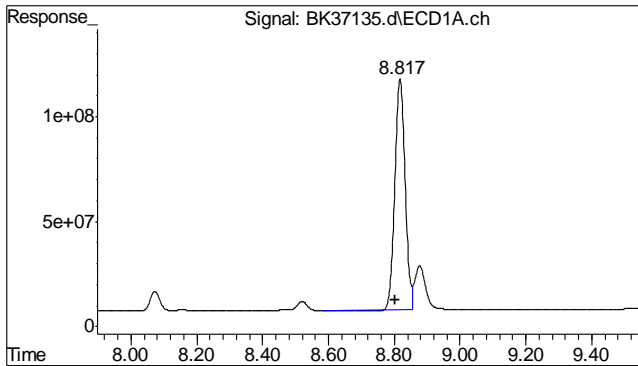


#12 AR1260-F
 R.T.: 8.073 min
 Delta R.T.: 0.015 min
 Response: 187844135
 Conc: 52.28

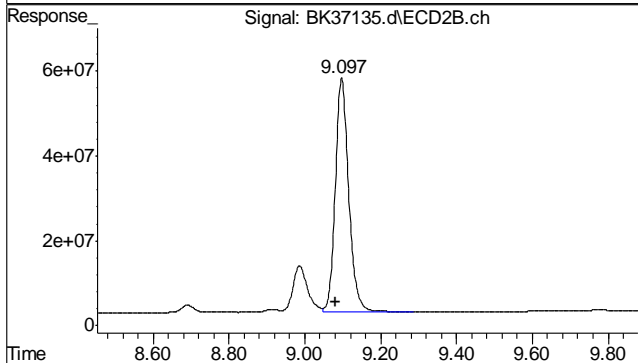


#12 AR1260-F
 R.T.: 8.179 min
 Delta R.T.: 0.012 min
 Response: 94823015
 Conc: 56.85 m

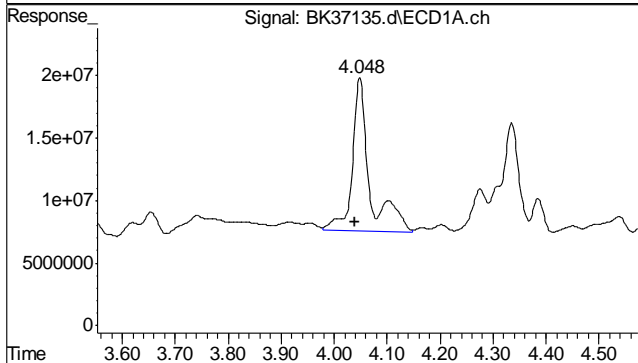
7.12
7



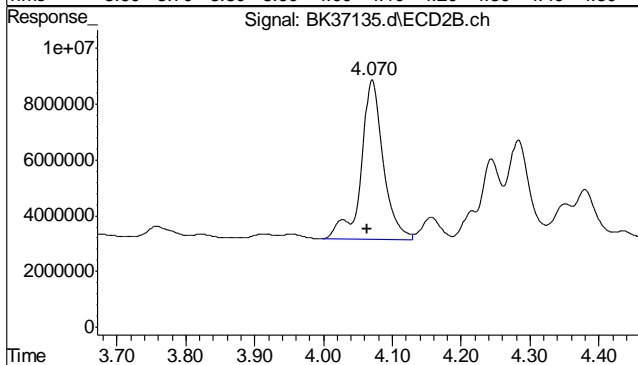
#13 DCB
 R.T.: 8.817 min
 Delta R.T.: 0.016 min
 Response: 2369749564
 Conc: 20.36 ppb



#13 DCB
 R.T.: 9.097 min
 Delta R.T.: 0.015 min
 Response: 1358587459
 Conc: 26.23 ppb

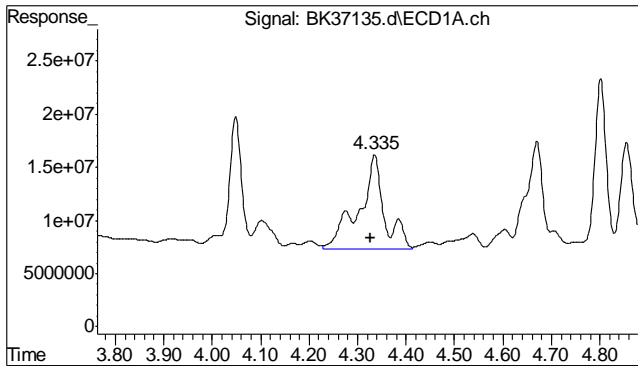


#32 AR1254-A
 R.T.: 4.048 min
 Delta R.T.: 0.008 min
 Response: 279950328
 Conc: 29.48 ppb m

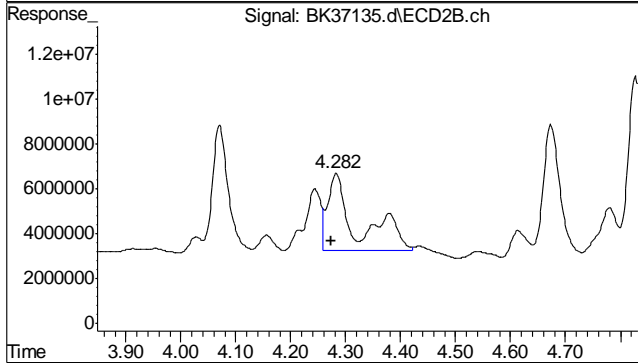


#32 AR1254-A
 R.T.: 4.070 min
 Delta R.T.: 0.007 min
 Response: 127422271
 Conc: 28.58 ppb m

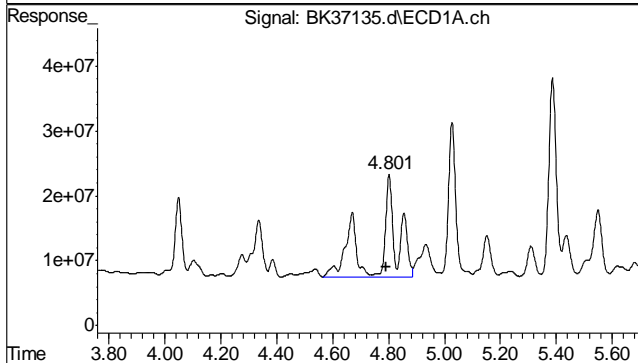
7.12
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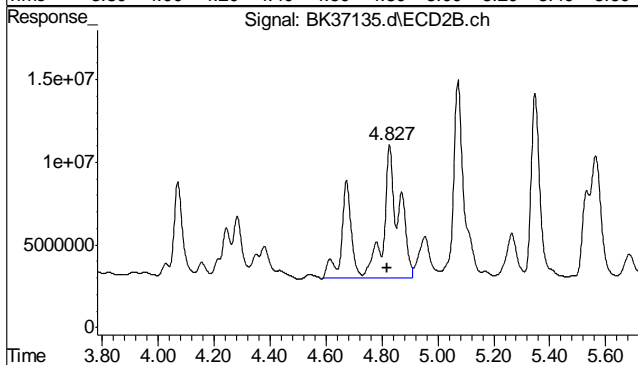
#33 AR1254-B
 R.T.: 4.335 min
 Delta R.T.: 0.009 min
 Response: 324621950
 Conc: 25.89 ppb m



#33 AR1254-B
 R.T.: 4.282 min
 Delta R.T.: 0.008 min
 Response: 128101156
 Conc: 19.60 ppb m



#34 AR1254-C
 R.T.: 4.801 min
 Delta R.T.: 0.009 min
 Response: 713477112
 Conc: 37.62 ppb m



#34 AR1254-C
 R.T.: 4.827 min
 Delta R.T.: 0.008 min
 Response: 458321677
 Conc: 43.41 ppb m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37136.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:37 am
 Operator : nickk
 Sample : mc30120-3,op37822
 Misc : op37822,gbk1213,15.77,,,10,,s
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:43:12 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.219	2.080	3489.8E6	2020.6E6	23.410m	24.263m
Spiked Amount	40.000		Recovery	=	58.53%	60.66%
13) s DCB	8.817	9.096	2520.2E6	1401.5E6	21.655	27.059
Spiked Amount	40.000		Recovery	=	54.14%	67.65%
Target Compounds						
10) AR1260-D	6.704	6.738	1070.4E6	608.8E6	72.359	82.091m
11) AR1260-E	7.118	7.279	1107.1E6	559.2E6	76.799m	80.939m
12) AR1260-F	8.072	8.179	271.1E6	136.7E6	75.466	81.980m
32) AR1254-A	4.048	4.071	273.0E6	130.8E6	28.748m	29.346m
33) AR1254-B	4.335	4.282	341.9E6	161.4E6	27.272m	24.694m

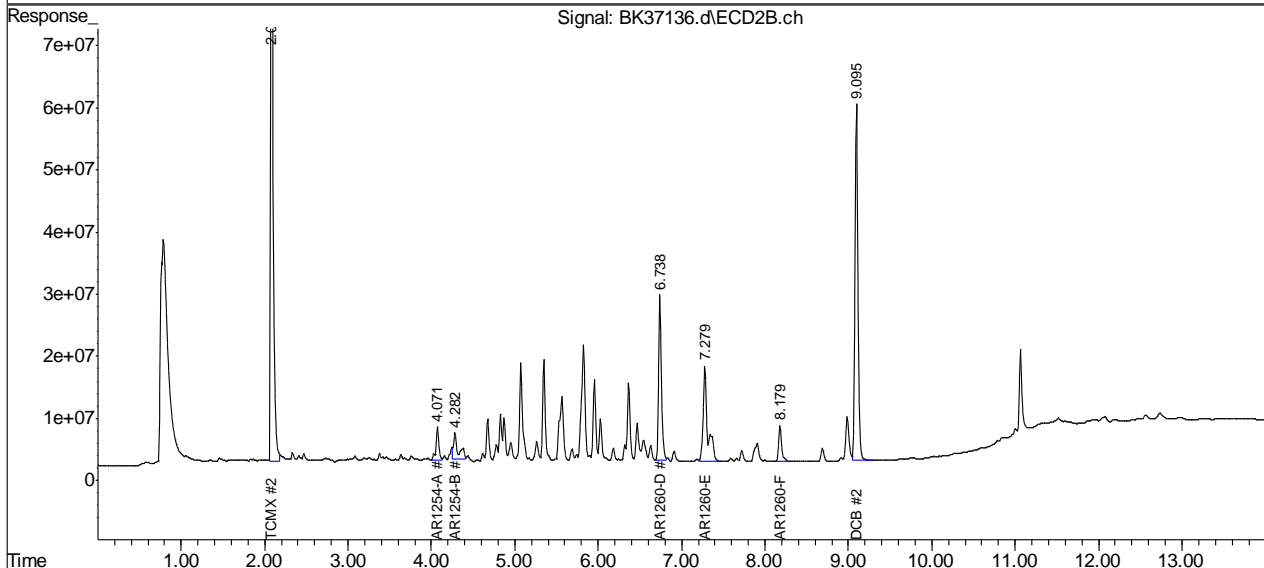
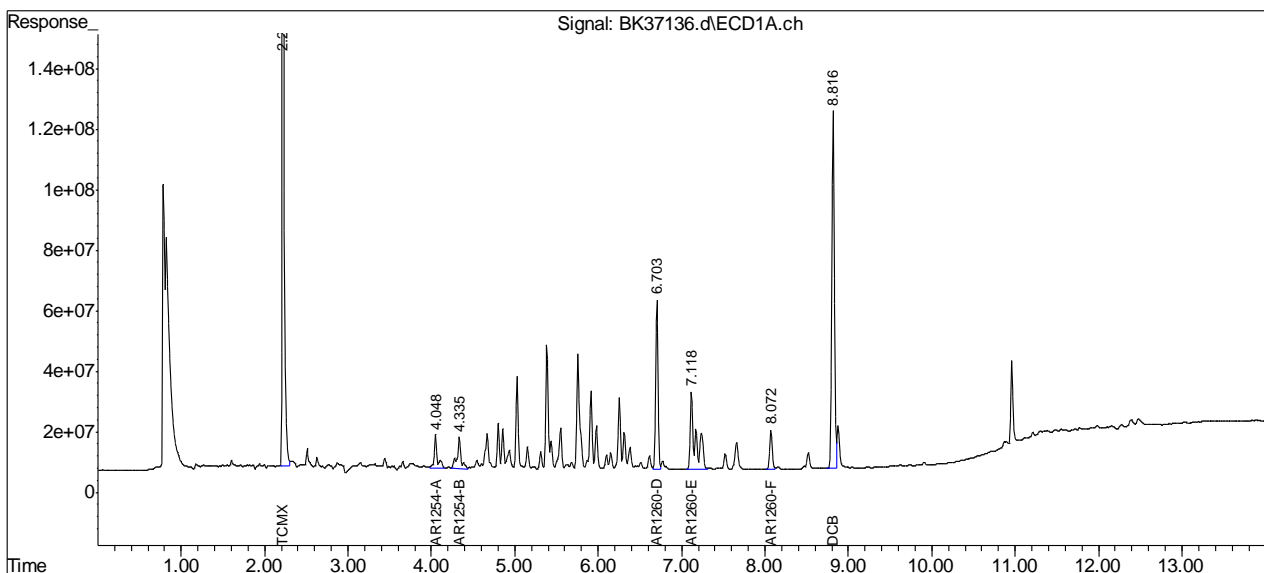
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

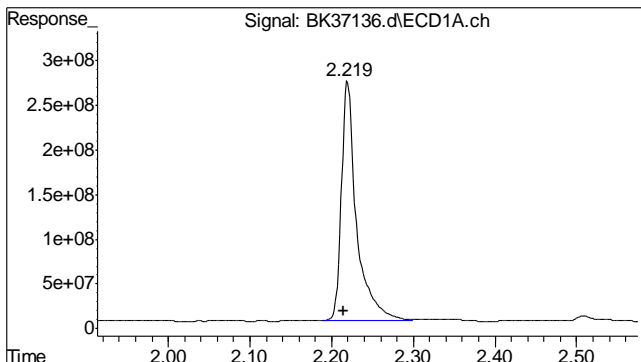
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37136.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:37 am
 Operator : nickk
 Sample : mc30120-3,op37822
 Misc : op37822,gbk1213,15.77,,,10,,,s
 ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:43:12 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

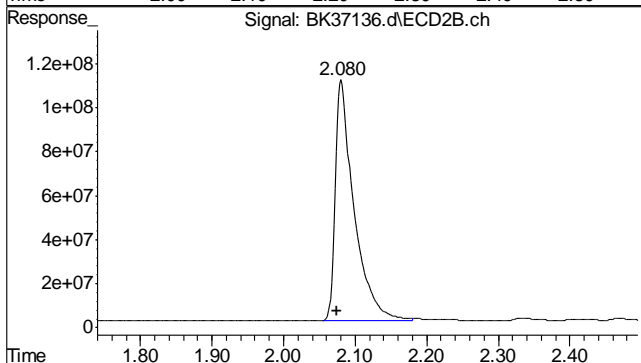
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



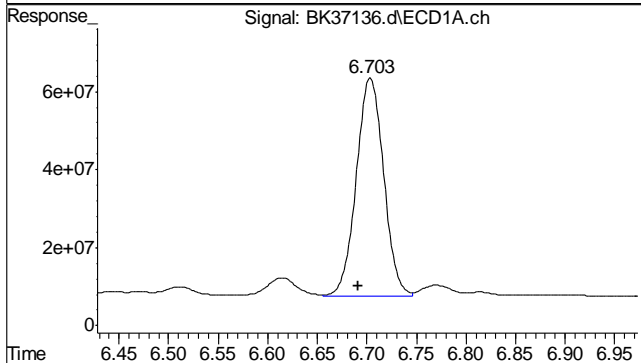
7.1.3
 7



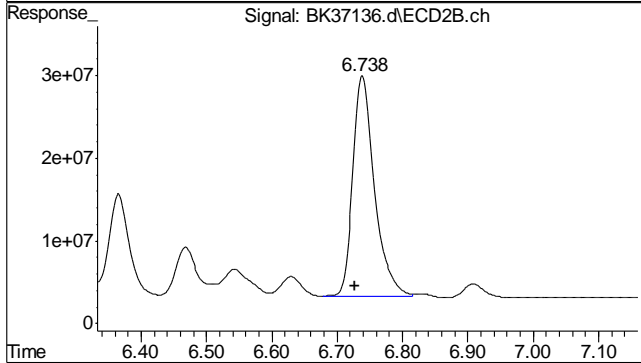
#1 TCMX
 R.T.: 2.219 min
 Delta R.T.: 0.005 min
 Response: 3489765896
 Conc: 23.41 ppb m



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 2020609709
 Conc: 24.26 ppb m

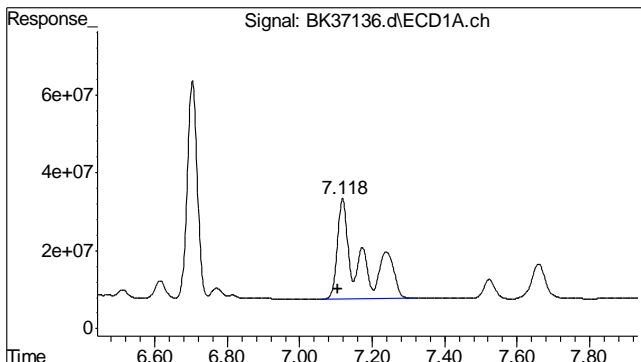


#10 AR1260-D
 R.T.: 6.704 min
 Delta R.T.: 0.012 min
 Response: 1070396806
 Conc: 72.36 ppb

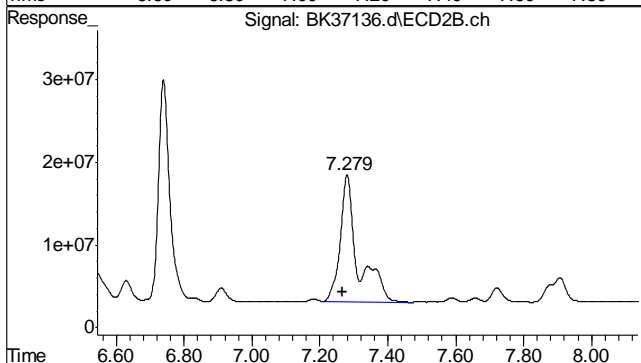


#10 AR1260-D
 R.T.: 6.738 min
 Delta R.T.: 0.012 min
 Response: 608802175
 Conc: 82.09 ppb m

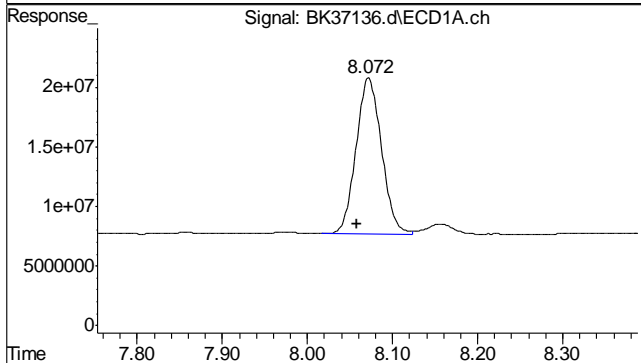
7.1.3
 7



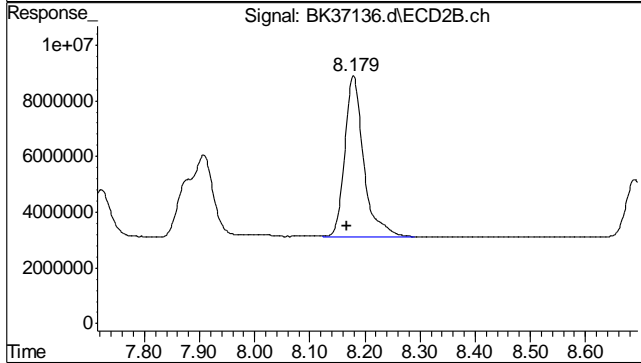
#11 AR1260-E
 R.T.: 7.118 min
 Delta R.T.: 0.013 min
 Response: 1107051233
 Conc: 76.80 ppb m



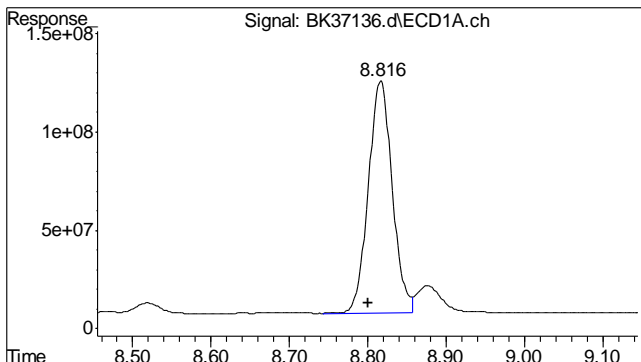
#11 AR1260-E
 R.T.: 7.279 min
 Delta R.T.: 0.012 min
 Response: 559160513
 Conc: 80.94 ppb m



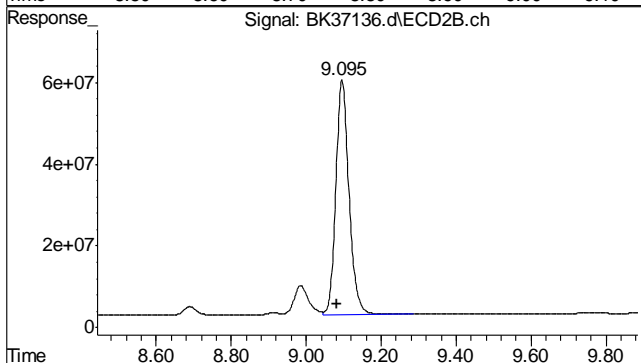
#12 AR1260-F
 R.T.: 8.072 min
 Delta R.T.: 0.014 min
 Response: 271147852
 Conc: 75.47



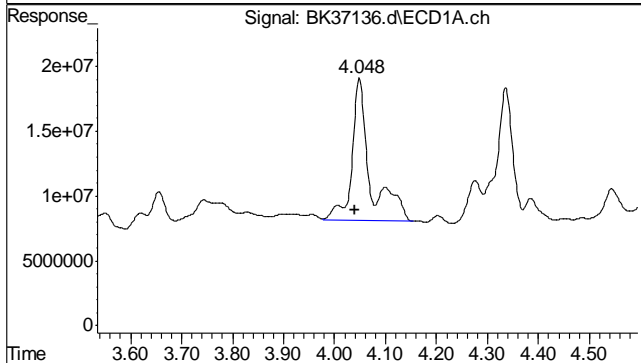
#12 AR1260-F
 R.T.: 8.179 min
 Delta R.T.: 0.012 min
 Response: 136732688
 Conc: 81.98 m



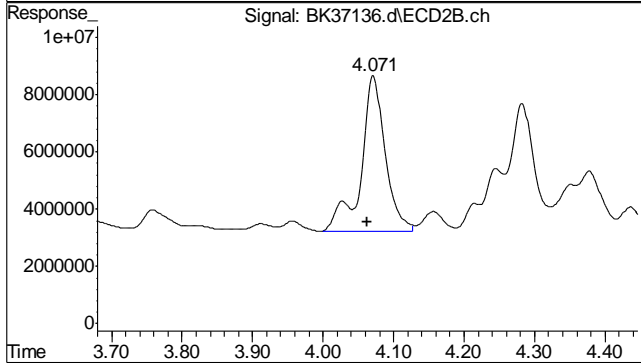
#13 DCB
 R.T.: 8.817 min
 Delta R.T.: 0.016 min
 Response: 2520215004
 Conc: 21.66 ppb



#13 DCB
 R.T.: 9.096 min
 Delta R.T.: 0.014 min
 Response: 1401528333
 Conc: 27.06 ppb

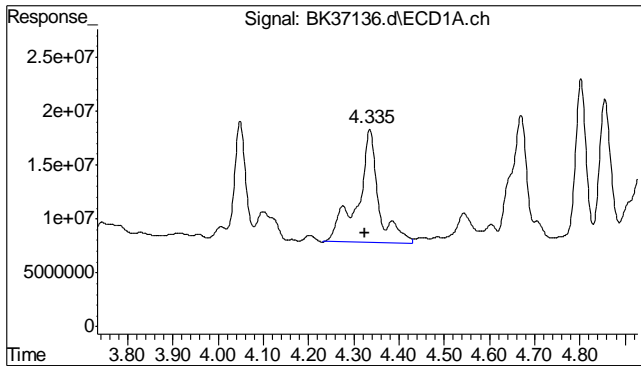


#32 AR1254-A
 R.T.: 4.048 min
 Delta R.T.: 0.009 min
 Response: 273041063
 Conc: 28.75 ppb m

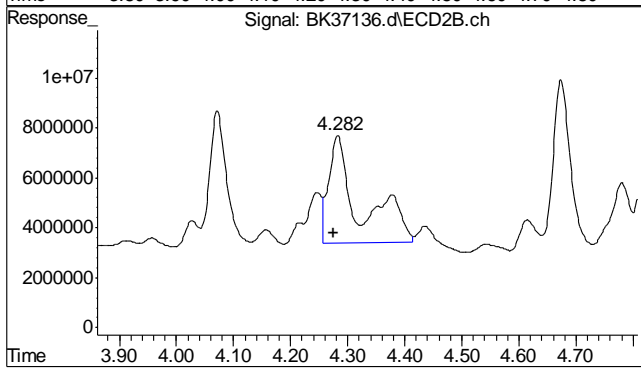


#32 AR1254-A
 R.T.: 4.071 min
 Delta R.T.: 0.008 min
 Response: 130822331
 Conc: 29.35 ppb m

7.1.3
7



#33 AR1254-B
R.T.: 4.335 min
Delta R.T.: 0.009 min
Response: 341904449
Conc: 27.27 ppb m



#33 AR1254-B
R.T.: 4.282 min
Delta R.T.: 0.008 min
Response: 161410794
Conc: 24.69 ppb m

7.1.3
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37137.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:53 am
 Operator : nickk
 Sample : mc30120-4,op37822
 Misc : op37822,gbk1213,15.19,,,10,,s
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:44:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.220	2.081	3586.6E6	1894.2E6	24.060	22.744
Spiked Amount	40.000		Recovery	=	60.15%	56.86%
13) s DCB	8.818	9.098	2470.0E6	1310.7E6	21.224	25.306
Spiked Amount	40.000		Recovery	=	53.06%	63.27%
Target Compounds						
10) AR1260-D	6.704	6.739	198.6E6	71835792	13.428	9.686m#
11) AR1260-E	7.119	7.278	204.6E6	83658432	14.191m	12.110m
12) AR1260-F	8.075	8.181	48529620	22813564	13.507	13.678
32) AR1254-A	4.049	4.070	53490202	19395084	5.632m	4.351m
33) AR1254-B	4.336	4.283	84058863	33212087	6.705m	5.081m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.1.4
7

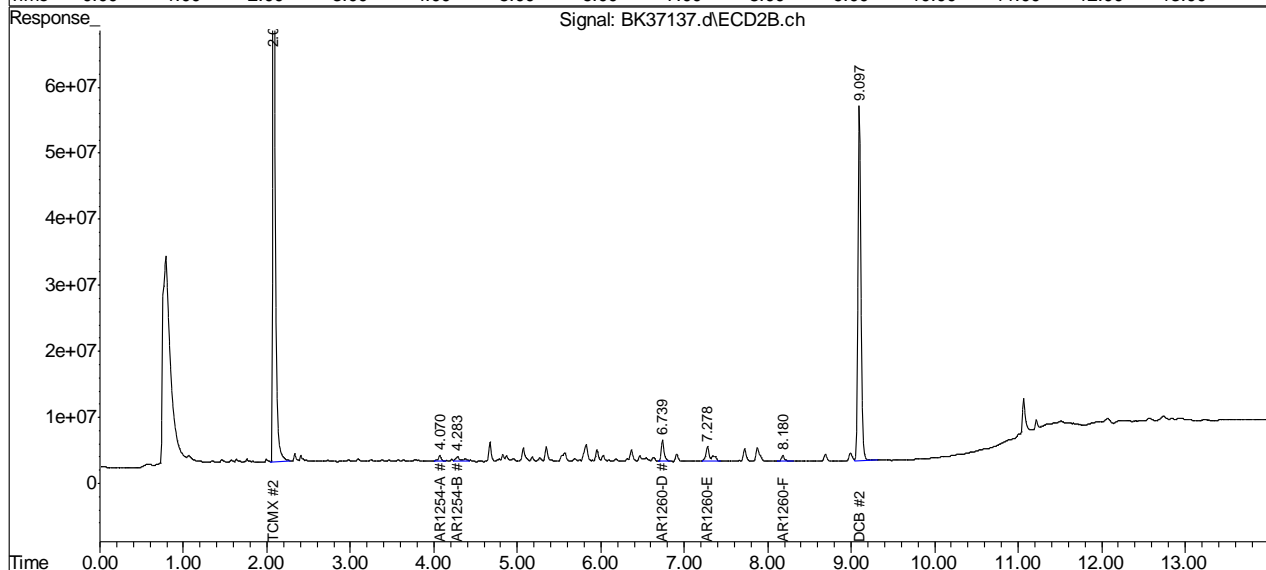
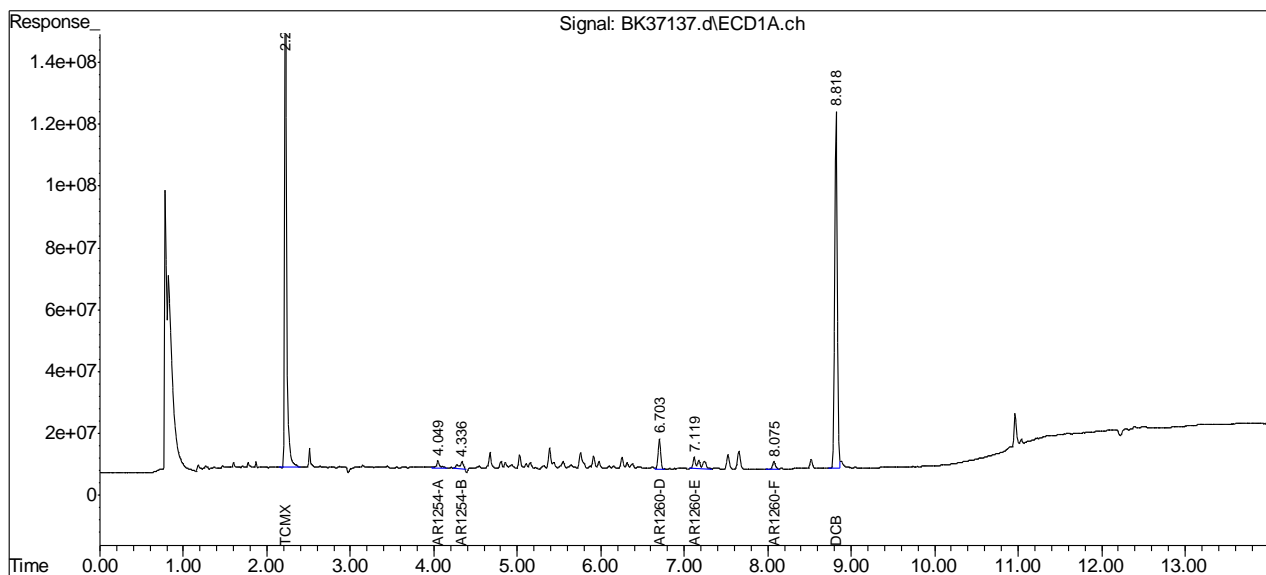
Quantitation Report (QT Reviewed)

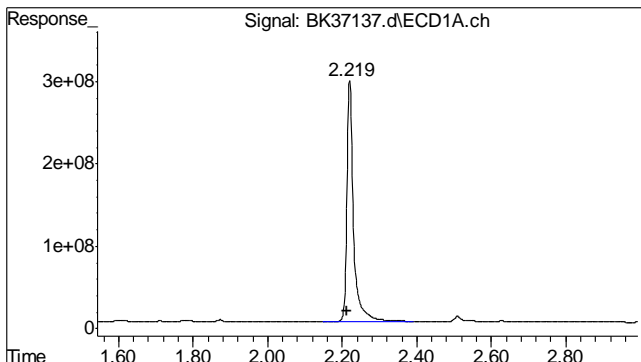
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37137.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 9:53 am
 Operator : nickk
 Sample : mc30120-4,op37822
 Misc : op37822,gbk1213,15.19,,,10,,,s
 ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:44:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

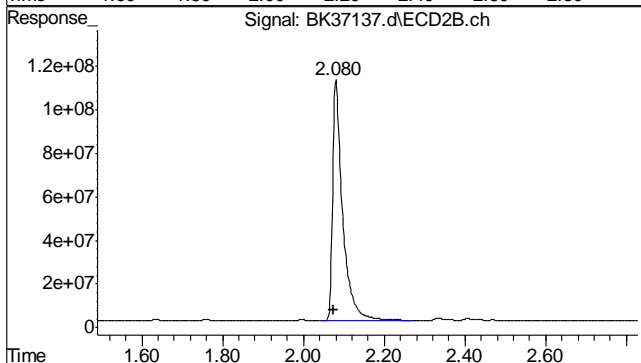
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

7.1.4
7

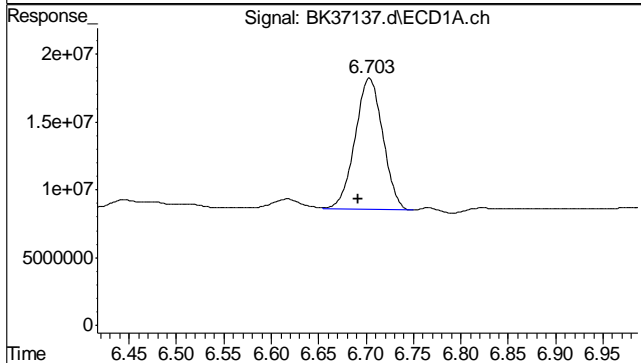




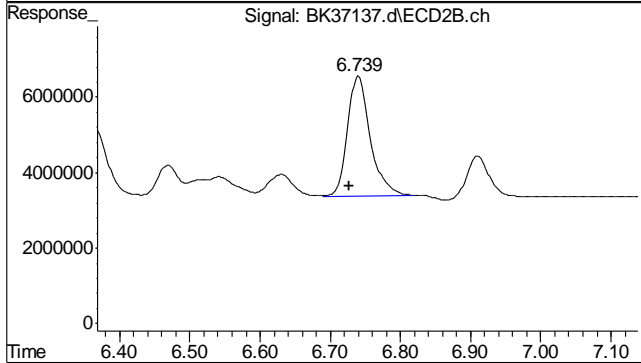
#1 TCMX
 R.T.: 2.220 min
 Delta R.T.: 0.006 min
 Response: 3586626691
 Conc: 24.06 ppb



#1 TCMX
 R.T.: 2.081 min
 Delta R.T.: 0.006 min
 Response: 1894168324
 Conc: 22.74 ppb

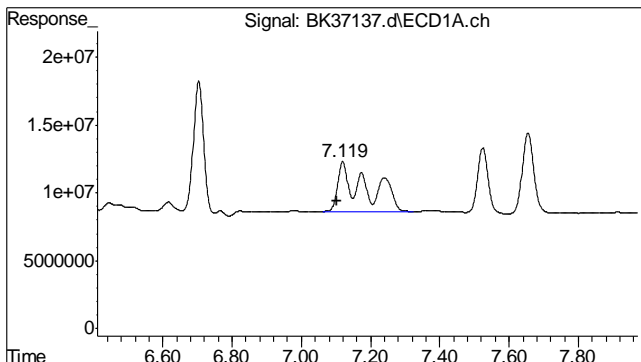


#10 AR1260-D
 R.T.: 6.704 min
 Delta R.T.: 0.012 min
 Response: 198644017
 Conc: 13.43 ppb

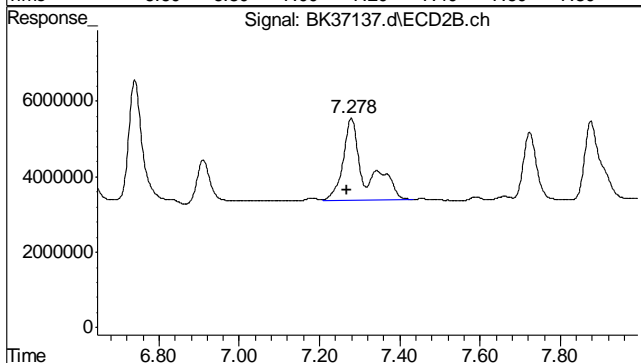


#10 AR1260-D
 R.T.: 6.739 min
 Delta R.T.: 0.012 min
 Response: 71835792
 Conc: 9.69 ppb m

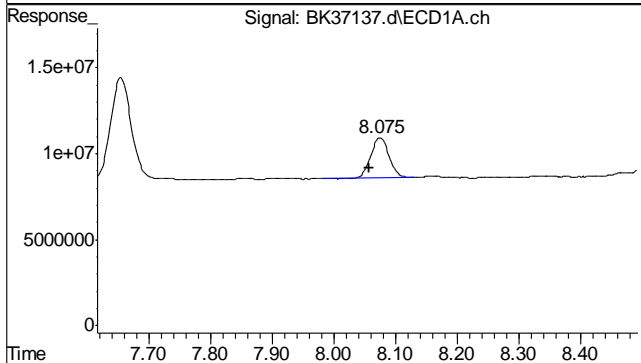
7.14
 7



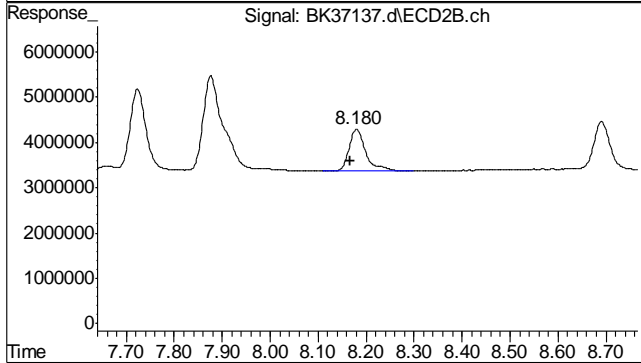
#11 AR1260-E
R.T.: 7.119 min
Delta R.T.: 0.015 min
Response: 204554719
Conc: 14.19 ppb m



#11 AR1260-E
R.T.: 7.278 min
Delta R.T.: 0.011 min
Response: 83658432
Conc: 12.11 ppb m

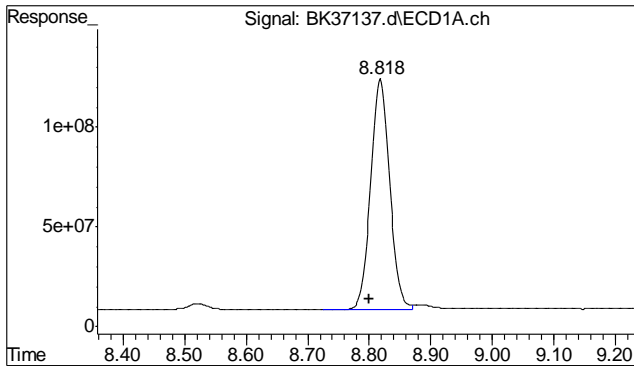


#12 AR1260-F
R.T.: 8.075 min
Delta R.T.: 0.017 min
Response: 48529620
Conc: 13.51

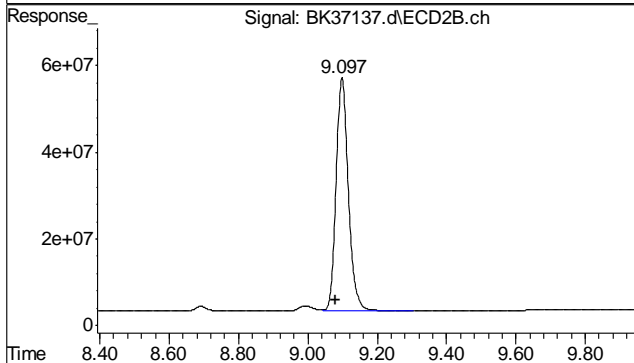


#12 AR1260-F
R.T.: 8.181 min
Delta R.T.: 0.013 min
Response: 22813564
Conc: 13.68

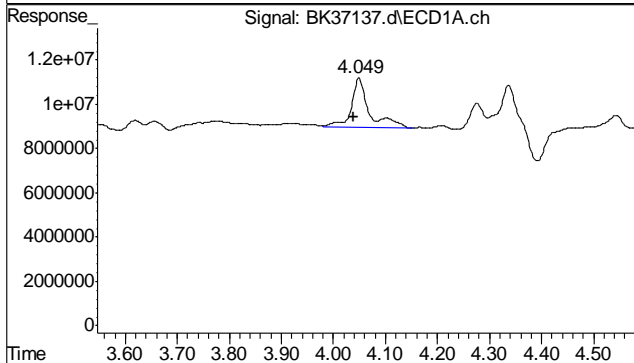
7.14
7



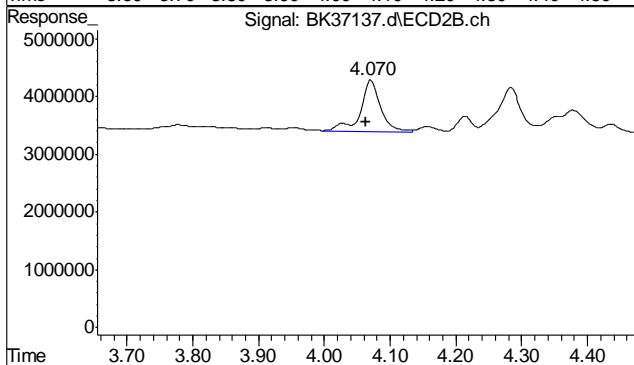
#13 DCB
 R.T.: 8.818 min
 Delta R.T.: 0.017 min
 Response: 2469952855
 Conc: 21.22 ppb



#13 DCB
 R.T.: 9.098 min
 Delta R.T.: 0.016 min
 Response: 1310696533
 Conc: 25.31 ppb

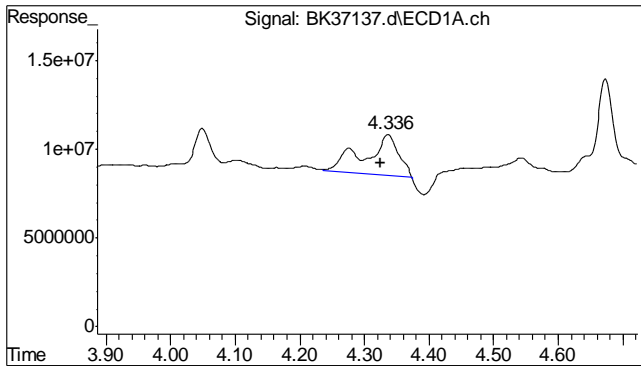


#32 AR1254-A
 R.T.: 4.049 min
 Delta R.T.: 0.009 min
 Response: 53490202
 Conc: 5.63 ppb m

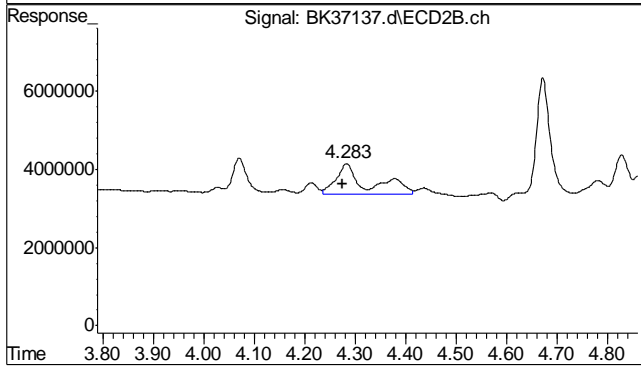


#32 AR1254-A
 R.T.: 4.070 min
 Delta R.T.: 0.007 min
 Response: 19395084
 Conc: 4.35 ppb m

7.14
7



#33 AR1254-B
R.T.: 4.336 min
Delta R.T.: 0.011 min
Response: 84058863
Conc: 6.70 ppb m



#33 AR1254-B
R.T.: 4.283 min
Delta R.T.: 0.008 min
Response: 33212087
Conc: 5.08 ppb m

7.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37138.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:09 am
 Operator : nickk
 Sample : mc30120-5,op37822
 Misc : op37822,gbk1213,15.37,,,10,,s
 ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:45:26 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.220	2.082	3081.6E6	1913.4E6	20.672	22.975
	Spiked Amount	40.000		Recovery	=	51.68%	57.44%
13)	s DCB	8.821	9.101	2167.5E6	1290.7E6	18.624	24.920 #
	Spiked Amount	40.000		Recovery	=	46.56%	62.30%
Target Compounds							
10)	AR1260-D	6.708	6.743	4650.2E6	3199.0E6	314.357	431.360 #
11)	AR1260-E	7.121	7.283	4934.1E6	3197.9E6	342.296m	462.895m#
12)	AR1260-F	8.077	8.184	1475.5E6	942.3E6	410.666	564.980 #
32)	AR1254-A	4.050	4.072	384.9E6	213.2E6	40.522m	47.825m
33)	AR1254-B	4.337	4.285	602.7E6	338.6E6	48.076m	51.798m

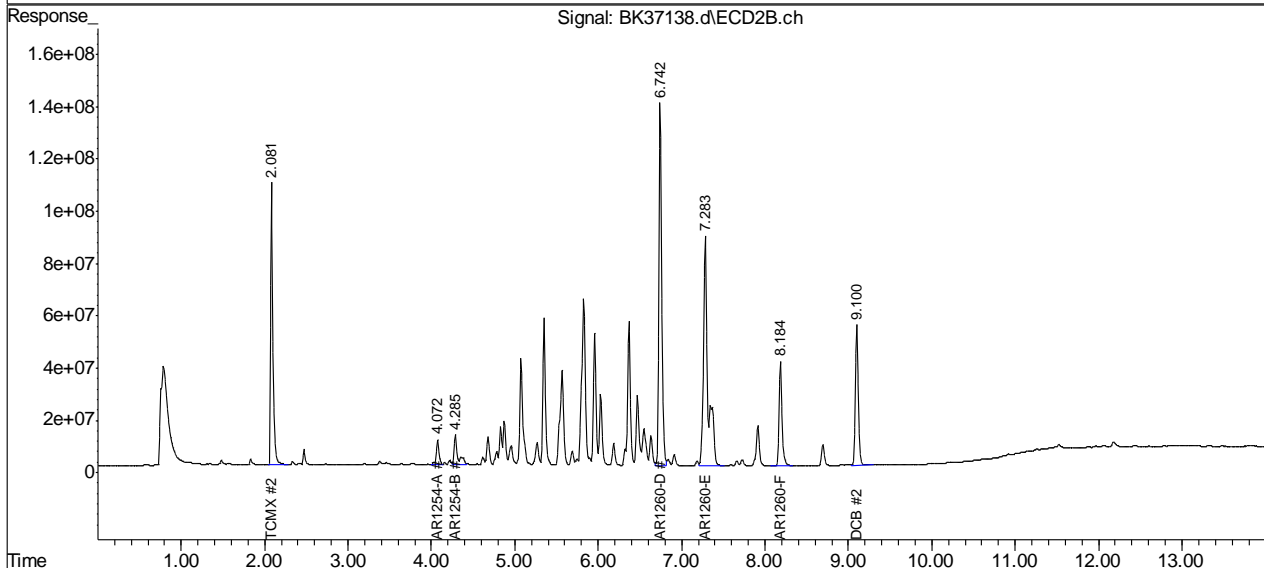
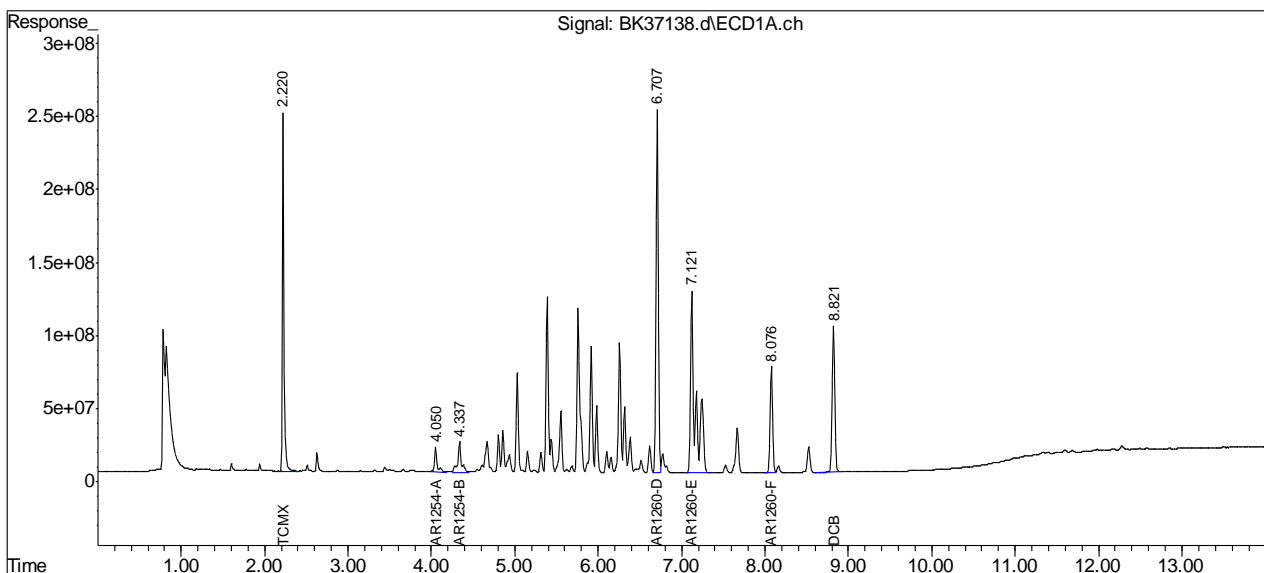
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

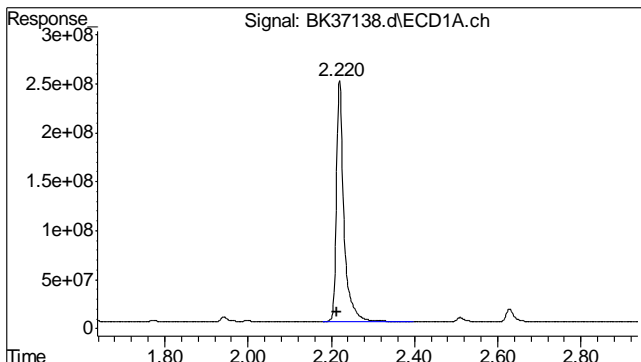
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37138.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:09 am
 Operator : nickk
 Sample : mc30120-5,op37822
 Misc : op37822,gbk1213,15.37,,,10,,,s
 ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:45:26 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

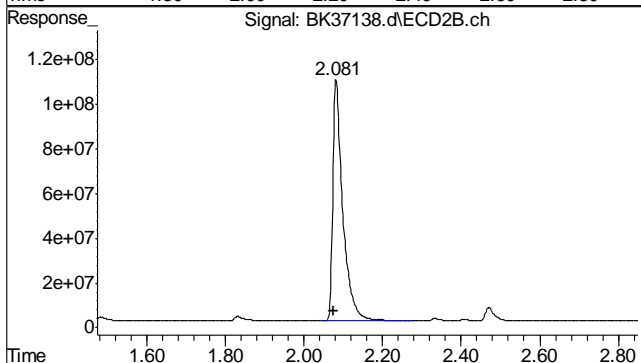
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



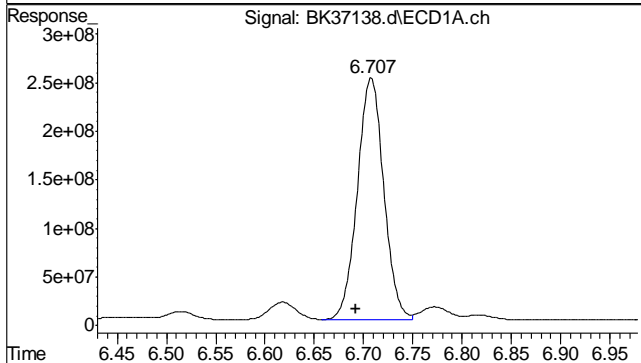
7.15
 7



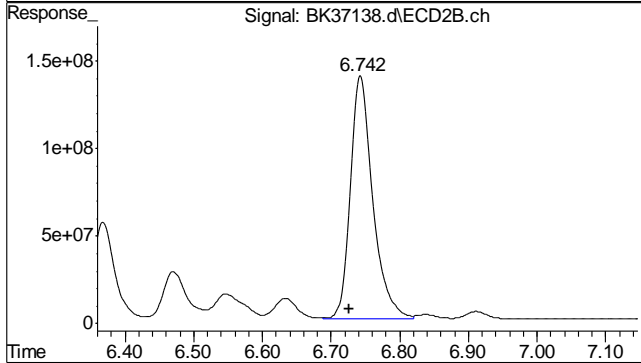
#1 TCMX
 R.T.: 2.220 min
 Delta R.T.: 0.006 min
 Response: 3081587976
 Conc: 20.67 ppb



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 1913359371
 Conc: 22.97 ppb

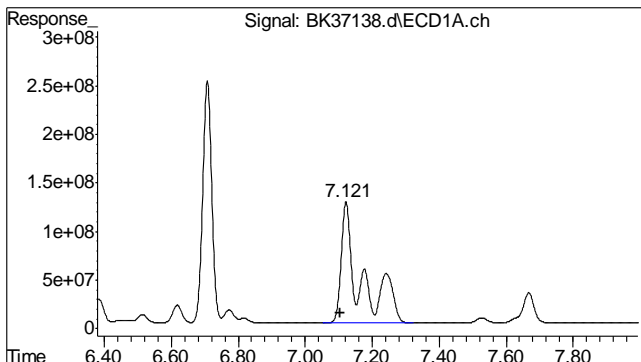


#10 AR1260-D
 R.T.: 6.708 min
 Delta R.T.: 0.016 min
 Response: 4650245273
 Conc: 314.36 ppb

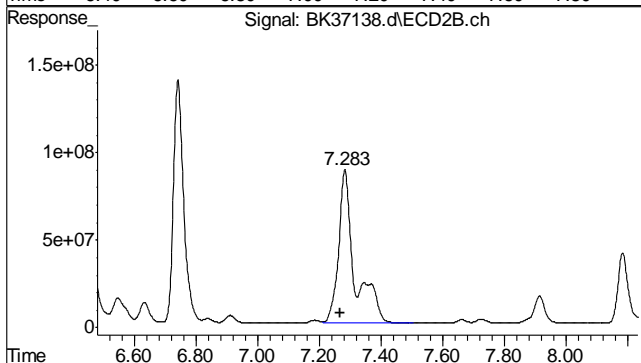


#10 AR1260-D
 R.T.: 6.743 min
 Delta R.T.: 0.016 min
 Response: 3199041103
 Conc: 431.36 ppb

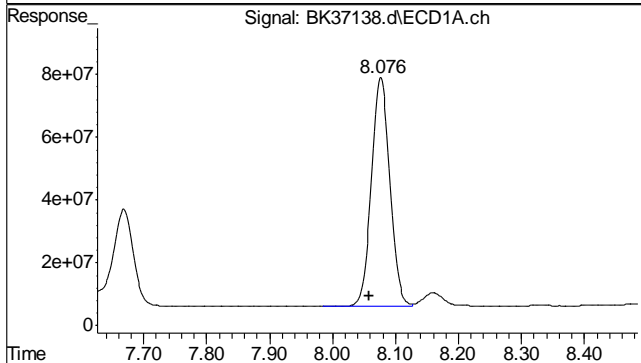
7.15
 7



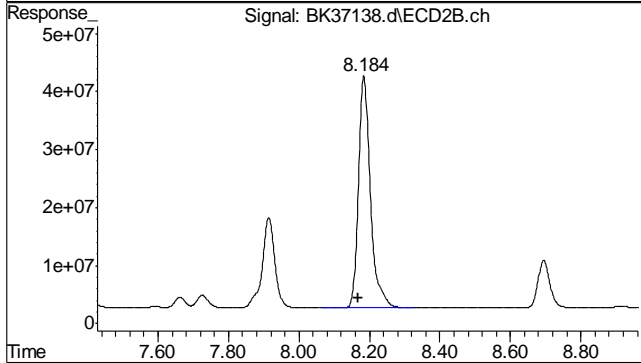
#11 AR1260-E
 R.T.: 7.121 min
 Delta R.T.: 0.017 min
 Response: 4934148550
 Conc: 342.30 ppb m



#11 AR1260-E
 R.T.: 7.283 min
 Delta R.T.: 0.016 min
 Response: 3197867857
 Conc: 462.89 ppb m

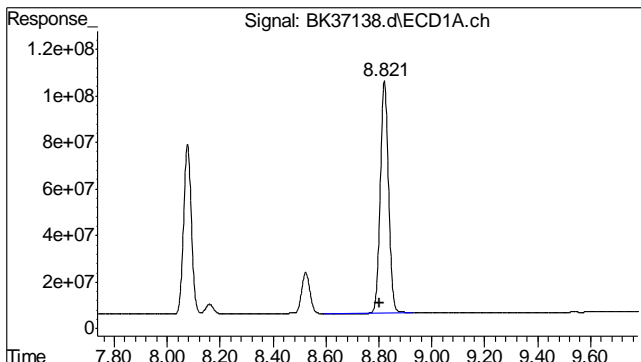


#12 AR1260-F
 R.T.: 8.077 min
 Delta R.T.: 0.018 min
 Response: 1475521639
 Conc: 410.67

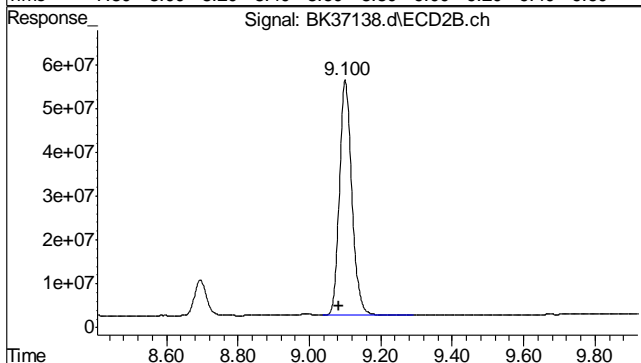


#12 AR1260-F
 R.T.: 8.184 min
 Delta R.T.: 0.017 min
 Response: 942315897
 Conc: 564.98

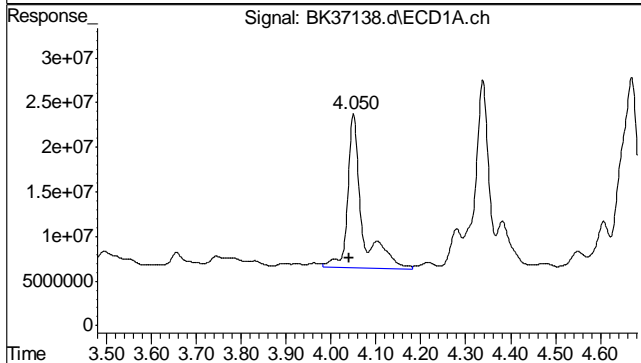
7.15
7



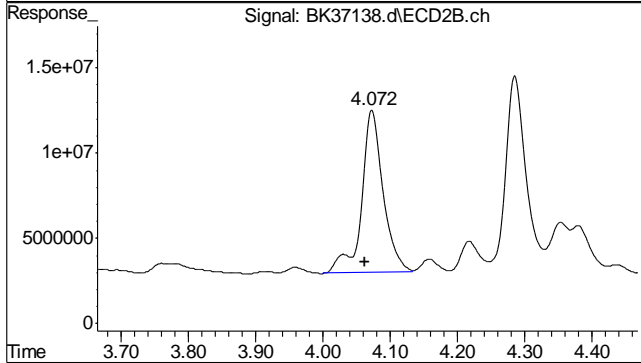
#13 DCB
 R.T.: 8.821 min
 Delta R.T.: 0.020 min
 Response: 2167458823
 Conc: 18.62 ppb



#13 DCB
 R.T.: 9.101 min
 Delta R.T.: 0.019 min
 Response: 1290708859
 Conc: 24.92 ppb

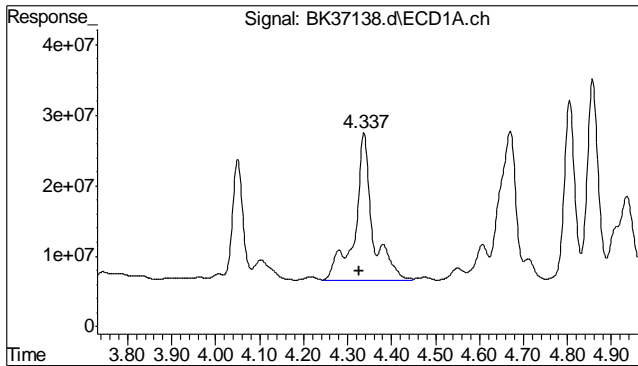


#32 AR1254-A
 R.T.: 4.050 min
 Delta R.T.: 0.010 min
 Response: 384866485
 Conc: 40.52 ppb m

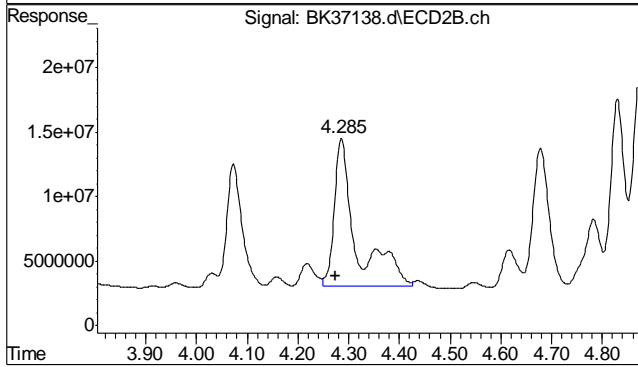


#32 AR1254-A
 R.T.: 4.072 min
 Delta R.T.: 0.009 min
 Response: 213203455
 Conc: 47.83 ppb m

7.15
7



#33 AR1254-B
R.T.: 4.337 min
Delta R.T.: 0.011 min
Response: 602717286
Conc: 48.08 ppb m



#33 AR1254-B
R.T.: 4.285 min
Delta R.T.: 0.010 min
Response: 338580061
Conc: 51.80 ppb m

7.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37139.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:25 am
 Operator : nickk
 Sample : mc30120-6,op37822
 Misc : op37822,gbk1213,15.65,,,10,,s
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:46:40 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.222	2.083	2834.6E6	1803.4E6	19.015	21.654
	Spiked Amount	40.000		Recovery	=	47.54%	54.13%
13)	s DCB	8.823	9.102	2059.7E6	1227.3E6	17.698	23.695 #
	Spiked Amount	40.000		Recovery	=	44.25%	59.24%
Target Compounds							
10)	AR1260-D	6.709	6.744	708.7E6	456.1E6	47.908	61.507 #
11)	AR1260-E	7.123	7.284	691.0E6	405.3E6	47.938m	58.662m
12)	AR1260-F	8.079	8.185	176.1E6	95261619	49.016	57.116
32)	AR1254-A	4.051	4.074	124.6E6	72313632	13.119m	16.221m
33)	AR1254-B	4.339	4.286	202.6E6	119.0E6	16.163m	18.210m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

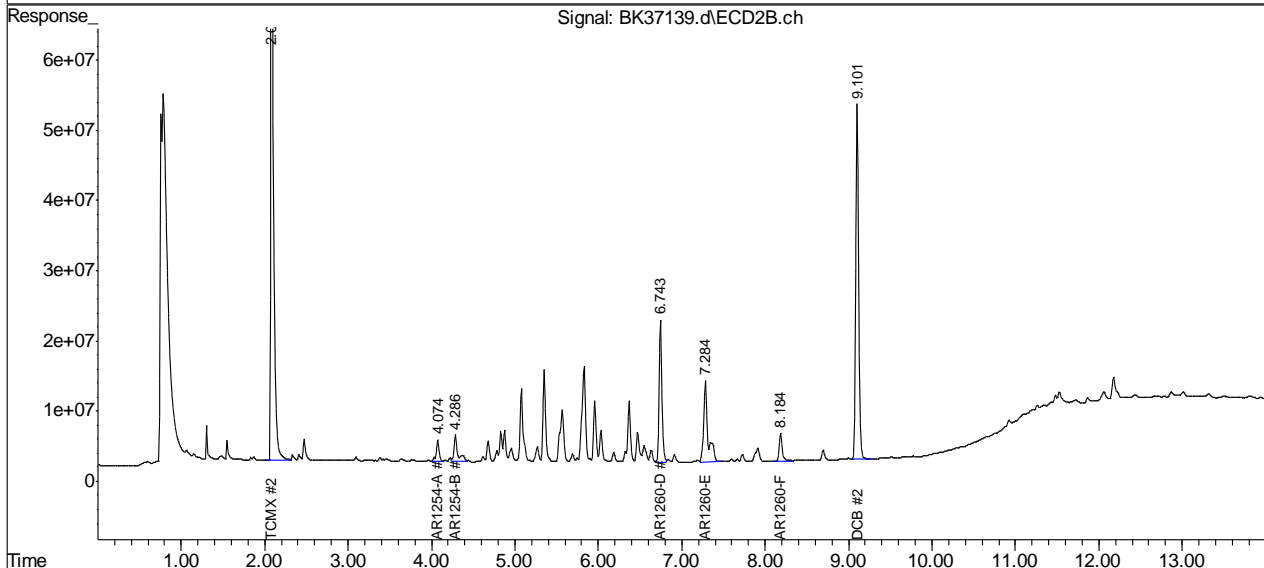
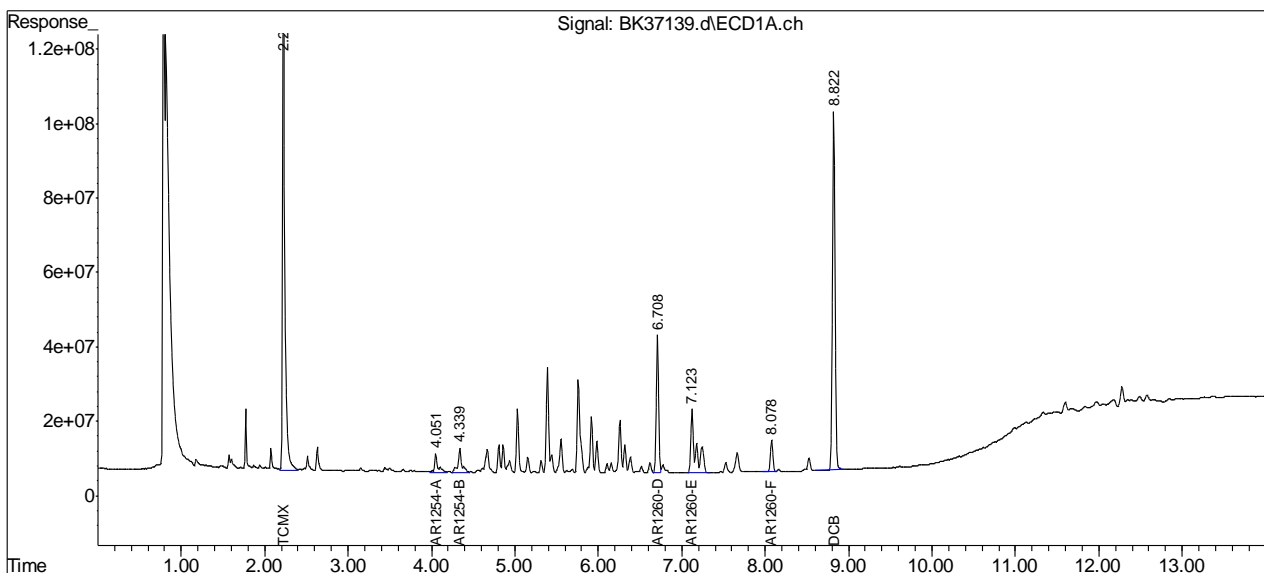
7.1.6
7

Quantitation Report (QT Reviewed)

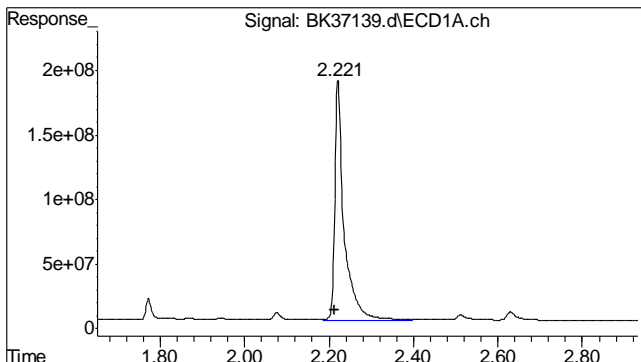
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37139.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:25 am
 Operator : nickk
 Sample : mc30120-6,op37822
 Misc : op37822,gbk1213,15.65,,,10,,s
 ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:46:40 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

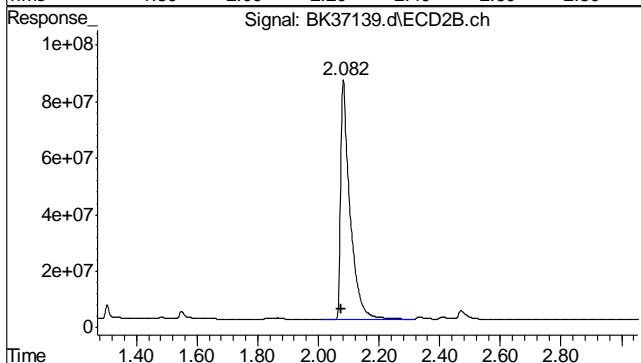
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



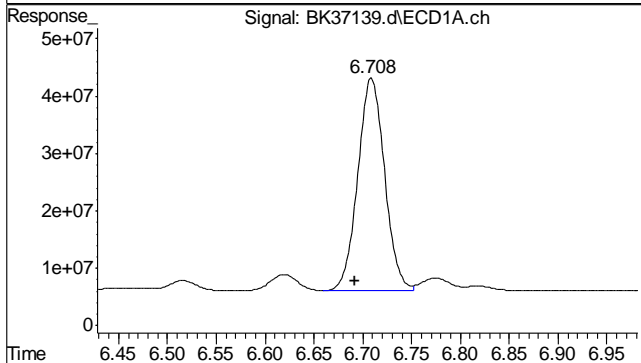
7.1.6
 7



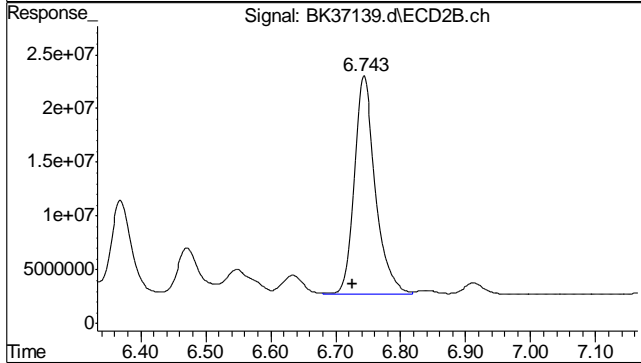
#1 TCMX
 R.T.: 2.222 min
 Delta R.T.: 0.008 min
 Response: 2834638660
 Conc: 19.02 ppb



#1 TCMX
 R.T.: 2.083 min
 Delta R.T.: 0.008 min
 Response: 1803393687
 Conc: 21.65 ppb

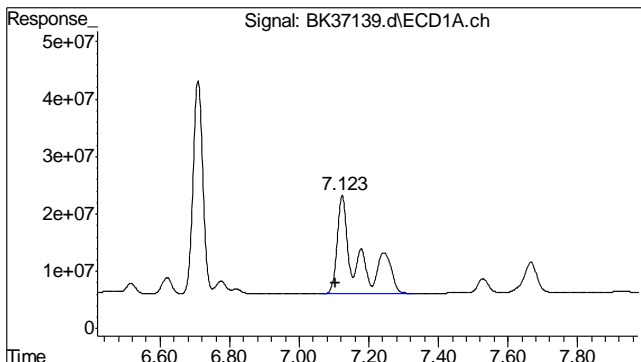


#10 AR1260-D
 R.T.: 6.709 min
 Delta R.T.: 0.017 min
 Response: 708690556
 Conc: 47.91 ppb

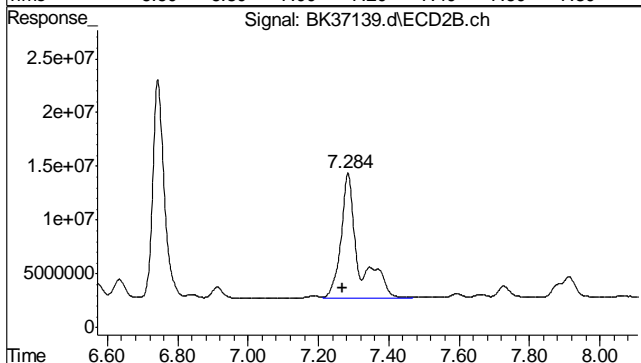


#10 AR1260-D
 R.T.: 6.744 min
 Delta R.T.: 0.017 min
 Response: 456145487
 Conc: 61.51 ppb

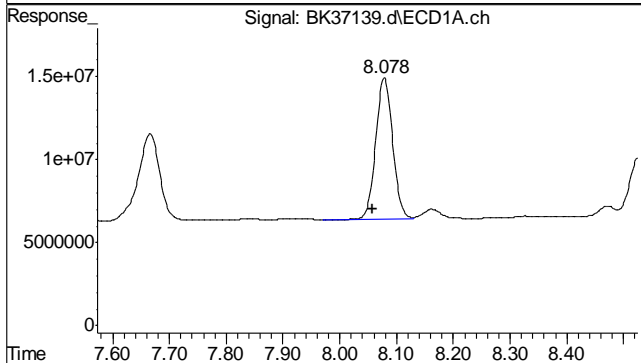
7.1.6
 7



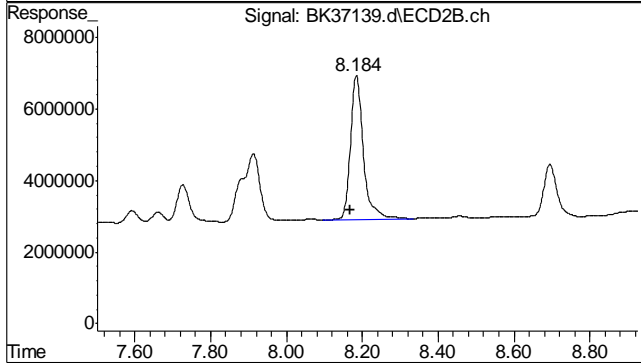
#11 AR1260-E
 R.T.: 7.123 min
 Delta R.T.: 0.019 min
 Response: 691017947
 Conc: 47.94 ppb m



#11 AR1260-E
 R.T.: 7.284 min
 Delta R.T.: 0.016 min
 Response: 405260048
 Conc: 58.66 ppb m

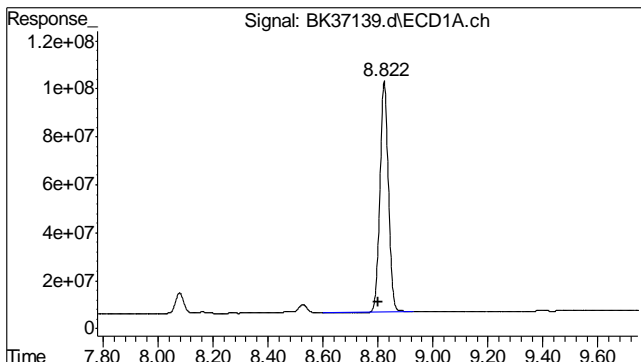


#12 AR1260-F
 R.T.: 8.079 min
 Delta R.T.: 0.020 min
 Response: 176113743
 Conc: 49.02

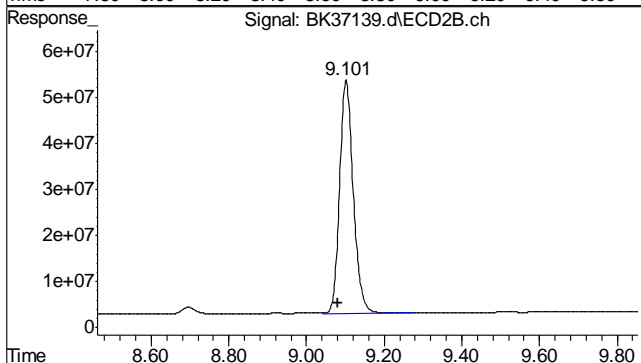


#12 AR1260-F
 R.T.: 8.185 min
 Delta R.T.: 0.017 min
 Response: 95261619
 Conc: 57.12

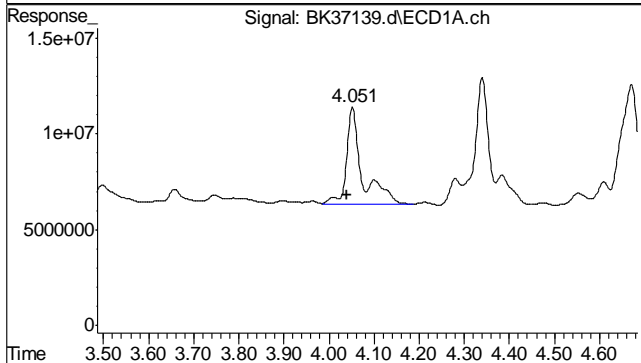
7.1.6
7



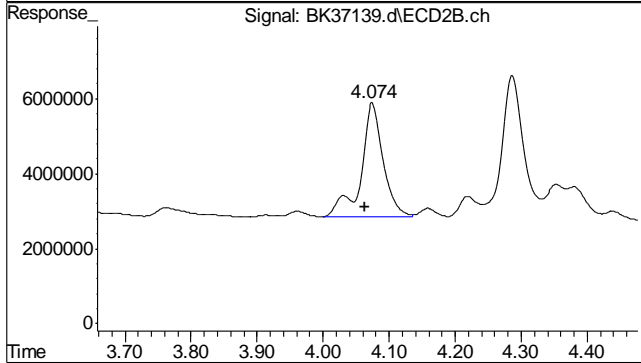
#13 DCB
 R.T.: 8.823 min
 Delta R.T.: 0.022 min
 Response: 2059661667
 Conc: 17.70 ppb



#13 DCB
 R.T.: 9.102 min
 Delta R.T.: 0.020 min
 Response: 1227272374
 Conc: 23.70 ppb

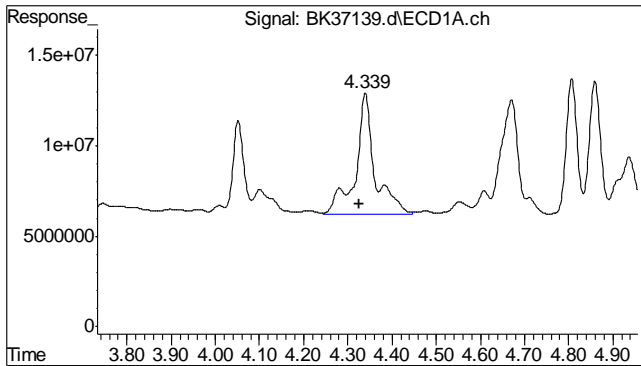


#32 AR1254-A
 R.T.: 4.051 min
 Delta R.T.: 0.012 min
 Response: 124605155
 Conc: 13.12 ppb m

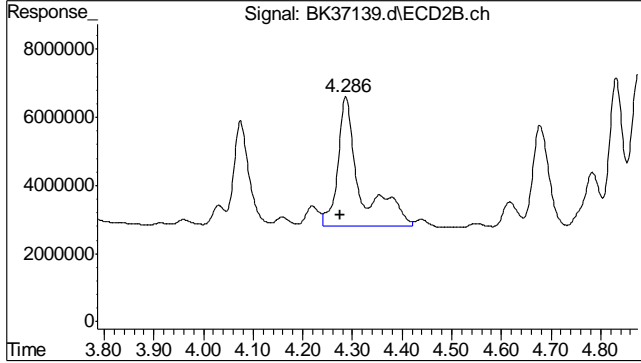


#32 AR1254-A
 R.T.: 4.074 min
 Delta R.T.: 0.011 min
 Response: 72313632
 Conc: 16.22 ppb m

7.1.6
7



#33 AR1254-B
R.T.: 4.339 min
Delta R.T.: 0.013 min
Response: 202633114
Conc: 16.16 ppb m



#33 AR1254-B
R.T.: 4.286 min
Delta R.T.: 0.012 min
Response: 119029834
Conc: 18.21 ppb m

7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37140.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:41 am
 Operator : nickk
 Sample : mc30120-7,op37822
 Misc : op37822,gbk1213,15.58,,,10,,,s
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:10:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.221	2.082	3076.4E6	1655.9E6	20.637	19.883
Spiked Amount	40.000		Recovery	=	51.59%	49.71%
13) s DCB	8.821	9.100	1737.0E6	993.4E6	14.926	19.180 #
Spiked Amount	40.000		Recovery	=	37.31%	47.95%
Target Compounds						
10) AR1260-D	6.704	6.741	53377638	19430455	3.608	2.620 #
11) AR1260-E	7.121	7.280	43708010	19761338	3.032m	2.860m
12) AR1260-F	8.077	8.183	9803641	4882886	2.729	2.928m
32) AR1254-A	4.050	4.071	11079898	5548769	1.167m	1.245m
33) AR1254-B	4.338	4.283	18003508	10030621	1.436m	1.535m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

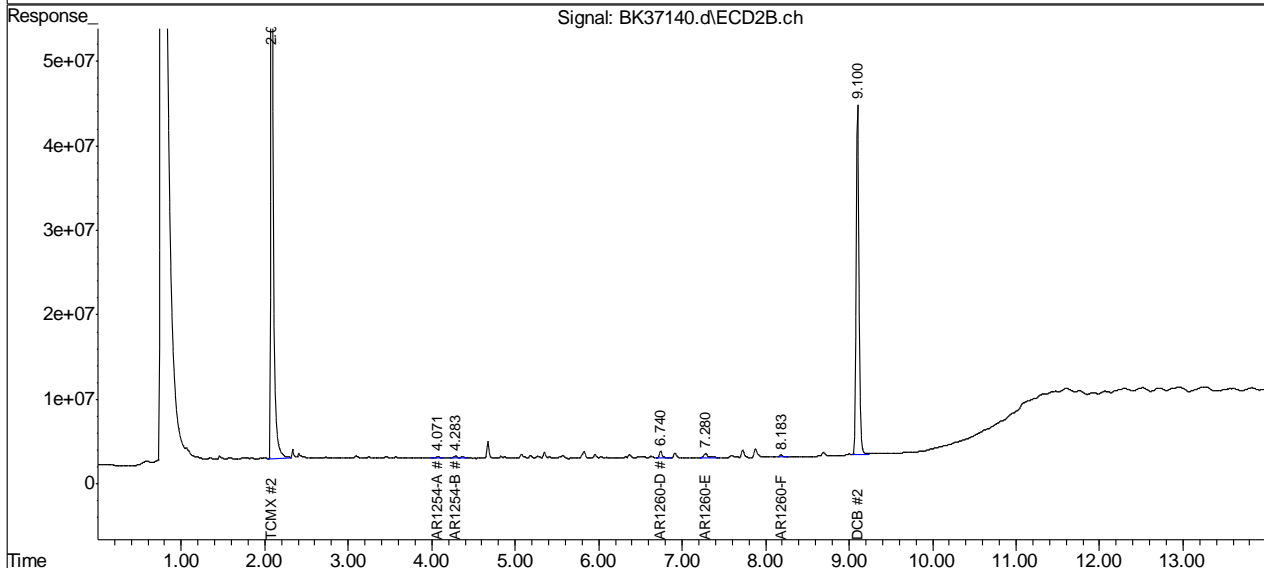
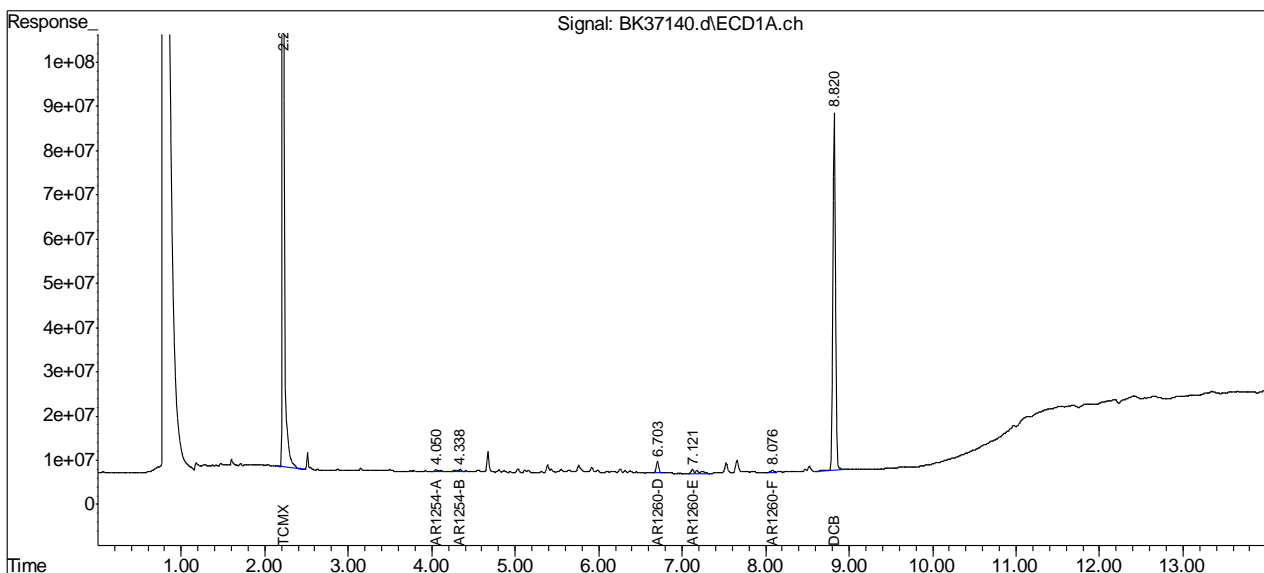
7.17
7

Quantitation Report (QT Reviewed)

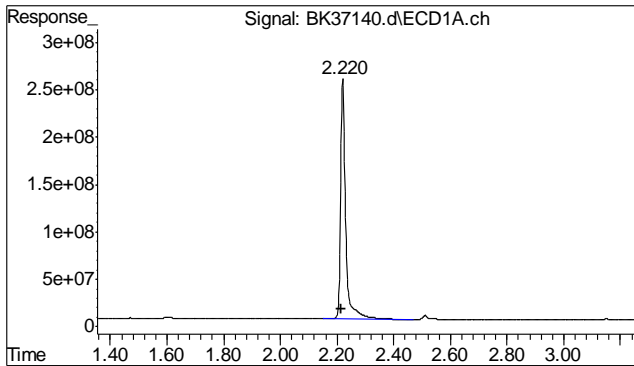
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37140.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:41 am
 Operator : nickk
 Sample : mc30120-7,op37822
 Misc : op37822,gbk1213,15.58,,,10,,,s
 ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:10:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

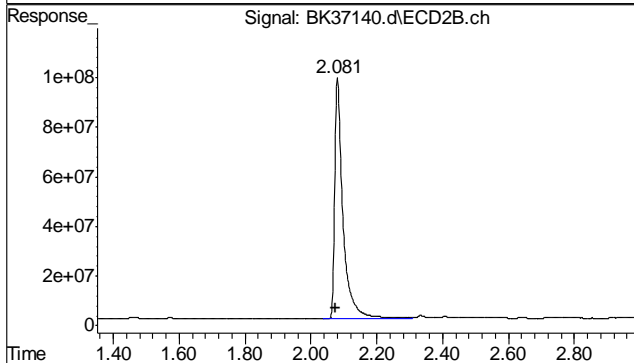
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



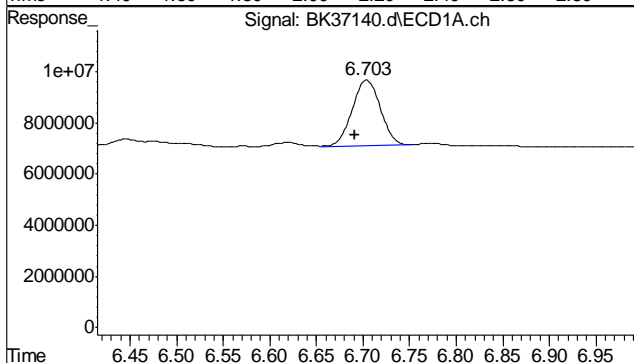
7.17
 7



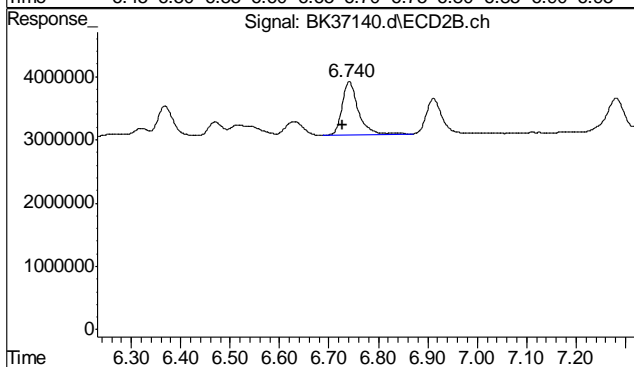
#1 TCMX
 R.T.: 2.221 min
 Delta R.T.: 0.007 min
 Response: 3076445157
 Conc: 20.64 ppb



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 1655853322
 Conc: 19.88 ppb

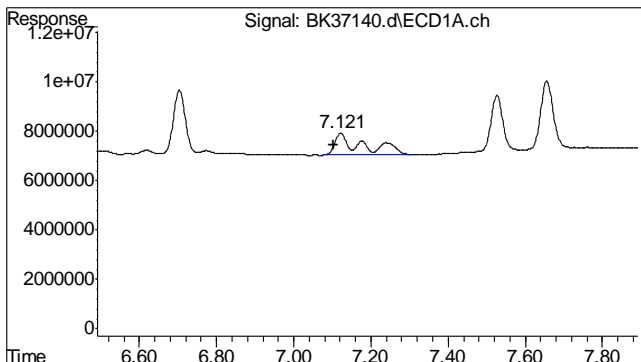


#10 AR1260-D
 R.T.: 6.704 min
 Delta R.T.: 0.012 min
 Response: 53377638
 Conc: 3.61 ppb

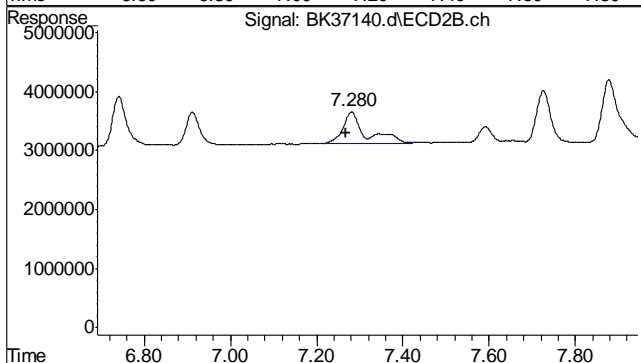


#10 AR1260-D
 R.T.: 6.741 min
 Delta R.T.: 0.015 min
 Response: 19430455
 Conc: 2.62 ppb

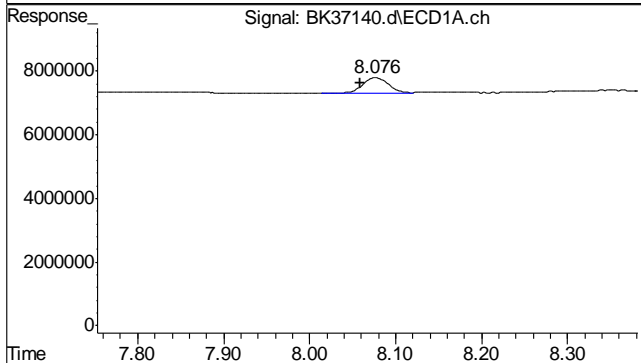
7.17
 7



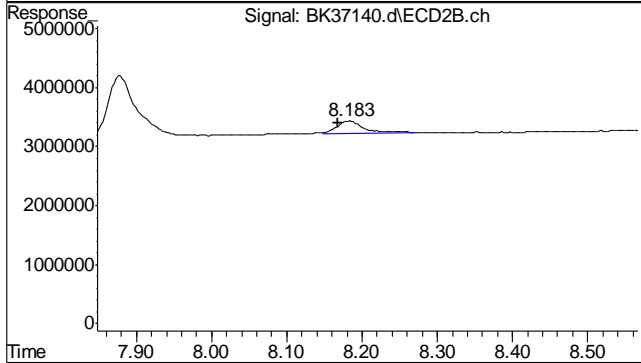
#11 AR1260-E
 R.T.: 7.121 min
 Delta R.T.: 0.017 min
 Response: 43708010
 Conc: 3.03 ppb m



#11 AR1260-E
 R.T.: 7.280 min
 Delta R.T.: 0.013 min
 Response: 19761338
 Conc: 2.86 ppb m

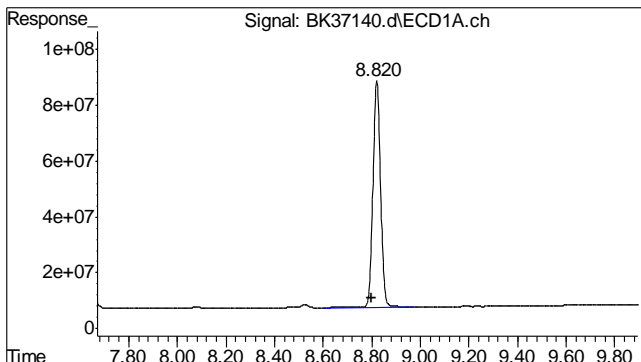


#12 AR1260-F
 R.T.: 8.077 min
 Delta R.T.: 0.019 min
 Response: 9803641
 Conc: 2.73

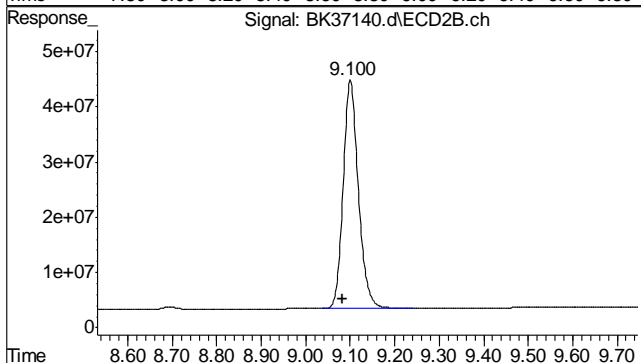


#12 AR1260-F
 R.T.: 8.183 min
 Delta R.T.: 0.016 min
 Response: 4882886
 Conc: 2.93 m

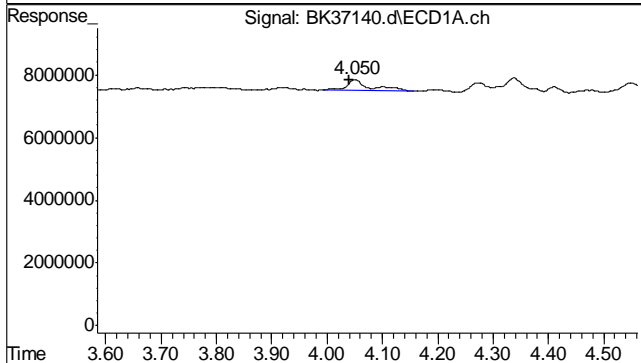
7.17
7



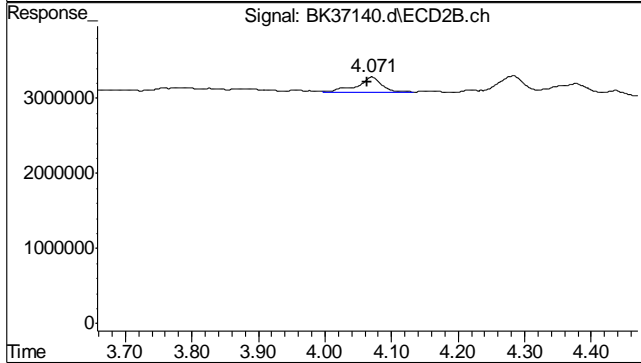
#13 DCB
 R.T.: 8.821 min
 Delta R.T.: 0.020 min
 Response: 1737022037
 Conc: 14.93 ppb



#13 DCB
 R.T.: 9.100 min
 Delta R.T.: 0.018 min
 Response: 993434417
 Conc: 19.18 ppb

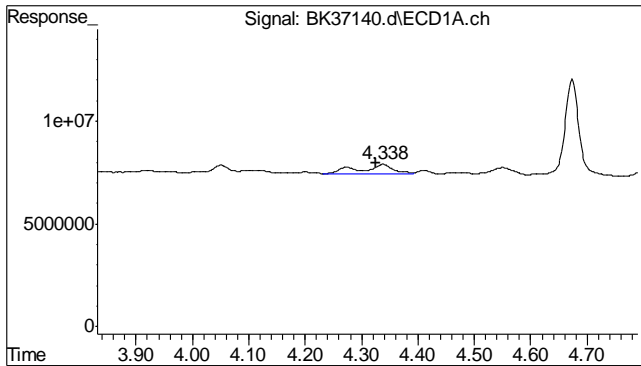


#32 AR1254-A
 R.T.: 4.050 min
 Delta R.T.: 0.011 min
 Response: 11079898
 Conc: 1.17 ppb m

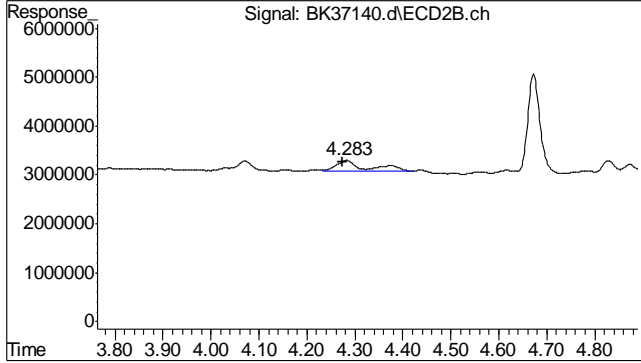


#32 AR1254-A
 R.T.: 4.071 min
 Delta R.T.: 0.008 min
 Response: 5548769
 Conc: 1.24 ppb m

7.17
7



#33 AR1254-B
R.T.: 4.338 min
Delta R.T.: 0.012 min
Response: 18003508
Conc: 1.44 ppb m



#33 AR1254-B
R.T.: 4.283 min
Delta R.T.: 0.009 min
Response: 10030621
Conc: 1.53 ppb m

7.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37141.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:57 am
 Operator : nickk
 Sample : mc30120-8,op37822
 Misc : op37822,gbk1213,15.65,,,10,,s
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:12:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.221	2.082	2765.0E6	1570.8E6	18.548	18.862
	Spiked Amount	40.000		Recovery	=	46.37%	47.15%
13)	s DCB	8.823	9.102	1933.1E6	1154.2E6	16.610	22.284 #
	Spiked Amount	40.000		Recovery	=	41.52%	55.71%
Target Compounds							
10)	AR1260-D	6.710	6.744	16508.9E6	11396.7E6	1116.001	1536.730m#
11)	AR1260-E	7.123	7.286	14103.7E6	9114.2E6	978.411m	1319.290m#
12)	AR1260-F	8.078	8.185	3083.1E6	2073.5E6	858.092	1243.208m#
32)	AR1254-A	4.052	4.074	2760.1E6	1709.2E6	290.610m	383.406m#
33)	AR1254-B	4.339	4.286	4229.9E6	2475.0E6	337.403m	378.636m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

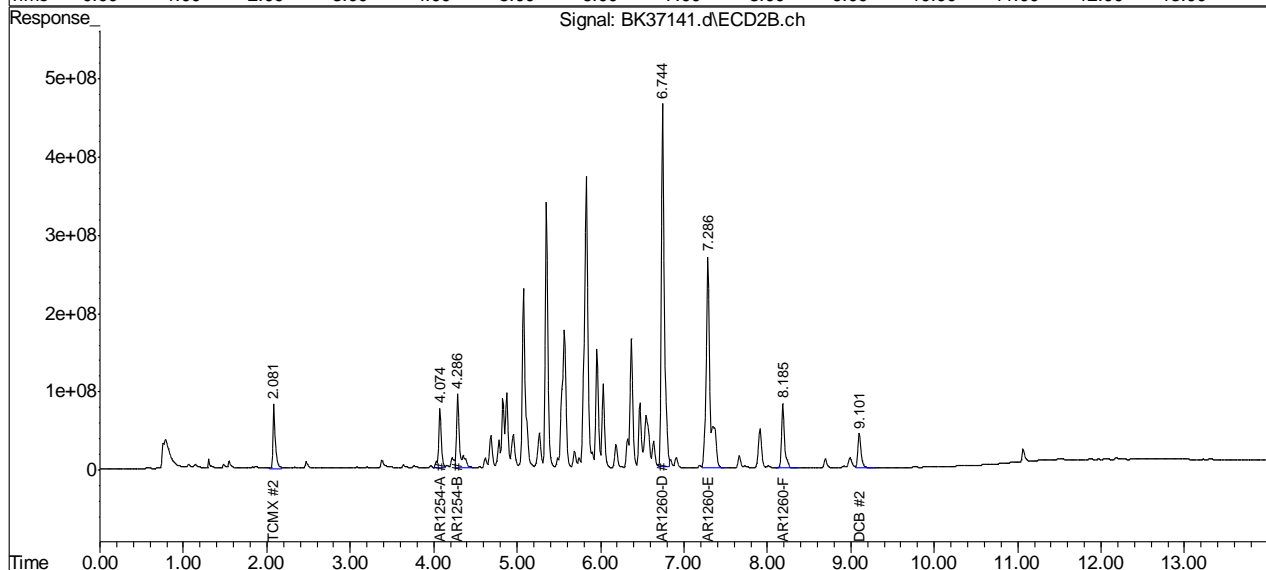
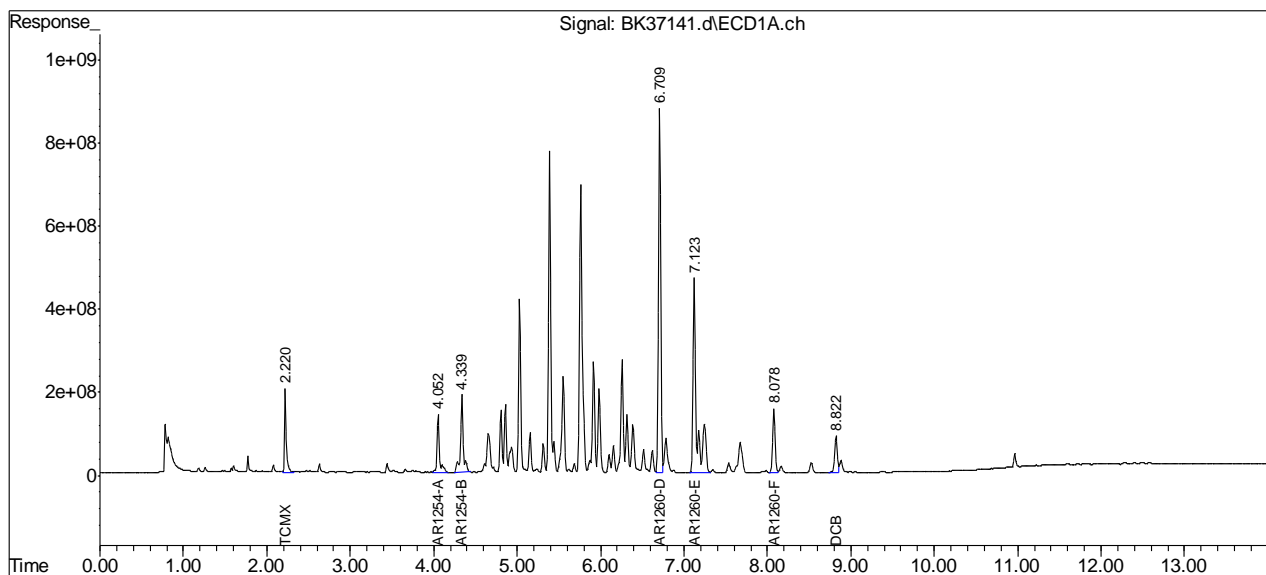
7.1.8
7

Quantitation Report (QT Reviewed)

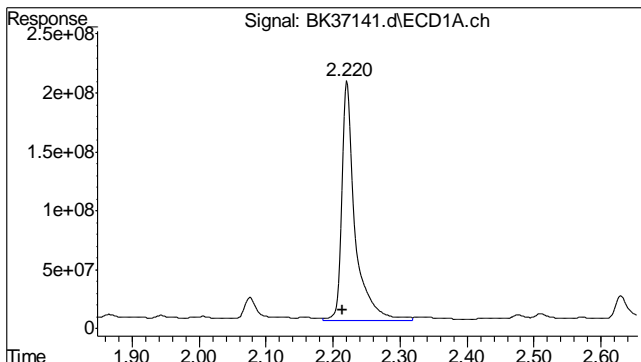
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37141.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 10:57 am
 Operator : nickk
 Sample : mc30120-8,op37822
 Misc : op37822,gbk1213,15.65,,,10,,,s
 ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:12:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

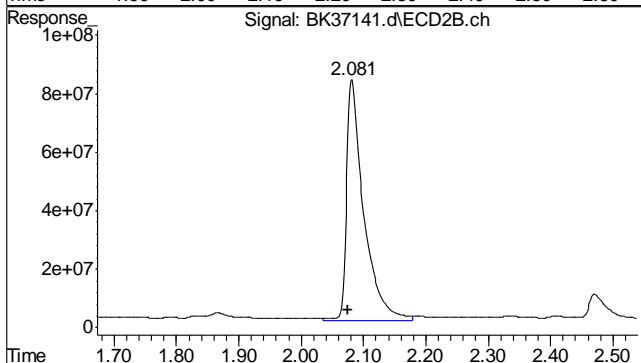
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



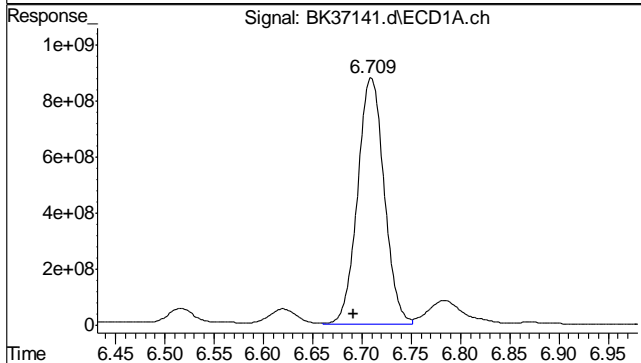
7.18



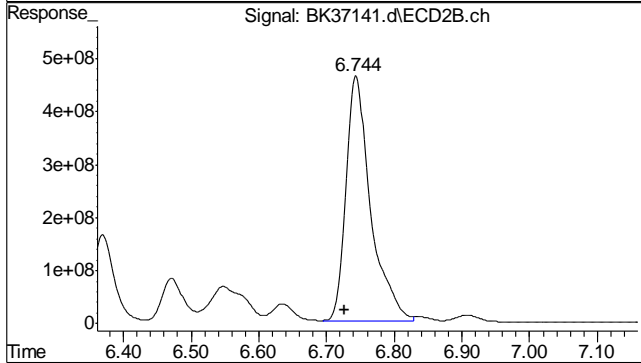
#1 TCMX
R.T.: 2.221 min
Delta R.T.: 0.007 min
Response: 2764958497
Conc: 18.55 ppb



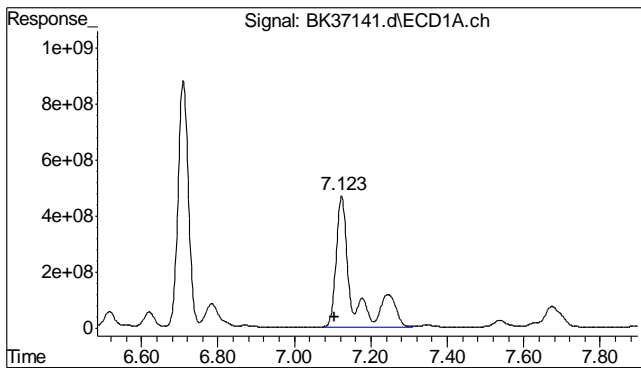
#1 TCMX
R.T.: 2.082 min
Delta R.T.: 0.007 min
Response: 1570815041
Conc: 18.86 ppb



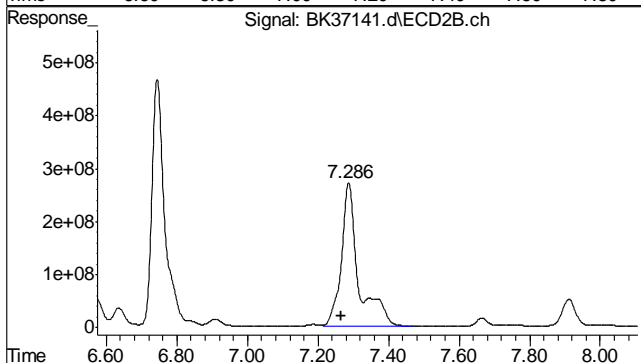
#10 AR1260-D
R.T.: 6.710 min
Delta R.T.: 0.018 min
Response: 16508854068
Conc: 1116.00 ppb



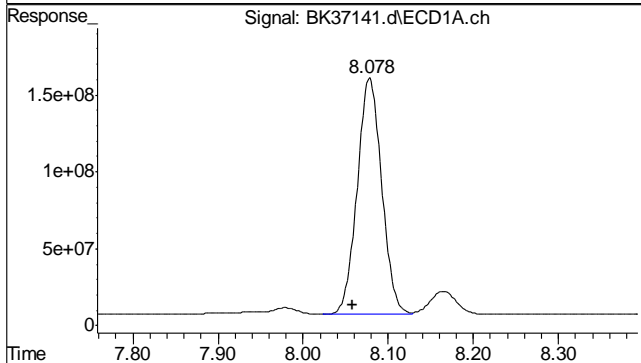
#10 AR1260-D
R.T.: 6.744 min
Delta R.T.: 0.017 min
Response: 11396658258
Conc: 1536.73 ppb m



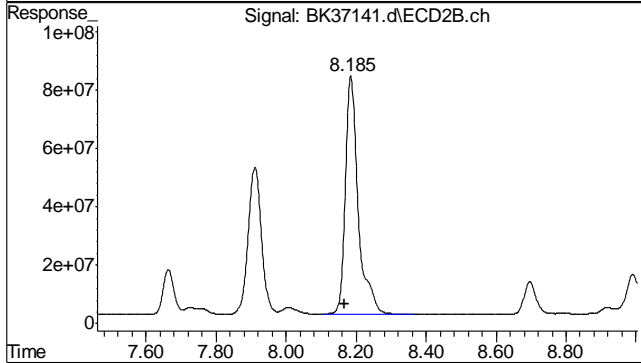
#11 AR1260-E
 R.T.: 7.123 min
 Delta R.T.: 0.019 min
 Response: 14103667024
 Conc: 978.41 ppb m



#11 AR1260-E
 R.T.: 7.286 min
 Delta R.T.: 0.019 min
 Response: 9114202655
 Conc: 1319.29 ppb m

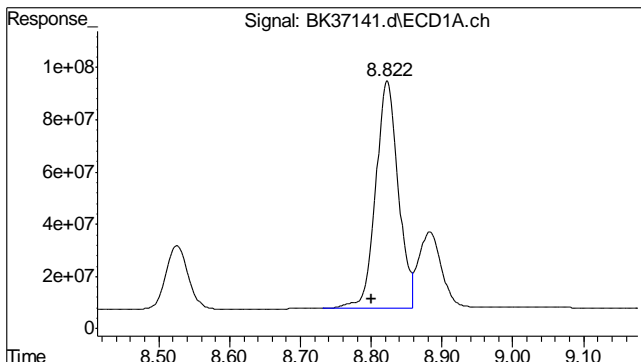


#12 AR1260-F
 R.T.: 8.078 min
 Delta R.T.: 0.020 min
 Response: 3083118005
 Conc: 858.09

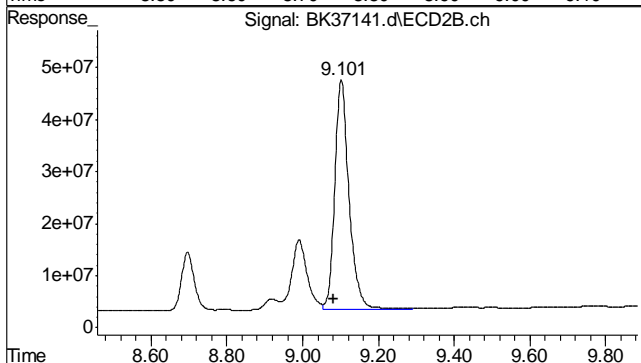


#12 AR1260-F
 R.T.: 8.185 min
 Delta R.T.: 0.018 min
 Response: 2073514963
 Conc: 1243.21 m

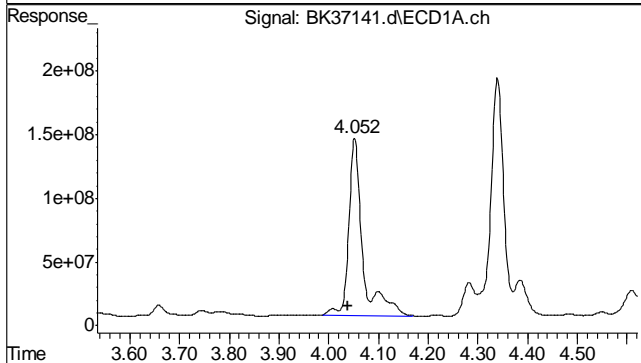
7.18



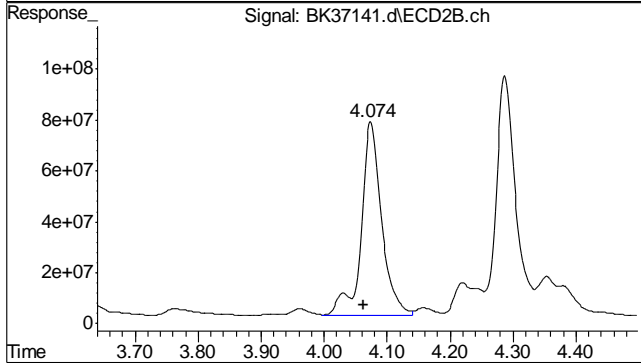
#13 DCB
 R.T.: 8.823 min
 Delta R.T.: 0.022 min
 Response: 1933077736
 Conc: 16.61 ppb



#13 DCB
 R.T.: 9.102 min
 Delta R.T.: 0.020 min
 Response: 1154195417
 Conc: 22.28 ppb

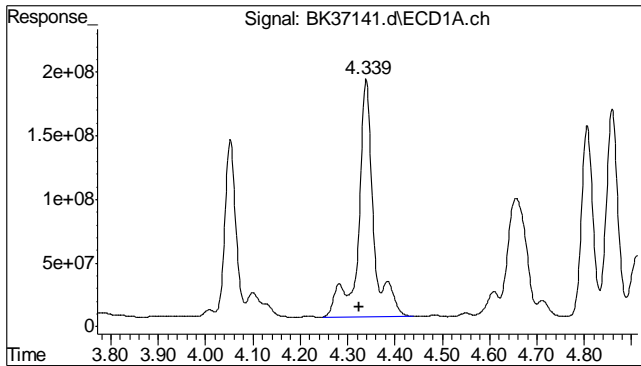


#32 AR1254-A
 R.T.: 4.052 min
 Delta R.T.: 0.012 min
 Response: 2760144667
 Conc: 290.61 ppb m



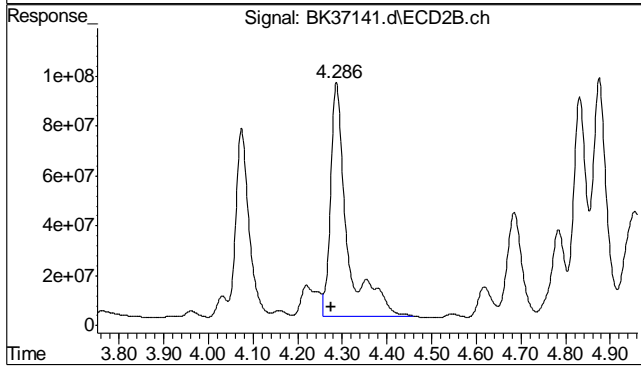
#32 AR1254-A
 R.T.: 4.074 min
 Delta R.T.: 0.011 min
 Response: 1709216158
 Conc: 383.41 ppb m

7.1.8
7



#33 AR1254-B

R.T.: 4.339 min
Delta R.T.: 0.013 min
Response: 4229945750
Conc: 337.40 ppb m



#33 AR1254-B

R.T.: 4.286 min
Delta R.T.: 0.012 min
Response: 2474969523
Conc: 378.64 ppb m

7.1.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37142.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:13 am
 Operator : nickk
 Sample : mc30120-8,1:5 op37822
 Misc : op37822,gbk1213,15.65,,,10,5,s
 ALS Vial : 105 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:45:00 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.220	2.080	550.6E6	263.3E6	3.694	3.162m
	Spiked Amount	40.000		Recovery	=	9.23%	7.90%
13)	s DCB	8.821	9.100	407.3E6	216.5E6	3.500	4.179
	Spiked Amount	40.000		Recovery	=	8.75%	10.45%
Target Compounds							
10)	AR1260-D	6.708	6.743	3223.7E6	2168.1E6	217.923	292.353 #
11)	AR1260-E	7.122	7.285	2917.3E6	1718.1E6	202.382m	248.702m
12)	AR1260-F	8.077	8.184	633.8E6	363.8E6	176.393	218.126

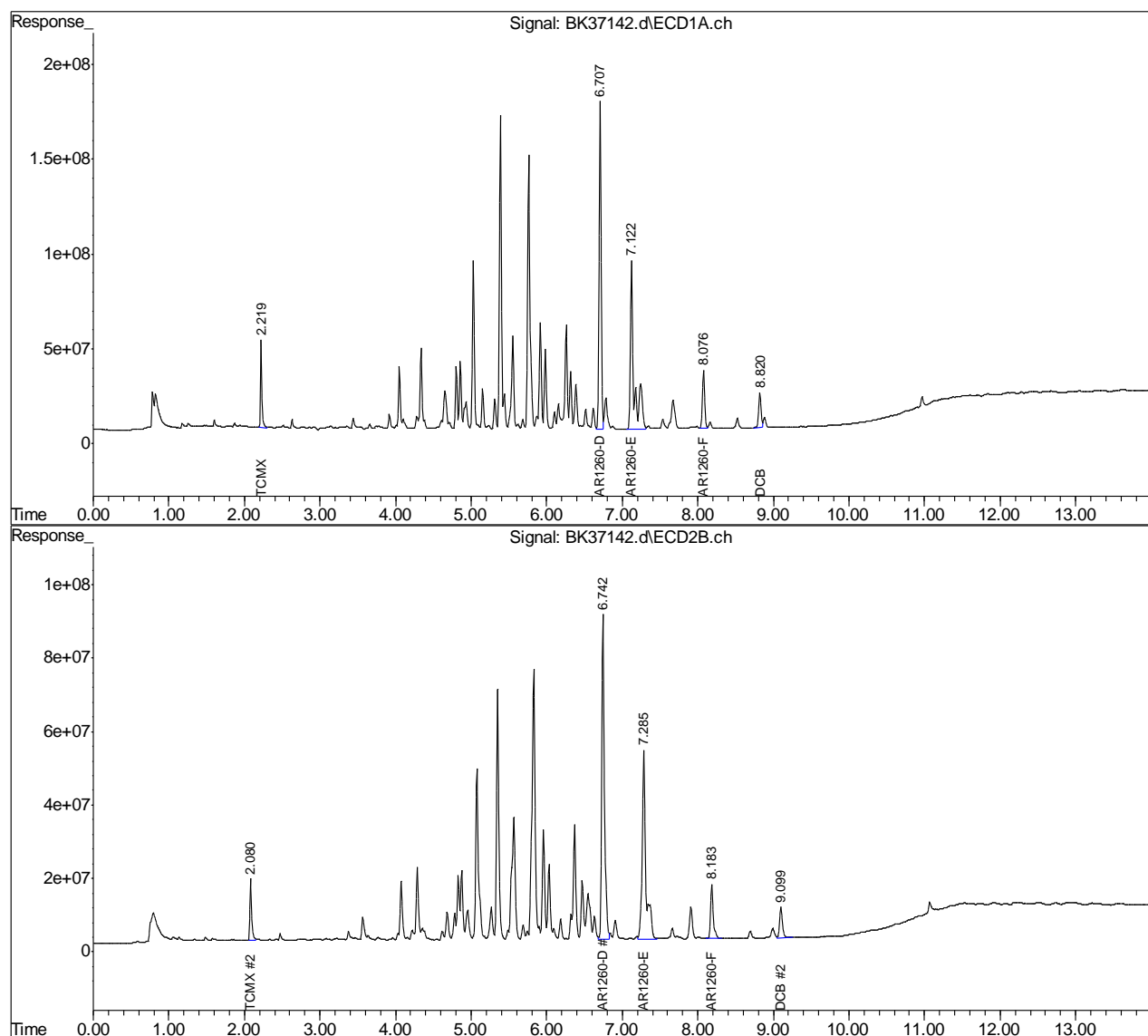
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

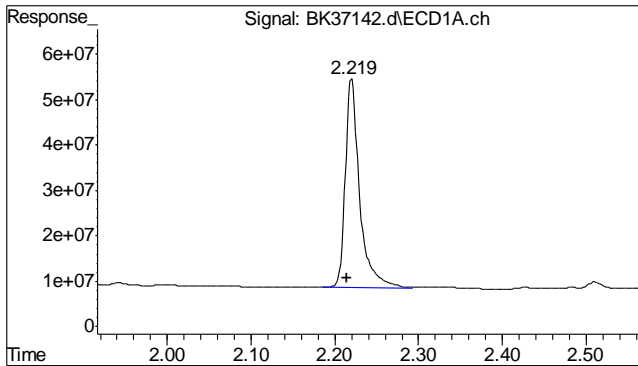
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37142.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:13 am
 Operator : nickk
 Sample : mc30120-8,1:5 op37822
 Misc : op37822,gbk1213,15.65,,,10,5,s
 ALS Vial : 105 Sample Multiplier: 1

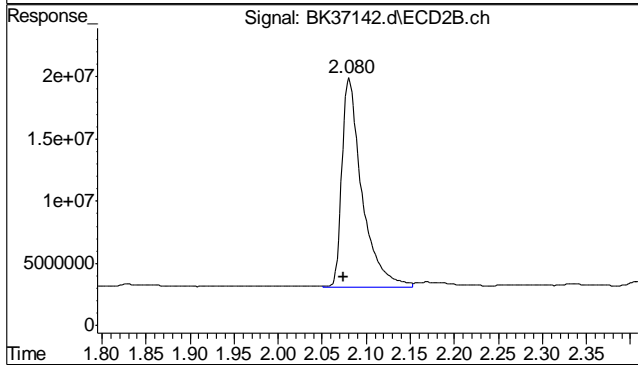
Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:45:00 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

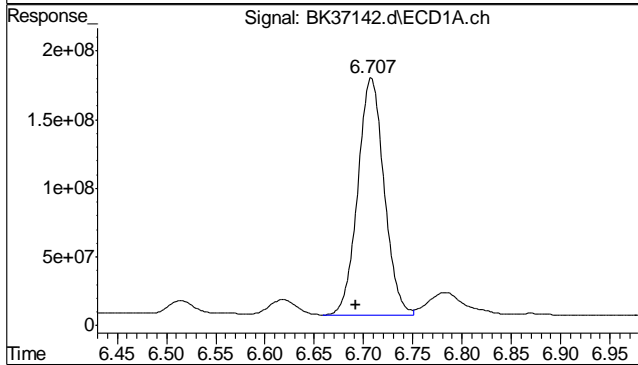




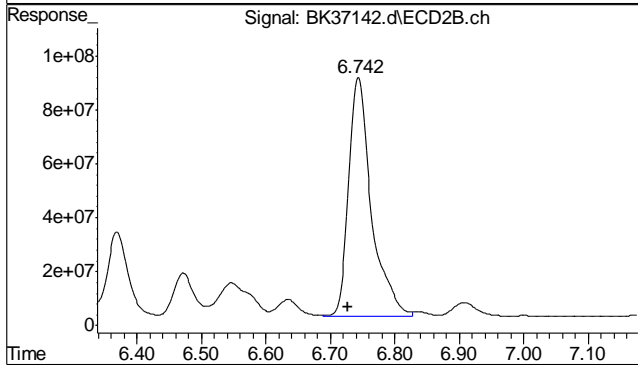
#1 TCMX
 R.T.: 2.220 min
 Delta R.T.: 0.006 min
 Response: 550609468
 Conc: 3.69 ppb



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 263314181
 Conc: 3.16 ppb m

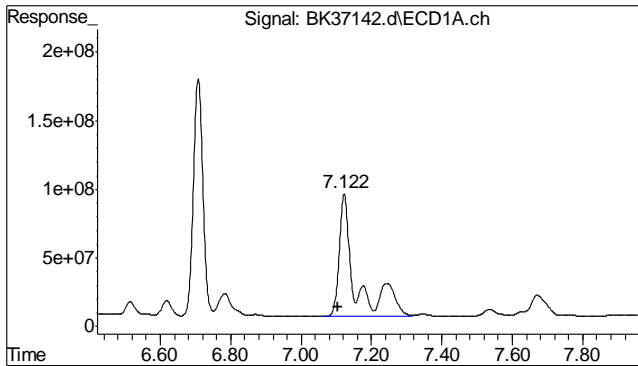


#10 AR1260-D
 R.T.: 6.708 min
 Delta R.T.: 0.016 min
 Response: 3223703889
 Conc: 217.92 ppb

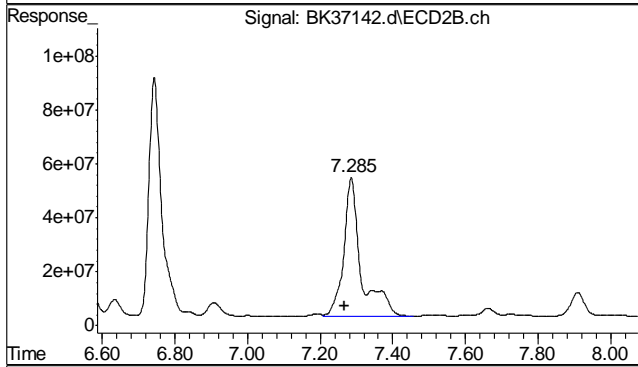


#10 AR1260-D
 R.T.: 6.743 min
 Delta R.T.: 0.017 min
 Response: 2168139424
 Conc: 292.35 ppb

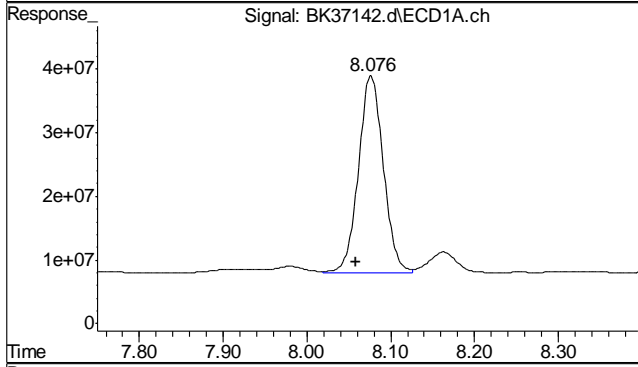
7.1.9
 7



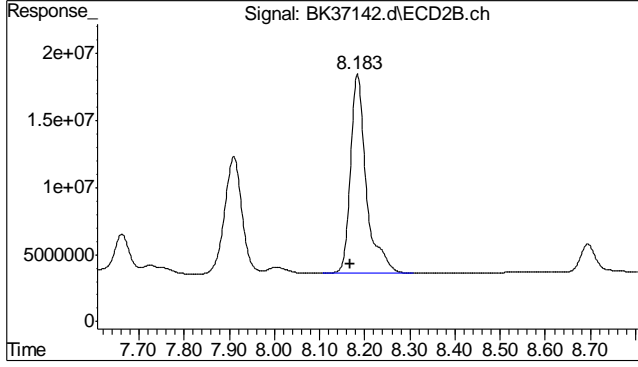
#11 AR1260-E
R.T.: 7.122 min
Delta R.T.: 0.018 min
Response: 2917311384
Conc: 202.38 ppb m



#11 AR1260-E
R.T.: 7.285 min
Delta R.T.: 0.018 min
Response: 1718137225
Conc: 248.70 ppb m

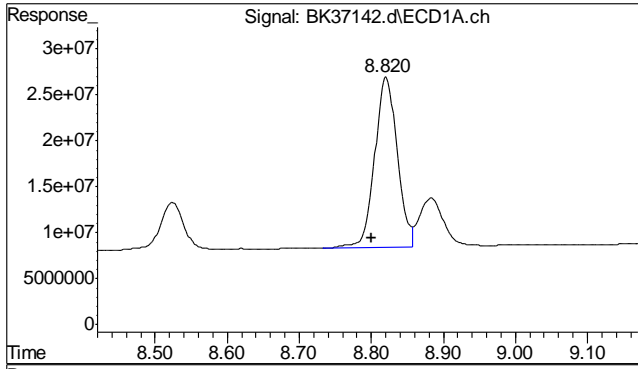


#12 AR1260-F
R.T.: 8.077 min
Delta R.T.: 0.018 min
Response: 633778471
Conc: 176.39

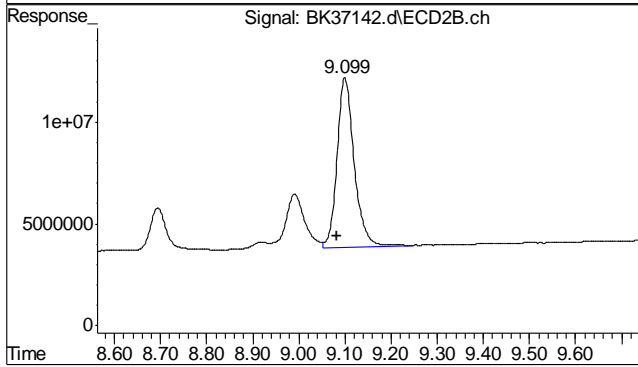


#12 AR1260-F
R.T.: 8.184 min
Delta R.T.: 0.017 min
Response: 363807529
Conc: 218.13

7.1.9
7



#13 DCB
R.T.: 8.821 min
Delta R.T.: 0.020 min
Response: 407337314
Conc: 3.50 ppb



#13 DCB
R.T.: 9.100 min
Delta R.T.: 0.018 min
Response: 216468101
Conc: 4.18 ppb

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37144.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:48 am
 Operator : nickk
 Sample : mc30120-9,op37822
 Misc : op37822,gbk1213,15.14,,,10,,s
 ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:03:24 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.227	2.079	3042.7E6	1841.3E6	20.411m	22.110m
Spiked Amount	40.000		Recovery	=	51.03%	55.27%
13) s DCB	8.832	9.103	2261.2E6	1284.6E6	19.430	24.801 #
Spiked Amount	40.000		Recovery	=	48.58%	62.00%
Target Compounds						
10) AR1260-D	6.719	6.745	706.9E6	415.7E6	47.786m	56.053
11) AR1260-E	7.134	7.286	696.7E6	358.1E6	48.335m	51.834m
12) AR1260-F	8.089	8.186	166.3E6	85162697	46.290	51.061
32) AR1254-A	4.062f	4.073	205.6E6	100.4E6	21.646m	22.528m
33) AR1254-B	4.350f	4.286	306.1E6	156.5E6	24.417m	23.940m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

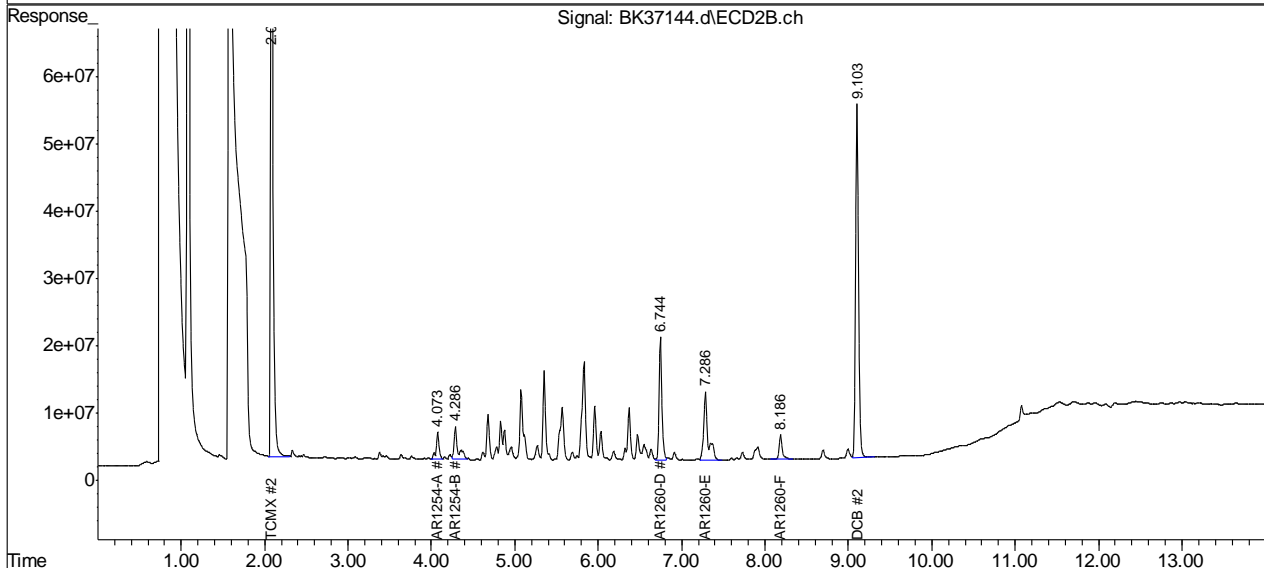
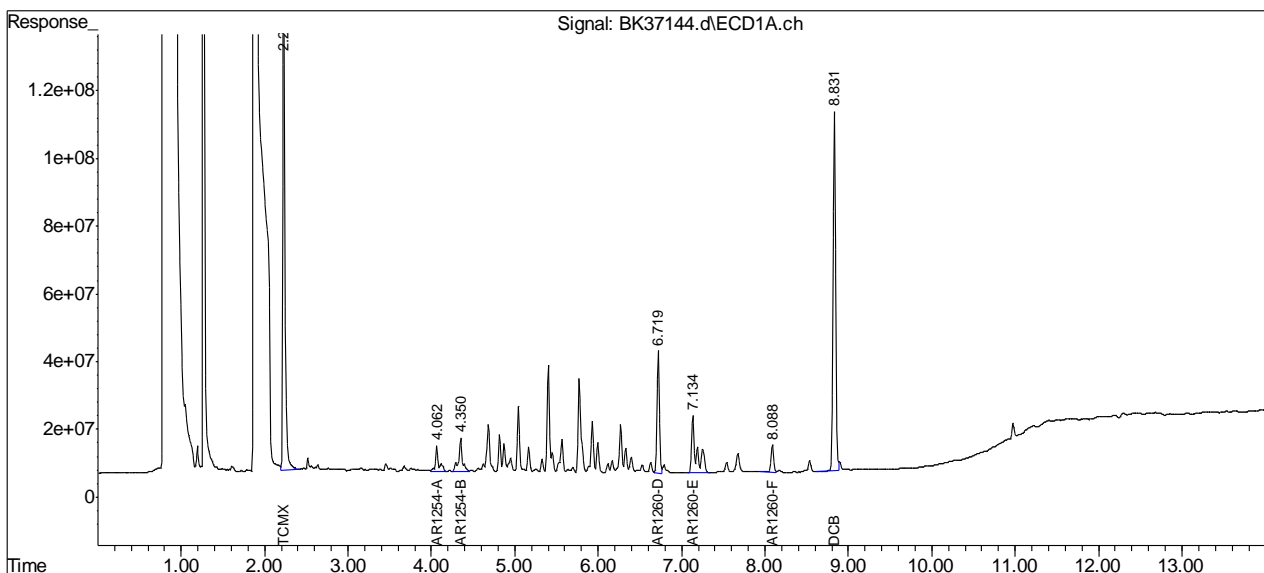
7.1.10
7

Quantitation Report (QT Reviewed)

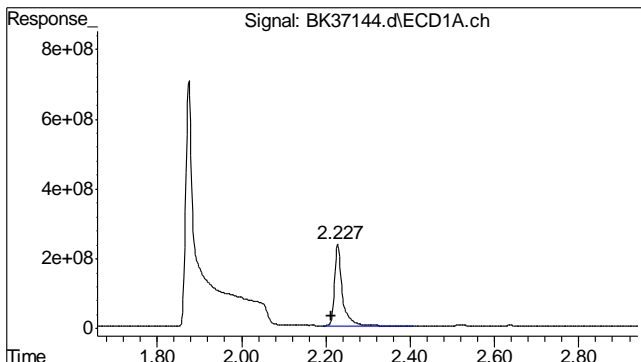
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37144.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:48 am
 Operator : nickk
 Sample : mc30120-9,op37822
 Misc : op37822,gbk1213,15.14,,,10,,s
 ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:03:24 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

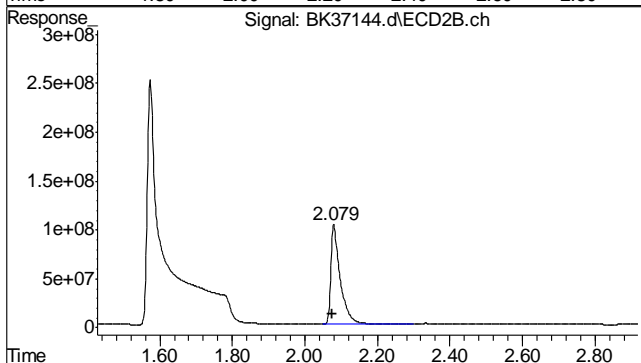
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



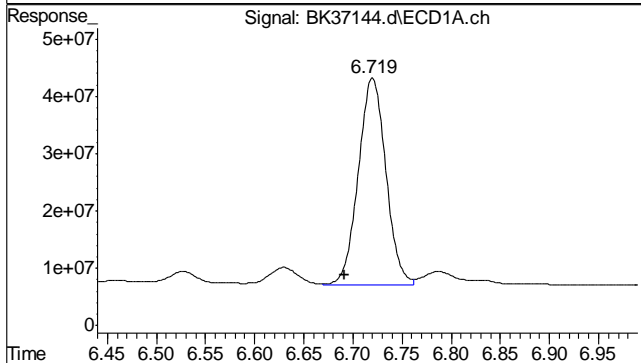
7.1.10
 7



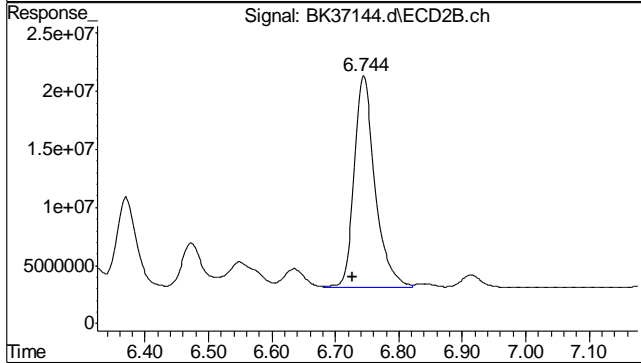
#1 TCMX
 R.T.: 2.227 min
 Delta R.T.: 0.013 min
 Response: 3042736019
 Conc: 20.41 ppb m



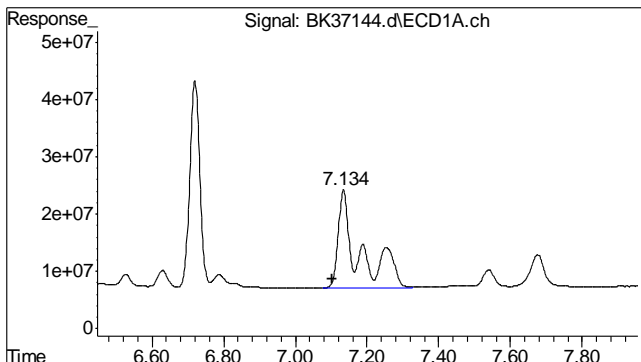
#1 TCMX
 R.T.: 2.079 min
 Delta R.T.: 0.005 min
 Response: 1841341641
 Conc: 22.11 ppb m



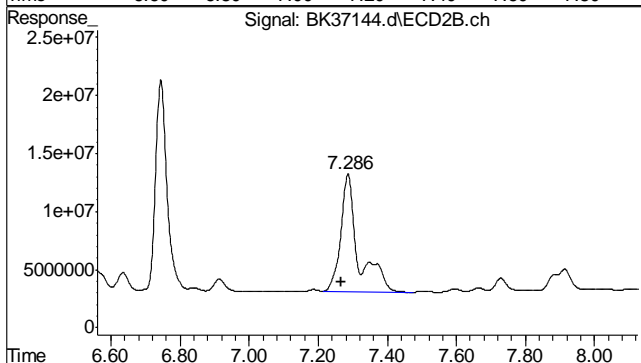
#10 AR1260-D
 R.T.: 6.719 min
 Delta R.T.: 0.028 min
 Response: 706898204
 Conc: 47.79 ppb m



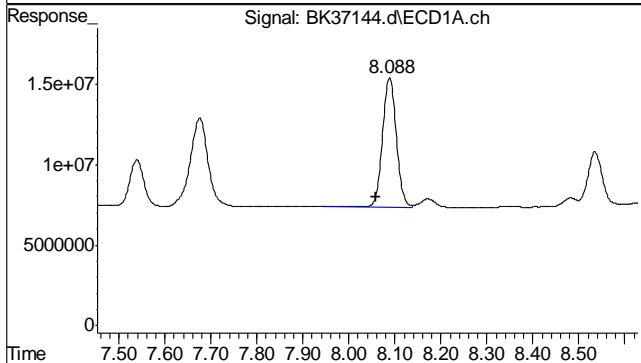
#10 AR1260-D
 R.T.: 6.745 min
 Delta R.T.: 0.018 min
 Response: 415702038
 Conc: 56.05 ppb



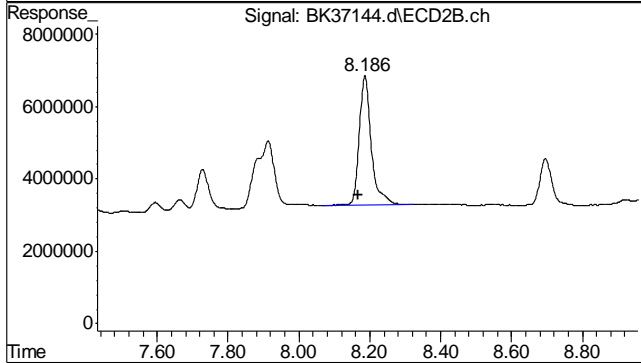
#11 AR1260-E
 R.T.: 7.134 min
 Delta R.T.: 0.029 min
 Response: 696740401
 Conc: 48.33 ppb m



#11 AR1260-E
 R.T.: 7.286 min
 Delta R.T.: 0.018 min
 Response: 358090833
 Conc: 51.83 ppb m

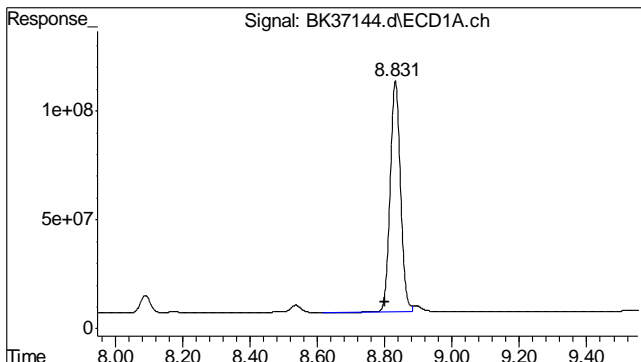


#12 AR1260-F
 R.T.: 8.089 min
 Delta R.T.: 0.030 min
 Response: 166318035
 Conc: 46.29

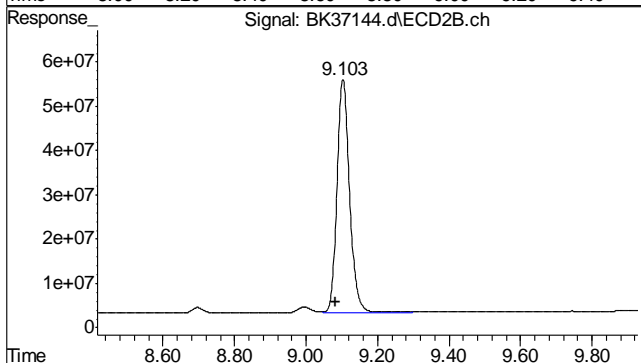


#12 AR1260-F
 R.T.: 8.186 min
 Delta R.T.: 0.019 min
 Response: 85162697
 Conc: 51.06

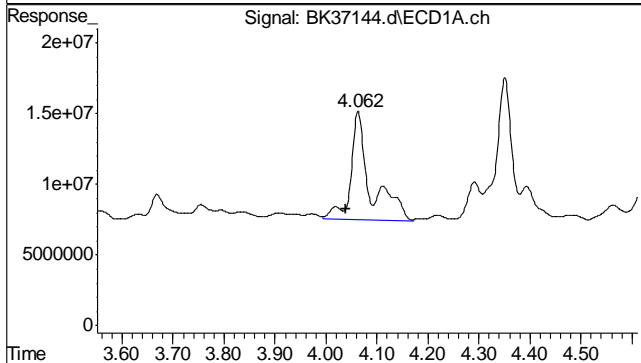
7.1.10
7



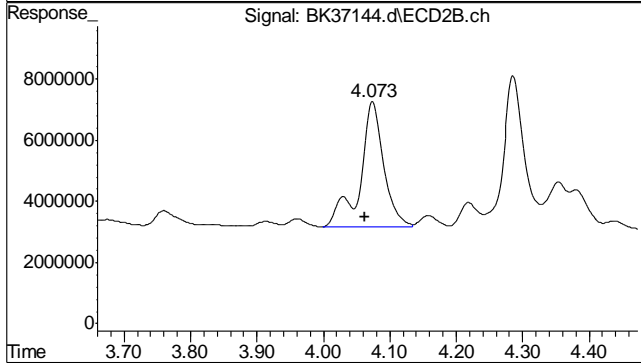
#13 DCB
 R.T.: 8.832 min
 Delta R.T.: 0.031 min
 Response: 2261232826
 Conc: 19.43 ppb



#13 DCB
 R.T.: 9.103 min
 Delta R.T.: 0.022 min
 Response: 1284550606
 Conc: 24.80 ppb

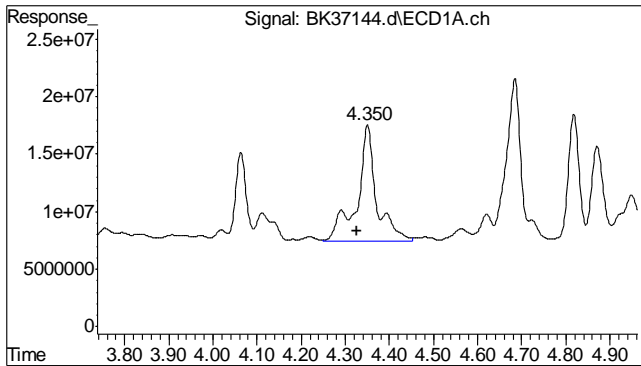


#32 AR1254-A
 R.T.: 4.062 min
 Delta R.T.: 0.023 min
 Response: 205586302
 Conc: 21.65 ppb m

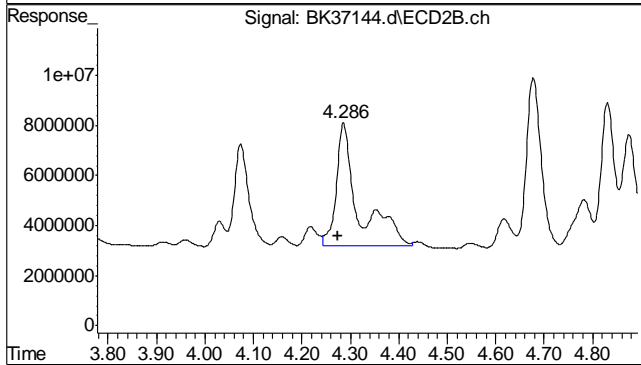


#32 AR1254-A
 R.T.: 4.073 min
 Delta R.T.: 0.010 min
 Response: 100430065
 Conc: 22.53 ppb m

7.1.10
7



#33 AR1254-B
R.T.: 4.350 min
Delta R.T.: 0.024 min
Response: 306111681
Conc: 24.42 ppb m



#33 AR1254-B
R.T.: 4.286 min
Delta R.T.: 0.011 min
Response: 156488091
Conc: 23.94 ppb m

7.1.10
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37145.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:04 pm
 Operator : nickk
 Sample : mc30120-10,op37822
 Misc : op37822,gbk1213,15.40,,,10,,s
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:04:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.221	2.082	3354.4E6	1978.3E6	22.502	23.754
	Spiked Amount	40.000		Recovery	=	56.26%	59.38%
13)	s DCB	8.821	9.101	2371.1E6	1342.6E6	20.375m	25.922 #
	Spiked Amount	40.000		Recovery	=	50.94%	64.81%
Target Compounds							
10)	AR1260-D	6.709	6.743	401.0E6	221.9E6	27.109	29.921
11)	AR1260-E	7.123	7.282	392.2E6	198.6E6	27.207m	28.751m
12)	AR1260-F	8.078	8.183	97153556	45687130	27.040m	27.392
32)	AR1254-A	4.051	4.073	143.3E6	72159280	15.084m	16.187m
33)	AR1254-B	4.338	4.285	218.7E6	119.9E6	17.444m	18.350m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

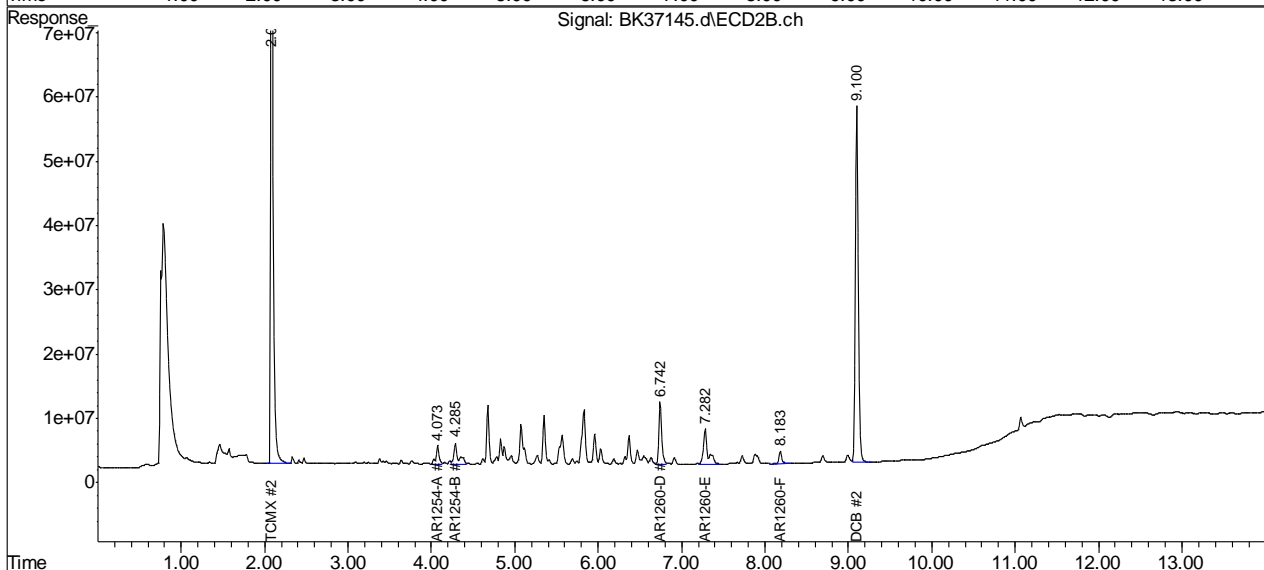
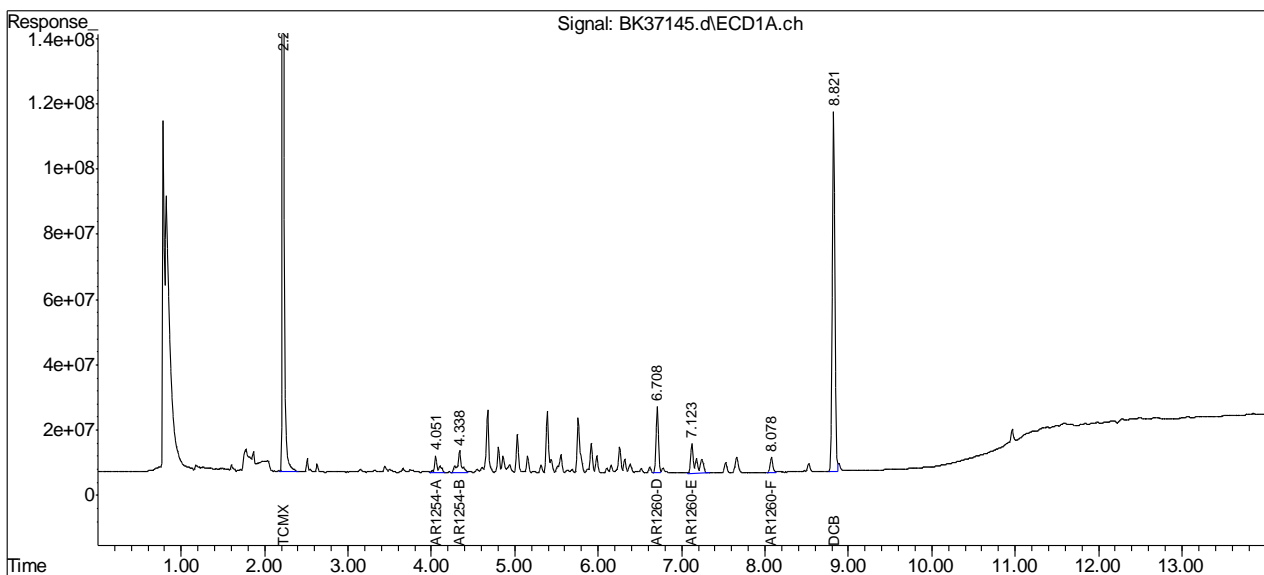
7.1.11
7

Quantitation Report (QT Reviewed)

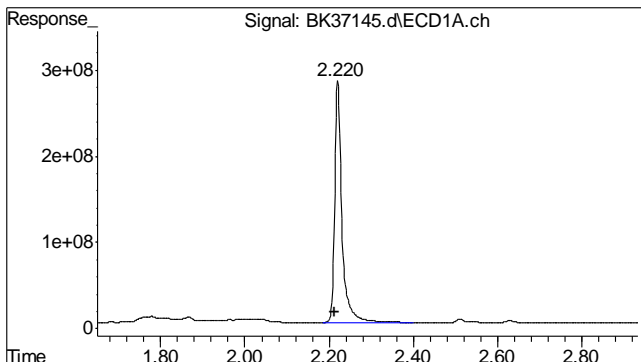
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37145.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:04 pm
 Operator : nickk
 Sample : mc30120-10,op37822
 Misc : op37822,gbk1213,15.40,,,10,,,s
 ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:04:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

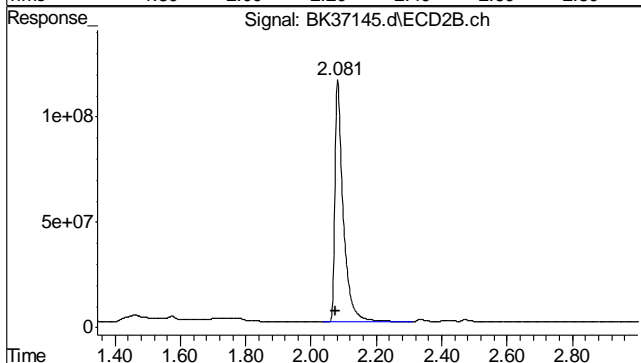
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



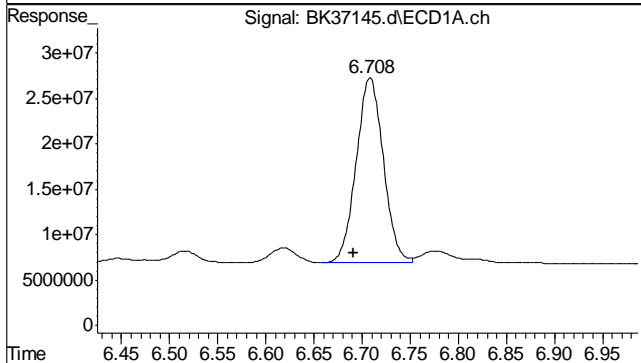
7.1.11
 7



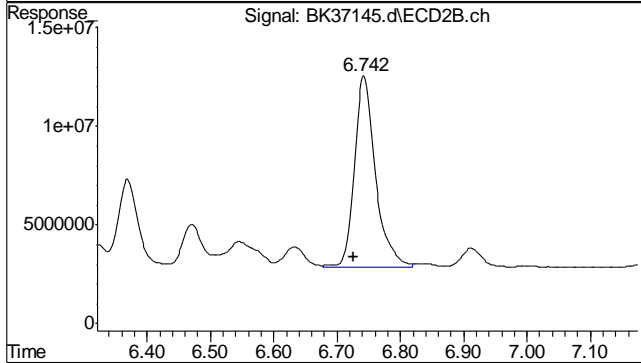
#1 TCMX
 R.T.: 2.221 min
 Delta R.T.: 0.007 min
 Response: 3354440831
 Conc: 22.50 ppb



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.008 min
 Response: 1978277695
 Conc: 23.75 ppb

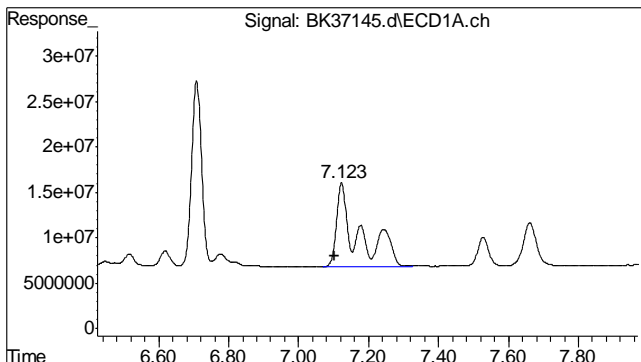


#10 AR1260-D
 R.T.: 6.709 min
 Delta R.T.: 0.017 min
 Response: 401018173
 Conc: 27.11 ppb

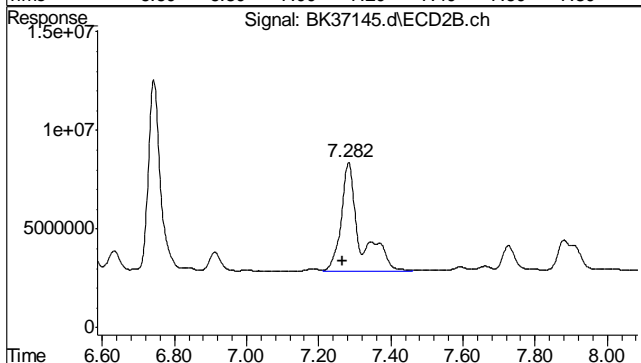


#10 AR1260-D
 R.T.: 6.743 min
 Delta R.T.: 0.016 min
 Response: 221898534
 Conc: 29.92 ppb

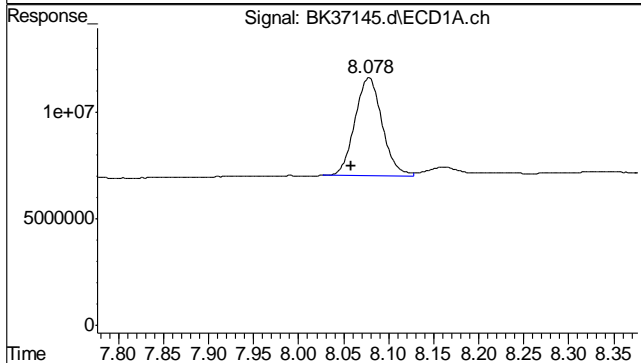
7.1.11
 7



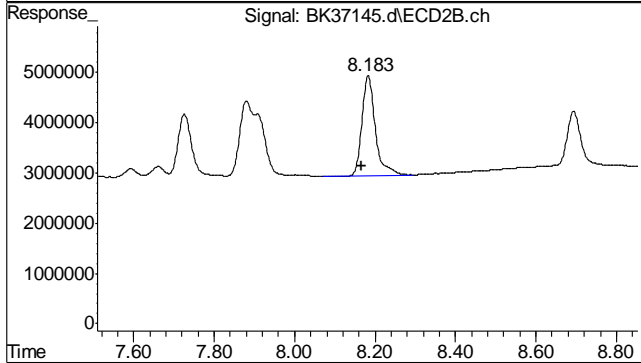
#11 AR1260-E
 R.T.: 7.123 min
 Delta R.T.: 0.019 min
 Response: 392190069
 Conc: 27.21 ppb m



#11 AR1260-E
 R.T.: 7.282 min
 Delta R.T.: 0.015 min
 Response: 198622372
 Conc: 28.75 ppb m

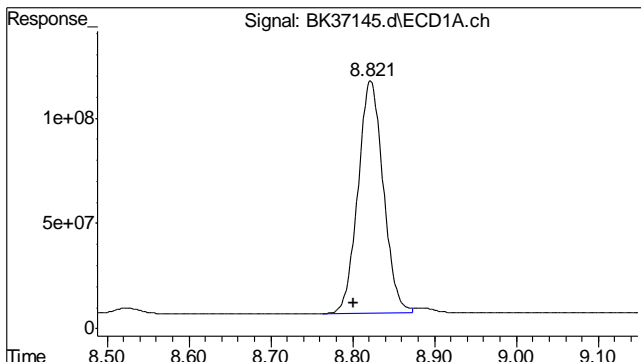


#12 AR1260-F
 R.T.: 8.078 min
 Delta R.T.: 0.019 min
 Response: 97153556
 Conc: 27.04 m

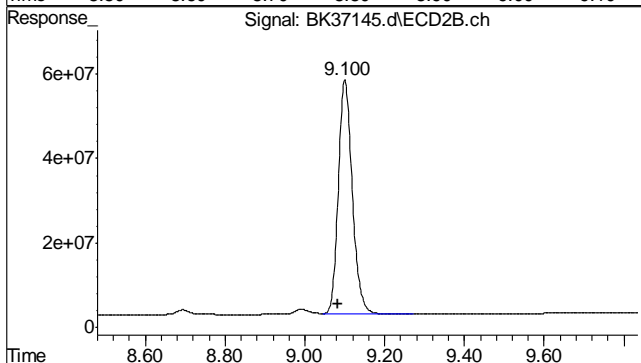


#12 AR1260-F
 R.T.: 8.183 min
 Delta R.T.: 0.016 min
 Response: 45687130
 Conc: 27.39

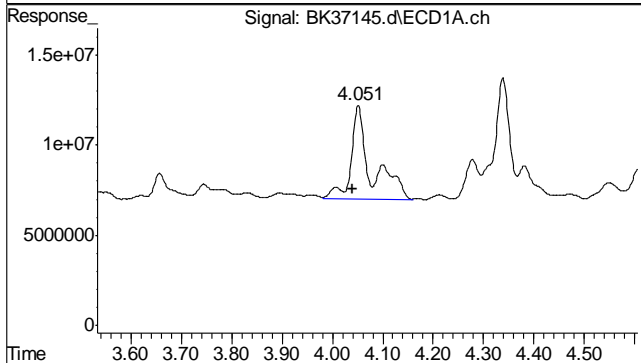
7.1.11
7



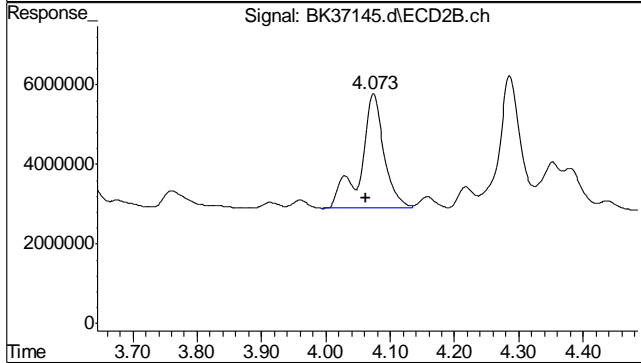
#13 DCB
 R.T.: 8.821 min
 Delta R.T.: 0.020 min
 Response: 2371145278
 Conc: 20.37 ppb m



#13 DCB
 R.T.: 9.101 min
 Delta R.T.: 0.019 min
 Response: 1342602605
 Conc: 25.92 ppb

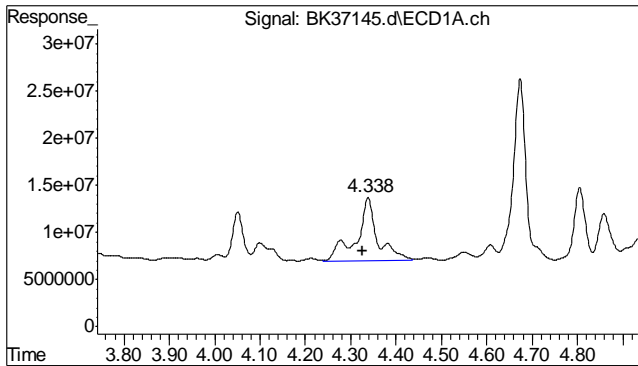


#32 AR1254-A
 R.T.: 4.051 min
 Delta R.T.: 0.011 min
 Response: 143264267
 Conc: 15.08 ppb m

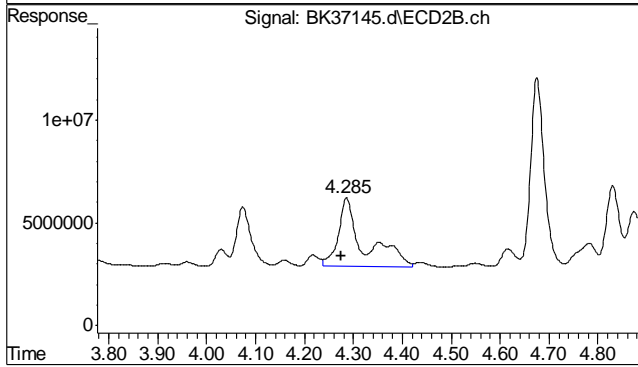


#32 AR1254-A
 R.T.: 4.073 min
 Delta R.T.: 0.010 min
 Response: 72159280
 Conc: 16.19 ppb m

7.1.11
7



#33 AR1254-B
R.T.: 4.338 min
Delta R.T.: 0.012 min
Response: 218690366
Conc: 17.44 ppb m



#33 AR1254-B
R.T.: 4.285 min
Delta R.T.: 0.011 min
Response: 119944173
Conc: 18.35 ppb m

7.1.11
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37146.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:20 pm
 Operator : nickk
 Sample : mc30120-11,op37822
 Misc : op37822,gbk1213,15.75,,,10,,s
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:06:34 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.221	2.082	3415.7E6	1899.2E6	22.913m	22.804m
	Spiked Amount	40.000		Recovery	=	57.28%	57.01%
13)	s DCB	8.823	9.102	2757.8E6	1595.7E6	23.697	30.808 #
	Spiked Amount	40.000		Recovery	=	59.24%	77.02%
Target Compounds							
10)	AR1260-D	6.709	6.744	2211.8E6	1473.1E6	149.520	198.638 #
11)	AR1260-E	7.123	7.284	2191.9E6	1285.2E6	152.057m	186.029m
12)	AR1260-F	8.079	8.185	540.3E6	315.3E6	150.366	189.048 #
32)	AR1254-A	4.051	4.072	899.4E6	566.4E6	94.697m	127.045m#
33)	AR1254-B	4.274f	4.278	1413.1E6	926.7E6	112.719m	141.778m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

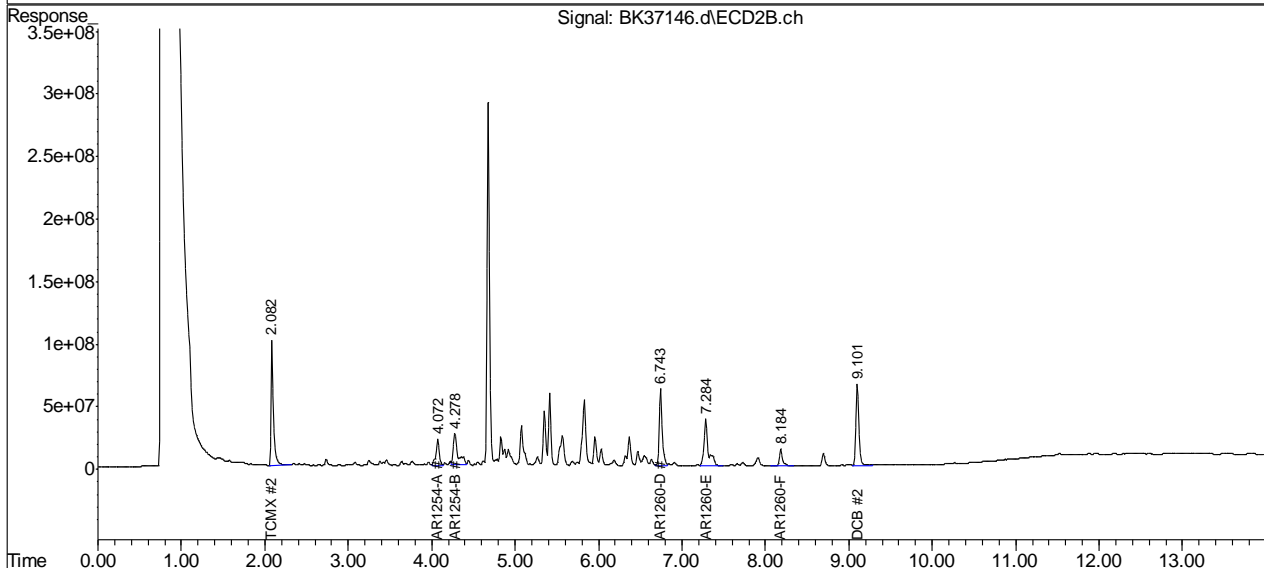
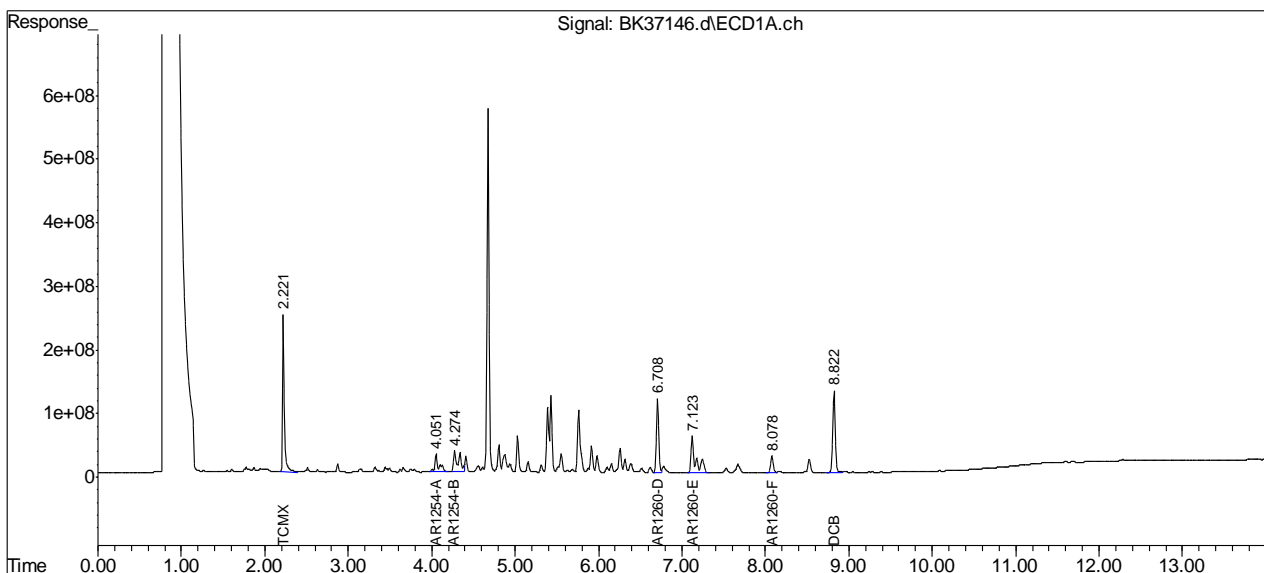
7.1.12
7

Quantitation Report (QT Reviewed)

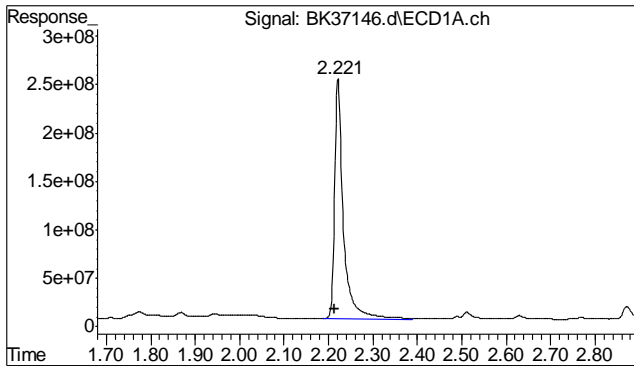
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37146.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:20 pm
 Operator : nickk
 Sample : mc30120-11,op37822
 Misc : op37822,gbk1213,15.75,,,10,,,s
 ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:06:34 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

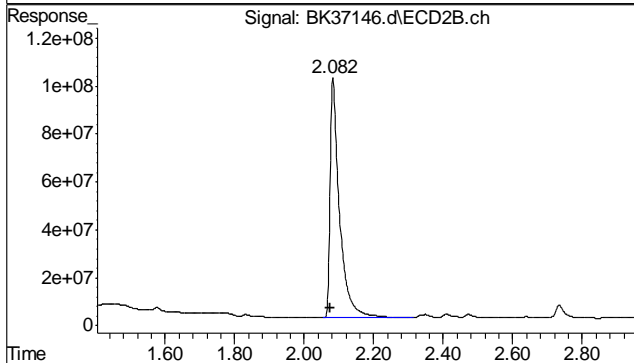
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



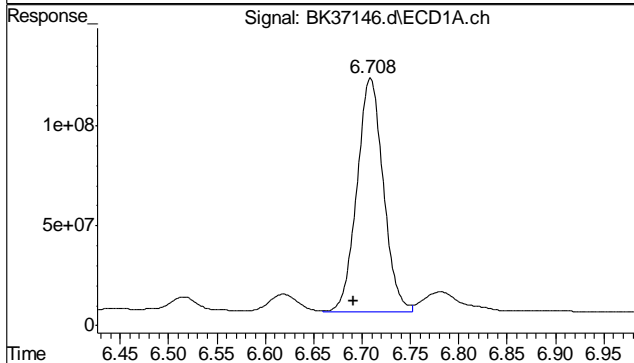
7.1.12
 7



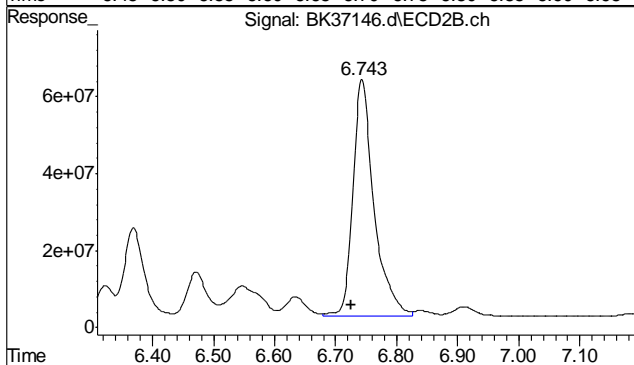
#1 TCMX
 R.T.: 2.221 min
 Delta R.T.: 0.007 min
 Response: 3415715278
 Conc: 22.91 ppb m



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 1899160188
 Conc: 22.80 ppb m

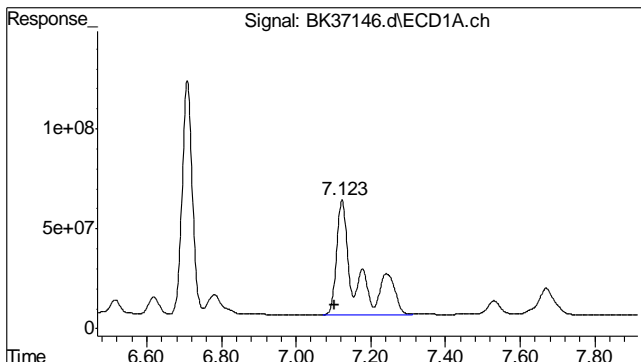


#10 AR1260-D
 R.T.: 6.709 min
 Delta R.T.: 0.017 min
 Response: 2211831113
 Conc: 149.52 ppb

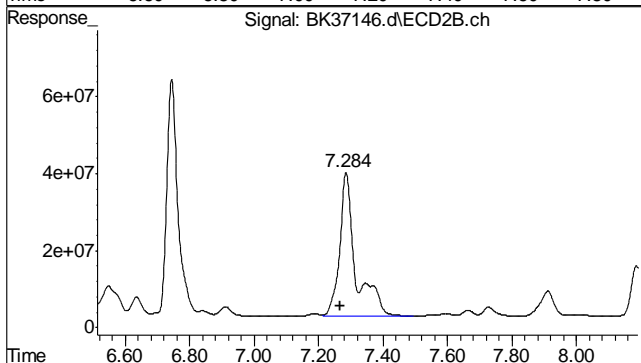


#10 AR1260-D
 R.T.: 6.744 min
 Delta R.T.: 0.017 min
 Response: 1473135575
 Conc: 198.64 ppb

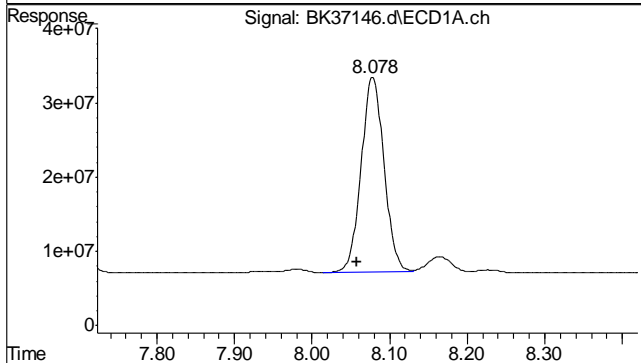
7.1.12
7



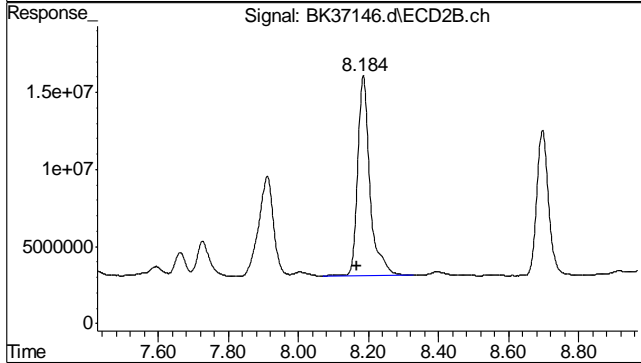
#11 AR1260-E
 R.T.: 7.123 min
 Delta R.T.: 0.019 min
 Response: 2191889834
 Conc: 152.06 ppb m



#11 AR1260-E
 R.T.: 7.284 min
 Delta R.T.: 0.017 min
 Response: 1285166788
 Conc: 186.03 ppb m

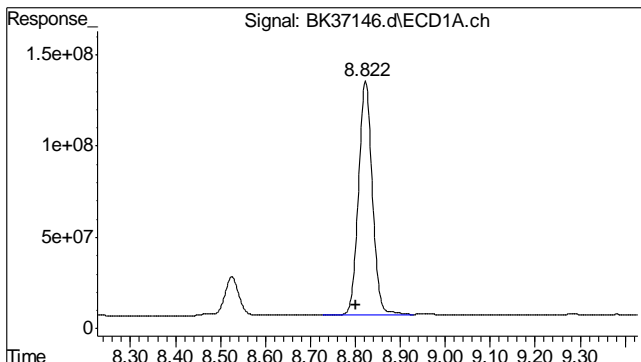


#12 AR1260-F
 R.T.: 8.079 min
 Delta R.T.: 0.020 min
 Response: 540263981
 Conc: 150.37

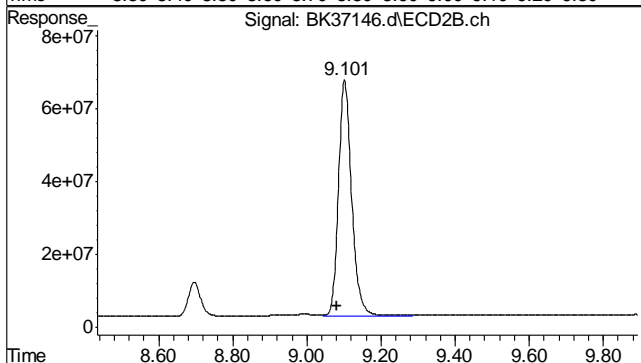


#12 AR1260-F
 R.T.: 8.185 min
 Delta R.T.: 0.018 min
 Response: 315308443
 Conc: 189.05

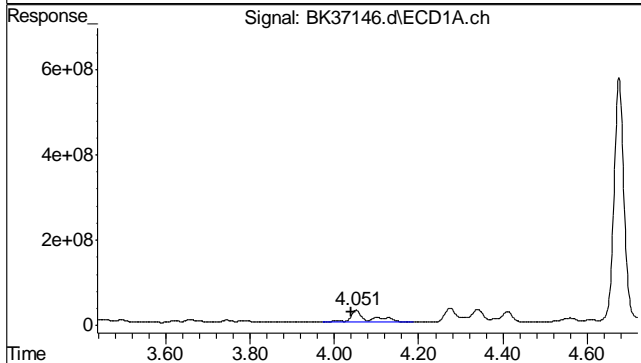
7.1.12
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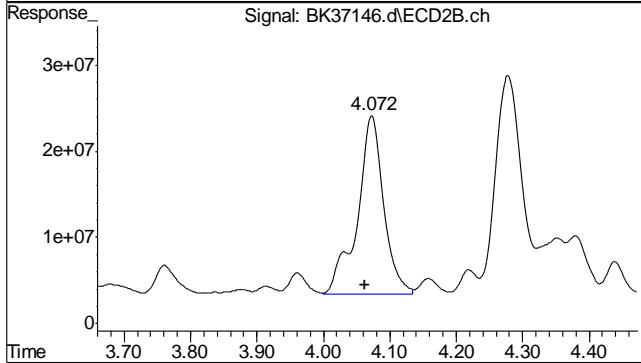
#13 DCB
 R.T.: 8.823 min
 Delta R.T.: 0.022 min
 Response: 2757793212
 Conc: 23.70 ppb



#13 DCB
 R.T.: 9.102 min
 Delta R.T.: 0.020 min
 Response: 1595702172
 Conc: 30.81 ppb

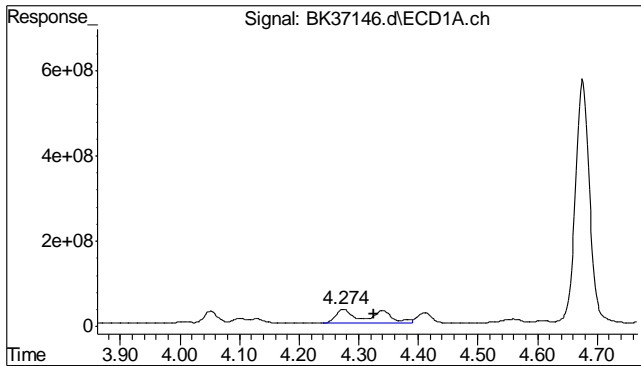


#32 AR1254-A
 R.T.: 4.051 min
 Delta R.T.: 0.012 min
 Response: 899407744
 Conc: 94.70 ppb m

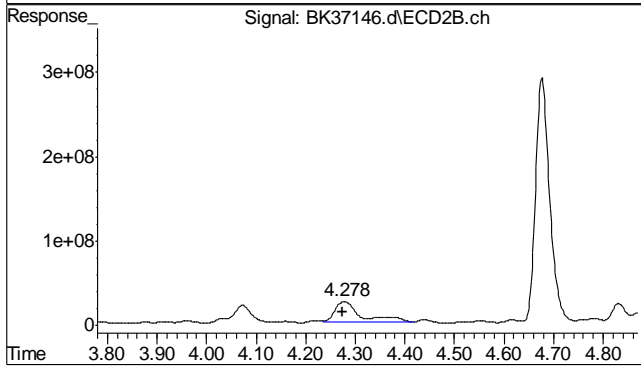


#32 AR1254-A
 R.T.: 4.072 min
 Delta R.T.: 0.009 min
 Response: 566363880
 Conc: 127.05 ppb m

7.1.12
 7



#33 AR1254-B
R.T.: 4.274 min
Delta R.T.: -0.052 min
Response: 1413130569
Conc: 112.72 ppb m



#33 AR1254-B
R.T.: 4.278 min
Delta R.T.: 0.003 min
Response: 926735634
Conc: 141.78 ppb m

7.1.12
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37147.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:36 pm
 Operator : nickk
 Sample : mc30120-12,op37822
 Misc : op37822,gbk1213,15.41,,,10,,,s
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:07:52 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.222	2.082	3116.2E6	2015.0E6	20.904m	24.195m
	Spiked Amount	40.000		Recovery	=	52.26%	60.49%
13)	s DCB	8.828	9.106	2684.3E6	1577.6E6	23.065	30.458 #
	Spiked Amount	40.000		Recovery	=	57.66%	76.14%
Target Compounds							
10)	AR1260-D	6.713	6.747	1909.1E6	1316.3E6	129.058	177.484 #
11)	AR1260-E	7.127	7.288	1853.6E6	1137.9E6	128.590m	164.718m#
12)	AR1260-F	8.083	8.189	447.9E6	265.8E6	124.663	159.341 #
32)	AR1254-A	4.053	4.076	275.0E6	173.0E6	28.954m	38.815 #
33)	AR1254-B	4.340	4.288	324.6E6	187.8E6	25.891m	28.734m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

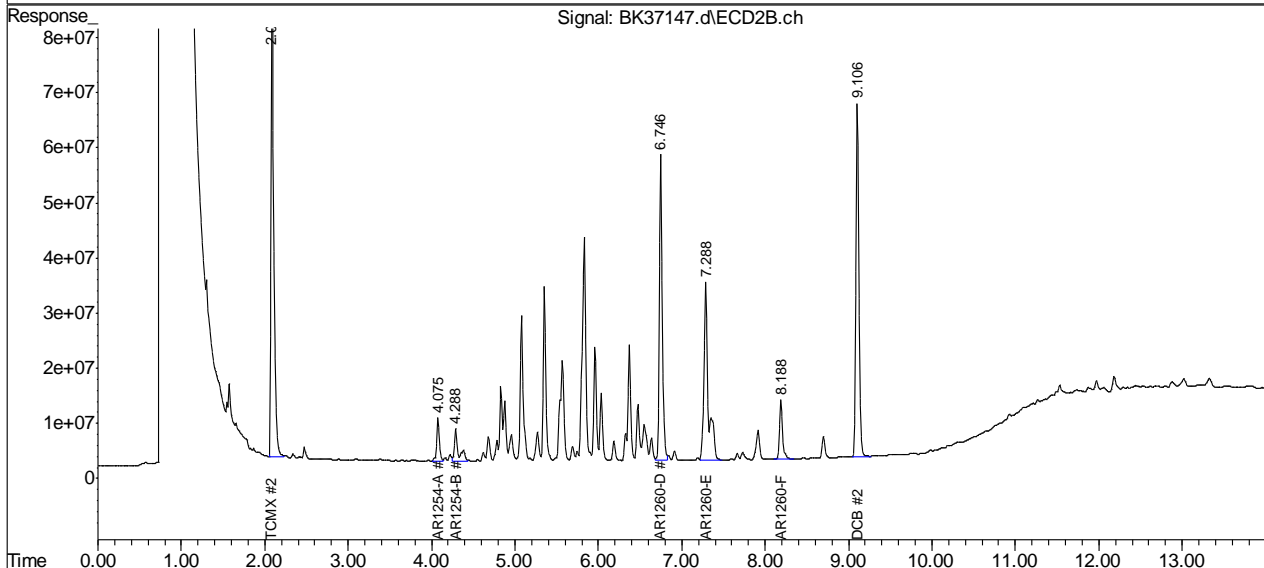
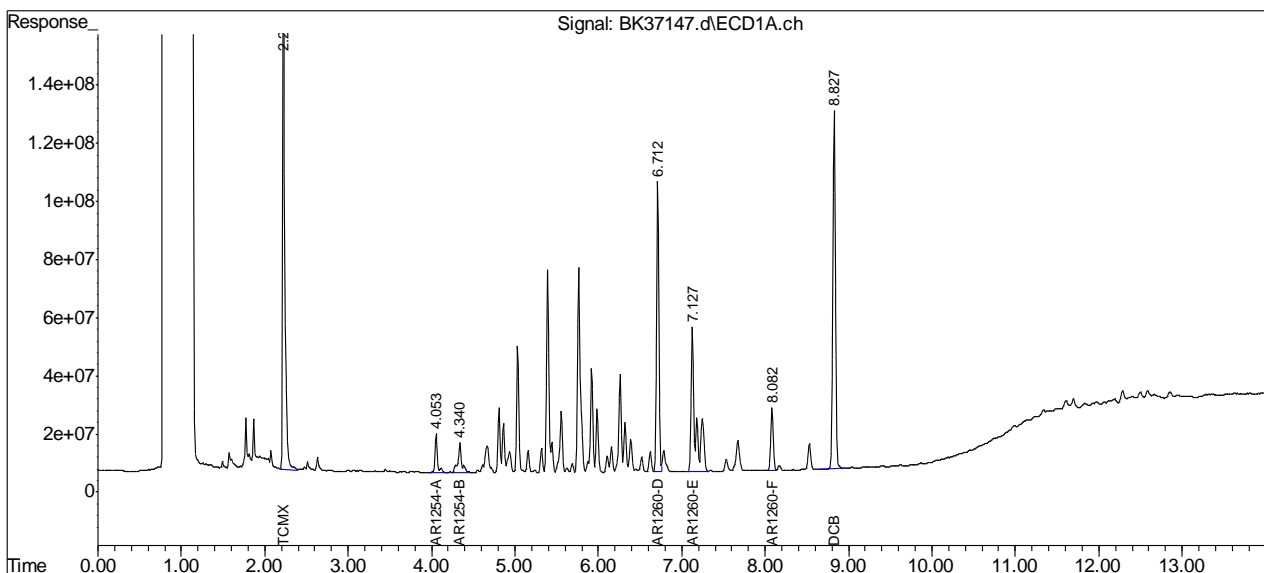
7.1.13
 7

Quantitation Report (QT Reviewed)

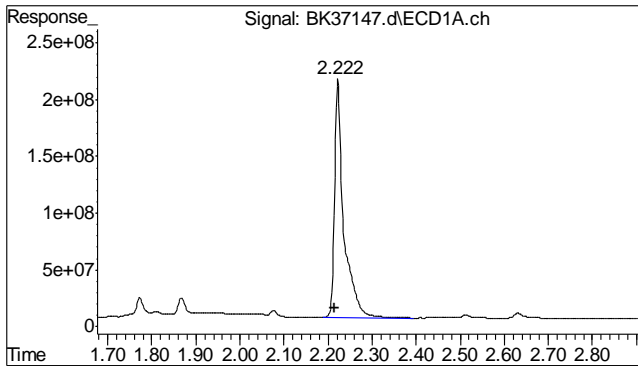
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37147.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:36 pm
 Operator : nickk
 Sample : mc30120-12,op37822
 Misc : op37822,gbk1213,15.41,,,10,,s
 ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:07:52 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

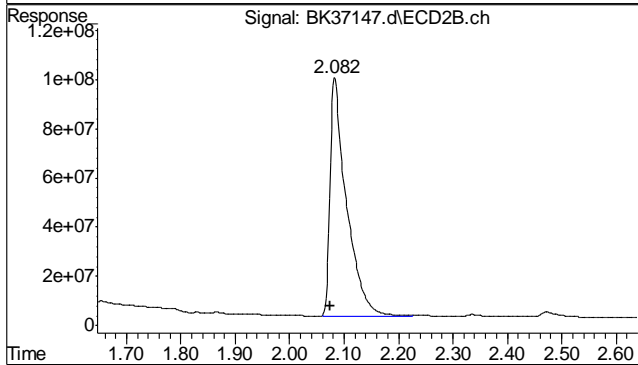
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



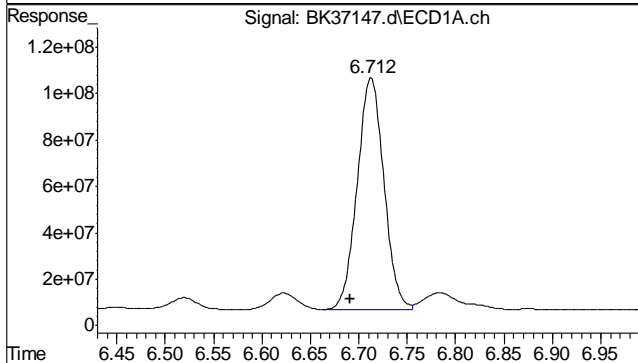
7.1.13
 7



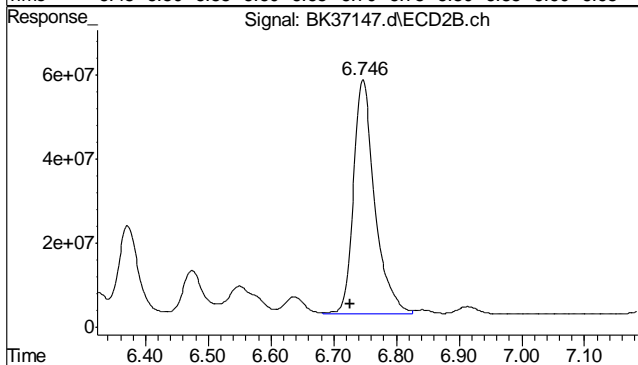
#1 TCMX
 R.T.: 2.222 min
 Delta R.T.: 0.008 min
 Response: 3116165077
 Conc: 20.90 ppb m



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 2015005086
 Conc: 24.20 ppb m

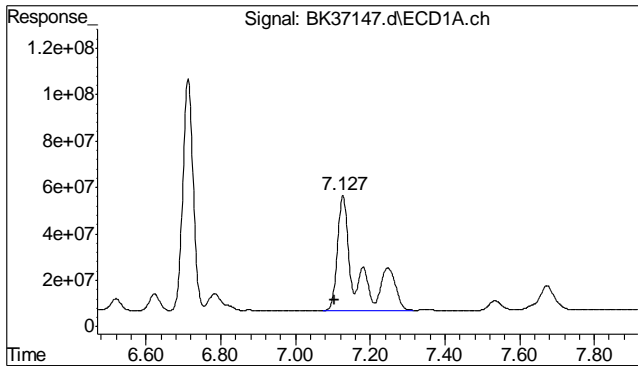


#10 AR1260-D
 R.T.: 6.713 min
 Delta R.T.: 0.021 min
 Response: 1909141944
 Conc: 129.06 ppb

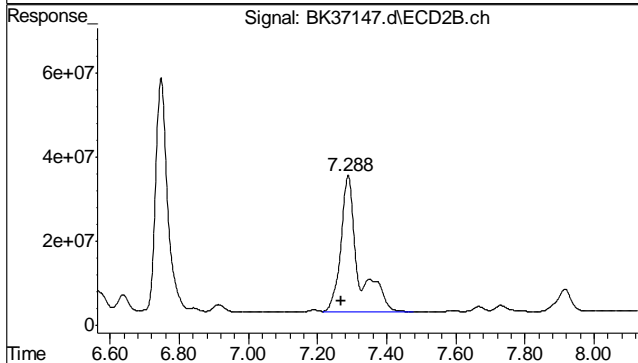


#10 AR1260-D
 R.T.: 6.747 min
 Delta R.T.: 0.020 min
 Response: 1316254328
 Conc: 177.48 ppb

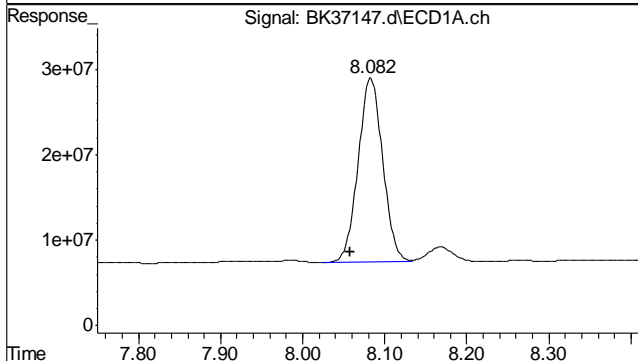
7.1.13
7



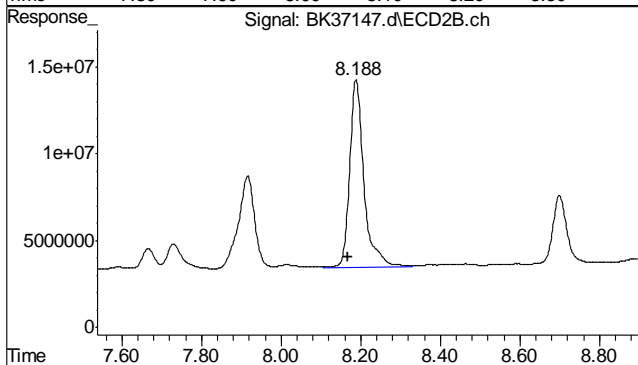
#11 AR1260-E
 R.T.: 7.127 min
 Delta R.T.: 0.022 min
 Response: 1853608717
 Conc: 128.59 ppb m



#11 AR1260-E
 R.T.: 7.288 min
 Delta R.T.: 0.020 min
 Response: 1137936872
 Conc: 164.72 ppb m

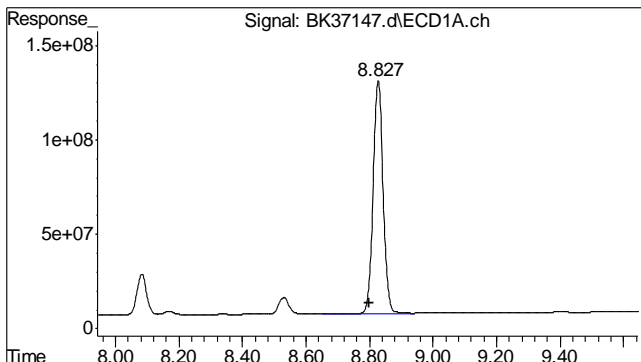


#12 AR1260-F
 R.T.: 8.083 min
 Delta R.T.: 0.025 min
 Response: 447913139
 Conc: 124.66

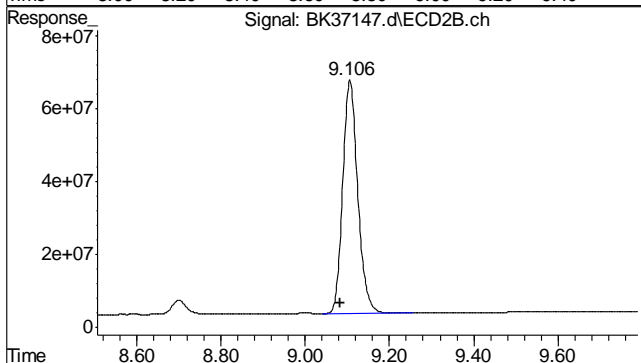


#12 AR1260-F
 R.T.: 8.189 min
 Delta R.T.: 0.021 min
 Response: 265761346
 Conc: 159.34

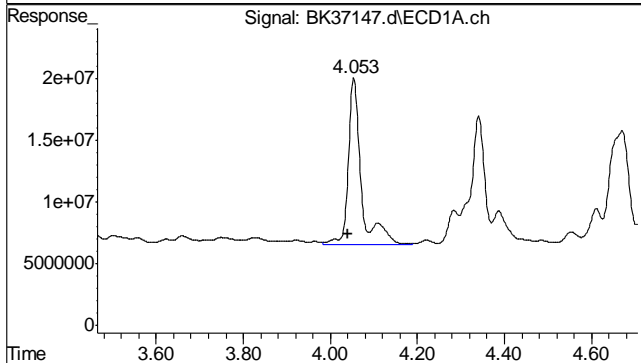
7.1.13
7



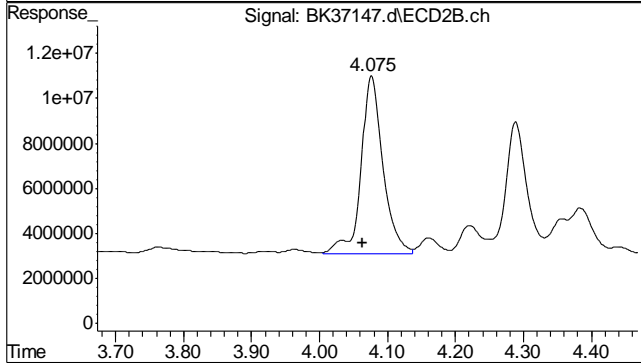
#13 DCB
 R.T.: 8.828 min
 Delta R.T.: 0.027 min
 Response: 2684257756
 Conc: 23.07 ppb



#13 DCB
 R.T.: 9.106 min
 Delta R.T.: 0.024 min
 Response: 1577551427
 Conc: 30.46 ppb

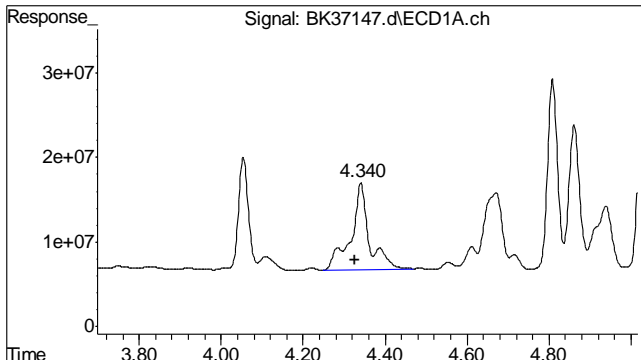


#32 AR1254-A
 R.T.: 4.053 min
 Delta R.T.: 0.014 min
 Response: 274998064
 Conc: 28.95 ppb m

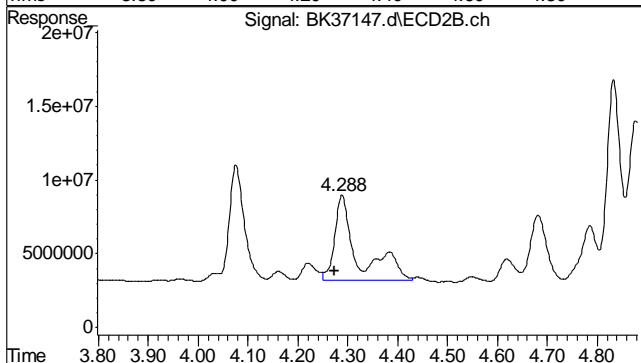


#32 AR1254-A
 R.T.: 4.076 min
 Delta R.T.: 0.013 min
 Response: 173037409
 Conc: 38.82 ppb

7.1.13
7



#33 AR1254-B
R.T.: 4.340 min
Delta R.T.: 0.015 min
Response: 324595957
Conc: 25.89 ppb m



#33 AR1254-B
R.T.: 4.288 min
Delta R.T.: 0.013 min
Response: 187821978
Conc: 28.73 ppb m

7.1.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37148.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:52 pm
 Operator : nickk
 Sample : mc30120-13,op37822
 Misc : op37822,gbk1213,15.44,,,10,,s
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:08:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.223	2.084	3043.5E6	1806.9E6	20.416	21.697
Spiked Amount	40.000		Recovery	=	51.04%	54.24%
13) s DCB	8.829	9.108	2050.9E6	1216.9E6	17.623	23.495 #
Spiked Amount	40.000		Recovery	=	44.06%	58.74%
Target Compounds						
10) AR1260-D	6.714	6.748	370.0E6	221.9E6	25.009	29.917
11) AR1260-E	7.128	7.289	359.7E6	198.4E6	24.955m	28.723m
12) AR1260-F	8.084	8.190	89450993	46734843	24.896m	28.021m
32) AR1254-A	4.053	4.075	94876000	55107972	9.989m	12.362m
33) AR1254-B	4.341f	4.288	135.1E6	71593670	10.774m	10.953m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

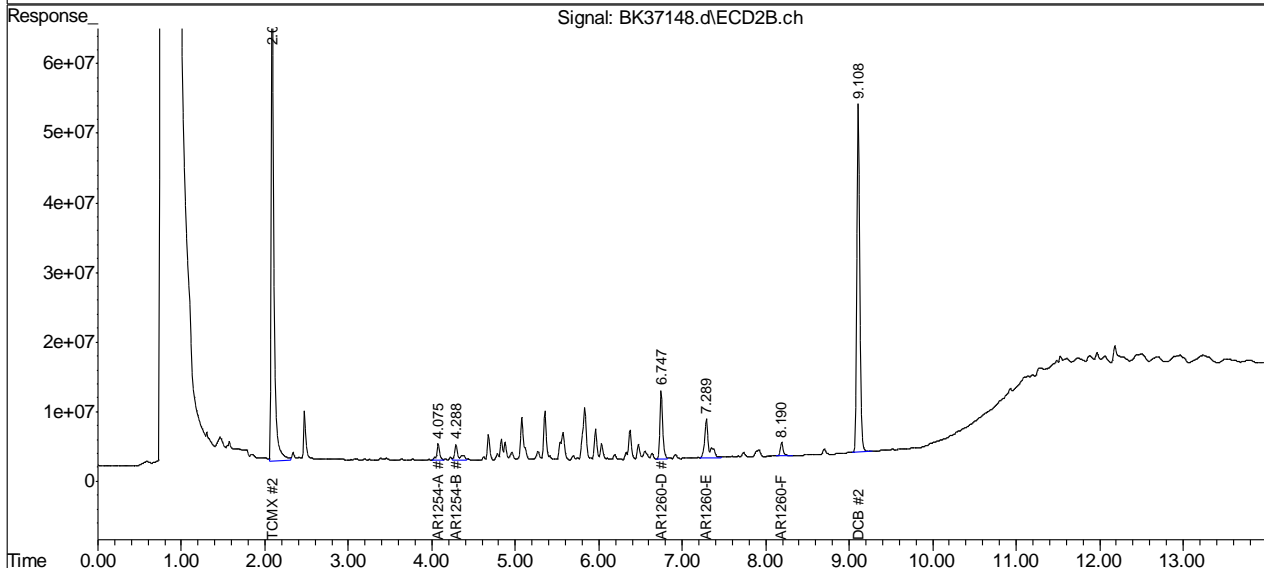
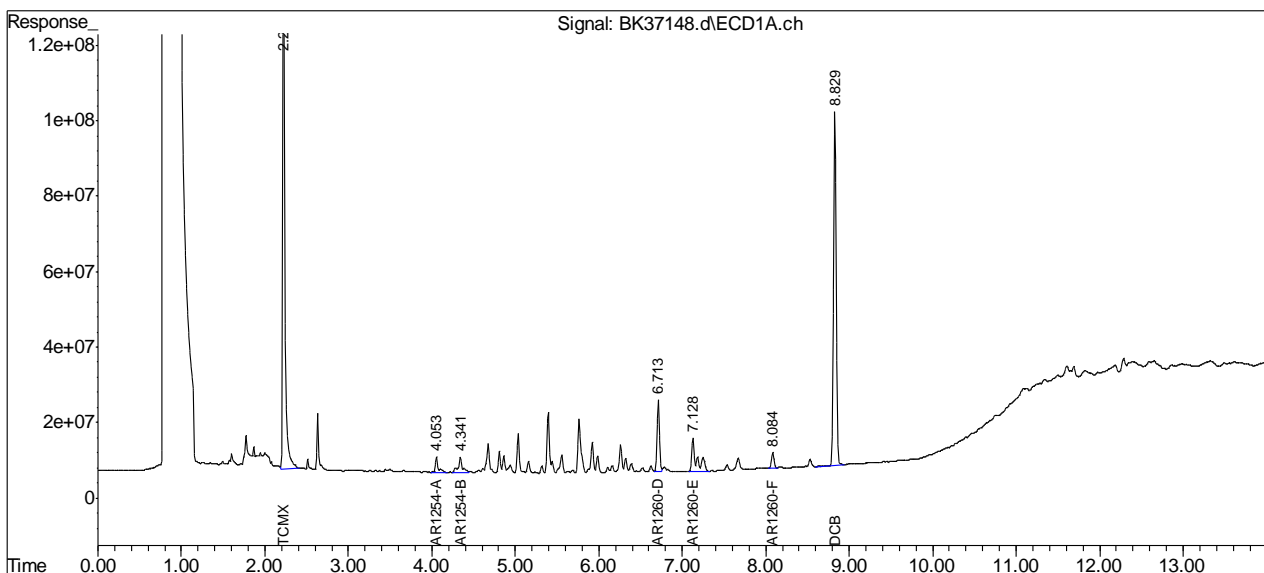
7.1.14
7

Quantitation Report (QT Reviewed)

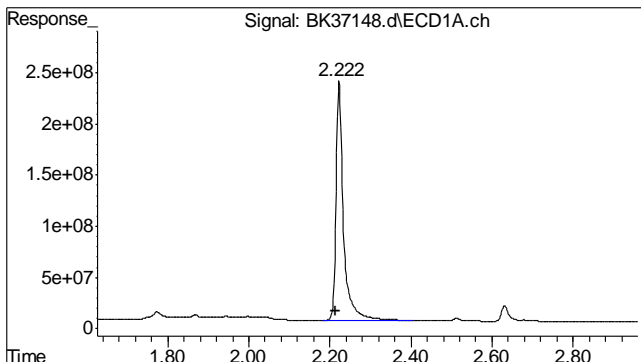
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37148.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 12:52 pm
 Operator : nickk
 Sample : mc30120-13,op37822
 Misc : op37822,gbk1213,15.44,,,10,,,s
 ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:08:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

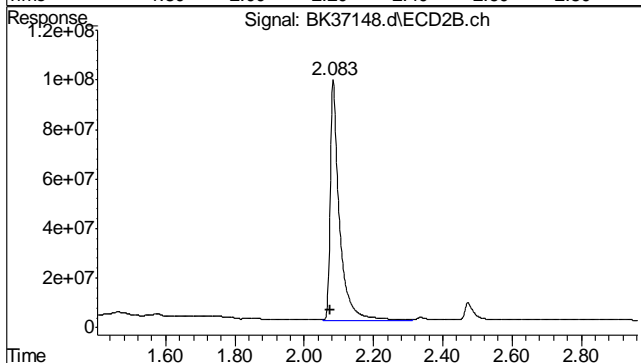
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



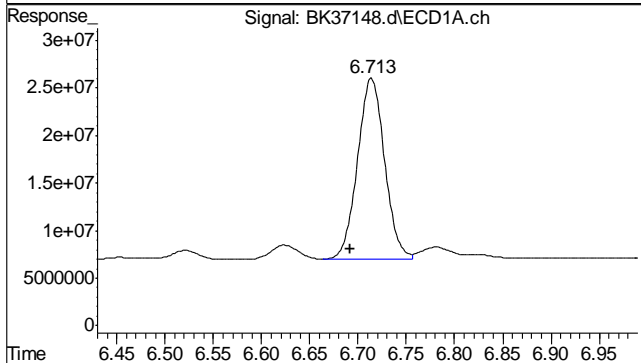
7.1.14
 7



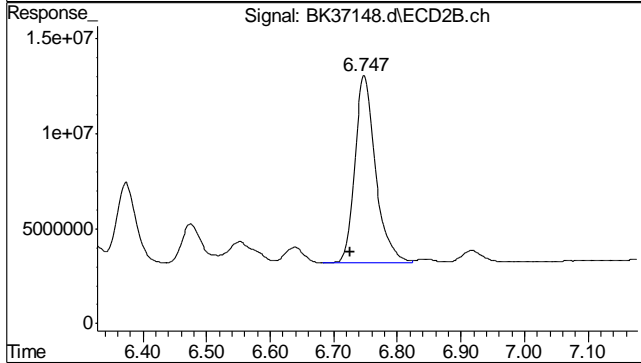
#1 TCMX
 R.T.: 2.223 min
 Delta R.T.: 0.009 min
 Response: 3043518819
 Conc: 20.42 ppb



#1 TCMX
 R.T.: 2.084 min
 Delta R.T.: 0.009 min
 Response: 1806897374
 Conc: 21.70 ppb

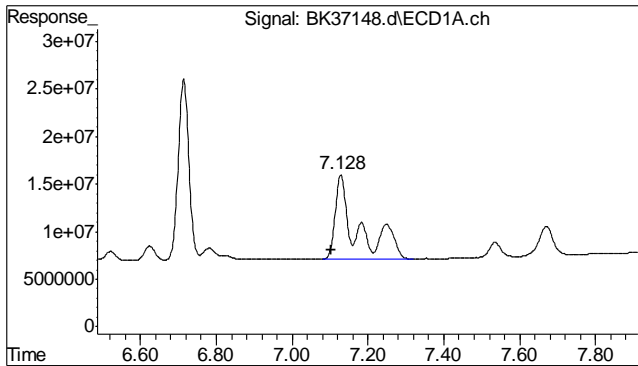


#10 AR1260-D
 R.T.: 6.714 min
 Delta R.T.: 0.022 min
 Response: 369951261
 Conc: 25.01 ppb

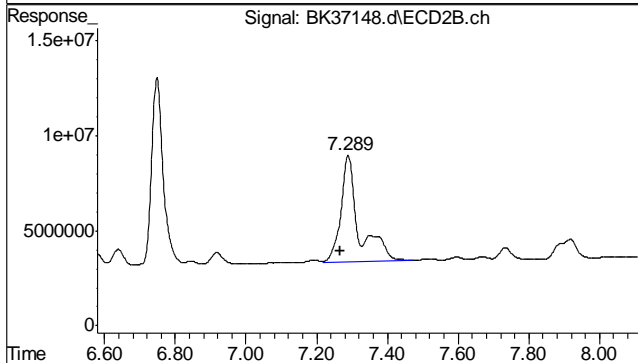


#10 AR1260-D
 R.T.: 6.748 min
 Delta R.T.: 0.022 min
 Response: 221872276
 Conc: 29.92 ppb

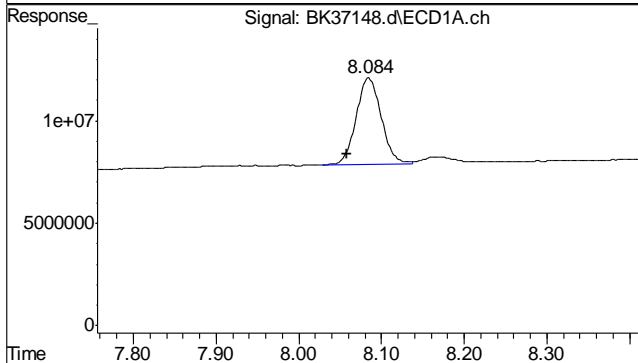
7.1.14
 7



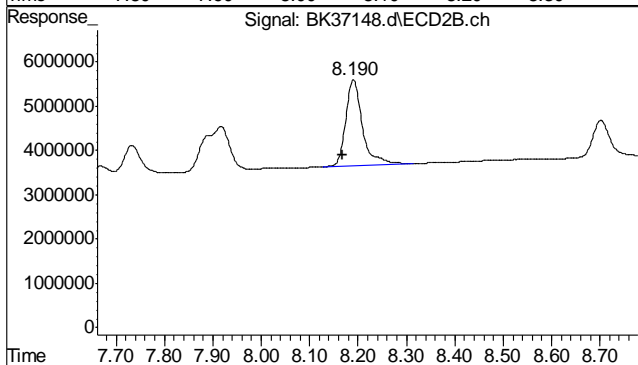
#11 AR1260-E
 R.T.: 7.128 min
 Delta R.T.: 0.023 min
 Response: 359718116
 Conc: 24.95 ppb m



#11 AR1260-E
 R.T.: 7.289 min
 Delta R.T.: 0.021 min
 Response: 198429044
 Conc: 28.72 ppb m

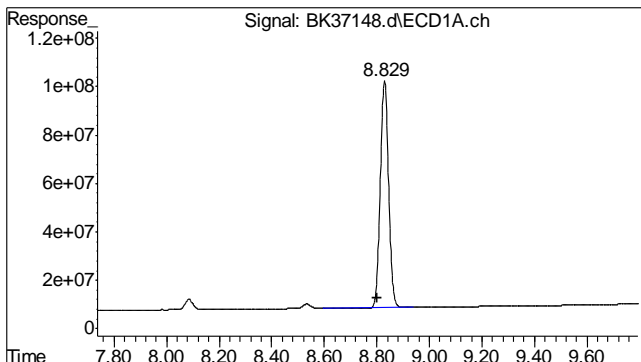


#12 AR1260-F
 R.T.: 8.084 min
 Delta R.T.: 0.026 min
 Response: 89450993
 Conc: 24.90 m

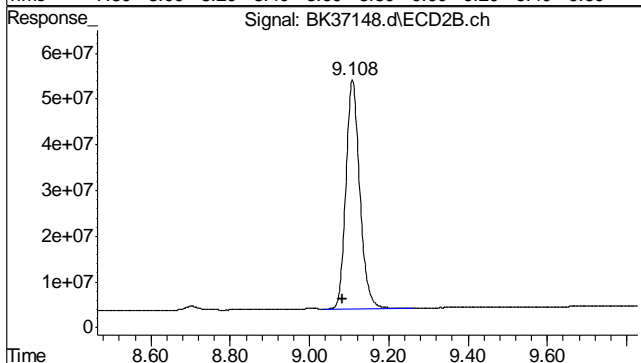


#12 AR1260-F
 R.T.: 8.190 min
 Delta R.T.: 0.022 min
 Response: 46734843
 Conc: 28.02 m

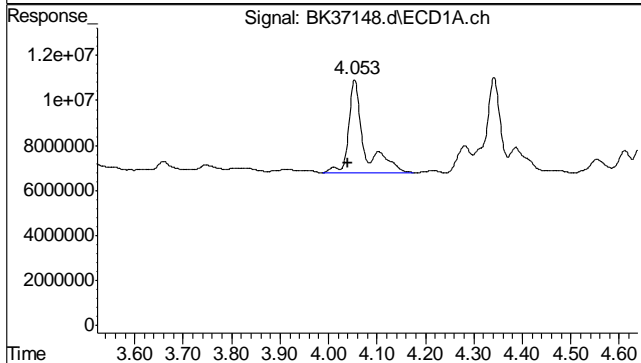
7.1.14
7



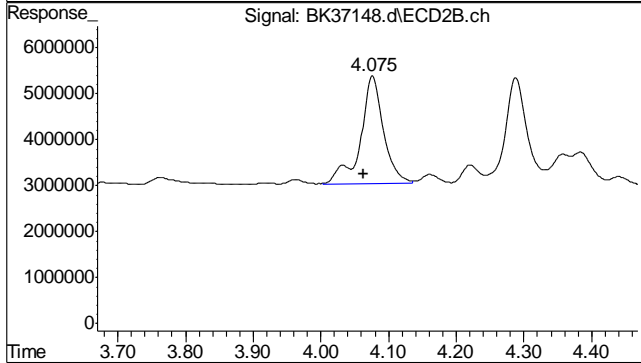
#13 DCB
 R.T.: 8.829 min
 Delta R.T.: 0.028 min
 Response: 2050918730
 Conc: 17.62 ppb



#13 DCB
 R.T.: 9.108 min
 Delta R.T.: 0.027 min
 Response: 1216928332
 Conc: 23.50 ppb

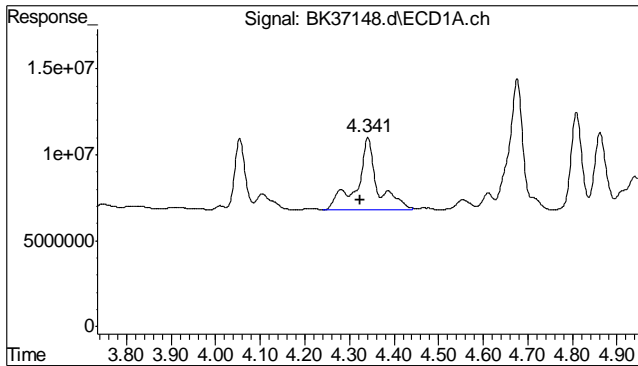


#32 AR1254-A
 R.T.: 4.053 min
 Delta R.T.: 0.014 min
 Response: 94876000
 Conc: 9.99 ppb m

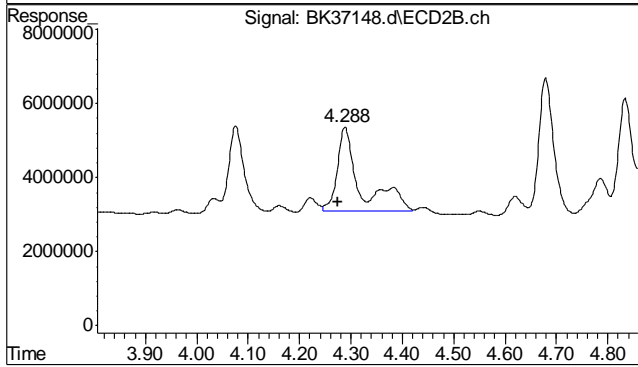


#32 AR1254-A
 R.T.: 4.075 min
 Delta R.T.: 0.012 min
 Response: 55107972
 Conc: 12.36 ppb m

7.1.14
7



#33 AR1254-B
R.T.: 4.341 min
Delta R.T.: 0.015 min
Response: 135065494
Conc: 10.77 ppb m



#33 AR1254-B
R.T.: 4.288 min
Delta R.T.: 0.013 min
Response: 71593670
Conc: 10.95 ppb m

7.1.14
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37133.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 8:49 am
 Operator : nickk
 Sample : mc30120-14,op37822
 Misc : op37822,gbk1213,15.50,,,10,,s
 ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:37:02 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.226	2.080	3841.5E6	2217.3E6	25.769	26.625
Spiked Amount	40.000		Recovery	=	64.42%	66.56%
13) s DCB	8.825	9.098	2329.0E6	1331.3E6	20.012	25.703 #
Spiked Amount	40.000		Recovery	=	50.03%	64.26%
Target Compounds						
10) AR1260-D	6.713	6.740	618.5E6	360.5E6	41.811m	48.613m
11) AR1260-E	7.128	7.281	555.1E6	298.0E6	38.510m	43.132m
12) AR1260-F	8.082	8.181	124.0E6	62027446	34.516	37.190
32) AR1254-A	4.058f	4.072	253.6E6	138.2E6	26.699m	31.012m
33) AR1254-B	4.346f	4.283	290.4E6	150.1E6	23.165m	22.971m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

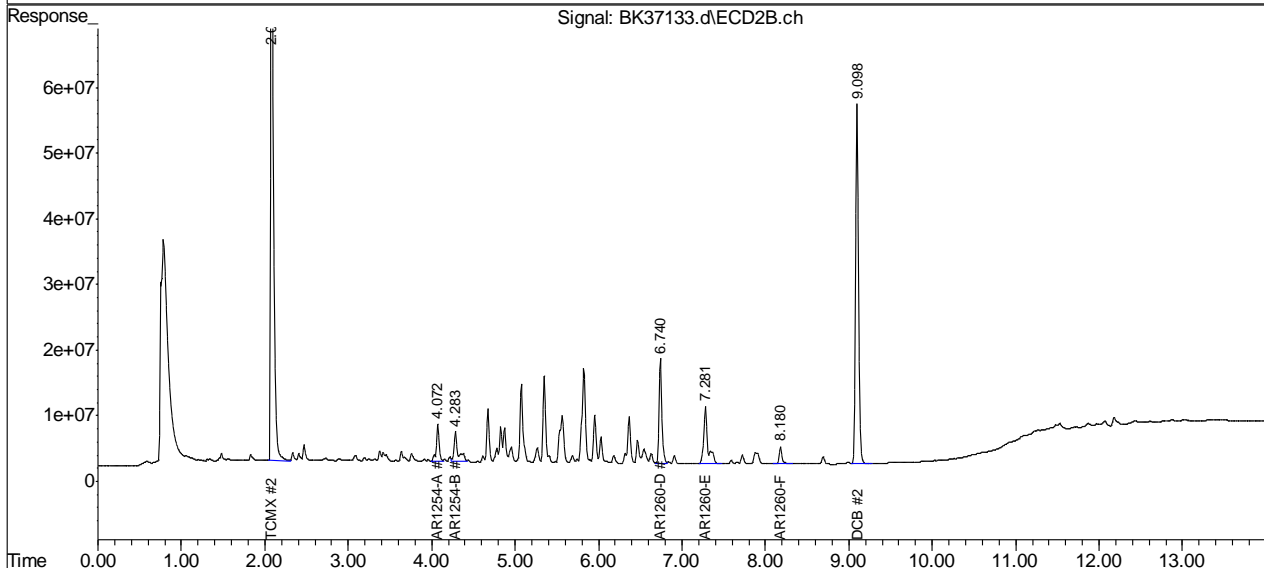
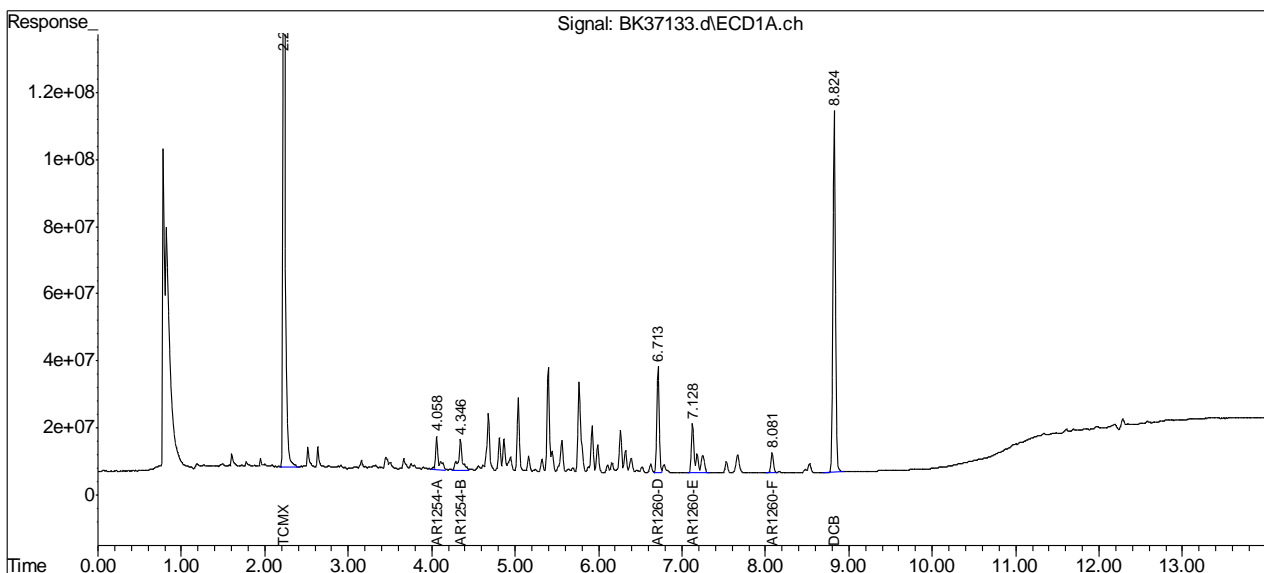
7.1.15
7

Quantitation Report (QT Reviewed)

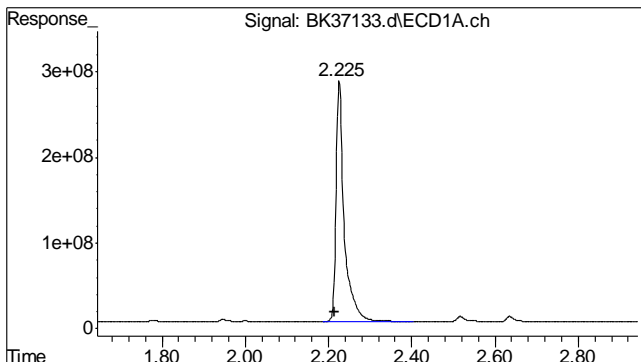
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37133.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 8:49 am
 Operator : nickk
 Sample : mc30120-14,op37822
 Misc : op37822,gbk1213,15.50,,,10,,s
 ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 10:37:02 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

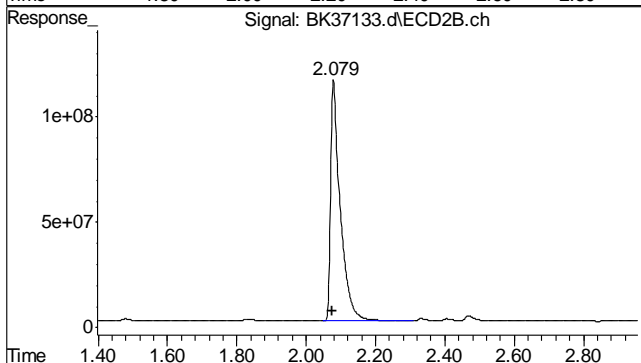
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



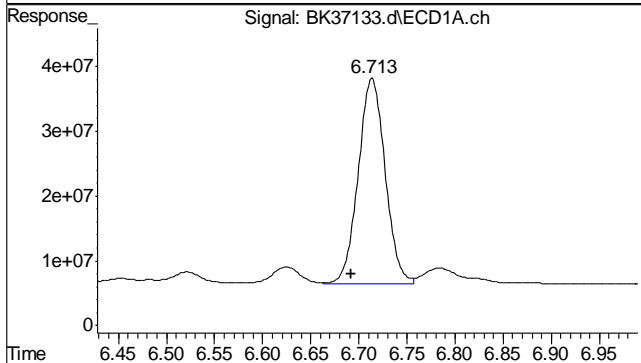
7.1.15
 7



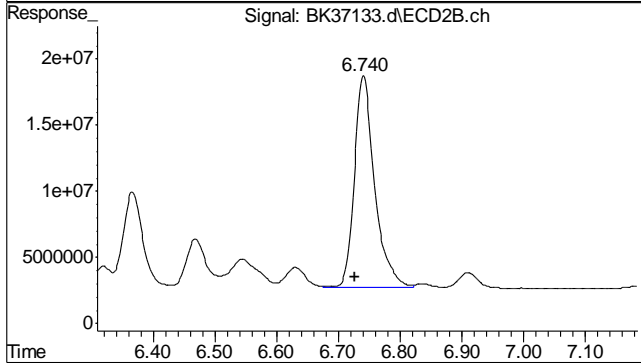
#1 TCMX
 R.T.: 2.226 min
 Delta R.T.: 0.012 min
 Response: 3841456511
 Conc: 25.77 ppb



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 2217310766
 Conc: 26.62 ppb

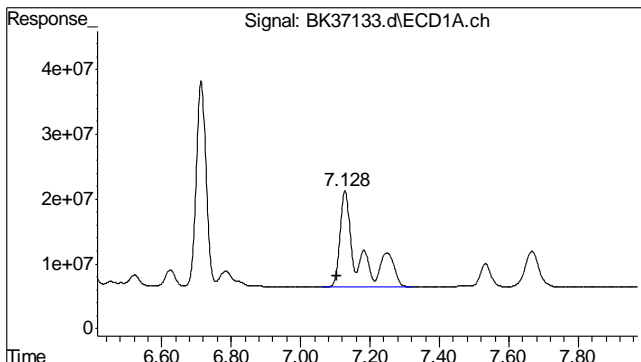


#10 AR1260-D
 R.T.: 6.713 min
 Delta R.T.: 0.021 min
 Response: 618509872
 Conc: 41.81 ppb m

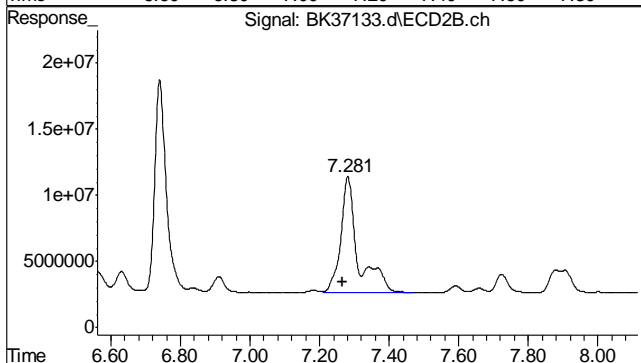


#10 AR1260-D
 R.T.: 6.740 min
 Delta R.T.: 0.014 min
 Response: 360525167
 Conc: 48.61 ppb m

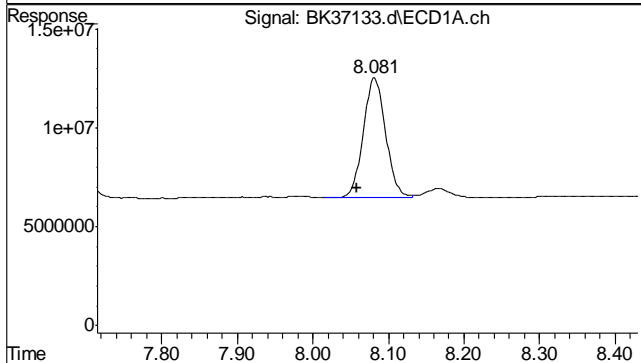
7.1.15
 7



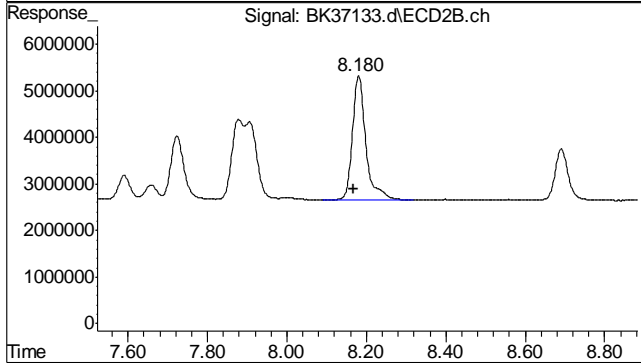
#11 AR1260-E
 R.T.: 7.128 min
 Delta R.T.: 0.024 min
 Response: 555111713
 Conc: 38.51 ppb m



#11 AR1260-E
 R.T.: 7.281 min
 Delta R.T.: 0.014 min
 Response: 297972960
 Conc: 43.13 ppb m

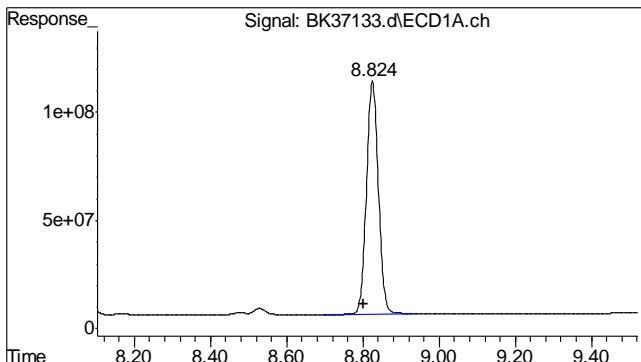


#12 AR1260-F
 R.T.: 8.082 min
 Delta R.T.: 0.023 min
 Response: 124016341
 Conc: 34.52

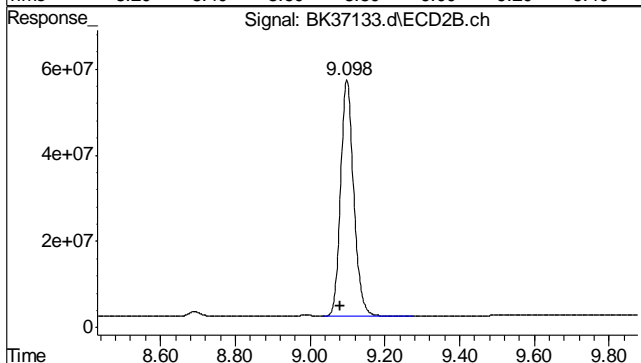


#12 AR1260-F
 R.T.: 8.181 min
 Delta R.T.: 0.013 min
 Response: 62027446
 Conc: 37.19

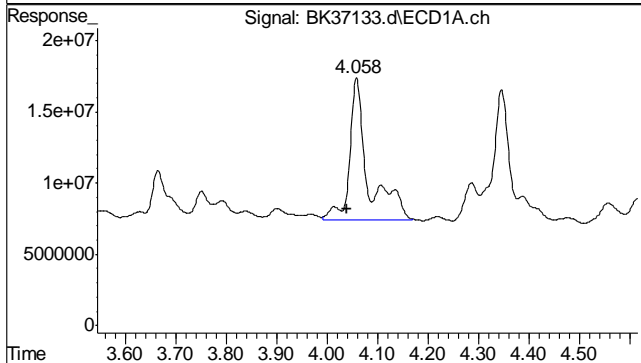
7.1.15
 7



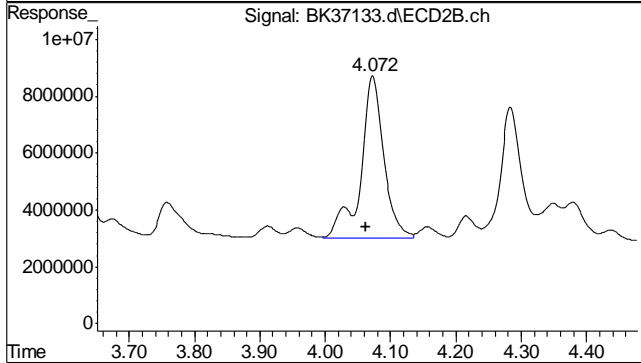
#13 DCB
 R.T.: 8.825 min
 Delta R.T.: 0.024 min
 Response: 2329003888
 Conc: 20.01 ppb



#13 DCB
 R.T.: 9.098 min
 Delta R.T.: 0.017 min
 Response: 1331283619
 Conc: 25.70 ppb

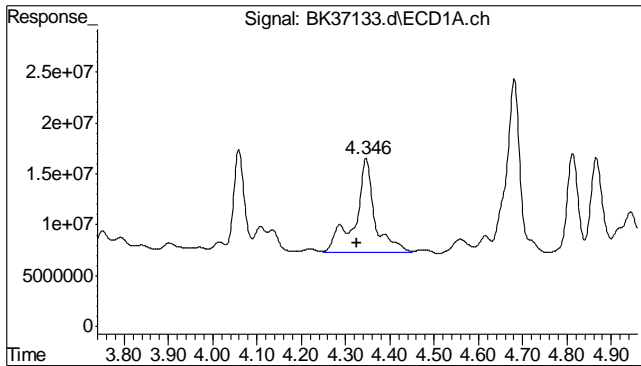


#32 AR1254-A
 R.T.: 4.058 min
 Delta R.T.: 0.019 min
 Response: 253579307
 Conc: 26.70 ppb m

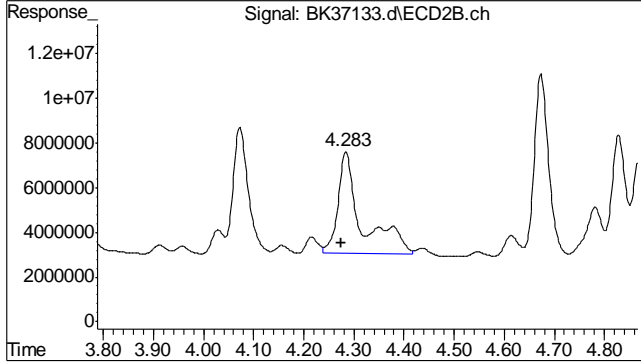


#32 AR1254-A
 R.T.: 4.072 min
 Delta R.T.: 0.009 min
 Response: 138249531
 Conc: 31.01 ppb m

7.1.15
7



#33 AR1254-B
R.T.: 4.346 min
Delta R.T.: 0.020 min
Response: 290412925
Conc: 23.16 ppb m



#33 AR1254-B
R.T.: 4.283 min
Delta R.T.: 0.009 min
Response: 150149046
Conc: 22.97 ppb m

7.1.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37149.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 1:08 pm
 Operator : nickk
 Sample : mc30120-15,op37822
 Misc : op37822,gbk1213,15.41,,,10,,,s
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:24:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.222	2.083	3430.2E6	1818.7E6	23.010	21.839
Spiked Amount	40.000		Recovery	=	57.53%	54.60%
13) s DCB	8.826	9.106	2135.8E6	1253.1E6	18.352m	24.194m#
Spiked Amount	40.000		Recovery	=	45.88%	60.48%
Target Compounds						
10) AR1260-D	6.713	6.748	1294.4E6	880.6E6	87.499	118.741 #
11) AR1260-E	7.127	7.288	1337.9E6	779.9E6	92.813m	112.893m
12) AR1260-F	8.083	8.189	326.6E6	185.7E6	90.891	111.336m
32) AR1254-A	4.053	4.075	464.2E6	253.9E6	48.872m	56.948m
33) AR1254-B	4.340	4.288	720.8E6	409.8E6	57.492m	62.695m
34) AR1254-C	4.808f	4.833f	1717.1E6	1069.6E6	90.534m	101.319m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

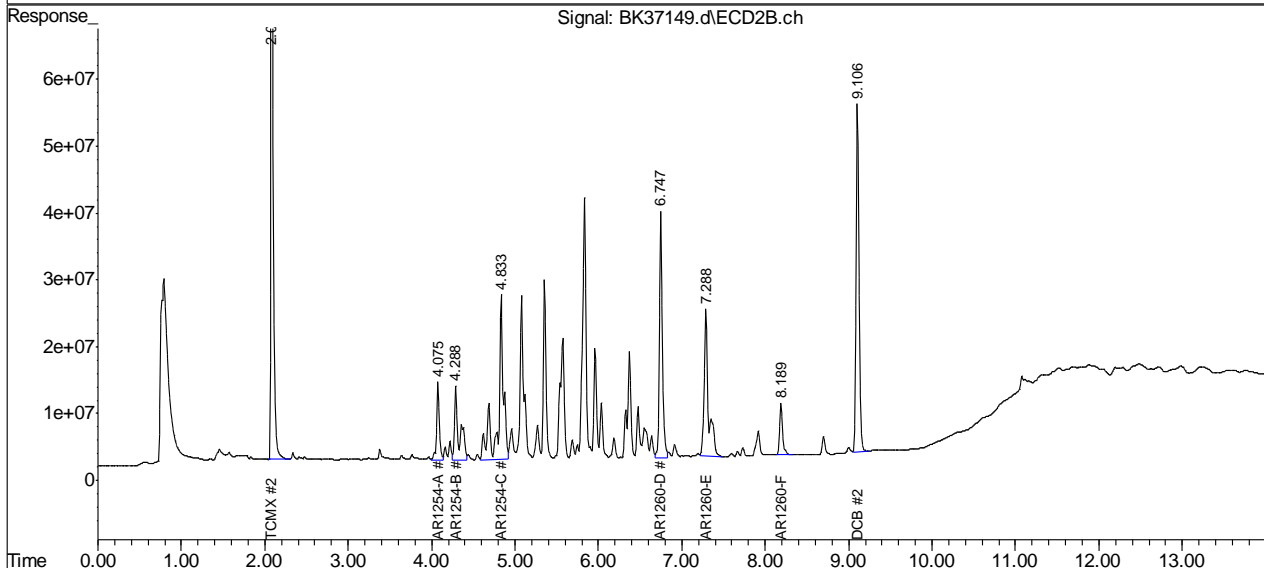
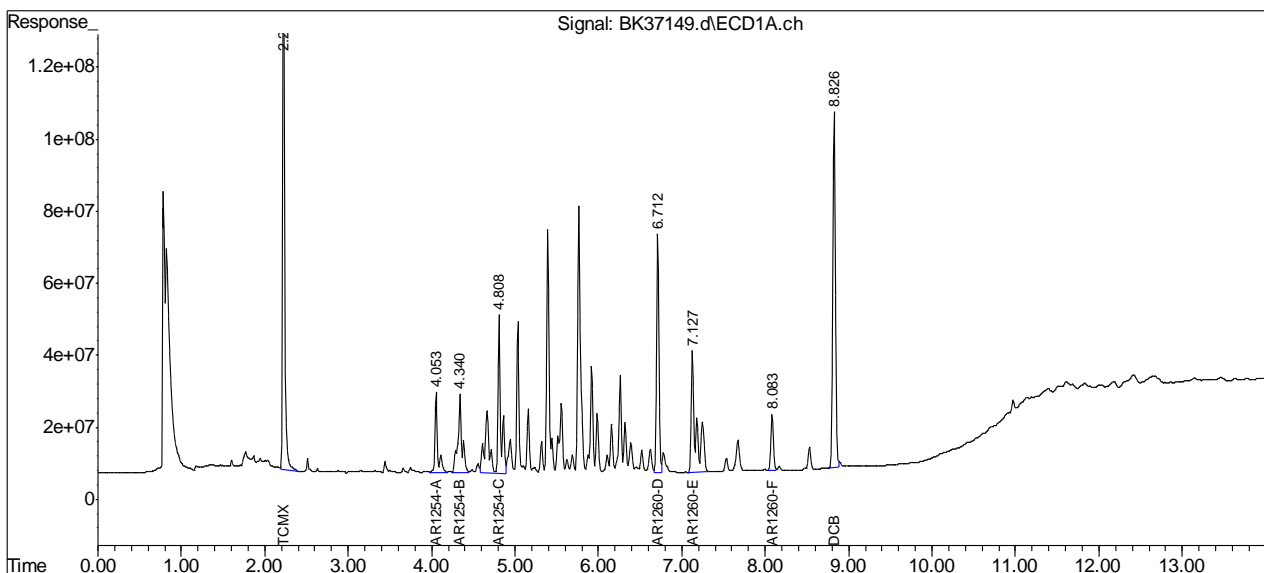
7.1.16
7

Quantitation Report (QT Reviewed)

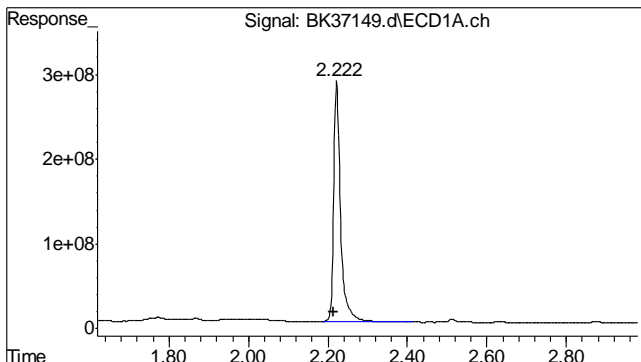
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37149.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 1:08 pm
 Operator : nickk
 Sample : mc30120-15,op37822
 Misc : op37822,gbk1213,15.41,,,10,,s
 ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:24:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

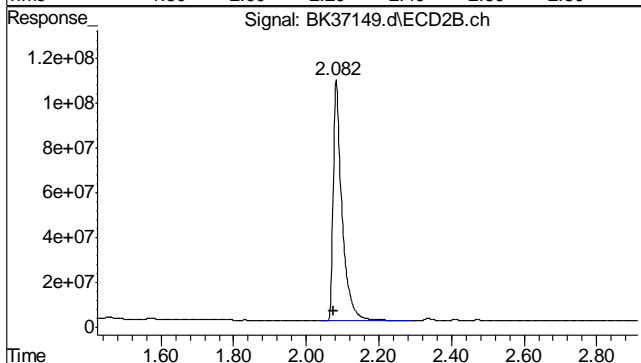
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



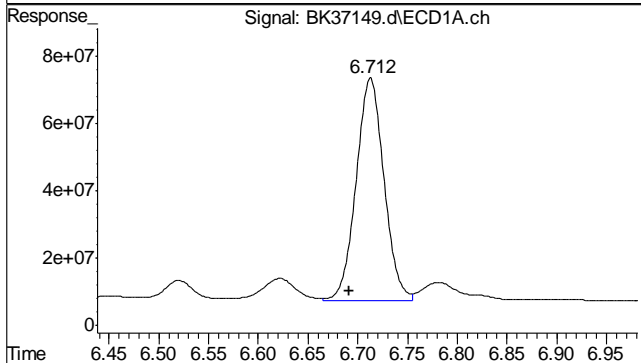
7.1.16
 7



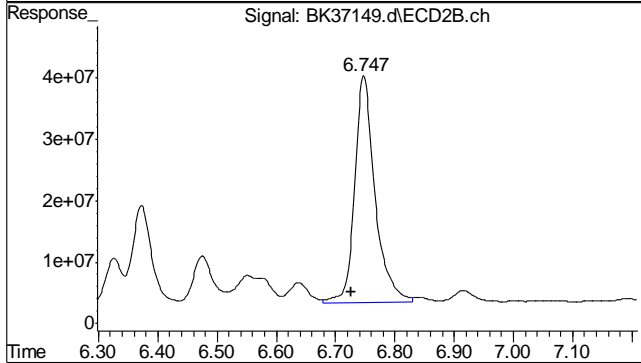
#1 TCMX
 R.T.: 2.222 min
 Delta R.T.: 0.008 min
 Response: 3430213049
 Conc: 23.01 ppb



#1 TCMX
 R.T.: 2.083 min
 Delta R.T.: 0.008 min
 Response: 1818723885
 Conc: 21.84 ppb

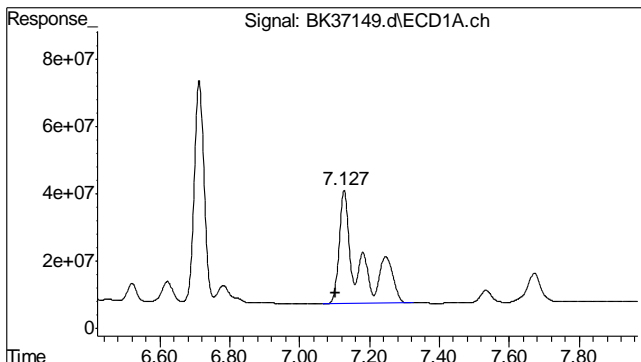


#10 AR1260-D
 R.T.: 6.713 min
 Delta R.T.: 0.021 min
 Response: 1294360417
 Conc: 87.50 ppb

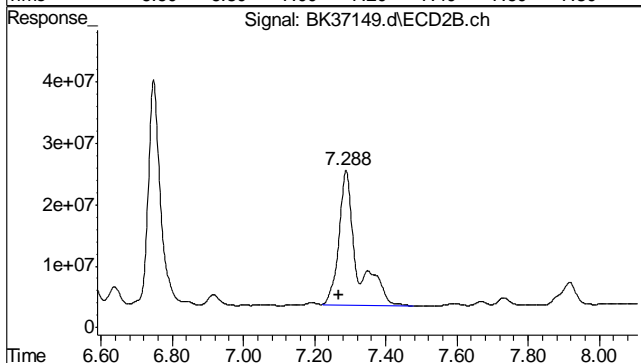


#10 AR1260-D
 R.T.: 6.748 min
 Delta R.T.: 0.021 min
 Response: 880606255
 Conc: 118.74 ppb

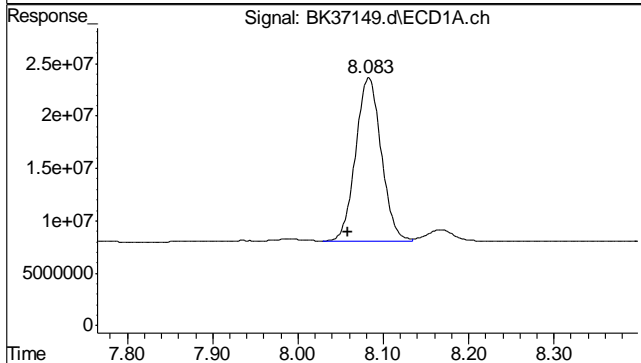
7.1.16
 7



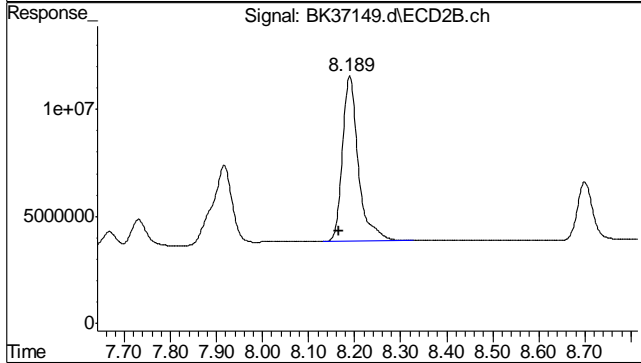
#11 AR1260-E
 R.T.: 7.127 min
 Delta R.T.: 0.023 min
 Response: 1337885970
 Conc: 92.81 ppb m



#11 AR1260-E
 R.T.: 7.288 min
 Delta R.T.: 0.021 min
 Response: 779908607
 Conc: 112.89 ppb m

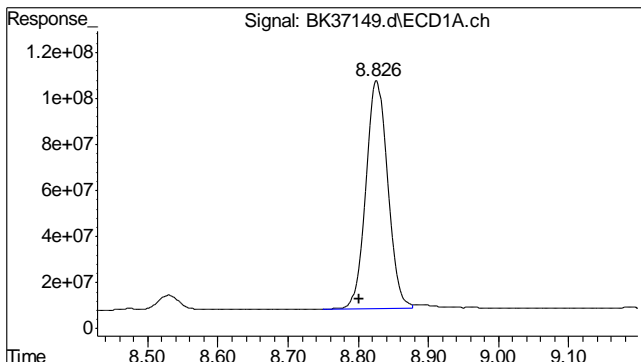


#12 AR1260-F
 R.T.: 8.083 min
 Delta R.T.: 0.025 min
 Response: 326569183
 Conc: 90.89

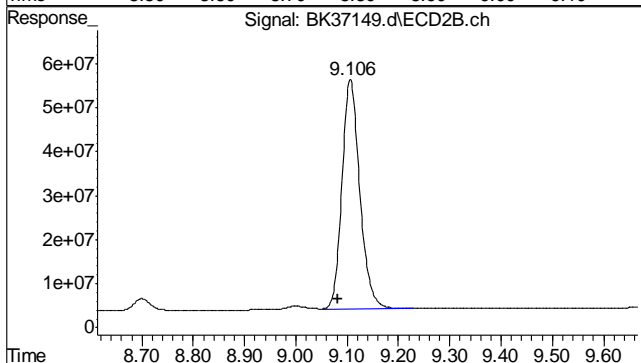


#12 AR1260-F
 R.T.: 8.189 min
 Delta R.T.: 0.021 min
 Response: 185693981
 Conc: 111.34 m

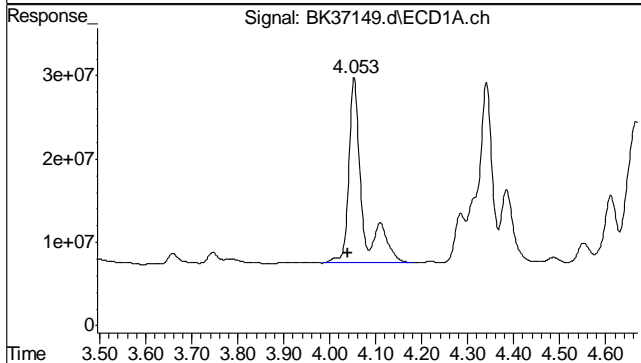
7.1.16
7



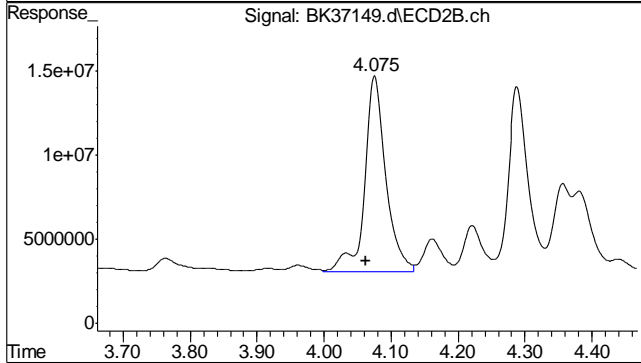
#13 DCB
 R.T.: 8.826 min
 Delta R.T.: 0.025 min
 Response: 2135760905
 Conc: 18.35 ppb m



#13 DCB
 R.T.: 9.106 min
 Delta R.T.: 0.024 min
 Response: 1253114920
 Conc: 24.19 ppb m

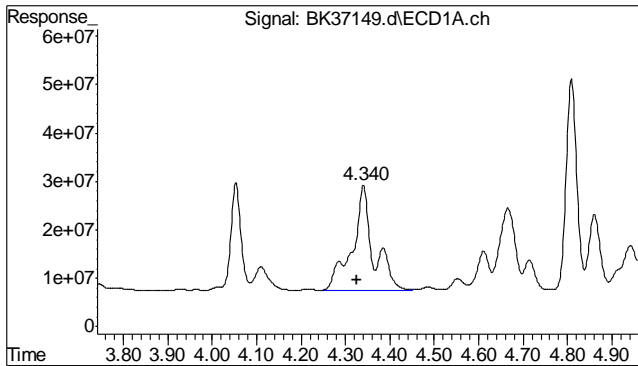


#32 AR1254-A
 R.T.: 4.053 min
 Delta R.T.: 0.013 min
 Response: 464170964
 Conc: 48.87 ppb m

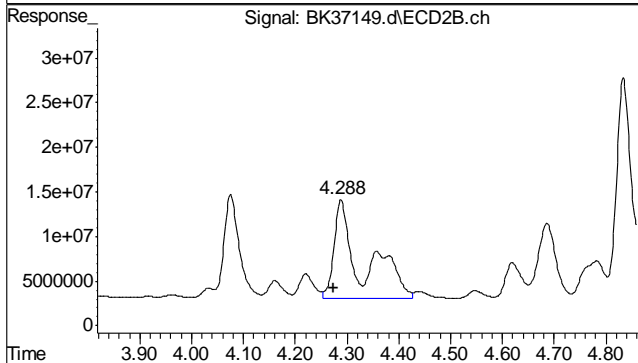


#32 AR1254-A
 R.T.: 4.075 min
 Delta R.T.: 0.012 min
 Response: 253874261
 Conc: 56.95 ppb m

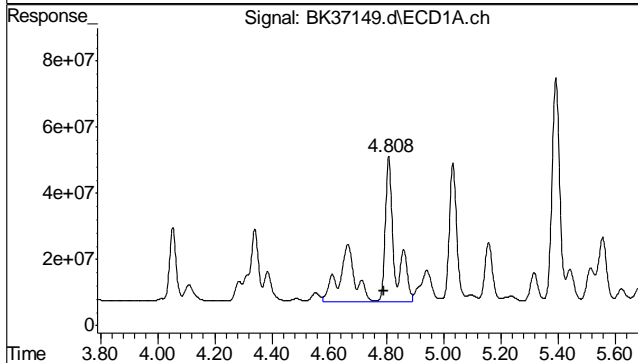
7.1.16
7



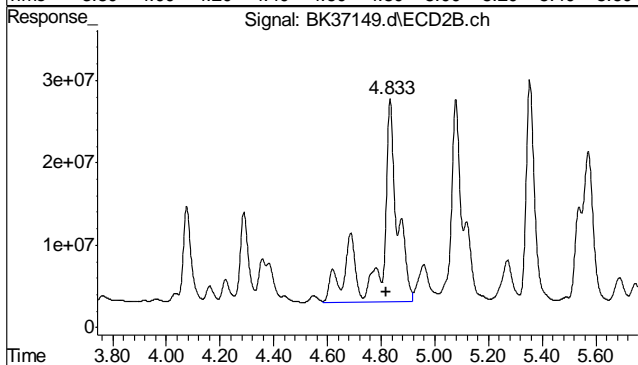
#33 AR1254-B
 R.T.: 4.340 min
 Delta R.T.: 0.014 min
 Response: 720770074
 Conc: 57.49 ppb m



#33 AR1254-B
 R.T.: 4.288 min
 Delta R.T.: 0.013 min
 Response: 409809228
 Conc: 62.70 ppb m



#34 AR1254-C
 R.T.: 4.808 min
 Delta R.T.: 0.016 min
 Response: 1717143249
 Conc: 90.53 ppb m



#34 AR1254-C
 R.T.: 4.833 min
 Delta R.T.: 0.015 min
 Response: 1069634483
 Conc: 101.32 ppb m

7.1.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37150.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 1:24 pm
 Operator : nickk
 Sample : mc30120-16,op37822
 Misc : op37822,gbk1213,15.16,,,10,,s
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:40:15 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.222	2.082	3766.6E6	1999.5E6	25.267	24.009m
	Spiked Amount	40.000		Recovery	=	63.17%	60.02%
13)	s DCB	8.827	9.106	2437.7E6	1420.4E6	20.946	27.423 #
	Spiked Amount	40.000		Recovery	=	52.37%	68.56%
Target Compounds							
10)	AR1260-D	6.713	6.747	3928.1E6	2670.7E6	265.542	360.116m#
11)	AR1260-E	7.127	7.289	3967.8E6	2324.1E6	275.254m	336.422m
12)	AR1260-F	8.083	8.189	881.2E6	523.3E6	245.258	313.768m#
32)	AR1254-A	4.053	4.075	1524.4E6	795.8E6	160.505m	178.504m
33)	AR1254-B	4.341	4.289	1724.4E6	875.0E6	137.547m	133.869m
34)	AR1254-C	4.808f	4.834f	5364.4E6	3336.5E6	282.831m	316.043m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

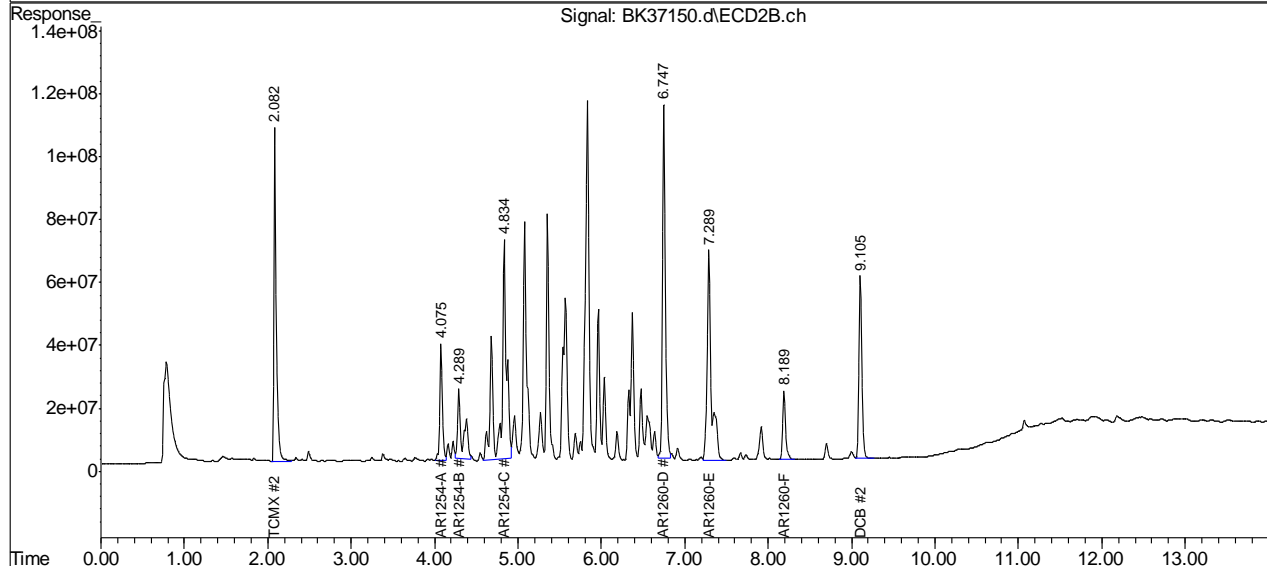
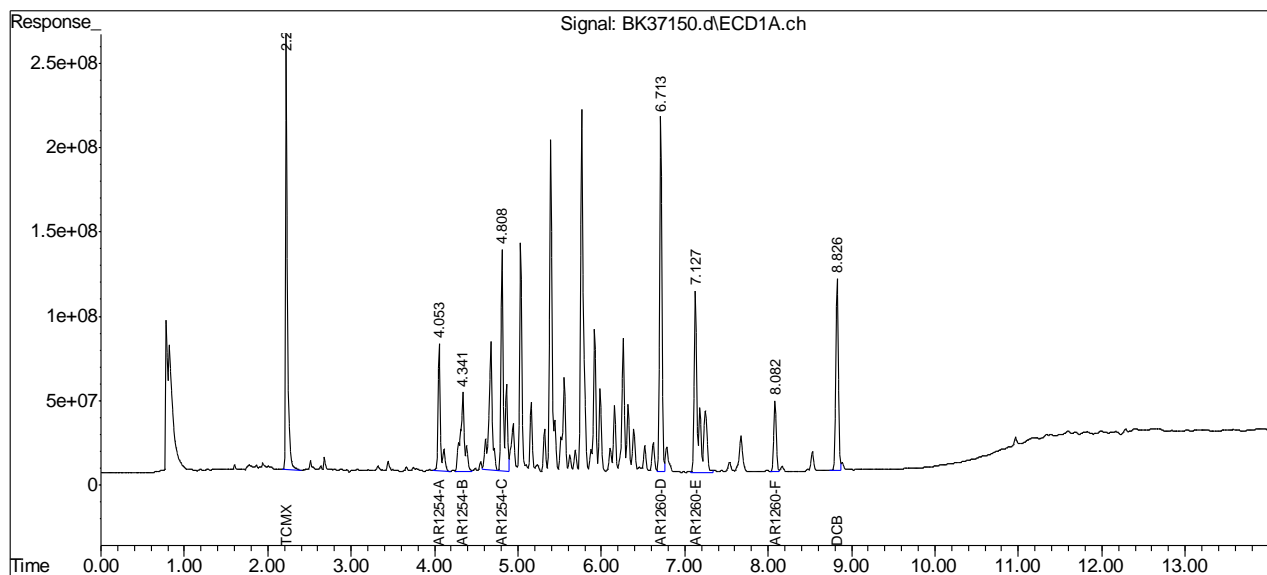
7.1.17
7

Quantitation Report (QT Reviewed)

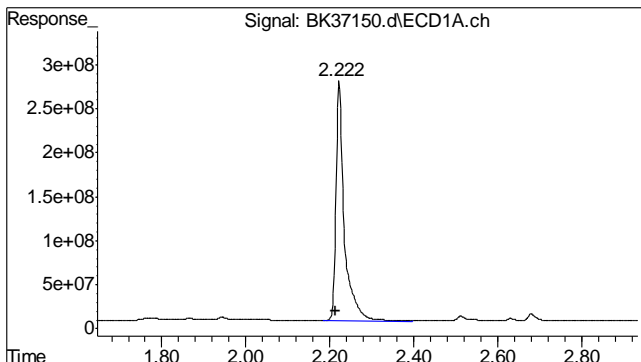
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37150.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 1:24 pm
 Operator : nickk
 Sample : mc30120-16,op37822
 Misc : op37822,gbk1213,15.16,,,10,,s
 ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:40:15 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

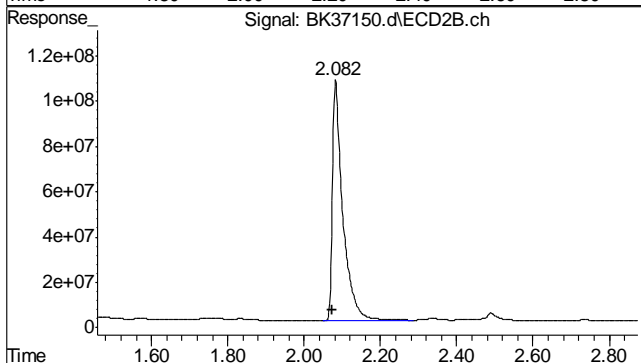
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



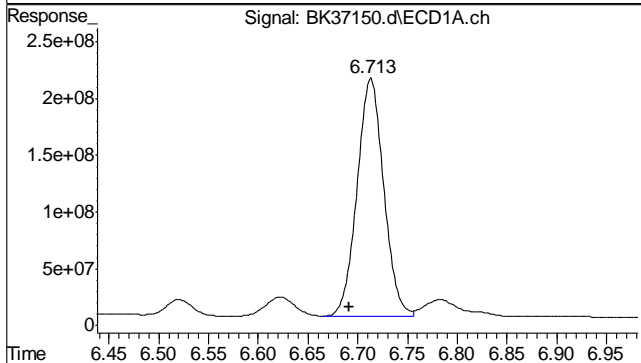
7.1.11
 7



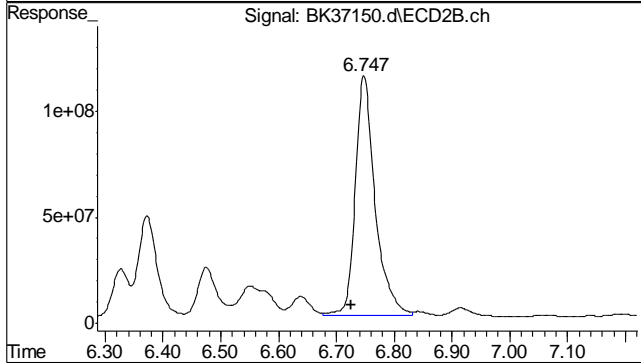
#1 TCMX
 R.T.: 2.222 min
 Delta R.T.: 0.008 min
 Response: 3766562037
 Conc: 25.27 ppb



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 1999464287
 Conc: 24.01 ppb m

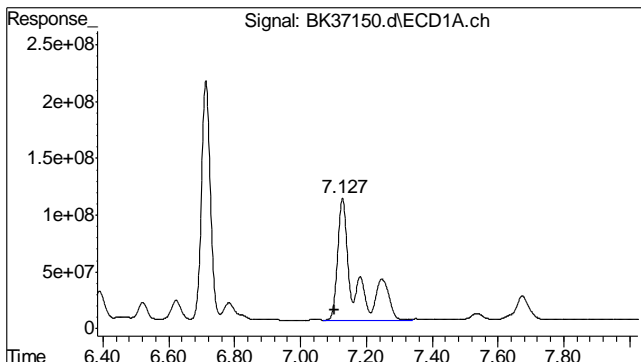


#10 AR1260-D
 R.T.: 6.713 min
 Delta R.T.: 0.022 min
 Response: 3928127849
 Conc: 265.54 ppb

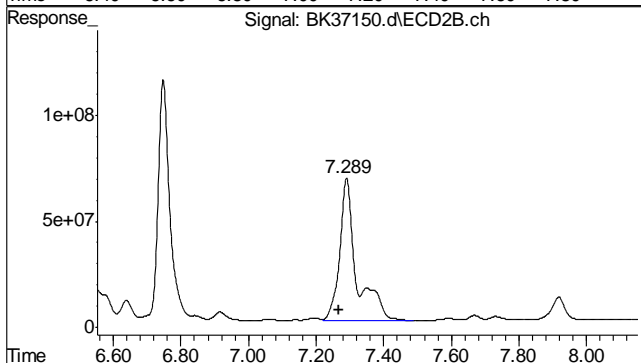


#10 AR1260-D
 R.T.: 6.747 min
 Delta R.T.: 0.021 min
 Response: 2670682924
 Conc: 360.12 ppb m

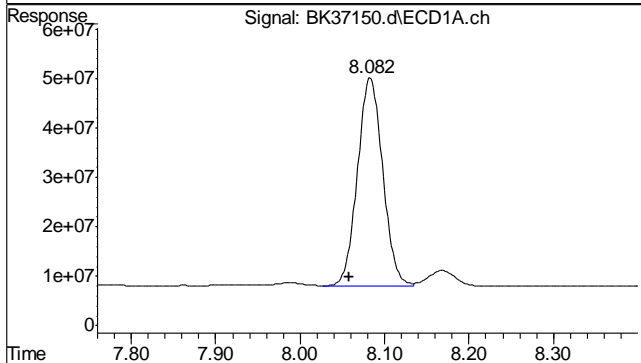
7.1.17
 7



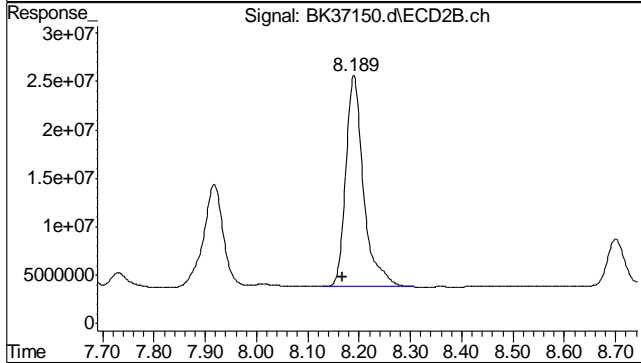
#11 AR1260-E
 R.T.: 7.127 min
 Delta R.T.: 0.023 min
 Response: 3967755467
 Conc: 275.25 ppb m



#11 AR1260-E
 R.T.: 7.289 min
 Delta R.T.: 0.022 min
 Response: 2324143581
 Conc: 336.42 ppb m

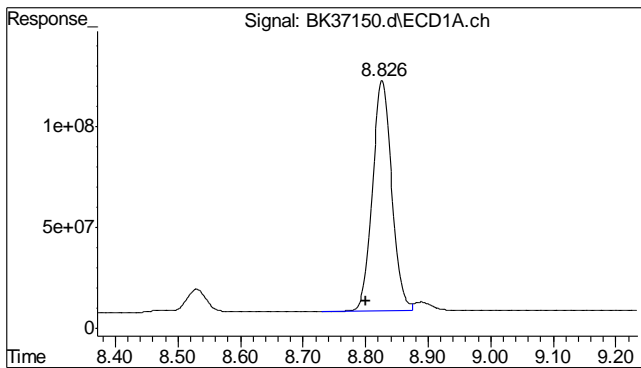


#12 AR1260-F
 R.T.: 8.083 min
 Delta R.T.: 0.025 min
 Response: 881211717
 Conc: 245.26

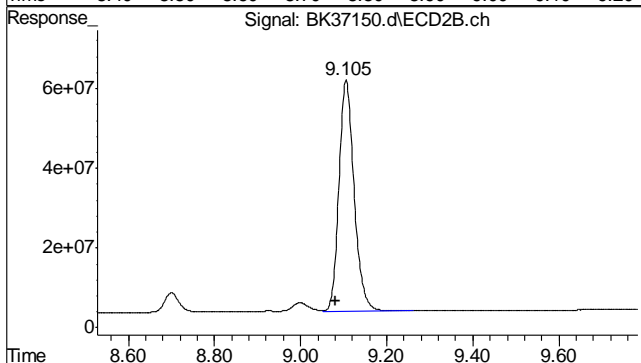


#12 AR1260-F
 R.T.: 8.189 min
 Delta R.T.: 0.022 min
 Response: 523326081
 Conc: 313.77 m

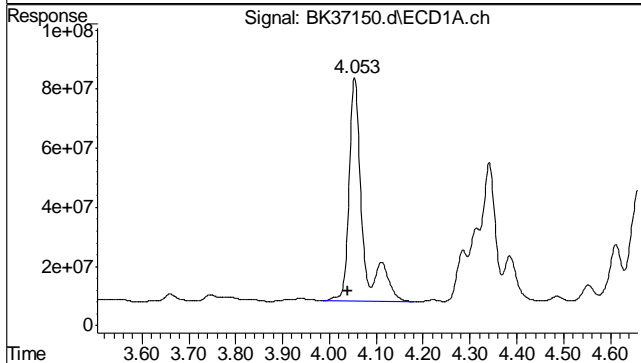
7.1.17
 7



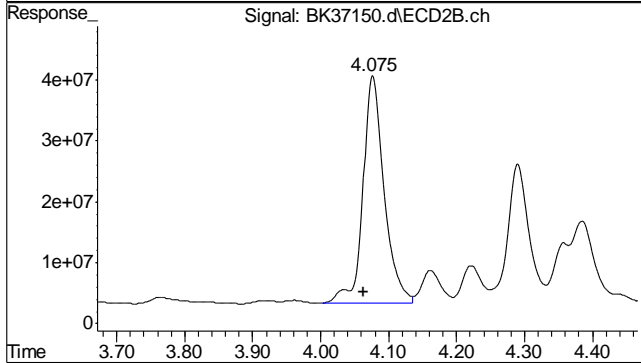
#13 DCB
 R.T.: 8.827 min
 Delta R.T.: 0.026 min
 Response: 2437686207
 Conc: 20.95 ppb



#13 DCB
 R.T.: 9.106 min
 Delta R.T.: 0.024 min
 Response: 1420356564
 Conc: 27.42 ppb

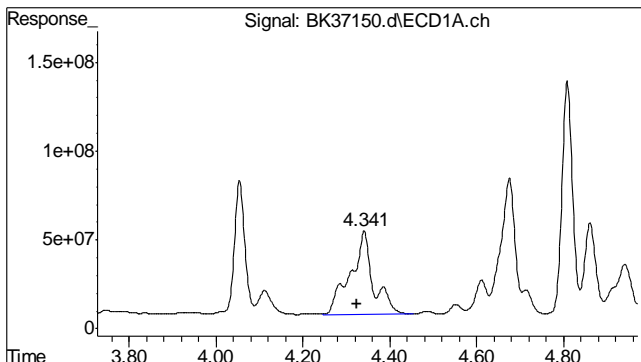


#32 AR1254-A
 R.T.: 4.053 min
 Delta R.T.: 0.014 min
 Response: 1524435398
 Conc: 160.50 ppb m

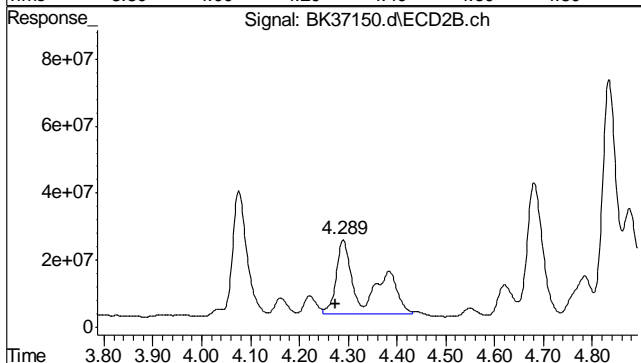


#32 AR1254-A
 R.T.: 4.075 min
 Delta R.T.: 0.012 min
 Response: 795765245
 Conc: 178.50 ppb m

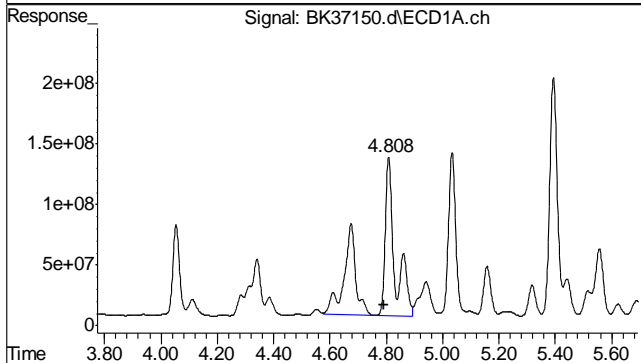
7.1.17
7



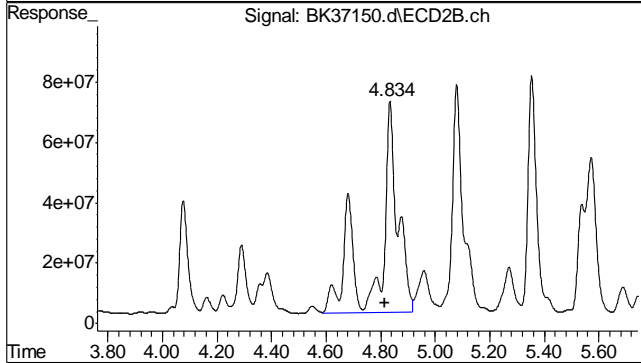
#33 AR1254-B
 R.T.: 4.341 min
 Delta R.T.: 0.015 min
 Response: 1724395920
 Conc: 137.55 ppb m



#33 AR1254-B
 R.T.: 4.289 min
 Delta R.T.: 0.015 min
 Response: 875040468
 Conc: 133.87 ppb m



#34 AR1254-C
 R.T.: 4.808 min
 Delta R.T.: 0.016 min
 Response: 5364439344
 Conc: 282.83 ppb m



#34 AR1254-C
 R.T.: 4.834 min
 Delta R.T.: 0.016 min
 Response: 3336494925
 Conc: 316.04 ppb m

7.1.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37100.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 11:58 pm
 Operator : nickk
 Sample : mc30120-17,op37822
 Misc : op37822,gbk1213,15.74,,,10,,s
 ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 08:26:23 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.219	2.080	4323.6E6	2191.9E6	29.003	26.320
Spiked Amount	40.000		Recovery	=	72.51%	65.80%
13) s DCB	8.812	9.093	2515.7E6	1468.0E6	21.617	28.343 #
Spiked Amount	40.000		Recovery	=	54.04%	70.86%
Target Compounds						
10) AR1260-D	6.701	6.736	6902.3E6	4336.8E6	466.599	584.773m#
11) AR1260-E	7.115	7.277	6625.6E6	3983.8E6	459.634m	576.653m#
12) AR1260-F	8.069	8.178	1572.4E6	941.8E6	437.641	564.684 #
32) AR1254-A	4.046	4.069	3418.8E6	1540.7E6	359.956m	345.608m
33) AR1254-B	4.332	4.282	4271.2E6	2066.6E6	340.693m	316.164m
34) AR1254-C	4.799	4.826	10412.3E6	6152.9E6	548.972m	582.820m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

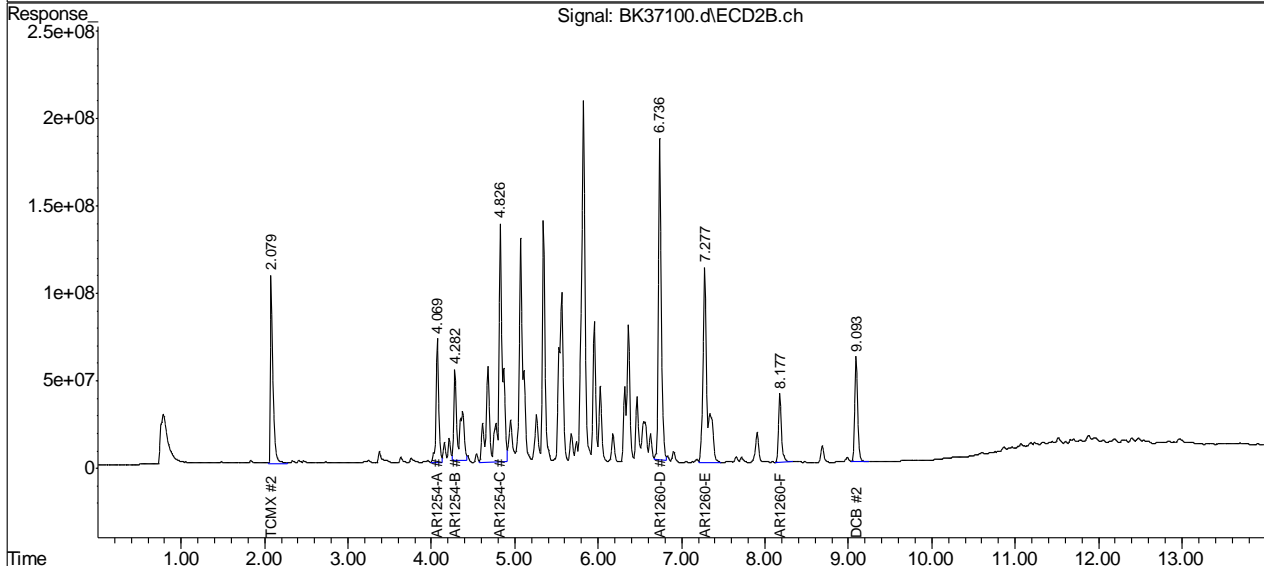
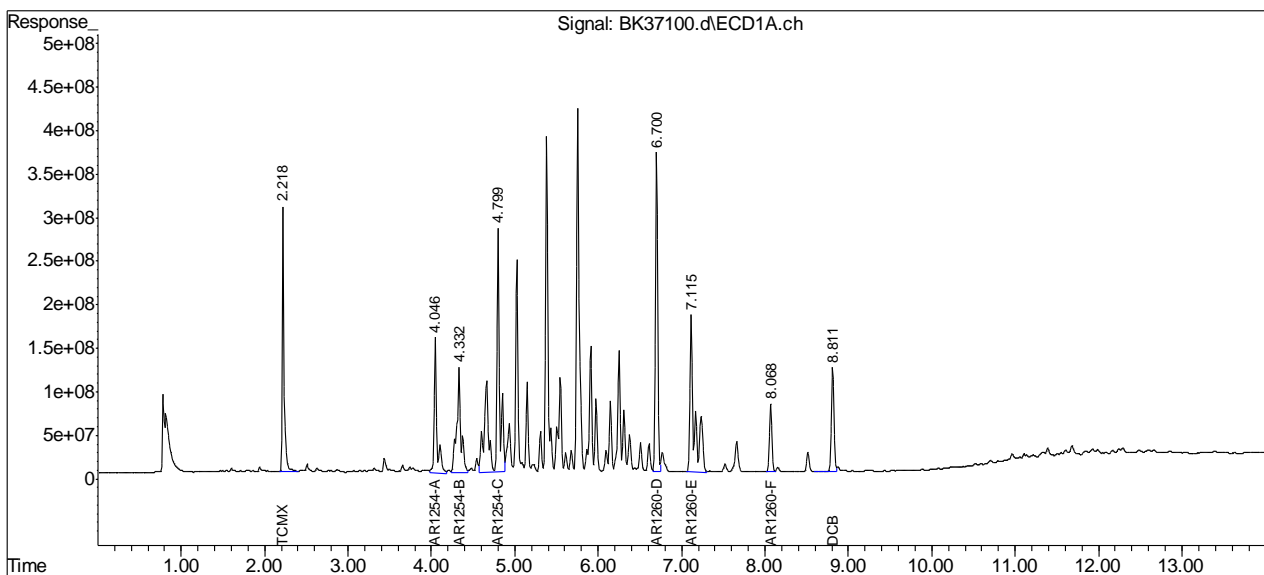
7.1.18
7

Quantitation Report (QT Reviewed)

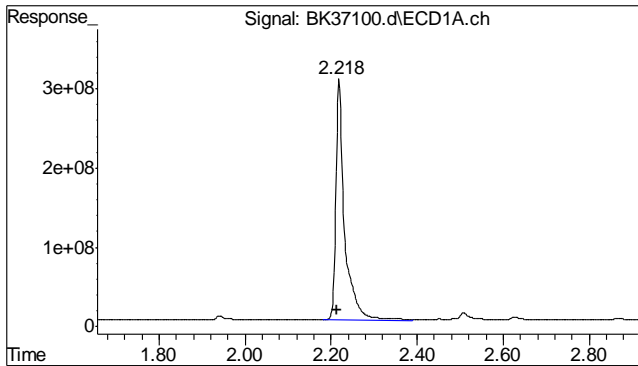
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37100.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 11:58 pm
 Operator : nickk
 Sample : mc30120-17,op37822
 Misc : op37822,gbk1213,15.74,,,10,,s
 ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 08:26:23 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

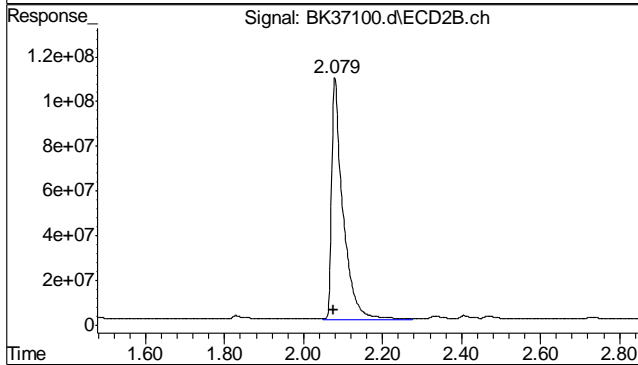
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



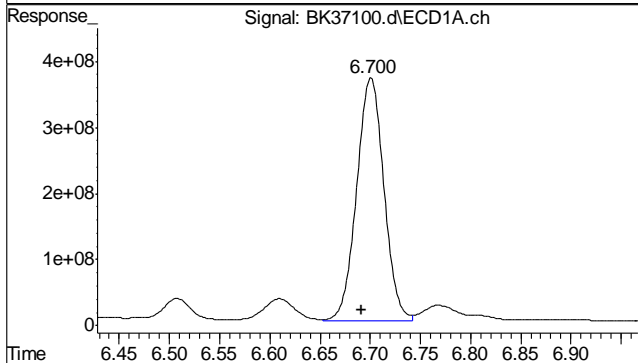
7.1.18
 7



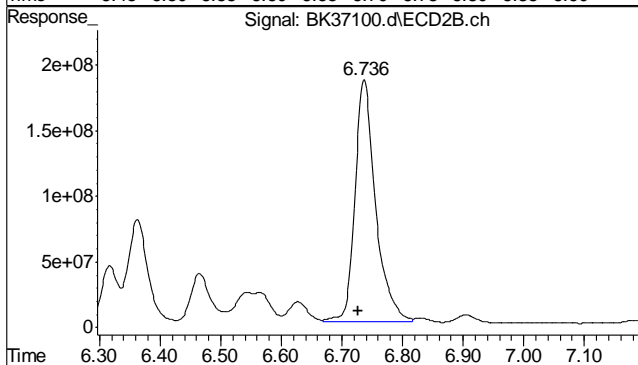
#1 TCMX
 R.T.: 2.219 min
 Delta R.T.: 0.005 min
 Response: 4323562567
 Conc: 29.00 ppb



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 2191924150
 Conc: 26.32 ppb

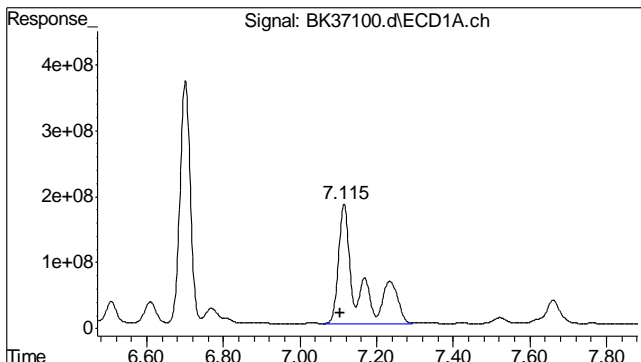


#10 AR1260-D
 R.T.: 6.701 min
 Delta R.T.: 0.009 min
 Response: 6902333246
 Conc: 466.60 ppb

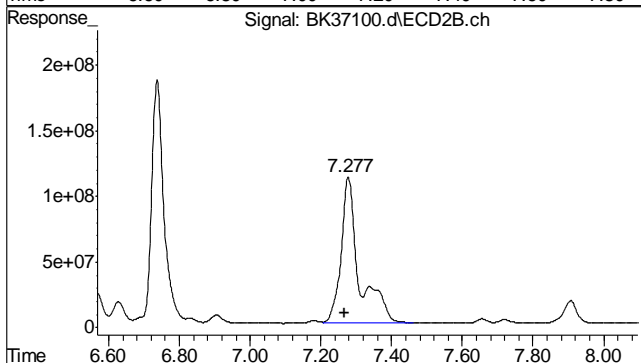


#10 AR1260-D
 R.T.: 6.736 min
 Delta R.T.: 0.010 min
 Response: 4336781213
 Conc: 584.77 ppb m

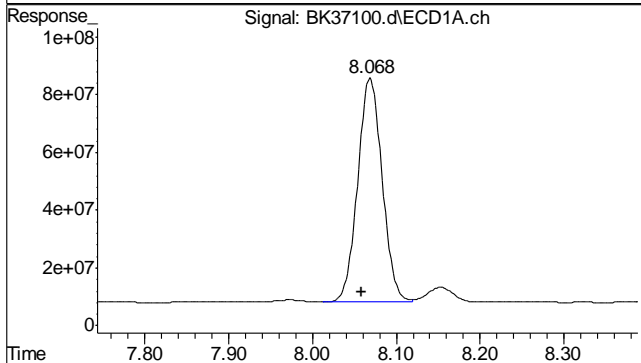
7.1.18
7



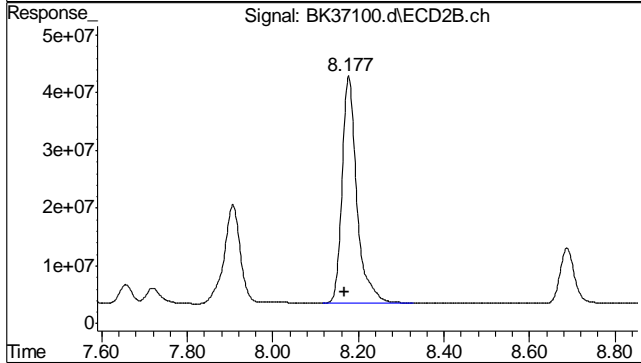
#11 AR1260-E
 R.T.: 7.115 min
 Delta R.T.: 0.010 min
 Response: 6625569604
 Conc: 459.63 ppb m



#11 AR1260-E
 R.T.: 7.277 min
 Delta R.T.: 0.010 min
 Response: 3983754939
 Conc: 576.65 ppb m

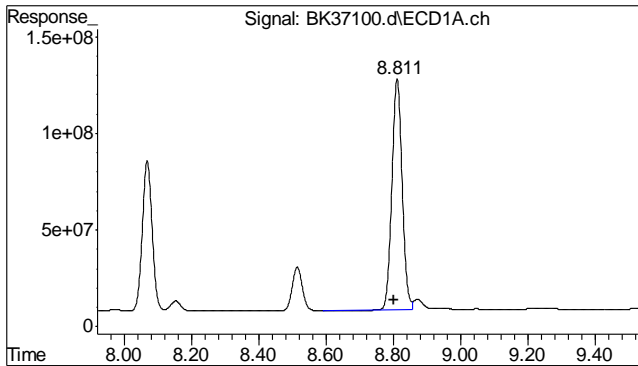


#12 AR1260-F
 R.T.: 8.069 min
 Delta R.T.: 0.010 min
 Response: 1572440330
 Conc: 437.64

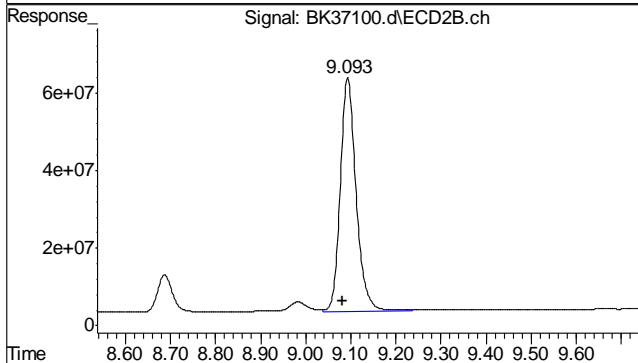


#12 AR1260-F
 R.T.: 8.178 min
 Delta R.T.: 0.010 min
 Response: 941822130
 Conc: 564.68

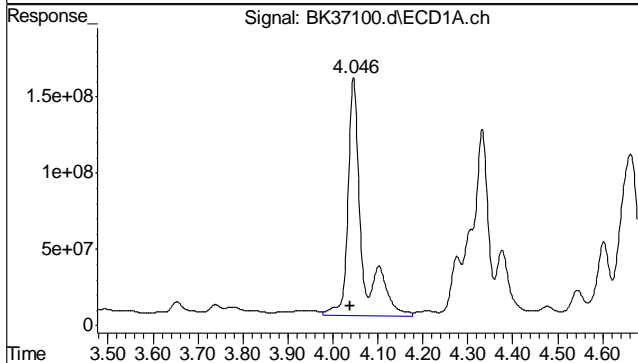
7.1.18
 7



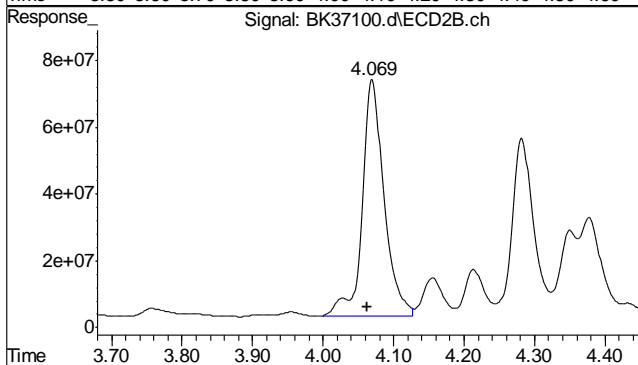
#13 DCB
 R.T.: 8.812 min
 Delta R.T.: 0.011 min
 Response: 2515697135
 Conc: 21.62 ppb



#13 DCB
 R.T.: 9.093 min
 Delta R.T.: 0.011 min
 Response: 1468027133
 Conc: 28.34 ppb

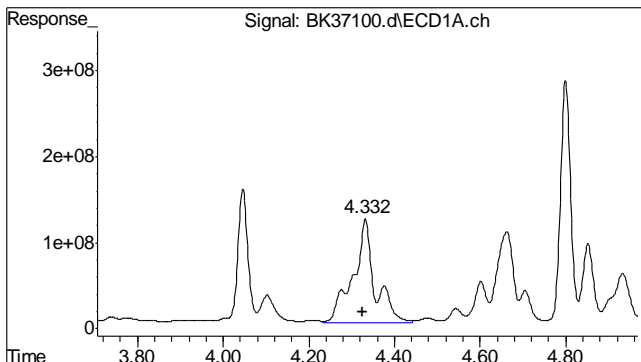


#32 AR1254-A
 R.T.: 4.046 min
 Delta R.T.: 0.006 min
 Response: 3418782479
 Conc: 359.96 ppb m

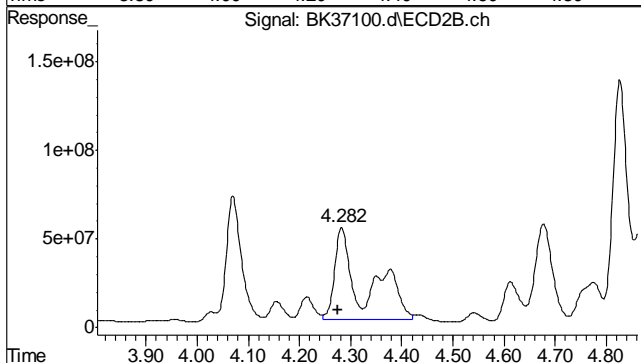


#32 AR1254-A
 R.T.: 4.069 min
 Delta R.T.: 0.006 min
 Response: 1540712261
 Conc: 345.61 ppb m

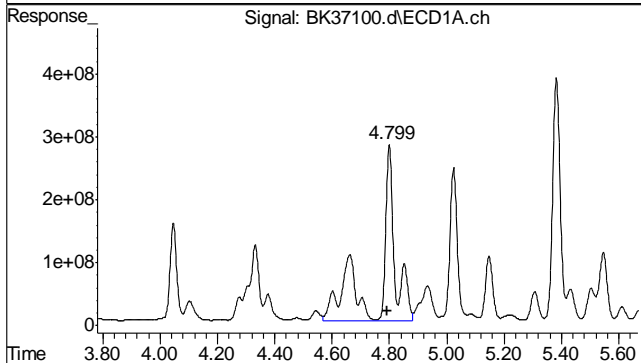
7.1.18
7



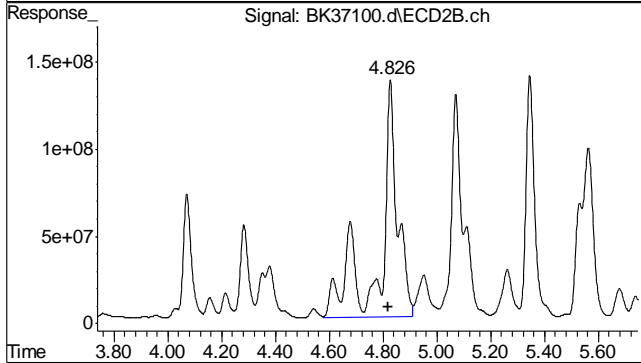
#33 AR1254-B
R.T.: 4.332 min
Delta R.T.: 0.006 min
Response: 4271193569
Conc: 340.69 ppb m



#33 AR1254-B
R.T.: 4.282 min
Delta R.T.: 0.007 min
Response: 2066621402
Conc: 316.16 ppb m



#34 AR1254-C
R.T.: 4.799 min
Delta R.T.: 0.007 min
Response: 10412313981
Conc: 548.97 ppb m



#34 AR1254-C
R.T.: 4.826 min
Delta R.T.: 0.008 min
Response: 6152880802
Conc: 582.82 ppb m

7.1.18
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37078.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:07 pm
 Operator : nickk
 Sample : op37822-mb
 Misc : op37822,gbk1213,15.15,,,10,,s
 ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:46:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1) s	TCMX	2.220	2.074	3563.3E6	2067.1E6	23.903	24.821
	Spiked Amount	40.000		Recovery	=	59.76%	62.05%
13) s	DCB	8.809	9.084	2927.2E6	1394.2E6	25.153	26.918
	Spiked Amount	40.000		Recovery	=	62.88%	67.29%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

7.2.1

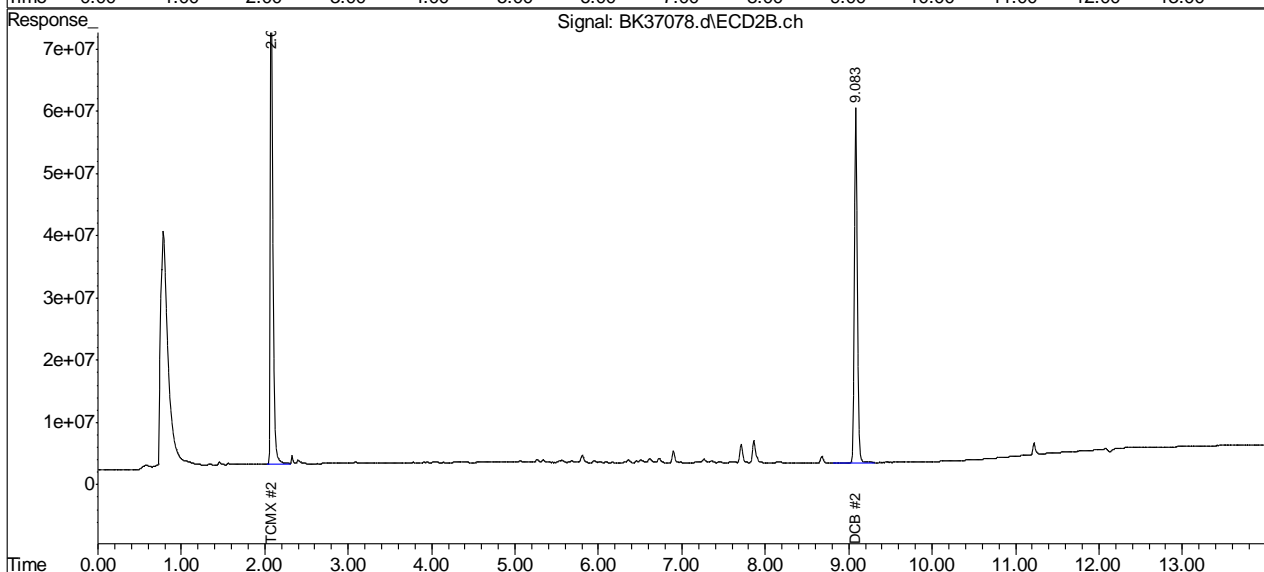
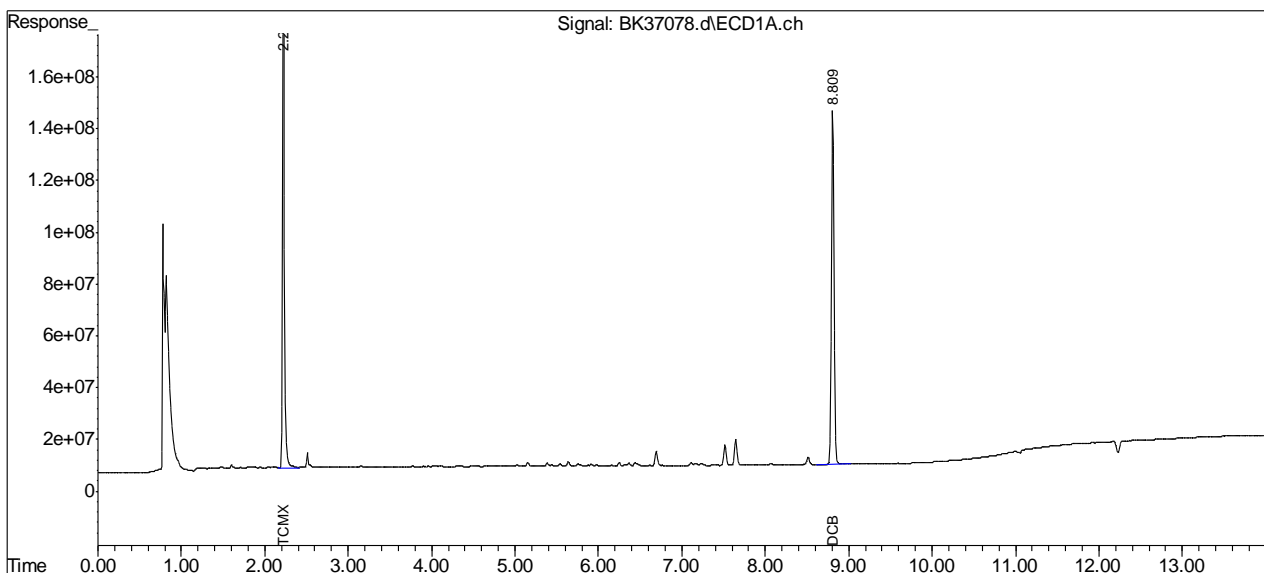
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Quantitation Report (QT Reviewed)

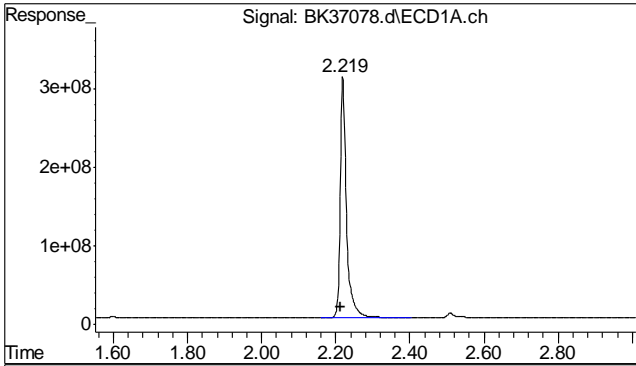
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37078.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:07 pm
 Operator : nickk
 Sample : op37822-mb
 Misc : op37822,gbk1213,15.15,,,10,,s
 ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:46:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

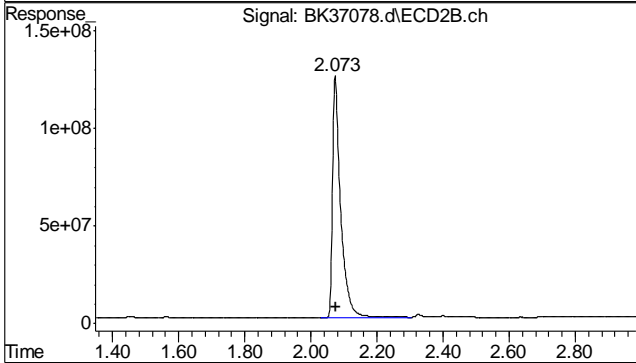
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



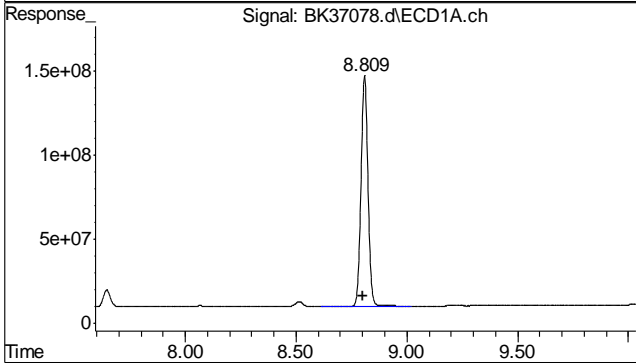
7.2.1
 7



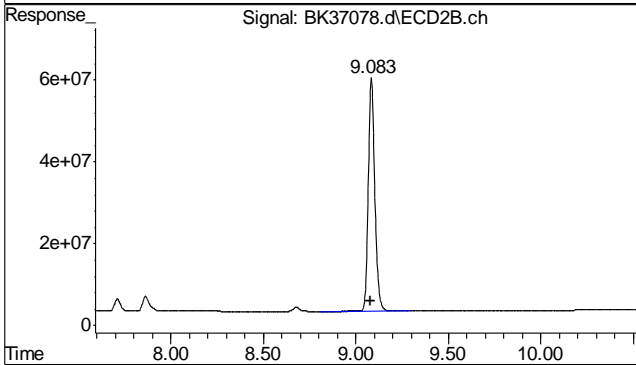
#1 TCMX
 R.T.: 2.220 min
 Delta R.T.: 0.006 min
 Response: 3563286982
 Conc: 23.90 ppb



#1 TCMX
 R.T.: 2.074 min
 Delta R.T.: 0.000 min
 Response: 2067133289
 Conc: 24.82 ppb



#13 DCB
 R.T.: 8.809 min
 Delta R.T.: 0.008 min
 Response: 2927238219
 Conc: 25.15 ppb



#13 DCB
 R.T.: 9.084 min
 Delta R.T.: 0.002 min
 Response: 1394218644
 Conc: 26.92 ppb

7.2.1
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37079.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:23 pm
 Operator : nickk
 Sample : op37822-bs
 Misc : op37822,gbk1213,15.41,,,10,,s
 ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:48:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds							
1) s	TCMX	2.215	2.074	4375.2E6	2576.0E6	29.349	30.932m
	Spiked Amount	40.000		Recovery	=	73.37%	77.33%
13) s	DCB	8.802	9.083	3606.0E6	1745.3E6	30.985m	33.697
	Spiked Amount	40.000		Recovery	=	77.46%	84.24%
Target Compounds							
2)	AR1016-A	2.473	2.405	715.6E6	493.3E6	322.521m	321.610m
3)	AR1016-B	2.748	2.707	1615.7E6	1006.7E6	317.957	329.947m
4)	AR1016-C	3.142	3.072	3389.8E6	2034.1E6	318.675	348.106
5)	AR1016-D	3.260	3.189	2277.8E6	814.7E6	321.289m	335.274m
6)	AR1016-E	3.648	3.626	1510.3E6	967.0E6	322.865	355.446m
7)	AR1260-A	5.017	5.062	2189.4E6	1367.0E6	314.729	345.972m
8)	AR1260-B	5.375	5.336	3332.6E6	1538.4E6	321.028	344.096m
9)	AR1260-C	5.744	5.814	6775.8E6	3775.8E6	320.979m	343.353m
10)	AR1260-D	6.692	6.727	4776.6E6	2577.5E6	322.901	347.550m
11)	AR1260-E	7.106	7.268	4703.6E6	2402.8E6	326.300m	347.806m
12)	AR1260-F	8.060	8.167	1169.8E6	584.6E6	325.592	350.502m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

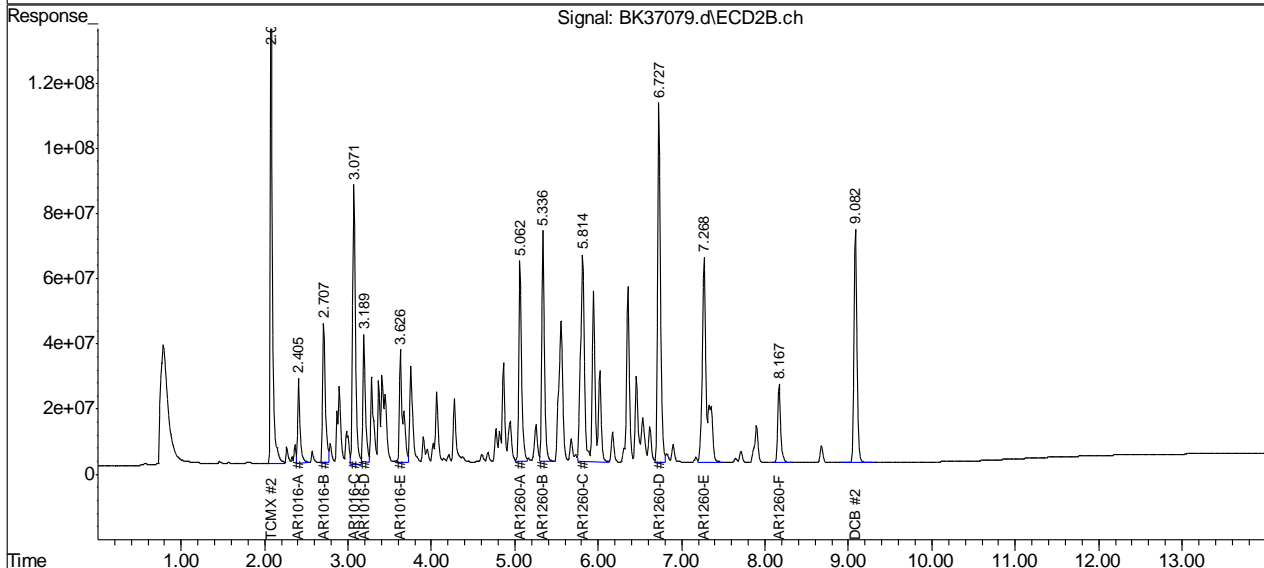
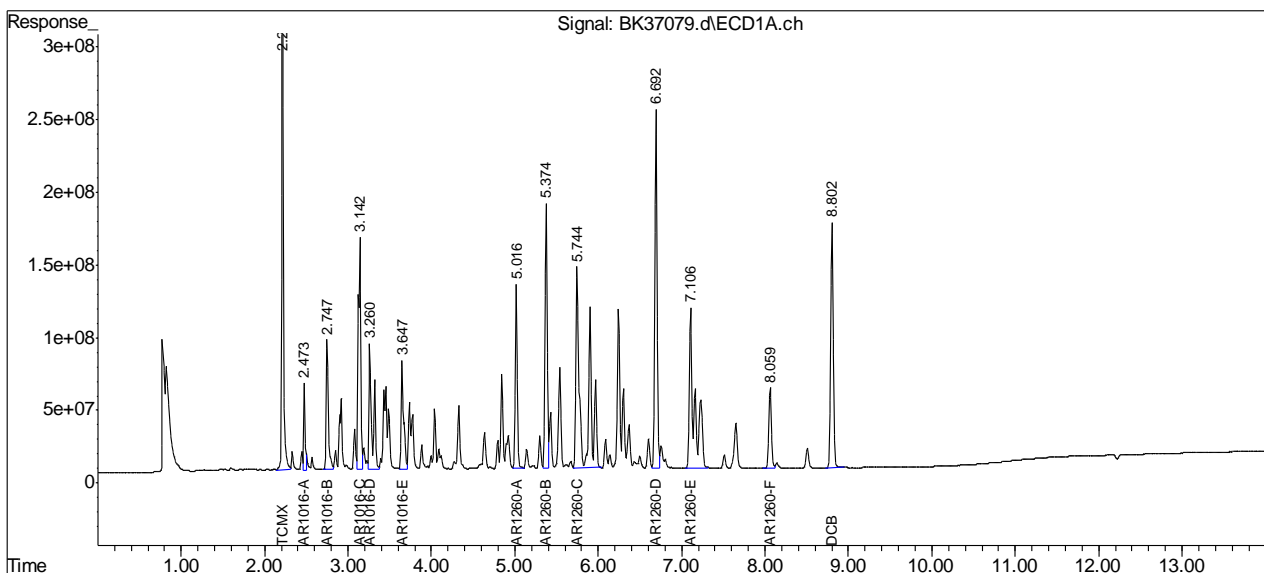
7.3.1
7

Quantitation Report (QT Reviewed)

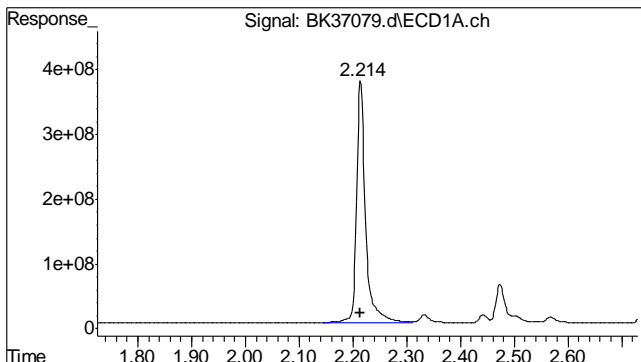
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37079.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:23 pm
 Operator : nickk
 Sample : op37822-bs
 Misc : op37822,gbk1213,15.41,,,10,,s
 ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:48:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

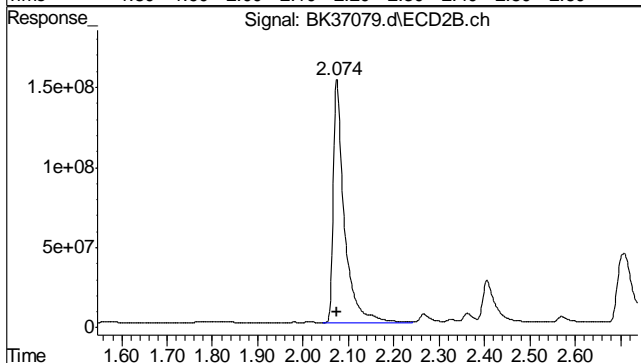
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



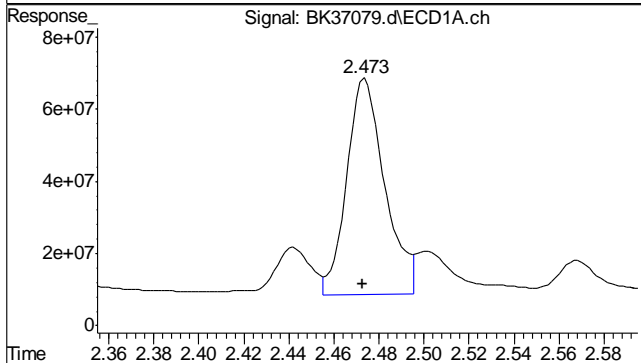
7.3.1
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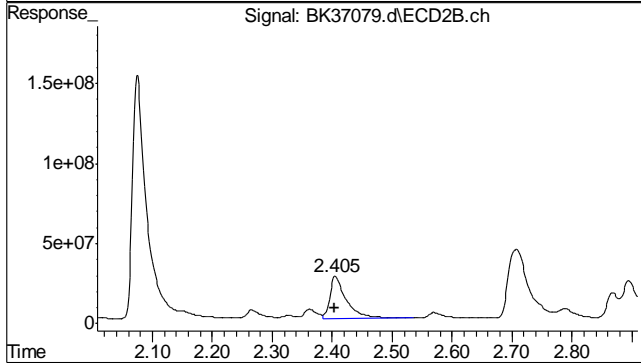
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: 0.000 min
 Response: 4375185013
 Conc: 29.35 ppb



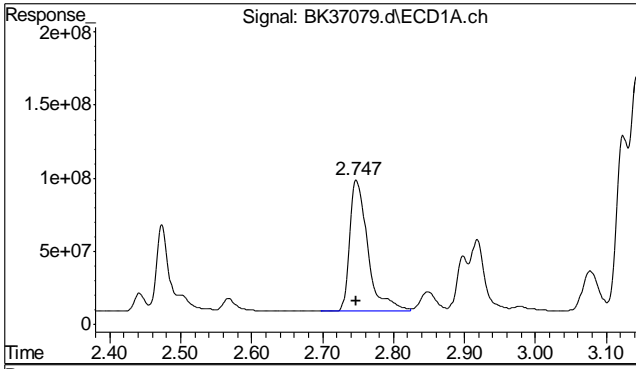
#1 TCMX
 R.T.: 2.074 min
 Delta R.T.: 0.000 min
 Response: 2576014099
 Conc: 30.93 ppb m



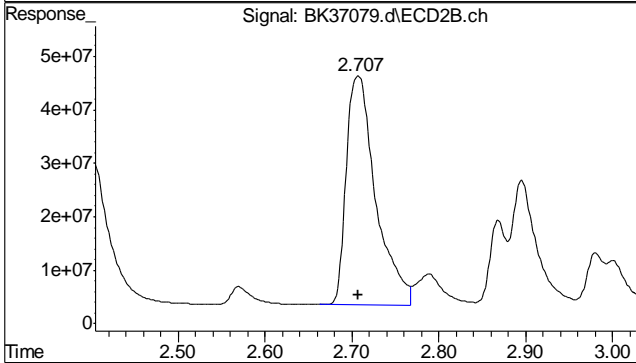
#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 715581504
 Conc: 322.52 ppb m



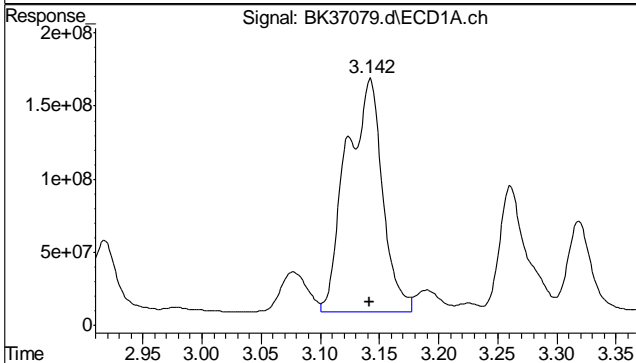
#2 AR1016-A
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 493312831
 Conc: 321.61 ppb m



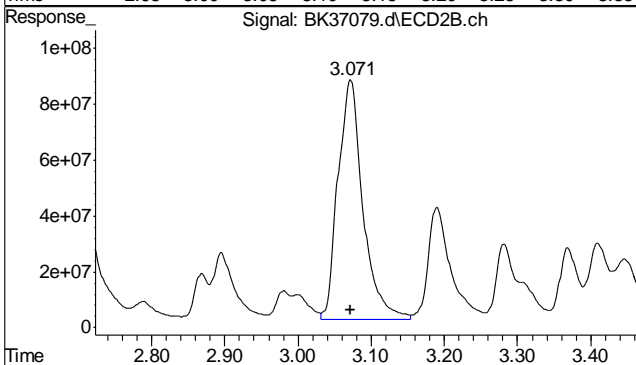
#3 AR1016-B
 R.T.: 2.748 min
 Delta R.T.: 0.001 min
 Response: 1615703135
 Conc: 317.96 ppb



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: 0.000 min
 Response: 1006718183
 Conc: 329.95 ppb m

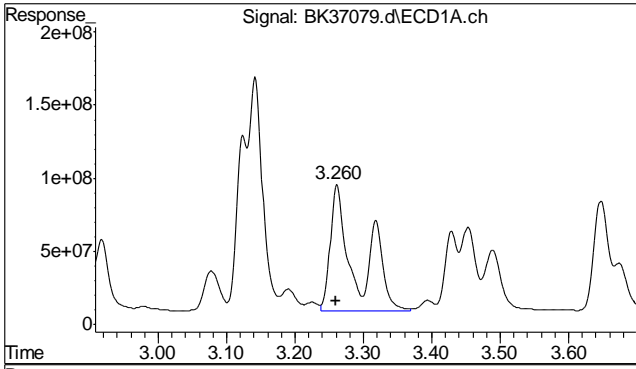


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 3389754055
 Conc: 318.68 ppb

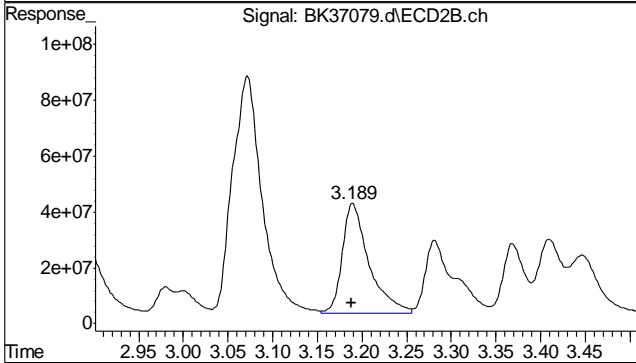


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 2034093834
 Conc: 348.11 ppb

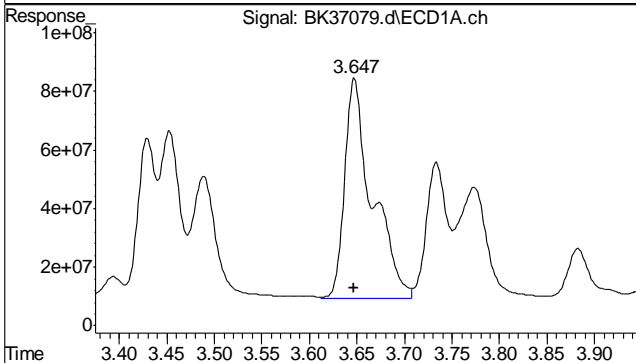
7.3.1
7



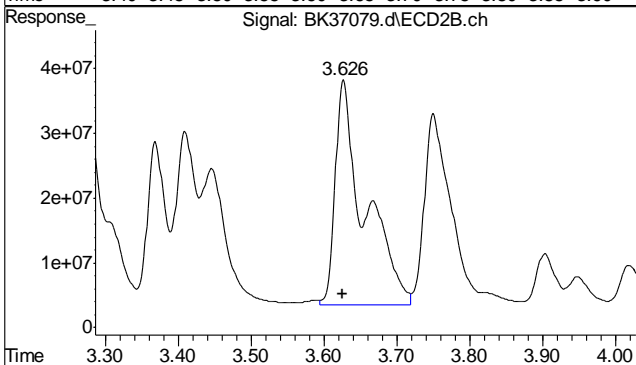
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 2277818532
 Conc: 321.29 m



#5 AR1016-D
 R.T.: 3.189 min
 Delta R.T.: 0.000 min
 Response: 814670060
 Conc: 335.27 m

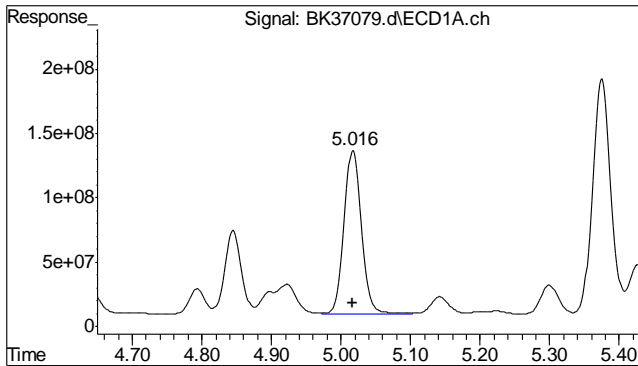


#6 AR1016-E
 R.T.: 3.648 min
 Delta R.T.: 0.000 min
 Response: 1510318794
 Conc: 322.86

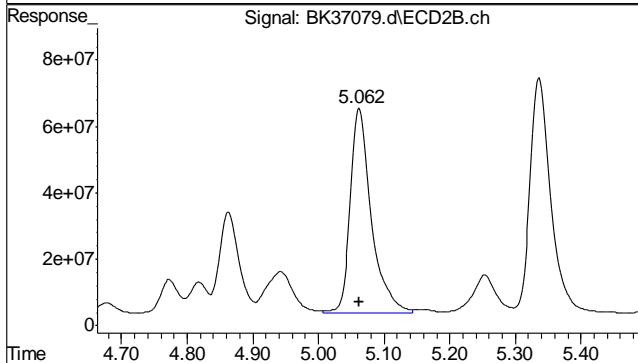


#6 AR1016-E
 R.T.: 3.626 min
 Delta R.T.: 0.000 min
 Response: 966991565
 Conc: 355.45 m

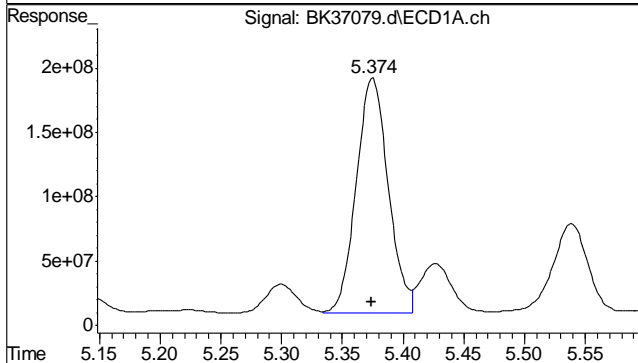
7.3.1
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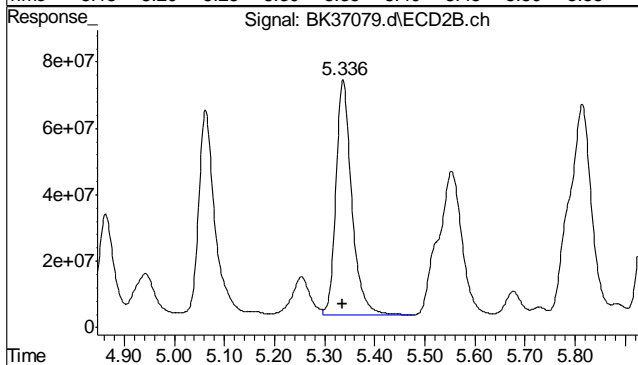
#7 AR1260-A
 R.T.: 5.017 min
 Delta R.T.: 0.000 min
 Response: 2189446810
 Conc: 314.73 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 1367035875
 Conc: 345.97 ppb m

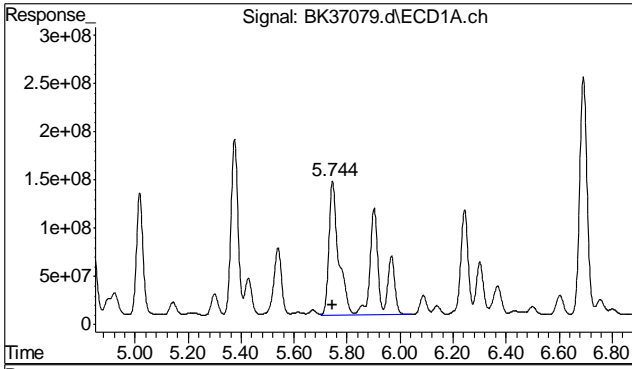


#8 AR1260-B
 R.T.: 5.375 min
 Delta R.T.: 0.001 min
 Response: 3332623894
 Conc: 321.03 ppb

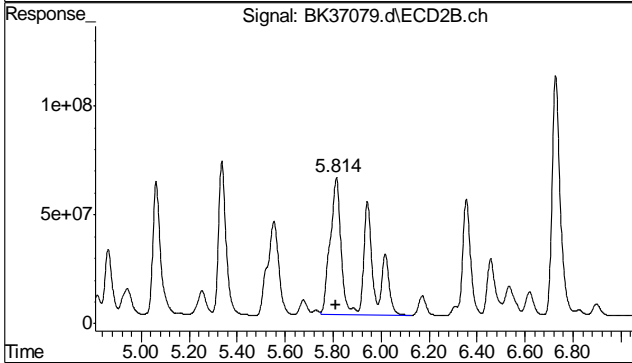


#8 AR1260-B
 R.T.: 5.336 min
 Delta R.T.: 0.000 min
 Response: 1538358564
 Conc: 344.10 ppb m

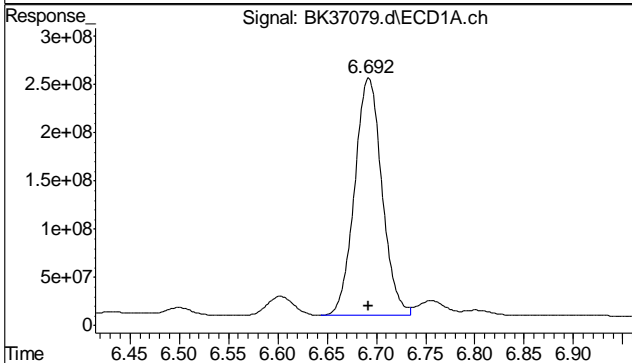
7.3.1
7



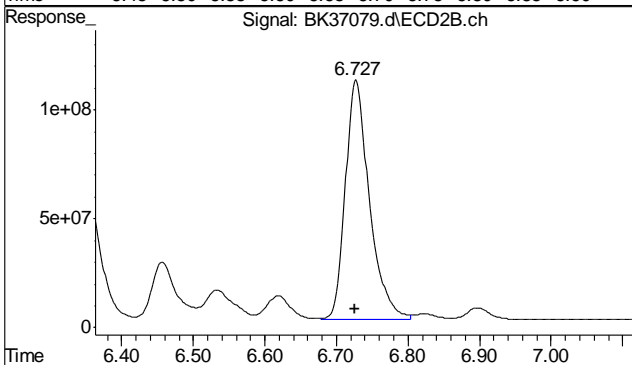
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 6775759666
 Conc: 320.98 ppb m



#9 AR1260-C
 R.T.: 5.814 min
 Delta R.T.: 0.000 min
 Response: 3775773941
 Conc: 343.35 ppb m

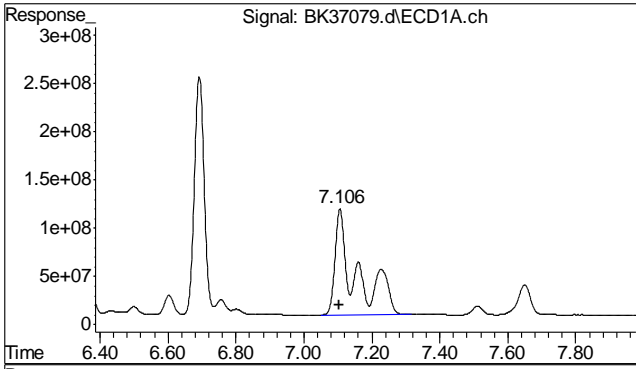


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.000 min
 Response: 4776631309
 Conc: 322.90 ppb

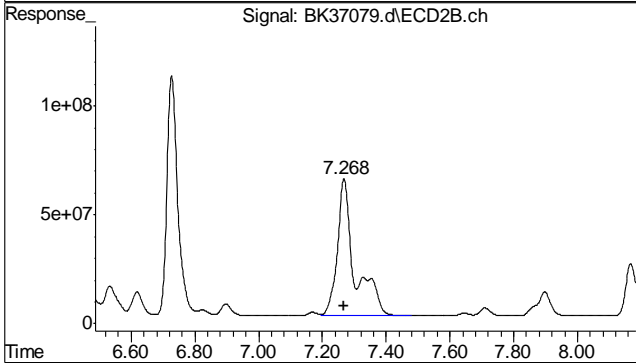


#10 AR1260-D
 R.T.: 6.727 min
 Delta R.T.: 0.000 min
 Response: 2577493288
 Conc: 347.55 ppb m

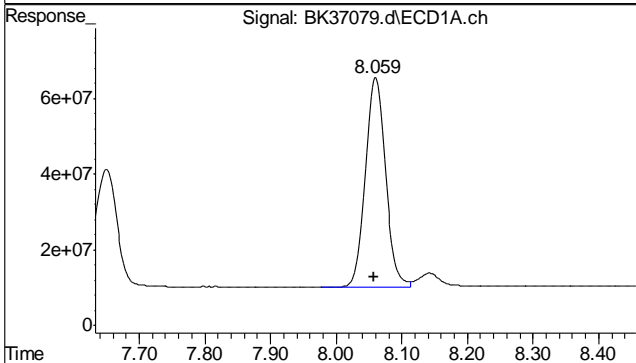
7.3.1
 7



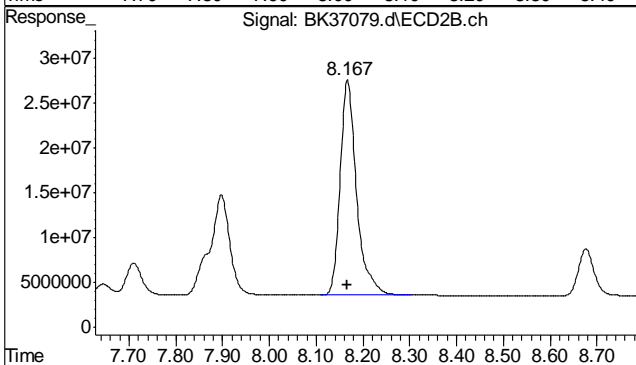
#11 AR1260-E
 R.T.: 7.106 min
 Delta R.T.: 0.001 min
 Response: 4703567210
 Conc: 326.30 ppb m



#11 AR1260-E
 R.T.: 7.268 min
 Delta R.T.: 0.000 min
 Response: 2402784436
 Conc: 347.81 ppb m

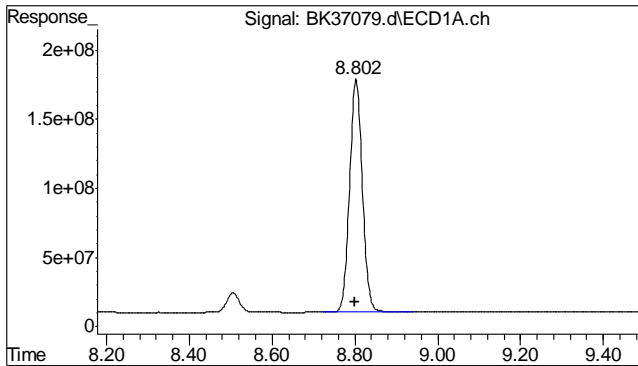


#12 AR1260-F
 R.T.: 8.060 min
 Delta R.T.: 0.002 min
 Response: 1169849461
 Conc: 325.59

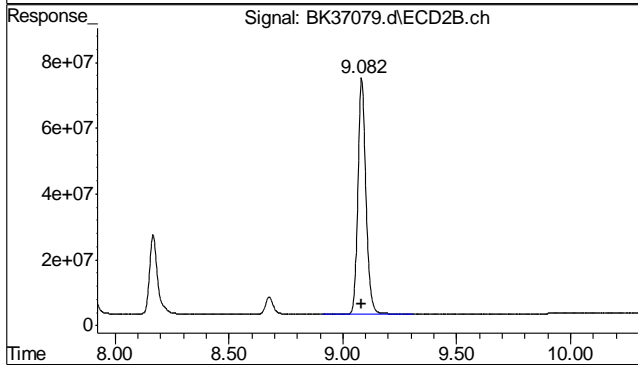


#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 584592816
 Conc: 350.50 m

7.3.1
7



#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.001 min
 Response: 3606010607
 Conc: 30.99 ppb m



#13 DCB
 R.T.: 9.083 min
 Delta R.T.: 0.000 min
 Response: 1745321662
 Conc: 33.70 ppb

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37080.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:39 pm
 Operator : nickk
 Sample : op37822-ms
 Misc : op37822,gbk1213,15.04,,,10,,s
 ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:00:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.214	2.076	4426.6E6	2670.0E6	29.694	32.060
Spiked Amount	40.000		Recovery	=	74.23%	80.15%
13) s DCB	8.802	9.083	2712.6E6	1522.1E6	23.309	29.387 #
Spiked Amount	40.000		Recovery	=	58.27%	73.47%
Target Compounds						
2) AR1016-A	2.473	2.406	720.1E6	546.7E6	324.575m	356.388
3) AR1016-B	2.748	2.708	1655.3E6	1086.0E6	325.745	355.926
4) AR1016-C	3.142	3.072	3397.5E6	2113.8E6	319.406	361.751
5) AR1016-D	3.260	3.190	2303.0E6	886.6E6	324.842m	364.895
6) AR1016-E	3.647	3.627	1440.1E6	975.5E6	307.862m	358.559m
7) AR1260-A	5.017	5.062	2282.9E6	1564.9E6	328.156	396.051m
8) AR1260-B	5.375	5.336	3448.2E6	1800.9E6	332.160	402.823m
9) AR1260-C	5.744	5.814	6757.5E6	4322.5E6	320.115m	393.070m
10) AR1260-D	6.691	6.727	4552.6E6	2877.4E6	307.755	387.988 #
11) AR1260-E	7.104	7.268	4242.6E6	2496.0E6	294.320m	361.298m
12) AR1260-F	8.059	8.167	1018.6E6	584.3E6	283.502	350.325
32) AR1254-A	4.039	4.063	1181.9E6	609.8E6	124.443m	136.797m
33) AR1254-B	4.326	4.274	997.9E6	533.0E6	79.600m	81.546m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

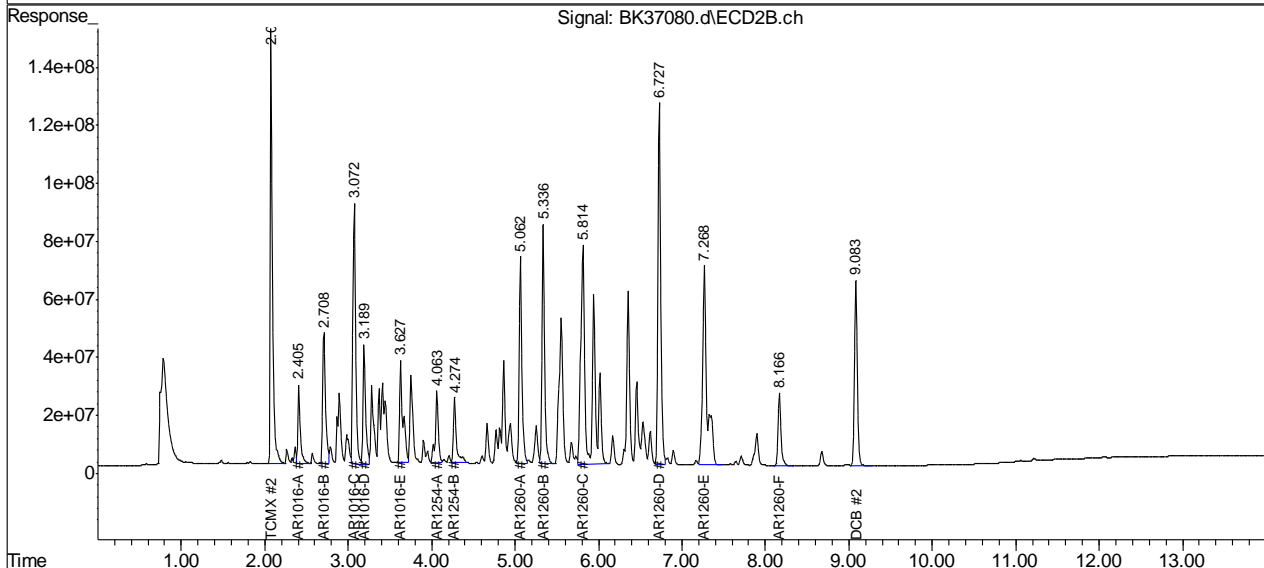
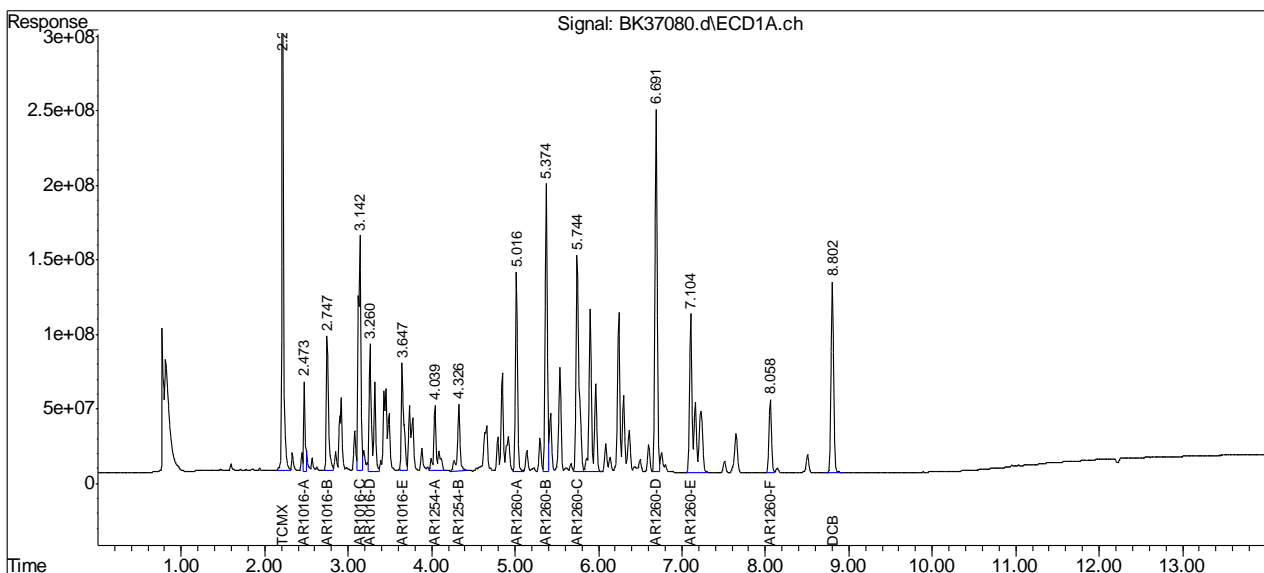
7.4.1
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Quantitation Report (QT Reviewed)

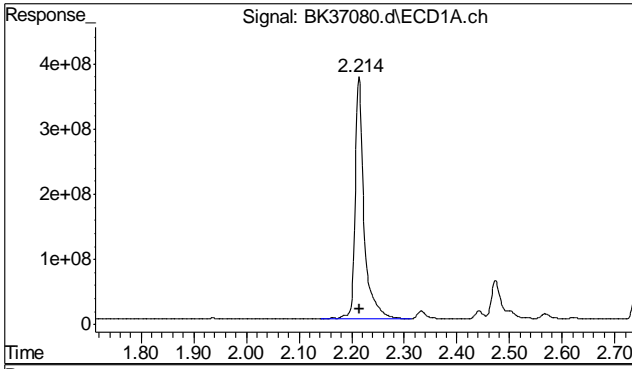
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37080.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:39 pm
 Operator : nickk
 Sample : op37822-ms
 Misc : op37822,gbk1213,15.04,,,10,,s
 ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:00:50 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

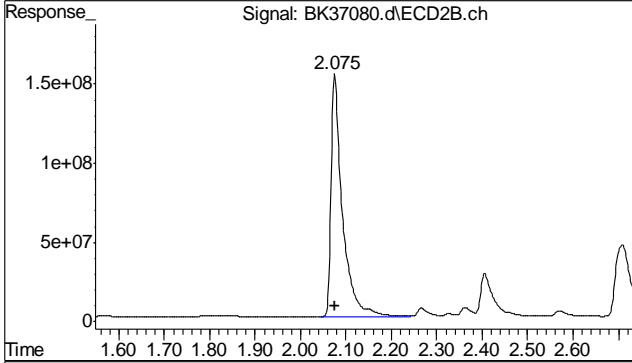
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



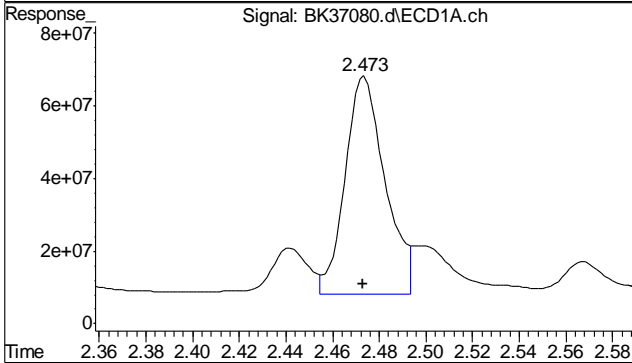
7.4.1
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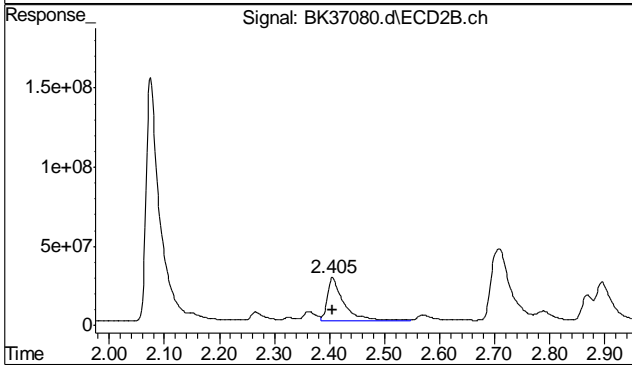
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 4426560250
 Conc: 29.69 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.000 min
 Response: 2669998708
 Conc: 32.06 ppb



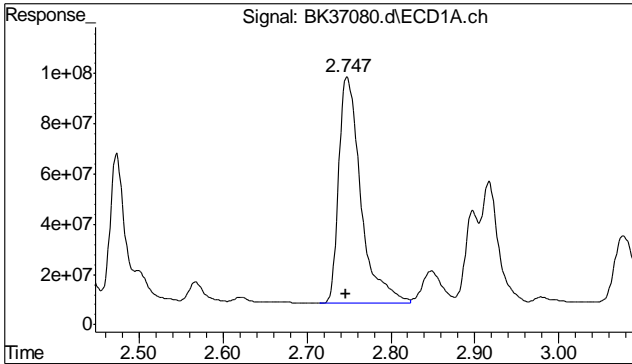
#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 720137348
 Conc: 324.57 ppb m



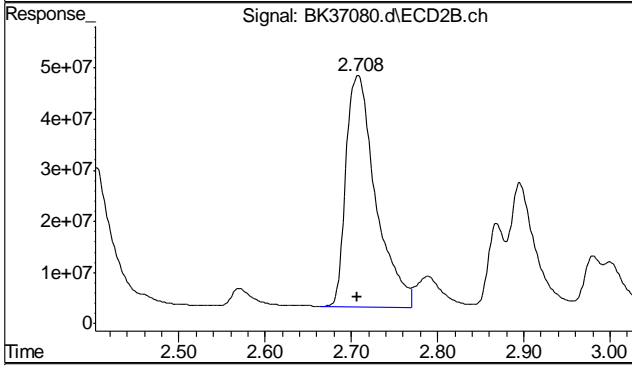
#2 AR1016-A
 R.T.: 2.406 min
 Delta R.T.: 0.001 min
 Response: 546658785
 Conc: 356.39 ppb

7.4.1

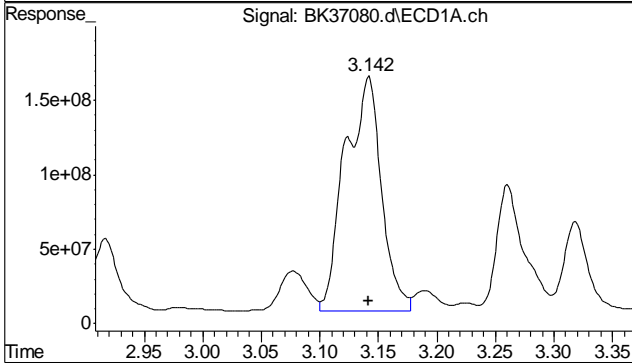
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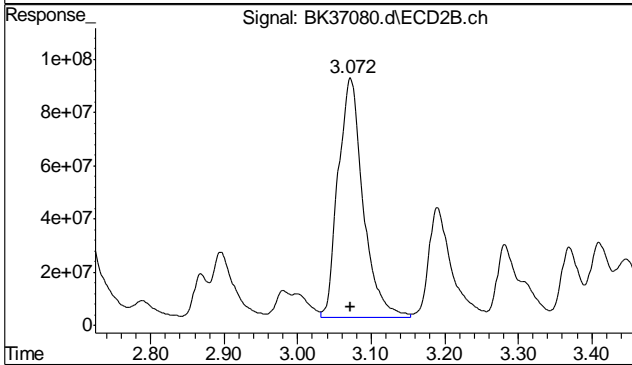
#3 AR1016-B
 R.T.: 2.748 min
 Delta R.T.: 0.001 min
 Response: 1655277546
 Conc: 325.75 ppb



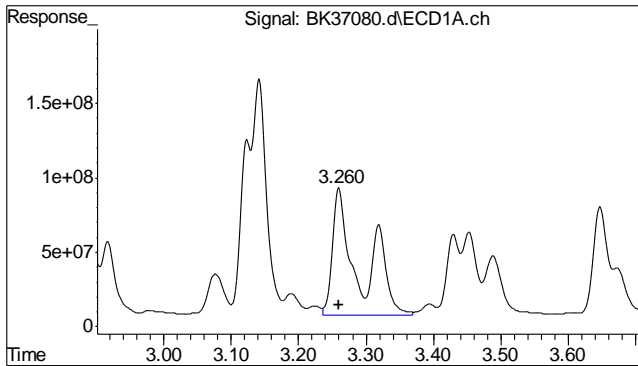
#3 AR1016-B
 R.T.: 2.708 min
 Delta R.T.: 0.001 min
 Response: 1085984378
 Conc: 355.93 ppb



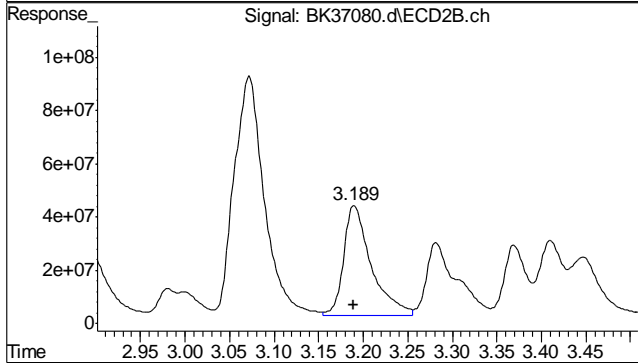
#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 3397524039
 Conc: 319.41 ppb



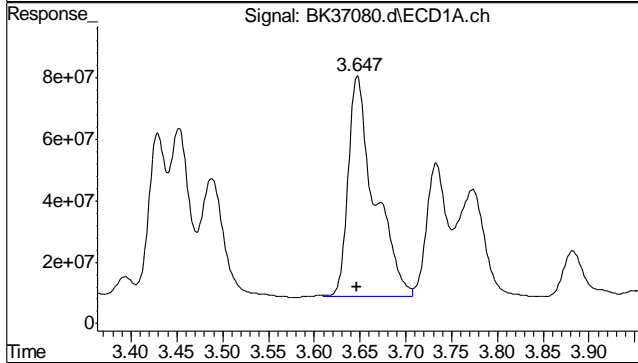
#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 2113824926
 Conc: 361.75 ppb



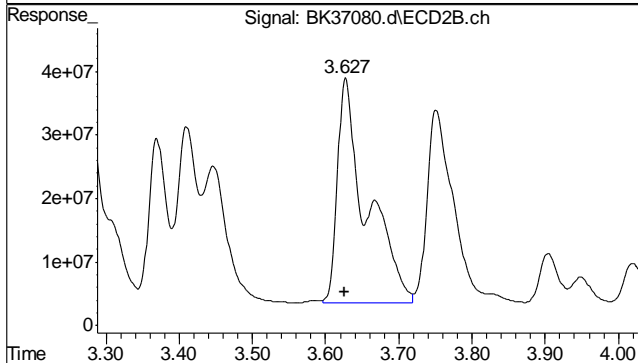
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 2303006573
 Conc: 324.84 m



#5 AR1016-D
 R.T.: 3.190 min
 Delta R.T.: 0.001 min
 Response: 886646450
 Conc: 364.90

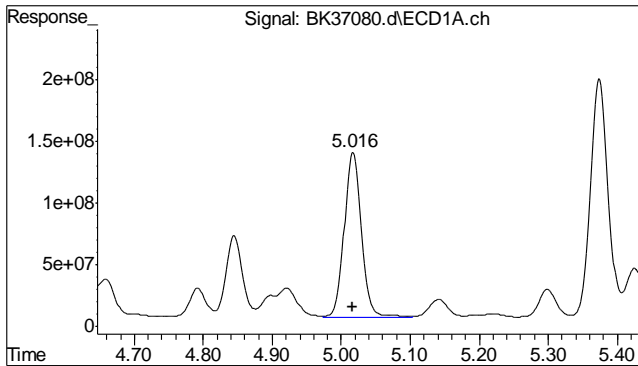


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: 0.000 min
 Response: 1440137899
 Conc: 307.86 m

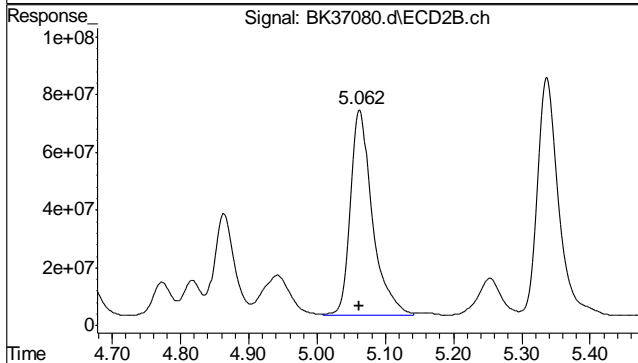


#6 AR1016-E
 R.T.: 3.627 min
 Delta R.T.: 0.000 min
 Response: 975460077
 Conc: 358.56 m

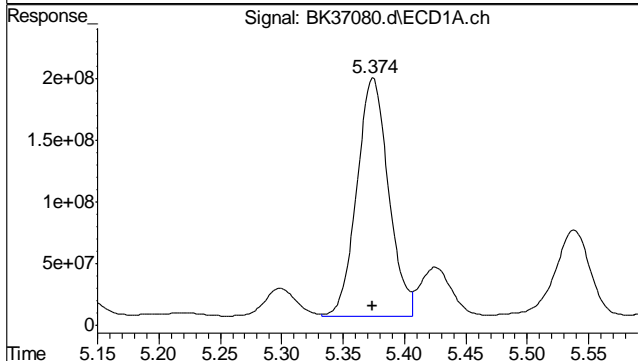
7.4.1
 7



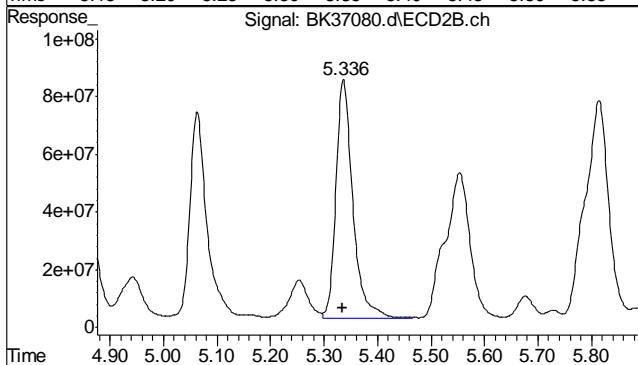
#7 AR1260-A
 R.T.: 5.017 min
 Delta R.T.: 0.000 min
 Response: 2282855112
 Conc: 328.16 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 1564914898
 Conc: 396.05 ppb m

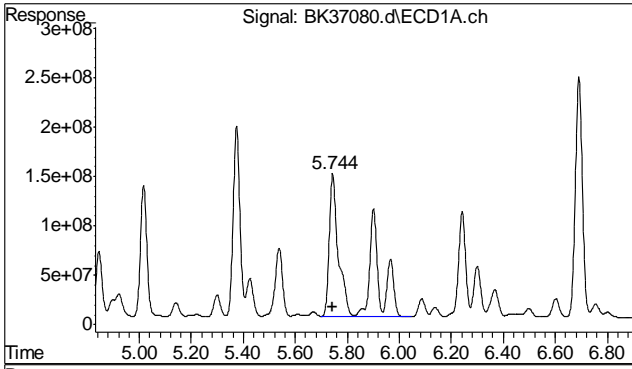


#8 AR1260-B
 R.T.: 5.375 min
 Delta R.T.: 0.000 min
 Response: 3448188143
 Conc: 332.16 ppb

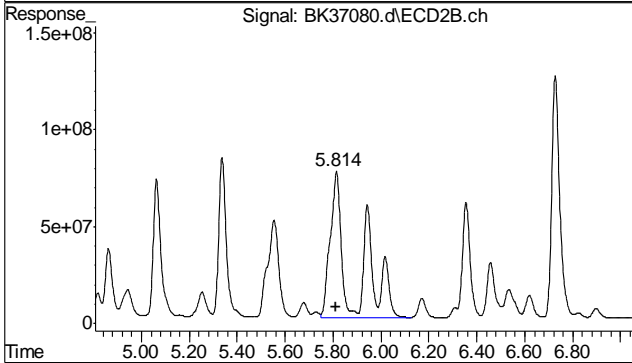


#8 AR1260-B
 R.T.: 5.336 min
 Delta R.T.: 0.000 min
 Response: 1800909060
 Conc: 402.82 ppb m

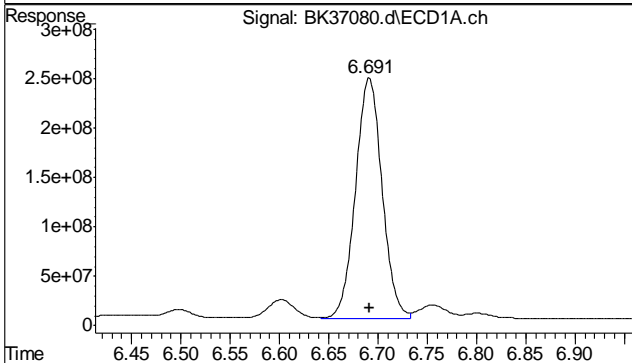
7.4.1
7



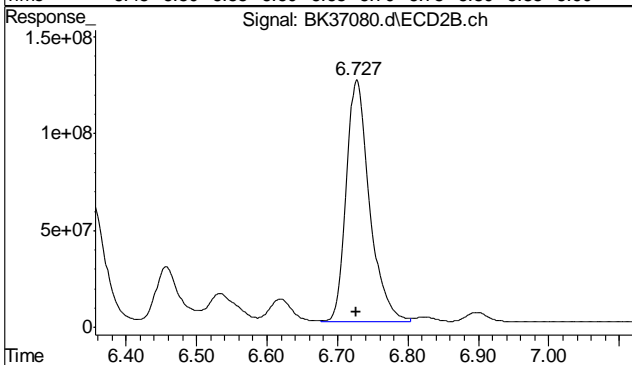
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 6757515279
 Conc: 320.11 ppb m



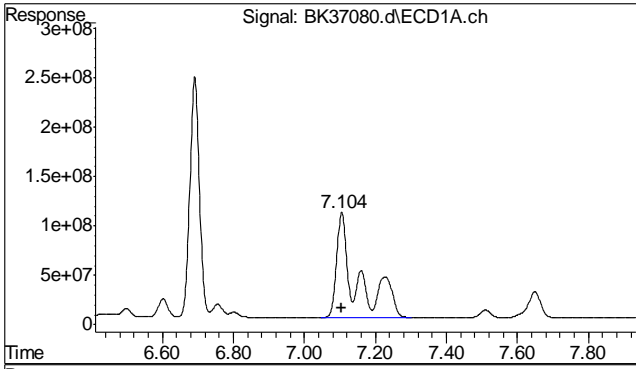
#9 AR1260-C
 R.T.: 5.814 min
 Delta R.T.: 0.000 min
 Response: 4322498454
 Conc: 393.07 ppb m



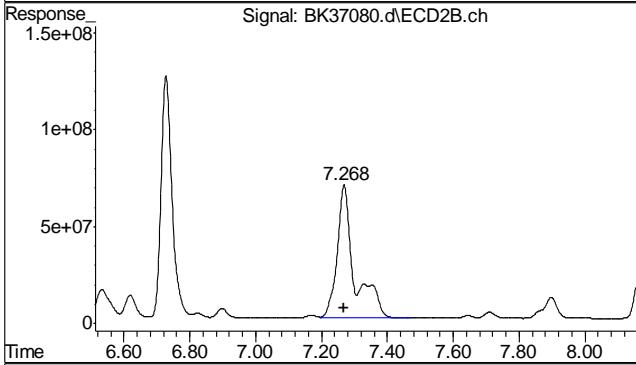
#10 AR1260-D
 R.T.: 6.691 min
 Delta R.T.: 0.000 min
 Response: 4552571038
 Conc: 307.75 ppb



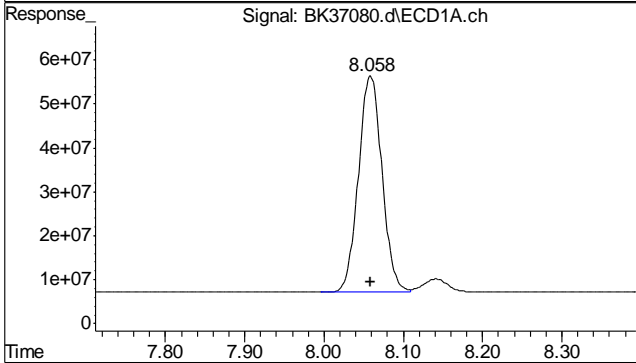
#10 AR1260-D
 R.T.: 6.727 min
 Delta R.T.: 0.000 min
 Response: 2877389945
 Conc: 387.99 ppb



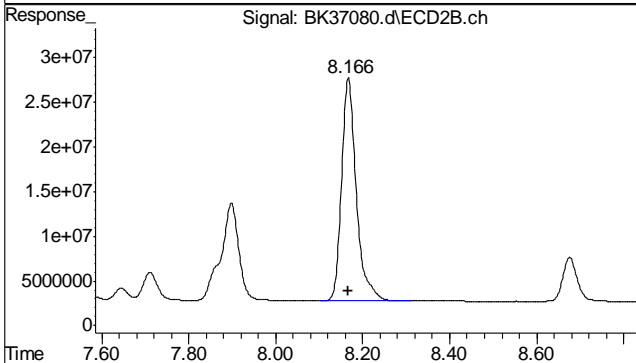
#11 AR1260-E
 R.T.: 7.104 min
 Delta R.T.: 0.000 min
 Response: 4242581878
 Conc: 294.32 ppb m



#11 AR1260-E
 R.T.: 7.268 min
 Delta R.T.: 0.000 min
 Response: 2495996091
 Conc: 361.30 ppb m



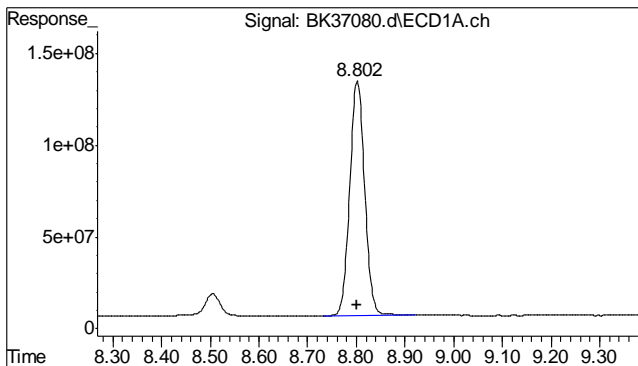
#12 AR1260-F
 R.T.: 8.059 min
 Delta R.T.: 0.000 min
 Response: 1018621287
 Conc: 283.50



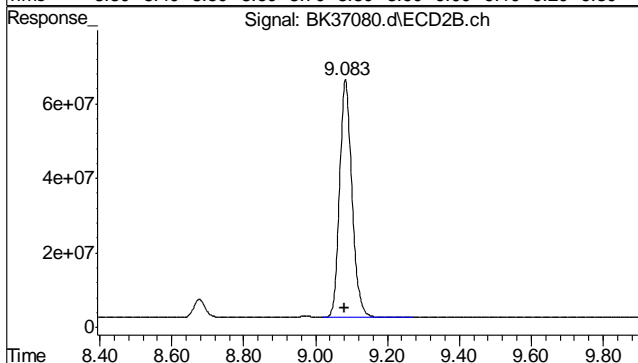
#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 584297517
 Conc: 350.32

7.4.1

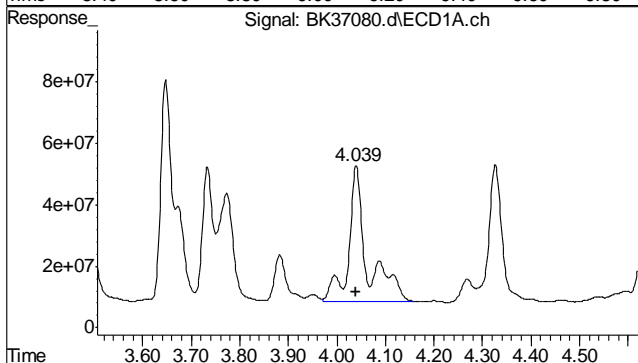
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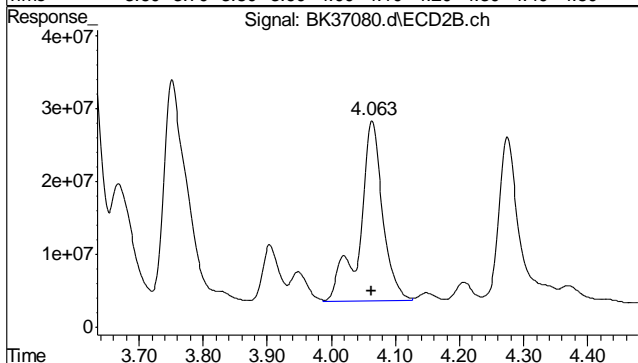
#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.001 min
 Response: 2712602494
 Conc: 23.31 ppb



#13 DCB
 R.T.: 9.083 min
 Delta R.T.: 0.001 min
 Response: 1522098994
 Conc: 29.39 ppb

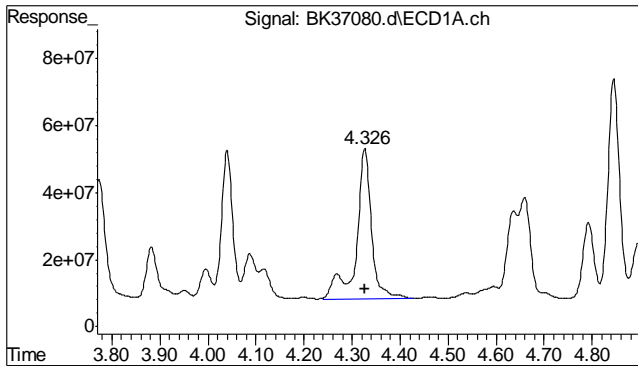


#32 AR1254-A
 R.T.: 4.039 min
 Delta R.T.: 0.000 min
 Response: 1181931101
 Conc: 124.44 ppb m

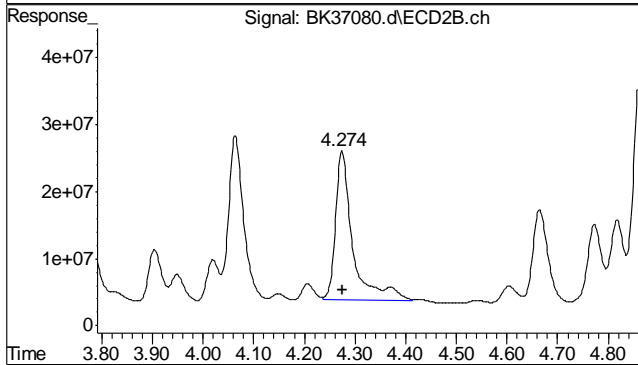


#32 AR1254-A
 R.T.: 4.063 min
 Delta R.T.: 0.000 min
 Response: 609836094
 Conc: 136.80 ppb m

7.4.1
7



#33 AR1254-B
 R.T.: 4.326 min
 Delta R.T.: 0.000 min
 Response: 997931984
 Conc: 79.60 ppb m



#33 AR1254-B
 R.T.: 4.274 min
 Delta R.T.: 0.000 min
 Response: 533030214
 Conc: 81.55 ppb m

7.4.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37081.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:55 pm
 Operator : nickk
 Sample : op37822-msd
 Misc : op37822,gbk1213,15.02,,,10,,s
 ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:01:14 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.214	2.075	4398.2E6	2734.6E6	29.504	32.836
	Spiked Amount	40.000		Recovery	=	73.76%	82.09%
13)	s DCB	8.804	9.084	2535.5E6	1502.3E6	21.787	29.005 #
	Spiked Amount	40.000		Recovery	=	54.47%	72.51%
Target Compounds							
2)	AR1016-A	2.473	2.406	678.2E6	469.7E6	305.692m	306.187
3)	AR1016-B	2.749	2.707	1531.5E6	1027.0E6	301.385	336.597
4)	AR1016-C	3.142	3.072	3003.0E6	1993.8E6	282.317	341.212
5)	AR1016-D	3.260	3.190	1984.5E6	819.2E6	279.913m	337.152
6)	AR1016-E	3.647	3.626	1231.8E6	898.8E6	263.316m	330.381m#
7)	AR1260-A	5.017	5.062	1889.8E6	1421.0E6	271.650	359.624m#
8)	AR1260-B	5.375	5.337	2877.0E6	1632.4E6	277.142	365.125 #
9)	AR1260-C	5.744	5.814	5614.3E6	3857.3E6	265.959m	350.770m#
10)	AR1260-D	6.692	6.728	3881.3E6	2657.9E6	262.375	358.388 #
11)	AR1260-E	7.105	7.268	3557.8E6	2290.3E6	246.816m	331.521m#
12)	AR1260-F	8.060	8.167	891.1E6	541.8E6	248.022	324.870 #
32)	AR1254-A	4.039	4.063	1040.4E6	591.1E6	109.536m	132.583m
33)	AR1254-B	4.326	4.274	897.4E6	509.6E6	71.579m	77.958m

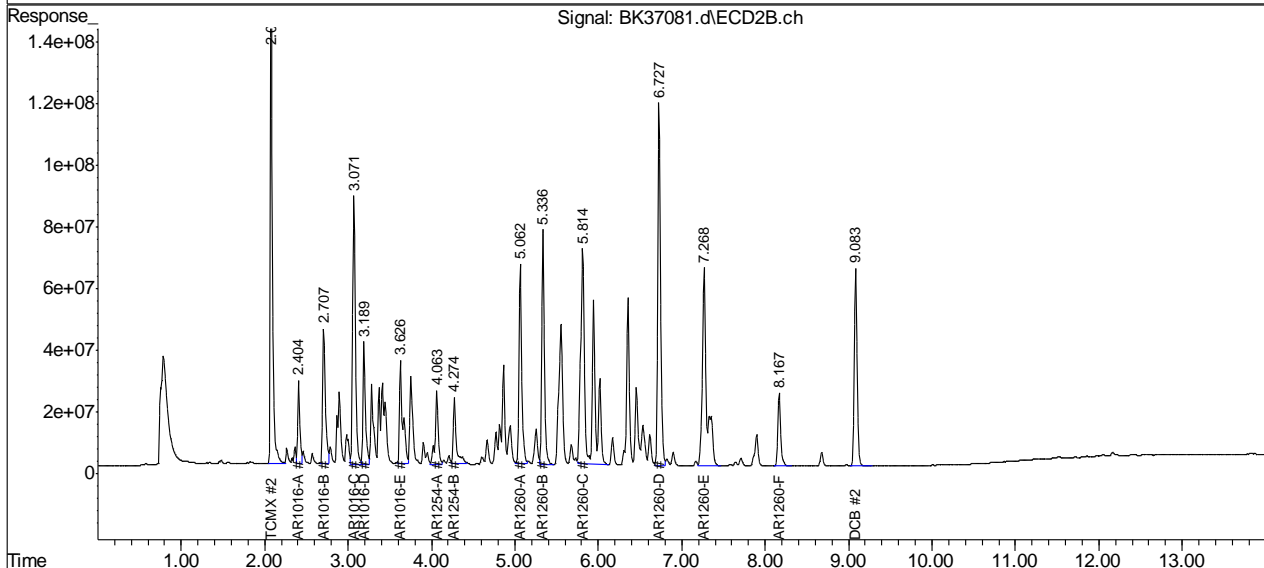
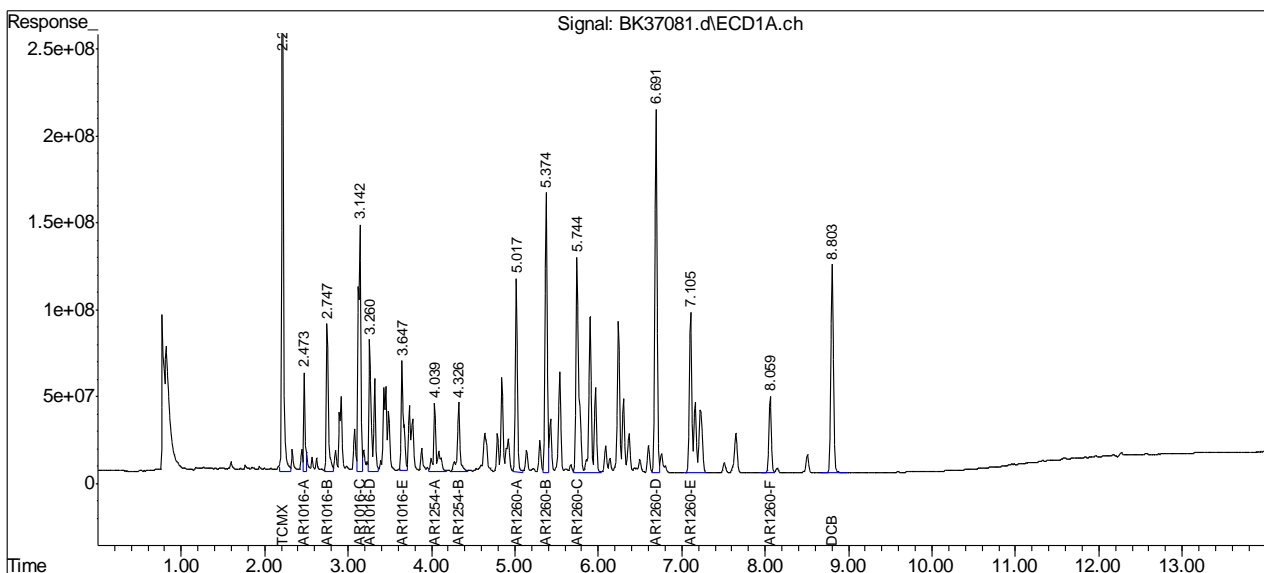
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

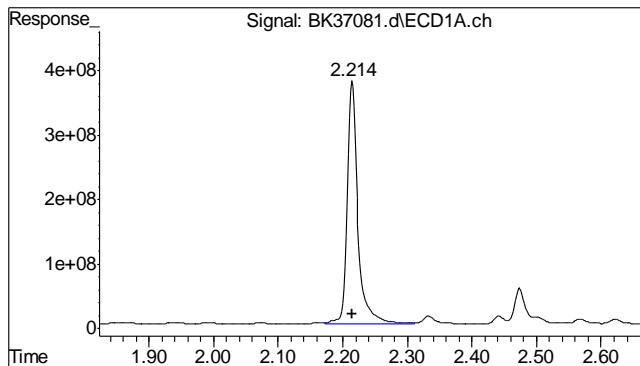
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37081.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 6:55 pm
 Operator : nickk
 Sample : op37822-msd
 Misc : op37822,gbk1213,15.02,,,10,,s
 ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 13:01:14 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

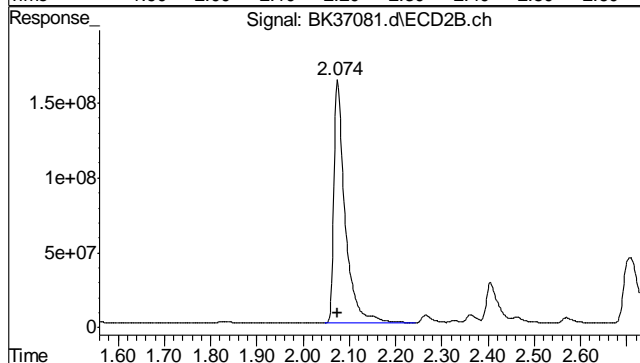
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



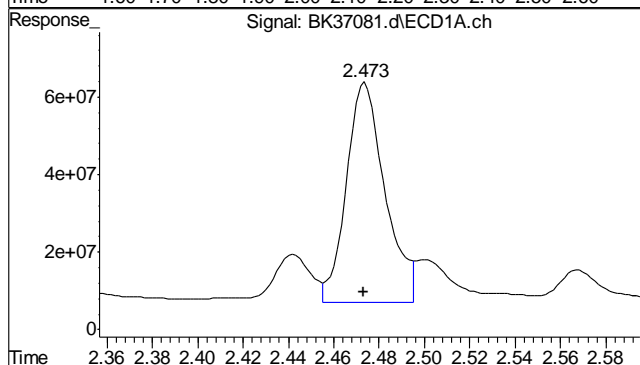
7.4.2
 7



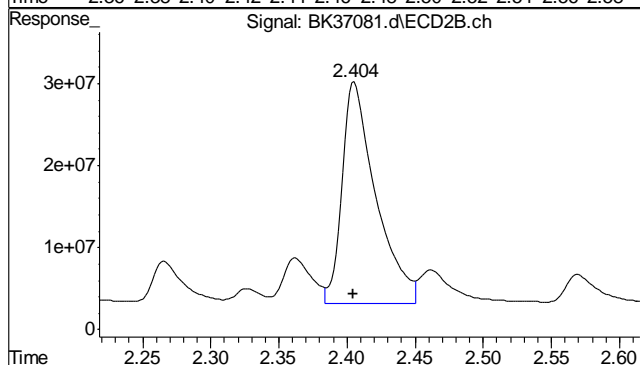
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 4398188449
 Conc: 29.50 ppb



#1 TCMX
 R.T.: 2.075 min
 Delta R.T.: 0.000 min
 Response: 2734593828
 Conc: 32.84 ppb

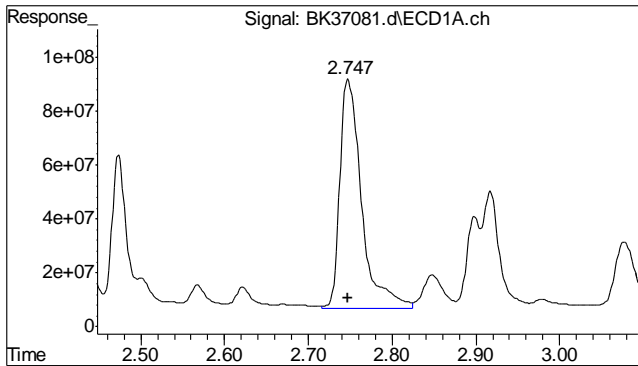


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 678241694
 Conc: 305.69 ppb m

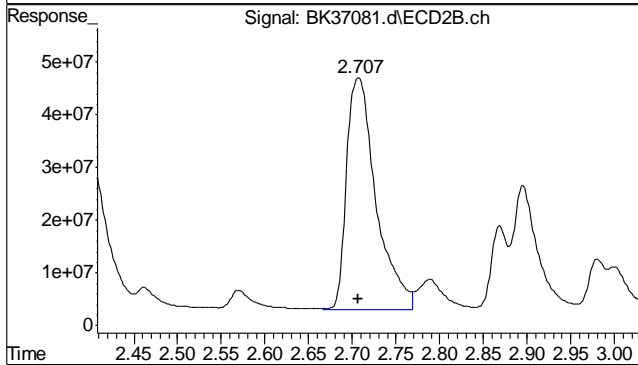


#2 AR1016-A
 R.T.: 2.406 min
 Delta R.T.: 0.000 min
 Response: 469655572
 Conc: 306.19 ppb

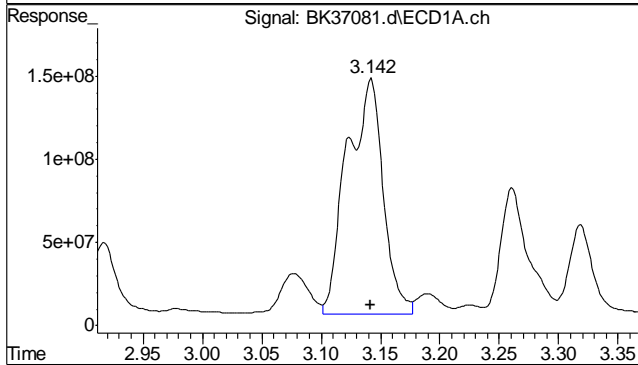
7.4.2
 7



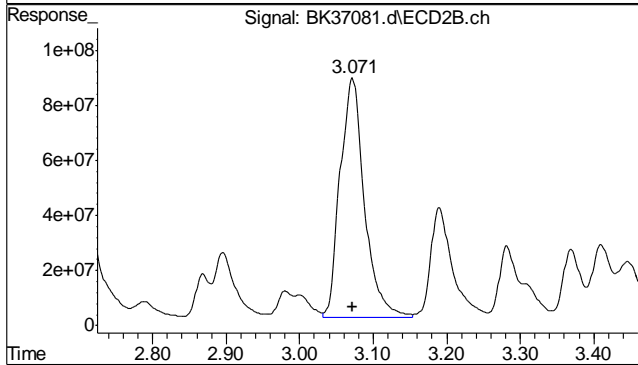
#3 AR1016-B
 R.T.: 2.749 min
 Delta R.T.: 0.002 min
 Response: 1531487844
 Conc: 301.38 ppb



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: 0.000 min
 Response: 1027007489
 Conc: 336.60 ppb

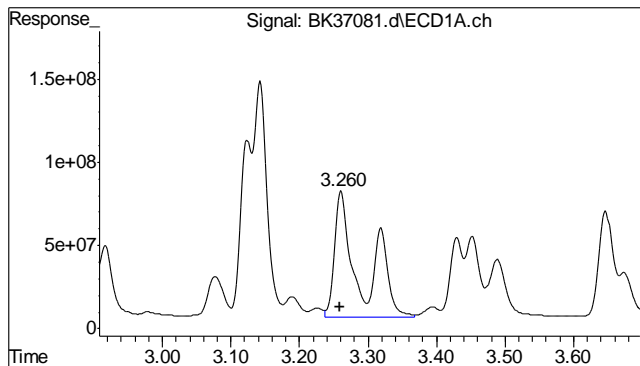


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 3003010547
 Conc: 282.32 ppb

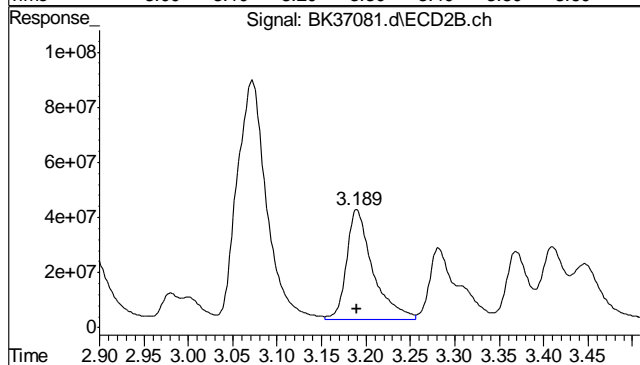


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 1993809152
 Conc: 341.21 ppb

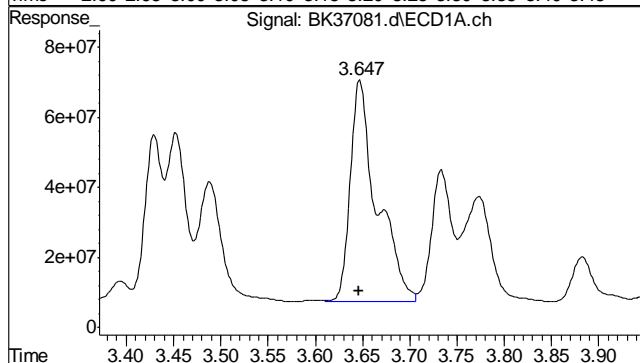
7.4.2
 7



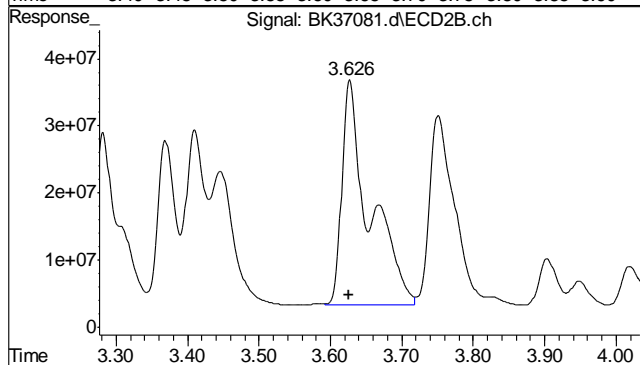
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 1984478877
 Conc: 279.91 m



#5 AR1016-D
 R.T.: 3.190 min
 Delta R.T.: 0.000 min
 Response: 819233122
 Conc: 337.15

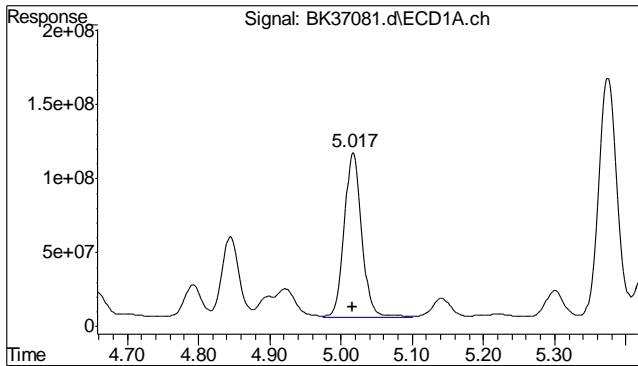


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: 0.000 min
 Response: 1231758438
 Conc: 263.32 m

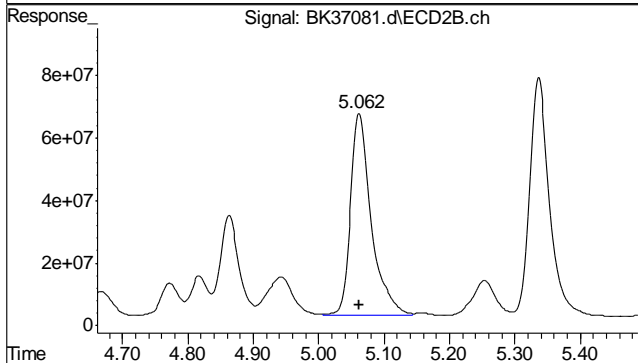


#6 AR1016-E
 R.T.: 3.626 min
 Delta R.T.: 0.000 min
 Response: 898802028
 Conc: 330.38 m

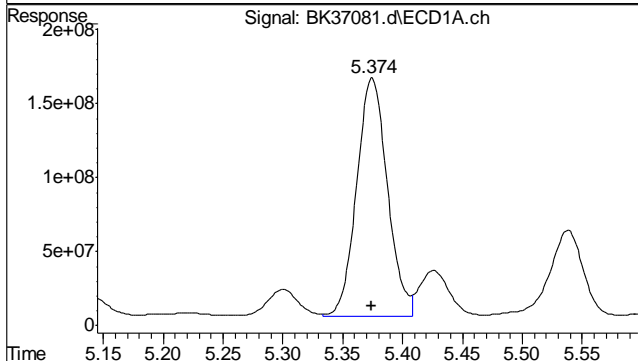
7.4.2
 7



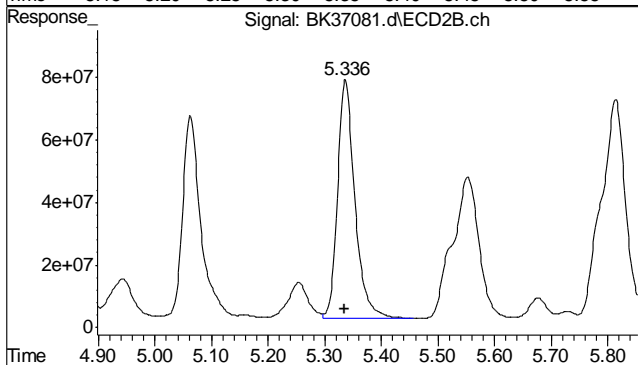
#7 AR1260-A
 R.T.: 5.017 min
 Delta R.T.: 0.000 min
 Response: 1889762644
 Conc: 271.65 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 1420979791
 Conc: 359.62 ppb m

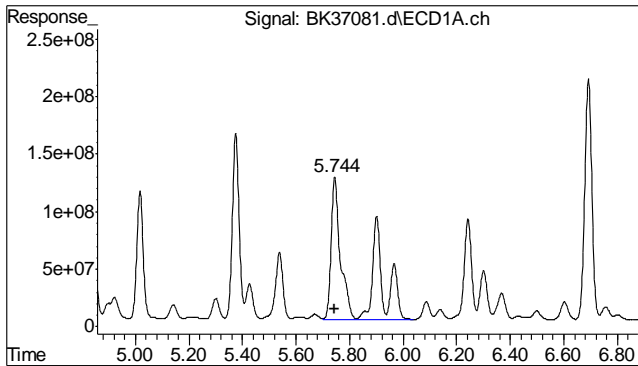


#8 AR1260-B
 R.T.: 5.375 min
 Delta R.T.: 0.001 min
 Response: 2877039346
 Conc: 277.14 ppb

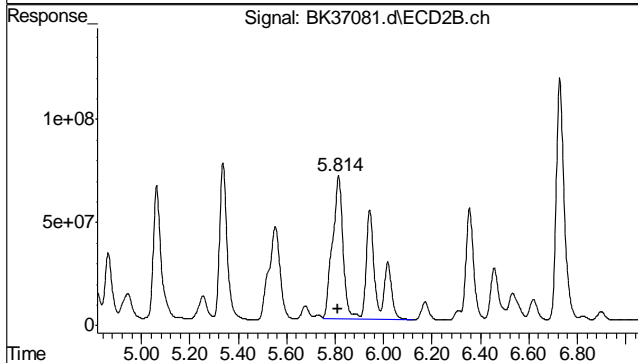


#8 AR1260-B
 R.T.: 5.337 min
 Delta R.T.: 0.001 min
 Response: 1632375870
 Conc: 365.13 ppb

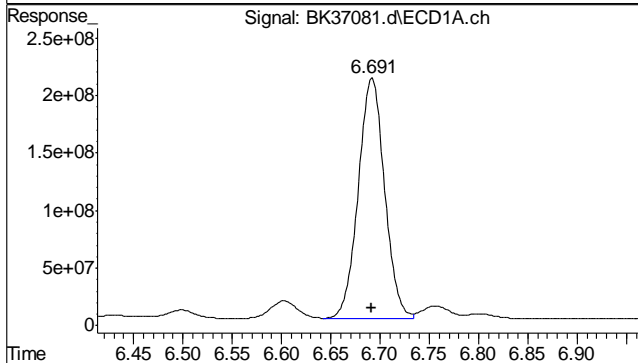
7.4.2
 7



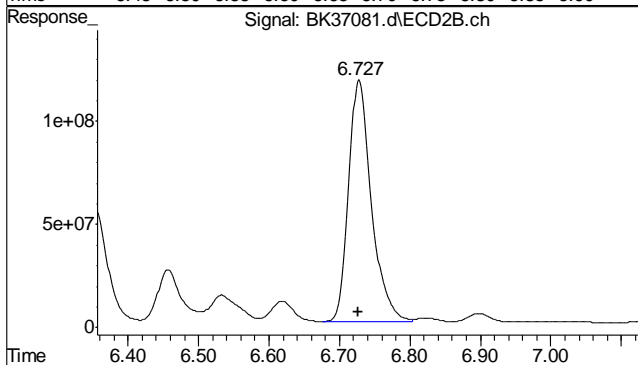
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 5614316677
 Conc: 265.96 ppb m



#9 AR1260-C
 R.T.: 5.814 min
 Delta R.T.: 0.000 min
 Response: 3857330876
 Conc: 350.77 ppb m

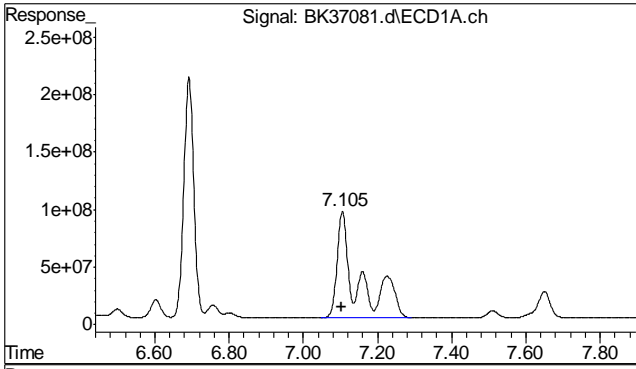


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.000 min
 Response: 3881283563
 Conc: 262.38 ppb

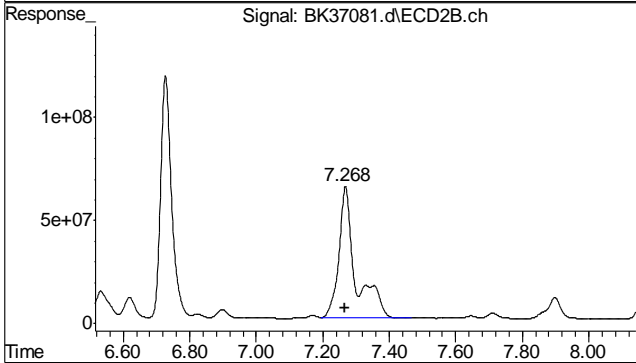


#10 AR1260-D
 R.T.: 6.728 min
 Delta R.T.: 0.000 min
 Response: 2657867135
 Conc: 358.39 ppb

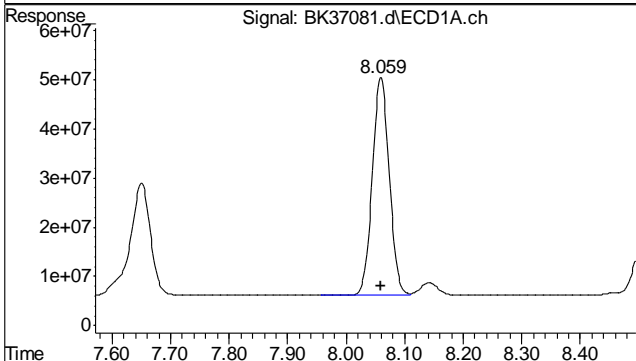
7.4.2
 7



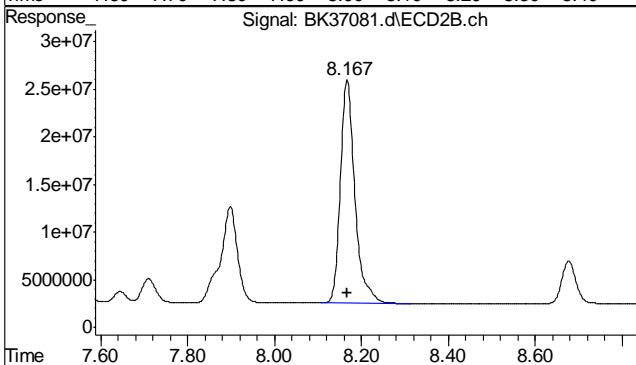
#11 AR1260-E
 R.T.: 7.105 min
 Delta R.T.: 0.000 min
 Response: 3557828102
 Conc: 246.82 ppb m



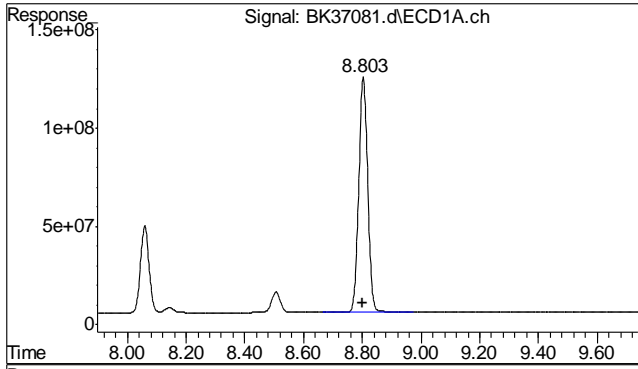
#11 AR1260-E
 R.T.: 7.268 min
 Delta R.T.: 0.000 min
 Response: 2290287199
 Conc: 331.52 ppb m



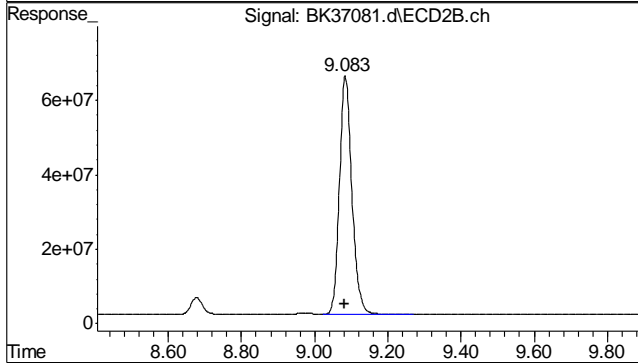
#12 AR1260-F
 R.T.: 8.060 min
 Delta R.T.: 0.001 min
 Response: 891142511
 Conc: 248.02



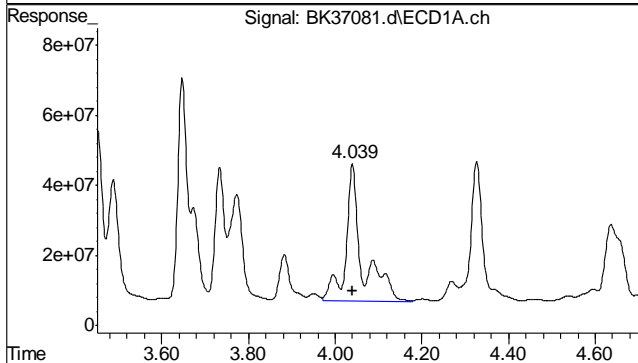
#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 541843059
 Conc: 324.87



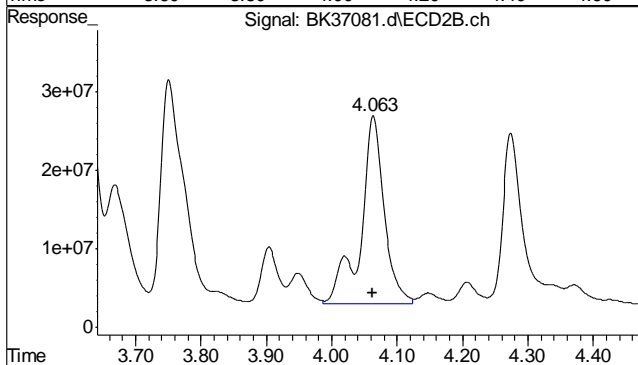
#13 DCB
 R.T.: 8.804 min
 Delta R.T.: 0.003 min
 Response: 2535471903
 Conc: 21.79 ppb



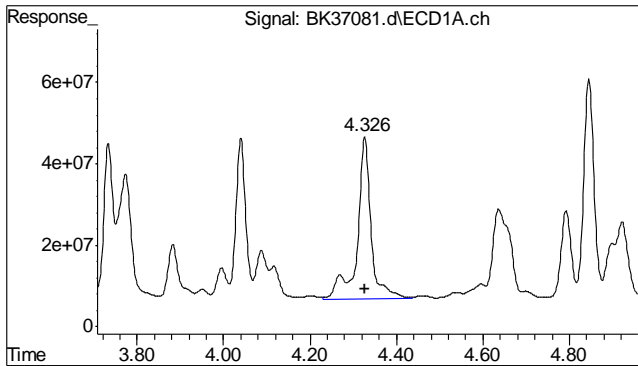
#13 DCB
 R.T.: 9.084 min
 Delta R.T.: 0.002 min
 Response: 1502284344
 Conc: 29.00 ppb



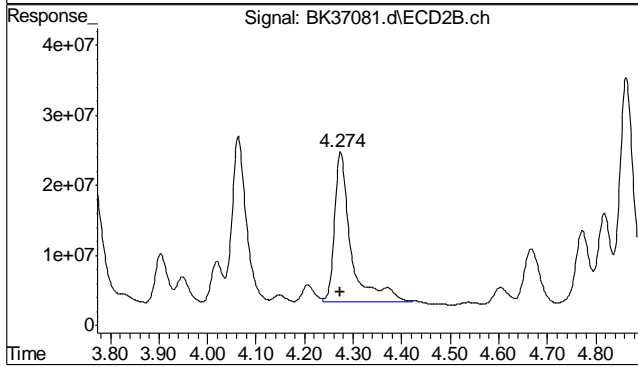
#32 AR1254-A
 R.T.: 4.039 min
 Delta R.T.: 0.000 min
 Response: 1040352346
 Conc: 109.54 ppb m



#32 AR1254-A
 R.T.: 4.063 min
 Delta R.T.: 0.000 min
 Response: 591050072
 Conc: 132.58 ppb m



#33 AR1254-B
R.T.: 4.326 min
Delta R.T.: 0.000 min
Response: 897366474
Conc: 71.58 ppb m



#33 AR1254-B
R.T.: 4.274 min
Delta R.T.: 0.000 min
Response: 509575470
Conc: 77.96 ppb m

7.4.2
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37067.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:09 pm
 Operator : nickk
 Sample : ic1213-50,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:50:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Sat Apr 26 08:42:51 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.220	2.073	1257.1E6	664.7E6	8.827	7.990m
	Spiked Amount	40.000		Recovery	=	22.07%	19.98%
13)	s DCB	8.805	9.083	1038.6E6	427.3E6	11.643m	10.315
	Spiked Amount	40.000		Recovery	=	29.11%	25.79%
Target Compounds							
2)	AR1016-A	2.480	2.402	121.8E6	83680850	59.552	53.367m
3)	AR1016-B	2.754	2.707	282.4E6	160.4E6	55.368m	53.277m
4)	AR1016-C	3.149	3.071	578.5E6	282.4E6	57.921	52.096
5)	AR1016-D	3.267	3.188	366.8E6	117.3E6	52.256m	50.762m
6)	AR1016-E	3.654	3.626	252.5E6	134.4E6	55.274m	51.597m
7)	AR1260-A	5.023	5.061	401.2E6	205.9E6	59.686m	55.360m
8)	AR1260-B	5.382	5.335	564.5E6	226.7E6	56.810	55.019m
9)	AR1260-C	5.751	5.812	1115.6E6	553.5E6	57.045m	56.028m
10)	AR1260-D	6.696	6.726	751.6E6	352.6E6	56.674m	54.965m
11)	AR1260-E	7.110	7.267	766.3E6	341.1E6	61.973m	57.818m
12)	AR1260-F	8.062	8.165	185.5E6	76935677	63.052m	54.572

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

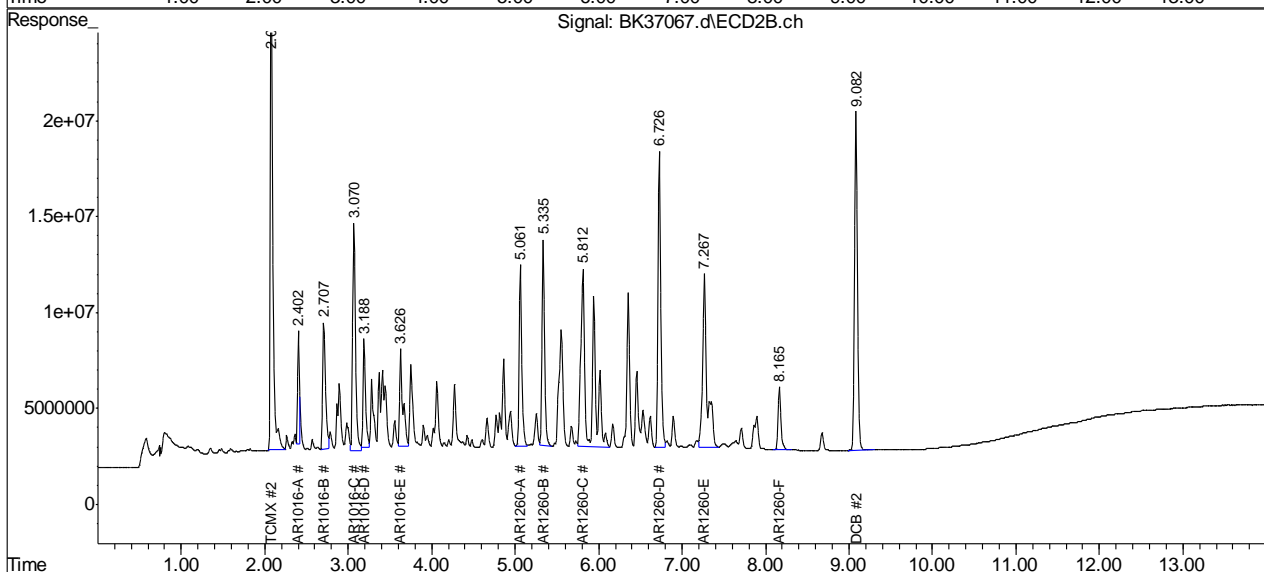
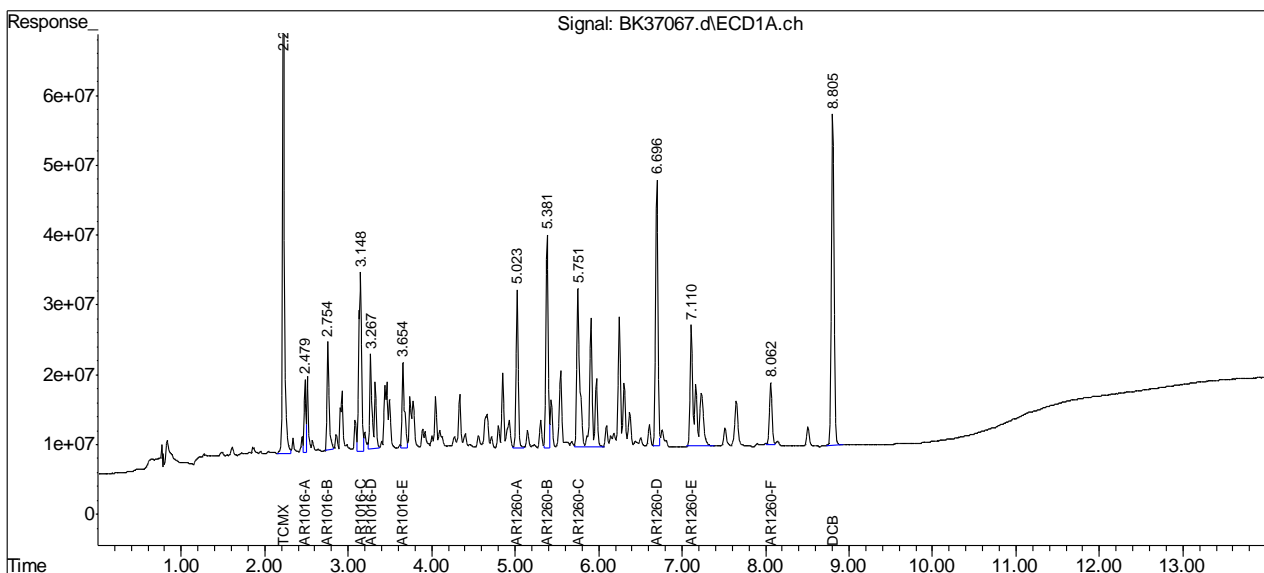
7.5.1
7

Quantitation Report (QT Reviewed)

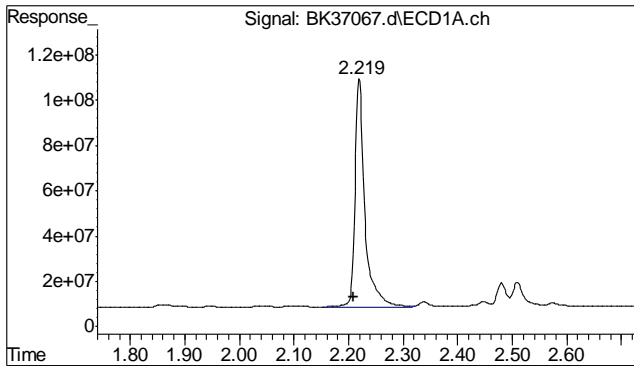
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37067.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:09 pm
 Operator : nickk
 Sample : ic1213-50,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:50:42 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Sat Apr 26 08:42:51 2014
 Response via : Initial Calibration
 Integrator: ChemStation

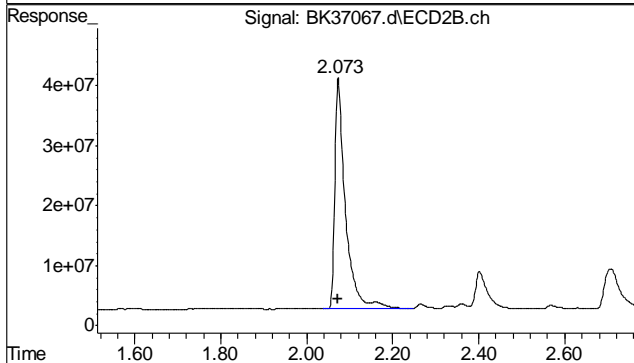
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



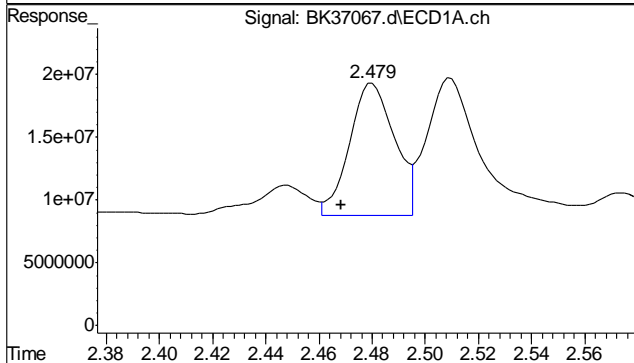
7.5.1
 7



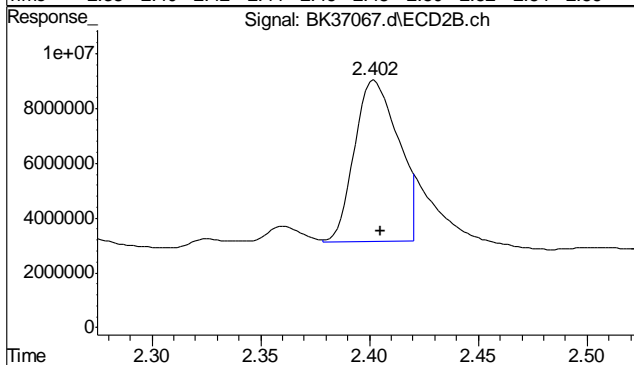
#1 TCMX
 R.T.: 2.220 min
 Delta R.T.: 0.010 min
 Response: 1257052847
 Conc: 8.83 ppb



#1 TCMX
 R.T.: 2.073 min
 Delta R.T.: 0.000 min
 Response: 664665296
 Conc: 7.99 ppb m

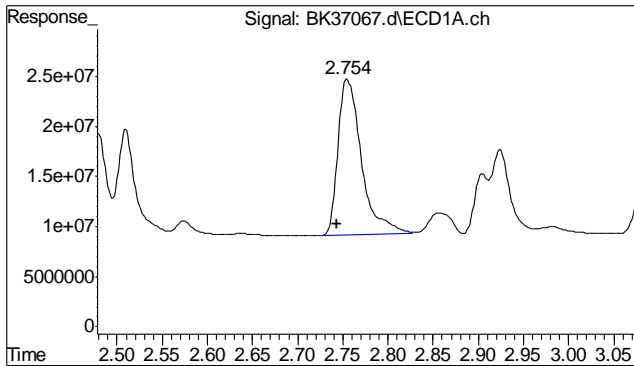


#2 AR1016-A
 R.T.: 2.480 min
 Delta R.T.: 0.012 min
 Response: 121759211
 Conc: 59.55 ppb

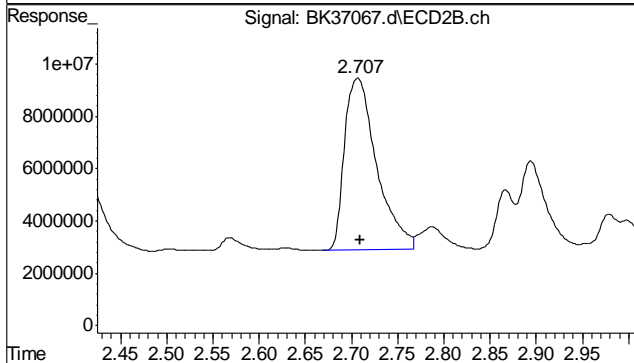


#2 AR1016-A
 R.T.: 2.402 min
 Delta R.T.: -0.004 min
 Response: 83680850
 Conc: 53.37 ppb m

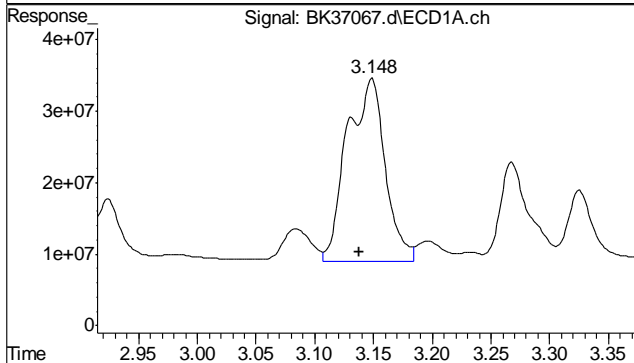
7.5.1
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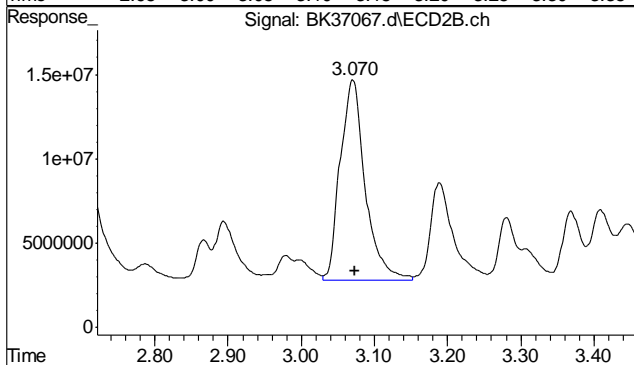
#3 AR1016-B
 R.T.: 2.754 min
 Delta R.T.: 0.011 min
 Response: 282386515
 Conc: 55.37 ppb m



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: -0.002 min
 Response: 160402747
 Conc: 53.28 ppb m

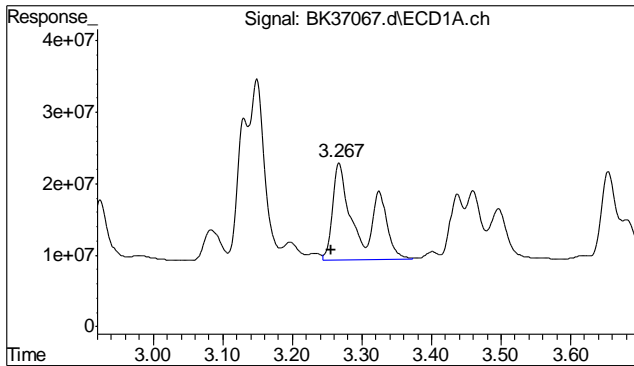


#4 AR1016-C
 R.T.: 3.149 min
 Delta R.T.: 0.011 min
 Response: 578517730
 Conc: 57.92 ppb

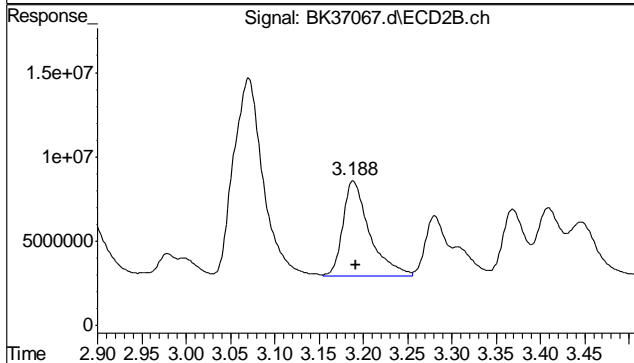


#4 AR1016-C
 R.T.: 3.071 min
 Delta R.T.: -0.002 min
 Response: 282390509
 Conc: 52.10 ppb

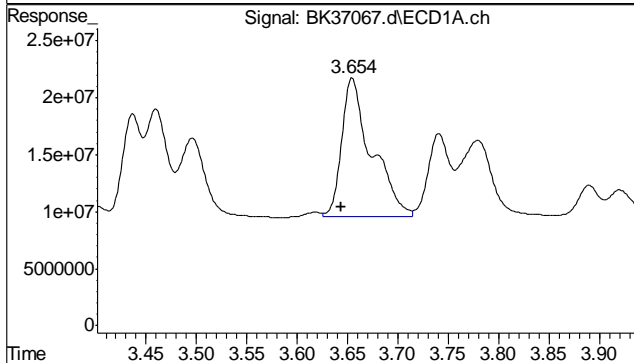
7.5.1
7



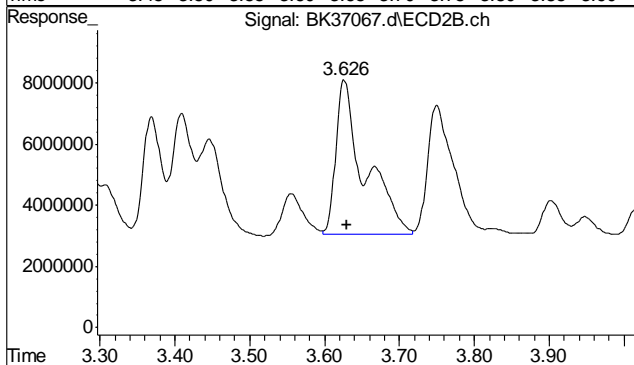
#5 AR1016-D
 R.T.: 3.267 min
 Delta R.T.: 0.011 min
 Response: 366815204
 Conc: 52.26 m



#5 AR1016-D
 R.T.: 3.188 min
 Delta R.T.: -0.004 min
 Response: 117293296
 Conc: 50.76 m

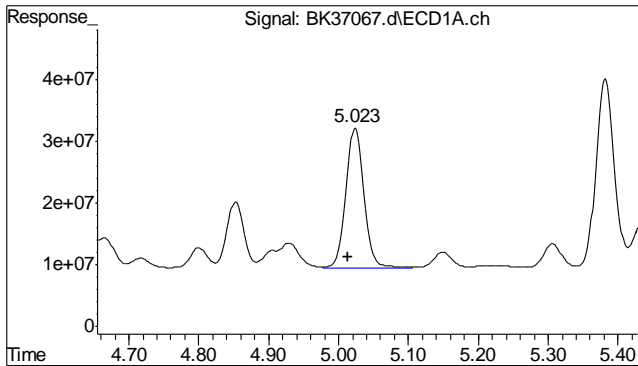


#6 AR1016-E
 R.T.: 3.654 min
 Delta R.T.: 0.010 min
 Response: 252505100
 Conc: 55.27 m

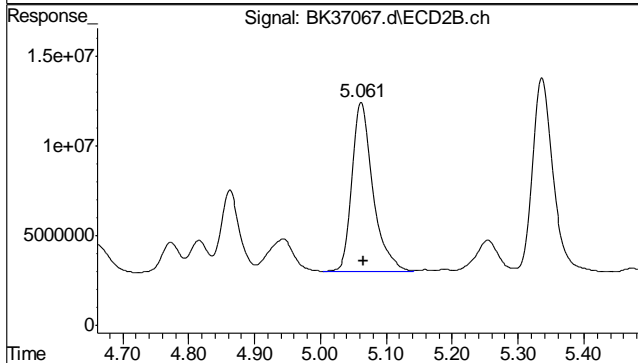


#6 AR1016-E
 R.T.: 3.626 min
 Delta R.T.: -0.004 min
 Response: 134372342
 Conc: 51.60 m

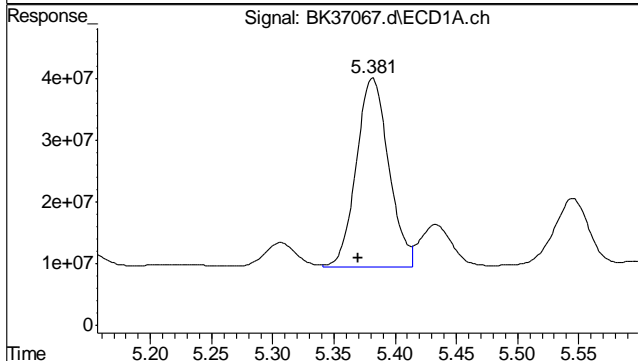
7.5.1
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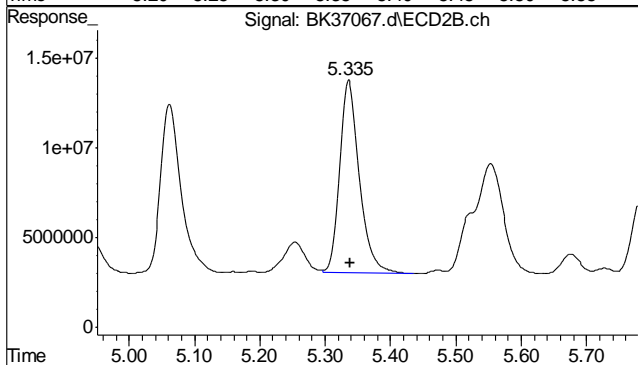
#7 AR1260-A
 R.T.: 5.023 min
 Delta R.T.: 0.010 min
 Response: 401223809
 Conc: 59.69 ppb m



#7 AR1260-A
 R.T.: 5.061 min
 Delta R.T.: -0.004 min
 Response: 205940417
 Conc: 55.36 ppb m

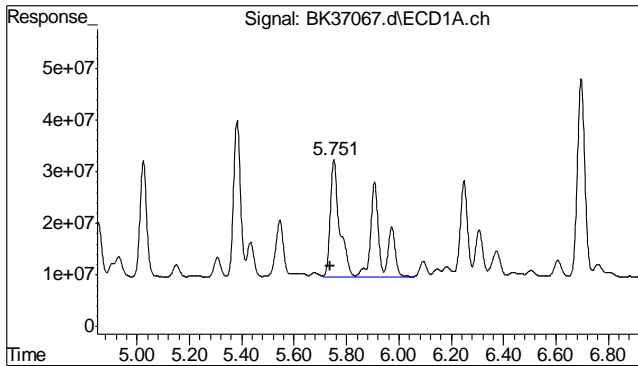


#8 AR1260-B
 R.T.: 5.382 min
 Delta R.T.: 0.012 min
 Response: 564525850
 Conc: 56.81 ppb

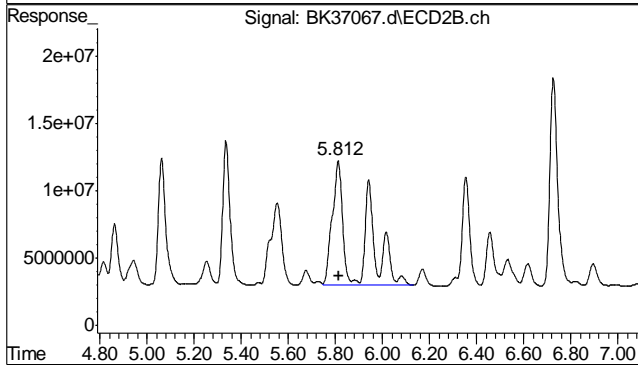


#8 AR1260-B
 R.T.: 5.335 min
 Delta R.T.: -0.003 min
 Response: 226744183
 Conc: 55.02 ppb m

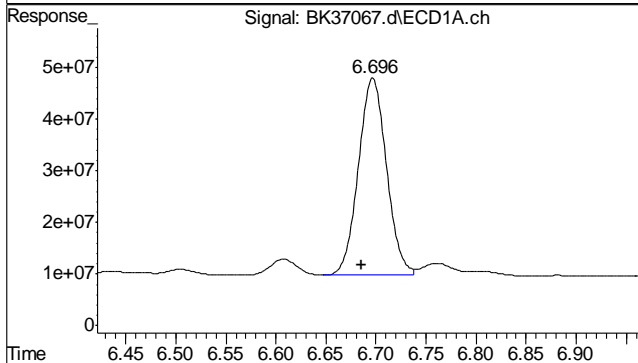
7.5.1
7



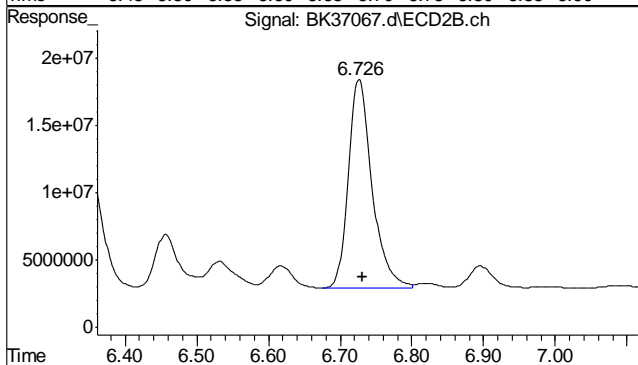
#9 AR1260-C
 R.T.: 5.751 min
 Delta R.T.: 0.012 min
 Response: 1115564947
 Conc: 57.05 ppb m



#9 AR1260-C
 R.T.: 5.812 min
 Delta R.T.: -0.004 min
 Response: 553463080
 Conc: 56.03 ppb m

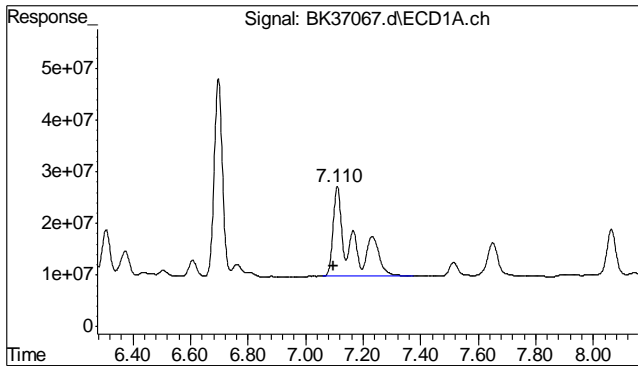


#10 AR1260-D
 R.T.: 6.696 min
 Delta R.T.: 0.011 min
 Response: 751573741
 Conc: 56.67 ppb m

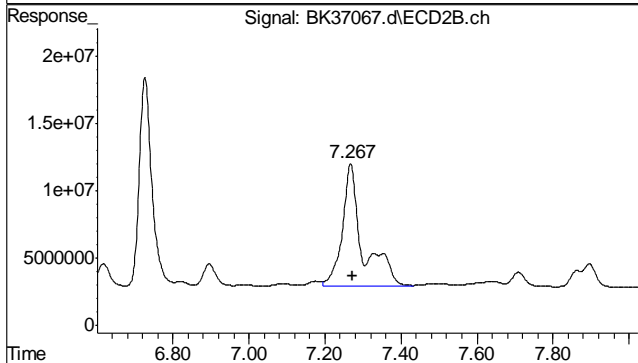


#10 AR1260-D
 R.T.: 6.726 min
 Delta R.T.: -0.005 min
 Response: 352637737
 Conc: 54.96 ppb m

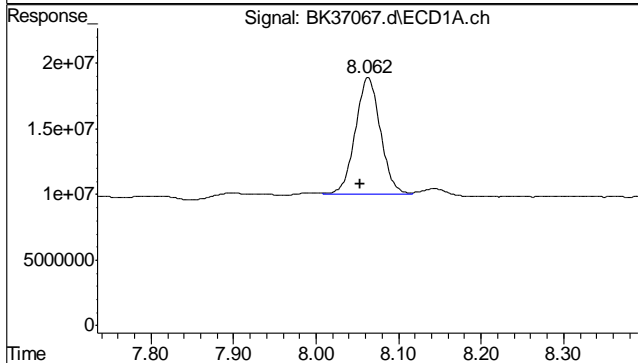
7.5.1
 7



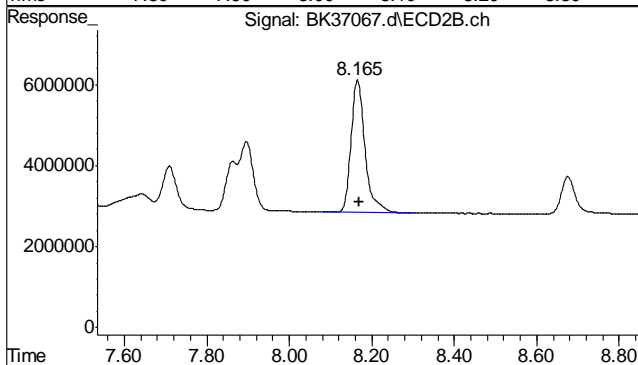
#11 AR1260-E
 R.T.: 7.110 min
 Delta R.T.: 0.012 min
 Response: 766306665
 Conc: 61.97 ppb m



#11 AR1260-E
 R.T.: 7.267 min
 Delta R.T.: -0.005 min
 Response: 341108040
 Conc: 57.82 ppb m

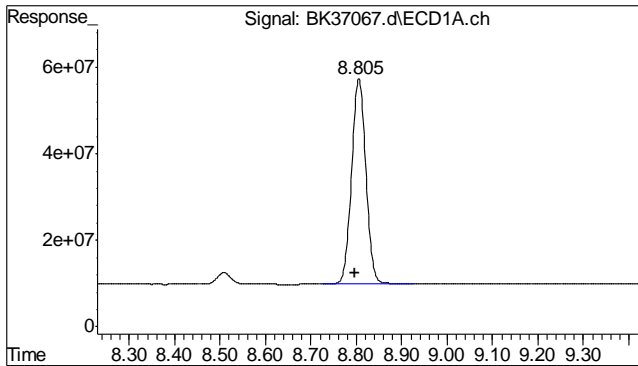


#12 AR1260-F
 R.T.: 8.062 min
 Delta R.T.: 0.009 min
 Response: 185541731
 Conc: 63.05 m

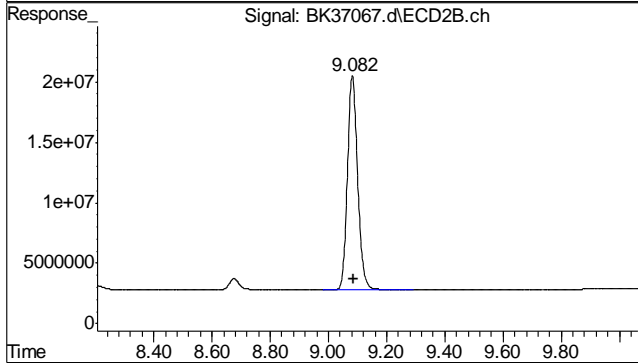


#12 AR1260-F
 R.T.: 8.165 min
 Delta R.T.: -0.004 min
 Response: 76935677
 Conc: 54.57

7.5.1
7



#13 DCB
 R.T.: 8.805 min
 Delta R.T.: 0.007 min
 Response: 1038581018
 Conc: 11.64 ppb m



#13 DCB
 R.T.: 9.083 min
 Delta R.T.: -0.005 min
 Response: 427327663
 Conc: 10.32 ppb

7.5.1
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37068.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:25 pm
 Operator : nickk
 Sample : ic1213-100,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:48:07 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 15:37:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.214	2.074	2370.8E6	1293.4E6	16.408	15.600m
	Spiked Amount	40.000		Recovery	=	41.02%	39.00%
13)	s DCB	8.800	9.082	1842.2E6	785.5E6	19.753m	18.329
	Spiked Amount	40.000		Recovery	=	49.38%	45.82%
Target Compounds							
2)	AR1016-A	2.473	2.405	238.3E6	170.0E6	113.107	107.308
3)	AR1016-B	2.747	2.708	562.7E6	319.4E6	108.530m	105.085
4)	AR1016-C	3.142	3.072	1105.7E6	579.4E6	108.356	105.454
5)	AR1016-D	3.260	3.190	734.5E6	251.3E6	104.398m	107.522
6)	AR1016-E	3.647	3.627	503.2E6	279.2E6	109.748	105.665m
7)	AR1260-A	5.016	5.062	721.3E6	410.8E6	106.935	108.839m
8)	AR1260-B	5.374	5.336	1082.5E6	461.4E6	108.110	110.739m
9)	AR1260-C	5.744	5.813	2176.7E6	1111.5E6	110.586m	109.657m
10)	AR1260-D	6.691	6.726	1513.0E6	731.5E6	113.002	112.017m
11)	AR1260-E	7.104	7.267	1514.3E6	669.3E6	120.824m	110.952m
12)	AR1260-F	8.058	8.166	371.2E6	158.7E6	123.101m	110.483

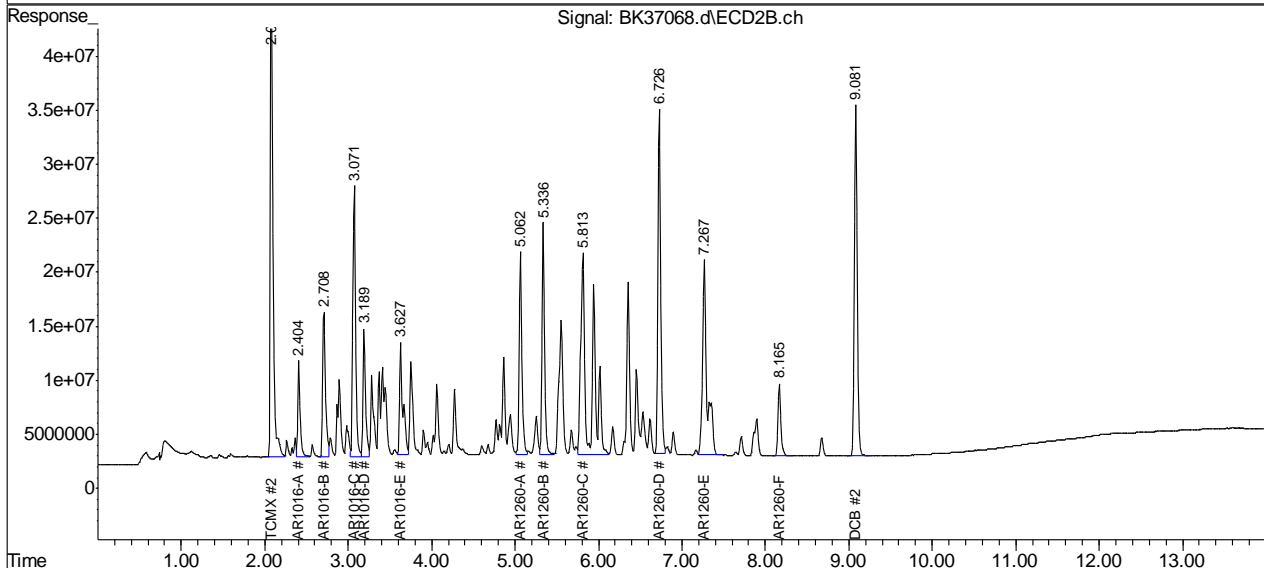
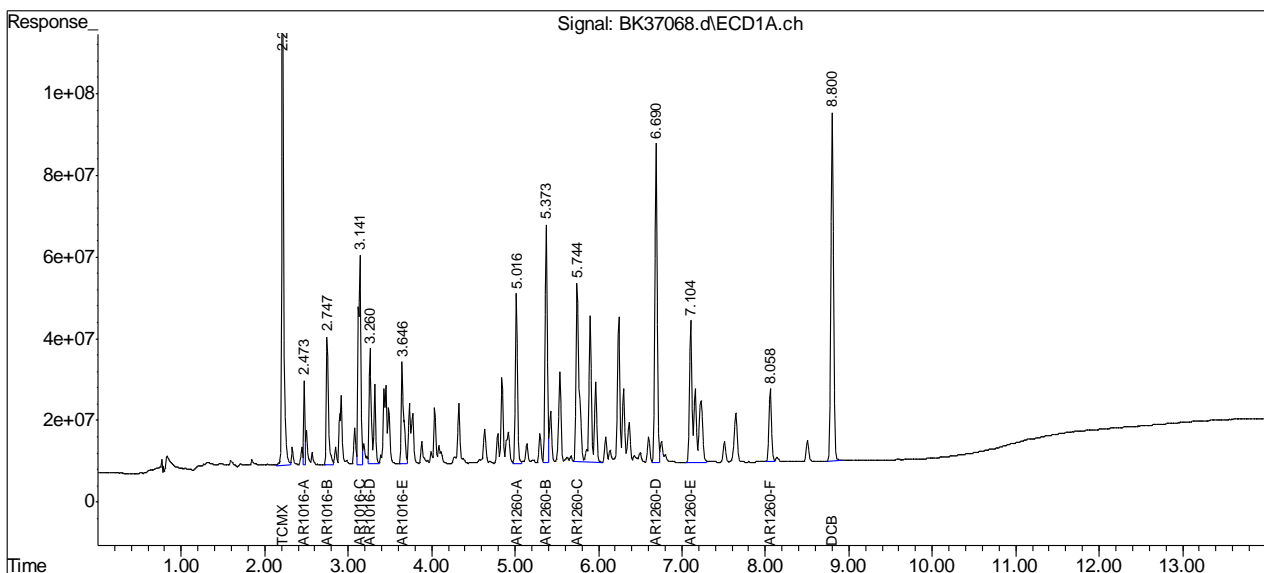
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

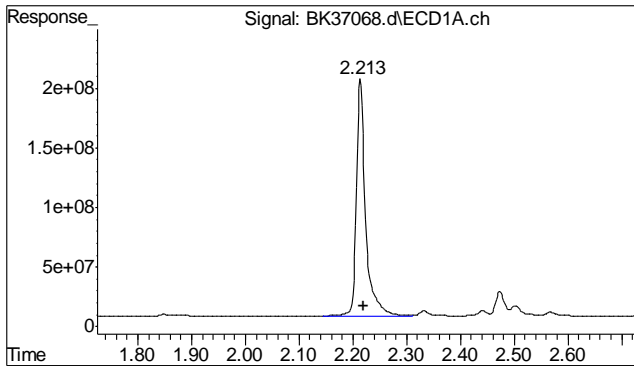
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37068.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:25 pm
 Operator : nickk
 Sample : ic1213-100,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:48:07 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 15:37:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation

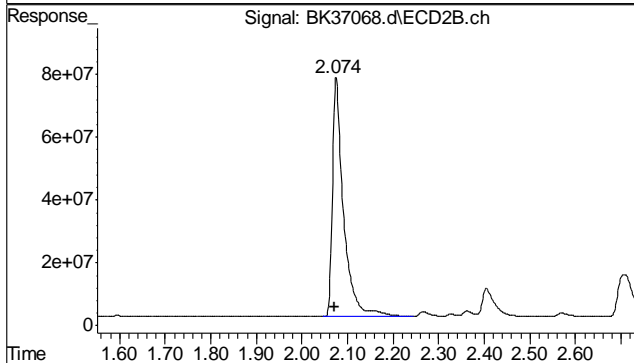
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



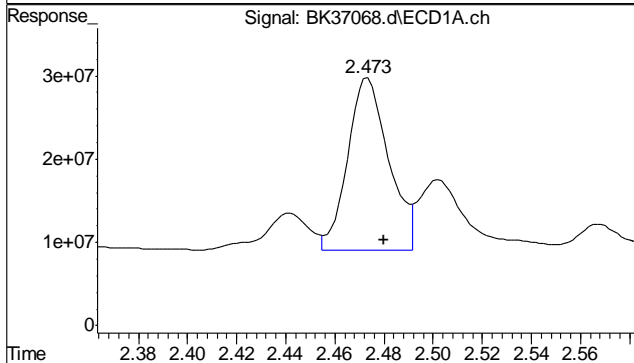
7.5.2
 7



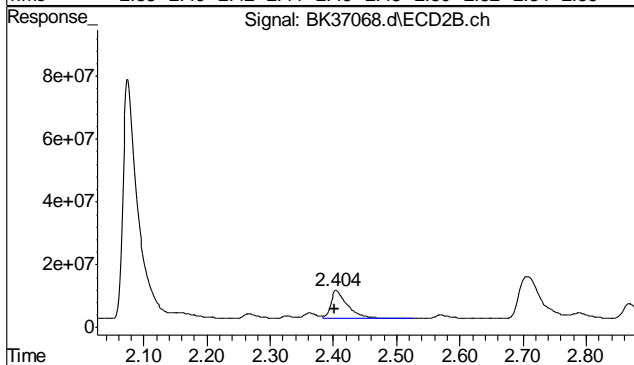
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: -0.006 min
 Response: 2370790990
 Conc: 16.41 ppb



#1 TCMX
 R.T.: 2.074 min
 Delta R.T.: 0.002 min
 Response: 1293437297
 Conc: 15.60 ppb m

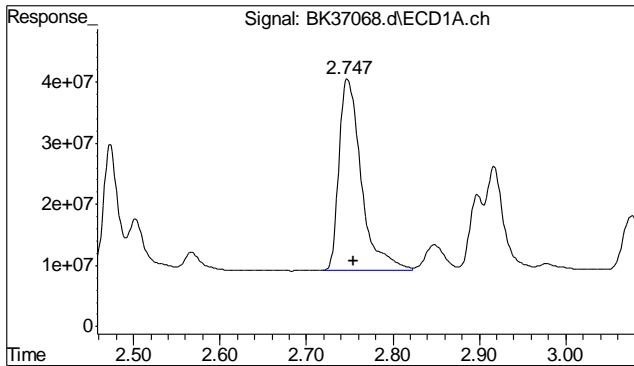


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: -0.007 min
 Response: 238268170
 Conc: 113.11 ppb

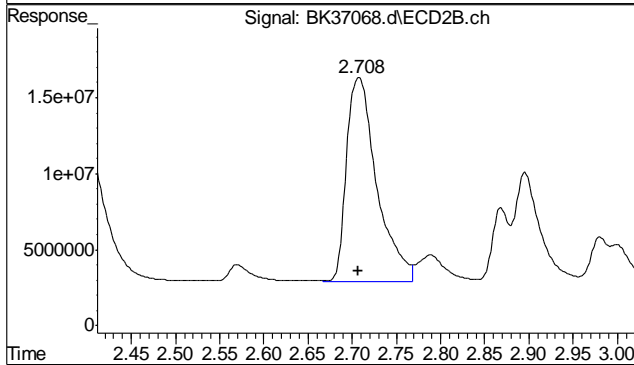


#2 AR1016-A
 R.T.: 2.405 min
 Delta R.T.: 0.004 min
 Response: 170035509
 Conc: 107.31 ppb

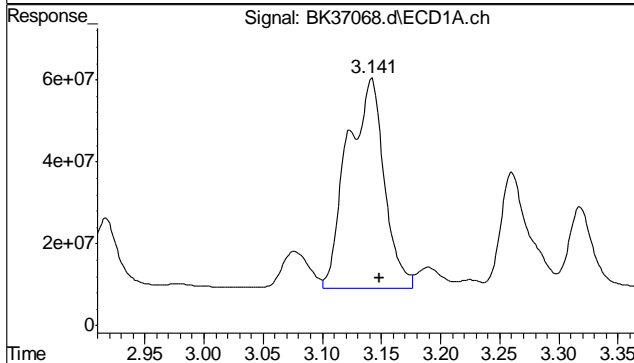
7.5.2
 7



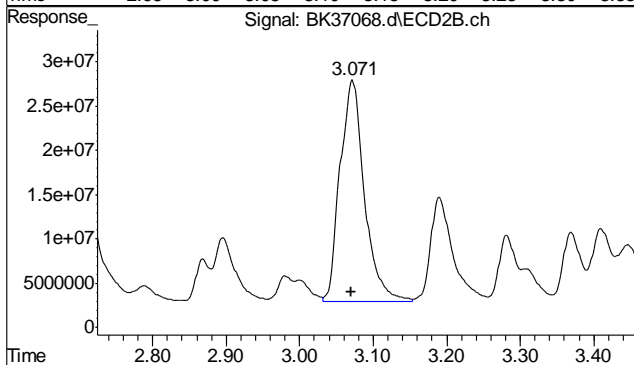
#3 AR1016-B
 R.T.: 2.747 min
 Delta R.T.: -0.009 min
 Response: 562720933
 Conc: 108.53 ppb m



#3 AR1016-B
 R.T.: 2.708 min
 Delta R.T.: 0.001 min
 Response: 319445471
 Conc: 105.09 ppb

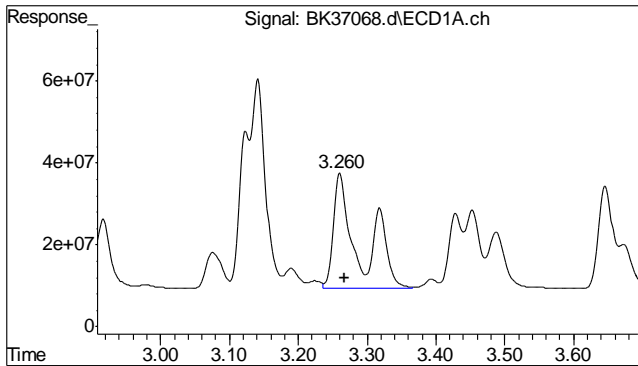


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: -0.007 min
 Response: 1105656593
 Conc: 108.36 ppb

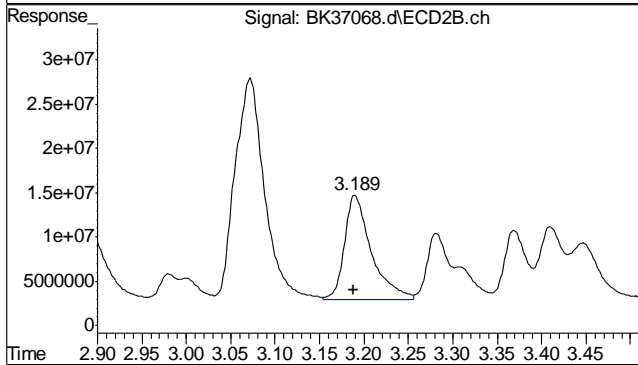


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.001 min
 Response: 579401689
 Conc: 105.45 ppb

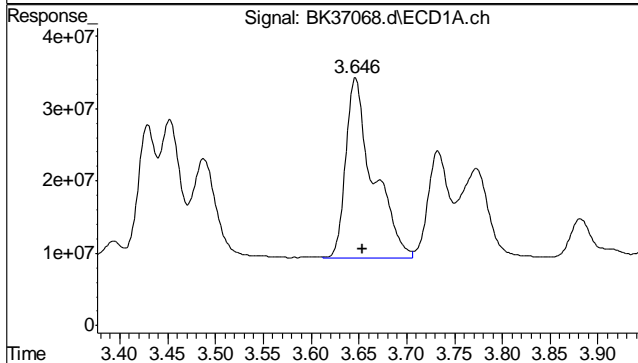
7.5.2
 7



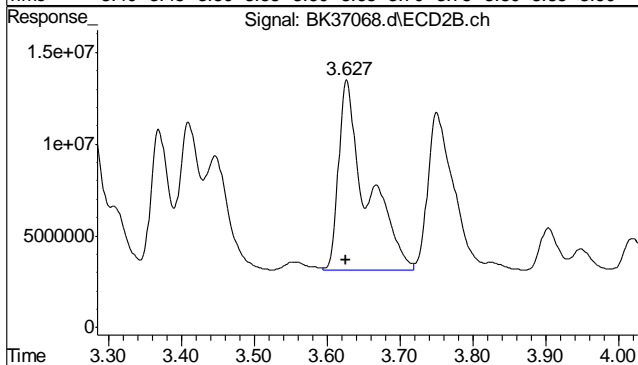
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: -0.007 min
 Response: 734461143
 Conc: 104.40 m



#5 AR1016-D
 R.T.: 3.190 min
 Delta R.T.: 0.002 min
 Response: 251306113
 Conc: 107.52

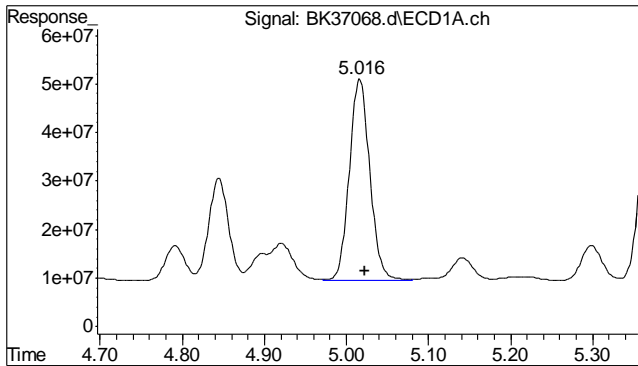


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: -0.007 min
 Response: 503156002
 Conc: 109.75

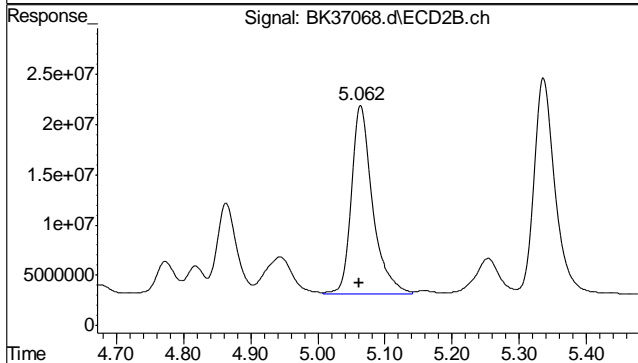


#6 AR1016-E
 R.T.: 3.627 min
 Delta R.T.: 0.001 min
 Response: 279229366
 Conc: 105.67 m

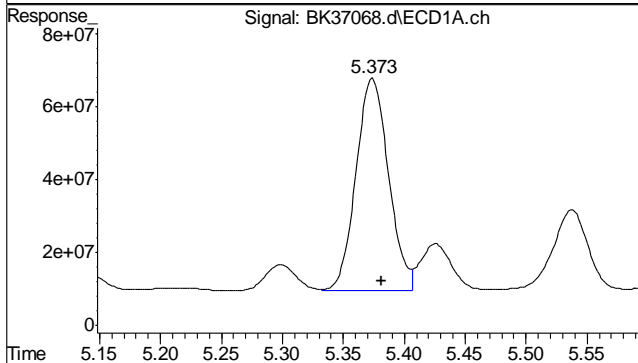
7.5.2
 7



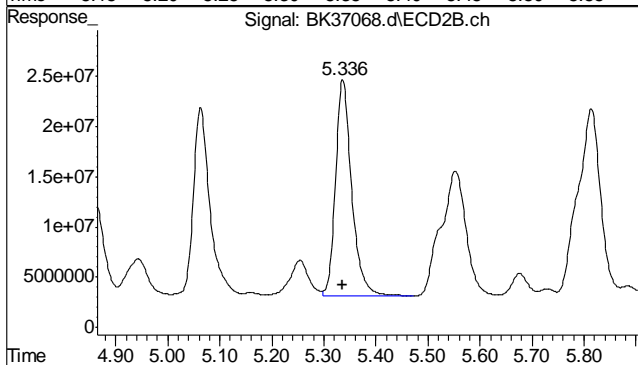
#7 AR1260-A
 R.T.: 5.016 min
 Delta R.T.: -0.007 min
 Response: 721325152
 Conc: 106.94 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 410779389
 Conc: 108.84 ppb m

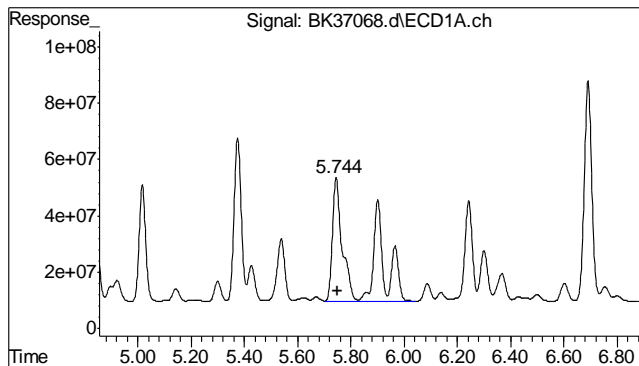


#8 AR1260-B
 R.T.: 5.374 min
 Delta R.T.: -0.008 min
 Response: 1082464877
 Conc: 108.11 ppb



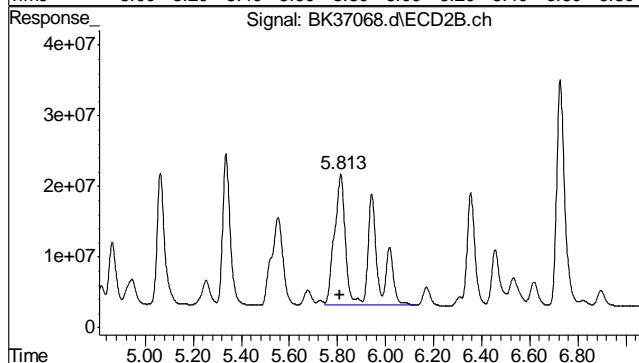
#8 AR1260-B
 R.T.: 5.336 min
 Delta R.T.: 0.000 min
 Response: 46135266
 Conc: 110.74 ppb m

7.5.2
7



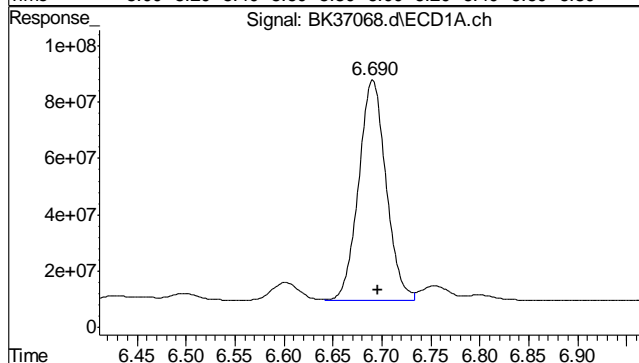
#9 AR1260-C

R.T.: 5.744 min
 Delta R.T.: -0.007 min
 Response: 2176668141
 Conc: 110.59 ppb m



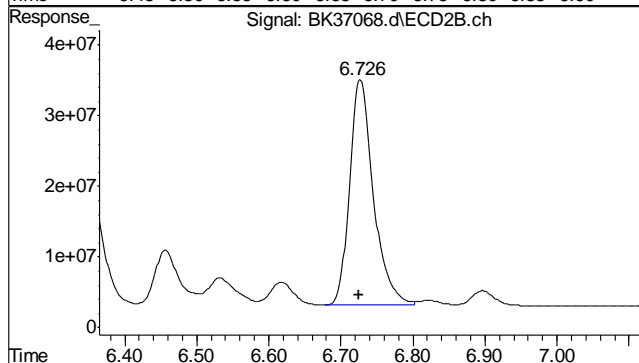
#9 AR1260-C

R.T.: 5.813 min
 Delta R.T.: 0.001 min
 Response: 1111473050
 Conc: 109.66 ppb m



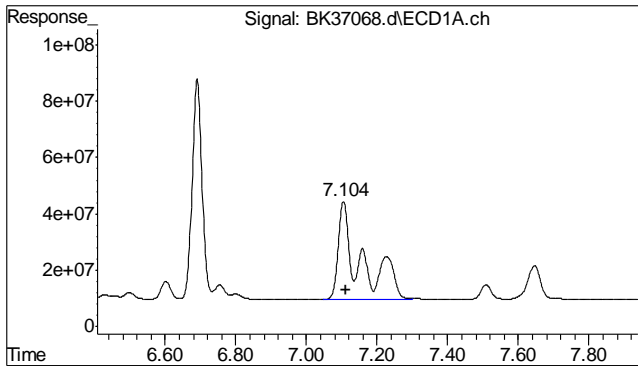
#10 AR1260-D

R.T.: 6.691 min
 Delta R.T.: -0.005 min
 Response: 1513028814
 Conc: 113.00 ppb

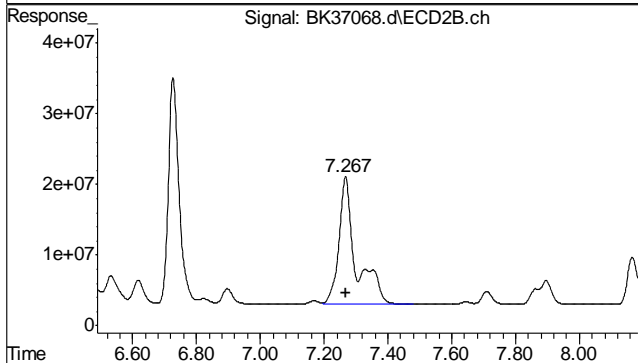


#10 AR1260-D

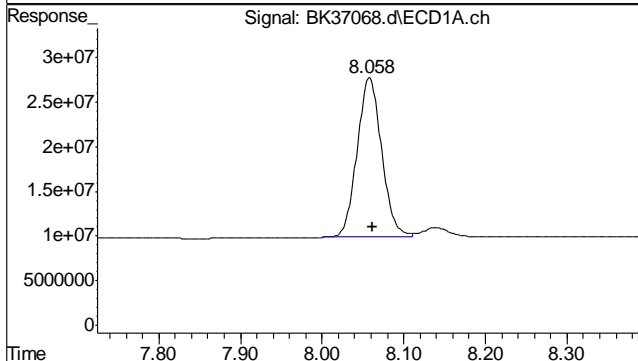
R.T.: 6.726 min
 Delta R.T.: 0.000 min
 Response: 731521884
 Conc: 112.02 ppb m



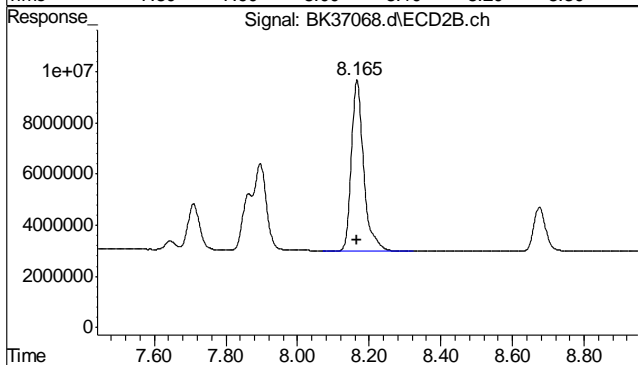
#11 AR1260-E
 R.T.: 7.104 min
 Delta R.T.: -0.006 min
 Response: 1514336435
 Conc: 120.82 ppb m



#11 AR1260-E
 R.T.: 7.267 min
 Delta R.T.: 0.000 min
 Response: 669297479
 Conc: 110.95 ppb m

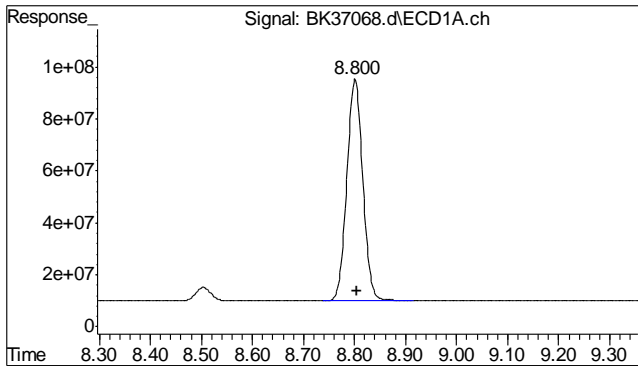


#12 AR1260-F
 R.T.: 8.058 min
 Delta R.T.: -0.005 min
 Response: 371161735
 Conc: 123.10 m

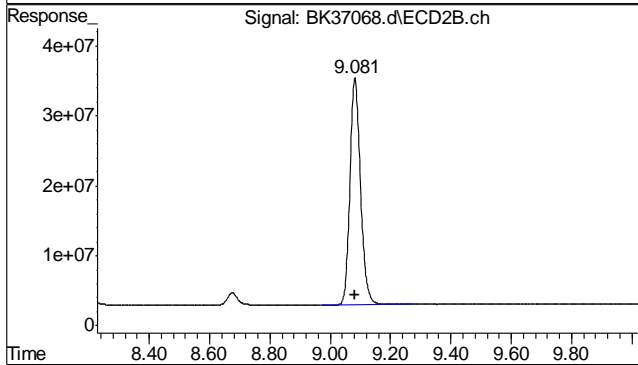


#12 AR1260-F
 R.T.: 8.166 min
 Delta R.T.: 0.000 min
 Response: 158692882
 Conc: 110.48

7.5.2
 7



#13 DCB
 R.T.: 8.800 min
 Delta R.T.: -0.004 min
 Response: 1842213542
 Conc: 19.75 ppb m



#13 DCB
 R.T.: 9.082 min
 Delta R.T.: 0.000 min
 Response: 785520881
 Conc: 18.33 ppb

7.5.2
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37069.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:41 pm
 Operator : nickk
 Sample : ic1213-250,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:47:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 15:46:08 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds							
1) s	TCMX	2.214	2.075	6033.8E6	3337.5E6	41.259	39.957
	Spiked Amount	40.000		Recovery	=	103.15%	99.89%
13) s	DCB	8.801	9.082	4823.8E6	2168.2E6	49.803m	49.309
	Spiked Amount	40.000		Recovery	=	124.51%	123.27%
Target Compounds							
2)	AR1016-A	2.473	2.404	571.0E6	389.9E6	263.720	241.679m
3)	AR1016-B	2.746	2.706	1319.1E6	785.7E6	251.851m	255.438
4)	AR1016-C	3.142	3.072	2730.3E6	1511.6E6	261.875	270.078
5)	AR1016-D	3.259	3.189	1835.3E6	635.9E6	257.929m	266.537
6)	AR1016-E	3.647	3.626	1219.9E6	701.9E6	261.860	261.201m
7)	AR1260-A	5.016	5.061	1753.9E6	1024.9E6	256.151	266.109m
8)	AR1260-B	5.373	5.335	2660.7E6	1158.7E6	262.031	272.248m
9)	AR1260-C	5.743	5.812	5477.8E6	2853.3E6	273.017m	274.778m
10)	AR1260-D	6.690	6.726	3861.2E6	1969.3E6	282.246	292.992
11)	AR1260-E	7.104	7.267	3792.1E6	1817.2E6	292.601m	293.330m
12)	AR1260-F	8.058	8.166	973.4E6	444.9E6	311.779	302.767

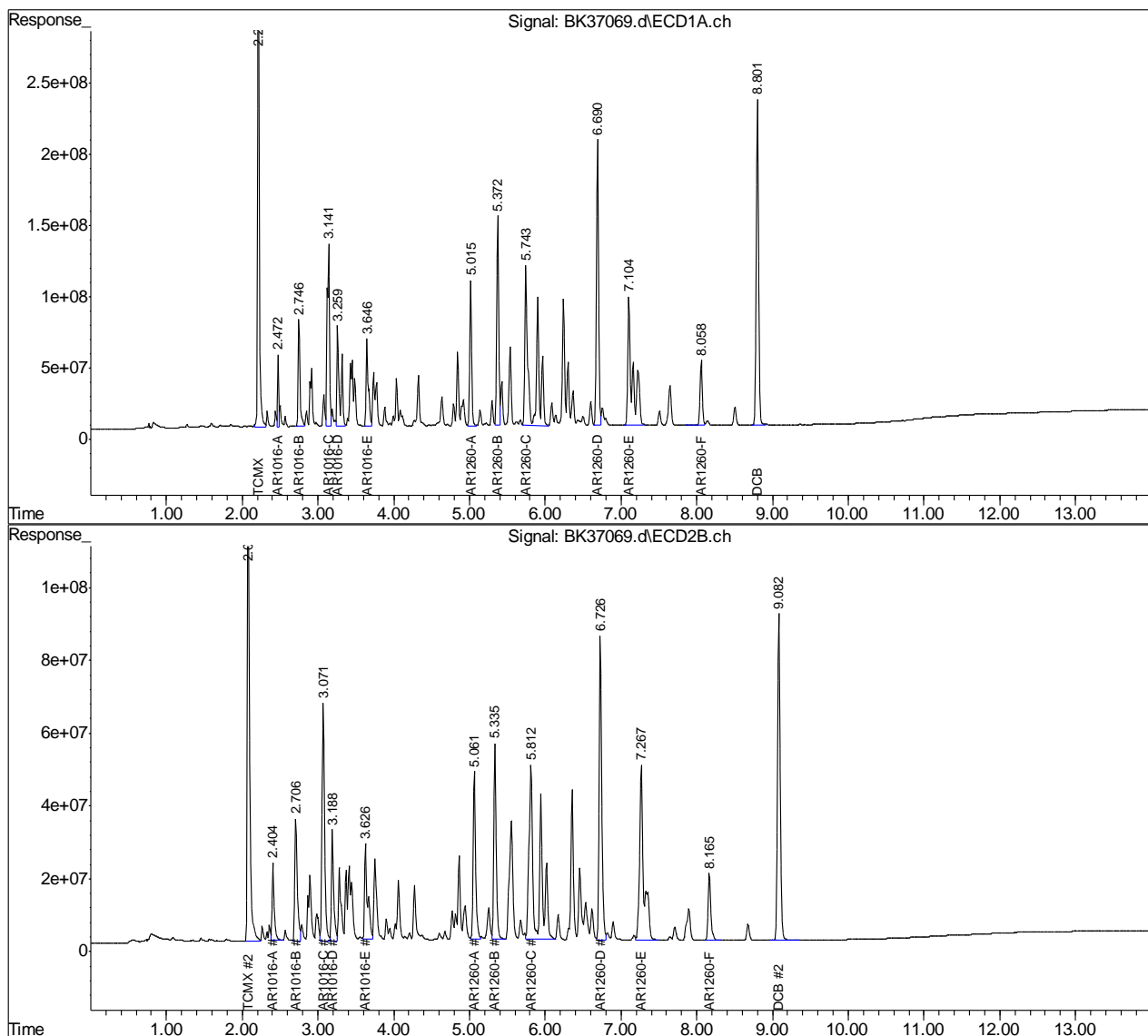
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

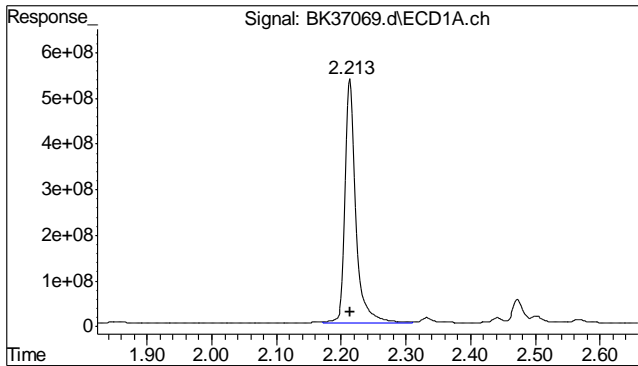
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37069.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:41 pm
 Operator : nickk
 Sample : ic1213-250,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 53 Sample Multiplier: 1

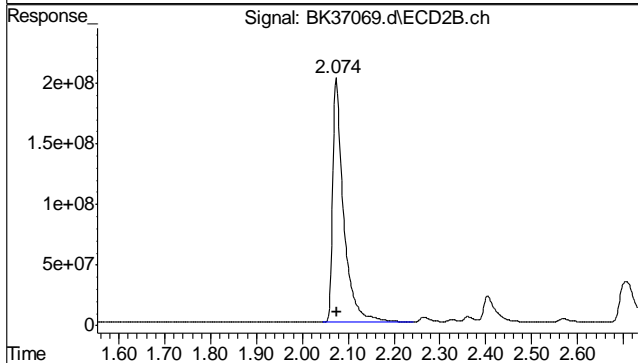
Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:47:47 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 15:46:08 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

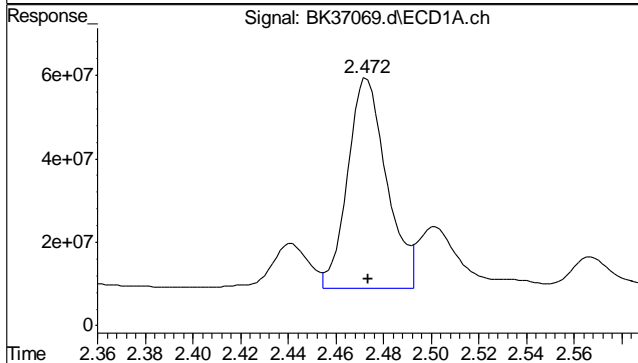




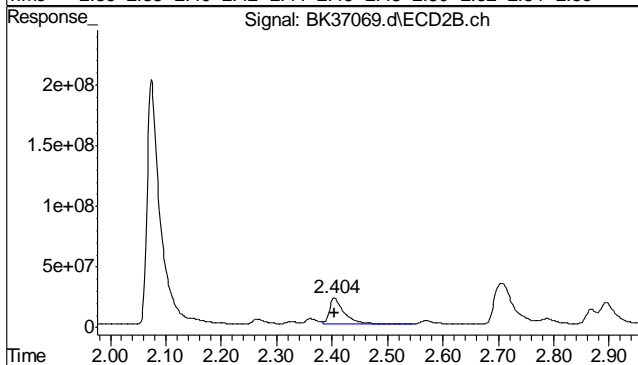
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 6033779679
 Conc: 41.26 ppb



#1 TCMX
 R.T.: 2.075 min
 Delta R.T.: 0.000 min
 Response: 3337535683
 Conc: 39.96 ppb

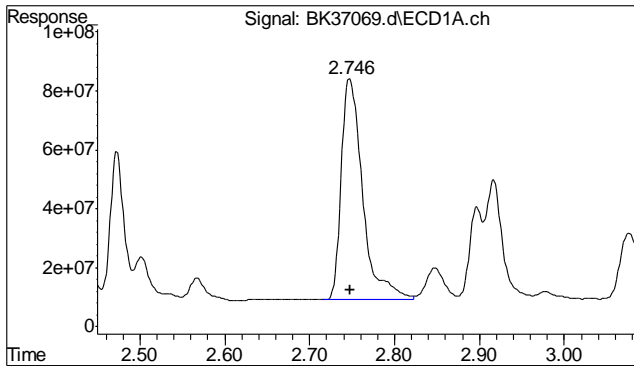


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 570985932
 Conc: 263.72 ppb

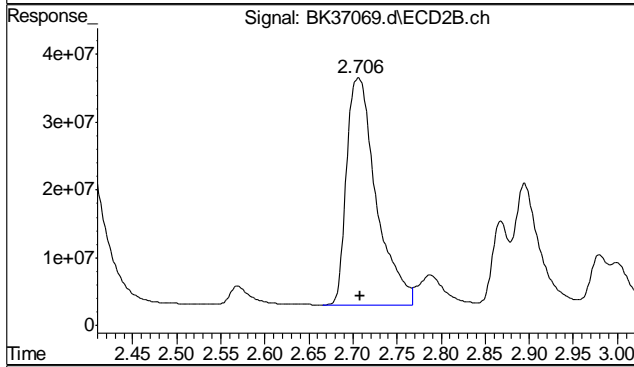


#2 AR1016-A
 R.T.: 2.404 min
 Delta R.T.: -0.002 min
 Response: 389903273
 Conc: 241.68 ppb m

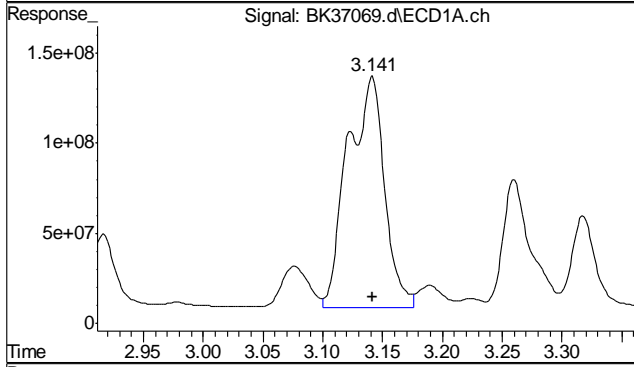
7.5.3
 7



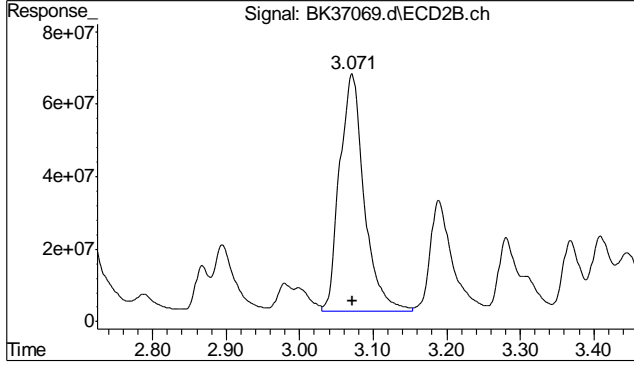
#3 AR1016-B
 R.T.: 2.746 min
 Delta R.T.: -0.002 min
 Response: 1319132759
 Conc: 251.85 ppb m



#3 AR1016-B
 R.T.: 2.706 min
 Delta R.T.: -0.001 min
 Response: 785653902
 Conc: 255.44 ppb

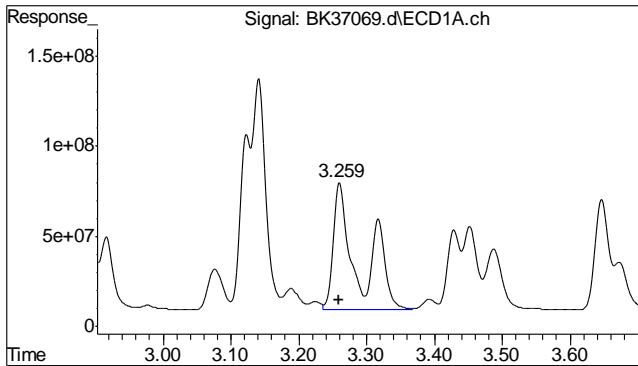


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 2730298185
 Conc: 261.88 ppb

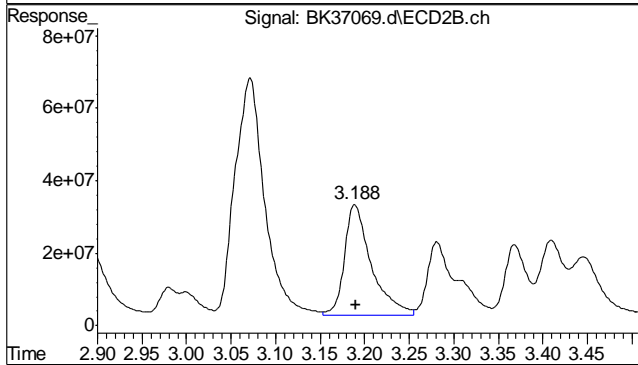


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 1511646356
 Conc: 270.08 ppb

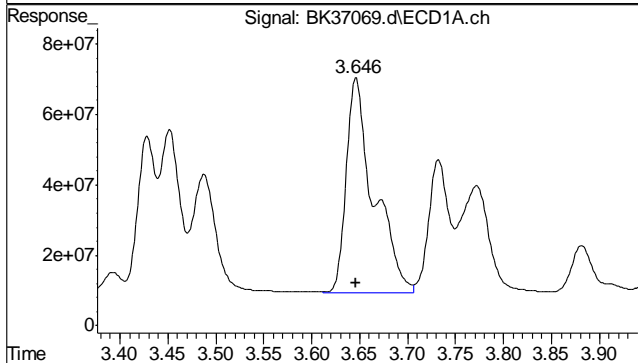
7.5.3
 7



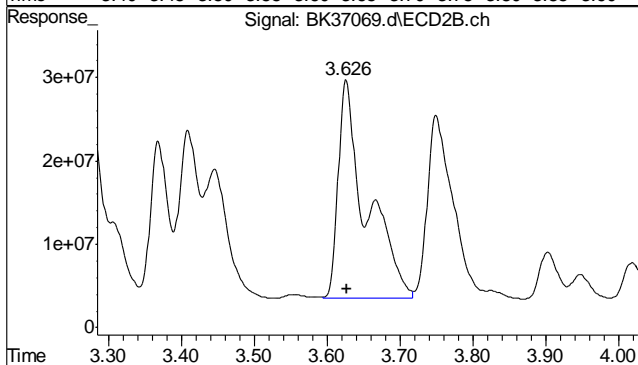
#5 AR1016-D
 R.T.: 3.259 min
 Delta R.T.: 0.000 min
 Response: 1835294069
 Conc: 257.93 m



#5 AR1016-D
 R.T.: 3.189 min
 Delta R.T.: 0.000 min
 Response: 635853758
 Conc: 266.54

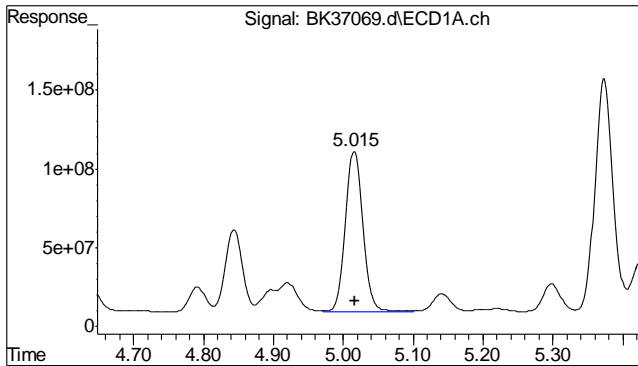


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: 0.000 min
 Response: 1219877228
 Conc: 261.86

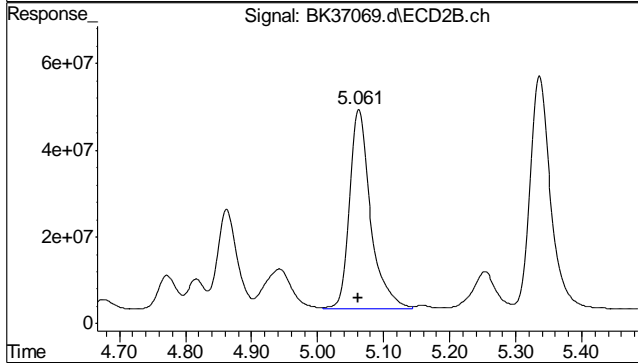


#6 AR1016-E
 R.T.: 3.626 min
 Delta R.T.: 0.000 min
 Response: 701861126
 Conc: 261.20 m

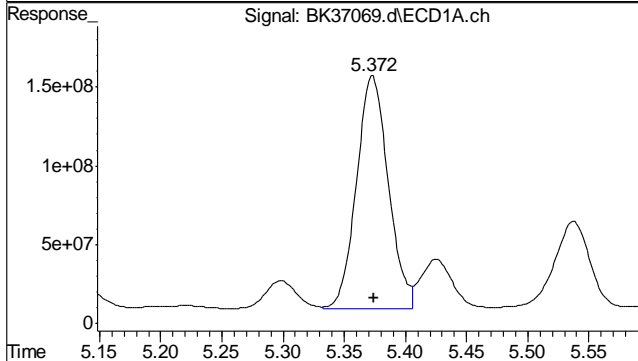
7.5.3
7



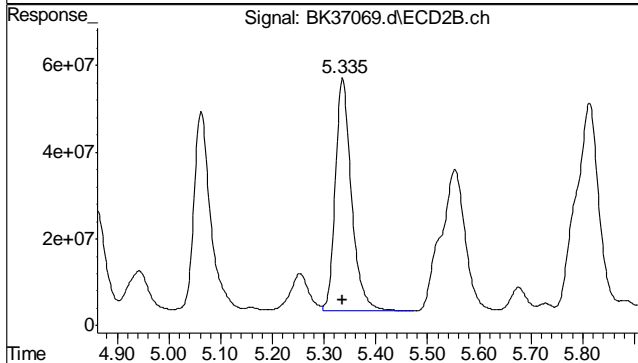
#7 AR1260-A
 R.T.: 5.016 min
 Delta R.T.: 0.000 min
 Response: 1753867042
 Conc: 256.15 ppb



#7 AR1260-A
 R.T.: 5.061 min
 Delta R.T.: 0.000 min
 Response: 1024929638
 Conc: 266.11 ppb m

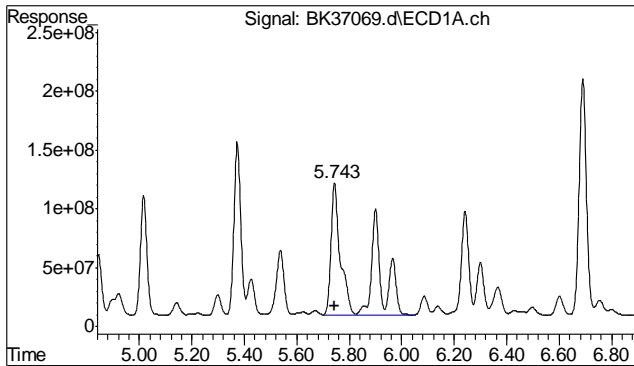


#8 AR1260-B
 R.T.: 5.373 min
 Delta R.T.: 0.000 min
 Response: 2660735959
 Conc: 262.03 ppb

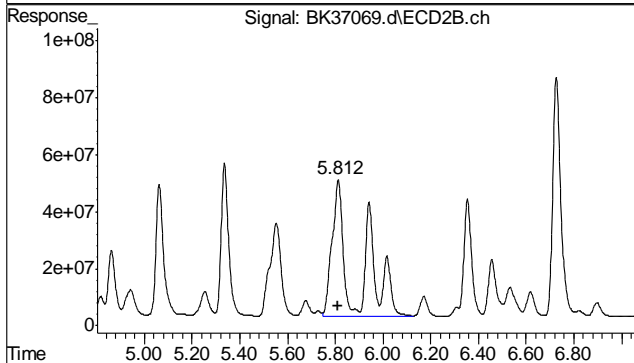


#8 AR1260-B
 R.T.: 5.335 min
 Delta R.T.: 0.000 min
 Response: 1158662062
 Conc: 272.25 ppb m

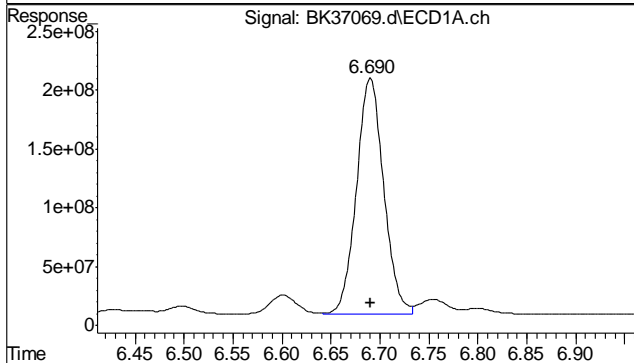
7.5.3
 7



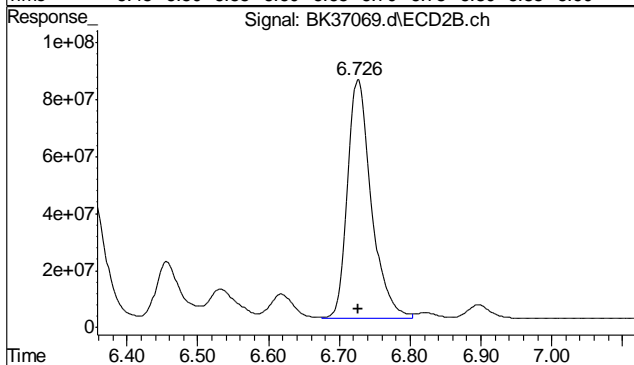
#9 AR1260-C
 R.T.: 5.743 min
 Delta R.T.: 0.000 min
 Response: 5477808181
 Conc: 273.02 ppb m



#9 AR1260-C
 R.T.: 5.812 min
 Delta R.T.: -0.001 min
 Response: 2853279420
 Conc: 274.78 ppb m

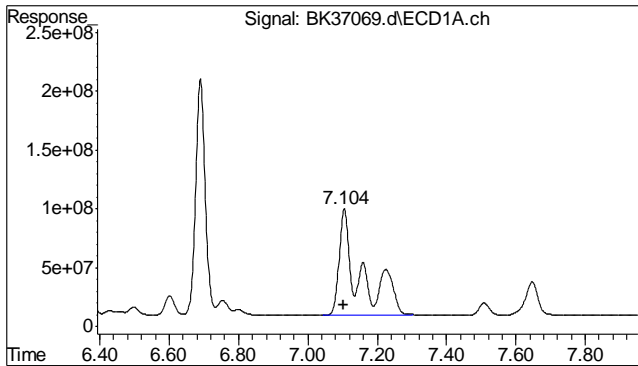


#10 AR1260-D
 R.T.: 6.690 min
 Delta R.T.: 0.000 min
 Response: 3861236915
 Conc: 282.25 ppb

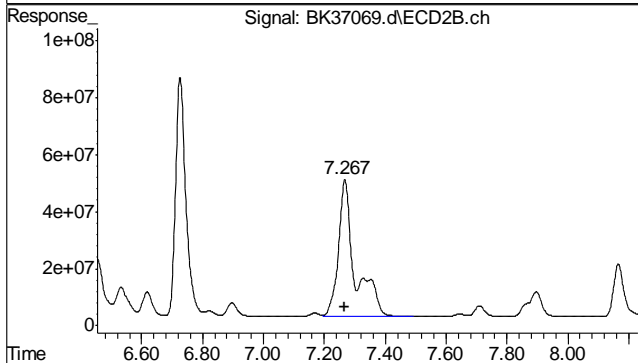


#10 AR1260-D
 R.T.: 6.726 min
 Delta R.T.: 0.000 min
 Response: 1969322521
 Conc: 292.99 ppb

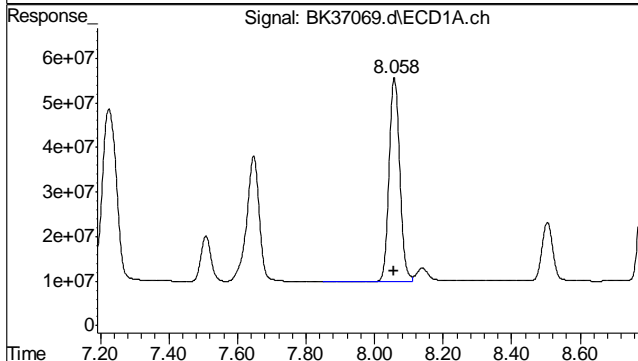
7.5.3
 7



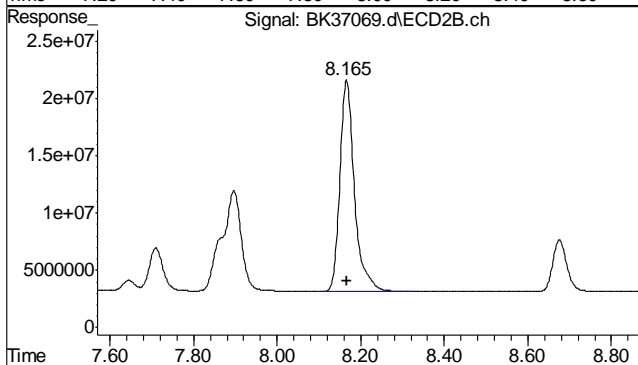
#11 AR1260-E
 R.T.: 7.104 min
 Delta R.T.: 0.000 min
 Response: 3792123137
 Conc: 292.60 ppb m



#11 AR1260-E
 R.T.: 7.267 min
 Delta R.T.: 0.000 min
 Response: 1817221864
 Conc: 293.33 ppb m

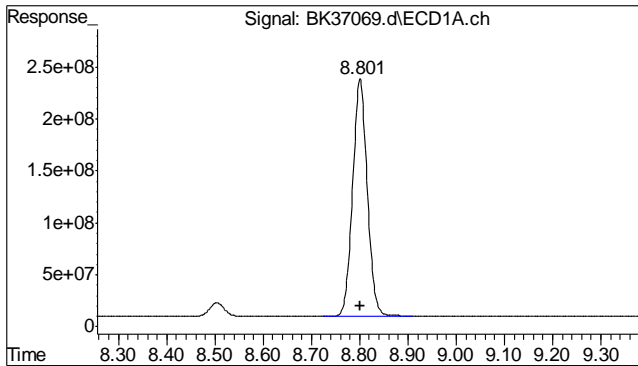


#12 AR1260-F
 R.T.: 8.058 min
 Delta R.T.: 0.000 min
 Response: 973436604
 Conc: 311.78

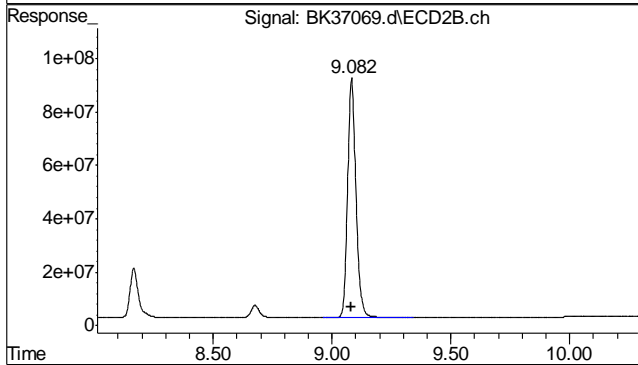


#12 AR1260-F
 R.T.: 8.166 min
 Delta R.T.: 0.000 min
 Response: 444910778
 Conc: 302.77

7.5.3
7



#13 DCB
 R.T.: 8.801 min
 Delta R.T.: 0.000 min
 Response: 4823797329
 Conc: 49.80 ppb m



#13 DCB
 R.T.: 9.082 min
 Delta R.T.: 0.000 min
 Response: 2168164655
 Conc: 49.31 ppb

7.5.3
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37070.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:57 pm
 Operator : nickk
 Sample : icc1213-500,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:15 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:06:14 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.214	2.075	6622.8E6	3778.1E6	44.571m	44.878m
	Spiked Amount	40.000		Recovery	=	111.43%	112.19%
13)	s DCB	8.801	9.082	5086.5E6	2325.5E6	49.351m	50.015m
	Spiked Amount	40.000		Recovery	=	123.38%	125.04%
Target Compounds							
2)	AR1016-A	2.473	2.405	1010.2E6	697.5E6	455.830m	428.931m
3)	AR1016-B	2.747	2.707	2326.8E6	1404.8E6	440.345m	452.449m
4)	AR1016-C	3.142	3.072	4924.9E6	2875.3E6	462.797	502.779
5)	AR1016-D	3.260	3.189	3334.6E6	1156.5E6	462.032m	475.123m
6)	AR1016-E	3.647	3.627	2182.1E6	1282.6E6	461.779	470.070m
7)	AR1260-A	5.016	5.062	3165.5E6	1839.6E6	457.081	469.328m
8)	AR1260-B	5.374	5.335	4784.1E6	2103.1E6	464.419	482.847m
9)	AR1260-C	5.744	5.813	9745.6E6	5216.7E6	474.593m	489.852m
10)	AR1260-D	6.692	6.727	6931.1E6	3543.9E6	491.709	506.338m
11)	AR1260-E	7.104	7.267	6710.8E6	3326.4E6	496.843m	515.137m
12)	AR1260-F	8.059	8.167	1679.4E6	815.8E6	510.013m	529.547

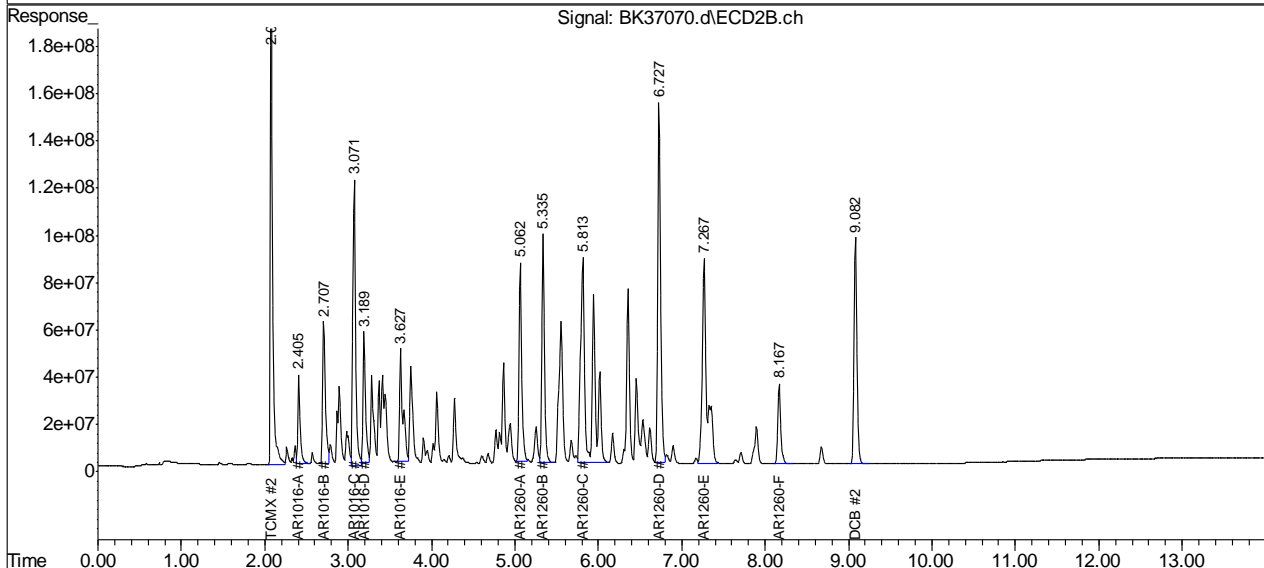
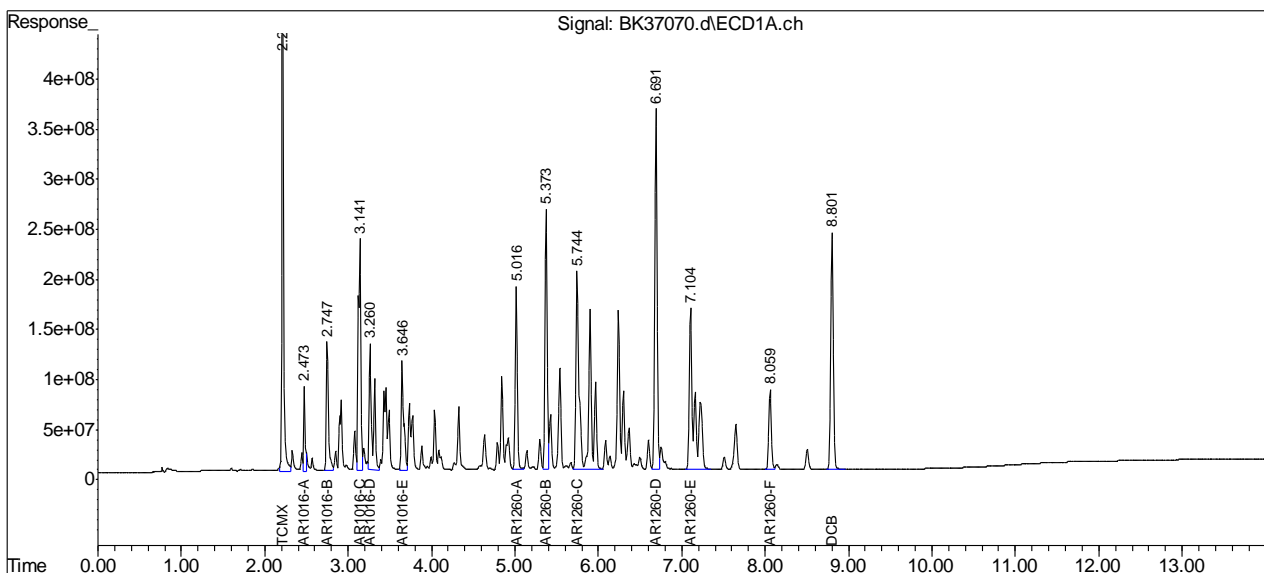
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

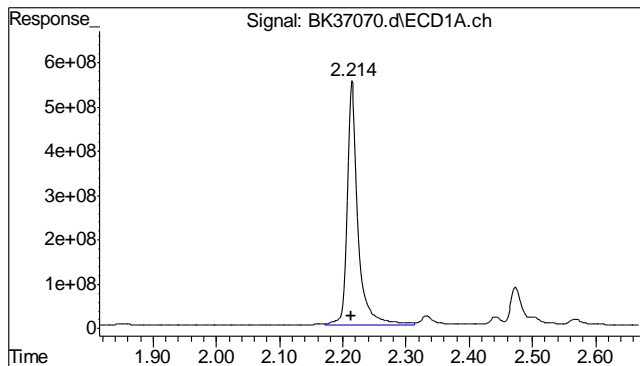
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37070.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 3:57 pm
 Operator : nickk
 Sample : iccl1213-500,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:15 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:06:14 2014
 Response via : Initial Calibration
 Integrator: ChemStation

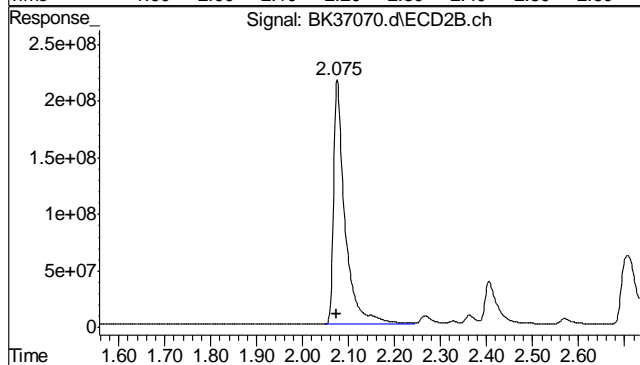
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



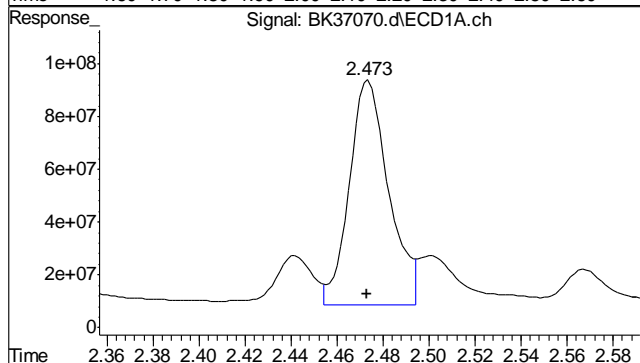
7.54
 7



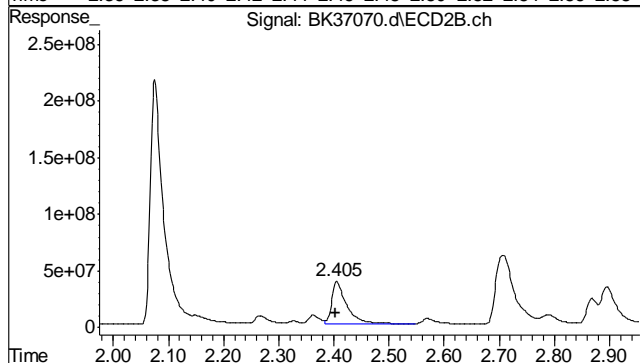
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 6622785611
 Conc: 44.57 ppb m



#1 TCMX
 R.T.: 2.075 min
 Delta R.T.: 0.000 min
 Response: 3778126838
 Conc: 44.88 ppb m

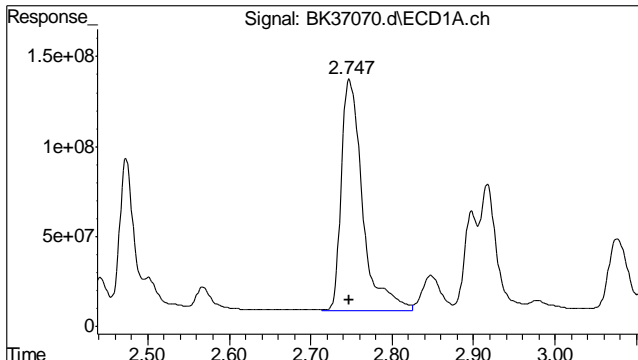


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 1010169089
 Conc: 455.83 ppb m

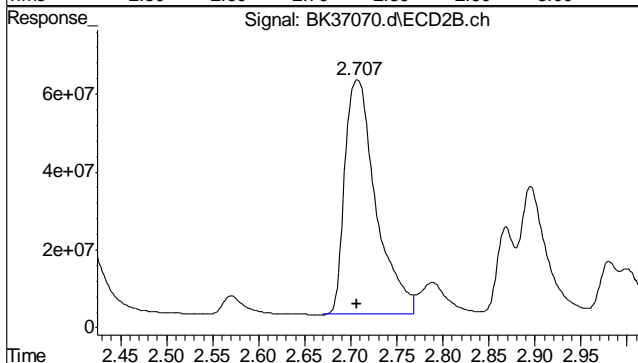


#2 AR1016-A
 R.T.: 2.405 min
 Delta R.T.: 0.001 min
 Response: 697474647
 Conc: 428.93 ppb m

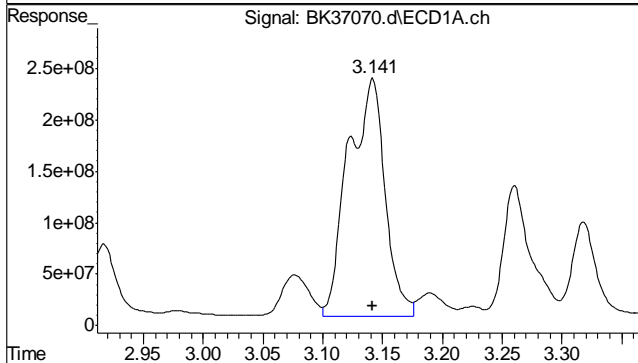
7.5.4
 7



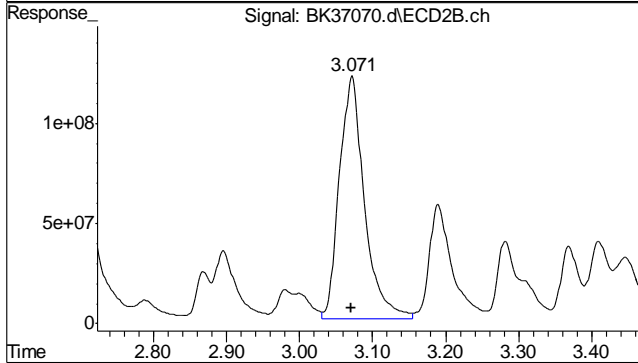
#3 AR1016-B
 R.T.: 2.747 min
 Delta R.T.: 0.000 min
 Response: 2326837650
 Conc: 440.35 ppb m



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: 0.000 min
 Response: 1404771971
 Conc: 452.45 ppb m

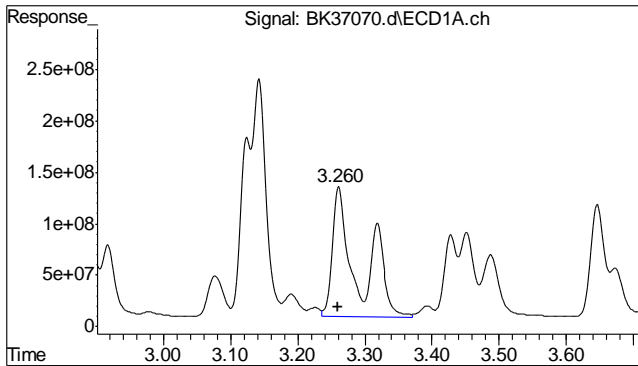


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 4924945272
 Conc: 462.80 ppb

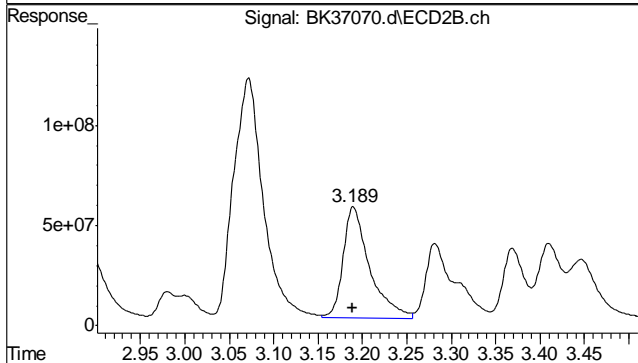


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 2875303324
 Conc: 502.78 ppb

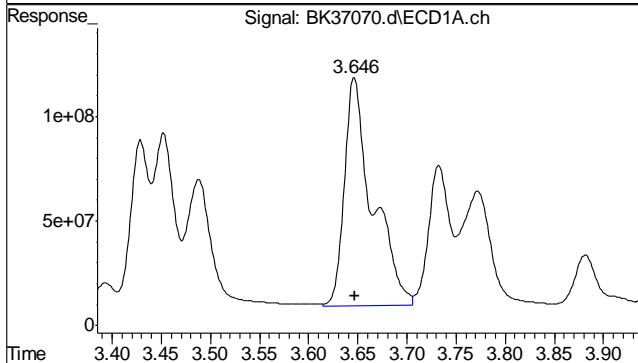
7.5.4
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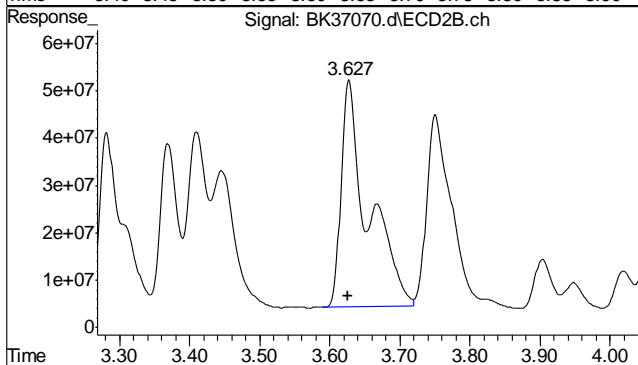
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 3334596129
 Conc: 462.03 m



#5 AR1016-D
 R.T.: 3.189 min
 Delta R.T.: 0.000 min
 Response: 1156492924
 Conc: 475.12 m

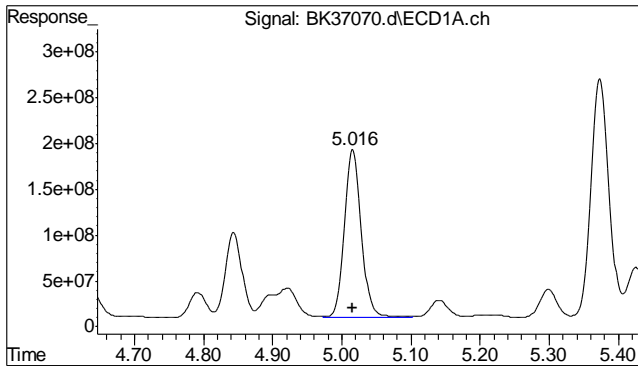


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: 0.000 min
 Response: 2182054236
 Conc: 461.78

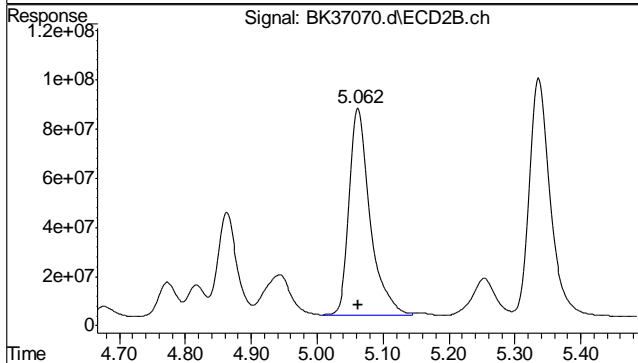


#6 AR1016-E
 R.T.: 3.627 min
 Delta R.T.: 0.000 min
 Response: 1282605797
 Conc: 470.07 m

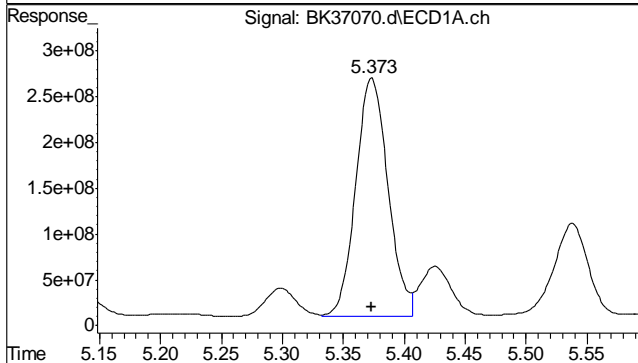
7.5.4
 7



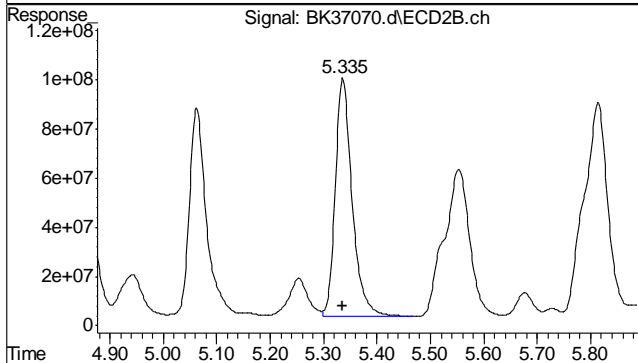
#7 AR1260-A
 R.T.: 5.016 min
 Delta R.T.: 0.000 min
 Response: 3165482001
 Conc: 457.08 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 1839555200
 Conc: 469.33 ppb m

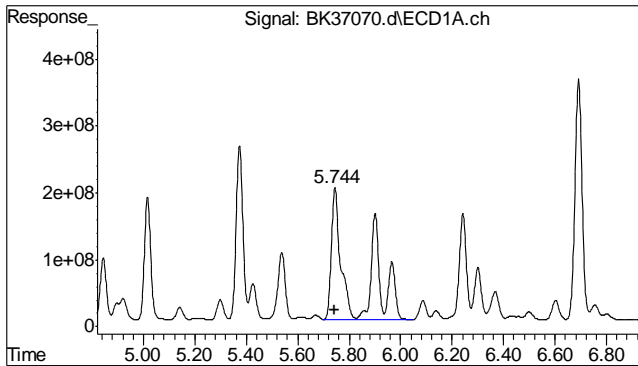


#8 AR1260-B
 R.T.: 5.374 min
 Delta R.T.: 0.000 min
 Response: 4784065870
 Conc: 464.42 ppb

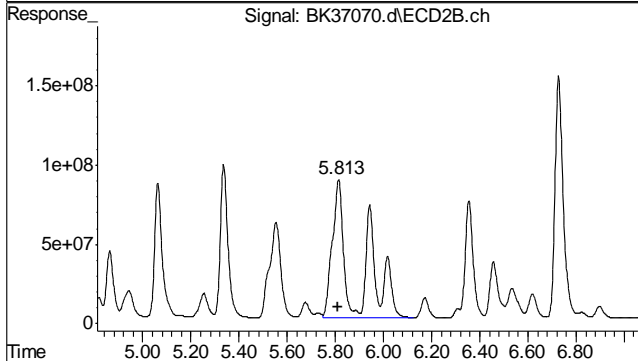


#8 AR1260-B
 R.T.: 5.335 min
 Delta R.T.: 0.000 min
 Response: 2103087932
 Conc: 482.85 ppb m

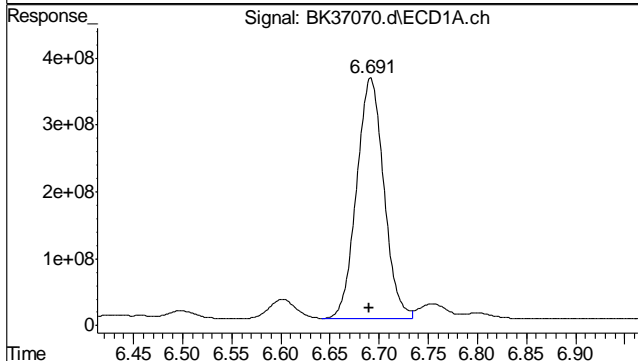
7.5.4
7



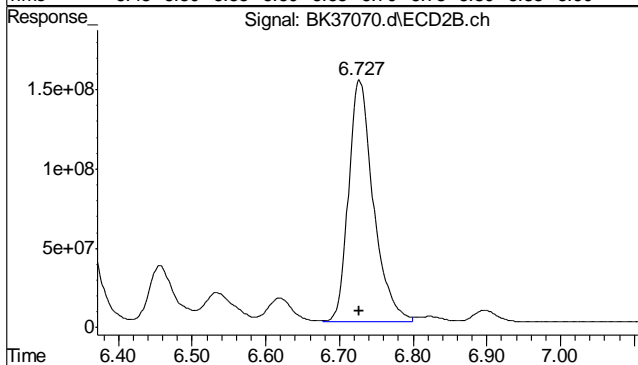
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 9745585372
 Conc: 474.59 ppb m



#9 AR1260-C
 R.T.: 5.813 min
 Delta R.T.: 0.000 min
 Response: 5216682703
 Conc: 489.85 ppb m

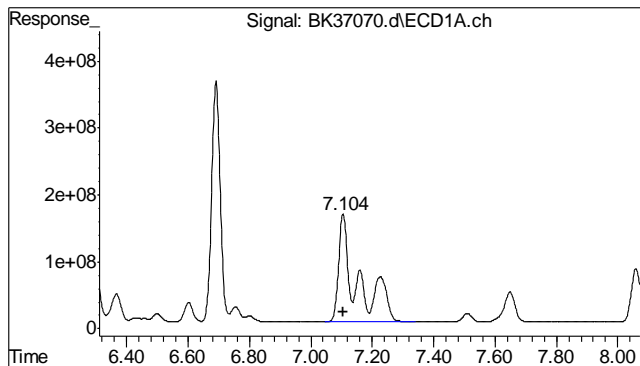


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.001 min
 Response: 6931063648
 Conc: 491.71 ppb

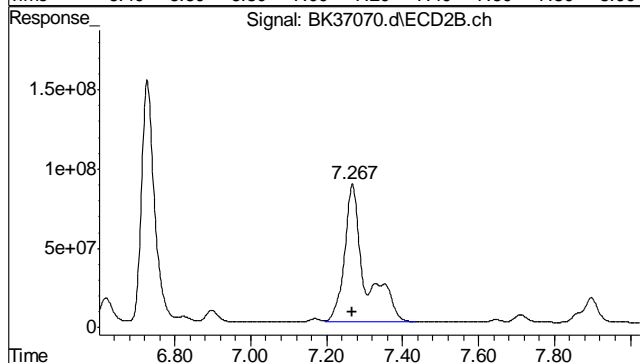


#10 AR1260-D
 R.T.: 6.727 min
 Delta R.T.: 0.000 min
 Response: 3543938575
 Conc: 506.34 ppb m

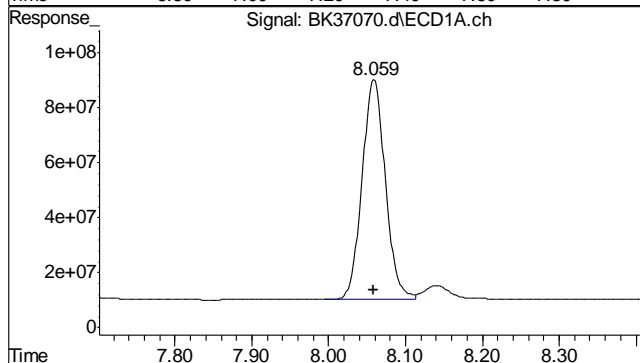
7.54
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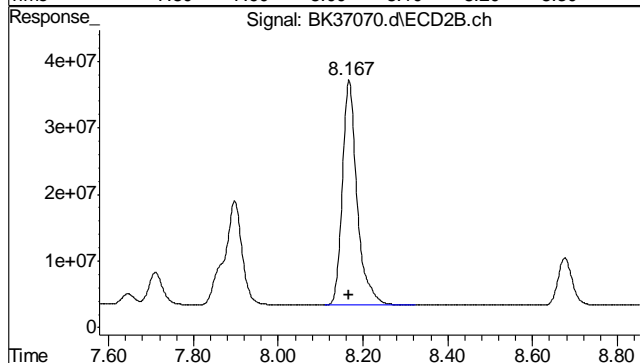
#11 AR1260-E
 R.T.: 7.104 min
 Delta R.T.: 0.000 min
 Response: 6710847959
 Conc: 496.84 ppb m



#11 AR1260-E
 R.T.: 7.267 min
 Delta R.T.: 0.000 min
 Response: 3326419208
 Conc: 515.14 ppb m

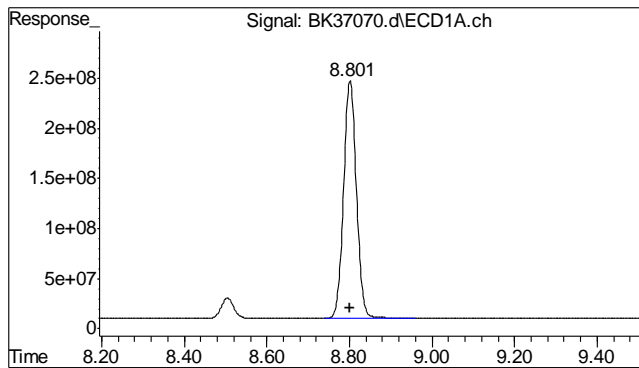


#12 AR1260-F
 R.T.: 8.059 min
 Delta R.T.: 0.000 min
 Response: 1679402281
 Conc: 510.01 m



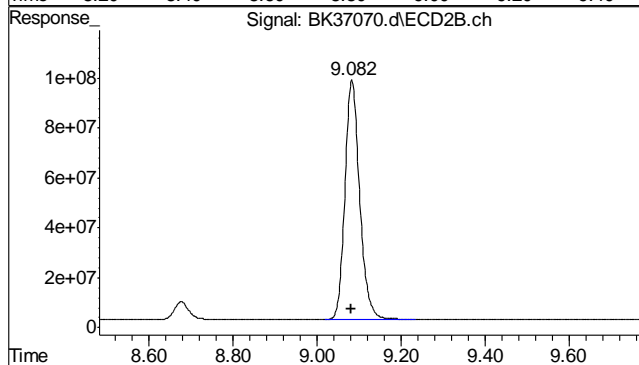
#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.001 min
 Response: 815819790
 Conc: 529.55

7.54
7



#13 DCB

R.T.: 8.801 min
Delta R.T.: 0.000 min
Response: 5086470174
Conc: 49.35 ppb m



#13 DCB

R.T.: 9.082 min
Delta R.T.: 0.000 min
Response: 2325495052
Conc: 50.02 ppb m

7.5.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37071.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:13 pm
 Operator : nickk
 Sample : ic1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:33 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:25:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.215	2.074	8468.8E6	4868.7E6	57.635	58.423m
	Spiked Amount	40.000		Recovery	=	144.09%	146.06%
13)	s DCB	8.801	9.082	6487.6E6	3011.9E6	61.074m	63.260
	Spiked Amount	40.000		Recovery	=	152.69%	158.15%

Target Compounds							
2)	AR1016-A	2.473	2.404	1644.0E6	1052.8E6	752.534m	653.631m
3)	AR1016-B	2.747	2.707	3536.4E6	2251.1E6	676.419m	734.474
4)	AR1016-C	3.142	3.072	7743.7E6	4493.4E6	732.926	782.432
5)	AR1016-D	3.259	3.190	5206.3E6	1872.0E6	727.362m	770.150
6)	AR1016-E	3.646	3.626	3307.1E6	2071.8E6	702.051m	764.516m
7)	AR1260-A	5.016	5.062	4947.5E6	2911.9E6	715.293	743.987m
8)	AR1260-B	5.374	5.336	7561.4E6	3326.0E6	737.184	762.050m
9)	AR1260-C	5.744	5.813	15548.9E6	8301.5E6	756.539m	776.356m
10)	AR1260-D	6.692	6.728	11035.6E6	5719.3E6	777.315	810.733
11)	AR1260-E	7.104	7.268	10347.3E6	5264.1E6	754.570m	804.308m
12)	AR1260-F	8.059	8.167	2624.1E6	1311.7E6	780.423	838.283

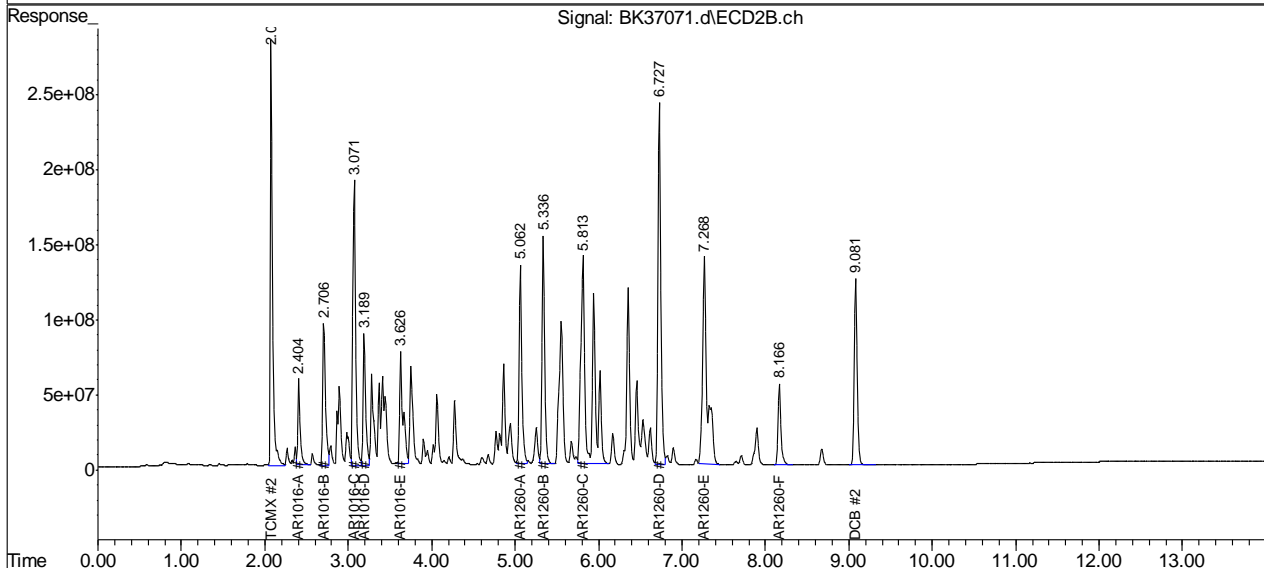
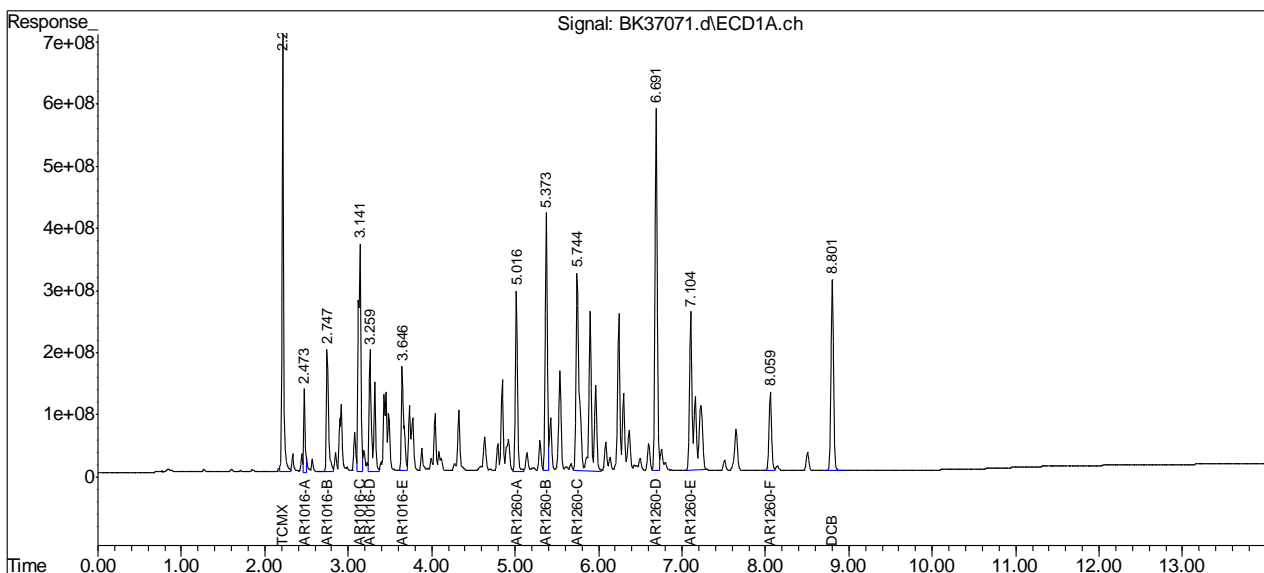
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

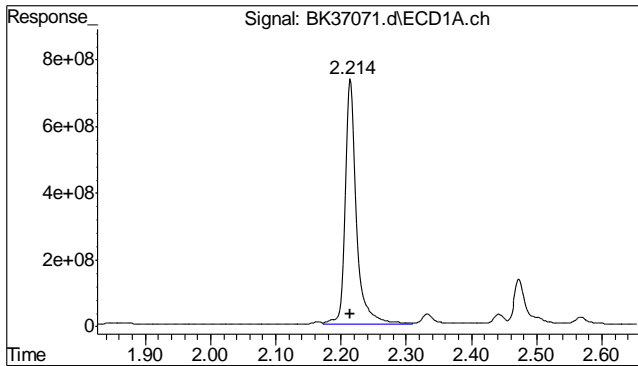
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37071.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:13 pm
 Operator : nickk
 Sample : ic1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:33 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:25:11 2014
 Response via : Initial Calibration
 Integrator: ChemStation

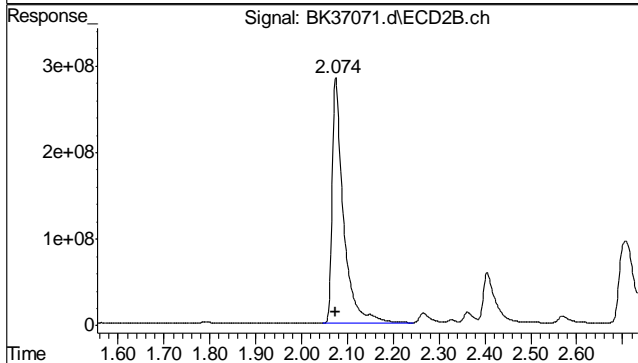
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



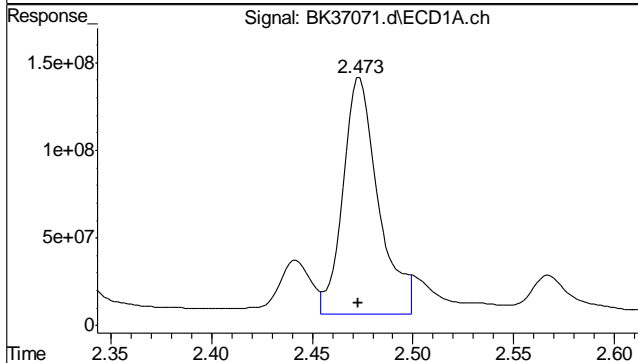
7.5.5
 7



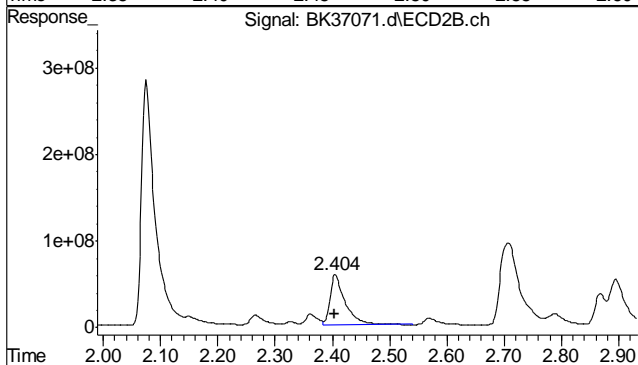
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: 0.000 min
 Response: 8468767483
 Conc: 57.64 ppb



#1 TCMX
 R.T.: 2.074 min
 Delta R.T.: 0.000 min
 Response: 4868665630
 Conc: 58.42 ppb m

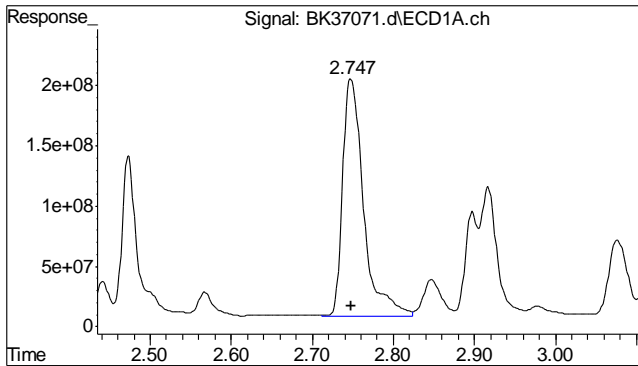


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 1643981772
 Conc: 752.53 ppb m

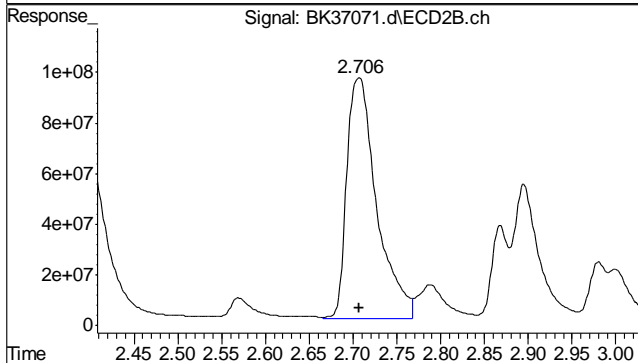


#2 AR1016-A
 R.T.: 2.404 min
 Delta R.T.: 0.000 min
 Response: 1052815826
 Conc: 653.63 ppb m

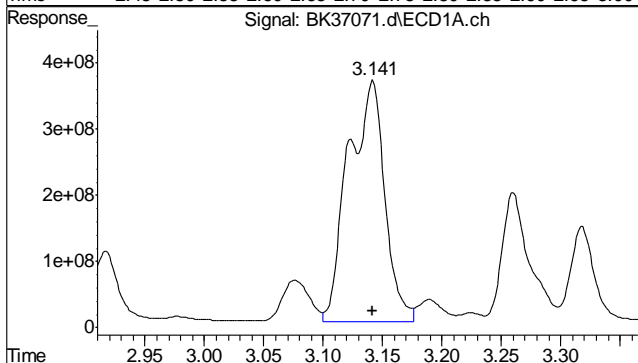
7.5.5
 7



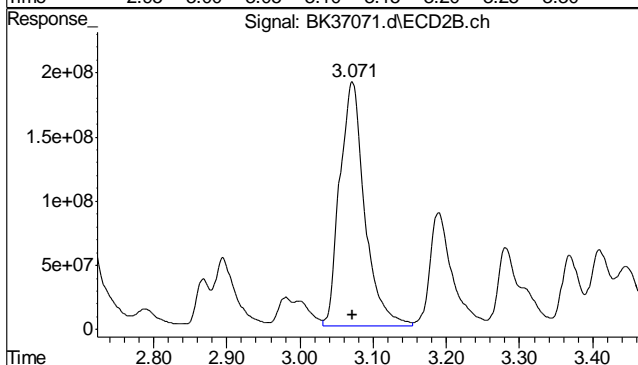
#3 AR1016-B
 R.T.: 2.747 min
 Delta R.T.: -0.002 min
 Response: 3536422692
 Conc: 676.42 ppb m



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: 0.000 min
 Response: 2251067982
 Conc: 734.47 ppb

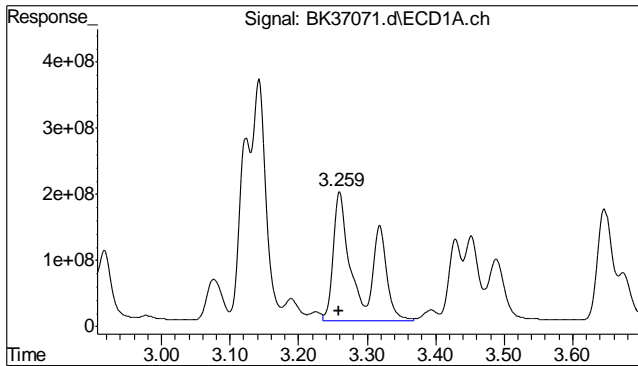


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 7743712391
 Conc: 732.93 ppb

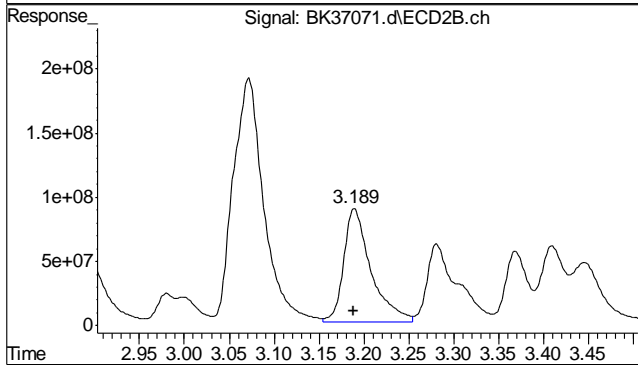


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 4493395297
 Conc: 782.43 ppb

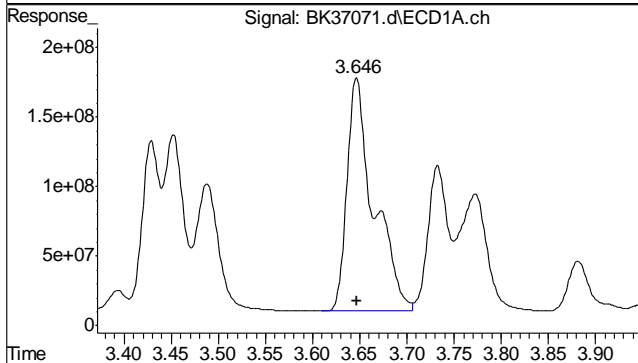
7.5.5
7



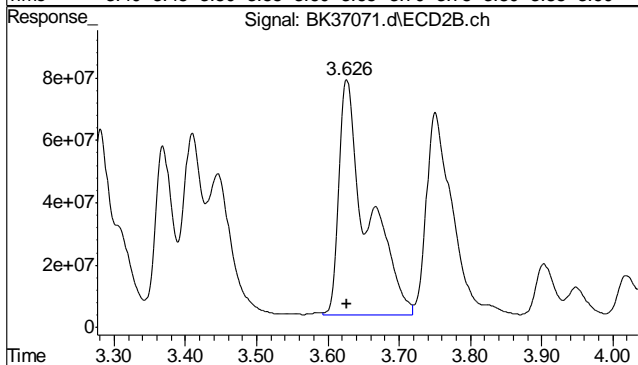
#5 AR1016-D
 R.T.: 3.259 min
 Delta R.T.: 0.000 min
 Response: 5206344569
 Conc: 727.36 m



#5 AR1016-D
 R.T.: 3.190 min
 Delta R.T.: 0.000 min
 Response: 1872006783
 Conc: 770.15

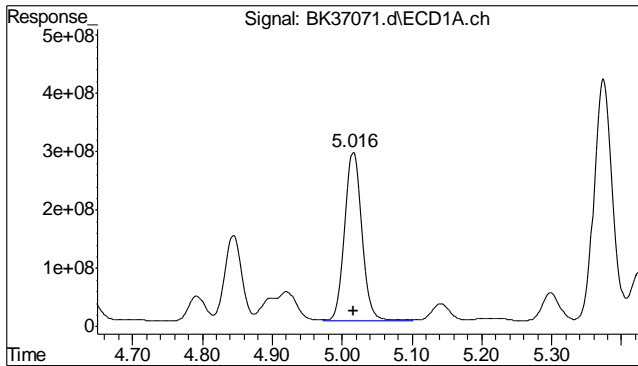


#6 AR1016-E
 R.T.: 3.646 min
 Delta R.T.: 0.000 min
 Response: 3307070271
 Conc: 702.05 m

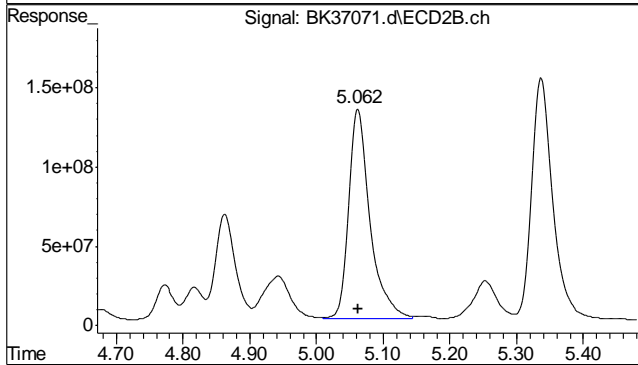


#6 AR1016-E
 R.T.: 3.626 min
 Delta R.T.: 0.000 min
 Response: 2071847718
 Conc: 764.52 m

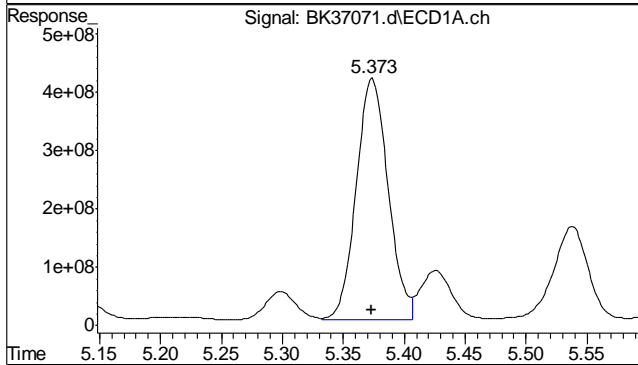
7.5.5
7



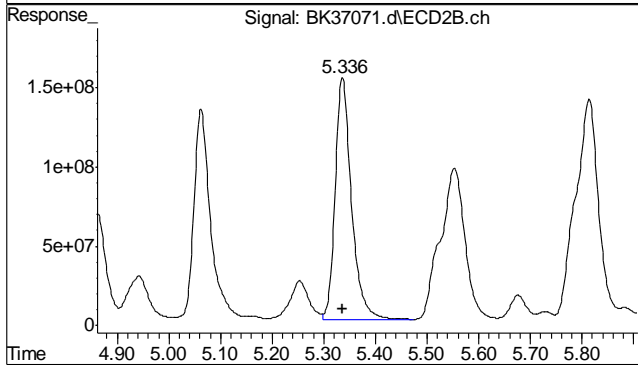
#7 AR1260-A
 R.T.: 5.016 min
 Delta R.T.: 0.000 min
 Response: 4947504883
 Conc: 715.29 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 2911874996
 Conc: 743.99 ppb m

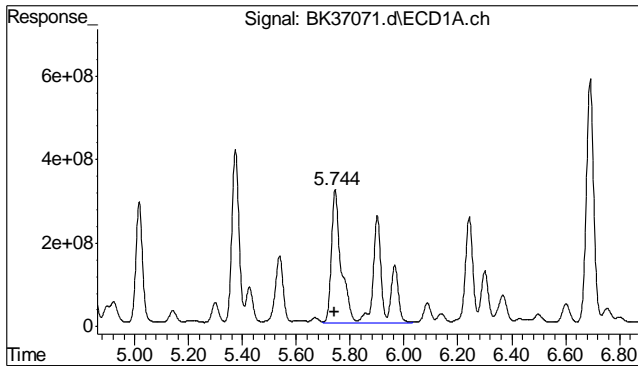


#8 AR1260-B
 R.T.: 5.374 min
 Delta R.T.: 0.000 min
 Response: 7561445061
 Conc: 737.18 ppb

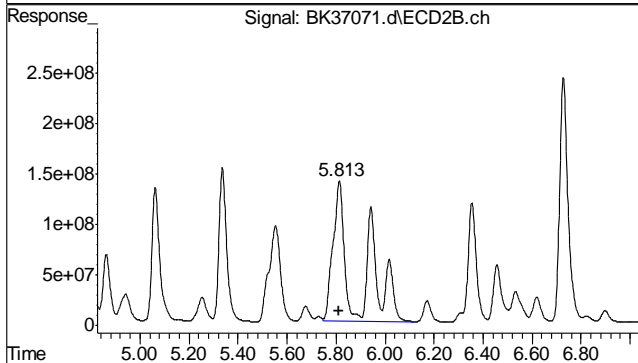


#8 AR1260-B
 R.T.: 5.336 min
 Delta R.T.: 0.000 min
 Response: 3325972515
 Conc: 762.05 ppb m

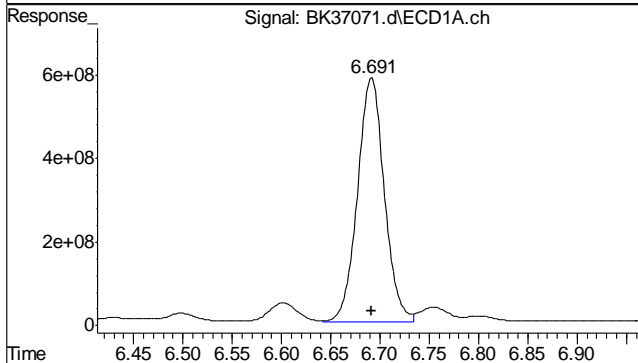
7.5.5
7



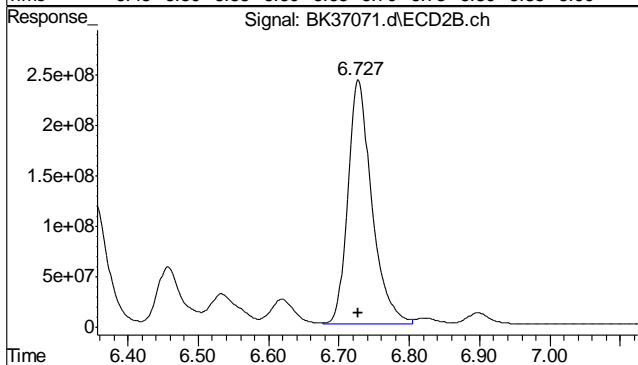
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 15548909168
 Conc: 756.54 ppb m



#9 AR1260-C
 R.T.: 5.813 min
 Delta R.T.: 0.000 min
 Response: 8301483947
 Conc: 776.36 ppb m

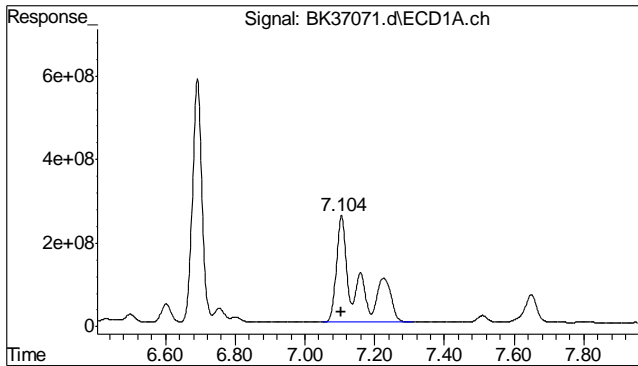


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.000 min
 Response: 11035611468
 Conc: 777.32 ppb

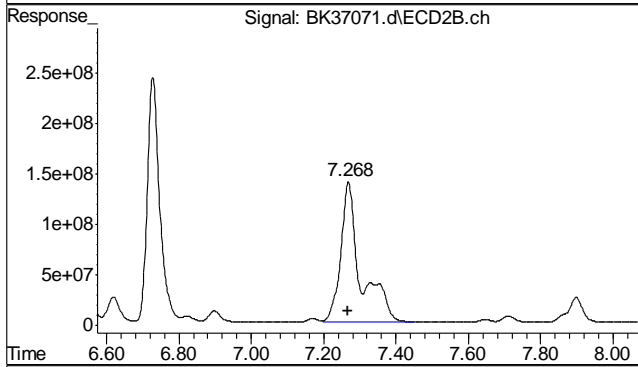


#10 AR1260-D
 R.T.: 6.728 min
 Delta R.T.: 0.001 min
 Response: 5719255725
 Conc: 810.73 ppb

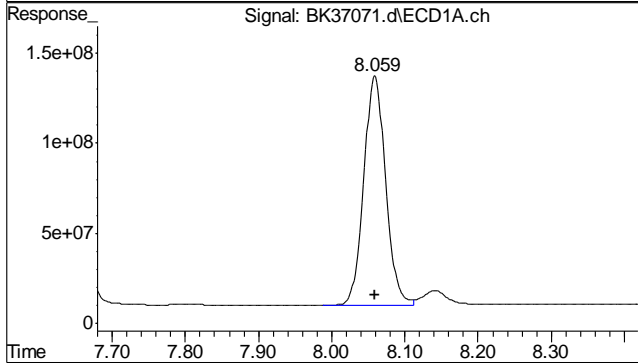
7.5.5
7



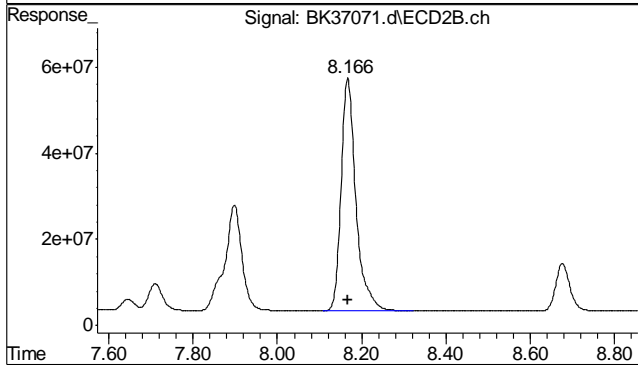
#11 AR1260-E
 R.T.: 7.104 min
 Delta R.T.: 0.000 min
 Response: 10347276773
 Conc: 754.57 ppb m



#11 AR1260-E
 R.T.: 7.268 min
 Delta R.T.: 0.000 min
 Response: 5264118107
 Conc: 804.31 ppb m

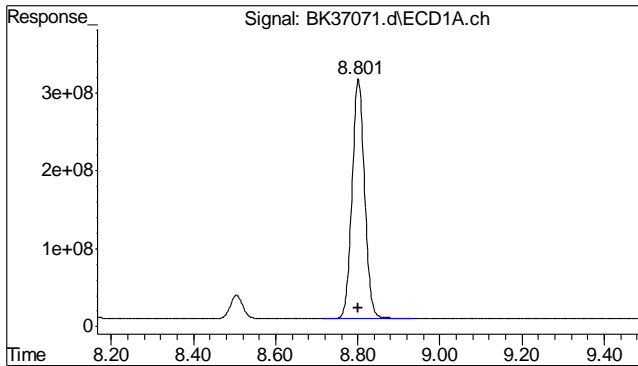


#12 AR1260-F
 R.T.: 8.059 min
 Delta R.T.: 0.000 min
 Response: 2624109453
 Conc: 780.42

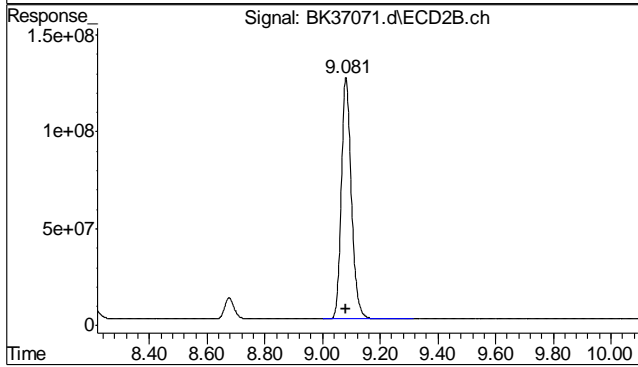


#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 131165511
 Conc: 838.28

7.5.5
 7



#13 DCB
 R.T.: 8.801 min
 Delta R.T.: 0.000 min
 Response: 6487568641
 Conc: 61.07 ppb m



#13 DCB
 R.T.: 9.082 min
 Delta R.T.: 0.000 min
 Response: 3011927871
 Conc: 63.26 ppb

7.5.5
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37072.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:29 pm
 Operator : nickk
 Sample : ic1213-1000,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:30:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.215	2.076	11926.4E6	6933.6E6	80.536	83.453
	Spiked Amount	40.000		Recovery	=	201.34%	208.63%
13)	s DCB	8.802	9.084	8871.5E6	4145.6E6	80.332	84.170
	Spiked Amount	40.000		Recovery	=	200.83%	210.42%
Target Compounds							
2)	AR1016-A	2.473	2.405	1998.1E6	1471.0E6	905.401m	926.458m
3)	AR1016-B	2.747	2.709	4568.7E6	2950.8E6	880.745m	966.557
4)	AR1016-C	3.142	3.072	10099.2E6	5829.7E6	955.535	1008.697m
5)	AR1016-D	3.260	3.190	6904.6E6	2367.9E6	970.658m	973.622m
6)	AR1016-E	3.647	3.628	4332.5E6	2708.1E6	927.279m	1001.722m
7)	AR1260-A	5.017	5.063	6558.8E6	3819.8E6	950.639	978.018m
8)	AR1260-B	5.375	5.337	9878.5E6	4400.5E6	962.938	1003.524m
9)	AR1260-C	5.745	5.814	20445.8E6	10881.5E6	988.278m	1010.568m
10)	AR1260-D	6.692	6.728	14574.2E6	7538.2E6	1013.928	1051.390m
11)	AR1260-E	7.106	7.268	13633.2E6	6994.8E6	977.662m	1050.093m
12)	AR1260-F	8.059	8.167	3384.1E6	1721.4E6	979.837	1075.867m

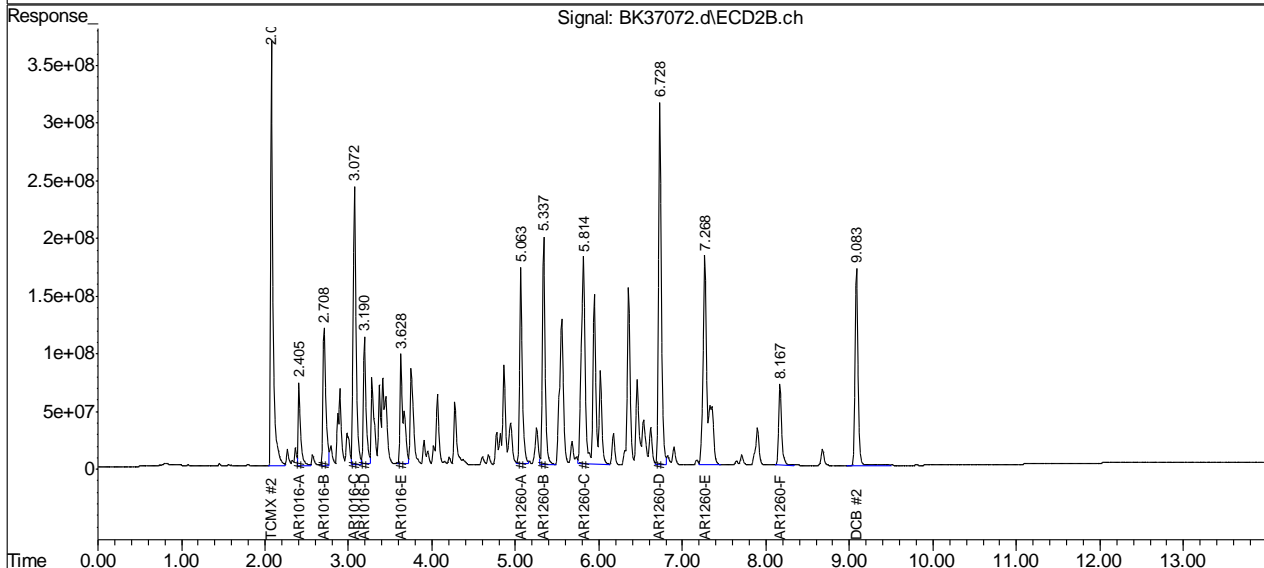
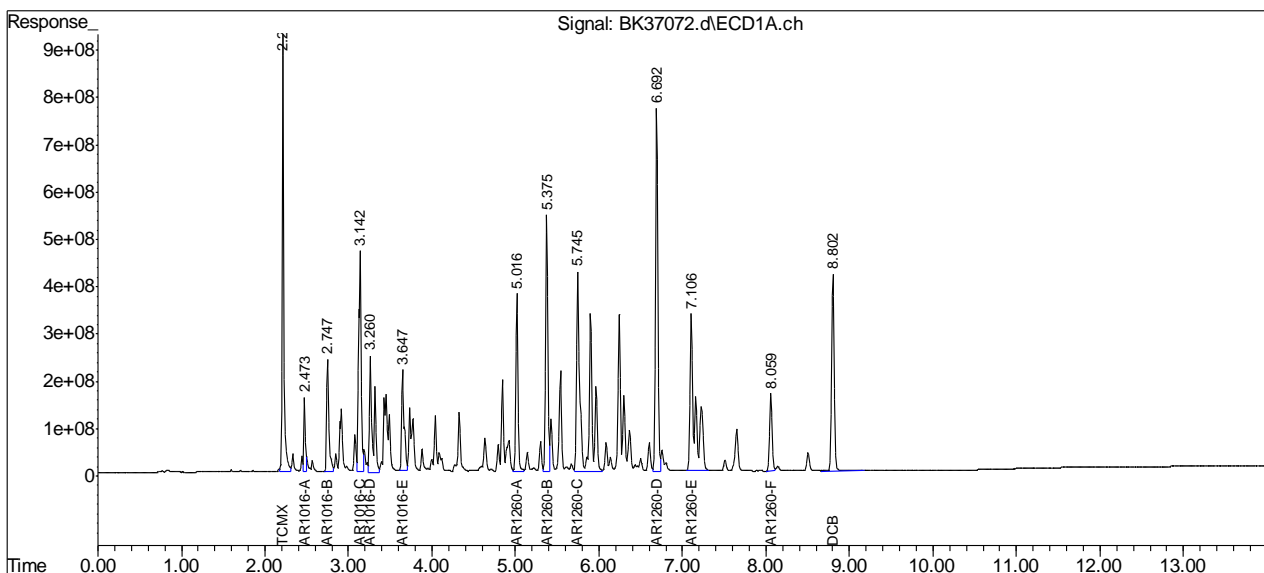
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

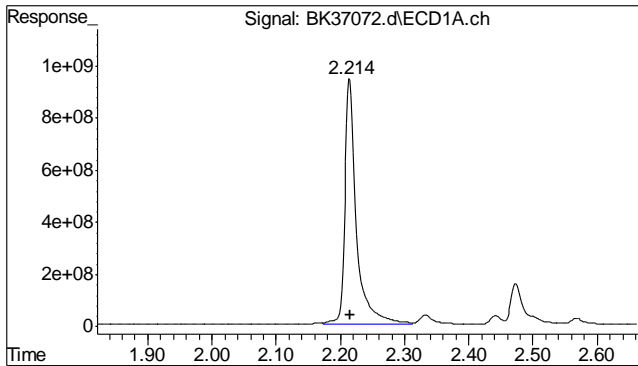
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37072.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:29 pm
 Operator : nickk
 Sample : ic1213-1000,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 16:49:56 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:30:38 2014
 Response via : Initial Calibration
 Integrator: ChemStation

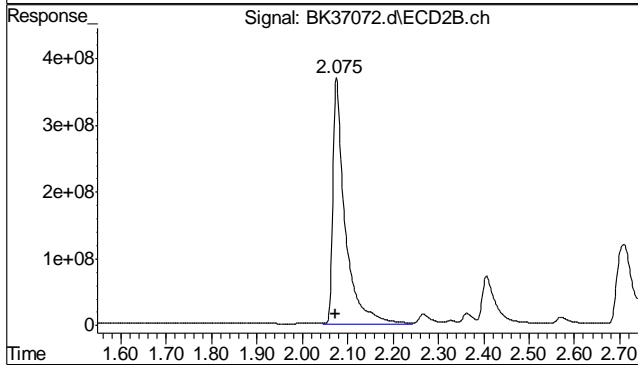
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



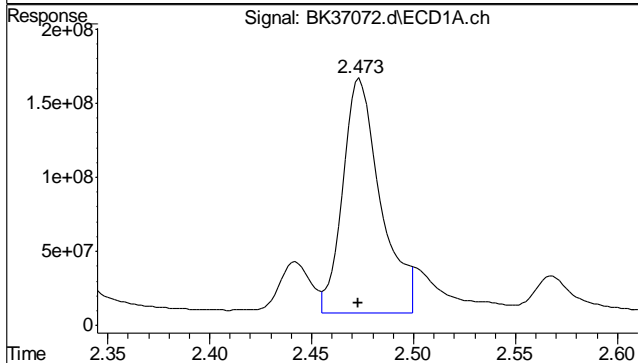
7.5.6
 7



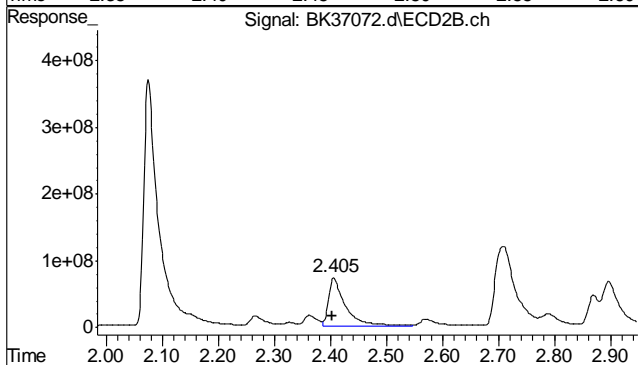
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: 0.000 min
 Response: 11926385707
 Conc: 80.54 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.002 min
 Response: 6933598523
 Conc: 83.45 ppb

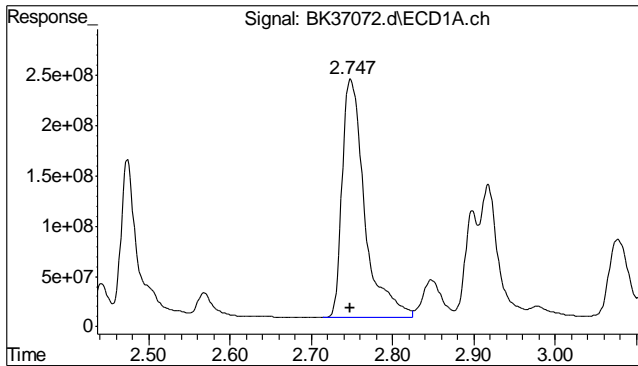


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 1998148104
 Conc: 905.40 ppb m

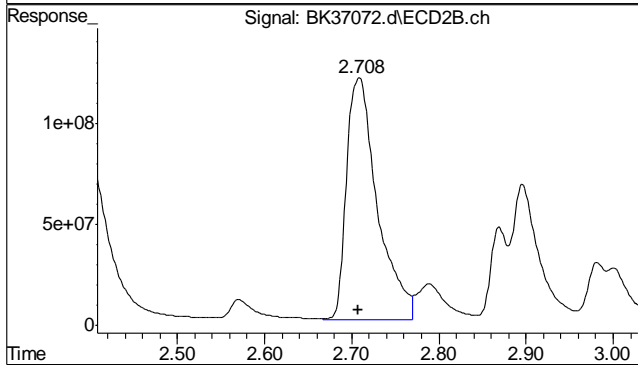


#2 AR1016-A
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 1471029266
 Conc: 926.46 ppb m

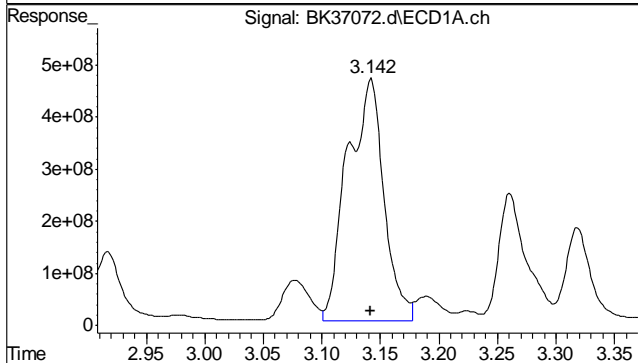
7.5.6
 7



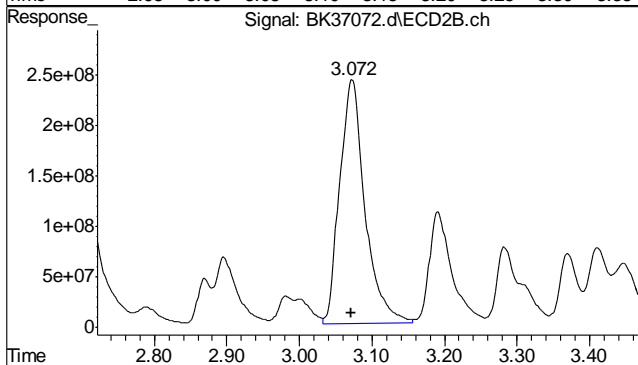
#3 AR1016-B
 R.T.: 2.747 min
 Delta R.T.: 0.000 min
 Response: 4568672738
 Conc: 880.74 ppb m



#3 AR1016-B
 R.T.: 2.709 min
 Delta R.T.: 0.002 min
 Response: 2950797321
 Conc: 966.56 ppb

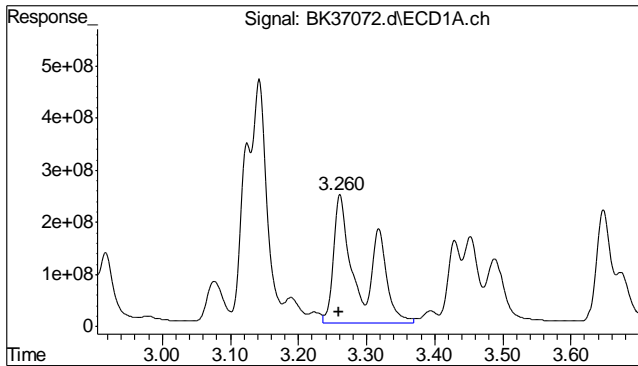


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 10099161783
 Conc: 955.54 ppb

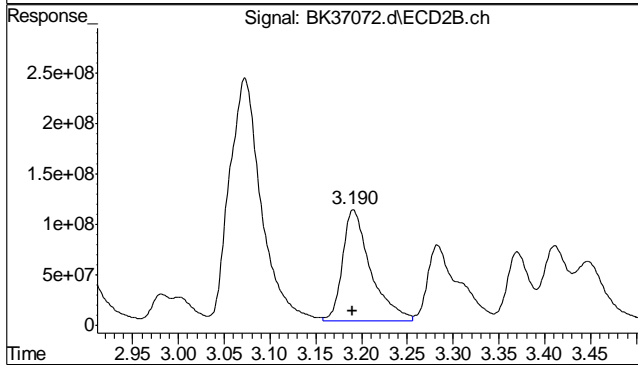


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 5829714737
 Conc: 1008.70 ppb m

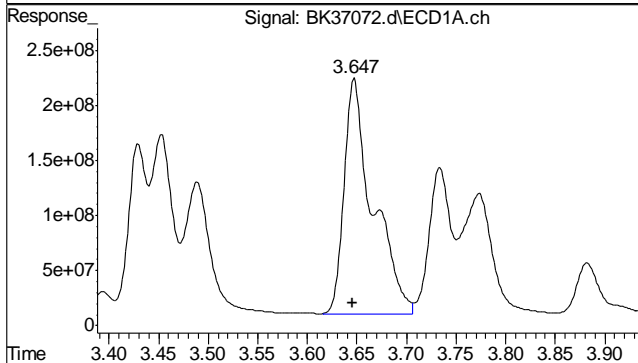
7.5.6
7



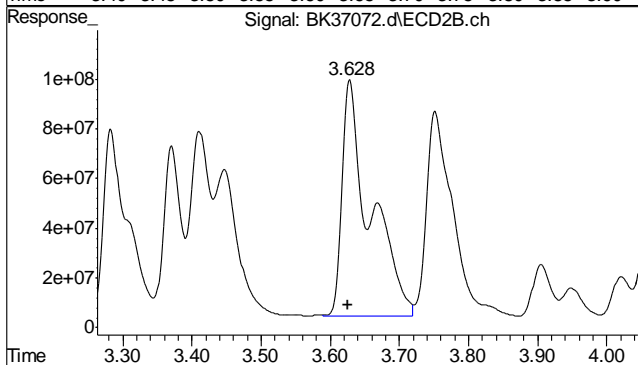
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 6904613955
 Conc: 970.66 m



#5 AR1016-D
 R.T.: 3.190 min
 Delta R.T.: 0.000 min
 Response: 2367859684
 Conc: 973.62 m

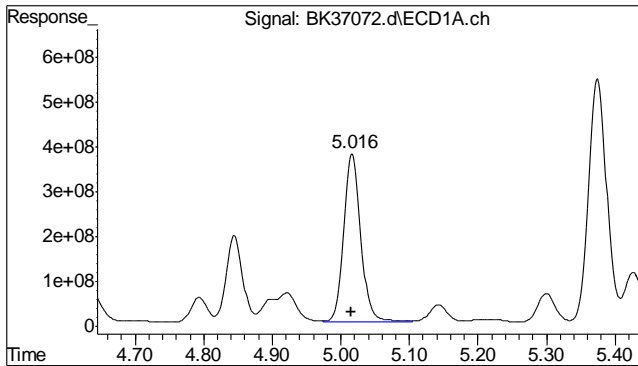


#6 AR1016-E
 R.T.: 3.647 min
 Delta R.T.: 0.000 min
 Response: 4332511700
 Conc: 927.28 m

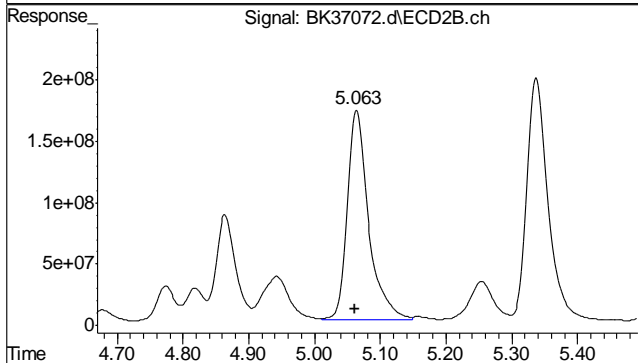


#6 AR1016-E
 R.T.: 3.628 min
 Delta R.T.: 0.002 min
 Response: 2708147079
 Conc: 1001.72 m

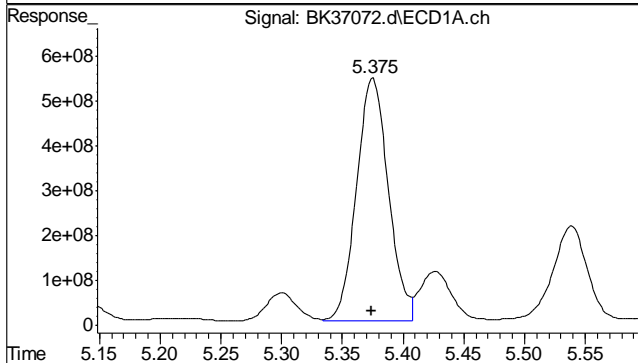
7.5.6
7



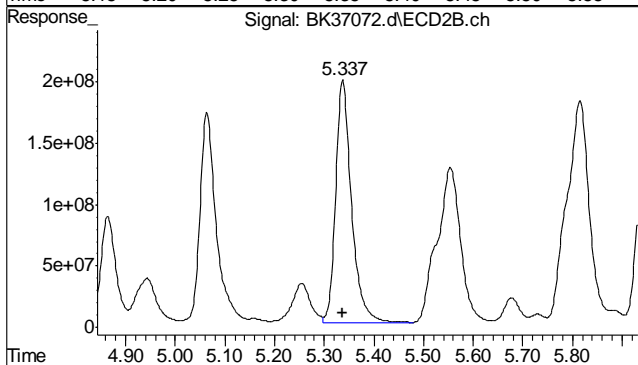
#7 AR1260-A
 R.T.: 5.017 min
 Delta R.T.: 0.001 min
 Response: 6558834475
 Conc: 950.64 ppb



#7 AR1260-A
 R.T.: 5.063 min
 Delta R.T.: 0.001 min
 Response: 3819841616
 Conc: 978.02 ppb m

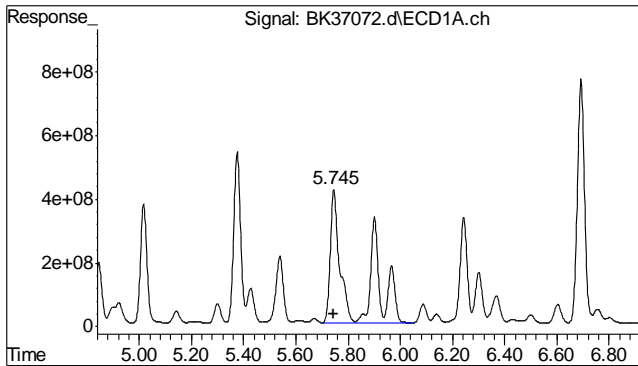


#8 AR1260-B
 R.T.: 5.375 min
 Delta R.T.: 0.001 min
 Response: 9878501065
 Conc: 962.94 ppb

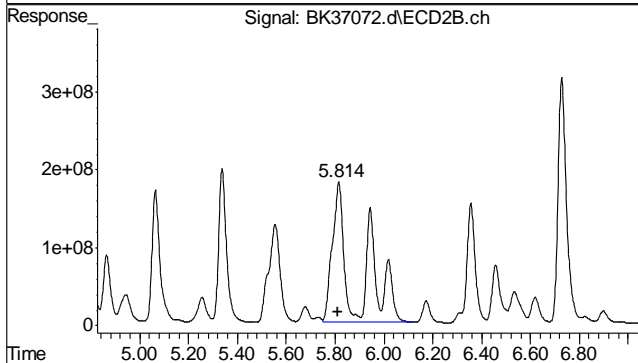


#8 AR1260-B
 R.T.: 5.337 min
 Delta R.T.: 0.000 min
 Response: 4400464266
 Conc: 1003.52 ppb m

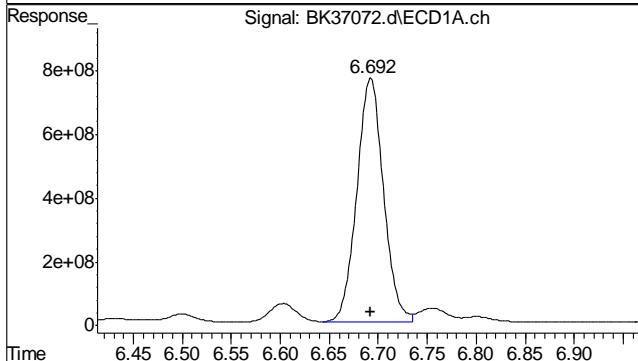
7.5.6
7



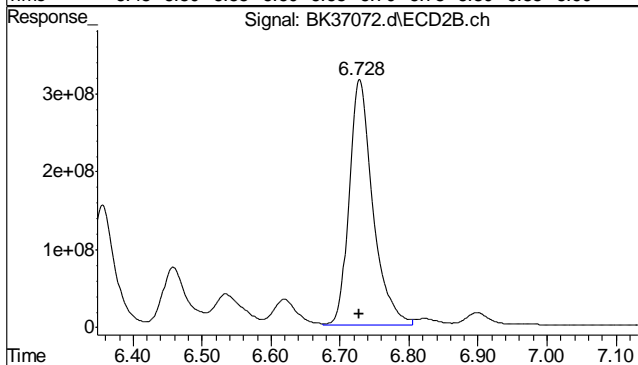
#9 AR1260-C
 R.T.: 5.745 min
 Delta R.T.: 0.000 min
 Response: 20445770465
 Conc: 988.28 ppb m



#9 AR1260-C
 R.T.: 5.814 min
 Delta R.T.: 0.001 min
 Response: 10881476977
 Conc: 1010.57 ppb m

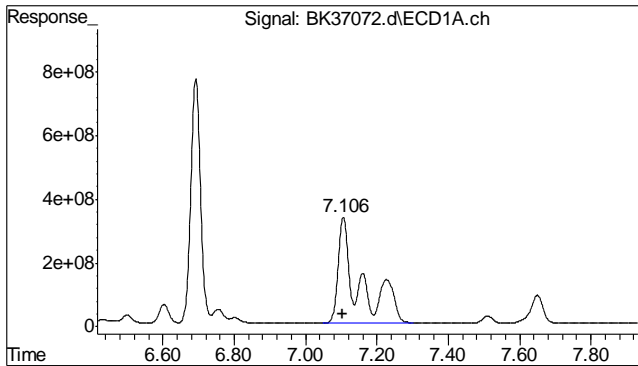


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.000 min
 Response: 14574192830
 Conc: 1013.93 ppb

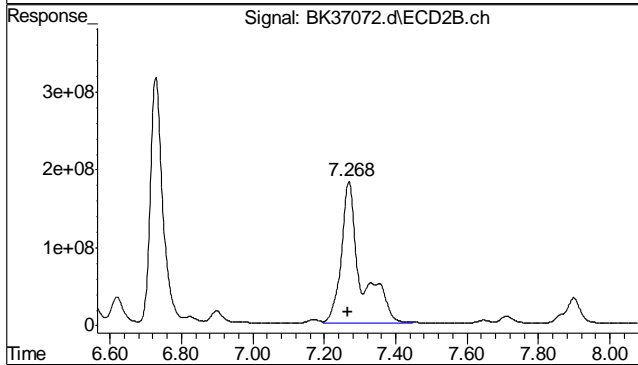


#10 AR1260-D
 R.T.: 6.728 min
 Delta R.T.: 0.000 min
 Response: 7538243987
 Conc: 1051.39 ppb m

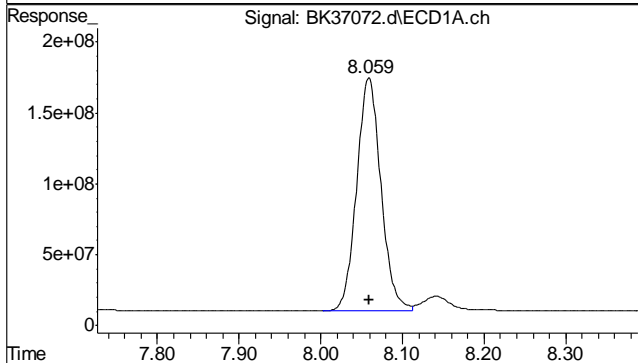
7.5.6
7



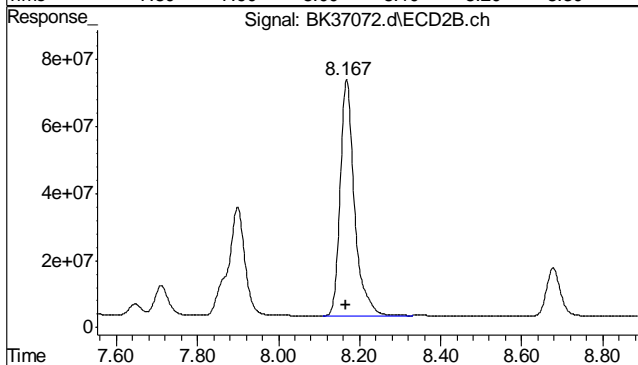
#11 AR1260-E
 R.T.: 7.106 min
 Delta R.T.: 0.002 min
 Response: 13633204164
 Conc: 977.66 ppb m



#11 AR1260-E
 R.T.: 7.268 min
 Delta R.T.: 0.000 min
 Response: 6994792492
 Conc: 1050.09 ppb m

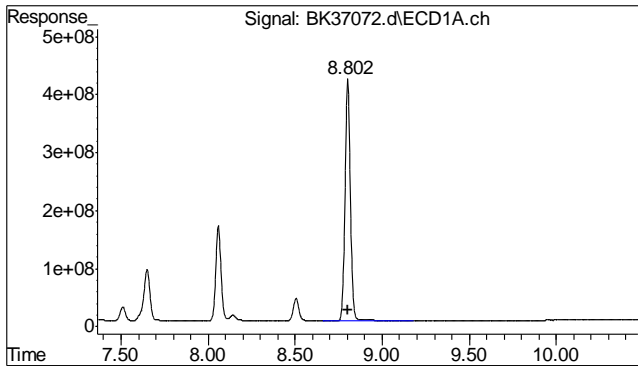


#12 AR1260-F
 R.T.: 8.059 min
 Delta R.T.: 0.000 min
 Response: 3384141353
 Conc: 979.84

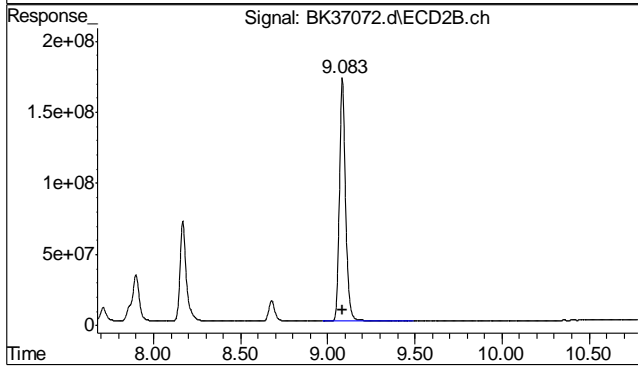


#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 1721449912
 Conc: 1075.87 m

7.5.6
7



#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.001 min
 Response: 8871500811
 Conc: 80.33 ppb



#13 DCB
 R.T.: 9.084 min
 Delta R.T.: 0.002 min
 Response: 4145603268
 Conc: 84.17 ppb

7.5.6
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37073.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:45 pm
 Operator : nickk
 Sample : ic1213-500,a21/54
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:17:43 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:50:47 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.215	2.076	7588.5E6	4430.4E6	50.905	53.198
	Spiked Amount	40.000		Recovery	=	127.26%	133.00%
13)	s DCB	8.802	9.082	5784.9E6	2732.7E6	49.708	52.761
	Spiked Amount	40.000		Recovery	=	124.27%	131.90%
Target Compounds							
14)	AR1221-A	1.847	1.789	400.2E6	330.8E6	539.440m	549.897m
15)	AR1221-B	2.333	2.265	737.3E6	368.8E6	512.181	505.572m
16)	AR1221-C	2.473	2.405	1703.9E6	1049.5E6	505.160m	523.608m
32)	AR1254-A	4.040	4.063	4748.9E6	2229.0E6	525.093m	529.501m
33)	AR1254-B	4.326	4.274	6268.4E6	3268.3E6	517.630m	524.581m
34)	AR1254-C	4.792	4.818	9483.5E6	5278.5E6	524.632m	528.931m
35)	AR1254-D	5.139	5.104	3083.5E6	2959.3E6	508.885m	539.727m
36)	AR1254-E	5.746	5.815	4614.2E6	2544.8E6	539.035	545.415m

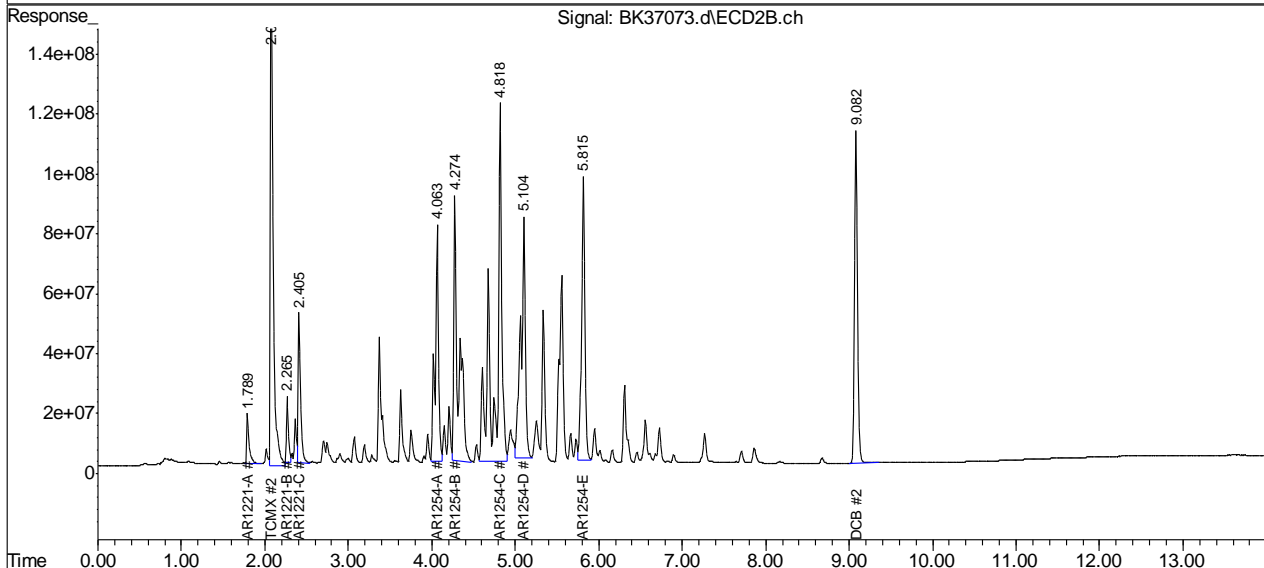
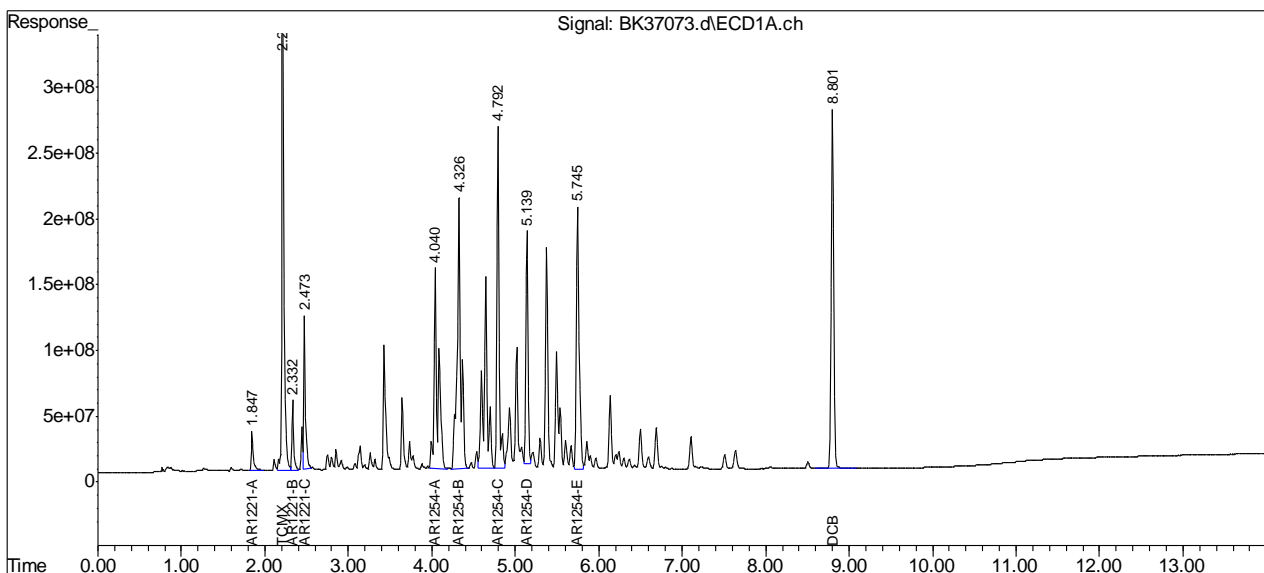
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

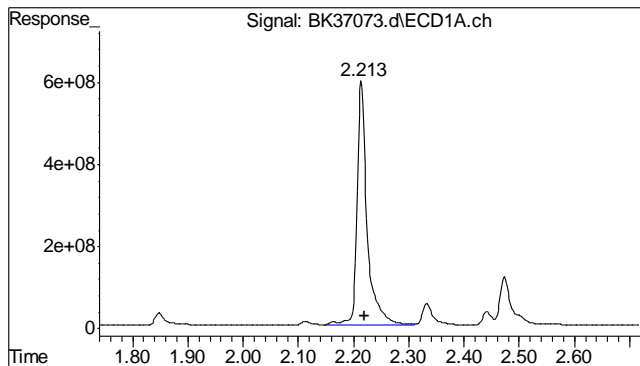
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37073.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 4:45 pm
 Operator : nickk
 Sample : ic1213-500,a21/54
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:17:43 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 16:50:47 2014
 Response via : Initial Calibration
 Integrator: ChemStation

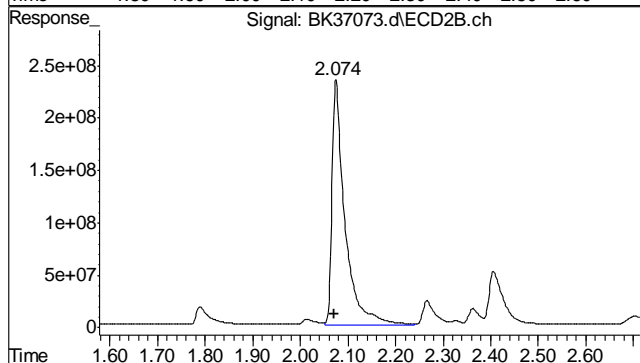
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



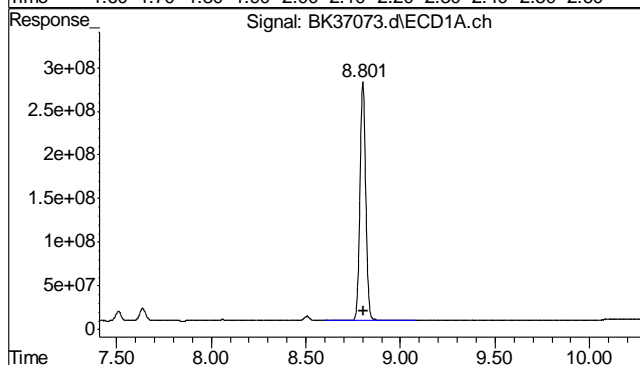
7.5.7
 7



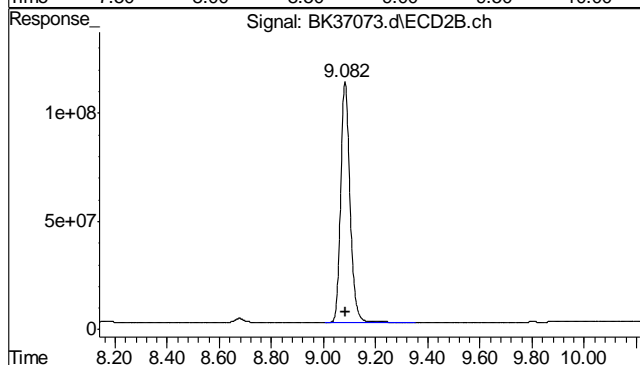
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: -0.005 min
 Response: 7588549796
 Conc: 50.91 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.003 min
 Response: 4430375803
 Conc: 53.20 ppb

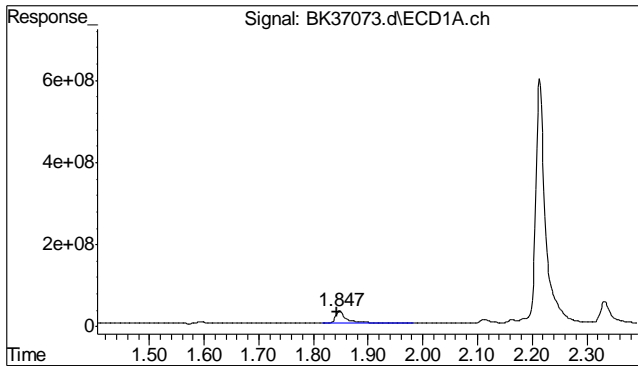


#13 DCB
 R.T.: 8.802 min
 Delta R.T.: -0.003 min
 Response: 5784932215
 Conc: 49.71 ppb

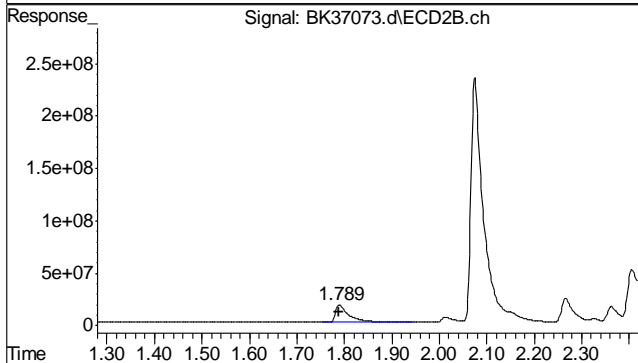


#13 DCB
 R.T.: 9.082 min
 Delta R.T.: 0.000 min
 Response: 2732719063
 Conc: 52.76 ppb

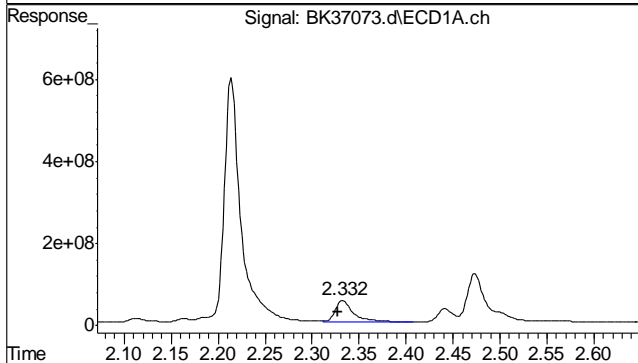
7.57
7



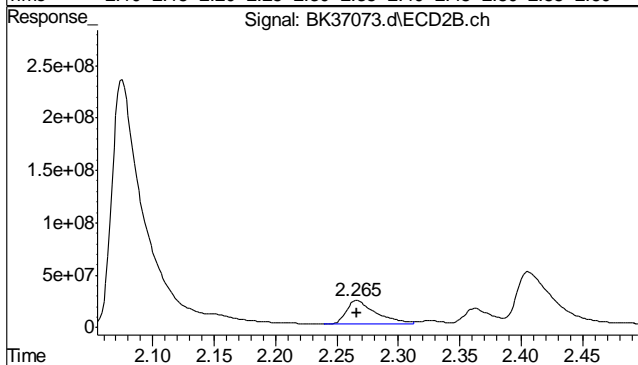
#14 AR1221-A
 R.T.: 1.847 min
 Delta R.T.: 0.004 min
 Response: 400210557
 Conc: 539.44 ppb m



#14 AR1221-A
 R.T.: 1.789 min
 Delta R.T.: 0.000 min
 Response: 330811231
 Conc: 549.90 ppb m

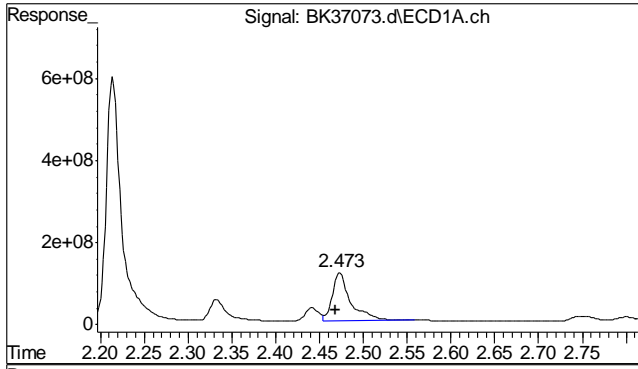


#15 AR1221-B
 R.T.: 2.333 min
 Delta R.T.: 0.006 min
 Response: 737317588
 Conc: 512.18 ppb

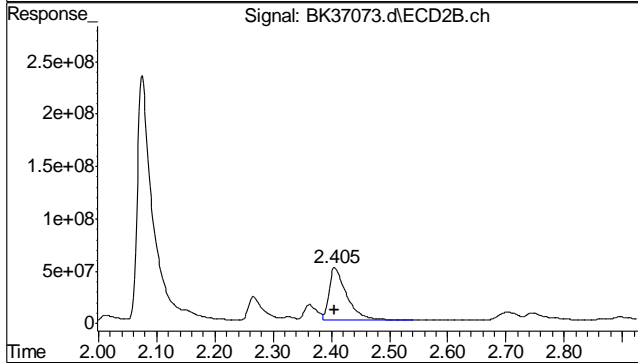


#15 AR1221-B
 R.T.: 2.265 min
 Delta R.T.: 0.000 min
 Response: 368755149
 Conc: 505.57 ppb m

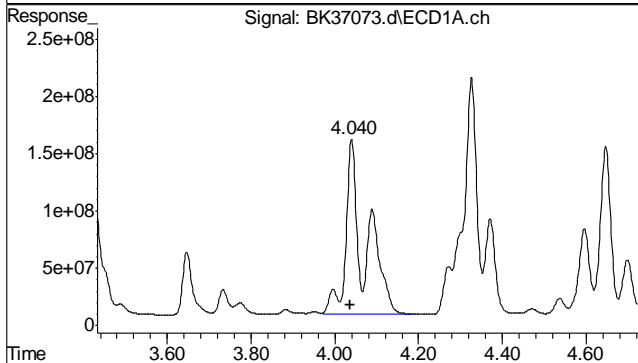
7.57
7



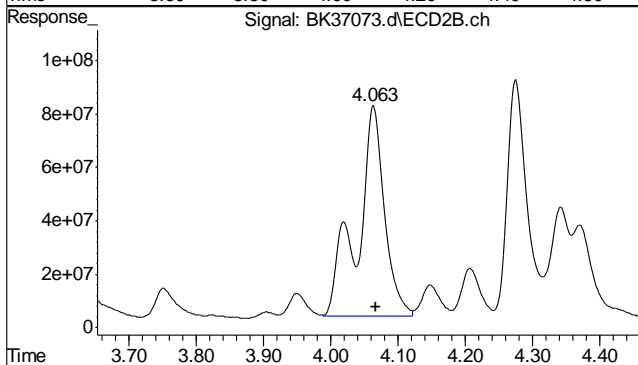
#16 AR1221-C
 R.T.: 2.473 min
 Delta R.T.: 0.005 min
 Response: 1703944083
 Conc: 505.16 ppb m



#16 AR1221-C
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 1049456465
 Conc: 523.61 ppb m

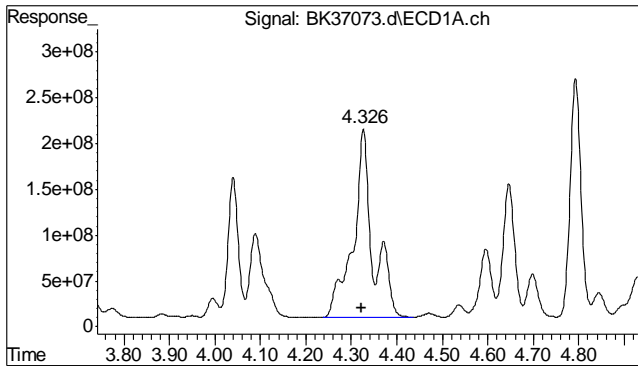


#32 AR1254-A
 R.T.: 4.040 min
 Delta R.T.: 0.003 min
 Response: 4748885405
 Conc: 525.09 ppb m

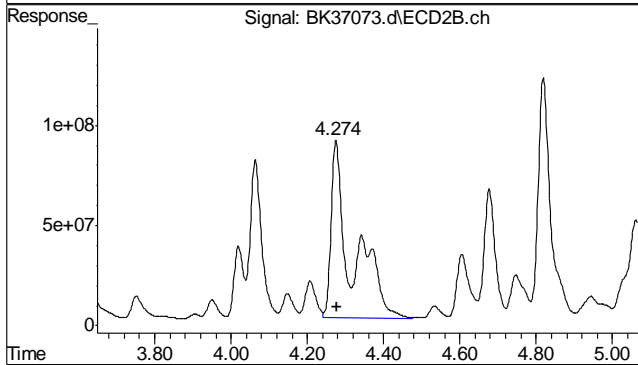


#32 AR1254-A
 R.T.: 4.063 min
 Delta R.T.: -0.004 min
 Response: 2228988661
 Conc: 529.50 ppb m

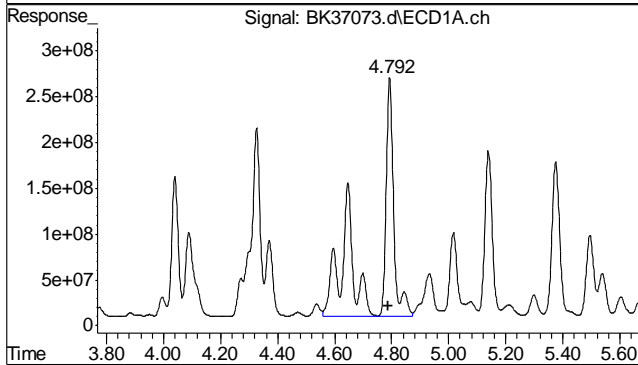
7.57
7



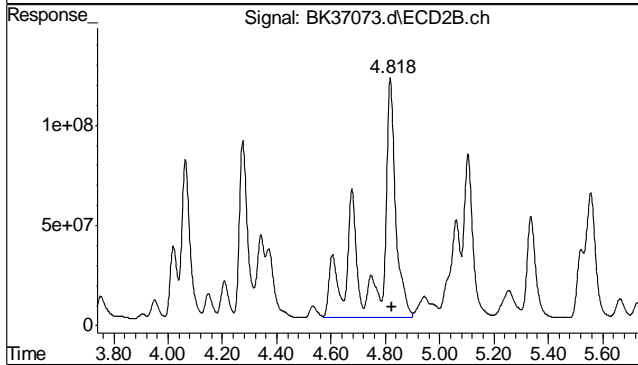
#33 AR1254-B
 R.T.: 4.326 min
 Delta R.T.: 0.003 min
 Response: 6268388826
 Conc: 517.63 ppb m



#33 AR1254-B
 R.T.: 4.274 min
 Delta R.T.: -0.004 min
 Response: 3268272213
 Conc: 524.58 ppb m

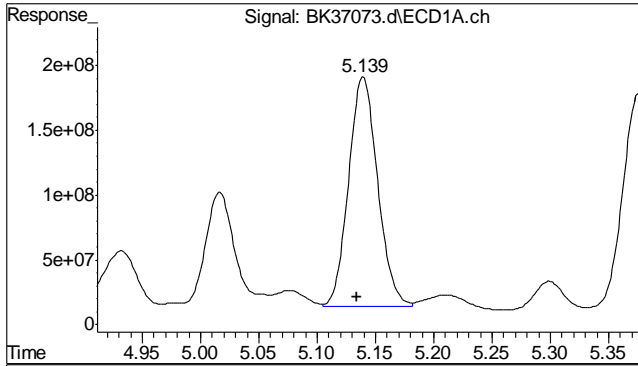


#34 AR1254-C
 R.T.: 4.792 min
 Delta R.T.: 0.003 min
 Response: 9483461385
 Conc: 524.63 ppb m

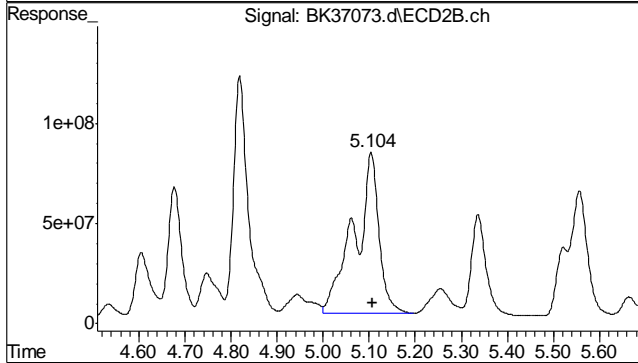


#34 AR1254-C
 R.T.: 4.818 min
 Delta R.T.: -0.004 min
 Response: 5278542176
 Conc: 528.93 ppb m

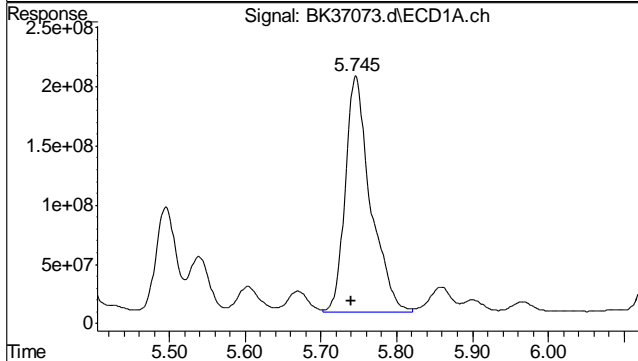
7.57
7



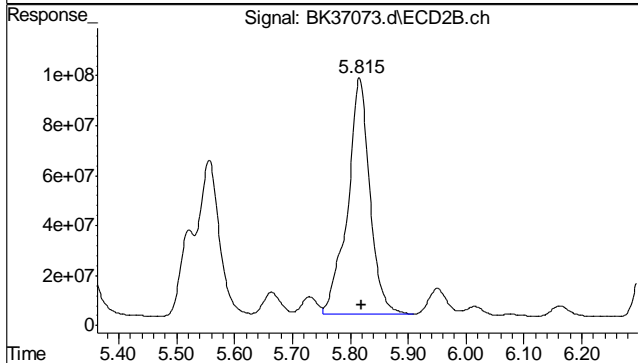
#35 AR1254-D
 R.T.: 5.139 min
 Delta R.T.: 0.005 min
 Response: 3083501438
 Conc: 508.88 ppb m



#35 AR1254-D
 R.T.: 5.104 min
 Delta R.T.: -0.003 min
 Response: 2959342397
 Conc: 539.73 ppb m



#36 AR1254-E
 R.T.: 5.746 min
 Delta R.T.: 0.006 min
 Response: 4614174839
 Conc: 539.03 ppb



#36 AR1254-E
 R.T.: 5.815 min
 Delta R.T.: -0.004 min
 Response: 2544776478
 Conc: 545.42 ppb m

7.57
7

Manual Integrations
APPROVED
 (compounds with "m" flag)

Andri Piluri
 04/30/14 14:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37074.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:01 pm
 Operator : nickk
 Sample : ic1213-500,a32/62
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:27:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:17:48 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.214	2.076	7569.8E6	4402.0E6	49.662	51.458
	Spiked Amount	40.000		Recovery	=	124.15%	128.64%
13)	s DCB	8.802	9.083	5999.6E6	2824.8E6	50.500	53.088
	Spiked Amount	40.000		Recovery	=	126.25%	132.72%
Target Compounds							
17)	AR1232-A	2.473	2.405	1151.6E6	849.1E6	547.017m	544.613m
18)	AR1232-B	2.747	2.708	1279.1E6	817.9E6	521.266m	528.022m
19)	AR1232-C	3.142	3.072	2547.4E6	1400.7E6	585.423	562.920m
20)	AR1232-D	3.452	3.410	1598.2E6	873.2E6	556.460m	501.785m
21)	AR1232-E	4.087	4.066	2546.6E6	1426.9E6	550.498m	526.835m
37)	AR1262-A	5.017	5.062	2804.4E6	1727.1E6	550.339	548.593m
38)	AR1262-B	5.374	5.336	3763.5E6	1783.1E6	558.721	582.803m
39)	AR1262-C	5.901	5.942	10119.0E6	5461.2E6	578.689m	589.864m
40)	AR1262-D	7.159	7.263	10115.4E6	5032.8E6	662.982m	658.180m
41)	AR1262-E	8.059	8.167	2879.0E6	1482.6E6	696.159	692.150

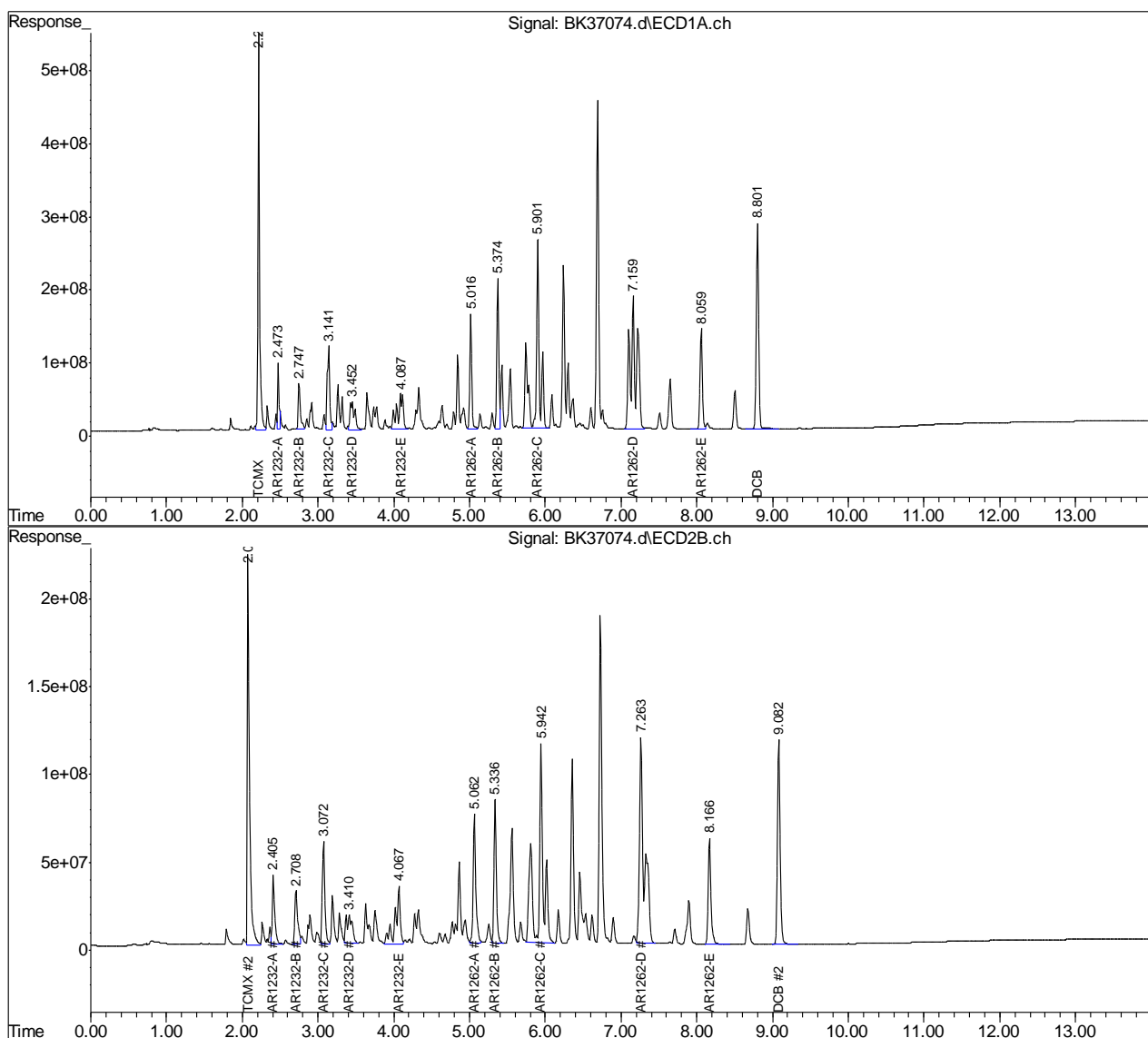
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

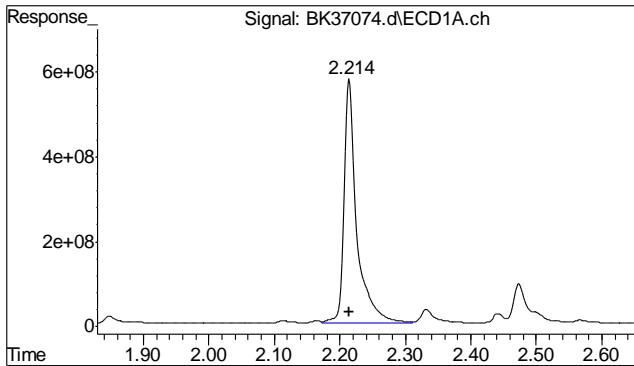
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37074.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:01 pm
 Operator : nickk
 Sample : ic1213-500,a32/62
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 58 Sample Multiplier: 1

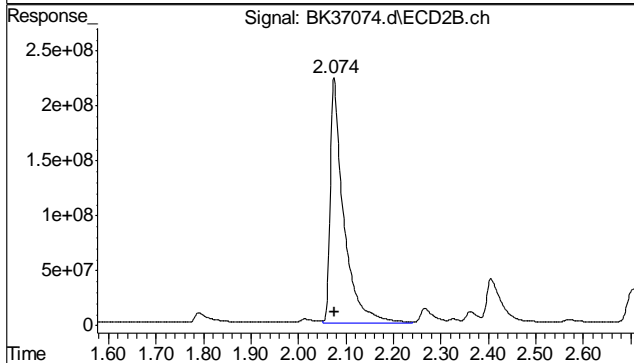
Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:27:58 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:17:48 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

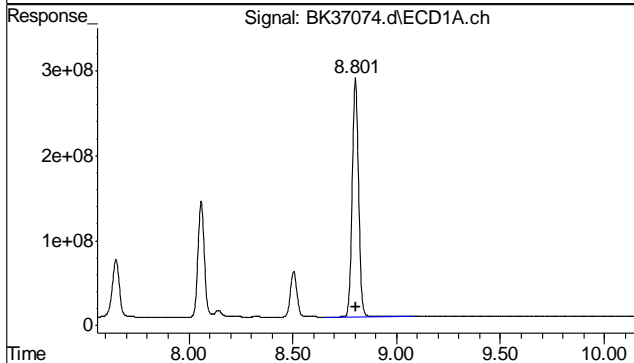




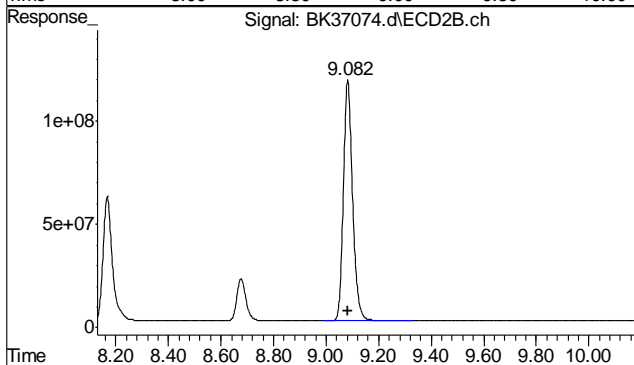
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 7569752241
 Conc: 49.66 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.000 min
 Response: 4402015814
 Conc: 51.46 ppb

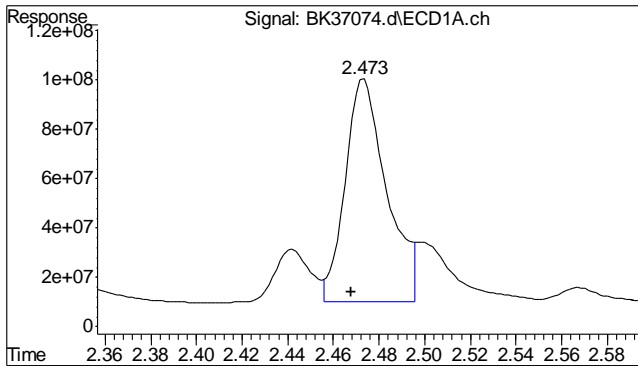


#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.000 min
 Response: 5999595062
 Conc: 50.50 ppb

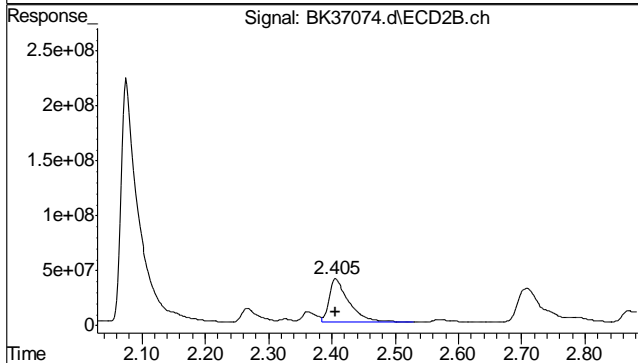


#13 DCB
 R.T.: 9.083 min
 Delta R.T.: 0.000 min
 Response: 2824760643
 Conc: 53.09 ppb

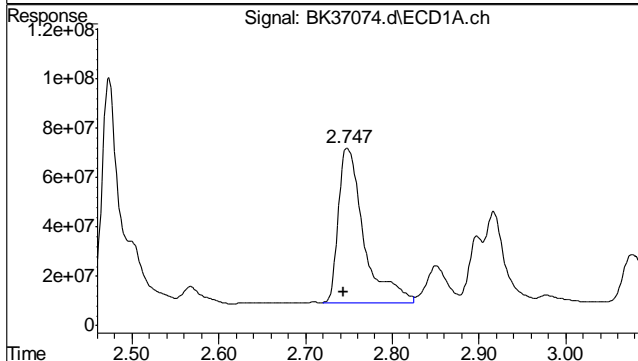
7.5.8
 7



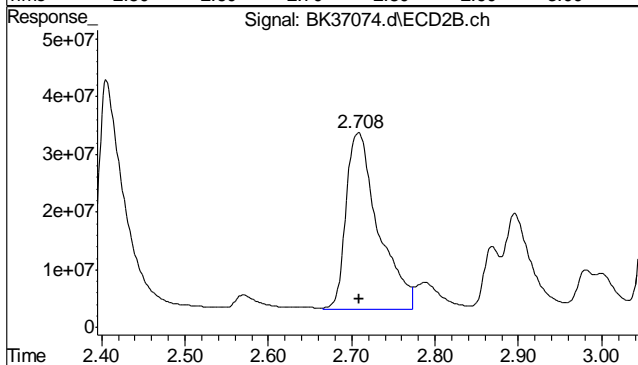
#17 AR1232-A
 R.T.: 2.473 min
 Delta R.T.: 0.005 min
 Response: 1151567051
 Conc: 547.02 ppb m



#17 AR1232-A
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 849106655
 Conc: 544.61 ppb m

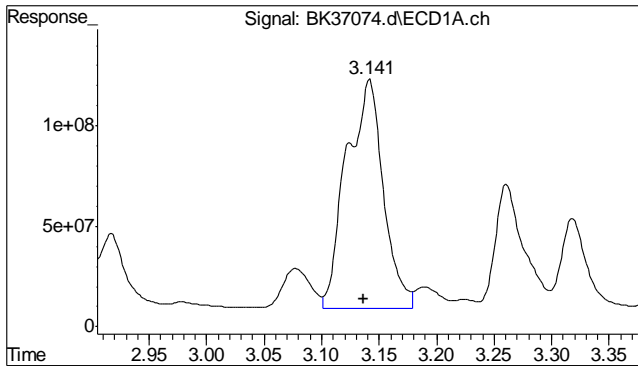


#18 AR1232-B
 R.T.: 2.747 min
 Delta R.T.: 0.003 min
 Response: 1279077332
 Conc: 521.27 ppb m

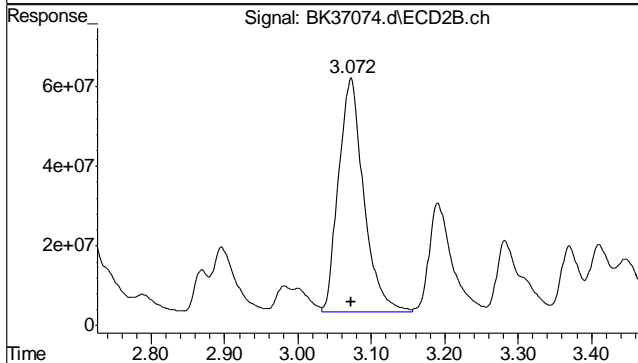


#18 AR1232-B
 R.T.: 2.708 min
 Delta R.T.: 0.000 min
 Response: 817885246
 Conc: 528.02 ppb m

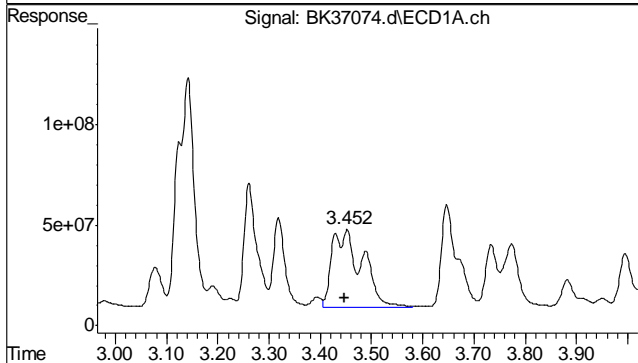
7.5.8
7



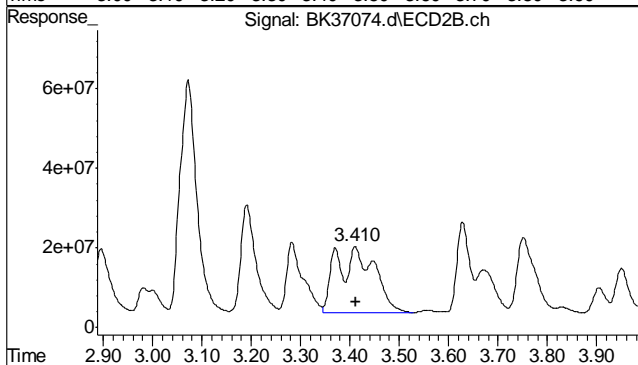
#19 AR1232-C
 R.T.: 3.142 min
 Delta R.T.: 0.005 min
 Response: 2547375018
 Conc: 585.42 ppb



#19 AR1232-C
 R.T.: 3.072 min
 Delta R.T.: -0.001 min
 Response: 1400706265
 Conc: 562.92 ppb m

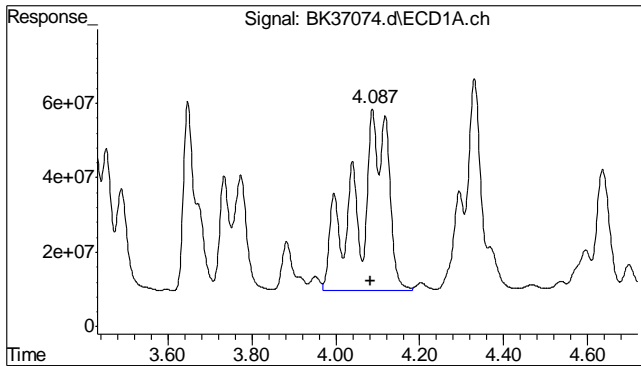


#20 AR1232-D
 R.T.: 3.452 min
 Delta R.T.: 0.004 min
 Response: 1598154208
 Conc: 556.46 ppb m

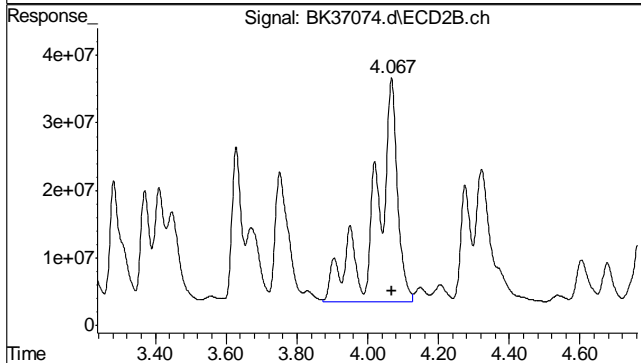


#20 AR1232-D
 R.T.: 3.410 min
 Delta R.T.: -0.002 min
 Response: 873245991
 Conc: 501.79 ppb m

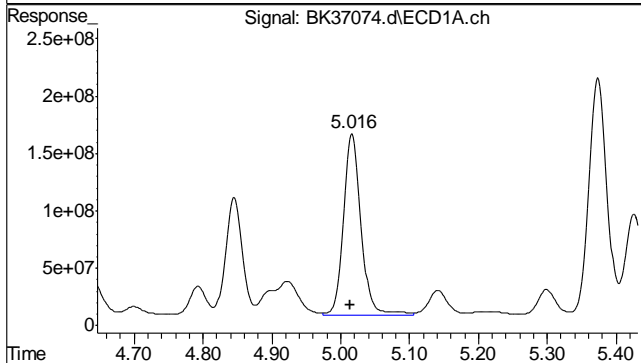
7.5.8
7



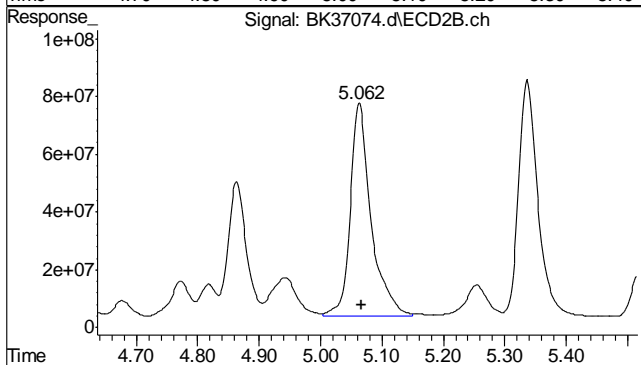
#21 AR1232-E
 R.T.: 4.087 min
 Delta R.T.: 0.004 min
 Response: 2546593353
 Conc: 550.50 ppb m



#21 AR1232-E
 R.T.: 4.066 min
 Delta R.T.: -0.003 min
 Response: 1426865027
 Conc: 526.83 ppb m

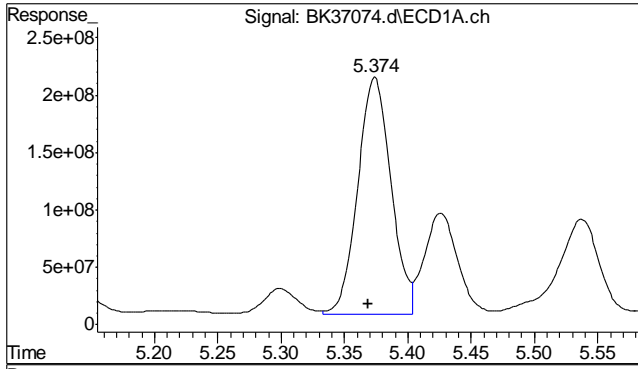


#37 AR1262-A
 R.T.: 5.017 min
 Delta R.T.: 0.003 min
 Response: 2804443278
 Conc: 550.34 ppb

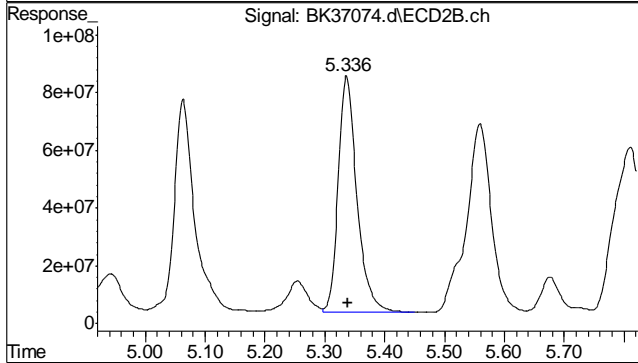


#37 AR1262-A
 R.T.: 5.062 min
 Delta R.T.: -0.004 min
 Response: 1727143919
 Conc: 548.59 ppb m

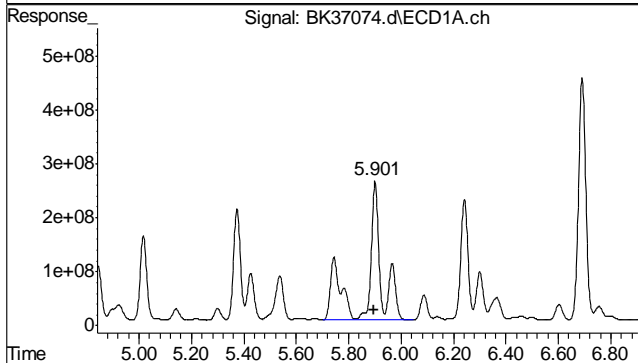
7.5.8
7



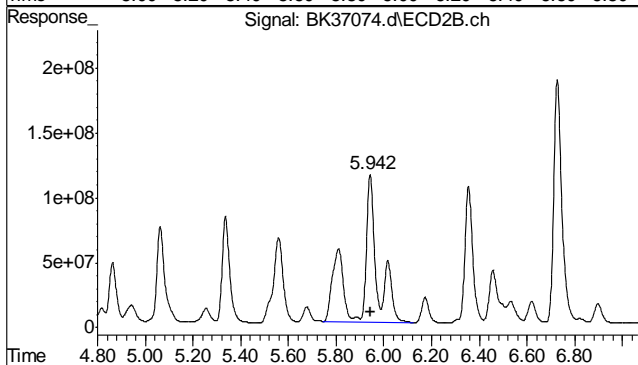
#38 AR1262-B
 R.T.: 5.374 min
 Delta R.T.: 0.005 min
 Response: 3763464187
 Conc: 558.72 ppb



#38 AR1262-B
 R.T.: 5.336 min
 Delta R.T.: -0.002 min
 Response: 1783111964
 Conc: 582.80 ppb m

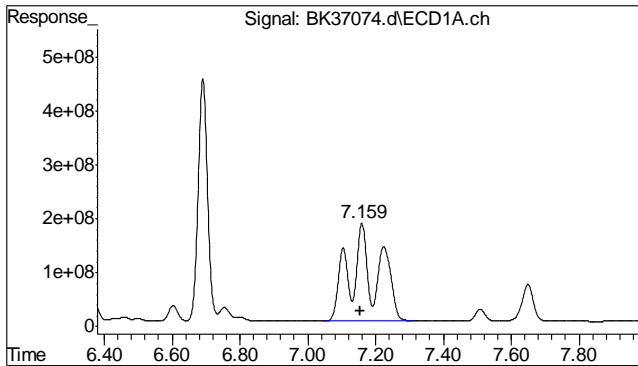


#39 AR1262-C
 R.T.: 5.901 min
 Delta R.T.: 0.006 min
 Response: 10118971207
 Conc: 578.69 ppb m

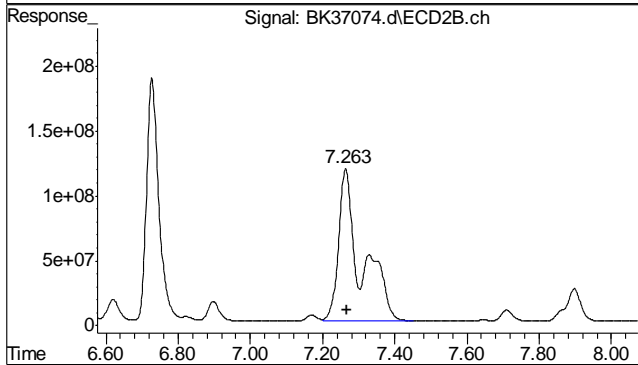


#39 AR1262-C
 R.T.: 5.942 min
 Delta R.T.: -0.004 min
 Response: 5461224221
 Conc: 589.86 ppb m

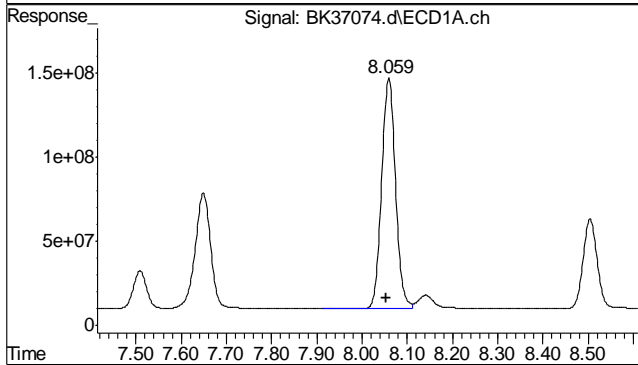
7.5.8
7



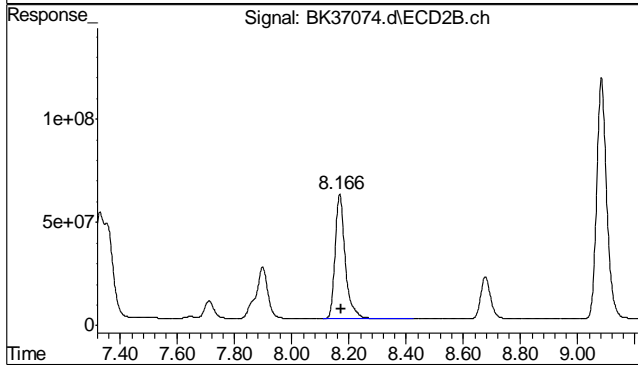
#40 AR1262-D
 R.T.: 7.159 min
 Delta R.T.: 0.005 min
 Response: 10115408331
 Conc: 662.98 ppb m



#40 AR1262-D
 R.T.: 7.263 min
 Delta R.T.: -0.005 min
 Response: 5032811697
 Conc: 658.18 ppb m



#41 AR1262-E
 R.T.: 8.059 min
 Delta R.T.: 0.006 min
 Response: 2878950134
 Conc: 696.16 ppb



#41 AR1262-E
 R.T.: 8.167 min
 Delta R.T.: -0.004 min
 Response: 1482633309
 Conc: 692.15 ppb

7.5.8
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37075.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:17 pm
 Operator : nickk
 Sample : ic1213-500,a42/68
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:42:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:28:03 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.215	2.076	7360.9E6	4494.0E6	48.313	52.595
	Spiked Amount	40.000		Recovery	=	120.78%	131.49%
13)	s DCB	8.803	9.084	10599.5E6	5062.1E6	88.662	94.569
	Spiked Amount	40.000		Recovery	=	221.66%	236.42%
Target Compounds							
22)	AR1242-A	2.473	2.405	850.4E6	586.6E6	517.810m	496.657m
23)	AR1242-B	2.749	2.709	1980.0E6	1243.2E6	519.172	522.524m
24)	AR1242-C	3.143	3.073	4240.3E6	2498.6E6	557.767	577.106
25)	AR1242-D	3.453	3.411	2693.1E6	1671.9E6	511.324m	533.819m
26)	AR1242-E	4.087	4.068	3953.9E6	2367.5E6	537.981m	539.847m
42)	AR1268-A	5.901	5.943	1977.3E6	1131.5E6	558.334m	478.170m
43)	AR1268-B	6.235	6.358	2787.2E6	1567.9E6	505.312m	525.533m
44)	AR1268-C	7.160	7.260	20763.0E6	10597.9E6	700.010m	676.291m
45)	AR1268-D	7.509	7.711	8467.7E6	4100.5E6	761.354	746.418m
46)	AR1268-E	8.500	8.678	20539.0E6	11106.5E6	752.405	832.690m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

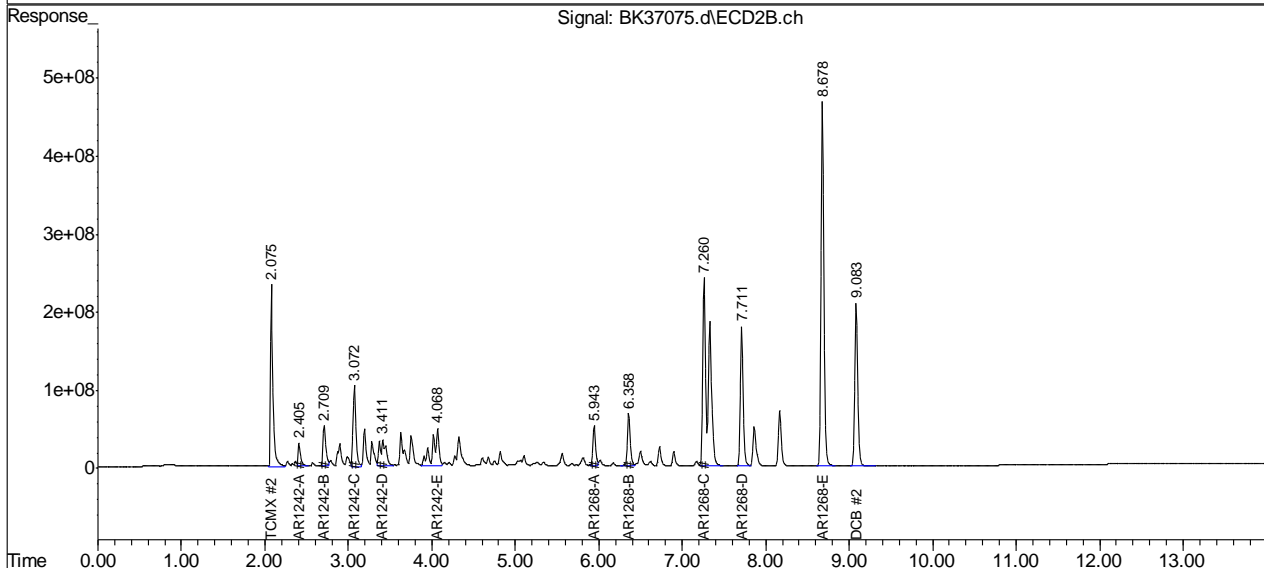
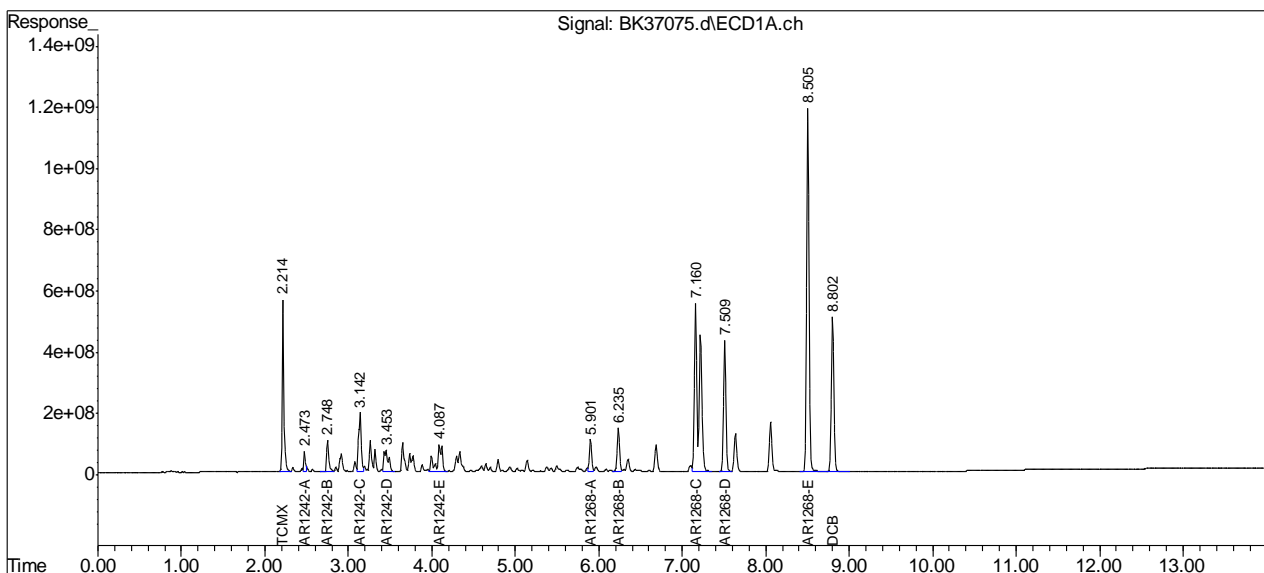
7.59
7

Quantitation Report (QT Reviewed)

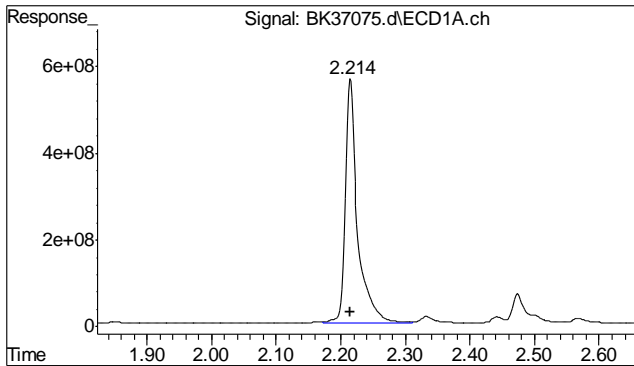
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37075.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:17 pm
 Operator : nickk
 Sample : ic1213-500,a42/68
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:42:04 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:28:03 2014
 Response via : Initial Calibration
 Integrator: ChemStation

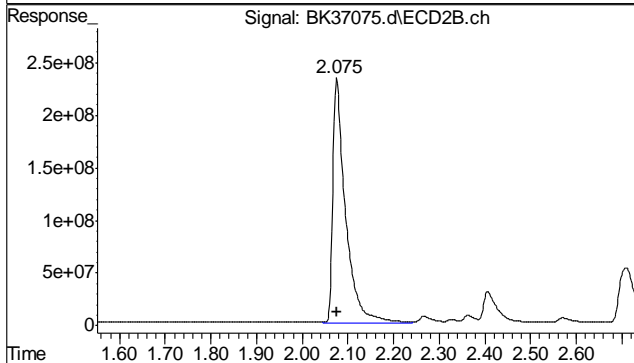
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



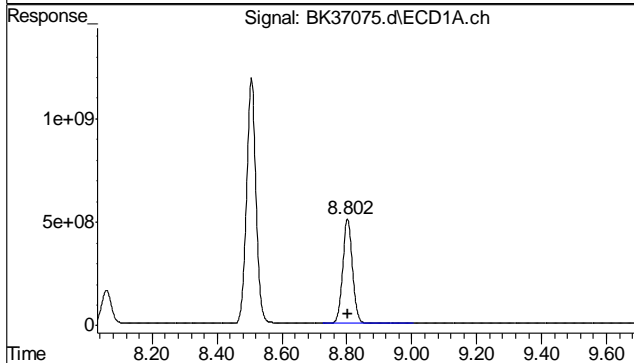
7.5.9
 7



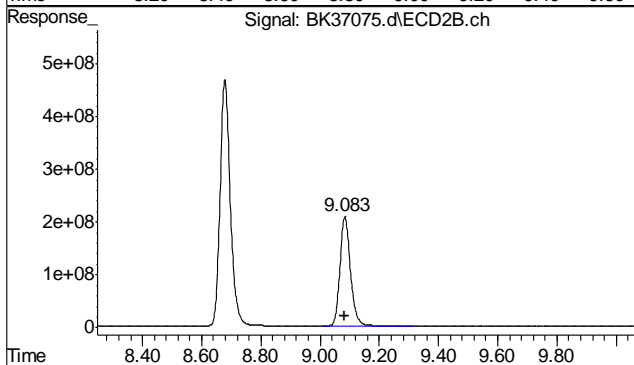
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: 0.000 min
 Response: 7360908614
 Conc: 48.31 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.000 min
 Response: 4494046167
 Conc: 52.59 ppb

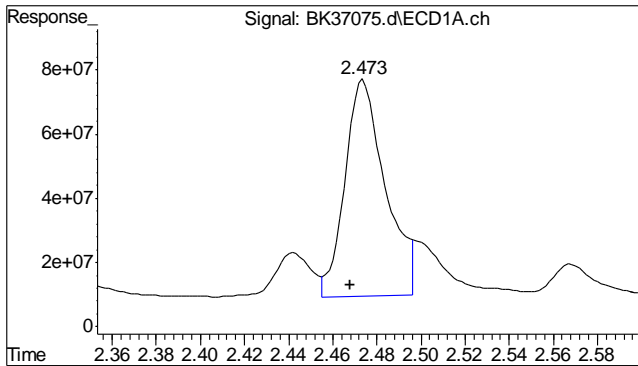


#13 DCB
 R.T.: 8.803 min
 Delta R.T.: 0.000 min
 Response: 10599451902
 Conc: 88.66 ppb

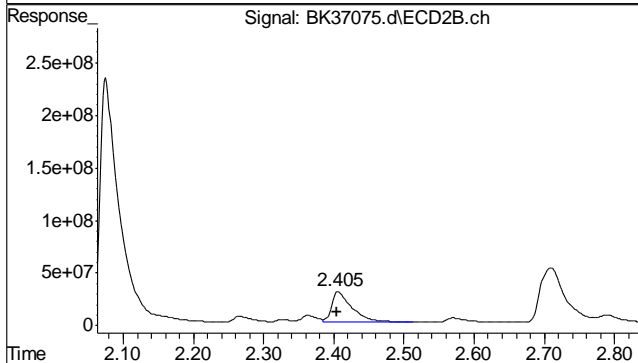


#13 DCB
 R.T.: 9.084 min
 Delta R.T.: 0.001 min
 Response: 5062127819
 Conc: 94.57 ppb

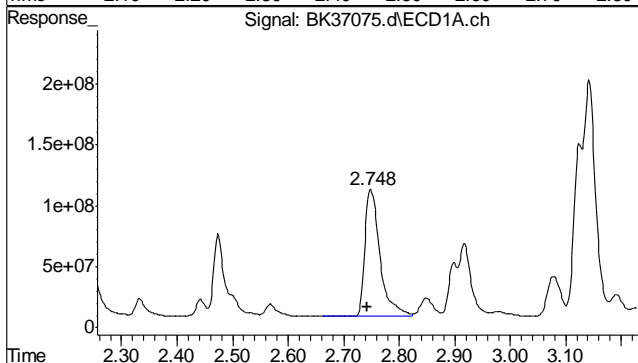
7.5.9
7



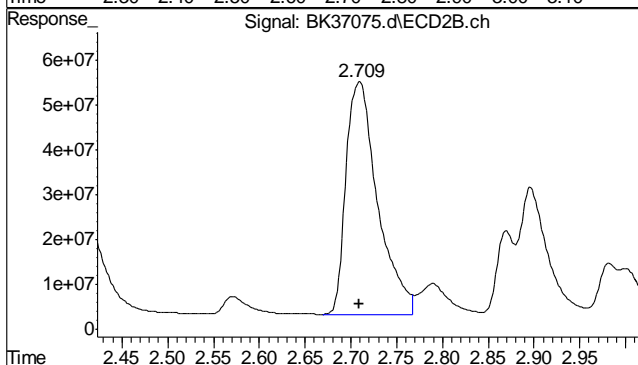
#22 AR1242-A
 R.T.: 2.473 min
 Delta R.T.: 0.005 min
 Response: 850376032
 Conc: 517.81 ppb m



#22 AR1242-A
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 586648287
 Conc: 496.66 ppb m

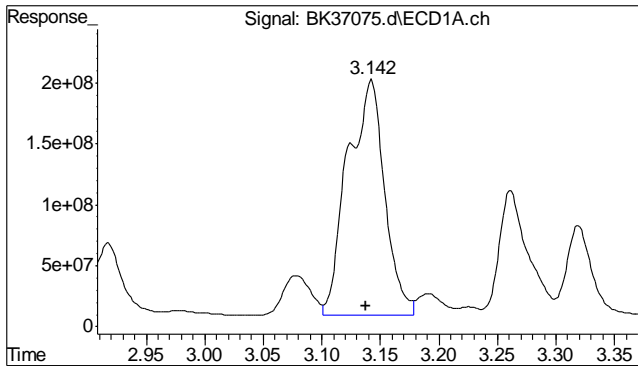


#23 AR1242-B
 R.T.: 2.749 min
 Delta R.T.: 0.006 min
 Response: 1979957161
 Conc: 519.17 ppb

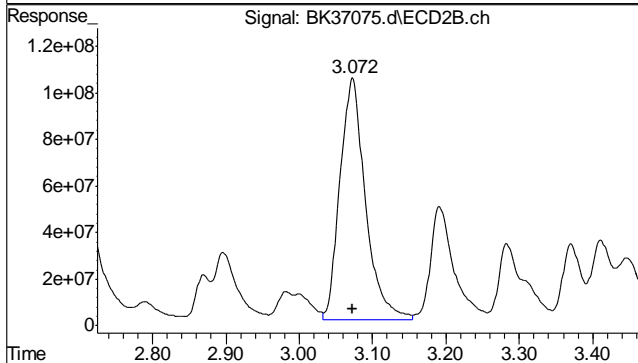


#23 AR1242-B
 R.T.: 2.709 min
 Delta R.T.: 0.000 min
 Response: 1243233625
 Conc: 522.52 ppb m

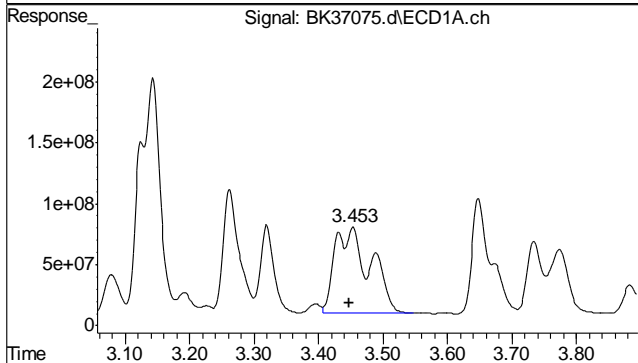
7.5.9
7



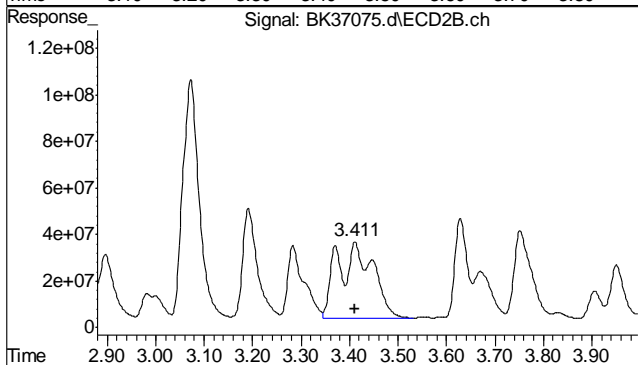
#24 AR1242-C
 R.T.: 3.143 min
 Delta R.T.: 0.005 min
 Response: 4240312875
 Conc: 557.77 ppb



#24 AR1242-C
 R.T.: 3.073 min
 Delta R.T.: 0.000 min
 Response: 2498598467
 Conc: 577.11 ppb

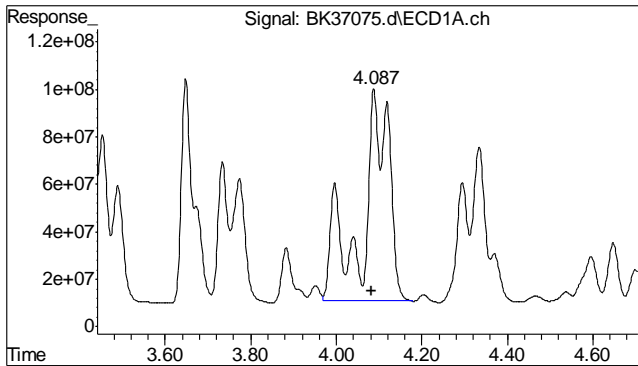


#25 AR1242-D
 R.T.: 3.453 min
 Delta R.T.: 0.005 min
 Response: 2693090722
 Conc: 511.32 ppb m

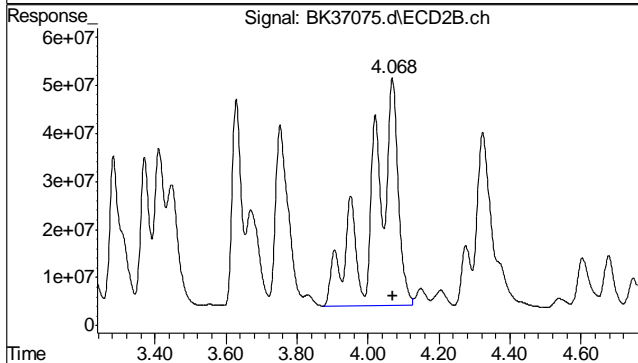


#25 AR1242-D
 R.T.: 3.411 min
 Delta R.T.: -0.001 min
 Response: 1671878749
 Conc: 533.82 ppb m

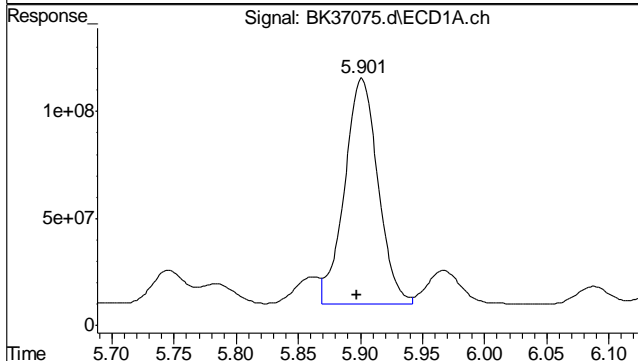
7.5.9
7



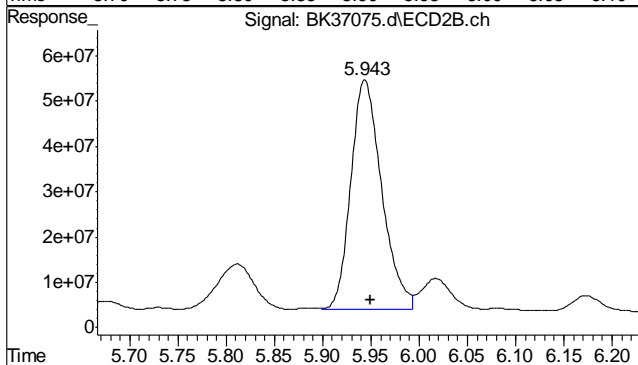
#26 AR1242-E
 R.T.: 4.087 min
 Delta R.T.: 0.004 min
 Response: 3953860288
 Conc: 537.98 ppb m



#26 AR1242-E
 R.T.: 4.068 min
 Delta R.T.: -0.002 min
 Response: 2367484490
 Conc: 539.85 ppb m

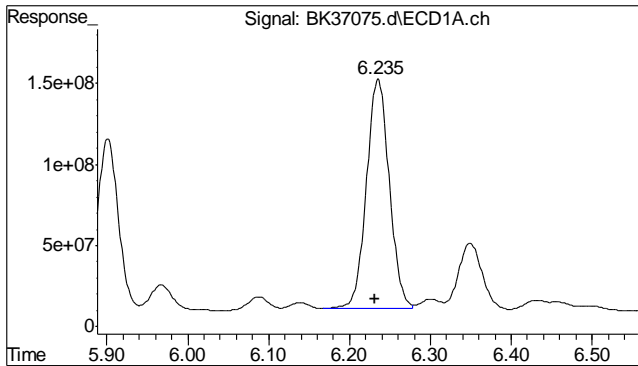


#42 AR1268-A
 R.T.: 5.901 min
 Delta R.T.: 0.004 min
 Response: 1977326156
 Conc: 558.33 ppb m

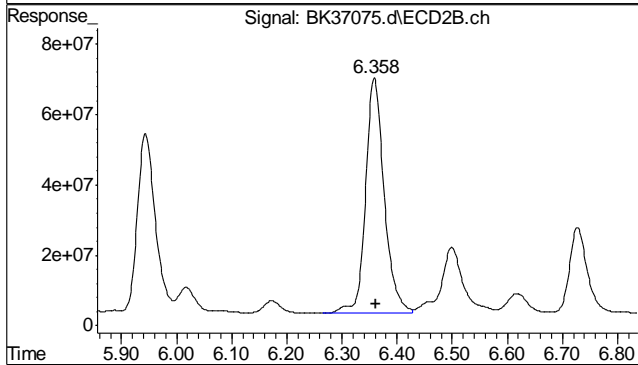


#42 AR1268-A
 R.T.: 5.943 min
 Delta R.T.: -0.006 min
 Response: 1131477017
 Conc: 478.17 ppb m

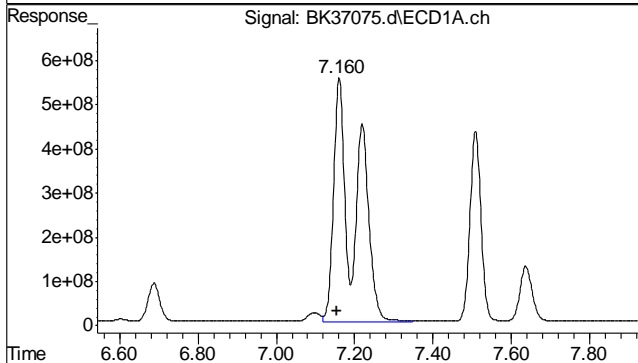
7.5.9
7



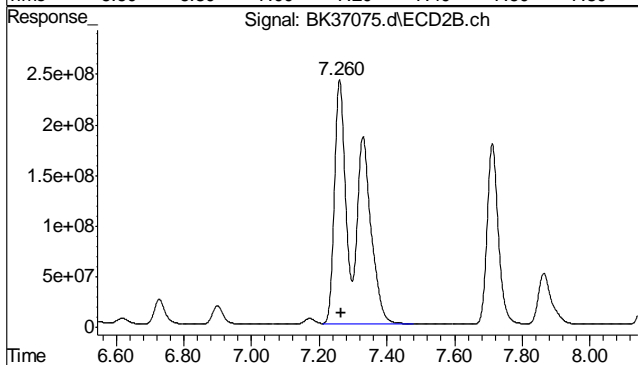
#43 AR1268-B
 R.T.: 6.235 min
 Delta R.T.: 0.003 min
 Response: 2787246201
 Conc: 505.31 ppb m



#43 AR1268-B
 R.T.: 6.358 min
 Delta R.T.: -0.004 min
 Response: 1567930389
 Conc: 525.53 ppb m

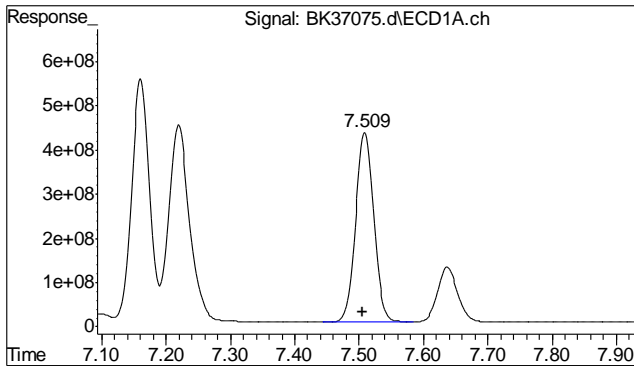


#44 AR1268-C
 R.T.: 7.160 min
 Delta R.T.: 0.005 min
 Response: 20763045993
 Conc: 700.01 ppb m

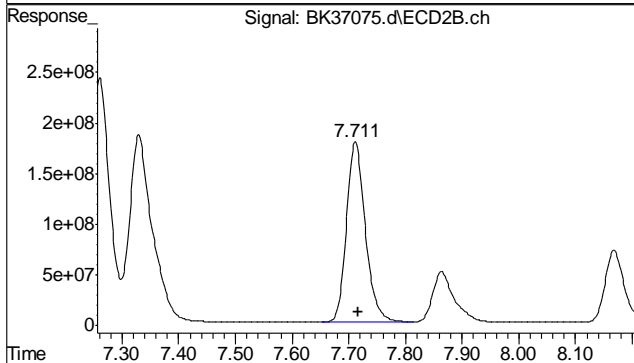


#44 AR1268-C
 R.T.: 7.260 min
 Delta R.T.: -0.005 min
 Response: 10597879737
 Conc: 676.29 ppb m

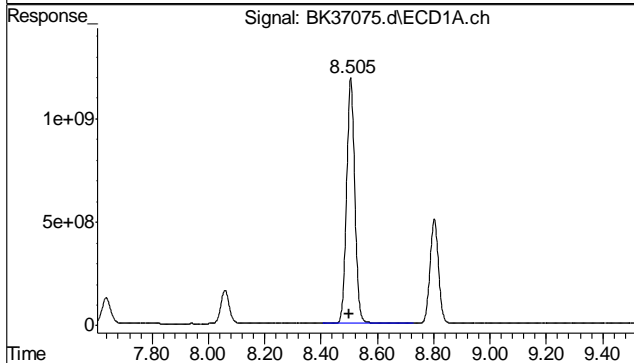
7.5.9
7



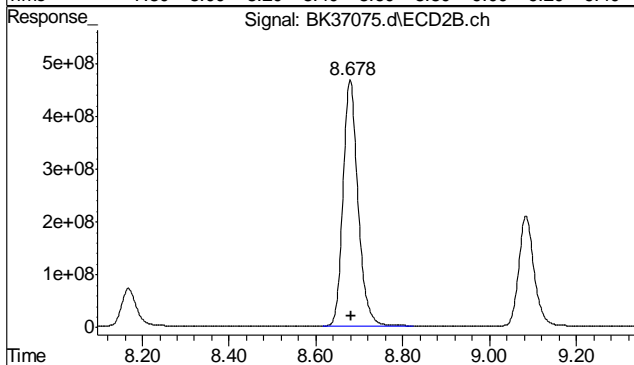
#45 AR1268-D
 R.T.: 7.509 min
 Delta R.T.: 0.004 min
 Response: 8467730585
 Conc: 761.35 ppb



#45 AR1268-D
 R.T.: 7.711 min
 Delta R.T.: -0.005 min
 Response: 4100484525
 Conc: 746.42 ppb m



#46 AR1268-E
 R.T.: 8.500 min
 Delta R.T.: -0.002 min
 Response: 20538987433
 Conc: 752.40 ppb



#46 AR1268-E
 R.T.: 8.678 min
 Delta R.T.: -0.004 min
 Response: 11106481540
 Conc: 832.69 ppb m

7.5.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37076.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:33 pm
 Operator : nickk
 Sample : ic1213-500,a1248
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 60 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:49:28 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:42:09 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.215	2.076	7522.5E6	4413.3E6	49.610	51.457
	Spiked Amount	40.000		Recovery	=	124.03%	128.64%
13)	s DCB	8.802	9.083	5619.2E6	2695.7E6	41.464	43.978
	Spiked Amount	40.000		Recovery	=	103.66%	109.95%
Target Compounds							
27)	AR1248-A	2.746	2.704	1097.9E6	665.8E6	533.656m	522.013m
28)	AR1248-B	3.142	3.071	2806.6E6	1588.1E6	589.152m	595.521m
29)	AR1248-C	3.429	3.369	4153.7E6	2541.3E6	575.689m	583.257m
30)	AR1248-D	3.647	3.627	5585.1E6	3188.9E6	589.185m	595.262m
31)	AR1248-E	4.087	4.068	6789.7E6	4018.9E6	612.325m	619.132m

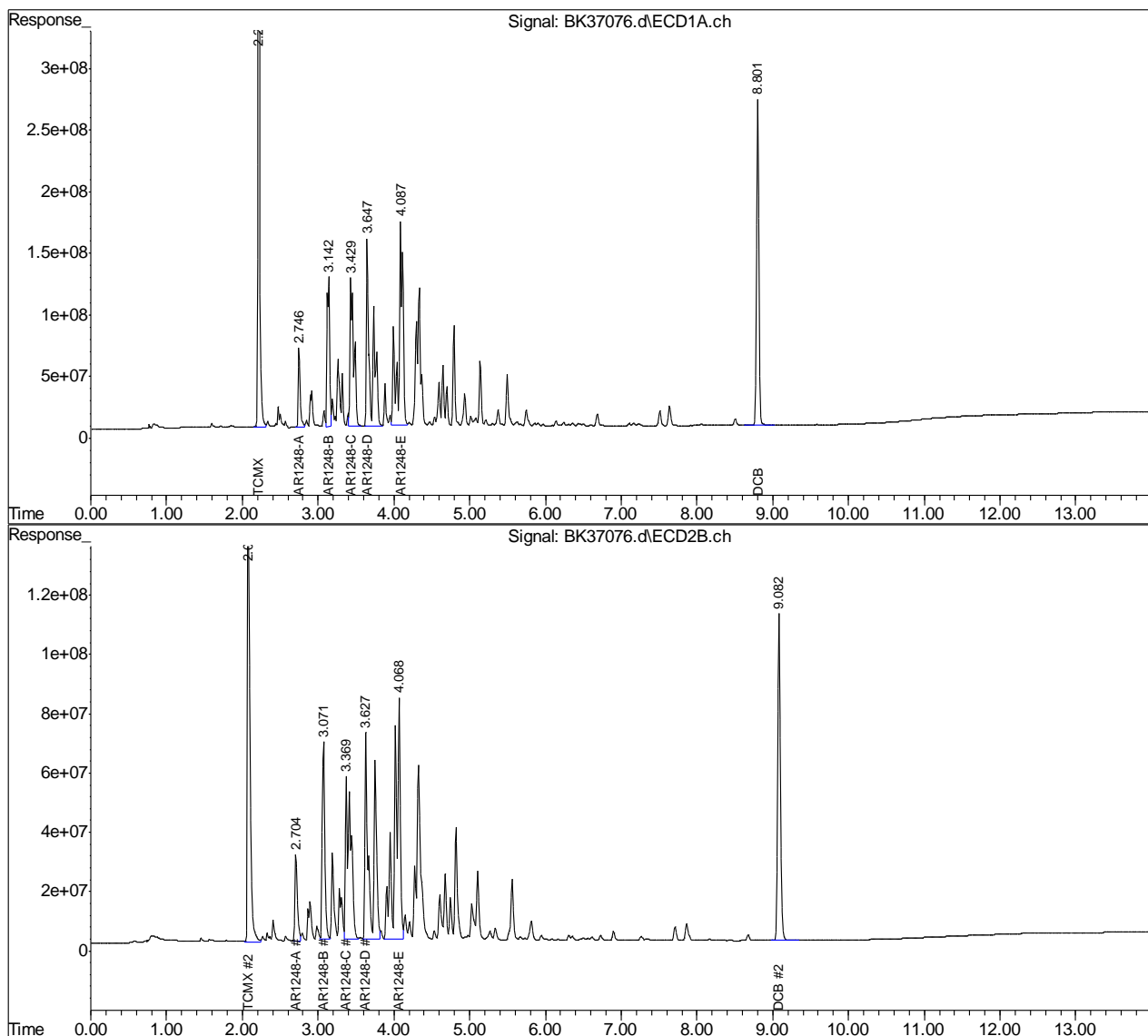
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

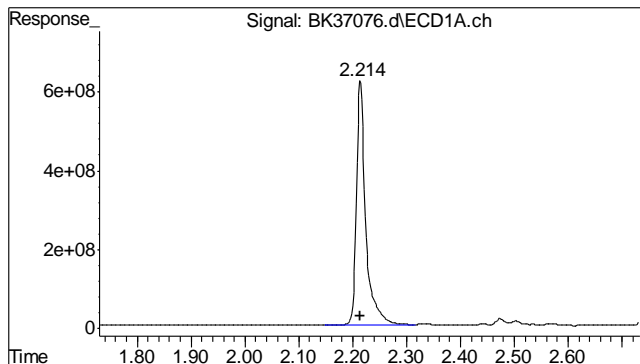
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37076.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:33 pm
 Operator : nickk
 Sample : ic1213-500,a1248
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 60 Sample Multiplier: 1

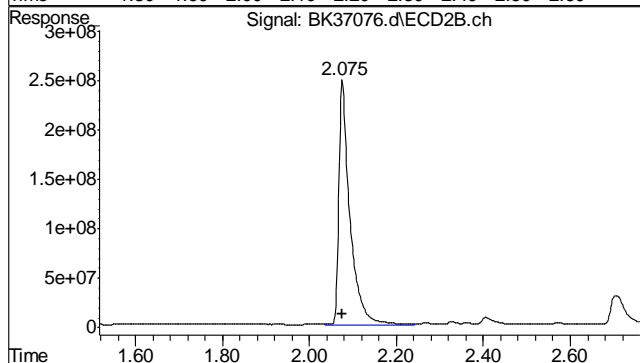
Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 17:49:28 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:42:09 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

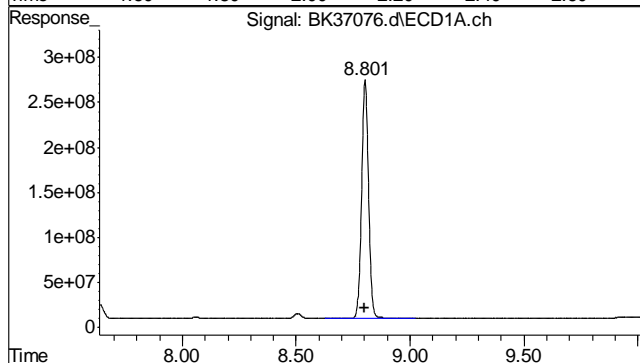




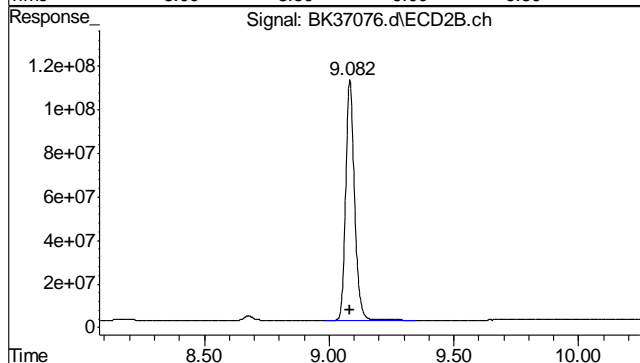
#1 TCMX
 R.T.: 2.215 min
 Delta R.T.: 0.000 min
 Response: 7522541908
 Conc: 49.61 ppb



#1 TCMX
 R.T.: 2.076 min
 Delta R.T.: 0.000 min
 Response: 4413282620
 Conc: 51.46 ppb

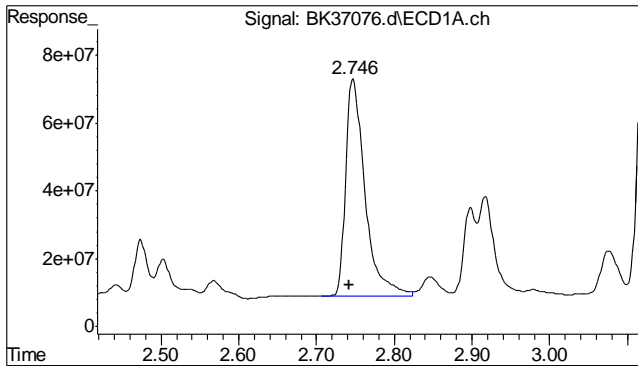


#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.000 min
 Response: 5619163106
 Conc: 41.46 ppb

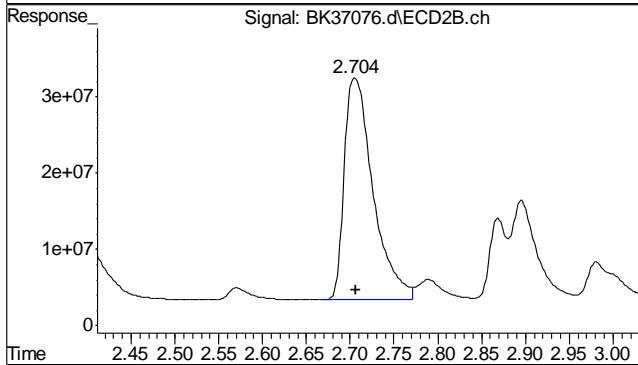


#13 DCB
 R.T.: 9.083 min
 Delta R.T.: 0.000 min
 Response: 2695697152
 Conc: 43.98 ppb

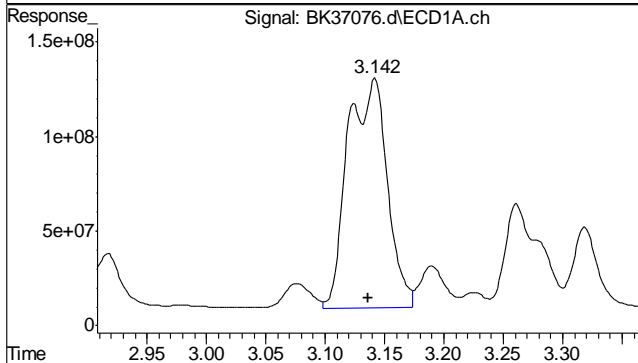
7.5.10
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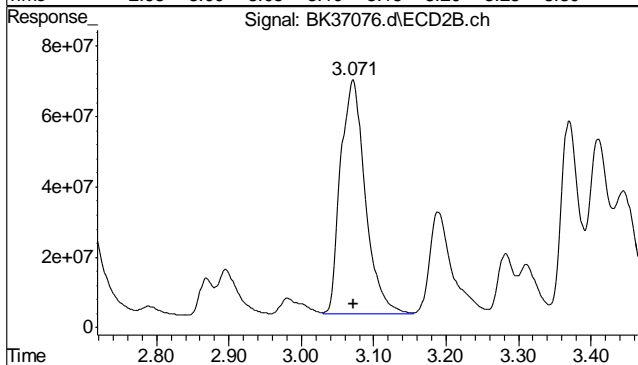
#27 AR1248-A
 R.T.: 2.746 min
 Delta R.T.: 0.004 min
 Response: 1097852941
 Conc: 533.66 ppb m



#27 AR1248-A
 R.T.: 2.704 min
 Delta R.T.: -0.003 min
 Response: 665809003
 Conc: 522.01 ppb m

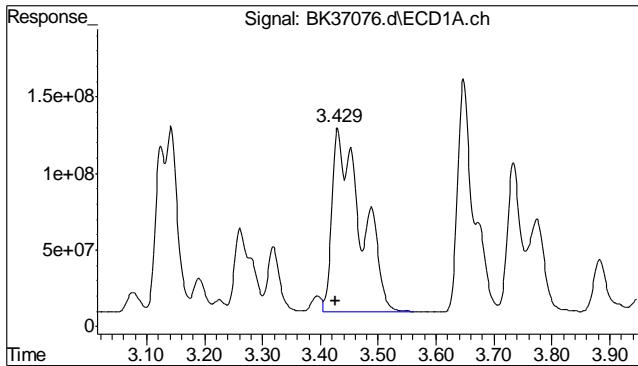


#28 AR1248-B
 R.T.: 3.142 min
 Delta R.T.: 0.006 min
 Response: 2806569221
 Conc: 589.15 ppb m

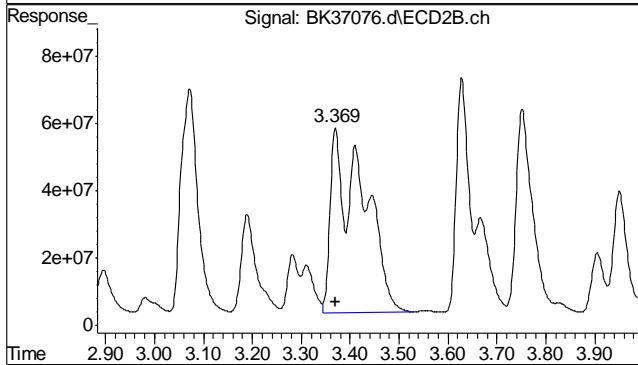


#28 AR1248-B
 R.T.: 3.071 min
 Delta R.T.: 0.000 min
 Response: 1588061384
 Conc: 595.52 ppb m

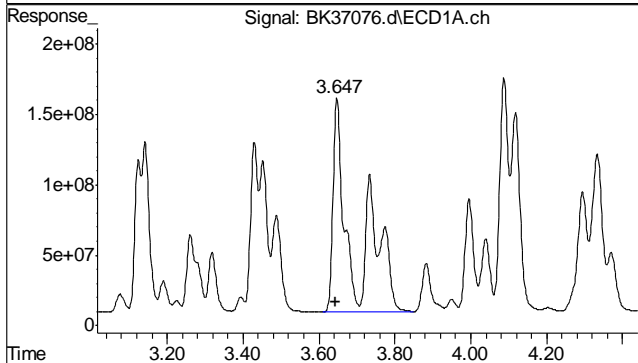
7.5.10
7



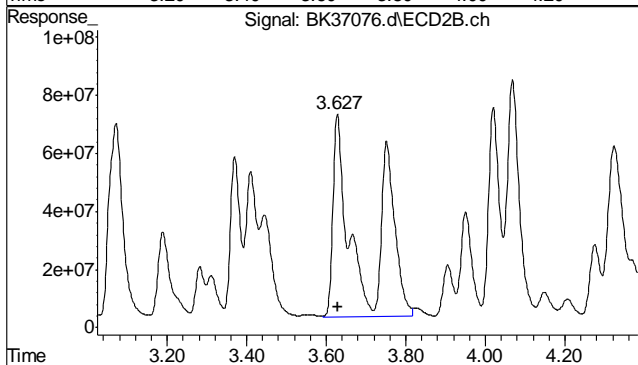
#29 AR1248-C
 R.T.: 3.429 min
 Delta R.T.: 0.003 min
 Response: 4153734618
 Conc: 575.69 ppb m



#29 AR1248-C
 R.T.: 3.369 min
 Delta R.T.: -0.002 min
 Response: 2541301080
 Conc: 583.26 ppb m

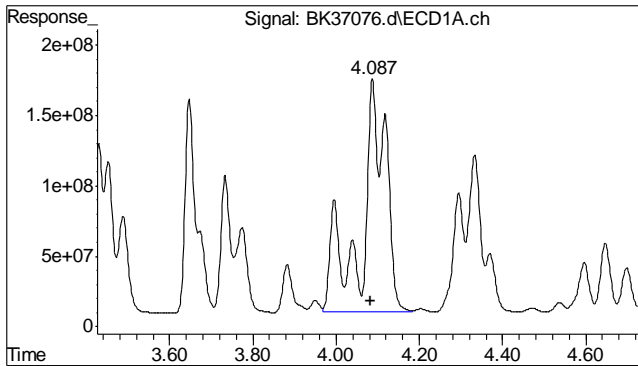


#30 AR1248-D
 R.T.: 3.647 min
 Delta R.T.: 0.004 min
 Response: 5585088279
 Conc: 589.19 ppb m

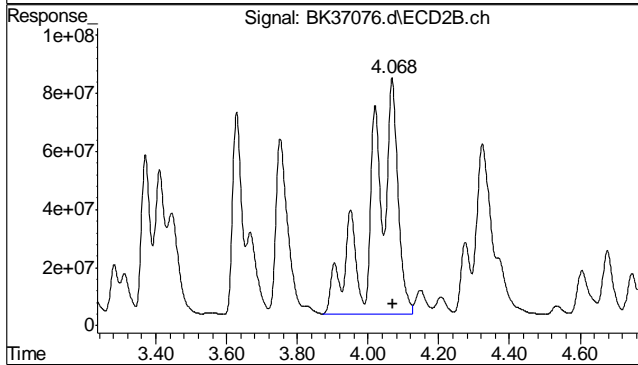


#30 AR1248-D
 R.T.: 3.627 min
 Delta R.T.: -0.003 min
 Response: 3188940291
 Conc: 595.26 ppb m

7.5.10
7



#31 AR1248-E
 R.T.: 4.087 min
 Delta R.T.: 0.004 min
 Response: 6789708291
 Conc: 612.32 ppb m



#31 AR1248-E
 R.T.: 4.068 min
 Delta R.T.: -0.002 min
 Response: 4018936785
 Conc: 619.13 ppb m

7.5.10
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37077.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:49 pm
 Operator : nickk
 Sample : icv1213-500,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 18:05:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.214	2.075	6323.9E6	4068.2E6	42.422m	48.850m
	Spiked Amount	40.000		Recovery	=	106.05%	122.13%
13)	s DCB	8.802	9.083	5215.7E6	2477.3E6	44.817	47.829
	Spiked Amount	40.000		Recovery	=	112.04%	119.57%
Target Compounds							
2)	AR1016-A	2.473	2.405	998.1E6	729.4E6	449.847m	475.513m
3)	AR1016-B	2.748	2.707	2213.7E6	1447.6E6	435.634	474.453m
4)	AR1016-C	3.142	3.072	4847.3E6	2906.4E6	455.698	497.390
5)	AR1016-D	3.260	3.189	3345.2E6	1153.6E6	471.851m	474.777m
6)	AR1016-E	3.646	3.627	2099.3E6	1353.3E6	448.772m	497.454m
7)	AR1260-A	5.016	5.062	2991.5E6	1925.1E6	430.029	487.212m
8)	AR1260-B	5.374	5.336	4790.3E6	2146.1E6	461.441	480.036m
9)	AR1260-C	5.744	5.814	9584.1E6	5343.9E6	454.016m	485.952m
10)	AR1260-D	6.692	6.727	6585.2E6	3484.4E6	445.160	469.840m
11)	AR1260-E	7.105	7.267	6539.4E6	3346.8E6	453.654m	484.450m
12)	AR1260-F	8.059	8.167	1688.0E6	877.6E6	469.794	526.206

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

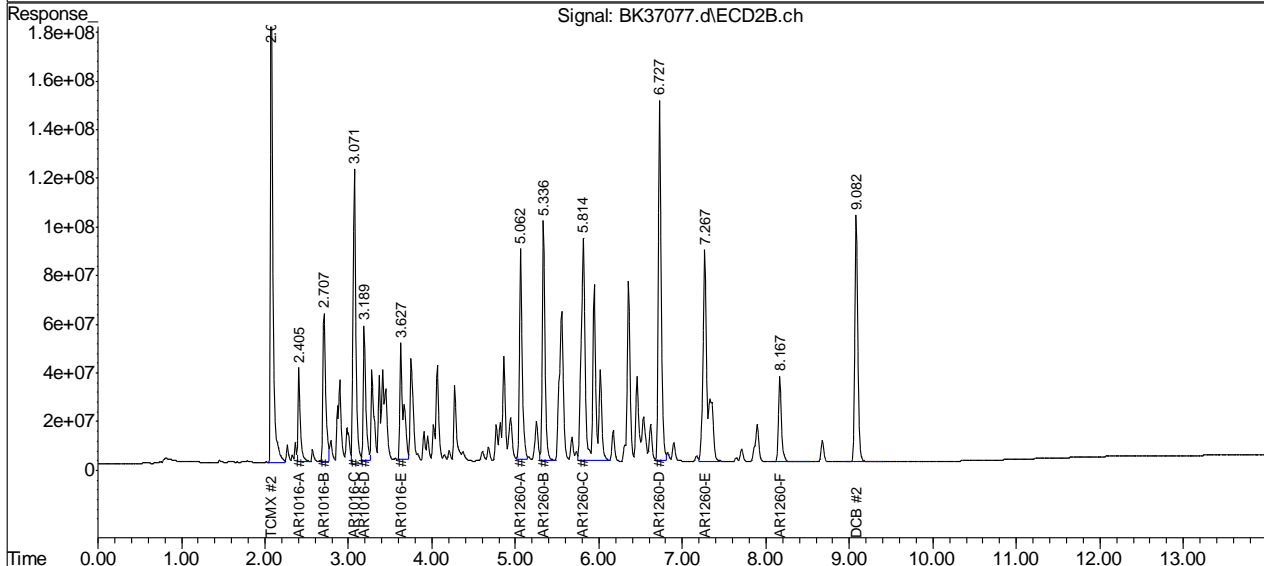
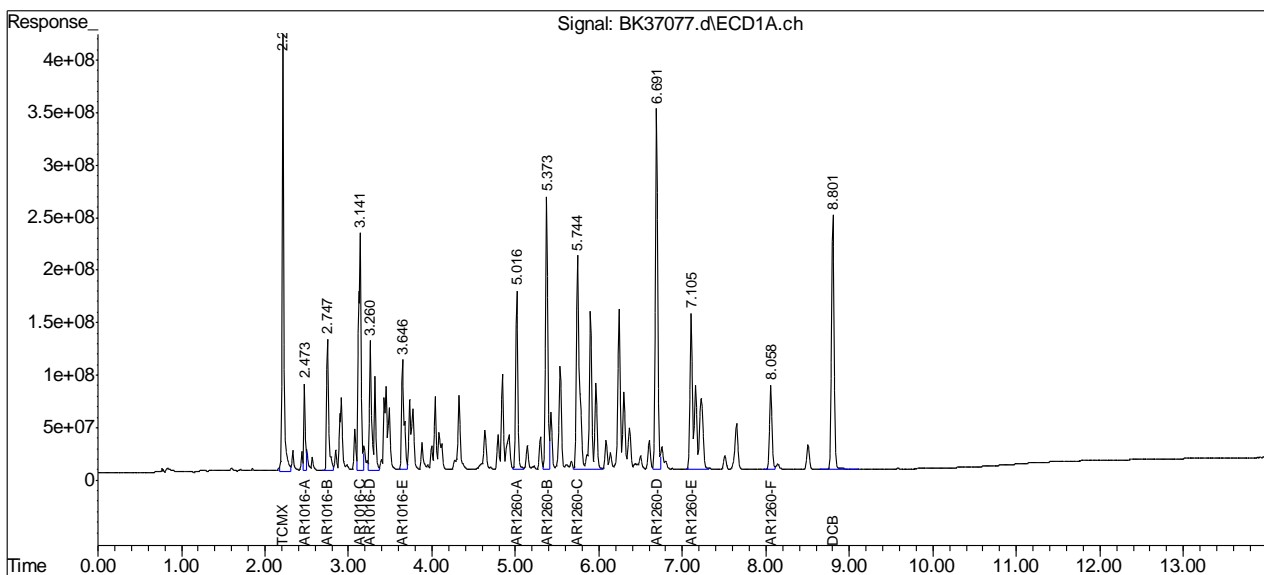
7.5.11
7

Quantitation Report (QT Reviewed)

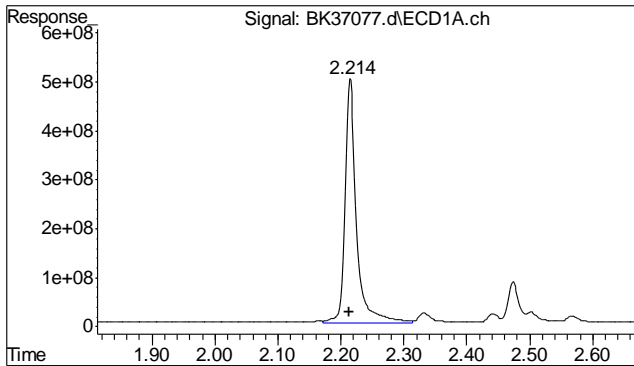
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37077.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 5:49 pm
 Operator : nickk
 Sample : icv1213-500,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 29 18:05:44 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

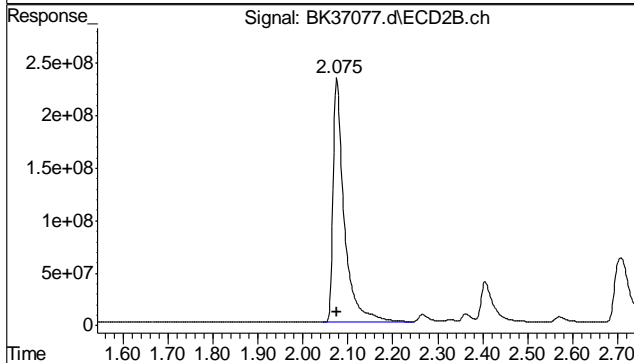
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



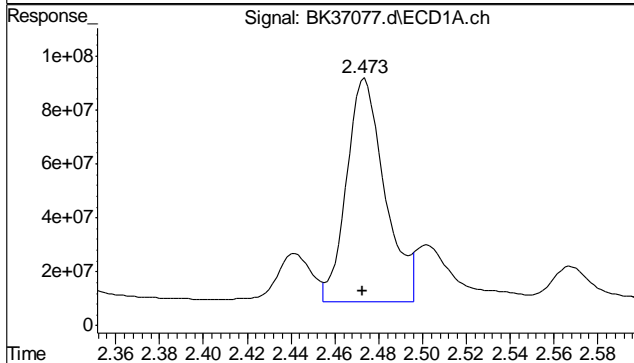
7.5.11
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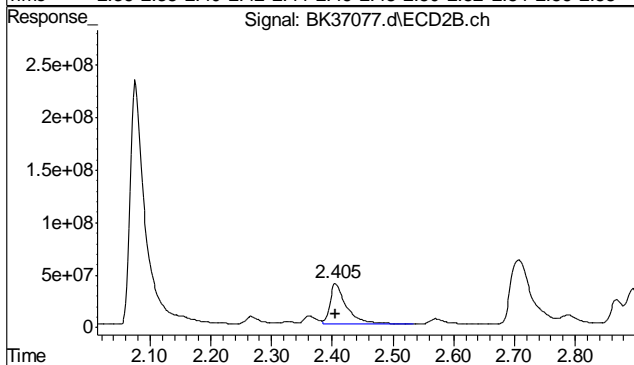
#1 TCMX
 R.T.: 2.214 min
 Delta R.T.: 0.000 min
 Response: 6323926403
 Conc: 42.42 ppb m



#1 TCMX
 R.T.: 2.075 min
 Delta R.T.: 0.000 min
 Response: 4068232047
 Conc: 48.85 ppb m

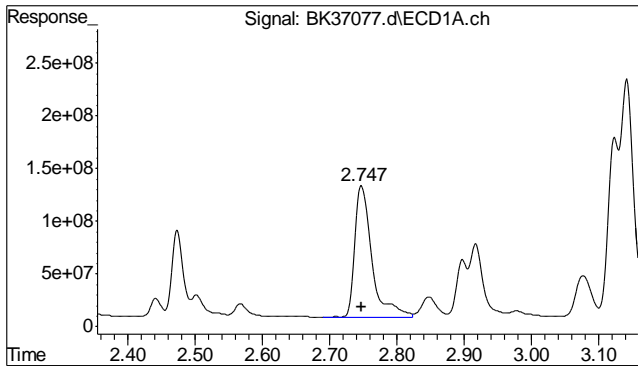


#2 AR1016-A
 R.T.: 2.473 min
 Delta R.T.: 0.000 min
 Response: 998080928
 Conc: 449.85 ppb m

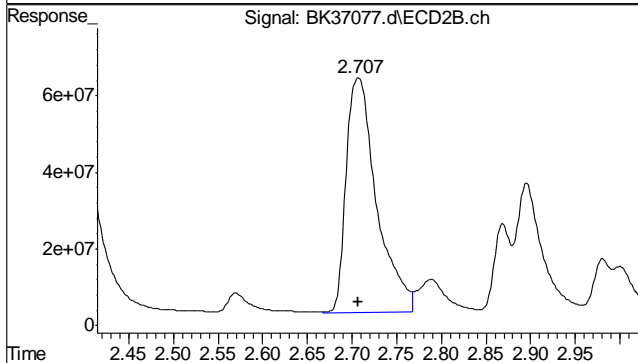


#2 AR1016-A
 R.T.: 2.405 min
 Delta R.T.: 0.000 min
 Response: 729382466
 Conc: 475.51 ppb m

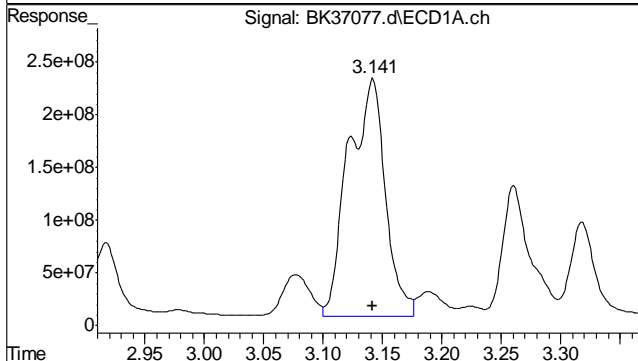
7.5.11
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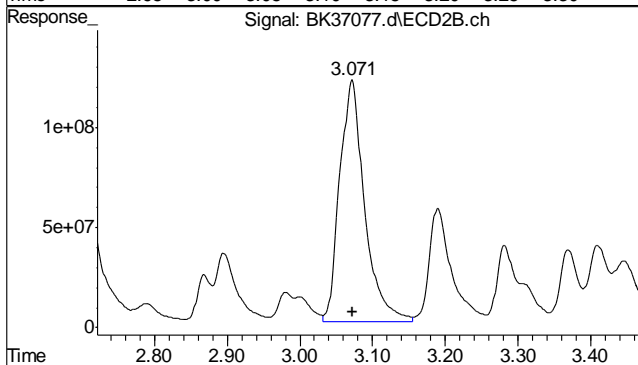
#3 AR1016-B
 R.T.: 2.748 min
 Delta R.T.: 0.000 min
 Response: 2213677077
 Conc: 435.63 ppb



#3 AR1016-B
 R.T.: 2.707 min
 Delta R.T.: 0.000 min
 Response: 1447627176
 Conc: 474.45 ppb m

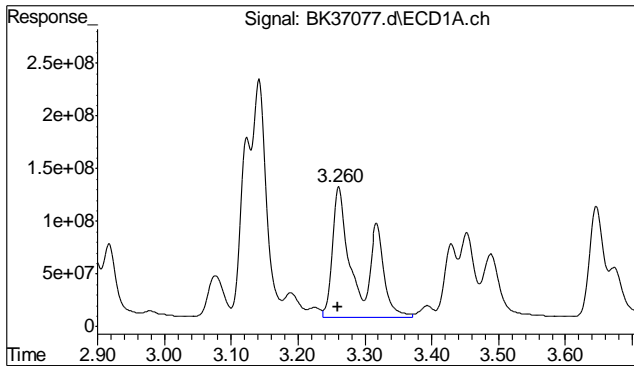


#4 AR1016-C
 R.T.: 3.142 min
 Delta R.T.: 0.000 min
 Response: 4847264355
 Conc: 455.70 ppb

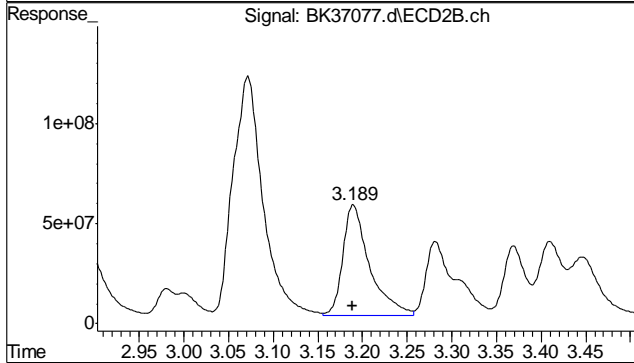


#4 AR1016-C
 R.T.: 3.072 min
 Delta R.T.: 0.000 min
 Response: 2906407666
 Conc: 497.39 ppb

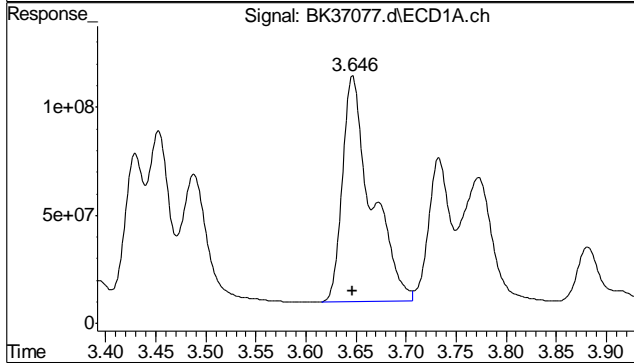
7.5.11
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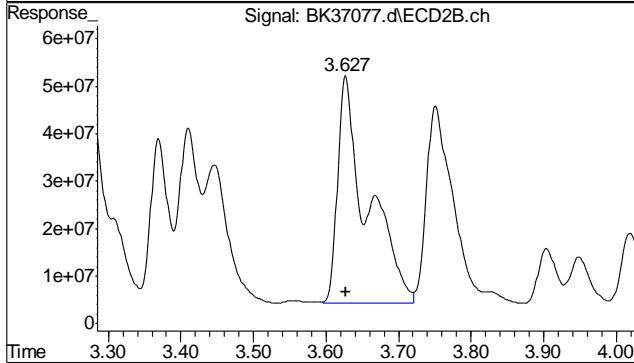
#5 AR1016-D
 R.T.: 3.260 min
 Delta R.T.: 0.000 min
 Response: 3345243575
 Conc: 471.85 m



#5 AR1016-D
 R.T.: 3.189 min
 Delta R.T.: 0.000 min
 Response: 1153644178
 Conc: 474.78 m

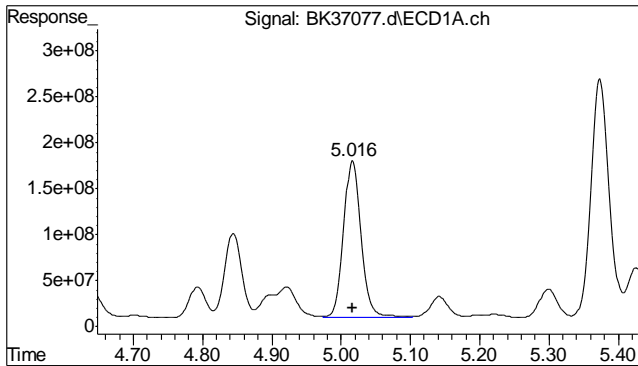


#6 AR1016-E
 R.T.: 3.646 min
 Delta R.T.: 0.000 min
 Response: 2099297861
 Conc: 448.77 m

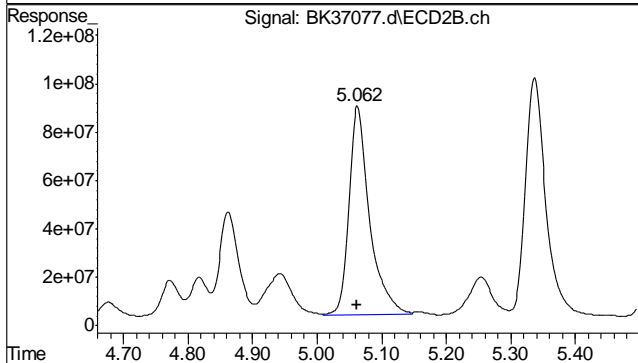


#6 AR1016-E
 R.T.: 3.627 min
 Delta R.T.: 0.000 min
 Response: 1353324162
 Conc: 497.45 m

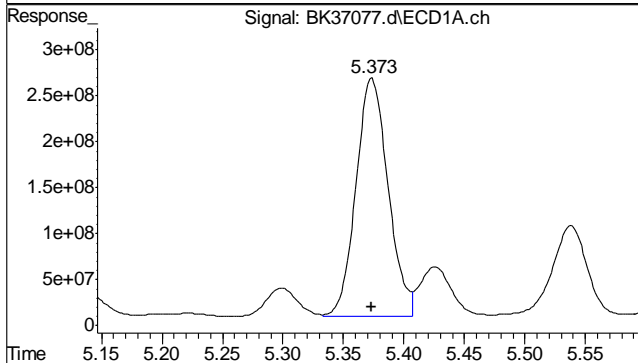
7.5.11
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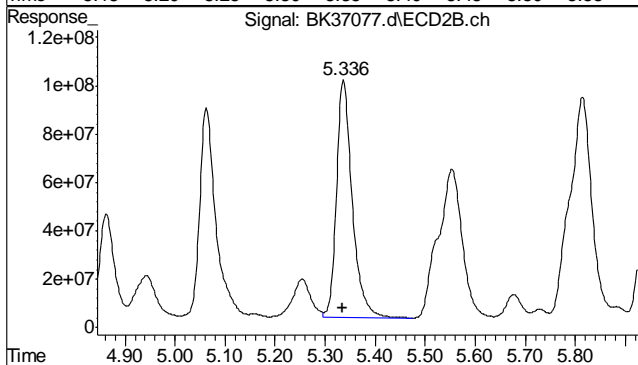
#7 AR1260-A
 R.T.: 5.016 min
 Delta R.T.: 0.000 min
 Response: 2991542042
 Conc: 430.03 ppb



#7 AR1260-A
 R.T.: 5.062 min
 Delta R.T.: 0.000 min
 Response: 1925118797
 Conc: 487.21 ppb m

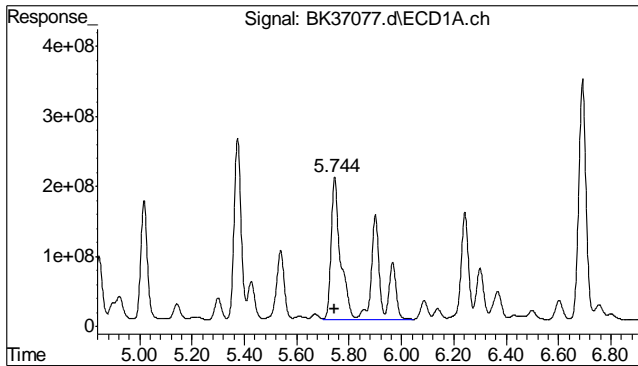


#8 AR1260-B
 R.T.: 5.374 min
 Delta R.T.: 0.000 min
 Response: 4790275552
 Conc: 461.44 ppb

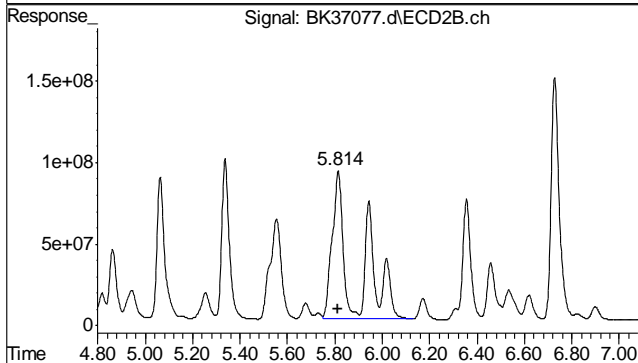


#8 AR1260-B
 R.T.: 5.336 min
 Delta R.T.: 0.000 min
 Response: 2146109590
 Conc: 480.04 ppb m

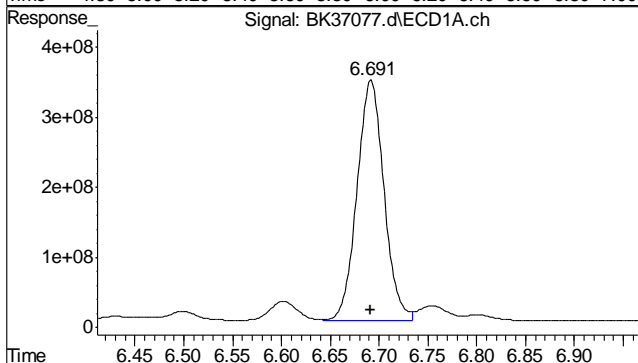
7.5.11
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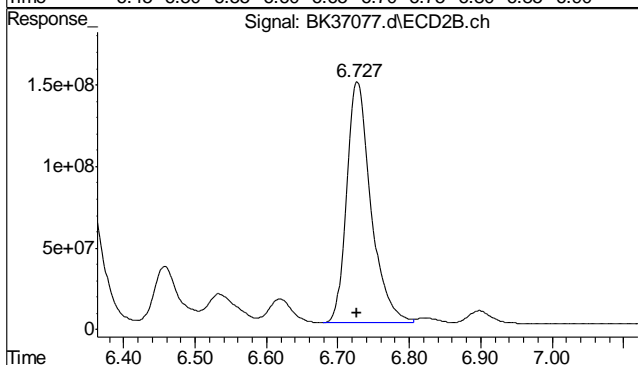
#9 AR1260-C
 R.T.: 5.744 min
 Delta R.T.: 0.000 min
 Response: 9584135991
 Conc: 454.02 ppb m



#9 AR1260-C
 R.T.: 5.814 min
 Delta R.T.: 0.000 min
 Response: 5343898394
 Conc: 485.95 ppb m

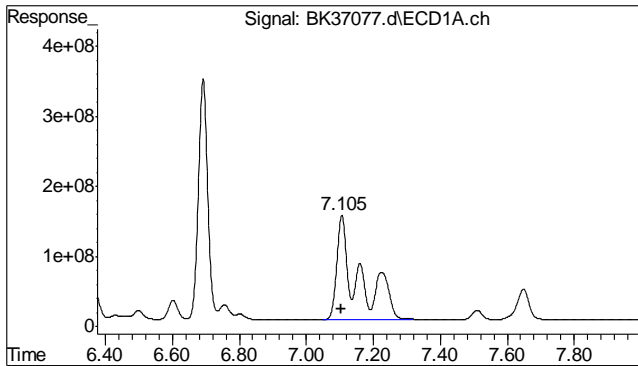


#10 AR1260-D
 R.T.: 6.692 min
 Delta R.T.: 0.000 min
 Response: 6585188319
 Conc: 445.16 ppb

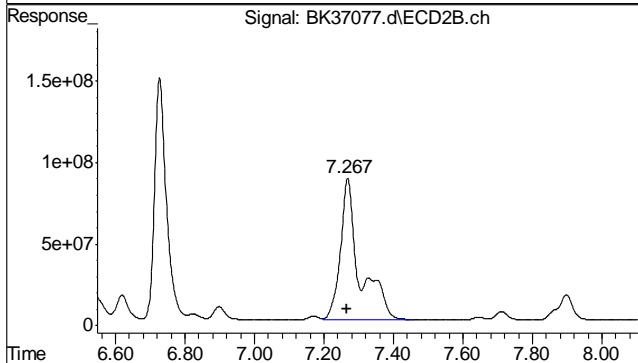


#10 AR1260-D
 R.T.: 6.727 min
 Delta R.T.: 0.000 min
 Response: 3484418798
 Conc: 469.84 ppb m

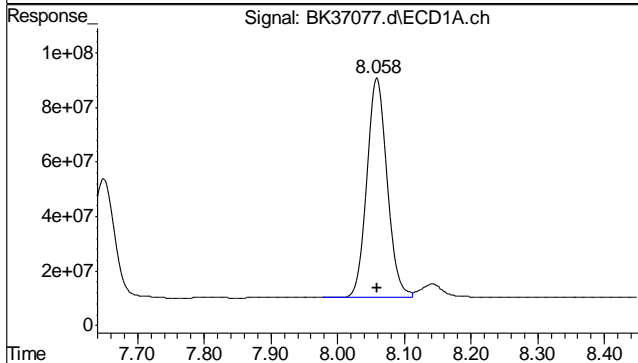
7.5.11
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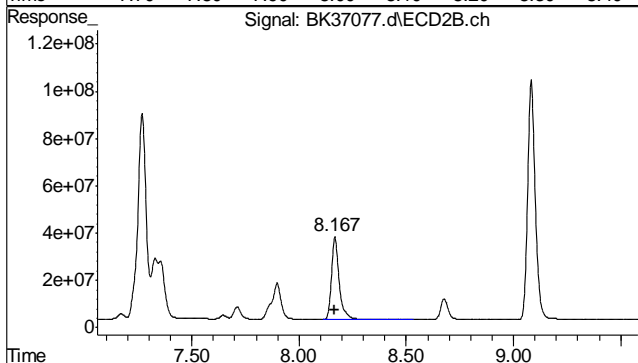
#11 AR1260-E
 R.T.: 7.105 min
 Delta R.T.: 0.001 min
 Response: 6539359826
 Conc: 453.65 ppb m



#11 AR1260-E
 R.T.: 7.267 min
 Delta R.T.: 0.000 min
 Response: 3346779948
 Conc: 484.45 ppb m



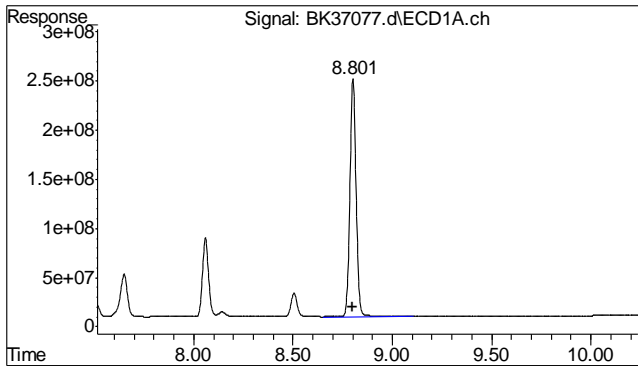
#12 AR1260-F
 R.T.: 8.059 min
 Delta R.T.: 0.000 min
 Response: 1687965161
 Conc: 469.79



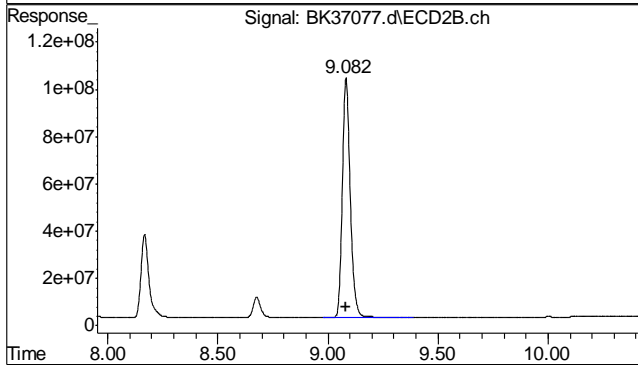
#12 AR1260-F
 R.T.: 8.167 min
 Delta R.T.: 0.000 min
 Response: 877645308
 Conc: 526.21

7.5.11

7



#13 DCB
 R.T.: 8.802 min
 Delta R.T.: 0.001 min
 Response: 5215738231
 Conc: 44.82 ppb



#13 DCB
 R.T.: 9.083 min
 Delta R.T.: 0.000 min
 Response: 2477271097
 Conc: 47.83 ppb

7.5.11
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37088.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 8:47 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:41:36 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.216	2.078	7026.4E6	3940.7E6	47.134	47.318
	Spiked Amount	40.000		Recovery	=	117.84%	118.29%
13)	s DCB	8.806	9.086	3573.9E6	2094.4E6	30.709	40.436 #
	Spiked Amount	40.000		Recovery	=	76.77%	101.09%
Target Compounds							
2)	AR1016-A	2.475	2.408	1079.6E6	854.2E6	486.597m	556.894
3)	AR1016-B	2.751	2.711	2539.4E6	1687.7E6	499.735	553.149
4)	AR1016-C	3.144	3.075	5344.1E6	3424.5E6	502.409	586.051
5)	AR1016-D	3.262	3.193	3716.3E6	1414.4E6	524.189m	582.103
6)	AR1016-E	3.649	3.629	2208.7E6	1551.8E6	472.150m	570.393m
7)	AR1260-A	5.019	5.066	2999.8E6	2081.7E6	431.213	526.849
8)	AR1260-B	5.377	5.339	4865.0E6	2342.2E6	468.638	523.908
9)	AR1260-C	5.747	5.816	9644.6E6	5655.9E6	456.881m	514.322m
10)	AR1260-D	6.695	6.731	6468.3E6	4078.3E6	437.256	549.925 #
11)	AR1260-E	7.108	7.271	5682.8E6	3605.2E6	394.234m	521.851m#
12)	AR1260-F	8.063	8.170	1386.2E6	854.0E6	385.812	512.013 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

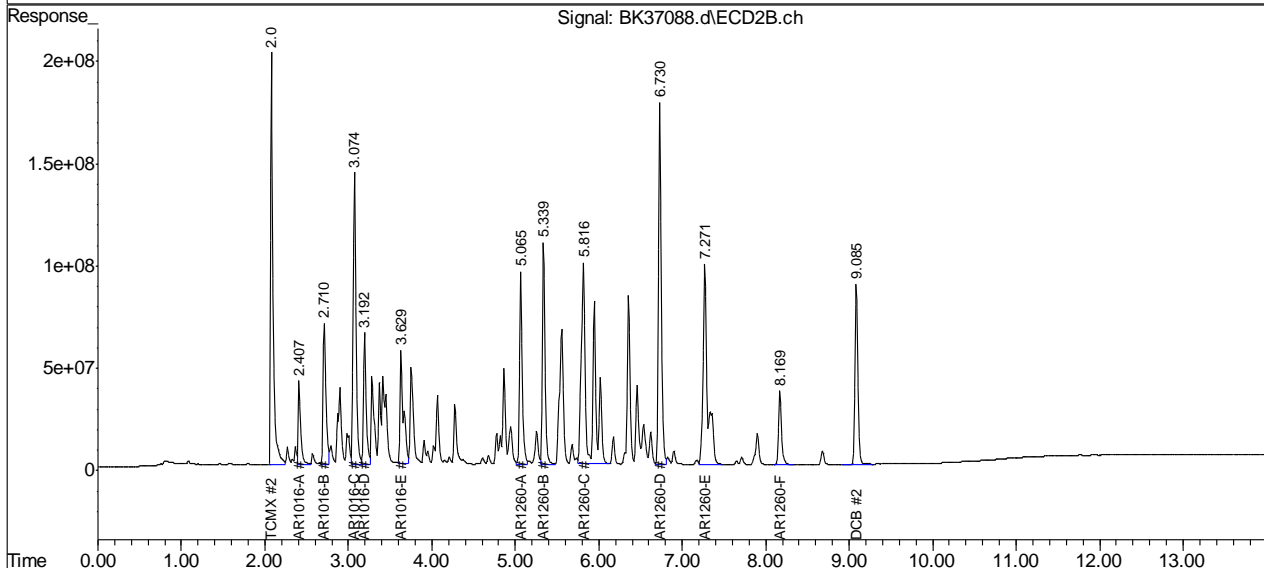
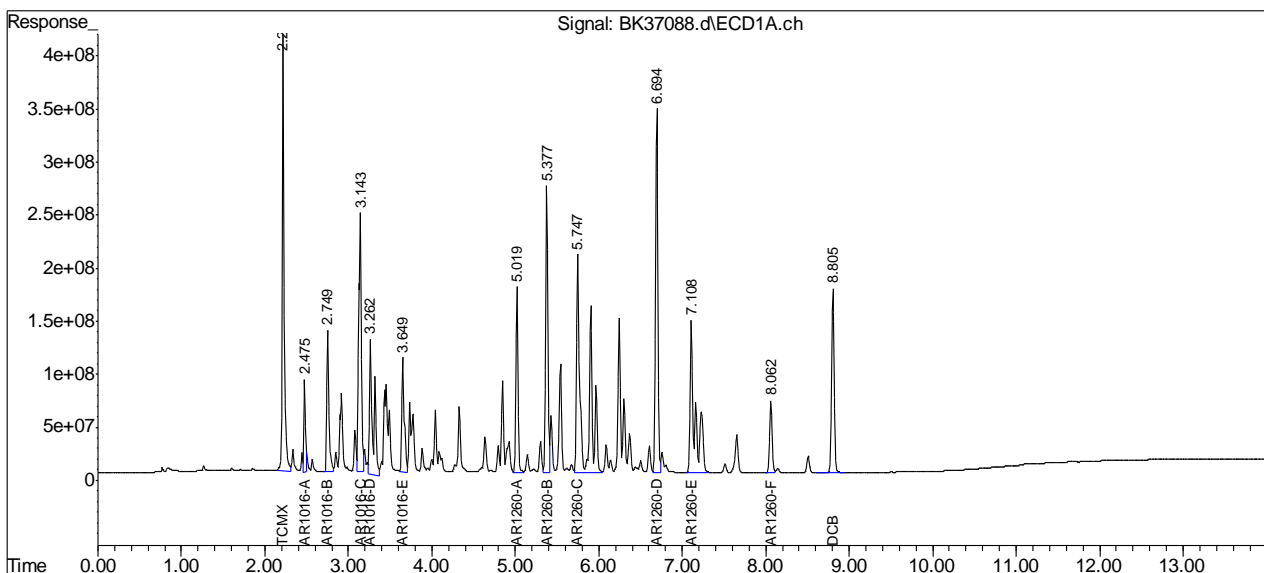
7.5.12
7

Quantitation Report (QT Reviewed)

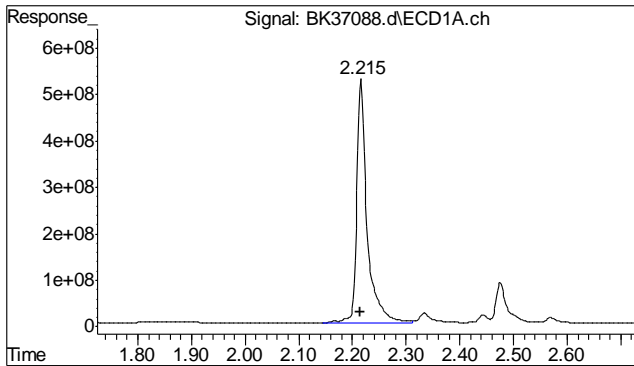
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37088.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 8:47 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:41:36 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

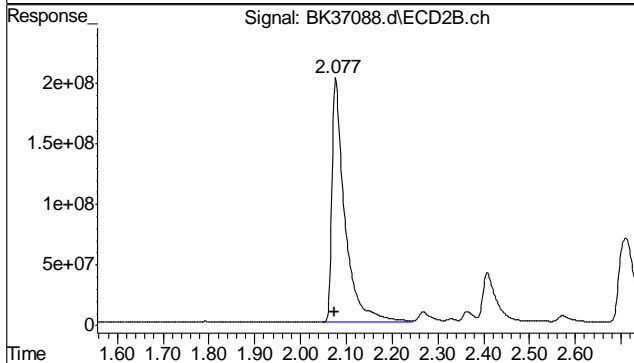
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



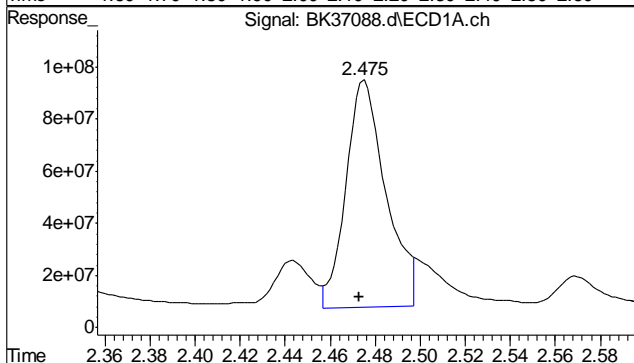
7.5.12
 7



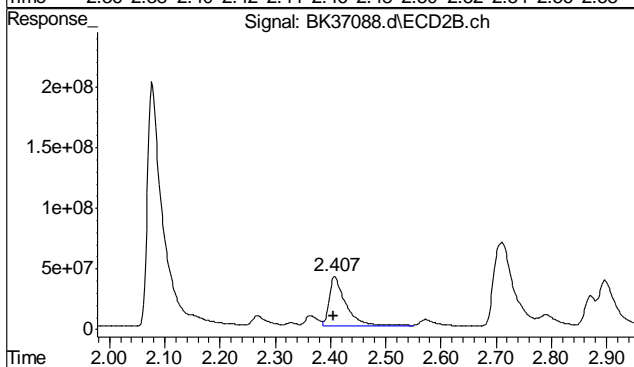
#1 TCMX
 R.T.: 2.216 min
 Delta R.T.: 0.002 min
 Response: 7026422969
 Conc: 47.13 ppb



#1 TCMX
 R.T.: 2.078 min
 Delta R.T.: 0.003 min
 Response: 3940654262
 Conc: 47.32 ppb

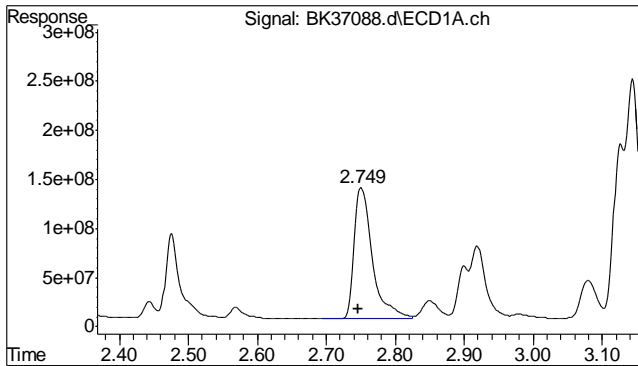


#2 AR1016-A
 R.T.: 2.475 min
 Delta R.T.: 0.002 min
 Response: 1079619039
 Conc: 486.60 ppb m

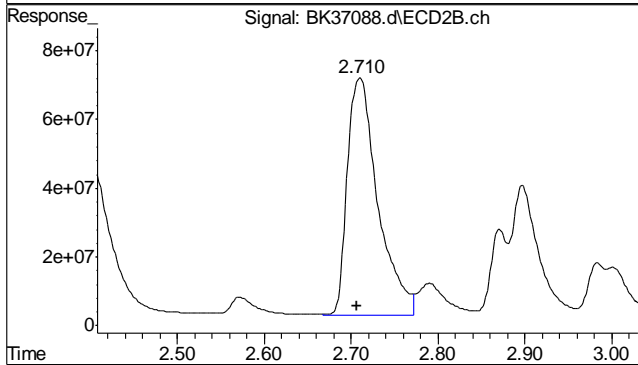


#2 AR1016-A
 R.T.: 2.408 min
 Delta R.T.: 0.003 min
 Response: 854212045
 Conc: 556.89 ppb

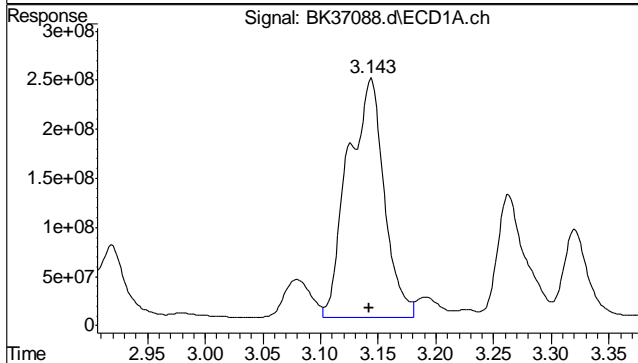
7.5.12
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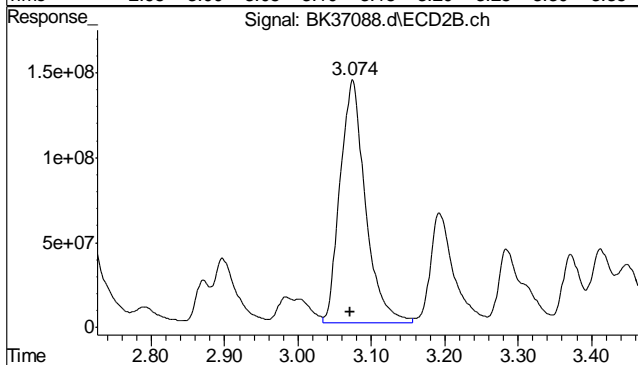
#3 AR1016-B
 R.T.: 2.751 min
 Delta R.T.: 0.004 min
 Response: 2539409694
 Conc: 499.74 ppb



#3 AR1016-B
 R.T.: 2.711 min
 Delta R.T.: 0.004 min
 Response: 1687740787
 Conc: 553.15 ppb

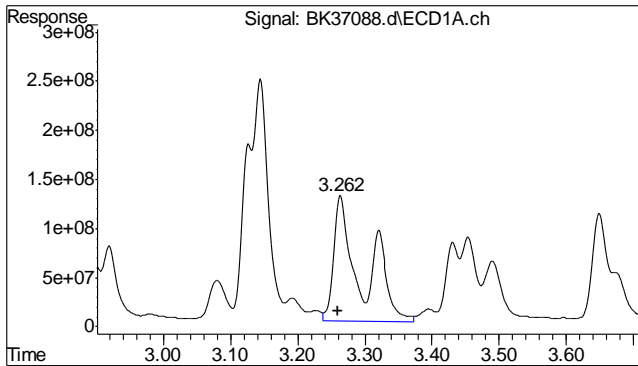


#4 AR1016-C
 R.T.: 3.144 min
 Delta R.T.: 0.002 min
 Response: 5344134714
 Conc: 502.41 ppb

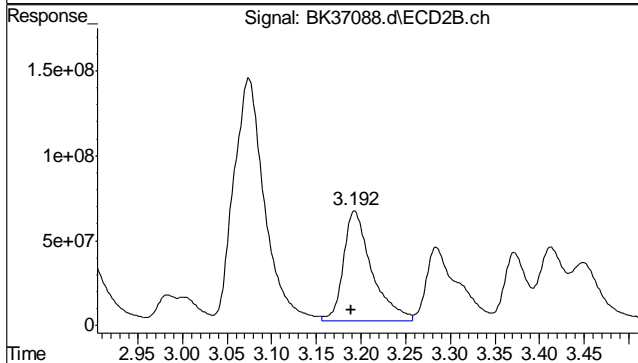


#4 AR1016-C
 R.T.: 3.075 min
 Delta R.T.: 0.003 min
 Response: 3424486383
 Conc: 586.05 ppb

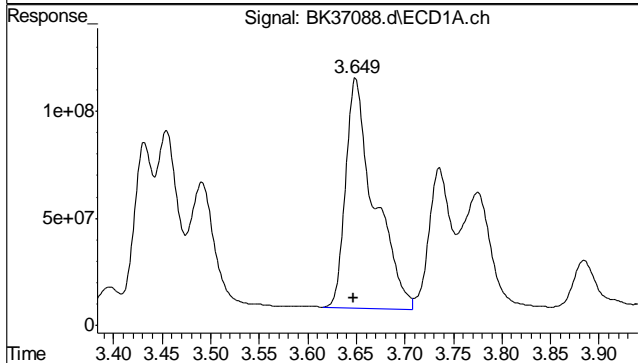
7.5.12
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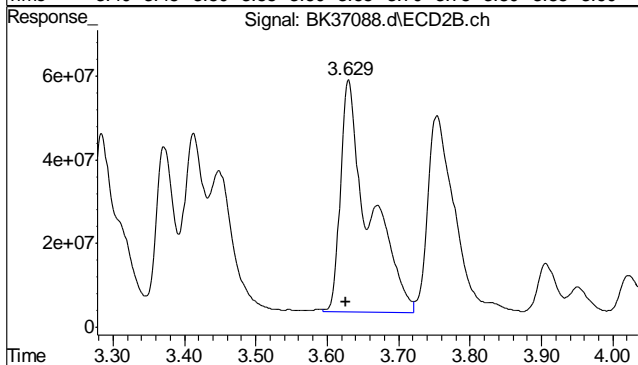
#5 AR1016-D
 R.T.: 3.262 min
 Delta R.T.: 0.002 min
 Response: 3716296051
 Conc: 524.19 m



#5 AR1016-D
 R.T.: 3.193 min
 Delta R.T.: 0.004 min
 Response: 1414432095
 Conc: 582.10

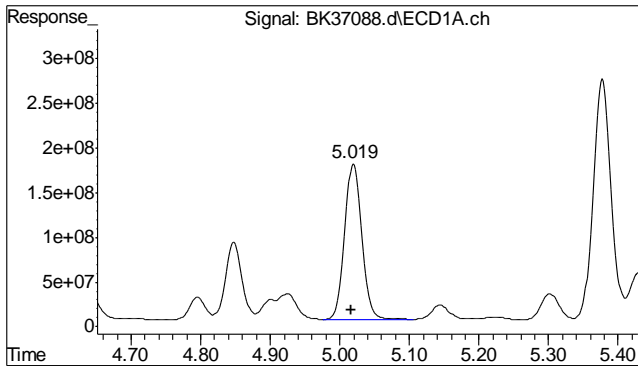


#6 AR1016-E
 R.T.: 3.649 min
 Delta R.T.: 0.002 min
 Response: 2208654271
 Conc: 472.15 m

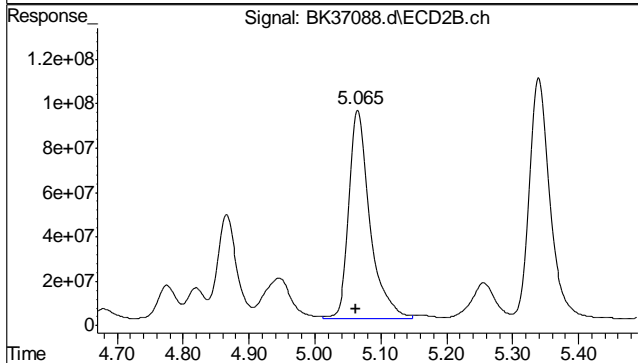


#6 AR1016-E
 R.T.: 3.629 min
 Delta R.T.: 0.003 min
 Response: 1551755819
 Conc: 570.39 m

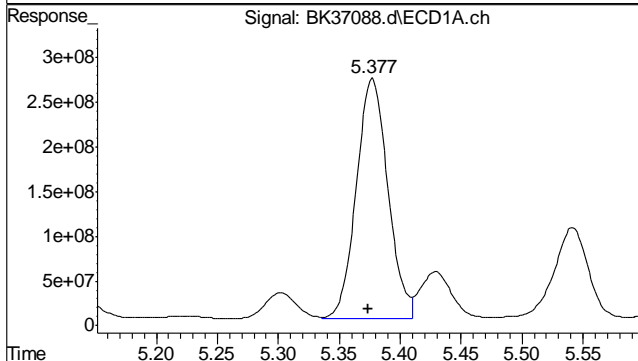
7.5.12
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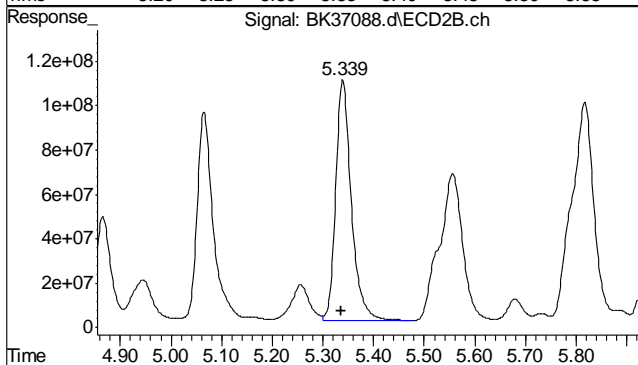
#7 AR1260-A
 R.T.: 5.019 min
 Delta R.T.: 0.003 min
 Response: 2999779316
 Conc: 431.21 ppb



#7 AR1260-A
 R.T.: 5.066 min
 Delta R.T.: 0.004 min
 Response: 2081737174
 Conc: 526.85 ppb

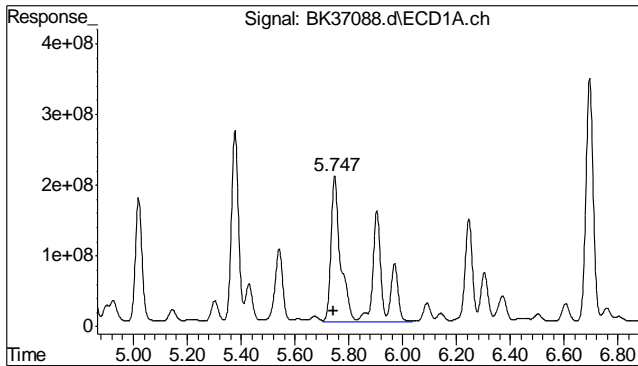


#8 AR1260-B
 R.T.: 5.377 min
 Delta R.T.: 0.004 min
 Response: 4864981057
 Conc: 468.64 ppb

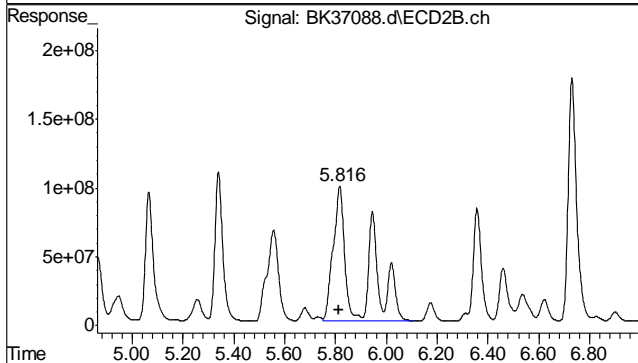


#8 AR1260-B
 R.T.: 5.339 min
 Delta R.T.: 0.004 min
 Response: 2342247851
 Conc: 523.91 ppb

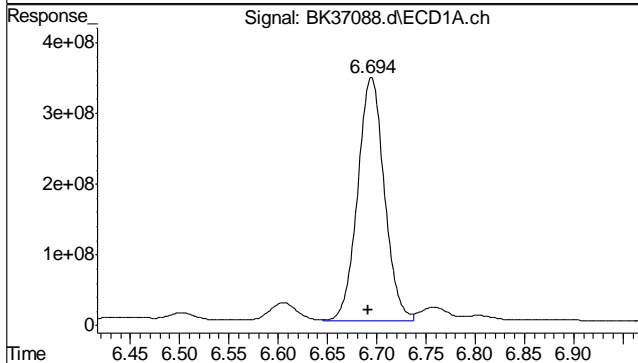
7.5.12
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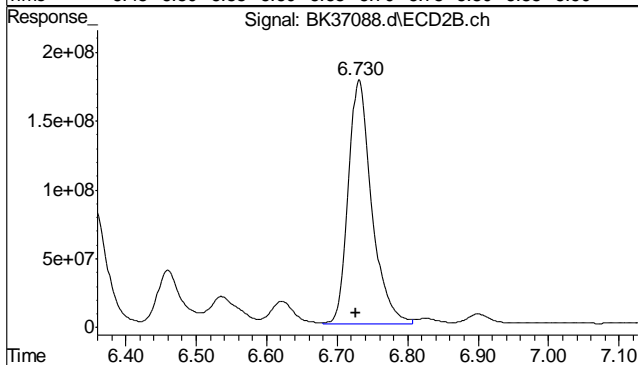
#9 AR1260-C
 R.T.: 5.747 min
 Delta R.T.: 0.003 min
 Response: 9644617518
 Conc: 456.88 ppb m



#9 AR1260-C
 R.T.: 5.816 min
 Delta R.T.: 0.003 min
 Response: 5655883832
 Conc: 514.32 ppb m

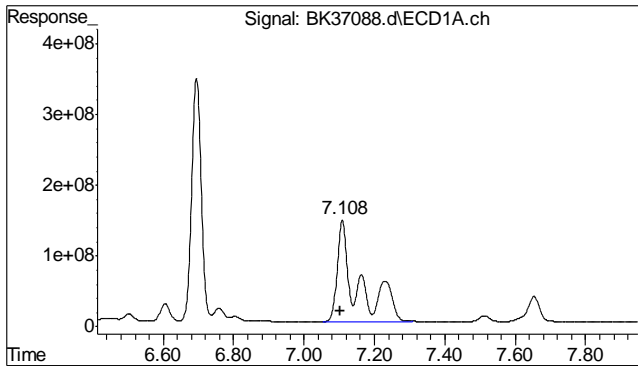


#10 AR1260-D
 R.T.: 6.695 min
 Delta R.T.: 0.003 min
 Response: 6468271227
 Conc: 437.26 ppb

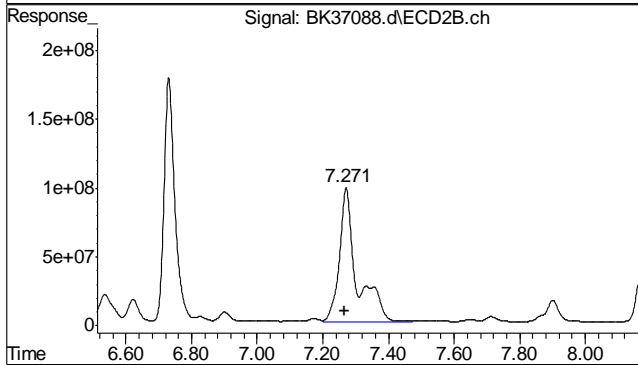


#10 AR1260-D
 R.T.: 6.731 min
 Delta R.T.: 0.004 min
 Response: 4078340911
 Conc: 549.93 ppb

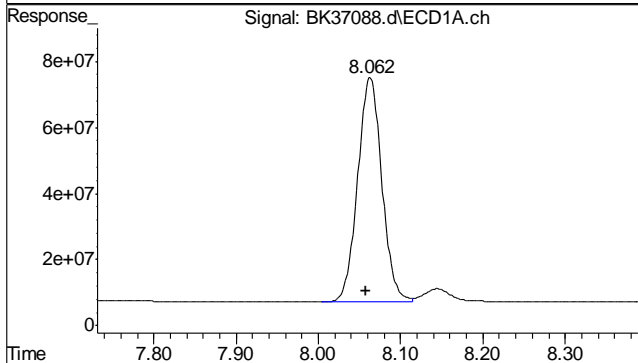
7.5.12
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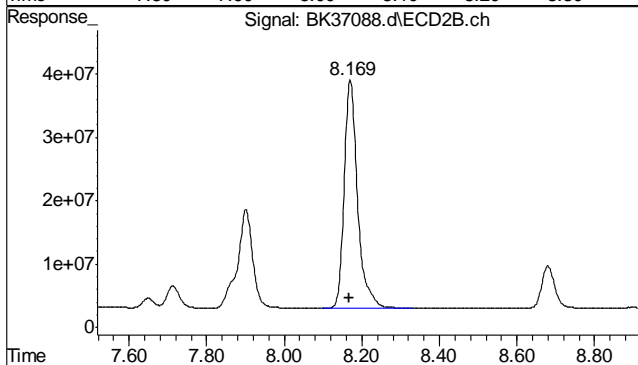
#11 AR1260-E
 R.T.: 7.108 min
 Delta R.T.: 0.004 min
 Response: 5682835649
 Conc: 394.23 ppb m



#11 AR1260-E
 R.T.: 7.271 min
 Delta R.T.: 0.003 min
 Response: 3605159622
 Conc: 521.85 ppb m

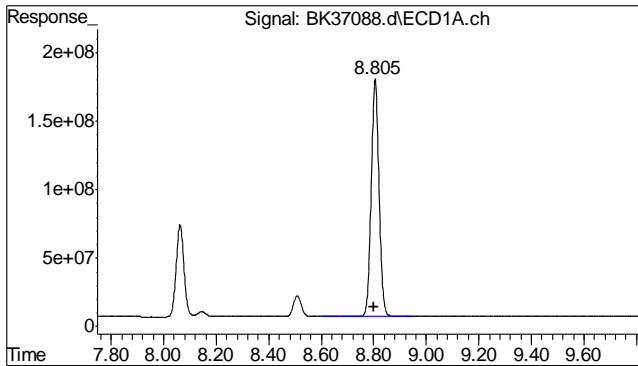


#12 AR1260-F
 R.T.: 8.063 min
 Delta R.T.: 0.005 min
 Response: 1386218773
 Conc: 385.81

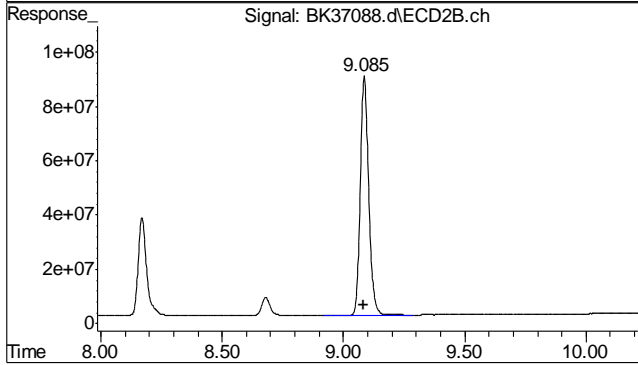


#12 AR1260-F
 R.T.: 8.170 min
 Delta R.T.: 0.003 min
 Response: 853973116
 Conc: 512.01

7.5.12
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#13 DCB
 R.T.: 8.806 min
 Delta R.T.: 0.005 min
 Response: 3573875891
 Conc: 30.71 ppb



#13 DCB
 R.T.: 9.086 min
 Delta R.T.: 0.004 min
 Response: 2094381546
 Conc: 40.44 ppb

7.5.12
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37099.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 11:42 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:38:13 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds							
1)	s TCMX	2.218	2.079	8378.7E6	4271.3E6	56.205	51.288
	Spiked Amount	40.000		Recovery	=	140.51%	128.22%
13)	s DCB	8.812	9.094	4753.0E6	2752.6E6	40.841	53.144 #
	Spiked Amount	40.000		Recovery	=	102.10%	132.86%
Target Compounds							
2)	AR1016-A	2.476	2.410	1565.0E6	927.3E6	705.346m	604.528
3)	AR1016-B	2.753	2.713	3455.8E6	1931.7E6	680.079	633.092
4)	AR1016-C	3.147	3.077	7717.6E6	4007.9E6	725.538	685.887
5)	AR1016-D	3.265	3.195	5057.8E6	1606.3E6	713.407m	661.059
6)	AR1016-E	3.653	3.633	3196.9E6	1821.9E6	683.409	669.689m
7)	AR1260-A	5.023	5.070	4169.0E6	2569.3E6	599.281m	650.250
8)	AR1260-B	5.382	5.345	6500.2E6	2963.5E6	626.157m	662.859
9)	AR1260-C	5.752	5.822	12510.6E6	7309.7E6	592.646m	664.716m
10)	AR1260-D	6.700	6.737	8696.6E6	5268.0E6	587.895m	710.344
11)	AR1260-E	7.115	7.277	7944.1E6	4669.8E6	551.101m	675.954m
12)	AR1260-F	8.069	8.178	1887.1E6	1116.0E6	525.221m	669.132 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

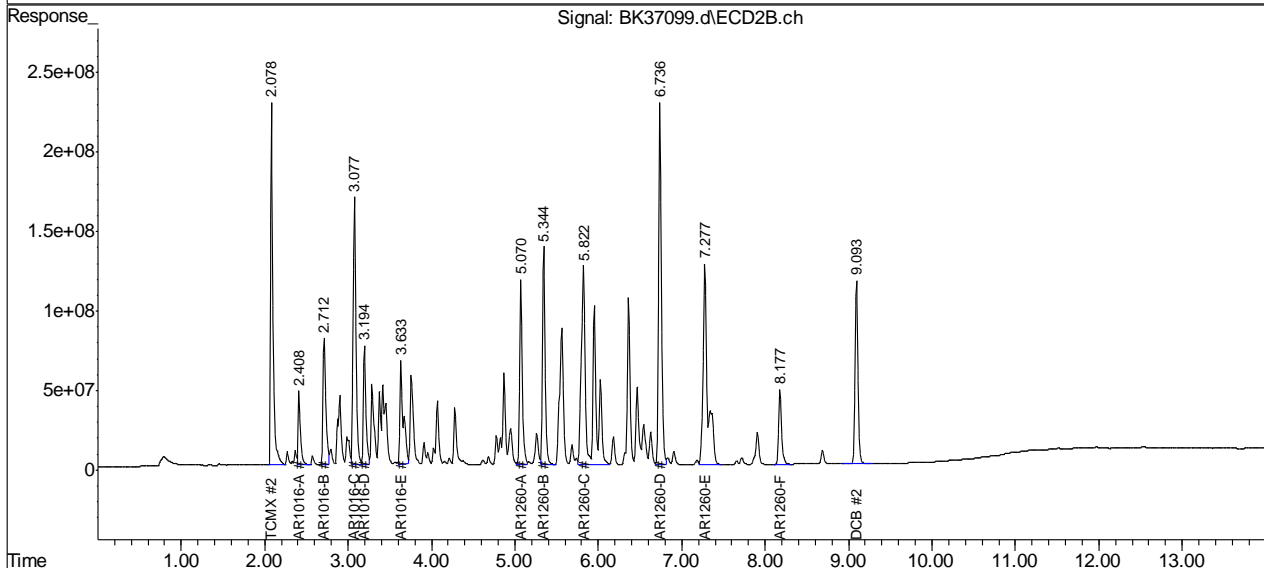
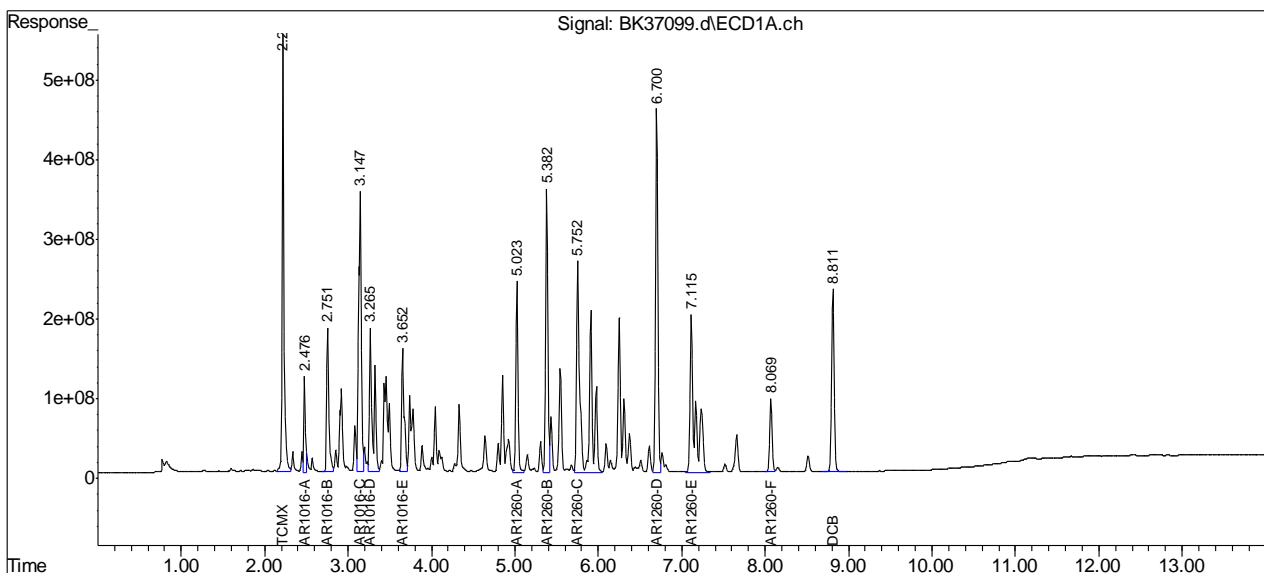
7.5.13
7

Quantitation Report (QT Reviewed)

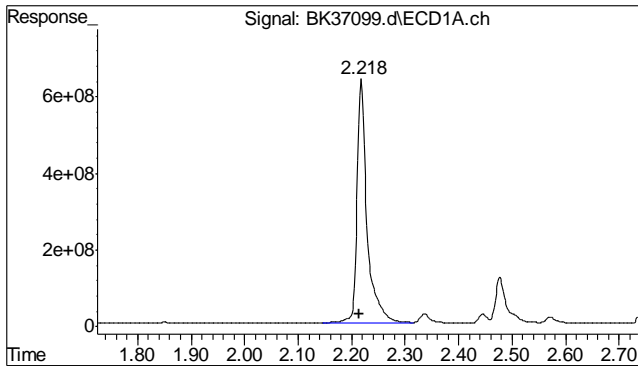
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37099.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 29 Apr 2014 11:42 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:38:13 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

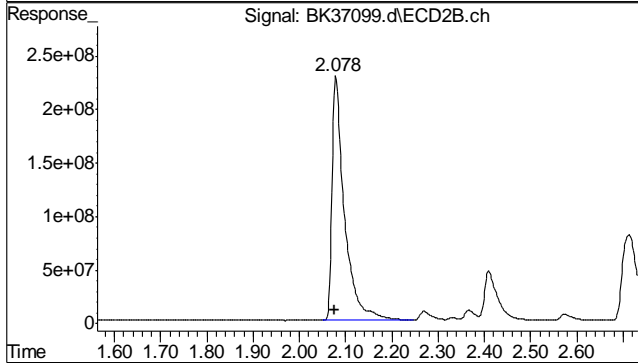
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



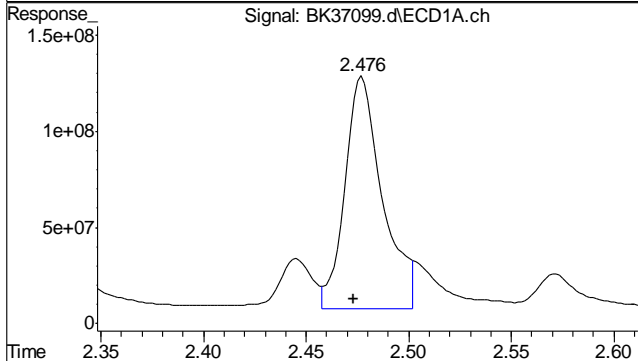
7.5.13
 7



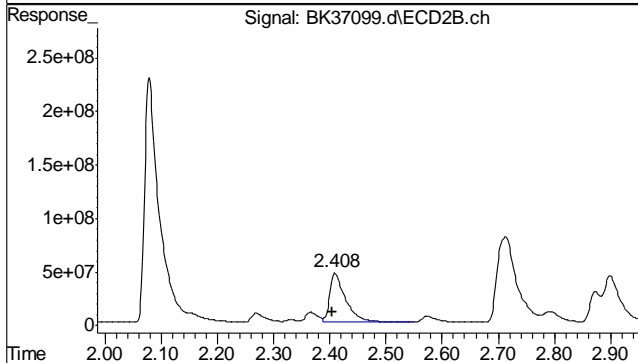
#1 TCMX
 R.T.: 2.218 min
 Delta R.T.: 0.004 min
 Response: 8378660412
 Conc: 56.21 ppb



#1 TCMX
 R.T.: 2.079 min
 Delta R.T.: 0.005 min
 Response: 4271269209
 Conc: 51.29 ppb

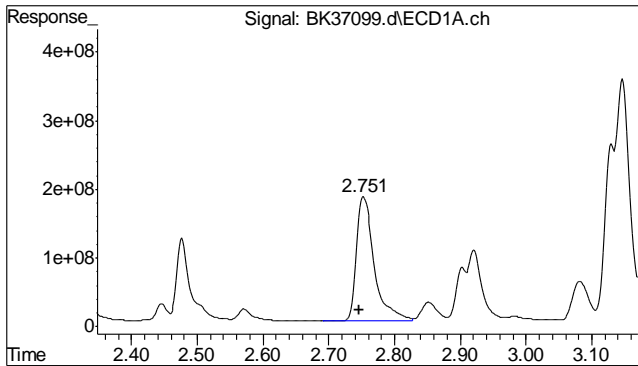


#2 AR1016-A
 R.T.: 2.476 min
 Delta R.T.: 0.004 min
 Response: 1564959879
 Conc: 705.35 ppb m

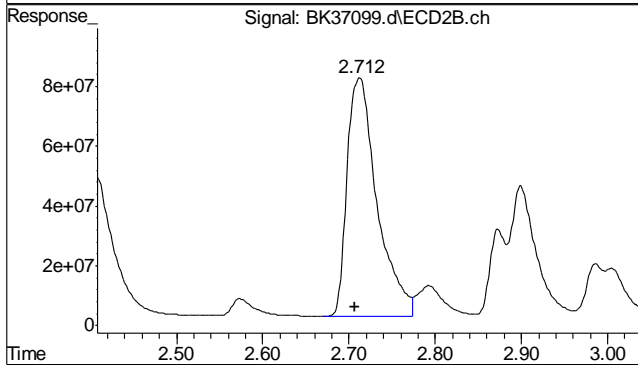


#2 AR1016-A
 R.T.: 2.410 min
 Delta R.T.: 0.005 min
 Response: 927277620
 Conc: 604.53 ppb

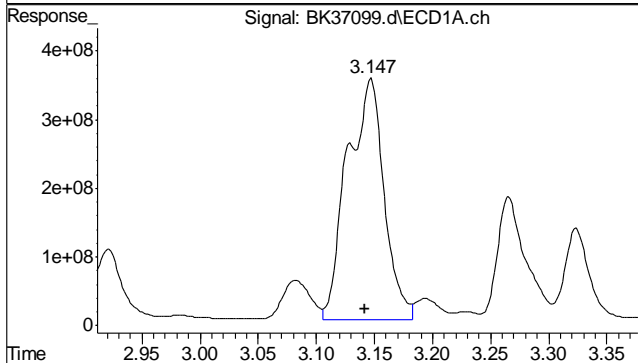
7.5.13
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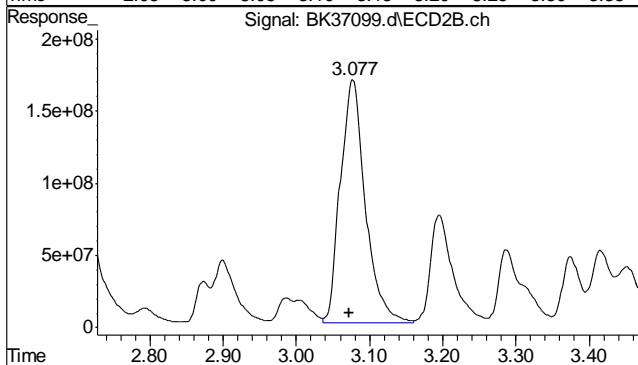
#3 AR1016-B
 R.T.: 2.753 min
 Delta R.T.: 0.006 min
 Response: 3455825832
 Conc: 680.08 ppb



#3 AR1016-B
 R.T.: 2.713 min
 Delta R.T.: 0.006 min
 Response: 1931657754
 Conc: 633.09 ppb

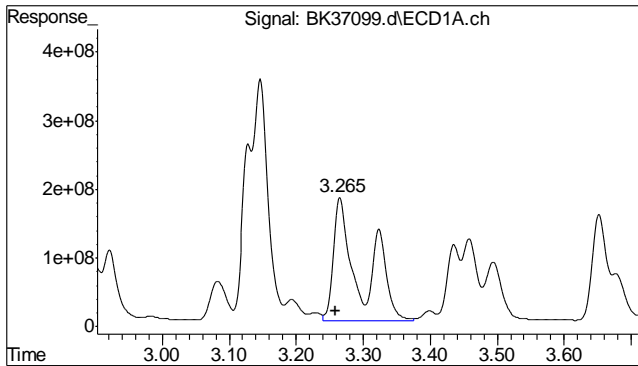


#4 AR1016-C
 R.T.: 3.147 min
 Delta R.T.: 0.005 min
 Response: 7717563271
 Conc: 725.54 ppb

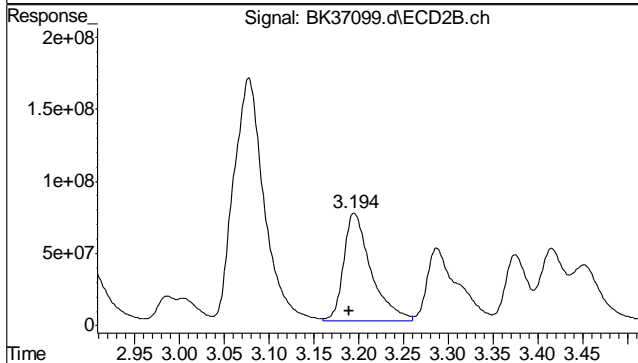


#4 AR1016-C
 R.T.: 3.077 min
 Delta R.T.: 0.005 min
 Response: 4007856658
 Conc: 685.89 ppb

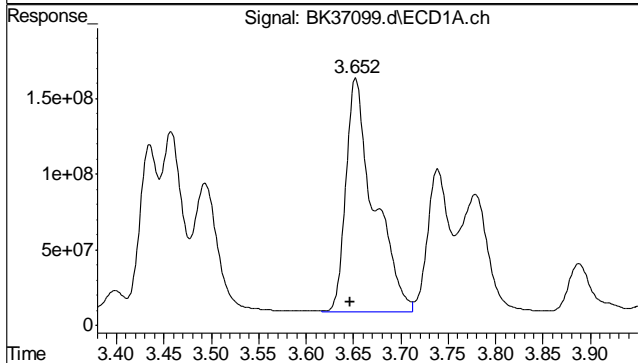
7.5.13
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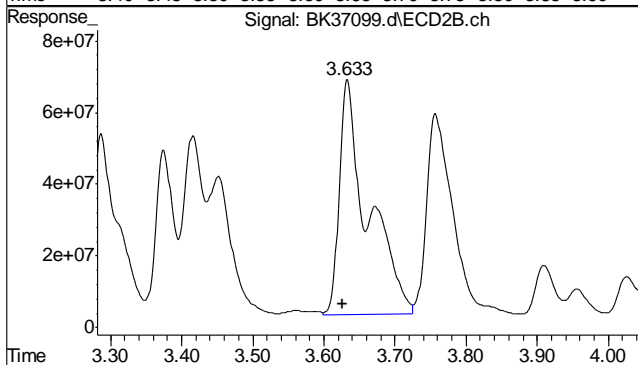
#5 AR1016-D
 R.T.: 3.265 min
 Delta R.T.: 0.005 min
 Response: 5057779749
 Conc: 713.41 m



#5 AR1016-D
 R.T.: 3.195 min
 Delta R.T.: 0.006 min
 Response: 1606283896
 Conc: 661.06

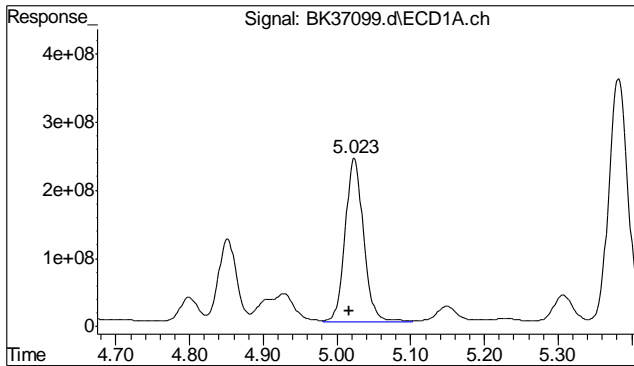


#6 AR1016-E
 R.T.: 3.653 min
 Delta R.T.: 0.006 min
 Response: 3196897201
 Conc: 683.41

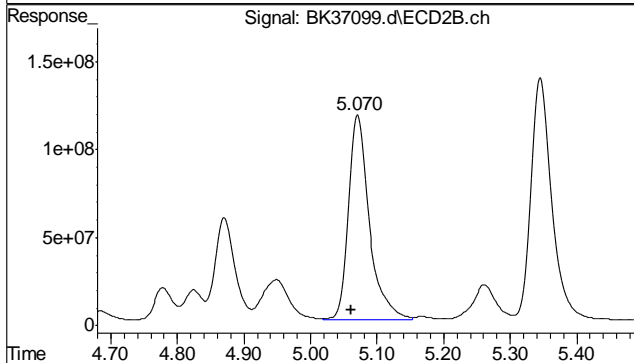


#6 AR1016-E
 R.T.: 3.633 min
 Delta R.T.: 0.006 min
 Response: 1821888679
 Conc: 669.69 m

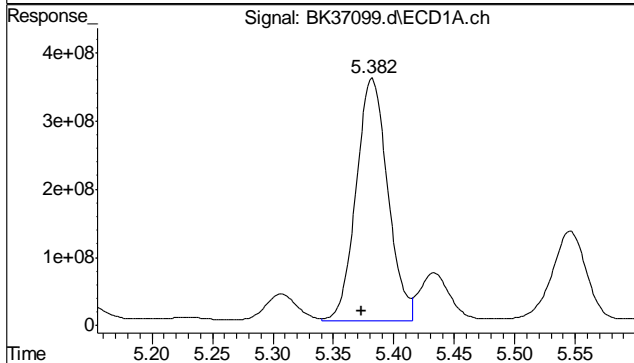
7.5.13
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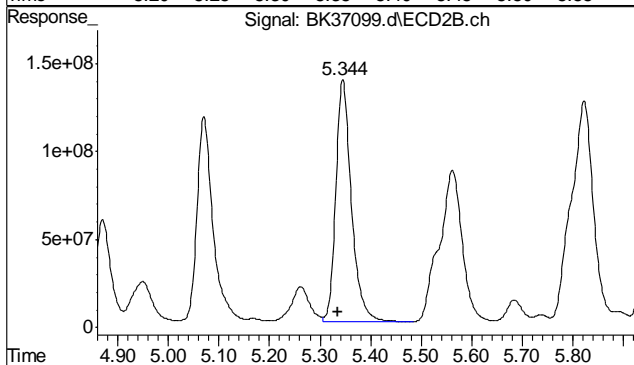
#7 AR1260-A
 R.T.: 5.023 min
 Delta R.T.: 0.007 min
 Response: 4168964388
 Conc: 599.28 ppb m



#7 AR1260-A
 R.T.: 5.070 min
 Delta R.T.: 0.009 min
 Response: 2569331528
 Conc: 650.25 ppb

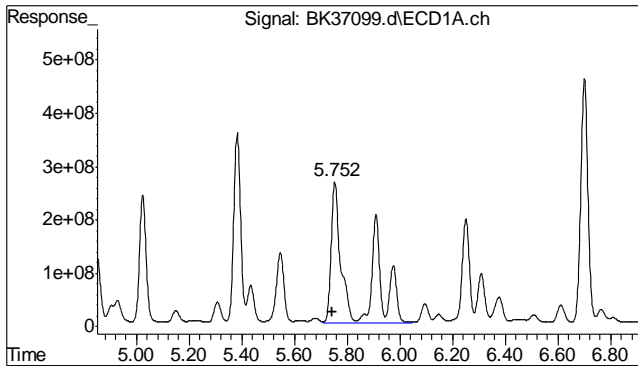


#8 AR1260-B
 R.T.: 5.382 min
 Delta R.T.: 0.008 min
 Response: 6500210052
 Conc: 626.16 ppb m

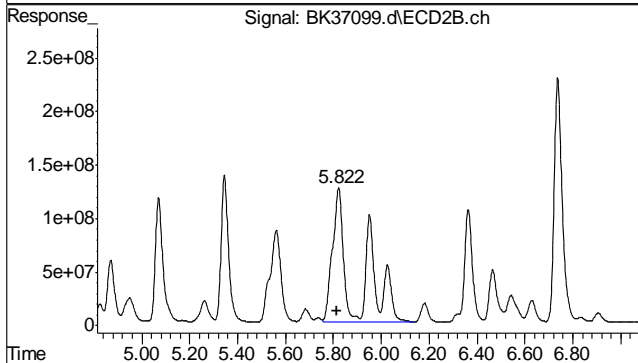


#8 AR1260-B
 R.T.: 5.345 min
 Delta R.T.: 0.010 min
 Response: 2963461697
 Conc: 662.86 ppb

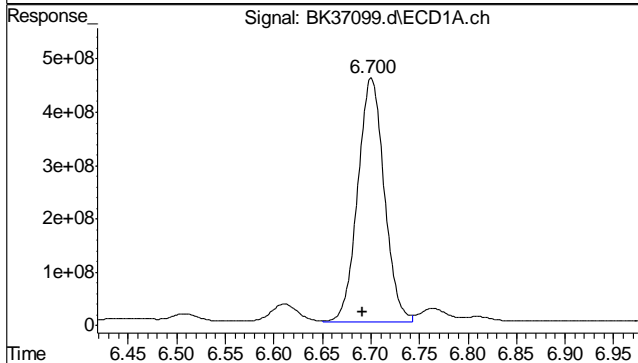
7.5.13
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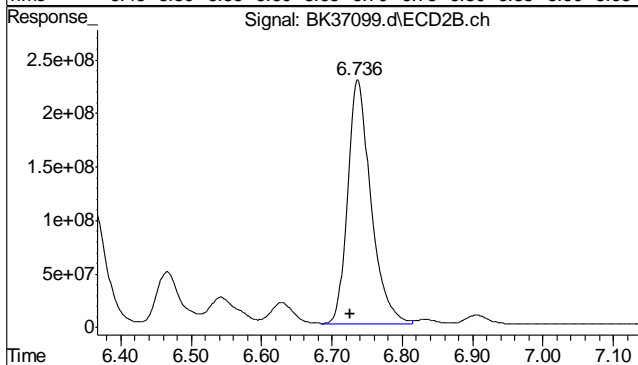
#9 AR1260-C
 R.T.: 5.752 min
 Delta R.T.: 0.008 min
 Response: 12510557901
 Conc: 592.65 ppb m



#9 AR1260-C
 R.T.: 5.822 min
 Delta R.T.: 0.009 min
 Response: 7309724963
 Conc: 664.72 ppb m

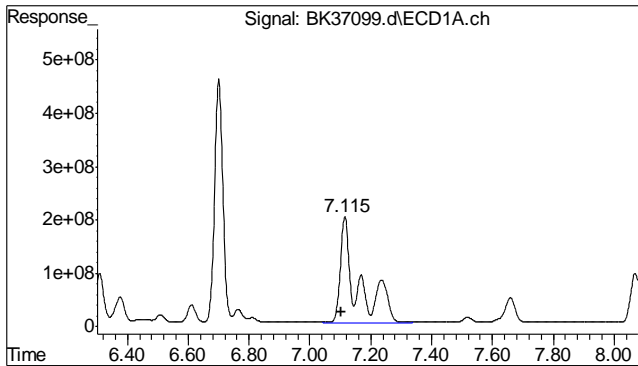


#10 AR1260-D
 R.T.: 6.700 min
 Delta R.T.: 0.008 min
 Response: 8696643382
 Conc: 587.89 ppb m

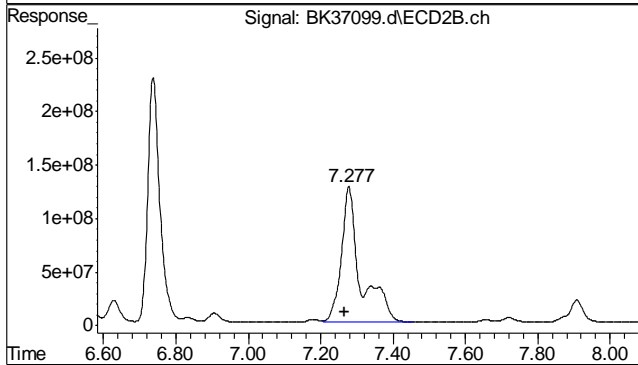


#10 AR1260-D
 R.T.: 6.737 min
 Delta R.T.: 0.011 min
 Response: 5268033484
 Conc: 710.34 ppb

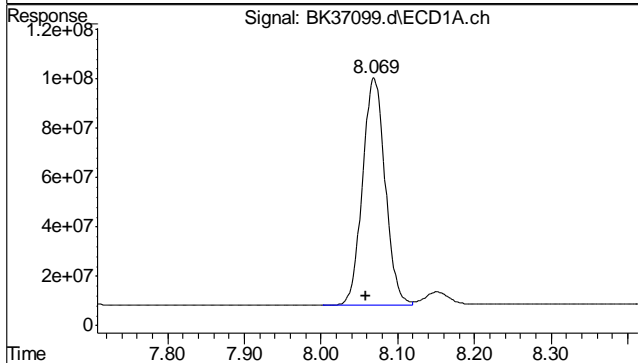
7.5.13
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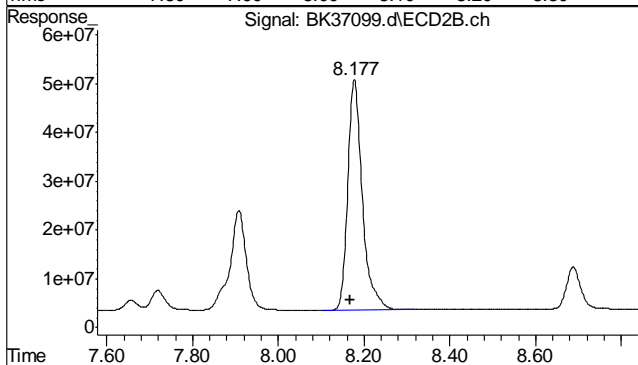
#11 AR1260-E
 R.T.: 7.115 min
 Delta R.T.: 0.010 min
 Response: 7944050608
 Conc: 551.10 ppb m



#11 AR1260-E
 R.T.: 7.277 min
 Delta R.T.: 0.010 min
 Response: 4669766756
 Conc: 675.95 ppb m

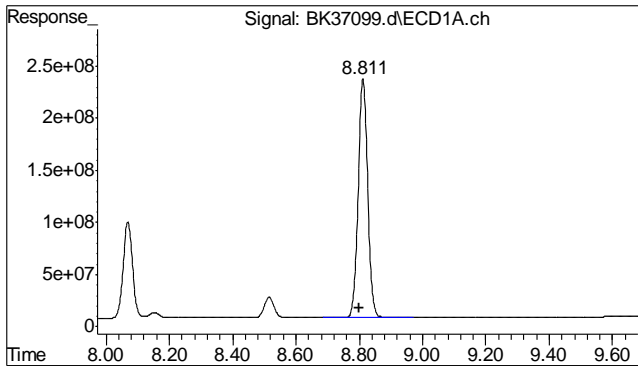


#12 AR1260-F
 R.T.: 8.069 min
 Delta R.T.: 0.010 min
 Response: 1887116078
 Conc: 525.22 m

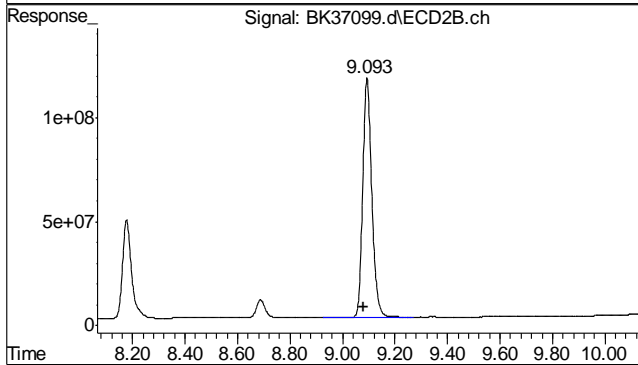


#12 AR1260-F
 R.T.: 8.178 min
 Delta R.T.: 0.010 min
 Response: 1116027894
 Conc: 669.13

7.5.13
 7



#13 DCB
 R.T.: 8.812 min
 Delta R.T.: 0.011 min
 Response: 4752978295
 Conc: 40.84 ppb



#13 DCB
 R.T.: 9.094 min
 Delta R.T.: 0.012 min
 Response: 2752589492
 Conc: 53.14 ppb

7.5.13
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37110.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 2:38 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:34:31 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.219	2.079	8931.1E6	4914.8E6	59.911	59.015m
Spiked Amount	40.000		Recovery	=	149.78%	147.54%
13) s DCB	8.816	9.097	6509.6E6	3376.0E6	55.935	65.181m
Spiked Amount	40.000		Recovery	=	139.84%	162.95%
Target Compounds						
2) AR1016-A	2.478	2.410	1649.3E6	1075.0E6	743.339m	700.846
3) AR1016-B	2.753	2.712	3818.0E6	2252.3E6	751.359	738.176
4) AR1016-C	3.149	3.078	8744.2E6	4666.0E6	822.057	798.519
5) AR1016-D	3.266	3.196	5662.3E6	1886.3E6	798.671m	776.296
6) AR1016-E	3.653	3.633	3704.6E6	2129.5E6	791.944m	782.769m
7) AR1260-A	5.026	5.072	5418.6E6	3059.7E6	778.919	774.354m
8) AR1260-B	5.385	5.347	8767.0E6	3565.2E6	844.510	797.456m
9) AR1260-C	5.755	5.825	17782.4E6	8946.8E6	842.379m	813.584m
10) AR1260-D	6.704	6.739	13177.7E6	6438.0E6	890.818m	868.106m
11) AR1260-E	7.118	7.280	12005.4E6	6023.1E6	832.850m	871.846m
12) AR1260-F	8.072	8.181	2795.7E6	1479.4E6	778.088m	887.019

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

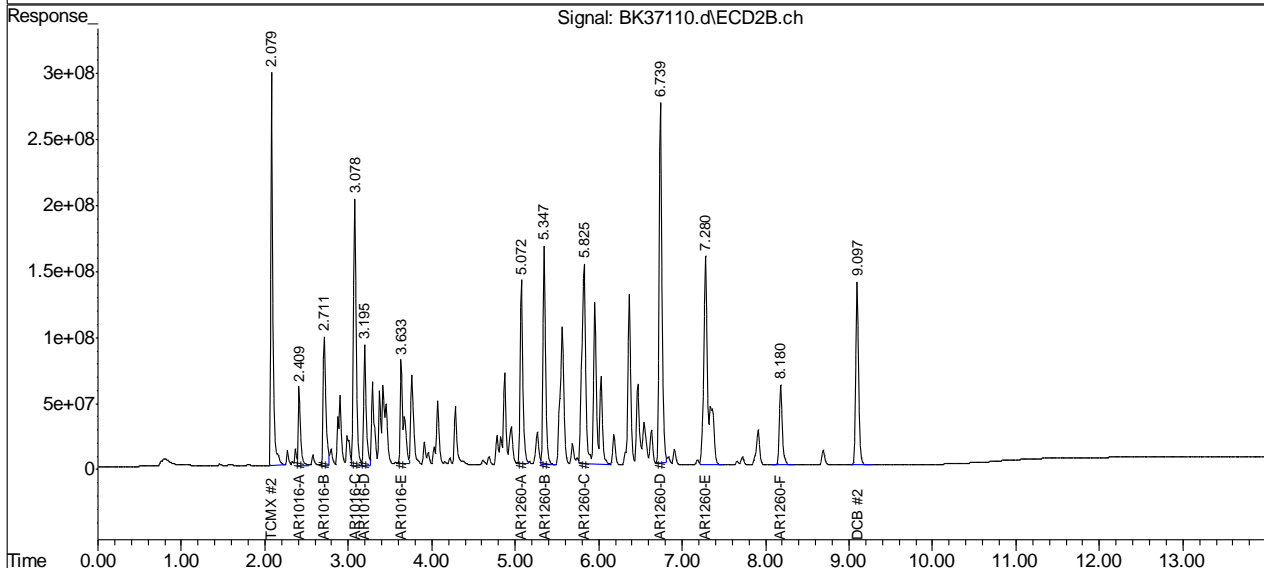
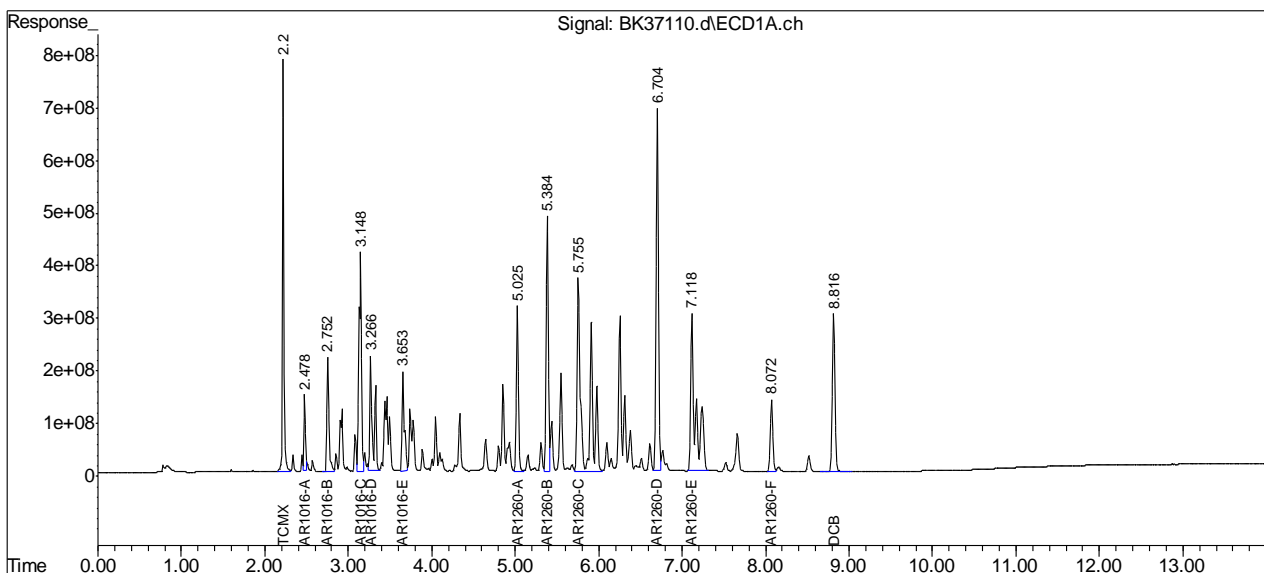
7.5.14
7

Quantitation Report (QT Reviewed)

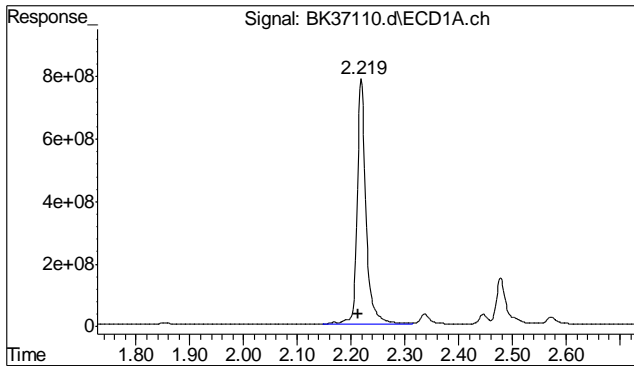
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37110.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 2:38 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 100 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 07:34:31 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

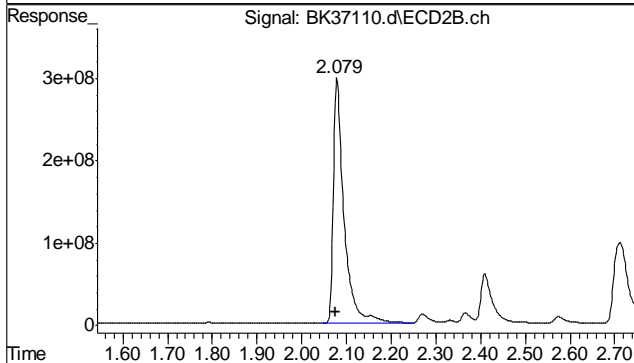
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



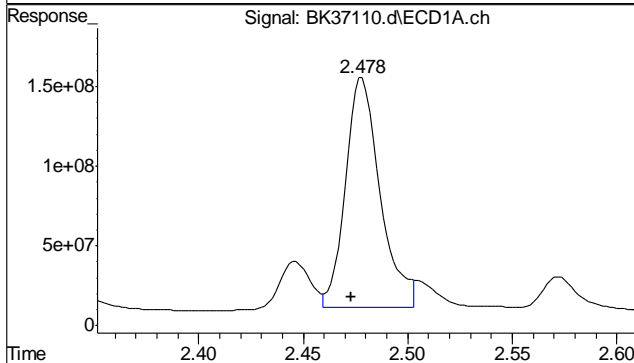
7.5.14
 7



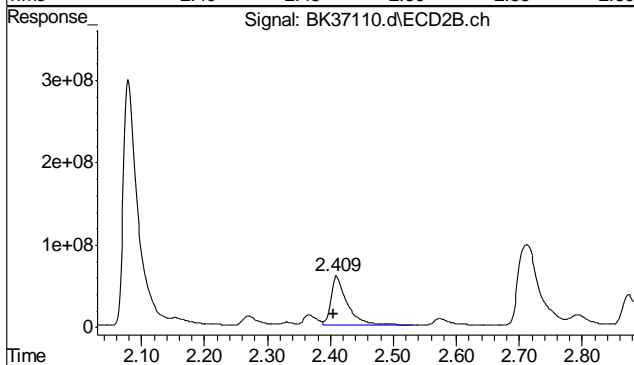
#1 TCMX
 R.T.: 2.219 min
 Delta R.T.: 0.005 min
 Response: 8931110502
 Conc: 59.91 ppb



#1 TCMX
 R.T.: 2.079 min
 Delta R.T.: 0.004 min
 Response: 4914789334
 Conc: 59.01 ppb m

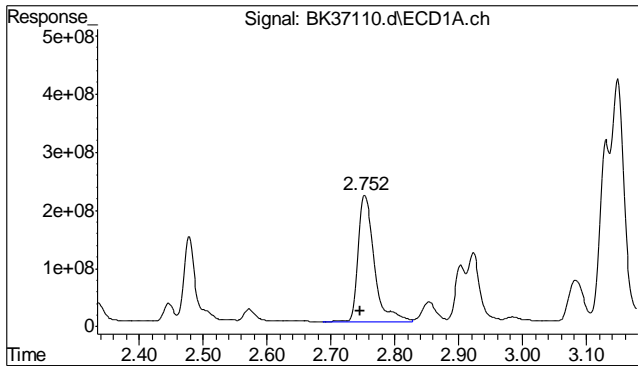


#2 AR1016-A
 R.T.: 2.478 min
 Delta R.T.: 0.005 min
 Response: 1649255820
 Conc: 743.34 ppb m

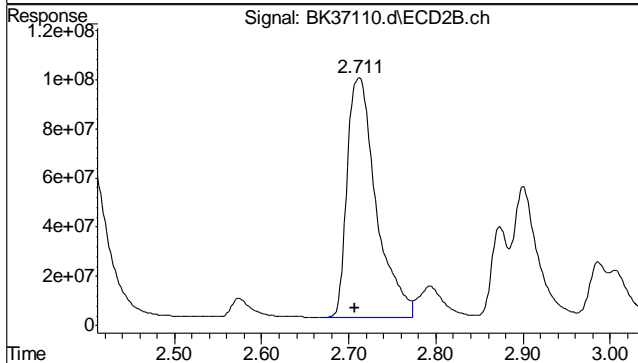


#2 AR1016-A
 R.T.: 2.410 min
 Delta R.T.: 0.005 min
 Response: 1075017924
 Conc: 700.85 ppb

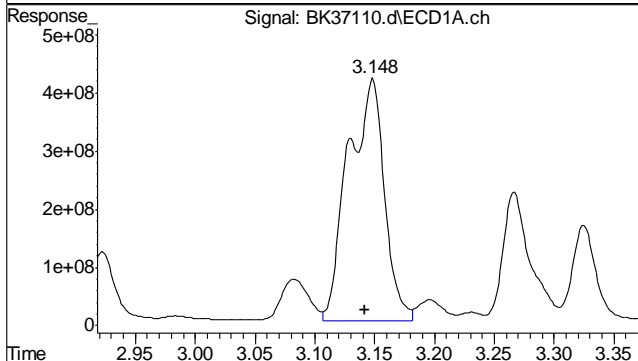
7.5.14
 7



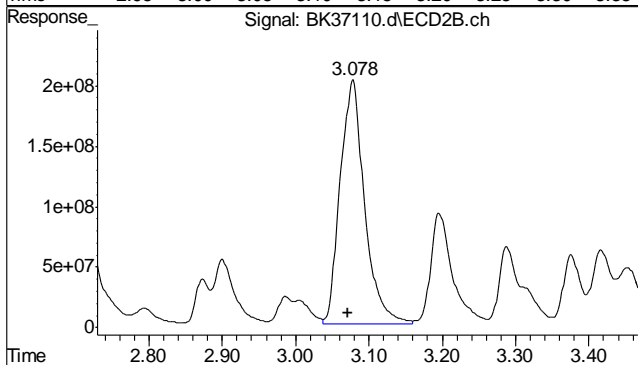
#3 AR1016-B
 R.T.: 2.753 min
 Delta R.T.: 0.006 min
 Response: 3818038918
 Conc: 751.36 ppb



#3 AR1016-B
 R.T.: 2.712 min
 Delta R.T.: 0.005 min
 Response: 2252283199
 Conc: 738.18 ppb

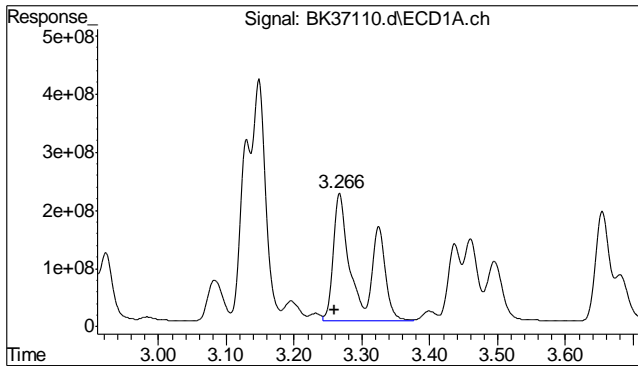


#4 AR1016-C
 R.T.: 3.149 min
 Delta R.T.: 0.007 min
 Response: 8744237289
 Conc: 822.06 ppb

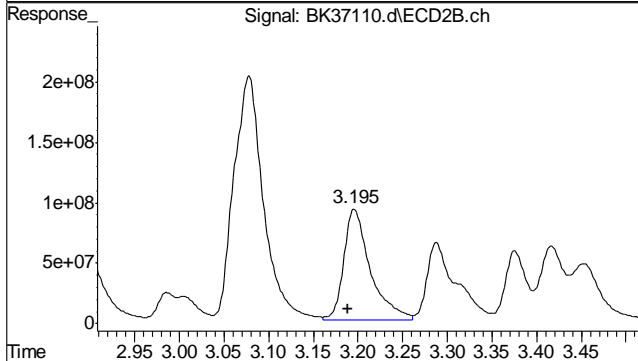


#4 AR1016-C
 R.T.: 3.078 min
 Delta R.T.: 0.006 min
 Response: 4666005224
 Conc: 798.52 ppb

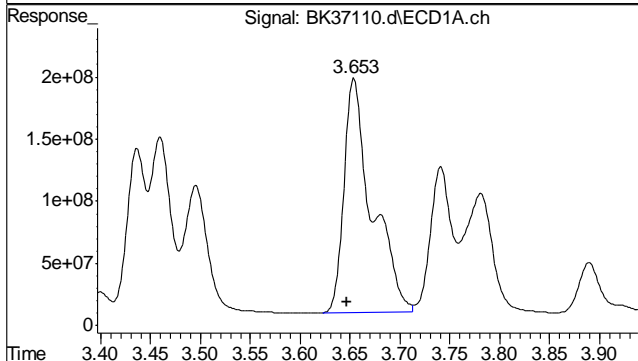
7.5.14
 7



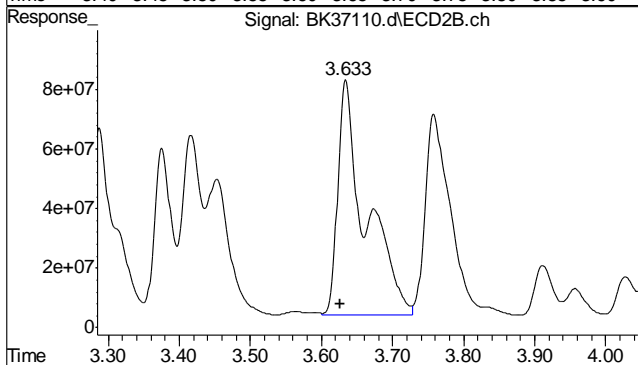
#5 AR1016-D
 R.T.: 3.266 min
 Delta R.T.: 0.006 min
 Response: 5662269069
 Conc: 798.67 m



#5 AR1016-D
 R.T.: 3.196 min
 Delta R.T.: 0.007 min
 Response: 1886294645
 Conc: 776.30

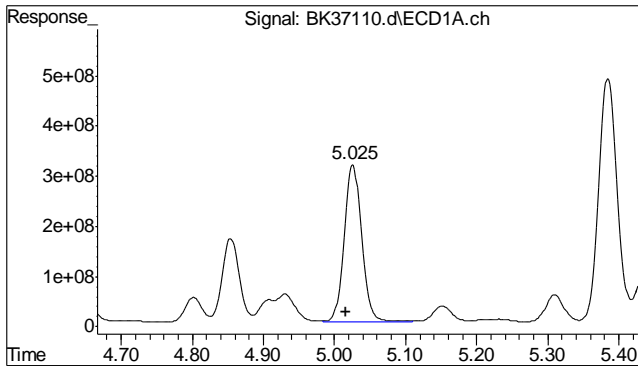


#6 AR1016-E
 R.T.: 3.653 min
 Delta R.T.: 0.007 min
 Response: 3704611692
 Conc: 791.94 m

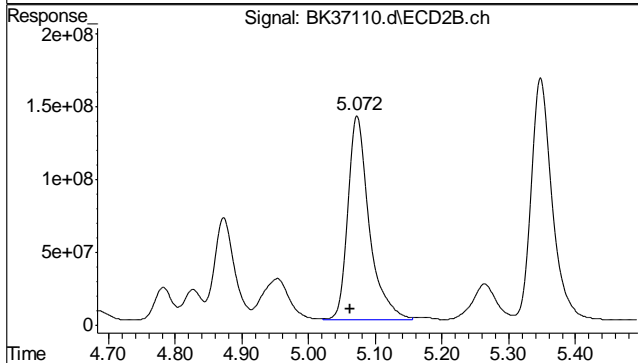


#6 AR1016-E
 R.T.: 3.633 min
 Delta R.T.: 0.007 min
 Response: 2129524313
 Conc: 782.77 m

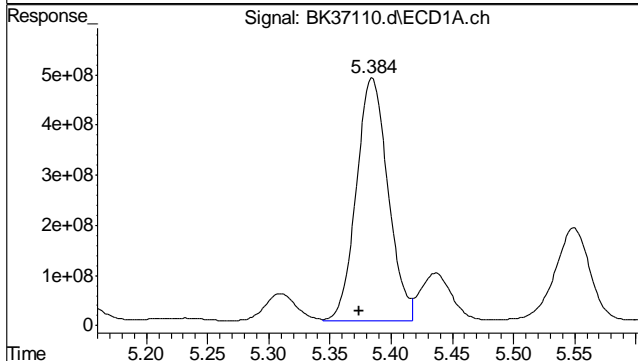
7.5.14
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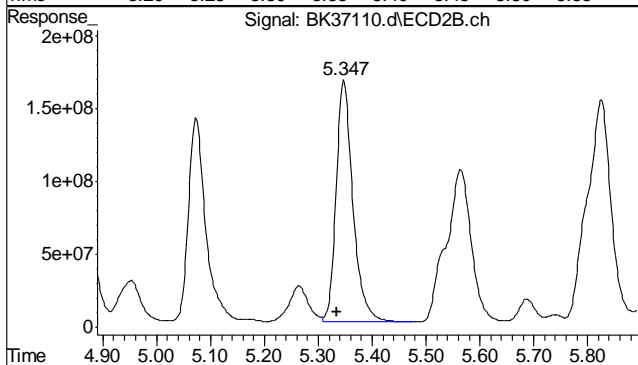
#7 AR1260-A
 R.T.: 5.026 min
 Delta R.T.: 0.010 min
 Response: 5418634243
 Conc: 778.92 ppb



#7 AR1260-A
 R.T.: 5.072 min
 Delta R.T.: 0.010 min
 Response: 3059700024
 Conc: 774.35 ppb m

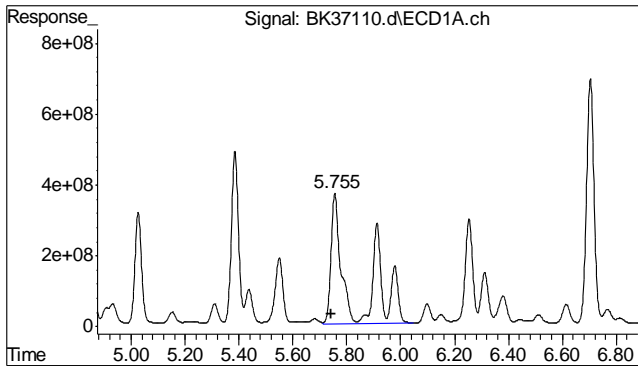


#8 AR1260-B
 R.T.: 5.385 min
 Delta R.T.: 0.011 min
 Response: 8766954035
 Conc: 844.51 ppb

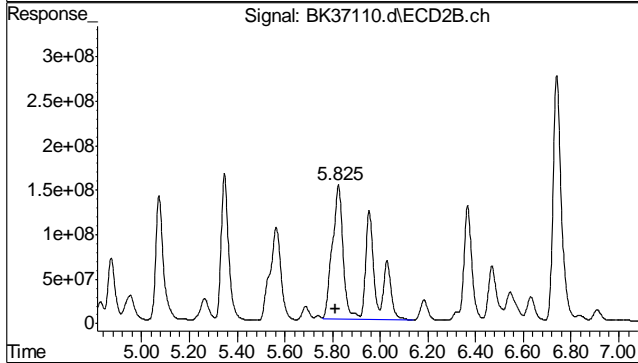


#8 AR1260-B
 R.T.: 5.347 min
 Delta R.T.: 0.011 min
 Response: 3565206257
 Conc: 797.46 ppb m

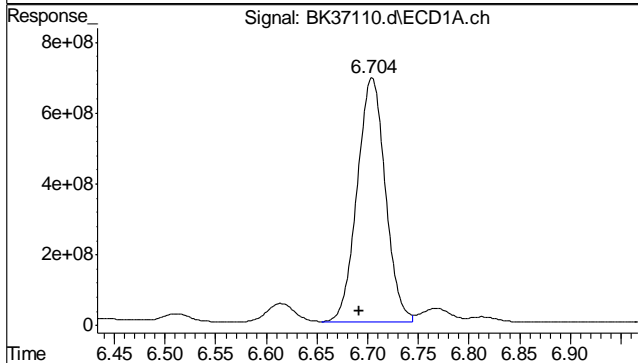
7.5.14
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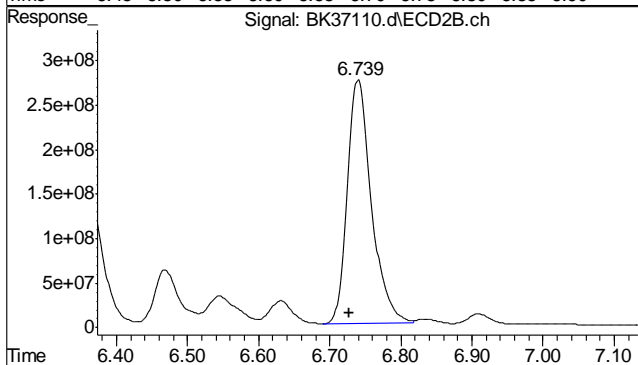
#9 AR1260-C
 R.T.: 5.755 min
 Delta R.T.: 0.011 min
 Response: 17782351505
 Conc: 842.38 ppb m



#9 AR1260-C
 R.T.: 5.825 min
 Delta R.T.: 0.012 min
 Response: 8946797020
 Conc: 813.58 ppb m

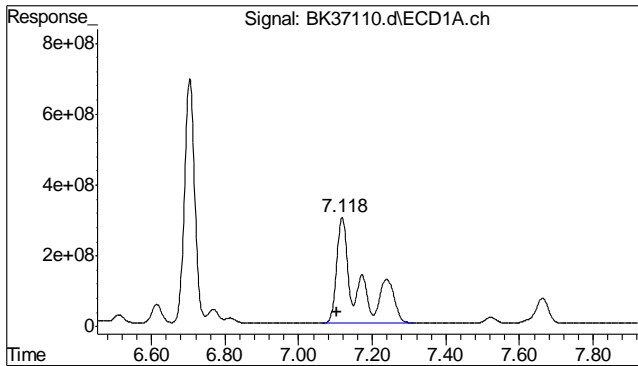


#10 AR1260-D
 R.T.: 6.704 min
 Delta R.T.: 0.012 min
 Response: 13177748405
 Conc: 890.82 ppb m

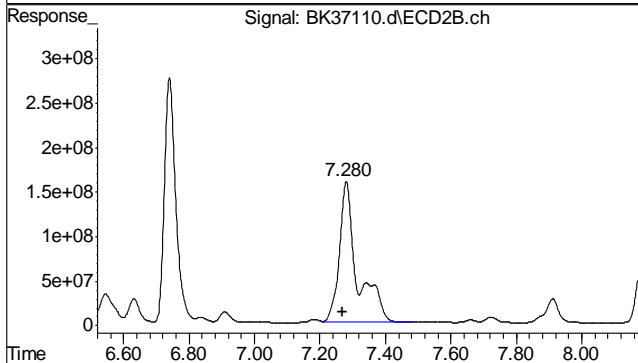


#10 AR1260-D
 R.T.: 6.739 min
 Delta R.T.: 0.013 min
 Response: 6438029018
 Conc: 868.11 ppb m

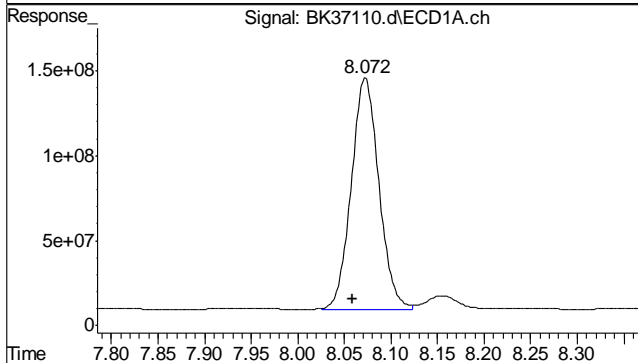
7.5.14
 7



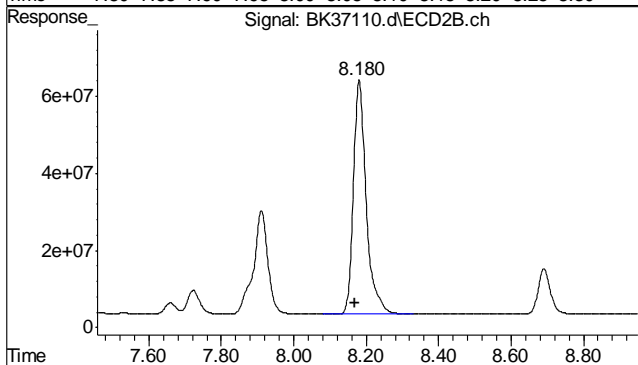
#11 AR1260-E
 R.T.: 7.118 min
 Delta R.T.: 0.013 min
 Response: 12005432285
 Conc: 832.85 ppb m



#11 AR1260-E
 R.T.: 7.280 min
 Delta R.T.: 0.013 min
 Response: 6023073083
 Conc: 871.85 ppb m

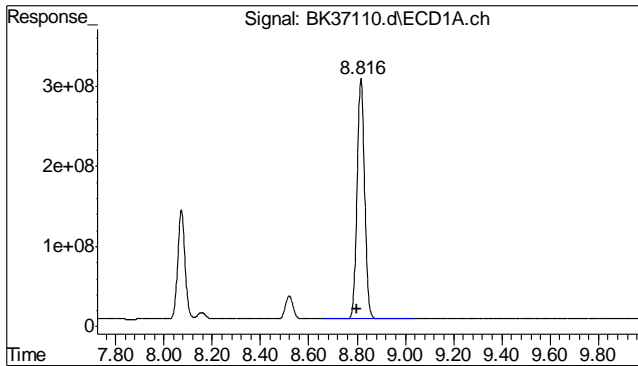


#12 AR1260-F
 R.T.: 8.072 min
 Delta R.T.: 0.013 min
 Response: 2795664360
 Conc: 778.09 m

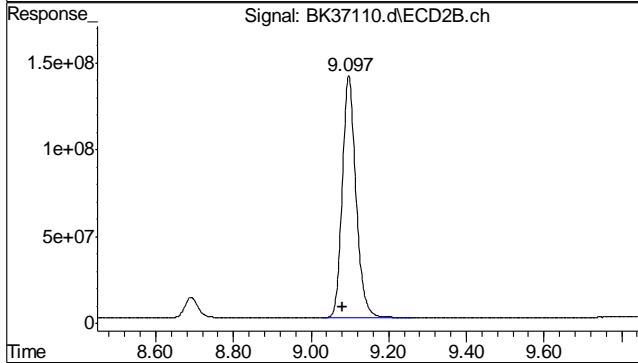


#12 AR1260-F
 R.T.: 8.181 min
 Delta R.T.: 0.013 min
 Response: 1479436596
 Conc: 887.02

7.5.14
 7



#13 DCB
 R.T.: 8.816 min
 Delta R.T.: 0.015 min
 Response: 6509618284
 Conc: 55.94 ppb



#13 DCB
 R.T.: 9.097 min
 Delta R.T.: 0.015 min
 Response: 3376017811
 Conc: 65.18 ppb m

7.5.14
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37132.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 8:30 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 08:47:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds						
1) s TCMX	2.218	2.080	8354.5E6	4649.8E6	56.044m	55.833
Spiked Amount	40.000		Recovery	=	140.11%	139.58%
13) s DCB	8.815	9.095	6713.9E6	3306.8E6	57.691m	63.844
Spiked Amount	40.000		Recovery	=	144.23%	159.61%
Target Compounds						
2) AR1016-A	2.477	2.410	1506.1E6	1028.5E6	678.830m	670.535
3) AR1016-B	2.753	2.714	3507.8E6	2106.3E6	690.302m	690.343
4) AR1016-C	3.148	3.078	7966.2E6	4316.6E6	748.912	738.715
5) AR1016-D	3.266	3.197	5146.4E6	1748.5E6	725.902m	719.583
6) AR1016-E	3.654	3.633	3345.7E6	1959.9E6	715.216m	720.417m
7) AR1260-A	5.026	5.072	5089.7E6	2841.7E6	731.639	719.174
8) AR1260-B	5.385	5.346	7795.6E6	3285.6E6	750.942	734.919
9) AR1260-C	5.755	5.824	15845.7E6	8099.0E6	750.638m	736.490m
10) AR1260-D	6.703	6.738	11650.9E6	5890.9E6	787.603	794.326
11) AR1260-E	7.118	7.278	10967.3E6	5494.9E6	760.834m	795.391m
12) AR1260-F	8.072	8.179	2775.3E6	1400.4E6	772.434m	839.653

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

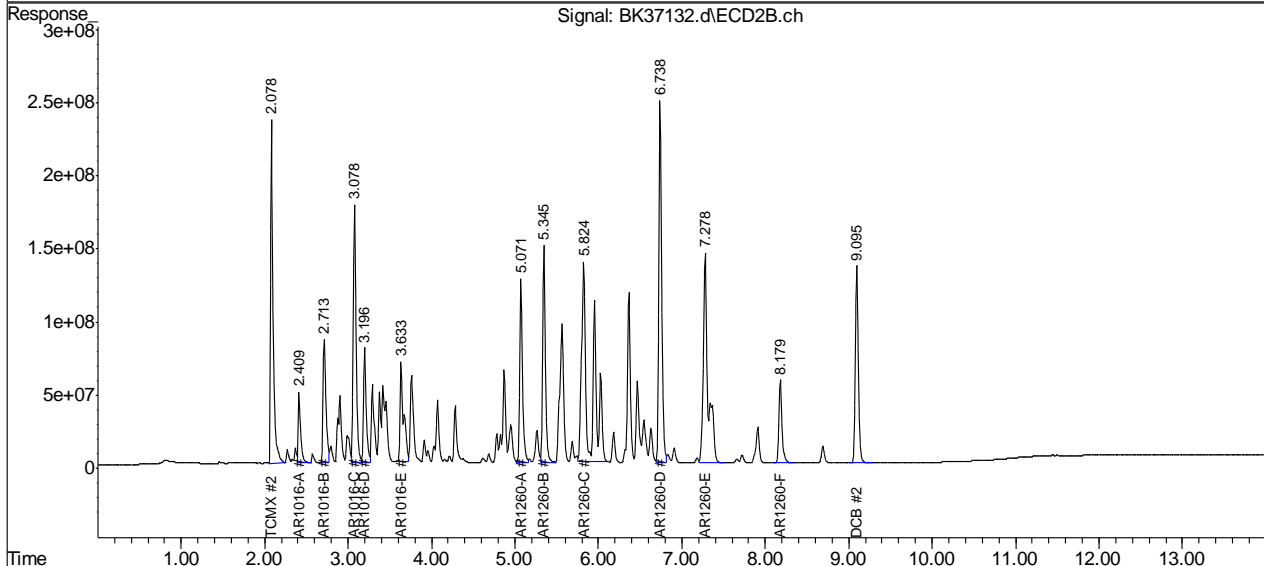
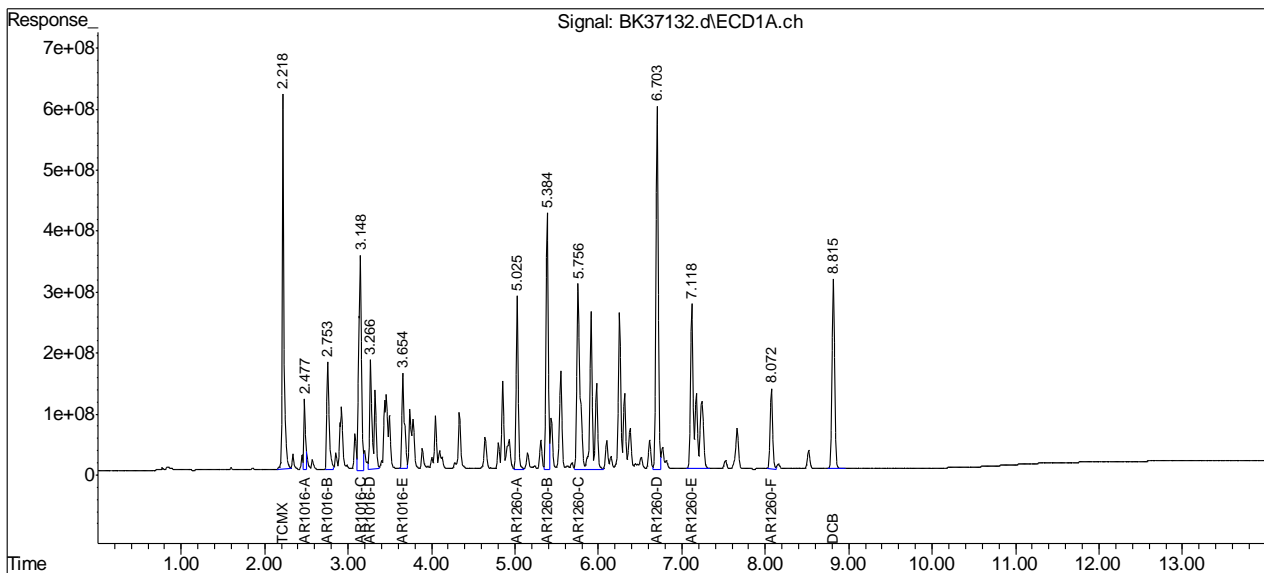
7.5.15
7

Quantitation Report (QT Reviewed)

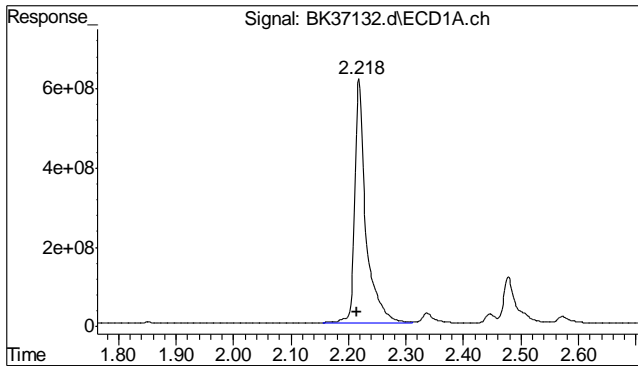
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37132.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 8:30 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 08:47:16 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

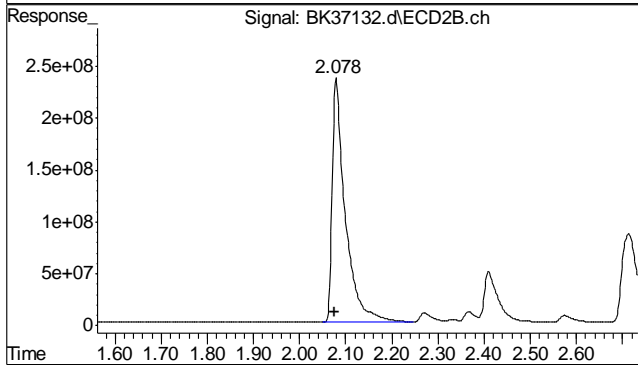
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



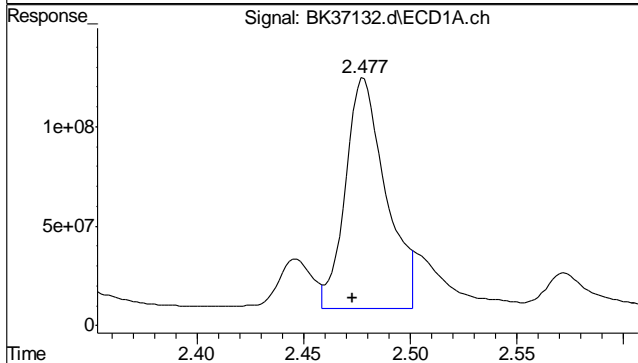
7.5.15
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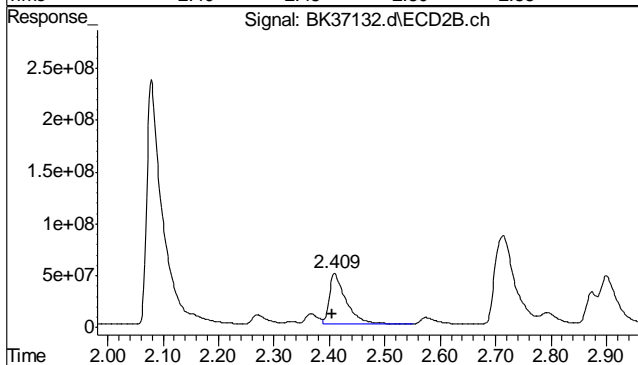
#1 TCMX
 R.T.: 2.218 min
 Delta R.T.: 0.004 min
 Response: 8354540140
 Conc: 56.04 ppb m



#1 TCMX
 R.T.: 2.080 min
 Delta R.T.: 0.005 min
 Response: 4649787947
 Conc: 55.83 ppb

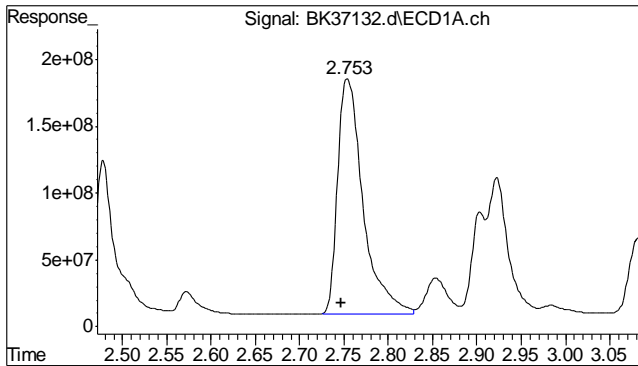


#2 AR1016-A
 R.T.: 2.477 min
 Delta R.T.: 0.004 min
 Response: 1506127793
 Conc: 678.83 ppb m

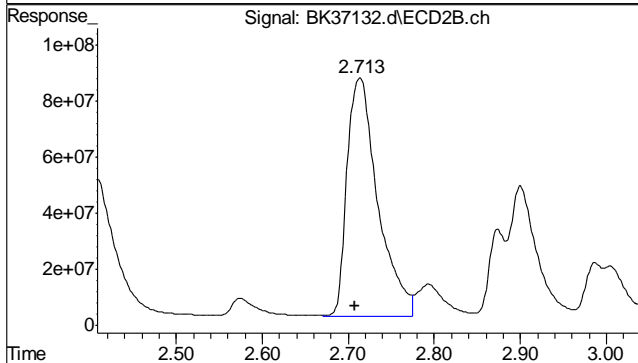


#2 AR1016-A
 R.T.: 2.410 min
 Delta R.T.: 0.005 min
 Response: 1028524141
 Conc: 670.53 ppb

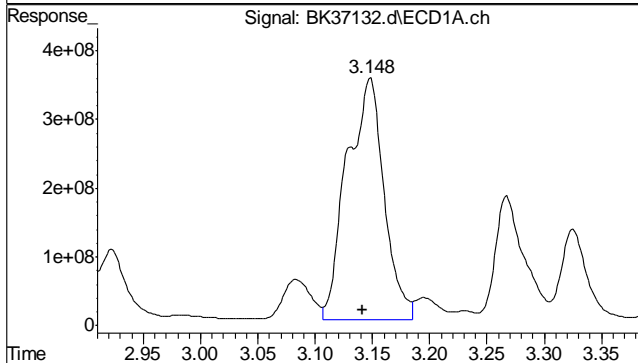
7.5.15
 7



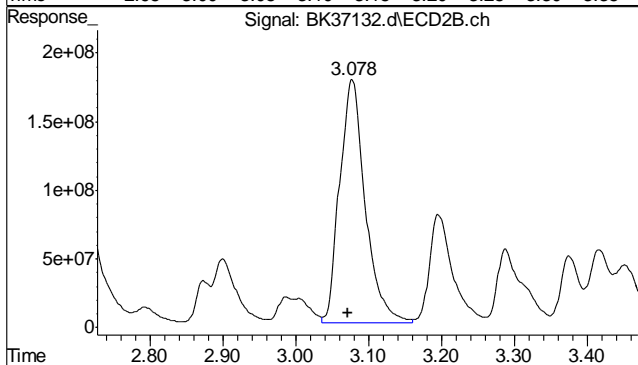
#3 AR1016-B
 R.T.: 2.753 min
 Delta R.T.: 0.006 min
 Response: 3507776398
 Conc: 690.30 ppb m



#3 AR1016-B
 R.T.: 2.714 min
 Delta R.T.: 0.007 min
 Response: 2106340237
 Conc: 690.34 ppb

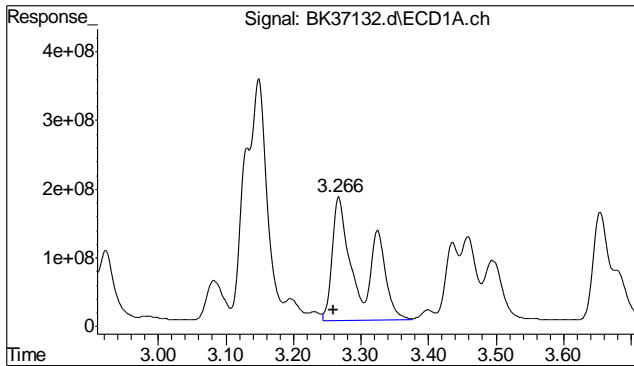


#4 AR1016-C
 R.T.: 3.148 min
 Delta R.T.: 0.006 min
 Response: 7966189168
 Conc: 748.91 ppb

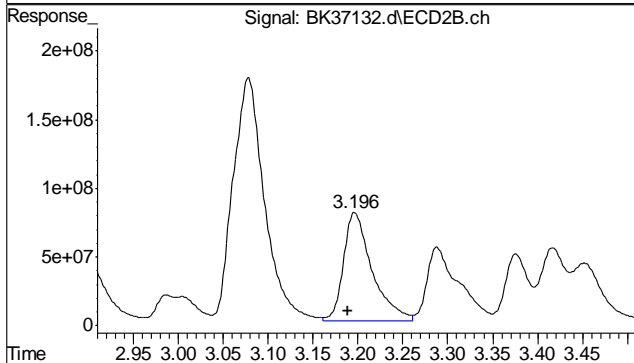


#4 AR1016-C
 R.T.: 3.078 min
 Delta R.T.: 0.006 min
 Response: 4316551937
 Conc: 738.72 ppb

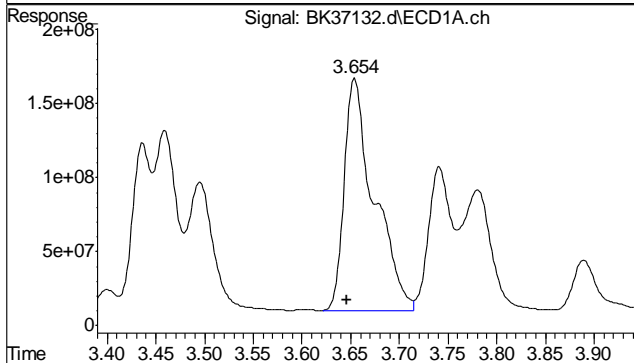
7.5.15
7



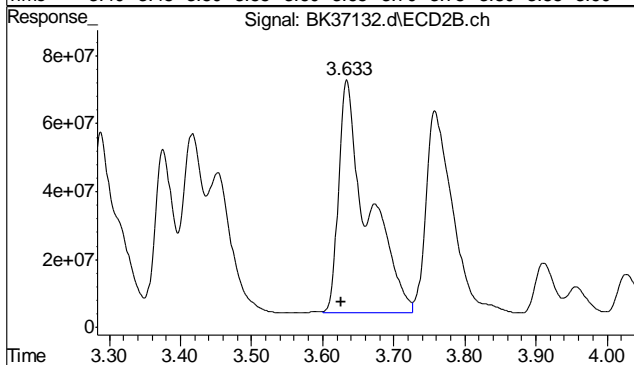
#5 AR1016-D
 R.T.: 3.266 min
 Delta R.T.: 0.007 min
 Response: 5146368976
 Conc: 725.90 m



#5 AR1016-D
 R.T.: 3.197 min
 Delta R.T.: 0.007 min
 Response: 1748491297
 Conc: 719.58

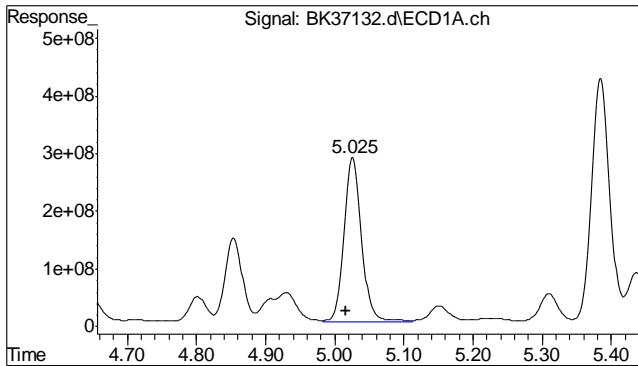


#6 AR1016-E
 R.T.: 3.654 min
 Delta R.T.: 0.007 min
 Response: 3345686593
 Conc: 715.22 m

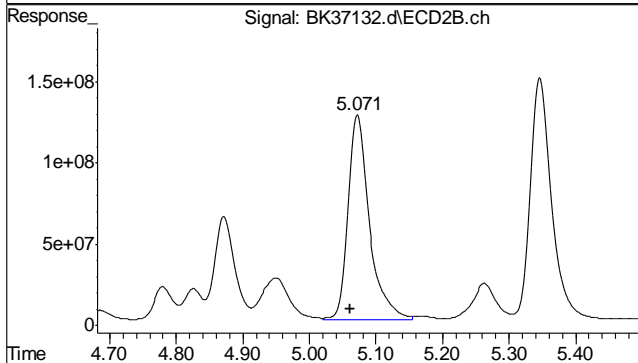


#6 AR1016-E
 R.T.: 3.633 min
 Delta R.T.: 0.007 min
 Response: 1959896428
 Conc: 720.42 m

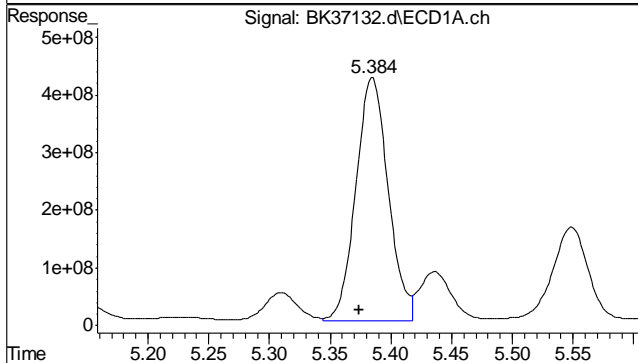
7.5.15
7



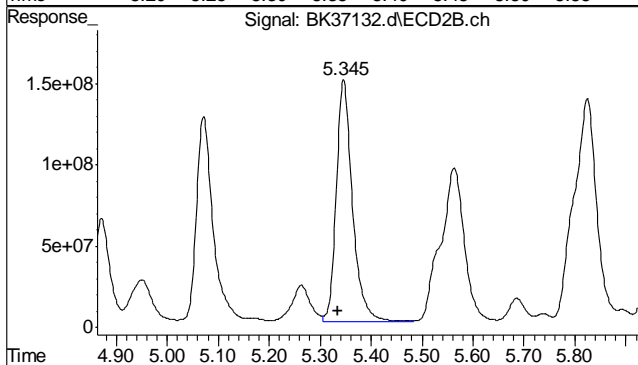
#7 AR1260-A
 R.T.: 5.026 min
 Delta R.T.: 0.010 min
 Response: 5089724965
 Conc: 731.64 ppb



#7 AR1260-A
 R.T.: 5.072 min
 Delta R.T.: 0.010 min
 Response: 2841668771
 Conc: 719.17 ppb

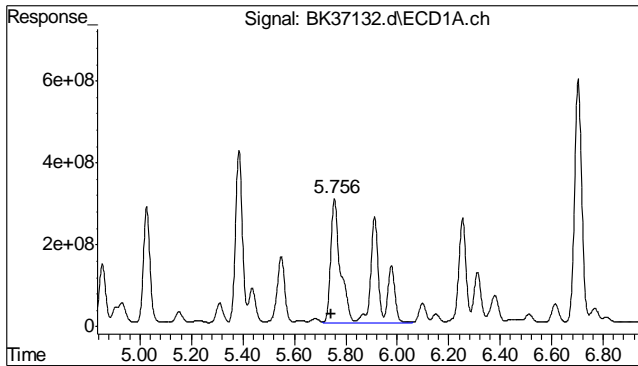


#8 AR1260-B
 R.T.: 5.385 min
 Delta R.T.: 0.011 min
 Response: 7795612200
 Conc: 750.94 ppb

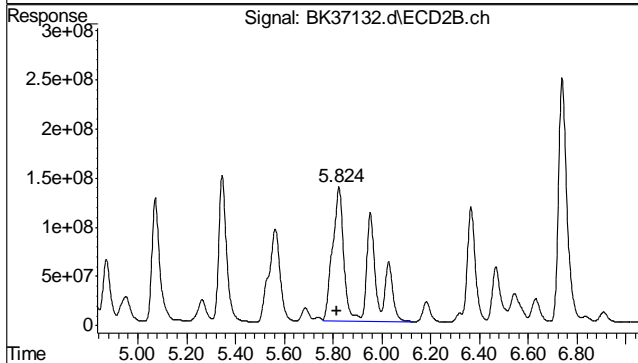


#8 AR1260-B
 R.T.: 5.346 min
 Delta R.T.: 0.011 min
 Response: 3285623077
 Conc: 734.92 ppb

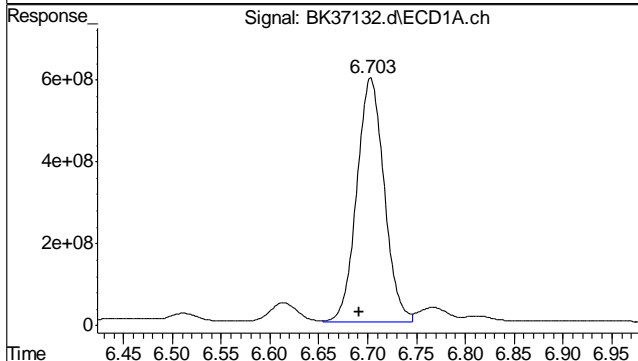
7.5.15
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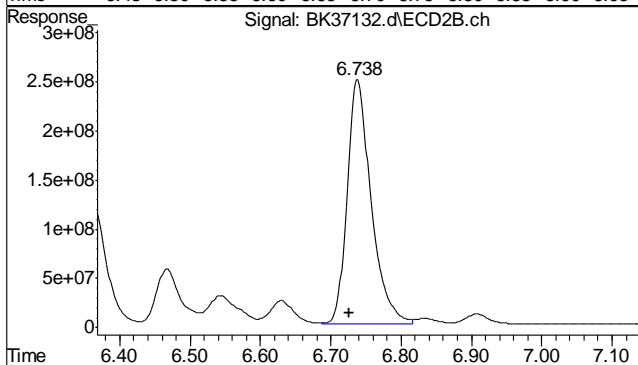
#9 AR1260-C
 R.T.: 5.755 min
 Delta R.T.: 0.011 min
 Response: 15845712193
 Conc: 750.64 ppb m



#9 AR1260-C
 R.T.: 5.824 min
 Delta R.T.: 0.010 min
 Response: 8099011528
 Conc: 736.49 ppb m

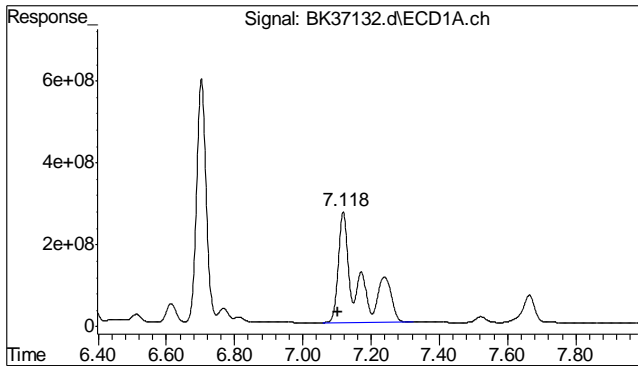


#10 AR1260-D
 R.T.: 6.703 min
 Delta R.T.: 0.012 min
 Response: 11650899834
 Conc: 787.60 ppb

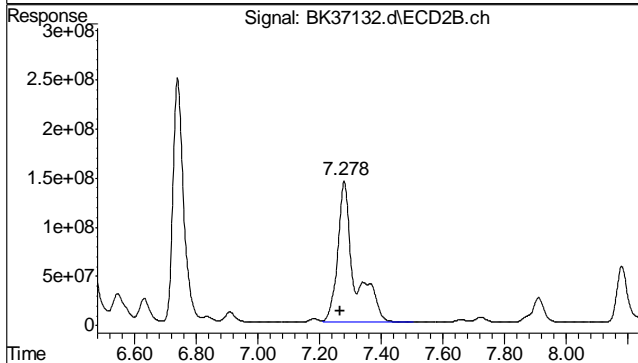


#10 AR1260-D
 R.T.: 6.738 min
 Delta R.T.: 0.012 min
 Response: 5890860654
 Conc: 794.33 ppb

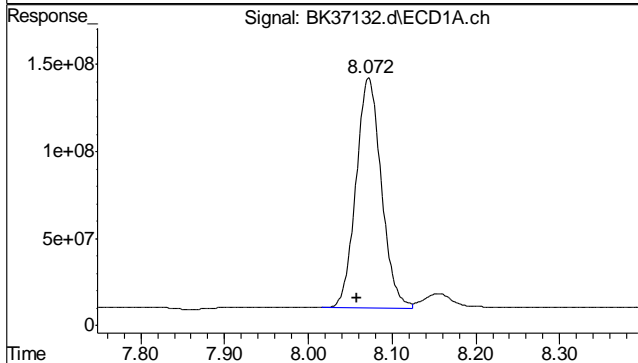
7.5.15
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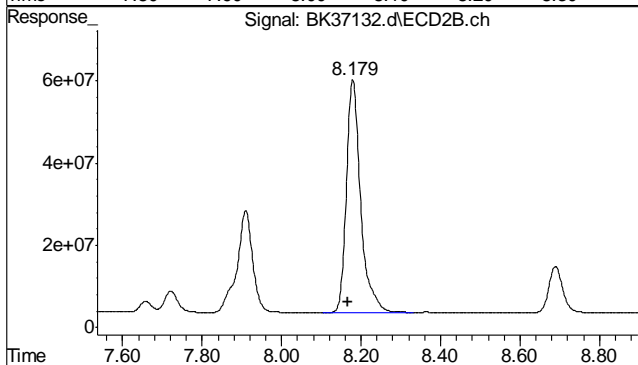
#11 AR1260-E
 R.T.: 7.118 min
 Delta R.T.: 0.013 min
 Response: 10967328596
 Conc: 760.83 ppb m



#11 AR1260-E
 R.T.: 7.278 min
 Delta R.T.: 0.011 min
 Response: 5494888631
 Conc: 795.39 ppb m

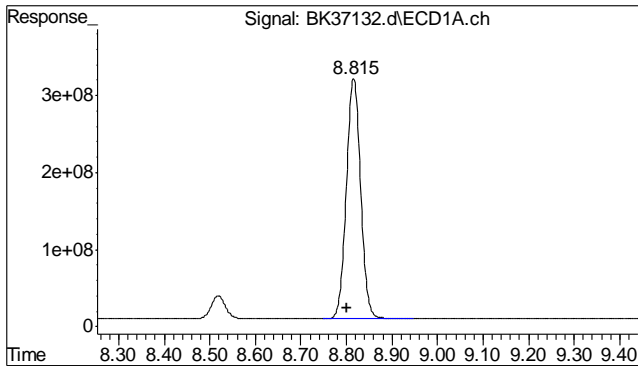


#12 AR1260-F
 R.T.: 8.072 min
 Delta R.T.: 0.013 min
 Response: 2775348737
 Conc: 772.43 m

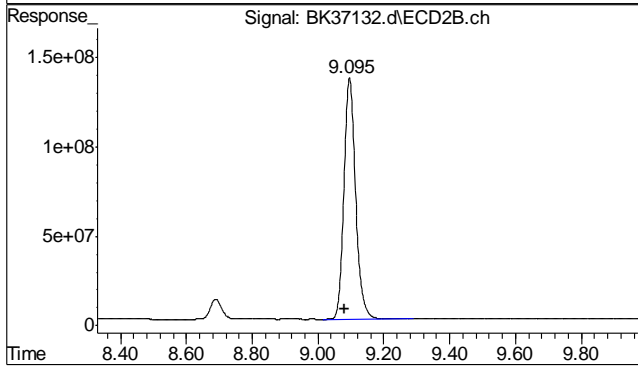


#12 AR1260-F
 R.T.: 8.179 min
 Delta R.T.: 0.012 min
 Response: 1400436209
 Conc: 839.65

7.5.15
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#13 DCB
 R.T.: 8.815 min
 Delta R.T.: 0.014 min
 Response: 6713911630
 Conc: 57.69 ppb m



#13 DCB
 R.T.: 9.095 min
 Delta R.T.: 0.014 min
 Response: 3306785549
 Conc: 63.84 ppb

7.5.15
 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37143.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:29 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:46:19 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.221	2.082	8217.0E6	4278.0E6	55.121	51.368
Spiked Amount	40.000		Recovery	=	137.80%	128.42%
13) s DCB	8.821	9.100	4907.6E6	2758.4E6	42.170	53.257 #
Spiked Amount	40.000		Recovery	=	105.43%	133.14%
Target Compounds						
2) AR1016-A	2.479	2.412	1494.9E6	929.7E6	673.759m	606.097
3) AR1016-B	2.756	2.715	3461.9E6	1923.6E6	681.283	630.450
4) AR1016-C	3.151	3.080	7511.1E6	3958.3E6	706.133	677.406
5) AR1016-D	3.269	3.199	4992.5E6	1585.6E6	704.199m	652.562
6) AR1016-E	3.656	3.636	3075.0E6	1785.8E6	657.356m	656.420m
7) AR1260-A	5.030	5.075	4033.2E6	2531.1E6	579.765	640.585
8) AR1260-B	5.389	5.350	6306.2E6	2921.9E6	607.465	653.564
9) AR1260-C	5.759	5.827	12815.8E6	7133.9E6	607.106m	648.731m
10) AR1260-D	6.708	6.743	8833.9E6	5176.9E6	597.170m	698.059
11) AR1260-E	7.122	7.284	8193.8E6	4592.7E6	568.426m	664.795m
12) AR1260-F	8.078	8.184	1962.9E6	1130.5E6	546.305	677.801

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

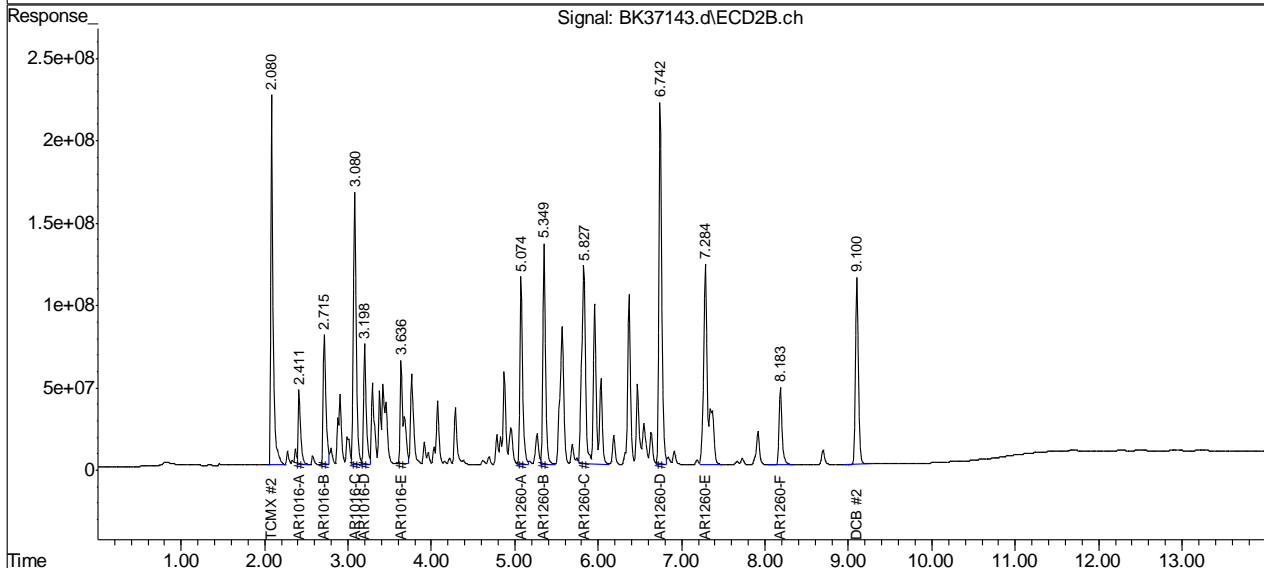
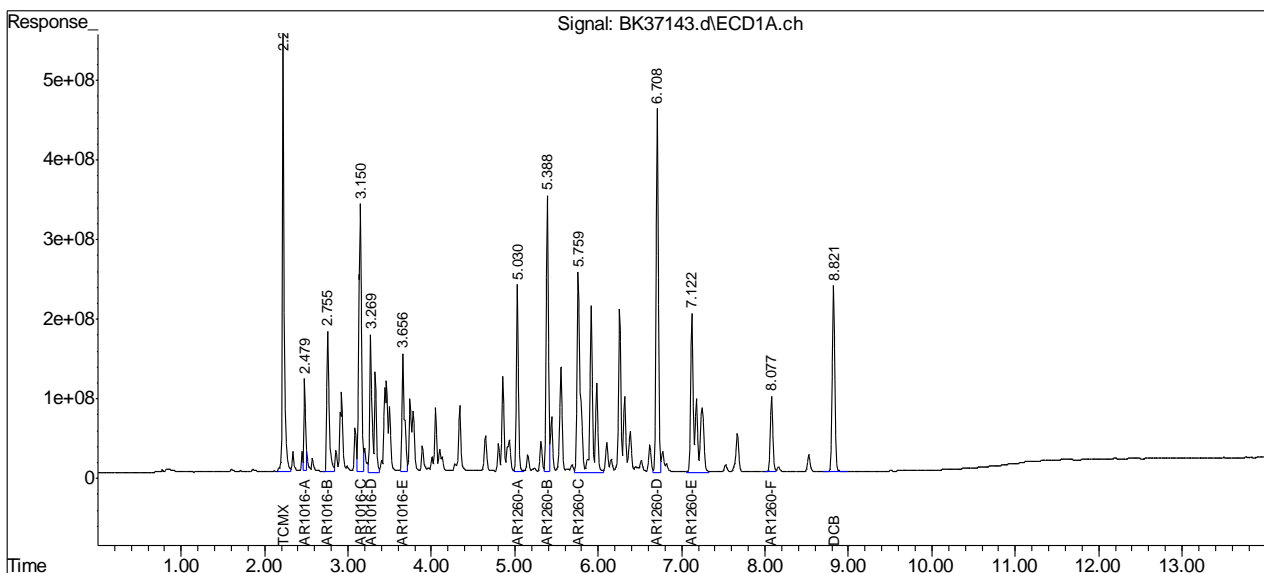
7.5.16
7

Quantitation Report (QT Reviewed)

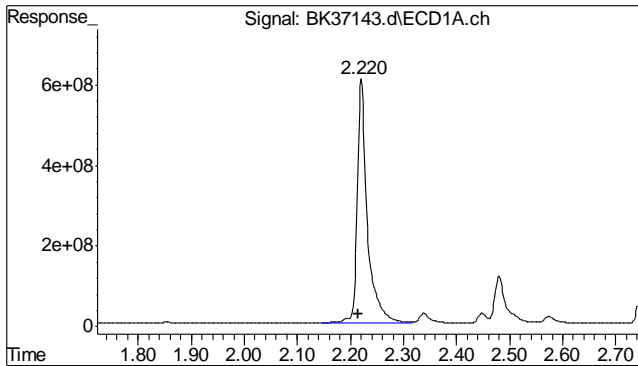
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37143.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 11:29 am
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 11:46:19 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

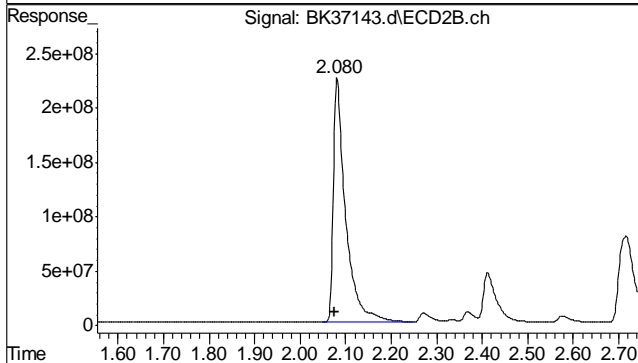
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



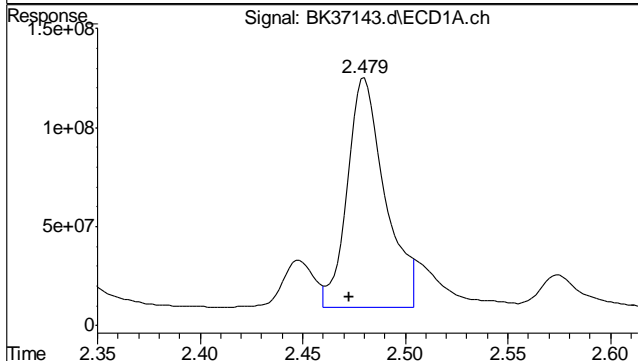
7.5.16
 7



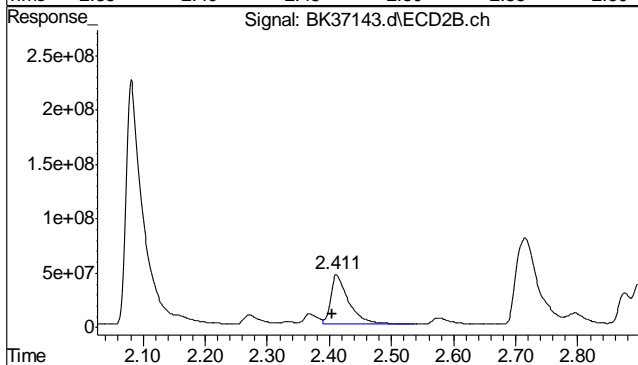
#1 TCMX
 R.T.: 2.221 min
 Delta R.T.: 0.007 min
 Response: 8216985372
 Conc: 55.12 ppb



#1 TCMX
 R.T.: 2.082 min
 Delta R.T.: 0.007 min
 Response: 4277989700
 Conc: 51.37 ppb

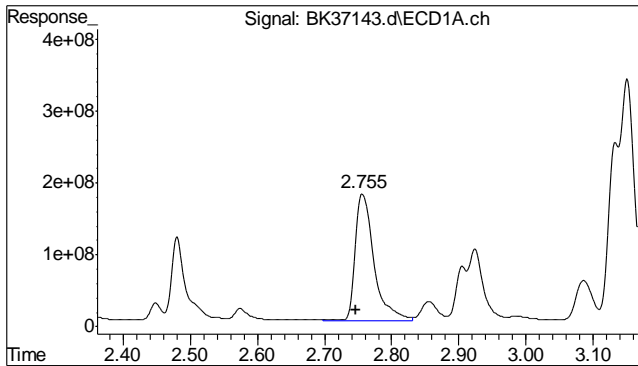


#2 AR1016-A
 R.T.: 2.479 min
 Delta R.T.: 0.006 min
 Response: 1494876569
 Conc: 673.76 ppb m

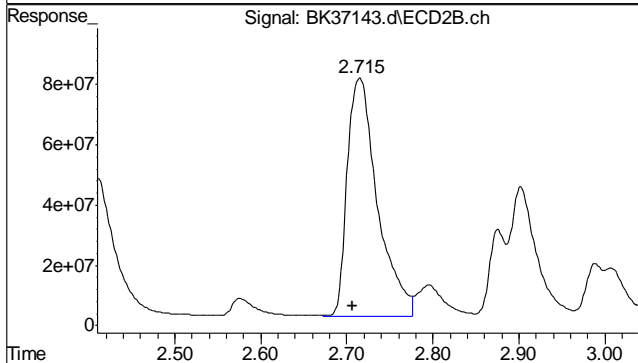


#2 AR1016-A
 R.T.: 2.412 min
 Delta R.T.: 0.007 min
 Response: 929684131
 Conc: 606.10 ppb

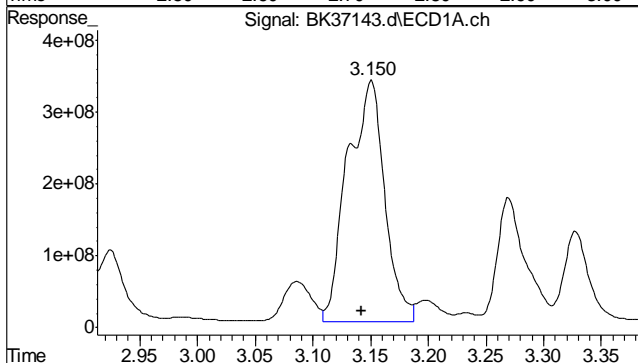
7.5.16
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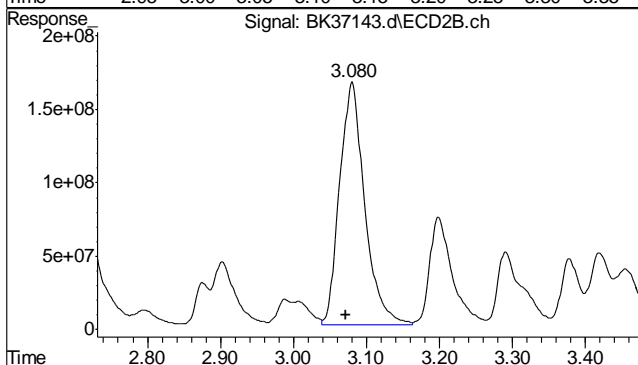
#3 AR1016-B
 R.T.: 2.756 min
 Delta R.T.: 0.009 min
 Response: 3461946095
 Conc: 681.28 ppb



#3 AR1016-B
 R.T.: 2.715 min
 Delta R.T.: 0.008 min
 Response: 1923597330
 Conc: 630.45 ppb

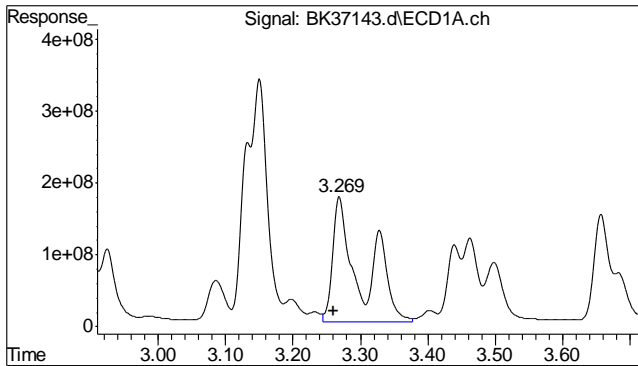


#4 AR1016-C
 R.T.: 3.151 min
 Delta R.T.: 0.009 min
 Response: 7511145622
 Conc: 706.13 ppb

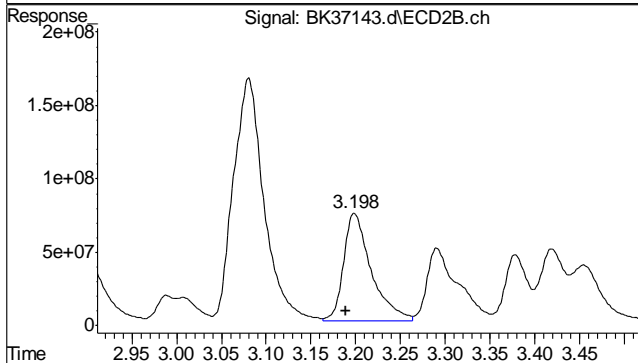


#4 AR1016-C
 R.T.: 3.080 min
 Delta R.T.: 0.008 min
 Response: 3958298577
 Conc: 677.41 ppb

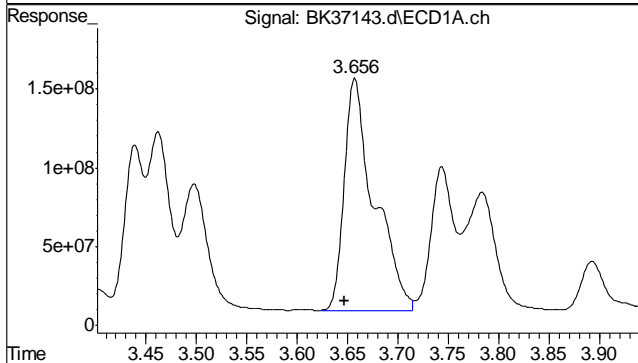
7.5.16
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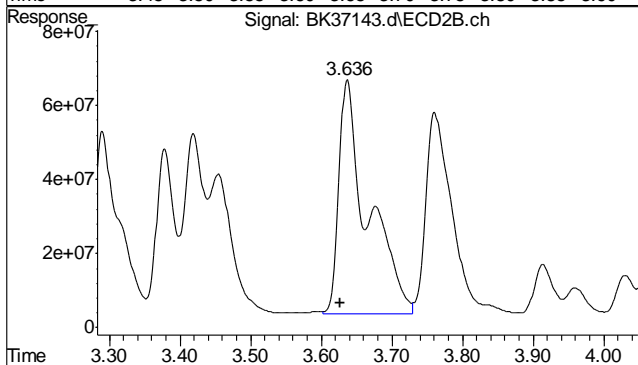
#5 AR1016-D
 R.T.: 3.269 min
 Delta R.T.: 0.009 min
 Response: 4992501460
 Conc: 704.20 m



#5 AR1016-D
 R.T.: 3.199 min
 Delta R.T.: 0.010 min
 Response: 1585638561
 Conc: 652.56

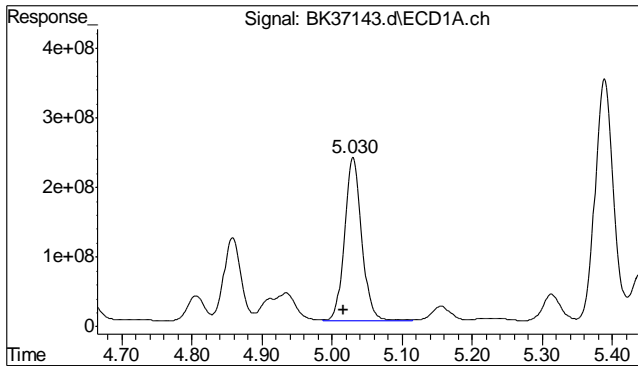


#6 AR1016-E
 R.T.: 3.656 min
 Delta R.T.: 0.010 min
 Response: 3075023615
 Conc: 657.36 m

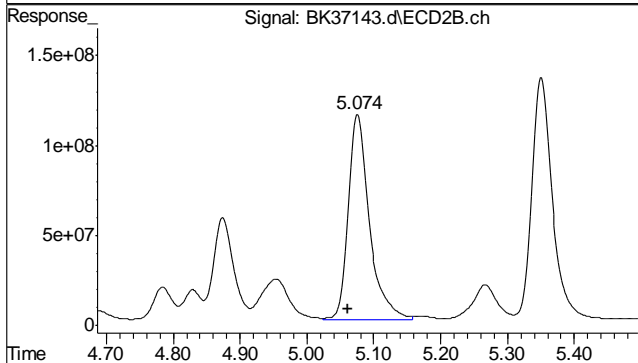


#6 AR1016-E
 R.T.: 3.636 min
 Delta R.T.: 0.009 min
 Response: 1785792342
 Conc: 656.42 m

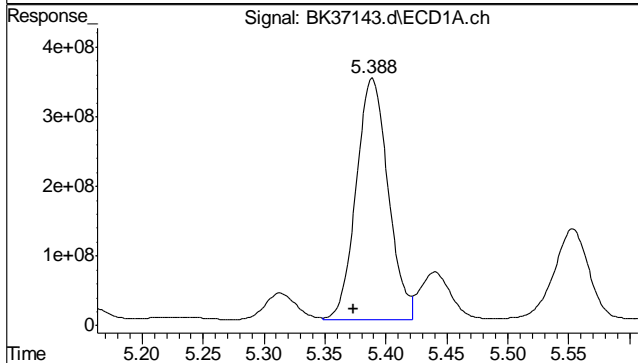
7.5.16
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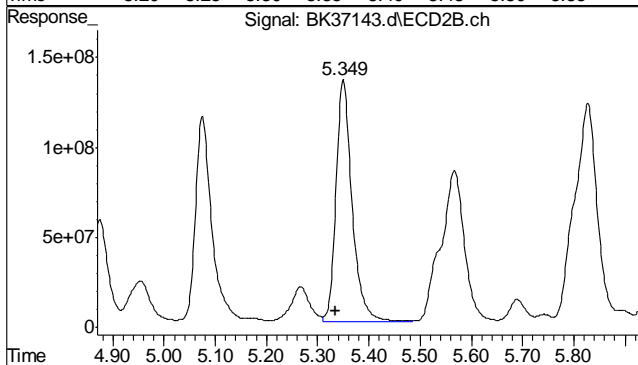
#7 AR1260-A
 R.T.: 5.030 min
 Delta R.T.: 0.014 min
 Response: 4033202059
 Conc: 579.77 ppb



#7 AR1260-A
 R.T.: 5.075 min
 Delta R.T.: 0.013 min
 Response: 2531139216
 Conc: 640.58 ppb

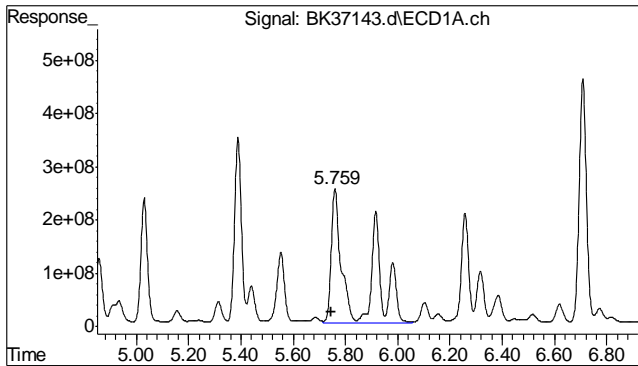


#8 AR1260-B
 R.T.: 5.389 min
 Delta R.T.: 0.015 min
 Response: 6306166217
 Conc: 607.47 ppb

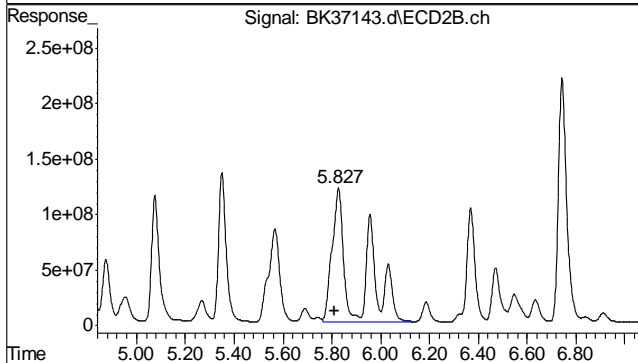


#8 AR1260-B
 R.T.: 5.350 min
 Delta R.T.: 0.015 min
 Response: 2921905310
 Conc: 653.56 ppb

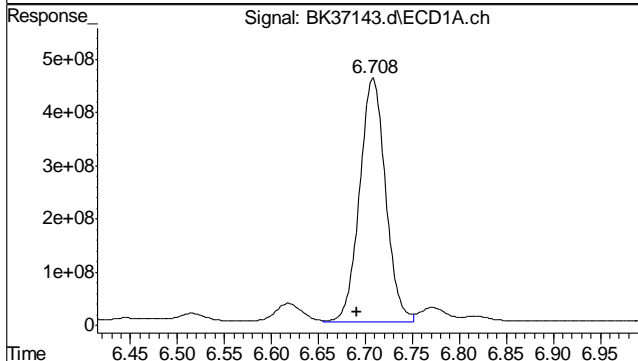
7.5.16
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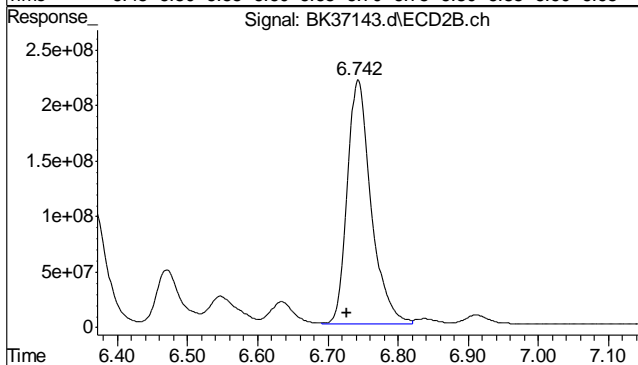
#9 AR1260-C
 R.T.: 5.759 min
 Delta R.T.: 0.015 min
 Response: 12815810143
 Conc: 607.11 ppb m



#9 AR1260-C
 R.T.: 5.827 min
 Delta R.T.: 0.014 min
 Response: 7133943730
 Conc: 648.73 ppb m

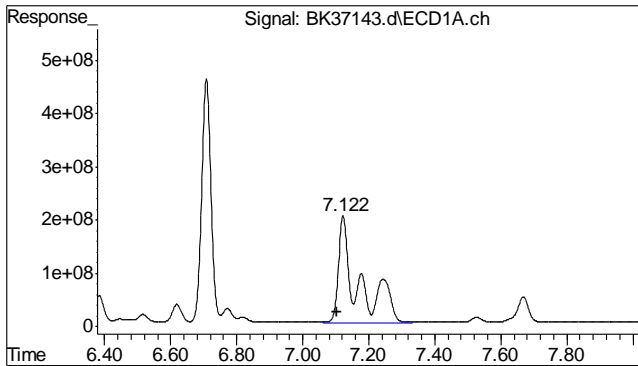


#10 AR1260-D
 R.T.: 6.708 min
 Delta R.T.: 0.016 min
 Response: 8833852876
 Conc: 597.17 ppb m

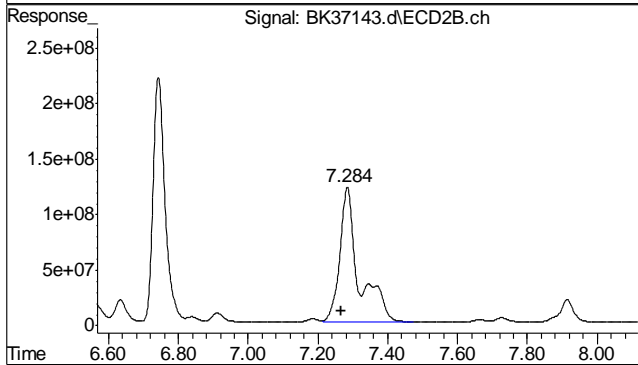


#10 AR1260-D
 R.T.: 6.743 min
 Delta R.T.: 0.016 min
 Response: 5176928327
 Conc: 698.06 ppb

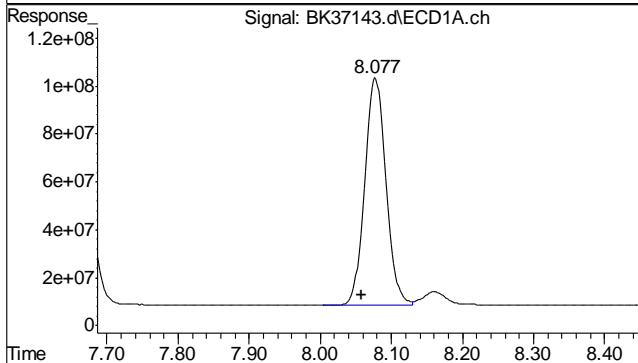
7.5.16
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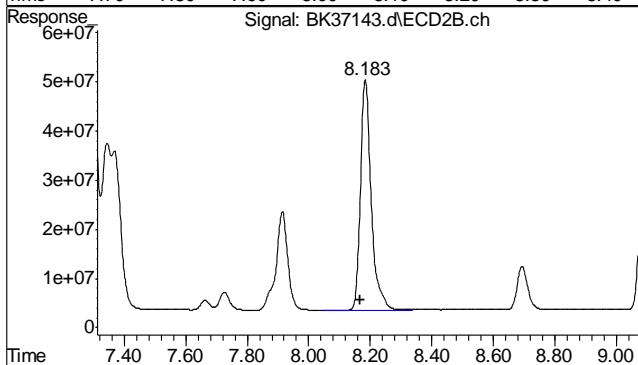
#11 AR1260-E
 R.T.: 7.122 min
 Delta R.T.: 0.018 min
 Response: 8193790710
 Conc: 568.43 ppb m



#11 AR1260-E
 R.T.: 7.284 min
 Delta R.T.: 0.016 min
 Response: 4592676768
 Conc: 664.79 ppb m

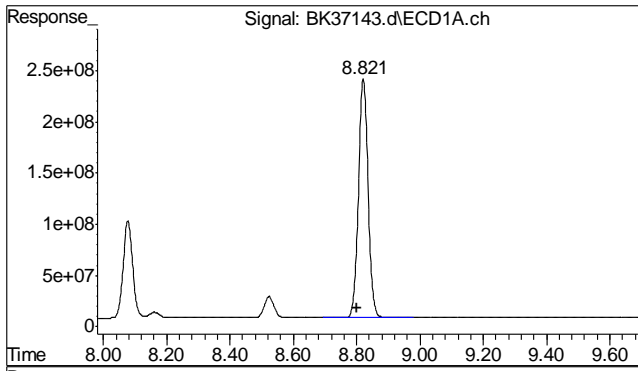


#12 AR1260-F
 R.T.: 8.078 min
 Delta R.T.: 0.019 min
 Response: 1962868293
 Conc: 546.30

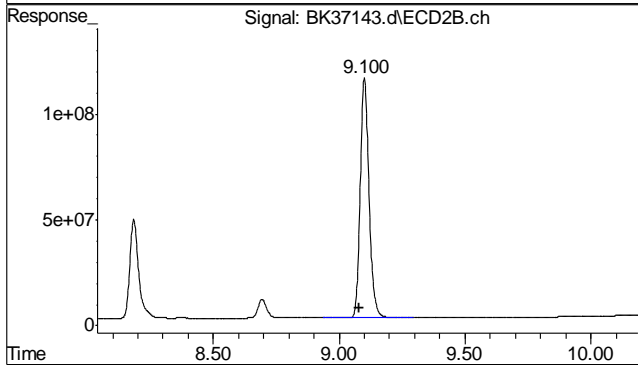


#12 AR1260-F
 R.T.: 8.184 min
 Delta R.T.: 0.017 min
 Response: 1130487238
 Conc: 677.80

7.5.16
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#13 DCB
 R.T.: 8.821 min
 Delta R.T.: 0.020 min
 Response: 4907639832
 Conc: 42.17 ppb



#13 DCB
 R.T.: 9.100 min
 Delta R.T.: 0.018 min
 Response: 2758439444
 Conc: 53.26 ppb

7.5.16
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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37154.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 2:28 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 14:52:25 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
System Monitoring Compounds						
1) s TCMX	2.222	2.083	8126.6E6	4393.8E6	54.515	52.759
Spiked Amount	40.000		Recovery	=	136.29%	131.90%
13) s DCB	8.825	9.104	5224.1E6	2891.5E6	44.889	55.826
Spiked Amount	40.000		Recovery	=	112.22%	139.57%
Target Compounds						
2) AR1016-A	2.480	2.412	1478.8E6	943.2E6	666.515m	614.915m
3) AR1016-B	2.755	2.716	3421.5E6	1930.5E6	673.328m	632.726m
4) AR1016-C	3.152	3.082	7867.7E6	4035.2E6	739.653	690.571
5) AR1016-D	3.270	3.201	5188.9E6	1622.2E6	731.908m	667.603
6) AR1016-E	3.658	3.638	3322.0E6	1816.1E6	710.150m	667.564m
7) AR1260-A	5.032	5.077	4490.2E6	2600.4E6	645.461	658.111m
8) AR1260-B	5.392	5.353	7239.7E6	3065.7E6	697.390	685.732
9) AR1260-C	5.762	5.830	13330.8E6	7464.5E6	631.502m	678.790m
10) AR1260-D	6.712	6.747	9733.6E6	5363.1E6	657.990	723.162
11) AR1260-E	7.126	7.287	8885.0E6	4852.9E6	616.380m	702.461m
12) AR1260-F	8.081	8.188	2127.2E6	1214.5E6	592.052	728.188

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

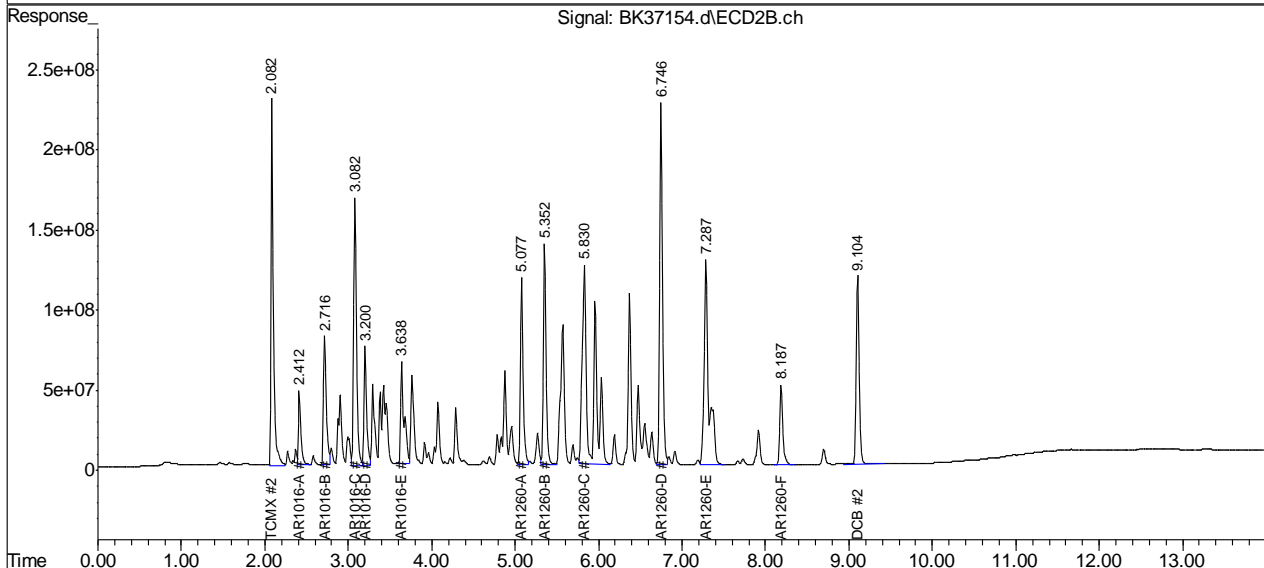
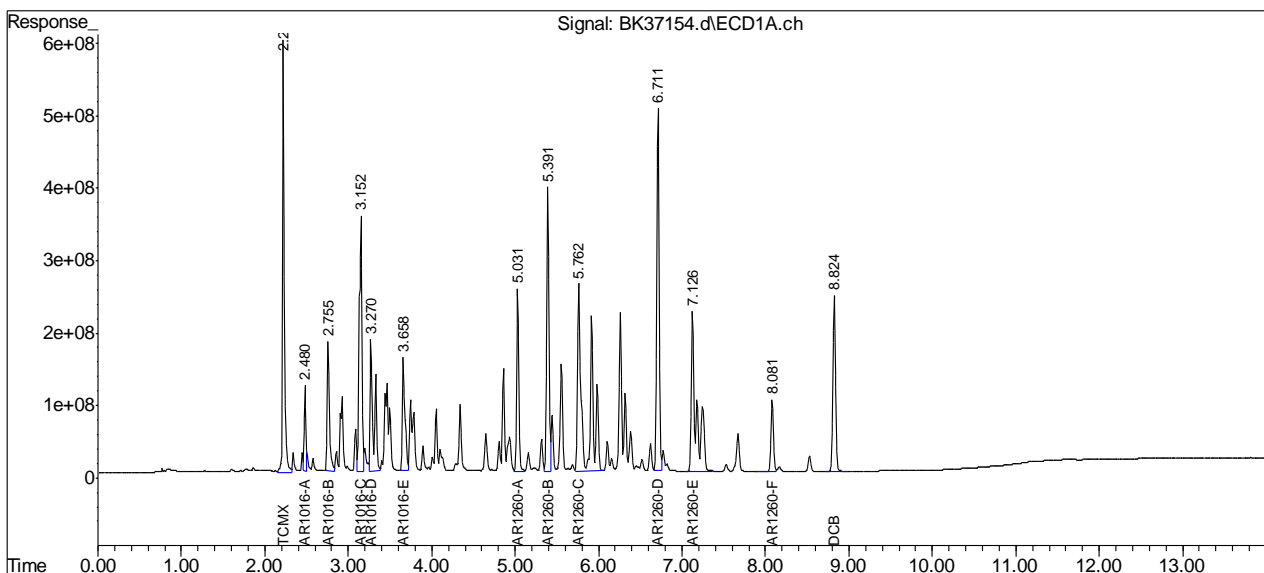
7.5.17
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Quantitation Report (QT Reviewed)

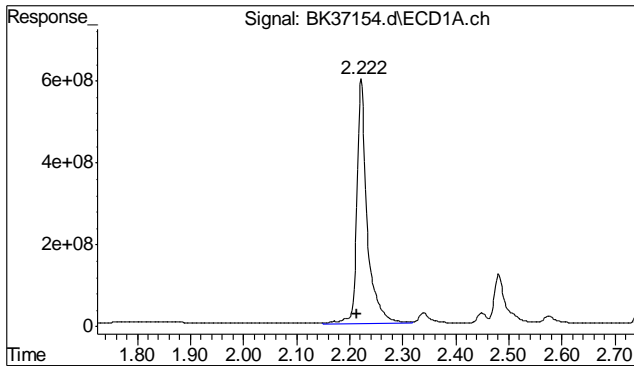
Data Path : C:\msdchem\1\DATA\BK140429\
 Data File : BK37154.d
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 30 Apr 2014 2:28 pm
 Operator : nickk
 Sample : cc1213-750,a16/60
 Misc : op37822,gbk1213,15,,,10,,s
 ALS Vial : 99 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
 Integration File signal 2: EVENTS2.E
 Quant Time: Apr 30 14:52:25 2014
 Quant Method : C:\msdchem\1\METHODS\PC140429.M
 Quant Title : PCB,rtx-clpest front,rtx-clpest2-rear
 QLast Update : Tue Apr 29 17:49:50 2014
 Response via : Initial Calibration
 Integrator: ChemStation

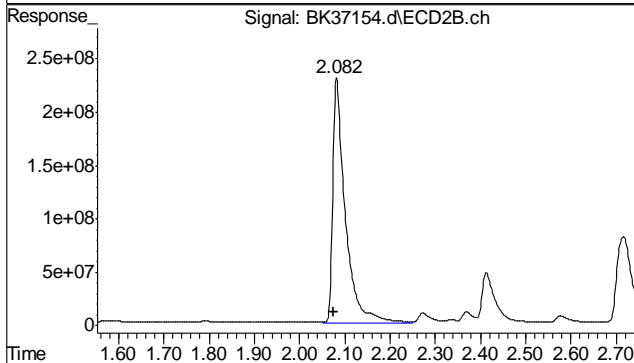
Volume Inj. :
 Signal #1 Phase : Signal #2 Phase:
 Signal #1 Info : Signal #2 Info :



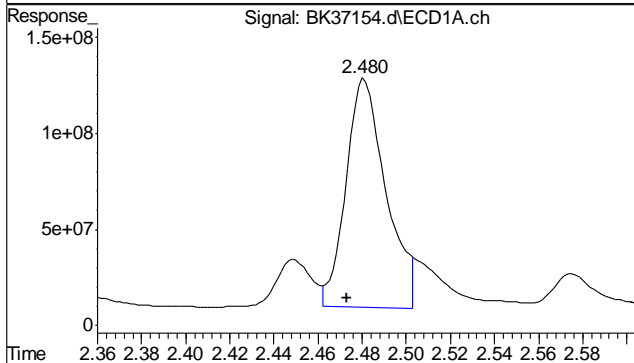
7.5.17
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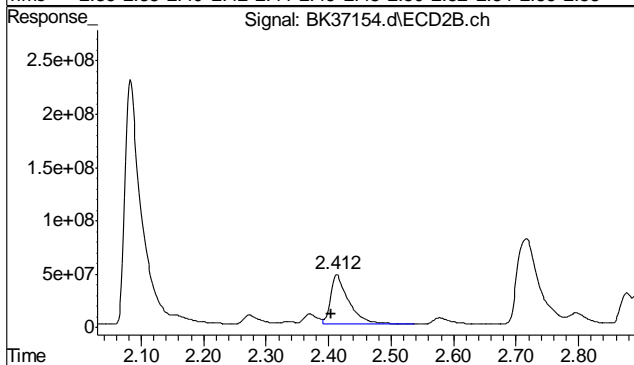
#1 TCMX
 R.T.: 2.222 min
 Delta R.T.: 0.008 min
 Response: 8126609692
 Conc: 54.51 ppb



#1 TCMX
 R.T.: 2.083 min
 Delta R.T.: 0.008 min
 Response: 4393779519
 Conc: 52.76 ppb

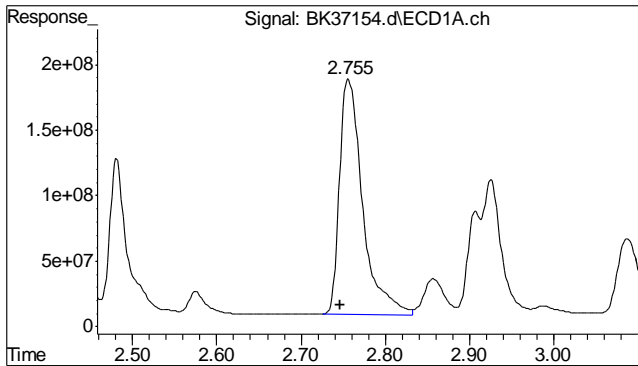


#2 AR1016-A
 R.T.: 2.480 min
 Delta R.T.: 0.007 min
 Response: 1478803972
 Conc: 666.51 ppb m

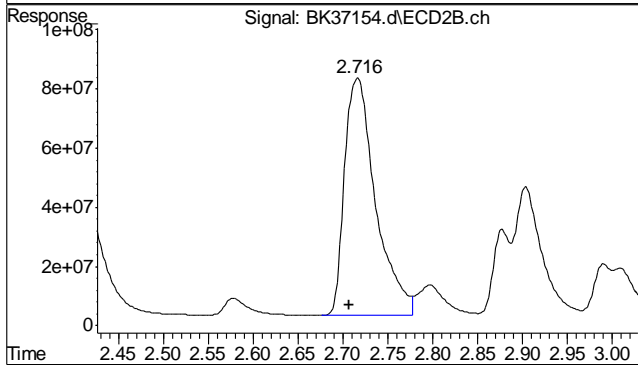


#2 AR1016-A
 R.T.: 2.412 min
 Delta R.T.: 0.007 min
 Response: 943210006
 Conc: 614.92 ppb m

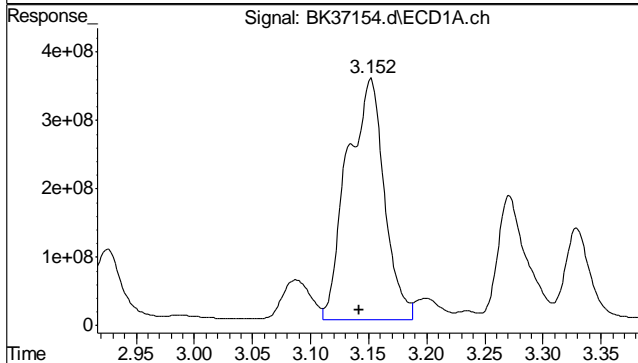
7.5.17
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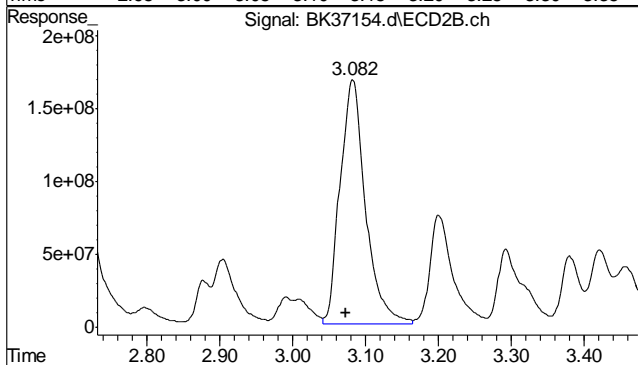
#3 AR1016-B
 R.T.: 2.755 min
 Delta R.T.: 0.009 min
 Response: 3421519749
 Conc: 673.33 ppb m



#3 AR1016-B
 R.T.: 2.716 min
 Delta R.T.: 0.009 min
 Response: 1930542373
 Conc: 632.73 ppb m

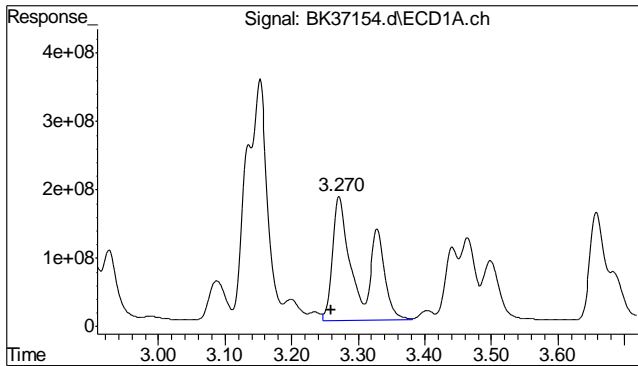


#4 AR1016-C
 R.T.: 3.152 min
 Delta R.T.: 0.010 min
 Response: 7867700672
 Conc: 739.65 ppb

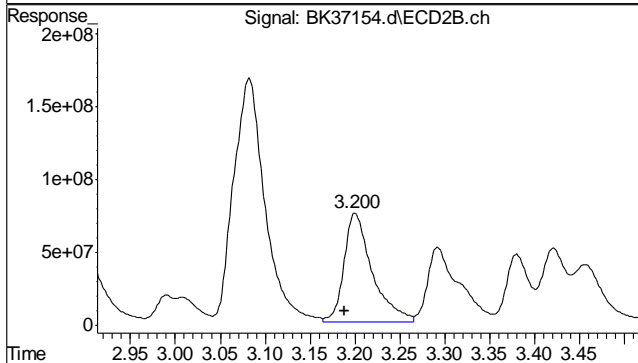


#4 AR1016-C
 R.T.: 3.082 min
 Delta R.T.: 0.010 min
 Response: 4035228557
 Conc: 690.57 ppb

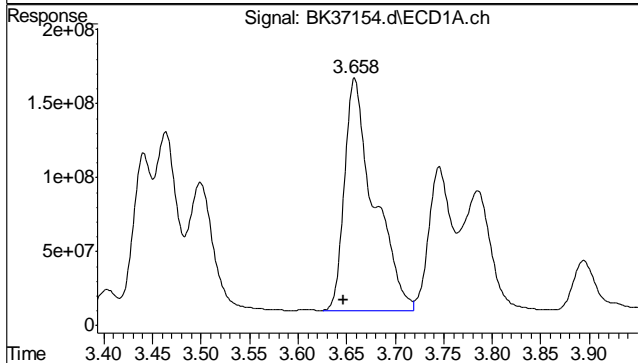
7.5.17
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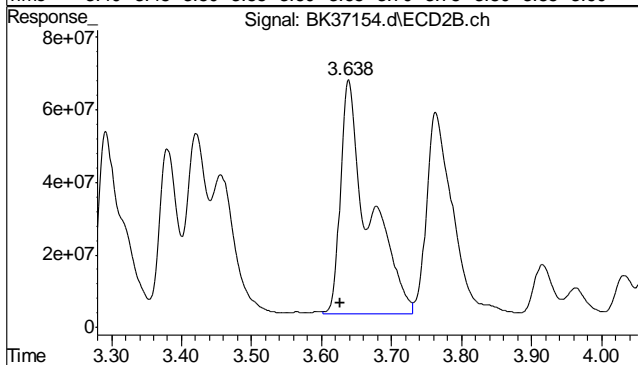
#5 AR1016-D
 R.T.: 3.270 min
 Delta R.T.: 0.011 min
 Response: 5188948667
 Conc: 731.91 m



#5 AR1016-D
 R.T.: 3.201 min
 Delta R.T.: 0.011 min
 Response: 1622184839
 Conc: 667.60

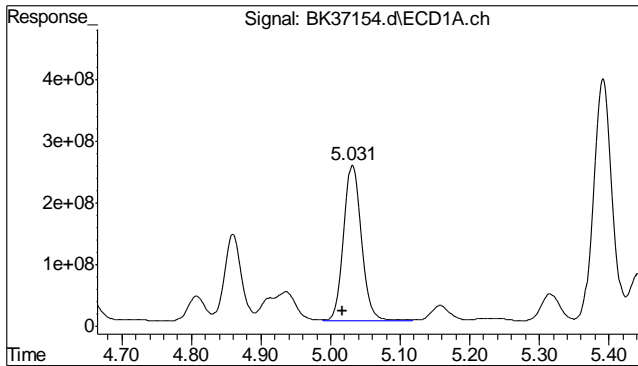


#6 AR1016-E
 R.T.: 3.658 min
 Delta R.T.: 0.011 min
 Response: 3321988530
 Conc: 710.15 m

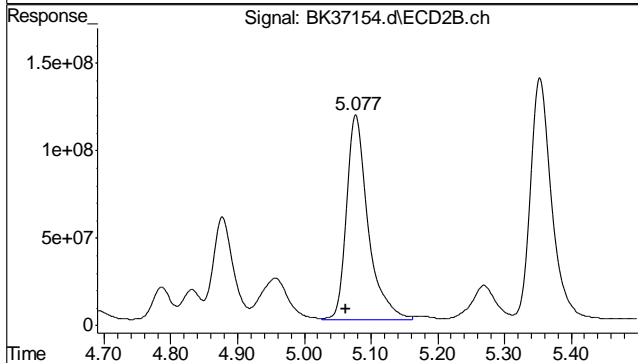


#6 AR1016-E
 R.T.: 3.638 min
 Delta R.T.: 0.011 min
 Response: 1816107598
 Conc: 667.56 m

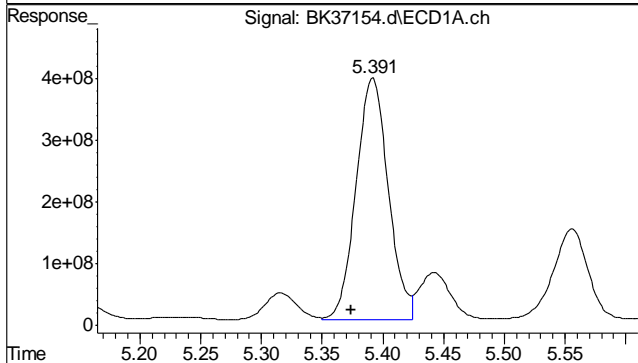
7.5.17
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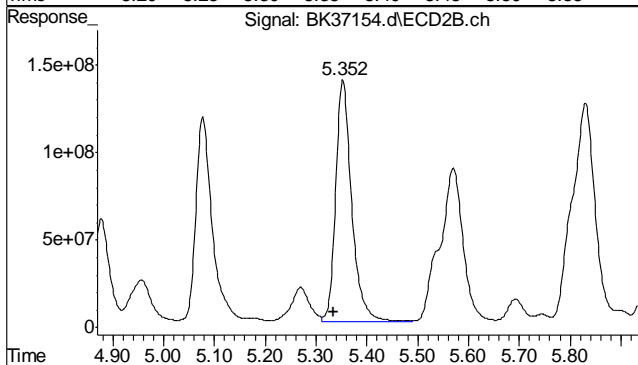
#7 AR1260-A
 R.T.: 5.032 min
 Delta R.T.: 0.015 min
 Response: 4490218080
 Conc: 645.46 ppb



#7 AR1260-A
 R.T.: 5.077 min
 Delta R.T.: 0.015 min
 Response: 2600392907
 Conc: 658.11 ppb m

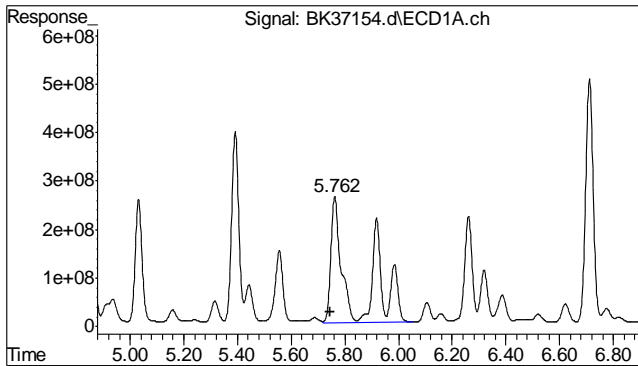


#8 AR1260-B
 R.T.: 5.392 min
 Delta R.T.: 0.018 min
 Response: 7239684982
 Conc: 697.39 ppb

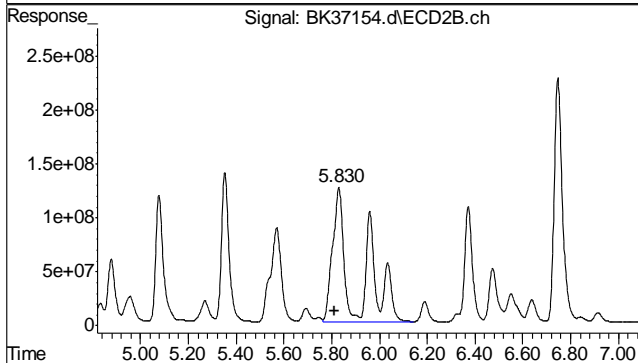


#8 AR1260-B
 R.T.: 5.353 min
 Delta R.T.: 0.018 min
 Response: 3065717758
 Conc: 685.73 ppb

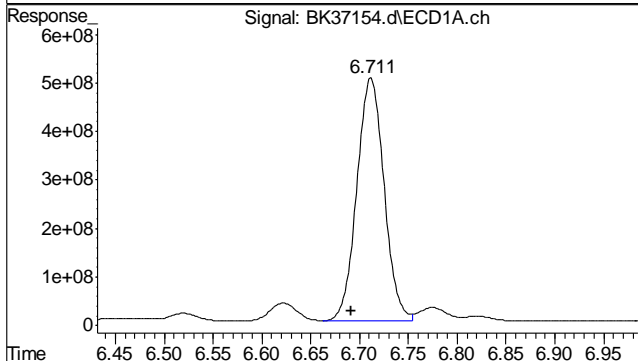
7.5.17
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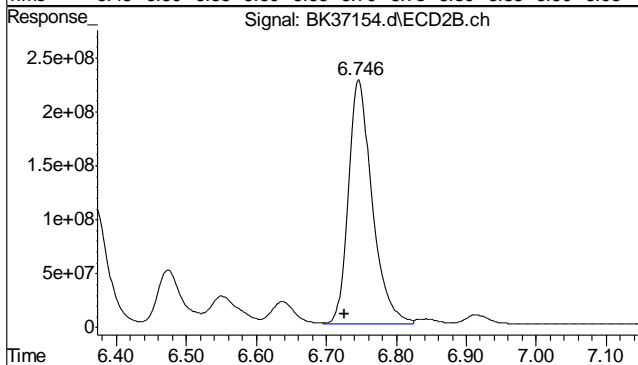
#9 AR1260-C
 R.T.: 5.762 min
 Delta R.T.: 0.018 min
 Response: 13330794875
 Conc: 631.50 ppb m



#9 AR1260-C
 R.T.: 5.830 min
 Delta R.T.: 0.016 min
 Response: 7464493183
 Conc: 678.79 ppb m

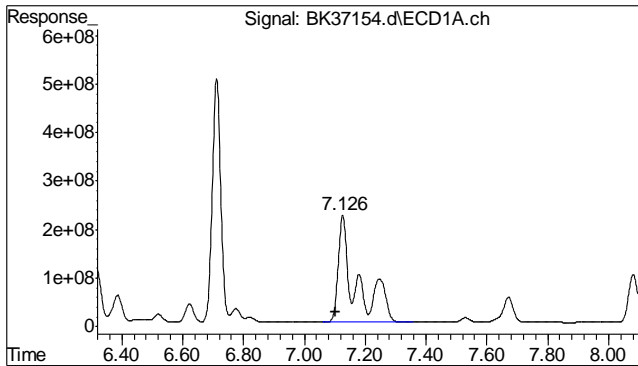


#10 AR1260-D
 R.T.: 6.712 min
 Delta R.T.: 0.020 min
 Response: 9733556527
 Conc: 657.99 ppb

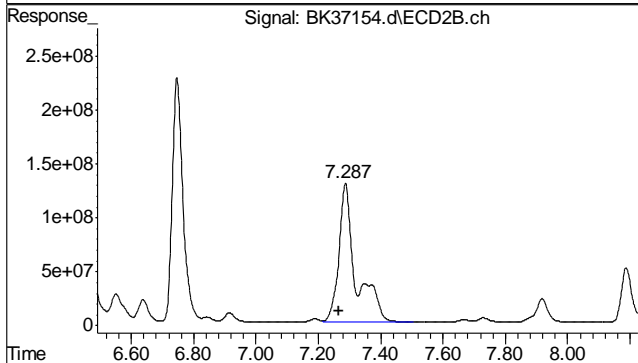


#10 AR1260-D
 R.T.: 6.747 min
 Delta R.T.: 0.020 min
 Response: 5363096695
 Conc: 723.16 ppb

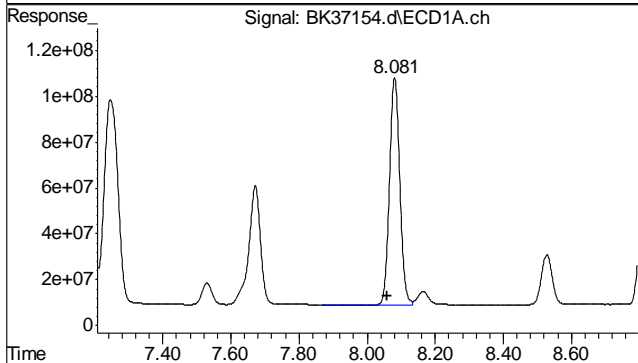
7.5.17
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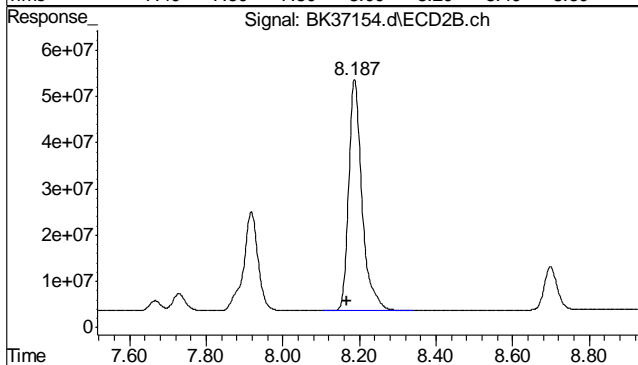
#11 AR1260-E
 R.T.: 7.126 min
 Delta R.T.: 0.021 min
 Response: 8885045449
 Conc: 616.38 ppb m



#11 AR1260-E
 R.T.: 7.287 min
 Delta R.T.: 0.019 min
 Response: 4852887363
 Conc: 702.46 ppb m

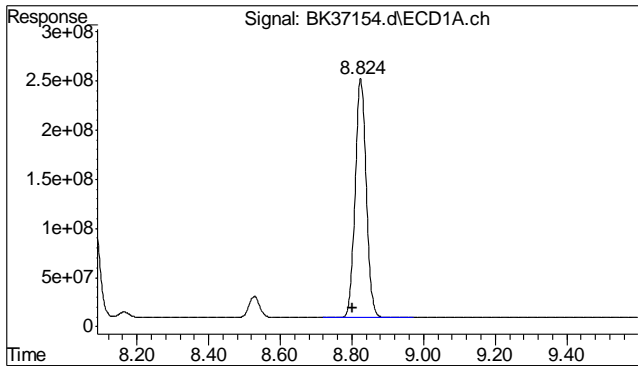


#12 AR1260-F
 R.T.: 8.081 min
 Delta R.T.: 0.023 min
 Response: 2127238533
 Conc: 592.05

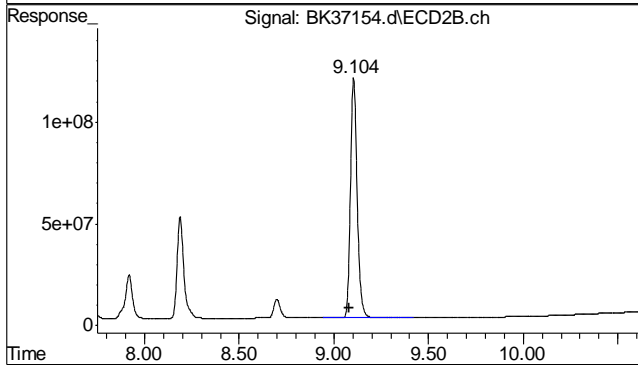


#12 AR1260-F
 R.T.: 8.188 min
 Delta R.T.: 0.020 min
 Response: 1214526038
 Conc: 728.19

7.5.17
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#13 DCB
 R.T.: 8.825 min
 Delta R.T.: 0.024 min
 Response: 5224091394
 Conc: 44.89 ppb



#13 DCB
 R.T.: 9.104 min
 Delta R.T.: 0.022 min
 Response: 2891458794
 Conc: 55.83 ppb

7.5.17
 7

GC Analysis Log - Extractables

Run Date: 4.29.14

Analyst Signature: NK pg 1 of 4

Standard Data

Lot#	Description	Conc
6517462	AlleleD	750 ug/l
/		

Column Information: Front : Pest RTX-5 Alternate: _____
 Rear : Pest2 RTX-5 Alternate: _____
 Sequence File: 140429
 Quantitation Methods: PC140429
 Instrument Run Batches: GBK1213
 Data Acquisition Methods: GC31PCB14 Inj. Vol: 1-1
 Inj. Vol: _____

Date of ICAL: 4.29.14 ICAL Verified Sample positions verified against sequence:

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
100	BK37066	64207-750	NA	PC082	NA	NA	OUT- Reserve
51	67	ICV1213-50					AlleleD 6517460
52	68	-100					59
53	69	-250					58
54	70	-500					57
55	71	-750					56
56	72	-1000					55
57	73	-500				A21/54	61
58	74	-500				A32/62	62
59	75	-500				A42/68	63
60	76	✓ 500				A48	64
61	77	ICV1213-500				AlleleD	✓ 65 ICV OK
1	78	CP37822-MB	CP37822		S		
2	79	-85					
3	80	-115					
4	81	✓ -150					
5	82	MC30120-14					Return to confirm
6	83	-1					
7	84	-2					
8	85	-3					
9	86	-4					
10	87	✓ -5					
55	88	CL1213-750					AlleleD low
11	89	MC30120-6					Return to confirm
12	90	-7					
13	91	-8					
14	✓ 92	✓ -9					RR 1:5

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent: _____ Lot#: _____

7.6.1
7

GC Analysis Log - Extractables

Run Date: 4.29.14

Analyst Signature: NK pg 2 of 4

Lot#	Description	Conc
SEE PAGE 2		

Column Information: Front: Pest RTX-5 Alternate: _____
 Rear: Pest2 RTX-5 Alternate: _____
 Sequence File: _____
 Quantitation Methods: _____
 Instrument Run Batches: _____
 Data Acquisition Methods: _____
 Inj. Vol: _____
 Inj. Vol: _____

Date of ICAL: _____ ICAL Verified _____ Sample positions verified against sequence: _____

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
15	BK37093	MC30120-10	0037822	P8C32	S	NA	Rean to confirm
16	94	-11					
17	95	-12					
18	96	-13					
19	97	-15					
20	98	-16					
100	99	001213-750					
21	BK37100	MC30120-17					Alotted OK (Sig 2) Rep Sig 2
22	01	0037811-MB	0037811				
23	02	-18S					
24	03	MC30064-7					
25	04	-13					
26	05	-18					
27	06	-23					
28	07	-27					
29	08	-32					
30	09	-34					
100	10	001213-750					Alotted OK
31	11	MC30008-6A					
32	12	-13A					
33	13	-17A					
34	14	-21A					
35	15	-22A					
36	16	-24A					
37	17	-35A					
38	18	MC30073-1					
39	19	MC30096-6					

MTX = Matrix: Designate W for water, S for soil, O for oil.

Dilution Solvent: _____ Lot#: _____

GC014-01
Date: 9/15/10

Review: _____

GC Analysis Log - Extractables

Run Date: 4-29-14

Analyst Signature: NK pg 3 of 4

Standard Data

Lot#	Description	Conc

SEE PAGE 1

Column Information: Front: Pest RTX-5 Alternate: _____
 Rear: Pest2 RTX-5 Alternate: _____
 Sequence File: _____
 Quantitation Methods: _____
 Instrument Run Batches: _____
 Data Acquisition Methods: SEE PAGE 2
 Inj. Vol: _____
 Inj. Vol: _____

Date of ICAL: _____ ICAL Verified _____

Sample positions verified against sequence: _____

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
40	AK37120	MC30096-7	OP37811	P882	S	NA	
99		21 CL1213-TSD					Allowed OK
41		22 OP37811-MS					
42		23 ↓ -MSD					
43		24 OP37849-MS	OP37849		WIPE		
44		25 ↓ -BS					
45		26 MC30117-1					
46		27 ↓ -2					
47		28 MC30122-1					
48		29 ↓ -2					
49		30 ↓ -3					
50		31 ↓ -4					
99		32 CL1213-TSD					Allowed OK
5		33 MC30120-14	OP37822		S		Rep Sig 2
6		34 ↓ -1					
7		35 ↓ -2					
8		36 ↓ -3					
9		37 ↓ -4					
10		38 ↓ -5					
11		39 ↓ -6					
12		40 ↓ -7					
13		41 ↓ -8					
105		42 ↓ -8					
99		43 CL1213-TSD			NA		Allowed OK (Sig 2)
14		44 MC30120-9					Rep Sig 2
15		45 ↓ -10					
16		46 ↓ -11					

MTX = Matrix: Designate W for water, S for soil, O for oil.

Dilution Solvent: JT Baker Hex Lot# 103347

C014-01
Date: 9/15/10

Review: _____

GC Analysis Log - Extractables

Run Date: 4-29-14

Analyst Signature: NK pg 4 of 4

Lot #	Description	Conc
<i>SEE PAGE 1</i>		

Column Information: Front : Pest RTX-5 Alternate: _____
 Rear : Pest2 RTX-5 Alternate: _____
 Sequence File: _____
 Quantitation Methods: _____
 Instrument Run Batches: _____
 Data Acquisition Methods: _____ Inj. Vol: _____
 Inj. Vol: _____

Date of ICAL: _____ ICAL Verified _____ Sample positions verified against sequence: _____

Vial #	Data File ID	Sample ID	Ext. Batch	Analysis	Matrix	Dilution	Comments
17	BK37147	MC30120-12	0937822	P882	S	NA	Rep Sieg
18	48	-13	↓	↓	↓	↓	↓
19	49	-15	↓	↓	↓	↓	↓
20	50	-16	↓	↓	↓	↓	↓
101	51	MC30122-5	0937849		WIFE		
102	52	-6	↓	↓	↓	↓	↓
103	53	-7	↓	↓	↓	↓	↓
99	54	CC1213-750	↓	↓	↓	↓	AL660 OK
104	55	MC30122-8	↓	↓	↓	↓	↓
99	56	CC1213-750	↓	↓	↓	↓	AL660 OK
<i>SEE PAGE 1</i>							

MTX = Matrix: Designate **W** for water, **S** for soil, **O** for oil. Dilution Solvent: _____ Lot#: _____

GC014-01
Date: 9/15/10

Review: _____

7.6.1
7

Approximate Gram weight equals +/- 0.5g

Extracted by: MOT

Date/Time: 4/28/14

Spike Witness: NA

Date/Time: _____

Concentrated by: FC 4/29/2014

Batch: 037822

Fractionated by: _____

Matrix: Soil/Solid; Sand Lot:

Extraction Method: ASE #1 ASE #2 ASE #3 ASE #4 Sonicate Analysis Method: P8082PCB

Soxhlet SW 3540C SW 3545A SW 3545A SW3545A SW3545A SW3550B Waste Dilution: SW3580 Micro. SW 3546

Sample	Bottle No.	ASE Position	Initial Weight (g)	Final Volume (ml)	**Cleanup/Comments (3660B, 3630, 3665, other)	Received by: Date:
1 OP37822 MB	NA	NA	15.15	10 ml		4/29/14 SC
2 L BS	L		15.41			
3 MC 30120 #MS			15.04			
4 L #MSD			15.02			
5 MC 30120.14			15.50			
6 -1			15.97			
7 -2			15.69			
8 -3			15.77			
9 -4			15.19			
10 -5			15.37			
11 -6			15.65			
12 -7			15.58			
13 -8			15.65			
14 -9			15.14			
15 -10			15.40			
16 -11			15.75			
17 -12			15.41			
18 -13			15.44			
19 -15			15.41			
20 -16			15.16			
21 -17			15.74			4/29/14 SC
22						
23						
24						
25						

Fraction	Bottle #	Lot #	Concentration	Volume	H2SO4 Lot # <u>ST BAKER 52429</u>
Surrogate: PCB	1	P07163	<u>4.0ug/ml</u>	100ul	Ether: _____
Surrogate:					MeCl2: _____
Spike: PCB	1	P07124	<u>40ug/ml</u>	100ul	Hexane: <u>65260</u>
Spike:					MeCl2/Acetone: _____
Spike:					Acetone: _____
Spike:					Acetonitrile: _____
Spike:					Na Sulfate Lot #: <u>B351</u>
Hexane Frac. Volume:	NA	NA	NA		Silica Lot #: _____
Soxhlet Start/Stop Date/Time:					SPE MFG/Lot #: _____
					Copper: <u>AIR TECH 14407 Lot</u>
					Hydromatrix: _____
					Florisil: _____
					Sand Lot #: _____

Balance ID: # 8

Filter Paper Lot # FC0098510 Filtered By MAT

Water Bath Temp: 40°C Water Bath ID: 0120-21

*Note volume of extract: N = Normal
L = Low

Laboratory Percent Humidity: _____

Reviewed by: _____

Tray #: LC-23

** Circle as applicable: 3660B = Cu cleanup; 3630 = Silica gel cleanup; 3665 = Acid cleanup; 3620 = Florisil
**For Soxhlet extraction document date/time started and finished

OP001-17 (08/08/13)

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30120-1 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-02-0-2

Wet Weight (Total)	41.531	g
Tare Weight	30.963	g
Dry Weight (Total)	39.979	g
Solids, Percent	85.3	%

Sample: MC30120-2 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-02-2-4

Wet Weight (Total)	29.485	g
Tare Weight	20.504	g
Dry Weight (Total)	28.293	g
Solids, Percent	86.7	%

Sample: MC30120-3 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-02-4-6

Wet Weight (Total)	29.16	g
Tare Weight	18.818	g
Dry Weight (Total)	28.042	g
Solids, Percent	89.2	%

Sample: MC30120-4 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-02-6-8

Wet Weight (Total)	29.885	g
Tare Weight	20.819	g
Dry Weight (Total)	28.575	g
Solids, Percent	85.6	%

Sample: MC30120-5 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-03-0-2

Wet Weight (Total)	34.261	g
Tare Weight	24.528	g
Dry Weight (Total)	32.699	g
Solids, Percent	84	%

Sample: MC30120-6 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-03-2-4

Wet Weight (Total)	34.969	g
Tare Weight	25.386	g
Dry Weight (Total)	34.14	g
Solids, Percent	91.3	%

8.1
8

Percent Solids Raw Data Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30120-7 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-03-4-6

Wet Weight (Total)	30.778	g
Tare Weight	21.965	g
Dry Weight (Total)	29.272	g
Solids, Percent	82.9	%

Sample: MC30120-8 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-04-0-2

Wet Weight (Total)	28.549	g
Tare Weight	20.507	g
Dry Weight (Total)	26.707	g
Solids, Percent	77.1	%

Sample: MC30120-9 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-04-2-4

Wet Weight (Total)	29.41	g
Tare Weight	18.841	g
Dry Weight (Total)	28.454	g
Solids, Percent	91	%

Sample: MC30120-10 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-104-2-4

Wet Weight (Total)	30.902	g
Tare Weight	20.266	g
Dry Weight (Total)	30.001	g
Solids, Percent	91.5	%

Sample: MC30120-11 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-04-4-6

Wet Weight (Total)	29.194	g
Tare Weight	20.964	g
Dry Weight (Total)	27.915	g
Solids, Percent	84.5	%

Sample: MC30120-12 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-05-0-2

Wet Weight (Total)	33.07	g
Tare Weight	23.881	g
Dry Weight (Total)	32.432	g
Solids, Percent	93.1	%

8.1
8

Percent Solids Raw Data Summary

Job Number: MC30120
Account: AECOMNYS AECOM
Project: UTC - Debris Pile

Sample: MC30120-13 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-05-2-4

Wet Weight (Total)	35.803	g
Tare Weight	26.842	g
Dry Weight (Total)	35.03	g
Solids, Percent	91.4	%

Sample: MC30120-14 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-05-4-6

Wet Weight (Total)	35.011	g
Tare Weight	25.931	g
Dry Weight (Total)	33.51	g
Solids, Percent	83.5	%

Sample: MC30120-15 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-08-0-2

Wet Weight (Total)	31.958	g
Tare Weight	21.347	g
Dry Weight (Total)	30.113	g
Solids, Percent	82.6	%

Sample: MC30120-16 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-07-0-2

Wet Weight (Total)	39.699	g
Tare Weight	29.194	g
Dry Weight (Total)	37.815	g
Solids, Percent	82.1	%

Sample: MC30120-17 **Analyzed:** 28-APR-14 by MA **Method:** SM21 2540 B MOD.
ClientID: A2-SB-06-0-2

Wet Weight (Total)	30.17	g
Tare Weight	20.681	g
Dry Weight (Total)	28.687	g
Solids, Percent	84.4	%

8.1
8

Appendix D – Soil Boring Logs

Correspondence from EPA providing approval of the SIP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NEW YORK 10007-1866

JUN 18 2014

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article No. 7012 3460 0002 1646 2312

Mr. John G. Wolski
Remediation Project Manager
United Technologies Corporation
9 Farm Springs Road
Farmingdale, Connecticut 06032

Re: Approval for Cleanup and Disposal of PCB Remediation Waste under 40 CFR §761.61(a), and Approval for Characterization and Verification Sampling under 40 CFR §761.61(c)
UTC/Carrier Site
Thompson Road, Syracuse, New York

Dear Mr. Wolski:

This letter is in response to the May 16, 2014 Notification for conducting a polychlorinated biphenyl (PCB) self-implementing cleanup at the United Technologies Corporation/Carrier facility located on Thompson Road in Syracuse, New York (hereinafter referred to as the Facility). Supplemental information was provided by letter dated June 9, 2014. The May 16, 2014 and June 9, 2014 documents are hereinafter referred to collectively as the Application. The Application was submitted by AECOM Technical Services, Inc. on behalf of United Technologies Corporation (UTC).

The Application addresses PCB contamination identified in a debris stockpile at levels up to 69.4 parts per million (ppm). The remediation goal is to achieve the low occupancy use standard of 25 ppm through excavation and off-site disposal. A deed restriction will be filed.

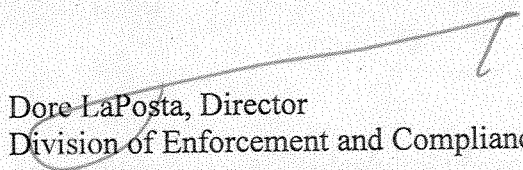
With the exception of the characterization and verification sampling requirements under Subparts N and O of 40 CFR Part 761, the proposed disposal of the PCB-remediation waste meets the self-implementing cleanup and disposal requirements under 40 CFR § 761.61(a). The United States Environmental Protection Agency (EPA) finds that the characterization sampling conducted at the Facility is acceptable for delineating areas of the PCB remediation waste to be addressed. The EPA also finds the plan for verification sampling is acceptable for purposes of determining compliance with the PCB cleanup standard for low occupancy

areas of 25 ppm. The EPA is approving the Application, and UTC may proceed with the cleanup and disposal under 40 CFR §§ 761.61(a) and (c) and its Application, subject to this approval. This Approval constitutes an order under the authority of Section 6 of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605.

Please note that this Approval does not constitute a determination by EPA that the transporters or disposal facilities selected for the cleanup are authorized to conduct the activities set forth in the Application. The selected transporters and disposal facilities must conduct these activities in accordance with all applicable federal, state, and local statutes and regulations. Furthermore, any proposed changes or alterations to the scope or schedule of the cleanup, or major timetable shifts once the cleanup is underway, must be submitted in writing to EPA for approval 14 days prior to implementation of the changes.

Should you have any questions concerning this matter, please contact Vivian Chin, of my staff, at (732) 906-6179 or at chin.vivian@epa.gov.

Sincerely,



Dore LaPosta, Director
Division of Enforcement and Compliance Assistance

cc: Daniel Servetas
AECOM Technical Services, Inc.

Health and Safety Plan

HEALTH AND SAFETY PLAN

UTC/Carrier Site
Remediation of the Southeast Debris/Soil Pile
Thompson Road, Syracuse, NY

Prepared for:



UTC Shared Remediation Services
9 Farm Springs Road
Farmington, Connecticut 06032

Prepared by:

AECOM
40 British American Boulevard
Latham, NY 12110

Issue Date: June 25, 2014

Project Health and Safety Plan

This project Health and Safety Plan (HASP) was prepared for employees performing a specific, limited scope of work. It was prepared based on the best available information regarding the physical and chemical hazards known or suspected to be present on the project site. While it is not possible to discover, evaluate, and protect in advance against all possible hazards, which may be encountered during the completion of this project, adherence to the requirements of the HASP will significantly reduce the potential for occupational injury.

By signing below, I acknowledge that I have reviewed and hereby approve the HASP for the Thompson Road Southeast Debris/Soil Pile site. This HASP has been written for the exclusive use of AECOM, its employees, and subcontractors. The plan is written for specified site conditions, dates, and personnel, and must be amended if these conditions change.

Prepared by:

Michael Grasso, CIH
District SH&E Manager
michael.grasso@aecom.com

June 25, 2014
Date

Concurrence by:

Kelly Lurie
Latham, NY SH&E Coordinator
kelly.lurie@aecom.com

Date June 25, 2014

Approved by:

Lindsay Mitchell
Project Manager
lindsay.mitchell@aecom.com

Date June 25, 2014

Executive Summary

The purpose of this Health and Safety Plan (HASP) is to address health and safety concerns related to AECOM-managed activities at the UTC Southeast Debris/Soil Pile ("Debris Pile" or "site"), located on Thompson Road in Syracuse, New York. The specific roles, responsibilities, authority, and requirements as they pertain to the safety of employees and the scope of services are discussed herein. The document is intended to identify known potential hazards and facilitate communication and control measures to prevent injury or harm. Additionally, provisions to control the potential for environmental impact from these activities are included where applicable.

AECOM will be implementing remedial activities at the site which will include excavating, loading and off-site transport of debris and soil.

The primary physical hazards which may be encountered include:

- Slips, Trips, and Falls
- Working Around Construction Equipment
- Underground Utilities
- Spill Prevention
- Wildlife, Plant and Insect Hazards
- Weather Hazards

The chemical hazards which may be encountered include:

- Asbestos Containing Material
- Polychlorinated Biphenyls

All staff are bound by the provisions of this HASP and are required to participate in a preliminary project safety meeting to familiarize them with the anticipated hazards and respective onsite controls. The discussion will cover the entire HASP subject matter, putting emphasis on critical elements of the plan; such as the emergency response procedures, personal protective equipment, site control strategies, and monitoring requirements. In addition, daily tailgate safety meetings will be held to discuss: the anticipated scope of work, required controls, identifying new hazards and controls, incident reporting, reviewing the results of inspections, and any lessons learned or concerns from the previous day.

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ATTACHMENTS

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1.0 Introduction

This Health and Safety Plan (HASP) (including Attachments A-D) provides a general description of the levels of personal protection and safe operating guidelines expected of each employee or subcontractor associated with the environmental services being conducted at the Southeast Debris/Soil Pile (“Debris Pile” or “site”), located on Thompson Road in Syracuse, NY. This HASP also identifies chemical and physical hazards known to be associated with the AECOM-managed activities addressed in this document.

HASP Supplements will be generated as necessary to address any additional activities or changes in site conditions which may occur during field operations.

1.1 General

The provisions of this HASP are mandatory for all AECOM personnel engaged in fieldwork associated with the environmental services being conducted at the subject site. A copy of this HASP, any applicable HASP Supplements, and the AECOM's North America Safety, Health, and Environmental (SH&E) Procedures and Manual shall be accessible on site and available for review at all times. Record keeping will be maintained in accordance with this HASP and the applicable Standard Operating Procedures (SOPs). In the event of a conflict between this HASP, the SOPs, and federal, provincial, state, and local regulations, workers shall follow the most stringent/protective requirements. Concurrence with the provisions of this HASP is mandatory for all personnel at the site covered by this HASP and must be signed on the acknowledgement page.

1.2 Project Policy Statement

AECOM is committed to protecting the safety and health of our employees and meeting our obligations with respect to the protection of others affected by our activities. We are also committed to protecting and preserving the natural environment in which we operate. The safety of persons and property is of vital importance to the success of this project, and accident prevention measures shall be taken toward the avoidance of needless waste and loss. It shall be the policy of this project that all operations be conducted safely. Onsite supervisors are responsible for those they supervise by maintaining a safe and healthy working environment in their areas of responsibility, and by fairly and uniformly enforcing safety and health rules and requirements for all project personnel. Subcontractors shall comply with the requirements of this HASP, provisions contained within the contract document and all applicable rules, requirements and health, safety and environmental regulations. All practical measures shall be taken to promote safety and maintain a safe place to work. Contractors are wholly responsible for the prevention of accidents on work under their direction and shall be responsible for thorough safety and loss control programs and the execution of their own safety plans for the protection of workers.

1.3 References

This HASP conforms to the regulatory requirements and guidelines established in the following documents:

- Title 29, Part 1910 of the Code of Federal Regulations (29 CFR 1910), Occupational Safety and Health Standards (with special attention to Section 120, Hazardous Waste Operations and Emergency Response).
- Title 29, Part 1926 of the Code of Federal Regulations (29 CFR 1926), Safety and Health Regulations for Construction.
- National Institute for Occupational Safety and Health (NIOSH)/OSHA/U.S. Coast Guard (USCG)/EPA, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, Publication No. 85-115, 1985.
- United Technologies Corporation (UTC) Environmental Health and Safety Guidelines for Contractors.

2.0 Site Information and Scope of Work

AECOM will conduct environmental services at the UTC/Carrier site. Work will be performed in accordance with the applicable Scope of Work (SOW) developed for the project site. Deviations from the listed SOW will require that a Safety Professional review and update this HASP as appropriate, to ensure adequate protection of personnel and other property.

The following is a summary of relevant data concerning the project site and the work procedures to be performed.

2.1 Site Information and General Description

The Carrier Thompson Road Facility is located in the northeast portion of Syracuse, New York, approximately one mile south of the New York State Thruway (Figure 1). The facility property is bordered by Sanders Creek to the north, Thompson Road to the west, Kinne Street to the east, and a residential area to the south. The property slopes slightly north toward Sanders Creek. The facility property covers approximately 175 acres and most is either paved or covered by former manufacturing and office buildings.

2.1.1 Facility History

The facility was purchased in the 1950s by Carrier. The Carrier Syracuse facility formerly produced a variety of products associated with the HVAC (heating, ventilation, air conditioning units) industry for home and commercial applications. Operations have included the manufacture and assembly of various components associated with these HVAC units. Carlyle compressors were also manufactured at the facility.

The RCRA Facility Assessment Report for the Carrier facility prepared by A.T. Kearney, Inc. (January 6, 1997) describes pre-1950 use of the property as follows: "Prior to the purchase of the facility by Carrier, the existing facility was owned and operated by the General Electric Corporation, which was built in 1942 for defense purposes; Defense Corporation, a government-owned World War II manufacturing facility; and Syracuse University. Prior to World War II, the property was utilized as farmland."

2.1.2 Historic PCB Usage

At this facility, PCB usage was incidental to the manufacturing of HVAC products. PCBs were not manufactured or incorporated into final products. PCBs were known to be present in transformers, ancillary equipment, cutting oils and hydraulic oils. PCB containing oils have been found at the Carrier facility both above and below 50 mg/kg. Some limited remediation has been performed associated with localized spills and small impacted areas to address PCB releases. Waste materials were disposed off-site in accordance with §761.61(b) regardless of PCB concentrations.

2.1.3 Southeast Debris/Soil Pile Background

According to facility personnel, the Debris Pile was used to stockpile soils and construction and demolition (C&D) debris generated from various onsite activities including facility expansion, remodeling and repair. The Debris Pile was first investigated according to the requirement of a Corrective Action Order (CAO, Index CO 7-20051118-4) late in 2013 and reported as an Area of Concern (AOC) to the New York State Department of Environmental Conservation (NYSDEC) on January 30, 2014. Results from the initial investigation were provided to NYSDEC in an AOC Assessment Report Southeast Debris Pile (Assessment Report, EnSafe, 2013) [Note: the Assessment Report was submitted to USEPA Region 2 on February 25, 2014.]. A confirmation sampling event was completed in April of 2014. The results of these sampling events form the basis of this SIP and are detailed below in accordance with the requirements of 40 CFR 761.61(a).

2.2 Scope of Work

Task 1 – Mobilization and Site Preparation

Mobilize remediation personnel, equipment and materials to the Carrier, Syracuse facility, initiate construction of temporary facilities required to support removal of the Debris Pile, and prepare the site for remediation activity, including:

- Install site trailer and sanitary facilities,
- Equipment mobilization,
- Installation of decontamination pad,
- Installation and maintenance of gravel road for loading trucks, set up of truck staging area and tarping station,
- Installation of additional erosion and sediment controls,
- Installation and removal of temporary security fences,
- Completion of required clearing and grubbing activities,
- Community Air Monitoring Program (CAMP), and

- Pre-construction survey.

Task 2 – Excavate, Load, Transport and Dispose of Potential Asbestos Containing Material at Off-Site Disposal Facility

Excavate and prepare for transportation of approximately 7,350 tons of material characterized as potential asbestos containing material (ACM) with polychlorinated biphenyl (PCB) concentrations less than 50 milligrams per kilogram (mg/kg). AECOM will utilize an ACM-certified subcontractor to excavate and load this material.

Task 3 – Excavate, Load, Transport and Dispose of Soil with PCBs Less Than 50 mg/kg

Excavate and prepare for transportation of approximately 50,513 tons of material characterized as soil with PCB concentrations less than 50mg/kg. Transportation and disposal of approximately 50,513 tons of soil with PCB concentrations less than 50 mg/kg.

Task 4 – Excavate, Load, Transport and Dispose of Soil with PCBs Greater than 50 mg/kg

Excavate and prepare for transportation of approximately 638 tons of material characterized as soil with PCB concentrations greater than 50 mg/kg. Transportation and disposal of approximately 638 tons of soil with PCB concentrations greater than 50 mg/kg.

Task 5 – Site Restoration

Provide personnel, equipment and materials required to restore the site (approximately 3.8 acres) by grading, placing topsoil and hydro seeding the former Debris area.

Task 6 – Demobilization, Confirmation Sampling and Final Reporting

Demobilize remediation personnel, equipment and materials from the Carrier facility. Complete confirmation sampling and generate a final report. This task includes:

- Removal of decontamination pad,
- Removal of erosion and sediment controls (silt fence, straw bales, check dams, silt socks, etc.) around truck loading/staging areas,
- Removal of all temporary fencing,
- Confirmation sampling, and
- Preparation of a final report.

2.2.1 Additional Work Operations

Operations at the site may require additional tasks not identified in this section or addressed in Attachment A, THAs. Before performing any task not covered in this HASP a THA must be prepared, and approved by the Safety Professional.

3.0 Hazard Assessment (Safety)

3.1 Physical Hazards

The following physical hazards are anticipated to be present on the site. Additional hazards may be noted on the THA's developed for the individual tasks.

3.1.1 Construction Equipment

Use of construction equipment (excavators, dump trucks, etc.) will require all personnel to wear steel-toed boots, hard hat, high visibility garment, and safety eyewear. Personnel shall not remain in the vicinity of construction equipment unless it is required for their work responsibilities. AECOM personnel are to remain clear of operating heavy equipment to the extent feasible. Specific requirements for construction equipment can be found in SOP S3NA-309-PR Mobile or Heavy Equipment.

When employees must work near construction equipment, eye contact and clear communication must be maintained. When working around construction equipment, employees must:

- Hard hat and high visibility outer garment required to be seen;
- Make sure that the operator/driver is aware of your presence/activities;
- Stay in the operator's line of sight, don't work in his/her blind spot;
- Approach areas where equipment is operating from a direction visible to the operator;
- Be aware of the swing radius of the excavator and sudden movement of equipment;
- Do not walk or work underneath loads handled by digging equipment;
- Stand away from trucks being loaded or unloaded to avoid being struck by any spillage or falling materials; and
- Cell phone, text messaging or the use of personal headsets is prohibited when working near construction equipment.

Additionally, when samples are collected from an excavator bucket, the collector must follow a communication and work protocol to ensure that the equipment operator is aware of their presence, the bucket is lowered to the ground while samples are collected, and during sample collection the equipment operator will remove their hands from the controls; it is preferred that the equipment be completely turned off and de-energized while sample collection occurs. The operator will not re-engage the equipment until the sample collector has left the area.

3.1.2 Electrical

Potential electrical hazards include electric shock, electrocution, burns, fires, and explosion. Electrical cords used to carry electrical power pose a trip and fall hazards. The use of portable generator not alone poses an electrical hazard but also the hazard associated with exposure to carbon monoxide.

AECOM employees are not authorized to work on electrical equipment or near any part of an electrical circuit unless they are protected against shock by guarding or by de-energizing and grounding the circuit. Information on general electrical safety can be found in S3NA-302-PR and information on hazard energy control (lockout) is found in S3NA-410-PR

To prevent potential electrical incidents the following basic electrical practices must be followed at all times while working on this project.

- Only qualified electricians with full knowledge of the electrical code requirements will be allowed to perform electrical work.
- The use ground-fault circuit interrupters (GFCIs) are required on this project. Additionally, inspection and testing shall be conducted to locate defective electrical equipment, tools, and cords, which may expose personnel to electrical hazards.
- Temporary electrical cords must be rated for extra hard usage or hard usage and must be of the three-wire type with a grounding pin and a grounding receptacle. Look for the following letters on the cord: S, SJ, ST, or SO markings on the cord.
- Temporary electrical cords must be kept clear of walkways and other location where they may be exposed to damage or create a trip hazard.
- Inspect all electrical cords for signs of wear and exposed wiring, strain, and ripped, torn, cut or burned insulation. Defective cords shall be removed from service.
- Electrical tools and equipment must be grounded, of the double insulated or cordless type.

- All receptacles must be protected by a Ground Fault Circuit Interrupter (GFCI). Follow manufacturers' recommended testing procedure to insure GFCI is working correctly.
- Check the work area for overhead and underground electrical utilities. Employees must be protected from overhead hazards by meeting the guidelines listed below.
 - If the overhead power line is 50 kV or less, then stay at least 10 feet away. For everything else, keep at least 35 feet away. Contact the power company if power lines needed to be, moved, de-energized and grounded, or have insulated sleeves installed.
- In potentially hazardous environments electrical equipment must meet the National Electrical Code (NEC) classification for hazardous locations. Consult the RISM for the proper type of equipment.
- When work is to be performed on electrical equipment, lockout procedures are required to ensure that the equipment is de-energized and isolated.
- Fuel generators before use and re-fuel only after the engine has been shut down and allowed to cool.
- Never use a portable generator indoors. Locate a generator so that the exhaust is downwind from your position or locations where carbon monoxide can enter (e.g. confined spaces, indoor locations etc.).

3.1.3 Excavation Hazards

AECOM employees will be working in proximity to excavations required for the removal of impacted soils. In addition, personnel shall maintain at least 3 foot distance from the edge of the excavation that is not protected by a guardrail system, fence or other barriers. Additional information on excavation and trenching can be found in SOP [S3NA-303-PR Excavation and Trenching](#).

The principle hazards associated with excavation and trench activities are striking buried utilities, struck by material being handled and engulfment from soil caving in. In addition, excavations and trenches constructed in a hazardous area such as near a gasoline station, landfill or hazardous waste site may be classified as permit required confined space do to potential that the atmosphere may contain hazardous gases or vapors, or be oxygen deficient.

It is the responsibility of the excavation contractor retained by the client to ensure that a competent person conducts a daily inspection of the excavation and that excavations are properly constructed and site personnel are prevented from falling into an excavation or trench.

In accordance with OSHA regulations, a competent person must conduct daily inspection of each trench or excavation, the adjacent hazards and protective systems for evidence of possible cave-in/failure of protective systems, hazardous atmosphere, and other hazardous condition and determine the necessary precautions to take.

AECOM employees should not enter an excavation or trench if they feel that entry is unsafe or does not meet the requirements presented below.

- All underground utilities in the work area must be positively identified by calling 811. Markings made during the utility investigation must be maintained throughout the course of work. Utilities within an excavation must be supported;
- A trench or excavation over 4 feet deep, an adequate means of exit, such as a ladder, steps, or ramp must be provided and located so as to require no more than 25 feet of lateral travel. Ladders will extend at least 3 feet above the edge of the trench and will be securely staked in place;
- No person shall be permitted under loads handled by power equipment;
- Material, including excavated soil, must be stored at least 2 feet from the side of the excavation;
- Adequate physical barriers must be provided around all excavations;
- Employees should never enter an excavation that show signs of a cave-in, has water seeping into it, or contains free standing water;
- Protective system(s) to prevent cave-in shall be used when personnel enter excavations unless:
 - The excavation is entirely in stable bedrock; or
 - The excavation is less than 5 feet deep AND has been examined by a competent person who has found no signs of potential cave-ins.
- All excavations greater than 5 feet deep must be properly sloped, shored, braced, shielded, or protected by a system designed by a professional engineer; and

- Excavation or trenches four feet or deeper that pose an atmospheric hazard must be tested for oxygen content, explosive gases/vapors and toxic gases/vapors (i.e. Carbon monoxide, Hydrogen sulfide, contaminants of concern) prior to and periodically thereafter.

3.1.4 Falls

3.1.4.1 Same Level

Falls from slips and trips are common workplace occurrences that can result in serious injuries and disabilities. The most common types of falls: is falls at the same level. Fall hazards exist in most workplaces including offices, manufacturing and construction. Slips and trips can be prevented by following these guidelines:

- Personnel shall be vigilant in providing clear footing, clearly identifying obstructions, holes, protruding objects, or other tripping hazards and maintaining an awareness of uneven terrain and slippery surfaces.
- Walking and working surfaces shall be kept free of materials, obstructions, and substances that could cause a surface to become slick or otherwise hazardous.
- Always utilize roads, pathways, or other designated routes or travel. Do not take shortcuts.
- Makeshift substitute ladders such as toolboxes, buckets, and coolers shall not be used.
- The use of cellular telephones (testing, making or receiving calls) for personal use is prohibited in the work area.
- Walk around, not over or on, debris or equipment that might have been stored in the work area.
- Don't jump from platforms or truck beds.
- Don't climb on stock piles or trucks.
- When carrying equipment, identify a path that is clear of any obstructions. It might be necessary to remove obstacles to create a smooth, unobstructed access point to the work areas on site.

3.1.4.2 Elevated Surfaces

Falls from elevation greater than 6 feet above a lower level or less than 6 feet above dangerous equipment can result in serious injury and even death. To prevent falls from elevations the walking and working surface must be surrounded on all open sides by standard railings or their equivalent (fence, barricade or cover), or by employees who are protected by a personal fall arrest system. Specific requirements for Fall Protection can be found in SOP S3NA-304-PR Fall Protection.

To use a personal fall arrest system employees must be trained in their use, limitations and care of the system. A personal fall arrest system consists of the following:

- Anchor point capable of supporting 5000 pounds;
- Full body harness meeting ANSI requirements;
- Shock absorbing lanyard meeting ANSI requirements that limit free fall distance to six feet; or
- Self –retracting lanyard that meets ANSI requirements for limiting the free fall distance to two feet.

A standard railing or equivalent must be provided around openings greater than 6 feet above a lower level or less than 6-feet above dangerous equipment. In addition, excavation 6 feet or more in depth not readily seen must have a standard railing or equivalent around openings. Employee at the edge of a well, pit, shaft, and similar excavation 6 feet or more in depth must be protected from falling by standard railing or equivalent.

Falls from elevations can be prevented by following these guidelines:

- Where an employee observes that a fall hazard exists in the workplace that is not protected by a standard rail the employee shall promptly notify the responsible party. Employees must avoid the area until the responsible party has taken the necessary corrective actions.
- Stay away (at least 15 feet) from unprotected opening;
- Do not lean on or climb a standard railing or equivalent;
- Avoid walking on floor hole covers and do not remove floor hole covers; and
- Where a standard railing is not provided or when removed employee must use a personal fall arrest system.

3.1.5 Traffic Control

As part of the Scope of Work a Traffic Control Plan will be developed. Only approved traffic control devices per accordance with the Manual of Uniform Traffic Control Devices (MUTCD) will be used on public road ways per accordance with the applicable State regulatory guidance. Traffic Control signs that maybe required:

- Truck Cross
- Construction Zone
- Flag person

3.1.6 Underground Utilities

New York State Law requires that a utility clearance be performed prior to initiation of any subsurface work. The number to call in this area to request a mark-out of natural gas, electric, telephone, cable television, water and sewer lines in the proposed excavation or boring locations is 811. Work will not begin until the required utility clearances have been performed. Additional information on underground utilities can be found in SOP S3NA-417-PR Utilities, Underground.

Utility clearance organizations typically do not mark-out underground utility lines that are located on private property. As such, the drilling contractor must exercise due diligence and try to identify the location of any private utilities on the property being investigated. AECOM can fulfill this requirement in several ways, including:

- Obtaining as-built drawings for the areas being investigated from the property owner;
- Visually reviewing each proposed soil boring locations with the property owner or knowledgeable site representative;
- Performing a geophysical survey to locate utilities; and
- Hiring a private line locating firm to determine the location of utility lines that are present at the property.

All underground utilities shall be exposed via hand or soft-dig techniques within 5 feet of a mark out or within the distance required by the owner of the utility before operating any mechanized equipment. Use of mechanical means or using a hand auger is not permitted.

- When soft digging use a non-cutting nozzle. A digging bar should be limited to prying out material encountered during the soft-dig.
- Where hand digging is performed a blunt-nosed shovel must be used to loosen the soil and a regular shovel to remove to remove it. Do not stab at the soil or stomp on the shovel with both feet. A pickax, hand auger, digging bar or similar tools should not be used.

3.2 Radiological Hazards

Radioactive materials are not known to be environmental contaminants on-site and not expected to be encountered.

3.3 Wildlife, Plant and Insect Hazards

Contact with animals, insects, and plants can cause injury and illness to personnel. Care must be taken to avoid these types of injuries associated with:

- Wild animals, such as snakes, raccoons, squirrels, and rats and domestic animals such as dogs and cats not only can bite and scratch but may carry transmittable diseases (ie., Rabies). Avoid the animals whenever possible. If bitten, go to nearest medical facility.
- Insects such as spiders, mosquitoes, ticks, bees and wasps. Mosquitoes can potentially carry and transmit the west Nile Virus. Ticks can transmit Lyme disease or Rocky Mountain spotted fever. Bees, wasps and spiders can sting and bite injecting venom, which causes some individuals to experience anaphylactic shock (extreme allergic reaction). Whenever you will enter areas that provide a habitat for insects (grass, woods) wear light colored clothing, long pants and shirt, and spray exposed skin areas with a DEET- containing insect repellent. Keep away from high grass whenever possible. Keep eyes and ears open for bee and wasp nests.

3.4 Noise Exposure

The use of construction equipment can expose the field team to noise levels that exceed the 85 dB for an 8-hour day. Exposure to noise can result in the following:

- Temporary hearing losses where normal hearing returns after a rest period;
- Interference with speech communication and the perception of auditory signals;
- Interference with the performance of complicated tasks;
- Permanent hearing loss due to repeated exposure resulting in nerve destruction in the hearing organ; and
- Since personal noise monitoring will not be conducted during the proposed activities, employees must follow this general rule of thumb: If the noise levels are such that you must shout at someone two (2) feet away from you, you need to be wearing hearing protection. Employees can wear either disposable earplugs or earmuffs but all hearing protection must have a minimum noise reduction rating ("NRR") of 29 decibels ("dB").

3.5 Weather Hazards

Field activities are not permitted when severe weather conditions exist. The Site Supervisor will monitor real-time weather and local weather forecasts during site work activities. 30-30 Rule: Work will be stopped when there are less than 30 seconds between a flash of lightning and the rumble of thunder and workers will seek shelter promptly. Employees will remain in shelter until 30 minutes after the last flash of lightning or rumble of thunder.

Severe weather can occur with little warning. Employees will be vigilant for the potentials for storms, lightning, high winds, and flash flood events.

3.5.1 Heat Stress

Heat stress may vary based upon work activities, PPE/clothing selection, geographical locations, and weather conditions. To reduce the potential of developing heat be aware of the signs and symptoms of heat stress and watch fellow employees for signs of heat stress.

Heat stress can be a significant hazard, particularly for non-acclimated personnel operating in a hot, humid setting. Site personnel will be instructed in the identification of a heat stress victim, the first-aid treatment procedures for the victim and the prevention of heat stress casualties. Work-rest cycles will be determined and the appropriate measures taken to prevent heat stress as outlined in SOP S3NA-511-PR Heat Stress Prevention Program. Heat stress prevention methods are as follows:

- Education of workers on the signs and symptoms of heat related illnesses.
- Provide water and sports drinks.
- Provide a shaded area.
- Evaluate the need for excessive PPE.
- Monitor co-workers for signs and symptoms of heat related illnesses.
- Establish a work/rest cycle-work 40 minutes of every hour with 20 minutes spent at rest in the shade.

3.5.2 Cold Stress

If work on this project is conducted between late fall and early spring climate conditions will increase susceptibility to cold stress (hypothermia) and cold injury. Work will cease under unusually hazardous conditions (e.g., wind-chill less than 0°F, or wind-chill less than 10°F with precipitation). Systemic cold exposure is referred to as hypothermia. Localized cold exposure is generally labeled frostbite. Recognition of the symptoms of cold related illness will be discussed during the health and safety briefing conducted prior to the onset of site activities

Before the beginning of the workday, staff must prepare themselves for cold weather work by wearing the appropriate cold weather and bringing extra clothing. Cold stress is further discussed in S3NA-505-PR Cold Stress Prevention. Cold stress can be prevented using the following guidelines:

Staff working in extreme cold (wind chill or ECT below 10°F or -12°C) shall not work alone.

- Education of workers on the signs and symptoms of hypothermia and frostbite.
- Wear proper clothing for cold, wet and windy conditions, including layers that can be adjusted to changing conditions.

- Take frequent short breaks in warm dry shelters to allow your body to warm up. Limit time of exposure.
- Schedule work for the warmest part of the day or when the wind is most calm.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Because prolonged exposure to cold air or to immersion in cold water at temperatures even well above freezing can lead to dangerous hypothermia, whole-body protection shall be used.
- Ensure the availability of dry changes of clothes.
- Have available warm, sweet beverages (sugar water, sports-type drinks) and avoid drinks with caffeine (coffee, tea, sodas or hot chocolate) or alcohol.
- Monitor co-workers for signs and symptoms of hypothermia and frostbite.

3.6 Incidental Spills/Releases

The purpose of this section is to define practices and procedures for the prevention, containment, and cleanup of incidental discharges of hazardous substances during the project. These substances include both the contaminated material encountered as a result of the construction project, such as contaminated soils and decontamination liquids, and construction materials typically found on any construction site, such as lubricating fluids, diesel fuel, gasoline, etc.

Spill prevention applies to all types of spills and can be described as the first and simplest approach to spill control. Human error is a major contributing factor to spills and releases. An awareness of spill consequences, preventive measures, and countermeasures will greatly reduce spill occurrences. A sound prevention program includes careful work practices, constant inspection, and immediate notification and correction of deficiencies. In the event that a spill does occur, proper containment and cleanup procedures must then be followed in order to reduce the effect of the spill.

3.6.1 Prevention

Prevention of unnecessary spills is of first priority. Prevention measures include:

- All equipment will be inspected for leaks before daily and after service.
- All stationary vehicles and fluid-containing equipment involved on this project will be parked over polyethylene sheeting for the full width and length of the vehicle and equipment.
- When removing hoses from machines an appropriate and adequate supply of absorbents will be on hand. A supply of the following absorbents will be kept on-site, oil sorbent booms, rolls and pillows, universal towels and sheets, and vermiculite.
- Hoses will be capped when not connected to their appropriate fitting.
- All containers will be inspected daily for decay. No open container will be exposed to rainfall, snowfall, etc. without being emptied and cleaned of residue.
- Storage of material such as fuels, oils, and solvents on-site will be limited to the minimum required. All fluids will be stored in individual fluid containers appropriate and approved for the material.
- Drums or other containers too large to be stored in containers will be stored raised off the ground on a liner and covered by plastic.
- All nearby storm sewers, catch basins, drains, and related structures will be protected from being impacted from investigation-related runoff and/or releases to the environment. Prevention methods, such as booms, berms or other effective materials, will be used as necessary to ensure proper mitigation.

3.6.2 Release Reporting

All releases must be reported to the AECOM PM, Regional Safety Health and Environmental Manager and Incident Reporting Line at (800-348-5046), with the PM providing notification to the Client representative, no matter how small of a release. Consideration will need to be given to whether or not the release is deemed to be a reportable to the Connecticut Department of Energy & Environmental Protection (CT-DEEP) or the EPA, National Spill Response Center. See Section 10.3 Environmental Spill/Release Reporting.

3.7 Hazard Analysis

Task Hazard Analyses (THAs) have been completed for all tasks identified in the Scope of Work (Attachment A).

3.8 Task Specific SH&E Procedures

As discussed in Section 5.0, personnel may be exposed to a variety of chemical, physical, and radiological hazards resulting from task or equipment-specific activities. The controls for many of these hazards are discussed in SOPs found in the **Series 300 to 500** North America SH&E SOPs.

S3NA-307-PR	Housekeeping, Worksite
S3NA-308-PR	Manual Lifting, Field
S3NA-313-PR	Wildlife, Plants and Insects
S3NA-314-PR	Working Alone & Remote Travel
S3NA-315-PR	Water, Working Around
S3NA-417-PR	Utilities, Underground
S3NA-505-PR	Cold Stress Prevention
S3NA-511-PR	Heat Stress Prevention
S3NA-507-PR	Hazardous Materials Communication / WHMIS

4.0 SH&E Requirements (Safety)

4.1 HAZWOPER Qualifications

Personnel performing work at the job site must be qualified as HAZWOPER workers (unless otherwise noted in specific THAs or by the SSO), and must meet the medical monitoring and training requirements specified in the AECOM's North America SH&E Standard Operating Procedures.

If site monitoring procedures indicate that a possible exposure has occurred above the OSHA permissible exposure limit (PEL), employees may be required to receive supplemental medical testing to document any symptoms that may be specific to the particular materials present.

4.2 Asbestos Qualifications

During activities involving the excavation of potentially asbestos containing material (ACM) the asbestos certified contractor shall have the necessary license as required by New York State Department of Labor Code Rule 56. Personnel engaged in the asbestos activities shall be trained-certified as required by New York State Department of Labor Code Rule 56.

4.3 Medical Monitoring

In accordance with the requirements of 29 CFR 1910.120(f) site personnel entering the exclusion zone (EZ) or contaminate reduction zone (CRZ) shall be medical qualified to work on a hazardous waste site and to wear respiratory protection.

The medical examinations will be administered on a pre-employment and annual or biannual basis, as warranted in the opinion of examining doctor by symptoms of exposure or specialized activities. These examinations will also be provided to employees upon termination of employment or reassignment to non-hazardous waste site activities. For the purpose of this HASP, all contractors will assume the employer's responsibility in obtaining the necessary medical monitoring for their employees and provide compliance documentation upon request.

Personnel engaged in asbestos activities shall be under a medical monitoring program for asbestos per 29 CFR 1910.1001 (I).

4.4 Site-Specific Safety Training

All AECOM personnel performing activities at the site will be trained in accordance with *S3NA-003-PR SH&E Training*. All personnel are required to remain current in all of their required training and evaluate their need for additional training when there is a change in work. In addition to the general health and safety training programs, personnel will be required to complete any supplemental task specific training developed for the tasks to be performed. Administration and compliance with the requirements for additional task-specific training will be the responsibility of the project or lead manager. Any additional required training that is completed will be documented and tracked in the project files.

4.5 Tailgate Meetings

Prior to the commencement of daily project activities, a tailgate meeting will be conducted by the SSO to review the specific requirements of this HASP, applicable THA. Attendance at the daily tailgate meeting is mandatory for all employees at the site covered by this HASP and must be documented on the attendance form. All safety training documentation is to be maintained in the project file by the SSO.

4.6 Hazard Communication

Hazardous materials that may be encountered as existing on-site environmental or physical/health contaminants during the work activities are addressed in this HASP and their properties, hazards and associated required controls will be communicated to all affected staff and subcontractors.

In addition, any employee or organization (contractor or subcontractor) intending to bring any hazardous material onto this AECOM-controlled work site must first provide a copy of the item's Material Safety Data Sheet (MSDS) to the SSO for review and filing (the SSO will maintain copies of all MSDS on site). MSDS may not be available for locally-obtained products, in which case some alternate form of product hazard documentation will be acceptable in accordance with the requirements of S3NA-507-PR Hazardous Materials Communication/WHMIS.

All personnel shall be briefed on the hazards of any chemical product they use, and shall be aware of and have access to all MSDS.

All containers on site shall be properly labeled to indicate their contents. Labeling on any containers not intended for single-day, individual use shall contain additional information indicating potential health and safety hazards (flammability, reactivity, etc.).

Attachment B provides copies of MSDS for those items planned to be brought on site at the time this HASP is prepared. This information will be updated as required during site operations.

4.7 Confined Space Entry

The SSO/site supervisor shall identify all potential confined spaces in accordance with S3NA-301-PR Confined Spaces. In addition; the SSO/site supervisor will inform all employees of the location of onsite confined spaces, and their associated security controls and procedures.

4.8 Hazardous, Solid, or Municipal Waste

If hazardous, solid, and/or municipal wastes are generated during any phase of the project, the waste shall be accumulated, labeled, and disposed of in accordance with applicable Federal, State, Provincial, Territorial and/or local regulations. Consult the Regional SH&E Manager for further guidance.

4.9 General Safety Rules

All site personnel shall conduct themselves in a safe manner and maintain a working environment that is free of additional hazards, in adherence to S3NA-001-PR Safe Work Standards and Rules and S3NA-103-PR General Housekeeping.

4.9.1 Housekeeping

During site activities, work areas will be continuously policed for identification of excess trash and unnecessary debris. Excess debris and trash will be collected and stored in an appropriate container (e.g., plastic trash bags, garbage can, roll-off bin) prior to disposal. At no time will debris or trash be intermingled with waste PPE or contaminated materials.

4.9.2 Smoking, Eating, or Drinking

Smoking, eating and drinking will not be permitted inside any controlled work area at any time. Field workers will first wash hands and face immediately after leaving controlled work areas (and always prior to eating or drinking). Consumption of alcoholic beverages is prohibited at any AECOM site. Smoking, eating or drinking must be in an approved area.

4.9.3 Personal Hygiene

The following personal hygiene requirements will be observed:

Water Supply: A water supply meeting the following requirements will be utilized:

Potable Water - An adequate supply of potable water will be available for field personnel consumption. Potable water can be provided in the form of water bottles or water coolers. Where water coolers are available, individual-use cups will be provided as well as adequate disposal containers. Potable water containers will be properly identified in order to distinguish them from non-potable water sources.

Non-Potable Water – All containers of non-potable water will be marked with a label stating:

***Non-Potable Water
Not Intended for Drinking Water Consumption***

Toilet Facilities - Where toilet facilities are not located on the jobsite, the crews shall have transportation readily available to nearby toilet facilities.

Washing Facilities-Commercial towelettes or equivalent will be available for cleansing of hands or other body parts. Employees will be encouraged to shower upon arriving home or at their temporary residents.

4.9.4 Buddy System

All field personnel will use the buddy system when working within any controlled work area. Personnel belonging to another organization on site can serve as "buddies" for AECOM personnel. Under no circumstances will any employee be present alone in a controlled work area. For areas not in controlled work areas, the procedures outlined in *S3NA-314-PR Working Alone Remote Travel* will be followed at all times.

4.10 Fire Prevention

Each employer shall establish fire prevention and protection techniques in accordance with 29 CFR 1926 Subpart F and AECOM SH&E SOP S3NA-206-PR. The AECOM Project Manager or designee shall meet with the local fire department. During the initial meeting, the fire department will be briefed on the scope of work at the site; requirements for various

response situations; site access control measures; and the types of incidents for which response may be required. Fire prevention/protection requirements are as follows:

- An alarm system, e.g., telephone system, siren, etc., shall be established whereby personnel on the project and the local fire department can be alerted for an emergency;
- Smoking shall be prohibited at in the work area;
- Fire extinguishers shall be conspicuously located. Tri-class chemical fire extinguishers shall be provided within 50 feet of more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas. Fire extinguishers shall be inspected monthly;
- Prior to performing Hot Work (welding, cutting, etc.) or operating other flame-producing/spark producing devices, a written permit (see S3NA-418-PR Welding, Cutting and Other Hot Work)shall be requested from the SSO;
- Only Type I or Type II safety cans shall be used. All safety cans shall be equipped with a dispensing funnel or hose, and each container shall be clearly labeled;
- Containers used for flammable liquids shall be removed from a vehicle (e.g., a pickup truck with a bed liner) before the container is filled;
- Flammable and combustible materials shall be stored away from sources of ignition and areas where hot work is performed. Flammable material storage areas shall be clearly marked with signs reading "FLAMMABLE — No smoking or open flames within 50 feet";
- Flammable and combustible materials shall not be stored in areas used for exits or stairways or areas normally used for safe passage of people;
- Fire lanes providing access to all areas shall be established and kept free from obstructions; and
- Exits shall be established and the exit and exit pathway shall be kept free of obstructions.

4.11 First-Aid

AECOM has made available to employees, first aid services, and has made provisions for medical care as required by with 29 CFR 1926.50. The AECOM will maintain a first aid kit in accordance with 29 CFR 1926.50. In addition, where the eyes or body of any person may be exposed to injurious corrosive materials, dust etc., suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate use.

Supervisors or persons in charge of crews will be first aid trained unless their duties require them to be away from the jobsite. If so, other persons who are certified in first aid will be designated as the recognized first aid responder. Valid first aid cards are recognized as ones that include both first aid and cardiopulmonary resuscitation (CPR) and have not reached the expiration date.

First aid responders are designated to ensure that the first aid kits are properly maintained and stocked. Posters listing emergency numbers, procedures, etc. will be strategically located, such as on the first aid kit, at telephones, and in other areas where employees have easy access.

4.12 Stop Work Authority

All employees have the right and duty to stop work when conditions are unsafe and to assist in correcting these conditions as outlined in S3NA-002-PR Stop Work Authority. Whenever the SSO determines that workplace conditions present an uncontrolled risk of injury or illness to employees, immediate resolution with the appropriate supervisor shall be sought. Should the supervisor be unable or unwilling to correct the unsafe conditions, the SSO is authorized and required to stop work, which shall be immediately binding on all affected AECOM employees and subcontractors.

Upon issuing the stop work order, the SSO shall implement corrective actions so that operations may be safely resumed. Resumption of safe operations is the primary objective; however, operations shall not resume until the Safety Professional has concurred that workplace conditions meet acceptable safety standards

4.13 UTC Safety Requirements

All site activities must be performed in accordance with the *UTC Environmental Health and Safety Guidelines for Contractors* (Attachment D). This includes, but is not limited to, UTC's Five Cardinal Rules that regulate:

1. Confined Space Entry;
2. Use of a GFCI on Hand and Portable Power Tools;

3. Elevated Work;
4. Lockout Tagout; and
5. Machine Guarding.

The following UTC specific health and safety requirements must be adhered to during all phases of work at the facility.

- Contractors are responsible for ensuring their employees, subcontractors and agents comply with this EH&S Guide and applicable Federal, State and Local regulations at all times during performance of their work.
- Each contractor will complete a Contractor EH&S Assessment pre-qualification questionnaire. The pre-qualification process will identify contractors, vendors and service providers who have effective Environment, Health and Safety (EH&S) programs with demonstrated leadership and performance in their industry.
- UTC reserves the right to verify that the Contractor and all of the Contractor's employees meet contractual requirements, including orientation, training, medical testing and substance abuse screening.
- The Contractor EH&S Program at UTC is administered in English. The Program includes this Contractor Handbook, online computer training, and a Contract Coordinator who will provide project management and supervision. AECOM's contractors will ensure that non-English speaking staff are fully fluent with the UTC EH&S requirements and AECOM SH&E requirements.
- Contractor employees who will be issued a picture badge or act in a supervisory role in the performance of their duties at UTC, must first complete Contractor Supervisor EH&S orientation training. This training covers the UTC requirements in this handbook, and includes a test to verify comprehension. Information on how to take this training is available from EH&S, your Contractor Coordinator or Emergency Services.
- All contractors must communicate in English with the level of proficiency necessary to ensure the safety of their employees and the safety of others.
- Contractor activities and performance will be audited and evaluated through the Contractor EH&S Progressive Improvement Plan to ensure ongoing compliance with UTC policies, procedures and requirements, and to achieve a successful and injury-free workplace.
- Contractor employees may be required to sign a contractor verification card supplied by Emergency Services.
- Each contractor employee must carry the card with them at all times, as it is required in order to enter the facility through the security post.
- A UTC Contractor Coordinator will be assigned for each project. The Contractor Coordinator will be the Contractor's primary UTC contact on all matters related to the task.
- Contractors will conduct safety meetings with their employees to cover all applicable sections of this Guide before any work is done on UTC property.

Each contractor shall:

- Have ready access to the UTC EH&S handbook at all times to use as a reference source.
- Report all injuries, spills, and near misses immediately to Emergency Services and Contractor Coordinator.
- Conduct daily inspections of work areas to ensure compliance with the requirements of this guide. Review findings and corrective actions with Contractor Coordinator.
- Activities performed at the site will also be performed in accordance with the conditions stipulated in the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) work plan submitted to United Technologies Corporation in April 2010.

5.0 Exposure Monitoring Procedures (Health)

5.1 Contaminant Exposure Hazards

The following is a discussion of the hazards presented to worker personnel during this project from on-site chemical hazards known, suspected or anticipated to be present on site.

5.1.1 Asbestos

Asbestos containing material (ACM) has been identified on the site. Asbestos is a general name for a group of naturally-occurring minerals that takes the form of hollow, microscopic fibers which are nearly indestructible. It can be densely packed into a tough, flexible and very useful material, which has been used for hundreds of years as an insulating, fireproofing, and building material. Asbestos may be found in insulating cements, sprayed-on insulation for fireproofing or acoustical purposes, thermal insulation and textiles. Airborne asbestos fibers can be dangerous, even in concentrations which may not be visible.

Asbestos fibers can enter the air or water from the breakdown of natural deposits and manufactured asbestos products. Asbestos fibers do not evaporate into air or dissolve in water. Small diameter fibers and particles may remain suspended in the air for a long time and be carried long distances by wind or water before settling down. Larger diameter fibers and particles tend to settle more quickly. Asbestos fibers are not able to move through soil. Asbestos fibers are generally not broken down to other compounds and will remain virtually unchanged over long periods.

Asbestos fibers may be released into the air by the disturbance of asbestos-containing material during product use, demolition work, building or home maintenance, repair, and remodeling. In general, exposure may occur only when the asbestos-containing material is disturbed in some way to release particles and fibers into the air.

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos, but not in the general public. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Pleural plaques can occur in workers and sometimes in people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone are not usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing.

A rare cancer of the lining of the chest cavity called mesothelioma can occur even from low-level exposures. Although the primary route of exposure to asbestos is by inhalation, it can also be inadvertently ingested as a result of poor hygiene practices. The OSHA permissible exposure limit (PEL) for asbestos is 0.1 fibers per cubic centimeter of air (f/cc) as an 8-hour, time-weighted average (TWA).

5.1.2 Polychlorinated Biphenyls (PCBs)

Polychlorinated biphenyls (PCBs) are a series of mixtures consisting of many isomers and compounds that vary from mobile oily liquids to white crystalline solids to hard non-crystalline resins. PCB oils are typically used in heat transfer applications, hydraulic fluids, and lubricants. Technical products vary in composition and in the degree of chlorination. Toxicity increases with the degree of chlorination. Dermal contact with liquid PCBs may produce skin irritation or a rash. Prolonged or repeated skin contact may cause dermatitis or "chloracne." Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects.

Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. The EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic to humans.

The Occupational Safety and Health Administration (OSHA) has set a maximum concentration limit in workplace air of 1 milligram per cubic meter of air (mg/m³) for 42% chlorine PCBs, or to 0.5 mg/m³ for 54% chlorine PCBs for an 8-hour workday over a 40-hour week to protect workers.

5.1.3 Concrete Dust

During the demolition of concrete personnel have a potential exposure to crystalline silica. Crystalline silica (quartz) is a common mineral found in the earth's crust and is found in many types of rock including sedimentary, metamorphic or igneous. Silica is present in both work and non-work environments, and exposure to crystalline silica dust has long been known to cause a disease called silicosis. When crystalline silica is inhaled, the lung tissue reacts by developing fibrous tissue around trapped silica particles.

This condition of the lung is called silicosis. Dust containing the crystalline forms of silica particles small enough to enter the deep parts of the lung can cause "silicosis", which is a scarring of the lung tissues, cancer and other forms of lung disease, including an increased risk of getting tuberculosis. The effects of silicosis can be undetected for several years before the problem is known. Elevated exposures can produce health problems sooner. At first, there may be no symptoms of disease, and then shortness of breath, fatigue, severe cough and chest pain can develop later on. Silicosis cannot be reversed and requires a lung transplant in advanced stages. Therefore, minimizing exposure to crystalline silica is the best prevention for silicosis.

Routes of exposure include contact and inhalation. Concrete dust exposure in the eyes may cause immediate or delayed irritation and inflammation. Skin contact with concrete dusts may cause drying of the skin with consequent mild irritation. Inhaling concrete dust may irritate the moist mucous membranes of the nose, throat and upper respiratory system.

The Occupational Safety and Health Administration (OSHA) proposed PEL of 50 micrograms of respirable crystalline silica per cubic meter of air ($\mu\text{g}/\text{m}^3$), averaged over an 8-hour day

5.2 Route of Entry Assessment of Exposure Hazards

Inhalation: Potentially contaminated suspended dust may be generated from construction equipment, traffic, or weather conditions. A dust monitor will be maintained on site and deployed in the breathing zone of the immediate work area whenever visible dust is present. In addition, personal air monitors may be used to supplement existing dust data collected on the site. Applying dust suppressing water onto the ground surface in the event of excessive dust generation may be implemented as a mitigation measure.

Skin Contact: Contaminated particles may contract the skin through materials handling and dust. Protective clothing (i.e. gloves) will be worn when handling contaminated or potentially contaminated materials or equipment. Frequent glove changes are required to reduce wear and potentially penetration of the glove surface. To prevent skin contact with potentially contaminated suspended dust, protective clothing will be worn to reduce skin exposure and dust suppression measures will be enacted (as described above) whenever excessive dust is present.

Ingestion: Protection against exposure via ingestion can be accomplished by performance of proper decontamination procedures when exiting contaminated work areas. Food and beverages will not be permitted within potentially contaminated work areas. Food and beverages will be maintained in a clearing labeled and dedicated food and beverage refrigerator or cooler.

5.3 Exposure Controls

Dust mitigation measures will be achieved through the application of water or amended water as supplied by a water truck or water misting from hoses. Access roads will be kept moist through the use of a water truck to prevent the generation of dust. To prevent dust from debris being excavated a water hose will be trained on the debris. Additional dust mitigation measures will include:

- Minimizing the dump height from excavator to truck;
- Covering of material stock piles (as applicable);
- Slowing the movement of vehicles onsite to 5 mph; and
- Covering of loaded trucks.

5.4 Air Monitoring

Real time air monitoring will be conducted to qualitatively assess the levels of airborne contaminants. The purpose of the air monitoring is for selection of respiratory protection, delineating areas where respiratory protection is required and to evaluate the effectiveness of work practices and engineering controls.

5.4.1 Frequency of Air Monitoring

The frequency of the air monitoring is dependent on the type of intrusive work and the location of the work being conducted in the exclusion zone. At the discretion of the SSO, real time air monitoring shall be collected during the initial intrusive activities and periodically throughout the course of the activities. Initial air monitoring shall also be conducted when the location of the intrusive work changes, when there has been a change in operations and a change in respiratory protection requirements and/or work practices. Air monitoring readings shall be conducted at breathing zone levels (4- 6 feet above ground level).

5.4.2 Instrumentation

A digital dust meter shall be used to determine the airborne concentration of airborne dust in the breathing zone of personnel working in the exclusion zone. Dust will be measured with the digital dust meter. However, if visible dust emissions occur and are not suppressible by control measures such as applying water to the site, appropriate adjustments in personal protective equipment will be made in accordance with the site dust action levels. Calibration and Recordkeeping

The digital dust meter will be functional tested in zero/clean air following the manufacturer's instructions. The digital dust meter will be maintained in accordance with the manufacturer's instructions. Functional tests shall be recorded in a field logbook. The instruction manual for the instrument must be maintained on the project site.

5.4.3 Instrument Action Levels

Action levels are based on consistent 10-15 minute readings as conducted at breathing zone levels (4- 6 feet above ground level).

The following limits will be used to assess whether dust concentrations are acceptable in the worker-breathing zone (4-6 feet above ground level) using a real-time dust monitor.

If the dust level of 0.25 mg/m^3 above background is exceeded and the source is from activities within the site, work will be temporarily stopped until dust suppression activities are reviewed. If the source is determined to be from non-work related activities (i.e. passing traffic or ambient conditions) no corrective action will be required.

When dust levels exceed 0.15 mg/m^3 but less than 0.25 mg/m^3 above background respiratory protection in the form of an air purifying respirator with dust filtration capabilities shall be used. NIOSH approved disposable dust mask (P95) is acceptable for nuisance dust.

5.4.4 Personal Exposure Monitoring

Should site activities warrant performing personal sampling (breathing zone) to better assess potential airborne exposure experienced by AECOM employees, the SSO, under the direction of a Certified Industrial Hygienist (CIH), will be responsible for specifying the monitoring required. Within five working days after the receipt of monitoring results, the CIH will notify each employee, in writing, of the results that represent that employee's exposure. Copies of air sampling results will be maintained in the SSO project files.

6.0 Personal Protective Equipment

6.1 Personal Protective Equipment

The purpose of personal protective equipment (PPE) is to provide a barrier which will shield or isolate individuals from the chemical and/or physical hazards that may be encountered during work activities. *S3NA-208-PR Personal Protective Equipment Program* lists the general requirements for selection and usage of PPE. The specific PPE requirements for each work task are specified in the individual THAs.

6.1.1 Task 1

The PPE requirements for Task 1, mobilization and site preparation, are as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Hearing protection (as necessary)
- Long sleeve shirt is advised. No shorts/cutoff jeans or sleeveless shirts.

6.1.2 Task 2

The PPE requirements for Task 2, excavate and load potential Asbestos Containing Material, is as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Protective coveralls (breathable for particle protection)
- Respirator with appropriate filtering elements for asbestos (half face or full face)
- Hearing protection (as necessary)

6.1.3 Task 3

The PPE requirements for Task 3, excavate and load soils with PCBs less than 50 mg/kg, is as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Hearing protection (as necessary)
- Long sleeve shirt is advised. No shorts/cutoff jeans or sleeveless shirts.
- Additional PPE as determined by the SSO:
 - Protective coveralls (breathable for particle protection)
 - NIOSH certified disposable dust respirator for particles (N95).

6.1.4 Task 4

The PPE requirements for Task 4, excavate and load soils with PCBs greater than 50 mg/kg, is as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Hearing protection (as necessary)
- Long sleeve shirt is advised. No shorts/cutoff jeans or sleeveless shirts.
- Additional PPE as determined by the SSO:
 - Protective coveralls (breathable for particle protection)
 - NIOSH certified disposable dust respirator for particles (N95)
 - Disposable boots
 - Chemical resistant gloves such as nitrile.

6.1.5 Task 5

The PPE requirements for Task 5, site restoration, are as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Hearing protection (as necessary)
- Long sleeve shirt is advised. No shorts/cutoff jeans or sleeveless shirts.

6.1.6 Task 6

The PPE requirements for Task 6, demobilization and confirmation sampling, are as follows:

- High visibility outer garment (ANSI Type II) with reflective strips
- Hard hat
- Eye protection
- Work gloves (Cut level 2 or higher)
- Protective footwear (ASTM/ANSI Compliant)
- Hearing protection (as necessary)
- Long sleeve shirt is advised. No shorts/cutoff jeans or sleeveless shirts.

6.2 PPE Doffing and Donning (Utilization) Information

6.2.1 Inspection of PPE

Before use of protective clothing, all personnel shall determine that the clothing material is correct for the specified task at hand. The clothing is to be visually inspected for imperfect seams, non-uniform coatings, tears and malfunctioning closures. It is to be held up to the light to check for pinholes. It is to be flexed to observe for cracks or other signs of shelf deterioration. If the product has been used previously, it should be inspected inside and out for signs of chemical deterioration, such as discoloration, swelling and stiffness. During work, the clothing should be periodically inspected for evidence of chemical deterioration, closure failure, tears, punctures and seam discontinuities.

Before using gloves, check for pinhole leaks. Face shields and lenses should be checked for cracks, crazing and fogginess. It is imperative that any equipment found to be defective be replaced immediately.

6.2.2 PPE Donning Procedures

The following procedures will be used when donning PPE:

- Put on the required I protective coveralls;
- Put on the required chemical protective boots or boot covers (Never cut disposable booties from your feet with basic utility knives);
- Tape the legs of the coveralls to the boots with duct tape;
- Put on the required chemical protective gloves;
- Tape the wrists of the protective coveralls to the gloves; and
- Don the remaining PPE, such as safety glasses or goggles.

6.2.3 PPE Doffing Procedures

Whenever a field crew member leaves the exclusion zone of a work area, the following decontamination sequence must be followed:

- Rinse contaminated materials from the boots or remove contaminated overboots;
- Clean reusable protective equipment;
- Remove protective garments and equipment (remove inner gloves last to protect against dermal contact during doffing outer garments);
- All disposable clothing should be placed in plastic bags;
- Wash hands, arms, face and neck as appropriate; and
- Proceed to clean area and dress in clean clothing.

7.0 Project Health and Safety Organization

7.1 Project Manager

Project Manager (PM) Lindsay Mitchel has overall management authority and responsibility for all site operations, including safety. The PM will provide the site supervisor with work plans, staff, and budgetary resources, which are appropriate to meet the safety needs of the project operations. The PM will be held responsible for the safety performance of the project.

7.2 Site Supervisor

The site supervisor (George Fischer) has the overall responsibility and authority to direct work operations at the job site according to the provided work plans and for implementing and enforcing this HASP.

7.2.1 Responsibilities

The site supervisor is responsible for:

- Discussing deviations from the work plan with the SSO and PM.
- Discussing safety issues with the PM, SSO, and field personnel.
- Assisting the SSO with inspections of the site for compliance with this HASP and applicable SOPs.
- Assisting the SSO with the development and implementation of corrective actions for site safety deficiencies.
- Immediately reporting major incidents to the Regional Executive and SH&E Manager by phone once the situation has stabilized (S3NA-004 PR Incident Reporting).
- Investigating all incidents in a timely manner.

7.2.2 Authority

The site supervisor has authority to:

- Verify that all operations are in compliance with the requirements of this HASP, and halt any activity that poses a potential hazard to personnel, property, or the environment.
- Temporarily suspend individuals from field activities for infractions against the HASP pending consideration by the SH&E Manager and the PM.

7.2.3 Qualifications

In addition to being Hazardous Waste Operations and Emergency Response (HAZWOPER)-qualified (see Section 4.1), the Site Supervisor is required to have completed the 8-hour HAZWOPER Supervisor Training Course in accordance with 29 CFR 1910.120 (e)(4).

7.3 Site Safety Officer

The SSO will be appointed by the PM. The SSO will be on-site during all activities covered by this HASP. The SSO is responsible for enforcing the requirements of this HASP once work begins. The SSO has the authority to immediately correct all situations where noncompliance with this HASP is noted and to immediately stop work in cases where an immediate danger is perceived. The SSO is responsible for:

- Updating the site-specific HASP to reflect changes in site conditions or the scope of work. HASP updates must be reviewed and approved by the Safety Professional.
- Being aware of changes in AECOM Safety Policy.
- Inspecting the Site for compliance with this HASP and the SOPs using the appropriate audit inspection checklist provided by an AECOM Safety Professional.
- Working with the SS and PM to develop and implement corrective action plans to correct deficiencies discovered during site inspections. Deficiencies will be discussed with project management to determine appropriate corrective action(s).
- Contacting the Safety Professional for technical advice regarding safety issues.

- Determining the emergency evacuation routes, establishing and posting local emergency telephone numbers, and arranging emergency transportation.
- Checking that all site personnel and visitors have received the proper training and medical clearance prior to entering the site.
- Establishing any necessary controlled work areas (as designated in this HASP or other safety documentation).
- Presenting tailgate safety meetings and maintain attendance logs and records.
- Discussing potential health and safety hazards with the SS, the Safety Professional, and the PM.
- Selecting an alternate SSO by name and inform him/her of their duties, in the event that the SSO must leave or is absent from the site.

The SSO has authority to:

- Verify that all operations are in compliance with the requirements of this HASP.
- Issue a “Stop Work Order” under the conditions set forth in this HASP.
- Temporarily suspend individuals from field activities for infractions against the HASP pending consideration by the Safety Professional and the PM.

In addition to being HAZWOPER-qualified, the SSO is required to have completed the 8-hour HAZWOPER Supervisor Training Course in accordance with 29 CFR 1910.120 (e)(4).

7.4 Employees

7.4.1 Employee Responsibilities

Responsibilities of employees associated with this project include, but are not limited to:

- Understanding and abiding by the policies and procedures specified in the HASP and other applicable safety policies, and clarifying those areas where understanding is incomplete.
- Providing feedback to health and safety management relating to omissions and modifications in the HASP or other safety policies.
- Notifying of site supervisor of unsafe conditions and acts.

7.4.2 Employee Authority

The health and safety authority of each employee assigned to the site includes the following:

- The right to refuse to work and/or stop work authority when the employee feels that the work is unsafe (including subcontractors or team contractors), or where specified safety precautions are not adequate or fully understood.
- The right to contact the SH&E Manager at any time to discuss potential concerns.
- The right and duty to stop work when conditions are unsafe, and to assist in correcting these conditions.

7.5 Safety Health and Environmental Manager

The Regional Safety, Health and Environmental (SH&E) Manager (Nash Doyle) is the member of the AECOM Safety, Health and Environmental Department assigned to provide guidance and technical support for the project. Duties include the following:

- Reviewing all personal exposure monitoring results.
- Investigating any reported unsafe acts or conditions.

7.6 Subcontractors

The requirements for subcontractor selection and subcontractor safety responsibilities are outlined in *S3NA-213-PR Subcontractors*. Each AECOM subcontractor is responsible for assigning specific work tasks to their employees. Each subcontractor's management will provide qualified employees and allocate sufficient time, materials, and equipment to safely

complete assigned tasks. In particular, each subcontractor is responsible for equipping its personnel with any required personnel protective equipment (PPE and all required training.

AECOM considers each subcontractor to be an expert in all aspects of the work operations for which they are tasked to provide, and each subcontractor is responsible for compliance with the regulatory requirements that pertain to those services. Each subcontractor is expected to perform its operations in accordance with its own unique safety policies and procedures, in order to ensure that hazards associated with the performance of the work activities are properly controlled. Copies of any required safety documentation for a subcontractor's work activities will be provided to AECOM for review prior to the start of onsite activities, if required.

Hazards not listed in this HASP but known to any subcontractor, or known to be associated with a subcontractor's services, must be identified and addressed to the AECOM PM or the Site Supervisor prior to beginning work operations. The Site Supervisor or authorized representative has the authority to halt any subcontractor operations, and to remove any subcontractor or subcontractor employee from the site for failure to comply with established health and safety procedures or for operating in an unsafe manner.

7.7 Visitors

Authorized visitors (e.g., client representatives, regulators, AECOM management staff, etc.) requiring entry to any work location on the site will be briefed by the Site Supervisor on the hazards present at that location. Visitors will be escorted at all times at the work location and will be responsible for compliance with their employer's health and safety policies. In addition, this HASP specifies the minimum acceptable qualifications, training and personal protective equipment which are required for entry to any controlled work area; visitors must comply with these requirements at all times.

8.0 Site Control/Decontamination

8.1 General

The purpose of site control is to minimize potential contamination of workers, protect the public from site hazards, and prevent vandalism. The degree of site control necessary depends on the site characteristics, site size, and the surrounding community.

Controlled work areas will be established at each work location, and if required, will be established directly prior to the work being conducted.

8.2 Controlled Work Areas

Each HAZWOPER controlled work area will consist of the following three zones:

- Exclusion Zone: Contaminated work area.
- Contamination Reduction Zone: Decontamination area.

Support Zone: Uncontaminated or “clean area” where personnel should not be exposed to hazardous conditions.

Each zone will be periodically monitored in accordance with the air monitoring requirements established in this HASP. The Exclusion Zone and the Contamination Reduction Zone are considered work areas. The Support Zone is accessible to the public (e.g., vendors, inspectors).

8.2.1 Exclusion Zone

The Exclusion Zone is the area where primary activities occur, such as sampling, remediation operations, installation of wells, cleanup work, etc. This area must be clearly marked with hazard tape, barricades or cones, or enclosed by fences or ropes. Only personnel involved in work activities, and meeting the requirements specified in the applicable THA and this HASP will be allowed in an Exclusion Zone.

The extent of each area will be sufficient to ensure that personnel located at/beyond its boundaries will not be affected in any substantial way by hazards associated with sample collection activities.

All personnel should be alert to prevent unauthorized, accidental entrance into controlled-access areas (the EZ and CRZ). If such an entry should occur, the trespasser should be immediately escorted outside the area, or all HAZWOPER-related work must cease. All personnel, equipment, and supplies that enter controlled-access areas must be decontaminated or containerized as waste prior to leaving (through the CRZ only).

8.2.2 Contamination Reduction Zone

The Contamination Reduction Zone is the transition area between the contaminated area and the clean area. Decontamination is the main focus in this area. The decontamination of workers and equipment limits the physical transfer of hazardous substances into the clean area. This area must also be clearly marked with hazard tape and access limited to personnel involved in decontamination.

8.2.3 Support Zone

The Support Zone is an uncontaminated zone where administrative and other support functions, such as first aid, equipment supply, emergency information, etc., are located. The Support Zone shall have minimal potential for significant exposure to contaminants (i.e., background levels).

Employees will establish a Support Zone (if necessary) at the site before the commencement of site activities. The Support Zone would also serve as the entry point for controlling site access.

8.3 Site Access Documentation

If implemented by the PM, all personnel entering the site shall complete the “Site Entry/Exit Log” located at the site trailer or primary site support vehicle.

8.4 Site Security

To maintain site security during working hours:

- Maintain security in the Support Zone and at access control points.
- Establish an identification system to identify authorized persons and limitations to their approved activities.

- Assign responsibility for enforcing authority for entry and exit requirements.
- When feasible, install fencing or other physical barrier around the site.
- If the site is not fenced, post signs around the perimeter and whenever possible, use guards to patrol the perimeter. Guards must be fully apprised of the hazards involved and trained in emergency procedures.

To maintain site security during off-duty hours:

- Enlist public enforcement agencies, such as the local police department, if the site presents a significant risk to local health and safety.
- Secure the equipment.

8.5 Decontamination

8.5.1 General Requirements

All possible and necessary steps shall be taken to reduce or minimize contact with chemicals and contaminated/impacted materials while performing field activities (e.g., avoid sitting or leaning on, walking through, dragging equipment through or over, tracking, or splashing potential or known contaminated/impacted materials, etc).

All personal decontamination activities shall be performed with an attendant (buddy) to provide assistance to personnel that are performing decontamination activities. Depending on specific site hazards, attendants may be required to wear a level of protection that is equal to the required level in the Exclusion Zone (EZ).

All persons and equipment entering the EZ shall be considered contaminated, and thus, must be properly decontaminated prior to entering the SZ.

Decontamination procedures may vary based on site conditions and nature of the contaminant(s). If chemicals or decontamination solutions are used, care should be taken to minimize reactions between the solutions and contaminated materials. In addition, personnel must assess the potential exposures created by the decontamination chemical(s) or solutions. The applicable Material Safety Data Sheet (MSDS) must be reviewed, implemented, and filed by personnel contacting the chemicals/solutions.

All contaminated PPE and decontamination materials shall be contained, stored and disposed of in accordance with site-specific requirements determined by site management.

8.5.2 Decontamination Equipment

The equipment required to perform decontamination may vary based on site-specific conditions and the nature of the contaminant(s). The following equipment is commonly used for decontamination purposes:

- Soft-bristle scrub brushes or long-handled brushes to remove contaminants;
- Hoses, buckets of water or garden sprayers for rinsing;
- Large plastic/galvanized wash tubs or children's wading pools for washing and rinsing solutions;
- Large plastic garbage cans or similar containers lined with plastic bags for the storage of contaminated clothing and equipment;
- Metal or plastic cans or drums for the temporary storage of contaminated liquids; and
- Paper or cloth towels for drying protective clothing and equipment.

8.5.3 Personal Decontamination

Decontamination will take place in the area designated as the CRZ. Personnel egress to and from this zone will be limited in order to minimize the potential spread of contaminated sediments to clean areas. Under no circumstances is a potentially contaminated person to exit the site by means other than through the CRZ, except in emergencies as directed by the Site Health and Safety Officer. Upon leaving the site for any reason, personnel will be required to remove all contaminated clothing or equipment before leaving the CRZ.

For Level D PPE, disposable gloves will be disposed of as municipal waste. All personnel wearing Modified Level D PPE in a work area must undergo decontamination prior to entering a SZ. In the CRZ, the personnel decontamination area will consist of the following stations:

- *Station 1:* Personnel entering the CRZ will remove the sediment contamination from their outer clothing, boots and instruments using brushes and cloths. Personnel will also wipe down respirators if they have been used.
- *Station 2:* Personnel will remove their outer garment and outer gloves and dispose of them as municipal waste. Personnel will then decontaminate their boots, with an aqueous solution of detergent or other appropriate cleaning solution. These items will then be hand carried to the next station. Inner gloves may then be discarded as municipal waste.
- *Station 3:* Personnel will thoroughly wash their hands and face before leaving the CRZ. Air purifying cartridges will be removed from respirators, if used, and then sanitized, dried and placed in a clean plastic bag.

8.5.4 Equipment Decontamination

All potentially contaminated equipment will remain in the EZ until the end of the activity. A bristle brush and a soap and water solution (Alconox) will be used to remove sediment contamination from all equipment and will be decontaminated accordingly before being removed from the CRZ. A pump sprayer may be utilized for each rinse station.

For larger equipment, a high-pressure washer may need to be used. Some contaminants require the use of a detergent or chemical solution and scrub brushes to ensure proper decontamination.

For smaller equipment, use the following steps for decontamination:

- Remove majority of visible gross contamination in EZ.
- Wash equipment in decontamination solution with a scrub brush and/or power wash heavy equipment.
- Rinse equipment.
- Visually inspect for remaining contamination.

9.0 Emergency Response Planning

9.1 Emergency Action Plan

OSHA defines emergency response as any "response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result in an uncontrolled release of a hazardous substance. AECOM personnel shall not participate in any emergency response where there are potential safety or health hazards (i.e., fire, explosion, or chemical exposure). AECOM response actions will be limited to evacuation. As such this section is written to comply with the requirements of 29 CFR 1910.38 (a).

9.2 Site-Specific Emergency Procedures

Site-specific emergency procedures are presented in Table 9-1 with site-specific information regarding evacuations, muster points, communication, and other site-specific emergency procedures.

Table 9-1: Emergency Planning

Emergency	Evacuation Route	Muster Location
Chemical Spill	Upwind	Upwind Site Entrance
Fire/Explosion	Away from incident	Site Entrance away from incident
Tornado	Away from Soil Pile	Site Trailer
Lightning	Away from Soil Pile and Electric Lines	Site Trailer
Additional Information		
Communication Procedures	Direct verbal communications. Must be supplemented when voices cannot be clearly perceived above ambient noise levels and when a clear line-of-sight cannot be maintained by AECOM personnel. AECOM personnel will bring a mobile phone to the site to ensure that communications with local emergency responders is maintained, when necessary.	

9.3 Incident Reporting

All incidents (first aid ,fire, property damage, near-miss, compliance inspection) occur on-site during any field activity will be promptly reported to the Site Supervisor who will contact the Project Manager and Regional Safety Manager, AECOM's Incident Reporting Line at (800) 348-5046, and the applicable Project Manager immediately. The Site Supervisor will initiate a written report, using IndustrySafe, AECOM's online incident reporting system.

9.4 Minor Injuries

Minor occupational injuries or illnesses (First Aid variety) that do not require the services of the emergency hospital, AECOM employees should contact the Incident Reporting Line to report the event and ask for the location of the nearest occupational clinic or asked to be connected with WorkCare.

9.5 Environmental Spill/Release Reporting

All environmental spills or releases of hazardous materials (e.g., fuels, solvents, etc.), whether in excess of the Reportable Quantity or not, will be immediately reported to the AECOM Project Manager (PM) and Regional SH&E Manager. Also you are required to call the Incident Reporting Line at (800- 348-5046).

The PM is responsible for notifying the client, AECOM legal representative and for determining if the spill or release is reportable to the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC reporting requirements are to contact the NYSDEC Spill Hotline at 1-800-457-7362 within two hours of the discovery of the spill.

9.6 Emergency Contacts

Emergency Coordinators / Key Personnel			
<u>Name</u>	<u>Title/Workstation</u>	<u>Telephone Number</u>	<u>Mobile Phone</u>
Lindsay Mitchel	Project Manager	518-951-2373	518-951-6039
George Fischer	Supervisor/SSO	315-432-0506	315-569-0474
Todd Schwendeman	Account Manager	518-951-2200	518-369-5722
Nash Doyle	Regional SH&E Manager	312-373-7813	312- 593-8489
Michael Grasso	District SH&E Manager	607-201-6737	607-201-6737
Incident Reporting	Incident Reporting Line	(800) 348-5046	
Organization / Agency			
<u>Name</u>		<u>Telephone Number</u>	
Police Department		911	
Fire Department		911	
Ambulance Service <i>(EMT will determine appropriate hospital for treatment)</i>		911	
Occupational Clinic (Use by site personnel is only for non-emergency cases)			
Riverside Medical 1020 7th North Street Liverpool, NY 13088-6196		315-451-3906	
Emergency Hospital			
Upstate Medical University Hospital 750 E. Adams Street Syracuse, NY 13210			
Poison Control Center		(800) 222-1222	
NYSDEC Spill Hotline		800 457-7362	
National Response Center		800 424-8802	
INFOTRAC(insert account number)		800 353-5053	
Public Utilities			
<u>Name</u>		<u>Telephone Number</u>	
Call Before You Dig		811	

9.7 Emergency Occupational Hospital Route/Detail Map

Occupation Clinic

Riverfront Medical

Drive 7.4 miles, 10 min

This route has tolls.

O 1198 Kinne St

East Syracuse, NY 13057

Get on I-90 W from NY-298 W

1.7 mi / 3 min

Continue on I-90 W to Salina. Take exit 37 from I-90 W

5.4 mi / 6 min

Take 7th N St to your destination

0.4 mi / 1 min

7. Turn left onto Electronics Pkwy

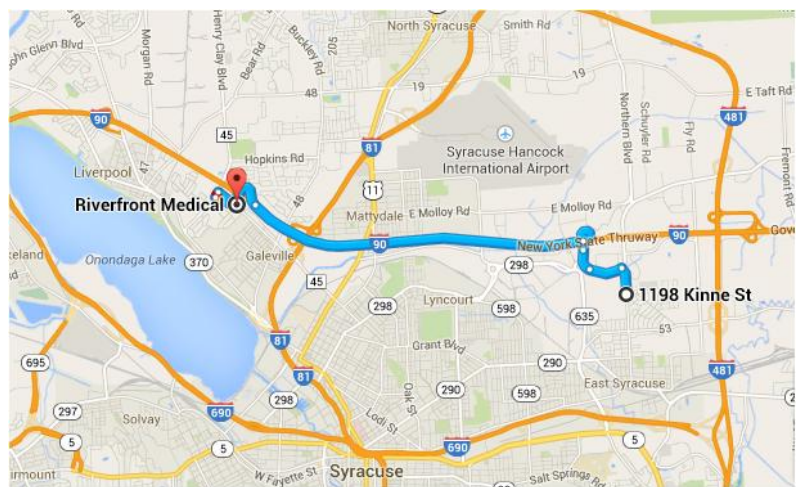
390 ft

8. Take the 1st left onto 7th N St

0.3 mi

9. Turn left

Destination will be on the left



Upstate Medical University Hospital

○ 1182-1198 Kinne St

East Syracuse, NY 13057

Take NY-635 S/Thompson Rd and I-690 W to E Adams St in Syracuse

↑ 1. Head south on 86/Kinne St toward Altmont Dr

↘ 2. Take the 2nd right onto Exeter St

↙ 3. Turn left onto NY-635 S/Thompson Rd

↘ 4. Merge onto I-690 W via the ramp to Syracuse

↘ 5. Take exit 13 for Townsend St toward Downtown

↘ 6. Merge onto Brown St

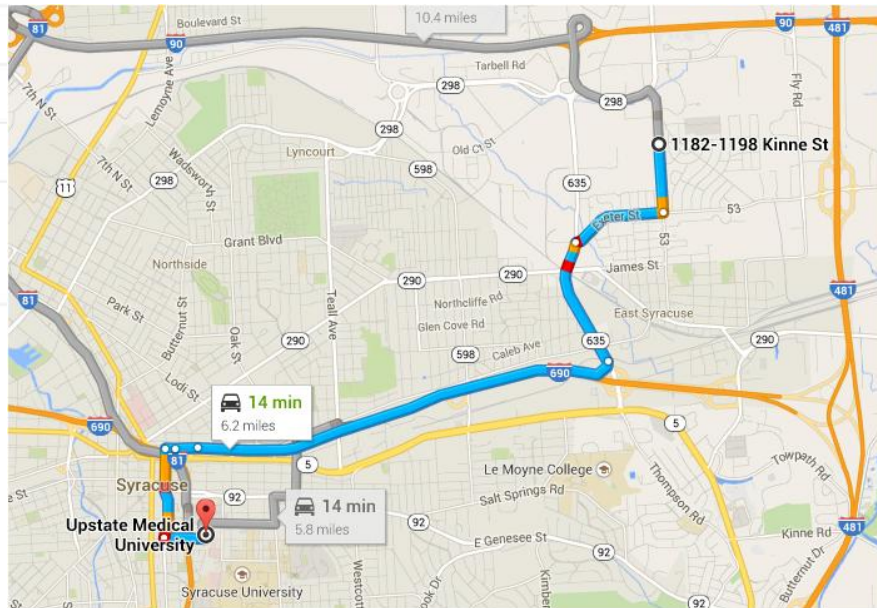
↙ 7. Turn left onto N Townsend St

↙ Turn left onto E Adams St

📍 Destination will be on the left

📍 Upstate Medical University

750 E Adams St, Syracuse, NY 13210



Attachment A
Task Hazard Analyses

Attachment B
Material Safety Data Sheets

Attachment C
UTC Health and Safety Guidelines



Environment, Health & Safety
United Technologies Corporation

ENVIRONMENT, HEALTH & SAFETY GUIDELINES For Level III CONTRACTORS



September 2012

UTC

EH&S Guidelines for Level III Contractors

UTC On-Line Training

For Risk Level III Contractors & Supervisors
For Risk Level III Picture Badge Employees
For Risk Level III Contractor Coordinators

Disclaimer

- This training does not replace any regulatory training employers are required to provide to their own employees
- By providing this training, UTC is not accepting responsibility for direct oversight of contractor activities
- This training covers the highlights of the EHS Guidelines for Level III Contractors handbook. Contractor employees who receive credit for this training agree to review the sections in the handbook pertaining to their on site work for additional information.

This Contains No Technical Data
subject to the EAR and the ITAR

Agenda

EH&S Introduction

EH&S Policy & Objectives
Workplace Violence Prevention
Export Control
FOD

Security & Identification

Basic Safety Requirements

Housekeeping Chemicals
Motor Vehicles Compressed Gas
PPE Tools
Training

Emergency Response:

Evacuation
Reporting Spills, Incidents & Near Misses

Cardinal Rules

Overhead Work

Cranes & Hoisting Scaffold
Ladders Aerial lifts

Roof Work

Barricades

Hot Work

Excavation & Trenching

Miscellaneous Operations

Environmental Requirements:

Clean fill Stormwater Management
Stacks and Drains Dumpster Management
Waste Management

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Introduction

The 2012 edition of the UTC Guidelines for Level III Contractors Training has incorporated several new elements and requirements designed to assist UTC in the implementation of best management practices to ensure the safety of our employees as well as the contractors working on behalf of UTC.

We hope you will find this material helpful and provide you with clear guidance of the expectations and guidelines to meet our Contractor Safety Program goals and initiatives.

Introduction

- Level III Contractor/ Projects: Contractor Services that involve moderate to High Risk of injury through the use of power tools or equipment or high risk activities.
- These include Electrical, Plumbing, Pipefitting, Rigging, Carpentry, Mechanical, Paving, Roofing, Sheet Metal, Painting, Elevated Work, Hazardous Materials Abatement, Hazardous Chemical Handling, Confined Space Entry, Hot Work and/or are engaged in activities that involve potentially hazardous chemicals or energy sources.

UTC EH&S Policy



UTC will not be satisfied until its:

- Workplace is safe from hazards
- Employees are injury free
- Products and services are safe
- Commitment and record in compliance, pollution prevention, and protection of the natural environment are unmatched.

UTC EH&S Objectives

- **Eliminate** all employee injuries and ill health by making the workplace free from hazards and unsafe actions.
- **Drive pollutants** in manufacturing processes to the lowest achievable levels.
- **Conserve natural resources** in the design, manufacture, use and disposal of products and delivery of services.
- **Comply** with safety and environmental protection standards, applicable laws, and company policies and go beyond, when necessary, to **achieve our goals**.
- **Hold** operating managers **accountable** for safety and environmental performance and for providing leadership and required resources.
- **Require** all employees to **support** the policy and objectives.
- **Continually improve** EH&S management and performance.

UTC Contractor Practices

- UTC will select and conduct business only with contractors who have demonstrated a high degree of concern for the safety of their employees
- UTC will continually monitor contractor EH&S performance which will become a criteria for awarding future contracts

Contractor EH&S Requirements

- Responsible for ensuring their employees, subcontractors and agents comply with this guide & all applicable Federal, State & Local regulations
- Completing an EH&S Pre-Qualification process as it pertains to the business unit
- Complete required training & demonstrate comprehension to qualify to perform work for UTC.

Contractor EH&S Requirements

- ✓ Keep guidebook readily available for reference
- ✓ Work through UTC assigned Contractor Coordinator for performing all activities
- ✓ Conduct daily inspections of work areas, and take immediate corrective actions on findings
- ✓ Report all injuries, spills and near hits (misses) immediately

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Contractor EH&S Performance Progressive Improvement Plan

- To ensure and improve compliance, Each business unit will monitor & record contractor performance via audits, observations and/or incidents
 - For non-compliance, points will be assigned depending upon severity of violation
 - Points will accumulate over a 24 month period by subject category & total for each contractor
 - Some Divisions may use alternate Progressive Improvement plan criteria
- Repeated violations could result in contractor suspension at division and/or UTC level

Contractor EH&S Performance Progressive Improvement Plan

Category Points*	Total Points ¹	Division Improvement Action
1		Verbal Warning to Work Crew and Contractor
2	8	Written Warning to Contractor
3	10	Contractor Meeting with site Review Board
4	15	Work Crew ¹ Suspended from site for 1 week and Contractor Suspended from bidding jobs at the site/division ² for 6 weeks
5	20	Work Crew and Contractor suspended from site for 3 months
6	25	Contractor suspended from site indefinitely

* - For violations/incidents within the last 24 months.

1 - Alternate work crew may be assigned to continue work

2 - Site or division suspension determined by review board

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Contractor EH&S Performance & Improvement Plan – UTC Wide

UTC-Wide Consequences*	Improvement Action
1 Divisional Suspension	Written Warning ¹ to Contractor Management
2 Divisional Suspensions	12 Week UTC Bid Suspension
3 Divisional Suspensions	1 Year UTC Bid Suspension
4 Divisional Suspensions	Permanent UTC Site and Bid Suspension

* - For suspensions within the last 24 months. A suspension at any division initiates the UTC-wide Improvement Action

1 - Including warning that Contractor is at risk of UTC-wide bid suspension.

WORKPLACE VIOLENCE PREVENTION

It is essential that all employees and contractor employees are able to work in a safe environment, free from acts of intimidation, threats of violence or actual violence.

WORKPLACE VIOLENCE PREVENTION

Workplace violence can be committed by:

Employees

Customers

Vendors

Contractors

Associates of employees

Individuals who have no other workplace connection



WORKPLACE VIOLENCE PREVENTION

Overview: Do Something!

If you or fellow employee are a victim, or observe acts, of intimidation, threatening or bullying behavior by another employee, you are encouraged to report it.

- Contact your contractor coordinator or
- Business Unit Contractor Program Manager



The sooner acts are addressed,
the sooner they are resolved.



Conversely, the longer you wait,
the more difficult to resolve.

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Export Compliance

All UTC employees, contractors, and third parties within the U.S. are subject to U.S. export laws and regulations

It is essential that all contractor personnel understand and comply with all elements specified by the International Trade Compliance group.

Watchlist Screening:

Watchlist Screening refers to the process of determining whether parties to a potential transaction with P&W are listed on various “watchlists” established by the U.S. Government.

MK denial reviews:

All contractor personnel will be subject to review by UTC using MK Denial for inclusion on the Denied Persons list. This will be performed initially and on an annual basis.

- Prior to granting access to P&W facilities, network, data, software, or commodities
- Prior to being enrolled in P&W-provided training

Export Compliance

- Export controlled areas are marked with signage as listed in the examples below.



The BAER must review these areas and cleanse them of any technical information that is controlled or not authorized prior to the visit. The BAER should consider the potential for export of technical data, including the visual observation of hardware, controlled processes and equipment by non-U.S. persons visiting an export-controlled area.

Photographic equipment:

- Camera and video equipment (including cell phones with digital camera capability) require a UTC pass, which must be displayed at all times if issued.

Foreign Object Damage (FOD)

Foreign Object Damage (FOD) – Any damage attributed to a foreign object that can be expressed in physical or economic (monetary) terms which may or may not degrade a product's required safety and/or performance characteristics.

Many of our products are sensitive to debris that can be produced during contractor work activities in manufacturing areas. The following requirements must be implemented for all work performed in manufacturing areas to protect our products from FOD:

- ❑ All items brought into the work area should be accounted for, this includes personal items (watch, jewelry, cell phone, food, etc).
- ❑ Every effort should be made to prevent any and all debris or parts to fall from overhead/aerial work areas
- ❑ Tools - All hand and power tools should be accounted for during work. At the end of the day or operation, ensure that all tools, bits, fixtures are accounted for and returned to proper storage locations.
- ❑ Tool breakage- should a tool break or be determined to be missing (or any personal items), contact the Contractor Coordinator to ensure that the tool and all parts can be located.

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SECURITY & IDENTIFICATION

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Security and Identification



- Emergency Services will clear contractors prior to their first day of work at UTC
- During registration, proof of citizenship must be provided. Acceptable documents are:
 - Original birth certificate (no copies) with picture ID
 - U.S. passport
 - INS Resident Alien Registration Card
- For non-US citizens, foreign national authorization is required.

Security and Identification



- All persons visiting the site will register at the appropriate entry points in accordance with site requirements as specified by the Contractor Coordinator
- Contractors will display their one-day or picture badge at all times. Badges are not transferable.
 - Reusable one-day badges are to be turned in at the end of each day.
 - Report the loss of a contractor picture badge immediately to Emergency Services
- Portable radios, tape decks, television sets, cameras, video equipment and cell phones with camera/video capability are prohibited, unless authorized by Contractor Coordinator



Security and Identification

- Firearms of any type are not permitted except under special authorization
- Contractor employees will be restricted to the particular area in which they are working
- Contractors are responsible for the security of all materials, tools and equipment used for the job whether owned or rented by the contractor
- All packages, equipment and vehicles are subject to inspection by Emergency Services
- Contractor Coordinator must authorize access to UTC property during non-business hours



Security and Identification

- Contractor vehicles will be parked in designated parking areas only. After unloading tools or equipment, vehicles must be relocated to the parking areas. Exceptions require Contractor Coordinator pre-approval
- Contractors shall never block access to emergency equipment, or use fire hydrants without approval
- Contractors must conduct themselves in an orderly and safe manner. Fighting, engaging in horseplay, being under the influence of or possessing alcohol or drugs, gambling, soliciting, stealing, immoral or otherwise undesirable conduct is not permitted

BASIC SAFETY REQUIREMENTS

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Housekeeping and Sanitation

- A high standard of housekeeping shall be maintained on the job site at all times. Daily clean up of work areas is required
- All equipment and materials shall be stored in an orderly and safe manner
- Aisles, stairways and exits shall be kept clear, free of debris and equipment



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Housekeeping and Sanitation

- No materials shall be stored on/underneath stairways, or be stored outdoors without the permission of the Contractor Coordinator.
- Material stored outside shall be marked with the Contractor's name and project number
- Each Contractor shall perform work in a manner that will minimize and control the production and migration of noise, dust and debris to adjacent work areas



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Motor Vehicle Safety



- Drivers shall **obey all traffic regulations and signs**, and carry a current driver's license for any vehicles they operate.
- Drivers shall **not use mobile phones** while operating vehicles on company property.
- All vehicles are subject to inspection when entering or leaving the location.
- Vehicle's engines shall be turned off when parked.
- Mobile sources **cannot idle** for more than 3 consecutive minutes when not in motion.
(e.g. ,delivery vehicles, construction equipment, security vehicles, and even personal vehicles)
- Contractor employees shall park their personal vehicles only in those areas designated by P&W Emergency Services or the Contractor Coordinator.



Motor Vehicle Safety

- Drivers shall be mindful of pedestrian traffic at all times.



- All accidents will be reported immediately to the site emergency number.
- Vehicles brought on site carrying equipment must be inspected daily.
- All cargo and equipment on vehicles shall be properly loaded and secured. Vehicles shall not be overloaded.

Personal Protective Equipment

- Contractors shall furnish and require the use of personal protective devices and equipment (PPE) by their employees and by their subcontractor employees.
- PPE shall meet applicable specifications and not be modified or used in any manner other than for which it was designed.

Personal Protective Equipment

Eye Protection

- Employees shall wear safety glasses with side shields that meet the specifications of ANSI Z87
- Safety glasses with side shields shall be worn under welding hoods and face shields.
- Safety glasses with side shields shall be worn under chemical goggles unless the goggles are manufactured with high impact lenses.
- Safety glasses with side shields shall be worn throughout the manufacturing facility and in outdoor work areas, except in the office and cafeteria areas, unless performing work activities.
- Safety glasses tinted above #2 shade are not permitted indoors, unless needed for the job hazards.



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Personal Protective Equipment (cont.)



Hearing Protection

Hearing protection is required in designated and posted high noise areas and when performing high noise producing activities.

Respiratory Protection

Contractors shall provide their employees with respiratory protection to protect them from exposure to harmful dust, mist, fumes, gases or vapors.

Site EHS representatives will advise the contractor of specific location requirements for respiratory protection.

Hand Protection

Contractors shall ensure that their employees wear gloves to protect their hands from chemical agents, heat, cold, etc

Gloves should not be worn around moving machine parts such as belts, pulleys and gears.



Personal Protective Equipment (cont.)

Foot Protection

ANSI-rated steel toe shoes or work boots are required for construction and maintenance activities.

Head Protection

ANSI-Z89 rated hard hats are required on all construction sites

Roadwork/Parking/ Material Loading & Unloading areas

Individuals performing work in roads and parking areas as well as performing material loading and or unloading shall don high-visibility safety apparel in accordance with ANSI/ISEA 107-2004



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Training



Contractors shall:

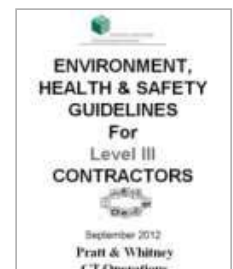
- instruct each of their employees and sub-contractors in the recognition and avoidance of unsafe conditions
- identify regulations applicable to his/her work environment to control or eliminate any hazards or exposure to illness or injury
- require their supervisory employees or lead person to attend **OSHA's 510 or 501 (30 hour) Training Course on Construction Standards**
- maintain records of all employees training
- provide upon request documentation and certification of contractor employee training

Training

All contractors and their subcontractors performing jobs on a P&W premises shall ensure that all of their employees assigned to perform work have been **properly trained to the OSHA regulations** applicable to the hazards associated with the work they will perform prior to permitting the employee(s) to begin work.



- Training may include, but is not limited to, on-the-job (OJT) training, tool box sessions, internal or external formal training, etc. The training must meet the minimum criteria set forth by the state, federal, national, provincial, and local requirements regarding the specific subject matter.
- Contractors are required to work to the most stringent applicable sections of OSHA 1910 and 1926 at a minimum.
- The rules and requirements covered in the Guidelines for Contractor Handbook are not all inclusive and there may be additional requirements specific to a project or task. Copies of OSHA standards can be obtained from OSHA's web site <http://www.osha.gov>.



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Asbestos Containing Materials

- Assume that all piping insulation, joint insulation, floor and ceiling tile, window caulking, and roofing materials, contain asbestos, unless labeled as non-ACM.
- Construction and demolition activities will require prior approval by means of the site Facilities/EHS department review procedure.



Asbestos Containing Materials

- If suspect ACM material is encountered during construction or demolition, the contractor shall **stop** work immediately and call the Contractor Coordinator or the site emergency response number.
- Only trained and qualified workers approved by UTC for asbestos abatement projects may perform asbestos abatement or clean up.



Chemical Handling & Storage/Hazcom



- Contractors shall train their employees on the physical, chemical and biological agents they use in the workplace.
- All chemicals used by contractor personnel must have prior approval via the site EHS approval process.

Chemical Handling & Storage/Hazcom

- Factory Mutual approved metal safety cans with self-closing lids and flame arrests shall be used for handling flammable liquids.
- All containers must be properly labeled for their contents, potential chronic health effects and target organs.



SUBSTANCE IDENTITY (Same as shown on MSDS)	
HEALTH	<input type="checkbox"/>
FLAMMABILITY	<input type="checkbox"/>
INSTABILITY	<input type="checkbox"/>
4 - Severe	1 - Slight
3 - Serious	0 - Minimal
2 - Moderate	

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Chemical Handling & Storage/Hazcom

- Storage and transfer processes of flammable liquids will be grounded and bonded where necessary.
- Emergency safety showers and eyewash units are provided in various areas of the facility. UTC personnel will identify their locations for you.
- In the case that there is not an immediate eyewash station available, your own portable eyewash station may be required.

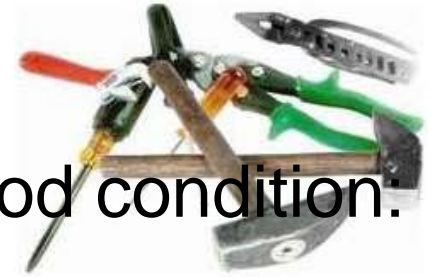


Compressed Gas Cylinders

- If a leak develops in a cylinder, follow emergency procedures and call Emergency Services from any telephone within the facility.
- Cylinders will be permanently labeled, marked or stenciled to identify the gas in the cylinder.
- Cylinders shall be mounted and stored so as to have the content labels facing out.
- Cylinders shall not be transported horizontally on the prong of a fork truck.



Tools



- Hand tools shall be kept in good condition: sharp, clean oiled, etc.
- Tools and other materials shall not be left on ladders, scaffolds, roofs or other places where they may be dislodged and fall.
- Non-sparking tools are required where sparks could lead to a fire or explosion.
- Cords and hoses shall be protected from damage and routed to minimize tripping hazards.

Tools

- All portable power tools, electrical cords and pneumatic hoses shall be kept in good condition.
- Faulty or damaged tools shall be tagged “Do Not Use” and immediately removed from service.
- Powder actuated tools require advance written approval, and shall not be left unattended.



EMERGENCY RESPONSE

This Contains No Technical Data
subject to the EAR and the ITAR

Emergency Response & Notification

EMERGENCY
EXIT

Fires

- Locate and pull nearest fire pull box

OR



- Call the emergency number specific to the site you are working
- Only trained and qualified personnel should attempt to extinguish a fire

Evacuation

- Indicated by an audible signal
- Followed by specific announcement over P.A. system
- Exit quickly and in an orderly manner
- Your Contractor Coordinator will review evacuation routes and assembly areas with you

Emergency Response & Notification

Injuries

- Dial site-specific emergency phone number from any internal UTC phone.
- Pre-work review shall cover the site specific emergency numbers

Provide the dispatcher with the following information:

- Nature of emergency (type and severity of injury)
- Location (dept. name/number, bldg. letter, column #)
- Your name and the name of the company you work for

Emergency Response & Notification



Injuries



- Injuries and illnesses at UTC must be reported to EH&S through the Contractor Coordinator
- EH&S tracks all injuries and illnesses incurred by those contracted to UTC



- **ONLY PROPERLY TRAINED UTC EMERGENCY RESPONSE PERSONNEL ARE QUALIFIED TO CLEAN UP INJURY SITES INVOLVING BODY FLUIDS**

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subject to the EAR and the ITAR

Spills

Spill – an accidental release of any product, including water, outside of its normal container except during use.

THERE IS NO MINIMUM TO THE QUANTITY THAT DEFINES A SPILL.

All spills, including those that occur outside a building, ***shall be reported immediately*** by dialing the emergency response number applicable to the site.

Provide the dispatcher with the following information:

- Nature of emergency (spill type and severity)
- Location (dept. name/number, bldg. letter, column #)
- Your name and the name of company you work for
- Identity of material spilled/released
- Quantity of material spilled/released
- Time of the spill



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Spills

Disposal of chemicals and/or fluids in a sanitary or storm drain is not permitted. Contact your Contractor Coordinator for disposal guidelines.

Contractors shall;

- be responsible for all spills that result from their work**
- not start cleaning up any spill(s) until Emergency Services has authorized them to do so**
- abide by UTC's decision in use of resources besides those of the contractor in cleaning large and / or specialized spills**
- be responsible for all clean-up costs (including area restoration) should UTC use internal / external resources**

Injury & Illness

OSHA's Form 301
Injuries and Illnesses Incident Report

Record Keeping and Reporting

Contractors shall:

- immediately notify the Contractor Coordinator of any injury, illness and or damage to UTC property
- report to the Contractor Coordinator any unsafe conditions
- Perform incident investigation with Contractor Coordinator to identify root cause
- shall submit incident investigation data to the Contractor Coordinator within **24-hours**

This Contains No Technical Data
subject to the EAR and the ITAR



Accident / Incident Investigation



All incidents, injuries, spills and near misses are investigated by the Contractor Coordinator accompanied by the contractor. They are required to:

- secure the area with barricades/caution tape to preserve the scene
- perform a walk-through of the incident site
- interview witnesses, where applicable
- take photographs and/or create a diagram of the incident site

Accident / Incident Investigation

An incident report is required for the following:

- recordable injury
- environmental release deemed hazardous by the Environmental Health and Safety department
- significant property damage



Within 24 hours of the incident

Submit a written investigation report to the Contractor Coordinator describing:

- the incident in detail
- the root cause and corrective action(s)
- a timetable for implementing the corrective action(s)

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subject to the EAR and the ITAR

Cardinal Rule Programs

UTC CARDINAL RULE PROGRAMS

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Confined Spaces



- **Cardinal Rule: Contractors shall follow their own Confined Space Entry procedure when entry into a designated permit required confined space is necessary.**
- Contractors shall submit their procedure to their Contractor Coordinator for review and approval prior to entering a permit required confined space.
- Contractor Coordinator must provide a copy of the confined space assessment and rescue plan to the contractor.

Confined Spaces

- Contractor shall review the completed entry permit with their Contractor Coordinator or EH&S personnel prior to entry.
- All permits will be provided to Site EHS
- UTC will retain a copy of permit.
- Contractors will supply all necessary equipment and support personnel required to enter a “Permit Required Confined Space”.
- UTC EH&S personnel reserve the right to deny entry into a confined space should conditions warrant it.





Lockout/Tagout of Hazardous Energy Sources

Cardinal Rule:

Before working on machines or equipment Contractors shall isolate all forms of hazardous energy, secure them with locks and tags, then verify Zero Energy State.



- Contractors shall restrict access to work areas where energy sources have been de-energized for entry by unauthorized employees.
- During multiple trade lockout tagout events, a Primary Authorized employee must be designated to oversee the event, and each employee who will perform work that exposes them to the controlled energy must verify or witness zero energy state for each hazardous energy sources he or she will be exposed to.
- Each contractor employee performing operations where equipment or systems require de-energizing shall place his/her own lock and tag on each energy source requiring de-energizing; each employee shall sign and date the tag.



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Lockout/Tagout of Hazardous Energy Sources

- Standardized lockout devices and "Danger" tags shall be used.
- The tag shall include the employee's name, the name of the contractor they work for, the date the lock is installed and the reason for lockout is required.
- If equipment for de-energizing is in a confined space, the confined space will be cleared of all employees prior to testing the energy source for deactivation.
- Contractor employees shall remove only their own locks and tags when they complete their work.
- All affected employees shall be notified.



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Lockout/tagout of Hazardous Energy Sources

Special Permits:

- **Line Breaking** - Whenever authorized employees intend to perform work associated with the intentional opening of a pipe, line, or duct that is or has been carrying **flammable, combustible, corrosive, or toxic material, or any fluid at a volume, pressure, temperature, or unknown substance capable of causing injury**, a line breaking permit is required.



- Line breaking permits required if breaking into a live / pipe containing a hazard.
- Gas line purging permit required for all work done to lines containing flammable gasses.

(P&W) Form CTF AP 22.05.2.2

Line Breaking Permit

The work is to be done in a live line (condition under pressure) and it is intended to break the pipe or duct into two or more sections. When this work is done, the pipe or duct will be open to the atmosphere. The work must be done in accordance with the following conditions:

PERMITS

1. Permit required (Specify Energy Control Procedure) and no Live Work Substances in the area provided

LINE BREAKING CONDITIONS	Permitting for Closure	Work Resumption Required

2. No live substances in the area provided
3. No live substances in the area provided
4. No live substances in the area provided
5. No live substances in the area provided
6. No live substances in the area provided
7. No live substances in the area provided
8. No live substances in the area provided

Work to be done: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Hazardous Gas Purging Operations: Truck Permit

HAZARD C PROJECT DESCRIPTION AND APPLICABLE DETERMINATION

Work & Safety: _____

Project: _____

Phase: _____

Start: _____

End: _____

Work to be done: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

Work to be done on: _____

Work to be done at: _____

Work to be done by: _____

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Powered Industrial Vehicles

Cardinal Rule:

- **Contractor operators must be properly qualified / authorized and abide by all traffic rules. Be aware of surroundings and always yield to pedestrians.**



Scope and Application

- These requirements apply to all contractor vehicles whether owned, rented, or leased.
- Contractors must provide their own powered industrial vehicles (PIV's) that are in proper working order and comply with safety standards.
- Operators of PIVs shall be trained in their safe operation, and shall carry proof of training with them in some form (a permit, wallet card, copy of a training record, etc.) and provide such proof upon request
- Powered industrial vehicles include, but are not limited to, fork trucks, electric buggies, aerial lifts, earth-moving equipment, cranes and hoisting equipment.

Powered Industrial Vehicles

Registration Requirements:

- UTC Contractor Coordinator must register resident and non-resident contractor PIVs
- Initial inspection must be completed by the UTC Contractor Coordinator.
- All contractor PIVs shall be identified with the Company Name and PIV Number on four sides of the PIV. The letters shall be a minimum of two inches high.

Powered Industrial Vehicles

Inspection/ Maintenance requirements

- Contractors must maintain a copy of an annual inspection performed by a qualified person of each vehicle brought on site.
- Contractors are responsible for daily inspections of PIV's and a record of this must be kept in the vehicle at all times. All defects shall be corrected before the vehicle is placed in service.



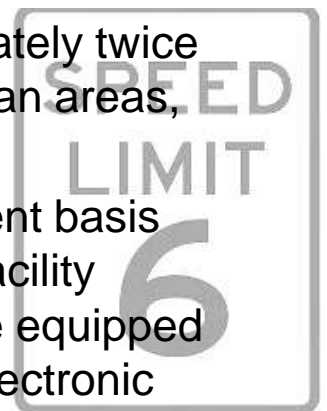
- Any vehicle found deficient must be removed from the site and will not be allowed back until the items have been repaired and a new inspection and maintenance report has been presented.
- All PIVs shall have a record of periodic maintenance in accordance with manufacturer's requirements
- Maintenance and inspection of contractor PIV's must be performed at least annually by a qualified individual.



Powered Industrial Vehicles

Operational Requirements:

- PIV speed will be limited to **6-mph/10-kph** (approximately twice walking speed) in manufacturing areas, high pedestrian areas, and areas with other potential significant risks.
- All resident contractor PIVs being used on a permanent basis including electric buggies/carts operating inside the facility capable of traveling faster than 6-mph/10-kph must be equipped with a **physical speed limiter device** (mechanical/electronic governor, keytroller) by **July 1, 2014**.
- Contractor equipment brought in for temporary use only is exempt from speed limiting control devices but the PIV shall have administrative controls in place to control speed (speedometer) and operations must comply with the 6 MPH speed limit.



Powered Industrial Vehicles

Operational Requirements:


- PIV operators must abide local rules (e.g., speed limits, restricted areas).
- PIV operators are not allowed to talk on a cell phone or wear ear buds/headphones while operating any PIV to avoid distracted driving. However, noise protection devices such as earmuffs or earplugs are permitted.
- PIV operators shall wear their seat belt at all times during operation when their PIV is provided with one by the manufacturer.



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Powered Industrial Vehicles

Operational Requirements

- All buggies, flatbeds, fork trucks, stackers and golf carts including those used in parking lots and roadways must have a yellow flashing (non-strobe) light that indicates that it is in operation. 
- All fork trucks, electric buggies, carts and earth moving equipment must have an audible alarm when operating in reverse. Audible alarms must be of sufficient sound level to be heard over ambient noise.
- PIVs designed solely for the transport of employees are not allowed on the site
- Diesel and gas powered vehicles are prohibited inside buildings unless prior approval and arrangements for ventilation have been made with the Contractor Coordinator and the EH&S department.



Electrical Safety

Cardinal Rule: Contractors must provide ground-fault circuit interrupters (GFCI's) at all times when using electric power cords in order to protect employees from ground-fault hazards.

- The requirements of NFPA 70E 2012 shall be followed for all live electrical work. This covers requirements for PPE, flash clothing, insulated tools, live work permits and establishing a blast radius for all work to be performed.
- Exposed live electrical parts will be de-energized and locked out before working on or near them whenever practical.
- Working on or near live electrical parts other than troubleshooting requires a Live Work Permit, which must be obtained through your contractor coordinator

Electrical Safety



- Use of electrical tape for temporary repair of frayed cords is prohibited.
- Extension cords shall not be fastened with staples, hung from nails or suspended by wire.
- Only qualified electrical contractor employees may enter substations and/or transformer vaults and only after being specifically authorized by the Contractor Coordinator. All others must be accompanied at all times by P&W qualified personnel.



Elevated Work

Cardinal Rule: For any (contractor) employee working six feet or more above an exposed work surface, contractors shall provide primary fall protection whenever possible and secondary fall protection only when primary fall protection is not practical.

- For work that requires disconnection from an anchorage point, a full body harness with two shock absorbing lanyards and locking snaphooks shall be used.
- Contractors must attach the second lanyard to a suitable anchorage point prior to disconnection from the original anchorage point.
- The anchorage point must be at waist level or higher; and capable of supporting at least 5,000 lbs. per employee attached.

Elevated Work

Primary Fall Protection System:

- Primary fall protection systems (e.g. guard rails) provide protection for walking and working surfaces in elevated areas with open sides, including exposed floor openings.
- Primary fall protection systems include, but are not limited to, fixed guardrails, as well as scaffolds, aerial lifts and other approved personnel lifting devices.

Secondary Fall Protection Systems:

- A secondary fall protection system consists of an approved full body harness and two shock-absorbing lanyards.
- A secondary fall protection system shall be worn when primary fall protection is not practical or feasible.
- Use of a secondary fall protection system shall include the prior establishment of a rescue plan for the immediate rescue of an employee in the event they experience a fall while using the system.



Elevated Work- Suspended Ceilings

- Suspended, drop, false or fragile ceilings that are not intended to be load bearing must have an appropriate warning as such that is visible from all normal access points (by January 1, 2013).
- Suspended, drop, false or fragile ceilings that are not intended to be load bearing must have an engineering control such as a guardrail separating them from walking/working surfaces (if accessible from those walking/working surfaces) by January 1, 2014.



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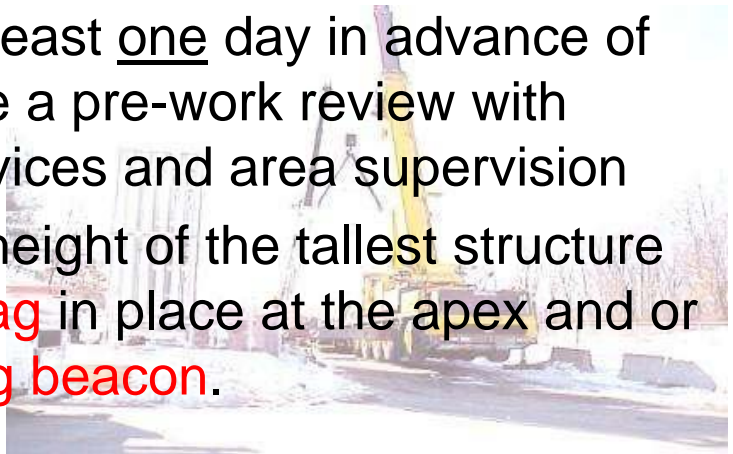
Cranes/hoisting, Ladders, Scaffolds, Aerial lifts

OVERHEAD WORK

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subject to the EAR and the ITAR

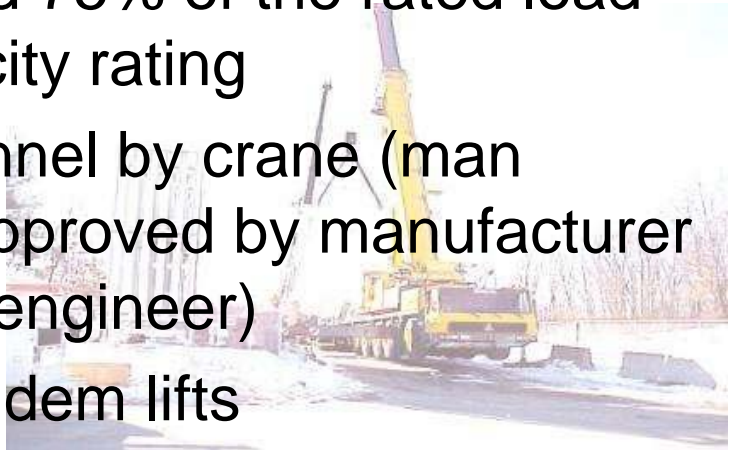
Cranes and Hoisting Equipment

- Operators must be *certified* to operate cranes
- Personnel must meet certification requirements of US, state and local governmental regulations
- The Contractor Coordinator shall be notified of all proposed crane use at least one day in advance of the actual lift to facilitate a pre-work review with EH&S, Emergency Services and area supervision
- If a crane exceeds the height of the tallest structure on site it shall have a **flag** in place at the apex and or equipped with a **flashing beacon**.



Cranes and Hoisting Equipment

- Critical lift guidelines:
 - Lifts which exceed 2 tons over critical equipment or occupied buildings
 - Lifts which exceed 75% of the rated load chart crane capacity rating
 - Hoisting of personnel by crane (man basket must be approved by manufacturer or a professional engineer)
 - Multiple crane tandem lifts
 - Work under power lines closer than 20 feet



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Cranes and Hoisting Equipment

Whenever there is a concern as to safety, the operator has the authority to stop and refuse to handle loads until a qualified person has determined that safety has been assured.

Every crane operation must have a dedicated signal person whenever:

- the point of operation is not in full view of the operator
- when traveling,
- or anytime the operator or the person handling the load determines that it is necessary.

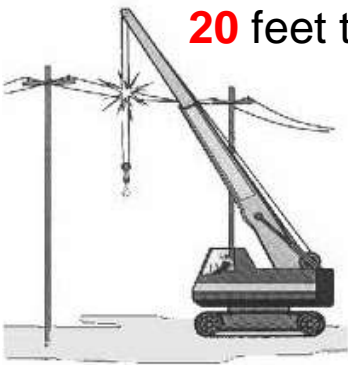


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Cranes and Hoisting Equipment

Working near power lines:

- When working around power lines, determine if any part of the equipment, load line or load if operated up to the equipment's maximum working radius in the work zone could get closer than **20** feet to a power line.



If so, one of the below must be met:

- **De-energize the ground.** Confirm from utility owner/operator that the power line has been de-energized and visibly grounded at the work site.
- **20 Foot Clearance:** Ensure that no part of the equipment load line or load gets closer than 20 feet to the power line.
- Determine the lines voltage and the minimum approach distance permitted

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Cranes and Hoisting Equipment

When making a lift with a crane:

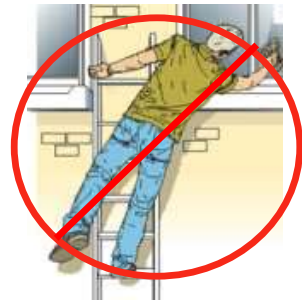
- One person shall supervise the lift.
- One person, proficient in hand signals, shall perform signaling.
- Signals will comply with ANSI standards for the type of crane used.
- An illustration of the signals will be posted at the job location.
- Crane operator and signal person will maintain continuous visual contact during lifting operation.
- Area shall be cleared and roped or barricaded off.



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Ladders

- No ladders other than Type 1 (heavy duty 250lbs) or Type 1A (extra Heavy duty 300lbs) shall be used.
- The top or first step below the top of ordinary stepladders will not be used as a step or a stool.
- Fiberglass ladders are mandatory for electrical tasks or when working in close proximity to electrical services.
- Employees shall not perform work that causes stretching of the center of the body beyond the ladder rail.



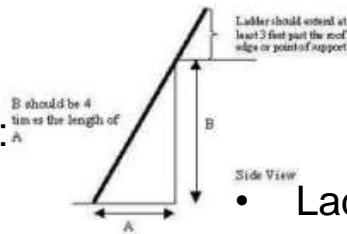
Ladders

- Ladders must be secured to keep them from shifting, slipping, being knocked or blown over.
- Ladders must be lowered and securely stored at the end of each workday.
- Ladders should not be placed in front of doors or door openings unless the door is either locked closed, monitored by an attendant or blocked open to prevent contact with the ladder.
- Ladders used for access to an upper landing surface shall have side rails that extend at least **three feet** above the landing surface.



Ladders

- Employees shall lean extension ladders at a 4':1' (height on wall: distance to wall) ratio.



When ascending or descending a ladder, the user shall:

- face the ladder
- use at least one hand to grasp the ladder;
- not carry any object or load that could cause him/her to lose balance and fall.



- Ladders will be visually inspected by a *competent person* and approved for use before being put into service
- Each user shall inspect ladders visually before using.
- Ladders with structural defects shall be tagged "**Out of Service-Do Not Use**" and immediately taken out of service.

This Contains No Technical Data
subject to the EAR and the ITAR

Overhead Work

- Loads shall not be suspended over any persons nor over occupied building areas.
- Contractors shall secure area with safety stanchions or caution tape and post warning signs to alert pedestrians and area occupants of overhead work.
- When work is limited to a visual inspection without tools (no potential for falling objects) - Caution tape or safety cones at a minimum of 2 feet from the work may be used.
- Employees who need to be within the barrier shall wear hard hats



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Scaffolding

- All scaffolds shall be inspected by the contractor competent person prior to use and shall be tagged and signed as acceptable.
- The footings or anchorage for scaffolds shall be sound, rigid and capable of carrying the maximum intended load without settling or displacement.
- Guardrails and toe-boards shall be installed on all open sides and ends of scaffold platforms that are more than four feet above the ground or floor.



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Aerial Lifts

Aerial lifts (boom, scissors, snorkel types, etc.) and other vehicle mounted elevated work platforms shall:

- **Meet all OSHA PIV requirements**
- **Be operated by properly trained personnel per regulations**
- **not be operated within 10 feet of overhead electrical power lines**

Areas below overhead work will be **clearly marked** with safety stanchions, caution tape and signs to protect associates at grade level



This Contains No Technical Data
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Aerial Lifts

- Employees shall work from the floor of the lift only.
- Climbing on handrails, mid-rails or brace members is **prohibited** unless a **permit** (where applicable) to do so has been issued
- Personal fall protection equipment is required to be worn at all times
- This requirement can be met by wearing either;
 - a. a fall restraint system; or
 - b. a fall arrest system
- ***Exception for scissor lifts: Personal Fall Protection is not required for the following scenario unless required per the manufacturer: Employees working in a properly guarded vertical scissor lift that is used in a stationary position on a level surface or moving while not elevated.***



ROOF WORK

This Contains No Technical Data
subject to the EAR and the ITAR

Roof Work/ Access

Personal Fall Protection:

- **Employees and contractors working on roofs 6ft. and higher with an unprotected edge, shall be protected from falls by one of the following methods.**
 - (a.) Construction of an approved temporary guardrail system
 - (b.) Personal fall protection equipment



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subject to the EAR and the ITAR

Roof Work/ Access

- Only personnel who have reviewed and fully understand the requirements of Site Specific Roof Activity Fall Protection work instructions are permitted to access roofs.



**AUTHORIZED
PERSONNEL ONLY**

PERFORMING WORK ON ROOFS

Personnel performing work on roofs with an unprotected edge must proceed directly to their work area. While in transit, they shall focus on staying as far away from unprotected edges as possible and continue moving toward the designated work area without stopping until they arrive. Upon arrival of work area you must either:

1. If greater than 15* feet from an unprotected edge:

1st: tie off in a fall restraint mode

2nd: Erect a Warning line that is at least 15 feet from any unprotected edge. All work must be done within the warning line.



2. If within 15 feet from an unprotected edge:

Personnel must use secondary fall protection always attempting in the below order.

1st: fall restraint with a restraint lanyard

2nd: fall positioning with a retractable lanyard

3rd: fall arrest with a shock-absorbing lanyard.



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INSPECTIONS ON ROOFS

Personnel accessing roofs to perform inspections or assessments of workplace conditions are exempt from using fall protection as long all the following criteria is met:

- Inspection is being performed before or after work has taken place.
- The employee making the inspection or assessment is aware of roof conditions, and is competent in recognizing and abating fall hazards.
- Inspector activities are limited to visual inspection, basic measurements and note taking.
- Any discussion, meeting, conversation or phone call while inspecting shall take place at least 15 feet from an unprotected edge.
- While in transit, the inspector shall stay as far from unprotected edges as possible. Employees approaching an unprotected edge shall travel in a perpendicular direction only.

BARRICADES & OPENINGS

This Contains No Technical Data
subject to the EAR and the ITAR

Barricades

FOR TRENCHES / HOLES / PITS

- If 4 feet or more in depth use a standard rail system that meets OSHA 1910.23(e) specifications
- Falls greater than 6 feet when inside the barricade, workers require additional fall protection
- 42 inch snow fencing or equivalent is acceptable for distances under 4 feet



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Barricades

HAZARDOUS AREA'S

- **42" snow fencing:** New Construction Area's
Unattended Work Area's
Authorized personnel only
- **Danger Tape:** Work in progress (attended)
Hazard potential moderate - severe injury
Authorized personnel only
- **Caution Tape or Cones:** Work in progress (attended)
Hazard potential minor
Authorized personnel only
- **Blocked Main Aisles:** Require contractor coordinator approval
Detour signs posted to alternate emergency exits
Authorized personnel only



Floor and Wall Openings

- A cover or a standard railing and toe board shall guard floor openings. The railing shall be provided on all exposed sides, except entrances to stairways.
- A standard railing or equivalent shall guard every **open-sided floor or platform** four feet or more above an adjacent floor or ground level.
- A toe-board shall be provided wherever persons can pass beneath the open sides or there is moving machinery or equipment which falling material could create a hazard.
- Employees shall be protected at all open sides and edges during the performance of built-up roofing work on low-pitched roofs.
- Contractors will post, install, and maintain signs, signals and barricades to detour passage of persons and vehicles at locations where potential hazards exist.
- Barricades shall be placed where necessary to warn employees against hazardous conditions and activities, such as overhead work, floor and wall openings and trenches.

Permits, Welding/Cutting/ Brazing, Fire Prevention

HOT WORK

This Contains No Technical Data
subject to the EAR and the ITAR

Fire Protection & Prevention

- Do not block emergency exits
- Access to fire fighting equipment, fire control and emergency vehicles shall be maintained at all times.
- Contractor shall familiarize employees with emergency response procedures.
- Contractors shall provide their own fire extinguisher for protection against hazards they introduce to the job location.
- Contractor fire extinguishers shall be inspected annually by a certified person, and visually inspected monthly and documented by the contractor.
- All tarps/ barriers/ sheeting shall be “fire/flame retardant” and shall be marked accordingly
- In the event of an alarm, contractor shall evacuate the area. Contractors are also required to evacuate during drills.
- **Smoking is not permitted anywhere on UTC property,**



Proper labeling, such as "Fire Retardant" is required for all flame retardant sheeting.

Hot Work Permits

- Contractors shall comply with the facility's hot work permit requirements as described below.
- A hot work permit shall be requested from the site department designated by the Contractor Coordinator for any activity that produces a source of ignition. Such activities include but are not limited to:

- Gas welding and cutting
- Electric arc welding
- Heating torches and other open flames
- Tar pots and kettles
- Other activities that produce a spark.



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Hot Work Permits

- Hot work permits are issued for one contractor's continuous work shift for a specific operation and will be displayed at the job site.
- Hot work permits are not transferable across Contractor shifts.
- Suitable fire extinguishing equipment (e.g., fire blankets, non-combustible heat shields, flash curtains and fire extinguishers) shall be provided by the contractor and shall be immediately available in all welding, cutting and brazing locations.
- For hot work involving open flame or high heat generation, a **fire watch** may be required during the conduct of the work as determined by Emergency Services.
- A fire watch is required for a minimum of **60** minutes after completion of the job, as directed by our insurance carrier Factory Mutual. The contractor shall provide the manpower for the watch.

Hot Work Permits

The following fire prevention activities shall be completed before hot work can begin:

- Combustibles shall be moved at least 35 feet from the hot work operations.
- Flammable liquids shall be removed from the area or totally isolated from the vicinity of the hot work
- Tarpaulins used as hot work barriers will be flame resistant.
- Combustible dust shall be cleaned from the vicinity
- Lines previously containing a flammable or combustible fluid must be purged, protected by inert gases, and verified safe for exposure to ignition sources.
- Floor, wall and other openings shall be closed or covered
- Contractor's employees shall be informed of the location of the nearest fire alarm pull box.
- Surrounding floors made of combustible construction shall be protected with a flame-retardant cover.

Welding, Cutting and Brazing



- A hot work permit must be obtained prior to all welding, cutting and brazing operations.
- Suitable fire extinguishing equipment shall be immediately available at all welding, cutting and brazing locations.
- Exhaust ventilation and/or air line respirators shall be provided whenever welding, cutting or heating is performed in a confined space.

Welding, Cutting and Brazing

- All hoses carrying acetylene, oxygen, fuel gas or other hazardous substance shall be inspected before each shift.
- Defective hoses and torches shall be tagged “DO NOT USE” and immediately removed from service.
- Acetylene cylinders shall not be stored on their side.



Welding, Cutting and Brazing

- Torches shall be lighted from friction lighters and not by matches or from hot work.
- Directional gas flow fittings (back-flow valves) shall be provided on hoses to prevent reverse gas flow.
- Arc welding and cutting operations shall be shielded by non-combustible or flame-retardant screens to protect employees from the direct rays of the arc.

Shoring, Excavation/Trenching

EXCAVATION

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Concrete, Concrete Forms and Shoring

- All protruding reinforcing steel will be guarded to prevent impalement.
- Employees shall not work under suspended concrete buckets.
- Fall protection systems and other necessary protective equipment required when 6 feet above working surface.
- Form work and shoring will safely support all vertical and lateral loads.
- A limited access zone **(length of finished wall)** will be established whenever a masonry wall is being constructed:



$$\text{ZONE} = (\text{Height of finished wall}) + (4 \text{ feet})$$

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Demolition and Dismantling

- **An engineering and environmental survey shall be made by a competent person prior to commencing the demolition of any structure.**
- **The survey shall determine the condition of:**
 - framing
 - floors
 - walls
- **The survey shall determine the potential for:**
 - possible unplanned collapse of structure
 - presence of hazardous materials



Trenching and Excavating



Exterior trenching, excavating or drilling

- **State Law requires the contractor to contact “Call Before You Dig” 1-800-922-4455 or 811 two full working days prior to any trenching, excavating, digging or drilling activities.**
- The Contractor and Contractor Coordinator shall clearly mark on the surface grade in paint the boundary limits of the planned work area with “CBYD”.
- Prior to commencing any subsurface excavation/digging/ trenching activity the Contractor Coordinator and the contractor **shall verify** that subsurface surveys have been completed upon receipt of appropriate documentation and or field marking of surface grade by a scanning professional.

Trenching, excavating or drilling into concrete (interior/exterior)



- Prior to commencing any subsurface excavation/digging/ trenching/drilling activity into a concrete surface a 3 dimensional scan shall be performed by a scanning professional.

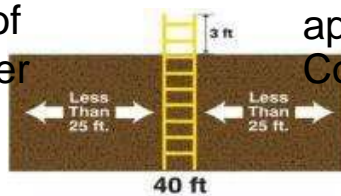
Trenching and Excavating



- Underground lines, equipment and electrical cables shall be identified and located prior to beginning work.
- Do not initiate work without prior approval/authorization
- ***Competent person must be assigned*** to all trenching and excavation work.
- Walls and faces of trenches and excavations, four or more feet deep, shall be shored, sloped or shielded
- Approval from the Contractor Coordinator and EH&S is required before commencing, or continuing, with trenching deeper than four feet.

Trenching and Excavating

- **Physical barriers** shall be placed around or over trenches and excavations. 
- Flashing light barriers shall be provided at night.
- A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are four feet or more in depth so as to require no more than 25 feet of lateral travel for employees.
- **Daily inspections** shall be conducted by a **competent person** for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems or other hazardous conditions.
- A confined space entry permit is required where an oxygen deficient or other hazardous atmosphere may exist.
- Employees shall not be permitted underneath loads handled by lifting or digging equipment.
- Employees shall be protected from excavated or other materials and equipment that could cause a hazard by falling or rolling into the excavation. 
- Erosion control measures to minimize storm water pollution shall be reviewed with and approved by the Contractor Coordinator



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Sample Slide: Special Operations Requirements For Concrete/ Road

Concrete/Road Saw cutting/drilling/ coring

To avoid accidentally contacting unknown live electrical utilities follow the following:

- Set up a designated “Safe Zone”
- Wear PPE
 - Dielectric Protective Footwear meeting ASTM F1117-03 (2008) standards
 - Insulating Protective Gloves (ASTM standard D 120) at a minimum



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MISCELLANEOUS OPERATIONS

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Working in a Manufacturing Unit

- When construction work is performed in a manufacturing unit, work shall be coordinated with the unit supervision through the Contractor Coordinator
- Contractors shall not access or perform any work on manufacturing processes or equipment unless specifically directed by their Contractor Coordinator
- Contractor employees who must operate UTC manufacturing equipment shall get prior approval and be trained in the operation before starting the work

Miscellaneous Operations Requirements

■ Blasting

- Any use of explosives, caps, blasting equipment, etc. must be reviewed and approved in advance by the Contractor Coordinator, the site EH&S Department and the site Emergency Services Department



■ Breaking Into Pipelines

- The Contractor Coordinator will review any specific line entry procedures for the site, including a review of emergency procedures and material safety data sheets for materials contained in pipelines (as applicable)

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Miscellaneous Operations Requirements

■ Clean Rooms

- The generation of dust and dirt by job activities must be minimized in clean rooms
- No food or drink allowed in clean rooms
- Appropriate clean room garments must be worn unless otherwise approved by the Contractor Coordinator
- Clean Rooms shall be entered and exited through approved doorways only
- All construction materials, tools, ladders, etc. entering the Clean Room shall be as clean as possible prior to entry

Miscellaneous Operations Requirements

■ Computer Rooms

- To avoid accidentally engaging switches, breakers, buttons, etc., do not place tools or materials on or against any equipment in computer rooms
- When working on any activity where flying or falling conductive material might occur (soldering, welding, sawing, etc.), all computer equipment near this activity must be completely protected from the falling material

Electrostatic Discharge Sensitive (ESDS) Areas

- Always wear static discharge equipment (except electricians) and test the static discharge equipment for effectiveness. Do not touch any ESDS equipment or hardware





Sprinkler Systems

- Contractors shall not install, paint or alter sprinkler systems without prints or documentation approved by the department at the site responsible for fire safety.



Noise

Hearing protection to be used:

- in accordance with facility rules
- posted signs



Noise protection:

- Levels greater than 85 dBA must be reported to the Contractor Coordinator

Miscellaneous Equipment



LASERS

- Prior approval must be obtained from the site EHS department before used on site



Radiographic Equipment

- Prior approval must be obtained from the site EHS department before used on site
- Approved radiation sources shall not be left unattended or on **UTC** property overnight



Temporary Heating Devices:

Propane or Resistance Heaters

- Must be approved by a nationally recognized testing agency (e.g. UL, Factory Mutual, etc.)
- Heater use and location must be approved in advance by the Contractor Coordinator
- Hot work permit must be issued on day of use

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Miscellaneous Equipment



Electric Utility Use:

- **Access appropriate electric utility sources**
- **Accessing power from test stands or production equipment is prohibited**

ENVIRONMENTAL REQUIREMENTS

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Clean Fill Materials

- Any fill material being brought on to UTC property must be free from contaminants. This may be confirmed by any of the following methods:
 - Certification in writing by the contractor that the fill is free of contamination
 - Taking reasonable steps to ensure fill material is clean such as composite sampling and analysis, review of fill source disclosure, photo ionization screening for fill material, etc.
 - Visual inspection of the fill material when it is placed on UTC property.

Stacks and Drains

- Stacks and drains shall not be painted, removed, relocated or altered in any way without prior approval from the UTC Contractor Coordinator.
- Operational exhaust systems shall not be compromised in any way without prior approval from the UTC Contractor Coordinator.

Waste Management

- Contractors must have pre-approval from the UTC Contractor Coordinator for all processes that will generate wastes, waste water or air emissions.
- All wastes must be properly characterized, managed and disposed of.
- Contractors shall provide appropriate, labeled containers for construction debris and general trash.

Waste Management

- No waste materials shall be disposed of or transported off-site without prior approval from the UTC Contractor Coordinator. (Contractors may be responsible for off-site disposal of non-regulated construction debris).
- Contractors shall provide the following information to the Contractor Coordinator for all waste disposed of off-site:
 - Date
 - Description of the Waste
 - Total Weight
 - Name of Transporter
 - Name, Address and Phone Number of the Disposal Facility

Contractors shall not add waste to existing waste collection containers without prior approval of the Contractor Coordinator.

Stormwater Management

- Contractors shall not pour any wastes or virgin materials, including waste water, into any sinks, drains, toilets, storm sewers or the ground.
- Any containers, equipment, pallets stored outdoors, *including roll-offs*, shall be covered and protected from the weather, and located to minimize the risk to storm drains.
- **Washing or rinsing vehicles is not permitted onsite**



Dumpster management

- Dumpsters must not be stored over a storm drain.
- Dumpsters must be provided with an impermeable cover such as a tarp or be maintained under a roof at all times to prevent entry of storm water.
- Dumpsters must be labeled for the materials they are permitted to contain and the name of the contractor who owns them.
- If a Dumpster's cover is damaged, it must be replaced immediately.
- Drain plugs must remain intact.
- Dumpsters must be structurally sound (no puncture holes, severe dents, etc.).
- Dumpsters must be covered at all times when not being actively filled.

END

Congratulations!
You have completed Level III
Contractor Training
Proceed to the Exam

Attachment D
Applicable SH&E SOPs

**New York State Department of Health Generic Community Air
Monitoring Plan and Fugitive Dust and Particulate Monitoring
Requirements**

Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B

Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.
2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.
3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM10) with the following minimum performance standards:
 - (a) Objects to be measured: Dust, mists or aerosols;
 - (b) Measurement Ranges: 0.001 to 400 mg/m³ (1 to 400,000 :ug/m³);
 - (c) Precision (2-sigma) at constant temperature: +/- 10 :g/m³ for one second averaging; and +/- 1.5 g/m³ for sixty second averaging;
 - (d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
 - (e) Resolution: 0.1% of reading or 1g/m³, whichever is larger;
 - (f) Particle Size Range of Maximum Response: 0.1-10;
 - (g) Total Number of Data Points in Memory: 10,000;
 - (h) Logged Data: Each data point with average concentration, time/date and data point number
 - (i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
 - (j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
 - (k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
 - (l) Operating Temperature: -10 to 50° C (14 to 122° F);
 - (m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.
4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.
5. The action level will be established at 150 ug/m³ (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m³, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m³ above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m³ continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM₁₀ at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;
- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases; and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m³ action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.

Construction Stormwater Pollution Prevention Plan



Environment

Prepared for:
United Technologies Corp.
Shared Remediation Services
Farmington, CT

Prepared by:
AECOM
Latham, NY
June 2014

**SOUTHEAST DEBRIS/SOIL PILE
UTC/CARRIER SITE
THOMPSON ROAD, SYRACUSE, NY**
Construction Stormwater Pollution
Prevention Plan

Corrective Action Order - Index CO 7-20051118-4
NYSDEC Site Registry #734043



SOUTHEAST DEBRIS/SOIL PILE UTC/CARRIER SITE THOMPSON ROAD, SYRACUSE, NY Construction Stormwater Pollution Prevention Plan

Corrective Action Order - Index CO 7-20051118-4
NYSDEC Site Registry #734043

Prepared for:



UTC Shared Remediation Services
9 Farm Springs Road
Farmington, Connecticut 06032

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Appendix B – NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity
(No. GP-0-10-001)

Appendix C – Inspection and Maintenance Reports

1.0 Introduction

1.1 General Project Description

1.1.1 Purpose

On behalf of United Technologies Corporation (UTC), AECOM Technical Services, Inc. (AECOM) has prepared this Storm Water Pollution Prevention Plan (SWPPP), which has been written to address stockpiled material placed on a 3.8-acre parcel of land identified as the Southeast Debris/Soil Pile (Debris Pile) located at the UTC/Carrier facility on Thompson Road, Syracuse, New York (**Figure 1**).

This SWPPP was prepared in accordance with the New York State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (GP-0-10-001) dated January 29, 2010.

An Interim Remedial Measure Work Plan (IRM WP) has been prepared pursuant to the Corrective Action Order CO 7-20051118-4 (Order) between The United Technologies Corporation (UTC)/Carrier Corporation and the New York State Department of Environmental Protection (NYSDEC), effective January 4, 2006. The proposed IRM consists of the removal of polychlorinated biphenyl (PCB)-impacted surface soils at the UTC Carrier Facility. Following soil removal activities, site restoration will take place with the goal of matching post-construction site conditions and stormwater flow patterns to pre-existing conditions. The IRM work boundaries and sequence of activities will be established prior to commencement of remediation. Any changes made to this SWPPP will be documented in a Record of Plan Amendment.

The Self-Implementing Cleanup and Disposal Plan (SIP) (AECOM, May 2014) provides detail regarding the facility's background, geology and hydrogeology.

2.0 Proposed Site Activities

2.1 Interim Remedial Measures

The field activities that are planned as part of the IRM are described in this section. This SWPPP describes the general procedures for site preparation, soil removal, waste handling, waste characterization, off-site treatment and disposal, and restoration.

AECOM will provide or direct the responsibility for inspections and other support to ensure compliance and proper application of this SWPPP.

As a result of the Order between UTC/Carrier Corporation and NYSDEC, this work plan constitutes submission of a Notice of Intent to NYSDEC in accordance with GP-0-10-001. A Notice of Termination will be provided to NYSDEC following completion of construction activities.

All subcontractors with the potential to perform work related to stormwater management will be required to sign a certification agreeing to comply with the SWPPP prior to commencing any construction activity (see **Appendix A**).

2.2 Stormwater Management Objectives

Remediation work activities under a NYSDEC-approved work plan do not need to obtain coverage under the General Permit. However, this SWPPP meets the “substantive requirements” of the General Permit GP-0-10-001 (See **Appendix B**). This SWPPP includes water quality and quantity control provisions in addition to the Erosion and Sediment Control Plan.

The management of stormwater will be per project-specific implementation of methods described in both the New York State Standards and Specifications for Erosion and Sediment Control (August 2005) and the New York State Stormwater Management Design Manual (August 2010). The goals include minimizing erosion and sedimentation impacts from construction activity involving soil disturbance, meeting pollutant removal goals, reducing channel erosion, preventing overbank flooding, and helping to control extreme floods.

All measures proposed are intended by design to conform to the NYSDEC’s technical standards.

2.3 Pre-development Conditions

2.3.1 Natural Drainage Areas and Drainage Points

Surface runoff radiates outward in a relatively proportionate manner from the midsection of the Site. Upon reaching perimeter grading of the Site, surface runoff flows through storm sewer lines, swales, and/or ditches that the Site drains to eventually discharge to surface waters located north of the Site.

Refer to **Figure 2** for existing site conditions and an overview of the general drainage pathways, drainage areas, and outfall locations.

2.3.2 Waters and Wetlands

No designated wetland areas are present on the Site.

2.3.3 Critical and Environmentally Sensitive Areas

There are no "critical and environmentally sensitive areas" on the Site.

2.3.4 Utility Lines, Easements, Water Supply Wells, and Sewage Treatment Systems

There are currently no active overhead electric lines, buried telephone lines, water, or sewer infrastructure at the Site. There is an abandoned power line on the Debris Pile that will be removed prior to commencement of remediation activities. Additionally, there is a gas line present to the east of proposed excavation activities and is not expected to be impacted by the work.

2.3.5 Soils

The soil types currently present at the Site include historic fill material from the previous development and construction in the area. The fill consists mainly of construction debris and loose, unconsolidated sands and gravels.

2.3.6 Historic Places and Archaeological Resources

No Historic Places and/or Archeological Resources are present at the Site.

2.4 Future Site Development

2.4.1 Backfill Requirements

After excavation and confirmation sampling, the excavation areas will be graded to match existing stormwater grading surrounding the former loose fill soil pile.

2.4.2 Areas of Disturbance

Temporary soil erosion and sediment control measures may be utilized as necessary during implementation of the IRM as described in Section 3.1.3.

2.4.3 Duration of Activity

Excavation areas will only remain open for the minimum period of time necessary to ensure that remediation goals have been achieved.

The Site will be graded to match existing stormwater grading surrounding the soil pile with respect to topography, hydrology, and surface cover (i.e., hard cover or vegetation).

Surveys, prepared by a New York State licensed surveyor, will be completed documenting pre-excavation, post-excavation (excavation depths), and post-restoration grades confirming restoration of the property outside the footprint of the Debris Pile to pre-existing grades.

2.4.4 Proposed Impervious Areas

Impervious areas that are currently in place at the Site will remain or be restored upon completion of the project.

2.4.5 Utility Lines, Easements, Water Supply Wells, and Sewage Treatment Systems

There are no additional proposed utilities for this project. All existing utilities will remain in-place, with the exception of the abandoned power line on the Debris Pile, which will be removed before work begins.

2.4.6 Pollution Prevention Measures

AECOM and all contractors shall require all workers to maintain a clean work site and use covered trash barrels. AECOM and all contractors shall protect construction equipment-related petroleum, lubricants, and similar small-volume hazardous materials and debris from being exposed to stormwater, either by covering the items or implementing another suitable protection or containment method.

An appropriately-sized dumpster will be placed on-site for waste materials. Construction materials awaiting use shall be secured and covered with tarps or situated within a structure when possible.

2.4.7 Responsible Parties

AECOM prepared this SWPPP and is the responsible party for specification of the measures contained herein, including site inspections. AECOM and its subcontractors are all responsible parties for construction activities. Certifications by AECOM and its contractors must be incorporated into **Appendix A** prior to the commencement of field activities.

3.0 Plan Components

3.1 Soil Erosion and Sediment Control

3.1.1 General Discussion

Erosion and Sediment Control (E&SC) measures will be implemented for the proposed project, in accordance with the NYSDEC's "New York State Standards and Specifications for Erosion and Sediment Control" (August 2005), in an effort to control and minimize the transport and deposition of soil particles during project construction activities.

While specific soil erosion and sediment control measures will be selected on a case-by-case basis, the goal to prevent erosion and contamination of waterways is the same throughout. Soil erosion control concepts to be implemented include: limiting and confining the disturbance areas to protect existing natural vegetation; diverting clean off-site water away from disturbance areas; and providing end-of-line capturing devices to prevent discharge violations. Typical practices include mulching, silt fences and/or hay or straw bales, and stabilized temporary construction entrances.

The IRM will follow the required standard sequence of actions: runoff control, followed by stabilization and, finally, sediment control. The effectiveness and locations of these measures are dependent on an assumed sequence of construction activities. A general construction sequence is provided in Section 4.0 of this SWPPP.

3.1.2 Soil Erosion and Sediment Control Planning

As part of the SWPPP development, the Site will be evaluated to identify locations where erosion and sediment control devices would be required to protect existing water resources, such as wetlands and surface water. Prior to the start of work, the erosion and sediment controls described herein will be installed according to standard practice and/or manufacturer recommendations to avoid indirect impacts to adjacent resources.

Throughout this project, grading will occur as necessary to blend new construction into existing contours. Earth disturbances will be limited, allowing excavation and grading only as necessary. Prior to any grading, erosion and sediment control measures must be in place. All stockpiled soil will be protected, stabilized, and placed away from storm drains and bodies of water. Grading that is proposed for this project will not impair existing surface drainage, when at all possible, in order to limit the impact on local bodies of water.

3.1.3 Soil Erosion and Sediment Control Practices

Temporary controls that may be implemented during IRM activities are described in this section.

Soil Erosion and Sediment Control

Soil erosion and sediment controls will be implemented to prevent transport of soils during excavation activities by vehicles, stormwater or other runoff events. The temporary controls will include placement of silt fences and/or hay or straw bales around the boundaries of excavation areas to: (1) prevent soils from leaving an excavation; (2) prevent soils on adjacent properties from entering a

clean excavation area; and (3) prevent soils from adjacent properties from entering the Site. These controls may be integrated into other site safety methods utilized during IRM implementation.

Refer to Section 4.0 for the proposed construction sequence.

Stormwater Management

In the event of a rain event or similar that generates surficial flow, stormwater management may be necessary. Soil erosion and sediment control measures, as described above, are expected to be sufficient to prevent transport of impacted soils into stormwater runoff. However, additional stormwater management measures may be implemented to limit the effect of stormwater on IRM implementation. Diversion berms may be constructed to limit the amount of runoff entering the excavation area.

Vegetation Protection

Because the extent of earthwork by necessity removes a wide area of vegetation, it becomes particularly important to confine impacts to the intended project limits. The contractor shall apply this practice to guard vegetation not slated for removal.

Ensure any measures implemented under this practice are kept in effect throughout the time that construction is proximate to vegetation that is to be protected.

Project Completion and Final Stabilization

Upon completion of backfilling operations at the site, grass will be installed. In the event that grass cannot be installed due to seasonal limitations, soil erosion and sediment controls will remain in-place until the growing season begins. The surface grade at the Debris Pile following project completion will match the grade around the pile to the extent practicable.

Site topography and character (i.e., hard covers and vegetation) is not expected to change from pre-remediation conditions and, therefore, no additional stormwater design is required.

3.1.4 Soil Erosion and Sediment Significant Event Protection

There may be scenarios that require contingency actions in the event that erosion and sediment control practices in place are not effective in preventing sediments or turbid waters from leaving the construction site. Example scenarios include:

- A significant storm event occurs in which the volume of the sediment trapping device is exceeded or damaged by the quantity of storm runoff;
- An intense rain shower occurs during the construction of the sediment trap before protections are in place;
- Construction operations accidentally damage drainage features without the knowledge of the on-site erosion control inspector, leaving an area vulnerable to sediment discharges; and
- A washout of soil containing colloidal clay occurs that will not settle prior to discharge.

Standard components of this SWPPP are intended to manage storms that occur with the greatest frequency. Larger, low probability storms generally have an effect on an entire watershed, resulting in

overall elevated levels of turbidity in the receiving waters. An emergency plan will provide an additional level of protection for the larger storms to the extent practicable.

The emergency plan would include preparatory steps in anticipation of a large storm event, as well as reactionary procedures during or following a storm event if it is determined that erosion practices are not performing effectively. Circumstances may also occur where erosion controls become ineffective, although not necessarily as a result of a major storm event. The emergency plan will serve as a plan to reduce or eliminate turbid discharges as quickly as possible until modifications to the temporary erosion control can be made.

The following actions constitute the **emergency plan** for this project:

- Cover exposed soils or stockpiles that do not have grass cover established or have not been stabilized through normal erosion control measures.
- Determine if a short-term modification to the construction schedule can avert potential damages caused by impending weather.
- Review inspection procedures and schedules, increasing frequency if necessary, to ensure any vulnerable areas will be discovered as early as possible.
- Immediately repair damages that have occurred, or are likely to cause turbid water discharges.
- Apply a pre-approved soil stabilizer or settling enhancer upslope of sediment trapping devices to reduce turbid water discharge.
- Develop improved erosion control measures to supersede any erosion control measures that appear ineffective.

3.1.5 Good Housekeeping and Best Management Practices

In addition to the erosion and sediment controls described above, additional controls or practices shall be utilized to comply with the requirements of the General Permit and to reduce pollution in stormwater runoff. Other controls that will be employed as necessary include the following:

- Practices to control off-site mud tracking from the construction site;
- Dust suppression practices;
- Proper sanitary waste disposal;
- Earthwork scheduling to minimize erosion and sedimentation;
- Proper disposal of waste; and
- Spill prevention and control measures.

Each of these controls is discussed below.

Practices to control off-site construction vehicle mud tracking – A stabilized construction entrance and exit will be installed.

Dust suppression – Water and/or similar dust control products shall be used to control dust.

Proper sanitary waste disposal – All sanitary waste will be collected from portable units, if utilized, by a licensed sanitary waste management contractor as required by local regulations. Portable units will be secured to prevent a unit from overturning.

Earthwork scheduling to minimize erosion and sedimentation – Earthwork procedures shall be timed and must progress in a manner that will minimize the exposure of disturbed surfaces to stormwater and to stormwater runoff erosion. Stripping and other construction activities shall be performed in order to minimize disturbances and prevent concentration of runoff into flow patterns capable of soil erosion.

Waste Characterization, Treatment and Disposal - All waste streams will be managed in accordance with applicable federal and state regulations.

It is anticipated that three general types of waste material will be generated during IRM activities:

1. **Site Clearing Materials** - Consists of organic materials such as brush, trees, or other plants cleared from areas to be excavated.
2. **Soils** - Excavation activities at the Site will generate soil. It is anticipated that Soil will be primarily unconsolidated sand and gravel.
3. **Debris** – Non-hazardous debris is anticipated to be located in the Debris Pile.
4. **Asbestos Containing Material** – Asbestos containing material is expected to be encountered during excavation activities.
5. **Water Generated During Construction** – This waste stream includes waters generated during construction activities, including decontamination, dewatering, or collection of precipitation from potential staging areas.

Sampling and analyses of the materials to be disposed will be conducted in conformance with applicable regulatory requirements for waste characterization and the requirements of the permitted off-site treatment and disposal and/or recycling facilities.

The materials will be removed from the facility after they are accepted for shipment to the selected treatment, disposal or recycling facility.

Spill prevention and control measures – The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff:

- All material stored on-site will be stored in a neat, orderly manner in their appropriate containers.
- Products will be kept in their original containers as often as possible with the original manufacturer's label, unless the containers are not resealable.
- Manufacturer's recommendation for proper use and disposal will be followed.
- A representative from each subcontractor will conduct weekly inspections to ensure proper use and disposal of materials and containers on-site.

- Substances will not be mixed unless necessary for the construction activity and as recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposing of the container.
- Original labels and material safety data sheets (MSDS) will be retained for the period of time that the product is being utilized on-site in accordance with all applicable Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.1200).
- If surplus product must be disposed of, manufacturer and local and state required methods of disposal will be followed.
- When practical, equipment fueling will occur over prepared containment areas. When not practical, fueling will occur in the field. If an oil spill occurs, a spill cleanup kit will be utilized. Spilled materials will be contained and deposited in containers for proper offsite removal.

Product-specific practices – the following practices will be adhered to:

- **Petroleum:** All on-site construction vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the risk of leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. Equipment fueling will be conducted with extreme care and away from conveyance channels. Any drips or spills will promptly be cleaned up.
- **Paints:** All paints will be kept tightly sealed and neatly stored out of conveyance channels when not in use. Excess paint will be disposed of according to manufacturer's instructions and local and state regulations.

3.2 Water Quality and Water Quantity Control

3.2.1 General Discussion

Any discharge that causes or contributes to a violation of the water quality standards listed in 6 NYCRR Parts 700-705 are also considered a violation of the SPDES General Permit. In order to prevent this from occurring, the following must be adhered to:

- There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
- There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
- There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

Additionally, the nature of the contamination onsite must be considered, and every effort must be made, to prevent the introduction of PCB-impacted soils or water into the municipal storm sewer system.

Final site conditions will be similar to the existing site conditions and, therefore, no additional water quantity or quality design is necessary.

3.2.2 Soil Investigations

A soil investigation revealed medium-to-coarse sands and organic soils.

3.2.3 Mapping Requirements

No mapping is required beyond those maps located within this document.

3.2.4 Hydrologic and Hydraulic Analysis

Final topography and surfaces will be different than existing conditions; however, water quantity measures are not required.

3.2.5 Final Landscaping

The Site will be restored to pre-remediation conditions with respect to hydrology and surface cover (i.e., hard cover or vegetation) to the greatest extent practicable. Site topography will be matched to the pre-existing grade surrounding the Debris Pile to the extent practicable.

3.2.6 Maintenance Plan

The erosion and sediment control measures described in Section 3.1.3 are all temporary measures that will not require maintenance beyond the construction phase, as they will be removed and/or superseded by other methods.

4.0 Construction Sequence

4.1 Phasing

The schedule for IRM implementation is contingent upon many variables. Implementation of remediation will be initiated upon NYSDEC and NYSDOH approval of the IRM WP and any other remediation document submitted for review.

4.2 Construction Sequence

The general construction sequence for IRM activities includes:

- **Mobilization:** Mobilization of field equipment and personnel.
- **Installation of Temporary Facilities:** Includes establishing a centralized field office, temporary sanitary facilities, construction staging area, and waste staging area (if used).
- **Work Zone Delineation:** Includes establishing a work area perimeter around the proposed excavation. If soils are staged, a work zone will be established around the secure staging area. The work area perimeter will be marked off using suitable methods (e.g., temporary fencing, jersey barriers, safety cones or caution tape) to discourage unauthorized access to the area during remediation and secure the work area.
- **Decontamination Setup:** Includes establishing decontamination stations for equipment and personnel decontamination in accordance with the Site-Specific Health and Safety Plan (HASP).
- **Installation of Temporary Controls:** Includes installation/inspection of soil and sediment erosion controls, stormwater control measures, dewatering systems (if necessary), air monitoring systems and air emission controls.
- **Clearing, Grubbing, and Demolition:** The work area will be cleared of materials, debris, or miscellaneous items, as necessary, to facilitate IRM implementation. Plants and trees may be removed and staged for disposal.
- **Soil Removal:** Soil removal will be conducted in accordance with the IRM WP.
- **Backfilling and Site Restoration:** After excavation and confirmation sampling, the excavation areas will be restored to existing conditions.

4.3 Inspections

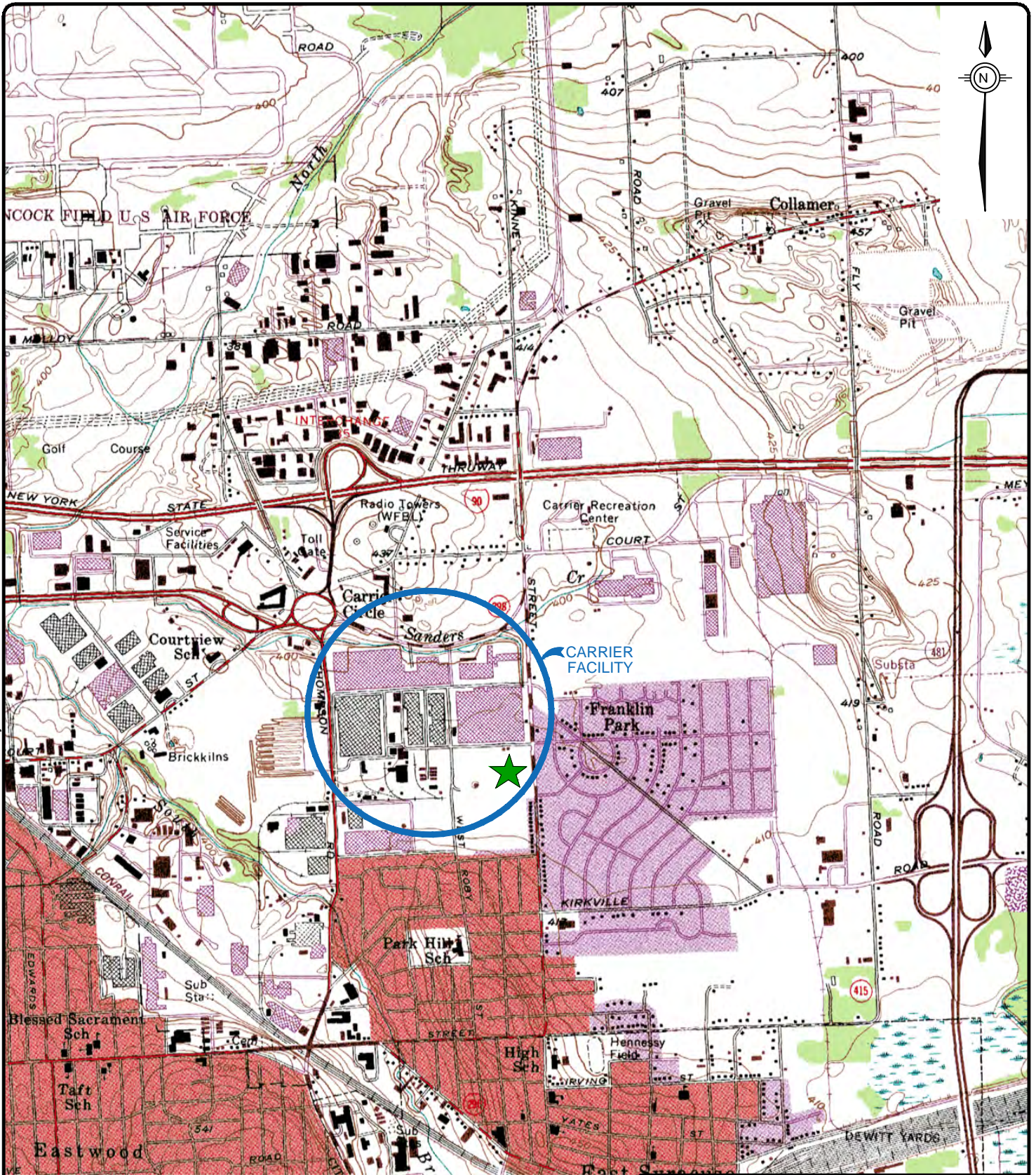
A program of inspections is required when implementing a SWPPP in accordance with GP-0-10-001. Inspections shall be conducted at least once every 7 calendar days. Inspections shall record the information described in the General Permit. A record of all inspections shall be kept in a site log book, and a summary of the site inspection activities shall be posted on-site on a monthly basis and in a secure location that is accessible during normal business hours to an individual performing a compliance inspection. A final site inspection shall be performed prior to filing the required Notice of Termination.

The contractor shall record rainfall (as “none” or the quantity measured) in daily logs. This data will be obtained from the Syracuse Hancock International Airport located in Syracuse, New York or a similar source.

A log book template, including a blank inspection form, is provided for the contractor's use in **Appendix C**. The log book shall be kept in the contractor's field office at the Site at all times.

Figures

File Name: I:\2014 PROJECTS BST114295 CARRIER VICINITY MAP.DWG Plotted By: WADE MAREK Plot Date: 1/15/2014 12:02:52 PM



LEGEND


 SITE LOCATION

FIGURE 1
SITE LOCATION MAP
SE STOCKPILE
CARRIER FACILITY
SYRACUSE, NEW YORK

MAP SOURCE:
 U.S.G.S. 7.5 MINUTE QUADRANGLE
 SYRACUSE EAST, NY 1967
 PHOTO REVISED 1978



REQUESTED BY:	RT
DRAWN BY:	WM
DWG DATE:	01-15-13
DWG NO:	14295 Vicinity

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LEGEND

- POTENTIAL STORMWATER PATHWAYS
- STORMWATER INLETS
- SANDERS CREEK



Approximate Scale (ft)



PROJ. NO: 60314591
 DATE: 6-24-2014
 DRAWN: CTN
 APPROVED: -

NOTES:

SHEET TITLE: POTENTIAL STORMWATER PATHWAYS

PROJECT:
 DEBRIS/SOIL PILE
 UTC/CARRIER SITE
 THOMPSON ROAD, SYRACUSE, NY

DRAWING REFERENCE:
 1) Image referenced from Google Earth, 2014. Dated June 2011.

FIGURE
 2

Appendix A

SWPPP Implementation Certification Statement

SWPPP Implementation Certification Statement

Site Information: UTC/Carrier Facility
Syracuse, NY

Contractor:

Trained Contractor Name:

Title:

Address:

Phone:

SPDES Permit Number: _____
(fill in when obtained)

Responsibilities:

-
-
-
-

Certification:

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activity and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Signature:

Print Name:

Title:

Date:

Appendix B

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (No. GP-0-10-001)



COPY

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

from

CONSTRUCTION ACTIVITY

Permit No. GP-0-10-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70
of the Environmental Conservation Law

Effective Date: January 29, 2010

Expiration Date: January 28, 2015

William R. Adriance
Chief Permit Administrator

William R. Adriance
Authorized Signature

January 28, 2010
Date

Address: NYS DEC
Div. Environmental Permits
625 Broadway, 4th Floor
Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System ("NPDES")* permit or by a state permit program. New York's *State Pollutant Discharge Elimination System ("SPDES")* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law ("ECL")*.

This general permit ("permit") is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation ("the Department") regional office (see Appendix G). They are also available on the Department's website at:

<http://www.dec.ny.gov/>

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of "*construction activity*", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to Article 17-0505 of the ECL, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. They cannot wait until there is an actual *discharge* from the construction site to obtain permit coverage.

***Note: The italicized words/phrases within this permit are defined in Appendix A.**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

FROM CONSTRUCTION ACTIVITIES

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Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application - This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State*.
3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

B. Maintaining Water Quality - It shall be a violation of this permit and the *ECL* for any *discharge* to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

C. Eligibility Under This General Permit

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph D. of this Part.
2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater discharges from *construction activities*.

(Part I. C)

3. Notwithstanding paragraphs C.1 and C.2 above, the following non-stormwater *discharges* may be authorized by this permit: discharges from fire fighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated groundwater or spring water; uncontaminated discharges from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who discharge as noted in this paragraph, and with the exception of flows from fire fighting activities, these discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with water quality standards in Part I.B.

D. Activities Which Are Ineligible for Coverage Under This General Permit - All of the following are **not** authorized by this permit:

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection C.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII, subparagraph K of this permit;
4. *Discharges* from *construction activities* that adversely affect a listed, or proposed to be listed, endangered or threatened species, or its critical habitat;
5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects that:
 - a. are tributary to waters of the state classified as AA or AA-s; and

(Part I. D. 6)

- b. disturb one or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.
7. *Construction activities* for linear transportation projects and linear utility projects that:
 - a. are tributary to waters of the state classified as AA or AA-s; and
 - b. disturb two or more acres of land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey for the County in which the disturbance will occur.
8. *Construction activities* that adversely affect a property that is listed or is eligible for listing on the State or National Register of Historic Places (Note: includes Archeological sites), unless there are written agreements in place with the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) or other governmental agencies to mitigate the effects, or there are local land use approvals evidencing the same.

Part II. OBTAINING PERMIT COVERAGE

A. Notice of Intent (NOI) Submittal

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a *regulated, traditional land use control MS4* must first develop a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the address below in order to be authorized to *discharge* under this permit. The NOI form shall be one which is associated with this permit, signed in accordance with Part VII.H. of this permit.

**NOTICE OF INTENT
NYS DEC, Bureau of Water Permits
625 Broadway, 4th Floor
Albany, New York 12233-3505**

2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first develop a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the “MS4 SWPPP Acceptance” form signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person, and then submit that form along with the NOI to the address referenced under “Notice of Intent (NOI) Submittal”.

(Part II. A.2)

This requirement does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (Change of Owner or Operator).

3. The *owner or operator* shall have the SWPPP preparer sign the “SWPPP Preparer Certification” statement on the NOI prior to submitting the form to the Department.
4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

B. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
 - a. project review pursuant to the State Environmental Quality Review Act (SEQRA) have been satisfied, when SEQRA is applicable,
 - b. where required, all necessary Department permits subject to the *Uniform Procedures Act (UPA)* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators of construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Regional Office in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,
 - c. the final SWPPP has been prepared, and
 - d. an NOI has been submitted to the Department in accordance with the requirements of this permit.
3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

(Part II. B. 3)

- a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:
 - i. Five (5) business days from the date the Department receives a complete NOI for *construction activities* with a SWPPP that has been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 and/or 3, or
 - ii. Sixty (60) business days from the date the Department receives a complete NOI for *construction activities* with a SWPPP that has not been prepared in conformance with the technical standards referenced in Parts III.B.1, 2 or 3.
- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
 - i. Five (5) business days from the date the Department receives a complete NOI and signed “MS4 SWPPP Acceptance” form,
4. The Department may suspend or deny an *owner’s or operator’s* coverage under this permit if the Department determines that the SWPPP does not meet the permit requirements.
5. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department.

C. General Requirements For Owners or Operators With Permit Coverage

1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (NOT) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4.
2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-10-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form and inspection reports at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department.

(Part II. C. 2)

The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:
 - a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
 - b. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.
 - c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
 - d. The *owner or operator* shall install any additional site specific practices needed to protect water quality.
 - e. The *owner or operator* shall include the requirements above in their SWPPP.
4. The Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements.

(Part II. C)

5. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the *MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *MS4* prior to commencing construction of the post-construction stormwater management practice.

D. Permit Coverage for Discharges Authorized Under GP-0-08-001

1. Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-08-001), an *owner or operator of construction activity* with coverage under GP-0-08-001, as of the effective date of GP-0-10-001, shall be authorized to *discharge* in accordance with GP-0-10-001 unless otherwise notified by the Department.

E. Change of Owner or Operator

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.A.1.. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*.

(Part III. A)

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP:
 - a. whenever the current provisions prove to be ineffective in minimizing pollutants in stormwater *discharges* from the site;
 - b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants; and
 - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority.
5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit.
6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP.

(Part III. A. 6)

The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. "

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.
8. The SWPPP must include documentation supporting the determination of permit eligibility with regard to Part I.D.8. (Historic Places or Archeological Resource). At a minimum, the supporting documentation shall include the following:

(Part III. A. 8)

- a. Information on whether the stormwater discharge or *construction activities* would have an effect on a property (historic or archeological resource) that is listed or eligible for listing on the State or National Register of Historic Places;
- b. Results of historic resources screening determinations conducted. Information regarding the location of historic places listed, or eligible for listing, on the State or National Registers of Historic Places and areas of archeological sensitivity that may indicate the need for a survey can be obtained online by viewing the New York State Office of Parks, Recreation and Historic Places (OPRHP) online resources located on their web site at: <http://nysparks.state.ny.us/shpo/online-tools/> (using The Geographic Information System for Archeology and National Register). OPRHP can also be contacted at: NYS OPRHP, State Historic Preservation Office, Peebles Island Resources Center, P.O. Box 189, Waterford, NY 12188-0189, phone: 518-237-8643;
- c. A description of measures necessary to avoid or minimize adverse impacts on places listed, or eligible for listing, on the State or National Register of Historic Places. If the *owner or operator* fails to describe and implement such measures, the stormwater *discharge* is ineligible for coverage under this permit; and
- d. Where adverse effects may occur, any written agreements in place with OPRHP or other governmental agency to mitigate those effects, or local land use approvals evidencing the same.

B. Required SWPPP Contents

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control. Where erosion and sediment control practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
 - a. Background information about the scope of the project, including the location, type and size of project;

(Part III. B. 1)

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s), wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each construction activity that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of final stabilization;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;

(Part III. B. 1)

- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6., to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule shall be in accordance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control;
 - j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the stormwater *discharges*;
 - k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the construction site; and
 - l. Identification of any elements of the design that are not in conformance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards.
2. Post-construction stormwater management practice component - All construction projects identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual (“Design Manual”). If the Design Manual is revised during the term of this permit, an *owner or operator* must begin using the revised version of the Design Manual to prepare their SWPPP six (6) months from the final revision date of the Design Manual.

Where post-construction stormwater management practices are not designed in conformance with this technical standard, the *owner or operator* must demonstrate equivalence to the technical standard.

At a minimum, the post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project;

(Part III. B. 2)

- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
 - c. The dimensions, material specifications and installation details for each post-construction stormwater management practice;
 - d. Identification of any elements of the design that are not in conformance with the Design Manual. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standards;
 - e. A hydrologic and hydraulic analysis for all structural components of the stormwater management control system;
 - f. A detailed summary (including calculations) of the sizing criteria that was used to design all post-construction stormwater management practices. At a minimum, the summary shall address the required design criteria from the applicable chapter of the Design Manual; including the identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required based on the design criteria or waiver criteria included in the Design Manual; and
 - g. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.
3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.g. above.

(Part III. C)

C. Required SWPPP Components by Project Type - Unless otherwise notified by the Department, *owners or operators of construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3.

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices and all post-construction stormwater management practices identified in the SWPPP are maintained in effective operating condition at all times.
2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Owner or Operator Maintenance Inspection Requirements

1. The *owner or operator* shall inspect, in accordance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, the erosion and sediment controls identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.
2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *owner or operator* can stop conducting the maintenance inspections. The *owner or operator* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.
3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

(Part IV. C)

C. Qualified Inspector Inspection Requirements - The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- Licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- Someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
 - a. the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
 - d. construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
 - a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.

(Part IV. C. 2)

- b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity) in writing prior to reducing the frequency of inspections.
- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity). in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the “Final Stabilization” and “Post-Construction Stormwater Management Practice” certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.A.1..

(Part IV. C. 3)

3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of discharge to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of discharge from the construction site.
4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
 - a. Date and time of inspection;
 - b. Name and title of person(s) performing inspection;
 - c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
 - d. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
 - e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;
 - f. Identification of all erosion and sediment control practices that need repair or maintenance;
 - g. Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
 - h. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;

(Part IV. C 4)

- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
 - j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s); and
 - k. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
 6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.C.2., the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.A.1. The NOT form shall be one which is associated with this general permit, signed in accordance with Part VII.H.
2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

(Part V. A. 2)

- a. Total project completion - All construction activity identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;
 - b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
 - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E.
3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the “Final Stabilization” and “Post-Construction Stormwater Management Practice” certification statements on the NOT, certify that all disturbed areas have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP.
 4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall also have the MS4 sign the “MS4 Acceptance” statement on the NOT. The *owner or operator* shall have the principal executive officer, ranking elected official, or duly authorized representative from the *regulated, traditional land use control MS4*, sign the “MS4 Acceptance” statement. The MS4 official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The MS4 can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector’s* final site inspection certification(s) required in Part V.3.
 5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

(Part V. A. 5)

- a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,
- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has modified their deed of record to include a deed covenant that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, college, university), or government agency or authority, the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

Part VI. REPORTING AND RETENTION OF RECORDS

A. Record Retention - The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the site achieves *final stabilization*. This period may be extended by the Department, in its sole discretion, at any time upon written notification.

B. Addresses - With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate Department Regional Office listed in Appendix F.

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply - The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied.

(Part VII. A)

The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

B. Continuation of the Expired General Permit - This permit expires five (5) years from the effective date. However, coverage may be obtained under the expired general permit, which will continue in force and effect, until a new general permit is issued. Unless otherwise notified by the Department in writing, an *owner or operator* seeking authorization under the new general permit must submit a new NOI in accordance with the terms of such new general permit.

C. Enforcement - Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense - It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

E. Duty to Mitigate - The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to minimize or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information - The *owner or operator* shall make available to the Department for review and copying or furnish to the Department within five (5) business days of receipt of a Department request for such information, any information requested for the purpose of determining compliance with this permit. This can include, but is not limited to, the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, executed maintenance agreement, and inspection reports. Failure to provide information requested by the Department within the request timeframe shall be a violation of this permit.

The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review the NOI, SWPPP or inspection reports. Copying of documents will be done at the requester's expense.

G. Other Information - When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any other report, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s)

(Part VII. G)

changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or impervious area), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:
 - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - i. a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - ii. the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
 - c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - i. the chief executive officer of the agency, or

(Part VII. H. 1. c)

- ii. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part VII.H.1.;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,
 - c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights - The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

J. Severability - The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

(Part VII. K)

K. Denial of Coverage Under This Permit

1. At its sole discretion, the Department may require any *owner or operator* authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from *owner or operator* receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Regional Water Engineer, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.
2. Any *owner or operator* authorized by this permit may request to be excluded from the coverage under this permit by applying for an individual permit or another general permit. In such cases, the *owner or operator* shall submit an individual application or an alternative general permit application in accordance with the requirements of this general permit, 40 CFR 122.26(c)(1)(ii) and 6 NYCRR Part 621, with reasons supporting the request, to the Department at the address for the appropriate Department Office (see addresses in Appendix F). The request may be granted by issuance of an individual permit or another general permit at the discretion of the Department.
3. When an individual SPDES permit is issued to a discharger authorized to discharge under a general SPDES permit for the same discharge(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance - The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry - The *owner or operator* shall allow the Department or an authorized representative of EPA, the State, or, in the case of a construction site which discharges through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

(Part VII. M)

1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

N. Permit Actions - At the Department's sole discretion, this permit may, at any time, be modified, suspended, revoked, or renewed. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions - Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
2. Permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports – Article 17 of the ECL provides for a civil penalty of \$37,500 per day per violation of this permit. Articles 175 and 210 of the New York State Penal Law provide for a criminal penalty of a fine and/or imprisonment for falsifying forms and reports required by this permit.

R. Other Permits – Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A

Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both “sewage” and “stormwater”.

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for “Construction Activity(ies)” also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or point source.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 authorizing a category of discharges.

Groundwater - means waters in the saturated zone. The saturated zone is a subsurface zone in

which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct construction activities are occurring, or will occur, under one plan. The term “plan” in “larger common plan of development or sale” is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that construction activities may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- i. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- ii. Designed or used for collecting or conveying stormwater;
- iii. Which is not a *combined sewer*; and
- iv. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department’s receipt and acceptance of a complete Notice of Intent. This letter documents the owner’s or operator’s authorization to discharge in accordance with the general permit for stormwater discharges from construction activity.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the construction activity is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in Parts 700 et seq of this Title.

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the Department's technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

Routine Maintenance Activity - means construction activity that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Stream bank restoration projects (does not include the placement of spoil material),
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that makes the transition between the road shoulder and the ditch or embankment,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or embankment,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* will be responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B

Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP
THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

<p>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</p> <ul style="list-style-type: none">• Single family home <u>not</u> located in one of the watersheds listed in Appendix C and <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E• Construction of a barn or other agricultural building, silo, stock yard or pen.
<p>The following construction activities that involve soil disturbances of one (1) or more acres of land:</p> <ul style="list-style-type: none">• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects• Bike paths and trails• Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project• Slope stabilization projects• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics• Spoil areas that will be covered with vegetation• Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that <i>alter hydrology from pre to post development</i> conditions• Athletic fields (natural grass) that do not include the construction or reconstruction of <i>impervious area</i> and do not <i>alter hydrology from pre to post development</i> conditions• Demolition project where vegetation will be established and no redevelopment is planned• Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with <i>impervious cover</i>• Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of less than five acres and construction activities that include the construction or reconstruction of impervious area
<p>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</p> <ul style="list-style-type: none">• All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.

Table 2
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP
THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's and water treatment plants
- Office complexes
- Sports complexes
- Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project or other linear utility project
- All other construction activities that include the construction or reconstruction of *impervious area* and *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual (“Design Manual”).

- Entire New York City Watershed located east of the Hudson River - Figure 1
- Onondaga Lake Watershed - Figure 2
- Greenwood Lake Watershed - Figure 3
- Oscawana Lake Watershed – Figure 4

Figure 1 - New York City Watershed East of the Hudson

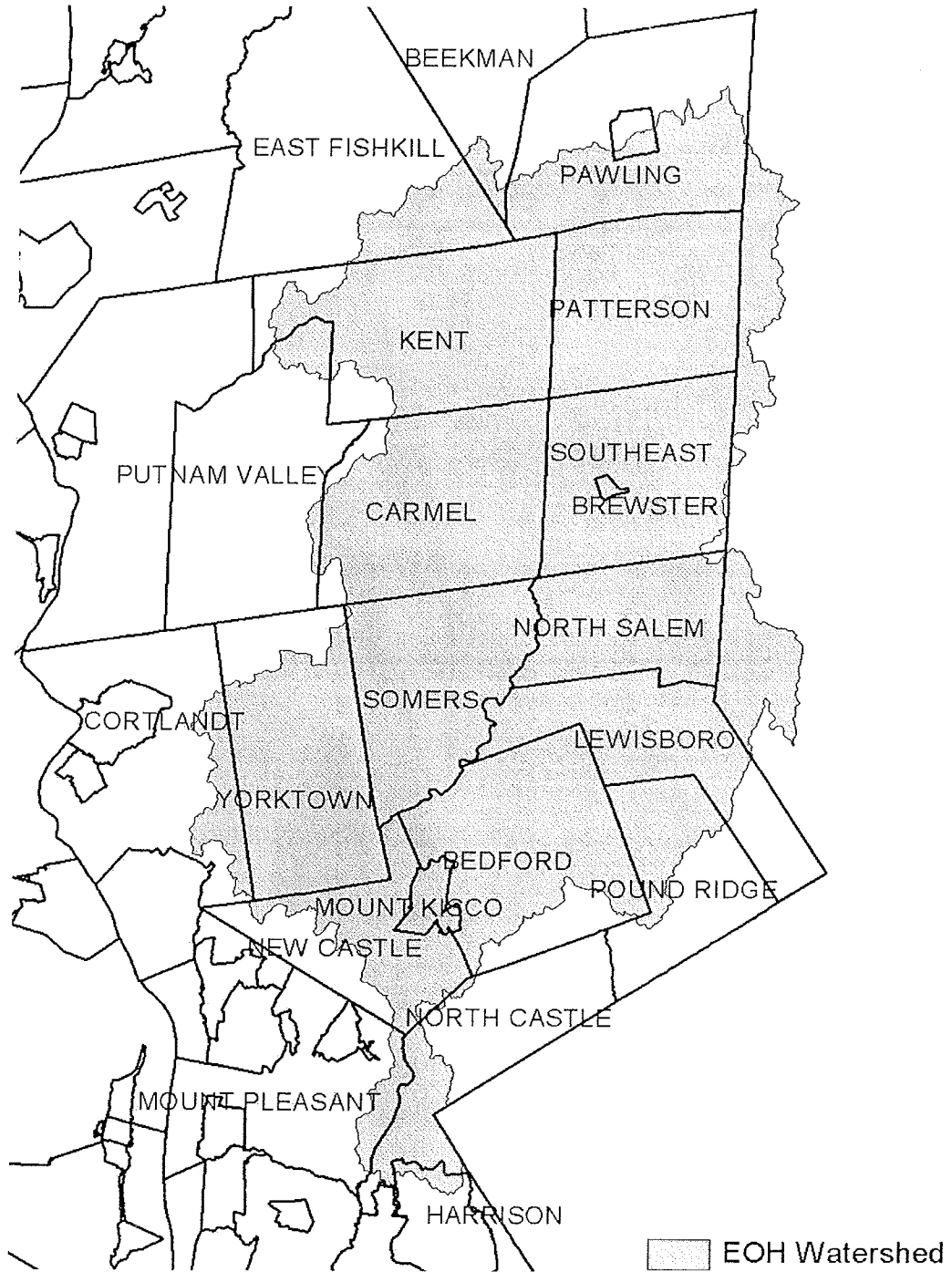


Figure 2 - Onondaga Lake Watershed

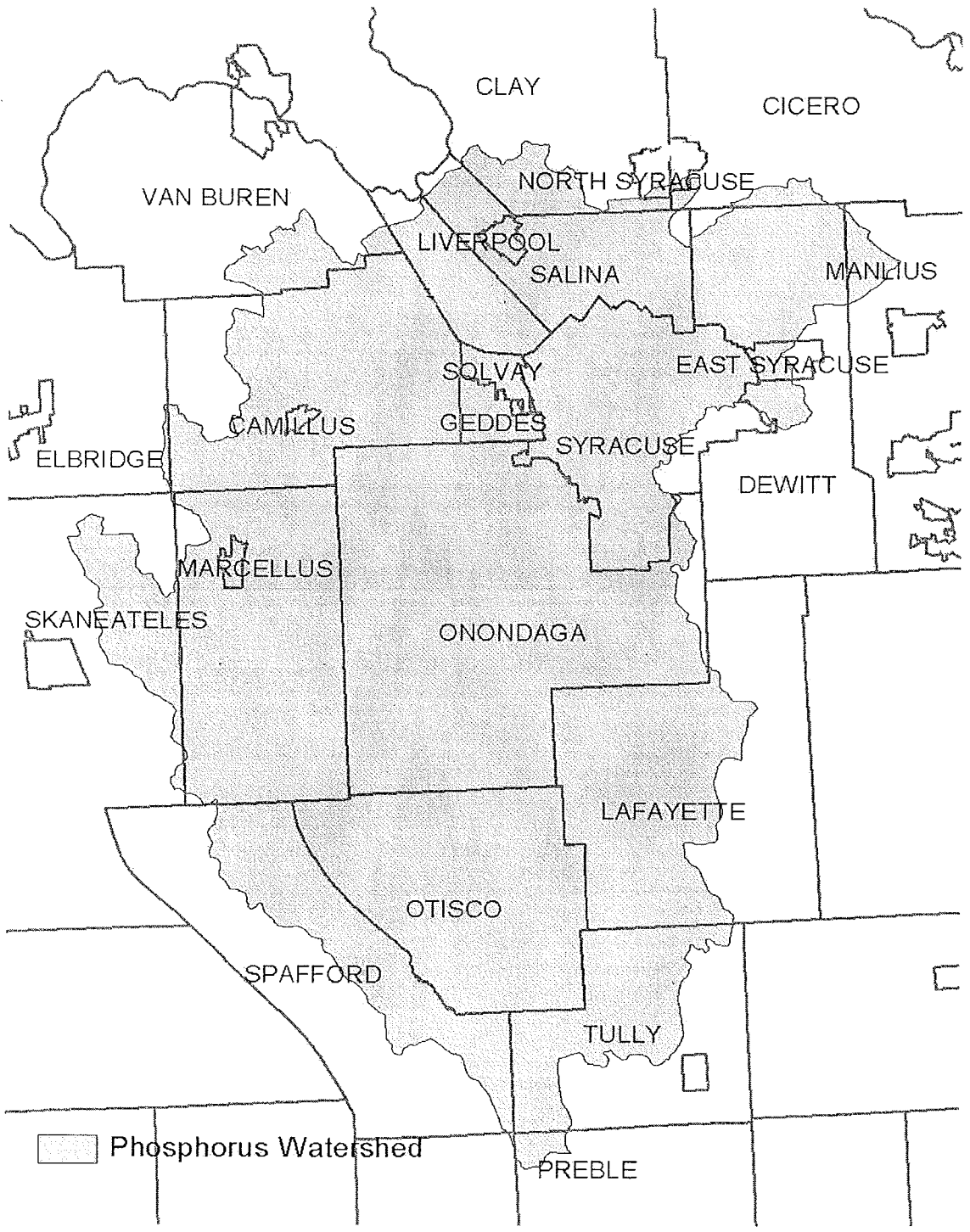


Figure 3 - Greenwood Lake Watershed

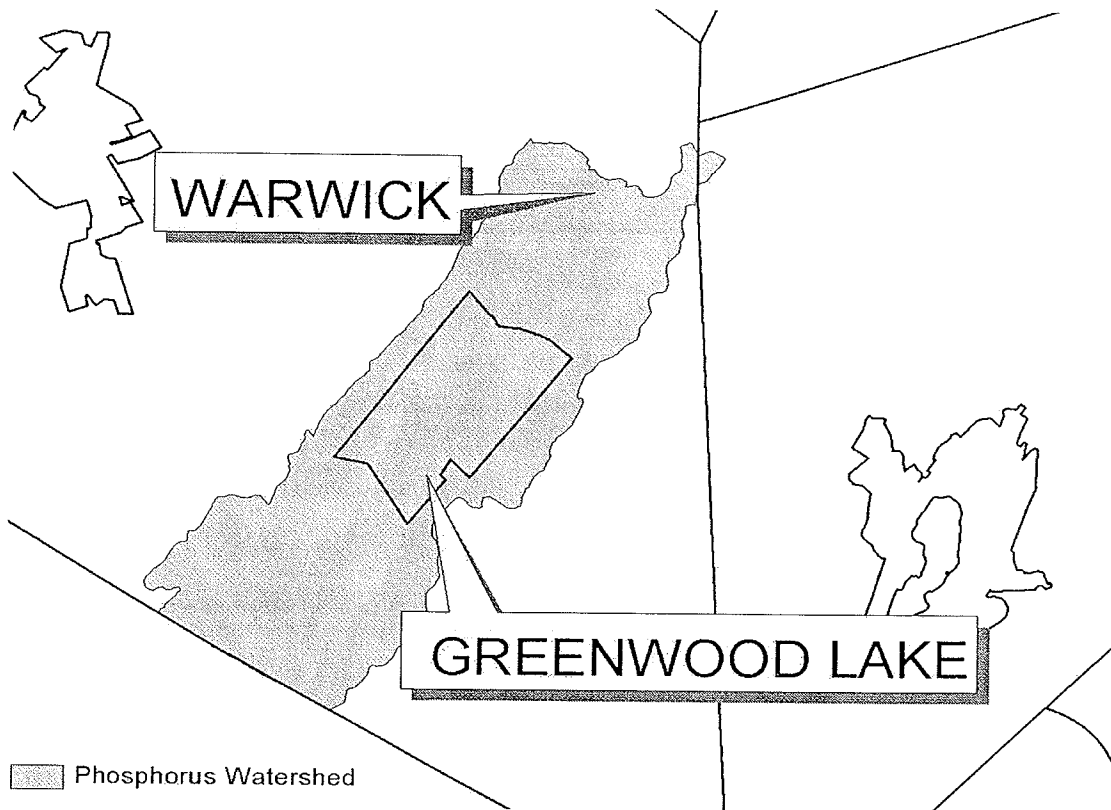
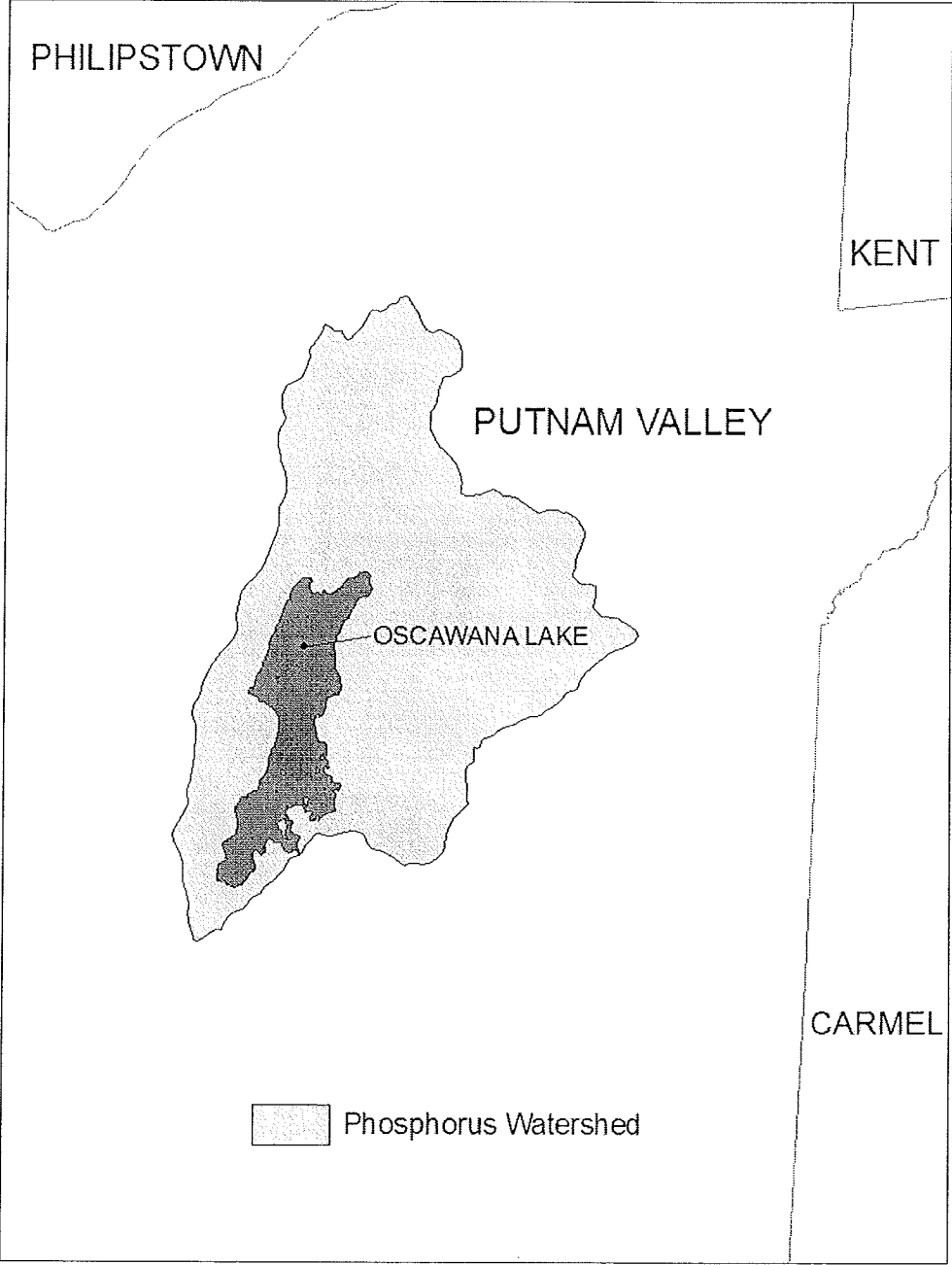


Figure 4 - Oscawana Lake Watershed



APPENDIX D

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivision construction activities that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual (“Design Manual”).

COUNTY	WATERBODY	COUNTY	WATERBODY
Albany	Ann Lee (Shakers) Pond, Stump Pond	Monroe	Genesee River, Lower, Main Stem
Albany	Basic Creek Reservoir	Monroe	Genesee River, Middle, Main Stem
Bronx	Van Cortlandt Lake	Monroe	Black Creek, Lower, and minor tribs
Broome	Whitney Point Lake/Reservoir	Monroe	Buck Pond
Broome	Beaver Lake	Monroe	Long Pond
Broome	White Birch Lake	Monroe	Cranberry Pond
Chautauqua	Chautauqua Lake, North	Monroe	Mill Creek and tribs
Chautauqua	Chautauqua Lake, South	Monroe	Shipbuilders Creek and tribs
Chautauqua	Bear Lake	Monroe	Minor tribs to Irondequoit Bay
Chautauqua	Chadakoin River and tribs	Monroe	Thomas Creek/White Brook and tribs
Chautauqua	Lower Cassadaga Lake	Nassau	Glen Cove Creek, Lower, and tribs
Chautauqua	Middle Cassadaga Lake	Nassau	LI Tribs (fresh) to East Bay
Chautauqua	Findley Lake	Nassau	East Meadow Brook, Upper, and tribs
Clinton	Great Chazy River, Lower, Main Stem	Nassau	Hempstead Bay
Columbia	Kinderhook Lake	Nassau	Hempstead Lake
Columbia	Robinson Pond	Nassau	Grant Park Pond
Dutchess	Hillside Lake	Niagara	Bergholtz Creek and tribs
Dutchess	Wappinger Lakes	Oneida	Ballou, Nail Creeks
Dutchess	Fall Kill and tribs	Onondaga	Ley Creek and tribs
Dutchess	Rudd Pond	Onondaga	Onondaga Creek, Lower and tribs
Erie	Rush Creek and tribs	Onondaga	Onondaga creek, Middle and tribs
Erie	Ellicott Creek, Lower, and tribs	Onondaga	Onondaga Creek, Upper, and minor tribs
Erie	Beeman Creek and tribs	Onondaga	Harbor Brook, Lower, and tribs
Erie	Murder Creek, Lower, and tribs	Onondaga	Ninemile Creek, Lower, and tribs
Erie	South Branch Smoke Cr, Lower, and tribs	Onondaga	Minor tribs to Onondaga Lake
Erie	Little Sister Creek, Lower, and tribs	Ontario	Honeoye Lake
Essex	Lake George (primary county listed as Warren)	Ontario	Hemlock Lake Outlet and minor tribs
Genesee	Black Creek, Upper, and minor tribs	Ontario	Great Brook and minor tribs
Genesee	Tonawanda Creek, Middle, Main Stem	Oswego	Lake Neatahwanta
Genesee	Tonawanda Creek, Upper, and minor tribs	Putnam	Oscawana Lake
Genesee	Little Tonawanda Creek, Lower, and tribs	Putnam	Lake Carmel
Genesee	Oak Orchard Creek, Upper, and tribs	Queens	Jamaica Bay, Eastern, and tribs (Queens)
Genesee	Bowen Brook and tribs	Queens	Bergen Basin
Genesee	Bigelow Creek and tribs	Queens	Shellbank Basin
Greene	Schoharie Reservoir	Rensselaer	Snyders Lake
Greene	Sleepy Hollow Lake	Richmond	Grasmere, Arbutus and Wolfes Lakes
Herkimer	Steele Creek tribs	Saratoga	Dwaas Kill and tribs
Kings	Hendrix Creek	Saratoga	Tribs to Lake Lonely
Lewis	Mill Creek/South Branch and tribs	Saratoga	Lake Lonely
Livingston	Conesus Lake	Saratoga	Schuyler Creek and tribs
Livingston	Jaycox Creek and tribs	Schenectady	Collins Lake
Livingston	Mill Creek and minor tribs		

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY
Schoharie	Engleville Pond		
Schoharie	Summit Lake		
St. Lawrence	Black Lake Outlet/Black Lake		
Steuben	Lake Salubria		
Steuben	Smith Pond		
Suffolk	Millers Pond		
Suffolk	Mattituck (Marratooka) Pond		
Suffolk	Tidal tribs to West Moriches Bay		
Suffolk	Canaan Lake		
Suffolk	Lake Ronkonkoma		
Tompkins	Cayuga Lake, Southern End		
Tompkins	Owasco Inlet, Upper, and tribs		
Ulster	Ashokan Reservoir		
Ulster	Esopus Creek, Upper, and minor tribs		
Warren	Lake George		
Warren	Tribs to L.George, Village of L George		
Warren	Huddle/Finkle Brooks and tribs		
Warren	Indian Brook and tribs		
Warren	Hague Brook and tribs		
Washington	Tribs to L.George, East Shore of Lake George		
Washington	Cossayuna Lake		
Wayne	Port Bay		
Wayne	Marbletown Creek and tribs		
Westchester	Peach Lake		
Westchester	Mamaroneck River, Lower		
Westchester	Mamaroneck River, Upper, and minor tribs		
Westchester	Sheldrake River and tribs		
Westchester	Blind Brook, Lower		
Westchester	Blind Brook, Upper, and tribs		
Westchester	Lake Lincolndale		
Westchester	Lake Meahaugh		
Wyoming	Java Lake		
Wyoming	Silver Lake		

Note: The list above identifies those waters from the final New York State “2008 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy”, dated May 26, 2008, that are impaired by silt, sediment or nutrients.

APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, PO BOX 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD, PO BOX 220 WARRENSBURG, NY 12885-0220 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

Appendix C

Inspection and Maintenance Reports

(To be inserted as completed during construction)



**UTC DEBRIS PILE
TOWN OF DEWITT, NY
SWPPP INSPECTION REPORT**

INSPECTION TYPE:	<input type="checkbox"/> Routine Weekly	<input type="checkbox"/> Pre-Rain	<input type="checkbox"/> During Rain	<input type="checkbox"/> Post Rain
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DATE: _____ FOR WEEK ENDING: _____

ZONE: _____ PROPERTY ADDRESS: _____

WEATHER: _____

STORM START TIME: _____ STORM DURATION: _____

TIME ELAPSED SINCE LAST STORM: _____

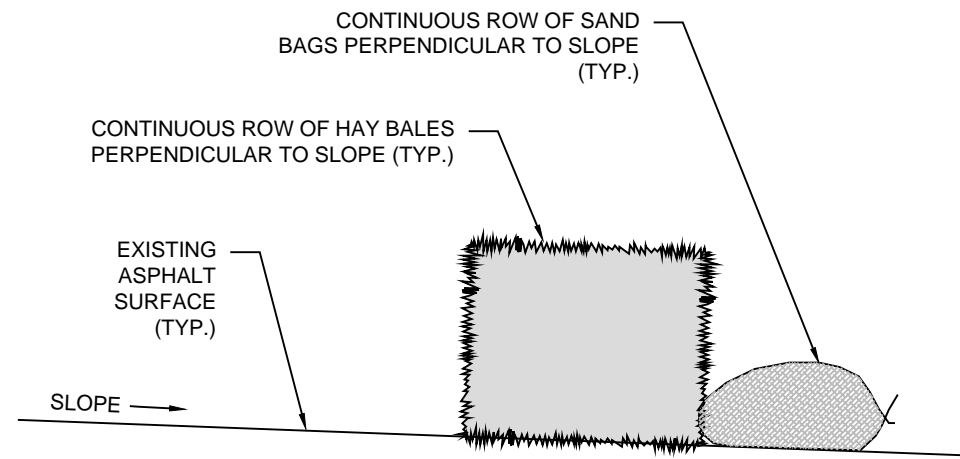
INSPECTED BY: _____ (print name) _____ (title)

_____ (signature)

NO.	DESCRIPTION	YES	NO*	N/A
1	Are perimeter silt fence, hay bales, and diversion berms in place and functioning properly?			
2	Are the stabilized construction entrances intact and functioning properly?			
3	Are all haul roads maintained and stabilized?			
4	Are the storm drain inlets and/or outfalls protected and functioning properly?			
5	Is sediment, debris, or mud being cleaned from public roads where they intersect with site access roads?			
6	Are all temporary stockpiles or construction materials located in approved areas and protected from erosion?			
7	Are dust controls measures being appropriately implemented?			
8	Are all materials and equipment properly covered?			
9	Are all materials handling and storage areas clean and free of spills, leaks, or other deleterious materials?			
10	Are all hazardous materials properly stored in bermed, covered area, and free of spills, leaks, or other deleterious materials?			
11	Are all equipment storage and maintenance area clean and free of spills, leaks, or any other deleterious materials?			
12	Are all on-site traffic routes, parking, and storage of equipment and supplies restricted to designated areas?			
13	Are all sediment traps, barriers, basins clean and functioning properly?			
14	Are all erosion control devices in-place and functioning in accordance with the erosion control plan?			
15	Are all exposed slopes protected from erosion through the implementation of acceptable soil stabilization practices?			
16	Are all discharge points free of any noticeable pollutant discharge?			
17	Other? (explain below)			

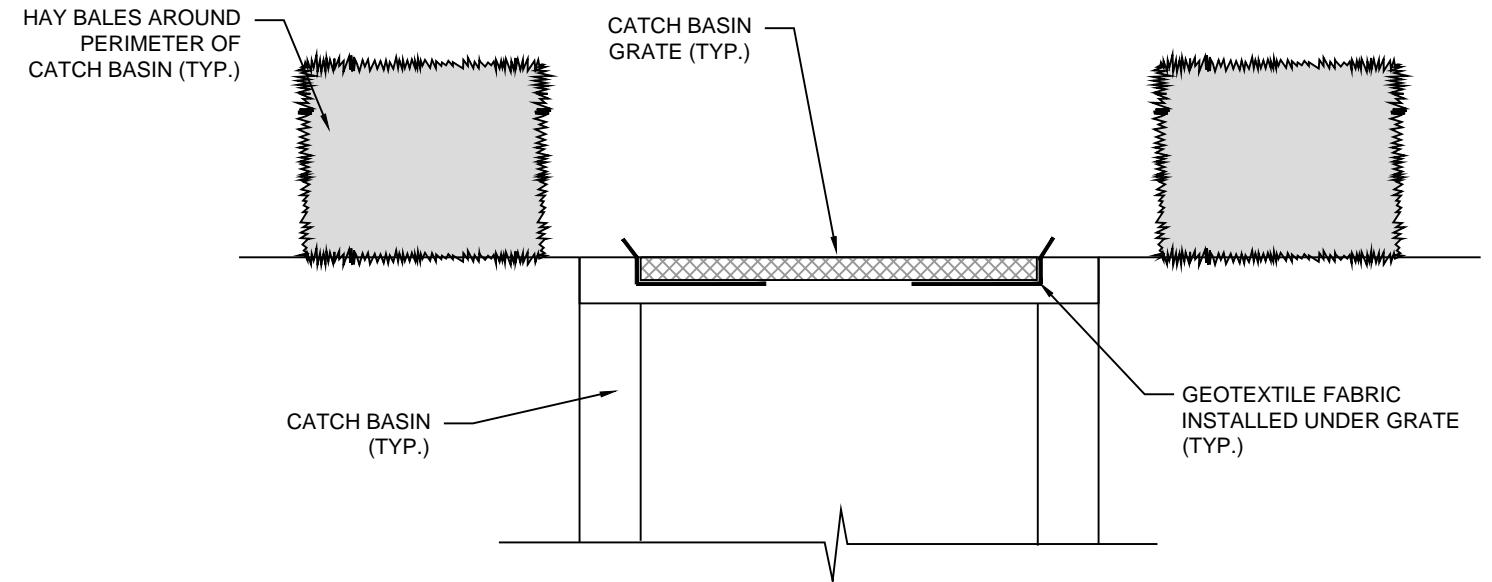
* If any answer in "no", describe needed correction(s) below. Indicate the location of needed correction(s), along with the date corrections are made.

Erosion and Sediment Control Details Figure



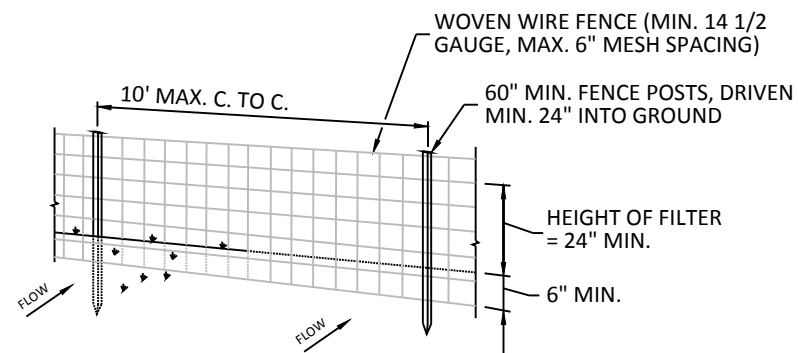
**SEDIMENT CONTROL MEASURES
AT PAVED EXISTING SURFACE**

NOT TO SCALE

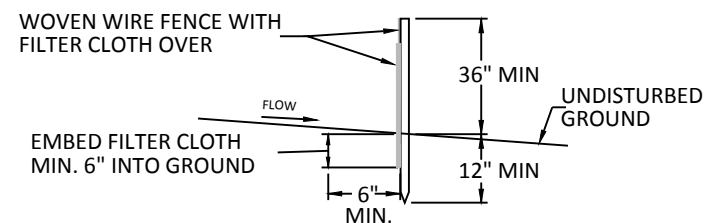


**SECTION
SEDIMENT CONTROL MEASURES
AT EXISTING CATCH BASINS**

NOT TO SCALE



PERSPECTIVE VIEW



SECTION

SILT FENCE DETAILS

NOT TO SCALE

SILT FENCE NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS:
2" HARDWOOD

FENCE:
WOVEN WIRE, 14 1/2 GA.
6" MAX. MESH OPENING.

FILTER CLOTH:
FILTER X. MIRAFI 100X.
STABILINKA T140N OR
APPROVED EQUAL.



**EROSION & SEDIMENT CONTROL
DETAILS**

INTERIM REMEDIAL MEASURE
WORK PLAN

FILE NAME:	DRN	PROJECT NO.	DATE	FIGURE NO.
---	---	---	6 - 2014	1

Written Certification Required Under DER-10 Section 1.5(b) 1

**INTERIM REMEDIAL MEASURE WORK PLAN
UTC/CARRIER SITE
SOUTHEAST DEBRIS/SOIL PILE
THOMPSON ROAD, SYRACUSE, NEW YORK**

CERTIFICATION STATEMENT

I, Daniel Servetas, P.E., certify that I am currently a New York State registered professional engineer and that this Interim Remedial Measure Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). This work plan was also prepared in accordance with the Corrective Action Order on Consent between the New York State Department of Environmental Conservation (NYSDEC) and the United Technologies Corporation (UTC)/Carrier Corporation Site at the Thompson Road facility (Index CO 7-20051118-4).



Daniel Servetas, P.E.

License Number 079068

In accordance with New York State Education Law, it is a violation for any person, unless he is acting under the direction of a licensed professional engineer, to alter this Work Plan in any way.