Appendix E

Tank Demolition Report

Demolition Report
Terminal 4 Grain Tanks Demolition and Removal
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Prepared for:
Port of Portland

March 5, 2009
1484-00

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

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1.0 Introduction

The Port of Portland (Port) requested assistance from Ash Creek Associates, Inc. (ACA) to provide oversight during demolition of the eight grain tanks (the Grain Tanks) formerly located on the north side of the Slip 1 Upland Facility at Terminal 4 (Figures 1 and 2). The Grain Tanks were located in Operational Unit 1 (OU1). The Port is actively marketing OU1 for redevelopment and determined that removal of the Grain Tanks would enhance or expand the opportunities for site usages by potential future tenants. Grain Tank dismantling and recycling was completed by Elder Demolition, Inc. (Elder) under a contract with the Port. Prior to beginning dismantling activities, the paint on the Grain Tanks was characterized for various constituents for purposes of evaluating recycling options. Polychlorinated biphenyls (PCBs) and metals were detected in the paint chips collected from the tanks; therefore, the Port hired ACA to provide environmental oversight during the project to ensure protection of storm water, verify proper disposal of paint chip-containing debris, and verify contractor compliance with other environmental controls. ACA completed the following services associated with the Grain Tank demolition project:

- Attendance at pre-demolition meeting;
- Photo-documentation of pre-demolition condition of the Grain Tanks;
- Sampling of paint chips and catch basin solids;
- Periodic observation and photo-documentation of conditions of ground surface and catch basin protection, observing particularly for the presence of paint chips;
- Verification of contractor compliance with requirement to maintain bottom plates until all other demolition work was completed, and that plates were cleaned prior to removal;
- Response to requests from the Port for inspection of particular issues; and
- Assisting the Port with disposal of paint chip debris generated during demolition.

1.1 Scope

The specific tasks that are described and summarized in this report include:

- Pre-demolition documentation of tank and site conditions;
- Sampling and analysis of paint chips and catch basin solids;
- Documentation of environmental controls and demolition process during tank removal;
- Post-demolition documentation of tank and site conditions; and
- Waste disposal.

1.2 Report Organization

The report text provides background information about the Grain Tanks (Section 2); observations of pre-demolition Grain Tank and site conditions and sampling results (Section 3); environmental control measures implemented before and during demolition (Section 4); site inspections documenting environmental controls and the demolition progress (Section 5); observations made during post-demolition inspection (Section 6); and description of waste handling and disposal (Section 7). Supporting information is provided in the tables, figures, and appendices. Appendix A contains the original paint chip sampling data to evaluate recycling options; Appendix B provides the environmental specifications for the demolition project; Appendix C contains the photograph log of site inspections; Appendix D contains the paint chip and catch basin solids analytical data; copies of field notes are provided in Appendix E; Appendix F contains the demolition-derived waste analytical data; and Appendix G provides copies of the waste manifests.

2.0 Background

2.1 Cargill Grain Tanks History

A detailed history of the Grain Tanks area is included in the Terminal 4 Slip 1 *Remedial Investigation Work Plan* (RI Work Plan; prepared by Hart Crowser and dated August 20, 2004) and is summarized as follows:

Prior to the Port's ownership of the facility in 1971, the City of Portland Commission of Public Docks (City) owned Terminal 4. In 1947, the City entered into a lease agreement with Kerr-Gifford for use of the grain facility at Terminal 4. Kerr-Gifford operated the grain elevator at Pier 1 from 1947 until 1954. In 1953, Cargill agreed to purchase all of the stock of Kerr-Gifford, and in November 1954, Kerr-Gifford was merged into Cargill. Eight grain storage silos (the Grain Tanks that are the subject of this demolition project) located east of the grain facility at Terminal 4 were built under an agreement entered into in 1954. Cargill operated the grain facility from 1947 to 2003, when it terminated its lease. Cargill operated the Grain Tanks from their construction until 2003, including having the obligation to keep them in good operating condition and repair. After Cargill shut down the grain facility, the Grain Tanks were never used.

2.2 Pre-Demolition Paint Analysis

Prior to demolition, samples of paint from the exterior of the Grain Tanks were collected for analysis to assist in characterizing the tanks for recycling. Results indicated that, in addition to metals, PCBs were present in the paint. The results of the pre-demolition sampling are included in Appendix A.

2.3 Demolition Specifications

The project specifications called for implementation of a number of measures to prevent release of paint chips to the environment during demolition. These measures included placing filters in catch basins, placing fabric beneath the

work area, routine sweeping of the work area, and similar measures. Appendix B contains a copy of the environmental specifications for the demolition project.

3.0 Pre-Demolition Observations and Sampling

A pre-demolition site visit was conducted by Ms. Ashleigh Fines of ACA on March 12, 2007. A photograph record of each Grain Tank and the surrounding ground surface was completed (Appendix C). Figure 3 shows the location of the Grain Tanks; the Grain Tanks have been numbered on the figure for ease of discussion in this report.

3.1 Pre-Demolition Grain Tank Observations

The Grain Tanks displayed signs of peeling paint, rust, and exposed metal during the pre-demolition site visit. The following summarizes the primary observations noted during the pre-demolition site visit.

- Peeling paint observed on the north side of Grain Tank 1 (Appendix C, Photograph 1);
- Horizontal marks on the lower portion of the northern side of Grain Tank 2 are sources of peeling paint and visible rust lines (Appendix C, Photograph 3);
- Peeling paint on Grain Tank 3 exposed a red-colored material underneath the layers of paint on the north side of the structure (Appendix C, Photograph 5);
- Linear stains, peeling paint, and exposed red material (red staining or rust) were observed on the north side of Grain Tank 4, while linear staining was observed on the east and south sides of the tank (Appendix C, Photographs 7 and 8);
- Linear scratches on the lower portion of the south side of Grain Tank 5 displayed signs of peeling paint and rust (Appendix C, Photograph 11);
- Rust was visible in broad linear stains spanning the entire height of Grain Tank 6 (Appendix C, Photograph 13);
- Large patches of paint were missing from the exterior walls of Grain Tank 7 (Appendix C, Photograph 15); and
- A portion of the east side of Grain Tank 8 was missing paint (Appendix C, Photograph 17).

3.2 Pre-Demolition Site Observations

Conditions of the ground surface around the Grain Tanks were also observed prior to tank demolition. The following presents a summary of the observed conditions.

- Paint chips from the Grain Tanks were observed on the ground surface north of Grain Tanks 1 through 4 (Appendix C, Photographs 2 and 4);

- Concrete between the tanks and railroad tracks on the south sides of Grain Tanks 1 through 4 had minor amounts of paint chips and debris scattered on the ground surface (Appendix C, Photographs 6 and 18);
- The majority of paint chips on the ground surface were observed between the north and south Grain Tanks in the railroad track ballast (Appendix C, Photographs 9, 10, 19, and 20);
- Moss and lichen observed on the north side of structures between the Grain Tanks entrapped paint chips and other debris on the ground surface (Appendix C, Photographs 12 and 16);
- Paint chips were not observed on the ground surface on the west side of Grain Tank 5 and the south sides of Grain Tanks 5 through 8 (Appendix C, Photographs 11, 13 and 14); and
- Minor amounts of paint chips were observed in the gravel on the east sides of Grain Tanks 4 and 8 (Appendix C, Photographs 8 and 17).

Observations of the ground surface around the Grain Tanks indicated loose paint chips and other debris. The majority of the observed paint chips were entrained in the moss and lichen growth on the north sides of all structures and the gravel and railroad tracks between the Grain Tanks.

3.3 Sampling and Analysis of Paint Chips and Catch Basins

As reported above, preliminary sampling and chemical analysis of the paint indicated the presence of PCBs and metals. Chips of paint from the Grain Tanks were identified on the ground surface surrounding the tanks. Therefore, prior to demolition, the Port retained ACA to collect samples of paint chips from the exterior walls of each tank and from the ground surface surrounding the tanks to document pre-demolition conditions. In addition, several catch basins are located near the Grain Tanks (Figure 2). To ascertain whether paint chips from the Grain Tanks had entered into the storm water conveyance system and to determine baseline conditions prior to tank demolition activities, storm water solids samples were collected from the catch basins for chemical analysis. The scope of the sampling and analysis, and results, are described below. Table 1 lists the sample identifications and volume collected at each location.

3.3.1 Paint Chip Sampling and Analysis

Based on observations during the site visit, a sampling approach was developed to characterize the paint from the Grain Tanks, the observed paint chips on the ground surface, and potential paint chips in storm water catch basins within the tank farm. The protocol used to collect samples was as follows:

- One 4-ounce jar of paint chips was collected from the exterior surface of each tank:
  - Samples were collected using a paint scraper to remove paint directly from the tank.
  - Garbage bags were placed under the collection area to prevent paint chips from collecting on the ground surface.

- One 4-ounce jar of paint chips was collected from the ground surface near each tank:
  - Paint chips were identified on the north sides of Grain Tanks 1 through 4 and on the south sides of Grain Tanks 5 through 8; therefore, the samples were collected from these locations, where feasible.
  - Each sample collection location was isolated to a limited area, where feasible. In some locations, the samples were collected across a larger area to obtain sufficient sample volume for analysis.

Figure 4 shows the paint chip sample locations. Sixteen (16) samples of paint chips were collected on March 17, 2008 and sent to Alpha Laboratories in Mansfield, Massachusetts on March 20, 2008. The laboratory was instructed to analyze the samples for semi-volatile volatile organic compounds (SVOCs) using EPA Method 8270 SIM, PCBs using EPA Method 8082, and selected metals using EPA Methods 6020/7474.

3.3.2 Catch Basin Sampling

Paint chips were observed near and in catch basins prior to the demolition. Therefore, to characterize pre-demolition activity conditions, the solids within the catch basins surrounding the Grain Tanks were sampled. Figure 4 shows the catch basin locations and identifies the sample designation for samples collected from each basin. The protocol used to collect samples was as follows:

- Collect at least two 2-ounce jars of sediment from each catch basin:
  - The samples were collected using a shovel. Prior to and following each catch basin sampled, the shovel was decontaminated using an Alconox® and water rinse.
  - Sediment was retrieved from beneath the catch basin insert in the inlet (i.e., from the area where materials could enter the storm water pipe) and placed into the laboratory-supplied containers.

Catch basin solids samples were collected on March 26, 2008 and sent to Alpha Laboratories in Mansfield, Massachusetts on March 27, 2008. The laboratory was instructed to analyze the samples for SVOCs using EPA Method 8270SIM, PCBs using EPA Method 8082, and selected metals using EPA Methods 6020/7474. Appendix D contains the analytical laboratory reports.

3.3.3 Chemical Analysis Results

SVOCs, PCBs, and metals analytical results of the paint chip samples are provided in Tables 2, 3, and 4, respectively. As shown in Table 2, SVOCs consisted primarily of phenols and phthalates. Four PAH compounds (flourene, pyrene, phenanthrene, and chrysene) were also detected in one or more of the paint chip samples. PCB Aroclors were detected in 15 out of 16 of the paint chip samples. Aroclors 1248, 1254, and 1260 were detected in one or more samples; however, the most commonly detected and highest concentrations were of Aroclor 1254 (Table 3). Most metals analyzed for were detected in the paint chip samples (Table 4).

The results from the catch basin solids sample analyses for SVOCs, PCBs, and metals are summarized in Tables 5, 6, and 7, respectively. Paint chips were observed in the solids samples collected. In addition, a comparison of the types and relative concentrations of the constituents detected in the catch basin solids samples supports that the paint chips are the likely source of the constituents reported in the samples.

4.0 Environmental Controls

Elder installed environmental control measures prior to demolition to prevent paint chips from being released to the environment. These measures are identified in the project specifications (Appendix B). Below is a list of the controls implemented by Elder.

- Geotextile filter inserts in each catch basin in the project area;
- Geotextile fabric placed over railroad tracks, 100 feet beyond work area;
- Geotextile fabric edges elevated to allow surface water runoff to be directed towards the demolition site for daily cleanup;
- Demolition debris only stored on impervious surfaces;
- Demolition debris not stored within 50 feet of storm drains;
- Paint chips removed from hard surfaces each day and stored in appropriate waste containers;
- Daily inspection of catch basin filters for proper function and for plugging; and
- Steel plates (tank flooring) remained in place until exteriors were fully removed. Tank exteriors were folded in and onto the tank flooring for demolition to reduce any additional demolition area footprint.

A preliminary site walk with Elder, Port personnel, and ACA was also completed to identify environmental controls and the location of the Port stockpile to be used for final grading. All environmental controls were in place prior to beginning demolition.

5.0 Demolition and Environmental Controls Oversight

ACA performed weekly visits to the site to support the Port's oversight of the project. The purpose of the oversight was to document specific aspects of the environmental measures taken by the contractor to prevent paint chips from being released to the environment and to document the progress of the Grain Tank demolition. Oversight began on March 24, 2008 and continued for 19 weeks until August 5, 2008. Photographs documenting the progress of the demolition and implementation of environmental controls are included in Appendix C (Photographs 21 through 76).

5.1 Demolition Procedures

Demolition began at Grain Tank 8 on March 24, 2008. Elder installed erosion control measures prior to demolition. Below is a summary of the steps taken by Elder during the removal of the Grain Tanks.

- Slice through side of Grain Tank structure;
- Remove roof and catwalk structures;
- Remove sidewalls of Grain Tank;
- Compile and condense all scrap metal from interior of Grain Tank for recycling;
- Remove metal flooring;
- Remove concrete structures from Grain Tank foundations;
- Remove rebar and crush concrete to pieces less than 24 inches in diameter;
- Use equipment to crush concrete to less than 2 inches in diameter;
- Grade concrete across former Grain Tank foundations;
- Transport soil from Port stockpile to grade former Grain Tank area to match existing ground surface; and
- Hydroseed.

During weekly site inspections, ACA documented the progress of the demolition of the Grain Tanks (photographs provided in Appendix C). Table 8 provides the dates at which progressive steps in the demolition process were observed during the weekly oversight visits.

5.2 Environmental Controls Inspections

Daily inspections of the environmental controls were performed by the Port Construction Inspector assigned to the project. Weekly inspections of the site, as well as inspection of environmental controls, were conducted by ACA staff. Any observations pertaining to correction or installation of the controls was directed through the Port Construction Inspector. Environmental controls inspected daily for the project are listed below.

- Proper installation of catch basin inserts;
- Catch basin filters functioning properly;
- Geotextile fabric is laid over railroad tracks and 100 feet beyond work area;
- Geotextile fabric edges elevated to prevent paint chips in runoff;
- Demolition debris stored on impervious surfaces;
- Demolition debris stored greater than 50 feet from storm drain; and
- Paint chips removed from hard surfaces and placed in waste containers daily.

Photographs are included in Appendix C and copies of field inspection notes are included in Appendix E.

6.0 Post-Demolition Site Observations

On August 5, 2008, the last weekly oversight inspection was performed by ACA. All Grain Tanks had been removed and the soil surface was graded and hydroseeded with soil erosion controls in place (Appendix C, Photographs 77, 78, and 80). Elder personnel were on-site removing remaining damaged asphalt and dismantling equipment. Equipment was observed to be in the process of dismantlement when ACA personnel observed an oil-type substance on asphalt near the equipment (Appendix C, Photographs 81 and 82). Absorbent pads were placed on the ground surface to absorb residual oil substances leaking from the dismantled hoses.

Two waste containers remained on-site during the last oversight inspection (one drop-box and one 55-gallon drum). The drop-box contained the last waste generated by the Grain Tank demolition and was subsequently removed on August 11, 2008. The 55-gallon drum was removed from the site on October 30, 2008 (see waste management discussion in Section 7).

7.0 Management of Demolition Waste

Waste derived from the demolition of the Grain Tanks consisted of paint chips, grain, and incidental existing material located on the concrete (e.g., moss, soil). During the project, demolition-derived waste (DDW) was placed in Oregon Department of Transportation (ODOT)-approved drums or tote sacks and then subsequently moved to 20-cubic-yard drop-boxes for management. Each drop-box was labeled with the project name, general contents, and date (see Table 9). The containers were temporarily stored at the site pending characterization and disposal.

A sample of the initial drum contents (T4GT041508) was obtained for waste designation purposes. The sample was analyzed for the Resource Conservation and Recovery Act (RCRA) 8 metals by EPA Method 6000/7000 series, TCLP Metals per EPA Method 1311/6000/7000, and PCBs by EPA Method 8082 (Appendix F). The chemical results are listed in Table 10. Chromium was detected at a concentration of 3,040 milligrams per kilogram (mg/kg). The TCLP chromium results were 25.3 milligrams per liter (mg/L), designating the DDW as hazardous waste. A total of 96.83 tons of material were disposed of at Chemical Waste Management's Subtitle C Landfill in Arlington, Oregon. Waste disposal manifests and weigh tickets are included in Appendix G.

During disconnection of the grain hydraulic valve connecting the tanks to the conveyor system, soil was impacted by the residual material remaining inside the line. The impacted soil was contained within one 55-gallon drum and a sample (IDW) was collected to identify the proper waste disposal method. The sample was analyzed for the RCRA 8 metals by EPA Method 6000/7000 series, NWTPH-HCID, and PCBs by EPA Method 8082. The chemical results are listed in Table 10. Chromium was detected at a concentration of 626 mg/kg and a follow-up analysis was performed for leachable metals by EPA Method 1311/6020A. The TCLP results indicated the impacted soil to be non-hazardous waste. The drum was disposed of at Hillsboro Landfill in Hillsboro, Oregon. Waste disposal manifests and weigh tickets are included in Appendix G.

Table 1
Sample Nomenclature and Volume
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Paint Chip Samples	Date Collected	Volume	Notes
T4-Tank 1	3/17/2008	4 oz.	1.
T4-Tank 2	3/17/2008	4 oz.	2.
T4-Tank 3	3/17/2008	4 oz.	3.
T4-Tank 4	3/17/2008	4 oz.	4.
T4-Tank 5	3/17/2008	4 oz.	--
T4-Tank 6	3/17/2008	4 oz.	--
T4-Tank 7	3/17/2008	4 oz.	--
T4-Tank 8	3/17/2008	4 oz.	--
T4-Tank 1-G	3/17/2008	4 oz.	5.
T4-Tank 2-G	3/17/2008	4 oz.	6.
T4-Tank 3-G	3/17/2008	~2 oz.	7.
T4-Tank 4-G	3/17/2008	4 oz.	8.
T4-Tank 5-G	3/17/2008	4 oz.	--
T4-Tank 6-G	3/17/2008	4 oz.	--
T4-Tank 7-G	3/17/2008	4 oz.	--
T4-Tank 8-G	3/17/2008	4 oz.	--

Catch Basin Samples	Date Collected	Volume	Notes
B1	3/26/2008	4 oz.	--
B1/2	3/26/2008	4 oz.	--
B2/3	3/26/2008	4 oz.	--
B3/4	3/26/2008	4 oz.	--
B4	3/26/2008	8 oz.	--
B5	3/26/2008	8 oz.	--
B5/6	3/26/2008	4 oz.	--
B6/7	3/26/2008	4 oz.	--
B7/8	3/26/2008	4 oz.	--
B8	3/26/2008	4 oz.	--

Notes:

1. Sample was incorrectly labeled. The sample applies to paint chips taken from the side of Tank 4.
2. Sample was incorrectly labeled. The sample applies to paint chips taken from the side of Tank 2.
3. Sample was incorrectly labeled. The sample applies to paint chips taken from the side of Tank 3.
4. Sample was incorrectly labeled. The sample applies to paint chips taken from the side of Tank 1.
5. Sample was incorrectly labeled. The sample applies to paint chips taken from the ground surface around Tank 4.
6. Sample was incorrectly labeled. The sample applies to paint chips taken from the ground surface around Tank 2.
7. Sample was incorrectly labeled. The sample applies to paint chips taken from the ground surface around Tank 3.
8. Sample was incorrectly labeled. The sample applies to paint chips taken from the ground surface around Tank 1.

Table 2
Paint Chip Chemistry Results: SVOCs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	T4-Tank 1		T4-Tank 1-G		T4-Tank 2		T4-Tank 2-G		T4-Tank 3		T4-Tank 3-G		T4-Tank 4		T4-Tank 4-G	
Sample ID:	T4-Tank 1		T4-Tank 1-G		T4-Tank 2		T4-Tank 2-G		T4-Tank 3		T4-Tank 3-G		T4-Tank 4		T4-Tank 4-G	
Date Sampled:	3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008	
SVOCs (µg/kg)																
bis(2-Chloroethyl)ether	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Phenol	2,550		8,140		2,430		2,560		2,360	U	3,330		2,150	U	3,560	
2-Chlorophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
1,3-Dichlorobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
1,4-Dichlorobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
1,2-Dichlorobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
bis(2-Chloroisporopyl)ether	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2-Methylphenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Hexachloroethane	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
n-nitroso-di-n-propylamine	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4-Methylphenol	76,500		154,000	R	57,400		59,500		9,060		59,300		4,180		28,800	
Nitrobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Isophorone	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	24,600		13,400	
2-Nitrophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4-Dimethylphenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
bis(2-Chloroethoxy)methane	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4-Dichlorophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
1,2,4-Trichlorobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Naphthalene	2,360	U	2,270	U	2,290	U	4,360		2,360	U	2,190	U	29,600		22,200	
4-Chloroaniline	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Hexachlorobutadiene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4-Chloro-3-methylphenol	8,300		12,400		9,630		12,400		2,360	U	10,800		1,120	J	6,020	
2-Methylnapthalene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Hexachlorocylclopentadiene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4,6-Trichlorophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4,5-Trichlorophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2-Chlronaphthalene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2-Nitroaniline	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Acenaphthylene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Dimethylnaphthalene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,6-Dinitrotoluene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Acenaphthene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
3-Nitroaniline	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4-Nitrophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Dibenzofuran	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
2,4-Dinitrotoluene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4-Nitrophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Fluorene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,110	J	2,270	J
4-Chlorophenyl-phenylether	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Diethylphthalate	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4-Nitroaniline	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4,6-Dinitro-2-methylphenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
n-Nitrosodiphenylamine	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
4-Bromophenyl-phenylether	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Hexachlorobenzene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Pentachlorophenol	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Phenanthrene	3,210		2,820		3,030		4,000		4,340		5,960		7,110		6,670	
Anthracene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Carbazole	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Di-n-butylphthalate	1,600	J	2,910		2,290	U	2,520		5,660		1,270	J	24,400		11,200	
Fluoranthene	1,370	J	2,270	U	1,280	J	1,040	J	2,360	U	4,740		2,100	J	1,810	J
Pyrene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,850		1,900	J	2,320	U
Butylbenzylphthalate	8,260		6,180		9,400		12,100		2,360	U	14,100		1,550	J	10,700	
3,3'-Dichlorobenzidine	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Benz(a)anthracene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Chrysene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	1,320	J	1,160	J	2,320	U
bis(2-Ethylhexyl)phthalate	7,780		18,200		3,350		12,600		16,100		6,360		13,400,000	R	5,910,000	R
Di-n-octylphthalate	2,360	U	9,770		2,290	U	2,000	U	2,360	U	3,550		19,200		51,600	
Benzo(b)fluoranthene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Benzo(k)fluoranthene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Benzo(a)pyrene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Indeno(1,2,3-cd)pyrene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Dibenz(a,h)anthracene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U
Benzo(g,h,i)perylene	2,360	U	2,270	U	2,290	U	2,000	U	2,360	U	2,190	U	2,150	U	2,320	U

Please refer to notes on last page of table.

Table 2
Paint Chip Chemistry Results: SVOCs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	T4-Tank 5		T4-Tank 5-G		T4-Tank 6		T4-Tank 6-G		T4-Tank 7		T4-Tank 7-G		T4-Tank 8		T4-Tank 8-G	
Sample ID:	T4-Tank 5		T4-Tank 5-G		T4-Tank 6		T4-Tank 6-G		T4-Tank 7		T4-Tank 7-G		T4-Tank 8		T4-Tank 8-G	
Date Sampled:	3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008	
SVOCs (µg/kg)																
bis(2-Chloroethyl)ether	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Phenol	1,580	J	2,870		2,150	U	3,750		2,160	U	2,820		2,330	U	9,330	
2-Chlorophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
1,3-Dichlorobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
1,4-Dichlorobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
1,2-Dichlorobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
bis(2-Chloroisporopyl)ether	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2-Methylphenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Hexachloroethane	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	33,300	
n-nitroso-di-n-propylamine	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Methylphenol	3,210		59,400		1,630	J	69,300		23,300		62,900		23,500		114,000	R
Nitrobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Isophorone	31,100		25,400		2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,540	J
2-Nitrophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4-Dimethylphenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
bis(2-Chloroethoxy)methane	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4-Dichlorophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
1,2,4-Trichlorobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Naphthalene	12,600		15,600		2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Chloroaniline	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Hexachlorobutadiene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Chloro-3-methylphenol	2,330	U	5,780		2,150	U	14,500		4,290		14,400		4,790		31,300	
2-Methylnapthalene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Hexachlorocylclopentadiene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4,6-Trichlorophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4,5-Trichlorophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2-Chlronaphthalene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2-Nitroaniline	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Acenaphthylene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Dimethylnaphthalene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,6-Dinitrotoluene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Acenaphthene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
3-Nitroaniline	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4-Nitrophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Dibenzofuran	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
2,4-Dinitrotoluene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Nitrophenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Fluorene	1,400	J	1,360	J	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Chlorophenyl-phenylether	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Diethylphthalate	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Nitroaniline	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4,6-Dinitro-2-methylphenol	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
n-Nitrosodiphenylamine	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
4-Bromophenyl-phenylether	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Hexachlorobenzene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Pentachlorophenol	2,330	U	1,940	U	2,150	U	2,140		2,160	U	2,350	U	2,330	U	1,980	U
Phenanthrene	4,330		7,400		2,150	U	1,170	J	1,170	J	1,970	J	1,950	J	2,530	
Anthracene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Carbazole	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Di-n-butylphthalate	3,490		8,370		2,150	U	3,670		2,080	J	5,450		3,630		9,960	
Fluoranthene	2,140	J	3,330		2,150	U	2,020	U	2,160	U	2,350	U	3,580		1,980	U
Pyrene	2,190	J	1,820	J	2,150	U	2,020	U	2,160	U	2,350	U	3,120		1,980	U
Butylbenzylphthalate	1,860	J	30,700		2,150	U	7,740		4,760		11,500		5,950		18,500	
3,3'-Dichlorobenzidine	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Benz(a)anthracene	1,160	J	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,000	J	1,980	U
Chrysene	1,260	J	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,840		1,980	U
bis(2-Ethylhexyl)phthalate	11,000,000	R	5,040,000	R	9,740		4,150		3,070		5,780		3,210		5,730	
Di-n-octylphthalate	34,900		1,940	U	5,360		2,020	U	2,160	U	1,920	J	2,330	U	1,980	U
Benzo(b)fluoranthene	1,950	J	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	3,540		1,980	U
Benzo(k)fluoranthene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,230	J	1,980	U
Benzo(a)pyrene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,370		1,980	U
Indeno(1,2,3-cd)pyrene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,140	J	1,980	U
Dibenz(a,h)anthracene	2,330	U	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330	U	1,980	U
Benzo(g,h,i)perylene	1,260	J	1,940	U	2,150	U	2,020	U	2,160	U	2,350	U	2,330		1,980	U

Notes:

1. SVOCs = Semi-Volatile Organic Compounds by EPA Method 8270.
2. µg/kg = Micrograms per kilogram.
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. -- = No screening level available or not analyzed.
5. J = Estimated value, below quantitation limit
6. U = The compound was analyzed for but was not detected at or above the method reporting limit (MRL) / method detection limit (MDL).
7. Shaded values indicate that the detected concentration exceeds the PEC.
8. **Bold** values indicate the compound was detected above the MRLs.
9. R = Sample was re-run to increase detection limits, to increase precision.

Table 3
Paint Chip Chemistry Results: PCBs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:		T4-Tank 1		T4-Tank 1-G		T4-Tank 2		T4-Tank 2-G		T4-Tank 3		T4-Tank 3-G		T4-Tank 4		T4-Tank 4-G	
Sample ID:	PEC	T4-Tank 1		T4-Tank 1-G		T4-Tank 2		T4-Tank 2-G		T4-Tank 3		T4-Tank 3-G		T4-Tank 4		T4-Tank 4-G	
Lab ID:		0804115-01		0804115-02		0804115-03		0804115-04		0804115-05		0804115-06		0804115-07		0804115-08	
Date Sampled:		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008	
PCBs (µg/kg)																	
Aroclor 1016	530	94.3	U	84.8	U	47.2	U	86.6	U	952	U	87.3	U	49.3	U	45.7	U
Aroclor 1221	--	94.3	U	84.8	U	47.2	U	86.6	U	952	U	87.3	U	49.3	U	45.7	U
Aroclor 1232	--	94.3	U	84.8	U	47.2	U	86.6	U	952	U	87.3	U	49.3	U	45.7	U
Aroclor 1242	--	94.3	U	84.8	U	47.2	U	86.6	U	952	U	87.3	U	49.3	U	45.7	U
Aroclor 1248	1,500	94.3	U	84.8	U	47.2	U	86.6	U	952	U	87.3	U	49.3	U	45.7	U
Aroclor 1254	300	5,220		5,120		3,630		5,550		56,200		6,030		516		1,980	
Aroclor 1260	200	94	U	1,280		47	U	87	U	952	U	87	U	49	U	46	U

Sample Location:		T4-Tank 5		T4-Tank 5-G		T4-Tank 6		T4-Tank 6-G		T4-Tank 7		T4-Tank 7-G		T4-Tank 8		T4-Tank 8-G	
Sample ID:	PEC	T4-Tank 5		T4-Tank 5-G		T4-Tank 6		T4-Tank 6-G		T4-Tank 7		T4-Tank 7-G		T4-Tank 8		T4-Tank 8-G	
Lab ID:		0804115-09		0804115-10		0804115-11		0804115-12		0804115-13		0804115-14		0804115-15		0804115-16	
Date Sampled:		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008	
PCBs (µg/kg)																	
Aroclor 1016	530	46.1	U	45.9	U	42.2	U	42.4	U	45.3	U	42.6	U	45.7	U	44.6	U
Aroclor 1221	--	46.1	U	45.9	U	42.2	U	42.4	U	45.3	U	42.6	U	45.7	U	44.6	U
Aroclor 1232	--	46.1	U	45.9	U	42.2	U	42.4	U	45.3	U	42.6	U	45.7	U	44.6	U
Aroclor 1242	--	46.1	U	45.9	U	138		42.4	U	45.3	U	42.6	U	45.7	U	44.6	U
Aroclor 1248	1,500	46.1	U	45.9	U	42.2	U	42.4	U	45.3	U	42.6	U	45.7	U	44.6	U
Aroclor 1254	300	215		45.9	U	521		1,220		956		1,420		1,380		1,990	
Aroclor 1260	200	46.1	U	45.9	U	133		42.4	U	45.3	U	42.6	U	45.7	U	44.6	U

Notes:

1. PCBs = Polychlorinated Biphenyls by EPA Method 8082.
2. µg/kg = Micrograms per kilogram (or parts per billion [ppb]).
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. -- = No screening level available or not analyzed.
5. J = The result is an estimated concentration due to sample analysis outside of recommended holding time.
6. U = The compound was analyzed for but was not detected at or above the method reporting limit (MRL) / method detection limit (MDL).
7. Shaded values indicate that the detected concentration exceeds the PEC.
8. **Bold** values indicate the compound was detected above the MRLs.

Table 4
Paint Chip Chemistry Results: Metals
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	T4-Tank 1		T4-Tank 1-G		T4-Tank 2		T4-Tank 2-G		T4-Tank 3		T4-Tank 3-G		T4-Tank 4		T4-Tank 4-G		Background	PEC
Lab ID:	0804115-01		0804115-02		0804115-03		0804115-04		0804115-05		0804115-06		0804115-07		0804115-08			
Date Sampled:	3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008			
Metals (mg/kg)																		
Aluminum	3,500		2,710		3,710		3,160		5,520		7,680		5,100		4,240		--	--
Antimony	0.511	N	0.374	N	0.737	N	0.405	N	1.57	N	2.77	N	1.51	N	0.89	N	5	64
Arsenic	1.42		1.32		1.67		1.33		1.27		1.26		2.56		2.21		6	33
Barium	2,490		2,300		2,340		2,510		438		2,450		562		2,840		--	--
Beryllium	0.085	J	0.070	J	0.0835	J	0.0815	J	0.146		0.086	J	0.098	J	0.179	J	2	--
Cadmium	1.84		1.64		3.19		1.80		4.50		7.95		4.61		1.46		1	5
Calcium	5,070		3,890		5,690		5,260		3,310		6,140		2,570		3,150		--	--
Chromium	10,800		7,660		11,500		11,500		3,500		14,100		157		5,620		26	111
Cobalt	63.4		43.2		62.2		62.9		6.4		69.0		5.0		33.7		--	--
Copper	114		87.1		150.0		114.0		90.5		113.0		91.6		102.0		34	149
Iron	8,460		7,600		13,200		6,680		25,800		5,460		22,700		22,200		--	--
Lead	993		706		1,130		969		842		1,150		90,500		30,100		24	128
Magnesium	4,820		3,600		5,360		5,520		1,970		5,940		1,920		3,380		--	--
Manganese	469	N	396	N	533	N	271	N	1,120	N	196	N	1,210	N	370	N	--	--
Mercury	0.454	E	0.373	E	0.434	E	0.466	E	0.074	E	0.685	E	0.197	E	0.305	E	0	1
Nickel	10.8		8.38		12.9		6.7		25.2		7.8		23.1		21.5		21	49
Potassium	4,800		3,420		4,910		5,100		1,680		5,730		606		2,720		--	--
Selenium	0.177	U	0.160	U	0.172	U	0.173	U	0.176	U	0.164	U	0.174	U	0.183	U	1	5
Silver	0.261		0.287		0.420		0.183		0.277		0.168		1.250		0.481		1	5
Sodium	263		233		365		231		408		225		507		217		--	--
Thallium	0.102	J	0.0684	J	0.102	J	0.0997	J	0.1310	J	0.1100	J	0.1580	J	0.1280	J	<5	--
Vanadium	18.3		15.0		15.7		12.7		26.8		13.0		24.4		13.2		--	--
Zinc	15,500		11,100		17,000		16,300		5,610		19,800		2,370		8,620		95	459

Please refer to notes on last page of table.

Table 4
Paint Chip Chemistry Results: Metals
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	T4-Tank 5		T4-Tank 5-G		T4-Tank 6		T4-Tank 6-G		T4-Tank 7		T4-Tank 7-G		T4-Tank 8		T4-Tank 8-G		Background	PEC
Lab ID:	0804115-09		0804115-10		0804115-11		0804115-12		0804115-13		0804115-14		0804115-15		0804115-16			
Date Sampled:	3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008		3/17/2008			
Metals (mg/kg)																		
Aluminum	8,770		3,740		9,160		3,000		3,040		4,770		5,450		2,760		--	--
Antimony	2.110	N	0.343	N	1.520	N	1.550	N	1.280	N	1.010	N	1.580	N	1.360	N	5	64
Arsenic	6.28		0.89		16.60		1.40		4.97		2.02		4.25		2.03		6	33
Barium	1,980		2,670		239		2,410		2,600		3,030		2,510		2,470		--	--
Beryllium	0.048	J	0.065	J	0.093	J	0.058	J	0.072	J	0.123	U	0.103	J	0.060	J	2	--
Cadmium	1.14		1.02		3.35		5.19		4.17		2.63		4.64		5.11		1	5
Calcium	994		1,290		13,800		5,730		4,470		3,900		5,510		5,100		--	--
Chromium	3,160		140		3,440		17,200		10,800		9,050		11,600		17,000		26	111
Cobalt	42.50		3.31		48.40		67.10		75.10		55.00		71.60		78.90		--	--
Copper	64.2		24.9		117.0		34.5		68.8		53.7		54.2		10.9		34	149
Iron	104,000		19,400		163,000		3,030		80,200		69,400		3,800		4,930		--	--
Lead	130,000		23,600		3,390		1,770		1,240		927		1,480		1,640		24	128
Magnesium	1,570		3,840		3,990		4,220		3,890		3,610		4,870		5,140		--	--
Manganese	711	N	356	N	2,040	N	164	N	631	N	424	N	631	N	110	N	--	--
Mercury	0.091	E	0.027	E	0.119	E	0.095	E	0.048	E	0.031	E	0.060	E	0.068	E	0	1
Nickel	67.600		8.680		104		4.13		69.2		57.4		32.3		4.3		21	49
Potassium	1,390		303		1,590		7,180		4,830		4,020		5,810		7,300		--	--
Selenium	0.478	J	0.165	U	0.690	J	0.162	U	0.171	U	1.240	U	0.179	J	0.172	U	1	5
Silver	1.210		0.331		0.944		0.278		0.449		0.255		0.487		0.287		1	5
Sodium	126		172		294		386		227		198		352		361		--	--
Thallium	0.2050		0.0451	J	0.0488	J	0.1070	J	0.0956	J	0.1230	U	0.0993	J	0.0985	J	<5	--
Vanadium	23.7		8.6		25.3		14.2		23.8		12.4		39.2		26.4		--	--
Zinc	4,140		2,400		9,580		32,800		19,300		16,400		22,800		30,100		95	459

Notes:

1. Metals using EPA Method 6020A/7474.
2. mg/kg = Milligrams per kilogram.
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. U = The compound was analyzed for but was not detected at or above the method reporting limit (MRL) / method detection limit (MDL).
5. -- = No screening level available or not analyzed.
6. Shaded values indicate that the detected concentration exceeds the PEC.
7. Background Levels are from the Washington Department of Ecology's publication Natural Background Soil Metals Concentrations in Washington State, dated October 1994. Values are the 90th percentile values for Clark County, except for antimony, selenium, silver and thallium where state-wide data were used due to a limited number of detections.
8. J = Below CRDL, Project DL, or RL but greater than or = MDL.
9. N = Spike recover outside control limits.
10. U = The analyte was analyzed for but not detected at the sample specific level reported.
11. E = The value is estimated due to interference.

Table 5
Catch Basin Sediment Chemistry Results: SVOCs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	Catch Basin 1		Catch Basin 1/2		Catch Basin 2/3		Catch Basin 3/4		Catch Basin 4		Catch Basin 5		Catch Basin 5/6		Catch Basin 6/7		Catch Basin 7/8		Catch Basin 8	
Sample ID:	B1		B1/2		B2/3		B3/4		B4		B5		B5/6		B6/7		B7/8		B8	
Date Sampled:	39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533	
SVOCs (µg/kg)																				
bis(2-Chloroethyl)ether	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Phenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,590	JB	1,140	U	1,380	U	1,210	U	2,260	U
2-Chlorophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
1,3-Dichlorobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
1,4-Dichlorobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
1,2-Dichlorobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
bis(2-Chloroisporopyl)ether	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2-Methylphenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Hexachloroethane	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
n-nitroso-di-n-propylamine	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Methylphenol	99,000		1,400	U	27,700		6,240		1,200	U	56,400		1,140	U	4,960		1,210	U	46,100	
Nitrobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Isophorone	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2-Nitrophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4-Dimethylphenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
bis(2-Chloroethoxy)methane	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4-Dichlorophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
1,2,4-Trichlorobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Naphthalene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Chloroaniline	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Hexachlorobutadiene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Chloro-3-methylphenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2-Methylnapthalene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Hexachlorocylclopentadiene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4,6-Trichlorophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4,5-Trichlorophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2-Chlronaphthalene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2-Nitroaniline	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Acenaphthylene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Dimethylnaphthalene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,6-Dinitrotoluene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Acenaphthene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
3-Nitroaniline	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4-Nitrophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Dibenzofuran	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
2,4-Dinitrotoluene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Nitrophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Fluorene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Chlorophenyl-phenylether	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Diethylphthalate	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Nitroaniline	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4,6-Dinitro-2-methylphenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
n-Nitrosodiphenylamine	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
4-Bromophenyl-phenylether	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U

Please refer to notes on last page of table.

Table 5
Catch Basin Sediment Chemistry Results: SVOCs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	Catch Basin 1		Catch Basin 1/2		Catch Basin 2/3		Catch Basin 3/4		Catch Basin 4		Catch Basin 5		Catch Basin 5/6		Catch Basin 6/7		Catch Basin 7/8		Catch Basin 8	
Sample ID:	B1		B1/2		B2/3		B3/4		B4		B5		B5/6		B6/7		B7/8		B8	
Date Sampled:	39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533		39,533	
Hexachlorobenzene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Pentachlorophenol	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Phenanthrene	3,670	U	1,400	U	1,940	J	1,820	J	1,200	U	2,820	U	1,140	U	827	J	1,210	U	2,080	J
Anthracene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Carbazole	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Di-n-butylphthalate	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Fluoranthene	2,790	J	726	J	3,710		4,250		841	J	2,250	J	1,140	U	1,880		1,210	U	3,530	
Pyrene	2,200	J	1,400	U	3,890		3,860		817	J	1,860	J	1,140	U	1,600		1,210	U	3,080	
Butylbenzylphthalate	3,670	U	1,400	U	1,770	J	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
3,3'-Dichlorobenzidine	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Benz(a)anthracene	3,670	U	1,400	U	2,470	J	2,040	J	697	J	2,820	U	1,140	U	937	J	1,210	U	1,270	J
Chrysene	2,350	J	838	J	5,650		3,530		1,060	J	1,970	J	1,140	U	1,600		1,210	U	2,540	
bis(2-Ethylhexyl)phthalate	10,100		11,600		17,700		5,020		767	J	9,980		4,950		4,160		821	J	2,670	
Di-n-octylphthalate	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Benzo(b)fluoranthene	2,200	J	810	J	5,590		3,260		1,100	J	1,690	J	1,140	U	1,540		1,210	U	2,220	J
Benzo(k)fluoranthene	3,670	U	1,400	U	2,240	J	2,540	J	889	J	2,820	U	1,140	U	1,300	J	1,210	U	1,950	J
Benzo(a)pyrene	3,670	U	1,400	U	2,940		2,540	J	673	J	2,820	U	1,140	U	1,350	J	1,210	U	1,810	J
Indeno(1,2,3-cd)pyrene	3,670	U	1,400	U	1,880	J	1,990	J	1,200	U	2,820	U	1,140	U	1,080	J	1,210	U	1,400	J
Dibenz(a,h)anthracene	3,670	U	1,400	U	2,940	U	2,760	U	1,200	U	2,820	U	1,140	U	1,380	U	1,210	U	2,260	U
Benzo(g,h,i)perylene	3,670	U	1,400	U	2,060	J	2,320	J	625	J	2,820	U	1,140	U	1,240	J	1,210	U	1,630	J

Notes:
1. SVOCs = Semi-Volatile Organic Compounds by EPA Method 8270.
2. µg/kg = Micrograms per kilogram.
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. -- = No screening level available or not analyzed.
5. J = The result is an estimated concentration due to sample analysis outside of recommended holding time.
6. U = The compound was analyzed for but was not detected at or above the method reporting limit (MRL) / method detection limit (MDL).
7. Shaded values indicate that the detected concentration exceeds the PEC.
8. **Bold** values indicate the compound was detected above the MRLs.
9. E = Estimated value, exceeds the upper limit of calibration.

Table 6
Catch Basin Sediment Chemistry Results: PCBs
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	Catch Basin 1		Catch Basin 1/2		Catch Basin 2/3		Catch Basin 3/4		Catch Basin 4		PEC
Sample ID:	B1		B1/2		B2/3		B3/4		B4		
Lab ID:	0804116-05		0804116-04		0804116-03		0804116-02		0804116-01		
Date Sampled:	3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		
PCBs (µg/kg)											
Aroclor 1016	143	U	56.0	U	120	U	115	U	45.1	U	530
Aroclor 1221	143	U	56.0	U	120	U	115	U	45.1	U	--
Aroclor 1232	143	U	56.0	U	120	U	115	U	45.1	U	--
Aroclor 1242	501		182		545		398		45.1	U	--
Aroclor 1248	143	U	56.0	U	120	U	115	U	45.1	U	1,500
Aroclor 1254	926		408		1,320		1,310		156		300
Aroclor 1260	143	U	56.0	U	364		277		45.1	U	200

Sample Location:	Catch Basin 5		Catch Basin 5/6		Catch Basin 6/7		Catch Basin 7/8		Catch Basin 8		PEC
Sample ID:	B5		B5/6		B6/7		B7/8		B8		
Lab ID:	0804116-06		0804116-07		0804116-08		0804116-09		0804116-10		
Date Sampled:	3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		
PCBs (µg/kg)											
Aroclor 1016	109	U	45.4	U	55.4	U	48.7	U	91.9	U	530
Aroclor 1221	109	U	45.4	U	55.4	U	48.7	U	91.9	U	--
Aroclor 1232	109	U	45.4	U	55.4	U	48.7	U	91.9	U	--
Aroclor 1242	394		45.4	U	55.4	U	48.7	U	117		--
Aroclor 1248	109	U	45.4	U	55.4	U	48.7	U	91.9	U	1,500
Aroclor 1254	640		108		193		120		408		300
Aroclor 1260	109	U	45.4	U	55.4	U	48.7	U	91.9	U	200

Notes:
1. PCBs = Polychlorinated Biphenyls by EPA Method 8082.
2. µg/kg = Micrograms per kilogram (or parts per billion [ppb]).
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. -- = No screening level available or not analyzed.
5. J = The result is an estimated concentration due to sample analysis outside of recommended holding time.
6. U = The compound was analyzed for but was not detected at or above the method reporting limity (MRL) / method detection limit (MDL).
7. Shaded values indicate that the detected concentration exceeds the PEC.
8. **Bold** values indicate the compound was detected above the MRLs.

Table 7
Catch Basin Sediment Chemistry Results: Metals
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample Location:	Catch Basin 1		Catch Basin 1/2		Catch Basin 2/3		Catch Basin 3/4		Catch Basin 4		Catch Basin 5		Catch Basin 5/6		Catch Basin 6/7		Catch Basin 7/8		Catch Basin 8		Background	PEC
Sample ID:	B1		B1/2		B2/3		B3/4		B4		B5		B5/6		B6/7		B7/8		B8			
Lab ID:	0804116-05		0804116-04		0804116-03		0804116-02		0804116-01		0804116-06		0804116-07		0804116-08		0804116-09		0804116-10			
Date Sampled:	3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008		3/26/2008			
Metals (mg/kg)																						
Aluminum	9,100	E	6,760	E	8,820	E	12,400	E	6,160	E	11,400	E	4,690	E	6,480	E	6,420	E	11,200	E	--	--
Antimony	4.66	N	2.21	N	3.72	N	6.02	N	1.31	N	3.99	N	0.271	N	1.72	N	0.894	N	1.42	N	5	64
Arsenic	7.27	H	6.02	H	8.58	H	19.3	H	5.34	H	8.42	H	2.1	H	4.74	H	3.71	H	9.54	H	6	33
Barium	339	EN	318	EN	417	EN	2130	EN	320	EN	543	EN	133	EN	335	EN	743	EN	618	EN	--	--
Beryllium	0.277		0.226		0.3		0.443		0.224		0.322		0.234		0.226		0.228		0.423		2	--
Cadmium	8.22		8.77		7.63		12		7.74		7.78		1.03		4.62		3.66		4.92		1	5
Calcium	5,730	E	5,250	E	5,360	E	7,780	E	4,610	E	6,680	E	3,420	E	4,340	E	4,020	E	6,760	E	--	--
Chromium	206	H	109	H	265	H	342	H	47.6	H	200	H	17.3	H	149	H	25	H	87.2	H	26	111
Cobalt	12.5	E	9.64	E	12.9	E	18	E	6.58	E	16.2	E	6	E	7.87	E	7.84	E	10.7	E	--	--
Copper	241	EH	128	EH	290	EH	303	EH	84.9	EH	222	EH	27.3	EH	84.3	EH	37.5	EH	87.4	EH	34	149
Iron	40,600	H	45,400	H	43,100	H	67,800	H	30,100	H	47,600	H	14,900	H	29,000	H	25,500	H	35,200	H	--	--
Lead	631	HN	445	HN	894	HN	750	HN	461	HN	576	HN	233	HN	607	HN	196	HN	417	HN	24	128
Magnesium	3,310	EN	3,250	EN	3,460	EN	5,030	EN	2,640	EN	4,320	EN	2,560	EN	3,040	EN	2,540	EN	4,710	EN	--	--
Manganese	2,410	H	1,240	H	1,760	H	2,050	H	739	H	1,920	H	270	H	693	H	595	H	1,150	H	--	--
Mercury	0.25		0.0476		0.283		0.282		0.0212		0.392		0.00111		0.0635		0.00742		0.0785		0	1
Nickel	58.6	E	36.6	E	63.7	E	85.6	E	24.7	E	63.9	E	15.6	E	30	E	22.6	E	35.2	E	21	49
Potassium	556	N	747	N	552	H	955	N	784	N	644	N	414	N	553	N	513	N	1,100	N	--	--
Selenium	0.887	J	0.317	J	0.984	J	1.21		0.439		0.484	J	0.083	J	0.122	J	0.32	J	0.396	J	1	5
Silver	1.2		1.42		1.58		2.1		0.859		1.02		0.174		0.883		0.672		0.743		1	5
Sodium	491	N	1,130	N	645	N	1,320	N	1,160	N	607	N	303	N	505	N	504	N	748	N	--	--
Thallium	0.0765		0.0445		0.09		0.105		0.0475		0.0846		0.0392		0.0515		0.0413		0.124		<5	--
Vanadium	60.2	H	35.3	H	73.8	H	97.7	H	34.5	H	72.4	H	24.6	H	38.5	H	27.9	H	60.3	H	--	--
Zinc	2,670	H	3,720	H	2,720	H	4,640	H	3,430	H	3,940	H	412	H	2,110	H	1,620	H	2,380	H	95	459

Notes:

1. Metals using EPA Method 6020A/7474.
2. mg/kg = Milligrams per kilogram.
3. PEC = Portland Harbor Joint Source Control Strategy (JSCS) Probable Effect Concentration for Upland Soil Toxicity.
4. U = The compound was analyzed for but was not detected at or above the method reporting limit (MRL) / method detection limit (MDL).
5. -- = No screening level available or not analyzed.
6. Shaded values indicate that the detected concentration exceeds the PEC.
7. Background Levels are from the Washington Department of Ecology's publication Natural Background Soil Metals Concentrations in Washington State, dated October 1994. Values are the 90th percentile values for Clark County, except for antimony, selenium, silve and thallium where state-wide data were used due to a limited number of detections.
8. J = Below CRDL, Project DL, or RL but greater than or = MDL.
9. N = Spike recover outside control limits.
10. U = The analyte was analyzed for but not detected at the sample specific level reported.
11. E = The value is estimated due to interference.
12. H = Duplicate outside control limits.

Table 8
Demolition Progress
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Action Completed	Tank 1	Tank 2	Tank 3	Tank 4	Tank 5	Tank 6	Tank 7	Tank 8
Demo Started	5/7/2008	5/14/2008	5/21/2008	5/21/2008	4/18/2008	4/11/2008	4/2/2008	3/24/2008
Roof Removed	5/7/2008	5/14/2008	5/21/2008	5/28/2008	4/24/2008	4/18/2008	4/11/2008	4/2/2008
Wall Removed	5/14/2008	5/21/2008	6/18/2008	6/18/2008	5/7/2008	4/24/2008	4/18/2008	4/18/2008
Scrap Metal Pile Removed	6/5/2008	6/5/2008	6/18/2008	6/18/2008	5/28/2008	5/7/2008	4/30/2008	4/24/2008
Metal Floor Removed	6/18/2008	6/18/2008	7/3/2008	7/3/2008	6/19/2008	5/21/2008	5/14/2008	5/14/2008
Concrete Foundation Structures Removed	7/3/2008	7/3/2008	7/3/2008	7/3/2008	7/3/2008	7/3/2008	6/5/2008	6/5/2008
Concrete Crushed	7/10/2008	7/10/2008	7/10/2008	7/18/2008	7/10/2008	7/10/2008	7/10/2008	7/3/2008
Former Tank Floor Graded	8/1/2008	8/1/2008	8/1/2008	8/1/2008	8/1/2008	7/24/2008	7/24/2008	7/24/2008
Hydroseeded	8/5/2008	8/5/2008	8/5/2008	8/5/2008	8/5/2008	8/5/2008	8/5/2008	8/5/2008

Note:
1. Date reflects the weekly oversight inspection at which the progres of demolition was observed.

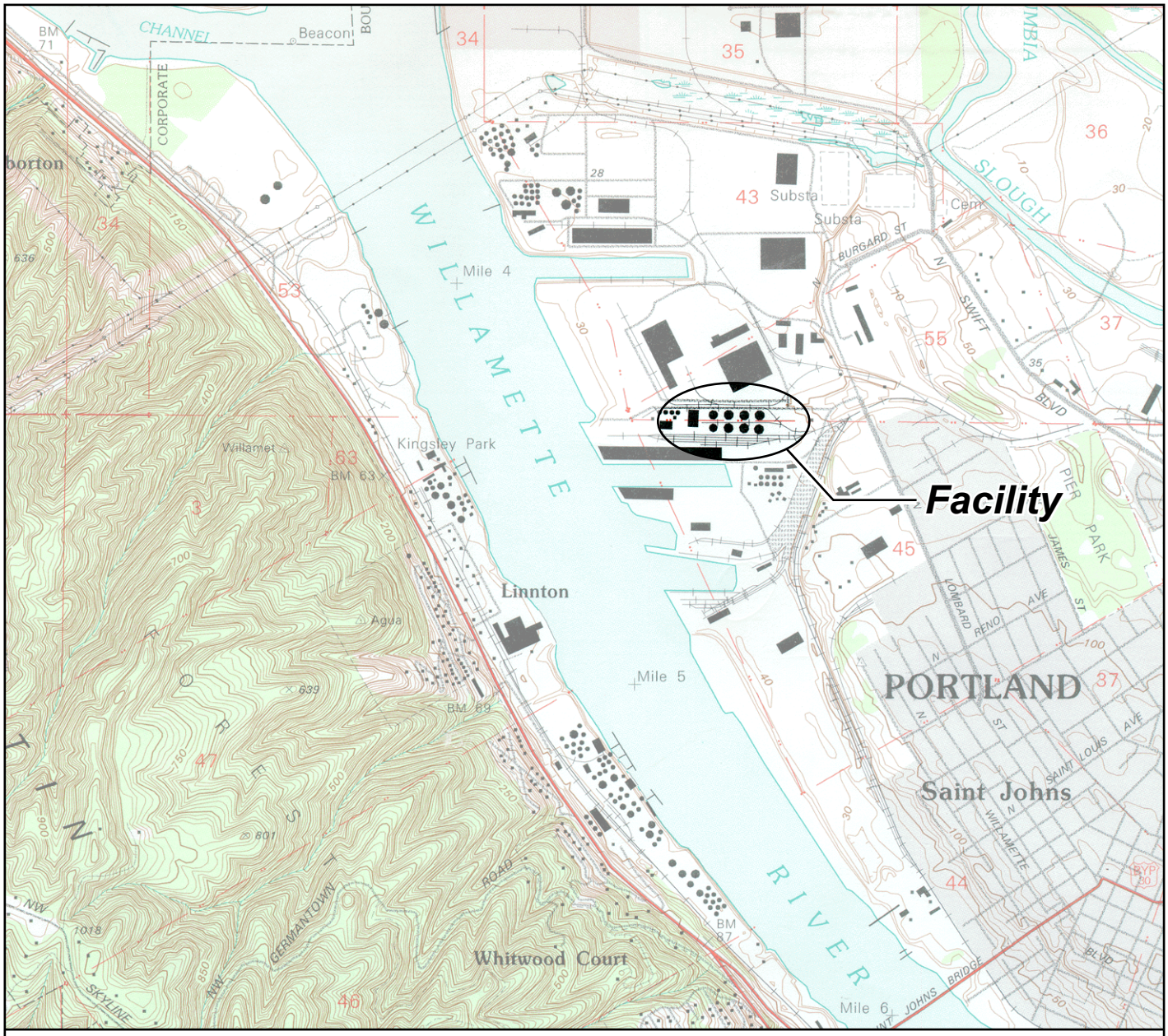
Table 9
Demolition-Derived Waste
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Drums	Opened	Closed	Shipped	Manifest	Tons	Comments
1	4/2/2008	4/2/2008	6/11/2008	1388808	2.20	Combined total for drums 1 - 10
2	4/3/2008	4/9/2008	6/11/2008	1388808		
3	4/10/2008	4/13/2008	6/11/2008	1388808		
4	4/18/2008	4/15/2008	6/11/2008	1388808		
5	4/18/2008	4/18/2008	6/11/2008	1388808		
6	4/18/2008	4/18/2008	6/11/2008	1388808		
7	4/18/2008	4/18/2008	6/11/2008	1388808		
8	4/18/2008	4/18/2008	6/11/2008	1388808		
9	4/18/2008	4/18/2008	6/11/2008	1388808		
10	4/18/2008	4/18/2008	6/11/2008	1388808		
11	4/18/2008	4/18/2008	6/2/2008	726518		Transferrred to drop-box 4/18/08, Manifest #726518
12	7/5/2008	7/5/2008	10/30/2008	--	0.2	Non-hazardous; disposed of at Hillsboro landfill
Totes	**Opened**	**Closed**	**Shipped**	**Manifest**	**Tons**	**Comments**
1	4/19/2008	4/19/2008	6/23/2008	1388786		Transferrred to drop-box 6/12/08, Manifest #1388786
2	4/19/2008	4/19/2008	6/23/2008	1388786		Transferrred to drop-box 6/12/08, Manifest #1388786
3	4/20/2008	4/20/2008	6/23/2008	1388786		Transferrred to drop-box 6/12/08, Manifest #1388786
4	4/21/2008	4/21/2008	6/23/2008	1388786		Transferrred to drop-box 6/12/08, Manifest #1388786
5	4/22/2008	4/22/2008	6/23/2008	1388786		Transferrred to drop-box 6/12/08, Manifest #1388786
Drop-Boxes	**Opened**	**Closed**	**Shipped**	**Manifest**	**Tons**	**Comments**
1	4/19/2008	4/19/2008	6/23/2008	1388786	18.93	
2	4/18/2008	4/30/2008	6/2/2008	726518		Tonnage included with 6/23/08 shipment below
3	5/12/2008	5/12/2008	6/2/2008	726518		
4	5/20/2008	6/11/2008	6/11/2008	1388807	24.40	Combined total for drop-boxes 4 and 5
5	5/28/2008	5/28/2008	6/11/2008	1388807		
6	6/12/2008	6/13/2008	6/26/2008	1388816		Tonnage included with 6/26/08 shipment
7	6/13/2008	6/12/2008	6/30/2008	1388819	5.80	
8	4/22/2008	6/13/2008	6/23/2008	1388786	21.20	
9	6/24/2008	6/25/2008	6/26/2008	1388816	16.75	
10	7/9/2008	8/11/2008	8/11/2008	1388842	7.55	

Table 10
Demolition-Derived Waste - Analytical Data
Terminal 4 Slip 1 Upland Facility
Portland, Oregon

Sample:	T4GT041508	IDW
Date Collected:	4/15/2008	8/6/2008
Total Metals (EPA 6000/7000 Series)	mg/kg	
Arsenic	9.74	4.62
Barium	4,950	306
Cadmium	7.25	2.84
Chromium	3,040	626
Lead	507	228
Mercury	0.102	0.124
Selenium	<0.521	0.774
Silver	0.671	<0.531
TCLP Metals (EPA 6000/7000 Series)	mg/L	
Arsenic	<0.05	<0.05
Barium	7.0	0.461
Cadmium	0.1	0.0186
Chromium	25.3	0.0149
Lead	0.1	<0.05
Mercury	<0.0002	<0.0002
Selenium	<0.02	<0.05
Silver	<0.05	<0.02
PCBs (EPA Method 8082)	mg/kg	
Aroclor 1016	<0.0344	<0.0349
Aroclor 1221	<0.0692	<0.0701
Aroclor 1232	<0.0344	<0.0349
Aroclor 1242	<0.0344	<0.0349
Aroclor 1248	<0.0344	<0.0349
Aroclor 1254	0.192	0.546
Aroclor 1260	<0.0344	<0.0349
HCID (NWTPH Method)	mg/kg	
Gasoline-Range Hydrocarbons	--	DET
Diesel-Range Hydrocarbons	--	DET
Heavy Oil-Range Hydrocarbons	--	DET

Notes:
1. mg/kg = Milligrams per kilogram.
2. mg/L = Milligrams per liter.
3. IDW = Investigation-derived waste.
4. DET = Analyte detected at or above the method reporting limit (MRL).



Base map prepared from the USGS 7.5-minute quadrangle of Linnton, Oregon, dated 1990.

0 2,000 4,000

Approximate Scale in Feet

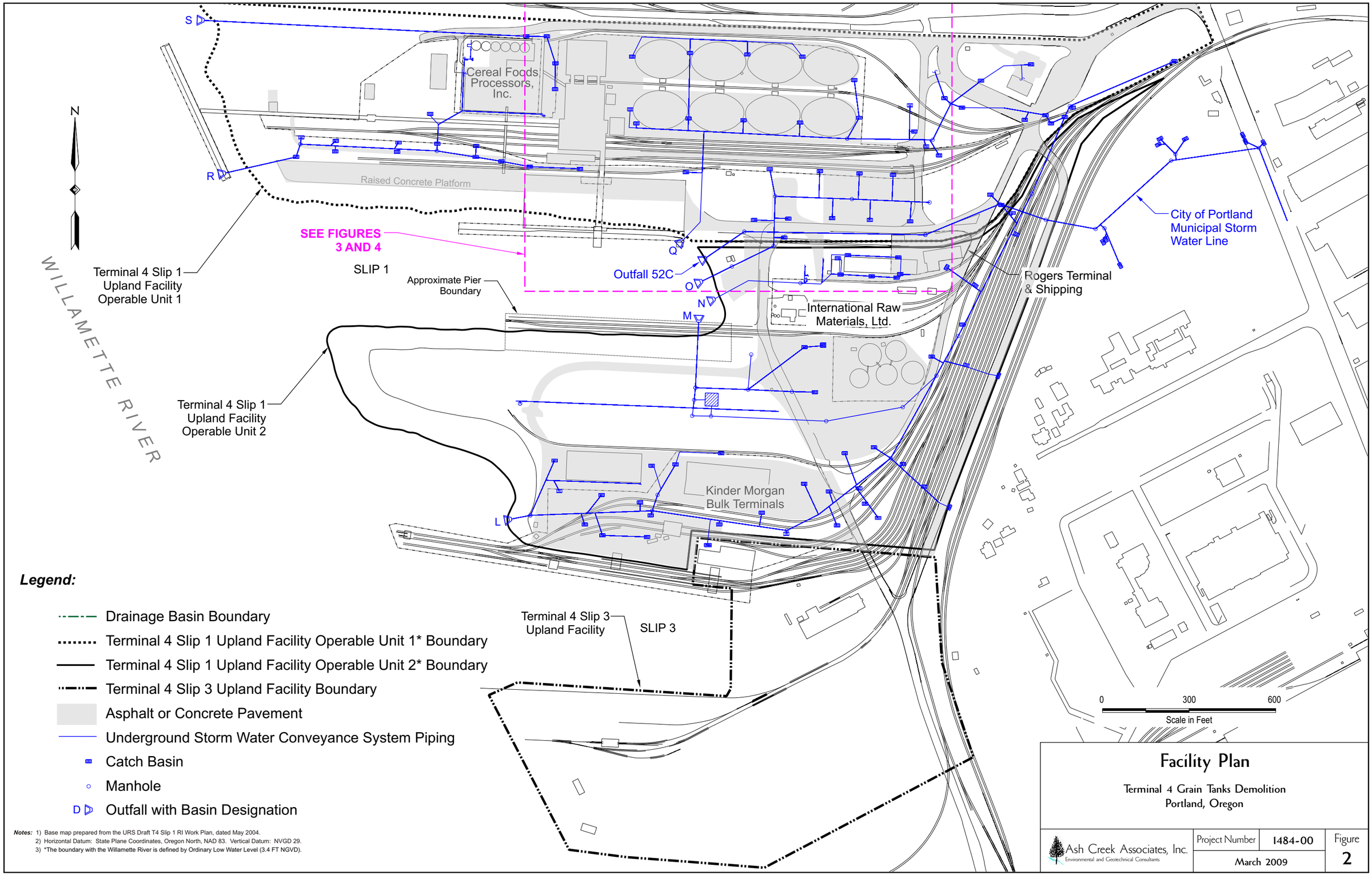
N

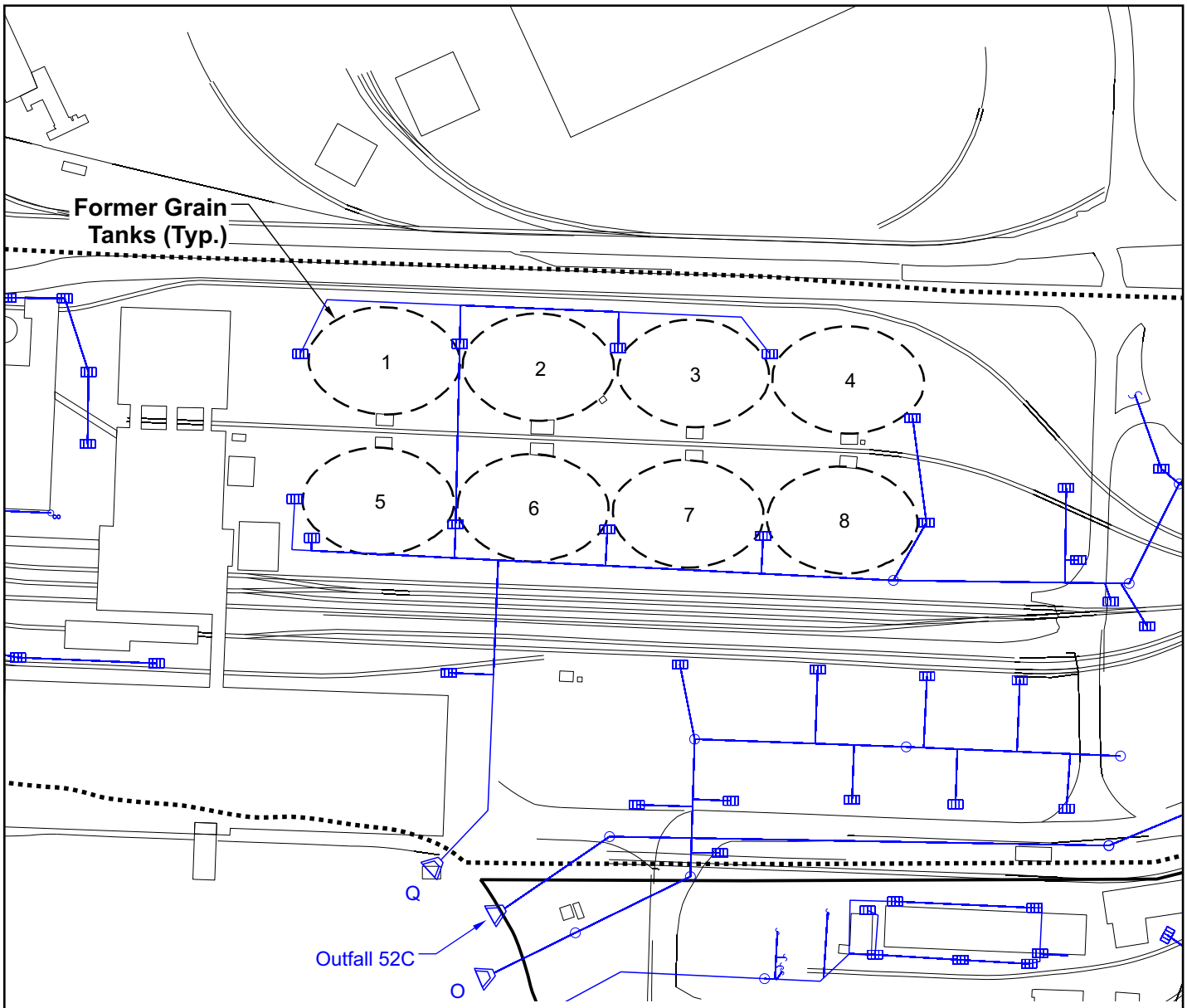
Facility Location Map

Terminal 4 Grain Tanks Demolition
Portland, Oregon

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

Project Number	1484-00	Figure
March 2009		1


N
S
R
Cereal Foods Processors, Inc.
Raised Concrete Platform
SEE FIGURES 3 AND 4
SLIP 1
Terminal 4 Slip 1 Upland Facility Operable Unit 1
Approximate Pier Boundary
Q
Outfall 52C
O
N
M
International Raw Materials, Ltd.
Rogers Terminal & Shipping
City of Portland Municipal Storm Water Line
WILLAMETTE RIVER
Terminal 4 Slip 1 Upland Facility Operable Unit 2
Kinder Morgan Bulk Terminals
L
Terminal 4 Slip 3 Upland Facility
SLIP 3
0
300
600
Scale in Feet
Legend:
Drainage Basin Boundary
Terminal 4 Slip 1 Upland Facility Operable Unit 1* Boundary
Terminal 4 Slip 1 Upland Facility Operable Unit 2* Boundary
Terminal 4 Slip 3 Upland Facility Boundary
Asphalt or Concrete Pavement
Underground Storm Water Conveyance System Piping
Catch Basin
Manhole
D Outfall with Basin Designation
Notes: 1) Base map prepared from the URS Draft T4 Slip 1 RI Work Plan, dated May 2004.
2) Horizontal Datum: State Plane Coordinates, Oregon North, NAD 83. Vertical Datum: NVGD 29.
3) *The boundary with the Willamette River is defined by Ordinary Low Water Level (3.4 FT NGVD).
Facility Plan
Terminal 4 Grain Tanks Demolition
Portland, Oregon
Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants
Project Number
1484-00
March 2009
Figure
2



Legend:

- Terminal 4 Slip 1 Upland Facility Operable Unit 1* Boundary
- Terminal 4 Slip 1 Upland Facility Operable Unit 2* Boundary
- Leasehold Boundary
- Underground Storm Water Conveyance System Piping
- Catch Basin
- Manhole
- D Outfall with Basin Designation

N

0 200 400

Approximate Scale in Feet

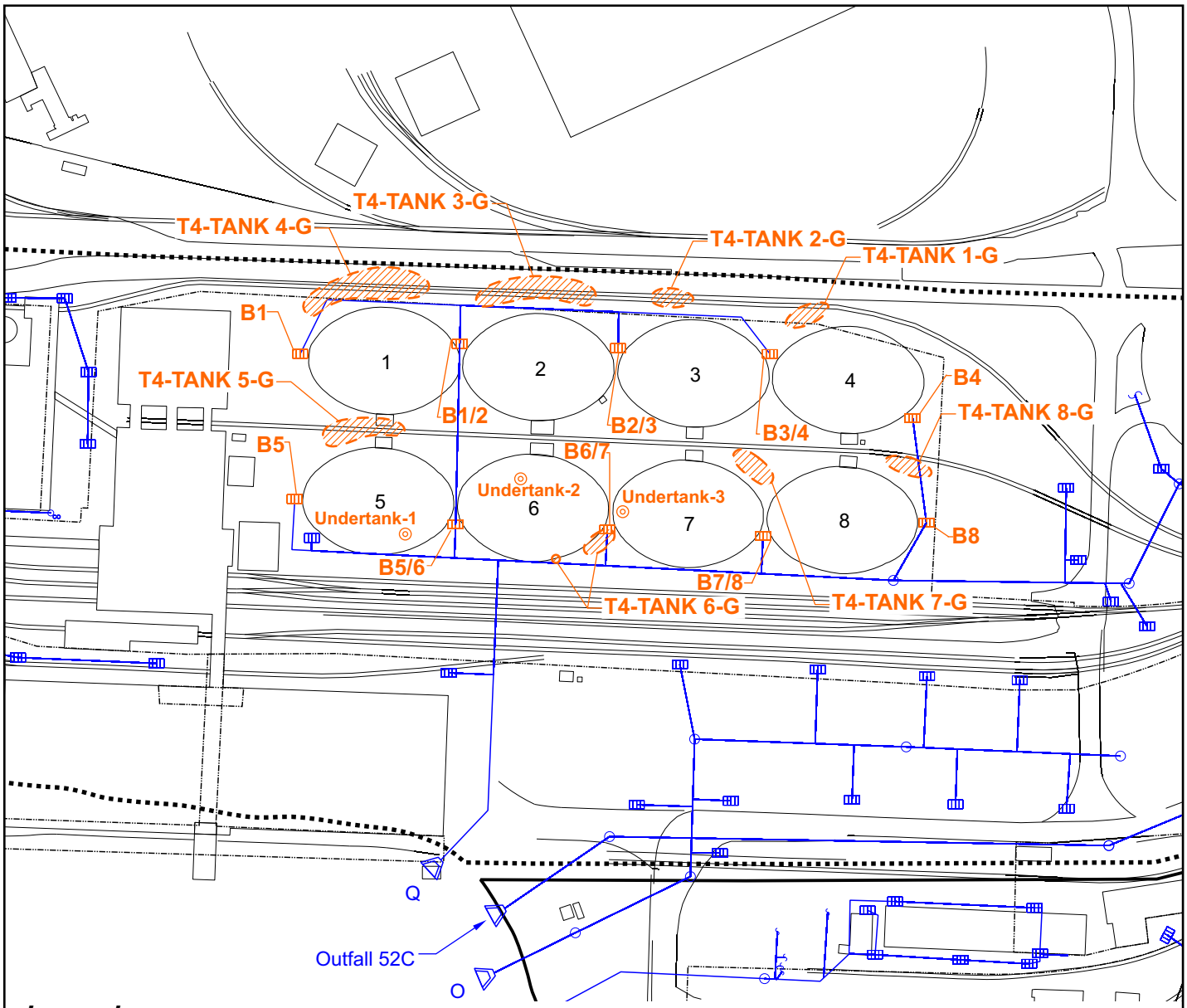
Tank Plan

Terminal 4 Grain Tanks Demolition
Portland, Oregon

Notes: 1) Base map prepared from the URS Draft T4 Slip 1 RI Work Plan, dated May 2004.
2) Horizontal Datum: State Plane Coordinates, Oregon North, NAD 83. Vertical Datum: NVGD 29.
3) *The boundary with the Willamette River is defined by Ordinary Low Water Level (3.4 FT NGVD).

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

Project Number	1484-00	Figure
March 2009		3



Legend:

T4-TANK 4-G	Paint Chip Ground Surface Sample Area
B5	Catch Basin Solid Sample
Undertank-1	Surface Soil Sample
	Terminal 4 Slip 1 Upland Facility Operable Unit 1* Boundary
	Terminal 4 Slip 1 Upland Facility Operable Unit 2* Boundary
	Leasehold Boundary
	Underground Storm Water Conveyance System Piping
	Catch Basin
	Manhole
D	Outfall with Basin Designation

N

0 200 400

Approximate Scale in Feet

Notes: 1) Base map prepared from the URS Draft T4 Slip 1 RI Work Plan, dated May 2004.
2) Horizontal Datum: State Plane Coordinates, Oregon North, NAD 83. Vertical Datum: NVGD 29.
3) *The boundary with the Willamette River is defined by Ordinary Low Water Level (3.4 FT NGVD).

Sample Locations

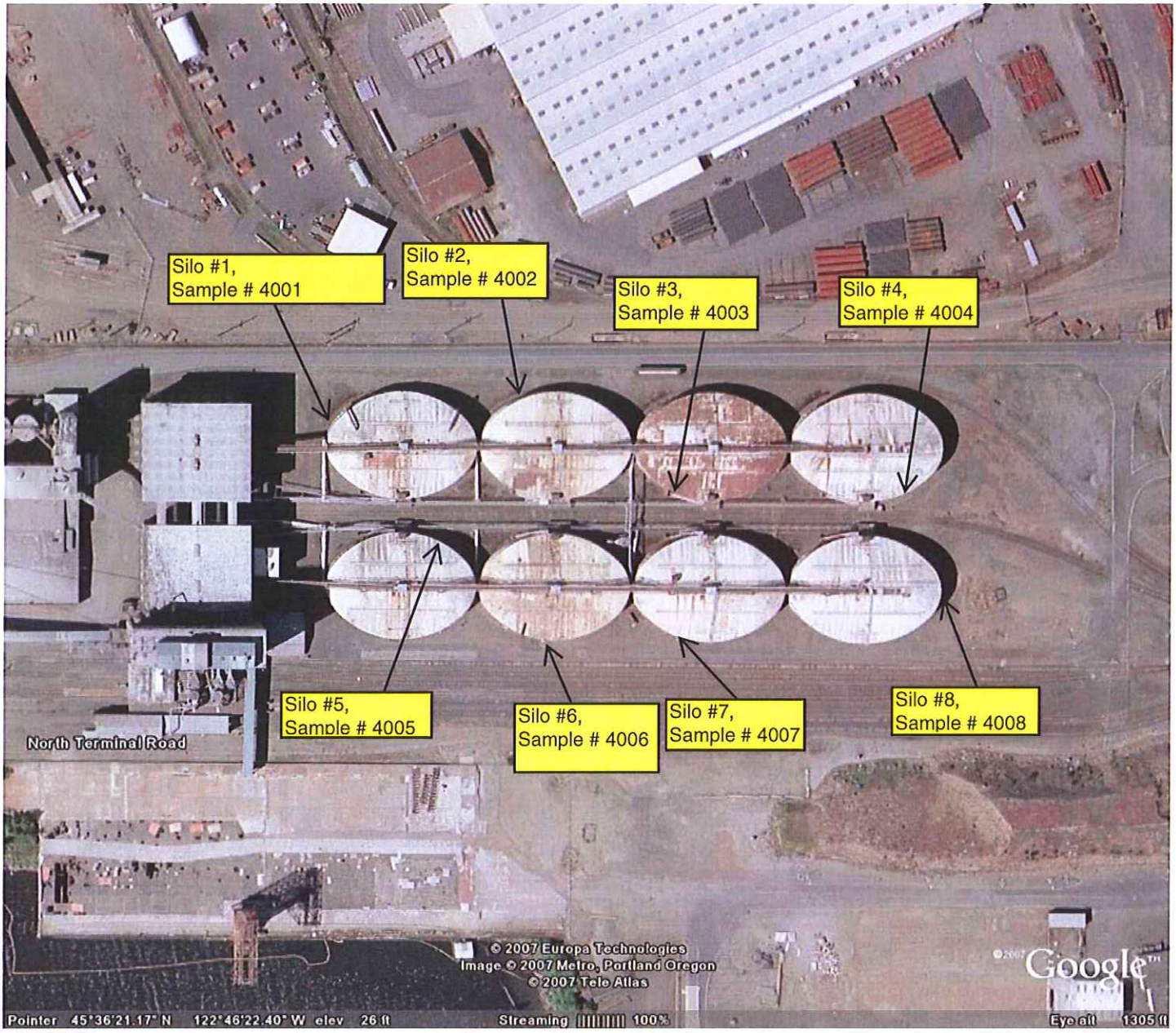
Terminal 4 Grain Tanks Demolition
Portland, Oregon

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

Project Number	1484-00	Figure
March 2009		4

Appendix A

Paint Chip Sampling Data (PBS Environmental)


Silo #1,
Sample # 4001
Silo #2,
Sample # 4002
Silo #3,
Sample # 4003
Silo #4,
Sample # 4004
Silo #5,
Sample # 4005
Silo #6,
Sample # 4006
Silo #7,
Sample # 4007
Silo #8,
Sample # 4008
North Terminal Road
© 2007 Europa Technologies
Image © 2007 Metro, Portland Oregon
© 2007 Tele Atlas
Google
Pointer 45°36'21.17" N 122°46'22.40" W elev 26 ft
Streaming 100%
Eye alt 1305 ft

LABORATORY REPORT

PBS Environmental
390 NE Emerson Avenue, Suite C
Bend, OR 97701

PROJECT NAME/SITE:	Dravo	**REPORT NUMBER:**	67533
PROJECT NUMBER:	15700.066	**REPORT DATE:**	12/10/07
EXTRACTION DATE:	12/07/07	**PAGE:**	1 of 1

EPA 8082
Analyte: Polychlorinated biphenyls (PCBs) identification and quantification in paint chip
All concentrations listed in mg/Kg (ppm)

		AROCHLOR #							Surrogate Recovery (%)
Field ID	**Lab ID**	1016	1221	1232	1242	1248	1254	1260	
Silo 1 – 4001	W1488	ND	ND	ND	ND	ND	ND	ND	94
Silo 2 – 4002	W1489	ND	ND	ND	ND	ND	ND	ND	105
Silo 3 – 4003	W1490	ND	ND	ND	ND	ND	0.6	ND	98
Silo 4 – 4004	W1491	ND	ND	ND	ND	ND	ND	ND	104
Silo 5 – 4004	W1492	ND	ND	ND	ND	ND	ND	ND	97
Silo 6 – 4005	W1493	ND	ND	ND	ND	ND	0.3	ND	94
Silo 7 – 4007	W1494	ND	ND	ND	ND	ND	ND	ND	99
Silo 8 - 4008	W1495	ND	ND	ND	ND	ND	ND	ND	104
BLANK	--	ND	ND	ND	ND	ND	ND	ND	--
Reporting Limit mg/Kg (ppm)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	--

Surrogate is Decafluorobiphenyl
ND = Not Detected (below reporting limit or detection limit)

Appendix B

Demolition Environmental Specifications

PORT OF PORTLAND
P.O. Box 3529
Portland, Oregon 97208

REQUEST FOR PROPOSALS

Including Specifications

for

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Solicitation No. 2007-0067

EAN 2007D039

September 2007

ADDENDA CHANGES INCORPORATED
Reprinted December 2007

DOCUMENT 000107
APPROVALS

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Project Manager: _____

Project Engineer: _____

REGISTERED PROFESSIONAL ENGINEER 19137 OREGON JULY 15, 1991 ALLEN T. BATESON

9/13/07

DOCUMENT 000110
TABLE OF CONTENTS

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

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Document 000115 Drawings Index 000115-1

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Document 001100 Request for Proposals 001100-1

Document 002100 Instructions to Proposers 002100-1

Document 004200 Price Proposal 004200-1

Document 005200 Agreement 005200-1

Document 006100 Performance Bond 006100-1

Document 006101 Labor and Material Payment Bond 006101-1

Document 007200 General Conditions 007200-1

SPECIFICATIONS GROUP

GENERAL REQUIREMENTS SUBGROUP

DIVISION 1 – GENERAL REQUIREMENTS

Section	011100	Summary of Work
	012200	Unit Prices
	013100	Project Management and Coordination
	013300	Submittal Procedures
	013553	Marine Terminal Security, Safety, and Operating Regulations
	014500	Quality Control
	015000	Temporary Facilities and Controls
	015320	Temporary Railroad Crossing
	015713	Temporary Erosion, Sediment, and Pollution Control
	015719	Environmental Construction Controls
	017000	Execution Requirements
	017419	Construction Waste Recycling
	017700	Closeout Procedures

FACILITY CONSTRUCTION SUBGROUP

DIVISION 2 – EXISTING CONDITIONS

Section	024113	Demolition
	028313	Hazardous Building Material Management

DIVISION 32 – EXTERIOR IMPROVEMENTS
Section 329119 Landscape Grading
Section 329219 Hydroseeding

EXHIBIT A: WY'EAST LABORATORY REPORT OF GRAIN TANKS

ADDENDUM NO. 1

ADDENDUM NO. 2

ADDENDUM NO. 3

ADDENDUM NO. 4

DOCUMENT 000115
DRAWINGS INDEX

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

DRAWING NUMBER	SHEET NUMBERS	SHEET SUBJECTS
T4 2007-2	GI-1	AERIAL SITE PLAN AND VICINITY MAP
	C-1 – C-3	CIVIL

REFERENCE DRAWINGS

CP T4 1954 0006	GRAIN TANKS

DOCUMENT 000118
PROPOSAL AND AWARD SCHEDULE

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

1.	September 21, 2007	Advertisement of Request for Proposals.
2.	October 3, 2007	2 p.m. pre-proposal meeting.
3.	November 7, 2007	3 p.m. for receipt of proposals at Port offices.
4.	November 19-20, 2007	Interviews (if required).
5.	November 30, 2007	Approximate date of evaluation of Proposals complete and notice of evaluation results to those who submitted Proposals.
6.	December 3, 2007	Approximate date of award of contract.
7.	December 28, 2007	Approximate date of Notice to Proceed.
8.	July 31, 2008	Approximate date of Substantial Completion.*
9.	August 29, 2008	Approximate date of Final Acceptance.*

* After contract award and upon submittal by the Contractor of the executed Agreement, including a performance bond, and a labor and material payment bond, a written Notice to Proceed will be issued. Contract Time is stated in the Agreement. The Notice to Proceed will establish the date by which the Contractor is required to complete the work.

DOCUMENT 001100
REQUEST FOR PROPOSALS

THE PORT OF PORTLAND

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Solicitation No. 2007-0067

Proposals for the Terminal 4 Removal and Sale of Grain Tanks will be received by the Manager, Contracts and Procurement, of The Port of Portland, 121 N.W. Everett Street, 5th floor, Portland, Oregon 97209 (mailing address: Post Office Box 3529, Portland, Oregon 97208) until, but not after, 3 p.m. November 7, 2007.

Description of Work:

> Dismantling and disposing of eight steel grain tanks, tank foundations, and associated conveyor galleries near Berth 405; management of lead paint and other heavy metals in the painted materials; and filling, grading, and hydroseeding disturbed areas. The work also includes arranging for and delivery of all metal salvaged under this project to a metals recycler/buyer and crediting the salvage value to the Port for the metal.
>
> Prevailing wage rates do not apply to this work.

A pre-proposal meeting will be held at 2:00 p.m. October 3, 2007, at Terminal 4 Administration Building (Building 100), 11040 N. Lombard Street, Portland, Oregon to discuss all phases of the work. Proposers are strongly encouraged to attend. This will be the only time the project site will be available for site inspection prior to the proposals due date.

Please direct general or procedural questions to the Project Buyer, Nathan Mosley, (503) 944-7620. Please direct technical questions to the Project Engineer, Allen Bateson, (503) 944-7406.

The contractor or a subcontractor need not be licensed for asbestos work under ORS 468A.720.

Prospective proposers may obtain a free copy of the project manual and drawings by online request through the Port's Supplier Registration and Online Solicitation (SROS) system at www.portofportland.com/sros_home.aspx, or by directly contacting Contracts and Procurement by telephone at 503-944-7599, or by fax at 503-548-5812. The project manual and drawings may also be examined at Port offices (address above).

Contractors, subcontractors, consultants, and suppliers are strongly encouraged to register through the Port's SROS system. Registered firms can view current business opportunities, receive electronic notification of Port solicitations, and have access to view, download, or request copies of solicitations, addenda, and solicitation-holders lists.

Proposals may be rejected if not in compliance with specified procedures and requirements. Any or all proposals may be rejected if in the public interest to do so. Proposer compliance includes the following:

A. All proposals must be accompanied by proposal security made payable to The Port of Portland in an amount equal to at least 10 percent of $500,000.

B. No proposal will be considered unless the proposer is registered with the State of Oregon Construction Contractors Board, pursuant to ORS 701.055 (1), prior to submitting a proposal.

THE PORT OF PORTLAND

Craig Johnsen, Manager
Contracts and Procurement

September 21, 2007

JEP/RFP

DOCUMENT 002100
INSTRUCTIONS TO PROPOSERS

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ARTICLE 1 – DESCRIPTION

A. Provide labor, materials, transportation, equipment, and other means required to complete the work in accordance with the contract documents.

B. Except where the words or context clearly require a different result, the Port intends its technical specifications to be performance specifications that either establish performance requirements or illustrate concepts or levels of quality.
   1. Alternate concepts, methods, or materials; innovative ideas; and the latest state-of-the-art developments are welcome and encouraged provided they are fully explained in the Proposal.

ARTICLE 2 – EXAMINATION OF SITE

A. A Proposer intending to submit a proposal is encouraged to examine the work site prior to the Proposal submittal due date.

B. Proposers are invited to attend the pre-proposal conference, which will include an opportunity to examine the site.

ARTICLE 3 – INTERPRETATION OF CONTRACT DOCUMENTS

C. If discrepancies or omissions are found or if there is doubt as to the true meaning of any part of the contract documents, submit to the Manager, Contracts and Procurement, a written request for a clarification or interpretation thereof no less than five business days prior to the due date set for submittal of Proposals. The Port may not consider requests submitted less than five business days prior to the Proposal due date.

D. Clarification or interpretation of the contract documents will be made by addendum. Consider addenda in the Proposal submittal. The Port is not responsible for and Proposers should not rely upon explanation, clarification, interpretation or approval made or given in any manner except by addendum.

ARTICLE 4 – PROPOSAL PROCESS

A. General:
   1. The Port is requesting proposals for Terminal 4, Removal and Sale of Grain Tanks project.
   2. Only one proposed removal and sale operation shall be described in any Proposal. A Proposer may submit as many Proposals as desired, but each Proposal shall be separate and independent of any other proposal.

B. Proposal Procedure:
   1. This RFP will be based on a competitive evaluation process. However, the Port reserves the right to make award on Proposal(s), as submitted, without discussions.
   2. The Port is using an RFP procedure. The process includes:
      a. Issuance of the RFP by the Port.
      b. Submittal of Proposals by Proposers.
      c. Evaluation of the Proposals.
      d. Written notification to each Proposer of the evaluation results.
      e. Award of the contract to the selected Proposer.

C. Protests:

1. Prospective Proposers who wish to protest any aspect of the RFP or the procedure for evaluating Proposals and selecting a Contractor must deliver a written protest to the Port's Manager of Contracts and Procurement no less than five business days before the deadline for receipt of proposals.
2. Proposers who wish to protest the results of the evaluation of proposals must submit a written protest to the Port's Manager of Contracts and Procurement no more than five business days after being notified of the evaluation team's recommendation regarding award of a contract.
3. The protest shall be deemed to include only the documents timely delivered pursuant to this article. It must clearly state all of the grounds for the protest and must include all arguments and evidence in support of the protest. Testimonial evidence may be submitted by affidavit. The Port may investigate as it deems appropriate in reviewing the protest, and will issue a written response to the protest. The Port may proceed with contract award, execution, and performance while a protest is pending.

D. The RFP (and any addenda) is the sole instrument by which the Port is soliciting Proposals.

1. Addenda to RFP:
   a. The Port reserves the right to make such changes in the RFP as it may deem appropriate. Any and all changes in the RFP will be by written addendum issued by the Port to all prospective Proposers who have been issued or obtained copies of the RFP from the Port.
   b. Any prospective Proposer may request a change in any part of the contract manual, including the RFP. Any such request shall:
      1) Be in writing.
      2) Identify the particular portion of the contract manual affected.
      3) Include the specific language requested to effect such change.
      4) Contain a statement of justification which establishes the advantage to the Port in making the change.
   c. It is preferred that Proposer-requested changes be submitted as early as possible. The Port may decline to consider a change requested less than five business days before proposals are due.
   d. The Port will evaluate any request so submitted, but reserves complete discretion to determine the desirability of any requested change. Any change desired by the Port will be the subject of an addendum and will be issued to all known prospective Proposers.

ARTICLE 5 – PROPOSAL SUBMITTAL

A. The Proposal submittal shall consist of one original (marked as such) and 6 identical sets of:

1. The properly executed Price Proposal on the form provided.
2. Written response to the required submissions described in Article 6.

B. Proposals shall not exceed 30 pages, including pictures or diagrams, but excluding Proposer's company safety policies, procedures, and plans. Each side of a sheet of paper is considered one page. Double-sided printing of the hard copy is encouraged. Pages should be numbered consecutively and stapled in the upper left corner. If a proposer exceeds the page limit the Port will consider the information on the first 30 pages, and may decline to consider information beyond the 30th page.

C. To ensure proper handling, the proposal shall be submitted in a sealed envelope that is plainly marked "Proposal to Provide Terminal 4, Removal and Sale of Grain Tanks,

Solicitation No. 2007-0067" and that bears the proposer's name and address; and be delivered to the Port's Contracts and Procurement office at 121 NW Everett Street, 5th Floor, Portland, OR 97209 (Mailing address: PO Box 3529, Portland, OR 97208) by 3 p.m. on the date indicated in the Request for Proposals. The Port, at its option, may decline to consider late submissions.

ARTICLE 6 – PROPOSAL CONTENT

A. The RFP contains performance requirements, dimensional constraints, and equipment preferences which shall be addressed and met in the Proposal. The Proposal must clearly describe the capabilities of the Proposer, the characteristics of the proposed approach, and the proposed suppliers of all equipment.

B. Proposals should be prepared simply and economically, providing a straightforward, concise description of the proposer's ability to satisfy the requirements of this RFP. Submissions of technical literature, display charts, or other supplemental materials are the responsibility and within the discretion of the proposer. The Port will not be liable for any expense incurred in the preparation of proposals.

C. Required Submissions: Firms interested in being considered for this work must submit the following written information for review by the evaluation team.

1. Proposed Demolition Approach, Experience, and Qualifications:

   a. Provide a detailed work plan for all demolition of the grain tanks, broken down by task. Proposers may recommend optional tasks, modifications to specified tasks, and/or innovation that would benefit the Port and increase the probability of project success. Success for this project is defined as completing the project in an environmentally sensitive manner, on time, and within the agreed upon scope. Identify potential roadblocks and discuss measures for avoidance during the demolition and salvage phases of the project.

   b. Describe Proposer's experience in demolition and salvage of similar projects within the past 3 years. Include location, project components, environmental and permitting issues encountered in the course of the work, schedule, costs, services provided, subcontractors, key dates, and name and telephone number of an Owner's representative familiar with the proposer's work.

   c. Provide detailed information on major work categories performed by subcontractors, including metal recyclers, and related work experience of these subcontractors.

2. Proposed Environmental Protection Plan/Measures: All painted components are painted with lead-based paint. Describe how Proposer plans to protect ground and surrounding surfaces to prevent the introduction of paint debris to the ground or water.

3. Proposed Safety Plan:

   a. The Proposer shall submit safety planning information. The Port requires that the Proposer abide by all Oregon OSHA requirements, including but not limited to the Contract Documents, to provide for the safety of the Proposer's employees, Port employees, tenants, and the general public. Work performed by Subcontractors shall be included. Material safety data sheets (MSDS) for chemical products

introduced to Port premises shall not be submitted with this information, but shall accompany the Contractor on site and be available to the Port upon request.

b. The Proposer shall also include applicable company safety policies, procedures, or plans (which will not be counted as part of the 30-page proposal page limit).

c. Submit copies of OSHA 300 logs for the last three years.

4. Proposed Method of Credit Balance Payment to the Port: In the event the Proposal Price is a credit amount because of the salvage value of the metal, describe the proposed method of ensuring that the Port receives timely payment of the credit balance.

5. List all proposed deviations from these specifications. Identify specification item, nature of the deviation, and explanation. List items referencing the Port's page numbers and specific paragraph number. If no deviations are identified and the Proposal is accepted by the Port, the Proposer shall conform to all the requirements specified.

   a. Unless the Proposer expressly identifies a proposed deviation as specified above, a conflict or inconsistency between any language in the RFP and the Proposer's Proposal shall be resolved in favor of the language in the RFP.

6. Emerging Small Business Participation:

   a. The Port is committed to increasing emerging small business (ESB) participation in Port business opportunities. Emerging small business means, for the purposes of this proposal, a firm that has been certified as an ESB by the Oregon State Office of Minority, Women, and Emerging Small Business. The State ESB certification is a race- and gender-neutral designation available to properly licensed, legally registered, and independently owned Oregon contracting firms that meet certain criteria. Refer to http://egov.oregon.gov/dcbs/omwesb for a list of certified ESBs. The Port's annual ESB participation target is 20 percent.

   b. Although this RFP does not contain an ESB participation goal, the Port encourages all Proposers to consider how they can help the Port achieve its ESB participation target.

   c. Include the following information in the Proposal:
      1) Is the Proposer certified by the State of Oregon as an ESB?
      2) Provide a narrative description of the Proposer's experience in promoting ESB participation as partners, subcontractors, or suppliers on previous projects. Include any innovative or successful measures the Proposer has taken to increase ESB participation on projects. Also include a list of ESBs with which the Proposer has had a contractual relationship during the previous 12 months.
      3) Describe portions of the work the Proposer may be able to subcontract and identify work items that could be performed by ESBs. If the Proposer believes it is not feasible to subcontract out a portion of the work, the Proposer should explain that in the Proposal.
      4) Describe the actions and strategies the Proposer will take to increase ESB participation in this work. Include names of ESBs that will be part of the team for this project.

D. Supplements to Proposals: If the evaluation of any Proposal indicates minor noncompliance with or variance from the technical provisions of the RFP, the Port may, but need not, make a written request to the Proposer for a Proposal Supplement. Such request will attempt to identify the noncompliance or variance, request additional information, and establish a date by which a Proposal Supplement must be submitted. To remain responsive, the Proposer shall submit a Proposal Supplement responsive to such request, within the time period established in such request, which the Port will receive and evaluate in conjunction with the Proposal. Any Proposal Supplement so submitted and approved will thereafter be deemed to be an integral part of the Proposer's Proposal. The Port will consider Proposal Supplements submitted after the Proposal due date only if the Port has invited the supplement or has entered into negotiation with the Proposer.

ARTICLE 7 – EVALUATION OF PROPOSALS

A. An evaluation team will be appointed by the Port to evaluate Proposals. The team may schedule meetings in Portland with Proposers in the competitive range, either individually or collectively as may be appropriate, to establish uniform interpretation of the RFP or to address issues of common interest. The evaluation team will evaluate the Proposers and Proposals and determine the most responsive Proposer. A recommendation of contract award will be made based on the team's evaluation. The Port reserves the right to determine that any or all Proposals are unacceptable or to reject all Proposals.

B. If a Proposer submits more than one Proposal, each Proposal will be evaluated independently.

ARTICLE 8 – EVALUATION CRITERIA

A. Evaluation of Proposals will be based on consideration of the following items listed in descending order of priority with the most important listed first.

B. Notwithstanding the relative importance of the evaluation criteria indicated below, a Proposer's failure to meet minimal requirements for any one of the criteria may cause its Proposal to be outside the competitive range.

	Criteria
1.	Demolition approach, experience, and qualifications.
2.	Environmental protection plan/measures.
3.	Price for all work.
4.	Safety plan/records.
5.	Proposed method of credit balance payment to the Port, if any.
6.	Optional innovations of benefit to the Port.
7.	Emerging small business participation.

C. One or more evaluation team members may conduct an initial evaluation of all proposals, using the evaluation criteria specified in the RFP, and may identify a subset of proposals as finalists for further evaluation by the evaluation team. After the initial evaluation, members of the evaluation team may perform any of their functions individually, or as a group consisting of two or more evaluation team members. If particular functions are performed by individual

evaluation team members or by a group consisting of less than the full evaluation team, the evaluation team members performing the functions shall report to the full team a summary of the information gathered or conclusions reached. A report of final evaluation results and any recommendation regarding award of a contract may be made to the Executive Director or the Executive Director's designee without the participation of all evaluation team members, provided that a majority of evaluation team members participate.

ARTICLE 9 – EQUALS AND SUBSTITUTES

A. Specified materials, products, or services are named for the purpose of establishing a standard of quality and characteristics desired. Unless the specification or description indicates that no substitution is permitted, other materials, products, or services of equal quality and characteristics for the purposes intended may be submitted at the appropriate time for approval. See the General Conditions for more information.

ARTICLE 10 – ELECTRONIC DOCUMENTS

A. Because electronic documents are subject to data erosion, erasure, and alteration, the Port makes no warranties or representations regarding the integrity or completeness of any electronic document it provides. Because computer software may become obsolete with time, the Port makes no warranties or representations regarding the ability to access electronic documents it provides. The Port makes no warranties or representations regarding the presence or absence of computer viruses in electronic documents it provides; any person using an electronic document provided by the Port should have the document and supporting medium (e.g. disk, CD, or tape) checked for computer viruses before using it in a manner that might allow the spread of a computer virus. All or parts of electronic documents provided by the Port may be copyrighted, and those using them are responsible for determining the existence of copyrights and for obtaining permission to copy copyrighted material. Those using electronic documents provided by the Port do so at their own risk. Only the hard copy documents incorporated into the RFP, or documents issued by addendum through the Port's Contracts and Procurement office, may be relied upon by the Proposer.

ARTICLE 11 – PUBLIC DISCLOSURE OF PROPOSALS

A. Any information provided to the Port pursuant to this RFP is subject to public disclosure pursuant to Oregon's public records laws (ORS 192.410 to 192.505).

B. The general requirement for public disclosure is subject to a number of exemptions. Each page containing information deemed by the proposer to remain exempt from public disclosure after proposals have been evaluated (e.g., pages containing trade secret, economic development information, etc.) should be plainly marked. A general statement that all or certain parts of the proposal are exempt from public disclosure will not be effective unless each page on which those parts appear has been marked in accordance with this section.

C. The fact that a proposer marks certain information as exempt from disclosure does not mean that the information is necessarily exempt. The Port will make an independent determination regarding exemptions applicable to information that has been properly marked. Information that has not been properly marked may be disclosed in response to a public records request. When exempt information is mixed with nonexempt information, the nonexempt information must be disclosed. The Port will redact pages that include both exempt and nonexempt information to allow disclosure of the nonexempt information.

D. Unless expressly provided otherwise in this RFP or in a separate communication, the Port does not agree to withhold from public disclosure any information submitted in confidence by a proposer unless the information is otherwise exempt under Oregon law. The Port considers proposals submitted in response to this RFP to be submitted in confidence only until the Port's evaluation is complete, and agrees not to disclose proposals until the Port has completed its evaluation of all proposals and publicly announced the results.

ARTICLE 12 – PROPOSAL SECURITY (BID BOND)

A. A certified or cashier's check, an irrevocable letter of credit, or a proposal bond (bid bond) payable to The Port of Portland in an amount equal to at least 10 percent of $500,000 shall accompany each Proposal as proposal security and as a guarantee that the Proposer will execute the Agreement and provide a performance bond, and a labor and material payment bond. In the event the Proposer submits more than one Proposal, proposal security shall be submitted for only one Proposal. The successful Proposer's check, letter of credit, or proposal bond will be retained until he has executed the Agreement, given satisfactory evidence of insurance, and furnished a performance bond and a labor and material payment bond, each in the amount of $500,000.

B. Checks shall be drawn on a United States bank. Irrevocable letters of credit shall be issued by a commercial bank as defined in ORS 706.008. Proposal bonds shall be fully executed by a surety company licensed to do business in the State of Oregon.

C. Should the successful Proposer fail to execute and deliver the contract documents, including a satisfactory performance bond, and labor and material payment bond, within 10 days after the Port's written notice, the contract award may be canceled by the Port and the proposal security forfeited to the Port.

ARTICLE 13 – WITHDRAWAL OF PROPOSAL

A. At any time prior to the scheduled Proposal submittal due date, a Proposer may withdraw his Proposal. This will not preclude the submission of another Proposal by such Proposer prior to the time set for receiving Proposals.

ARTICLE 14 – OPENING OF PROPOSALS

A. The Port reserves the right to postpone the Proposal submittal due date.

B. There will be no public opening of Proposals. Contents of Proposals will not be made public information until the evaluation committee has made its recommendation of award, subject to the withholding of trade secret or other information not subject to public disclosure under Oregon law.

ARTICLE 15 – EXECUTION OF AGREEMENT AND BONDS

A. The successful Proposer shall execute and deliver the Agreement and the performance bond, and labor and material payment bond, each for $500,000, fully executed by a surety company authorized to do business in the state of Oregon. The Agreement and the bonds shall be on the forms provided by the Port.

ARTICLE 16 – NOTICE TO PROCEED

A. The Port will issue Notice to Proceed after execution of the Agreement by the Port. The Notice to Proceed will state the date on which the Proposer is to begin work and the date by which the Proposer will be required to complete the work.

DOCUMENT 004200
PRICE PROPOSAL

THE PORT OF PORTLAND

To The Port of Portland
P.O. Box 3529
Portland, Oregon

The Proposer warrants that he has carefully examined the contract documents for the Contract described as follows:

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

The Proposer further warrants that he has examined, or did not avail himself of the opportunity to examine, the proposed work area independently of the indications in the contract documents and has made, or did not avail himself of the opportunity to make, such investigations as are necessary to determine: (1) the character of the materials to be handled, (2) the probable interferences due to Port operations, and (3) other conditions to be encountered.

The Proposer further warrants that if this Proposal is accepted, he will contract with The Port of Portland in the form of Agreement hereto annexed and provide all things necessary for the performance of the Contract, including, but not limited to, bonds, labor, material, transportation, and equipment.

The Port intends to authorize work to commence on or about December 28, 2007. The Proposer promises that all work under this Contract shall be substantially complete on or before July 31, 2008. The Proposer agrees to pay as liquidated damages to the Port for any delay, the sum of $250 per day for each day of delay beyond the substantial completion date so promised.

The Proposer further promises that all work under this Contract shall be complete, having gained a successful final inspection and received final acceptance from the Port, on or before August 29, 2008. Final payment will not be made until the work is judged complete by the Port.

The Proposer also agrees to pay Other Damages described in the General Conditions.

The Port of Portland is a Port district organized under ORS Chapter 778 and is exempt from Federal Excise Tax.

The Proposer submits and proposes the following proposed unit prices, to wit:

TERMINAL 4 REMOVAL AND SALE OF GRAIN TANKS				
Item No.	**Item Description**	**Estimated Quantity**	**Units**	**Total Price**
0001	Dismantling and Salvage of Eight Grain Tanks	1.0	LS	
0002	Borrow	6,000.0	CY	
	Total Amount Proposed			$_____

The Proposer hereby acknowledges receipt of Addendum Nos. ____, ____, ____, ____, ____ to these contract documents.

This proposal may not be revoked by the Proposer for a period of 50 days after the proposal submittal due date.

Accompanying this Price Proposal is proposal security in the amount of 10 percent of $500,000 as required in the Instructions to Proposers. It is agreed that if this Price Proposal is accepted by the Port's written notice within 50 days of the proposal submittal due date, and the Proposer executes and delivers the Agreement, including a satisfactory performance bond, and labor and material payment bond, each for $500,000, within 10 days after the Port's written notice, said proposal security will be returned to the undersigned; otherwise, said proposal security may be collected as liquidated damages at the option of the Port.

After the Contractor has delivered the executed Agreement (including a satisfactory performance bond, and labor and material payment bond, each for $500,000 and evidence of insurance, the Port will issue Notice to Proceed. If all of the documents are not provided within 10 days, the Port may nevertheless establish the date by which the Contractor is required to complete the work.

The surety company requested to issue the performance bond, and labor and material payment bond will be _____.

The Proposer hereby authorizes said surety to disclose to the Port any information concerning the Proposer's ability to supply the required bonds.

The Proposer acknowledges that the Port has the right to reject any or all Proposals.

Name of Proposer: _____

Business Address of Proposer: _____

_____

Business Phone Number: _____ Fax Number: _____

E-Mail Address: _____

Signature of Authorized Person: _____

Printed Name of Authorized Person: _____

Title: _____

Date: _____

State of Oregon Construction Contractors Board Registration No. _____ (Required for submitting a Proposal).

DOCUMENT 005200
AGREEMENT

THE PORT OF PORTLAND
P.O. BOX 3529
PORTLAND, OREGON 97208

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

THIS AGREEMENT made and entered into on the date of full execution of this Contract by and between The Port of Portland, a port district organized under ORS Chapter 778, hereinafter called "the Port," and _____ of _____, hereinafter called "the Contractor."

W I T N E S S E T H:

That the Contractor, in consideration of payments to be made by the Port, agrees to provide all things necessary for the performance of the Contract, including, but not limited to, bonds, labor, material, transportation, and equipment required to complete the work in accordance with the requirements of the contract documents:

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

The Contractor agrees that the following are hereby made a part of this Contract and are mutually cooperative therewith: The Contractor's accepted Proposal, signed on _____, 20____, including any documentation accompanying the Proposal; this Agreement, including any clarification information and documentation submitted after proposals were due and attached as an exhibit to this Contract; Performance Bond; Labor and Material Payment Bond; General Conditions; Drawings; Specifications, and Addenda.

For satisfactorily completed work under this Contract, the Port will pay the Contractor as provided by the Contract, but in no event more than $_____ without an amendment or change order.

The Port intends to authorize work to commence on or about December 28, 2007. The Contractor promises that all work under this Contract shall be substantially complete on or before July 31, 2008. The Contractor agrees to pay as liquidated damages to the Port for any delay, the sum of $250 per day for each day of delay beyond the substantial completion date so promised.

The Contractor further promises that all work under this Contract shall be complete, having gained a successful final inspection and received final acceptance from the Port, on or before August 29, 2008. Final payment will not be made until the work is judged complete by the Port.

The Contractor also agrees to pay Other Damages described in the General Conditions.

The Contractor shall obtain the prior written consent of the Port to any proposed assignment of any interest in or part of this Contract. Such consent shall be at the sole discretion of the Port.

Under the same date as this Agreement, the Contractor is furnishing the Port with a performance bond, and a labor and material payment bond, with _____ as surety, each in the amount of _____. These bonds shall insure complete performance by the Contractor of this Contract in accordance with all of its terms and provisions and payment of all amounts owed by the Contractor to others for work performed or materials provided under this Contract.

The Contractor agrees to diligently prosecute the work to final acceptance and to accept as full payment hereunder the amount specified in this Contract; and the Port agrees to make payment, at the time, in the amount, and upon the terms and conditions specified herein.

The Contractor agrees to comply with all federal and state laws and regulations regarding nondiscrimination in employment, employee benefits and facilities.

Because this Contract was not awarded through competitive bidding, the Contractor and the Port agree that ORS 279C.370 does not apply to this Contract.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be duly executed:

(FULL NAME OF CORPORATION)

BY: _____
(Signature)

NAME: _____
(Print)

TITLE: _____

DATE: _____

THE PORT OF PORTLAND

BY: _____
(Signature)

NAME: _____
(Print)

TITLE: _____

DATE: _____

Approved as to Legal Sufficiency for the Port of Portland:

_____
Counsel for The Port of Portland

Approved by Commission on

DOCUMENT 006100
PERFORMANCE BOND

Parties

Principal: _____ (Name)
_____ (Address)
_____
_____ (Telephone)

Surety: _____ (Name)
_____ (Address)
_____
_____ (Telephone)

Obligee: The Port of Portland
121 N.W. Everett Street
P.O. Box 3529
Portland, Oregon 97208

Agreement

Principal has entered into a contract ("Contract") with Obligee for the following project:

_____
_____. By this reference, the Contract is made a part of this bond.

Subject to the provisions of this bond, Principal and Surety, and their respective heirs, executors, administrators, successors, and assigns, are jointly and severally held and firmly bound unto Obligee, and Obligee's successors or assigns, in an amount equal to $500,000. The foregoing obligation shall be void if Principal promptly, faithfully, and fully performs the Contract including but not limited to warranty and maintenance work required under the Contract.

Surety waives any right it may have to notice of changes in the Contract agreed to by Principal and Obligee, or required by Obligee in accordance with the Contract, including but not limited to changes that increase the total amount of the Contract, or the guaranteed maximum price if the Contract is a guaranteed maximum price contract, and changes that extend the term of the Contract. Surety shall not be released from its obligation under this bond because of Obligee's failure to give Surety prompt notice of a breach or default by Principal.

Signed and sealed this _____day of _____, 20____.

PRINCIPAL

By: _____
Name: _____
Title: _____

SURETY

By: _____
Name: _____
Attorney in Fact

DOCUMENT 006101
LABOR AND MATERIAL PAYMENT BOND

Parties

Principal: _____ (Name)
_____ (Address)
_____
_____ (Telephone)

Surety: _____ (Name)
_____ (Address)
_____
_____ (Telephone)

Obligee: The Port of Portland
121 N.W. Everett Street
P.O. Box 3529
Portland, Oregon 97208

Agreement

Principal has entered into a contract ("Contract") with Obligee for the following project:

_____
_____. By this reference, the Contract is made a part of this bond.

Subject to the provisions of this bond, Principal and Surety, and their respective heirs, executors, administrators, successors, and assigns, are jointly and severally held and firmly bound unto Obligee, for the use and benefit of claimants as defined below, in an amount equal to $500,000. The foregoing obligation shall be void if Principal promptly pays all claimants for all labor and material supplied for the prosecution of the work provided for in the Contract, including but not limited to warranty and maintenance work required under the Contract.

For the purposes of this bond, a claimant is any person who has a right of action against a bond under ORS 279C.600 to 279C.625.

Surety waives any right it may have to notice of changes in the Contract agreed to by Principal and Obligee, including but not limited to changes that increase the total amount of the Contract, or the guaranteed maximum price if the Contract is a guaranteed maximum price contract.

Signed and sealed this _____day of _____, 20____.

PRINCIPAL

By: _____
Name: _____
Title: _____

SURETY

By: _____
Name: _____
Attorney in Fact

DOCUMENT 007200
GENERAL CONDITIONS

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PROJECT-RELATED FORMS AND APPLICATIONS ..... Following General Conditions

DEFINITIONS

For the purposes of this Contract, terms are defined in the Agreement and in this article, and may be defined in the Specifications or Drawings. Terms used in a defined sense normally are capitalized; terms used in a general or undefined sense normally are not capitalized. Unless the context clearly requires otherwise, or the term is expressly defined otherwise for a particular purpose, the following definitions apply throughout this Contract.

Act of God - Any misadventure or casualty caused by the direct, immediate, and exclusive operation of the forces of nature, uncontrolled and uninfluenced by the power of man and without human intervention, which could not have been prevented or escaped by any amount of foresight or prudence, by any reasonable degree of care, or by the aid of any appliances reasonably required under the circumstances. A meteorological event, including but not limited to, cold, heat, rain, snow, wind, flood, or lightning, shall be rebuttably presumed not to be an Act of God if it falls within two standard deviations of the mean of records for that event maintained by the U.S. Weather Bureau for the Portland International Airport at Portland, Oregon.

Addenda - Written or graphic instruments issued prior to the proposal submittal deadline which clarify, correct, or change the RFP documents.

Agreement - The written document signed by the parties and incorporating other documents.

Change Order - A written amendment to this Contract which authorizes an addition, deletion, or revision to the Work described in this Contract, and which may authorize an adjustment in the Contract Price, the Contract Time, or both.

Construction Contract Manager - An individual authorized in writing by the Port to represent the Port with respect to this Contract within the scope of the authority conferred by the written authorization.

Contract - The entire written agreement between the Port and the Contractor establishing their respective rights and obligations concerning the Work.

Contract Documents - The Contract Documents include all documents that make up this Contract, including but not limited to the Contractor's signed Proposal; the Agreement; bonds; these General Conditions; the Specifications; the Drawings; the Notice to Proceed; Addenda; and Change Orders.

Contract Price - The total compensation payable to the Contractor for performing the Work as stated in this Contract and as modified by Change Order.

Contract Time - The number of days between the Work Start Date established by the Notice to Proceed and the date by which Substantial Completion of all work must be achieved under this Contract.

Contractor's Representative - An individual authorized in writing by the Contractor to represent the Contractor with respect to this Contract.

Day or Calendar Day - Any 24-hour period beginning at midnight.

Day, Business - Any Calendar Day other than Saturday, Sunday, or a holiday on which the Port's administrative offices are closed.

Defective - (1) Unsatisfactory, faulty, or deficient, (2) not conforming to this Contract, or (3) not meeting the requirements of any inspection, test, or approval required by this Contract or federal, state, or local law.

Drawings - The graphic representations which show the character and scope of the Work to be performed, which have been prepared or approved by the Port, and which are expressly incorporated into this Contract.

Final Acceptance - The Port's written acknowledgment that the Work has been fully completed and all Contract-required documentation has been received and accepted.

He, Him, His - Used solely for legibility and ease of writing and applies equally to both genders.

Law – Any statute, rule, regulation, ordinance, or order of any federal, state, or local government including, but not limited to, ordinances and resolutions adopted by the Board of Commissioners of the Port of Portland, and rules and regulations adopted in accordance with those ordinances and resolutions.

Maintenance Data – Manufacturer's catalog information, shop drawings, installation, operation, and maintenance manuals, and other information needed for operating, troubleshooting, preventive maintenance, repair, restoration, or overhaul of materials, products, systems, and equipment furnished or provided by the Contractor.

Notice to Proceed - A written notice given by the Port to the Contractor fixing the Contract Time and designating a date on which the Contractor is authorized to begin the Work.

Owner - The Port of Portland.

Price Proposal – The offer of the Proposer, submitted on the prescribed form setting forth the Price(s) for the Work to be performed.

Product Data - Pictures, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product, or system for some portion of the Work.

Proposal – Proposer's submitted Price Proposal and written submission responses.

Proposer – the person, firm, or corporation submitting the specified Proposal.

Samples - Physical examples of material, equipment, or workmanship which demonstrate and establish standards by which the Work will be judged.

Shop Drawings - Diagrams, drawings, illustrations, instructions, and other data submitted by the Contractor to illustrate some portion of the Work.

Specifications - Those portions of this Contract consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual or firm having a direct contract with the Contractor or with any other Subcontractor at any tier for the performance of a part of the Work.

Substantial Completion - Completion of the Work, or a part of the Work designated by the Port, in accordance with this Contract, to the point where it may be utilized for the purpose for which it was intended.

Work - The labor, material, equipment, and services required by this Contract.

Work Start Date - The day stated in the Notice to Proceed when the Contract Time will begin to run in accordance with this Contract.

ARTICLE 1 – TERMINOLOGY -

1.1 Unless stated otherwise in this Contract, words or phrases which have a well-known technical, construction industry, or trade meaning are used in accordance with such recognized meaning.

1.2 Unless stated otherwise in this Contract, all specifications are directed to the Contractor. This includes statements which have no grammatical subject, as in "Install equipment plumb and level."

1.3 In the interest of brevity, this Contract frequently omits modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

1.4 The following terms are used in this Contract: as allowed, as directed, as ordered, as required, acceptable, proper, reasonable, satisfactory, suitable. These items and any others of like effect or import describe direction, judgment, requirement, or review of the Port. Such use is solely to evaluate the Work for compliance with this Contract unless there is a specific statement otherwise. The use of such terms never indicates the Port has authority to supervise or direct performance of the Work.

1.5 The words, "Furnish," "Install," "Perform," and "Provide" shall have the following meanings for the purposes of this Contract. When such verbs are not used in connection with services, materials, or equipment in a context clearly requiring an obligation on the part of the Contractor, "provide" is implied.

A. Furnish shall mean to supply and deliver services, materials, or equipment to the Work site (or other specified location) ready for use or installation and in usable or operable condition.

B. Install shall mean to put into use or place in final position services, materials, or equipment complete and ready for intended use.

C. Perform or provide shall mean to furnish and install services, materials, or equipment complete and ready for intended use.

ARTICLE 2 – PRELIMINARY MATTERS

Port Representative

2.1 The Port's Chief Engineer is authorized to represent the Port with respect to this Contract, provided that his authority to amend this Contract is limited to the amount set by Port policy. The Chief Engineer will appoint a Construction Contract Manager in writing to exercise all or part of his authority.

Contractor's Representative

2.2 The Contractor shall authorize the Contractor's Representative to receive communications from the Port and to sign the Contractor's communications to the Port. The Contractor's Representative shall not be replaced without written notice to the Port except under extraordinary circumstances.

Communications

2.3 In addition to the communication between the Port's Representative and the Contractor's Representative noted above, frequent informal communication will take place between Port and Contractor employees to facilitate the Work. These communications may include Contract enforcement and interpretation. If any communication from the Port appears that it will result in a change in Contract Time or Contract Price, the Contractor shall request that the issue be presented in writing.

Copies of Project Manual and Drawings

2.4 The Port will furnish to the Contractor up to six copies of the project manual and Drawings for execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time

2.5 The Contract Time will commence to run on the Work Start Date stated in the Notice to Proceed. Unless provided otherwise by the Agreement, the Work Start Date may be any date within 45 days after the Port delivers the executed Contract to the Contractor.

Starting the Work

2.6 The Contractor may start to perform the Work on the Work Start Date stated in the Notice to Proceed.

Before Starting Construction

2.7 Generally, a preconstruction meeting to establish a working understanding among the parties will be held before the Contractor begins the Work. Procedures will be established for operations coordination and administrative communication for matters such as submittals, clarifications and interpretations, and Change Orders; and for processing applications for payment. At this meeting, the Contractor shall submit to the Port for review a preliminary work progress schedule, a preliminary submittal schedule, a preliminary cash flow schedule, and the contractor safety information form.

A. The preliminary work progress schedule shall be finalized and submitted to the Port one week after the preconstruction meeting. Unless specified otherwise, the work progress schedule shall indicate the Contractor's planned progress in increments of not more than 7-day periods. The schedule will be subject to review and comment by the Port. The Contractor shall prepare and submit revisions to match actual and projected progress as requested by the Port, before and during the course of the work, at no added cost to the Port. The Contractor shall adhere to the most recent version of the schedule.

B. The preliminary submittal schedule shall be finalized and submitted to the Port one week after the preconstruction meeting. The submittal schedule shall demonstrate that submittals will be submitted in time to allow the Port's review and comment and the Contractor's submission of revised submittals before the Work covered by the submittals is scheduled to start under the work progress schedule.

C. The preliminary cash flow schedule shall be finalized and submitted to the Port one week after the preconstruction meeting. The schedule shall show the estimated dollar amount of each of the Contractor's monthly requests for progress payment and will be used by the Port for financial planning purposes. Payments to the Contractor are not restricted by the amounts given in the cash flow schedule. However, revised work progress and cash flow schedules will be required if amounts paid as monthly progress payments differ greatly from the amounts estimated.

D. Prior to commencement of work, the Contractor shall submit the contractor safety information form for safety planning purposes. The Port expects that the Contractor will abide by all Oregon OSHA requirements and the Contract Documents to provide for the safety of the Contractor's employees, Port employees, tenants, and the general public. Work performed by Subcontractors shall be on the form. The Contractor shall also include applicable company policies, procedures, or plans. Material safety data sheets (MSDS) for chemical products introduced to Port premises shall not be submitted with this information, but shall accompany the Contractor on site and be available to the Port upon request.

2.8 In the case of a lump-sum agreement or lump-sum bid items, the Contractor shall, no later than one week after receipt of the Notice to Proceed, submit to the Port a detailed breakdown of the amount of each item used in the compilation of the bid. The breakdown format shall be sufficiently detailed to meet the approval of the Port, and to serve as the basis for progress payment requests. The detailed breakdown may be used in the compilation of Change Order prices when such breakdown is determined by the Port to be applicable and consistent with accepted construction practice.

2.9 The Contractor shall, no later than one week after receipt of the Notice to Proceed, submit to the Port a breakdown of the payroll rates for each trade. The Port may use this breakdown when evaluating Contract Price adjustments. The breakdown shall include the base rate, benefits, payroll taxes, and insurance.

2.10 Before undertaking each part of the Work, the Contractor shall carefully study and compare this Contract and check and verify pertinent figures shown therein and all applicable field measurements. The Contractor shall promptly report in writing to the Port any conflict, error, or discrepancy that the Contractor may discover.

Ownership

2.11 Except as expressly provided otherwise by this Contract or by law, ownership of the things the Contractor must remove under this Contract ("Removables"), including without limitation eight steel grain tanks and associated conveyor galleries near Berth 405, and any material removed from them, remains in the Port until Removables have been removed from Port property. Ownership to an element of the Removables automatically transfers to the Contractor upon removal of the element from Port property. The Port will execute any documents reasonably requested by the Contractor to evidence of ownership in the Contractor after an element of Removables has been removed from Port property. The Contractor may not take any action purporting to transfer ownership, conditionally or otherwise, of an element of Removables until the element has been removed from Port property.

2.12 If the Contractor, without excuse and after notice and a reasonable opportunity to cure, fails to timely complete removal of Removables under this Contract, the Port may: (1) tender completion of the work to the Contractor's performance bond surety; or (2) dispose of or contract for disposal of those Removables, and recover from the Contractor any amount by which the Port's cost to dispose of those Removables exceeds the price under this Contract for disposal of those Removables.

ARTICLE 3 – CONTRACT DOCUMENTS

Intent

3.1 This Contract is complementary; what is called for by one element is as binding as if called for by all.

3.2 It is the intent of this Contract to describe the complete Work. Any labor, material, equipment, or service that may be reasonably inferred from this Contract as being required to produce the intended result shall be supplied whether or not it is expressly specified.

3.3 Where provisions of the General Conditions relate in general to the work of the Contractor and Subcontractors as administrative requirements, procedural requirements, or temporary facilities, those provisions may be amplified in other areas of the project manual. Unless expressly provided otherwise, specific requirements in other areas of the project manual take precedence over less rigorous requirements in the General Conditions.

3.4 Clarifications and interpretations of this Contract will be issued by the Port. They will be consistent with or reasonably inferable from the overall scope of this Contract.

3.5 This Contract is unique. Labor, material, equipment, or services approved for other Port work may not necessarily be approved for this Contract.

3.6 Pursuant to ORS 81.105, Oregon law applies to this Contract. In the event ORS 81.105 is deemed invalid or inapplicable, the parties agree that Oregon law applies to this Contract.

3.7 All provisions of this Contract are separable and independent of the others. If any provision of this Contract, including but not limited to any provision of a document incorporated by reference, is declared invalid for any reason, the remainder of this Contract shall remain valid and in full force and effect.

Reference Standards

3.8 Unless expressly provided otherwise, references to standard specifications, manuals, or codes of any technical society, organization, or association, or to the codes of any governmental authorities, shall mean the latest version or edition in effect on the effective date of this Contract. Such reference may be specific or implied. No provision of any referenced standard specification, manual, or code shall change the duties and responsibilities of the Port, the Contractor, or any of their employees, contractors, subcontractors, or agents from those set forth in this Contract.

Reporting Discrepancies

3.9 If, during the performance of the Work, the Contractor discovers any conflict, error, ambiguity, or discrepancy within this Contract, the Contractor shall report it to the Port, in writing, at once. The Contractor shall proceed with the affected Work after receiving clarification or interpretation from the Port. The Contractor shall not be liable to the Port for failure to report any conflict, error, ambiguity, or discrepancy in this Contract unless the Contractor factually knew or reasonably should have known of the conflict, error, ambiguity, or discrepancy.

Reuse

3.10 Neither the Contractor nor any Subcontractor, manufacturer, fabricator, supplier, or distributor shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents, or copies thereof, prepared by or for the Port. They shall not reuse any of them for any purpose unrelated to this Contract without the prior written consent of the Port and of any other person with an intellectual property interest in the documents.

Electronic Documents

3.11 Because electronic documents are subject to data erosion, erasure, and alteration, the Port makes no warranties or representations regarding the integrity or completeness of any electronic document it provides. Because computer software may become obsolete with time, the Port makes no warranties or representations regarding the ability to access electronic documents it provides. The Port makes no warranties or representations regarding the presence or absence of computer viruses in electronic documents it provides; any person using an electronic document provided by the Port should have the document and supporting medium (e.g. disk, CD, or tape) checked for computer viruses before using it in a manner that might allow the spread of a computer virus. All or parts of electronic documents provided by the Port may be copyrighted, and those using them are responsible for determining the existence of copyrights and for obtaining permission to copy copyrighted material. Those using electronic documents provided by the Port do so at their own risk.

ARTICLE 4 – AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

Physical Conditions – Investigations, Reports, and Tests

4.1 Investigations, reports, or tests which the Port may make available to the Contractor are the Port's best known information at the time the Work is designed. However, the Port makes no warranty or representation regarding accuracy or completeness unless the investigations, reports, or tests have been made a part of this Contract.

Differing Site Conditions

4.2 The Contractor shall promptly notify the Port in writing of any conditions at the site differing materially from those shown in this Contract. The Port will promptly review those differing conditions and advise the Contractor in writing if further investigation or tests are necessary. The Port will obtain any necessary additional investigations and tests. If the conditions differ materially from those shown in this Contract or from what reasonably could have been anticipated by the Contractor, this Contract may be amended to allow additional compensation, time, or both as reasonably necessary to accommodate the differing conditions.

ARTICLE 5 – BONDS AND INSURANCE

Bonds

5.1 The Contractor shall furnish a performance bond, and a labor and material payment bond, each in an amount equal to $500,000, as security for the faithful performance of, and payment of, all the Contractor's obligations under this Contract. The bonds shall remain in effect until at least one year after the date of Final Acceptance, except as otherwise provided by Law. All bonds required under this Contract shall be on the forms prescribed by the proposal and contract requirements and executed by sureties: (1) licensed to conduct business in the State of Oregon, and (2) named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All bonds signed by an agent shall be accompanied by a power of attorney or other evidence of the agent's authority to act on behalf of the surety.

5.2 The Contractor shall substitute another bond and surety meeting the requirements of Item 5.1 within 5 days after the surety on any bond furnished by the Contractor: (1) is declared bankrupt,

(2) becomes insolvent, (3) has its right to do business terminated in any state where any part of the Work is located, or (4) ceases to meet the requirements of Item 5.1.

Workers' Compensation

5.3 The Contractor shall maintain workers' compensation and employer's liability insurance for all employees subject to workers' compensation laws of the State of Oregon or any other appropriate jurisdiction unless exempt; and shall maintain liability coverage for employees subject to FELA, if applicable. The amount of employer's liability insurance shall not be less than $1,000,000 per accident, and $1,000,000 per employee for disease. The Contractor shall provide evidence of such insurance to the Port before commencing Work and throughout the term of this Contract.

Liability Insurance

5.4 The Contractor shall maintain the following liability coverages in an amount not less than $2,000,000 per occurrence (primary or combined primary and excess insurance). The Port shall be given not less than 30 days' written notice prior to cancellation, non-renewal, or material change of the policy. This insurance shall provide primary coverage and shall not seek any contribution from any insurance or self-insurance carried by the Port. One copy of each policy and a certificate(s) of such insurance shall be delivered to the Port before commencing Work and shall be subject to review and approval by the Port. The Port may defer delivery of the copy of the policy, but such deferral shall not be a waiver of the Port's right to a copy of the policy. In the event the Contractor fails to maintain such insurance, the Port may, without incurring liability to the Contractor for any related costs: (1) immediately suspend the Work until the required insurance is obtained, without any increase in the Contract Price or any extension of the Contract Time, directly or indirectly attributable to the suspension; and/or (2) terminate this Contract as provided for in Item 14.4.

A. The Contractor shall maintain commercial general liability insurance with any exclusions removed for (a) work within 50 feet of railroad tracks; and (b) explosion, collapse and underground hazards to protect against liability for bodily injury and property damage which may arise out of the Contractor's operations under this Contract. Such insurance shall include coverage for products-completed operations liability, independent contractors, contractual liability (including the tort liability of another assumed under a business contract), and all other standard coverages usually afforded by a commercial general liability policy. Such insurance shall name the Port and its commissioners, employees, and agents as additional insureds, and shall insure the Contractor's obligations under this Contract to indemnify and hold harmless the Port, its commissioners, employees, and agents, provided that the Contractor's insurer shall not be required to indemnify the Port for damages arising out of the death or bodily injury to persons or damage to property caused in whole or in part by the negligence of the Port.

B. The Contractor shall maintain business automobile liability insurance to protect against liability arising from the use, loading, and unloading of all of the Contractor's owned, hired, and non-owned automobiles in connection with this Contract. Such insurance shall cover the Port as an additional insured, provided that the Contractor's insurer shall not be required to indemnify the Port for damages arising out of the death or bodily injury to persons or damage to property caused in whole or in part by the negligence of the Port.

Claims-Made Coverage

5.5 If any of the required liability insurance is arranged on a 'claims-made' basis, such insurance shall have a retroactive date prior to the effective date of this Contract and the required coverage(s) shall be maintained continuously in effect throughout the term of this Contract. In the event of a change in carrier or policy form, the replacement coverage shall have a retroactive date prior to the

effective date of this Contract, or the Contractor shall purchase an extended reporting endorsement for the prior policy in addition to the new policy. Continuous coverage shall be maintained for not less than three years after Final Acceptance of the Work, either through policy renewals or purchase of an extended reporting endorsement at the Contractor's expense. Evidence of such continuous coverage shall be a condition of Final Acceptance and related warranty.

Contractor's Risks

5.6 The Contractor shall be responsible for obtaining any insurance the Contractor deems necessary to cover the Contractor's own risks, including without limitation: (1) business interruption, such as business income, extra expense, delay of opening, Act of God, or similar coverage; (2) personal property; and/or (3) automobile physical damage and/or theft. In no event will the Port be liable for any: (a) business interruption or any other related or consequential loss sustained by the Contractor; (b) damage to, or loss of, the Contractor's property; or (c) damage to, or loss of, an automobile, whether or not such loss is insured, even if such loss is caused by the negligence of the Port, excluding gross negligence or willful misconduct on the part of the Port.

Contractors Pollution Liability Insurance

5.7 The Contractor shall maintain Contractors Pollution Liability insurance in an amount not less than $1,000,000 per occurrence covering liability for sudden and non sudden pollution on land and on water, including first party clean up costs. Coverage shall include exacerbation of existing contamination to the extent exacerbated by the Contractor or his Subcontractors. If the policy is claims made, it shall: (1) have a retroactive date prior to the commencement date of this Contract, and (2) be maintained continuously in force for, or shall be endorsed with an extended reporting period of, two years beyond Final Acceptance of the Work.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

Administration and Supervision

6.1 The Contractor shall supervise and direct the Work competently and efficiently, applying the skills and expertise as may be necessary to perform the Work in accordance with this Contract. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor shall be responsible for seeing that the finished Work complies accurately with this Contract.

6.2 The Contractor shall provide a competent project superintendent at the site at all times during work progress. The superintendent shall be responsible for oversight of the work being performed by the Contractor and his Subcontractors. The project superintendent shall not be replaced without written notice to the Port.

6.3 If the Contractor's Representative is not available for project administration, the superintendent shall have the authority to receive direction from the Port on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor. This authority shall include, but not be limited to, receipt of Port-issued documentation, taking action on Port direction not involving changes to this Contract, taking direct action in emergency situations, and implementing stop work orders issued by the Port.

Labor and Material

6.4 The Contractor shall give not less than 24 hours' notice to the Port if work is to be performed outside normal day-shift hours or on Saturday, Sunday or any legal holiday. Emergency conditions relating to safety or protection of persons or property are valid exceptions to such notice.

6.5 Unless otherwise specified, the Contractor shall furnish for the execution, required testing, initial operation, and completion of the Work all necessary material, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, and all other facilities and incidentals.

Concerning Subcontractors

6.6 All subcontracts shall be subject to the provisions of this Contract insofar as applicable.

6.7 Subcontractors and suppliers shall be subject to disapproval of the Port. If the Port has reasonable objection to any of these, the Contractor shall submit an acceptable substitute. The Contractor will not be required to employ anyone against whom he has reasonable objection.

6.8 The Contractor is responsible for: (1) all acts and omissions of his Subcontractors, (2) persons and organizations directly or indirectly employed by his Subcontractors, (3) persons and organizations for whose acts any of his Subcontractors may be liable, and (4) scheduling and coordinating the work of Subcontractors, suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with the Contractor. Nothing in this Contract shall create any contractual relationship between the Port and any Subcontractor or other person or organization having a direct contract with the Contractor. Nothing in this Contract shall create any obligation on the part of the Port to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by Law. The Port may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work completed.

6.9 The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the work to be performed by any specific trade.

Permits

6.10 Port-Designed Work

A. The Port will submit to federal, state, and local units of government all calculations and other documentation required for review and checking for purposes of obtaining permits.

B. The Port will obtain, and pay the costs and charges of, general project permits such as building, fill, environmental, and land use.

C. The Contractor shall obtain and pay all costs and charges imposed for permits customarily issued only to a contractor, such as electrical, mechanical, and plumbing.

D. The Contractor shall give all notices necessary for permit-related inspections by third parties.

E. The Contractor shall submit to the Port a legible copy of permits, certificates of approval, and certificates of occupancy issued by the responsible unit of government.

6.11 Contractor-Designed Work

A. The Contractor shall submit to the Port, for review, all calculations and other documentation required for purposes of obtaining permits for Contractor-designed work.

B. After Port review, the Contractor shall submit to federal, state, and local units of government all calculations and other documentation required for obtaining permits. During review by units of government, the Contractor shall notify the Port of proposed deviations from the original permit documentation.

C. The Contractor shall submit to the Port all calculations and other documentation approved by units of government.

D. The Contractor shall pay costs and charges imposed by local units of government for permits issued to the Contractor.

E. The Contractor shall give all notices necessary for permit-related inspections by third parties.

F. The Contractor shall submit to the Port a legible copy of permits, certificates of approval, and certificates of occupancy issued by the responsible unit of government.

Laws and Regulations

6.12 The Contractor shall comply, and shall ensure that his employees and those of his Subcontractors and suppliers at every tier comply, with the most current versions of applicable Laws, rules, regulations, and practices.

6.13 If the Contractor performs any Work knowing or having reason to know that it is contrary to any Law, the Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to the Contractor's performance or the resulting Work. The Contractor shall immediately report to the Port if performance under this Contract would violate any Law in any respect.

6.14 The Contractor shall adhere to the following specific provisions of the Public Contracting Code.

A. The Contractor shall:

1. Make payment promptly, as due, to all persons supplying the Contractor labor or material for the performance of the work provided for in this Contract.

2. Pay all contributions or amounts due the Industrial Accident Fund from the Contractor or any Subcontractor incurred in the performance of this Contract.

3. Not permit any lien or claim to be filed or prosecuted against the Port on account of any labor or material furnished.

4. Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

5. Demonstrate that an employee drug testing program is in place.

B. If this is a public contract for demolition, the Contractor shall salvage or recycle construction and demolition debris, if feasible and cost-effective.

C. If this is a public contract for lawn and landscape maintenance, the Contractor shall compost or mulch yard waste material at an approved site, if feasible and cost-effective.

D. If the Contractor fails, neglects, or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a Subcontractor by any person in connection with this Contract as such claim becomes due, the proper officer or officers representing the Port may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of this Contract.

E. If the Contractor or a first-tier Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or material in connection with this Contract within 30 days after receipt of payment from the Port or the Contractor, the Contractor or first-tier Subcontractor shall owe the person the amount due plus interest charges commencing at the end of the 10 day period that payment is due under ORS 279C.580(4) and ending upon final payment, unless

payment is subject to a good faith dispute as defined in ORS 279C.580(5). The rate of interest charged to the Contractor or first-tier Subcontractor on the amount due shall equal three times the discount rate on 90-day commercial paper in effect at the Federal Reserve Bank in the Federal Reserve district that includes Oregon on the date that is 30 days after the date when payment was received from the Port or from the Contractor, but the rate of interest shall not exceed 30 percent. The amount of interest may not be waived.

F. If the Contractor or a Subcontractor fails, neglects, or refuses to make payment to a person furnishing labor or material in connection with this Contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580(5).

G. No person shall be employed for more than ten hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases the employee shall be paid at least time and a half pay:

1. For all overtime in excess of eight hours a day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; or

2. For all overtime in excess of ten hours a day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday; and

3. For work performed on Saturday, Sunday, New Year's Day on January 1, Memorial Day on the last Monday in May, Independence Day on July 4, Labor Day on the first Monday in September, Thanksgiving Day on the fourth Thursday in November, or Christmas Day on December 25, or, if one of those named holidays falls on a Sunday, on the following Monday or, if it falls on a Saturday, on the preceding Friday.

4. The Contractor shall ensure that each employer of employees working on this Contract gives those employees the written notice required by ORS 279C.520(2) and 279C.520(5)(b), either at the time of hire or before commencement of work on this Contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

The requirements of this section are subject to the exceptions established by ORS 279C.540 including, but not limited to, the exception when the Contractor is a party to a collective bargaining agreement in effect with any labor organization. When specifically agreed to under a written labor-management negotiated labor agreement, an employee may be paid at least time and a half for work performed on Martin Luther King, Jr.'s birthday on the third Monday in January, Veterans Day on November 11, and every day appointed by the Governor as a holiday.

H. The Contractor shall promptly, as due, make payment to any person, copartnership, association, or corporation furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums which the Contractor agrees to pay for such services and all moneys and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract, or agreement for the purpose of providing or paying for such service.

I. The Contractor shall comply with the terms of the workers' compensation laws of the State of Oregon, unless exempt, and any other applicable jurisdiction. All subject employers performing work under this Contract are either employers that will comply with ORS 656.017 or employers that are exempt under ORS 656.126.

J. The Contractor shall comply with the following requirements (and, if applicable, prompt payment provisions stated in Document 007301, Supplementary Conditions for Federally Assisted Contracts):

1. The Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier Subcontractor, including a material supplier, for the purpose of performing this Contract:

   a. A payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under the subcontract within 10 days out of such amounts as are paid to the Contractor by the Port under this Contract; and

   b. An interest penalty clause that obligates the Contractor, if payment is not made within 30 days after receipt of payment from the Port, to pay to the first-tier Subcontractor an interest penalty on amounts due in the case of each payment not made in accordance with the payment clause included in the subcontract pursuant to this subsection. The Contractor or first-tier Subcontractor shall not be obligated to pay an interest penalty if the only reason that the Contractor or first-tier Subcontractor did not make payment when payment was due is that the Contractor or first-tier Subcontractor had not received payment from the Port or the Contractor when payment was due. The interest penalty shall be:

      1) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

      2) Computed at the rate specified in ORS 279C.515(2).

2. The Contractor shall include in each of his subcontracts, for the purpose of performance of this Contract condition, a provision requiring the first-tier Subcontractor to include a payment clause and an interest penalty clause conforming to the standards of this section in each of his subcontracts and to require each of his Subcontractors to include such clauses in their subcontracts with each lower-tier Subcontractor or supplier.

3. The clauses required by this section are not intended to impair the right of the Contractor or a Subcontractor at any tier to negotiate, and to include in the subcontract, provisions that:

   a. Permit the Contractor or a Subcontractor to retain, in the event of a good faith dispute, an amount not to exceed 150 percent of the amount in dispute from the amount due a Subcontractor under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties consider appropriate to the ability of a Subcontractor to furnish a performance bond and a payment bond;

   b. Permit the Contractor or a Subcontractor to make a determination that part or all of the Subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

   c. Permit such withholdings without incurring any obligation to pay a late payment interest penalty if:

      1) A notice conforming to the standards of ORS 279C.580(8) has been previously furnished to the Subcontractor; and

2) A copy of any notice issued by the Contractor pursuant to the foregoing subsection has been furnished to the Port.

d. As used in this subsection, "good faith dispute" means a documented dispute concerning:

1) Unsatisfactory job progress.

2) Defective work not remedied.

3) Third party claims filed or reasonable evidence that claims will be filed.

4) Failure to make timely payments for labor, equipment, and materials.

5) Damage to the Contractor or a Subcontractor.

6) Reasonable evidence that the subcontract cannot be completed for the unpaid balance of the subcontract sum.

Environmental Responsibilities

6.15 The following federal, state, and local agencies have enacted ordinances or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the performance of this Contract:

A. City and county where the work is to be performed

B. Metro

C. Oregon Environmental Quality Commission

D. Oregon Fish and Wildlife Commission

E. U.S. Environmental Protection Agency

F. U.S. Fish and Wildlife Service

G. National Marine Fisheries Service

6.16 Known conditions at the construction site that may require the Contractor to comply with statutes or with ordinances or regulations enacted by the agencies listed above are specifically referred to at various places in this Contract, including but not necessarily limited to Division 1 of the Specifications.

6.17 The Contractor is solely responsible for (1) considering applicable statutes and the ordinances and regulations enacted by the agencies listed above, (2) considering the known conditions specifically referred to in this Contract, and (3) ensuring that the activities of the Contractor and the Contractor's employees, Subcontractors (including suppliers), agents, and invitees with respect to those conditions do not violate any of those statutes, ordinances, or regulations. Without limiting the foregoing, the Contractor is solely responsible for the following environmental and natural resource risks associated with the performance of this Contract:

A. Air pollution;

B. Water pollution;

C. Contamination of soil, groundwater, or sediment;

D. Filling or destruction of wetlands;

E. Taking of a federally listed threatened or endangered species through habitat destruction, habitat degradation, or otherwise; and

F. Introduction of an invasive species.

6.18 In addition to the foregoing requirements, the Contractor shall manage and conduct all activities related to the performance of this Contract in accordance with all environmental Laws and regulations, and with the requirements of all permits issued under those Laws and regulations of which the Contractor has been given notice or has actual knowledge. "Environmental laws and regulations" means all federal and state statutes, all local ordinances, and all regulations adopted pursuant to those statutes and ordinances, as any of them may be amended from time to time, dealing with the prevention of environmental pollution or the preservation of natural resources, including but not limited to: the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, and Oregon Revised Statutes Chapters 465, 466, 467, 468, 468A, 468B, and 496. If the Contractor believes compliance with a requirement under this Contract or a direction given by the Port will result in violation of any environmental laws or regulations, the Contractor shall so notify the Port in writing immediately and shall not proceed pursuant to that requirement or direction until the Port directs the Contractor to proceed.

6.19 In the event of a sudden spill or discharge of hazardous material as a result of actions related to this Contract by the Contractor or the Contractor's Subcontractor or agent, the Port may take action, including contracting for control or cleanup of the spill or discharge, unless the Contractor takes immediate appropriate action. If the Port takes action pursuant to this paragraph, the Port may recover from the Contractor all reasonable cost necessarily incurred in effecting the control and cleanup of the spill or discharge. Regardless of who undertakes the cleanup or control of the spill or discharge, the methods used shall be subject to the approval of the Port.

Taxes

6.20 The Contractor shall pay or ensure payment of sales, consumer, use, and other similar taxes required of the Contractor or any Subcontractor under any Law with respect to performance under this Contract.

Use of Premises

6.21 The Contractor shall confine equipment, the storage of material, and the operations of workers to areas permitted by this Contract. The Contractor shall not unreasonably encumber the premises with equipment or material.

6.22 During the progress of the Work, the Contractor shall keep the premises free from accumulations of waste material, rubbish and other debris resulting from the Work. At the completion of the Work, the Contractor shall leave the site clean and ready for occupancy. The Contractor shall restore to their original condition those portions of the site not designated for alteration by this Contract.

6.23 The Contractor shall not permit any part of any structure to be subjected to loads that may endanger its structural stability. The Contractor shall not subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

Safety and Protection

6.24 The Contractor shall comply with all Laws applicable to the safety of persons or property. Damage, injury, or loss to property caused by the Contractor, Subcontractor, or anyone directly or

indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor.

6.25 The Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities shall be the prevention of accidents and the maintenance and supervision of safety precautions and programs. This person shall be the Contractor's project superintendent unless otherwise designated in writing by the Contractor to the Port.

6.26 The Contractor shall erect and maintain necessary safeguards for the safety and protection of:

A. Employees on the Work and other persons whose safety may be adversely affected by performance of the Work.

B. The Work and material to be incorporated into the Work, whether in storage on or off the site. If the Contractor fails to protect the Work, the Port may, after giving notice to the Contractor, protect the Work and deduct the resulting cost from payment due the Contractor. The Port's determination of when and to what degree such protection is necessary shall be final.

C. Other property at the site including trees, shrubs, lawn, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement.

D. Adjacent property and utilities when prosecution of the Work may affect them.

6.27 The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until the Contractor has completed all obligations under this Contract.

Emergencies

6.28 In the event of an emergency affecting the safety or protection of persons or the Work or property at, adjacent to, or near the site, the Contractor shall act to prevent threatened damage, injury, or loss. The Contractor may act without special instruction or authorization from the Port. The Contractor shall give the Port written notice within 24 hours of any significant change in the Work or deviation from this Contract caused by the Contractor's acts.

Access to the Work

6.29 The Contractor shall provide reasonable and safe access to the Port and inspection authorities for observation, testing, and inspection of the Work including, but not limited to, ladders, lifts, equipment, and tie-off apparatus.

Prosecution of the Work

6.30 The Contractor shall continue performance of the Work in accordance with the work progress schedule during all claims or disputes with the Port. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the Contractor and the Port may otherwise agree in writing.

Port's Right to Do the Work

6.31 If the Contractor fails to prosecute the Work properly or fails to perform any provision of this Contract, the Port, after a 3-day written notice to the Contractor, may without prejudice to any other remedy it may have, make good such failures. The Port may deduct the cost thereof from any payment due the Contractor. In cases of emergency, the Port may prosecute such Work without notice or delay and may deduct the cost thereof from any payment due the Contractor.

Indemnification

6.32 The Contractor shall defend (using legal counsel acceptable to the Port), indemnify, and hold harmless the Port and the Port's commissioners, employees, contractors, and agents from and against, and reimburse the Port for, any and all actual or alleged claims, damages, expenses, costs, fees (including, but not limited to, attorney, accountant, paralegal, expert, and escrow fees), fines, and/or penalties (collectively "costs") which may be imposed upon or claimed against or incurred by the Port and which arise from any of the following: (a) any act, omission or negligence of the Contractor or the Contractor's partners, officers, directors, agents, employees, invitees or Subcontractors; (b) any use, occupation, management or control of Port property by the Contractor or the Contractor's employees, agents, Subcontractors, or suppliers, whether or not due to the Contractor's own act or omission and whether or not occurring on Port property; (c) any condition created on Port property by the Contractor or the Contractor's employees, agents, Subcontractors, or suppliers, and any accident, injury or damage arising from the condition; (d) any breach, violation or nonperformance of any of the Contractor's obligations under this Contract; (e) any damage caused by the Contractor or the Contractor's employees, agents, Subcontractors, or suppliers on or to Port property. Nothing in the foregoing indemnity shall be deemed to require the Contractor to indemnify the Port against liability for damage arising out of death or bodily injury to persons or damage to property caused in whole or in part by the negligence of the indemnitee, nor shall it be deemed to require any indemnity made void by ORS 30.140.

Labor Relations

6.33 The Contractor shall be responsible for labor relations and shall seek to resolve disputes between himself and his employees. Any labor dispute arising from this Contract that causes a disruption of the Port's operations shall be to the account of and the responsibility of the Contractor.

Records and Audits

6.34 The Port or its designee may inspect, audit, and copy any of the Contractor's financial records retained and any other records to the extent necessary to: (1) evaluate and verify the costs incurred by the Contractor in performing the work under this contract or the accuracy of any invoice, change order, payment, or claim submitted under this contract by the Contractor or the Contractor's payees; or (2) evaluate any claim asserted by the Contractor against the Port.

ARTICLE 7 – WORK BY OTHERS

7.1 The Contractor shall afford utility service companies, other contractors and Port employees reasonable access to the Work. He shall allow storage of material and execution of work by others. He shall properly connect and coordinate his Work with work by others.

7.2 Notice will be given to the Contractor prior to the start of any additional work by others not noted in this Contract. If the Contractor believes that the performance of such additional work by the Port or others involves additional expense to the Contractor or requires an extension of the Contract Time, the Contractor shall notify the Port.

7.3 If any part of the Contractor's Work depends upon the work of any other contractor, utility service company, or the Port, the Contractor shall inspect and promptly report to the Port in writing any reasons that render work by others unsuitable. The Contractor's failure to report unsuitability of work by others shall constitute the Contractor's acceptance of the work by others as fit and proper for integration with the Contractor's Work. Latent or non-apparent defects and deficiencies in the work by others shall be reported to the Port in writing promptly upon discovery.

7.4 Unless otherwise specified, the Port shall be the final authority regarding coordination issues between the Contractor and work by others.

ARTICLE 8 – PORT'S STATUS DURING CONSTRUCTION

Construction Contract Manager

8.1 The Port's Construction Contract Manager will be the Port's representative during the construction phase of the Work.

8.2 The Construction Contract Manager will resolve any and all questions which may arise as to Contract compliance. The Contractor shall at all times carry out and fulfill the instructions and directions of the Construction Contract Manager insofar as they concern the Work to be performed under this Contract.

A. The Construction Contract Manager's authority includes, but is not limited to:

1. Determining the quantity, quality, and acceptability of material furnished and Work performed.

2. Reviewing and approving/disapproving the manner of performance and rate of progress of the Work.

3. Stopping the Work whenever such stoppage is deemed necessary.

4. Administering this Contract.

5. Determining acceptable fulfillment of this Contract by the Contractor.

B. Written approval by the Construction Contract Manager signifies favorable opinion and qualified consent. It does not carry with it: (1) certification, (2) assurance of completeness, (3) assurance of quality, (4) assurance of accuracy concerning details, dimensions, and quantities.

C. Written approval by the Construction Contract Manager will not relieve the Contractor from responsibility for: (1) errors, (2) improper fabrication, (3) nonconformance with requirements, (4) deficiencies within the Contractor's control.

Clarifications and Interpretations

8.3 The Construction Contract Manager will issue with reasonable promptness such written clarifications or interpretations of this Contract as may be necessary. If the Contractor believes that a written clarification or interpretation justifies an increase in the Contract Price or the Contract Time, the Contractor may notify the Port as provided in Article 9.

Rejection of Defective Work

8.4 The Construction Contract Manager is authorized to disapprove or reject Work which is Defective and to require additional inspection or testing of the Work whether or not the Work is fabricated, installed, or completed.

Port Inspectors

8.5 The Port will assign Port inspectors who are authorized to:

A. Inspect the Work as it is performed and all material being furnished. Such inspections may extend to all or any part of the Work and to the preparation, fabrication, or manufacture of the material to be used.

B. Call the attention of the Contractor to any failure of the Work to meet this Contract.

C. Reject material not meeting the requirements of this Contract.

D. Suspend that part of the Work affected by Contract nonconformance until the issue can be referred to and a decision issued by the Construction Contract Manager.

E. Approve minor physical revisions to the Work that do not result in additional costs or credits, do not change the physical appearance of the finished Work, and do not change the structural integrity or function of the Work.

8.6 Port inspectors are not authorized to:

A. Supervise or perform any other duties for the Contractor, or interfere with the Contractor's management of the Work.

B. Give final approval or acceptance of any portion of the Work.

C. Issue instructions or directions contrary to this Contract.

8.7 No act or failure to act on the part of a Port inspector will render the Port liable in any way, nor shall it relieve the Contractor from fulfilling all of the terms and conditions of this Contract.

Limitations on the Port's Responsibilities

8.8 The Port is not responsible for the acts or omissions of the Contractor or the Contractor's employees, Subcontractors, manufacturers, fabricators, suppliers, distributors, or any other persons at the site or otherwise performing any of the Work, or their agents or employees.

8.9 The Port is not responsible for the Contractor's means, methods, procedures, sequences, or techniques of construction, or related safety precautions and programs except as specified in the Contract Documents.

8.10 The Port is not responsible for the Contractor's failure to perform the Work in accordance with this Contract.

ARTICLE 9 – CHANGE IN THE WORK

9.1 Without invalidating this Contract, the Port may, at any time, authorize additions, deletions, or revisions to the Work by written Change Order. All such Work shall be executed under the applicable conditions of this Contract. A Change Order will be executed to provide an equitable adjustment if any Port-issued change directive or Port-provided Contract interpretation or clarification causes an increase or decrease in the Contract Price, or an extension or shortening of the Contract Time.

9.2 No addition to Contract Price or extension of Contract Time will be allowed because of any condition of which the Contractor could have informed himself either by examination, testing, sampling, review of records, or otherwise.

9.3 Prior to the execution of, or in the absence of, a Change Order the Port may issue a change directive that will define the revision to the Work, may direct the Contractor as to what method to use for price and time adjustments, and may direct the Contractor to proceed with the Work.

9.4 If the Contractor believes that a change directive or Contract interpretation or clarification will require a change in the Contract Price or the Contract Time, the Contractor shall so notify the Port in writing. Such notification shall be delivered to the Port within 7 days after the Contractor receives the change directive or Contract interpretation or clarification.

9.5 The Contractor shall submit, in the format requested by the Port, an itemized cost estimate of any adjustment to the Contract Price, either additive or deductive, resulting from the change directive or Contract interpretation or clarification. If applicable, the Contractor shall also submit a work progress schedule analysis or summary which demonstrates the effect of the change directive or Contract interpretation or clarification on the Contract Time. The itemized estimate or analysis shall be submitted within 15 days of receipt of the change directive, Contract interpretation, or clarification from the Port or the submittal of the Contractor's written notice under Item 9.4. The Contractor shall submit such cost estimate or work progress schedule analysis in less than 15 days if so requested by the Port or if so required by work progress schedule limitations.

9.6 The Port may order the Contractor, in writing, to commence the added work immediately and account for cost using the force account method if: the Contractor fails to submit the cost estimate within the 15-day period (or earlier if requested); the parties fail to agree as to the cost or schedule impact; or the Port for any reason deems it necessary. If direction to proceed has already been given and the Contractor fails to submit the cost estimate within the 15-day period (or earlier if requested), if the parties fail to agree as to the cost or work progress schedule impact, or if the Port for any reason deems it necessary, the Port may issue a lump sum unilateral change to the Contract Price in accordance with the Port's estimate of cost.

9.7 The Contractor shall proceed with the work involved upon receipt of a Change Order or direction to proceed with the Work prior to execution of a Change Order. The Contractor shall continue performance of the Work, including the change, during the negotiation of the Change Order, even if a dispute arises which delays or prevents agreement on the terms and conditions of the Change Order.

9.8 Any Change Order shall constitute an accord and satisfaction with respect to issues related to changes in the Contract Price or the Contract Time. The Change Order shall be deemed to contain all the costs and credits relating to changes in the Work and effects on the unperformed or unchanged Work. If the Contractor contends that inefficiency and cumulative impacts cannot be accurately assessed at the time the Change Order is to be signed, the Contractor shall give the Port notice of a potential inefficiency or cumulative impact claim as soon as the Contractor suspects grounds for the claim exists, and shall submit evidence thereof at the first reasonable opportunity.

9.9 No payment will be made for additions, deletions, or revisions to the Work until a Change Order has been executed.

9.10 Additional work performed without written direction from the Port or authorization by a Change Order will not entitle the Contractor to an increase in the Contract Price or an extension of the Contract Time. Emergencies, as provided in Item 6.28, are an exception.

ARTICLE 10 – CHANGE OF CONTRACT PRICE

Contract Price Adjustment Methods

10.1 A contract price adjustment for the changes in the Work will be made in accordance with one or a combination of the following methods as the Port may elect:

A. Fixed price method as supported by the breakdown of estimated costs. If agreement cannot be reached by the fixed price method, the Port may require the Work to be performed on the basis of force account.

B. Unit price method.

C. Force account method.

Fixed Price Method

10.2 The Contractor shall prepare a fixed price proposal in the following format:

A. Direct Costs

1. Material (itemize)

a. The cost to the Contractor for the material directly required for the performance of the changed Work. Such cost of material may include the cost of transportation. No delivery charges will be allowed unless the delivery is specifically for the changed Work.

b. Trade discounts offered by the supplier to the Contractor shall be credited to the Port. If the material is obtained from a source owned wholly or in part by the Contractor, payment thereof will not exceed the current wholesale price for the material. The term "trade discount" includes the concept of cash discounting.

c. If, in the opinion of the Port, the cost of the material is excessive or if the Contractor fails to furnish satisfactory evidence of a cost to him from the supplier then, in either case, the cost of the material shall be deemed to be the lowest current wholesale price at which similar material is available in the quantities required.

d. The Port reserves the right to furnish such material as it deems advisable and the Contractor shall have no claims for cost or profit on material furnished by the Port.

2. Labor (man-hours, rates by crafts)

a. Payroll costs shall include, but not be limited to, salaries and wages, and fringe benefits including social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. The costs for all supervision, including general superintendents and foremen, shall be included in the markups established by this Contract. The only exception to this shall be working foremen who perform manual labor. No labor charges will be accepted for engineering or proposal preparation. These costs shall be included in the markups established by this Contract.

b. Overtime and premium time pricing will be allowed only for labor which is authorized by the Port to be performed after normal working hours, or on Saturday, Sunday, or legal holidays.

3. Equipment (type, size, attachments, hours, rate)

a. The cost to the Contractor for the use of equipment directly required in the performance of the changed Work. No mobilization or demobilization cost will be allowed for equipment already on site.

b. For equipment owned, furnished, or rented by the Contractor, costs allowed shall be the actual usage costs incurred as supported by the Contractor's published standard equipment rates or rental invoices. Rates charged shall not exceed the rates established by the Rental Rate Blue Book.

c. The amount to be paid to the Contractor for the use of equipment as set forth above will constitute full compensation for the cost of fuel, power, oil, lubricants, supplies, small tools, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for equipment operators) and any and all costs incidental to the use of the equipment.

4. Direct costs shall not include:

a. Payroll costs and other compensation of the Contractor's officers, executives, principals of partnerships and sole proprietorships, general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, superintendents and foremen, and similar administrative personnel. These costs shall be considered administrative costs covered by the Contractor's markup.

b. Expense of the Contractor's principal and branch offices other than the Contractor's office at the site.

c. Any part of the Contractor's capital expenses. Interest on the Contractor's capital employed for the Work. Charges against the Contractor for delinquent payments.

d. Costs due to the negligence of the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Negligence costs include correction of defective Work, disposal of material wrongly supplied, and making good any damage to property.

e. Other overhead or general expense costs of any kind.

f. Cost of small tools and supplies.

g. Cost of safety programs.

h. Cost of warranty work.

B. Subcontract Costs

1. Direct costs shall be as outlined in Item 10.2, A.

2. Subcontractors' (at any tier) markups for overhead and profit shall not exceed 15 percent of the direct costs.

C. Contractor's Markup

1. The Contractor's markup for overhead and profit shall not exceed the following:

a. Costs incurred under Item 10.2, A	15 percent
b. Costs incurred under Item 10.2, B, 1	
First $5,000	10 percent
Amount above $5,000	8 percent
(No markup allowed on Subcontractor markup)	

c. In no case shall the total markups be greater than 30 percent of the direct cost, regardless of the number of subcontract tiers existing. No markup is allowed for direct costs listed in Item 10.2, A, 4.

2. The amount of credit to the Port for a change which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in the Contractor's overhead and profit markup by an amount equal to that allowed in the table above.

3. When both additions and credits are involved in any one change, the adjustment in the Contractor's overhead and profit markup shall be computed on the basis of the net change in cost.

Unit Price Method

10.3 In the case of unit price bid items:

A. The Port may increase the units of Work without limit or adjustment of unit prices.

B. The Port may decrease the estimated quantity in a major item of Work. A major item of Work is any item in a unit price bid schedule which is equal to or greater than 10 percent of the Contract Price as bid. If the Port decreases the quantity in a major item of Work in excess of 25 percent, the remaining quantity shall be subject to a negotiated change in unit price.

C. The Port may decrease the estimated quantity or delete a minor item of Work. A minor item of Work is any item in a unit price bid schedule which is less than 10 percent of the Contract Price as bid. If accumulation of such changes decreases the Contract Price more than 25 percent based on the estimated quantities and prices bid, an equitable adjustment will be negotiated on the items of Work remaining.

Force Account Method

10.4 The force account method changes the Contract Price in accordance with the sum of all costs necessarily incurred and paid by the Contractor in the proper performance of the Work plus overhead and profit. Except as otherwise may be agreed to in writing by the Port, such costs shall be in amounts no higher than those prevailing in the locality of the Work, shall include only the following items, and shall not include any of the costs itemized under Item 2.8. The Contractor and the Port shall compare records of force account costs at the end of each workday. Copies of these records shall be made in duplicate by the Contractor and shall be signed daily by both the Port and the Contractor. Fully itemized force account invoices shall be submitted monthly to the Port. The Contractor's submittal shall be in the format described in Item 10.2. Payment will be included with regular periodic progress payments upon issuance of a Change Order for the Work. The Contractor shall submit final force account billing within 30 days after completion of that unit of Work. Force account costs may include:

A. Cost of all material furnished and incorporated in the Work, in accordance with Item 10.2, A, 1.

B. Labor costs for employees in the direct employment of the Contractor in the performance of the Work in accordance with Item 10.2, A, 2.

C. Cost of equipment furnished and used in completion of the Work in accordance with Item 10.2, A, 3.

1. Equipment will be eligible for payment when operated and used on a full-time basis. Equipment is considered to be used full time when the equipment must be manned and ready for use at all times.

2. When the Port determines that equipment need not remain at the site continuously, payment will be limited to actual hours of use.

3. Rental rates for equipment retained on the Work for an extended duration will be adjusted to the then-current rate on the anniversary of the Work Start Date.

4. The hourly operating cost will be allowed for each hour that the equipment is in use. The rate will be the monthly rate divided by 176 hours for single-shift operations. Hourly rates will be adjusted for two- and three-shift operations as recommended by the Rental Rate Blue Book.

5. Equipment attachments will be included in the rate only when deemed by the Port to be essential to the Work. When multiple attachments are approved for use (tractor with ripper, dozer or tractor with loader and backhoe, etc.) and the attachments are being used interchangeably, only the one attachment having the higher rate will be eligible for payment.

6. Standby time, when ordered by the Port, will be paid as follows: One-third of the total rate established in Items 10.4, C, 4 and 10.4, C, 5 above, rounded to the nearest 10 cents. Standby rates which are calculated at less than one dollar per hour will not be paid. No more than 8 hours of standby will be paid during a 24-hour period. No more than 40 hours of standby will be paid during a one-week period. In the event of breakdown, or shutdown by order of the Port, of part or all of the equipment being used, payment for such equipment that is idled shall cease. Labor that is idled and cannot be diverted to other Work will be paid through the one-half shift during which the breakdown or shutdown occurred. No other payment will be made for non-operating hours. Rental will not be allowed for equipment listed in the Shop Tools section of the Rental Rate Blue Book having a daily rate of less than $5 each. Individual pieces of equipment not specifically covered by the Rental Rate Blue Book and having a value of $350 or less shall be considered "small tools and equipment for which no rental is allowed."

D. Payments made by the Contractor to Subcontractors for Work performed by Subcontractors in accordance with Item 10.2, B. If required by the Port, the Contractor shall obtain competitive bids from Subcontractors acceptable to the Contractor and award to the lowest responsive and responsible bidder. If a subcontract provides that the Subcontractor is to be paid by force account method plus markup, the Subcontractor's force account costs shall be determined in the same manner as the Contractor's force account costs.

E. Supplemental costs:

1. Sales, use, or similar taxes related to the Work, and for which the Contractor is liable, imposed by any governmental authority.

2. Costs for royalty payments, fees, permits, and licenses other than those caused by the negligence of the Contractor or the Contractor's employees, agents, or Subcontractors.

3. Losses, damages, and related expenses sustained by the Contractor in connection with the execution of the Work that are not caused by the negligence of the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and are not compensated for by insurance recovery. Losses, damages, and related expenses shall include settlements made with the written consent and approval of the Port. No such losses, damages and related expenses shall be included in the force account cost for the purpose of determining the Contractor's markup for overhead and profit. If, however, any such loss, damage, and related expense requires

reconstruction and the Contractor is placed in charge thereof, the Contractor shall be paid for services in accordance with Item 10.4, G.

4. The cost of utilities, fuel, and sanitary facilities at the site.

5. Minor expenses in connection with the Work such as telegrams, long distance telephone calls, telephone service at the site, expressage, and petty cash items.

6. Rental of all the Contractor-owned and operated power tools and equipment which the Port approves for use.

F. Force account method shall not include:

1. Payroll costs and other compensation of the Contractor's officers, executives, principals of partnerships and sole proprietorships, general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, superintendents and foremen, and similar administrative personnel. These costs shall be considered administrative costs covered by the Contractor's markup.

2. Expense of the Contractor's principal and branch offices other than the Contractor's office at the site.

3. Any part of the Contractor's capital expenses. Interest on the Contractor's capital employed for the Work. Charges against the Contractor for delinquent payments.

4. Costs due to the negligence of the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Negligence costs include correction of defective Work, disposal of material wrongly supplied, and making good any damage to property.

5. The costs of any item not specifically and expressly included in Items 10.4, A through E.

G. The Contractor's markup for overhead and profit shall not exceed the following:

1. Costs incurred under Items 10.4, A, 10.4, B, and 10.4, C — 15 percent
(No markup allowed for Item 10.4, E)

2. Costs incurred under Item 10.4, D less Subcontractor's markup:
First $5,000 — 10 percent
Amount above $5,000 — 8 percent

3. If a subcontract is based on the force account method plus markup, the maximum allowable to the Subcontractor as markup for overhead and profit will be in accordance with Item 10.4, G.

4. In no case shall the total markups be greater than 30 percent of the direct cost, regardless of the number of subcontract tiers existing.

Cost Changes to Bonds and Insurance

10.5 When changes in the Work require new or increased premiums on bonds and insurance, the Port will reimburse the Contractor for such costs in the following manner:

A. Costs for new bonds or insurance shall be submitted as part of the Contractor's request for progress payment and supported by invoiced costs from the bond or insurance supplier.

B. Costs for increases to existing bonds or insurance shall be submitted as part of the Contractor's request for final payment and supported by invoiced costs from the bond or insurance supplier.

Rental Rate Blue Book

10.6 Equipment rental rates will be the lowest of: the Contractor's established company rates; actual rental rates; or the rates in effect in each section of the Rental Rate Blue Book on the Work Start Date.

A. When the Rental Rate Blue Book, published by EquipmentWatch, Primedia Corp., 1735 Technology Drive, Suite 410, San Jose, California 95110, will be used to establish equipment rental rates, the following shall apply:

1. For projects of more than one year duration, the rates shall be adjusted annually after the anniversary date of the Work Start Date to reflect published revisions of the Rental Rate Blue Book.

2. The Rental Rate Blue Book denotes discontinued models by showing a star next to the model number. Many manufacturers continue the same model number through successive years. In the event the Port and the Contractor are unable to distinguish discontinued models from current models having different rates in the Rental Rate Blue Book, the lower rate shall apply. In the event a rate is not given for either a new model or an older model, a rate for the most similar model in the Rental Rate Blue Book will be used. Such characteristics as manufacturer, capacity, horsepower, and fuel will be used as the basis for selecting a similar model.

3. In the event a rate has not been established for a particular equipment category in the Rental Rate Blue Book, the Contractor shall call the EquipmentWatch company for written documentation of a rental rate on the equipment and present it to the Port for approval before use of the equipment.

Lump-Sum Breakdown

10.7 The price of changes in a lump-sum agreement or lump-sum bid items will be based on the lump-sum breakdown furnished in accordance with Item 2.8.

Deleted Work

10.8 Deletion of any portion of the Work shall not be a waiver of any requirement of this Contract nor invalidate any of its provisions. The Contractor will be paid for all work performed toward the completion of the portion of the Work prior to its deletion as provided by the force account method. No allowance will be made for anticipated profits on the deleted portion of the Work. If the deletion of the Work results in surplus material that is not returnable by the Contractor for a credit acceptable to the Port, or if the Port so desires, the material will be purchased from the Contractor by the Port at cost, without allowance for overhead or profit.

ARTICLE 11 – CHANGE OF CONTRACT TIME

11.1 All time limits stated in this Contract are of the essence. Contract Time will be changed only by a Change Order. Any extension in Contract Time will be based on written notice delivered to the Port within 7 days of the occurrence of the event precipitating the request. The Contractor shall deliver a work progress schedule analysis or summary justifying the time extension within 15 days of such occurrence. Failure to deliver any documentation to the Port within the time limits

specified above shall completely foreclose consideration of an extension of Contract Time and all rights and remedies arising therefrom.

11.2 Time extensions will be granted only when conditions described in Items 11.3, 11.5, and 11.6 exist and when the approved work progress schedule substantiates the need.

A. An adjustment of Contract Time shall be the Contractor's sole remedy for any delay in meeting the specified Substantial Completion, Final Acceptance, or any milestone dates of the Work. Exception shall be to the extent the delay is caused by the acts or omissions of the Port or other contractors performing other work directly for the Port as contemplated in Article 7. To the extent the delay is caused by the acts or omissions of the Port or persons acting for the Port, the Contractor is not precluded from recovery of damages or from an equitable Contract Price adjustment.

11.3 Extension of Contract Time will be determined by the Port and will be an equitable adjustment if all or a part of the Work is hindered, delayed, or suspended by an Act of God, act of war, act of terrorism, or the acts or omissions of the Port or the Port's commissioners, employees, contractors, or agents.

11.4 Requests for extension of Contract Time will not be considered for: (1) contention that insufficient time was specified in this Contract; (2) delays which affect the Contractor's planned early completion but not the specified Contract Time; (3) suspensions made at the request of the Contractor; (4) delays caused by labor disputes involving the Contractor or his Subcontractors; or (5) delays caused by issues known and addressed in this Contract.

11.5 For those contracts which specify a completion date rather than contract duration, the specified Substantial Completion date will be adjusted by the number of days between the anticipated authorization to commence work date shown in the Agreement and the actual date authorizing work commencement shown in the Notice to Proceed, if the actual date is later than that shown in the Agreement. Any such adjustment of the completion date shall meet the requirements specified under Item 11.3 and shall be supported by the Contractor's work progress schedule. The Port may also request acceleration of the Work instead of adjustment of the completion date. If the Port requests acceleration of the Work, the Port will pay an agreed-upon reasonable cost resulting from the directed acceleration of the Work.

11.6 Work covered by a Change Order may require a Contract Time extension or reduction. The amount of time extension or reduction will be agreed upon by the Contractor and the Port as part of the negotiation of the Change Order.

ARTICLE 12 – WARRANTY; TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

Tests and Inspections

12.1 The Port will pay the cost of acceptance inspections, tests, and approvals unless otherwise specified.

12.2 The Contractor shall:

A. Be responsible for compliance with laws, ordinances, rules, regulations, codes, and orders of any public body having jurisdiction over inspection, testing, or approval of the Work. The Contractor shall arrange for, obtain, and pay for such inspections, tests, approvals, and related fees.

B. Give the Port and appropriate inspection and approval authorities timely notice of readiness of the Work for required inspections, tests, or approvals.

C. Furnish the Port the required certificates of inspection, testing, and approval from inspection or approval authorities.

D. Be responsible for inspection or testing required for the Port's acceptance of a manufacturer, fabricator, supplier, or distributor of material and pay related fees.

E. Pay the cost of inspections, tests, and approvals required as a result of failure to pass acceptance testing by the Port, unless otherwise specified.

12.3 The following shall not relieve the Contractor from his obligation to perform the Work in accordance with this Contract: (1) observation by the Port, (2) inspections, (3) tests, (4) approvals by others.

Uncovering Work

12.4 The Contractor, at the Port's request, shall uncover, expose, and reconstruct, or otherwise make available for observation, inspection, testing, or approval, any portion of the Work. The Contractor shall furnish all necessary labor, material, and equipment. The cost shall be allocated as follows:

A. The Contractor shall bear the cost if the Work was covered contrary to the direction of the Port.

B. The Contractor shall bear the cost if the Work was covered without concurrence of the Port unless the Contractor had given the Port timely notice of intent to cover such Work, and the Port did not act with reasonable promptness in response to such notice.

C. The Contractor shall bear the cost if the previously installed Work is found to be Defective.

D. For situations not covered above, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction if he makes a request therefor as provided in Articles 10 and 11.

Warranty

12.5 The Contractor warrants for one year after Substantial Completion, or for any longer period expressly provided by this Contract, provided by any special warranty or extended warranty required by this Contract or by a Subcontractor or supplier, or otherwise provided by Law, that all Work is not Defective for any reason.

Port May Correct Defective Work

12.6 If the Contractor fails, within 3 days after written notice from the Port, to proceed to correct, or to remove and replace Defective Work as required by the Port, or if the Contractor fails to perform the Work in accordance with this Contract (including any requirements of the work progress schedule), the Port may correct and remedy any such deficiency. In exercising the rights under this paragraph, the Port will proceed expeditiously. To the extent necessary to complete corrective and remedial action, the Port may: (1) exclude the Contractor from all or part of the site; (2) take possession of all or part of the site; (3) suspend the Contractor's services related thereto; (4) take possession of the Contractor's tools, appliances, construction equipment and machinery at the site; and (5) incorporate in the Work material stored at the site or for which the Port has paid the Contractor but which has been stored elsewhere. The Contractor shall allow the Port's representatives, contractors, agents, and employees such access to the site as may be necessary to

exercise the rights under this paragraph. All direct and indirect costs in exercising such rights will be charged against the Contractor. A Change Order will be executed incorporating the necessary revisions to this Contract and a reduction in the Contract Price. Such direct and indirect costs will include, in particular but without limitation: (1) additional professional services required; and (2) repair and replacement of the Work of others destroyed or damaged by correction, removal, or replacement of the Contractor's Defective Work. The Contractor will not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise of the Port's rights under this paragraph.

ARTICLE 13 – PAYMENTS TO THE CONTRACTOR AND COMPLETION

13.1 Prior to submitting the first request for progress payment, the Contractor shall submit the following to the Port:

A. Work progress schedule.

B. Final submittal schedule.

C. Cash flow schedule.

D. Lump-sum breakdown of the Work.

Request for Progress Payment

13.2 Thirty days or more following the Work Start Date, the Contractor may request the first monthly progress payment on Work completed by the date of the request. The request shall be made on the Contractor's Request for Payment form (form follows these General Conditions) and shall be accompanied by supporting documentation required by this Contract. Requests shall be signed by the Contractor and submitted to the Port for review.

13.3 All progress payment requests, except the first request, shall include the Subcontractor Payment and Utilization Report and the Contractor's Waiver of Claims to Date stating that all of the Contractor's obligations to date relating to the Work have been paid (forms follow these General Conditions).

13.4 Material delivered and stored on site but not yet incorporated in the Work may be included in the request for progress payment subject to approval by the Port and the following:

A. No payment will be made for material costing less than $50,000 total.

B. The Port's title to and interest in the material must be clearly established and free of all liens or other encumbrances.

C. Value shall be established by invoice, freight bill, or other document.

D. Payment for stored material will be limited to 90 percent of the net cost invoiced to the Contractor.

E. When there is a bid price on material in place, the Port will estimate the cost of placing. The progress payment will be limited to 90 percent of the bid price less the estimated cost of placing.

F. Risk of loss remains with the Contractor.

13.5 Progress payments shall not be construed as acceptance or approval of the Work or waiver of any defects in the Work.

Retainage

13.6 The Port will withhold from progress payments as follows:

A. The Port will retain 5 percent of the total earned for the work completed. The Contractor shall inform the Port if the Contractor wishes to exercise an option under ORS 279C.560.

Review of Request for Progress Payment

13.7 Within 15 days, the Port will review each request for progress payment and recommend payment or respond in writing to the Contractor with the reasons the Port is requiring resubmittal of the pay request before it can be approved.

13.8 The Port may refuse to make payment, in whole or any part, to the extent:

A. The Work is Defective, or completed Work has been damaged requiring correction or replacement;

B. Written claims have been made against the Port or liens have been filed in connection with the Work;

C. The Port has been required to correct Defective Work or to complete the Work;

D. The Contractor's prosecution of the Work in accordance with this Contract is unsatisfactory;

E. The Contractor has failed to make payments covered by past progress payments to Subcontractors, or for labor or material; or

F. The Contractor is in breach of this Contract.

Substantial Completion

13.9 When the Contractor considers the entire Work ready for its intended use, he shall certify in writing that the entire Work is Substantially Complete and request a letter confirming Substantial Completion. Within 15 days thereafter, the Contractor and the Port shall make an inspection of the Work to determine the status of completion. If the Port considers the Work Substantially Complete, the Port will, within 15 days of date of inspection, execute and deliver to the Contractor a letter confirming Substantial Completion with a list of items to be completed or corrected. The letter will state the date of Substantial Completion. If the Port does not consider the Work Substantially Complete, the Port will notify the Contractor in writing giving reasons therefor.

A. Warranties and operation and maintenance manuals shall be submitted and approved by the Port and training shall be completed for the Work to be considered Substantially Complete.

13.10 The Port may exclude the Contractor from that part of the Work after the date of Substantial Completion. The Port will allow the Contractor reasonable access to complete or correct items on the list.

13.11 The Contractor may request, in writing, that the Port confirm Substantial Completion for a part of the Work. The Port will only consider confirming Substantial Completion for a part of the Work if the Port desires that part to become operational.

13.12 The Port may allow the Contractor use of equipment installed as part of the Work prior to Substantial Completion, subject to the Contractor:

A. Obtaining the Port's written approval.

B. Maintaining the equipment, and preparing and maintaining a log recording all maintenance activities.

C. Returning equipment to "as-new" condition upon Substantial Completion.

Partial Utilization

13.13 The Port may request, in writing, the use of any part of the Work which may be used without significant interference with construction of other parts of the Work. If the Port requests use of any part of the Work prior to Substantial Completion of all the Work, the Port will issue to the Contractor a letter granting Substantial Completion for that portion of the Work with a list of items to be completed or corrected. The Port will assume responsibility for security, safety, operation, maintenance, utilities, and insurance for that part of the Work while it is being used by or under the control of the Port.

Final Inspection and Final Acceptance

13.14 When the Contractor considers the entire Work, or an agreed-upon portion thereof, to be complete, he shall certify, in writing, that the Work is complete and request a letter granting Final Acceptance. Within 15 days after receipt of the Contractor's certification, the Port will inspect the Work and will notify the Contractor, in writing, of Final Acceptance or of all particulars in which this inspection reveals that the Work is incomplete or Defective. The Contractor shall immediately take such measures as are necessary to remedy such deficiencies. The Contractor's certification shall be preceded or accompanied by all documentation called for in this Contract including but not limited to:

A. Marked-up Drawings for creating record drawings.

B. Bonds, if any.

C. Certificates of inspection from jurisdictional authorities.

D. Releases, waivers, or exoneration of all liens arising out of or filed in connection with the Work.

E. The Contractor's Waiver of Claims To Date form certifying that all payrolls and material bills and other indebtedness connected with the Work for which the Port might in any way be responsible have been paid or otherwise satisfied.

F. Consent of surety, if any, to final payment.

Final Payment

13.15 The Contractor may request final payment after receipt of Final Acceptance. The Contractor shall request final payment following the procedure for progress payments.

13.16 Upon receipt of the Contractor's request for final payment, the Port will, within 15 days, review the request and recommend payment or respond in writing to the Contractor with the reasons the Port is requiring resubmittal of the request before it can be approved. The Contractor shall make the necessary corrections and resubmit the request.

Contractor's Continuing Obligation

13.17 The Contractor's obligation to perform and complete the Work in accordance with this Contract shall be absolute. None of the following will constitute acceptance of Work not in accordance with this Contract or release the Contractor from obligation to perform the Work in accordance with this Contract:

A. Any act of acceptance by the Port.

B. Any correction by the Port of Defective Work.

C. Use, operation, or occupancy of the Work or any part of the Work by the Port.

D. Recommendation by Port staff for any progress or final payment.

E. Payment by the Port to the Contractor.

F. Issuance of a letter of Substantial Completion.

G. Issuance of a letter of Final Acceptance.

Waiver of Claims

13.18 The making of final payment will constitute a waiver of all claims by the Port against the Contractor except claims arising from:

A. Unsettled liens.

B. Defective Work appearing after final inspection.

C. Failure to comply with this Contract.

D. Failure to comply with the terms of any special guaranties.

E. The Contractor's continuing obligation under this Contract.

13.19 The acceptance of final payment will constitute a waiver of all claims by the Contractor against the Port other than those previously made in writing and still unsettled.

Liquidated Damages

13.20 Time is of the essence of this Contract. The Port will be harmed if the Work is not substantially complete by the Substantial Completion date established by this Contract. The parties agree that ascertaining the actual operational or business impact damages suffered by the Port as a result of that harm is impractical. Therefore, the Contractor shall pay the Port liquidated damages at the rate established by this Contract. The parties agree that, as of the date this Contract is signed, the established rate of liquidated damages is a reasonable forecast of the Port's actual operational or business impact damages for late Substantial Completion. The parties agree that the Port does not waive its right to liquidated damages by allowing the Contractor to continue and finish all or any part of the Work after the scheduled Substantial Completion date, or after Substantial Completion is actually achieved. The parties also agree that payment of liquidated damages does not release the Contractor from any duty under this Contract (other than the duty to pay liquidated damages). The parties further agree that the liquidated damages required by this Contract are compensation to the Port only for harm the Port sustains from late completion. They are not compensation for additional effort required by the Port because the Work has been extended over a longer period, or for other harm the Port may sustain from the Contractor's other breaches of this Contract. The Port may withhold liquidated damages from progress payments, or may withhold the full amount of accrued liquidated damages from final payment.

Other Damages

13.21 In addition to liquidated damages for harm arising from delays, the Port may recover from the Contractor, withhold from payments under this Contract, or both, costs incurred by the Port due to extra effort necessitated because the Work is extended over a longer time period including, without

limitation, the actual costs of the Port's additional engineering and inspection. This right to actual damages shall apply to both late Substantial Completion and late Final Acceptance.

13.22 The Port will have the right to recover from the Contractor and, to the extent permitted by Law, to deduct from any payment due the Contractor, the amount of any loss suffered by the Port on account of the failure of the Contractor, Subcontractor, anyone directly or indirectly employed by any of them, and anyone for whose acts any of them may be liable to comply with the rules and regulations referenced or contained in this Contract.

ARTICLE 14 – SUSPENSION OR TERMINATION OF THE WORK

Port May Suspend the Work

14.1 The Port may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice, in writing, to the Contractor. This notice will fix the date on which Work shall stop and the date on which it shall resume. The Contractor shall resume the Work on the date so fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to the suspension.

14.2 If the work is Defective, or if the Contractor fails to supply sufficient skilled workers or suitable material or equipment, or if he fails to perform the Work in such a manner that the completed Work conforms to this Contract, the Port may order the Contractor to suspend the Work, or any portion thereof, until the cause for such order has been eliminated. However, this right of the Port to suspend the Work shall not give rise to any duty on the part of the Port to exercise this right for the benefit of the Contractor or any other party.

14.3 In the event the Contractor, Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable fails to comply with the rules and regulations referenced in this Contract, the Port may suspend the Work or any portion thereof. The suspension shall continue until completion of any investigation or evaluation by the Port and full compliance with any corrective measures which the Port may reasonably require. The Port will not be liable to the Contractor for any delay caused by such suspension, nor will there be any adjustment in the Contract Price or Contract Time.

Port May Terminate the Work

14.4 The occurrence of any one or more of the following events will justify termination for cause:

A. The Contractor is adjudged bankrupt or insolvent.

B. The Contractor makes a general assignment for the benefit of creditors.

C. A trustee or receiver is appointed for the Contractor or for any of the Contractor's property.

D. The Contractor files petition to take advantage of any debtor's act, or to reorganize under bankruptcy or similar laws.

E. The Contractor fails to supply sufficient skilled workers or suitable material or equipment.

F. The Contractor fails to make prompt payments to Subcontractors or for labor and material.

G. The Contractor disregards Laws, ordinances, rules, regulations, or orders of any public body having jurisdiction including, without limitation, ordinances adopted by the Port and referenced in this Contract, and the rules and regulations adopted by the Port's Executive Director or his designee.

H. The Contractor disregards the authority of the Port.

I. The Contractor otherwise violates in any substantial way any provision of this Contract.

14.5 The Port may, after giving the Contractor and his surety a 7-day written notice: (1) terminate this Contract for default; (2) exclude the Contractor from the site; (3) take possession of the site and the Contractor's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the Contractor without liability to the Contractor for trespass or conversion; (4) incorporate in the Work material stored at the site or for which the Port has paid the Contractor but which is stored elsewhere; (5) finish the Work as the Port may deem expedient, and (6) obtain an assignment of some or all of the subcontracts and purchase orders relating to the uncompleted Work. By executing this Contract, the Contractor consents to the assignment of those subcontracts and purchase orders in the event of termination of this Contract pursuant to this article. In such case the Contractor will not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess will be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Port. Such costs incurred by the Port will be verified by the Port and incorporated in a Change Order; but in finishing the Work, the Port will not be required to obtain the lowest figure for the Work performed.

14.6 Where the Contractor's services have been so terminated by the Port, the termination will not affect any rights of the Port against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due the Contractor by the Port will not release the Contractor from liability.

Port May Terminate the Work for Convenience

14.7 Upon giving the Contractor a 7-day written notice, the Port may, without cause and without prejudice to any other right or remedy, elect to terminate this Contract for the convenience of the Port. In such case, the Contractor will be paid for the costs of all Work acceptably performed and installed, together with reasonable profit and overhead on those costs, and any justifiable costs actually sustained in the process of termination. The Contractor will not be entitled to overhead or profit on the unperformed Work, and will not be entitled to payments in excess of the amount determined by multiplying the percentage of the Work actually and acceptably completed by the Contract Price, as adjusted. If this Contract is terminated for default and it is subsequently determined through mediation, arbitration, or litigation that the termination was improper, this Contract shall be treated as if it had been terminated for the convenience of the Port, and the Contractor shall be entitled to payment under the provisions of this paragraph.

ARTICLE 15 – DISPUTE RESOLUTION

15.1 A party wishing to assert a claim shall submit to the other a written statement of the claim not otherwise provided for by this Contract within 30 calendar days after the claimant first has knowledge of or reason to know of the facts upon which the claim is based. The statement of claim shall recite the facts upon which the claim is based and shall include copies of all documentary evidence in support of the claim. Within 15 calendar days after receiving a claim, the party to which a claim is submitted shall respond in writing stating whether the claim is allowed, partially allowed, or denied. If the claimant disputes the action taken by the other party, the claimant shall deliver a written notice of dispute to the other party within 15 calendar days after the claimant receives the other party's written response to the claim. The written notice of dispute shall be entitled "Notice of Dispute." A claim shall be barred if the claimant fails to comply with the

foregoing notice of dispute requirement or fails to timely deliver the notice of dispute to the other party.

15.2 The parties shall attempt to resolve all disputes by negotiation. Negotiation shall be initiated at the earliest opportunity. Each party shall freely share unprivileged information requested by the other and shall make a good faith effort to ensure that all relevant issues are fully developed and fairly presented to the other side.

15.3 If a dispute is not resolved through negotiation between the Contractor and the Port, the parties shall submit the dispute to mediation. Either party may request mediation. The requesting party must suggest an independent mediator with the request for mediation. If the parties cannot agree upon a mediator, either party may apply to the Presiding Judge, Multnomah County Circuit Court, for appointment of a mediator. The parties shall share equally in the fees and costs of the mediator. Each party shall be responsible for its own attorney fees. Mediation shall be at Portland, Oregon, unless the parties agree otherwise.

15.4 If a dispute is not resolved by mediation, the parties may, but are not required to, agree to submit the dispute to binding arbitration. The parties shall agree upon the arbitrator, the applicable rules for arbitration, the time and place of arbitration, and the allocation of costs and attorney fees related to the arbitration.

15.5 If a dispute cannot be resolved by mediation, and the parties do not agree to submit the dispute to arbitration, either party may file a lawsuit to resolve the dispute in a court with proper jurisdiction located in Multnomah County, Oregon. The prevailing party shall be entitled to recover attorney fees and costs at trial and on appeal.

15.6 Except to the extent performance may be legally excused under the particular circumstances, each party shall continue to perform its duties under this Contract while the resolution of a dispute is pending. Failure to comply with this requirement shall be a material breach of this Contract.

ARTICLE 16 – MISCELLANEOUS

Giving Notice

16.1 When this Contract requires that written notice be given, notice shall be deemed valid if it is delivered to the individual who signed the Contract or to the Port's or the Contractor's Representative. Notice shall be deemed as delivered if it is:

A. Hand-carried to the person to whom it is intended, or

B. Hand-carried to an officer of the firm for which it is intended, or

C. Sent by registered or certified "Return Receipt Requested" mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time

16.2 Any period of time referred to in this Contract by days shall be computed to exclude the first and include the last day of such period. If the last day of any time period falls on a Saturday or Sunday or on a day made a legal holiday by the Law of the applicable jurisdiction, such day shall not be included in determining the time period.

Liability Claims

16.3 Should the Port or the Contractor suffer injury or damage to person or property because of any error, omission, or act of the other party or of any of the other party's employees, contractors, or agents or others for whose acts the other party is legally liable, claim shall be made: (1) in writing, and (2) to the other party within a reasonable time of the first observance of such injury or damage.

Rights and Remedies

16.4 These General Conditions impose duties and obligations on the Contract parties and provide for rights and remedies. The rights and remedies available to each party are in addition to, and shall not limit, actions allowed by Law or other parts of this Contract. All representations, warranties, and guaranties made in this Contract shall survive final payment and termination or completion of this Contract. The content of this paragraph shall apply as if repeated specifically in this Contract in connection with each duty, obligation, right, and remedy.

PORT OF PORTLAND

APPLICATION NO. _____
PAGE _____ OF _____

THE PORT OF PORTLAND
CONTRACTOR'S REQUEST FOR PAYMENT

CONTRACTOR: _____

PROJECT TITLE: _____

PROJECT NO.: _____ AIP NO.: _____

Work performed through: _____

☐ Wage certifications for all labor are attached, or have been submitted previously in accordance with ORS 279C.845.

☐ The undersigned certifies that to the best of the undersigned's knowledge:

1) work covered by this invoice is in accordance with the contract documents, and

2) the Contractor is entitled to payment of the amount requested by the invoice, and

3) all subcontractors have been paid, and retainage released in accordance with ORS Chapter 279C and, for federally funded work, 49 CFR Part 26.

☐ Waiver of Claims to Date attached (not required for first application for payment).

☐ Subcontractor Payment and Utilization Report attached (not required for first application for payment; required for all subsequent applications for payment).

☐ Site Waste Recycling Form (if applicable)

☐ Monthly Workforce Report (if applicable)

_____
Contractor's Representative

TOTAL WORK COMPLETE TO DATE:

Total Bid Item Work	$_____
Total Change Order Work	$_____
Total Material on Hand	$_____
Total to Date	$_____
Less 5% Retainage	$_____
Less Previous Payments	$_____
PAYMENT NOW DUE	$_____

PORT OF PORTLAND REVIEW ACTION:

Inspector: Approved (Date): _____
Disapproved (Date): _____

By: _____

Construction Contracts Manager:
Approved (Date): _____
Disapproved (Date): _____

By: _____

Date: _____

PORT OF PORTLAND

Bid Item Payment Summary

Project Title _____ Contractor _____ App. No. _____

Port EAN _____ AIP No. _____ Page _____ of _____

Project No. _____

Bid Item No.	Description	BID Quantity	BID Unit	BID Unit Price	BID Item Total	Complete To Date Quantity	Complete To Date Item Price	Complete This Period Quantity	Complete This Period Item Price

PORT OF PORTLAND

Change Order Payment Summary

Project Title _____ Contractor _____ App. No. _____

Port EAN _____ AIP No. _____ Page _____ of _____

Project No. _____

CO No.	CC No.	Description	Quantity	Unit	Unit Price	Item Total	Complete To Date Quantity	Complete To Date Item Price	Complete This Period Quantity	Complete This Period Item Price

PORT OF PORTLAND

APPLICATION NO._____
PAGE_____ OF _____

WAIVER OF CLAIMS TO DATE

_____ ("the Contractor") and the Port of Portland ("the Port") have entered into an agreement ("the Agreement") for the construction of certain improvements at _____ commonly referred to as the _____ Project.

The Agreement provides for monthly progress payments, provided, among other things, the Contractor executes and submits this Waiver of Claims to Date with respect to all claims through the end of the period covered by the immediately preceding progress payment.

The date of the request for progress payment with which this Waiver of Claims to Date is submitted ("Current Progress Payment") is _____ ("Current End Date"). The end of the period covered by the immediately preceding progress payment ("Last Progress Payment") was _____("Last End Date").

The Contractor certifies that all work covered by the Current Progress Payment is complete.

The Contractor certifies that all subcontractors, laborers, suppliers, and materialmen have been paid in full, less any retainage properly withheld by the Contractor, for all work performed and material provided for which the Contractor received payment in the Last Progress Payment.

The Contractor certifies that no extras have been furnished prior to the Last End Date for which payment has not been received.

The Contractor certifies that no claims are reserved by the Contractor or the Contractor's subcontractors, laborers, suppliers, or materialmen as of the Current End Date.

The Contractor, on behalf of the Contractor and all of the Contractor's subcontractors, laborers, suppliers, and materialmen, hereby waives and releases the Port from any mechanic's lien, stop notice, bond right, or other claim related to the Agreement through the Last End Date.

Exceptions, if any:

_____

_____

_____

I declare under penalty of perjury under the laws of the State of Oregon that the foregoing is true and correct.

CONTRACTOR'S REPRESENTATIVE

By: _____
(Signature)

Printed Name: _____

Title: _____

Date: _____

PORT OF PORTLAND

APPLICATION NO._____
PAGE _____ OF_____

THE PORT OF PORTLAND
SUBCONTRACTOR PAYMENT AND UTILIZATION REPORT

1. PRIME CONTRACTOR _____
2. CONTACT NAME AND PHONE NO. _____
3. PROJECT NAME _____
4. CONTRACT NUMBER _____ 5. SOLICITATION NUMBER _____
6. PRIME CONTRACT AMOUNT $_____
7. REQUEST FOR PAYMENT PERIODS FROM: _____ TO: _____ (PRIME) FROM: _____ TO: _____ (SUBCONTRACTORS)
8. REPORT DATE _____

IS THIS THE PRIME CONTRACTOR'S FINAL REQUEST FOR PAYMENT? ☐ YES ☐ NO

9 All First-Tier Subcontractors Utilized	10 Type of Work	11 Original Subcontract Amount	12 Amended Subcontract Amount	13 Amount Paid This Payment Period	14 Total Paid To Date

IT IS HEREBY CERTIFIED THAT THE ABOVE LISTED FIRMS HAVE BEEN UTILIZED BY OUR COMPANY IN THE AMOUNTS REPRESENTED ABOVE AND THAT THE INFORMATION CONTAINED HEREIN IS COMPLETE AND ACCURATE.

_____ _____

Authorized Signature of Contractor Representative Date

Submit with Contractor's Monthly Request for Payment to Construction Contract Manager.

INSTRUCTIONS FOR COMPLETING THE SUBCONTRACTOR PAYMENT AND UTILIZATION REPORT

File this form with each monthly application for payment, beginning with the second application. If no Subcontractors were used during the period for which payment is being requested, write "none" in Column 8. Following final payment, the Port will contact the Contractor within 60 days for verification that final payments to the Subcontractors have been made.

1. **PRIME CONTRACTOR:** Indicate the name of the prime Contractor.
2. **CONTACT NAME AND PHONE NUMBER:** Indicate the name and phone number of the prime Contractor's contact.
3. **PROJECT NAME:** Indicate the project name as shown on the contract documents.
4. **CONTRACT NUMBER:** Indicate the contract number for this project, as recorded on the cover of the signed project manual.
5. **SOLICITATION NUMBER:** Indicate the solicitation number for this project, as recorded on the cover of the signed project manual.
6. **PRIME CONTRACT AMOUNT:** Indicate the total dollar amount of the prime contract.
7. **REQUEST FOR PAYMENT PERIOD:** Indicate the time periods for reported payments. Subcontractor payment period should be for the month preceding the prime Contractor's payment period.
8. **REPORT DATE:** Indicate the date report is being filed. Also indicate if this is the Contractor's final request for payment.
9. **ALL FIRST-TIER SUBCONTRACTORS UTILIZED:** Names of first-tier Subcontractors. Subcontractors do not include firms serving as suppliers only.
10. **TYPE OF WORK:** Briefly describe Subcontractor's work (i.e., landscaping, electrical, paving, etc.).
11. **ORIGINAL SUBCONTRACT AMOUNT:** Indicate the dollar amount for each subcontract at time of award.
12. **AMENDED SUBCONTRACT AMOUNT:** This amount should be the total dollar value (original subcontract amount plus any additions or deletions) of the subcontract.
13. **AMOUNT PAID THIS PAYMENT PERIOD:** This amount should be the dollar amount paid to the Subcontractor this payment period.
14. **TOTAL PAID TO DATE:** This amount should be the total dollar amount paid to the Subcontractor to date.

COMMENTS (Include explanation if any payment amounts made to the Subcontractor are less than requested by the Subcontractor):

_____

_____

PORT OF PORTLAND

CONTRACTOR SAFETY INFORMATION

Project Name: _____ Project Number: _____

Prime Contractor: _____

Scope of Work Summary – Include location(s):

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Potential Work Hazards/Concerns Identified (check ALL that apply):

☐ Fall Exposure	☐ Traffic Control	☐ Scaffolding
☐ Excavation	☐ Chemicals	☐ Ladders
☐ Confined Space Entry	☐ Crane/Rigging	☐ Aerial Lift
☐ Electrical	☐ Demolition	☐ Airborne Contaminants/Dust
☐ Hazardous Energy/Lockout-Tagout	☐ Public Safety	☐ High Noise
☐ Asbestos/Lead	☐ Hot Work/Fire Hazard	☐ Painting
☐	☐	☐
☐	☐	☐

Note: Attach any company safety programs, policies, or procedures that will apply to your work at the Port.

Please note any Port facilities safety-related information you request that relates to your work at the Port:

_____

_____

_____

_____

_____

Responsible Persons

List Competent Person(s) responsible ON SITE to monitor work performed on this project. Note: a "Competent Person" by OSHA definition has the ability to identify hazards and has responsibility and authority to take immediate corrective actions.

Name:	Certification:	Phone (Mobile/Pager/Office):

Contractor's Project Manager

Name: _____ Phone (Mobile/Pager/Office): _____

Contractor's Primary On-Site Safety Contact:

Name: _____ Phone (Mobile/Pager/Office): _____

Worksheet Prepared by:

Name: _____ Title: _____ Date: _____

*****PORT USE ONLY*****

Port CCM/Project Manager

Name: _____ Phone (Mobile/Pager/Office): _____

Lead Inspector(s)

Name: _____ Phone (Mobile/Pager/Office): _____

Name: _____ Phone (Mobile/Pager/Office): _____

Distribution:

☐ Risk Management, Loss Control

Ops Safety (Check applicable) ☐ Aviation ☐ Marine ☐ Ind. Properties ☐ Navigation

FOR PORT USE ONLY

2007D039 | **TERMINAL 4** | *2-Aug-07*

GRAIN TANK AND DRAVO CRANE DEMOLITION

Location: T4

PM: HERMAM **CCM: DURSTJ** **Type: Cont.**

PE: BATESA **INSP:**

Project No.	Status	Title
810032	O	TERMINAL 4 GRAIN TANK AND DRAVO CRANE DEMOLITION

SECTION 011100 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 DESCRIPTION

A. The work includes but is not limited to:

Dismantling and disposing of eight steel grain tanks, tank foundations, and associated conveyor galleries near Berth 405; management of lead paint and other heavy metals in the painted materials; and filling, grading, and hydroseeding disturbed areas. The work also includes arranging for and delivery of all metal salvaged under this project to a metals recycler/buyer and crediting the salvage value to the Port for the metal.

1.2 KNOWN SITE CONDITIONS AFFECTED BY REGULATORY AGENCIES

A. The following materials or conditions are known to exist on the construction site. The Contractor shall comply with federal, state, or local agencies' ordinances or regulations pertaining to these conditions:
   1. Paint containing lead or other metals of toxic significance.
   2. Heavy metals.
   3. Lamps and ballasts.
      a. The Port will remove all lamps for disposal prior to the Contractor beginning demolition.
   4. Asbestos Conditions:
      a. No asbestos-containing material is known to exist at the grain tanks.
   5. Lead-Based Paint Conditions:
      a. A lead-based paint analysis of the grain tanks is included in the project manual as Exhibit A. The Contractor shall not rely on this information to assess his OSHA responsibilities.
      b. The Contractor shall be responsible for the management of lead-based paint in accordance with Section 028313.

1.3 UNEXPECTED SITE CONDITIONS

A. Suspected Hazardous or Environmentally Sensitive Conditions:
   1. If the Contractor encounters suspected hazardous or environmentally sensitive conditions in the work area beyond those mentioned in these specifications or the drawings, the Contractor shall immediately stop all work in the area of the suspected condition and notify the Port.
   2. The Port will make arrangements for testing and appropriate abatement, if required.
   3. The Contractor shall alert his employees to these facts and shall assure that no operations occur that disturb the suspected hazardous or environmentally sensitive condition.

1.4 ELECTRICAL CODE

A. Work shall comply with the requirements of the National Electrical Code, Oregon Electrical Specialty Code (OAR 918-305), Oregon Administrative Rules, Oregon Electrical Safety Law (ORS 479), and City of Portland Municipal Code Titles 26 and 32 as enforced by the City of Portland Bureau of Development Services.

1.5 PROGRESS MEETINGS

A. Regularly scheduled job meetings will be held between the Contractor and the Port. The Contractor's representative at job meetings shall be the person directly responsible for the work. The time and place of the meetings will be established by the Port.

B. Other unscheduled meetings may be required to resolve specific issues at the work area.

END OF SECTION 011100

SECTION 015719 - ENVIRONMENTAL CONSTRUCTION CONTROLS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section describes required environmental practices for construction work on Port property.

1.2 RELATED WORK SPECIFIED ELSEWHERE

A. Section 015713, Temporary Erosion, Sediment, and Pollution Control

B. Section 024113, Demolition

C. Section 028313, Hazardous Building Material Management

1.3 SUBMITTALS

A. Where hazardous materials or products are stored in quantities of 42 gallons or more, submit a spill response that includes a map indicating storage site locations.

B. If total petroleum product storage, including fuels and oil (e.g. drummed lubricants), exceeds 1,320 gallons, obtain special approval from the Port and submit a Spill Prevention Control and Countermeasures (SPCC) plan in accordance with federal regulations (40 CFR 112). Total storage is equal to the sum of all drums, receptacles, tanks, etc. equal to or greater than 55 gallons, including mobile storage tanks that are parked on site.

C. Submit a monthly written report that provides:
   1. A complete inventory of all hazardous waste generated that month;
   2. The current inventory of Contractor-generated hazardous waste stored on Port property; and
   3. The date(s) the waste was placed into onsite storage.

1.4 EMERGENCY CONTACT AND NOTIFICATION INFORMATION

A. Provide a notification sign with appropriate emergency contact information, including the Port's emergency dispatch number, in the following locations:
   1. Areas where fuel, hazardous waste, or hazardous liquid products are dispensed or stored.
   2. Areas where more than 42 gallons of hazardous materials are stored.
   3. On-board mobile motor fueling equipment. (If the mobile fueling equipment leaves Port property, the Port emergency dispatch notification sign shall be removed prior to leaving.)
   4. Tank farms on Port property.
   5. Asphalt or concrete plants on Port property.

B. Immediately notify the Port in the event of a spill outside a containment area.

C. In the event of a spill, it is the Contractor's responsibility to notify the appropriate regulatory agencies and provide written follow-up. Submit to the Port copies of all reports, written follow-ups, documentations, and agencies' responses.

1.5 EQUIPMENT FUELING AND MAINTENANCE

A. Ultra Low Sulfur Diesel (ULSD) Fuel:
   1. All diesel-powered off-road vehicles and equipment used on the project site for three consecutive days or more shall be fueled with ultra low sulfur diesel. This includes vehicles with engine horsepower ratings of 50 HP and above, and internal combustion engines used to power generators, compressors, and similar equipment.
   2. The ULSD fuel shall contain no more than 15 parts per million sulfur.
   3. Submit copies of diesel fuel delivery slips and fuel receipts each month.
   4. If sufficient quantities of ULSD are not available, or if the price of ULSD is at least 3 percent greater than diesel fuel with a sulfur content in excess of 15 parts per million, the Port may allow the use of higher sulfur fuel. Such exceptions will be made on a case-by-case basis.

B. Fueling Operations:
   1. Do not top off vehicle tanks when fueling on Port property.
   2. Where practicable, fuel and liquid product dispensing shall be done over an impervious surface such as a concrete pad or field-constructed temporary pad (e.g. an aggregate pad with membrane bottom and side liner), at least 50 feet from the nearest storm drain inlet, drainage ditch, surface water, wetland, or other drainage conveyance. Install temporary impervious covers over storm drain inlets. Provide storm drainage diversion away from drainage ditches, surface water, wetlands, or other drainage conveyances.
   3. Immediately clean up spilled materials associated with fueling, fuel staging, fuel transfer operations, product loading or unloading, or transfer operations, and notify the Port. The Contractor shall make all required regulatory agency notifications.

C. Equipment and Vehicle Maintenance Operations:
   1. Comply with requirements specified elsewhere in this section regarding onsite storage and use of hazardous material and management of hazardous or solid waste produced during the course of the work.
   2. Perform daily equipment checks for leaking oil and fluids. Visible spills shall be immediately cleaned up.
   3. Equipment with leaking oil or fluids shall be repaired prior to being operated on Port property.
   4. To the extent practicable, park vehicles and equipment indoors, under a roof, or on an impervious surface to prevent stormwater contact in the area.
   5. If a vehicle or equipment is known to be leaking oil or other fluids, and service cannot be completed that day, install a drip pan or absorbent materials to contain the leak until service and repair is completed.

D. Equipment Maintenance Areas:
   1. To the extent practicable, vehicle and equipment servicing shall be done indoors or under cover.

2. Perform vehicle and equipment maintenance over an impervious floor or pad (concrete, chemical-resistant coated asphalt, or other field-erected system). Ensure that contaminated liquids including, but not limited to, contaminated stormwater are not discharged to any storm drain inlet, drainage ditch, swale, or other surface water conveyance.
3. For equipment that cannot practicably be moved to an equipment service area, take all reasonable precautions to prevent chemical spills onto the ground or into water. Use protective ground sheeting or absorbent materials beneath and around equipment areas that may be vulnerable to chemical spills.
4. Contaminated stormwater from vehicle and equipment maintenance areas shall not be allowed to discharge into the stormwater collection system, discharge onto the ground, or run overland to any drainage ditch or swale.
5. Solvent or caustic parts washing stations shall not be used outdoors, unless the area is covered and equipped with appropriate secondary containment as described elsewhere in this section.

E. Mobile Equipment Service Vehicles (Including Oilers):
1. Multi-purpose mobile equipment maintenance vehicles (oilers) that are equipped with multiple tanks or containers of lubricants, fuels, hydraulic fluids, greases, chemicals, etc., may be used on Port property under the following conditions:
   a. The vehicle is equipped with a spill kit.
   b. The vehicle is equipped with a sufficient supply of containers for the collection of fluids that may be removed from the equipment being serviced (e.g. used oil, waste antifreeze, chemicals, etc.).
2. If equipment service is performed within 50 feet of a storm drain inlet, drainage ditch, surface water, or wetland, the Contractor shall install a flexible storm drain cover over the storm drain inlet or place oil absorbent booms or socks around the inlet or other drainage conveyance prior to commencing work.
3. Mobile tanker, mobile fueling, or equipment service personnel shall be appropriately trained in spill response techniques. At least one spill response-trained person shall be present at all times where fueling, fuel staging, or fuel transfers are made.
4. Mobile motor fueling equipment shall be equipped with an emergency dispenser shutoff switch located in the cab or on the opposite side of the vehicle or trailer from the pump(s).
5. Overnight/weekend parking of mobile equipment service vehicles shall not occur within 50 feet of the nearest storm drain inlet, drainage ditch, surface water, or wetland area unless the storm drain inlet, ditch, and all drainage conveyances leading to the surface water or wetland have been equipped with oil absorbent booms or pads.

F. Storage and Handling of Waste Oil, Fluids, and Filters:
1. The Contractor shall determine whether or not waste oil, fluids, filters, and other materials generated from onsite maintenance activities are regulated as hazardous waste under state and federal regulations.
2. Regardless of the regulatory status of waste oil, fluids, filters, and other material, if the waste material is accumulated and stored on Port property, the Contractor shall provide proper storage.

1.6 WASHDOWNS

A. The washdown or hosing of hazardous material storage areas, refueling areas, or tank farm and containment areas is prohibited unless the Contractor provides for the collection and disposal of the washdown liquids.

B. Limit washdown of vehicle and equipment service pads and other work areas. Limit steam cleaning and high pressure or other types of washing of vehicles and equipment. Liquids from these activities shall be collected, managed as contaminated wastewater, and properly disposed.

1.7 SPILL KITS

A. A clearly labeled spill kit shall be located within 50 feet of the following:
   1. Fueling areas.
   2. Liquid products storage and dispensing areas.
   3. Hazardous materials storage areas.
   4. Vehicle and equipment maintenance areas.
   5. Tank farm areas on Port property.
   6. Asphalt or concrete plant areas on Port property.
   7. Any surface water if work is being performed in the vicinity.

B. Spill kits shall contain an ample supply of oil-absorbent ground booms, socks, pads, bagged sorbents, flat-blade shovels, salvage drums suitable for collection of spilled materials and absorbents, provisions for preventing spilled materials from entering any storm drain inlet or conveyance, supplies to protect at least two storm drain inlets, and personnel protective equipment suitable for the quantity and type of hazardous substances handled.

C. Provide spill kits as described above for the following types of mobile equipment:
   1. Mobile fueling, maintenance, and storage equipment.
   2. Mobile equipment service vehicles (including oilers).
   3. Mobile tanker equipment (e.g. tanker vehicles used to apply bituminous tack material) and hazardous material transport vehicles.

1.8 HAZARDOUS MATERIAL MANAGEMENT

A. General:
   1. Minimize the volume and number of locations where hazardous material is used and stored by the Contractor on Port property.
   2. Minimize the type and volume of material used onsite that will be regulated as hazardous waste when the material becomes spent or unfit for further use.
   3. Ensure that any hazardous material or hazardous substance for which the use, storage, or disposal is regulated under federal, state, or local requirements is handled and managed in accordance with the requirements applicable to those substances.
   4. The use of degreasing or cleaning products containing chlorinated solvents such as 1,1,1-trichloroethane, perchloroethylene, and methylene chloride is prohibited unless approved by the Port.
   5. Immediately clean up hazardous material spilled outside any designated secondary containment system in accordance with Oregon DEQ, U.S. EPA, or Oregon OSHA

requirements. Clean up, as soon as possible, any hazardous materials spilled inside a secondary containment system.

6. Where hazardous materials or products are stored in quantities of 42 gallons or more, submit a spill response plan including a map indicating storage site locations.
7. Ensure that every hazardous material container is clearly labeled with its contents or original product label. Indicate the Contractor's name and contact number on the side of every container greater than 5 gallons in size with legible size lettering. If hazardous material is transferred into a secondary container (i.e., any container used to transfer material from a storage location to a point of use or storage prior to use, including but not limited to buckets, pails, pans, drums, bottles, cans, etc.), this container shall also be labeled with the contents, the Contractor's name, and contract number.
8. Storage of flammable or reactive hazardous material/waste on Port property or within 50 feet of the Port property line is not permitted unless stored inside a building or other portable device approved by the Fire Marshal (or airport fire department within the PDX security fence).
9. Keep an up-to-date file or notebook of Material Safety Data Sheets (MSDS) for all hazardous materials located by the Contractor on Port property. Upon request, this information shall be made available to the Port.
10. All containers used for storing, dispensing, or accumulating hazardous materials shall be placed inside a structure or under cover whenever possible. All containers not inside a structure shall be equipped with secondary containment.
11. Do not locate fuel and hazardous substances storage and dispensing areas where runoff flows from nearby roof drains.

B. Onsite Storage of Petroleum Products

1. Do not install or use underground storage tanks (USTs) on Port property.
2. Storage racks and vehicles shall be equipped with drip collection devices and enclosures.
3. Provide an emergency dispenser shut-off switch. Switch shall be located at least 15 feet from tanks or the minimum distance approved by the Fire Marshal (or airport fire department within the PDX security fence), whichever is greater.
4. Use bollards or other vehicle restraint devices (e.g., Jersey barriers) to prevent vehicles from damaging tanks and containment area.
5. Tanks, containment areas, and dispensing pads shall be under cover or under a temporary shelter to minimize contact with, or accumulation of, precipitation, unless otherwise approved by the Port.

C. Large Containers (20 Gallons or More):

1. Store containers of hazardous liquids on an impervious surface (i.e., concrete, asphalt, or field-erected system [heavy plastic ground sheeting] capable of withstanding normal wear and tear from construction equipment and other traffic throughout the course of the work) and inside or under cover in a location that does not have any storm drain inlets or floor drains within 50 feet of the storage location.
2. For containers of liquids that are not, or cannot, be stored inside a structure, equip the storage area with some form of secondary containment. Acceptable secondary containment devices may include, but are not limited to:
   a. Field constructed secondary containment area such as a perimeter berm with impervious interior surface; or
   b. Movable pallet systems with integrated secondary containment and covers (these systems are available in one, two, and four drum capacities).

3. Secondary containment systems shall have sufficient capacity to contain 10 percent of the total volume of hazardous material containers stored, or 110 percent of the volume of the largest container, whichever volume is greater.
4. Dispense from liquid-filled containers using a manually operated pump. Do not dispense from gravity feed spigots. Containers shall be used in an upright vertical position.

D. Small Containers (Less Than 20 Gallons):
1. Store containers of flammable liquids in National Fire Protection Association (NFPA) Code 30 approved safety cabinets, or equal.
2. Store containers of non-flammable liquids in cabinets or other devices equipped with secondary containment.

E. Empty Containers:
1. A container is deemed empty when all possible material has been removed using normal practices (e.g. pouring, pumping, aspirating, etc.) and no more than 1 inch of residue remains on the bottom of the container or inner liner.
2. Transferring of the liquid heel at the bottom of containers into other containers shall be done only in areas equipped with secondary containment.
3. Do not store empty containers upside down, although they may be stored in a horizontal position if the bungs/lids are securely fastened.
4. Do not rinse empty containers on the work site.
5. Manage empty or unwanted containers as solid waste in accordance with the requirements of this section.
6. Do not offer empty containers to employees or the public on Port property.

1.9 HAZARDOUS WASTE MANAGEMENT

A. General:
1. Obtain the necessary generator identification numbers from the Oregon Department of Environmental Quality (DEQ). Perform required characterization tests to determine if waste material produced is regulated as hazardous waste. Manage, transport, and dispose or recycle such waste in accordance with state and federal regulations.
2. In addition to that required by federal or state regulations, the storage of containers containing hazardous waste shall be in accordance with the requirements described elsewhere in this section.
3. Disposal of hazardous waste down any floor drain, sink, storm drain inlet, onto the ground, or into any water conveyance is strictly prohibited by state and federal law.
4. Submit a monthly written report to the Port that provides:
   a. A complete inventory of all hazardous waste generated that month;
   b. The current inventory of Contractor-generated hazardous waste stored on Port property; and
   c. The date(s) the waste was placed into onsite storage.
5. Keep all required hazardous waste documentation, including, but not limited to, testing records, inspection logs, manifests, and contingency plans onsite during the course of the work. Upon request, the Contractor shall make this information available to the Port.
6. Loading and transportation of hazardous waste from Port property shall be in accordance with the requirements described elsewhere in this section.

1.10 APPLICATION AND MANAGEMENT OF COATING SYSTEMS

A. General:

1. Onsite storage, dispensing, and management of coating systems, paints, solvents, thinners, and related products that contain hazardous materials shall be in accordance with the requirements of this section.
2. Unless otherwise specified by the Port, make all reasonable attempts to use low volatile organic compound (VOC) content coating systems in the course of the work.
3. Minimize the use of aerosol spray products containing VOCs or VOC propellants.
4. Do not dispose of aerosol spray product containers as general solid waste unless the can has been depressurized and all liquid contents drained into a waste container outfitted with a device specifically designed to puncture aerosol cans. The waste container shall also be outfitted with a carbon filter apparatus to minimize the loss of VOCs into the air and managed as solid or hazardous waste in accordance with the requirements of this section.
5. Take all reasonable steps to minimize public exposure to VOCs and nuisance odors.
6. Waste generated from painting operations such as scrap paint and solvents may be regulated as hazardous waste. Manage these materials in accordance with the requirements of this section.
7. If a spray booth is used at the work site for the application of coating systems, ensure that the spray booth is properly serviced, maintained, and operated in accordance with local, state, and federal worker safety and environmental regulations, including permitting.
8. Containers with small amounts of residual paint or solvent, unapproved paints, bad batches, or dirty cleaning solvents shall not be allowed to evaporate in open air. All liquids shall be poured, pumped, aspirated, or otherwise placed into a waste container, reused, or returned to the vendor.
9. The mixing and dispensing of all coating systems and paints for use, as well as the cleaning of coating system and painting equipment, shall be conducted over an impervious surface at least 50 feet from the nearest storm drain inlet, drainage ditch, surface water, or wetland. Any spill shall be immediately cleaned up.
10. Other Conditions: If sandblasting operations are performed, take all reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions include, but are not limited to, providing temporary enclosed shelters for sandblasting operations and providing covers or containment for the storage of spent abrasive materials. Sandblasting waste shall be collected and managed as hazardous or solid waste.
11. Disposal of any latex paint or washwater down any drain, onto the ground, or into any stormwater conveyance system is prohibited.
12. Manage empty containers in accordance with the requirements of this section.

B. Coating Systems, Paints, and Solvents Containing VOCs:

1. Take all reasonable precautions to minimize VOC emissions to the environment during the storage and use of these products, including, but not limited to:
   a. Keeping all product and waste containers tightly closed, except when dispensing or filling the container.
   b. Using airless sprayers to the maximum extent practicable.
   c. Assuring that the spray nozzles are appropriately sized for the application.
   d. Minimizing the use of thinners to the amount recommended by the manufacturer for the specific application.

e. Minimizing the volume of coating systems and paints that is premixed for use, but may not be immediately applied.

f. Not spraying cleaning solvents through spray equipment to clean buckets, lines, guns, and nozzles into the open air. Spray cleaning solvents into a container to capture and reuse as much cleaning solvent as possible.

C. Latex Paints:

1. Take all reasonable precautions to prevent latex paint emissions to the environment during the storage and use of these products, including, but not limited to:

a. Keeping product and waste containers tightly closed, except when dispensing or filling the container.

b. Minimizing the use of solvents, water, and detergents for the cleanup of latex painting equipment.

c. Not spraying cleaning solvents or water through spray equipment to clean buckets, lines, guns, and nozzles into the open air. Spray cleaning solvents or water into a container to capture and reuse as much cleaning solvent as possible.

END OF SECTION 015719

PORT OF PORTLAND
P.O. Box 3529
Portland, Oregon 97208

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS AND DRAVO CRANE

Solicitation No. 2007-0067

Proposals Due: November 7, 2007
By: 3:00 p.m.

ADDENDUM NO. 1

Addendum No. 1 hereby amends the request for proposals for the Terminal 4 Removal and Sale of Grain Tanks and Dravo Crane project dated September 21, 2007. It is essential that prospective proposers note the contents of this addendum and that the Port of Portland be made aware that the addendum has been received. Therefore, acknowledge receipt by inserting the number of this addendum in the space provided on Page 004100-3 of the Price Proposal.

Project Manual

Page 001100-1, first paragraph, change to read, in part, ". . . until, but not after 3 p.m. November 7, 2007." (The proposals due date has been extended; the time remains the same.)

NOTE: A second addendum that will affect other aspects of the contract manual is forthcoming.

THE PORT OF PORTLAND

Craig Johnsen, Manager
Contracts and Procurement

October 10, 2007

PORT OF PORTLAND
P.O. Box 3529
Portland, Oregon 97208

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Solicitation No. 2007-0067

Proposals Due: November 7, 2007
By: 3:00 p.m.

ADDENDUM NO. 2

Addendum No. 2 hereby amends the request for proposals and drawings for the Terminal 4, Removal and Sale of Grain Tanks project dated September 21, 2007. It is essential that prospective proposers note the contents of this addendum and that the Port of Portland be made aware that the addendum has been received. Therefore, acknowledge receipt by inserting the number of this addendum in the space provided on Page 004100-3 of the enclosed revised Price Proposal.

Failure to submit the proposal on the enclosed revised Price Proposal form will cause the proposal to be declared non-responsive.

Project Manual

All instances of the project title, change to read, "Terminal 4, Removal and Sale of Grain Tanks." (The Dravo crane has been removed from the project scope.)

Page 000110-1, add the following table of contents entries:

"Section 015320 Temporary Railroad Crossing

"Section 329119 Landscape Grading

"Section 329219 Hydroseeding"

Page 000110-2, Exhibit B, delete in its entirety.

Page 000115-1:

Reference drawing CP T4 1959 0014, delete in its entirety.

Document 000118, Proposal and Award Schedule, discard and replace with the enclosed reissued Document 000118. (Many schedule dates have changed.)

Page 001100-1, third paragraph, delete in its entirety, and replace with:

"Dismantling and disposing of eight steel grain tanks, tank foundations, and associated conveyor galleries near Berth 405; management of lead paint and other heavy metals in the painted materials; and filling, grading, and hydroseeding disturbed areas. The work also includes arranging for and delivery of all metal salvaged under this project to a metals recycler/buyer and crediting the salvage value to the Port for the metal."

Page 001100-2, second paragraph, delete in its entirety, and replace with:

"A. All proposals must be accompanied by proposal security made payable to The Port of Portland in an amount equal to at least 10 percent of $500,000."

Page 002100-3, Article 6, C, 1, 2, 3, 4, 5, and 6, delete in their entirety and replace with:

"1. Proposed Demolition Approach, Experience, and Qualifications:
   a. Provide a detailed work plan for all demolition of the grain tanks, broken down by task. Proposers may recommend optional tasks, modifications to specified tasks, and/or innovation that would benefit the Port and increase the probability of project success. Success for this project is defined as completing the project in an environmentally sensitive manner, on time, and within the agreed upon scope. Identify potential roadblocks and discuss measures for avoidance during the demolition and salvage phases of the project.
   b. Describe Proposer's experience in demolition and salvage of similar projects within the past 3 years. Include location, project components, environmental and permitting issues encountered in the course of the work, schedule, costs, services provided, subcontractors, key dates, and name and telephone number of an Owner's representative familiar with the proposer's work.
   c. Provide detailed information on major work categories performed by subcontractors, including metal recyclers, and related work experience of these subcontractors.

"2. Proposed Environmental Protection Plan/Measures: All painted components are painted with lead-based paint. Describe how Proposer plans to protect ground and surrounding surfaces to prevent the introduction of paint debris to the ground or water.

"3. Proposed Safety Plan:
   a. The Proposer shall submit safety planning information. The Port requires that the Proposer abide by all Oregon OSHA requirements, including but not limited to the Contract Documents, to provide for the safety of the Proposer's employees, Port employees, tenants, and the general public. Work performed by Subcontractors shall be included. Material safety data sheets (MSDS) for chemical products introduced to Port premises shall not be submitted with this information, but shall accompany the Contractor on site and be available to the Port upon request.
   b. The Proposer shall also include applicable company safety policies, procedures, or plans (which will not be counted as part of the 30-page proposal page limit).
   c. Submit copies of OSHA 300 logs for the last three years.

"4. Proposed Method of Credit Balance Payment to the Port: In the event the Proposal Price is a credit amount because of the salvage value of the metal, describe the proposed method of ensuring that the Port receives timely payment of the credit balance."

Page 002100-4, Article 6, C:

7, renumber as 5.
8, renumber as 6.

Page 002100-5, Article 8, B, criteria table, delete in its entirety, and replace with:

	"Criteria
1.	Demolition approach, experience, and qualifications.
2.	Environmental protection plan/measures.
3.	Price for all work.
4.	Safety plan/records.
5.	Proposed method of credit balance payment to the Port, if any.
6.	Optional innovations of benefit to the Port.
7.	Emerging small business participation."

Page 002100-7, Article 12, A, delete in its entirety and replace with:

"A certified or cashier's check, an irrevocable letter of credit, or a proposal bond (bid bond) payable to The Port of Portland in an amount equal to at least 10 percent of $500,000 shall accompany each Proposal as proposal security and as a guarantee that the Proposer will execute the Agreement and provide a performance bond, and a labor and material payment bond. In the event the Proposer submits more than one Proposal, proposal security shall be submitted for only one Proposal. The successful Proposer's check, letter of credit, or proposal bond will be retained until he has executed the Agreement, given satisfactory evidence of insurance, and furnished a performance bond and a labor and material payment bond, each in the amount of $500,000."

Page 002100-8, Article 15, A, first sentence, change to read, in part, ". . . payment bond, each for $500,000, fully executed by . . . ."

Document 004200, Price Proposal, discard and replace with the enclosed, reissued Document 004200. (The Dravo crane proposal item has been deleted, work scope of the grain tank item has changed, a new proposal item has been added, and the amounts of the proposal bond, performance bond, and labor and material payment bond have changed.)

Page 005200-1:

Fifth paragraph:

First sentence, change to read, in part, ". . . on or about December 28, 2007."

Second sentence, change to read, in part, ". . . on or before July 31, 2008."

Sixth paragraph, first sentence, change to read, in part, ". . . on or before August 29, 2008."

Document 006100, Performance Bond, discard and replace with the enclosed, reissued Document 006100. (The amount of the bond has changed.)

Document 006101, Labor and Material Payment Bond, discard and replace with the enclosed, reissued Document 006101. (The amount of the bond has changed.)

Page 007200-5, 2.11 (Ownership), delete in its entirety and replace with:

"2.11 Except as expressly provided otherwise by this Contract or by law, ownership of the things the Contractor must remove under this Contract ("Removables"), including without limitation eight steel grain tanks and associated conveyor galleries near Berth 405, and any material removed from them, remains in the Port until Removables have been removed from Port property. Ownership to an element of the Removables automatically transfers to the Contractor upon removal of the element from Port property. The Port will execute any documents reasonably requested by the Contractor to evidence of ownership in the Contractor after an element of Removables has been removed from Port property. The Contractor may not take any action purporting to transfer ownership, conditionally or otherwise, of an element of Removables until the element has been removed from Port property.

"2.12 If the Contractor, without excuse and after notice and a reasonable opportunity to cure, fails to timely complete removal of Removables under this Contract, the Port may: (1) tender completion of the work to the Contractor's performance bond surety; or (2) dispose of or contract for disposal of those Removables, and recover from the Contractor any amount by which the Port's cost to dispose of those Removables exceeds the price under this Contract for disposal of those Removables."

Page 007200-7, Article 5:

Item 5.1, first sentence, change to read, in part, ". . . payment bond, each in an amount equal to $500,000, as security for . . . ."

Item 5.3, first sentence, change to read, in part, "The Contractor shall maintain workers' compensation and employer's liability insurance for all employees subject to workers' compensation laws of the State of Oregon or any other appropriate jurisdiction unless exempt; and shall maintain liability coverage for employees subject to FELA, if applicable."

Page 007200-8, Article 5:

Item 5.4, first sentence, change to read, in part, ". . . in an amount not less than $2,000,000 per occurrence (primary or combined primary and excess insurance)."

Item 5.4.A, first sentence, change to read, in part, "The Contractor shall maintain commercial general liability insurance with any exclusions removed for (a) work within 50 feet of railroad tracks; and (b) explosion, collapse and underground hazards to protect against . . . ."

Page 007200-9, Article 5, after 5.6, add the following:

"Contractors Pollution Liability Insurance

"5.7. The Contractor shall maintain Contractors Pollution Liability insurance in an amount not less than $1,000,000 per occurrence covering liability for sudden and non sudden pollution on land and on water, including first party clean up costs. Coverage shall include exacerbation of existing contamination to the extent exacerbated by the Contractor or his Subcontractors. If the policy is claims made, it shall: (1) have a retroactive date prior to the commencement date of this Contract, and (2) be maintained continuously in force for, or shall be endorsed with an extended reporting period of, two years beyond Final Acceptance of the Work."

Section 011100, Summary of Work, discard and replace with enclosed reissued Section 011100. (See highlighted text showing changes to Article 1.1 Description of Work, and 1.2 Known Site Conditions Affected by Regulatory Agencies.)

Section 012200, Unit Prices, discard and replace with the enclosed, reissued Section 012200. (See highlighted text showing one proposal item has been deleted and changes to the remaining item's description.)

Page 013300-2, 1.5, add the following new other submittals:

015320	1.2, 3.1
329219	1.3

Page 015000-4, after this page add the enclosed new Section 015320, Temporary Railroad Crossing.

Section 024113, Demolition, discard and replace with the enclosed, reissued Section 024113. (See highlighted changes.)

Section 028313, Hazardous Building Material Management, discard and replace with the enclosed, reissued Section 028313. (See highlighted changes.)

Page 028313-5, after this page add the enclosed new Section 329119, Landscape Grading and new Section 329219, Hydroseeding.

Drawings

T4 2007-2

Sheet C-1, Detail 1/C-1, revise as shown on enclosed Sketch A.

Sheet C-2, Detail 1/C-2, revise as shown on enclosed Sketch B.

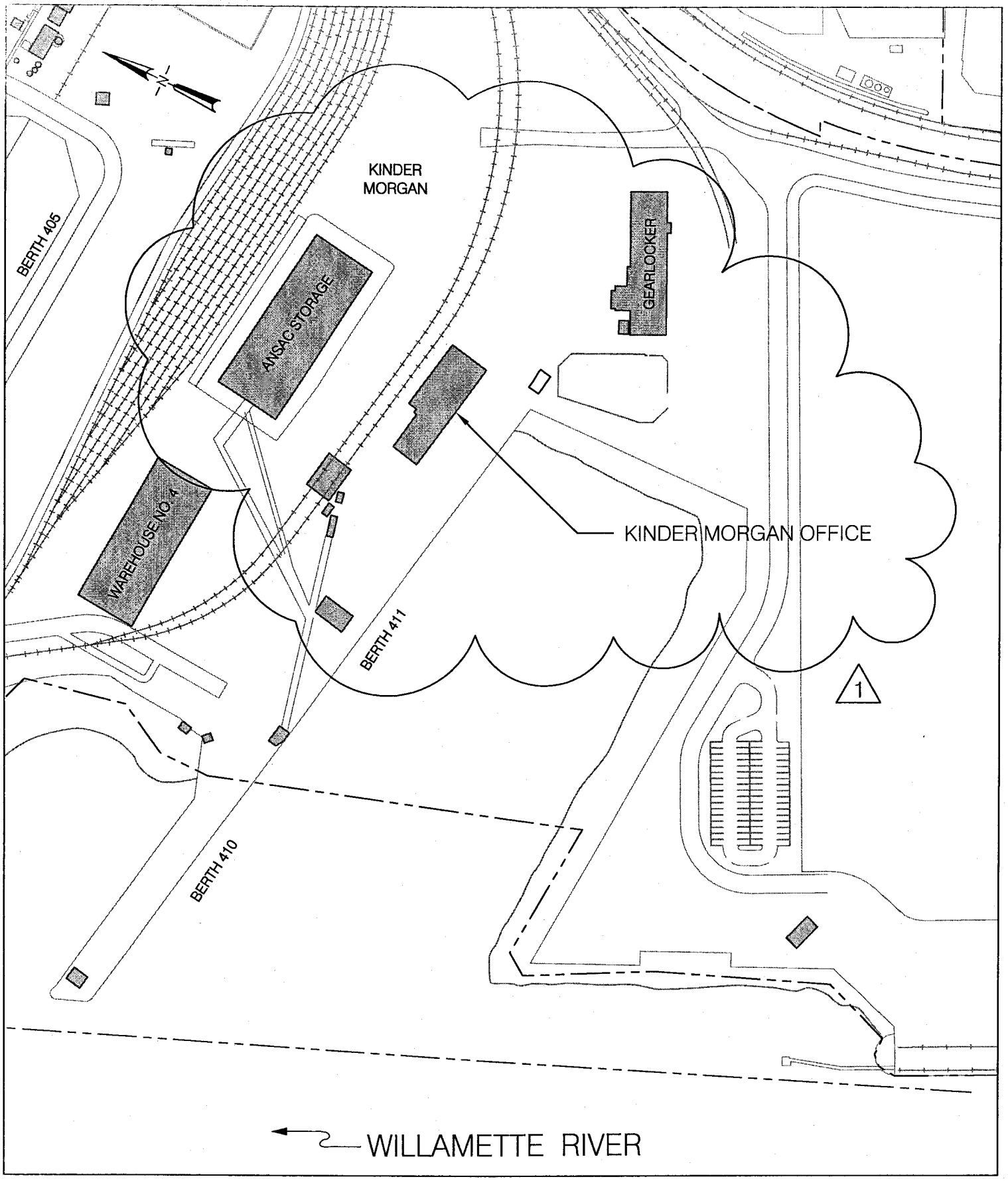
Sheet C-3, delete in its entirety.

THE PORT OF PORTLAND

Craig Johnsen, Manager
Contracts and Procurement

October 17, 2007

Enclosures:
Document 000118, Proposal and Award Schedule
Document 004200, Price Proposal
Document 006100, Performance Bond
Document 006101, Labor and Material Payment Bond
Section 011100, Summary of Work
Section 012200, Unit Prices
Section 015320, Temporary Railroad Crossing
Section 024113, Demolition
Section 028313, Hazardous Building Material Management
Section 329119, Landscape Grading
Section 329219, Hydroseeding
Sketches A and B



DRAVO CRANE DETAIL

SCALE: 1" = 200'

1
C-1

SKETCH A

1 10/11/07 TBT REVISED BY ADDENDUM NO. 2

NOTES :

1. TRACKS ON NORTH AND SOUTH SIDES OF TANKS ARE TO REMAIN IN SERVICE AT ALL TIMES.
2. TRACK BETWEEN TANKS SHALL ONLY BE CLOSED INTERMITTENTLY AND ONLY WITH PORT APPROVAL.
3. WHERE EQUIPMENT IS REMOVED, GRIND ALL ATTACHMENTS FLUSH WITH CONCRETE.
4. REMOVE CONCRETE TANK FOOTINGS. SEE REFERENCE DRAWING CP T4 1954 0006 1819 FOR MORE INFORMATION.
5. PROTECT ALL CATCH BASINS AND STORM DRAIN PIPING FROM DAMAGE.
6. PROVIDE SILT FENCING AROUND TANK AREAS AFTER TANK REMOVAL.

1

KEY NOTES :

(1) COVER CONVEYOR ENTRY TO ELEVATOR W/ 1/2" MARINE GRADE PLYWOOD. SEAL WEATHERTIGHT. SEE 5/ C-2 .

(2) COVER CONVEYOR ENTRY TO ELEVATOR W/ 1/2" MARINE GRADE PLYWOOD. SEAL WEATHERTIGHT. TYP. OF 6. SEE 6/ C-2 .

(3) REMOVE ALL CONDUIT BACK TO ELECTRICAL HOUSE. ALL CURCUITS HAVE BEEN DISCONNECTED. SEE 7/ C-2.

(4) PROTECT ALL CATCH BASINS SEE DETAIL 2/ C-1. 1

(5) FIRE HYDRANT. 1

GRAIN TANK DETAIL

SCALE: 1" = 200'

1 / C-2

SKETCH B

1 10/11/07 TBT REVISED BY ADDENDUM NO. 2

PORT OF PORTLAND
P.O. Box 3529
Portland, Oregon 97208

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Solicitation No. 2007-0067

Proposals Due: November 7, 2007
By: 3:00 p.m.

ADDENDUM NO. 3

Addendum No. 3 hereby amends Addendum No. 2 of the request for proposals for the Terminal 4 Removal and Sale of Grain Tanks project dated September 21, 2007. It is essential that prospective proposers note the contents of this addendum and that the Port of Portland be made aware that the addendum has been received. Therefore, acknowledge receipt by inserting the number of this addendum in the space provided on Page 004100-3 of the reissued Price Proposal.

Failure to submit the proposal on the revised Price Proposal form will cause the proposal to be declared non-responsive.

Addendum No. 2

Reissued Section 024113, Demolition:

Page 024113-1, Part 2, A, 1, delete in its entirety and replace with:

"2.1 Drainage Geotextile, Type 1 from ODOT Standard Specifications Table 02320-1. Non-woven, 4 ounce."

Page 024113-2, 3.2, C, after last sentence, add, "Fabric laid over the rail/ballast areas shall have the edges elevated to prevent accumulated debris from washing off the fabric in heavy rainfall. Unless explicitly approved by Union Pacific Railroad, fabric shall not be left over tracks and ballast during train movements, such that it conceals footing conditions for rail workers."

Page 024113-4, 3.3:

E, and F, delete in their entirety and replace with the following:

"E. The grain tank floors are below storm water drain elevations and therefore rain water will pond within the tank footprints. The Contractor shall implement water control procedures to prevent the uncontrolled release of all accumulated water into the storm drain system. Water may be allowed to overflow, to storm water drains, only after sediment filters have been installed as described in Section 3.1 (C). The water control plan shall be submitted to the Port for review and approval prior to commencing work on site.

"F. Ponded/accumulated rain water shall be pumped to stormwater drainages if it meets the water quality standards stipulated under the NPDES General Permit 1200-CA described in Section 015713-1, has been filtered for paint chips, and the means and methods are in conformance with the approved water control plan. Under the NPDES General Permit 1200-CA, discharge of turbid flows of water that are not filtered or settled to remove turbidity prior to leaving the construction site is prohibited. Ponded water will be visually inspected by the Port's designated representative prior to discharge. Any water which does not meet water quality criteria shall be pumped to a temporary storage tank to be provided by the Contractor for off-site disposal by the Port."

G, renumber as H.

After F, insert the following new paragraph:

"G. Several inches of grain dust is present on interior trusses and beams. Wash water, if used, must be kept to a minimum. In accordance with the NPDES General Permit 1200-CA, wash water discharge to the storm drain system and/or infiltration into the subsurface is prohibited. Wash water shall be collected and pumped to a temporary storage tank provided by the Contractor, for off-site disposal by the Contractor or disposal to the sanitary sewer system in accordance with POTW requirements after the Contractor receives regulatory approval."

Page 024113-5, 3.3, H and I, renumber as I and J, respectively.

Reissued Section 028313, Hazardous Building Material Management:

Page 028313-5, 3.1, C, delete in its entirety and replace with:

"C. Sediment filter inserts (or an alternative method providing equivalent protection may be proposed) shall be used on all storm drains in the work area to prevent paint chips from entering the storm sewer system. Filters shall be removed and cleaned as necessary to allow proper drainage in accordance with Section 015713-3 (3.2) (E). All paint chips or similar lead contaminated dirt, dust etc. shall be placed in drums for testing and disposal by the Port. Material placed in drums may be wet but shall not have any free or standing water."

THE PORT OF PORTLAND

Craig Johnsen, Manager
Contracts and Procurement

October 23, 2007

PORT OF PORTLAND
P.O. Box 3529
Portland, Oregon 97208

TERMINAL 4
REMOVAL AND SALE OF GRAIN TANKS

Solicitation No. 2007-0067

Proposals Due: November 7, 2007
By: 3:00 p.m.

ADDENDUM NO. 4

Addendum No. 4 hereby amends Addendum No. 2 of the request for proposals for the Terminal 4 Removal and Sale of Grain Tanks project dated September 21, 2007. It is essential that prospective proposers note the contents of this addendum and that the Port of Portland be made aware that the addendum has been received. Therefore, acknowledge receipt by inserting the number of this addendum in the space provided on Page 004100-3 of the reissued Price Proposal.

Failure to submit the proposal on the revised Price Proposal form will cause the proposal to be declared non-responsive.

Addendum No. 2

Reissued Section 329219,Hydroseeding:

Page 329219-2, 2.1, E, two lines below seed mix blend chart, delete in their entirety and replace with:

"Apply the seed mixture at the rate of 300 pounds per acre.

"Add 150 pounds per acre of an approved annual rye grass to the selected mix."

Page 329219-3, 3.3:

A, change to read, in part, ". . . at the rate of 3100 pounds per acre."

B, change to read, in part, ". . . at the rate of 450 pounds per acre."

Page 329219-4, 3.4, A, change to read, in part, ". . . germinate within 14 days . . . ."

THE PORT OF PORTLAND

Craig Johnsen, Manager
Contracts and Procurement

October 31, 2007

Appendix C

Site Inspection Photograph Log

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 1

Photo Date: March 12, 2008

Orientation: Looking east

Description: Tank 1

West side of Tank 1.

Photo No: 2

Photo Date: March 12, 2008

Orientation: Southwest

Description: Ground Surface Near Tank 1

Debris and paint chips scattered in moss on the ground surface north of Tank 1. This material was removed and disposed of properly during demolition.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 3

Photo Date: March 12, 2008

Orientation: Looking southeast

Description: Tank 2

Condition of peeling paint on the west side of Tank 2.

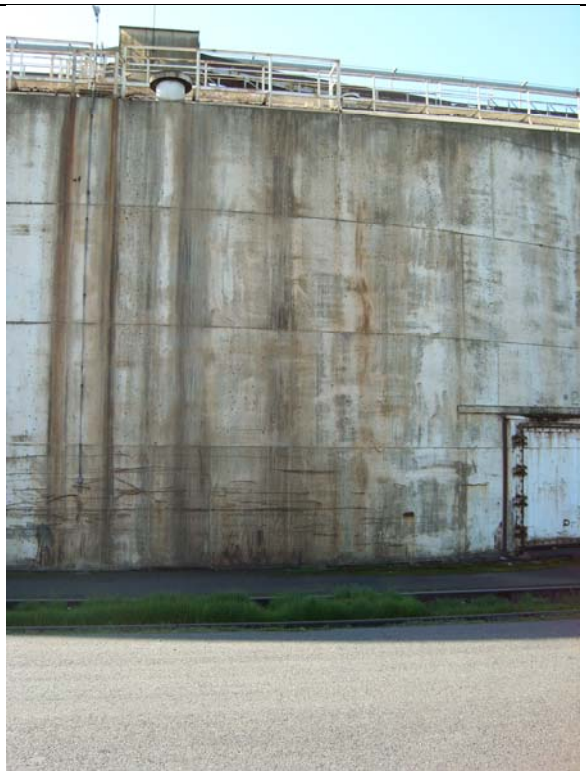


Photo No: 4

Photo Date: March 12, 2008

Orientation: Looking south

Description: Ground Surface Near Tank 2

Debris and paint chips scattered in moss on the ground surface north of Tank 2.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 5

Photo Date: March 12, 2008

Orientation: Looking southwest

Description: Tank 3

Exterior condition of Tank 3.

Photo No: 6

Photo Date: March 12, 2008

Orientation: Looking northeast

Description: Ground Surface Near Tank 3

Paint chips scattered in moss and vegetation on the ground surface south of Tank 3.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 7

Photo Date: March 12, 2008

Orientation: Looking southwest

Description: Tank 4

Exterior condition of Tank 4 displaying peeling paint and exposed red material.

Photo No: 8

Photo Date: March 12, 2008

Orientation: Looking south

Description: Tank 4

Stained linear lines on the east side of Tank 4.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 9	
Photo Date: March 12, 2008	
Orientation: Looking southwest	
Description: Tank 4 Ground surface on the south side of Tank 4.	
Photo No: 10	
Photo Date: March 12, 2008	
Orientation: Looking south	
Description: Ground Surface Near Tank 4 Paint chips scattered in gravel, railroad tracks, and vegetation on the ground surface north of Tank 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 11

Photo Date: March 12, 2008

Orientation: Looking northwest

Description: Tank 5

Exterior condition of Tank 5.

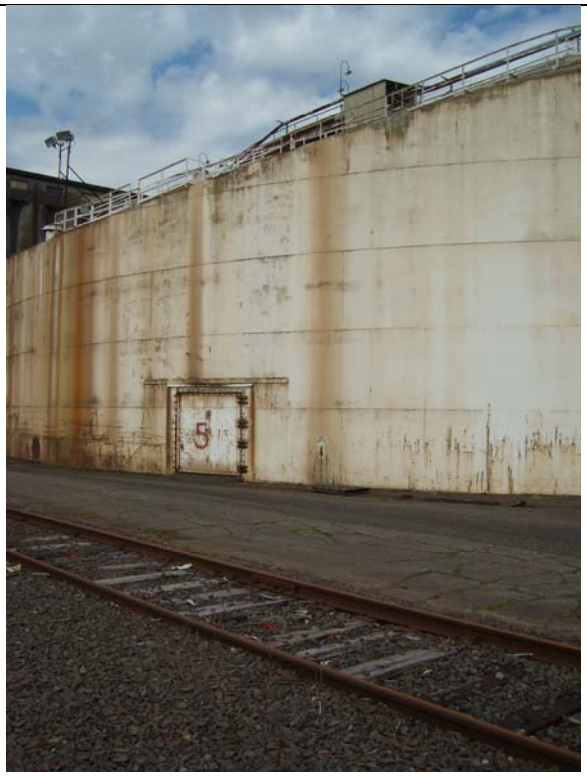


Photo No: 12

Photo Date: March 12, 2008

Orientation: Looking southeast

Description: Ground Surface Near Tank 5

Paint chips and debris scattered in gravel, structures, and vegetation on the ground surface north of Tank 5.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 13

Photo Date: March 12, 2008

Orientation: Looking northwest

Description: Tank 6

Exterior condition of Tank 6 prior to demolition.

Photo No: 14

Photo Date: March 12, 2008

Orientation: Looking west

Description: Ground Surface Near Tank 6

Vegetation on the ground surface south of Tank 6.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 15

Photo Date: March 12, 2008

Orientation: Looking southwest

Description: Tank 7

Exterior condition of Tank 7 prior to demolition.

Photo No: 16

Photo Date: March 12, 2008

Orientation: Looking south

Description: Ground Surface Near Tank 7

Paint chips and debris scattered in moss on the ground surface north of Tank 7.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 17

Photo Date: March 12, 2008

Orientation: Looking west

Description: Tank 8

Exterior condition of Tank 8 prior to demolition.

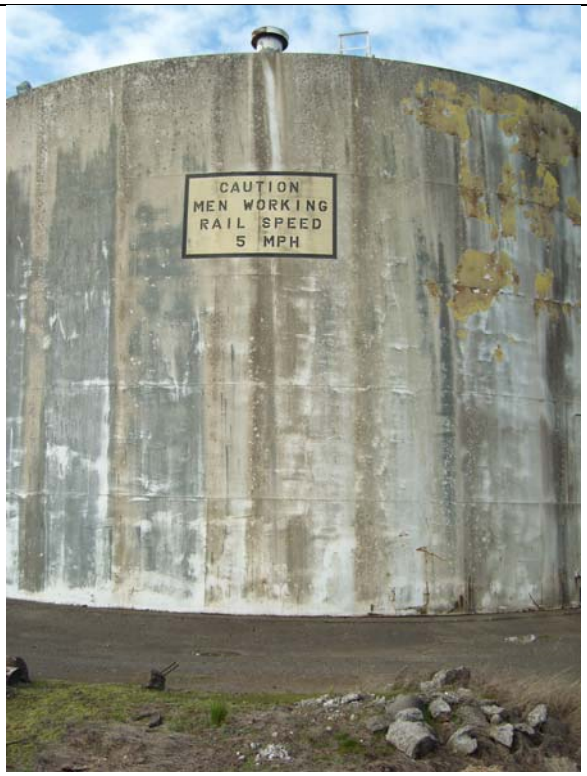


Photo No: 18

Photo Date: March 12, 2008

Orientation: Looking west

Description: Ground Surface Near Tank 8

Paint chips scattered on pavement north of Tank 8.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 19

Photo Date: March 12, 2008

Orientation: Looking east

Description: Between Tanks

Paint chips in vegetation, gravel, and center railroad tracks between the grain tanks.

Photo No: 20

Photo Date: March 12, 2008

Orientation: Looking north

Description: Between Tanks

Paint chips in vegetation, gravel, and center railroad tracks between the grain tanks.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 21	
Photo Date: April 2, 2008	
Orientation: Looking north	
Description: Environmental Control Fabric laid over pervious surface east of Tank 8 during demolition.	
Photo No: 22	
Photo Date: April 2, 2008	
Orientation: NA	
Description: Environmental Control Filter bag inside and biobags outside the catch basin.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 23

Photo Date: April 2, 2008

Orientation: Looking southwest

Description: Environmental Control

Rail fabric laid on tracks directly south of demolition area. Sand bags keep fabric in place and also incline the fabric to prevent surface runoff in the event of rain.

Photo No: 24

Photo Date: April 2, 2008

Orientation: Looking north

Description: Tank 8

Roof and a portion of Tank 8 have been removed. Interior metal is being consolidated for recycling.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 25

Photo Date: April 2, 2008

Orientation: NA

Description: Drum Contents

Contents of the first drum filled during demolition.

Photo No: 26

Photo Date: April 2, 2008

Orientation: Looking west

Description: Tanks 7 and 8

Portion of the walls from both Tanks 7 and 8 have been removed. The roof remains intact on Tank 7.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 27	
Photo Date: April 11, 2008	
Orientation: NA	
Description: Drum #2 Contents of Drum #2.	
Photo No: 28	
Photo Date: April 11, 2008	
Orientation: Looking northwest	
Description: Tanks 7 and 8 Demolition progress of Tanks 7 and 8.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 29	
Photo Date: April 11, 2008	
Orientation: Looking north	
Description: Tank 6 Demolition progress of Tank 6.	
Photo No: 30	
Photo Date: April 11, 2008	
Orientation: Looking northwest	
Description: Tank 5 Demolition progress of Tank 5.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 31	
Photo Date: April 18, 2008	
Orientation: Looking northeast	
Description: Tanks 7 and 8 Demolition progress of Tanks 7 and 8.	
Photo No: 32	
Photo Date: April 18, 2008	
Orientation: Looking north	
Description: Tank 6 Demolition progress of Tank 6.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 33	
Photo Date: April 18, 2008	
Orientation: Looking west	
Description: Tank 5 Demolition progress of Tank 5.	
Photo No: 34	
Photo Date: April 18, 2008	
Orientation: Looking west	
Description: Environmental Control Fabric laid on center tracks between the grain tanks during removal of roofs.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 35	
Photo Date: April 24, 2008	
Orientation: Looking north	
Description: Former Tank 8 Remaining metal floor of Tank 8.	
Photo No: 36	
Photo Date: April 24, 2008	
Orientation: Looking northwest	
Description: Tank 7 Demolition progress of Tank 7.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 37 **Photo Date:** April 24, 2008 **Orientation:** Looking southwest **Description:** Tank 6 Demolition progress of Tank 6.	
Photo No: 38 **Photo Date:** April 24, 2008 **Orientation:** Looking south **Description:** Tank 5 Demolition progress of Tank 5.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 39	
Photo Date: April 30, 2008	
Orientation: Looking northwest	
Description: Waste Storage Waste on-site was originally stored in 55-gallon drums. The volume of waste increased, so Galaxy Bags were used. As the volume increased, a more cost-effective alternative was used: drop-boxes.	
Photo No: 40	
Photo Date: April 30, 2008	
Orientation: Looking southeast	
Description: Former Tanks 7 and 8	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 41	
Photo Date: April 30, 2008	
Orientation: Looking northwest	
Description: Tank 6 Demolition progress of Tank 6.	
Photo No: 42	
Photo Date: April 30, 2008	
Orientation: Looking west	
Description: Tank 5 Demolition progress of Tank 5.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 43	
Photo Date: May 7, 2008	
Orientation: Looking west	
Description: Tanks 5 through 7 Demolition progress of Tanks 5 through 7.	
Photo No: 44	
Photo Date: May 7, 2008	
Orientation: Looking west	
Description: Tank 7 Demolition progress of Tank 7.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 45

Photo Date: May 7, 2008

Orientation: Looking east

Description: Tank 1

Demolition progress of Tank 1.

Photo No: 46

Photo Date: May 7, 2008

Orientation: Looking west

Description: Environmental Control

Fabric laid north of Tanks 1 through 4 to cover pervious surfaces and northern railroad tracks.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 47	
Photo Date: May 14, 2008	
Orientation: Looking north	
Description: Tank 8 Demolition progress of Tank 8.	
Photo No: 48	
Photo Date: May 14, 2008	
Orientation: Looking northwest	
Description: Tanks 5 through 7 Demolition progress of Tanks 5 through 7.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 49	
Photo Date: May 14, 2008	
Orientation: Looking north	
Description: Tanks 1 and 2 Demolition progress of Tanks 1 and 2.	
Photo No: 50	
Photo Date: May 21, 2008	
Orientation: Looking west	
Description: Tanks 5 through 8 Demolition progress of Tanks 5 through 8.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 51	
Photo Date: May 21, 2008	
Orientation: Looking southeast	
Description: Tank 5 Demolition progress of Tank 5.	
Photo No: 52	
Photo Date: May 21, 2008	
Orientation: Looking east	
Description: Tanks 1 through 3 Demolition progress of Tanks 1 through 3.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 53	
Photo Date: May 28, 2008	
Orientation: Looking west	
Description: Former Tanks 5 through 7 Demolition progress of Tanks 5 through 7.	
Photo No: 54	
Photo Date: May 28, 2008	
Orientation: Looking northeast	
Description: Tanks 1 and 2 Demolition progress of Tanks 1 and 2.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 55

Photo Date: May 28, 2008

Orientation: Looking east

Description: Tank 3

Rail fabric covering the northern tracks during demolition of Tanks 1 through 4.

Photo No: 56

Photo Date: May 28, 2008

Orientation: Looking southeast

Description: Tank 4

Demolition progress of Tank 4.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 57 **Photo Date:** June 5, 2008 **Orientation:** Looking north **Description:** Tank 8 Removal of concrete foundation structures at Tank 8.	
Photo No: 58 **Photo Date:** June 5, 2008 **Orientation:** Looking east **Description:** Former Tank 5 Progress of Tank 5; concrete foundation structures visible.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 59	
Photo Date: June 5, 2008	
Orientation: Looking east	
Description: Tanks 1 through 3 Demolition progress of Tanks 1 through 3.	
Photo No: 60	
Photo Date: June 5, 2008	
Orientation: Looking east	
Description: Tank 4 Demolition progress of Tank 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 61	
Photo Date: June 11, 2008	
Orientation: Looking east	
Description: Tanks 5 through 8 Removal of concrete foundation structures at Tanks 5 through 8.	
Photo No: 62	
Photo Date: June 11, 2008	
Orientation: Looking west	
Description: Tanks 1 through 4 Demolition progress of Tanks 1 through 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 63

Photo Date: June 11, 2008

Orientation: Looking west

Description: Tanks 1 through 4

Demolition progress of Tanks 1 through 4.

Photo No: 64

Photo Date: June 18, 2008

Orientation: Looking west

Description: Tanks 6 through 8

Foundation removal at Tanks 6 through 8.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 65	
Photo Date: June 18, 2008	
Orientation: Looking east	
Description: Tanks 1 through 4 Demolition progress of Tanks 1 through 4.	
Photo No: 66	
Photo Date: July 3, 2008	
Orientation: Looking south	
Description: Tanks 5 through 8 Concrete crushing at Tanks 5 through 8.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 67	
Photo Date: July 3, 2008	
Orientation: Looking east	
Description: Tanks 1 through 4 Concrete foundation removal at Tanks 1 through 4.	
Photo No: 68	
Photo Date: July 10, 2008	
Orientation: Looking east	
Description: Tanks 5 through 8 Concrete crushing at Tank 5.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 69	
Photo Date: July 10, 2008	
Orientation: Looking northwest	
Description: Tank 8 Concrete foundation removal at Tank 4.	
Photo No: 70	
Photo Date: July 18, 2008	
Orientation: Looking west	
Description: Tank 8 Concrete grading at Tank 8.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 71

Photo Date: July 18, 2008

Orientation: Looking southwest

Description: Tank 7

Concrete grading at Tank 7.

Photo No: 72

Photo Date: July 18, 2008

Orientation: Looking south

Description: Tanks 3, 4, and 8

Concrete grading at Tank 8 and crushing at Tanks 3 and 4.

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 73	
Photo Date: July 24, 2008	
Orientation: Looking west	
Description: Tanks 5 through 8 Fill grading at Tanks 5 through 8.	
Photo No: 74	
Photo Date: July 24, 2008	
Orientation: Looking northwest	
Description: Tank 4 Concrete crushing at Tank 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 75	
Photo Date: July 24, 2008	
Orientation: Looking north	
Description: Tank 4 Concrete crushing at Tank 4.	
Photo No: 76	
Photo Date: August 1 , 2008	
Orientation: Looking north	
Description: Tanks 5 through 8 Fill grading of Tanks 5 through 8.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 77	
Photo Date: August 1, 2008	
Orientation: Looking northwest	
Description: Grading Compaction of fill material at Tank 6.	
Photo No: 78	
Photo Date: August 5, 2008	
Orientation: Looking southwest	
Description: Impacted Soil Area Soil became impacted during the disconnection of a hydraulic hose.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 79	
Photo Date: August 5, 2008	
Orientation: Looking east	
Description: Tanks 5 through 8 Area of former Tanks 5 through 8.	
Photo No: 80	
Photo Date: August 5, 2008	
Orientation: Looking east	
Description: Tanks 1 through 4 Area of former Tanks 1 through 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 81	
Photo Date: August 5, 2008	
Orientation: NA	
Description: Environmental Control Catch basin environmental control following the demolition of grain tanks.	
Photo No: 82	
Photo Date: August 5, 2008	
Orientation: Looking west	
Description: Tanks 1 through 4 Area of former Tanks 1 through 4.	

APPENDIX C
SITE INSPECTION PHOTOGRAPH LOG

Project Name: Terminal 4 Grain Tank Demolition
Project Number: 1484-00

Client: Port of Portland
Location: Terminal 4 Slip 1

Photo No: 83	
Photo Date: August 5, 2008	
Orientation: Looking south	
Description: Elder Demolition Equipment Asphalt observed stained with unknown substance during last oversight visit. Absorbent material used to clean up and contain any leakage from dismantling of equipment.	
Photo No: 84	
Photo Date: August 5, 2008	
Orientation: Looking south	
Description: Elder Demolition Equipment Asphalt observed stained with unknown substance during last oversight visit.	

Appendix D

Paint Chip and Catch Basin Solids Analytical Laboratory Reports (included on CD-ROM)

ANALYTICAL REPORT

Prepared for:
NewFields
300 Ledgewood Place, Suite 305
Rockland, MA 02370

Project:	Port of Portland
ETR:	0801049
Report Date:	February 11, 2008

Certifications and Accreditations
Massachusetts M-MA030
Connecticut PH-0141
New Hampshire 2206
Rhode Island LAO00289
New Jersey MA015
Maine MA0030
New York 11627
Louisiana 03090
Florida E87814
Pennsylvania 68-02089
Army Corps of Engineers
Department of the Navy

This report shall not be reproduced except in full, without written approval from the laboratory.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample ID Cross Reference

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**

Lab Sample ID	Client Sample ID
0801049-01	Silo 3-121907-1249
0801049-02	Silo 6-121907-1318

Certificate/Approval Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate/Lab ID : PH-0141 - *Wastewater* (General Chemistry: EPA 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2, 365.2; Metals: 200.8, 245.1; Organics: 608, 624, 625, ETPH) *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9060; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate/Lab ID : E87814 - Primary NELAP Accreditation Authority for Air & Emissions. Secondary NELAP Accreditation for Wastwater and Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 335.2, 365.2, SM2320B, SM2340B, SM2540G, SM4500NH3; Metals: 245.1; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9065, Reactivity 7.3; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Louisiana Department of Environmental Quality Certificate/Lab ID : 03090 - Primary NELAP Accrediting Authority for Wastewater, Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1, 6020; Organics: 608, 624, 625, 8015-DRO/GRO, 8081, 8082, 8260, 8270). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060, Reactivity 7.3; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO/GRO, 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate/Lab ID : MA0030 - *Wastewater* (General Chemistry: EPA 120.1/ SM2510B, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2, 365.2; Metals: EPA 245.1; Organics: 608, 624)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2, 365.2; Metals: EPA 245.1; Organics: EPA 608, 624).

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 365.2, 376.2, SM2540G; Metals: 200.8, 245.4; Organics: 608, 624, 625).

New Jersey Department of Environmental Protection Certificate/Lab ID : MA015 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1 6020; Organics: 608, 624, 625, 8081, 8082, 8260, 8270). *Solid & Hazardous Waste* (General Chemistry: EPA 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO/GRO, 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

New York Department of Health Certificate/Lab ID : 11627 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 365.2, 376.2; Metals: 245.1; Organics: 608, 624, 625). *Solid and Hazardous Waste* (General Chemistry: EPA 1010, 1311; : 245.1; 6020, 7041; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Rhode Island Department of Health Certificate/Lab ID : LAO00289 - Chemistry: *Organic and Inorganic in Non-Poratable Water, Wastewater/Sewage and Soil* (Refer to LADEQ and MADEP certificates for method numbers.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-02089 - Registered laboratory

U.S. Army Corps of Engineers

Department of the Navy

CASE NARRATIVE
Alpha Analytical

ETR: 0801049
Project: Port of Portland

All analyses were performed according to the Alpha Analytical quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report were performed within holding time, and with appropriate quality control measures, except where noted. A summary of all state and federal accreditations is provided within this report. Blank correction of results is not performed in the laboratory for any parameter. Alpha Analytical certifies that the test results within meet all of the requirements of NELAC, for all NELAC accredited parameters.

Polychlorinated Biphenyls by 8082

Polychlorinated Biphenyls were analyzed following Alpha Analytical SOP *Method 8082-Polychlorinated Biphenyls (PCBs) as Aroclors or Congeners by Gas Chromatography/Electron Capture Detector (GC/ECD) Revision 1.0 03/06/2000.* Solid samples, approximately 2g were spiked with surrogate compounds and extracted by *Method 3570.* Solvent extracts are dried over sodium sulfate and concentrated to 5mL final volume methylene chloride. A 1.0 mL portion of the extract is alumina cleaned (*Alumina Column Cleanup of Organic Extracts, Revision 0.0, 02/21/1999*), hexane exchanged and concentrated to a 1mL final volume for a 5mL final volume equivalent. Prior to analysis the hexane extracts are acid cleaned by method 3665A *(Sulfuric Acid Cleanup, Revision 1.0, 09/16/2002)*. Qualitative identifications are confirmed by analyzing standards under the same conditions used for samples, comparing GC retention times and patterns. Quantification is based on response factors derived from a multi-level initial calibration using external standard techniques.

1. All data quality objectives were met.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Analytical makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Analytical. To the best of my knowledge, the information contained in this report is accurate and complete. For any questions regarding this report, please contact the signatory below at 508-822-9300.

Approved by: Elizabeth Porta Title: Organics Manager Date: 2/11/08

Elizabeth Porta **Organics Manager**

Sample Preparation

Alpha Woods Hole Lab
Batch Weight Report

02/06/2008

Lab ID	QC Type	0801049P - Sample
0801049-01	SAM	2.3
0801049-02	D	2.27
0801049-02	SAM	2.14
PS020608B11	B	2
PS020608LCS08LCS	OP PCB Aroclor 10mL FV	2
PS020608LCSD09LCO	P PCB Aroclor 10mL FV	2

METHYLENE CHLORIDE: E05E37(Tank) E42403 (Bottle)
HEXANE: E234E38 (Tank) E33E54(Bottle)
ACETONE: E25E50
COPPER: E41602
SULFURIC ACID: 3106040
ALUMINA: 55
GLASS WOOL: H1084303302
PENTANE: C19E42
SODIUM SULFATE: C30598
SILICA(923): 10901LE

Alpha Woods Hole Lab
Batch Prep Spike Report

02/06/2008 0801049P - OP PCB Aroclor Analyst: JFR Witness: NAR

Lab ID	QC Type	OP PCB Aroclor - surr	Vol OP PCB Aroclor - surr	Units OP PCB Aroclor - surr	OP PCB Aroclor - spk 1	Vol OP PCB Aroclor - spk 1	Units OP PCB Aroclor - spk 1	OP PCB Aroclor - spk 2	Vol OP PCB Aroclor - spk 2	Units OP PCB Aroclor - spk 2
0801049-01	SAM	PSW121307C	500	µl						
0801049-02	D	PSW121307C	500	µl						
0801049-02	SAM	PSW121307C	500	µl						
PS020608B11	B	PSW121307C	500	µl						
PS020608LCS08	LCS	PSW121307C	500	µl	PLW082807E	500	µl			
PS020608LCSD09	LCSD	PSW121307C	500	µl	PLW082807E	500	µl			

Test: PCB

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# PSW121307C

Conc. 1,000ng/L

Test: PCB

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# PLW082807E

Conc. 10,000ng/L

Alpha Woods Hole Lab
Batch Prep Report

02/06/2008 0801049P - OP PCB Aroclor 10mL FV

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume (ml)	Vialed By	Vialed Date	Cell Number
0801049-01	SAM	3570	JFR	2/6/08	2/7/08		2.3	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	
0801049-02	D	3570	JFR	2/6/08	2/7/08		2.27	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	
0801049-02	SAM	3570	JFR	2/6/08	2/7/08		2.14	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	
PS020608B11	B	3570	JFR	2/6/08	2/7/08		2	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	
PS020608LCS08	LCS	3570	JFR	2/6/08	2/7/08		2	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	
PS020608LCSD09	LCSD	3570	JFR	2/6/08	2/7/08		2	5	False	JFR	2/7/08	Turbo Vap 1		JFR	2/7/08	

Alpha Woods Hole Lab
Batch Prep Report

02/06/2008 0801049P - OP PCB Aroclor 10mL FV

Lab ID	Notes
0801049-01	3rd Prep
0801049-02	3rd Prep
0801049-02	3rd Prep
PS020608B11	3rd Prep
PS020608LCS08	3rd Prep
PS020608LCSD09	3rd Prep

Alpha Woods Hole Lab
Batch Clean Up Report

02/06/2008 0801049P - OP PCB Aroclor 10mL FV

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0801049-01	SAM	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1
0801049-02	D	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1
0801049-02	SAM	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1
PS020608B11	B	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1
PS020608LCS08	LCS	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1
PS020608LCSD09	LCSD	3610	JFR	2/7/08				JFR	2/7/08	True	5	1	0	1

Alpha Woods Hole Lab
Batch Clean Up Report

02/06/2008 0801049P - OP PCB Aroclor 10mL FV

Lab ID	Notes
0801049-01	
0801049-02	
0801049-02	
PS020608B11	
PS020608LCS08	
PS020608LCSD09	

Organics Preparation Checklist

ETR: 0801049 Client: New Fire Project: Port of Portland

Test Requested			
Aroclor	✓	RIM PAH/PCB (Reg I)	
Congener		RIM Pest (Reg I)	
Homolog		RIM PAH/PCB (Reg II)	
Pesticide		RIM Pest (Reg II)	
TPH		DAS	
PAH-SIM		EPH	
8270		Other:	

Required Cleanups	
No Cleanup Required	
Copper	
Conc. Sulfuric Acid	
GPC	
Automated Silica Fractionation	
Cartridge Silica Fractionation	
Alumina	✓

Sample Observations			
Normal Weight/Volume Extracted		Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	✓
Other:			

Extraction Notes		
Emulsions During Shake		**Identify Matrix - Circle One**
Samples Extracted Outside Of Hold Time		**Soil / Sediment / Water / Sheen / NAPL / Sludge / Solid**
Samples Not Field Preserved		**Tissue / Product / Oil / Net / Wipe / Elutriate**
No Observations		
Other: Difference in color between #2 + #2 Dup. JR		

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate	
Precipitate Formed During Concentration		No Observations	✓
Other:			

Cleanup Notes			
Auto-vialing not required		Auto-vialing for H_2O in extract	
Auto-vialing for precipitate in extract		No Observations	
Other: Paint percipitate formed during hexane exchange of #1+2 but not #2 Dup. JR			

Batch Reviewed

Analyst: JR

Date: 2/7/08

Batch Completed

Analyst: JR

Date: 2/7/08

PCB Aroclors

Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Silo 3-121907-1249**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **0801049-01**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/07	12/20/07	02/06/08	02/08/08	100	2.30	5	1	JBS

Parameter	Result
Aroclor 1016	44 U
Aroclor 1221	44 U
Aroclor 1232	44 U
Aroclor 1242	44 U
Aroclor 1248	44 U
Aroclor 1254	**3400**
Aroclor 1260	44 U
Aroclor 1262	44 U
Aroclor 1268	44 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	48	30-150
Decachlorobiphenyl	46	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 2/11/08

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010491.D\ECD1A.CH Vial: 37
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010491.D\ECD2B.CH
Acq On : 8 Feb 2008 10:45 am Operator:
Sample : 0801049-01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:16 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.18	6.42	643083	536452	47.858m	48.422m
Spiked Amount 100.000 Range 30 - 150 Recovery =					47.86%	48.42%
12) s DCB - Surrogate	26.11	25.03	995895	797985	45.835m	45.653m
Spiked Amount 100.000 Range 30 - 150 Recovery =					45.84%	45.65%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.99	794245	596084	1460.892	1506.945m
34) L6 A1254 2	14.31	13.93	1426258	998506	1571.866m	1575.184m(C)
35) L6 A1254 3	15.09	14.63	1434110	755012	1512.159m	1685.957m
36) L6 A1254 4	16.01	15.17	944826	533504	1533.778m	1482.524m(C)
37) L6 A1254 5	16.76	16.35	1229638	982730	1442.441m	1580.801m
Sum A1254 1			5829077	3865836	7521.136	7831.410
Average A1254 1					1504.227	1566.282
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

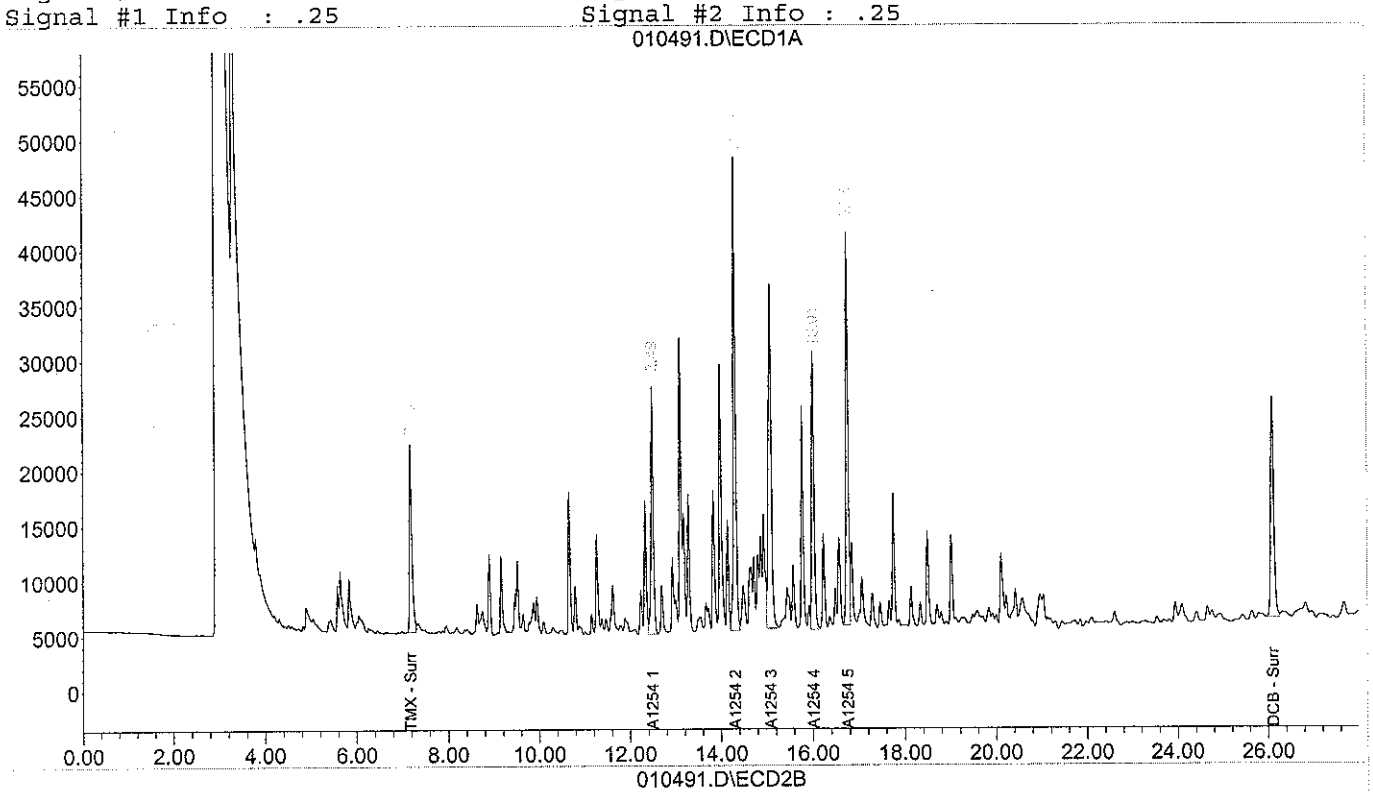
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

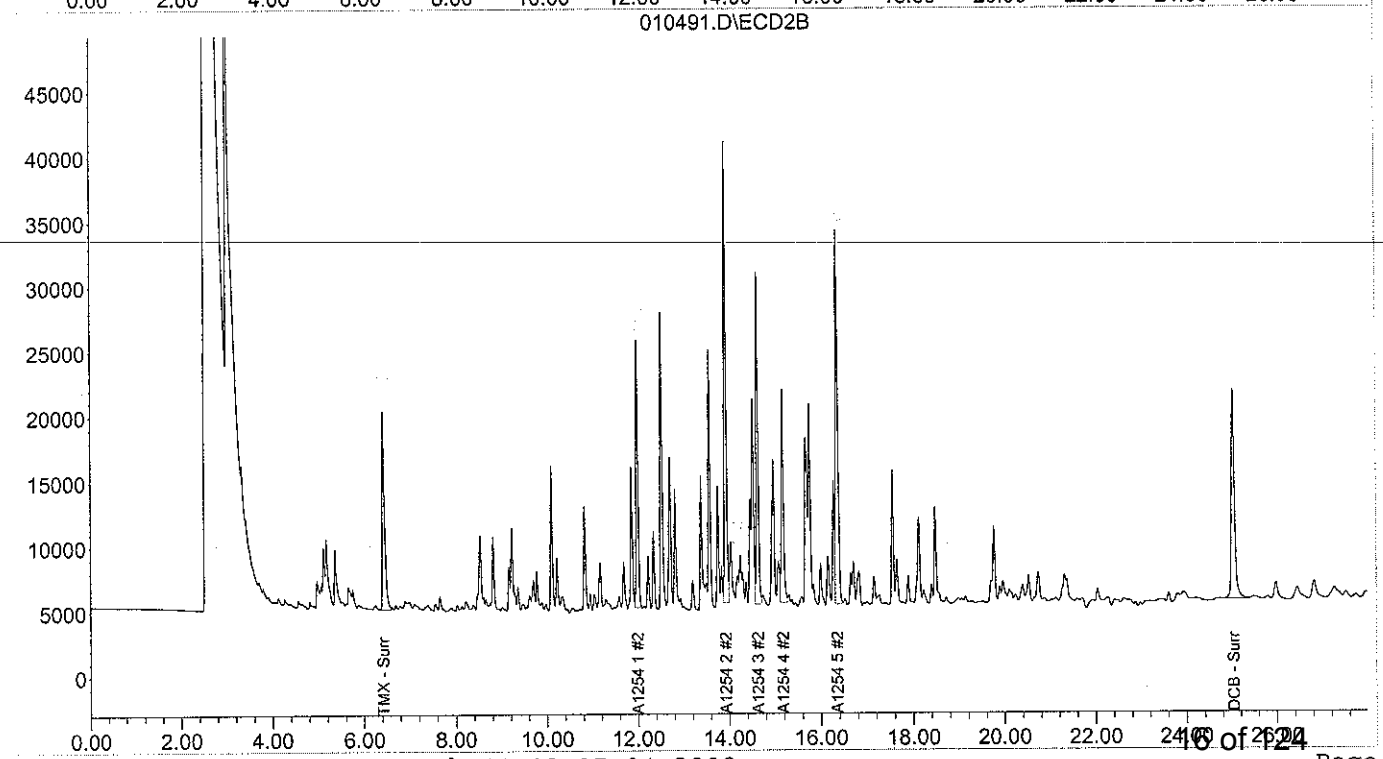
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010491.D\ECD1A.CH Vial: 37
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010491.D\ECD2B.CH
Acq On : 8 Feb 2008 10:45 am Operator:
Sample : 0801049-01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:16 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Silo 6-121907-1318**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **0801049-02**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/07	12/20/07	02/06/08	02/08/08	100	2.14	5	1	JBS

Parameter	Result
Aroclor 1016	47 U
Aroclor 1221	47 U
Aroclor 1232	47 U
Aroclor 1242	47 U
Aroclor 1248	47 U
Aroclor 1254	**1100**
Aroclor 1260	47 U
Aroclor 1262	47 U
Aroclor 1268	47 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	62	30-150
Decachlorobiphenyl	54	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

BS 2/11/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010492.D\ECD1A.CH Vial: 35
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010492.D\ECD2B.CH
Acq On : 8 Feb 2008 9:42 am Operator:
Sample : 0801049-02 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:08 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon Feb 11 12:05:24 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	823181	654812	62.261m	60.102m
Spiked Amount 100.000 Range 30 - 150 Recovery =					62.26%	60.10%
12) s DCB - Surrogate	26.11	25.03	1157906	893952	54.370m	51.915m
Spiked Amount 100.000 Range 30 - 150 Recovery =					54.37%	51.91%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.99	168984	140746	310.820m	355.816m
34) L6 A1254 2	14.30	13.92	304564	259788	335.657m	409.826m(C)
35) L6 A1254 3	15.08	14.63	395746	246556	417.284m	550.565m #
36) L6 A1254 4	16.01	15.17	190276	154516	308.884m	429.376m(C)#
37) L6 A1254 5	16.76	16.35	262338	319244	307.739m	513.530m #
Sum A1254 1			1321908	1120850	1680.383	2259.113
Average A1254 1					336.077	451.823
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

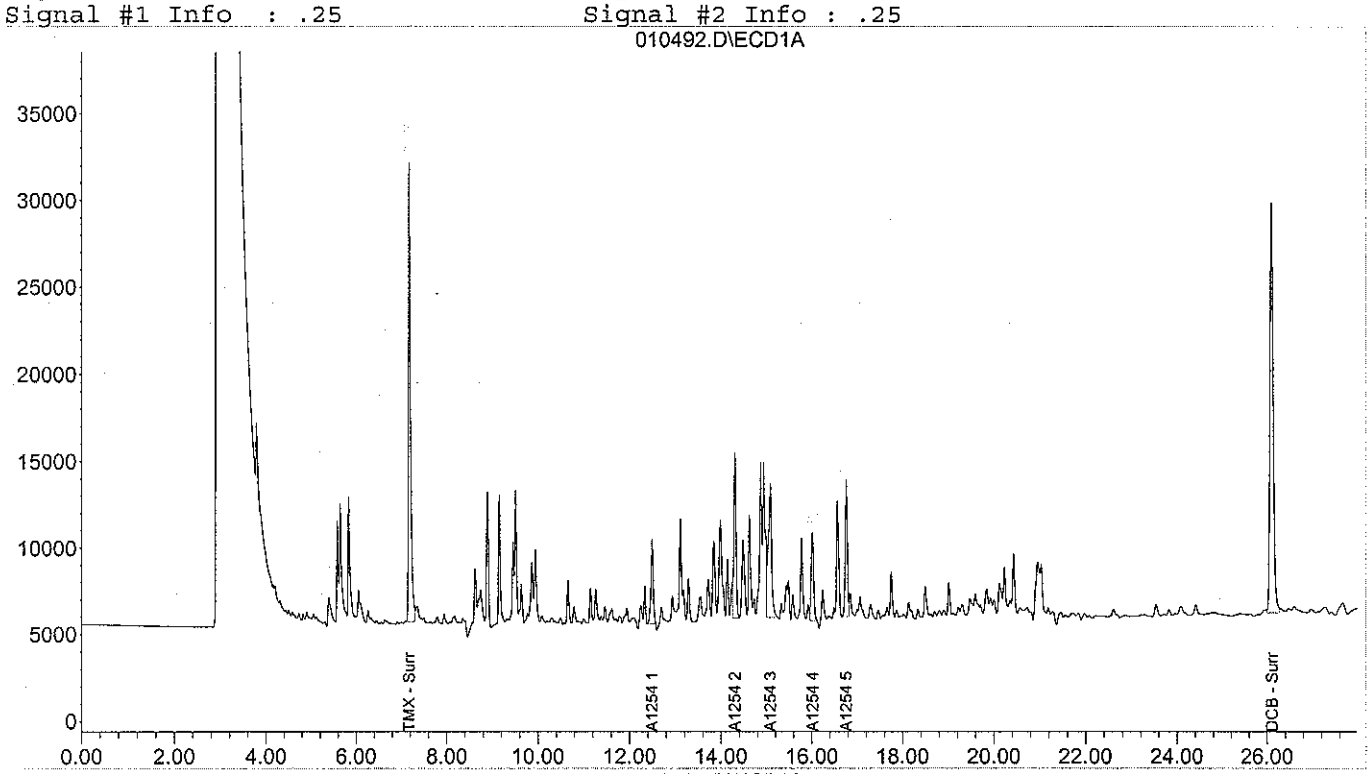
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

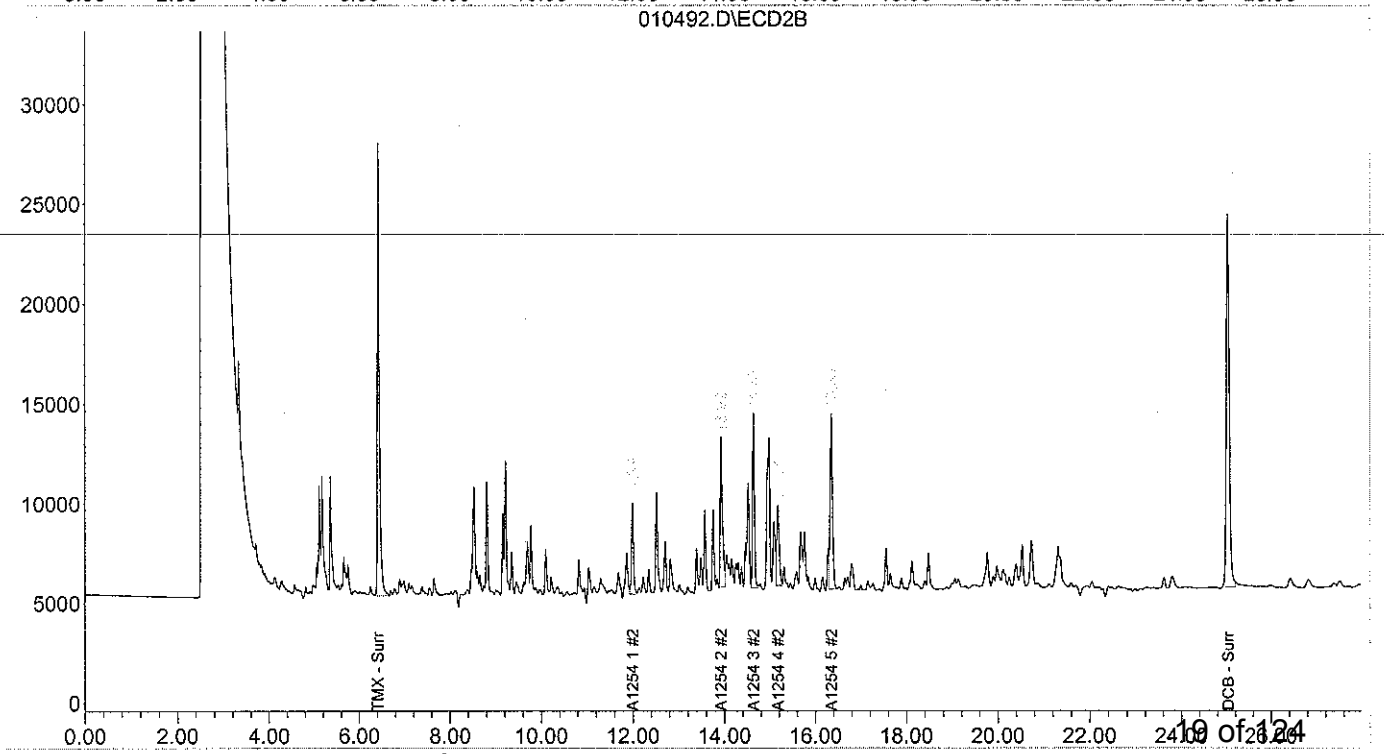
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010492.D\ECD1A.CH Vial: 35
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010492.D\ECD2B.CH
Acq On : 8 Feb 2008 9:42 am Operator:
Sample : 0801049-02 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:08 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon Feb 11 12:05:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Silo 6-121907-1318**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **0801049-02 D**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
12/19/07	12/20/07	02/06/08	02/08/08	100	2.27	5	1	JBS

Parameter	Result
Aroclor 1016	44 U
Aroclor 1221	44 U
Aroclor 1232	44 U
Aroclor 1242	44 U
Aroclor 1248	44 U
Aroclor 1254	**670**
Aroclor 1260	44 U
Aroclor 1262	44 U
Aroclor 1268	44 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	76	30-150
Decachlorobiphenyl	53	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

BS 2/11/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010492D.D\ECD1A.CH Vial: 36
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010492D.D\ECD2B.CH
Acq On : 8 Feb 2008 10:14 am Operator:
Sample : 0801049-02D Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:10 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon Feb 11 12:05:24 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	983711	756266	75.504m	70.387m
Spiked Amount 100.000 Range 30 - 150 Recovery =					75.50%	70.39%
12) s DCB - Surrogate	26.13	25.05	1134205	892156	53.105m	51.797m
Spiked Amount 100.000 Range 30 - 150 Recovery =					53.11%	51.80%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.99	158318	95446	291.202m	241.295m
34) L6 A1254 2	14.30	13.92	270640	164260	298.270m	259.127m(C)
35) L6 A1254 3	15.09	14.62	237884	127378	250.830m	284.438m
36) L6 A1254 4	16.02	15.17	216102	84308	350.808m	234.279m(C)#
37) L6 A1254 5	16.76	16.34	230680	307306	270.602m	494.327m #
Sum A1254 1			1113624	778698	1461.712	1513.464
Average A1254 1					292.342	302.693
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

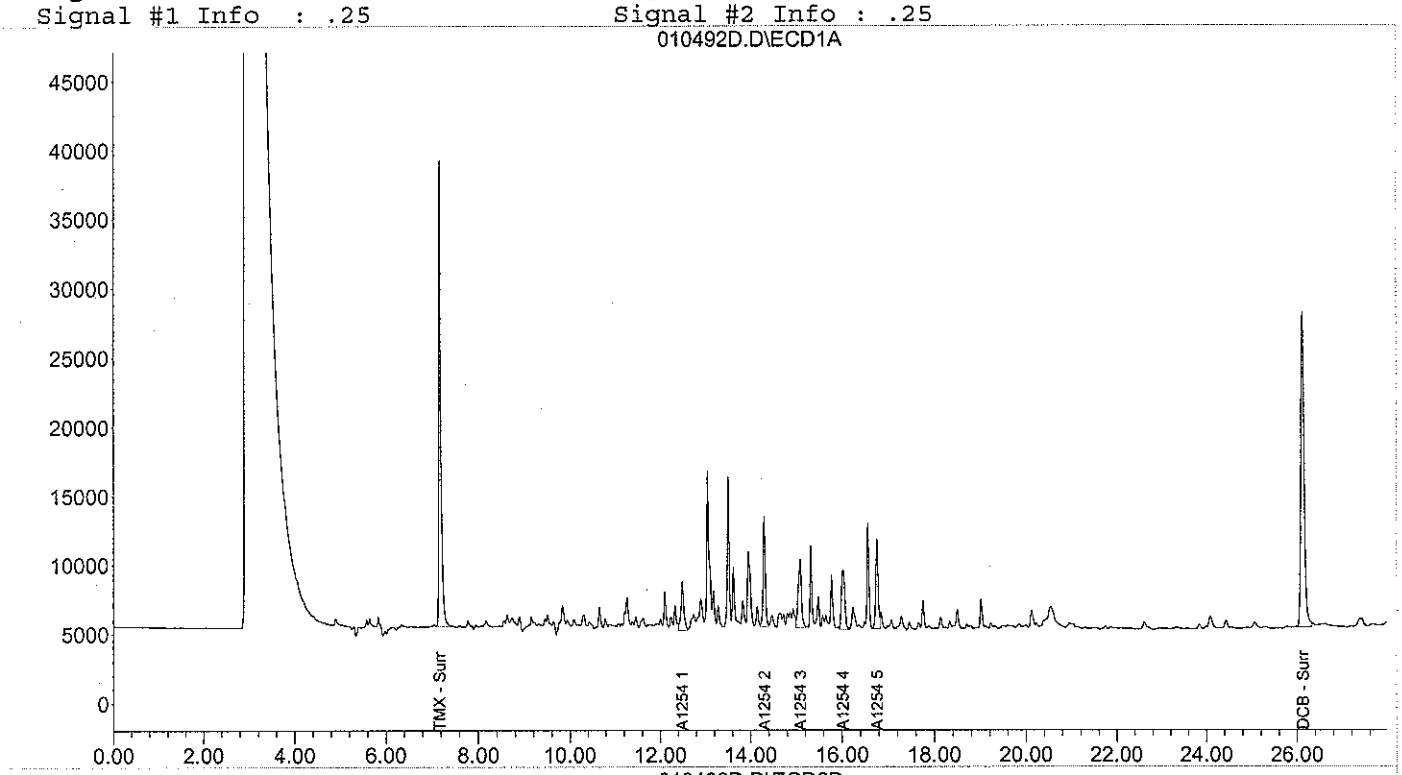
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

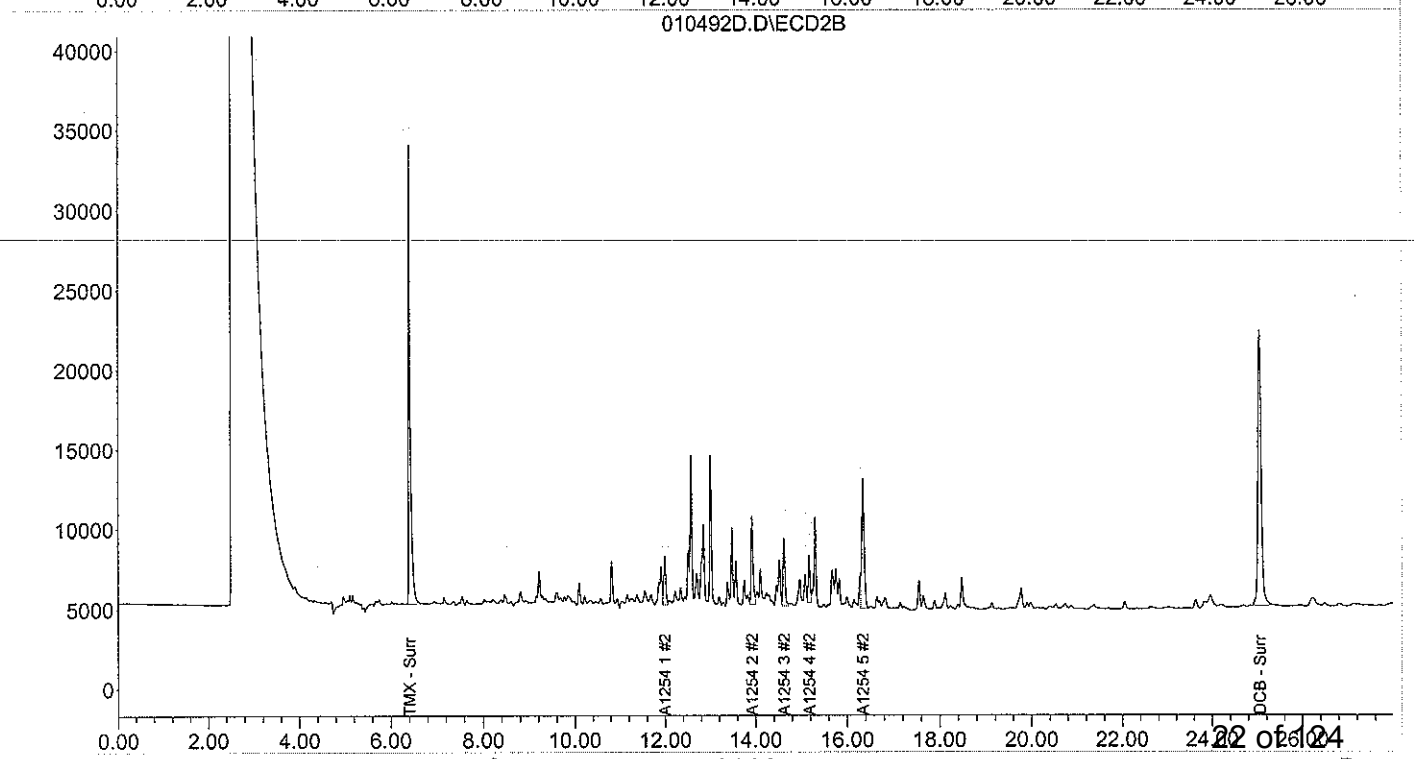
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\010492D.D\ECD1A.CH Vial: 36
Signal #2 : D:\HPCHEM\2\DATA\FEB07\010492D.D\ECD2B.CH
Acq On : 8 Feb 2008 10:14 am Operator:
Sample : 0801049-02D Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 11 12:10 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon Feb 11 12:05:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Silo 6-121907-1318**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **0801049-02**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
12/19/07	12/20/07	02/06/08	100	JBS

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Aroclor 1016	47 U	44 U	N/A	50
Aroclor 1221	47 U	44 U	N/A	50
Aroclor 1232	47 U	44 U	N/A	50
Aroclor 1242	47 U	44 U	N/A	50
Aroclor 1248	47 U	44 U	N/A	50
Aroclor 1254	**1100**	**670**	45	50
Aroclor 1260	47 U	44 U	N/A	50
Aroclor 1262	47 U	44 U	N/A	50
Aroclor 1268	47 U	44 U	N/A	50

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	62	76	30-150
Decachlorobiphenyl	54	53	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

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Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **PS020608B11**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/08	02/07/08	100	2.00	5	1	JBS

Parameter	Result
Aroclor 1016	50 U
Aroclor 1221	50 U
Aroclor 1232	50 U
Aroclor 1242	50 U
Aroclor 1248	50 U
Aroclor 1254	50 U
Aroclor 1260	50 U
Aroclor 1262	50 U
Aroclor 1268	50 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	85	30-150
Decachlorobiphenyl	84	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 2/11/08

Signal #1 : D:\HPCHEM\2\DATA\FEB07\PS0206B.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\FEB07\PS0206B.D\ECD2B.CH
Acq On : 7 Feb 2008 6:02 pm Operator:
Sample : PS020608B11 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	1092134	852306	84.683	80.374
Spiked Amount 100.000 Range 30 - 150 Recovery =					84.68%	80.37%
12) s DCB - Surrogate	26.07	25.00	1685884	1272043	84.325	78.110m
Spiked Amount 100.000 Range 30 - 150 Recovery =					84.33%	78.11%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

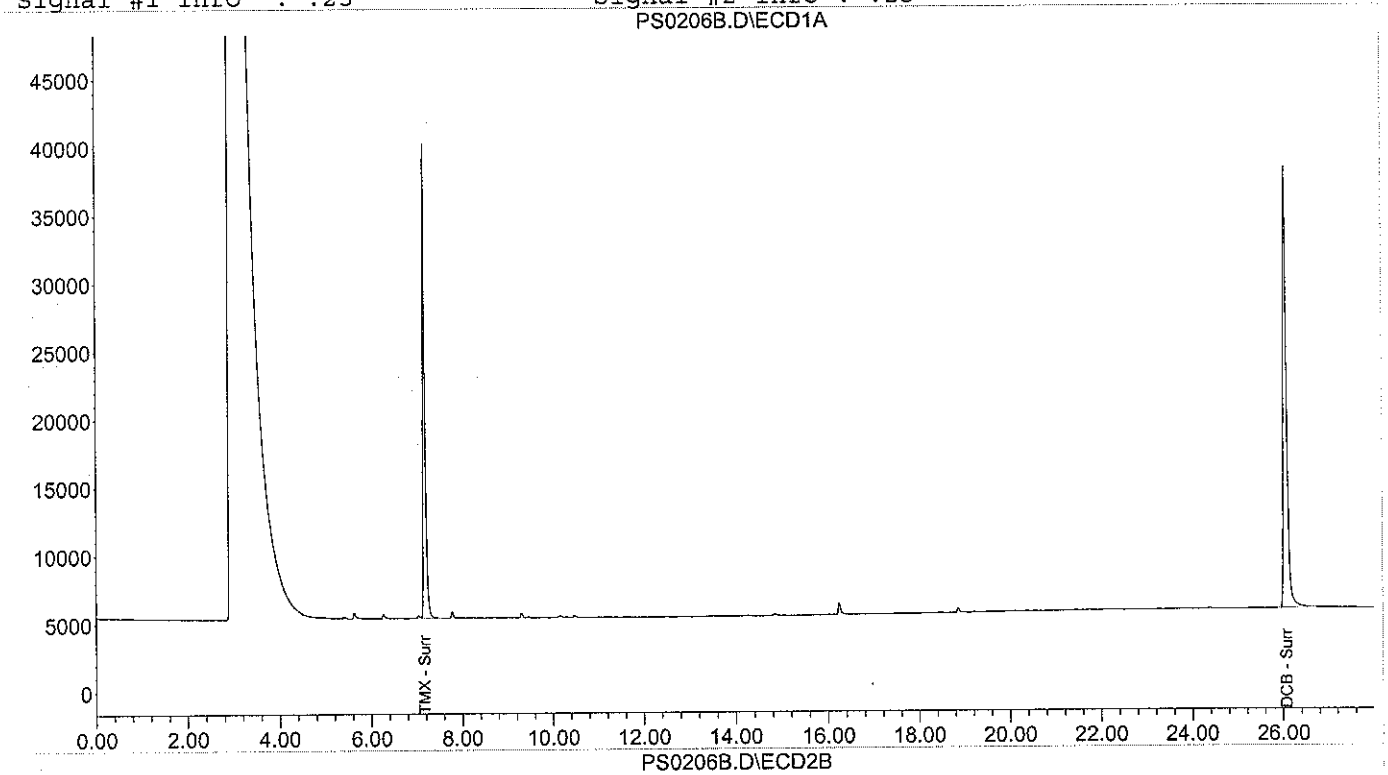
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

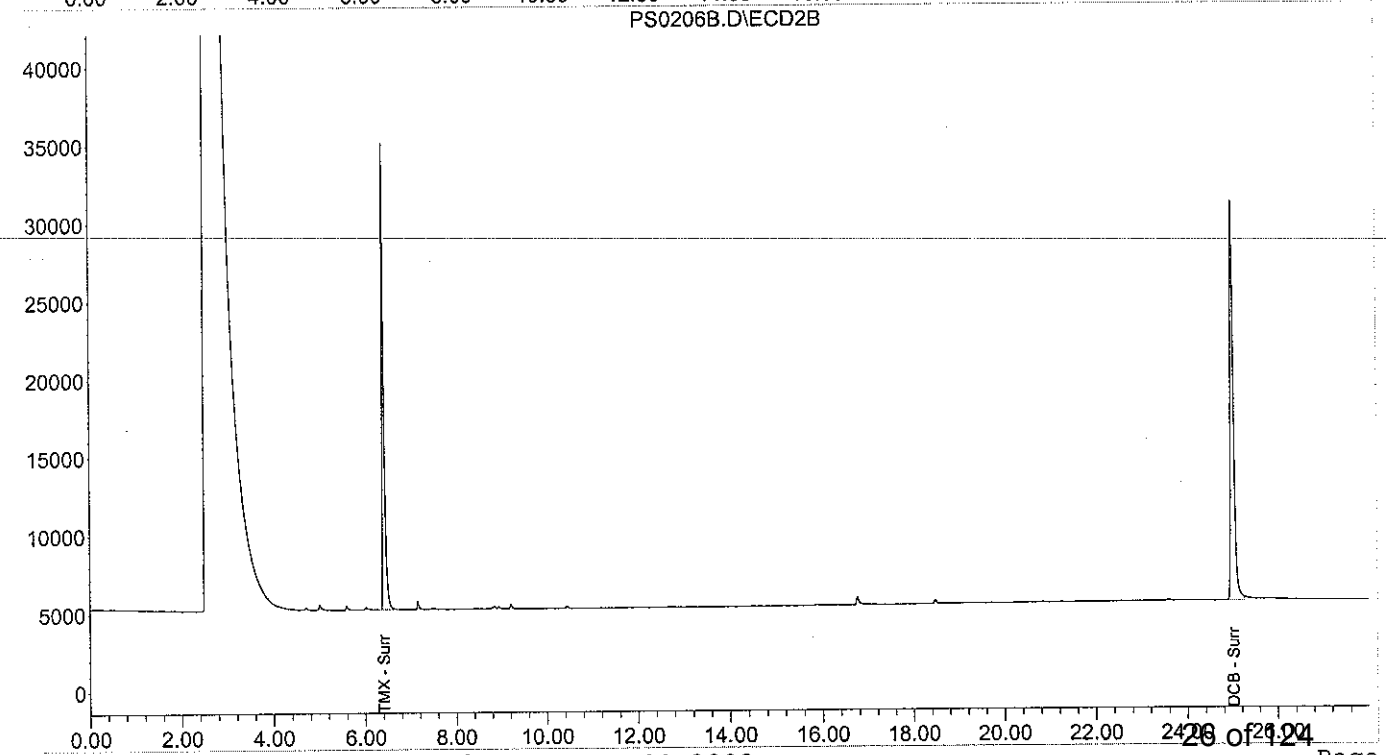
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\PS0206B.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\FEB07\PS0206B.D\ECD2B.CH
Acq On : 7 Feb 2008 6:02 pm Operator:
Sample : PS020608B11 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form III
Spike Recovery Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **See Below**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	02/06/08	100	JBS

Lab ID:	PS020608B11		PS020608LCS08		PS020608LCSD09				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Aroclor 1016	50	U	2400	95	2300	92	3	50	40-140
Aroclor 1260	50	U	2000	82	2000	80	2	50	40-140

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	84	81	30-150
Decachlorobiphenyl	86	84	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

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Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **PS020608LCS08**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/08	02/07/08	100	2.00	5	1	JBS

Parameter	Result	
Aroclor 1016	**2400**	S
Aroclor 1221	50	U
Aroclor 1232	50	U
Aroclor 1242	50	U
Aroclor 1248	50	U
Aroclor 1254	50	U
Aroclor 1260	**2000**	S
Aroclor 1262	50	U
Aroclor 1268	50	U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	84	30-150
Decachlorobiphenyl	86	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

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Quantitation Report (QT Reviewed)

TBS 2/11/08

Data File : D:\HPCHEM\2\DATA\FEB07\PS0206L.D\ECD1A.CH Vial: 11
Acq On : 7 Feb 2008 7:36 pm Operator:
Sample : PS020608LCS08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : D:\HPCHEM\2\DATA\FEB07\PS0206L.D\ECD2B.CH Vial: 11
Acq On : 7 Feb 2008 7:36 pm Operator:
Sample : PS020608LCS Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 8 12:30 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	1086520	850129	84.203m	80.145
Spiked Amount 100.000 Range 30 - 150 Recovery =					84.20%	80.14%
12) s DCB - Surrogate	26.07	25.00	1721323	1299639	86.474	80.131m
Spiked Amount 100.000 Range 30 - 150 Recovery =					86.47%	80.13%
Target Compounds						
2) L1 A1016 1	7.86	7.34	270264	213972	914.868	863.153
3) L1 A1016 2	9.21	8.70	353402	127130	961.172m	928.006
4) L1 A1016 3	10.08	9.61	422553	337292	956.035	893.984m
5) L1 A1016 4	10.65	9.87	257436	209750	969.121	909.014m(C)
6) L1 A1016 5	11.25	10.81	319910	254714	937.144 (C)	890.596m(C)
Sum A1016 1			1623565	1142858	4738.340	4484.754
Average A1016 1					947.668	896.951
7) L7 A1260 1	17.27	15.16	495502	577936	820.784	941.671m
8) L7 A1260 2	18.11	16.63	519898	400714	852.723	766.539m
9) L7 A1260 3	20.10	17.63	698058	435340	910.250	809.854m
10) L7 A1260 4	20.56	19.75	395760	773437	729.309m	832.049
11) L7 A1260 5	22.58	22.03	415811	328394	776.707	733.484
Sum A1260 1			2525029	2515821	4089.773	4083.596
Average A1260 1					817.955	816.719
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

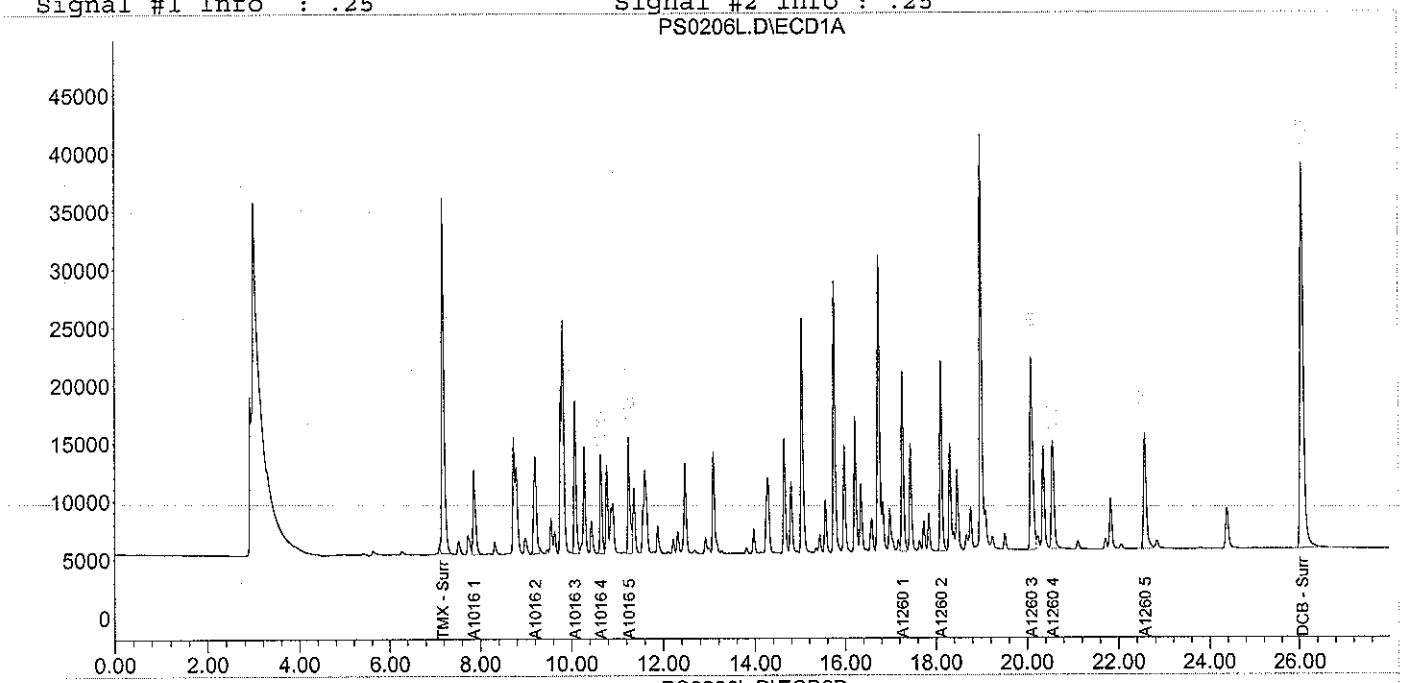
Quantitation Report

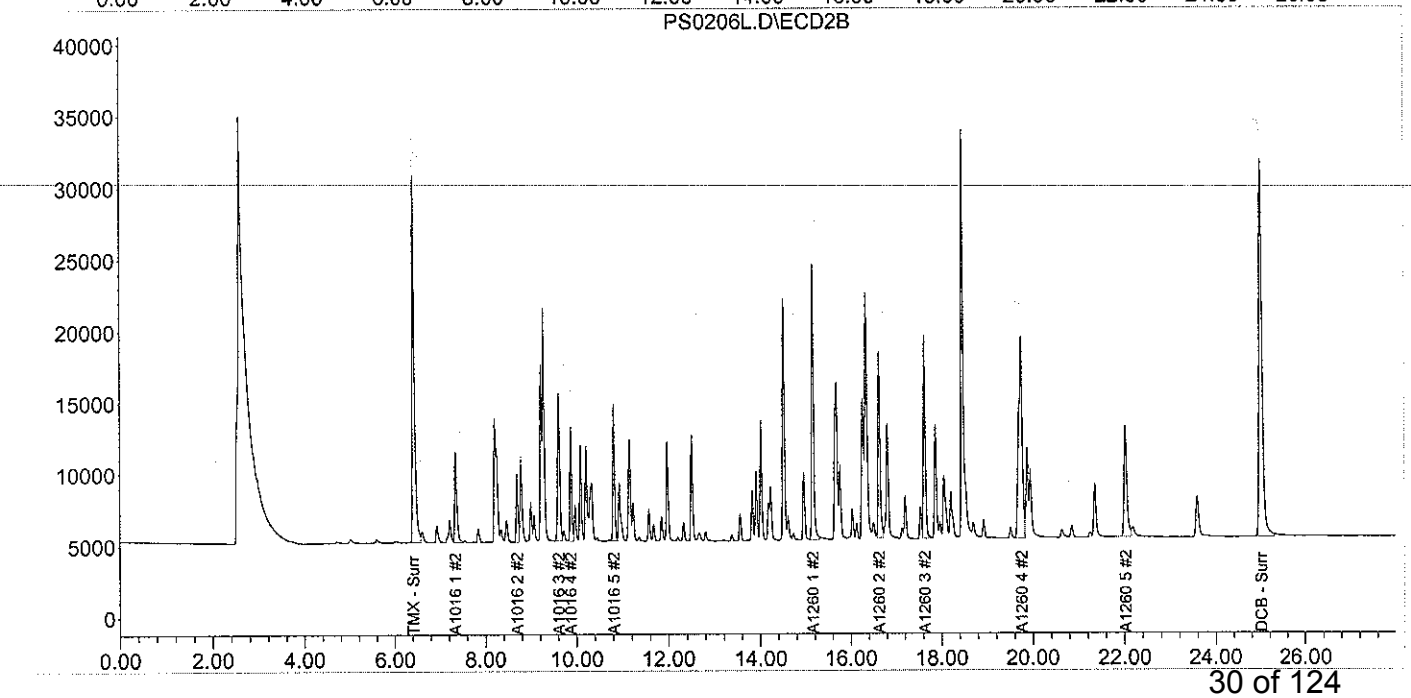
Data File : D:\HPCHEM\2\DATA\FEB07\PS0206L.D\ECD1A.CH Vial: 11
Acq On : 7 Feb 2008 7:36 pm Operator:
Sample : PS020608LCS08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : D:\HPCHEM\2\DATA\FEB07\PS0206L.D\ECD2B.CH Vial: 11
Acq On : 7 Feb 2008 7:36 pm Operator:
Sample : PS020608LCS Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 8 12:30 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **PS020608LCSD09**
Associated Blank: **PS020608B11**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	02/06/08	02/07/08	100	2.00	5	1	JBS

Parameter	Result	
Aroclor 1016	**2300**	S
Aroclor 1221	50	U
Aroclor 1232	50	U
Aroclor 1242	50	U
Aroclor 1248	50	U
Aroclor 1254	50	U
Aroclor 1260	**2000**	S
Aroclor 1262	50	U
Aroclor 1268	50	U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	81	30-150
Decachlorobiphenyl	84	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

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Quantitation Report (QT Reviewed)

BS 2/11/08

Data File : D:\HPCHEM\2\DATA\FEB07\PS0207D.D\ECD1A.CH Vial: 12
Acq On : 7 Feb 2008 8:08 pm Operator:
Sample : PS020608LCSD09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : D:\HPCHEM\2\DATA\FEB07\PS0207D.D\ECD2B.CH Vial: 12
Acq On : 7 Feb 2008 8:08 pm Operator:
Sample : PS020608LCSD Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 8 12:34 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	1051128	813955	81.188m	76.356
Spiked Amount 100.000 Range 30 - 150 Recovery =					81.19%	76.36%
12) s DCB - Surrogate	26.08	25.01	1683676	1269572	84.192	77.930m
Spiked Amount 100.000 Range 30 - 150 Recovery =					84.19%	77.93%
Target Compounds						
2) L1 A1016 1	7.86	7.34	257062	200836	864.277	802.487m
3) L1 A1016 2	9.21	8.70	353555	120846	961.641	876.699
4) L1 A1016 3	10.08	9.61	413038	326814	931.253	862.795m
5) L1 A1016 4	10.65	9.87	249241	202162	933.041	873.381m(C)
6) L1 A1016 5	11.25	10.81	310163	249266	905.567 (C)	868.860 (C)
Sum A1016 1			1583059	1099924	4595.779	4284.221
Average A1016 1					919.156	856.844
7) L7 A1260 1	17.27	15.16	484845	560610	800.494	908.775m
8) L7 A1260 2	18.12	16.63	509609	403182	833.613	772.024
9) L7 A1260 3	20.10	17.63	689242	431777	897.581m	802.449
10) L7 A1260 4	20.57	19.75	390248	761064	718.106m	817.314
11) L7 A1260 5	22.58	22.03	404817	322677	754.176	719.403
Sum A1260 1			2478760	2479310	4003.970	4019.966
Average A1260 1					800.794	803.993
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

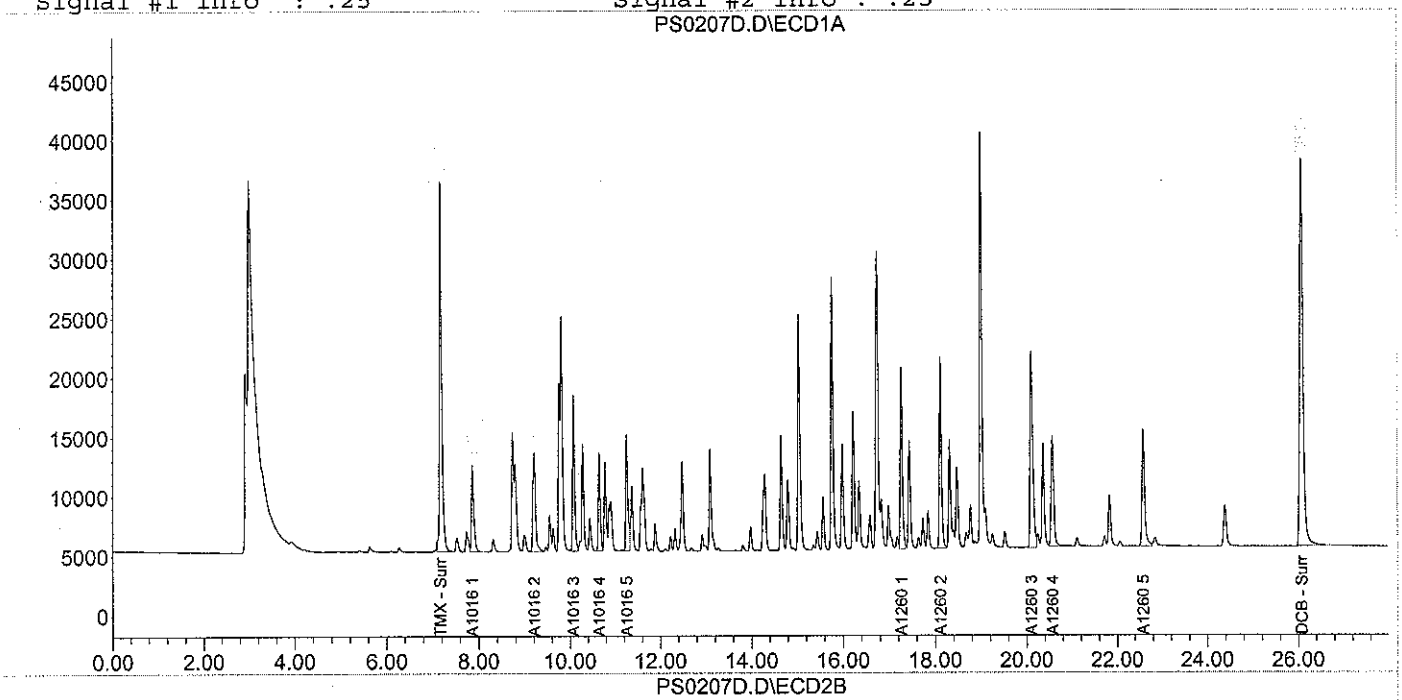
Quantitation Report

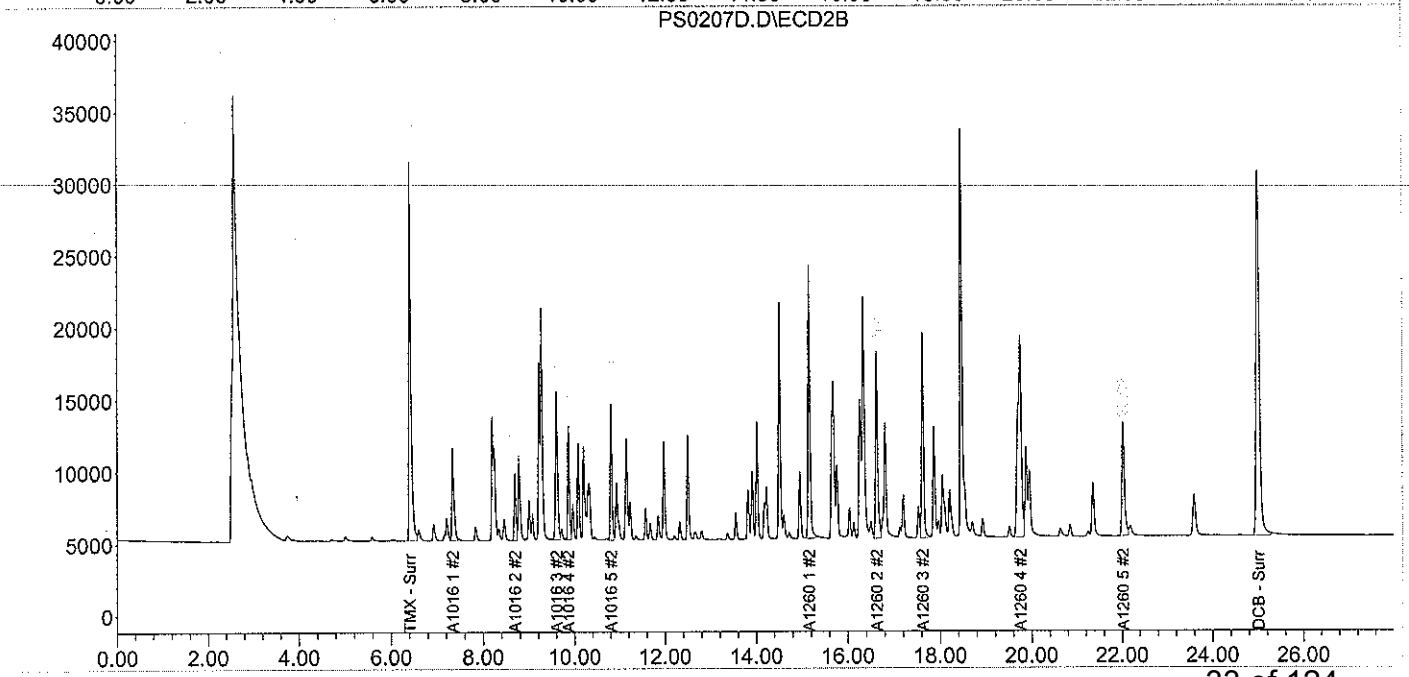
Data File : D:\HPCHEM\2\DATA\FEB07\PS0207D.D\ECD1A.CH Vial: 12
Acq On : 7 Feb 2008 8:08 pm Operator:
Sample : PS020608LCSD09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint1.e

Data File : D:\HPCHEM\2\DATA\FEB07\PS0207D.D\ECD2B.CH Vial: 12
Acq On : 7 Feb 2008 8:08 pm Operator:
Sample : PS020608LCSD Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Feb 8 12:34 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Supporting Quality Control Results

Form II
Surrogate Recovery
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Matrix: **Solid**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

		Column 1		Column 2	
Client ID	**Lab ID**	**TMX**	**Decachlorobiphenyl**	**TMX**	**Decachlorobiphenyl**
Blank	PS020608B11	85	84	80	78
LCS	PS020608LCS08	84	86	80	80
LCSD	PS020608LCSD09	81	84	76	78
Silo 6-121907-1318	0801049-02	62	54	60	52
Silo 6-121907-1318	0801049-02 D	76	53	70	52
Silo 3-121907-1249	0801049-01	48	46	48	46

N/A - Not Applicable

Surrogate	QC Limits
Tetrachloro-meta-xylene (TMX)	30-150
Decachlorobiphenyl	30-150

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Form IV
Method Blank Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **PS020608B11**
Date Analyzed: **02/07/08 18:02**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

Client ID	Lab ID	Date/Time Analyzed
LCS	PS020608LCS08	02/07/08 19:36
LCSD	PS020608LCSD09	02/07/08 20:08
Silo 6-121907-1318	0801049-02	02/08/08 09:42
Silo 6-121907-1318	0801049-02 D	02/08/08 10:14
Silo 3-121907-1249	0801049-01	02/08/08 10:45

N/A - Not Applicable

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Calibration Status Report HP ECD2

Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:34:51 2008
Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
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2	50	-1.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020103.D
3	100	-1.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020104.D
4	250	-1.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020105.D
5	500	-1.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020106.D
6	1000	1000.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020107.D
8	5000	5000.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020110.D
9	25	25.00	0.00	D:\HPCHEM\2\DATA\FEB01\I1020102.D
	1500			I102010208
	2000			I102010209

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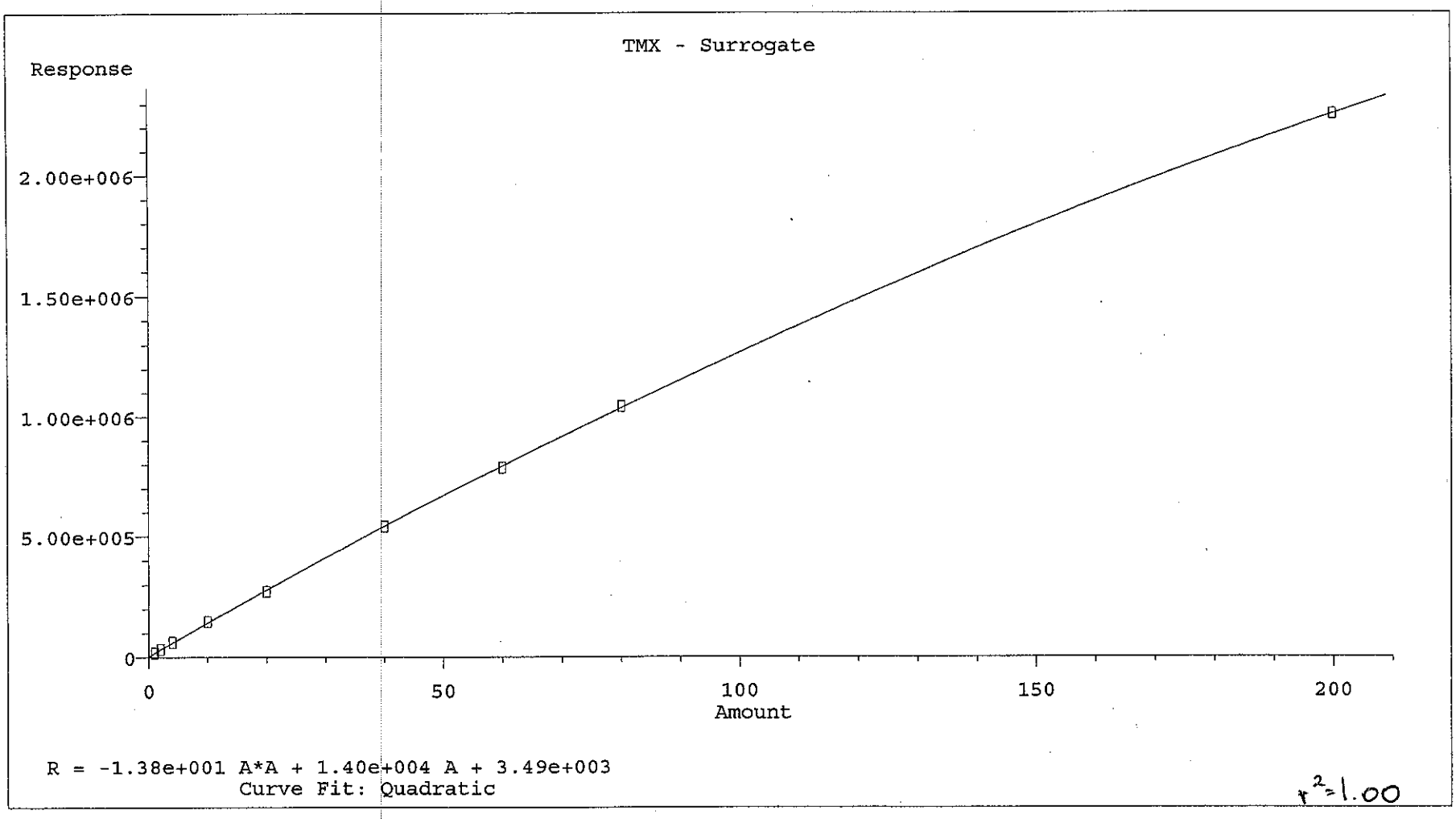
2	50	Feb 03 08:30 2008	Feb 03 08:14 19108	
3	100	Feb 03 08:30 2008	Feb 03 08:16 19108	
4	250	Feb 03 08:30 2008	Feb 03 08:18 19108	
5	500	Feb 03 08:30 2008	Feb 03 08:20 19108	
6	1000	Feb 03 08:31 2008	Feb 03 08:22 19108	
8	5000	Feb 03 08:31 2008	Feb 03 08:25 19108	
9	25	Feb 03 08:30 2008	Feb 03 08:12 19108	

A1020360.M Sun Feb 03 08:43:19 2008



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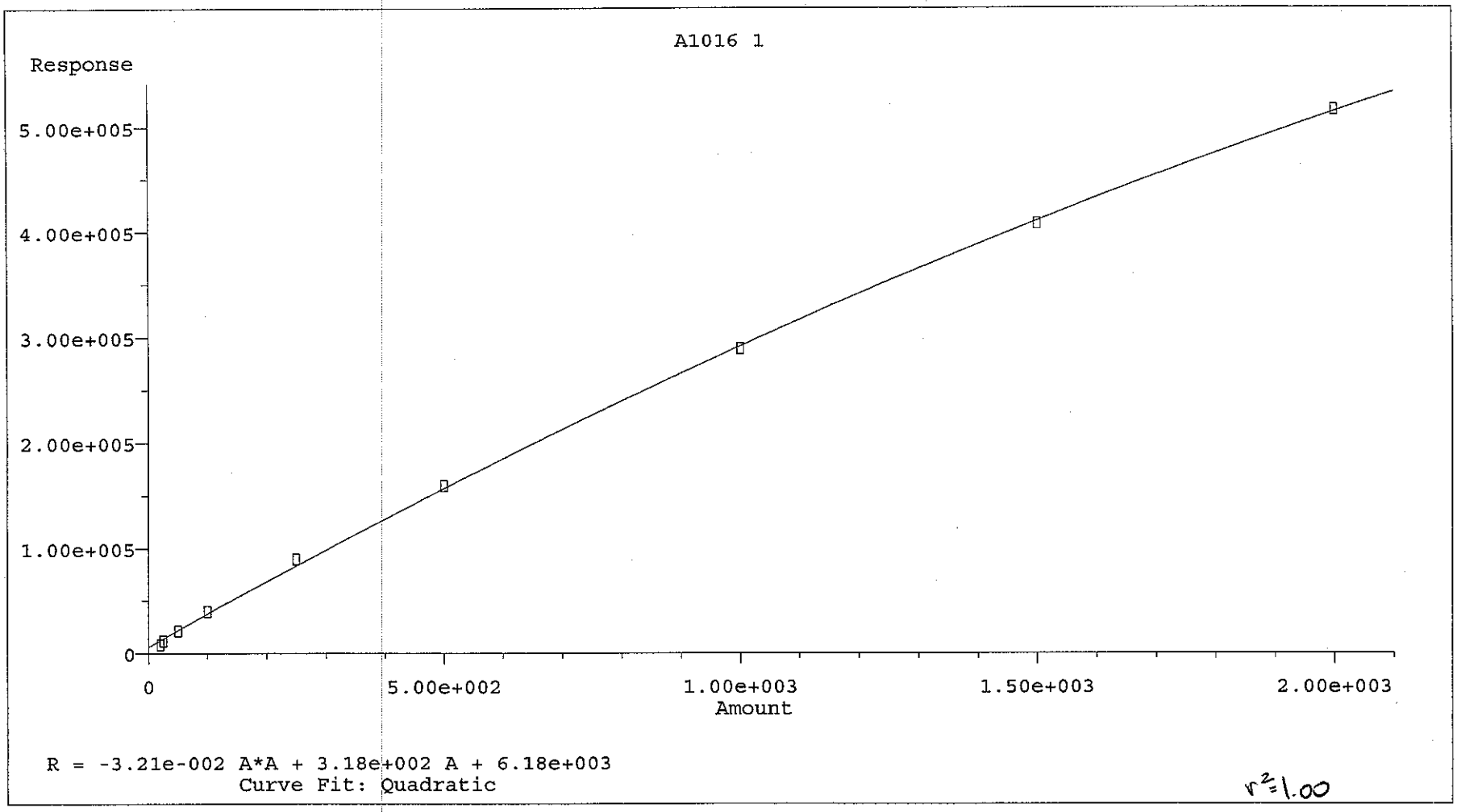
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



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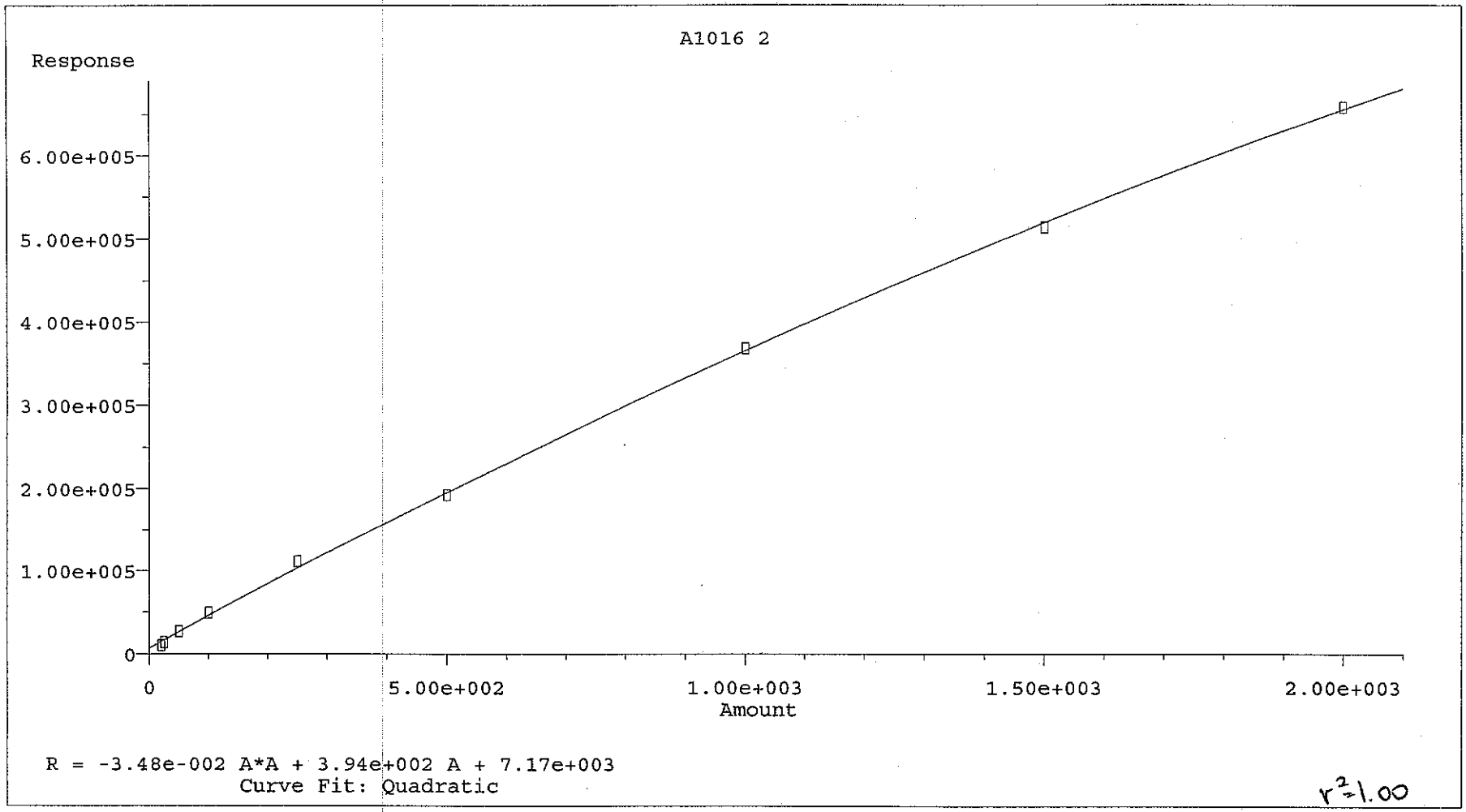
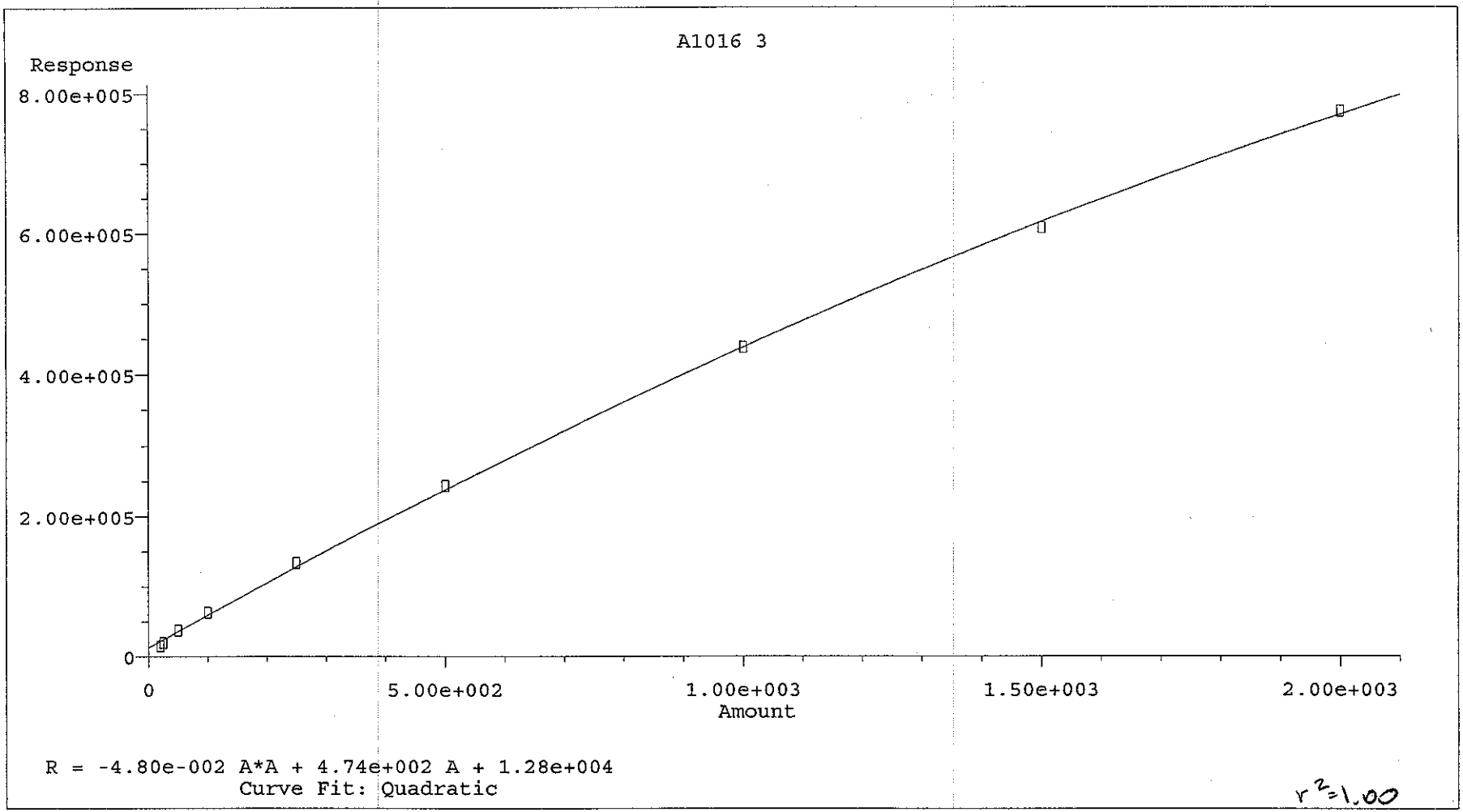
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



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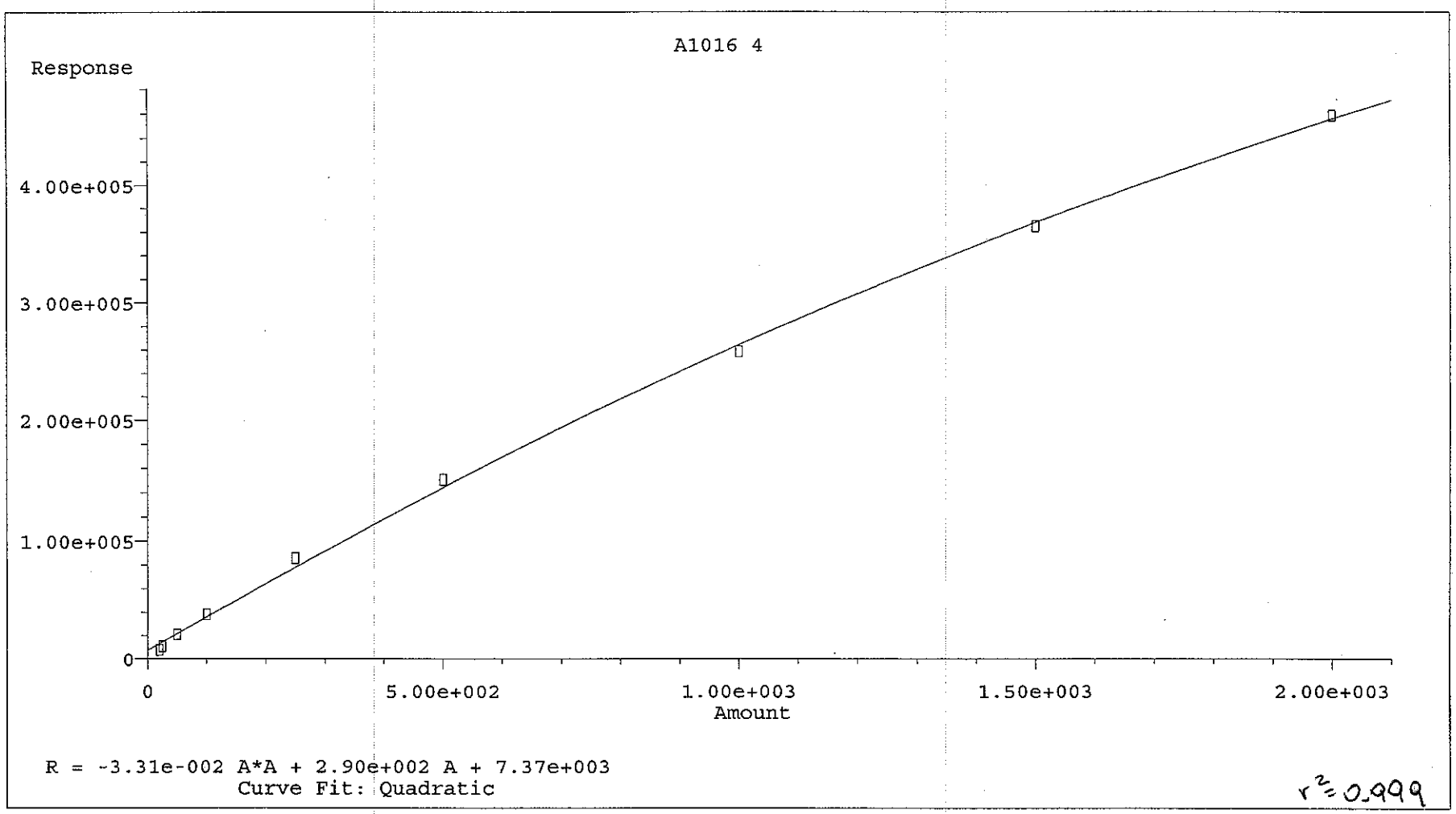
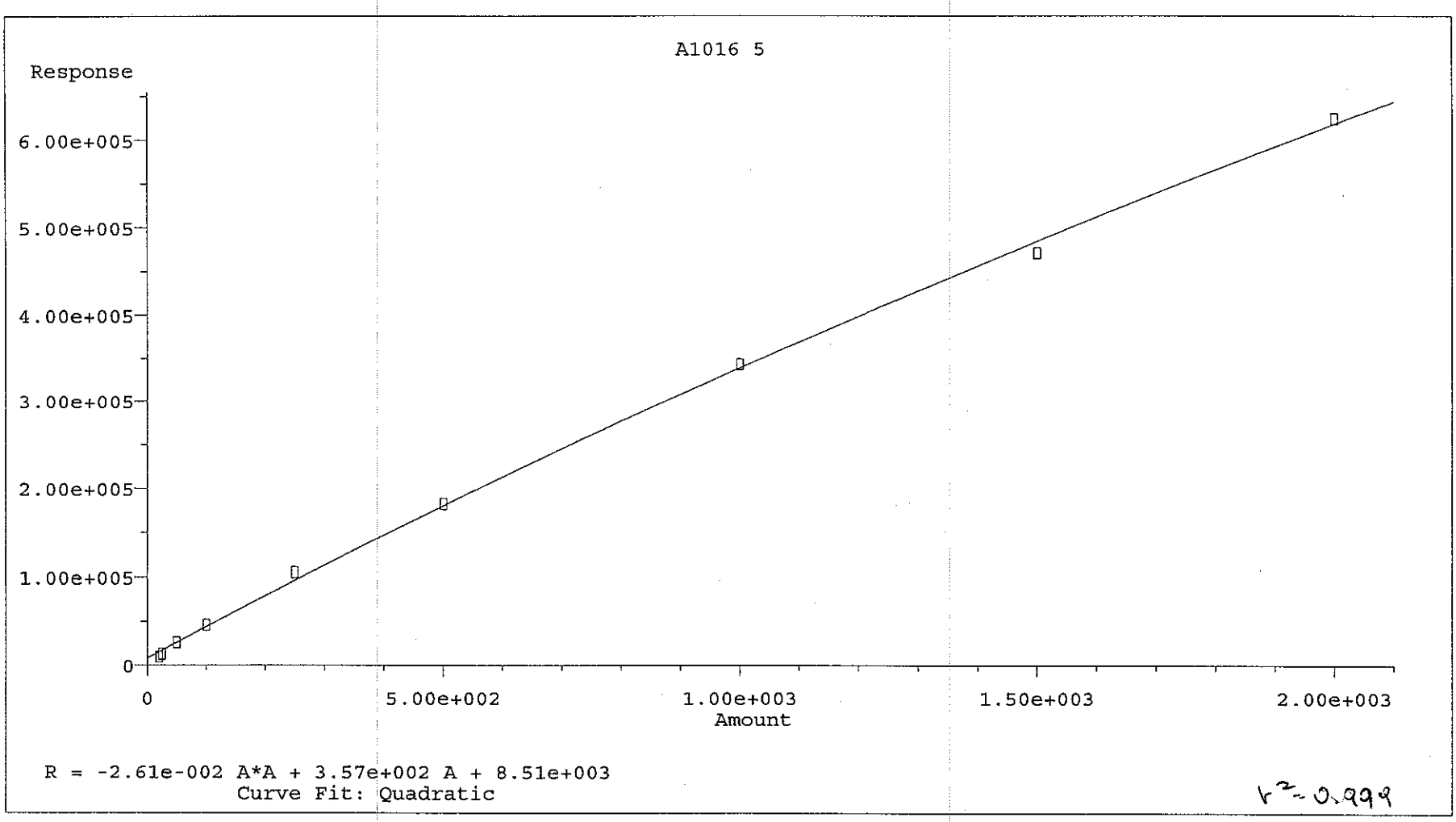
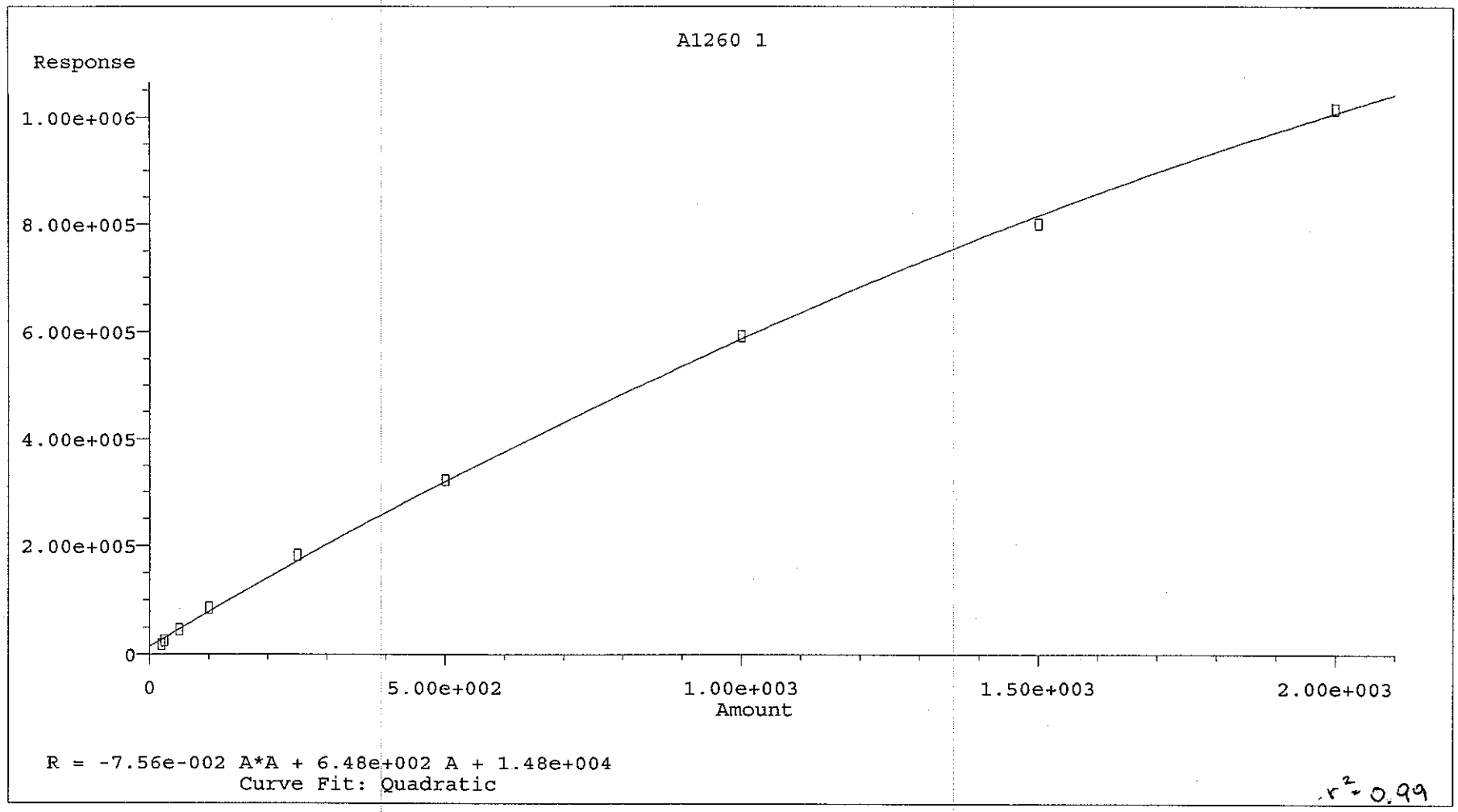
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



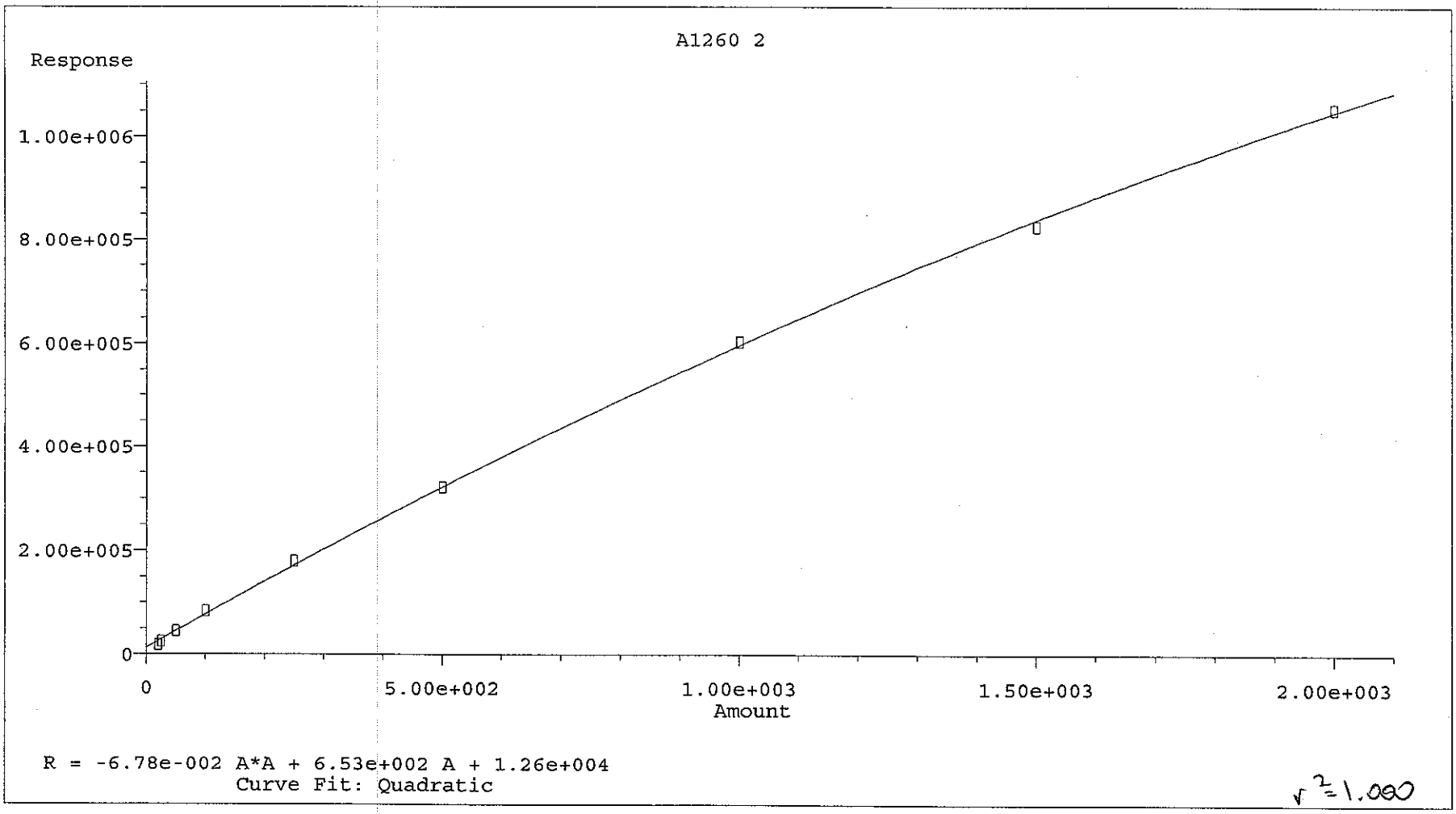
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



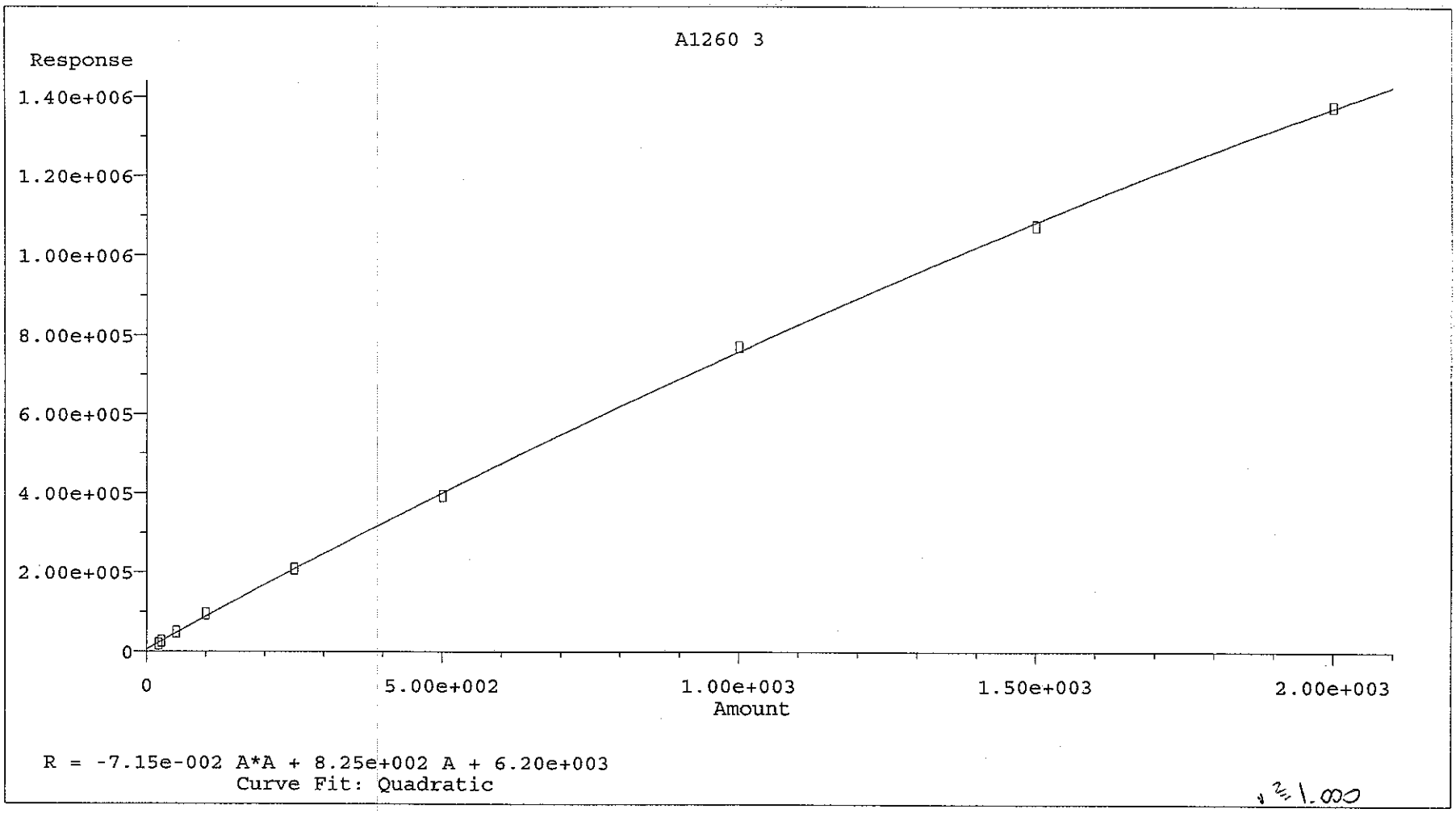
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



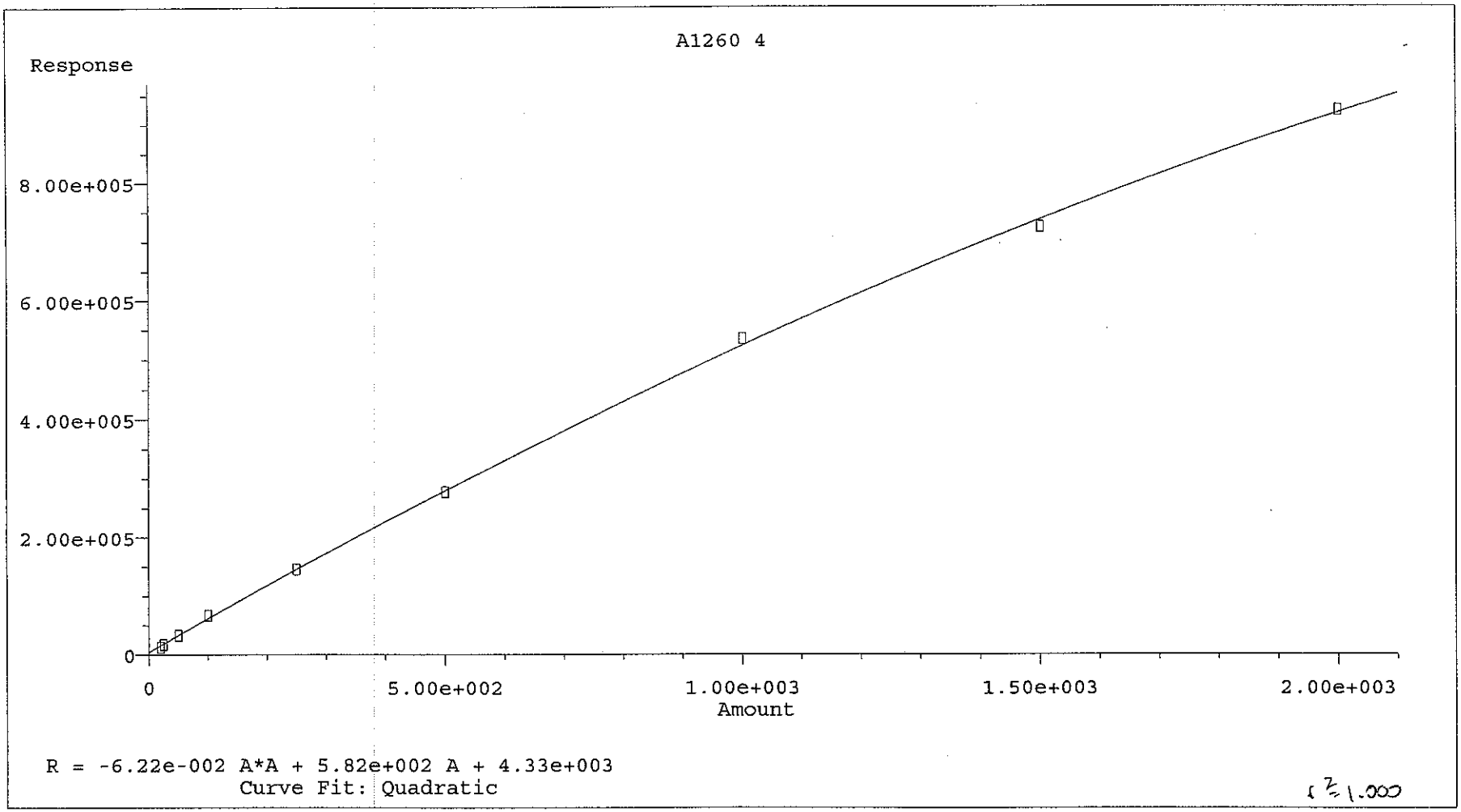
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



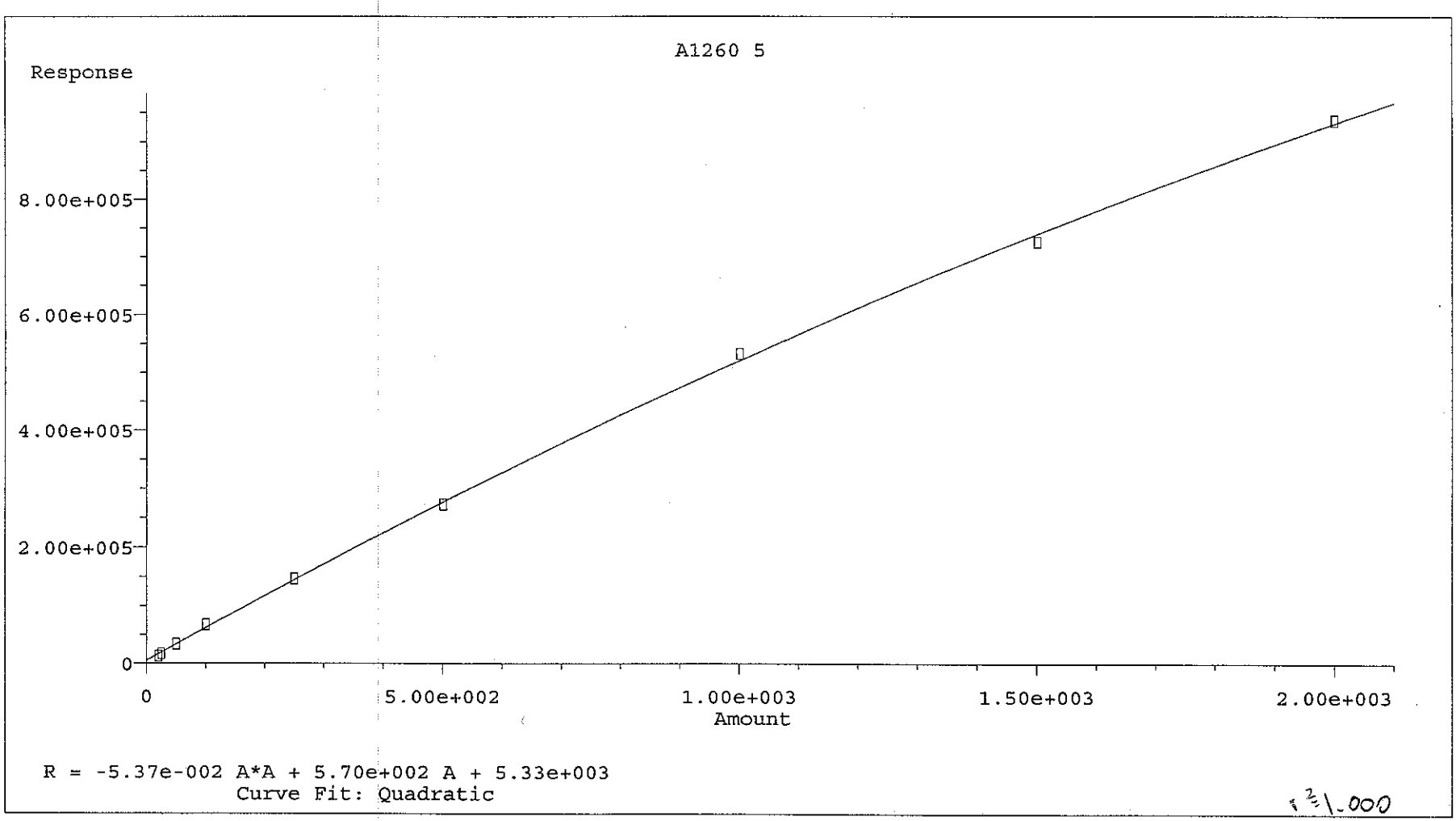
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



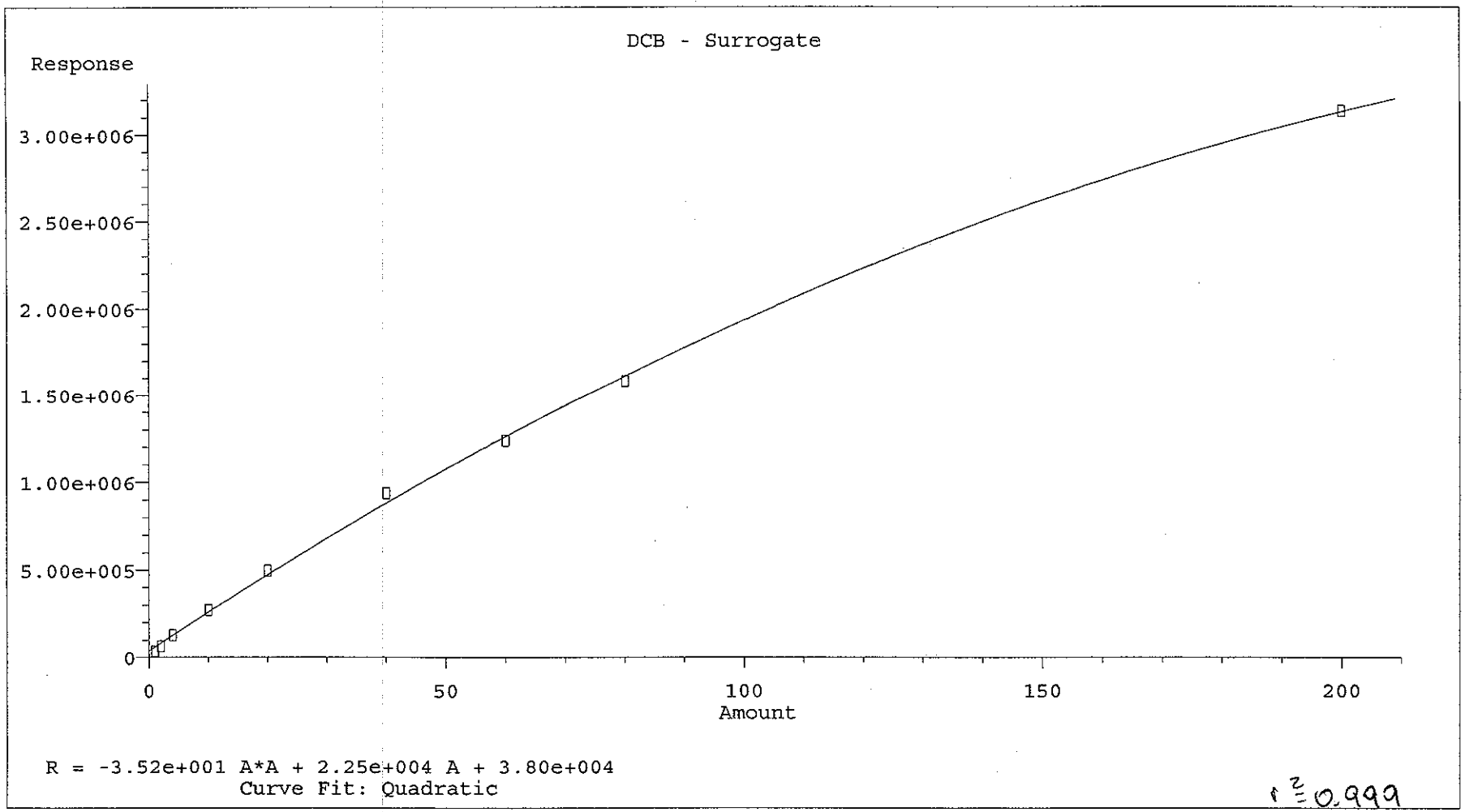
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



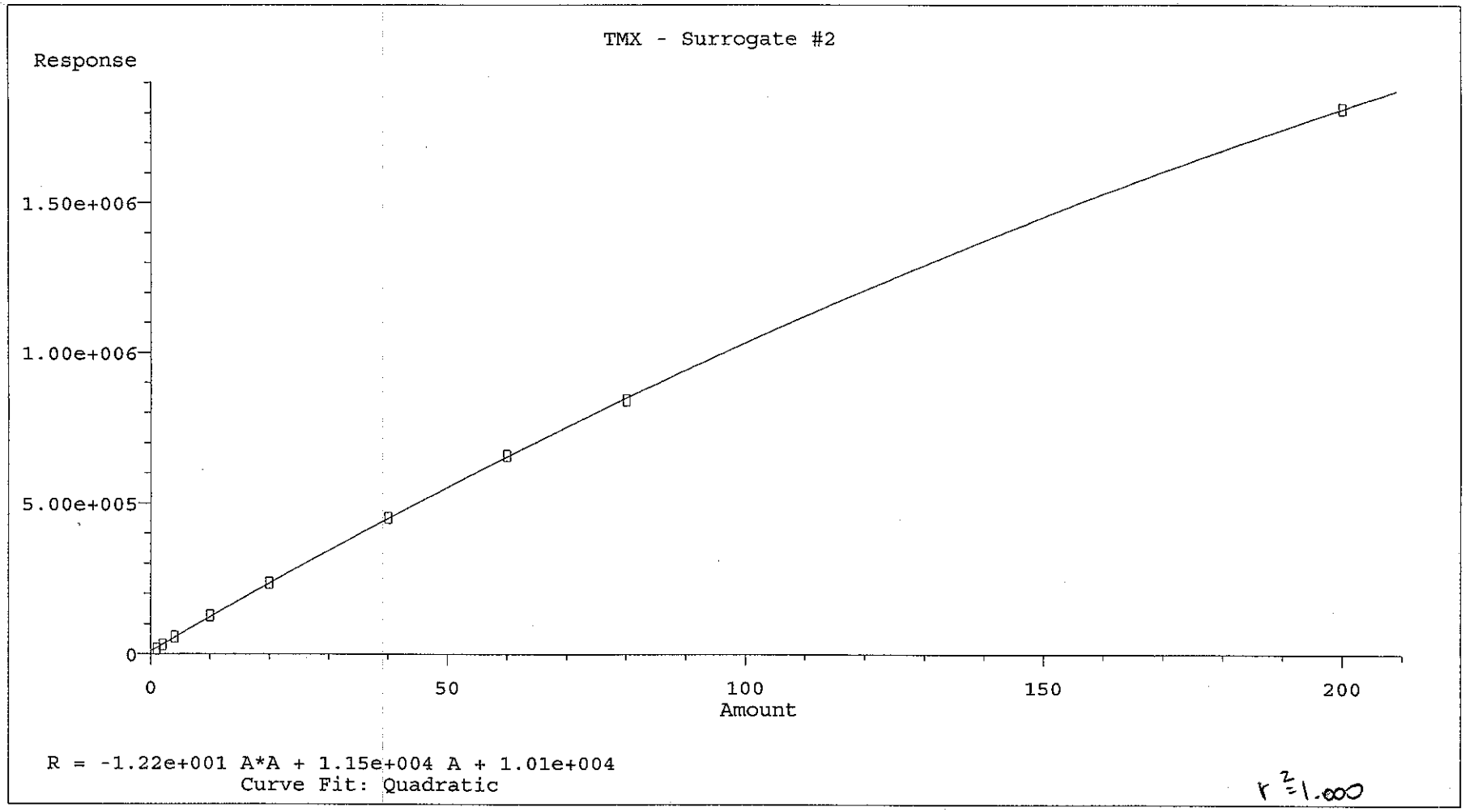
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



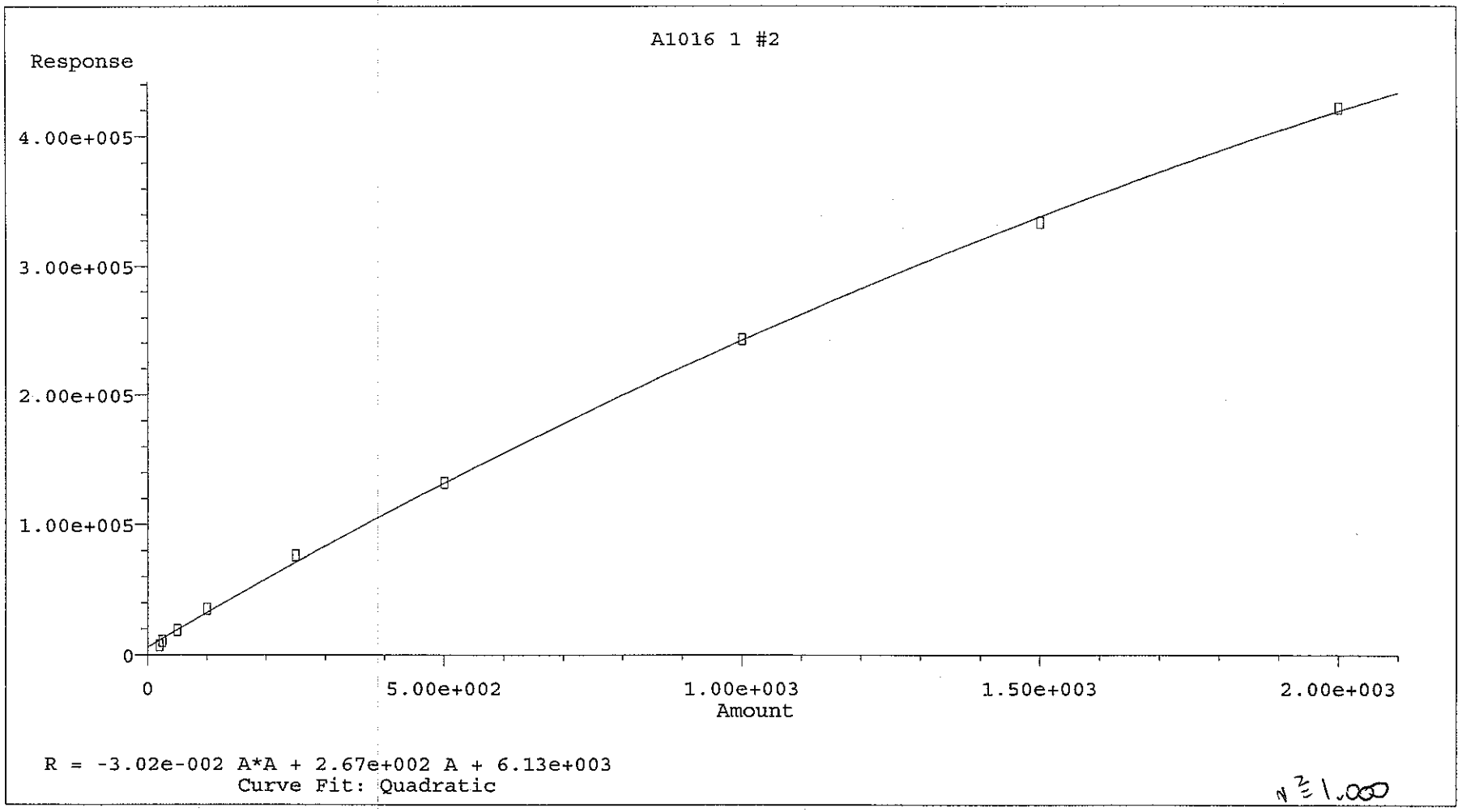
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



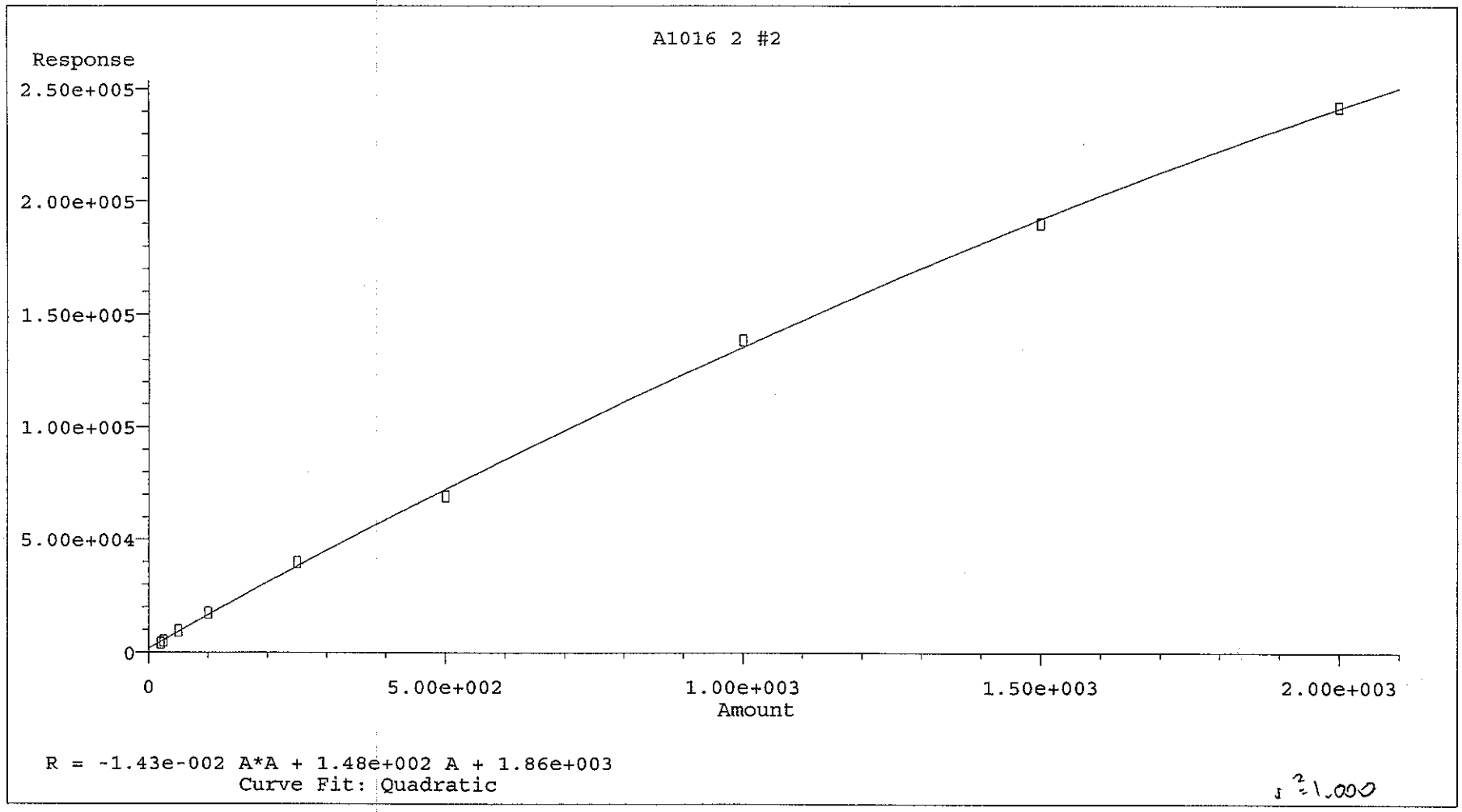
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



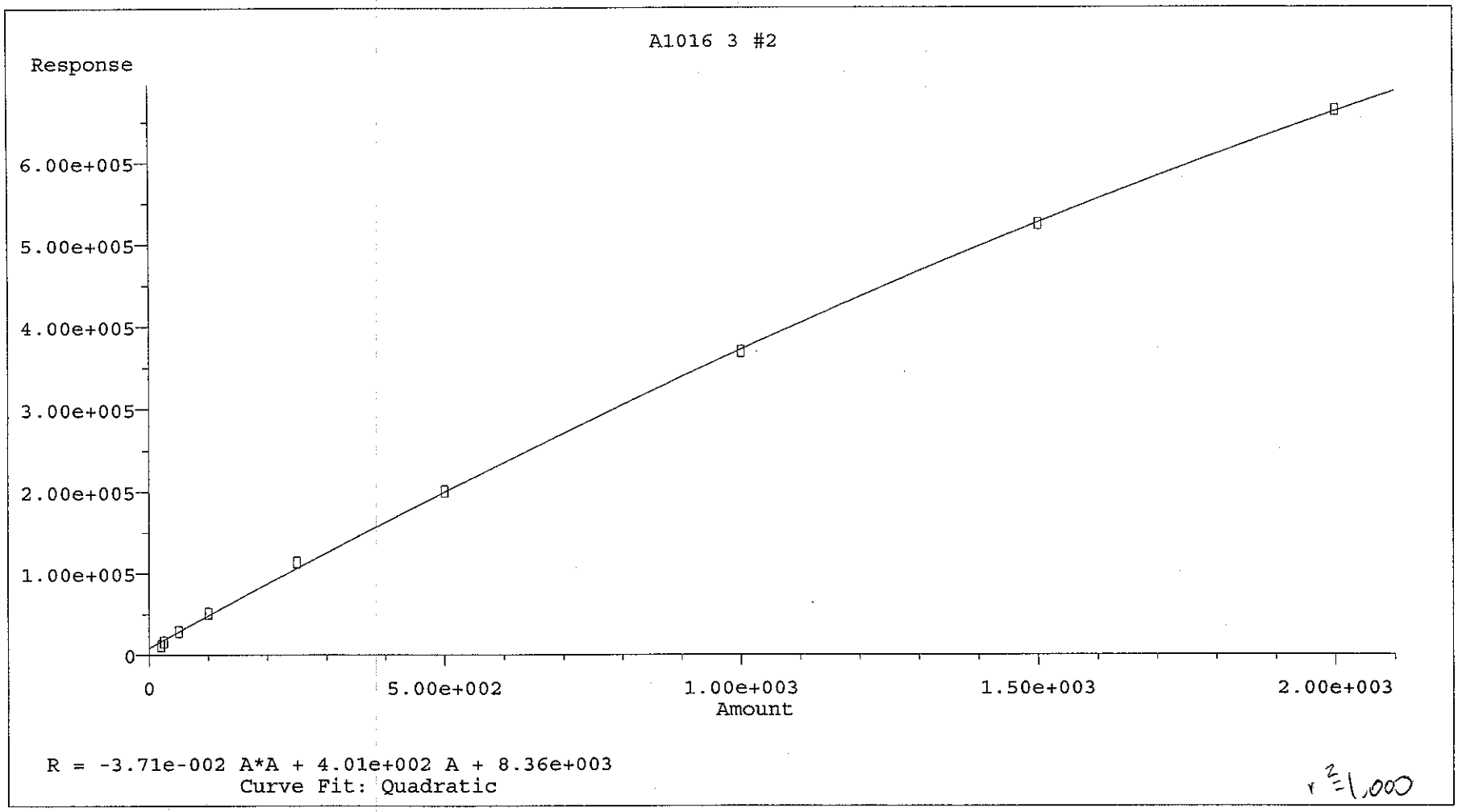
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



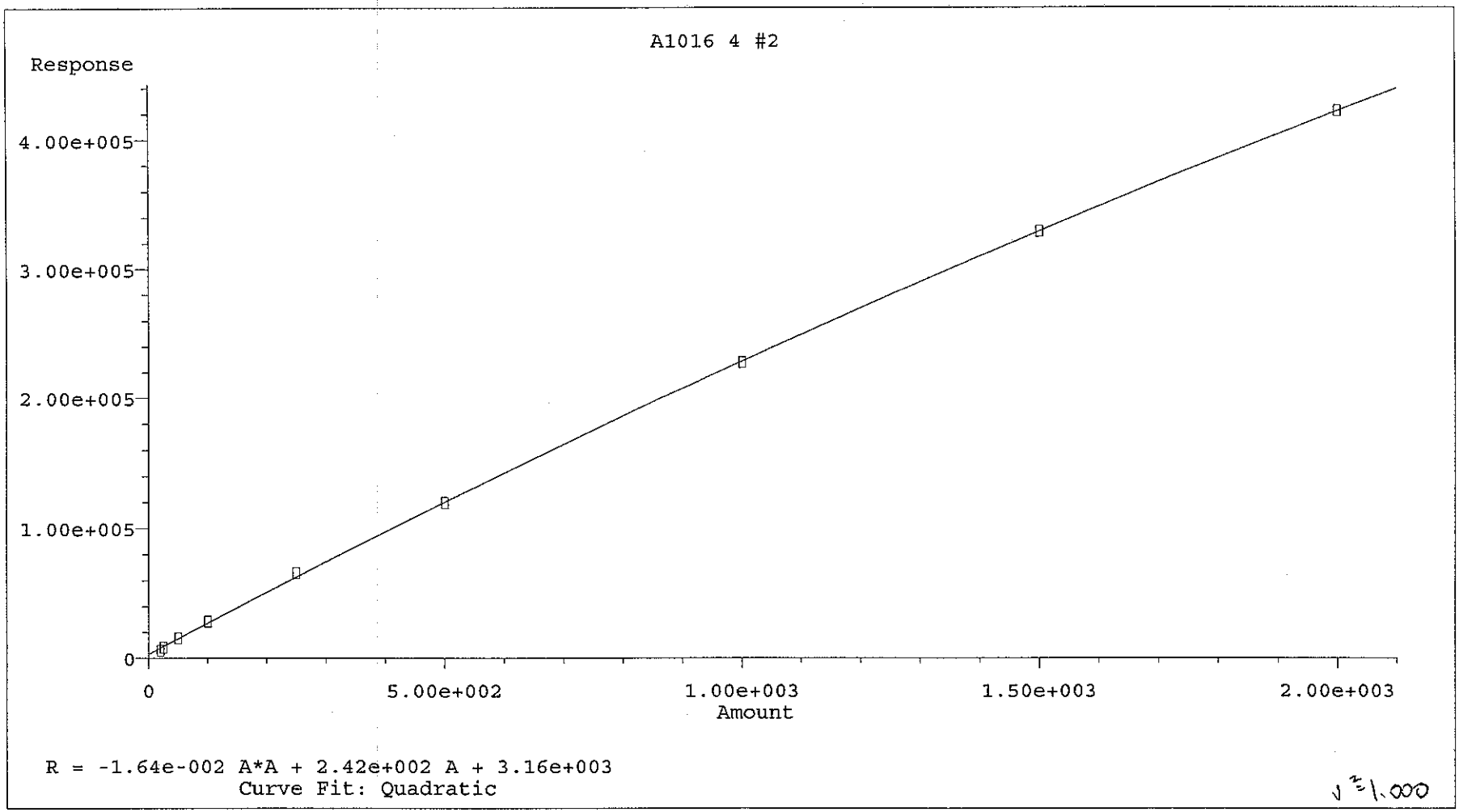
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



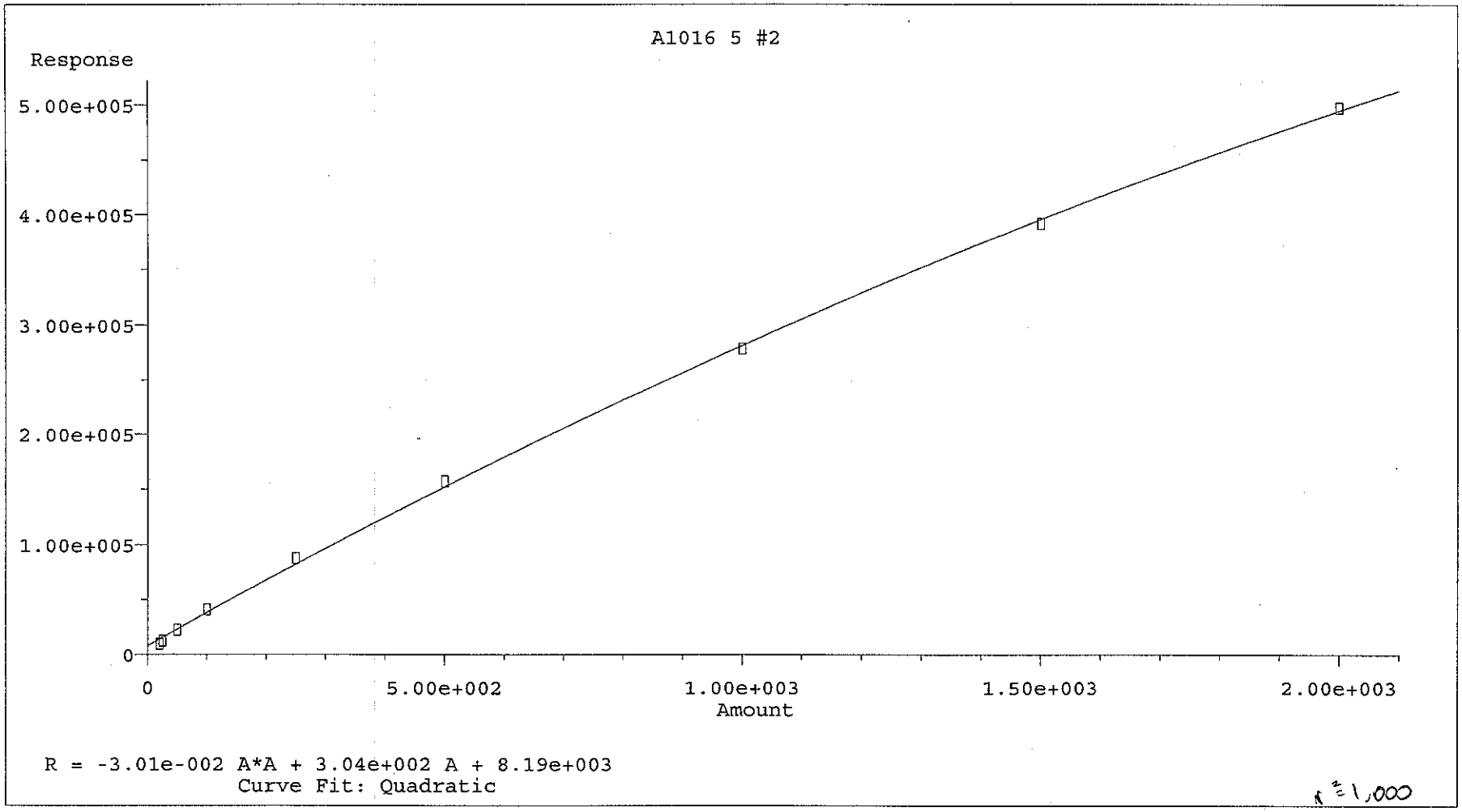
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



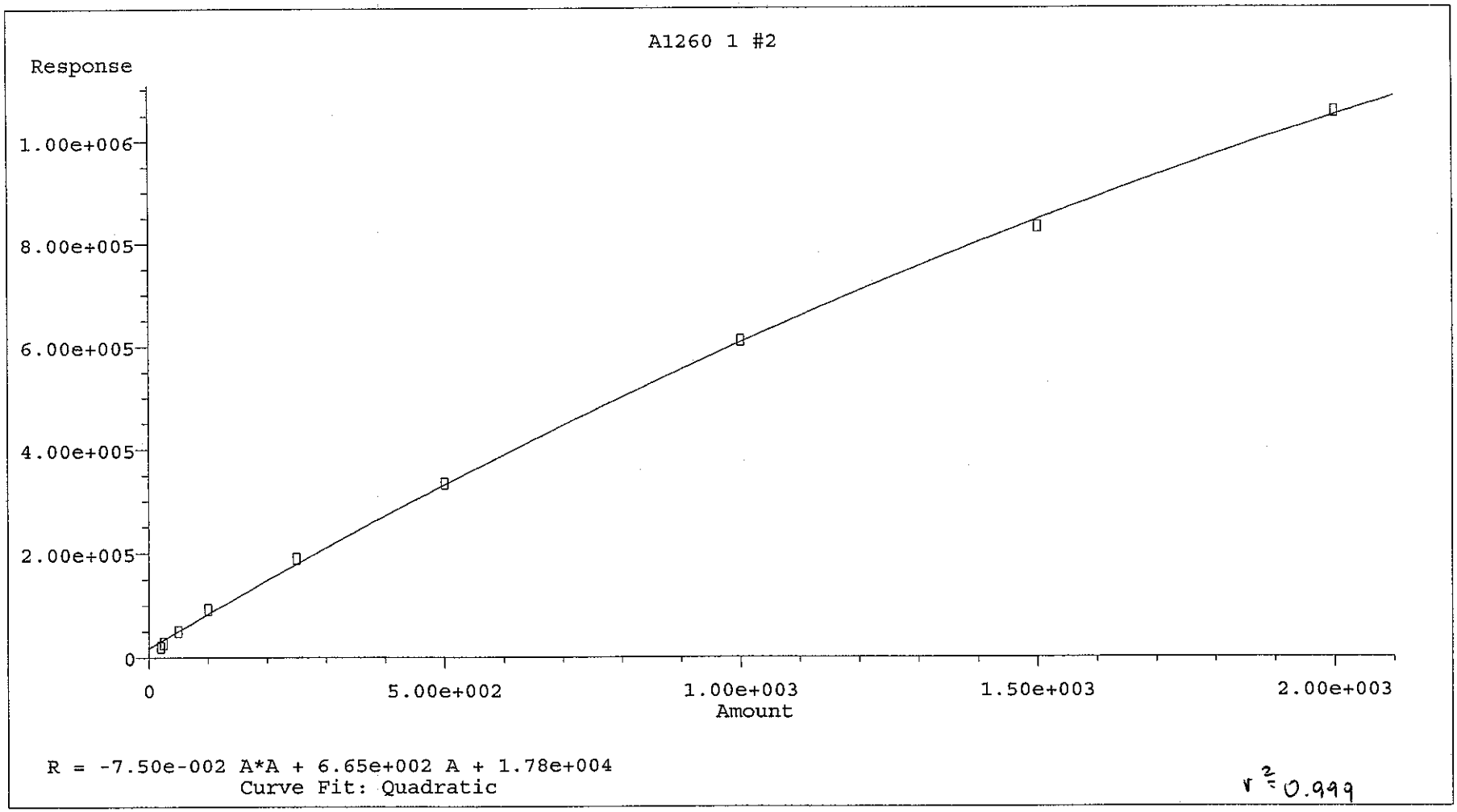
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



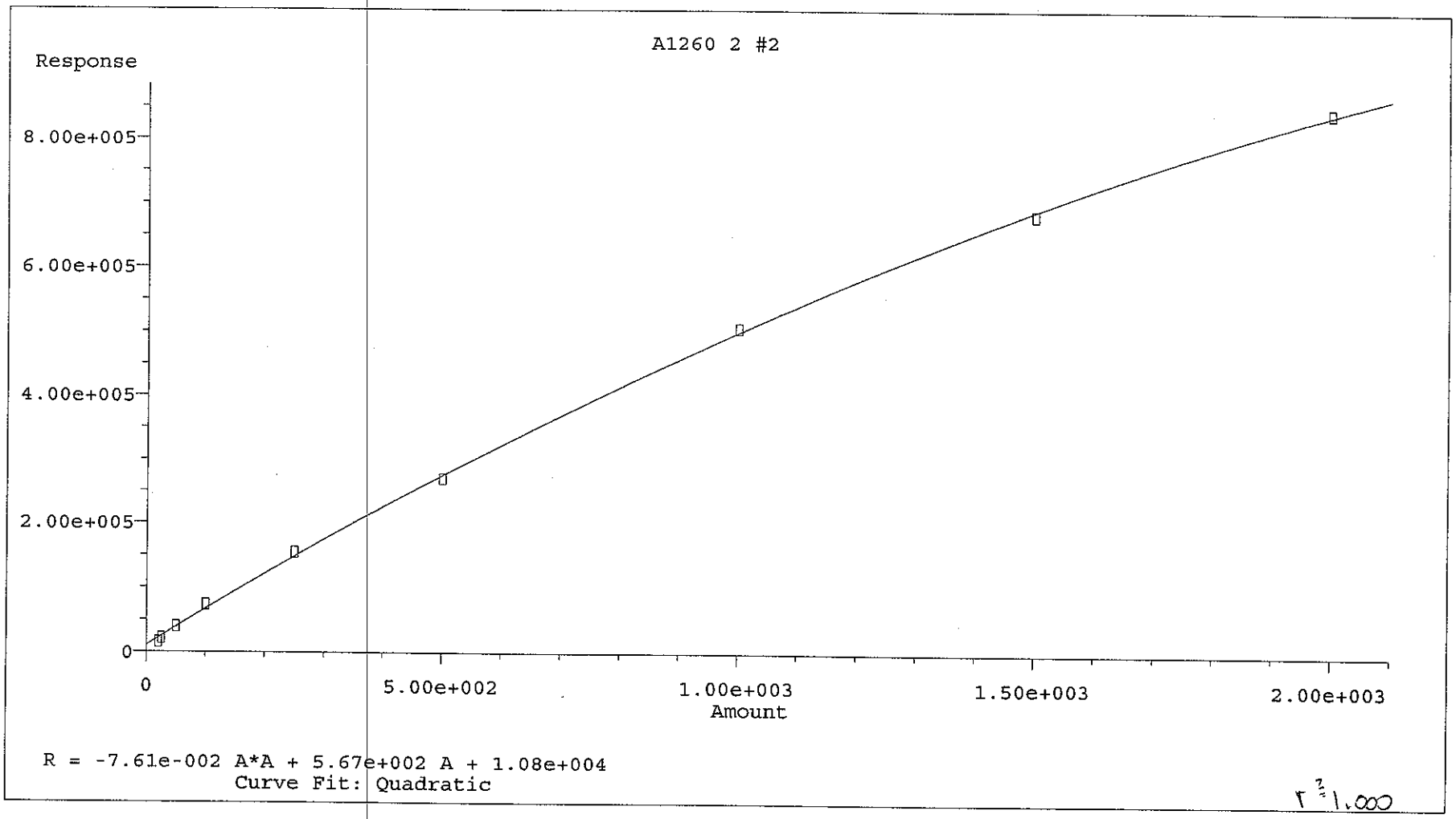
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



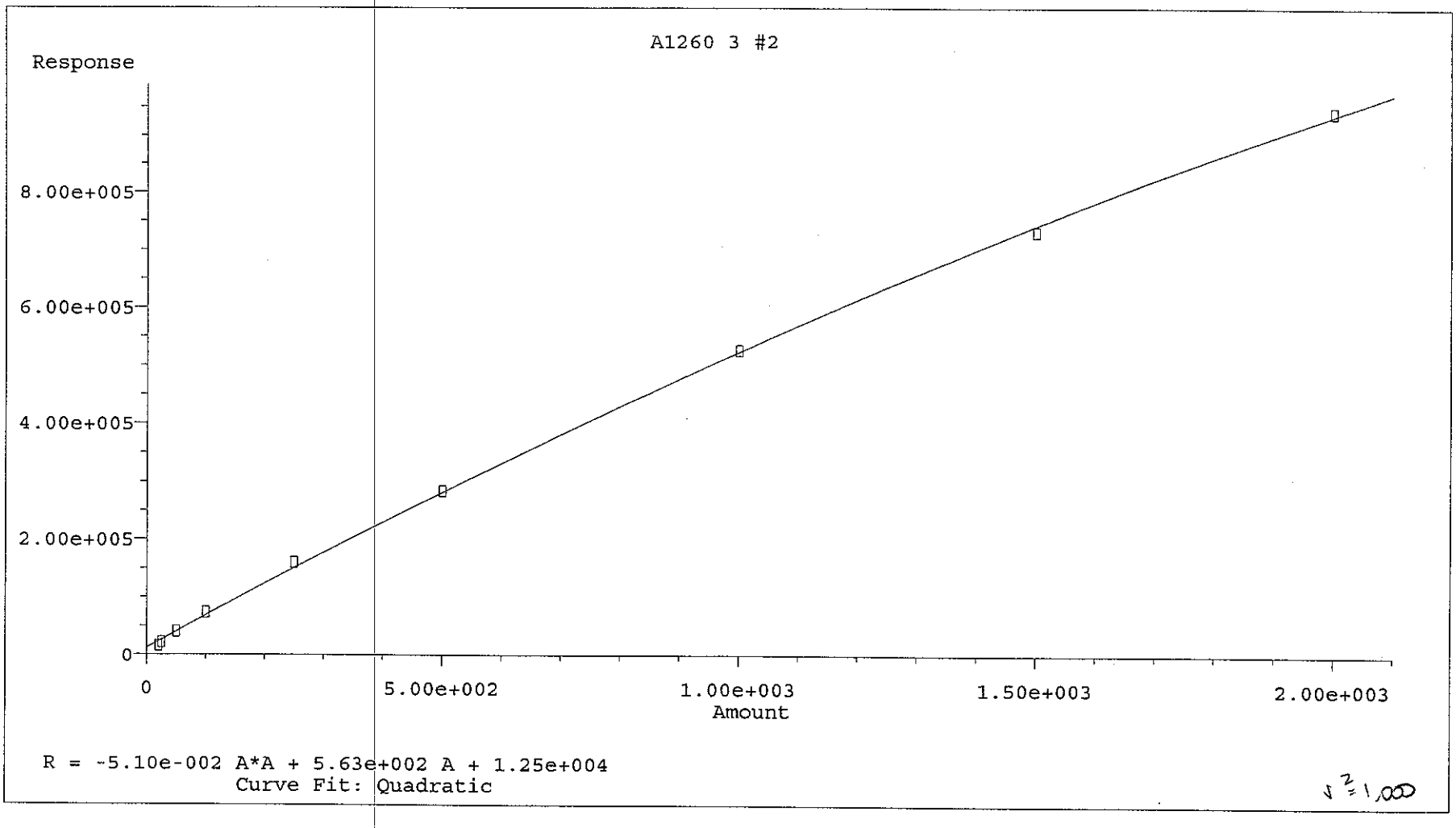
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



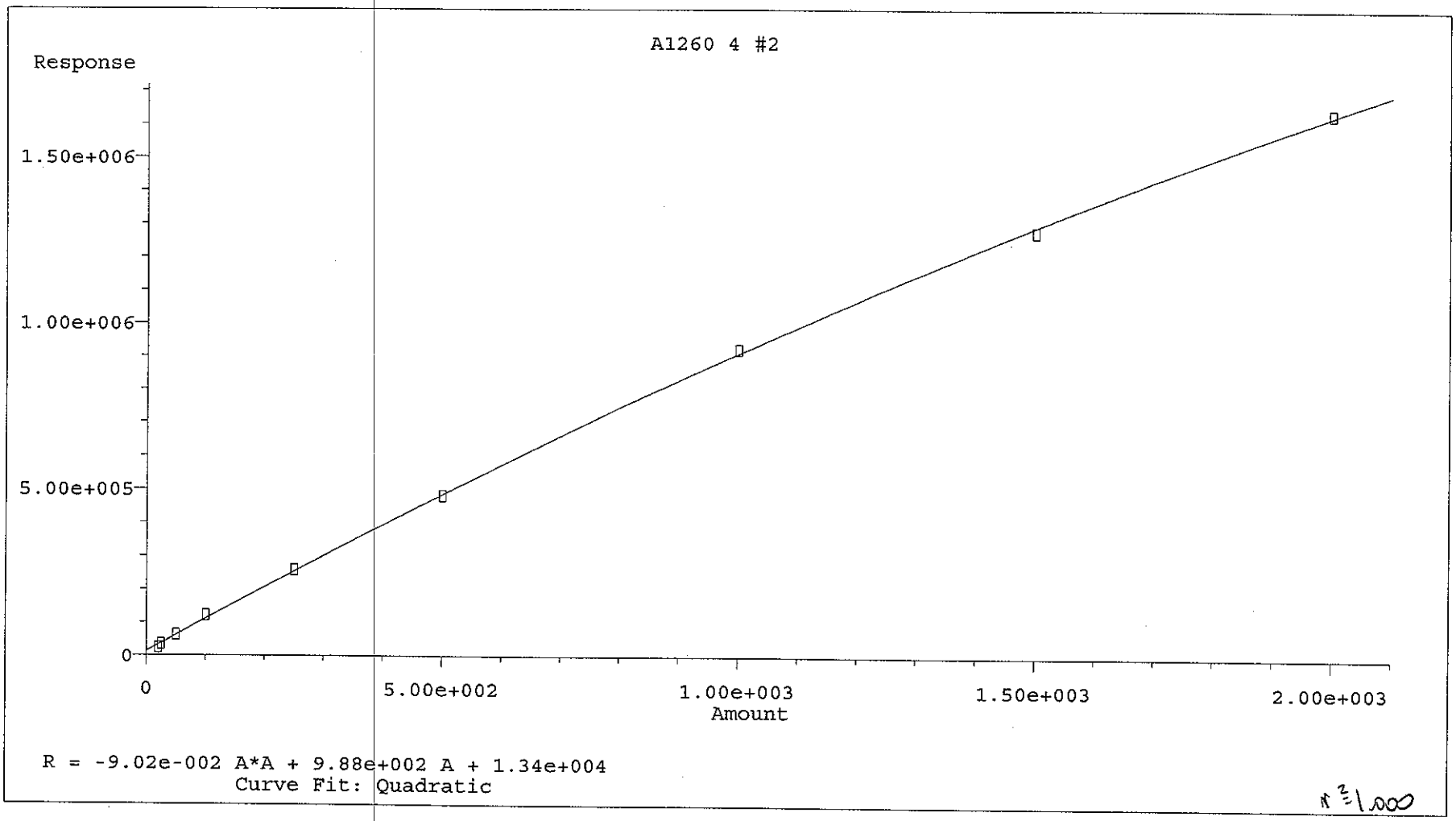
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:59:43 2008



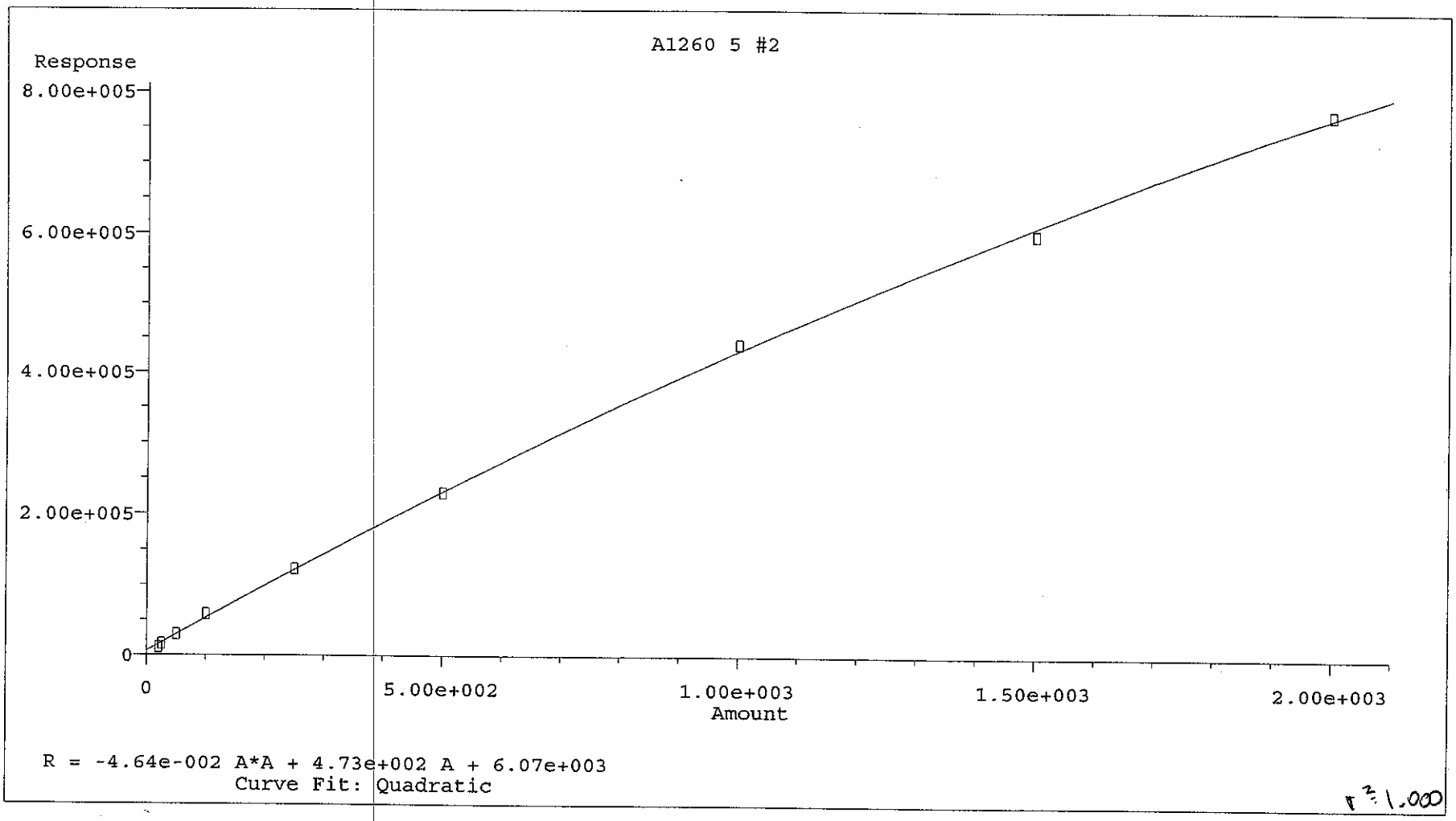
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



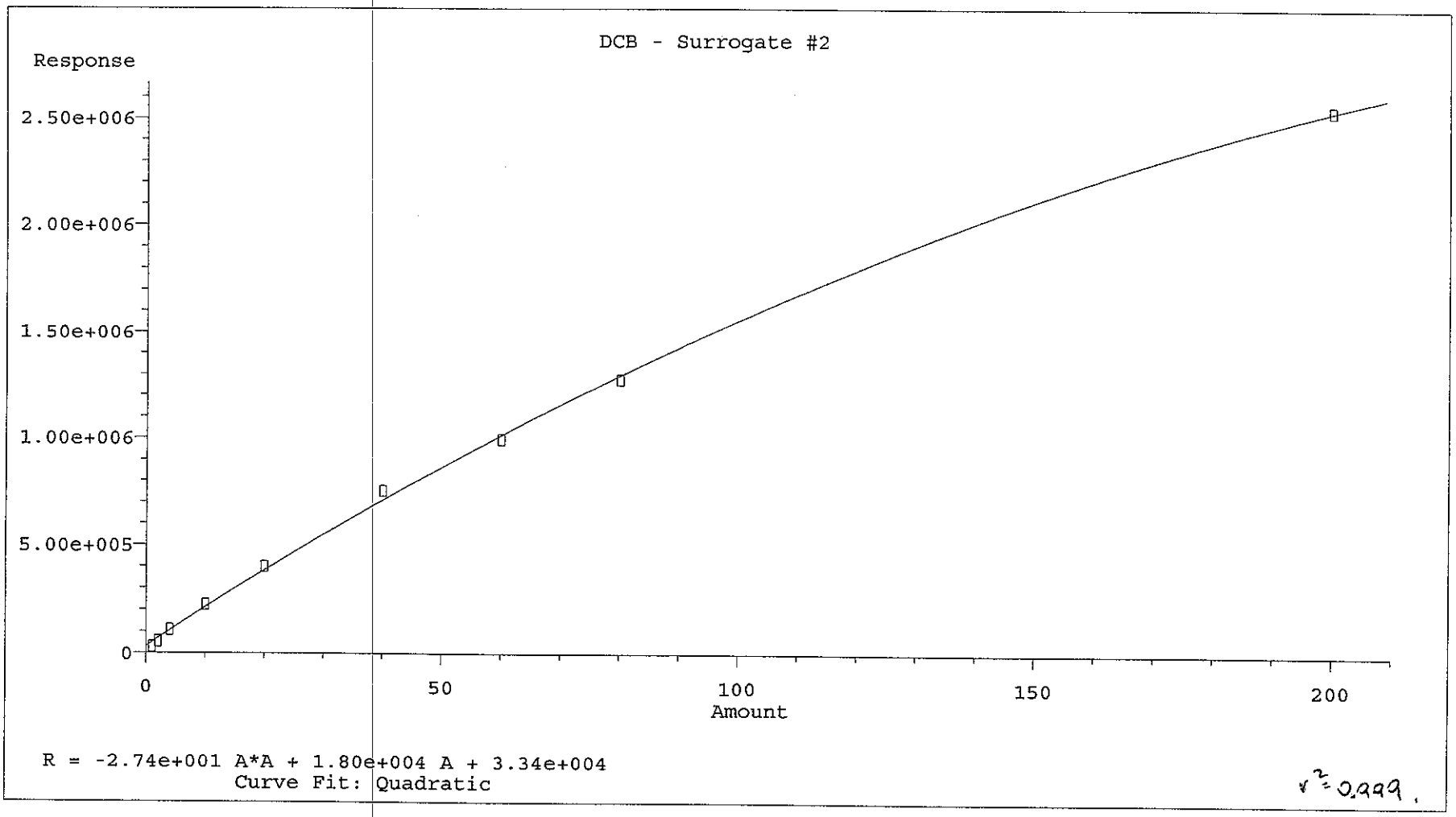
Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008



Method Name: D:\HPCHEM\2\METHODS\A1020360.M
Calibration Table Last Updated: Sun Feb 03 08:34:51 2008

Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD2B.CH
Acq On : 1 Feb 2008 9:35 pm Operator:
Sample : Q2020101 Inst : HP ECD2
Misc : PW020108A @1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:59:43 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1 A1016 1	1000.000	1092.096	-9.2	109	0.01
3	L1 A1016 2	1000.000	1149.496	-14.9	112	0.01
4	L1 A1016 3	1000.000	1132.479	-13.2	111	0.00
5	L1 A1016 4	1000.000	1136.321	-13.6	114	0.00
6	L1 A1016 5	1000.000	1110.475	-11.0	108	0.00
7	L7 A1260 1	1000.000	930.829	6.9	93	0.00
8	L7 A1260 2	1000.000	982.832	1.7	97	0.00
9	L7 A1260 3	1000.000	1068.301	-6.8	104	0.00
10	L7 A1260 4	1000.000	878.415	12.2	87	0.00
11	L7 A1260 5	1000.000	939.251	6.1	92	0.00
	Signal #2					
2	L1 A1016 1	1000.000	1071.733	-7.2	106	0.01
3	L1 A1016 2	1000.000	1170.535	-17.1#	112	0.00
4	L1 A1016 3	1000.000	1124.092	-12.4	112	0.00
5	L1 A1016 4	1000.000	1135.451	-13.5	113	0.00
6	L1 A1016 5	1000.000	1102.385	-10.2	110	0.00
7	L7 A1260 1	1000.000	1135.629	-13.6	111	0.00
8	L7 A1260 2	1000.000	983.752	1.6	98	0.00
9	L7 A1260 3	1000.000	998.192	0.2	99	0.00
10	L7 A1260 4	1000.000	1032.968	-3.3	102	0.00
11	L7 A1260 5	1000.000	939.709	6.0	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Q1020101.D A1020360.M Sun Feb 03 11:41:23 2008

Quantitation Report (QT Reviewed)

JSS 2/3/08

Signal #1 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD2B.CH
Acq On : 1 Feb 2008 9:35 pm Operator:
Sample : Q2020101 Inst : HP ECD2
Misc : PW020108A @1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:39 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:34:51 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
2) L1 A1016 1	7.87	7.35	315219	257436	1092.096	1071.733m
3) L1 A1016 2	9.22	8.70	413710	155818	1149.496m	1170.535m
4) L1 A1016 3	10.08	9.61	488596	412366	1132.479m	1124.092m
5) L1 A1016 4	10.65	9.88	294288	256996	1136.321m	1135.451m
6) L1 A1016 5	11.26	10.82	372486	306308	1110.475m	1102.385m
Sum A1016 1			1884299	1388924	5620.866	5604.196
Average A1016 1					1124.173	1120.839
7) L7 A1260 1	17.27	15.16	552216	676794	930.829m	1135.629m
8) L7 A1260 2	18.12	16.63	588632	494942	982.832	983.752m
9) L7 A1260 3	20.10	17.63	806116	524080	1068.301m	998.192m
10) L7 A1260 4	20.57	19.75	467638	938234	878.415m	1032.968
11) L7 A1260 5	22.59	22.03	493508	410027	939.251	939.709
Sum A1260 1			2908110	3044077	N.D.	N.D.
Average A1260 1					959.925	1018.050
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

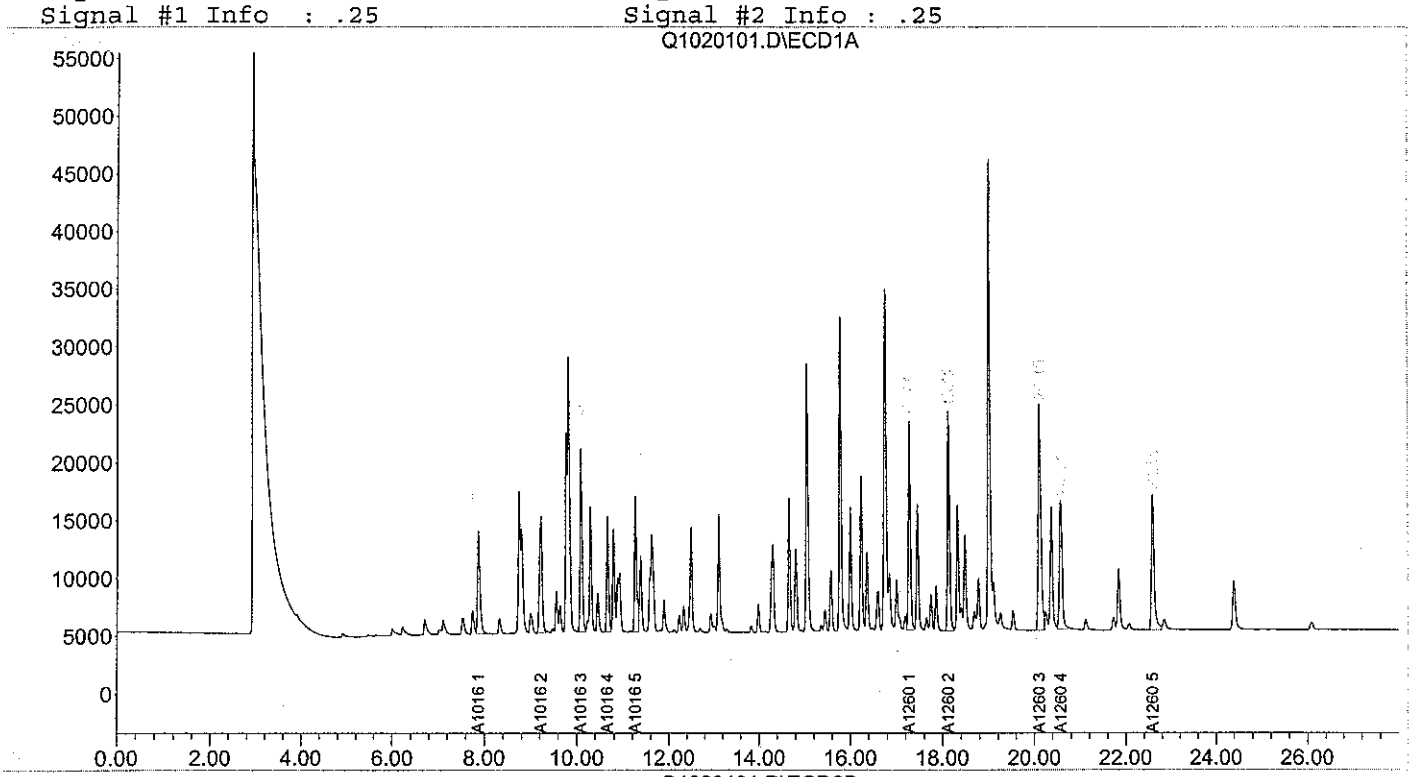
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

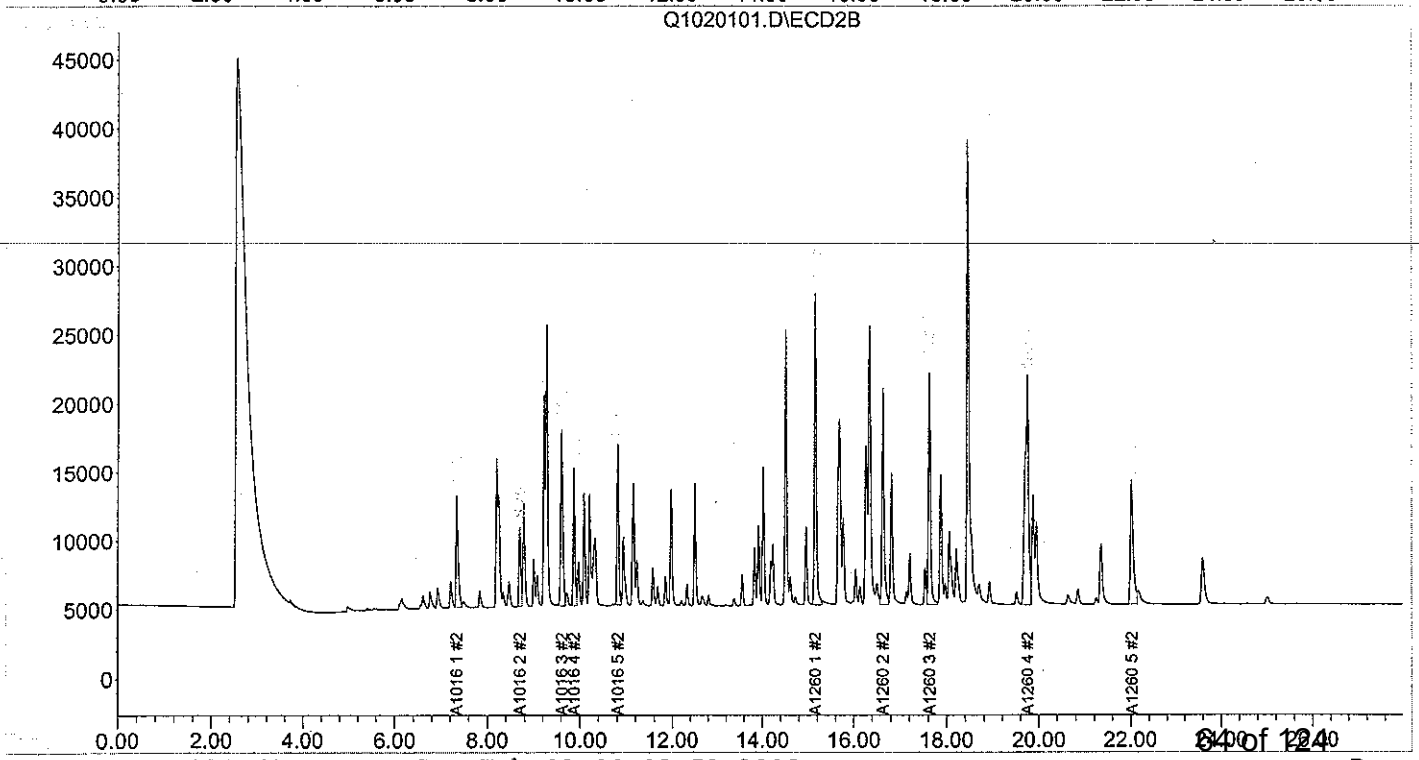
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\FEB01\Q1020101.D\ECD2B.CH
Acq On : 1 Feb 2008 9:35 pm Operator:
Sample : Q2020101 Inst : HP ECD2
Misc : PW020108A @1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:39 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:34:51 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020101.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020101.D\ECD2B.CH
Acq On : 1 Feb 2008 3:51 pm Operator:
Sample : I1020101 Inst : HP ECD2
Misc : PW120407A 20PPB ✓ Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:26 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
2) L1 A1016 1	7.86	7.34	8174	7476	6.227	1.214 (C)#
3) L1 A1016 2	9.20	8.69	10330	4156	9.600m	11.162m
4) L1 A1016 3	10.07	9.60	15200	11180	15.005m	7.725m #
5) L1 A1016 4	10.64	9.87	7678	5814	9.041m	9.444m(C)
6) L1 A1016 5	11.25	10.81	9772	9760	3.393m	8.152m(C)#
Sum A1016 1			51154	38386	43.267	37.697
Average A1016 1					8.653	7.539
7) L7 A1260 1	17.27	15.15	18420	20172	8.409m	9842.253m(C)#
8) L7 A1260 2	18.11	16.63	17818	15790	9.671m	4.045m #
9) L7 A1260 3	20.09	17.63	18982	15586	12.115m	2.935m #
10) L7 A1260 4	20.56	19.75	12760	24156	15.031m	4.126m #
11) L7 A1260 5	22.58	22.02	13138	11038	11.096m	6.528m #
Sum A1260 1			81118	86742	N.D.	N.D.
Average A1260 1					11.264	1971.978
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

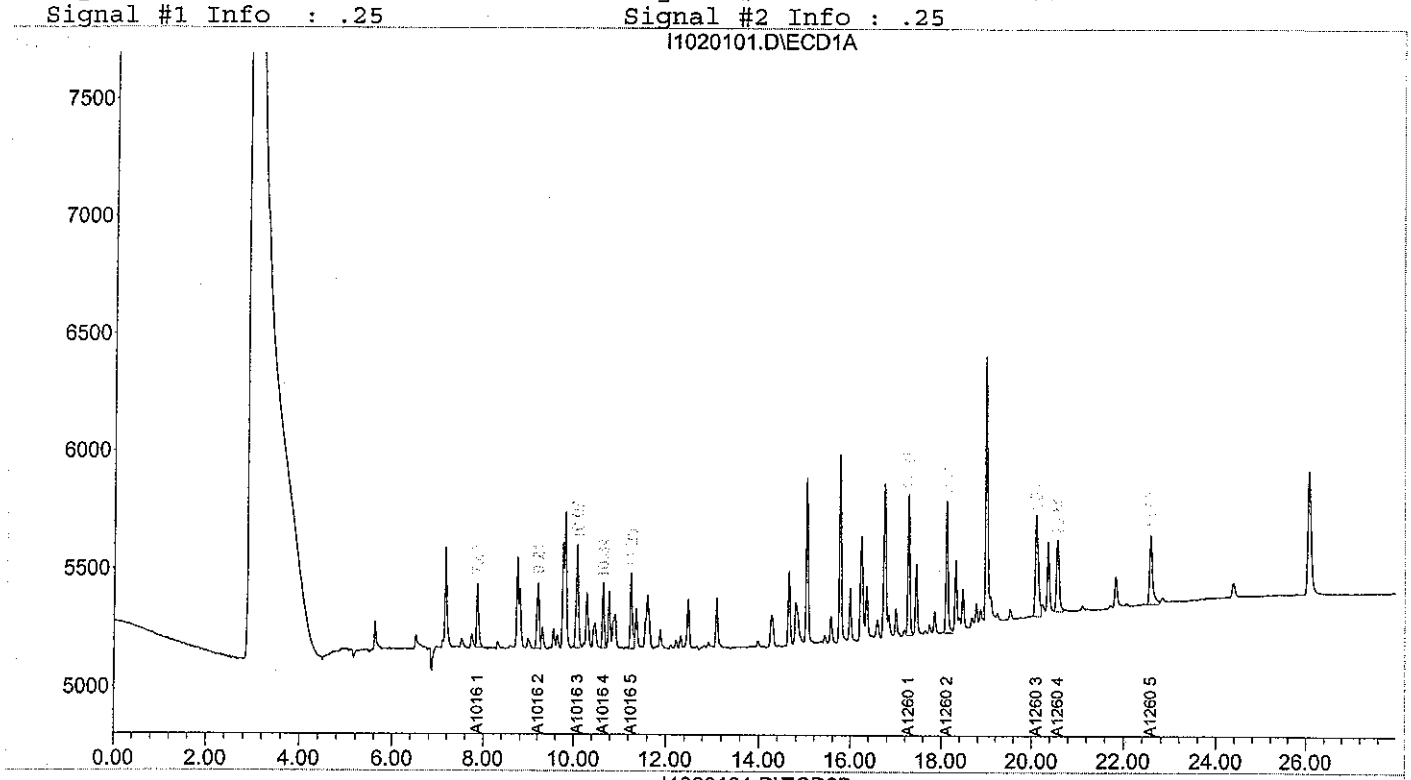
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

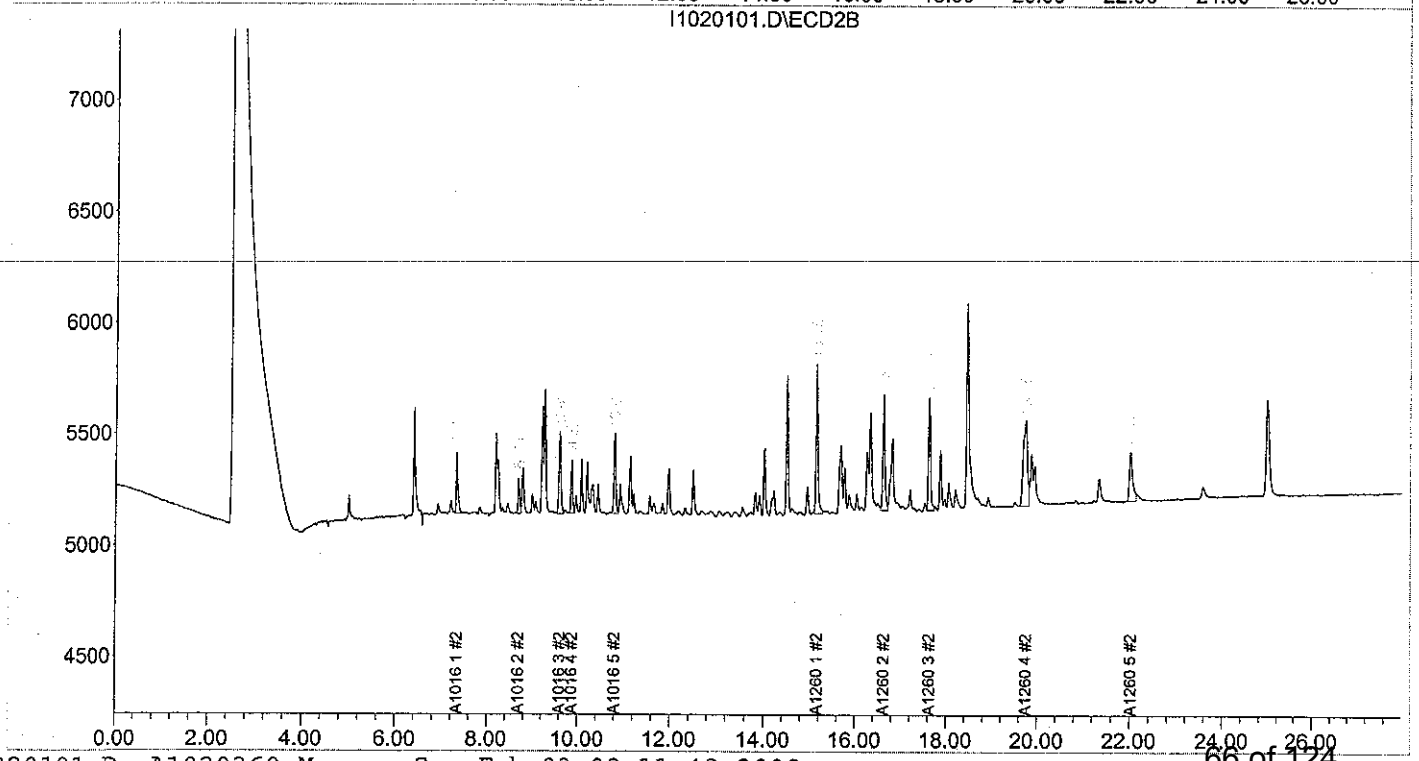
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020101.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020101.D\ECD2B.CH
Acq On : 1 Feb 2008 3:51 pm Operator:
Sample : I1020101 Inst : HP ECD2
Misc : PW120407A 20PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:26 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

MS 2/3/8

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020102.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020102.D\ECD2B.CH
Acq On : 1 Feb 2008 4:22 pm Operator:
Sample : I1020102 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:12 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	17516	17335	1.021m	0.599m #
Spiked Amount 100.000 Range 30 - 150 Recovery =					1.02%#	0.60%#
12) s DCB - Surrogate	26.07	25.00	34982	30219	0.805	0.487m #
Spiked Amount 100.000 Range 30 - 150 Recovery =					0.80%#	0.49%#
Target Compounds						
2) L1 A1016 1	7.86	7.34	11886	10688	19.190m	14.700m(C)
3) L1 A1016 2	9.21	8.69	14022	5126	19.750m	18.254m
4) L1 A1016 3	10.07	9.60	20076	15634	26.182m	19.689m
5) L1 A1016 4	10.64	9.87	10708	8250	20.570m	20.173m(C)
6) L1 A1016 5	11.25	10.81	13113	12704	14.295	18.550m(C)#
Sum A1016 1			69805	52402	99.987	91.366
Average A1016 1					19.997	18.273
7) L7 A1260 1	17.27	15.15	25432	27902	21.114	12.441m(C)#
8) L7 A1260 2	18.11	16.63	24472	21788	21.810m	16.534m
9) L7 A1260 3	20.10	17.63	26157	21958	23.036	15.831m #
10) L7 A1260 4	20.56	19.75	17299	34854	25.059	16.912m #
11) L7 A1260 5	22.58	22.02	16928	16130	19.609	19.796m
Sum A1260 1			110287	122632	110.629	81.514
Average A1260 1					22.126	16.303
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

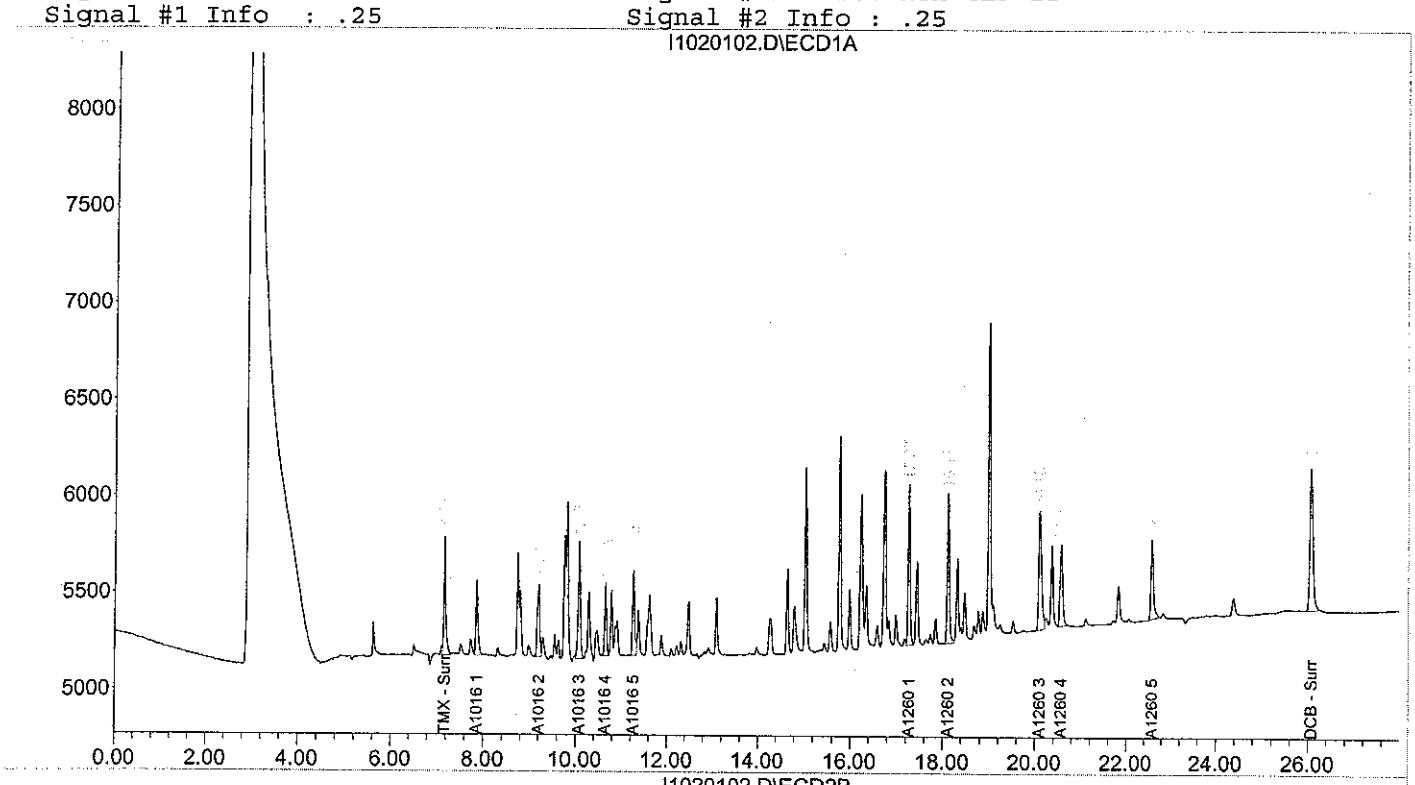
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

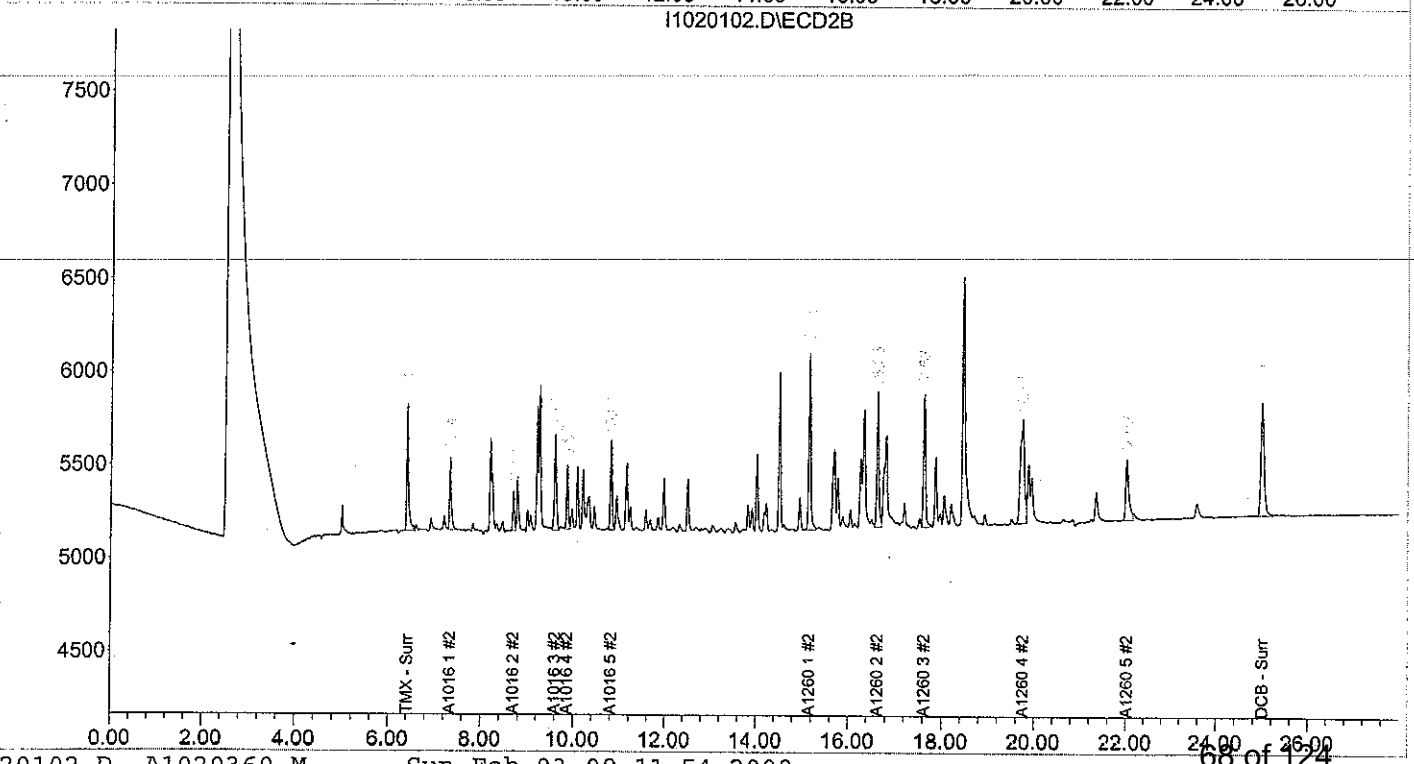
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020102.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020102.D\ECD2B.CH
Acq On : 1 Feb 2008 4:22 pm Operator:
Sample : I1020102 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:12 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020103.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020103.D\ECD2B.CH
Acq On : 1 Feb 2008 4:54 pm Operator:
Sample : I1020103 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:14 2008 Quant Results File: A1020360.RES

PS 2/3/8

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.40	32505	31546	2.226	1.988m
Spiked Amount 100.000 Range 30 - 150 Recovery =					2.23%#	1.99%#
12) s DCB - Surrogate	26.07	25.00	64398	54346	2.322	2.071
Spiked Amount 100.000 Range 30 - 150 Recovery =					2.32%#	2.07%#
Target Compounds						
2) L1 A1016 1	7.86	7.33	21327	18834	52.276	49.040m(C)
3) L1 A1016 2	9.20	8.69	26856	9480	55.170m	50.202m
4) L1 A1016 3	10.07	9.60	37810	28578	67.044m	54.631m
5) L1 A1016 4	10.64	9.87	21014	15546	59.995m	52.419 (C)
6) L1 A1016 5	11.25	10.81	26058	22606	56.677m	53.699m(C)
Sum A1016 1			133065	95044	291.163	259.991
Average A1016 1					58.233	51.998
7) L7 A1260 1	17.27	15.15	45881	50516	58.319	51.788m(C)
8) L7 A1260 2	18.11	16.63	44918	39480	59.217m	53.566m
9) L7 A1260 3	20.10	17.63	48283	40456	56.738	53.427m
10) L7 A1260 4	20.56	19.75	32966	62928	59.747	50.558
11) L7 A1260 5	22.58	22.02	33620	29622	57.156m	55.051m
Sum A1260 1			205667	223002	291.178	264.390
Average A1260 1					58.236	52.878
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

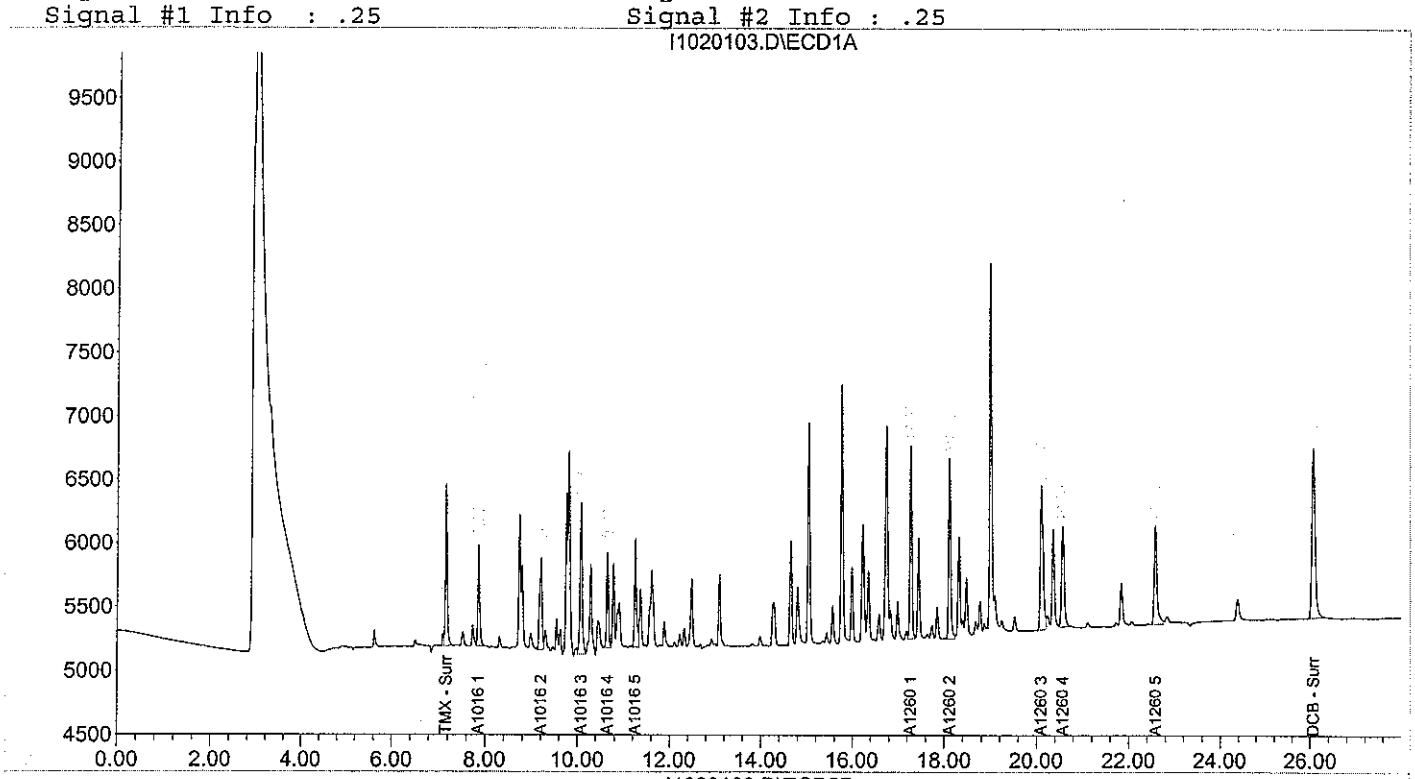
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

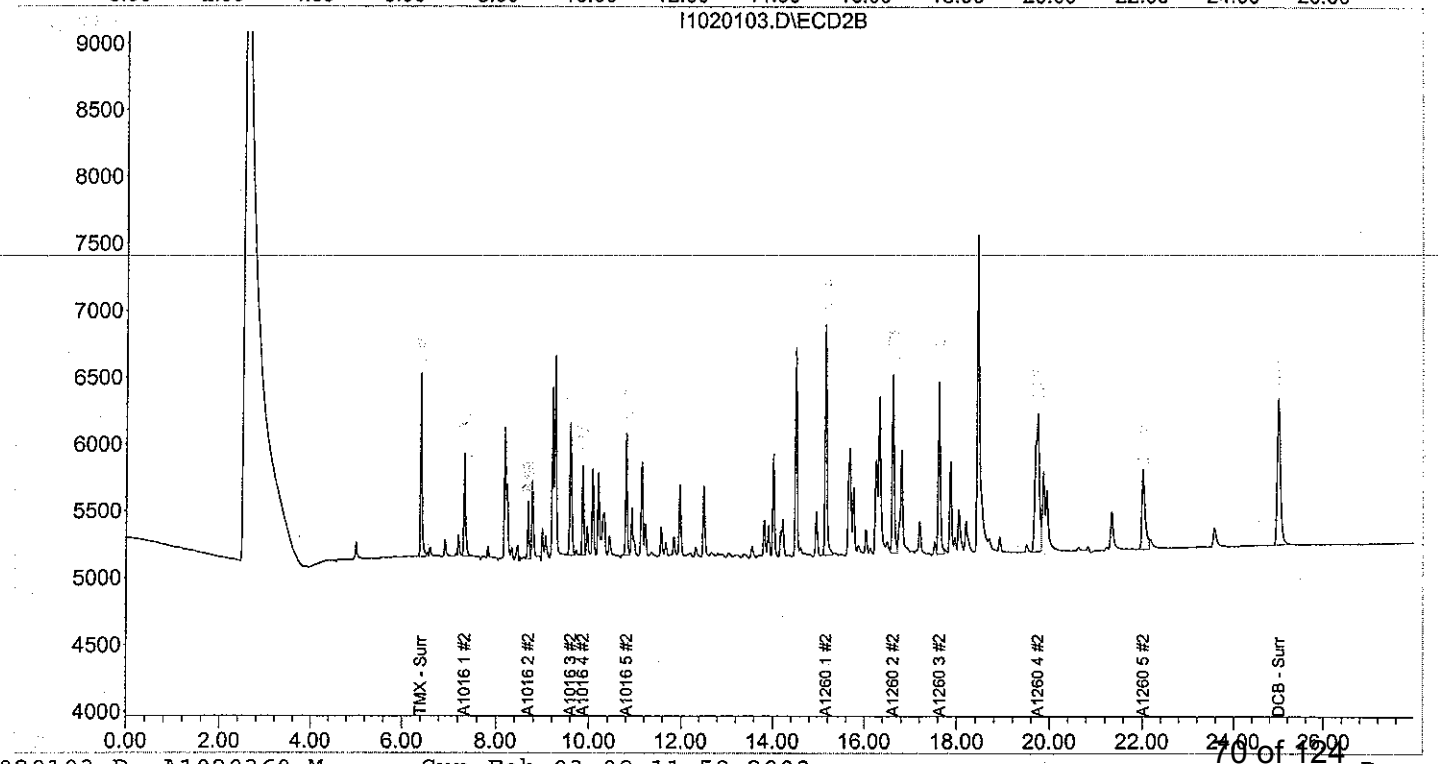
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020103.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020103.D\ECD2B.CH
Acq On : 1 Feb 2008 4:54 pm Operator:
Sample : I1020103 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:14 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020104.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020104.D\ECD2B.CH
Acq On : 1 Feb 2008 5:25 pm Operator:
Sample : I1020104 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:16 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	61085	56698	4.529m	4.451m
Spiked Amount 100.000 Range 30 - 150 Recovery =					4.53%#	4.45%#
12) s DCB - Surrogate	26.07	25.00	127728	106085	5.606	5.487
Spiked Amount 100.000 Range 30 - 150 Recovery =					5.61%#	5.49%#
Target Compounds						
2) L1 A1016 1	7.86	7.34	39570	35271	116.694	118.940 (C)
3) L1 A1016 2	9.21	8.69	49352	17297	117.794m	108.049
4) L1 A1016 3	10.08	9.61	63310	50592	126.389m	114.654m
5) L1 A1016 4	10.65	9.87	38330	28424	126.993m	109.735m(C)
6) L1 A1016 5	11.25	10.81	45778	40814	121.694m	119.060m(C)
Sum A1016 1			236340	172398	609.563	570.438
Average A1016 1					121.913	114.088
7) L7 A1260 1	17.27	15.16	85358	92022	130.784m	124.847m(C)
8) L7 A1260 2	18.11	16.63	83530	73440	130.315m	125.480m
9) L7 A1260 3	20.10	17.63	94400	73408	127.113m	120.996m
10) L7 A1260 4	20.57	19.75	67030	121262	135.538m	120.914m
11) L7 A1260 5	22.58	22.02	66866	58152	132.200m	130.088m
Sum A1260 1			397184	418284	655.950	622.325
Average A1260 1					131.190	124.465
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

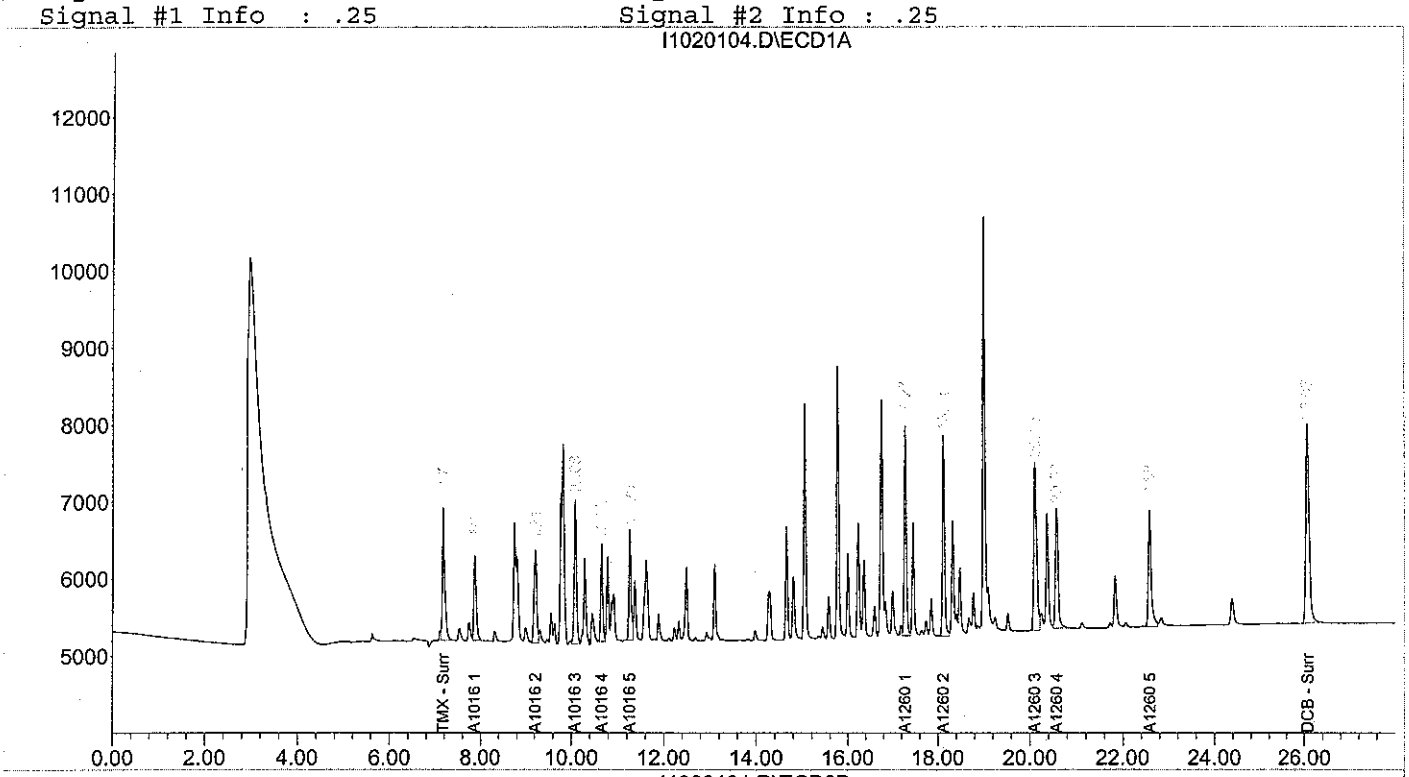
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

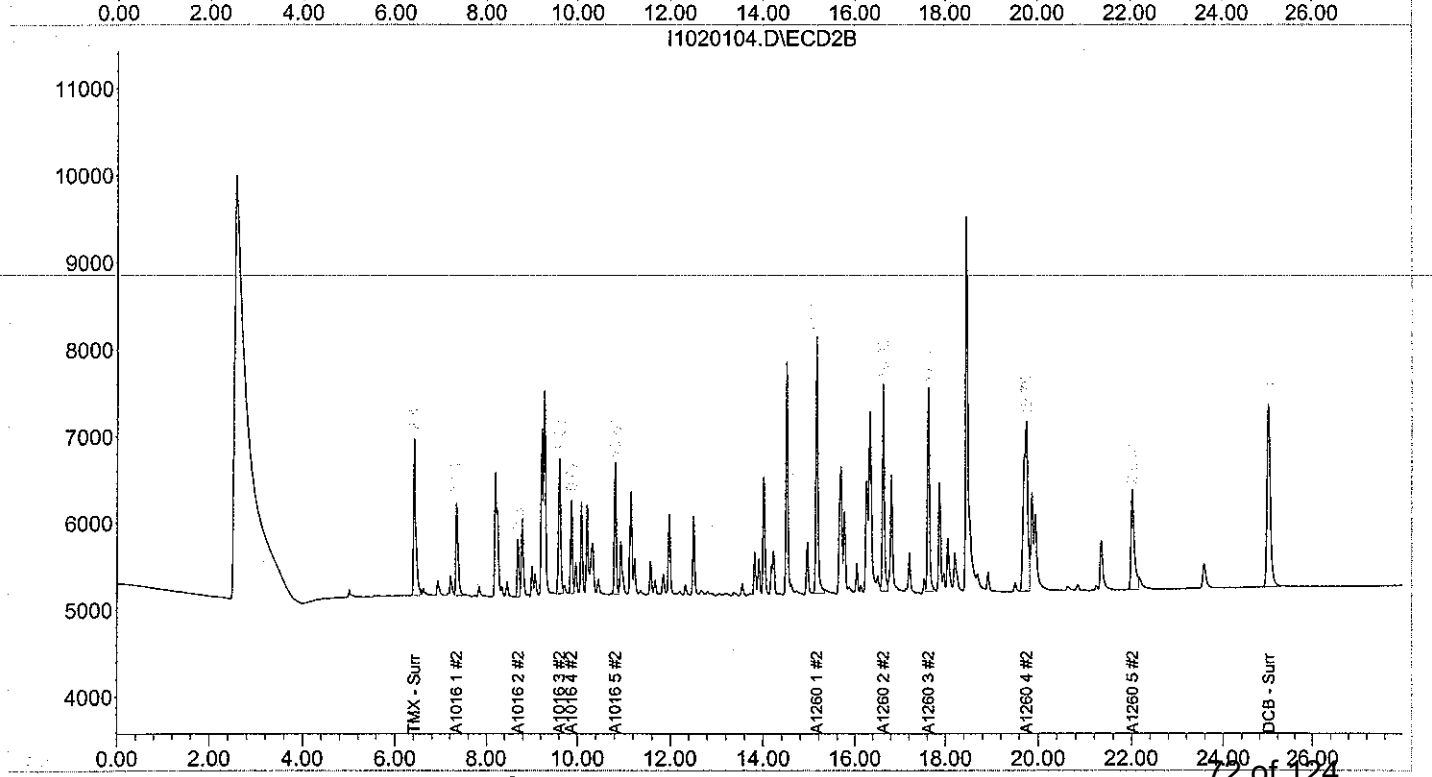
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020104.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020104.D\ECD2B.CH
Acq On : 1 Feb 2008 5:25 pm Operator:
Sample : I1020104 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:16 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020105.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020105.D\ECD2B.CH
Acq On : 1 Feb 2008 5:56 pm Operator:
Sample : I1020105 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:18 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	146478	126788	11.445	11.354m
Spiked Amount 100.000 Range 30 - 150 Recovery =					11.45%#	11.35%#
12) s DCB - Surrogate	26.07	25.00	270254	221315	13.087	13.200
Spiked Amount 100.000 Range 30 - 150 Recovery =					13.09%#	13.20%#
Target Compounds						
2) L1 A1016 1	7.86	7.34	89919	76148	297.973	296.471m(C)
3) L1 A1016 2	9.21	8.69	111236	39710	293.761m	277.562
4) L1 A1016 3	10.07	9.61	133892	113438	294.469m	290.391m
5) L1 A1016 4	10.64	9.87	85480	65668	314.548m	278.518m(C)
6) L1 A1016 5	11.25	10.81	105152	87564	320.879m	291.477m(C)
Sum A1016 1			525679	382528	1521.630	1434.419
Average A1016 1					304.326	286.884
7) L7 A1260 1	17.27	15.16	182206	190158	312.325	302.181m(C)
8) L7 A1260 2	18.11	16.63	179374	154126	309.453m	301.008m
9) L7 A1260 3	20.10	17.63	207436	159296	300.348	300.880m
10) L7 A1260 4	20.57	19.75	145618	258842	312.379m	289.283
11) L7 A1260 5	22.58	22.02	146698	122674	313.839m	302.305m
Sum A1260 1			861332	885096	1548.343	1495.656
Average A1260 1					309.669	299.131
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

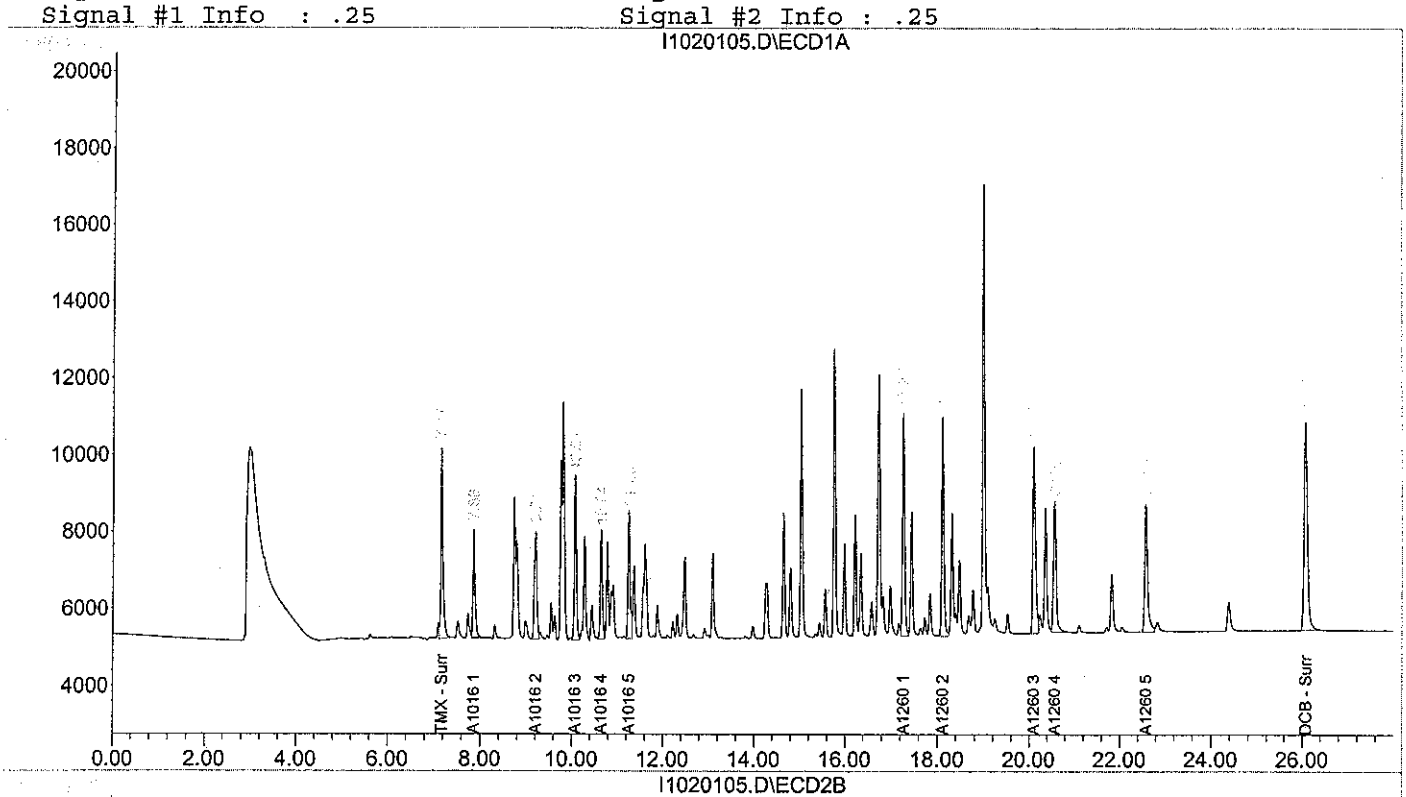
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

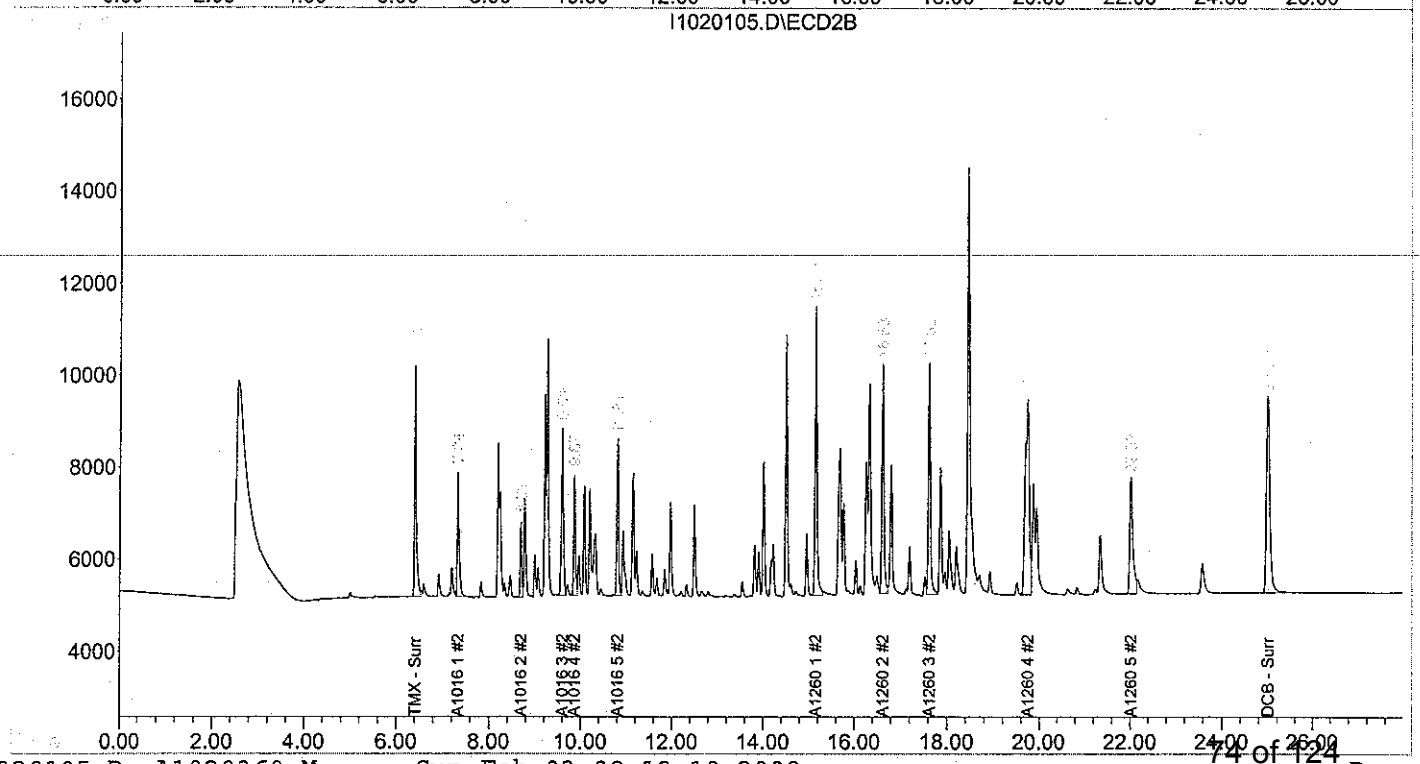
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020105.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020105.D\ECD2B.CH
Acq On : 1 Feb 2008 5:56 pm Operator:
Sample : I1020105 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:18 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020106.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020106.D\ECD2B.CH
Acq On : 1 Feb 2008 6:28 pm Operator:
Sample : I1020106 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:20 2008 Quant Results File: A1020360.RES

PBS 2/3/8

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	271600	234613	21.671	22.081
Spiked Amount 100.000 Range 30 - 150 Recovery =					21.67%#	22.08%#
12) s DCB - Surrogate	26.08	25.01	497136	399045	25.271	25.399
Spiked Amount 100.000 Range 30 - 150 Recovery =					25.27%#	25.40%#
Target Compounds						
2) L1 A1016 1	7.86	7.34	159559	132238	557.881	549.435m(C)
3) L1 A1016 2	9.21	8.69	192152	69247	532.770m	510.005
4) L1 A1016 3	10.07	9.60	243849	200692	568.715	546.366m
5) L1 A1016 4	10.64	9.87	150630	119524	587.584m	531.157m(C)
6) L1 A1016 5	11.25	10.81	182614	157190	589.058m	562.076m(C)
Sum A1016 1			928804	678891	2836.007	2699.039
Average A1016 1					567.201	539.808
7) L7 A1260 1	17.27	15.15	322323	334732	585.315	576.597m(C)
8) L7 A1260 2	18.12	16.63	321306	269846	582.144	565.596m
9) L7 A1260 3	20.10	17.63	392906	283778	586.920m	572.185m
10) L7 A1260 4	20.56	19.75	277394	481368	615.450m	569.336
11) L7 A1260 5	22.58	22.02	273230	229640	606.038m	596.021m
Sum A1260 1			1587159	1599364	2975.867	2879.736
Average A1260 1					595.173	575.947
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

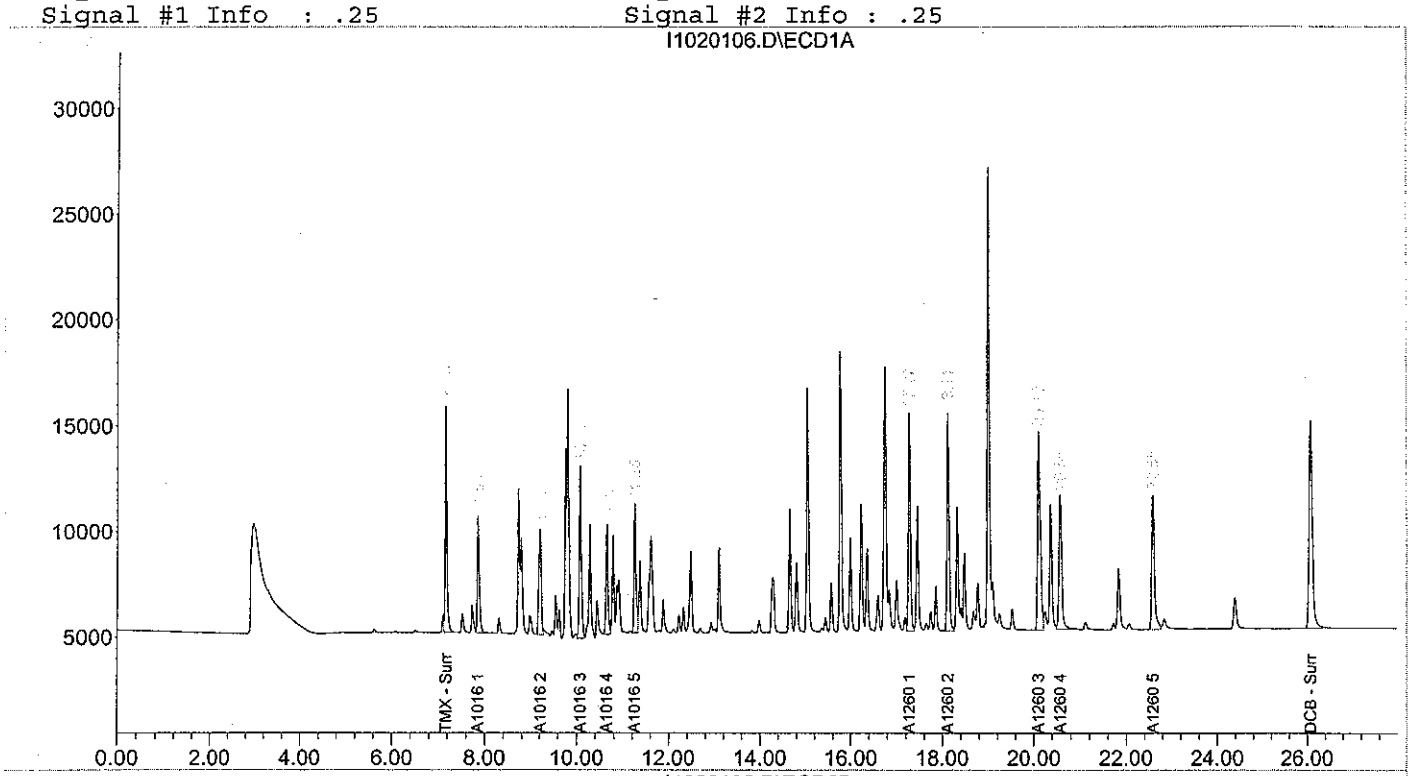
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

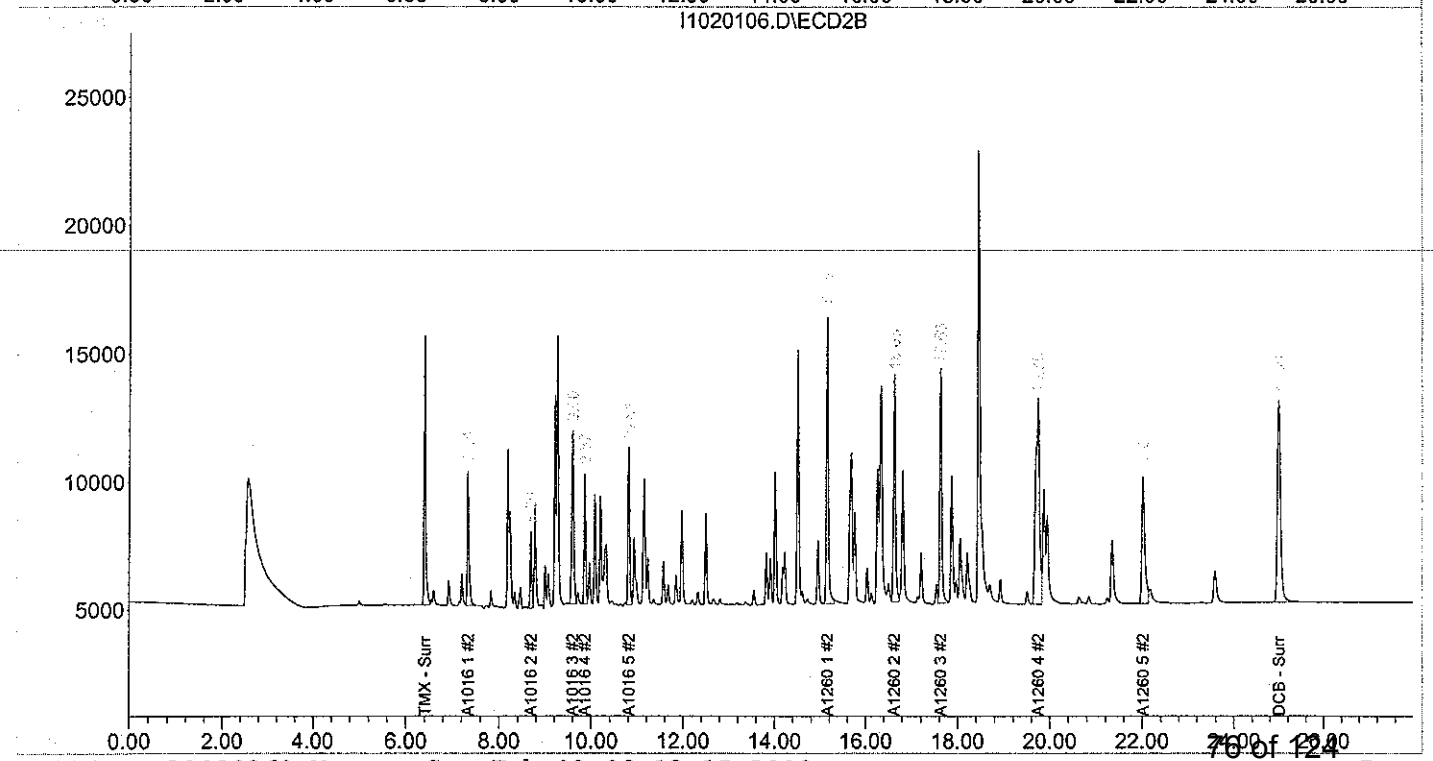
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020106.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020106.D\ECD2B.CH
Acq On : 1 Feb 2008 6:28 pm Operator:
Sample : I1020106 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:20 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020107.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020107.D\ECD2B.CH
Acq On : 1 Feb 2008 6:59 pm Operator:
Sample : I1020107 Inst : HP ECD2
Misc : PW112807A 1000PPB ✓ Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:22 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	541916	452014	44.161	44.131
Spiked Amount 100.000 Range 30 - 150 Recovery =					44.16%	44.13%
12) s DCB - Surrogate	26.07	25.00	937845	753146	50.013	50.926
Spiked Amount 100.000 Range 30 - 150 Recovery =					50.01%	50.93%
Target Compounds						
2) L1 A1016 1	7.85	7.33	289560	243494	1076.537	1089.424m(C)
3) L1 A1016 2	9.20	8.69	368828	138836	1096.990m	1107.647
4) L1 A1016 3	10.07	9.60	438724	369728	1100.683m	1092.044m
5) L1 A1016 4	10.64	9.87	258640	227916	1084.767m	1075.823m(C)
6) L1 A1016 5	11.25	10.81	343432	278678	1180.635m	1084.550m(C)
Sum A1016 1			1699184	1258652	5539.611	5449.488
Average A1016 1					1107.922	1089.898
7) L7 A1260 1	17.27	15.15	591687	611208	1151.254	1156.682m(C)
8) L7 A1260 2	18.11	16.63	603750	507280	1154.731	1169.249
9) L7 A1260 3	20.10	17.63	772014	527264	1182.021m	1146.581m
10) L7 A1260 4	20.56	19.75	535150	923106	1234.518m	1157.606
11) L7 A1260 5	22.58	22.02	533555	441778	1225.011	1213.235
Sum A1260 1			3036155	3010636	5947.535	5843.354
Average A1260 1					1189.507	1168.671
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

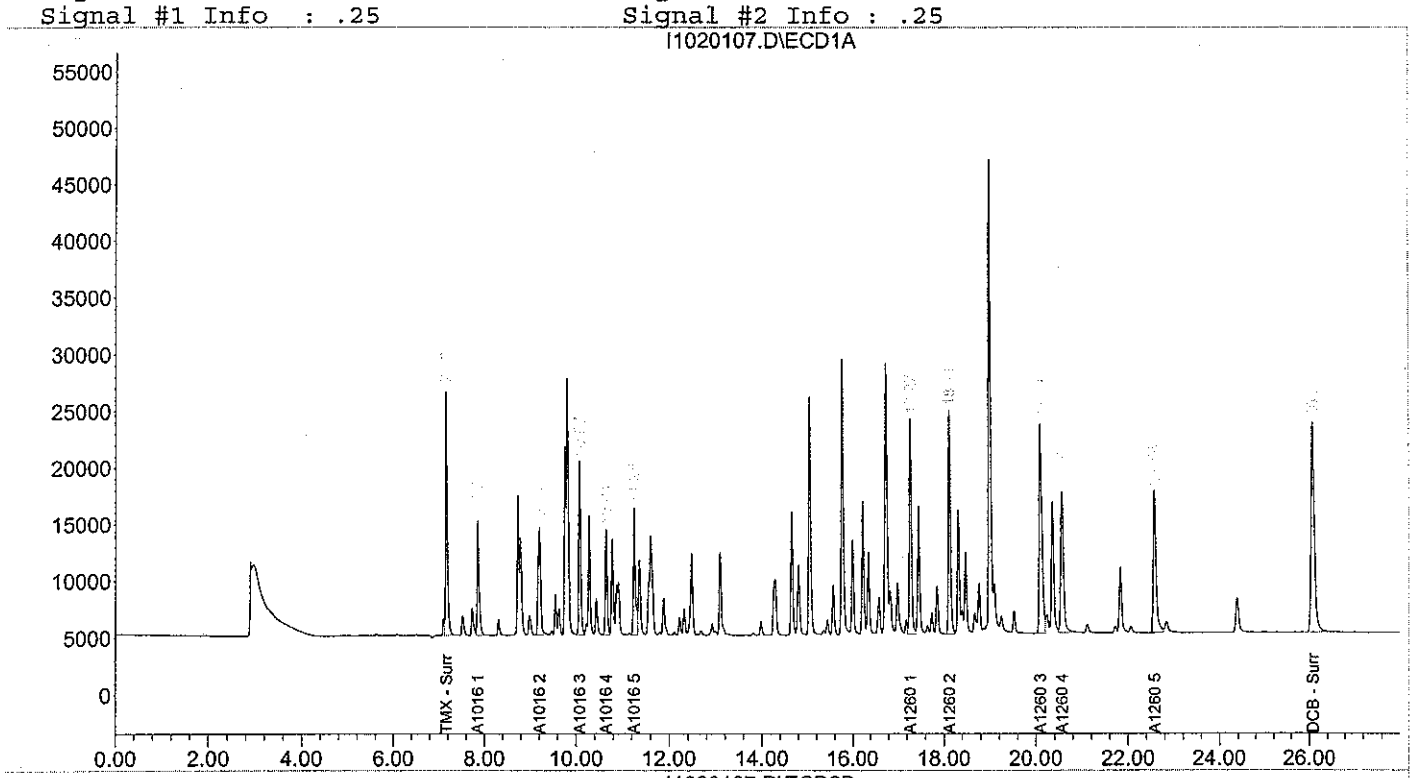
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

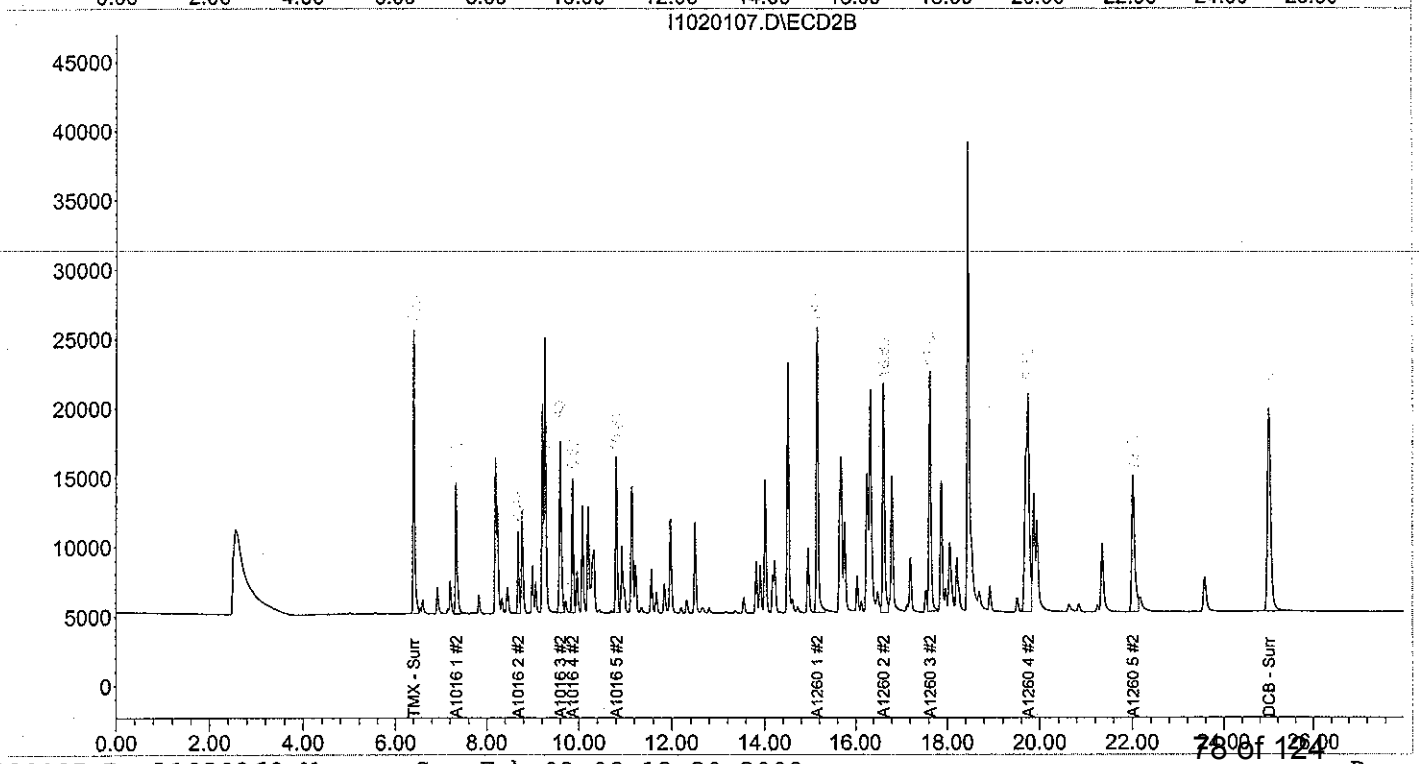
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020107.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020107.D\ECD2B.CH
Acq On : 1 Feb 2008 6:59 pm Operator:
Sample : I1020107 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:22 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020108.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020108.D\ECD2B.CH
Acq On : 1 Feb 2008 7:30 pm Operator:
Sample : I1020108 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:23 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.16	6.41	788716	658080	65.199m	65.584
Spiked Amount 100.000 Range 30 - 150 Recovery =					65.20%	65.58%
12) s DCB - Surrogate	26.07	25.00	1239186	994415	67.866	69.406
Spiked Amount 100.000 Range 30 - 150 Recovery =					67.87%	69.41%
Target Compounds						
2) L1 A1016 1	7.86	7.34	408365	333964	1598.678	1576.608m(C)
3) L1 A1016 2	9.20	8.69	513882	190094	1617.233m	1608.374m
4) L1 A1016 3	10.07	9.60	607889	524662	1627.913	1674.475m
5) L1 A1016 4	10.64	9.87	364842	329600	1650.406m	1643.104m(C)
6) L1 A1016 5	11.25	10.81	471812	391958	1694.161	1655.643m(C)
Sum A1016 1			2366791	1770278	8188.392	8158.203
Average A1016 1					1637.678	1631.641
7) L7 A1260 1	17.27	15.15	800764	833028	1638.472	1696.692m(C)
8) L7 A1260 2	18.11	16.63	826099	683166	1638.877	1692.428
9) L7 A1260 3	20.09	17.63	1073678	731598	1664.970m	1687.375
10) L7 A1260 4	20.56	19.75	724510	1277545	1714.667m	1667.078
11) L7 A1260 5	22.58	22.02	725714	600327	1698.733	1710.810
Sum A1260 1			4150766	4125663	8355.718	8454.383
Average A1260 1					1671.144	1690.877
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

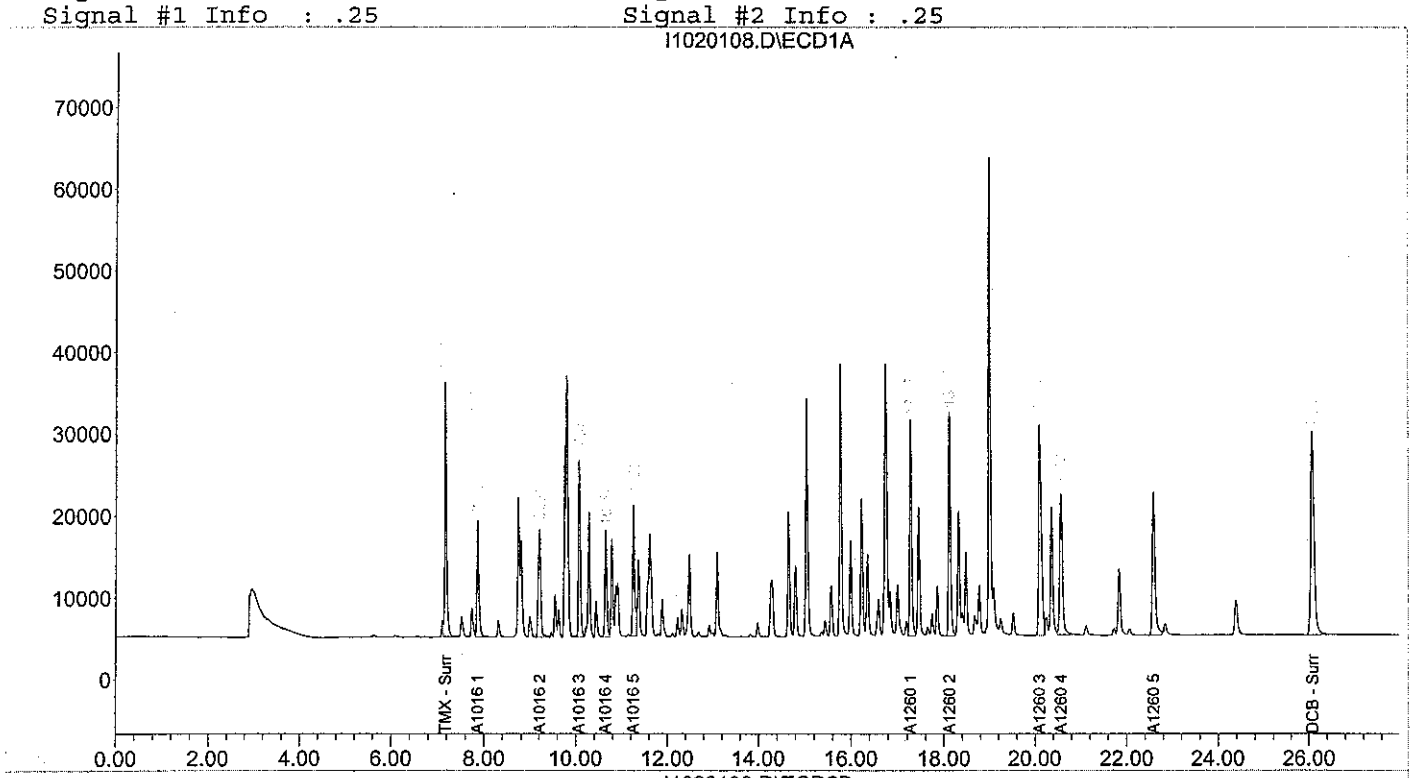
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

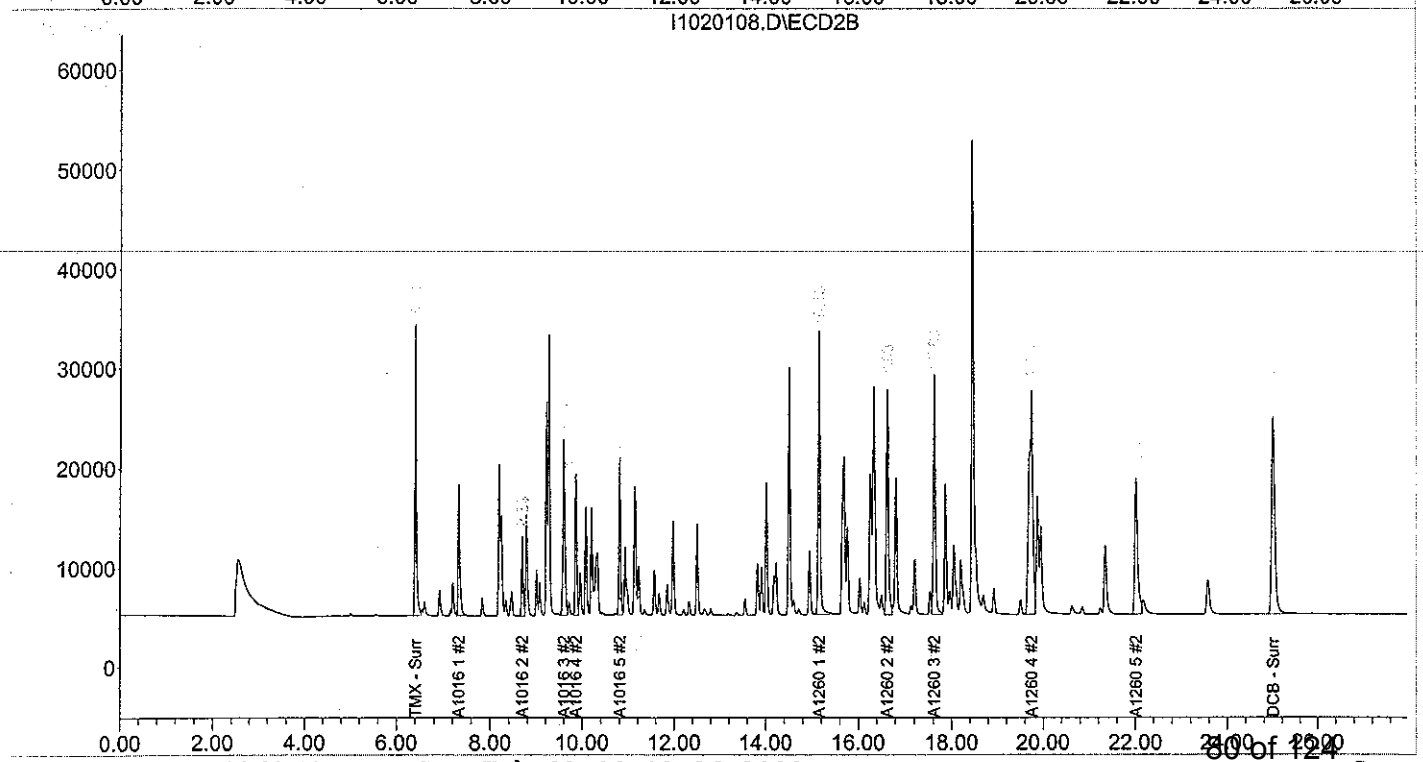
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020108.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020108.D\ECD2B.CH
Acq On : 1 Feb 2008 7:30 pm Operator:
Sample : I1020108 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:23 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020109.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020109.D\ECD2B.CH
Acq On : 1 Feb 2008 8:02 pm Operator:
Sample : I1020109 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	1044778	842391	87.574	85.266
Spiked Amount 100.000 Range 30 - 150 Recovery =					87.57%	85.27%
12) s DCB - Surrogate	26.08	25.01	1586914	1279084	89.581	92.579
Spiked Amount 100.000 Range 30 - 150 Recovery =					89.58%	92.58%
Target Compounds						
2) L1 A1016 1	7.86	7.34	515830	421188	2124.818	2103.223m(C)
3) L1 A1016 2	9.21	8.69	657808	241789	2207.895m	2192.709
4) L1 A1016 3	10.07	9.60	774442	663762	2240.408	2310.348m
5) L1 A1016 4	10.64	9.87	457881	422124	2248.894	2225.692m(C)
6) L1 A1016 5	11.25	10.81	623676	497570	2364.365m	2316.239m(C)
Sum A1016 1			3029638	2246433	11186.379	11148.211
Average A1016 1					2237.276	2229.642
7) L7 A1260 1	17.27	15.15	1015220	1055644	2199.099	2350.276m(C)
8) L7 A1260 2	18.11	16.63	1052541	843140	2169.694	2262.219m
9) L7 A1260 3	20.10	17.63	1373247	940771	2153.312	2322.636
10) L7 A1260 4	20.56	19.75	924318	1635596	2248.779m	2224.767
11) L7 A1260 5	22.58	22.02	935974	771853	2235.351	2293.526
Sum A1260 1			5301301	5247004	11006.234	11453.425
Average A1260 1					2201.247	2290.685
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

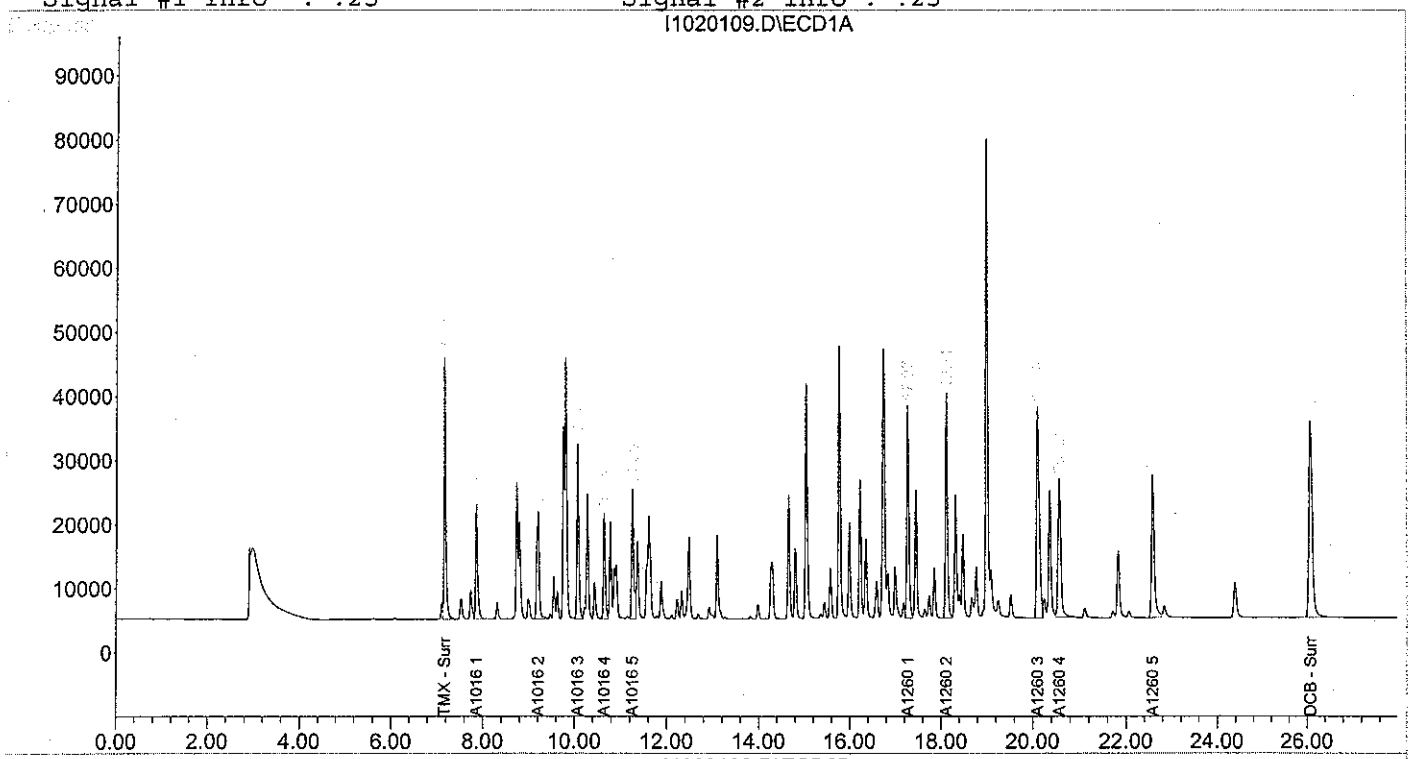
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

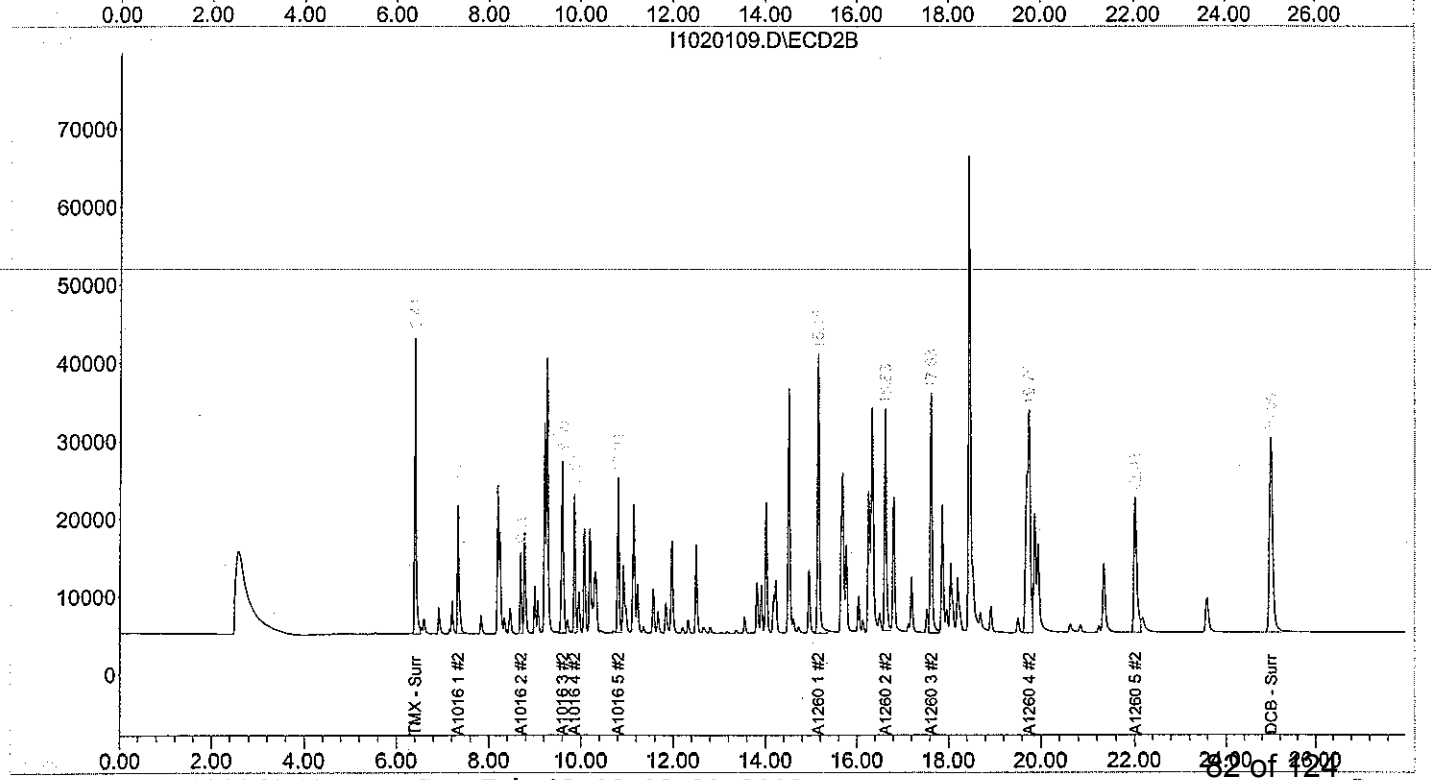
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020109.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020109.D\ECD2B.CH
Acq On : 1 Feb 2008 8:02 pm Operator:
Sample : I1020109 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Ms 2/3/8

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020110.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020110.D\ECD2B.CH
Acq On : 1 Feb 2008 8:33 pm Operator:
Sample : I1020110 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	2255266	1813262	202.455	198.311m
Spiked Amount 100.000 Range 30 - 150 Recovery =					202.46%#	198.31%#
12) s DCB - Surrogate	26.07	25.01	3134743	2538968	209.451m	227.155
Spiked Amount 100.000 Range 30 - 150 Recovery =					209.45%#	227.16%#
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

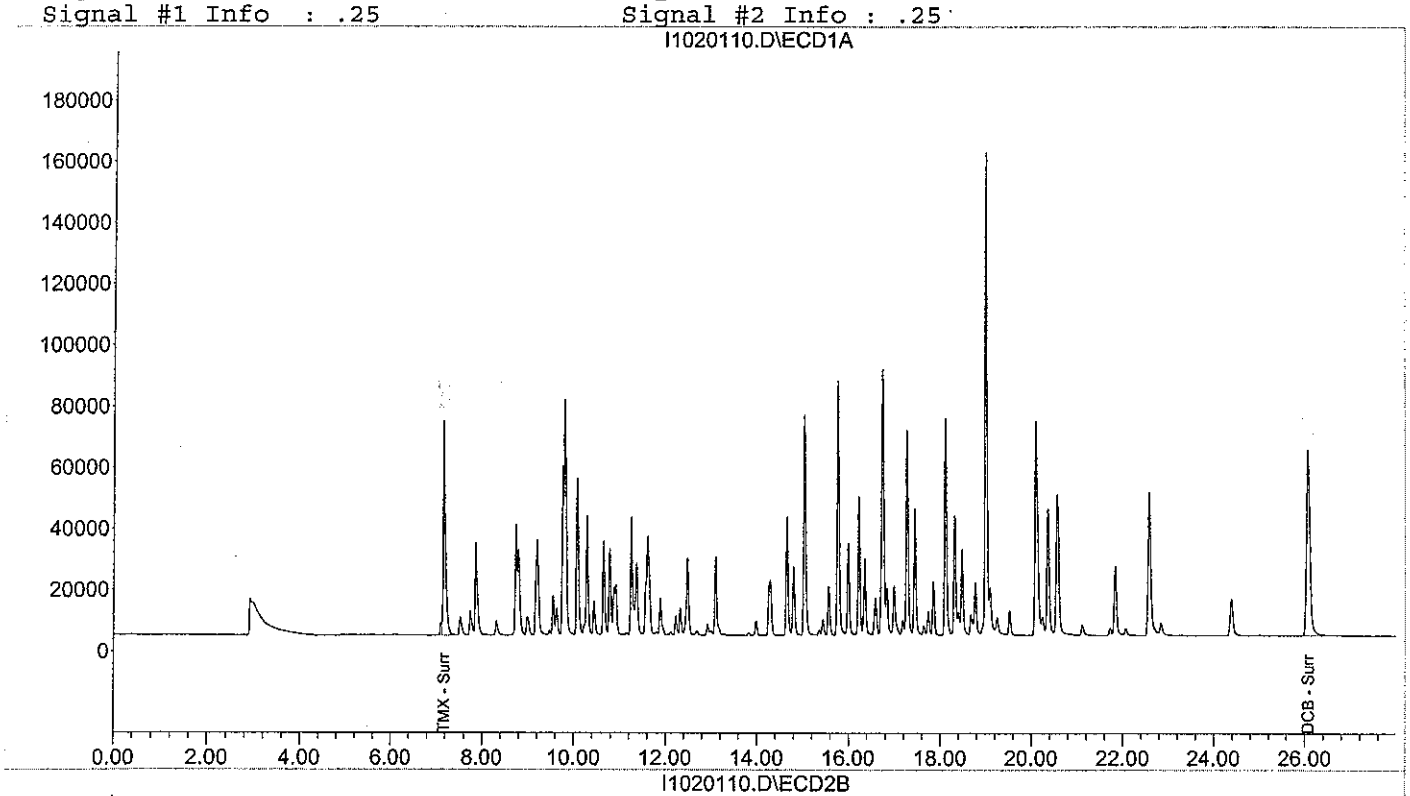
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

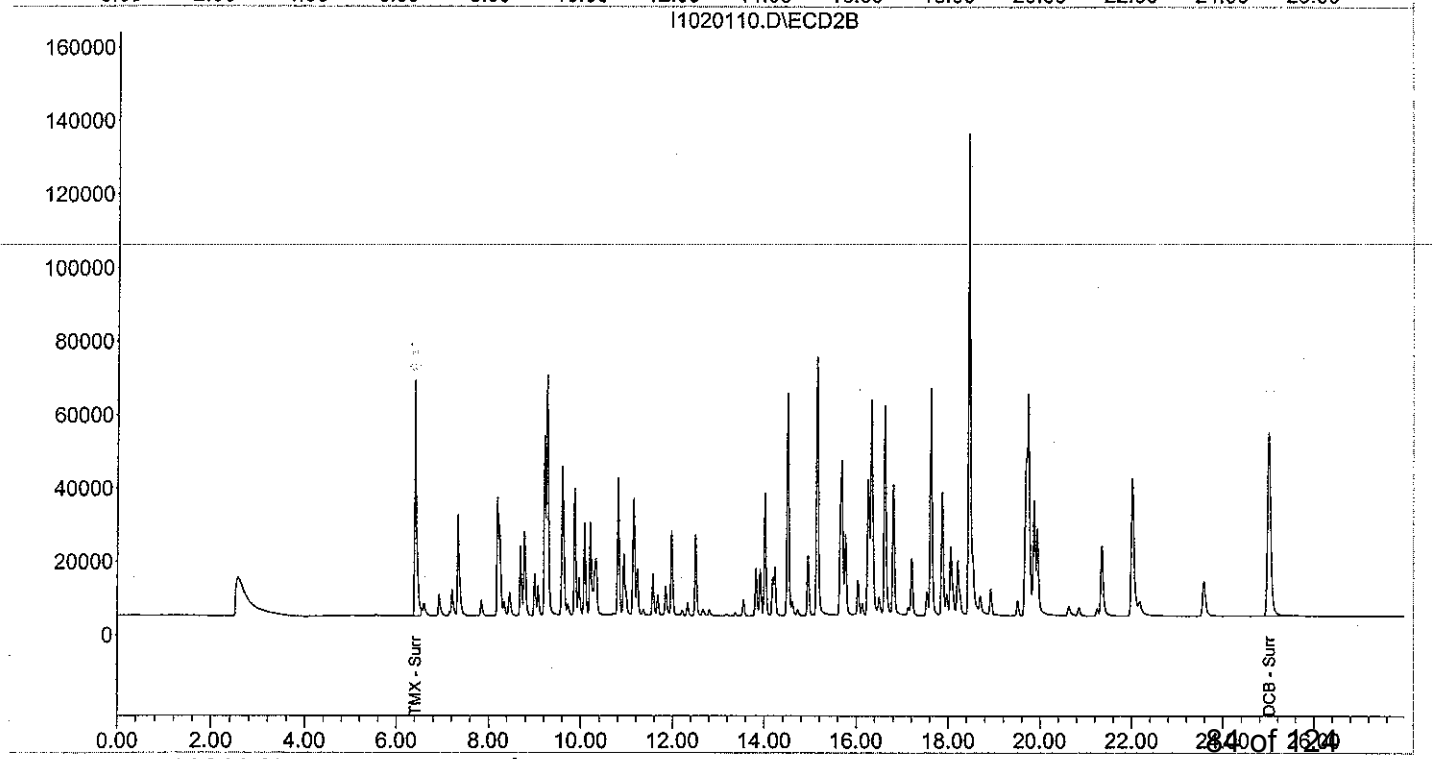
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020110.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020110.D\ECD2B.CH
Acq On : 1 Feb 2008 8:33 pm Operator:
Sample : I1020110 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:25 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Dec 07 07:44:05 2007
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020111.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020111.D\ECD2B.CH
Acq On : 1 Feb 2008 10:38 pm Operator:
Sample : I1020111 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:52 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:34:51 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

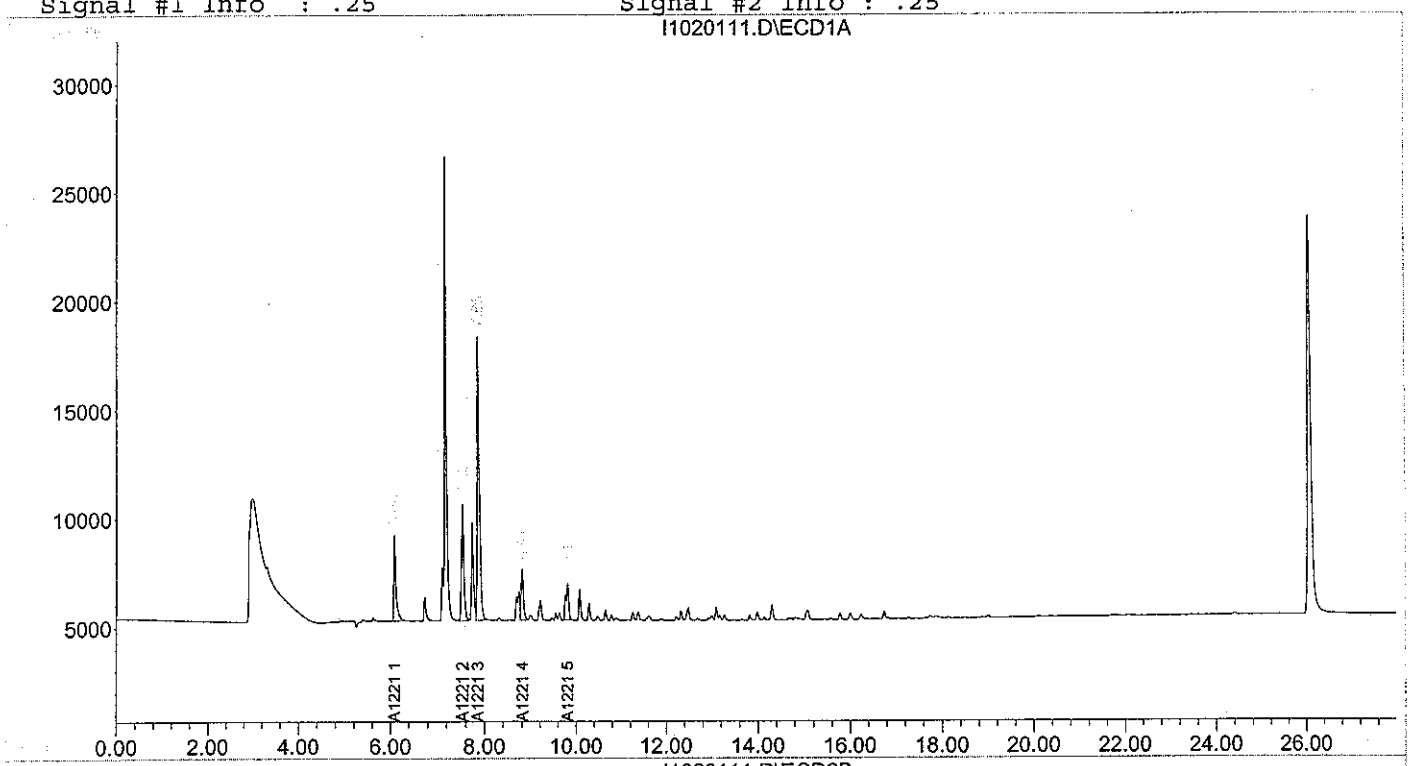
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
13) L2 A1221 1	6.09	5.56	125044	102555	1530.437	1467.048
14) L2 A1221 2	7.53	6.93	177219	149742	1516.281	1477.797m
15) L2 A1221 3	7.86	7.34	430356	356384	1478.661	1443.480m
16) L2 A1221 4	8.81	8.19	79698	70290	1441.367m	1775.051m
17) L2 A1221 5	9.81	9.28	73714	66504	1677.453m	1826.732m
Sum A1221 1			886031	745475	7644.199	7990.108
Average A1221 1					1528.840	1598.022
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

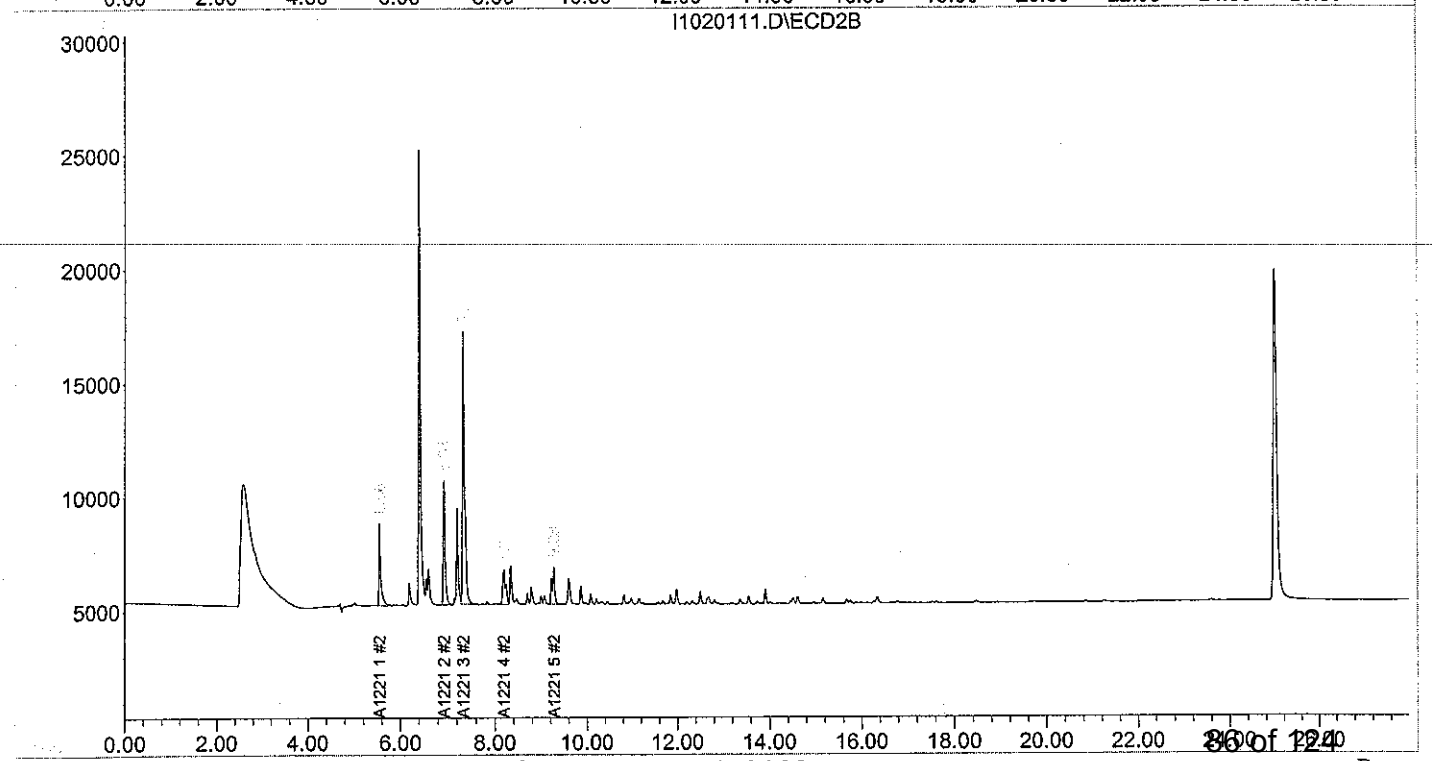
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020111.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020111.D\ECD2B.CH
Acq On : 1 Feb 2008 10:38 pm Operator:
Sample : I1020111 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:52 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:34:51 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020112.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020112.D\ECD2B.CH
Acq On : 1 Feb 2008 11:09 pm Operator:
Sample : I1020112 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:54 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:52:59 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
18) L3 A1232 1	7.86	7.34	409750	342187	1149.535	1094.331
19) L3 A1232 2	8.74	8.20	341646	251522	1177.919m	1111.051m
20) L3 A1232 3	9.81	9.28	523060	428938	1195.413m	1097.539m
21) L3 A1232 4	10.08	9.61	234119	200288	1154.558	1061.524m
22) L3 A1232 5	11.25	10.81	165800	146010	1092.304m	1063.950m
Sum A1232 1			1674375	1368945	5769.729	5428.395
Average A1232 1					1153.946	1085.679
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

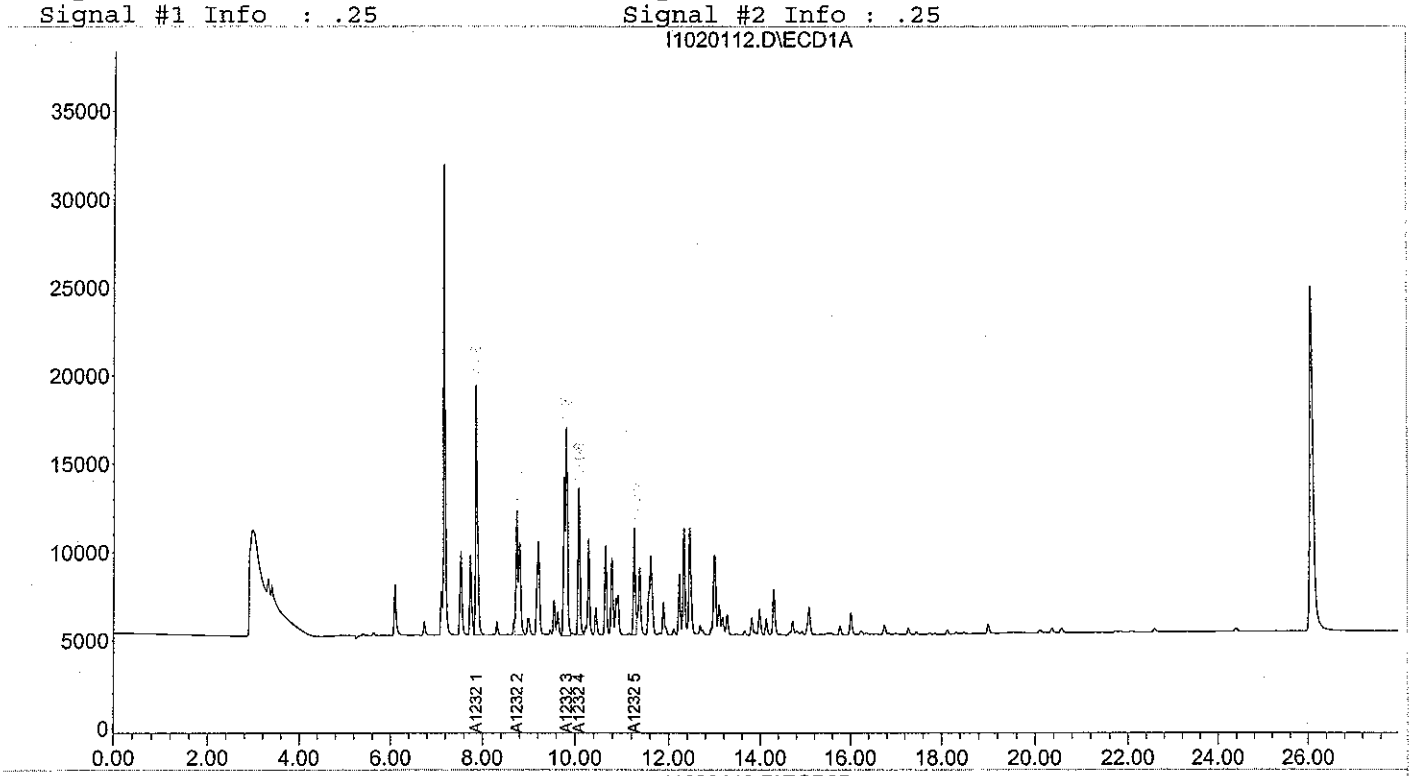
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

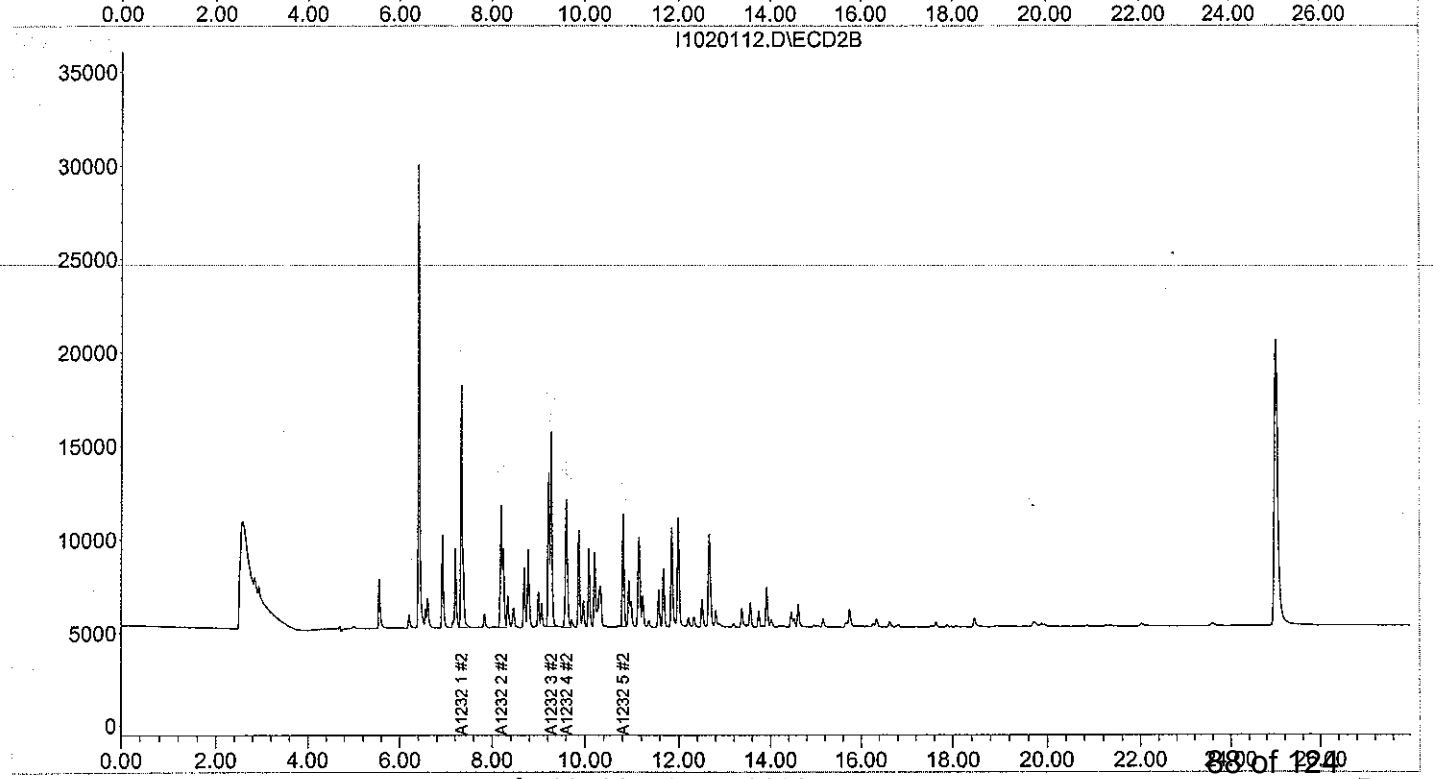
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020112.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020112.D\ECD2B.CH
Acq On : 1 Feb 2008 11:09 pm Operator:
Sample : I1020112 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:54 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:52:59 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020113.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020113.D\ECD2B.CH
Acq On : 1 Feb 2008 11:41 pm Operator:
Sample : I1020113 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:55 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:54:20 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.86	7.34	259401	219656	1105.320	1129.729
24) L4 A1242 2	8.74	8.20	514944	392645	1105.177m	1118.017
25) L4 A1242 3	9.81	9.28	901550	737240	1093.668m(C)	1087.923m
26) L4 A1242 4	10.08	9.87	398542	207977	1097.619	1088.604
27) L4 A1242 5	11.61	12.67	411322	309307	1100.181	1063.736
Sum A1242 1			2485759	1866825	5501.966	5488.010
Average A1242 1					1100.393	1097.602
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

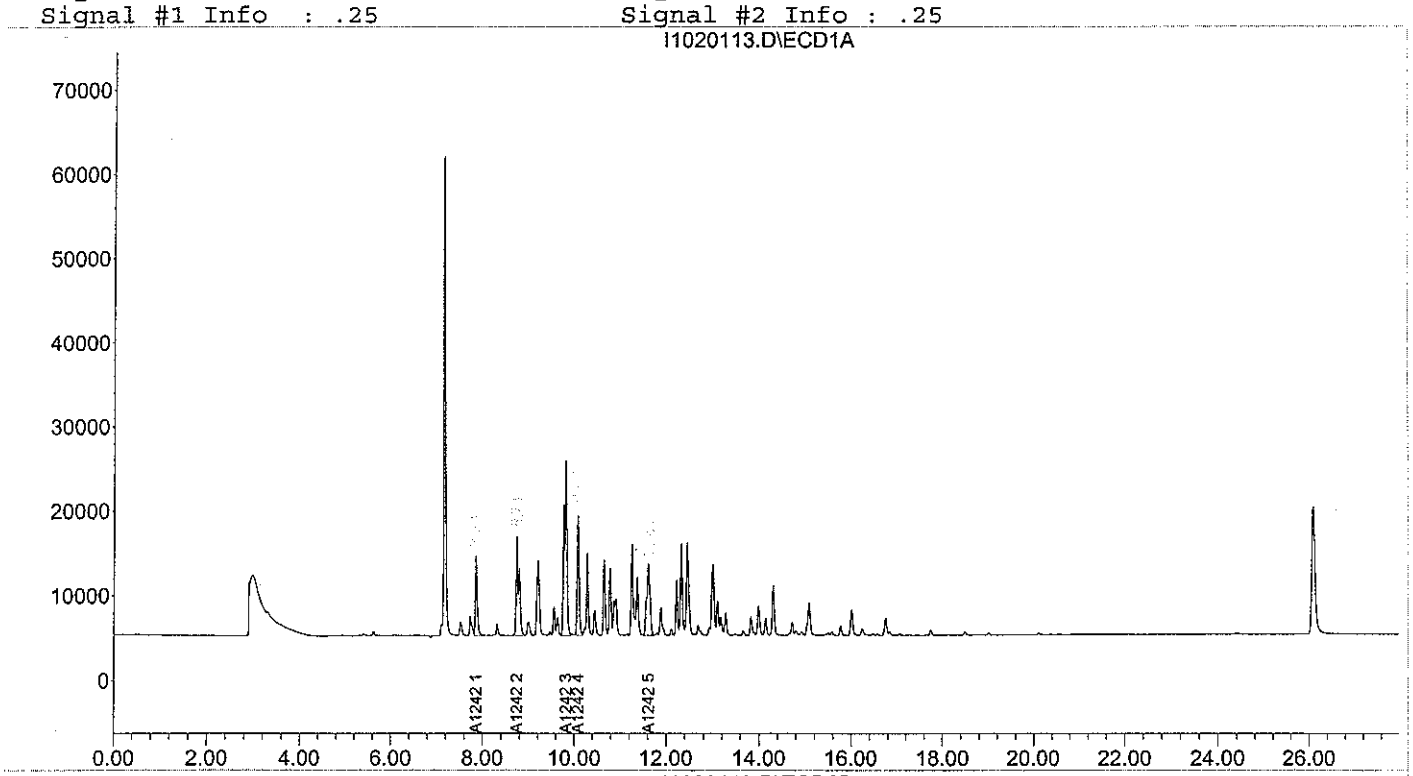
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

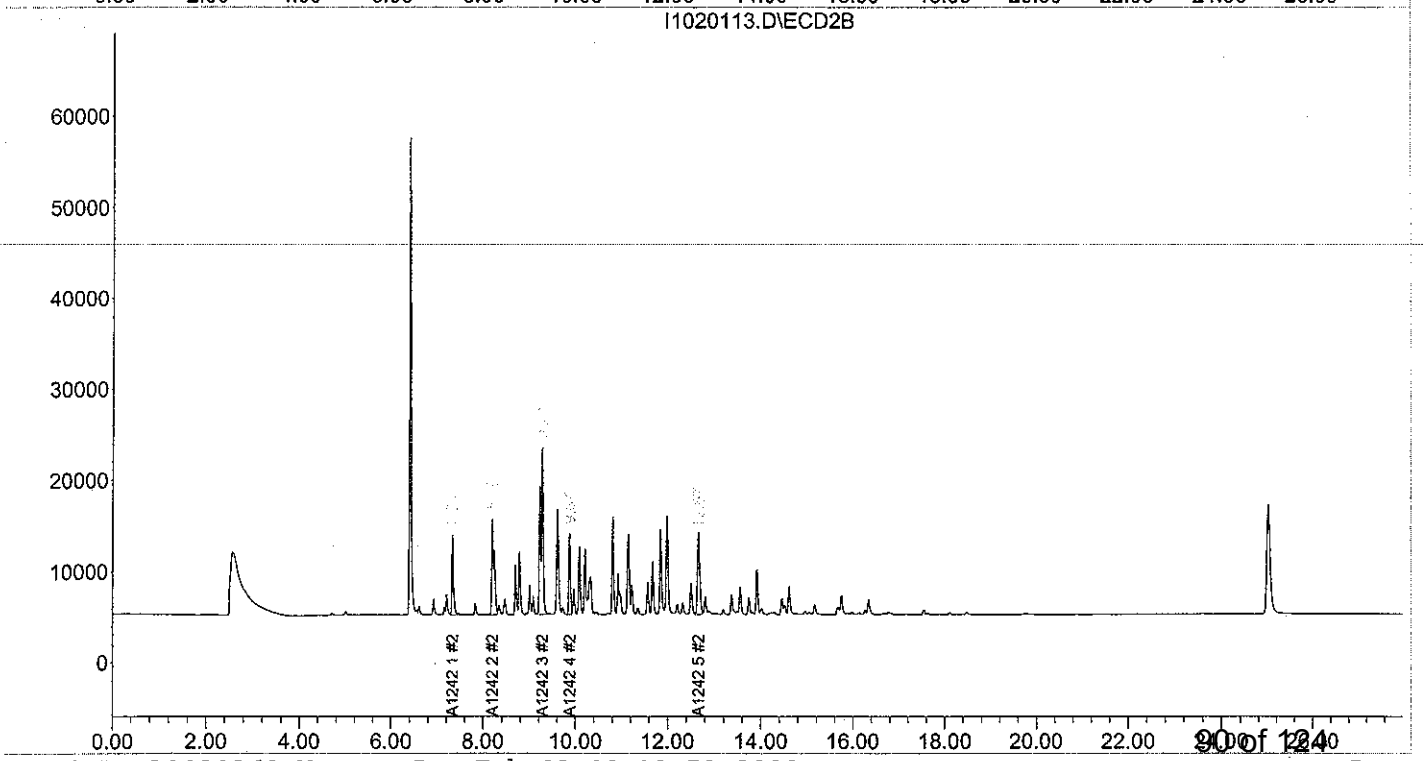
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020113.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020113.D\ECD2B.CH
Acq On : 1 Feb 2008 11:41 pm Operator:
Sample : I1020113 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:55 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:54:20 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020114.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020114.D\ECD2B.CH
Acq On : 2 Feb 2008 12:12 am Operator:
Sample : I1020114 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:55 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:55:18 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
28) L5 A1248 1	9.82	9.28	618308	277454	1233.616m	1244.423m
29) L5 A1248 2	10.65	10.09	384730	292205	1179.452	1204.192
30) L5 A1248 3	11.26	10.82	479803	393702	1224.690	1214.629
31) L5 A1248 4	12.33	11.85	517271	430160	1196.863	1194.159
32) L5 A1248 5	14.30	13.92	353234	259272	1228.751m	1177.636
Sum A1248 1			2353346	1652792	6063.372	6035.040
Average A1248 1					1212.674	1207.008
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

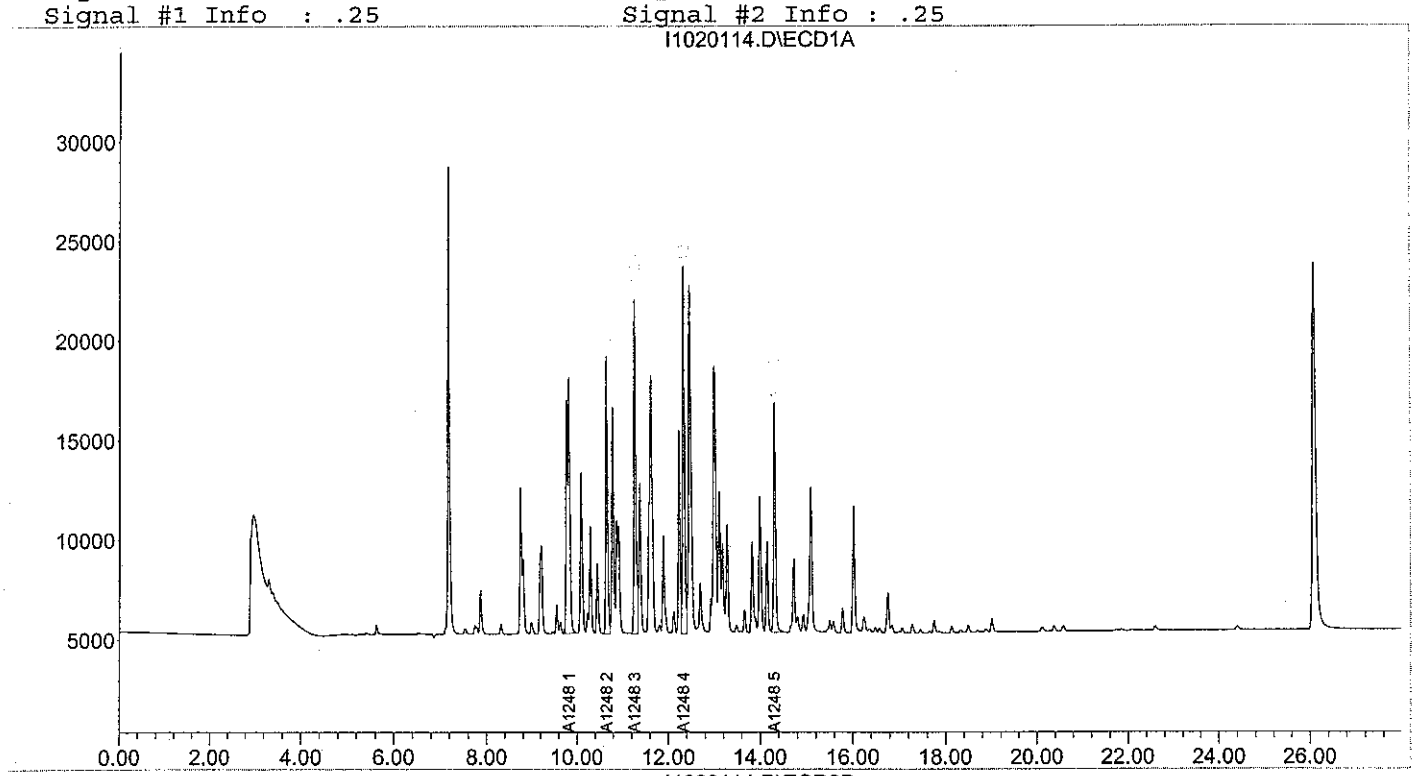
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

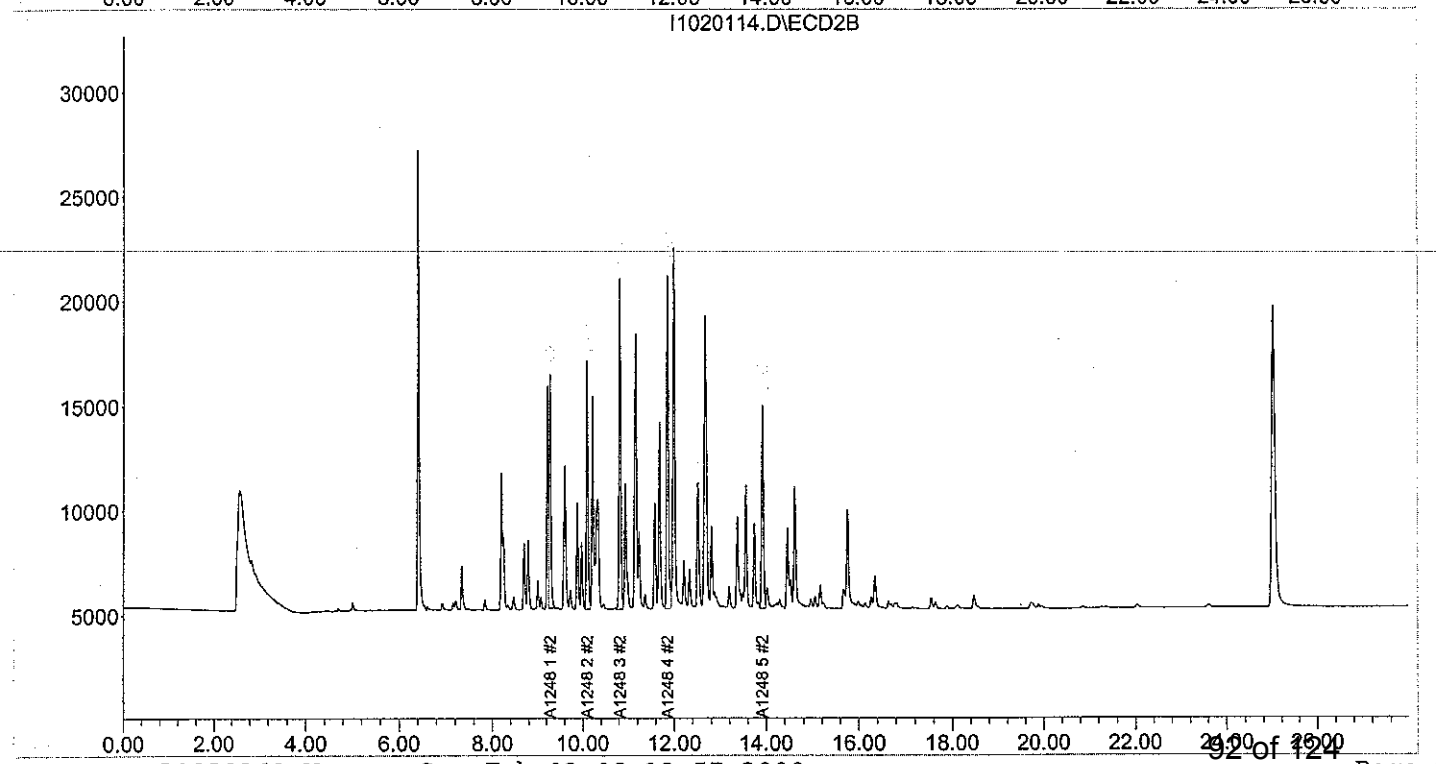
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020114.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020114.D\ECD2B.CH
Acq On : 2 Feb 2008 12:12 am Operator:
Sample : I1020114 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:55 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:55:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020115.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020115.D\ECD2B.CH
Acq On : 2 Feb 2008 12:43 am Operator:
Sample : I1020115 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:57 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:56:08 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.98	587293	445072	1195.058	1167.590m
34) L6 A1254 2	14.30	13.92	978734	705758	1157.983m	1183.931m
35) L6 A1254 3	15.08	14.62	1028514	492298	1154.557m	1147.773m
36) L6 A1254 4	16.01	15.16	664944	405280	1173.566m	1192.961m
37) L6 A1254 5	16.75	16.35	904408	712084	1174.093m	1150.122m
Sum A1254 1			4163893	2760492	5855.257	5842.377
Average A1254 1					1171.051	1168.475
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

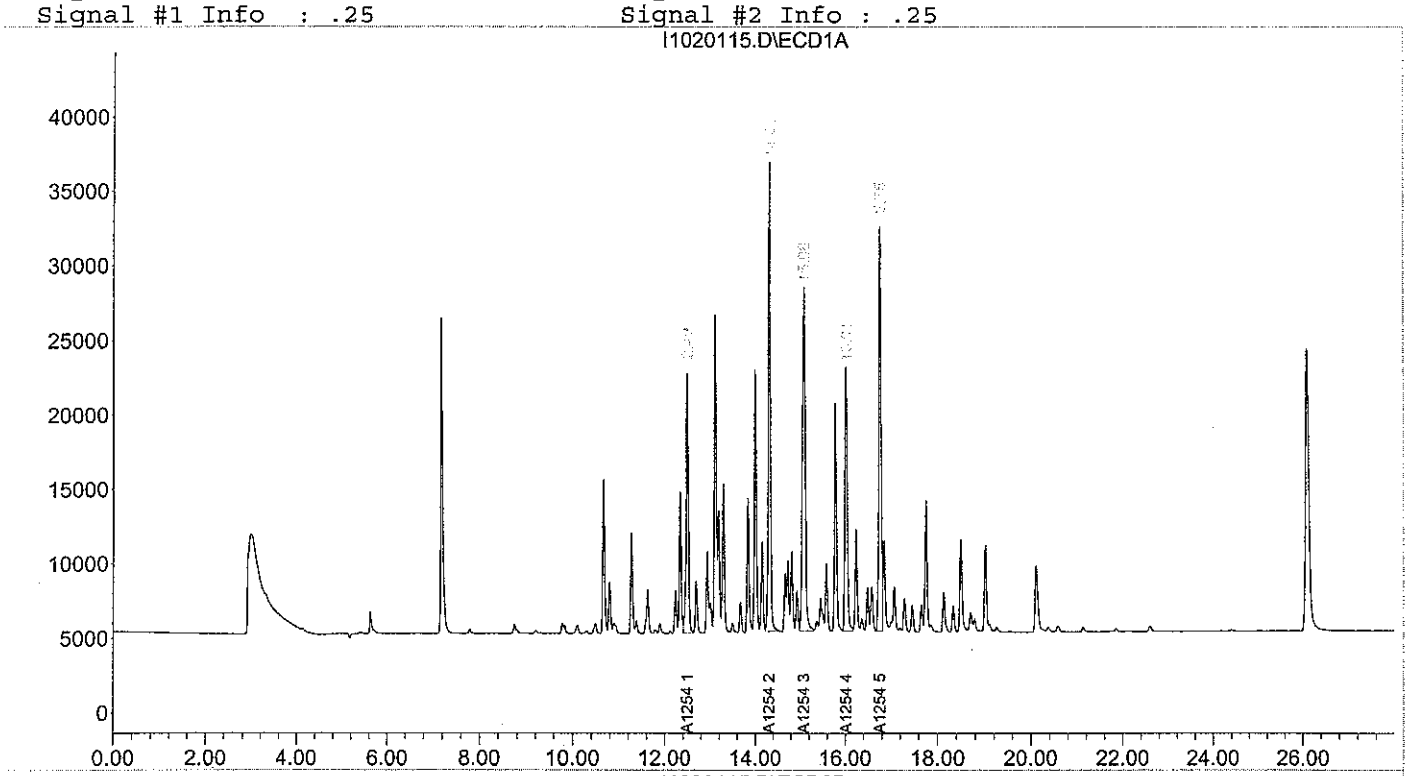
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

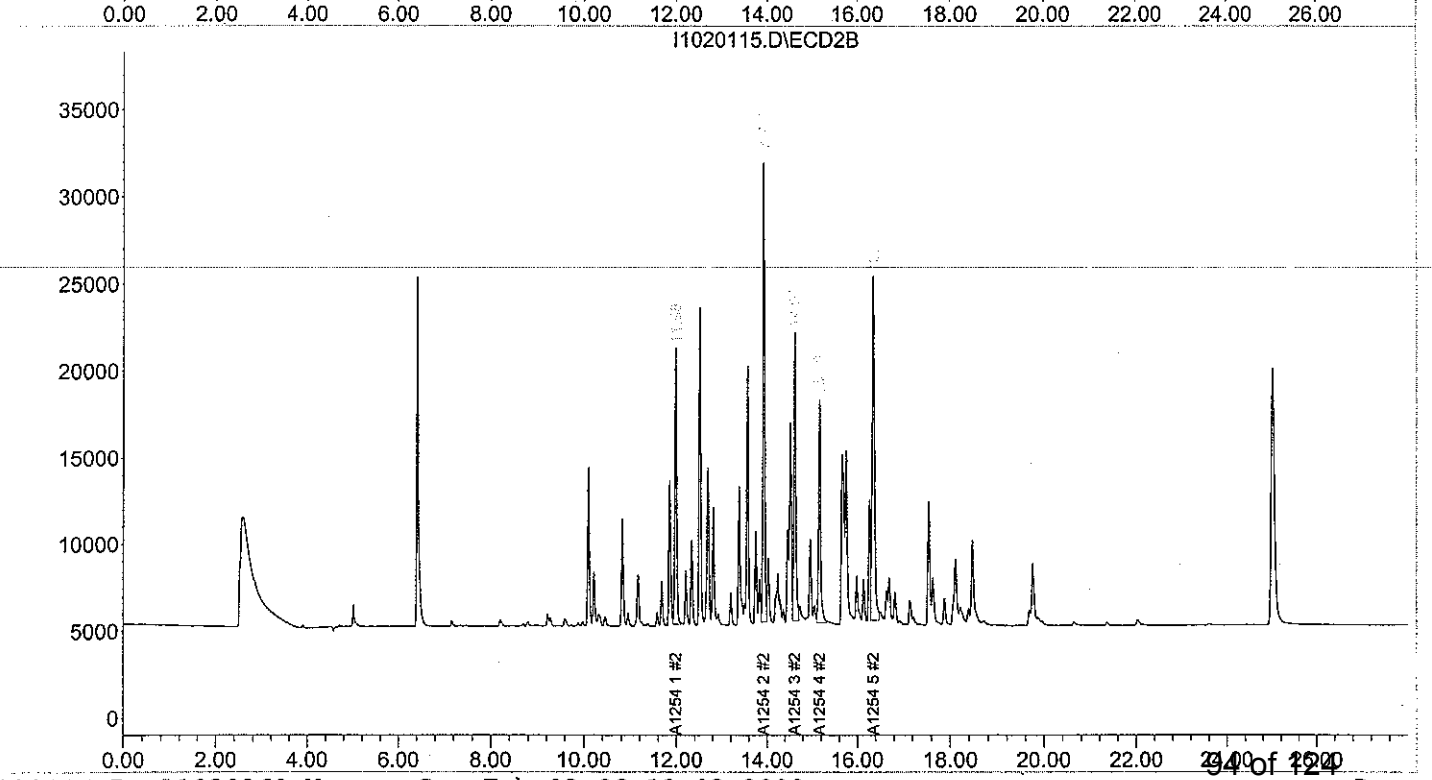
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020115.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020115.D\ECD2B.CH
Acq On : 2 Feb 2008 12:43 am Operator:
Sample : I1020115 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:57 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:56:08 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020116.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020116.D\ECD2B.CH
Acq On : 2 Feb 2008 1:14 am Operator:
Sample : I1020116 Inst : HP ECD2
Misc : PS050107C 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:58 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:57:26 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
Target Compounds							
Sum A1016 1			0	0	N.D.	N.D.	
Average A1016 1					0.000	0.000	
Sum A1260 1			0	0	N.D.	N.D.	
Average A1260 1					0.000	0.000	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
38) L8 A1262 1	15.77	15.16	661704	543044	1706.175m	1548.431m	
39) L8 A1262 2	17.28	16.64	879070	722308	1727.240m	1566.187m	
40) L8 A1262 3	18.12	17.64	766478	717364	1753.611m	1623.954	
41) L8 A1262 4	20.58	19.72f	942554	1138330	2143.335m	3904.886m	#
42) L8 A1262 5	22.59	22.03	858356	723902	1813.387m	1767.426m	
Sum A1262 1			4108162	3844948	9143.749	10410.883	
Average A1262 1					1828.750	2082.177	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

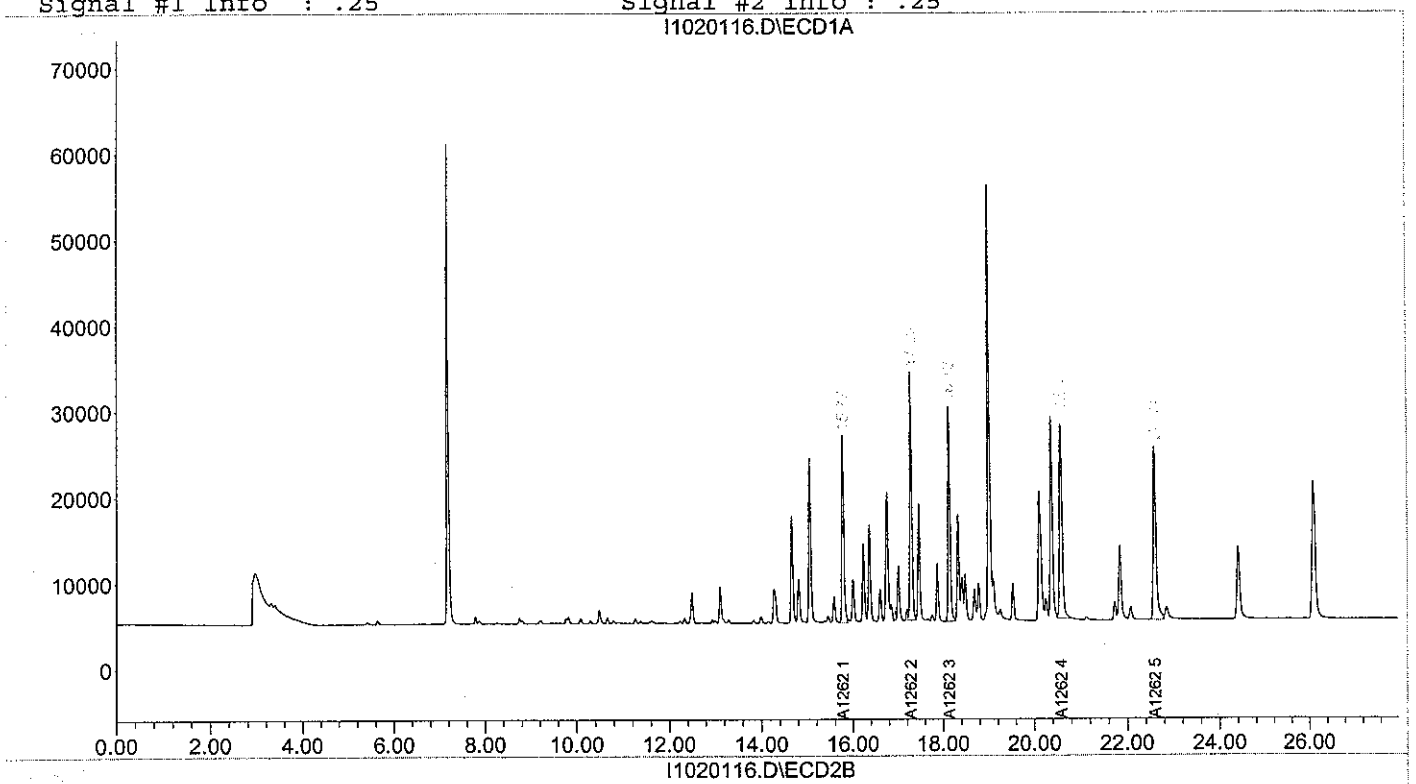
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

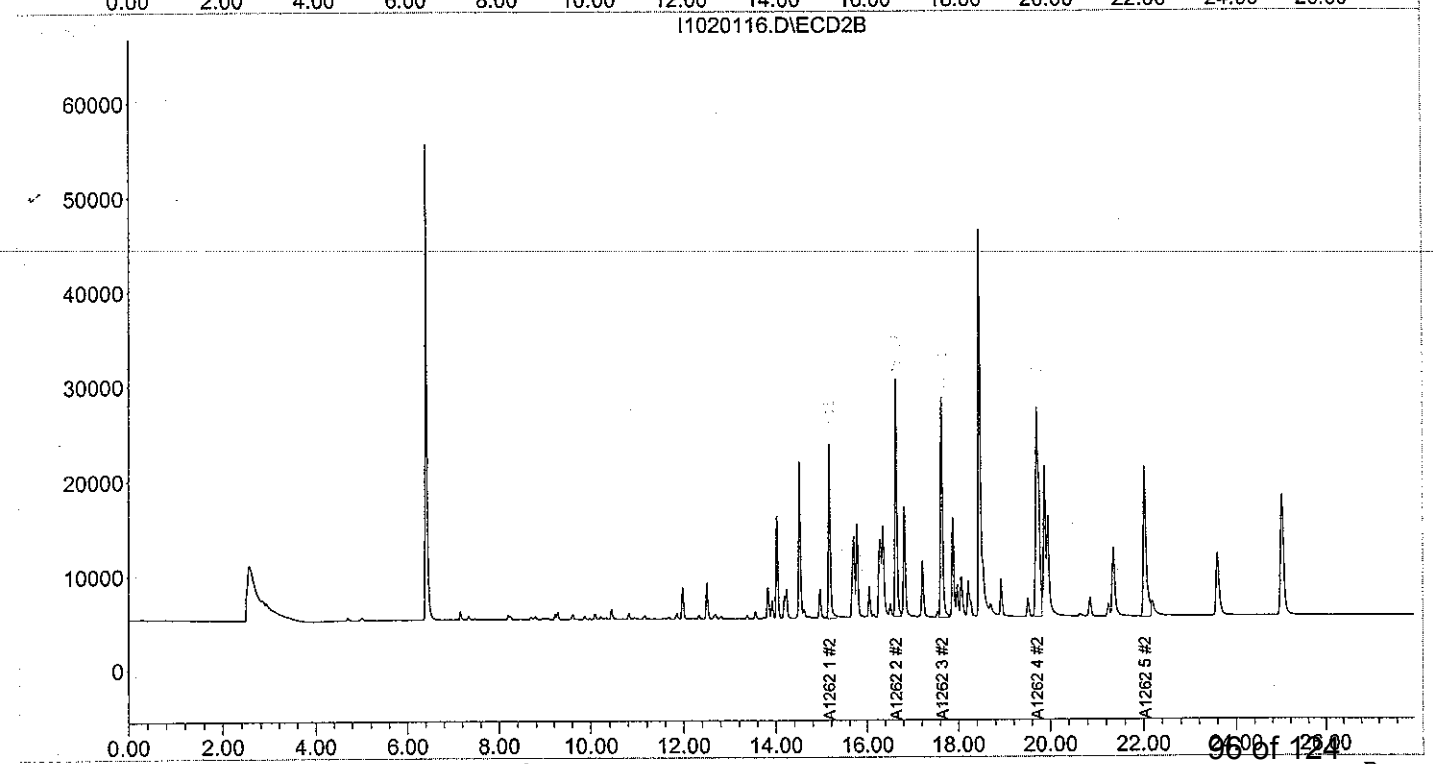
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020116.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020116.D\ECD2B.CH
Acq On : 2 Feb 2008 1:14 am Operator:
Sample : I1020116 Inst : HP ECD2
Misc : PS050107C 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:58 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:57:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020117.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020117.D\ECD2B.CH
Acq On : 2 Feb 2008 1:46 am Operator:
Sample : I1020117 Inst : HP ECD2
Misc : PS050107D 1:10 1268@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:59 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:58:39 2008
Response via : Initial Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
43) L9 A1268 1	18.41	17.65	668563	571186	1311.884	1227.413
44) L9 A1268 2	20.37	19.72	2366754	2019235	1254.179m	1236.967
45) L9 A1268 3	20.57	19.89	2555264	2268662	1104.388m	1241.761m
46) L9 A1268 4	21.73	20.86	2173486	1896773	1216.808m	1257.514
47) L9 A1268 5	24.40	23.61	6481822	5495945	1246.339m	1306.296
Sum A1268 1			14245889	12251801	6133.596	6269.952
Average A1268 1					1226.719	1253.990

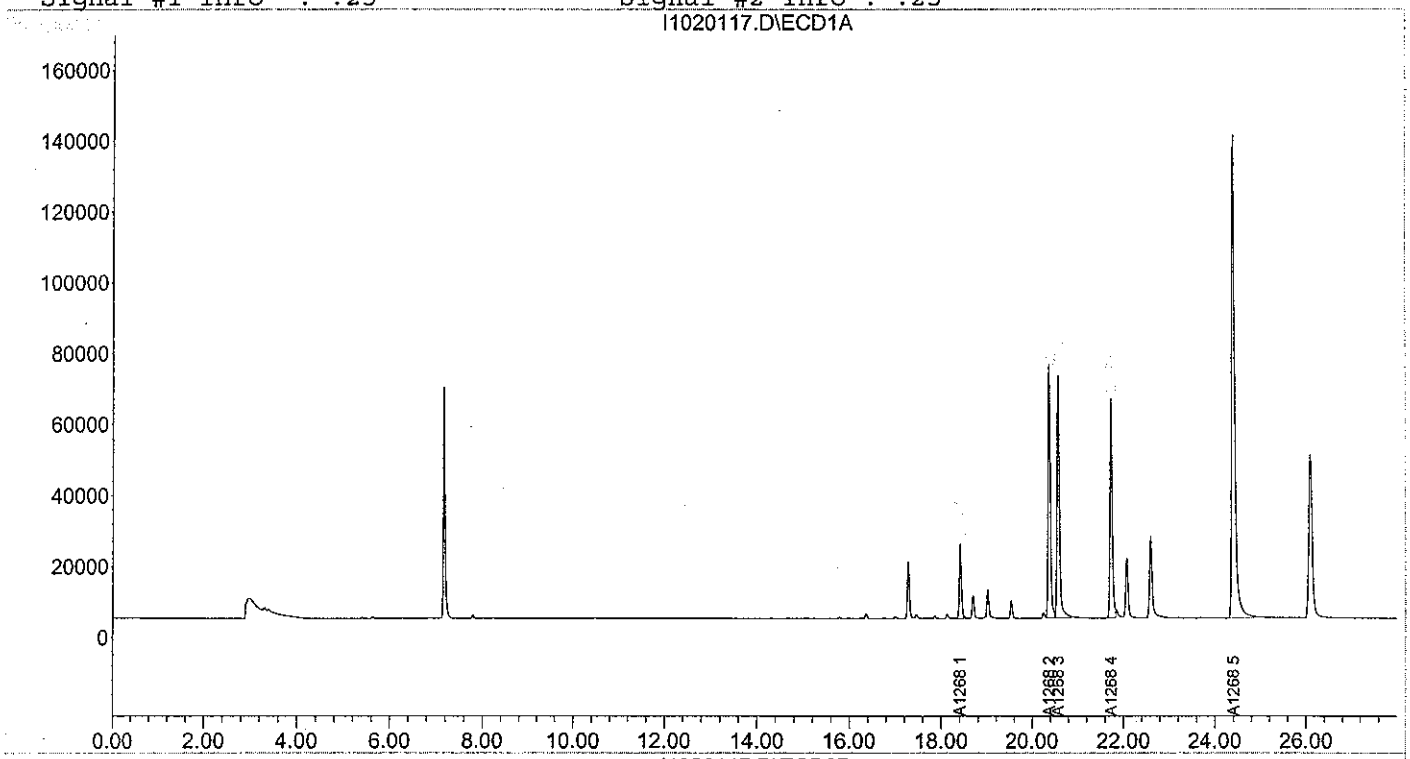
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

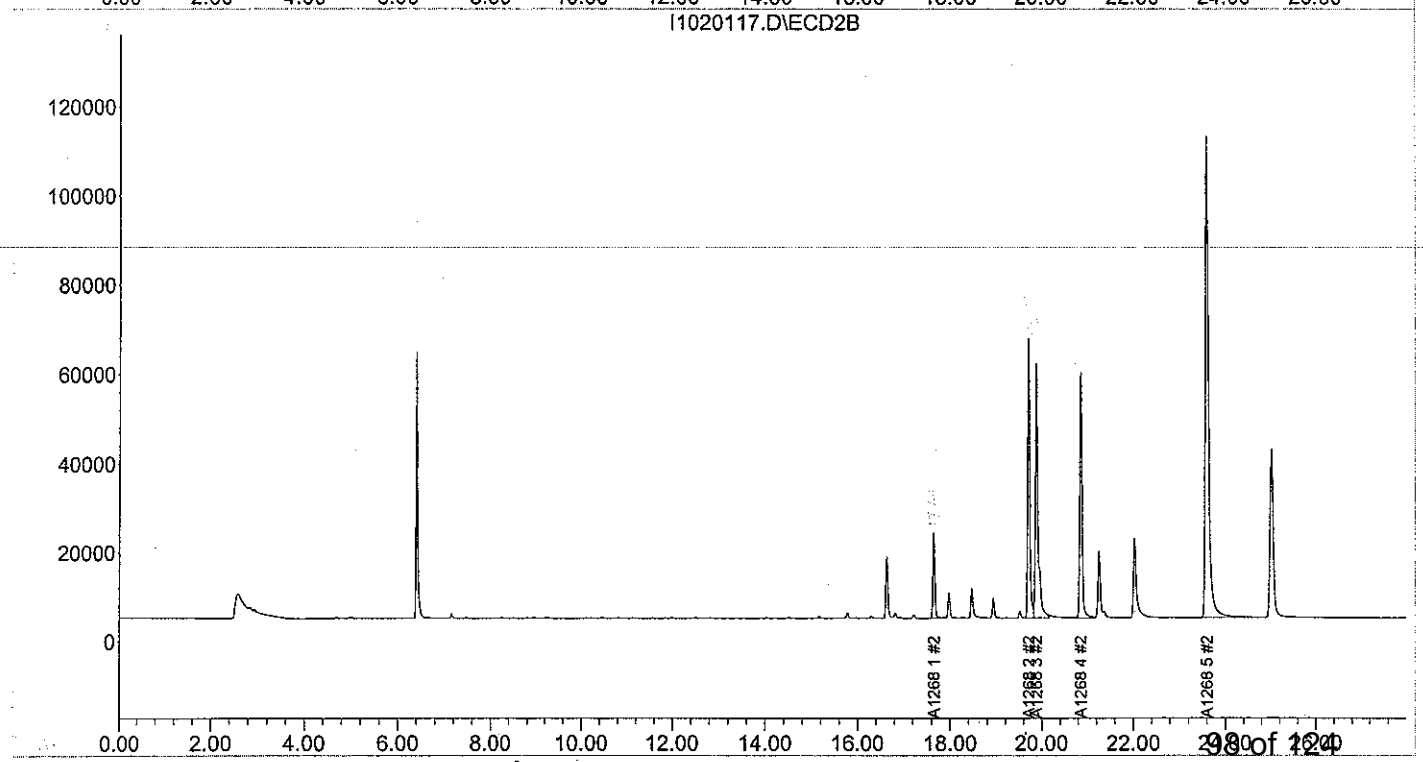
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB01\I1020117.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\FEB01\I1020117.D\ECD2B.CH
Acq On : 2 Feb 2008 1:46 am Operator:
Sample : I1020117 Inst : HP ECD2
Misc : PS050107D 1:10 1268@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 3 8:59 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Sun Feb 03 08:58:39 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1120460.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020701**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.86	7.81	7.91	1000.00	1031.49	3.1	15
PK #2 A1016	9.21	9.16	9.26	1000.00	1054.13	5.4	15
PK #3 A1016	10.07	10.02	10.12	1000.00	1087.75	8.8	15
PK #4 A1016	10.65	10.60	10.70	1000.00	1058.36	5.8	15
PK #5 A1016	11.25	11.20	11.30	1000.00	1069.86	7.0	15
PK #1 A1260	17.27	17.22	17.32	1000.00	1025.80	2.6	15
PK #2 A1260	18.12	18.07	18.17	1000.00	1047.72	4.8	15
PK #3 A1260	20.10	20.05	20.15	1000.00	1016.40	1.6	15
PK #4 A1260	20.57	20.52	20.62	1000.00	986.64	1.3	15
PK #5 A1260	22.58	22.53	22.63	1000.00	1009.14	0.9	15
Tetrachloro-meta-xylene	7.17	7.12	7.22	40.00	42.09	5.2	15
Decachlorobiphenyl	26.08	26.03	26.13	40.00	41.68	4.2	15
Average % D						4.2	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020701**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.34	7.29	7.39	1000.00	974.90	2.5	15
PK #2 A1016	8.69	8.64	8.74	1000.00	1034.91	3.5	15
PK #3 A1016	9.60	9.55	9.65	1000.00	1003.11	0.3	15
PK #4 A1016	9.87	9.82	9.92	1000.00	1010.37	1.0	15
PK #5 A1016	10.81	10.76	10.86	1000.00	989.96	1.0	15
PK #1 A1260	15.16	15.11	15.21	1000.00	1014.51	1.5	15
PK #2 A1260	16.63	16.58	16.68	1000.00	938.00	6.2	15
PK #3 A1260	17.63	17.58	17.68	1000.00	972.32	2.8	15
PK #4 A1260	19.75	19.70	19.80	1000.00	977.89	2.2	15
PK #5 A1260	22.03	21.98	22.08	1000.00	945.32	5.5	15
Tetrachloro-meta-xylene	6.41	6.36	6.46	40.00	39.03	2.4	15
Decachlorobiphenyl	25.01	24.96	25.06	40.00	39.69	0.8	15
Average % D						2.5	

N/A - Not Applicable

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Quantitation Report (QT Reviewed)

MJS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020701.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020701.D\ECD2B.CH
Acq On : 7 Feb 2008 2:54 pm Operator:
Sample : C1020701 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 7 15:38 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

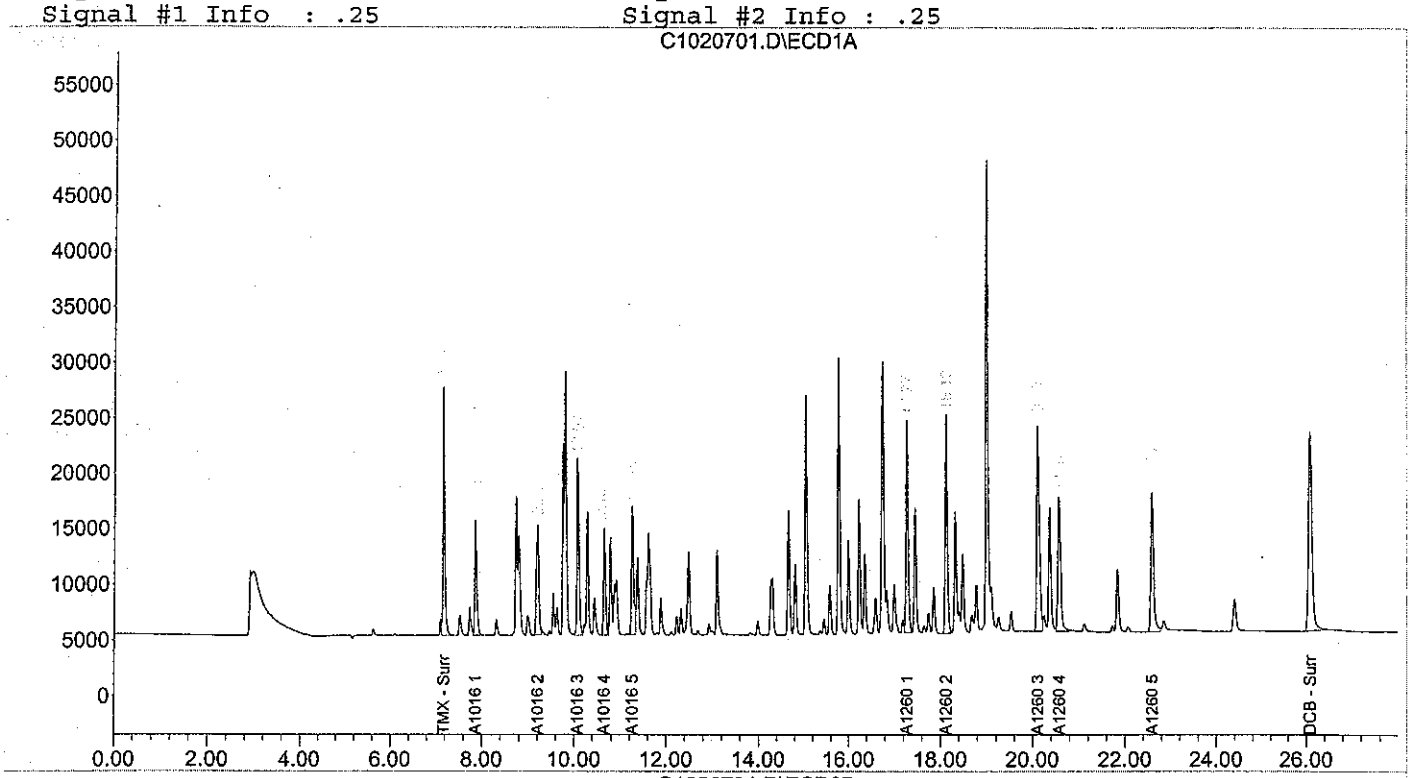
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	569382	438892	42.092	39.033
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.09%	39.03%
12) s DCB - Surrogate	26.08	25.01	915136	704610	41.679	39.690m
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.68%	39.69%
Target Compounds						
2) L1 A1016 1	7.86	7.34	300074	237584	1031.493	974.895m
3) L1 A1016 2	9.21	8.69	383480	139982	1054.134m	1034.909m
4) L1 A1016 3	10.07	9.60	472137	373384	1087.751	1003.109m
5) L1 A1016 4	10.65	9.87	277335	231106	1058.359	1010.372m
6) L1 A1016 5	11.25	10.81	360306	279256	1069.857m(C)	989.958m(C)
Sum A1016 1			1793332	1261312	5301.594	5013.242
Average A1016 1					1060.319	1002.648
7) L7 A1260 1	17.27	15.16	599690	615724	1025.798m	1014.512m
8) L7 A1260 2	18.12	16.63	622051	475692	1047.715	938.001m
9) L7 A1260 3	20.10	17.63	771028	512102	1016.403	972.316m
10) L7 A1260 4	20.57	19.75	518076	893786	986.641m	977.894
11) L7 A1260 5	22.58	22.03	526044	412192	1009.142m	945.317m
Sum A1260 1			3036888	2909496	5085.699	4848.040
Average A1260 1					1017.140	969.608
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

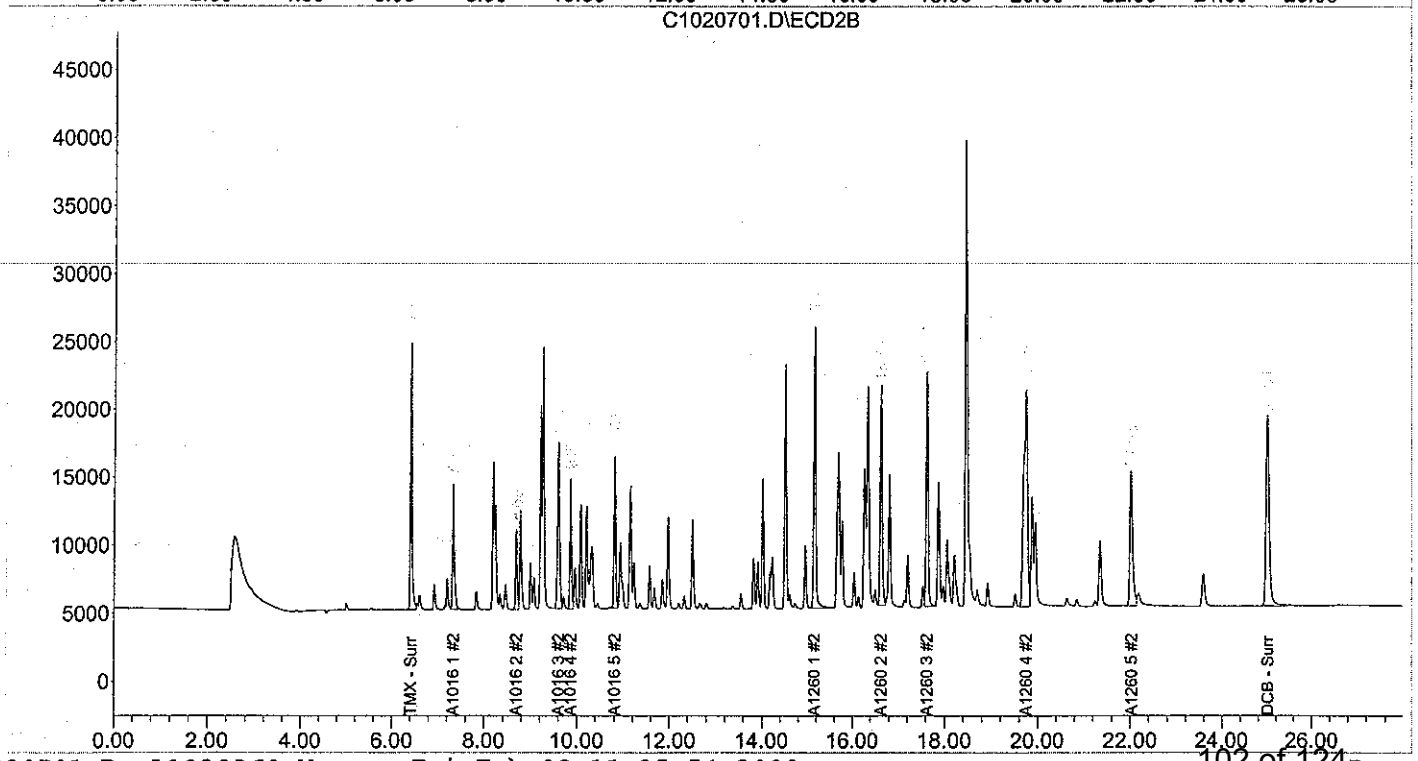
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020701.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020701.D\ECD2B.CH
Acq On : 7 Feb 2008 2:54 pm Operator:
Sample : C1020701 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 7 15:38 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020702**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.87	7.81	7.91	1000.00	1142.13	14.2	15
PK #2 A1016	9.22	9.16	9.26	1000.00	1144.33	14.4	15
PK #3 A1016	10.08	10.02	10.12	1000.00	1025.08	2.5	15
PK #4 A1016	10.65	10.60	10.70	1000.00	1078.32	7.8	15
PK #5 A1016	11.26	11.20	11.30	1000.00	1089.50	9.0	15
PK #1 A1260	17.28	17.22	17.32	1000.00	1056.62	5.7	15
PK #2 A1260	18.13	18.07	18.17	1000.00	1061.24	6.1	15
PK #3 A1260	20.11	20.05	20.15	1000.00	1040.54	4.1	15
PK #4 A1260	20.58	20.52	20.62	1000.00	951.88	4.8	15
PK #5 A1260	22.60	22.53	22.63	1000.00	923.79	7.6	15
Tetrachloro-meta-xylene	7.18	7.12	7.22	40.00	45.06	12.6	15
Decachlorobiphenyl	26.10	26.03	26.13	40.00	40.79	2.0	15
Average % D						7.6	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020702**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.35	7.29	7.39	1000.00	1060.53	6.1	15
PK #2 A1016	8.70	8.64	8.74	1000.00	1087.27	8.7	15
PK #3 A1016	9.62	9.55	9.65	1000.00	1033.76	3.4	15
PK #4 A1016	9.88	9.82	9.92	1000.00	1032.75	3.3	15
PK #5 A1016	10.82	10.76	10.86	1000.00	1028.70	2.9	15
PK #1 A1260	15.17	15.11	15.21	1000.00	1020.44	2.0	15
PK #2 A1260	16.64	16.58	16.68	1000.00	961.33	3.9	15
PK #3 A1260	17.64	17.58	17.68	1000.00	964.05	3.6	15
PK #4 A1260	19.77	19.70	19.80	1000.00	995.41	0.5	15
PK #5 A1260	22.04	21.98	22.08	1000.00	949.92	5.0	15
Tetrachloro-meta-xylene	6.42	6.36	6.46	40.00	40.83	2.1	15
Decachlorobiphenyl	25.03	24.96	25.06	40.00	39.29	1.8	15
Average % D						3.6	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

JS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020702.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020702.D\ECD2B.CH
Acq On : 8 Feb 2008 1:52 am Operator:
Sample : C1020702 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 7:40 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

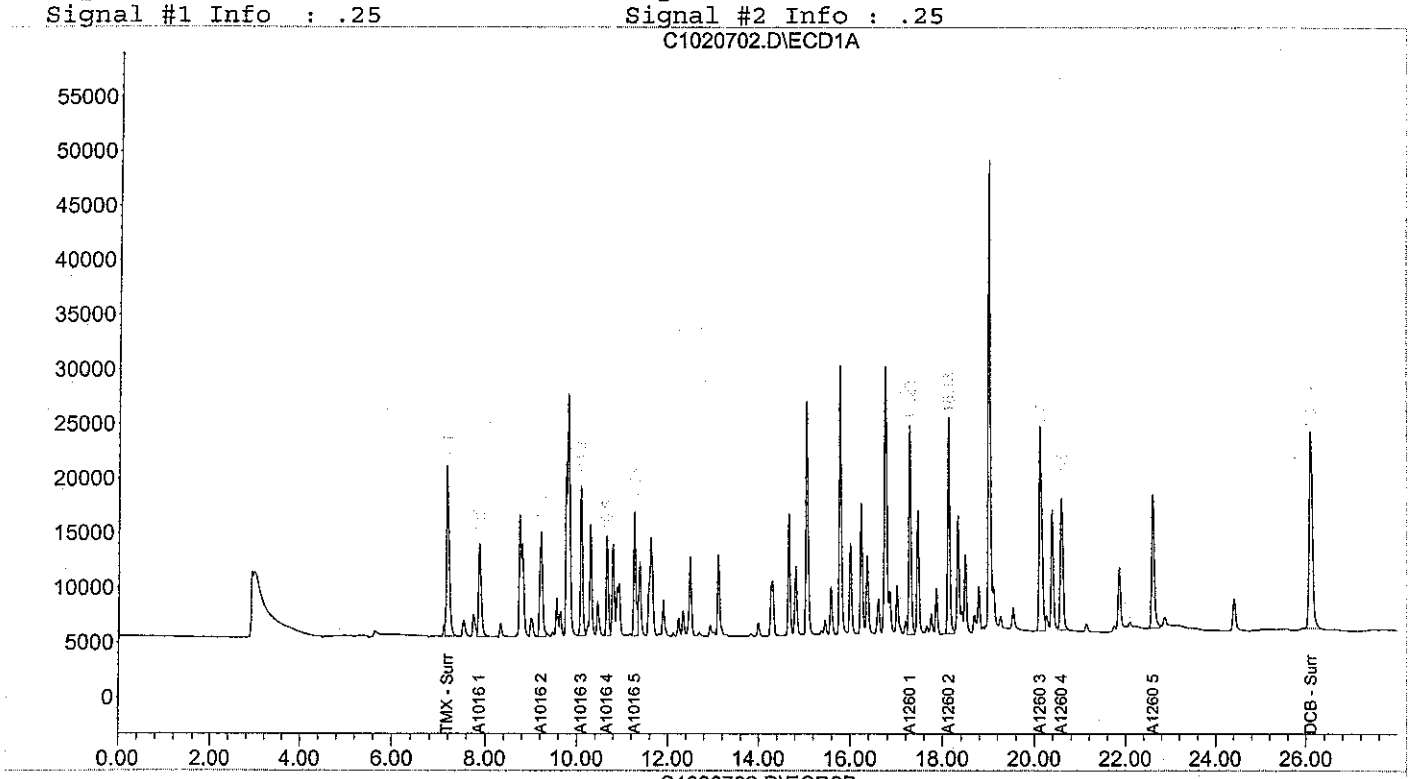
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.18	6.42	607431	457722	45.060m	40.830m
Spiked Amount 100.000 Range 30 - 150 Recovery =					45.06%	40.83%
12) s DCB - Surrogate	26.10	25.03	897680	698288	40.789m	39.291m
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.79%	39.29%
Target Compounds						
2) L1 A1016 1	7.87	7.35	327547	255168	1142.130	1060.528m
3) L1 A1016 2	9.22	8.70	412088	146158	1144.328m	1087.270m
4) L1 A1016 3	10.08	9.62	448754	383364	1025.084m	1033.764m
5) L1 A1016 4	10.65	9.88	281714	235776	1078.320m	1032.751m
6) L1 A1016 5	11.26	10.82	366208	288664	1089.503m(C)	1028.700m(C)
Sum A1016 1			1836311	1309130	5479.366	5243.013
Average A1016 1					1095.873	1048.603
7) L7 A1260 1	17.28	15.17	614805	618764	1056.621	1020.440m
8) L7 A1260 2	18.13	16.64	628944	485548	1061.239m	961.331m
9) L7 A1260 3	20.11	17.64	787395	508262	1040.541	964.051m
10) L7 A1260 4	20.58	19.77	502034	907980	951.878m	995.407
11) L7 A1260 5	22.60	22.04	486238	413966	923.786m	949.918m
Sum A1260 1			3019416	2934520	5034.064	4891.148
Average A1260 1					1006.813	978.230
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

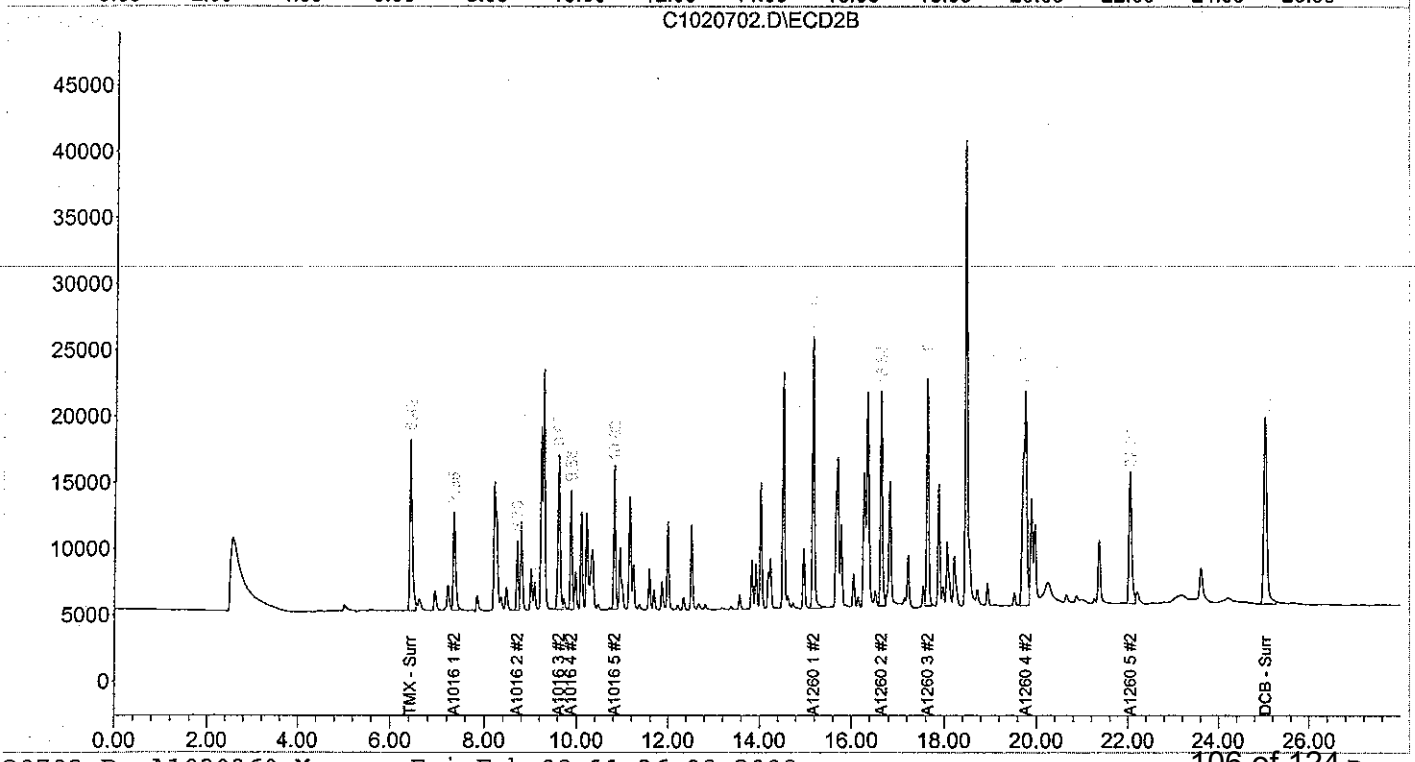
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020702.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020702.D\ECD2B.CH
Acq On : 8 Feb 2008 1:52 am Operator:
Sample : C1020702 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 7:40 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020706**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.87	7.82	7.92	1000.00	1105.21	10.5	15
PK #2 A1016	9.22	9.17	9.27	1000.00	1096.68	9.7	15
PK #3 A1016	10.09	10.04	10.14	1000.00	1059.78	6.0	15
PK #4 A1016	10.66	10.61	10.71	1000.00	1016.41	1.6	15
PK #5 A1016	11.27	11.22	11.32	1000.00	1010.54	1.1	15
PK #1 A1260	17.28	17.23	17.33	1000.00	942.90	5.7	15
PK #2 A1260	18.13	18.08	18.18	1000.00	964.48	3.6	15
PK #3 A1260	20.12	20.07	20.17	1000.00	951.25	4.9	15
PK #4 A1260	20.59	20.54	20.64	1000.00	950.91	4.9	15
PK #5 A1260	22.61	22.56	22.66	1000.00	1084.58	8.5	15
Tetrachloro-meta-xylene	7.17	7.12	7.22	40.00	43.29	8.2	15
Decachlorobiphenyl	26.11	26.06	26.16	40.00	41.64	4.1	15
Average % D						5.7	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020706**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.35	7.30	7.40	1000.00	1070.16	7.0	15
PK #2 A1016	8.70	8.65	8.75	1000.00	1039.04	3.9	15
PK #3 A1016	9.62	9.57	9.67	1000.00	1014.50	1.5	15
PK #4 A1016	9.88	9.83	9.93	1000.00	993.86	0.6	15
PK #5 A1016	10.82	10.77	10.87	1000.00	987.89	1.2	15
PK #1 A1260	15.17	15.12	15.22	1000.00	944.04	5.6	15
PK #2 A1260	16.64	16.59	16.69	1000.00	890.64	10.9	15
PK #3 A1260	17.64	17.59	17.69	1000.00	915.38	8.5	15
PK #4 A1260	19.77	19.72	19.82	1000.00	932.05	6.8	15
PK #5 A1260	22.05	22.00	22.10	1000.00	890.42	11.0	15
Tetrachloro-meta-xylene	6.41	6.36	6.46	40.00	40.99	2.5	15
Decachlorobiphenyl	25.03	24.98	25.08	40.00	38.76	3.1	15
Average % D						5.2	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantification Report (QT Reviewed)

JBS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020706.D\ECD1A.CH Vial: 33
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020706.D\ECD2B.CH
Acq On : 8 Feb 2008 7:04 am Operator:
Sample : C1020706 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 7:42 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

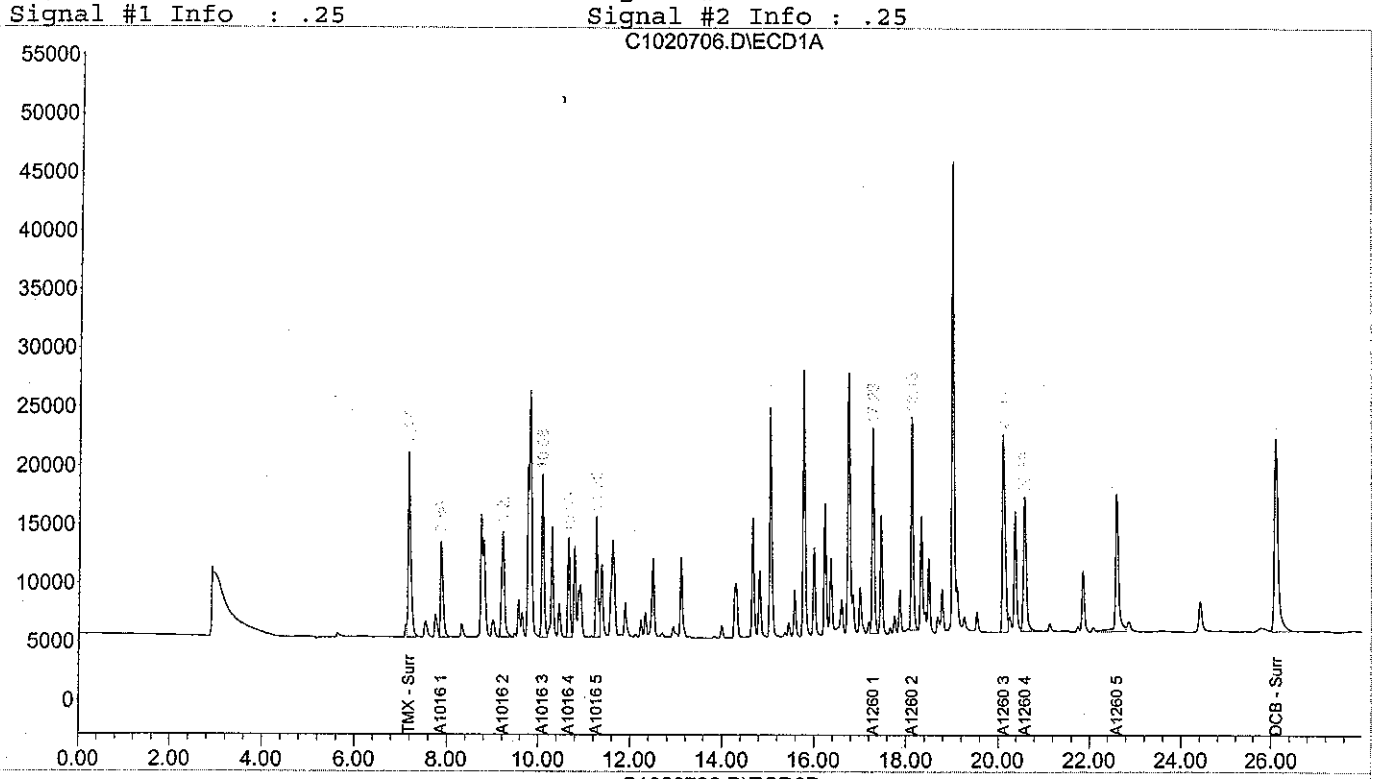
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	584781	459432	43.291m	40.993m
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.29%	40.99%
12) s DCB - Surrogate	26.11	25.03	914449	689836	41.644	38.758m
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.64%	38.76%
Target Compounds						
2) L1 A1016 1	7.87	7.35	318467	257118	1105.214	1070.159m
3) L1 A1016 2	9.22	8.70	397047	140472	1096.684	1039.041
4) L1 A1016 3	10.09	9.62	461746	377102	1059.779	1014.504m
5) L1 A1016 4	10.66	9.88	268047	227650	1016.413	993.860m
6) L1 A1016 5	11.27	10.82	342364	278752	1010.540 (C)	987.893 (C)
Sum A1016 1			1787671	1281094	5288.629	5105.458
Average A1016 1					1057.726	1021.092
7) L7 A1260 1	17.28	15.17	558326	579180	942.900m	944.045m
8) L7 A1260 2	18.13	16.64	579074	455430	964.476m	890.643m
9) L7 A1260 3	20.12	17.64	726430	485508	951.246m	915.383m
10) L7 A1260 4	20.59	19.77	501586	856366	950.912m	932.045m
11) L7 A1260 5	22.61	22.05	560574	390876	1084.583	890.422m
Sum A1260 1			2925990	2767360	4894.117	4572.537
Average A1260 1					978.823	914.507
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

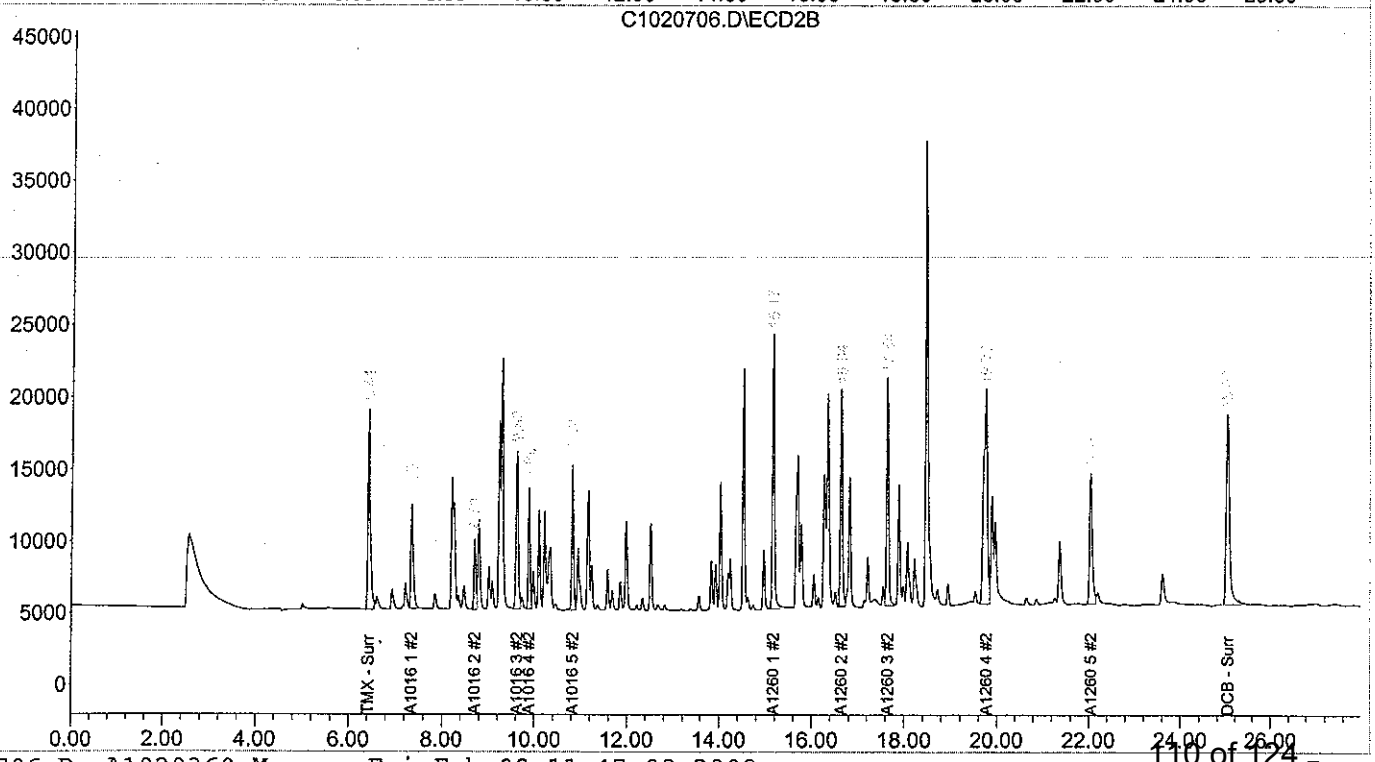
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020706.D\ECD1A.CH Vial: 33
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020706.D\ECD2B.CH
Acq On : 8 Feb 2008 7:04 am Operator:
Sample : C1020706 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 7:42 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Feb 07 07:47:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020710**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.87	7.82	7.92	1000.00	1114.83	11.5	15
PK #2 A1016	9.22	9.17	9.27	1000.00	1112.40	11.2	15
PK #3 A1016	10.09	10.04	10.14	1000.00	1070.86	7.1	15
PK #4 A1016	10.66	10.61	10.71	1000.00	1028.40	2.8	15
PK #5 A1016	11.27	11.22	11.32	1000.00	1028.76	2.9	15
PK #1 A1260	17.29	17.23	17.33	1000.00	968.24	3.2	15
PK #2 A1260	18.13	18.08	18.18	1000.00	997.58	0.2	15
PK #3 A1260	20.12	20.07	20.17	1000.00	968.55	3.1	15
PK #4 A1260	20.59	20.54	20.64	1000.00	936.37	6.4	15
PK #5 A1260	22.61	22.56	22.66	1000.00	921.76	7.8	15
Tetrachloro-meta-xylene	7.17	7.12	7.22	40.00	43.65	9.1	15
Decachlorobiphenyl	26.11	26.06	26.16	40.00	40.66	1.7	15
Average % D						5.6	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Port of Portland**

Lab Code: **MA00030**
ETR: **0801049**
Lab ID: **C1020710**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.35	7.30	7.40	1000.00	1077.35	7.7	15
PK #2 A1016	8.70	8.65	8.75	1000.00	1029.30	2.9	15
PK #3 A1016	9.62	9.57	9.67	1000.00	988.72	1.1	15
PK #4 A1016	9.88	9.83	9.93	1000.00	962.10	3.8	15
PK #5 A1016	10.82	10.77	10.87	1000.00	998.69	0.1	15
PK #1 A1260	15.17	15.12	15.22	1000.00	1005.10	0.5	15
PK #2 A1260	16.65	16.59	16.69	1000.00	918.20	8.2	15
PK #3 A1260	17.65	17.59	17.69	1000.00	904.52	9.5	15
PK #4 A1260	19.77	19.72	19.82	1000.00	903.82	9.6	15
PK #5 A1260	22.05	22.00	22.10	1000.00	932.81	6.7	15
Tetrachloro-meta-xylene	6.41	6.36	6.46	40.00	40.62	1.5	15
Decachlorobiphenyl	25.04	24.98	25.08	40.00	40.32	0.8	15
Average % D						4.4	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

JJS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020710.D\ECD1A.CH Vial: 39
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020710.D\ECD2B.CH
Acq On : 8 Feb 2008 11:49 am Operator:
Sample : C1020710 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:20 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

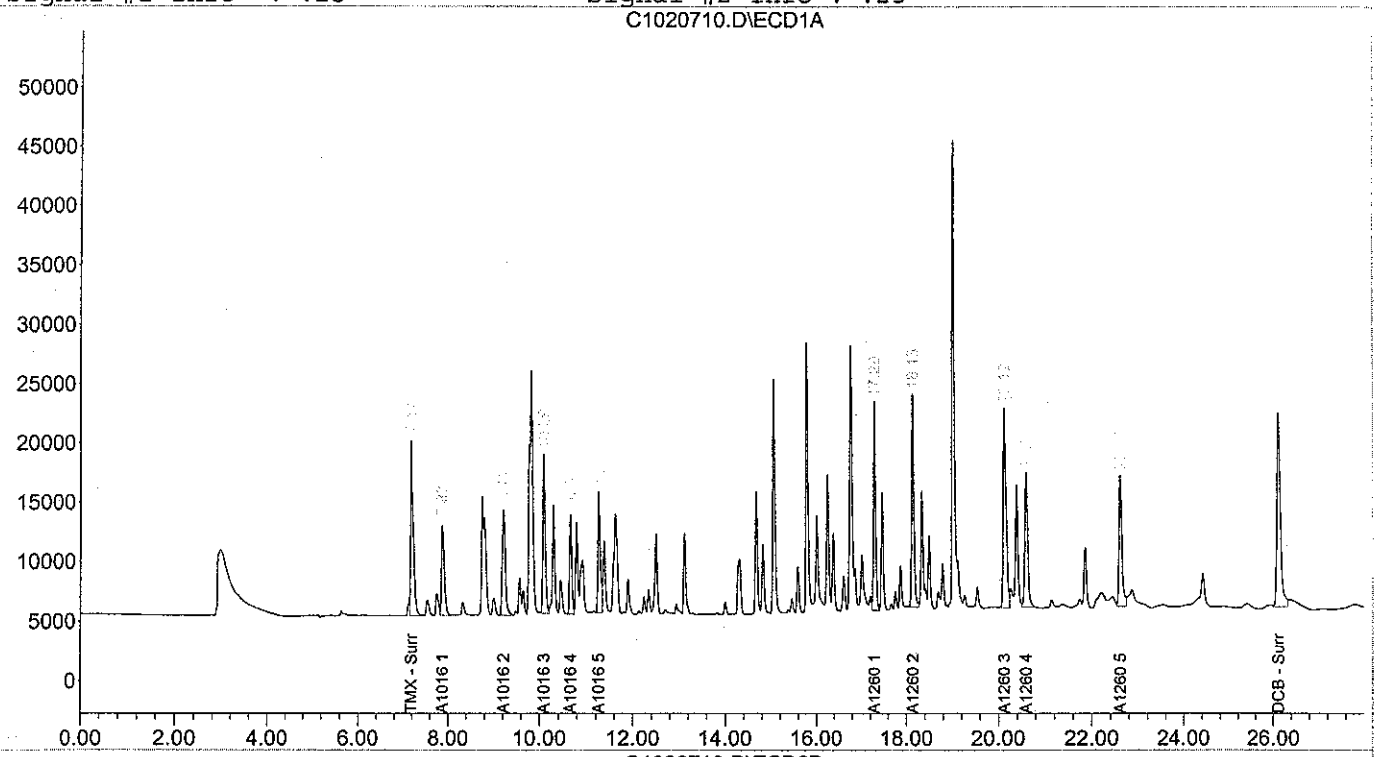
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.17	6.41	589428	455529	43.653m	40.620m
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.65%	40.62%
12) s DCB - Surrogate	26.11	25.04	895214	714609	40.663m	40.323m
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.66%	40.32%
Target Compounds						
2) L1 A1016 1	7.87	7.35	320840	258570	1114.828m	1077.349m
3) L1 A1016 2	9.22	8.70	402026	139316	1112.400	1029.302m
4) L1 A1016 3	10.09	9.62	465870	368674	1070.856m	988.715m
5) L1 A1016 4	10.66	9.88	270714	220976	1028.403m	962.095m(C)
6) L1 A1016 5	11.27	10.82	347894	281384	1028.758m(C)	998.689m(C)
Sum A1016 1			1807344	1268920	5355.246	5056.149
Average A1016 1					1071.049	1011.230
7) L7 A1260 1	17.29	15.17	571081	610884	968.242	1005.096m
8) L7 A1260 2	18.13	16.65	596280	467260	997.584m	918.196m
9) L7 A1260 3	20.12	17.65	738333	480394	968.550	904.515m
10) L7 A1260 4	20.59	19.77	494828	833142	936.368m	903.821m
11) L7 A1260 5	22.61	22.05	485282	407360	921.756m	932.810m
Sum A1260 1			2885804	2799040	4792.500	4664.439
Average A1260 1					958.500	932.888
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

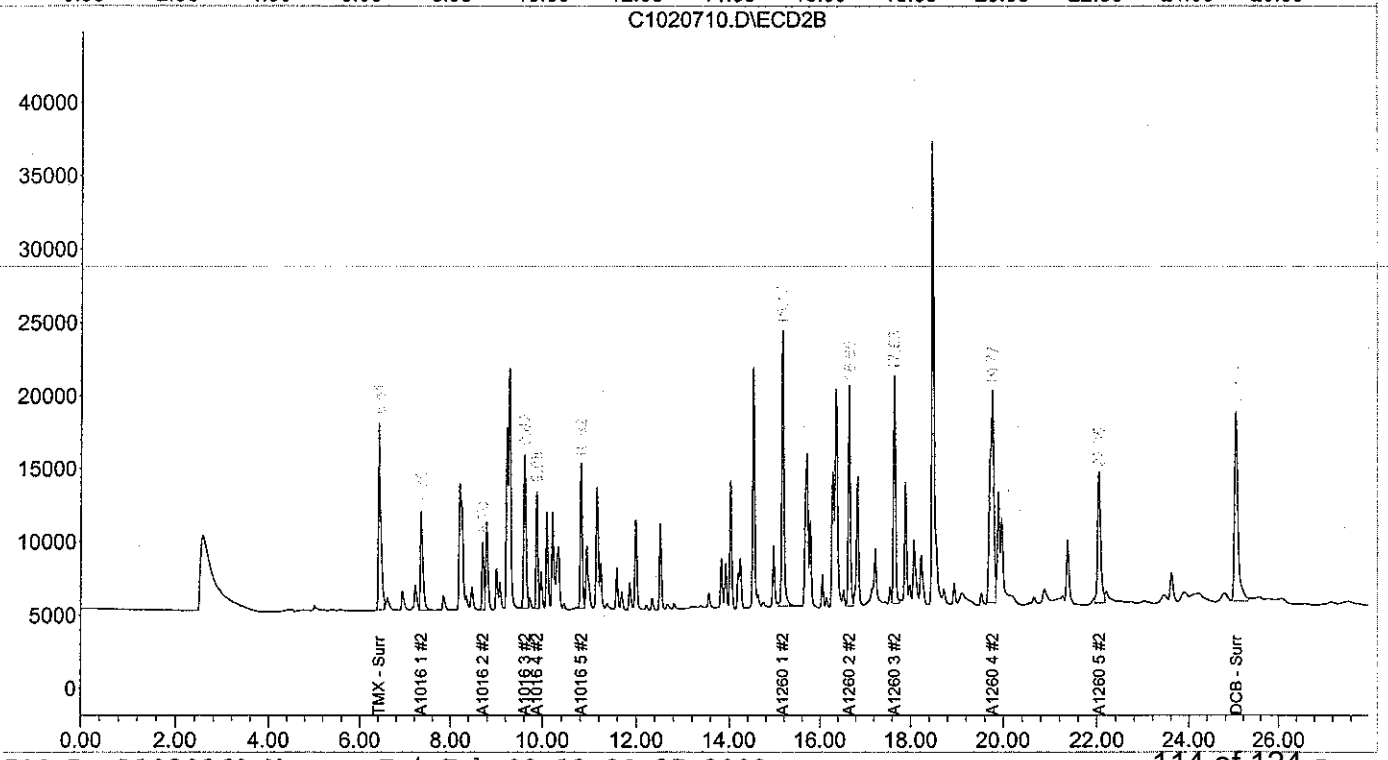
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020710.D\ECD1A.CH Vial: 39
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020710.D\ECD2B.CH
Acq On : 8 Feb 2008 11:49 am Operator:
Sample : C1020710 Inst : HP ECD2
Misc : PW112807A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:20 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

PS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\I1020703.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\2\DATA\FEB07\I1020703.D\ECD2B.CH
Acq On : 7 Feb 2008 4:28 pm Operator:
Sample : I1020703 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 11:42 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:38:48 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.48	11.98	543671	395558	994.857	980.653m
34) L6 A1254 2	14.29	13.91	907366	633898	975.576m(C)	978.851m
35) L6 A1254 3	15.07	14.61	948386	447824	979.837m	990.301m
36) L6 A1254 4	16.00	15.16	616012	359862	981.796	977.270m(C)
37) L6 A1254 5	16.74	16.34	852470	621666	995.574m	958.033m
Sum A1254 1			3867906	2458808	4927.640	4885.108
Average A1254 1					985.528	977.022
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

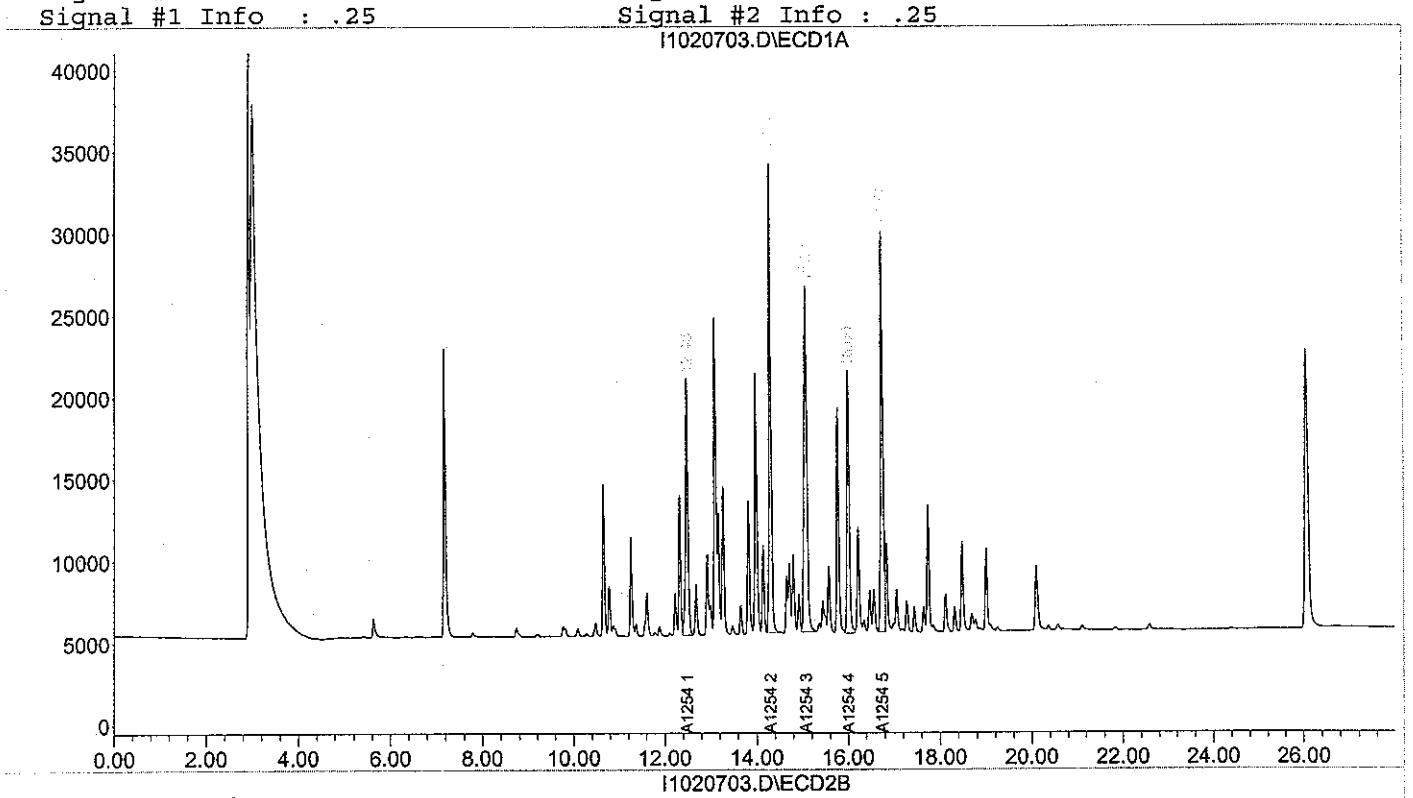
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

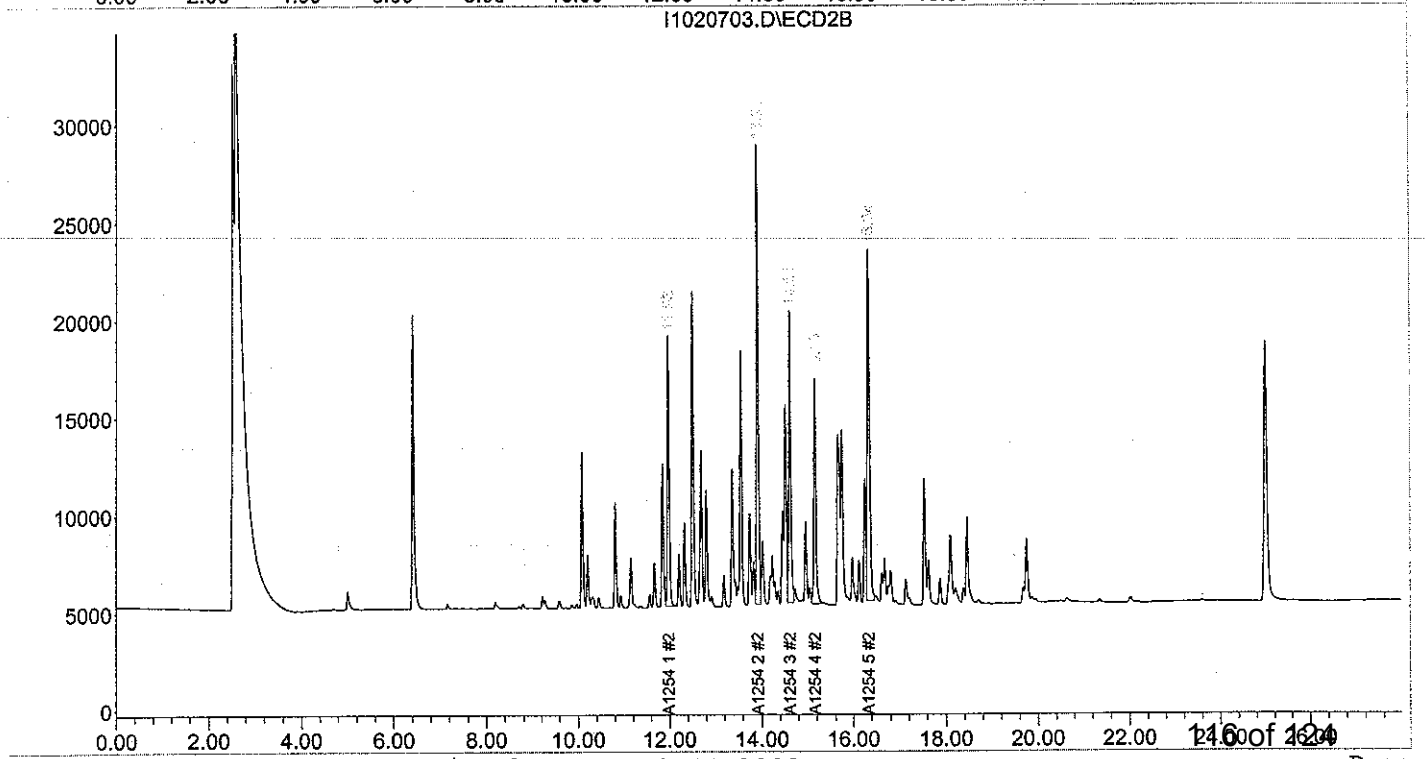
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\I1020703.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\2\DATA\FEB07\I1020703.D\ECD2B.CH
Acq On : 7 Feb 2008 4:28 pm Operator:
Sample : I1020703 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 11:42 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:38:48 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020709.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020709.D\ECD2B.CH
Acq On : 8 Feb 2008 8:38 am Operator:
Sample : C1020709 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:17 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.99	523266	396660	962.467m	1002.786m
34) L6 A1254 2	14.30	13.93	877158	619654	966.708m	977.529 (C)
35) L6 A1254 3	15.08	14.62	904320	438160	953.536m	978.420m
36) L6 A1254 4	16.01	15.17	575882	352830	934.855m	980.459m(C)
37) L6 A1254 5	16.76	16.35	804408	602268	943.620m	968.797m
Sum A1254 1			3685034	2409572	4761.187	4907.991
Average A1254 1					952.237	981.598
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

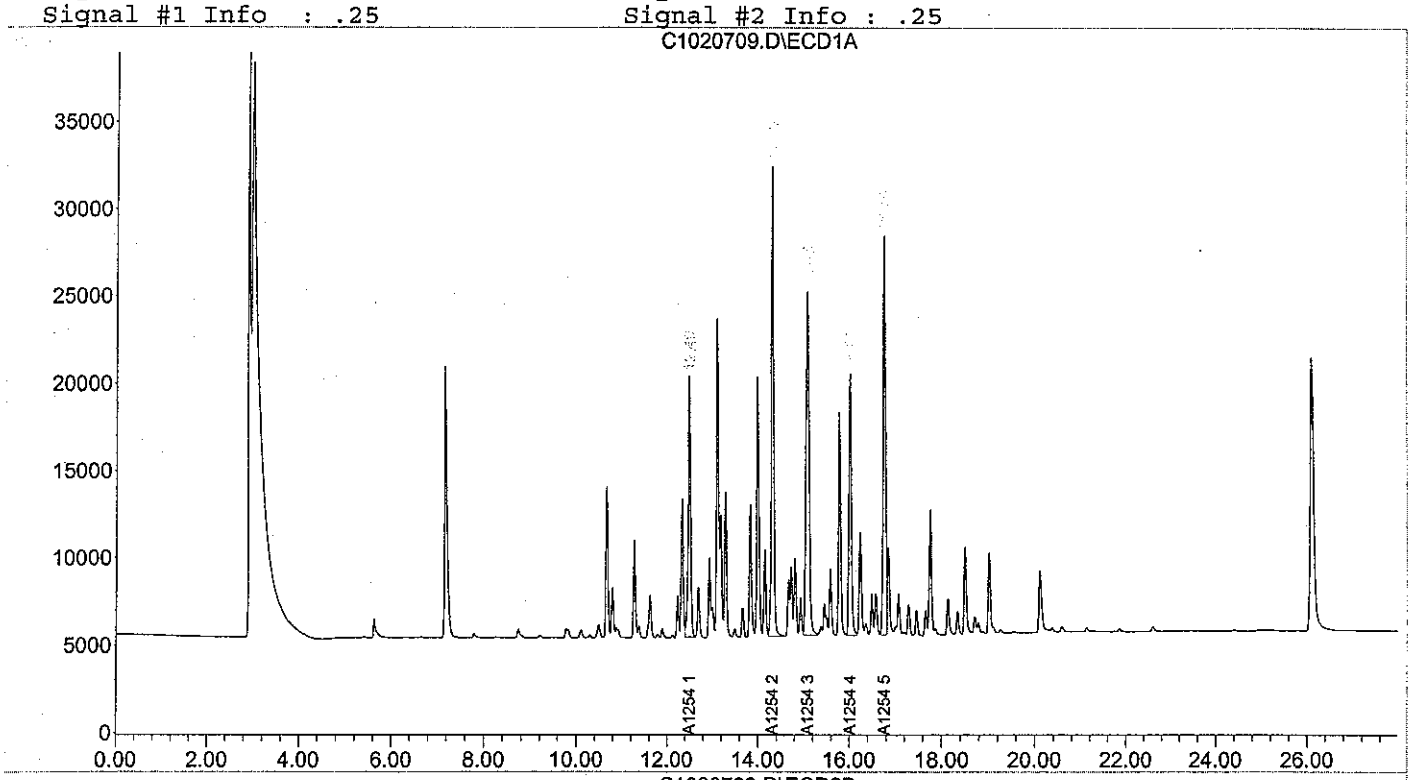
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

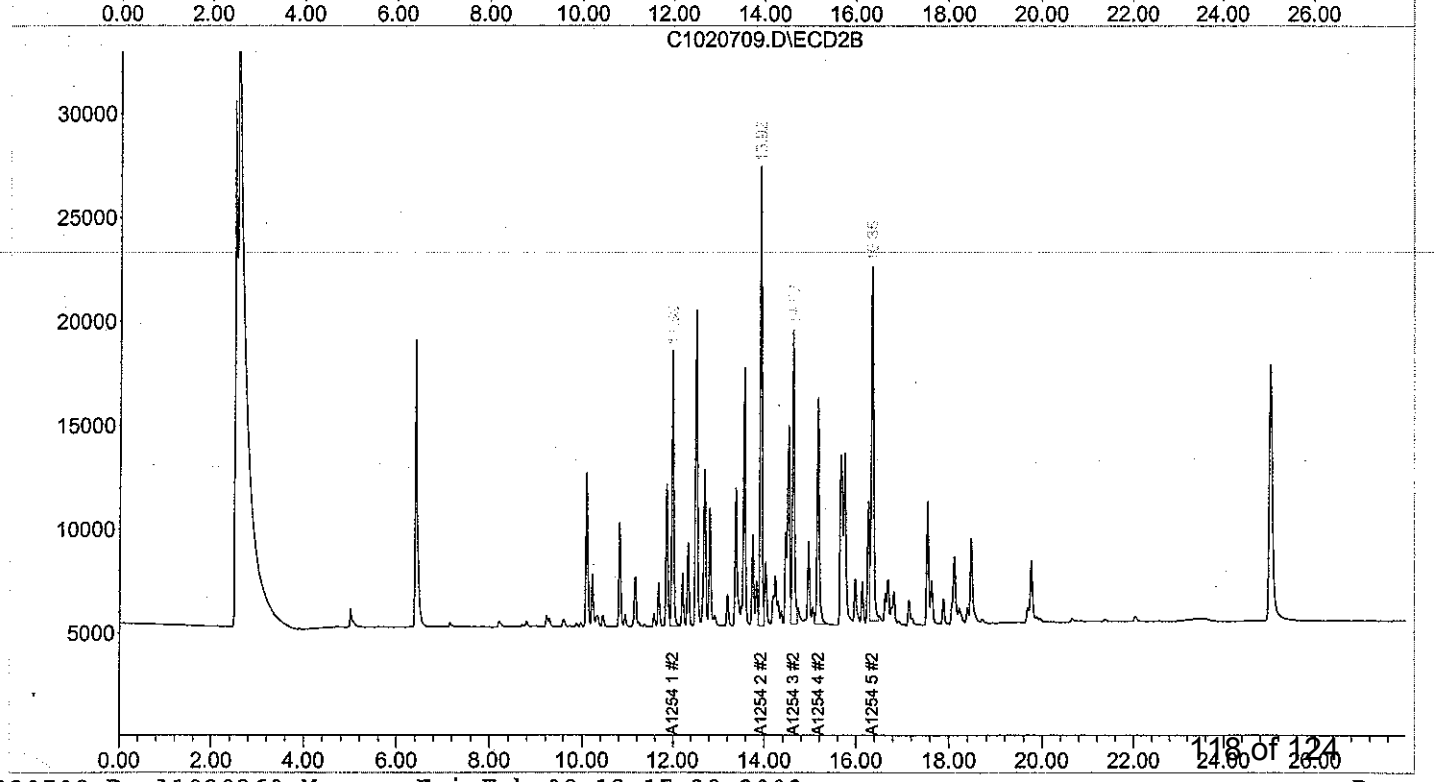
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020709.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020709.D\ECD2B.CH
Acq On : 8 Feb 2008 8:38 am Operator:
Sample : C1020709 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 12:17 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

PS 2/8/8

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020713.D\ECD1A.CH Vial: 42
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020713.D\ECD2B.CH
Acq On : 8 Feb 2008 1:23 pm Operator:
Sample : C1020713 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 14:08 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Initial Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.49	11.99	522082	381916	960.290	965.512m
34) L6 A1254 2	14.31	13.92	881401	596138	971.384	940.432m(C)
35) L6 A1254 3	15.09	14.62	914058	422702	963.804	943.902m
36) L6 A1254 4	16.01	15.17	564886	345262	917.005m	959.429m(C)
37) L6 A1254 5	16.76	16.35	791546	572364	928.532m	920.694m
Sum A1254 1			3673974	2318382	4741.016	4729.969
Average A1254 1					948.203	945.994
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

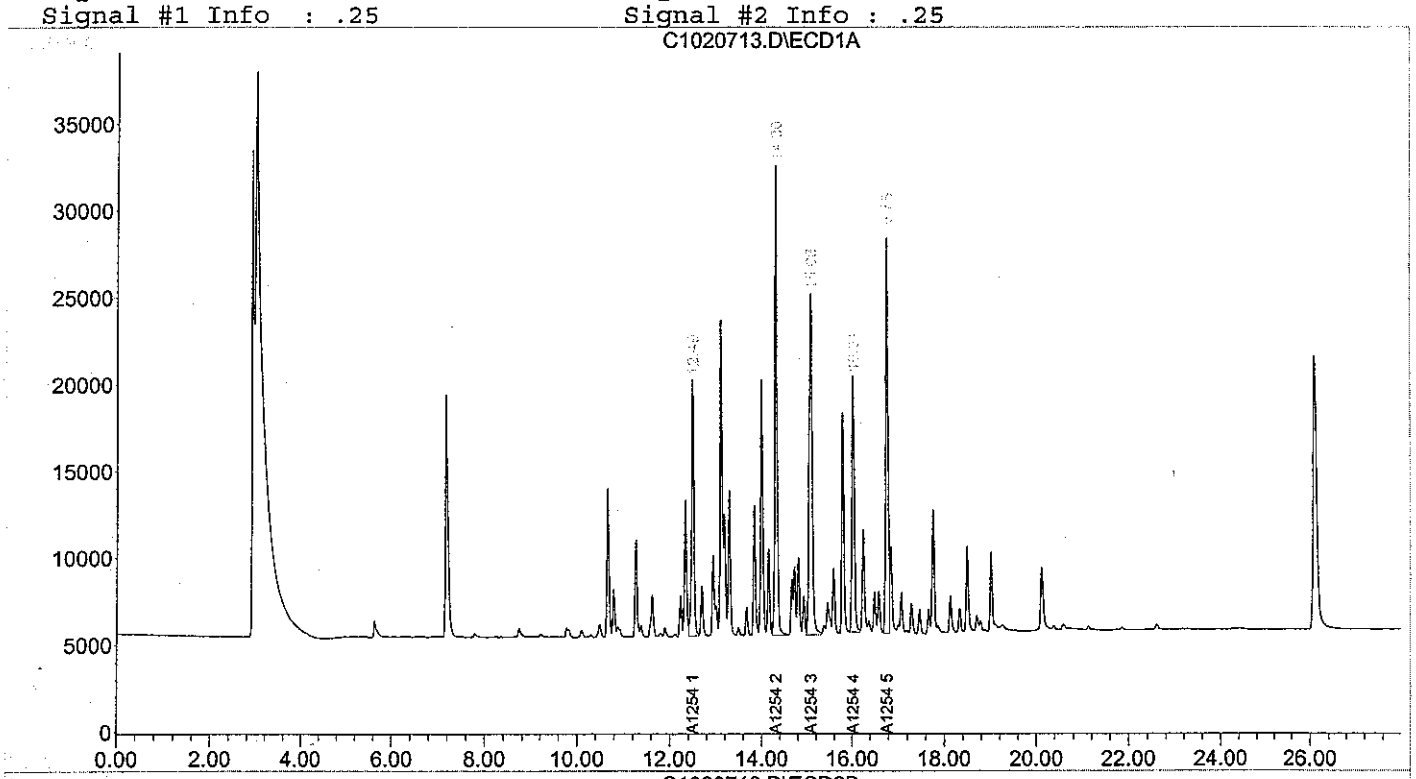
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

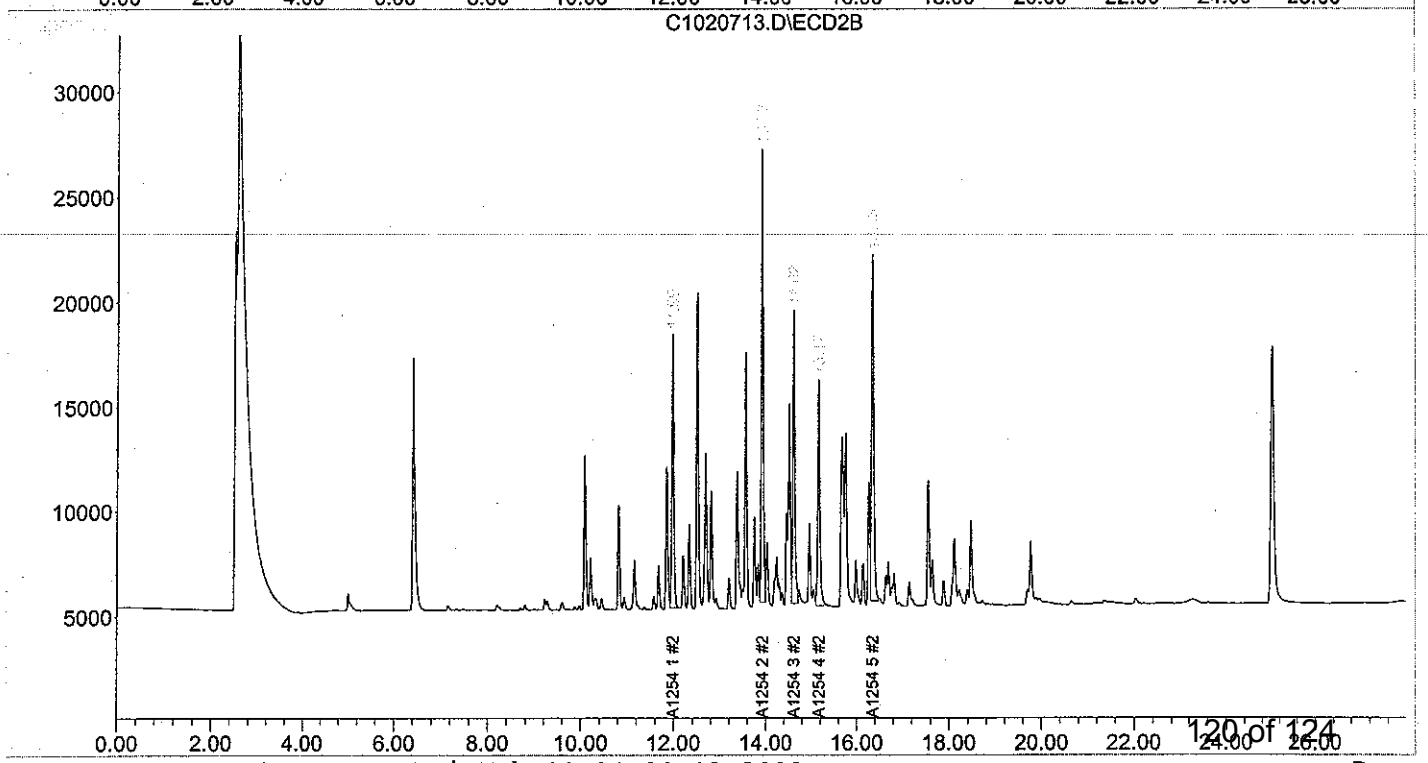
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\FEB07\C1020713.D\ECD1A.CH Vial: 42
Signal #2 : D:\HPCHEM\2\DATA\FEB07\C1020713.D\ECD2B.CH
Acq On : 8 Feb 2008 1:23 pm Operator:
Sample : C1020713 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Feb 8 14:08 2008 Quant Results File: A1020360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1020360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Feb 08 11:42:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1020360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Chain of Custody Records

NEWFIELDS

*801049

Chain of Custody

Environmental Forensics Practice LLC

Proj. No

Proj. Name: Paint Chips at T4

SAMPLERS: Signature: Mike Jeletic Mike Jeletic

ANALYSIS REQUESTED→ "NUMBER OF CONTANIERS"

DATE	TIME	LAB ID	CLIENT ID	SAMPLE DESCRIPTION	MATRIX (Oil/Soil/Water)	GC-FID-TPH (C_{8+})	GCMS-Alkyl PAH	GCMS-Biomarkers	PIANO - VOA	Organic Lead	METALS	PCB	Pesticides	PRESERVED	Total Number of Containers
12/19/07	12:49	Silo3-121907-1249		4-oz sample of paint chips collected from Silo #3								X			
12/19/07	13:18	Silo6-121907-1318		4-oz sample of paint chips collected from Silo #6								X			

Relinquished by: Mike Jeletic, Mike Jeletic, Port of Portland — Date/Time: 12/19/07 14:30

Received by: Gabe Pore — Date/Time: 12/20/07 10:30

Relinquished by: — Date/Time:

Received by: — Date/Time:

Comments: Samples to be shipped to:
Alpha Woods Hole Labs
320 Forbes Blvd.
Mansfield, MA 02048
Tel: (508) 822-9300
Attn: Liz Porta

Dec. 21. 2007- 9:57AM PORT OF PORTLAND No. 0852 P. 1
122 of 124

Sample Receipt Checklist

Page 1 of 1

Client: NEWFIE		**Receipt Date:** 12/20/07	
Project: Port of Portland		**Log-in Date:** 1/24/08	
ETR #: 0801049		**Inspection by:** W	**Login by:** W

ALL SECTIONS BELOW MUST BE COMPLETED

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, WHG Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: attached
No, Unavailable / NA

Number of coolers received for this project delivery: Ø

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from:_____IR Gun, _____Temp. Blank, / (NA)

Were samples received on ice? Yes / (No)

Chain-of-Custody present? Yes / (No)
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)
Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)
☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: EMP Date: 1/24/08

Comments / Notes

Sample storage refrigerator #:_____
Sample storage freezer #: #1

Cooler 2:_____ Cooler 3:_____
Cooler 4:_____ Cooler 5:_____
Cooler 6:_____ Cooler 7:_____
More:_____

Silo #6 12/19/07 1318
Silo #3 12/19/07 1249

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

FedEx Express USA Airbill

FedEx Tracking Number 8267 9499 8097

1 From Please print and press hard.

Date 12/19/07 Sender's FedEx Account Number 1159-7902-7

Sender's Name Phone (503) 240-2000

Company PORT OF PORTLAND

Address 7201 N MARINE DR

Dept./Floor/Suite/Room

City PORTLAND State OR ZIP 97203

2 Your Internal Billing Reference
First 24 characters will appear on invoice.

3 To

Recipient's Name Elizabeth Porta Phone (508) 844-3288

Company Alpha/aB

Address 320 ForBES BLVD

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

City Mansfield, ~~MA~~ SR State MA ZIP 02048

Peel and Stick FedEx USA Airbill

See back for application instructions.

Questions? Visit our Web site at fedex.com
or call 1-800-Go-FedEx® (800)463-3339.

By using this Airbill you agree to the service conditions on the back of this Airbill and in our applicable tariffs, including terms that limit our liability.

Dec. 21. 2007 9:58AM PORT OF PORTLAND 5097210 No. 0853 P. 1

DATE: 12/19/07

DAVE

Sender's Copy

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day
- [ ] NEW FedEx Extra Hours — Later drop-off with next business afternoon delivery for select locations

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — RESTRICTIONS: Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — RESTRICTIONS: Available only for FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — RESTRICTIONS: Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — RESTRICTIONS: Available only for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous Goods (incl. Dry Ice) cannot be shipped in FedEx packaging or with FedEx Extra Hours service.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [X] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†
1	5	$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details.

FedEx Use Only

8 Release Signature Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify us from any resulting claims.

ANALYTICAL REPORT

Prepared for:
NewFields
300 Ledgewood Place, Suite 305
Rockland, MA 02370

Project:	Ash Creek Associates-Port of Portland
ETR:	0804115
Report Date:	June 10, 2008

Certifications and Accreditations
Massachusetts M-MA030
Connecticut PH-0141
New Hampshire 2206
Rhode Island LAO00289
New Jersey MA015
Maine MA0030
New York 11627
Louisiana 03090
Florida E87814
Pennsylvania 68-02089
Army Corps of Engineers
Department of the Navy

This report shall not be reproduced except in full, without written approval from the laboratory.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample ID Cross Reference

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**

Lab Sample ID	Client Sample ID
0804115-01	T4-Tank 1
0804115-02	T4-Tank 1-G
0804115-03	T4-Tank 2
0804115-04	T4-Tank 2-G
0804115-05	T4-Tank 3
0804115-06	T4-Tank 3-G
0804115-07	T4-Tank 4
0804115-08	T4-Tank 4-G
0804115-09	T4-Tank 5
0804115-10	T4-Tank 5-G
0804115-11	T4-Tank 6
0804115-12	T4-Tank 6-G
0804115-13	T4-Tank 7
0804115-14	T4-Tank 7-G
0804115-15	T4-Tank 8
0804115-16	T4-Tank 8-G

Certificate/Approval Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate/Lab ID : PH-0141 - *Wastewater* (General Chemistry: EPA 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2; Metals: 200.8, 245.1; Organics: 608-PCB, ETPH) *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9060; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate/Lab ID : E87814 - Primary NELAP Accreditation Authority for Air & Emissions. Secondary NELAP Accreditation for Wastwater and Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 335.2, SM2320B, SM2340B, SM2540G, SM4500NH3; Metals: 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9065, Reactivity 7.3; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Louisiana Department of Environmental Quality Certificate/Lab ID : 03090 - Primary NELAP Accrediting Authority for Wastewater, Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1, 6020; Organics: 608-PCB, 8015-DRO, 8081, 8082, 8260, 8270). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060, Reactivity 7.3; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate/Lab ID : MA0030 - *Wastewater* (General Chemistry: EPA 120.1/ SM2510B, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: 608-PCB).

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: EPA 608-PCB).

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, SM2540G; Metals: 200.8, 245.4; Organics: 608-PCB).

New Jersey Department of Environmental Protection Certificate/Lab ID : MA015 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1 6020; Organics: 608-PCB, 8081, 8082, 8260, 8270). *Solid & Hazardous Waste* (General Chemistry: EPA 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

New York Department of Health Certificate/Lab ID : 11627 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 376.2; Metals: 200.8, 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: EPA 1010, 1311; : 200.8; 6020; 7041; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Rhode Island Department of Health Certificate/Lab ID : LAO00289 - Chemistry: *Organic and Inorganic in Non-Poratable Water, Wastewater/Sewage and Soil* (Refer to LADEQ and MADEP certificates for method numbers.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-02089 - Registered laboratory

U.S. Army Corps of Engineers

Department of the Navy

CASE NARRATIVE
Alpha Analytical

ETR: 0804115
Project: Ash Creek Associates-Port of Portland

All analyses were performed according to the Alpha Analytical quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report were performed within holding time, and with appropriate quality control measures, except where noted. All soil/sediment results are reported on a dry weight basis unless otherwise noted. A summary of all state and federal accreditations is provided within this report. Blank correction of results is not performed in the laboratory for any parameter. Alpha Analytical certifies that the test results within meet all of the requirements of NELAC, for all NELAC accredited parameters.

Semi-Volatile Organics by 8270

Semivolatile organic compounds were analyzed following procedures in the Alpha Analytical SOP *Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (Revision 3.2)* Method 8270C. Solid samples were aliquoted (approximately 5 g), spiked with surrogate compounds, and extracted by Microscale Extraction (Method 3570). Solvent extracts were dried over sodium sulfate and concentrated to a 10mL final volume. 9mL of the extracts were archived and the remaining 1mL was cleaned via gel permeation chromatography (GPC-Method 3640). Following sample cleanup, the extracts were re-concentrated to a 1mL final volume equivalent, spiked with internal standards, and analyzed by GC/MS. Qualitative identifications were confirmed by analyzing standards under the same conditions used for samples and comparing mass spectra and GC retention times. Quantification was based on a multi-level initial calibration.

1. The laboratory control sample (SS043008LCS09) and laboratory control sample duplicate (SS043008LCSD09) have 4-Nitrophenol and Pentachlorophenol recovered below the 50% and 47% recovery limits. Since all other spike compounds and the surrogates were within QC limits, the incident appears to be isolated to these laboratory control samples.

2. Several samples required dilutions due to over-calibration concentrations of target compounds. The diluted analyses are only quantified for the compounds that were over the calibration range of the analytical instrument in the un-diluted analyses. Additionally, the final diluted analysis on several samples had all the surrogates diluted out.

3. Sample duplicate T4-Tank 1 (0804115-01D) has three compounds above the reporting limit while its native sample (0804115-01) has these compounds below the detection limit. These compounds are flagged with an "X". The integrations and calculations in the native sample and the duplicate were reviewed and found to be appropriate.

4. Samples T4-Tank 5 (0804115-09) has acid surrogate compound 2-Fluorophenol recovered below the 25% QC limit potentially due to matrix interference. Please note that all other surrogates in this sample and the surrogates in the QC samples exhibited acceptable recoveries.

5. Samples T4-Tank 6 (0804115-11) has acid surrogate compounds 2-Fluorophenol, Phenol-d5, and 2,4,6-Tribromophenol recovered below the 25%, 24%, and 19% QC limit potentially due to matrix interference. Please note that all other surrogates in this sample and the surrogates in the QC samples exhibited acceptable recoveries.

6. The continuing calibration verification, C4052802, had the percent deviation for 2,4-Dimethylphenol above the 25%D QC limit at 28.0%D. This compound was not detected in the associated samples, therefore the calibration was accepted.

7. The continuing calibration verification, C4060602, had the percent deviation for Hexachlorocyclopentadiene and Pentachlorophenol above the 25%D QC limit at 32.8%D and 27.1%D, respectively. These values were below 35%D and represent less than 10% of all compounds, therefore the calibration was accepted.

8. The continuing calibration verification, C4060702, had the percent deviation for some compounds above the 25%D QC limit. This calibration standard was only evaluated for the compounds that required dilution, all of which were within QC limits, thus analysis proceeded.

9. The continuing calibration verification, C4060902, had the percent deviation for some compounds above the 25%D QC limit. This calibration standard was only evaluated for the compounds that required dilution, all of which were within QC limits, thus analysis proceeded.

Polychlorinated Biphenyls by 8082

Polychlorinated Biphenyls were analyzed following procedures in the Alpha Analytical SOP *Polychlorinated Biphenyls (PCBs) as Aroclors and Congeners by Gas Chromatography/Electron Capture Detection (Revision 1.0)* Method 8082. Solid samples (approximately 2g) are spiked with surrogate compounds and extracted by Microscale Extraction (Method 3570). Solvent extracts are dried over sodium sulfate, concentrated to a 5mL final volume and exchanged to hexane. 4mL of the extracts were archived, and the remaining 1mL was cleaned by silica gel column (Method 3630). After this sample cleanup, the extracts were re-concentrated to a 1mL final volume equivalent, and cleaned by Alumina Column (Method 3610). Finally after re-concentration to 1mL, the extracts were acid cleaned (Method 3665a), prior to analysis. Extracts are analyzed by gas chromatography with electron capture detection (ECD). Qualitative identifications are confirmed by analyzing standards under the same conditions used for samples and comparing GC retention times on two dissimilar columns. Quantification is based on a multi-level initial calibration.

1. The continuing calibration standards, C1051507 and C1051602 have values for one or more individual peaks that exceeded the 15% QC monitoring limit. The average for all peaks was below the 15% QC limit. Refer to the individual Form VII Calibration Verification for specific outliers.

2. Several samples required dilutions due to over-calibration concentrations of target compounds. The diluted analysis were identified to contain the same Aroclors as the original analysis therefore only the diluted analysis are reported.

3. Sample T4-Tank 5 (0804115-09) had the surrogate TMX, for both channels, recovered below the 30% QC Limit. Refer to the Form II for individual recoveries.

4. Sample T4-Tank 5-G (0804115-10) had the surrogates TMX and DCB, for both channels, recovered below the 30% QC Limit. Refer to the Form II for individual recoveries.

5. Sample T4-Tank 3 (0804115-05) had the surrogate DCB recovered below the 30% QC limit on the rtx-5 column due to matrix interference. The recovery for DCB, on the secondary rtx-CLPII column, was within QC Limits.

Metals

Metals were analyzed following procedures in the Alpha Analytical SOP *Inductively Coupled Plasma-Mass Spectrometry (Revision 1.0)* Method 6020A. Solid samples (approximately 1g) were digested by hot plate Method 3050. An aliquot of

digestate was nebulized into a spray chamber where a stream of argon carried the sample aerosol through a quartz torch and injected it into the radio frequency inductively coupled plasma. The ions produced in the plasma were introduced to the mass spectrometer for quantification against a multi-level initial calibration.

Mercury was analyzed following procedures in the Alpha Analytical SOP *Mercury Determination by Cold Vapor Atomic Fluorescence Spectroscopy (Revision 1.0)* Method 7474. Solid samples (approximately 1g) were digested by hot plate in aqua regia. An aliquot of the digest was then prepared with HCL/BrCl and hydroxylamine hydrochloride solution. Mercury in the digested sample was reduced to elemental mercury, aerated from solution and introduced into the spectrophotometer. The emission was measured and compared to a multi-level initial calibration for quantification.

Sample T4-Tank 1 (0804115-01) was digested and analyzed in duplicate with a matrix spike. All QC measures were within acceptance criteria except for the following:

1. The RPD between the QC sample result and the sample duplicate result was 23% for mercury. This value exceeds the 20% method acceptance limit indicating that the sample was non-homogenous.

2. The RPD between the QC sample result and the serial dilution result was 12% for mercury. This value exceeds the 10% method acceptance limit indicating that the sample result may be biased high due to a matrix effect.

3. The matrix spike recovery was 27% for antimony and 148% for manganese. These values are not within method acceptance limits of 75%-125%. The laboratory control sample was within acceptance limits.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Analytical makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Analytical. To the best of my knowledge, the information contained in this report is accurate and complete. For any questions regarding this report, please contact the signatory below at 508-822-9300.

Approved by: Elizabeth Porta Title: Forensic Manager Date: 6/10/08

Elizabeth Porta **Forensic Manager**

Sample Preparation

Alpha Woods Hole Lab
Batch Prep Report
04/30/2008 0804115S - OP 8270 Full List LCS

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume (ml)	Vialed By	Vialed Date	Cell Number
0804115-01	D	3570	LAB	4/30/08	5/19/08		2.29	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-01	SAM	3570	LAB	4/30/08	5/19/08		2.12	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-02	SAM	3570	LAB	4/30/08	5/19/08		2.2	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-03	SAM	3570	LAB	4/30/08	5/19/08		2.18	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-04	SAM	3570	LAB	4/30/08	5/19/08		2.5	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-05	SAM	3570	LAB	4/30/08	5/19/08		2.12	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-06	SAM	3570	LAB	4/30/08	5/19/08		2.28	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-07	SAM	3570	LAB	4/30/08	5/19/08		2.32	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-08	SAM	3570	LAB	4/30/08	5/19/08		2.16	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-09	SAM	3570	LAB	4/30/08	5/19/08		2.15	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-10	SAM	3570	LAB	4/30/08	5/19/08		2.58	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-11	SAM	3570	LAB	4/30/08	5/19/08		2.33	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-12	SAM	3570	LAB	4/30/08	5/19/08		2.48	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-13	SAM	3570	LAB	4/30/08	5/19/08		2.31	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-14	SAM	3570	LAB	4/30/08	5/19/08		2.13	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-15	SAM	3570	LAB	4/30/08	5/19/08		2.15	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
0804115-16	SAM	3570	LAB	4/30/08	5/19/08		2.53	10	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
SS043008B17	B	3570	LAB	4/30/08	5/19/08		2	5	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
SS043008LCS09	LCS	3570	LAB	4/30/08	5/19/08		2	5	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	
SS043008LCSD09	LCSD	3570	LAB	4/30/08	5/19/08		2	5	False	LAB	5/5/08	KD Flask	1	LAB	5/5/08	

Alpha Woods Hole Lab
Batch Weight Report
04/30/2008

Lab ID	QC Type	0804115S - Sample
0804115-01	D	2.29
0804115-01	SAM	2.12
0804115-02	SAM	2.2
0804115-03	SAM	2.18
0804115-04	SAM	2.5
0804115-05	SAM	2.12
0804115-06	SAM	2.28
0804115-07	SAM	2.32
0804115-08	SAM	2.16
0804115-09	SAM	2.15
0804115-10	SAM	2.58
0804115-11	SAM	2.33
0804115-12	SAM	2.48
0804115-13	SAM	2.31
0804115-14	SAM	2.13
0804115-15	SAM	2.15
0804115-16	SAM	2.53
SS043008B17	B	2
SS043008LCS09LCS	OP 8270 Full List LCS	2
SS043008LCSD09LCO	P 8270 Full List LCS	2

METHYLENE CHLORIDE (tank) E40E54
ACETONE: E31E30 HEXANE: E51E11
COPPER: E41602 SODIUM SULFATE: E40617
GLASS WOOL: H1084303302
METHYLENE CHLORIDE (bottle) E49403

Alpha Woods Hole Lab
Batch Prep Spike Report

04/30/2008 0804115S - OP 8270 Full Li Analyst: LAB Witness: MGH

Lab ID	QC Type	OP 8270 Full Li - surr	Vol OP 8270 Full Li - surr	Units OP 8270 Full Li - surr	OP 8270 Full Li - spk 1	Vol OP 8270 Full Li - spk 1	Units OP 8270 Full Li - spk 1	OP 8270 Full Li - spk 2	Vol OP 8270 Full Li - spk 2	Units OP 8270 Full Li - spk 2
0804115-01	D	SSW0302808A	1	ml						
0804115-01	SAM	SSW0302808A	1	ml						
0804115-02	SAM	SSW0302808A	1	ml						
0804115-03	SAM	SSW0302808A	1	ml						
0804115-04	SAM	SSW0302808A	1	ml						
0804115-05	SAM	SSW0302808A	1	ml						
0804115-06	SAM	SSW0302808A	1	ml						
0804115-07	SAM	SSW0302808A	1	ml						
0804115-08	SAM	SSW0302808A	1	ml						
0804115-09	SAM	SSW0302808A	1	ml						
0804115-10	SAM	SSW0302808A	1	ml						
0804115-11	SAM	SSW0302808A	1	ml						
0804115-12	SAM	SSW0302808A	1	ml						
0804115-13	SAM	SSW0302808A	1	ml						
0804115-14	SAM	SSW0302808A	1	ml						
0804115-15	SAM	SSW0302808A	1	ml						
0804115-16	SAM	SSW0302808A	1	ml						
SS043008B17	B	SSW0302808A	1	ml						
SS043008LCS09	LCS	SSW0302808A	1	ml	SS030508A	75	µl			
SS043008LCSD09	LCSD	SSW0302808A	1	ml	SS030508A	75	µl			

Test: 8270

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

ID# SSW0302808A

Conc. .20 ug/ml

Test: 8270

Standard Type: Surrogate / LCS / MS-MSD

LFB / Other

ID# SS030508A

Conc. 200 ppm.

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115S - OP 8270 Full List LCS

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction ation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804115-01	D	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-01	SAM	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-02	SAM	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-03	SAM	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-04	SAM	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-05	SAM	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-06	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-07	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-08	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-09	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-10	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-11	SAM	3640	JFR	5/13/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-12	SAM	3640	JFR	5/16/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-13	SAM	3640	JFR	5/16/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-14	SAM	3640	JFR	5/16/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-15	SAM	3640	JFR	5/16/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
0804115-16	SAM	3640	JFR	5/16/08	5	11:42	20:30	LAB	5/19/08	False	10	1	0	1
SS043008B17	B	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	2	0	1
SS043008LCS09	LCS	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	2	0	1
SS043008LCSD09	LCSD	3640	JFR	5/7/08	5	11:42	20:30	LAB	5/19/08	False	10	2	0	1

Alpha Woods Hole Lab
Batch Prep Report
04/30/2008 0804115S - OP 8270 Full List LCS

Lab ID	Notes
0804115-01	1st Prep
0804115-01	1st Prep
0804115-02	1st Prep
0804115-03	1st Prep
0804115-04	1st Prep
0804115-05	1st Prep
0804115-06	1st Prep
0804115-07	1st Prep
0804115-08	1st Prep
0804115-09	1st Prep
0804115-10	1st Prep
0804115-11	1st Prep
0804115-12	1st Prep
0804115-13	1st Prep
0804115-14	1st Prep
0804115-15	1st Prep
0804115-16	1st Prep
SS043008B17	1st Prep
SS043008LCS09	1st Prep
SS043008LCSD09	1st Prep

Organics Preparation Checklist

ETR: 0804115 **Client:** Newfield **Project:** Ash Creek

Test Requested			
Aroclor		RIM PAH/PCB (Reg I)	
Congener		RIM Pest (Reg I)	
Homolog		RIM PAH/PCB (Reg II)	
Pesticide		RIM Pest (Reg II)	
TPH		DAS	
PAH-SIM		EPH	
8270	✓	Other:	

Required Cleanups	
No Cleanup Required	
Copper	
Conc. Sulfuric Acid	
GPC	✓
Automated Silica Fractionation	
Cartridge Silica Fractionation	
Alumina	

Sample Observations			
Normal Weight/Volume Extracted		Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used	✓	No Observations	✓

Other: 2g - Paint chips

Extraction Notes		
Emulsions During Shake		**Identify Matrix - Circle One**
Samples Extracted Outside Of Hold Time		Soil / Sediment / Water / Sheen / NAPL / Sludge / Solid
Samples Not Field Preserved		Tissue / Product / Oil / Net / Wipe / Elutriate
No Observations		

Other:

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate	
Precipitate Formed During Concentration		No Observations	

Other: Batch is very viscus primarily white fluid. Hard to Blow down. JR

Please note there is a slight color difference btw sample 1 & Dup... Dup is darker. JR 5/28

Cleanup Notes			
Auto-vialing not required		Auto-vialing for H_2O in extract	
Auto-vialing for precipitate in extract	✓	No Observations	

Other: Ran six at a time thru GPC. They took the column out each time. They multiple days + cleanups to restore the column each time. JR

Sample # 0804115-08-11 had to be Autovialed JR

Batch Reviewed

Analyst: [signature]

Date: 5/19/08

Batch Completed

Analyst: [signature]

Date: 5/19/08

Semi-volatiles
8270
By
GC/MS

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.12	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2360	U	3-Nitroaniline	2360	U
Phenol	**2550**		2,4-Dinitrophenol	2360	U
2-Chlorophenol	2360	U	Dibenzofuran	2360	U
1,3-Dichlorobenzene	2360	U	2,4-Dinitrotoluene	2360	U
1,4-Dichlorobenzene	2360	U	4-Nitrophenol	2360	U
1,2-Dichlorobenzene	2360	U	Fluorene	2360	U
bis(2-Chloroisopropyl)ether	2360	U	4-Chlorophenyl-phenylether	2360	U
2-Methylphenol	2360	U	Diethylphthalate	2360	U
Hexachloroethane	2360	U	4-Nitroaniline	2360	U
n-Nitroso-di-n-propylamine	2360	U	4,6-Dinitro-2-methylphenol	2360	U
4-Methylphenol	**76500**		n-Nitrosodiphenylamine	2360	U
Nitrobenzene	2360	U	4-Bromophenyl-phenylether	2360	U
Isophorone	2360	U	Hexachlorobenzene	2360	U
2-Nitrophenol	2360	U	Pentachlorophenol	2360	U
2,4-Dimethylphenol	2360	U	Phenanthrene	**3210**	
bis(2-Chloroethoxy)methane	2360	U	Anthracene	2360	U
2,4-Dichlorophenol	2360	U	Carbazole	2360	U
1,2,4-Trichlorobenzene	2360	U	Di-n-butylphthalate	**1600**	J
Naphthalene	2360	U	Fluoranthene	**1370**	J
4-Chloroaniline	2360	U	Pyrene	2360	U
Hexachlorobutadiene	2360	U	Butylbenzylphthalate	**8260**	
4-Chloro-3-methylphenol	**8300**		3,3'-Dichlorobenzidine	2360	U
2-Methylnaphthalene	2360	U	Benz[a]anthracene	2360	U
Hexachlorocyclopentadiene	2360	U	Chrysene	2360	U
2,4,6-Trichlorophenol	2360	U	bis(2-Ethylhexyl)phthalate	**7780**	
2,4,5-Trichlorophenol	2360	U	Di-n-octylphthalate	2360	U
2-Chloronaphthalene	2360	U	Benzo[b]fluoranthene	2360	U
2-Nitroaniline	2360	U	Benzo[k]fluoranthene	2360	U
Acenaphthylene	2360	U	Benzo[a]pyrene	2360	U
Dimethylphthalate	2360	U	Indeno[1,2,3-cd]pyrene	2360	U
2,6-Dinitrotoluene	2360	U	Dibenz[a,h]anthracene	2360	U
Acenaphthene	2360	U	Benzo[g,h,i]perylene	2360	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	49	25-121
Phenol-d5	56	24-113
Nitrobenzene-d5	85	23-120
2-Fluorobiphenyl	83	30-115
2,4,6-Tribromophenol	34	19-122
Terphenyl-d14	88	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-01.D
Acq On : 6 Jun 2008 8:42 pm
Operator : SEO
Sample : 0804115-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 08 20:13:24 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

6/9/08

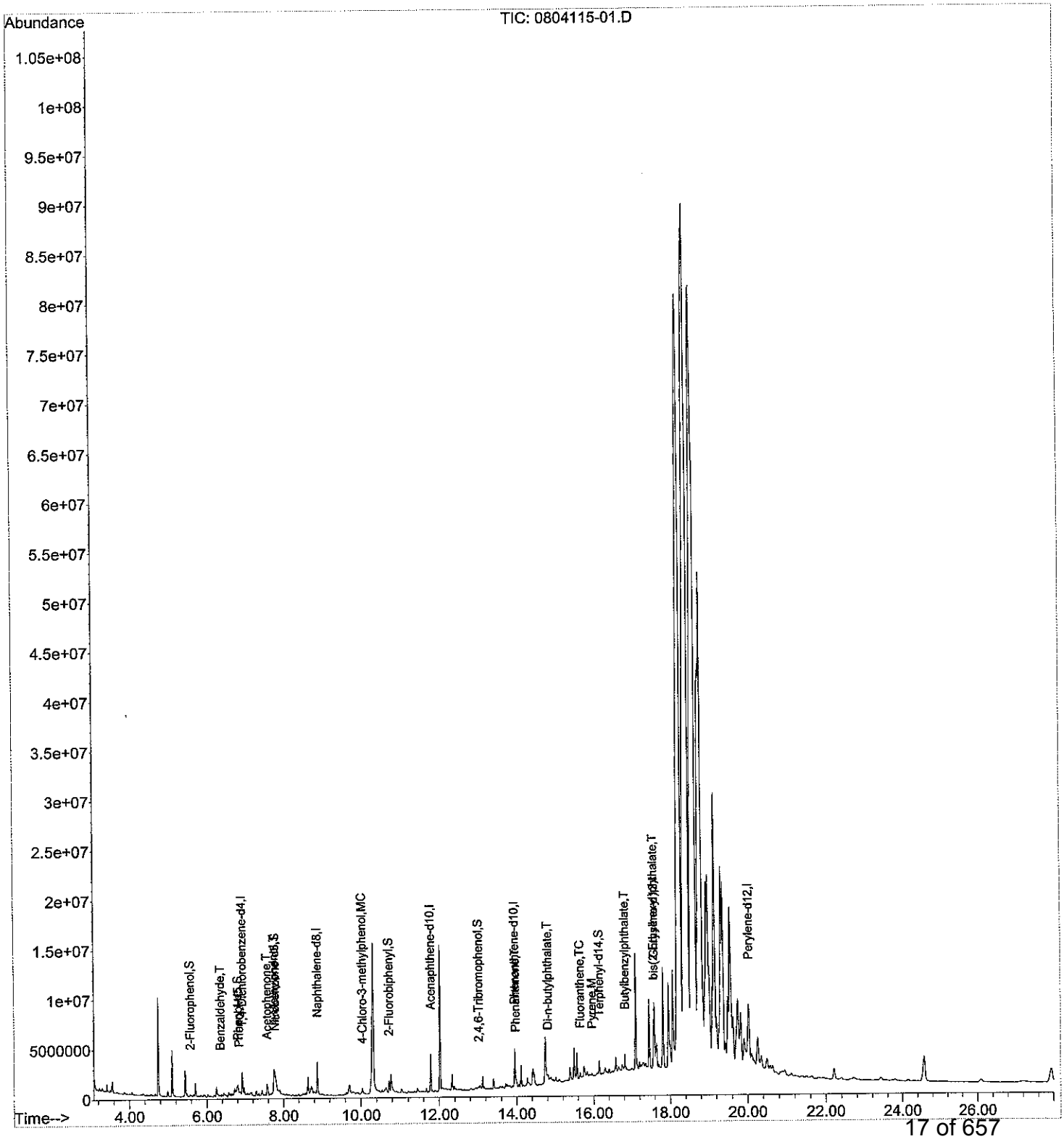
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	576256	5.00	ug/mL	0.00
21) Naphthalene-d8	8.88	136	2413479	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1348170	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2183024	5.00	ug/mL	0.00
72) Chrysene-d12	17.58	240	2116942	5.00	ug/mL	0.00
81) Perylene-d12	20.02	264	2316933	5.00	ug/mL	0.10
System Monitoring Compounds						
4) 2-Fluorophenol	5.57	112	142235m	0.98	ug/mL	0.24
Spiked Amount 20.000	Range 21 - 100		Recovery	=	4.90%#	
8) Phenol-d5	6.82	99	202818m	1.12	ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	=	5.60%#	
22) Nitrobenzene-d5	7.79	82	251498	1.70	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	8.50%#	
41) 2-Fluorobiphenyl	10.72	172	596142	1.66	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.30%#	
62) 2,4,6-Tribromophenol	13.02	330	30054	0.68	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	3.40%#	
75) Terphenyl-d14	16.15	244	688343	1.77	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.85%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.35	77	47624	0.48	ug/ml#	80
9) Phenol	6.84	94	118025m	0.54	ug/mL	
17) Acetophenone	7.57	105	527167	2.40	ug/ml#	95
20) 4-Methylphenol	7.75	108	2685204	16.21	ug/mL	79
35) 4-Chloro-3-methylphenol	10.04	107	260314	1.76	ug/mL	96
67) Phenanthrene	13.98	178	382605	0.68	ug/mL	99
70) Di-n-butylphthalate	14.81	149	228059	0.34	ug/mL#	81
71) Fluoranthene	15.64	202	166715	0.29	ug/mL	97
74) Pyrene	15.94	202	125871	0.21	ug/mL#	91
76) Butylbenzylphthalate	16.82	149	553092	1.75	ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.56	149	764268	1.65	ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-01.D
Acq On : 6 Jun 2008 8:42 pm
Operator : SEO
Sample : 0804115-01
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 08 20:13:24 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:08 2008

Form I
Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01 D**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.29	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	2180	U
Phenol	**2140**	J
2-Chlorophenol	2180	U
1,3-Dichlorobenzene	2180	U
1,4-Dichlorobenzene	2180	U
1,2-Dichlorobenzene	2180	U
bis(2-Chloroisopropyl)ether	2180	U
2-Methylphenol	2180	U
Hexachloroethane	2180	U
n-Nitroso-di-n-propylamine	2180	U
4-Methylphenol	**67400**	
Nitrobenzene	2180	U
Isophorone	2180	U
2-Nitrophenol	2180	U
2,4-Dimethylphenol	2180	U
bis(2-Chloroethoxy)methane	2180	U
2,4-Dichlorophenol	2180	U
1,2,4-Trichlorobenzene	2180	U
Naphthalene	2180	U
4-Chloroaniline	2180	U
Hexachlorobutadiene	2180	U
4-Chloro-3-methylphenol	**6900**	
2-Methylnaphthalene	2180	U
Hexachlorocyclopentadiene	2180	U
2,4,6-Trichlorophenol	2180	U
2,4,5-Trichlorophenol	2180	U
2-Chloronaphthalene	2180	U
2-Nitroaniline	2180	U
Acenaphthylene	2180	U
Dimethylphthalate	2180	U
2,6-Dinitrotoluene	2180	U
Acenaphthene	2180	U

Parameter	Result	
3-Nitroaniline	2180	U
2,4-Dinitrophenol	2180	U
Dibenzofuran	2180	U
2,4-Dinitrotoluene	2180	U
4-Nitrophenol	2180	U
Fluorene	2180	U
4-Chlorophenyl-phenylether	2180	U
Diethylphthalate	2180	U
4-Nitroaniline	2180	U
4,6-Dinitro-2-methylphenol	2180	U
n-Nitrosodiphenylamine	2180	U
4-Bromophenyl-phenylether	2180	U
Hexachlorobenzene	2180	U
Pentachlorophenol	2180	U
Phenanthrene	**2880**	
Anthracene	2180	U
Carbazole	2180	U
Di-n-butylphthalate	**1440**	J
Fluoranthene	**1660**	J
Pyrene	**1270**	J
Butylbenzylphthalate	**6770**	
3,3'-Dichlorobenzidine	2180	U
Benz[a]anthracene	2180	U
Chrysene	**1140**	J
bis(2-Ethylhexyl)phthalate	**6770**	
Di-n-octylphthalate	2180	U
Benzo[b]fluoranthene	**1140**	J
Benzo[k]fluoranthene	2180	U
Benzo[a]pyrene	2180	U
Indeno[1,2,3-cd]pyrene	2180	U
Dibenz[a,h]anthracene	2180	U
Benzo[g,h,i]perylene	2180	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	53	25-121
Phenol-d5	56	24-113
Nitrobenzene-d5	83	23-120
2-Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	47	19-122
Terphenyl-d14	85	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-01D.D
Acq On : 6 Jun 2008 9:18 pm
Operator : SEO
Sample : 0804115-01D
Misc :
ALS Vial : 15 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 20:12:23 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

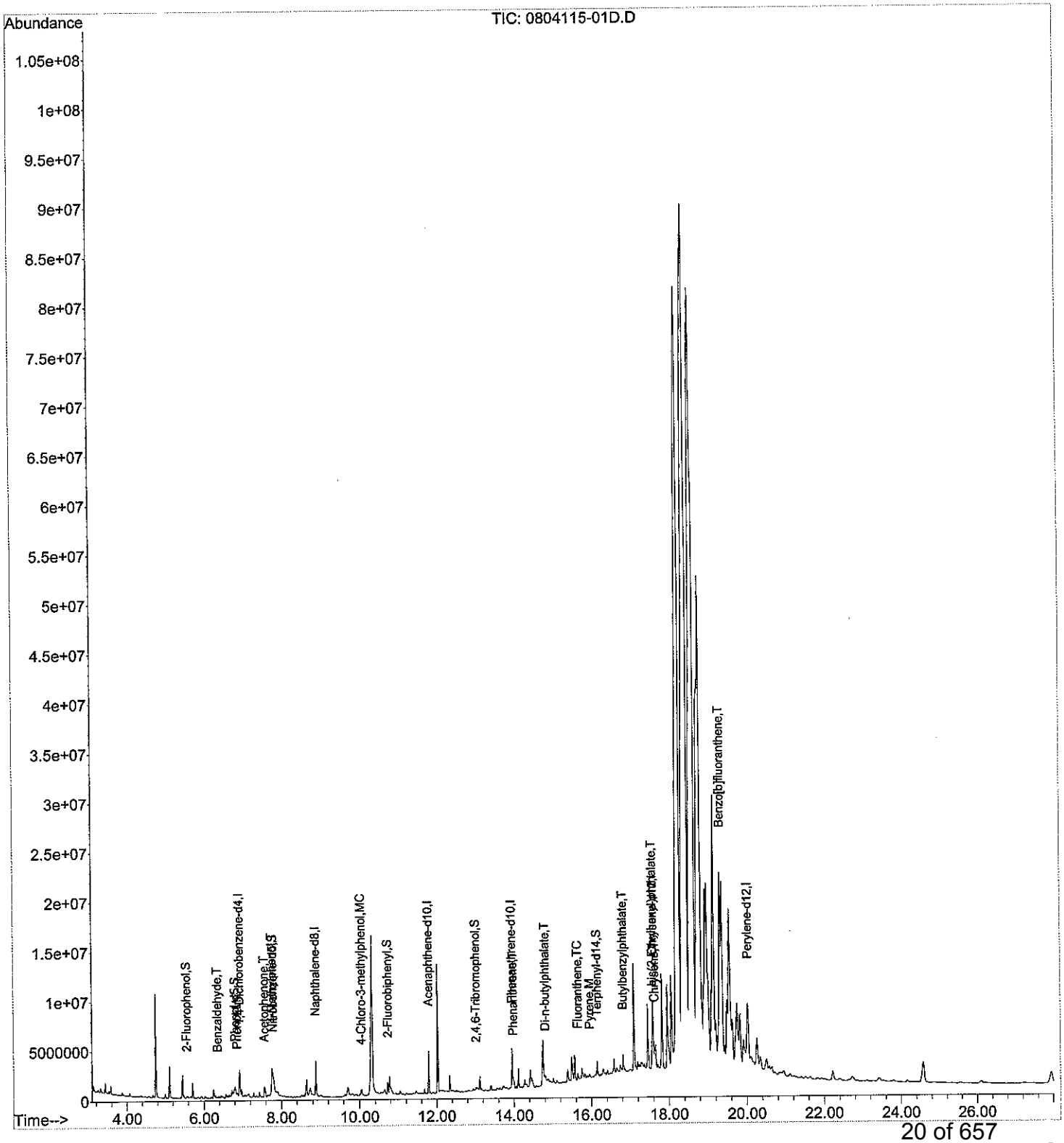
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	629446	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2627702	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1486175	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2409270	5.00 ug/mL	0.00
72) Chrysene-d12	17.59	240	2333096	5.00 ug/mL	0.00
81) Perylene-d12	20.02	264	2566598	5.00 ug/mL	0.10
System Monitoring Compounds					
4) 2-Fluorophenol	5.56	112	167388m	1.06 ug/mL	0.23
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.30%#	
8) Phenol-d5	6.82	99	221043m	1.12 ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	= 5.60%#	
22) Nitrobenzene-d5	7.80	82	266732	1.66 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.30%#	
41) 2-Fluorobiphenyl	10.73	172	637901	1.61 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 8.05%#	
62) 2,4,6-Tribromophenol	13.02	330	45548	0.93 ug/mL	0.02
Spiked Amount 20.000	Range 10 - 123		Recovery	= 4.65%#	
75) Terphenyl-d14	16.15	244	724801	1.69 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.45%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	43252m	0.40 ug/ml	
9) Phenol	6.85	94	116440m	0.49 ug/mL	
17) Acetophenone	7.57	105	466664	1.94 ug/ml	95
20) 4-Methylphenol	7.76	108	2794683	15.44 ug/mL#	78
35) 4-Chloro-3-methylphenol	10.05	107	254360m	1.58 ug/mL	
67) Phenanthrene	13.99	178	411479m	0.66 ug/mL	
70) Di-n-butylphthalate	14.81	149	245092m	0.33 ug/mL	
71) Fluoranthene	15.65	202	240572m	0.38 ug/mL	
74) Pyrene	15.95	202	195020	0.29 ug/mL#	96
76) Butylbenzylphthalate	16.82	149	539447	1.55 ug/mL	100
79) Chrysene	17.62	228	156055m	0.26 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.56	149	787788	1.55 ug/mL	96
83) Benzo[b]fluoranthene	19.34	252	189354m	0.26 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-01D.D
Acq On : 6 Jun 2008 9:18 pm
Operator : SEO
Sample : 0804115-01D
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 08 20:12:23 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:14 2008

Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/17/08	03/21/08	04/30/08	100	SEO

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
bis(2-Chloroethyl)ether	2360 U	2180 U	N/A	30
Phenol	**2550**	**2140 J**	17	30
2-Chlorophenol	2360 U	2180 U	N/A	30
1,3-Dichlorobenzene	2360 U	2180 U	N/A	30
1,4-Dichlorobenzene	2360 U	2180 U	N/A	30
1,2-Dichlorobenzene	2360 U	2180 U	N/A	30
bis(2-Chloroisopropyl)ether	2360 U	2180 U	N/A	30
2-Methylphenol	2360 U	2180 U	N/A	30
Hexachloroethane	2360 U	2180 U	N/A	30
n-Nitroso-di-n-propylamine	2360 U	2180 U	N/A	30
4-Methylphenol	**76500**	**67400**	13	30
Nitrobenzene	2360 U	2180 U	N/A	30
Isophorone	2360 U	2180 U	N/A	30
2-Nitrophenol	2360 U	2180 U	N/A	30
2,4-Dimethylphenol	2360 U	2180 U	N/A	30
bis(2-Chloroethoxy)methane	2360 U	2180 U	N/A	30
2,4-Dichlorophenol	2360 U	2180 U	N/A	30
1,2,4-Trichlorobenzene	2360 U	2180 U	N/A	30
Naphthalene	2360 U	2180 U	N/A	30
4-Chloroaniline	2360 U	2180 U	N/A	30
Hexachlorobutadiene	2360 U	2180 U	N/A	30
4-Chloro-3-methylphenol	**8300**	**6900**	18	30
2-Methylnaphthalene	2360 U	2180 U	N/A	30
Hexachlorocyclopentadiene	2360 U	2180 U	N/A	30
2,4,6-Trichlorophenol	2360 U	2180 U	N/A	30
2,4,5-Trichlorophenol	2360 U	2180 U	N/A	30
2-Chloronaphthalene	2360 U	2180 U	N/A	30
2-Nitroaniline	2360 U	2180 U	N/A	30
Acenaphthylene	2360 U	2180 U	N/A	30
Dimethylphthalate	2360 U	2180 U	N/A	30
2,6-Dinitrotoluene	2360 U	2180 U	N/A	30
Acenaphthene	2360 U	2180 U	N/A	30
3-Nitroaniline	2360 U	2180 U	N/A	30
2,4-Dinitrophenol	2360 U	2180 U	N/A	30
Dibenzofuran	2360 U	2180 U	N/A	30

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/17/08	03/21/08	04/30/08	100	SEO

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
2,4-Dinitrotoluene	2360 U	2180 U	N/A	30
4-Nitrophenol	2360 U	2180 U	N/A	30
Fluorene	2360 U	2180 U	N/A	30
4-Chlorophenyl-phenylether	2360 U	2180 U	N/A	30
Diethylphthalate	2360 U	2180 U	N/A	30
4-Nitroaniline	2360 U	2180 U	N/A	30
4,6-Dinitro-2-methylphenol	2360 U	2180 U	N/A	30
n-Nitrosodiphenylamine	2360 U	2180 U	N/A	30
4-Bromophenyl-phenylether	2360 U	2180 U	N/A	30
Hexachlorobenzene	2360 U	2180 U	N/A	30
Pentachlorophenol	2360 U	2180 U	N/A	30
Phenanthrene	**3210**	**2880**	11	30
Anthracene	2360 U	2180 U	N/A	30
Carbazole	2360 U	2180 U	N/A	30
Di-n-butylphthalate	**1600 J**	**1440 J**	11	30
Fluoranthene	**1370 J**	**1660 J**	19	30
Pyrene	2360 U	**1270 J**	X	30
Butylbenzylphthalate	**8260**	**6770**	20	30
3,3'-Dichlorobenzidine	2360 U	2180 U	N/A	30
Benz[a]anthracene	2360 U	2180 U	N/A	30
Chrysene	2360 U	**1140 J**	X	30
bis(2-Ethylhexyl)phthalate	**7780**	**6770**	14	30
Di-n-octylphthalate	2360 U	2180 U	N/A	30
Benzo[b]fluoranthene	2360 U	**1140 J**	X	30
Benzo[k]fluoranthene	2360 U	2180 U	N/A	30
Benzo[a]pyrene	2360 U	2180 U	N/A	30
Indeno[1,2,3-cd]pyrene	2360 U	2180 U	N/A	30
Dibenz[a,h]anthracene	2360 U	2180 U	N/A	30
Benzo[g,h,i]perylene	2360 U	2180 U	N/A	30

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	49	53	25-121
Phenol-d5	56	56	24-113
Nitrobenzene-d5	85	83	23-120
2-Fluorobiphenyl	83	81	30-115
2,4,6-Tribromophenol	34	47	19-122
Terphenyl-d14	88	85	18-137

N/A - Not Applicable
X - It is not possible to calculate RPD, one result is below the detection limit, the other is above reporting limit.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

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Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-02**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.20	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	2270	U
Phenol	**8140**	
2-Chlorophenol	2270	U
1,3-Dichlorobenzene	2270	U
1,4-Dichlorobenzene	2270	U
1,2-Dichlorobenzene	2270	U
bis(2-Chloroisopropyl)ether	2270	U
2-Methylphenol	2270	U
Hexachloroethane	2270	U
n-Nitroso-di-n-propylamine	2270	U
4-Methylphenol	**121000**	E
Nitrobenzene	2270	U
Isophorone	2270	U
2-Nitrophenol	2270	U
2,4-Dimethylphenol	2270	U
bis(2-Chloroethoxy)methane	2270	U
2,4-Dichlorophenol	2270	U
1,2,4-Trichlorobenzene	2270	U
Naphthalene	2270	U
4-Chloroaniline	2270	U
Hexachlorobutadiene	2270	U
4-Chloro-3-methylphenol	**12400**	
2-Methylnaphthalene	2270	U
Hexachlorocyclopentadiene	2270	U
2,4,6-Trichlorophenol	2270	U
2,4,5-Trichlorophenol	2270	U
2-Chloronaphthalene	2270	U
2-Nitroaniline	2270	U
Acenaphthylene	2270	U
Dimethylphthalate	2270	U
2,6-Dinitrotoluene	2270	U
Acenaphthene	2270	U

Parameter	Result	
3-Nitroaniline	2270	U
2,4-Dinitrophenol	2270	U
Dibenzofuran	2270	U
2,4-Dinitrotoluene	2270	U
4-Nitrophenol	2270	U
Fluorene	2270	U
4-Chlorophenyl-phenylether	2270	U
Diethylphthalate	2270	U
4-Nitroaniline	2270	U
4,6-Dinitro-2-methylphenol	2270	U
n-Nitrosodiphenylamine	2270	U
4-Bromophenyl-phenylether	2270	U
Hexachlorobenzene	2270	U
Pentachlorophenol	2270	U
Phenanthrene	**2820**	
Anthracene	2270	U
Carbazole	2270	U
Di-n-butylphthalate	**2910**	
Fluoranthene	2270	U
Pyrene	2270	U
Butylbenzylphthalate	**6180**	
3,3'-Dichlorobenzidine	2270	U
Benz[a]anthracene	2270	U
Chrysene	2270	U
bis(2-Ethylhexyl)phthalate	**18200**	
Di-n-octylphthalate	**9770**	
Benzo[b]fluoranthene	2270	U
Benzo[k]fluoranthene	2270	U
Benzo[a]pyrene	2270	U
Indeno[1,2,3-cd]pyrene	2270	U
Dibenz[a,h]anthracene	2270	U
Benzo[g,h,i]perylene	2270	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	52	25-121
Phenol-d5	59	24-113
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	79	30-115
2,4,6-Tribromophenol	50	19-122
Terphenyl-d14	89	18-137

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-02.D
Acq On : 6 Jun 2008 6:55 pm
Operator : SEO
Sample : 0804115-02
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 08 20:18:53 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

6/9/08 [illegible]

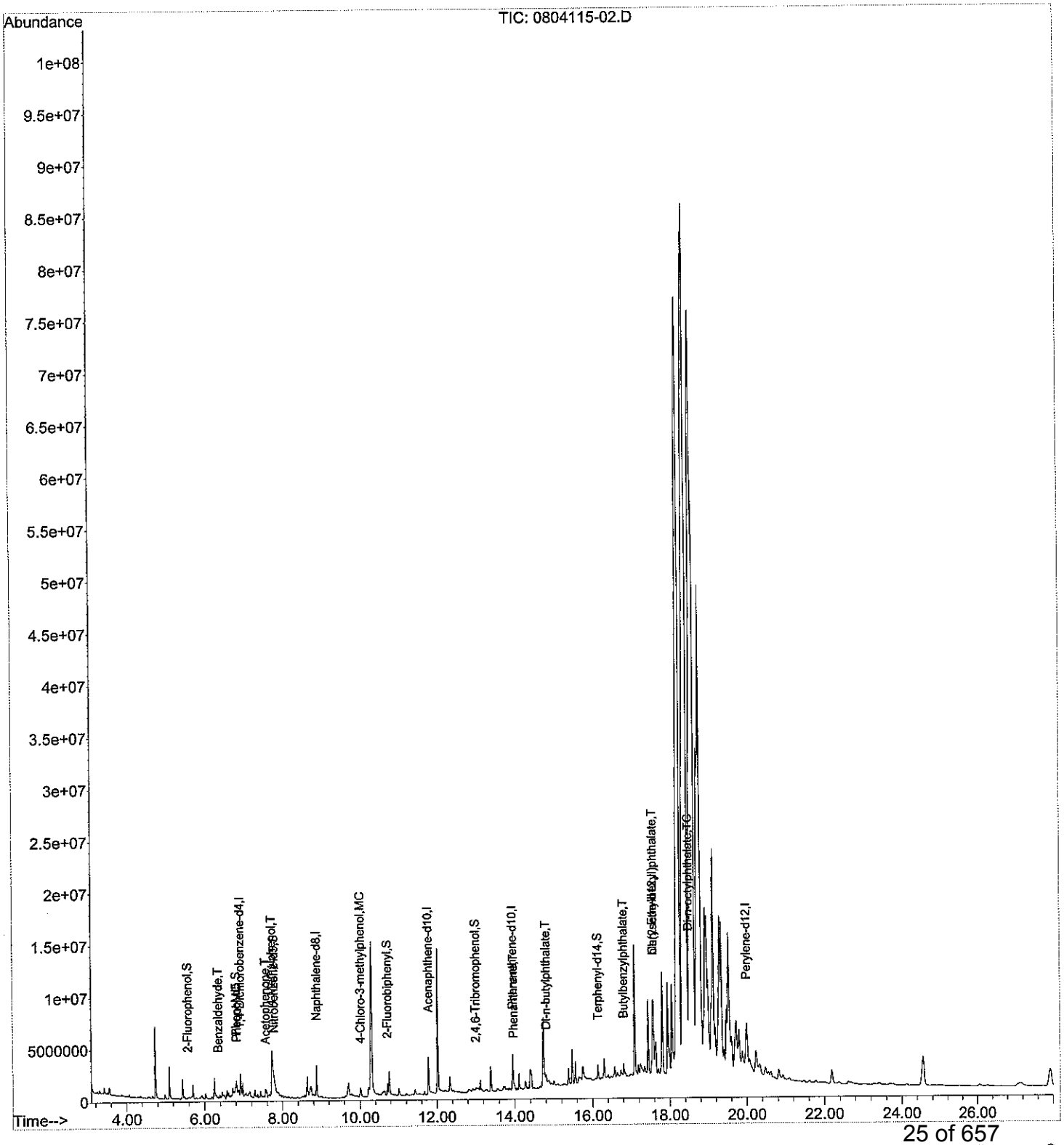
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.92	152	547461	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2305938	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.78	164	1306351	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2123238	5.00 ug/mL	0.00
72) Chrysene-d12	17.58	240	2066975	5.00 ug/mL	0.00
81) Perylene-d12	19.99	264	2258924	5.00 ug/mL	0.07
System Monitoring Compounds					
4) 2-Fluorophenol	5.59	112	142617m	1.04 ug/mL	0.26
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.20%#	
8) Phenol-d5	6.81	99	202890m	1.18 ug/mL	0.20
Spiked Amount 20.000	Range 10 - 94		Recovery	= 5.90%#	
22) Nitrobenzene-d5	7.79	82	210774	1.49 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.45%#	
41) 2-Fluorobiphenyl	10.72	172	546834	1.57 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.85%#	
62) 2,4,6-Tribromophenol	13.01	330	43559	1.01 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.05%#	
75) Terphenyl-d14	16.14	244	676088	1.78 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.90%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	36904m	0.39 ug/ml	
9) Phenol	6.83	94	368986m	1.79 ug/mL	
17) Acetophenone	7.57	105	384320	1.84 ug/ml	98
20) 4-Methylphenol	7.73	108	4200265	26.69 ug/mL# E	78
35) 4-Chloro-3-methylphenol	10.02	107	384560	2.72 ug/mL	91
67) Phenanthrene	13.98	178	342076	0.62 ug/mL	97
70) Di-n-butylphthalate	14.81	149	422833	0.64 ug/mL#	99
76) Butylbenzylphthalate	16.81	149	419239	1.36 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.56	149	1802939m	4.00 ug/mL	
82) Di-n-octylphthalate	18.49	149	1794439	2.15 ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-02.D
Acq On : 6 Jun 2008 6:55 pm
Operator : SEO
Sample : 0804115-02
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 08 20:18:53 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:21 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-02E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/29/08	100	2.20	10	10	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	22700	U	3-Nitroaniline	22700	U
Phenol	22700	U	2,4-Dinitrophenol	22700	U
2-Chlorophenol	22700	U	Dibenzofuran	22700	U
1,3-Dichlorobenzene	22700	U	2,4-Dinitrotoluene	22700	U
1,4-Dichlorobenzene	22700	U	4-Nitrophenol	22700	U
1,2-Dichlorobenzene	22700	U	Fluorene	22700	U
bis(2-Chloroisopropyl)ether	22700	U	4-Chlorophenyl-phenylether	22700	U
2-Methylphenol	22700	U	Diethylphthalate	22700	U
Hexachloroethane	22700	U	4-Nitroaniline	22700	U
n-Nitroso-di-n-propylamine	22700	U	4,6-Dinitro-2-methylphenol	22700	U
4-Methylphenol	**154000**		n-Nitrosodiphenylamine	22700	U
Nitrobenzene	22700	U	4-Bromophenyl-phenylether	22700	U
Isophorone	22700	U	Hexachlorobenzene	22700	U
2-Nitrophenol	22700	U	Pentachlorophenol	22700	U
2,4-Dimethylphenol	22700	U	Phenanthrene	22700	U
bis(2-Chloroethoxy)methane	22700	U	Anthracene	22700	U
2,4-Dichlorophenol	22700	U	Carbazole	22700	U
1,2,4-Trichlorobenzene	22700	U	Di-n-butylphthalate	22700	U
Naphthalene	22700	U	Fluoranthene	22700	U
4-Chloroaniline	22700	U	Pyrene	22700	U
Hexachlorobutadiene	22700	U	Butylbenzylphthalate	22700	U
4-Chloro-3-methylphenol	22700	U	3,3'-Dichlorobenzidine	22700	U
2-Methylnaphthalene	22700	U	Benz[a]anthracene	22700	U
Hexachlorocyclopentadiene	22700	U	Chrysene	22700	U
2,4,6-Trichlorophenol	22700	U	bis(2-Ethylhexyl)phthalate	22700	U
2,4,5-Trichlorophenol	22700	U	Di-n-octylphthalate	22700	U
2-Chloronaphthalene	22700	U	Benzo[b]fluoranthene	22700	U
2-Nitroaniline	22700	U	Benzo[k]fluoranthene	22700	U
Acenaphthylene	22700	U	Benzo[a]pyrene	22700	U
Dimethylphthalate	22700	U	Indeno[1,2,3-cd]pyrene	22700	U
2,6-Dinitrotoluene	22700	U	Dibenz[a,h]anthracene	22700	U
Acenaphthene	22700	U	Benzo[g,h,i]perylene	22700	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	55	25-121
Phenol-d5	60	24-113
Nitrobenzene-d5	65	23-120
2-Fluorobiphenyl	80	30-115
2,4,6-Tribromophenol	55	19-122
Terphenyl-d14	85	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : 0804115-02-D10.D
Acq On : 29 May 2008 1:51 am
Operator : JAD
Sample : 0804115-02-RE
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

6/9/08 JAD final JAD

Quant Time: Jun 09 12:02:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

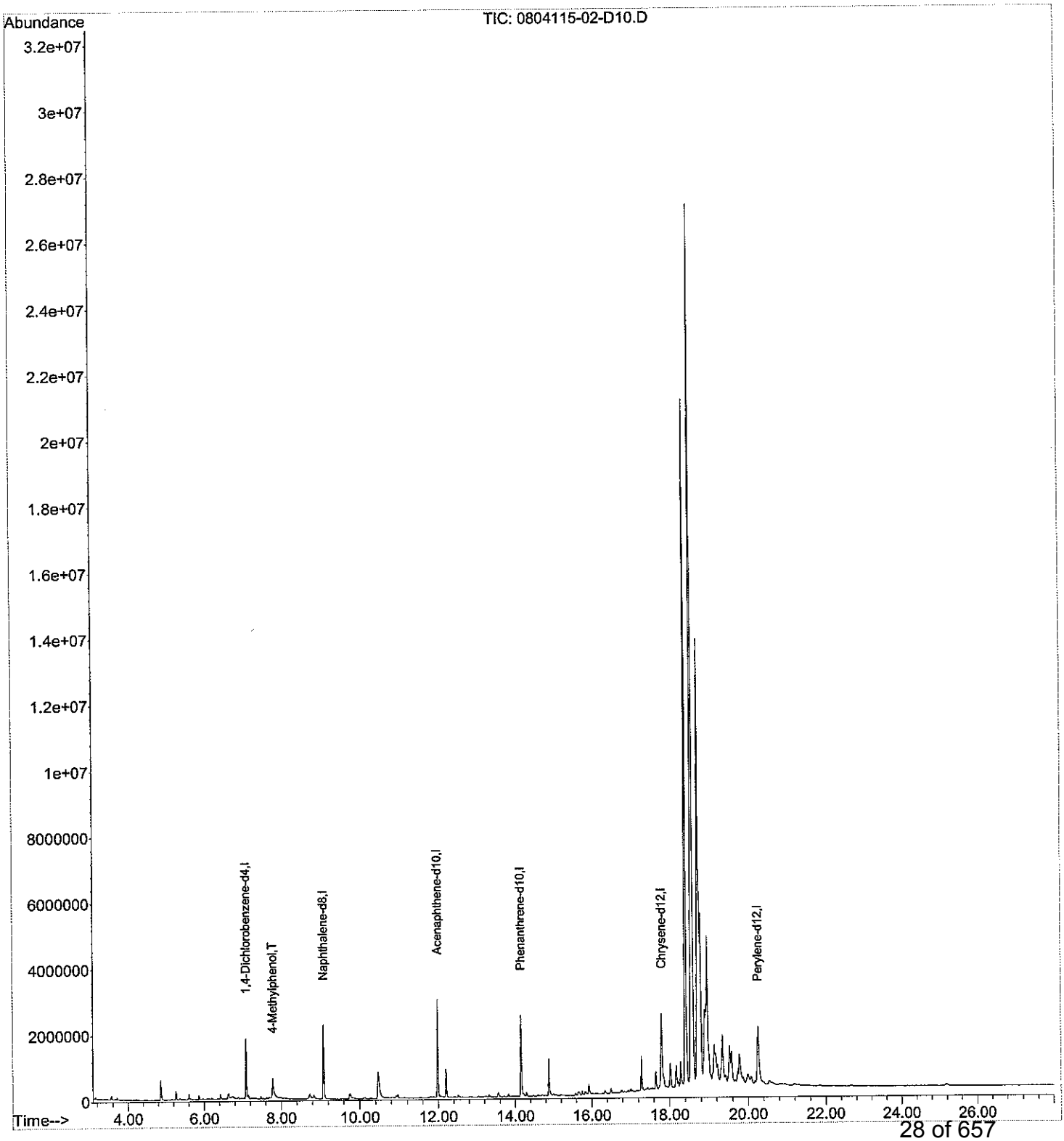
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	488735	5.00	ug/mL	0.18
21) Naphthalene-d8	9.08	136	1895911	5.00	ug/mL	0.20
37) Acenaphthene-d10	11.98	164	1089380m	5.00	ug/mL	0.20
58) Phenanthrene-d10	14.15	188	1718804m	5.00	ug/mL	0.20
72) Chrysene-d12	17.80	240	1647915	5.00	ug/mL	0.22
81) Perylene-d12	20.26	264	1764286	5.00	ug/mL	0.34
System Monitoring Compounds						
4) 2-Fluorophenol	5.35	112	13434m	0.11	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.55%#	
8) Phenol-d5	6.70	99	18234	0.12	ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	=	0.60%#	
22) Nitrobenzene-d5	7.98	82	14562m	0.13	ug/mL	0.19
Spiked Amount 20.000	Range 35 - 114		Recovery	=	0.65%#	
41) 2-Fluorobiphenyl	10.91	172	45773	0.16	ug/mL	0.20
Spiked Amount 20.000	Range 43 - 116		Recovery	=	0.80%#	
62) 2,4,6-Tribromophenol	13.20	330	3833	0.11	ug/mL	0.19
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.55%#	
75) Terphenyl-d14	16.34	244	52319	0.17	ug/mL	0.20
Spiked Amount 20.000	Range 33 - 141		Recovery	=	0.85%#	
Target Compounds						Qvalue
20) 4-Methylphenol	7.78	108	475878m	3.39	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : 0804115-02-D10.D
Acq On : 29 May 2008 1:51 am
Operator : JAD
Sample : 0804115-02-RE
Misc : 10X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 09 12:02:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-03**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.18	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2290	U	3-Nitroaniline	2290	U
Phenol	**2430**		2,4-Dinitrophenol	2290	U
2-Chlorophenol	2290	U	Dibenzofuran	2290	U
1,3-Dichlorobenzene	2290	U	2,4-Dinitrotoluene	2290	U
1,4-Dichlorobenzene	2290	U	4-Nitrophenol	2290	U
1,2-Dichlorobenzene	2290	U	Fluorene	2290	U
bis(2-Chloroisopropyl)ether	2290	U	4-Chlorophenyl-phenylether	2290	U
2-Methylphenol	2290	U	Diethylphthalate	2290	U
Hexachloroethane	2290	U	4-Nitroaniline	2290	U
n-Nitroso-di-n-propylamine	2290	U	4,6-Dinitro-2-methylphenol	2290	U
4-Methylphenol	**57400**		n-Nitrosodiphenylamine	2290	U
Nitrobenzene	2290	U	4-Bromophenyl-phenylether	2290	U
Isophorone	2290	U	Hexachlorobenzene	2290	U
2-Nitrophenol	2290	U	Pentachlorophenol	2290	U
2,4-Dimethylphenol	2290	U	Phenanthrene	**3030**	
bis(2-Chloroethoxy)methane	2290	U	Anthracene	2290	U
2,4-Dichlorophenol	2290	U	Carbazole	2290	U
1,2,4-Trichlorobenzene	2290	U	Di-n-butylphthalate	2290	U
Naphthalene	2290	U	Fluoranthene	**1280**	J
4-Chloroaniline	2290	U	Pyrene	2290	U
Hexachlorobutadiene	2290	U	Butylbenzylphthalate	**9400**	
4-Chloro-3-methylphenol	**9630**		3,3'-Dichlorobenzidine	2290	U
2-Methylnaphthalene	2290	U	Benz[a]anthracene	2290	U
Hexachlorocyclopentadiene	2290	U	Chrysene	2290	U
2,4,6-Trichlorophenol	2290	U	bis(2-Ethylhexyl)phthalate	**3350**	
2,4,5-Trichlorophenol	2290	U	Di-n-octylphthalate	2290	U
2-Chloronaphthalene	2290	U	Benzo[b]fluoranthene	2290	U
2-Nitroaniline	2290	U	Benzo[k]fluoranthene	2290	U
Acenaphthylene	2290	U	Benzo[a]pyrene	2290	U
Dimethylphthalate	2290	U	Indeno[1,2,3-cd]pyrene	2290	U
2,6-Dinitrotoluene	2290	U	Dibenz[a,h]anthracene	2290	U
Acenaphthene	2290	U	Benzo[g,h,i]perylene	2290	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	49	25-121
Phenol-d5	52	24-113
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	71	30-115
2,4,6-Tribromophenol	47	19-122
Terphenyl-d14	75	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-03.D
Acq On : 6 Jun 2008 10:30 pm
Operator : SEO
Sample : 0804115-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 20:24:24 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

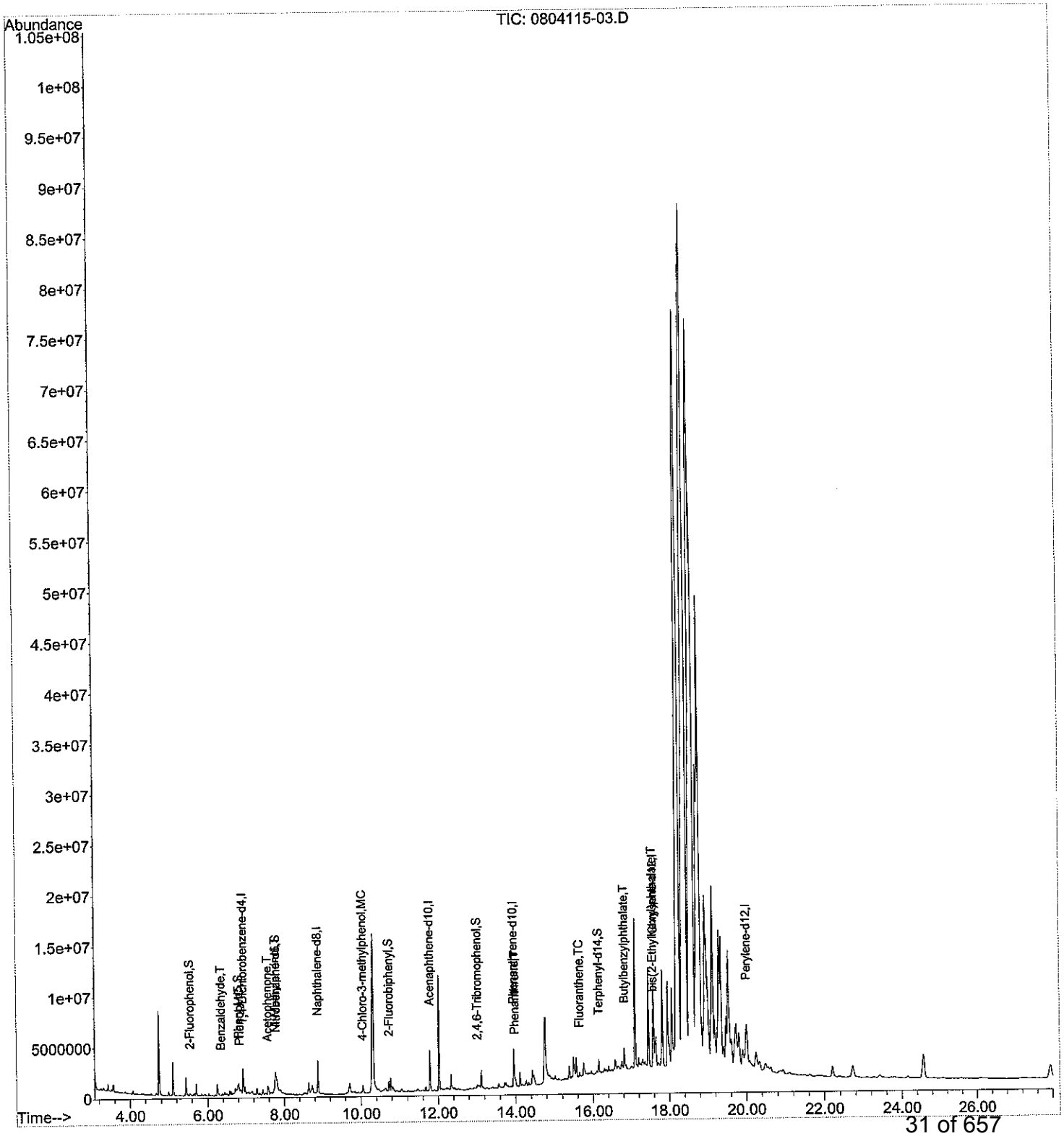
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	592174	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2482860	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1411860m	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2289288	5.00 ug/mL	0.00
72) Chrysene-d12	17.59	240	2239961	5.00 ug/mL	0.00
81) Perylene-d12	20.00	264	2452235	5.00 ug/mL	0.08
System Monitoring Compounds					
4) 2-Fluorophenol	5.55	112	144448m	0.97 ug/mL	0.22
Spiked Amount 20.000	Range 21 - 100		Recovery	= 4.85%#	
8) Phenol-d5	6.82	99	194133m	1.05 ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	= 5.25%#	
22) Nitrobenzene-d5	7.80	82	220564	1.45 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.25%#	
41) 2-Fluorobiphenyl	10.73	172	539072	1.43 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.15%#	
62) 2,4,6-Tribromophenol	13.02	330	43453	0.93 ug/mL	0.02
Spiked Amount 20.000	Range 10 - 123		Recovery	= 4.65%#	
75) Terphenyl-d14	16.15	244	615172	1.49 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 7.45%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	29610m	0.29 ug/ml	
9) Phenol	6.84	94	118662m	0.53 ug/mL	
17) Acetophenone	7.57	105	373678	1.65 ug/ml#	91
20) 4-Methylphenol	7.77	108	2129830	12.51 ug/mL#	78
35) 4-Chloro-3-methylphenol	10.05	107	319177m	2.10 ug/mL	
67) Phenanthrene	13.99	178	388651	0.66 ug/mL	98
71) Fluoranthene	15.65	202	167860	0.28 ug/mL	97
76) Butylbenzylphthalate	16.82	149	686541	2.05 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.56	149	357794	0.73 ug/mL#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-03.D
Acq On : 6 Jun 2008 10:30 pm
Operator : SEO
Sample : 0804115-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 08 20:24:24 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:27 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-04**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.50	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	2000	U
Phenol	**2560**	
2-Chlorophenol	2000	U
1,3-Dichlorobenzene	2000	U
1,4-Dichlorobenzene	2000	U
1,2-Dichlorobenzene	2000	U
bis(2-Chloroisopropyl)ether	2000	U
2-Methylphenol	2000	U
Hexachloroethane	2000	U
n-Nitroso-di-n-propylamine	2000	U
4-Methylphenol	**59500**	
Nitrobenzene	2000	U
Isophorone	2000	U
2-Nitrophenol	2000	U
2,4-Dimethylphenol	2000	U
bis(2-Chloroethoxy)methane	2000	U
2,4-Dichlorophenol	2000	U
1,2,4-Trichlorobenzene	2000	U
Naphthalene	**4360**	
4-Chloroaniline	2000	U
Hexachlorobutadiene	2000	U
4-Chloro-3-methylphenol	**12400**	
2-Methylnaphthalene	2000	U
Hexachlorocyclopentadiene	2000	U
2,4,6-Trichlorophenol	2000	U
2,4,5-Trichlorophenol	2000	U
2-Chloronaphthalene	2000	U
2-Nitroaniline	2000	U
Acenaphthylene	2000	U
Dimethylphthalate	2000	U
2,6-Dinitrotoluene	2000	U
Acenaphthene	2000	U

Parameter	Result	
3-Nitroaniline	2000	U
2,4-Dinitrophenol	2000	U
Dibenzofuran	2000	U
2,4-Dinitrotoluene	2000	U
4-Nitrophenol	2000	U
Fluorene	2000	U
4-Chlorophenyl-phenylether	2000	U
Diethylphthalate	2000	U
4-Nitroaniline	2000	U
4,6-Dinitro-2-methylphenol	2000	U
n-Nitrosodiphenylamine	2000	U
4-Bromophenyl-phenylether	2000	U
Hexachlorobenzene	2000	U
Pentachlorophenol	2000	U
Phenanthrene	**4000**	
Anthracene	2000	U
Carbazole	2000	U
Di-n-butylphthalate	**2520**	
Fluoranthene	**1040**	J
Pyrene	2000	U
Butylbenzylphthalate	**12100**	
3,3'-Dichlorobenzidine	2000	U
Benz[a]anthracene	2000	U
Chrysene	2000	U
bis(2-Ethylhexyl)phthalate	**12600**	
Di-n-octylphthalate	2000	U
Benzo[b]fluoranthene	2000	U
Benzo[k]fluoranthene	2000	U
Benzo[a]pyrene	2000	U
Indeno[1,2,3-cd]pyrene	2000	U
Dibenz[a,h]anthracene	2000	U
Benzo[g,h,i]perylene	2000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	54	25-121
Phenol-d5	60	24-113
Nitrobenzene-d5	80	23-120
2-Fluorobiphenyl	77	30-115
2,4,6-Tribromophenol	49	19-122
Terphenyl-d14	83	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-04.D
Acq On : 6 Jun 2008 7:31 pm
Operator : SEO
Sample : 0804115-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 20:28:17 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

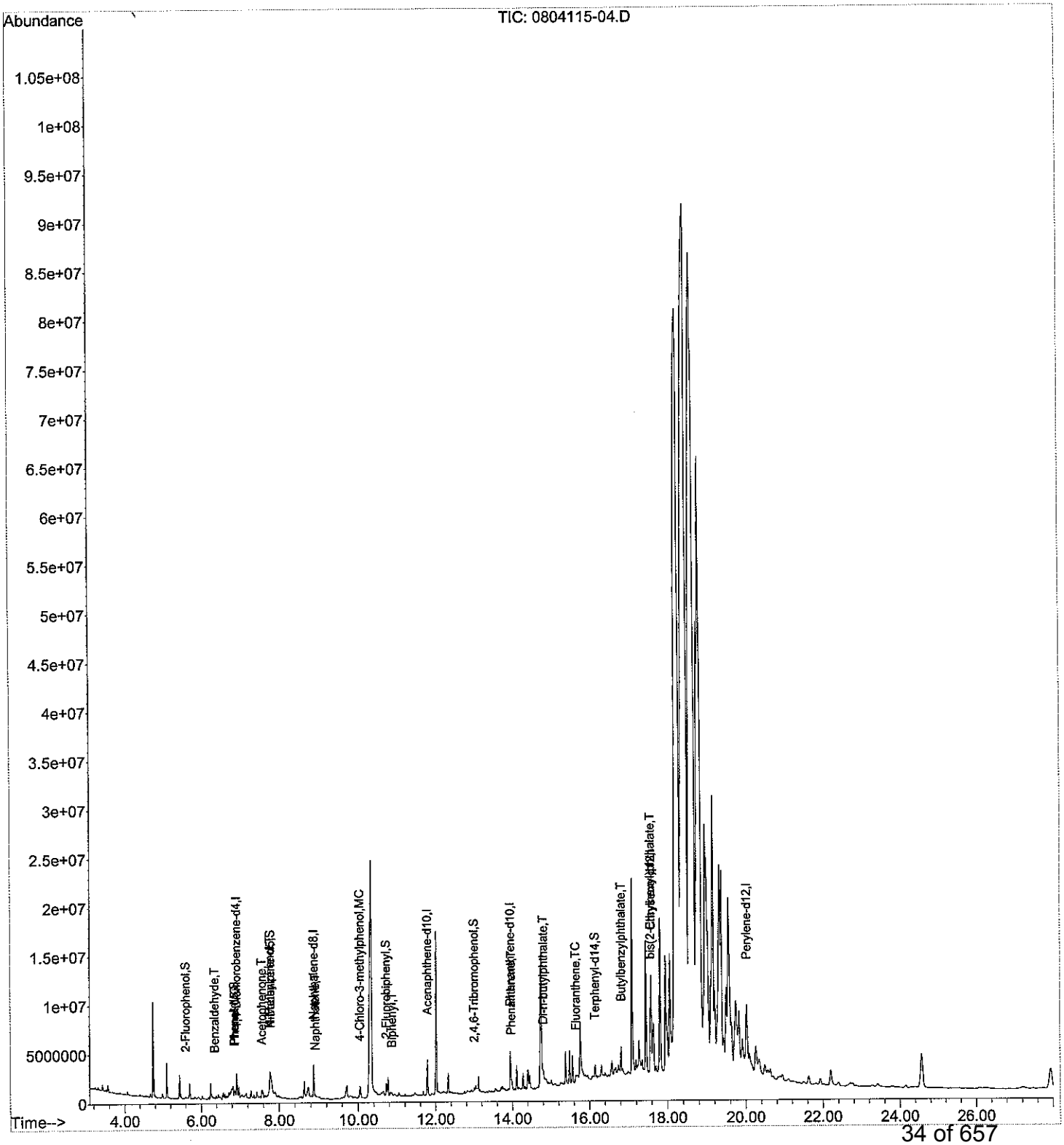
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	613364	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2566062	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1424529	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2306163	5.00 ug/mL	0.00
72) Chrysene-d12	17.58	240	2229377	5.00 ug/mL	0.00
81) Perylene-d12	20.02	264	2402108	5.00 ug/mL	0.11
System Monitoring Compounds					
4) 2-Fluorophenol	5.60	112	164918m	1.07 ug/mL	0.27
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.35%#	
8) Phenol-d5	6.85	99	230946m	1.20 ug/mL	0.24
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.00%#	
22) Nitrobenzene-d5	7.79	82	249504	1.59 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.95%#	
41) 2-Fluorobiphenyl	10.72	172	589711	1.55 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.75%#	
62) 2,4,6-Tribromophenol	13.02	330	46217	0.98 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 4.90%#	
75) Terphenyl-d14	16.14	244	684426	1.67 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.35%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	45111	0.43 ug/ml#	70
9) Phenol	6.87	94	148289m	0.64 ug/mL	
17) Acetophenone	7.57	105	407743	1.74 ug/ml	95
20) 4-Methylphenol	7.77	108	2623780	14.88 ug/mL	79
31) Naphthalene	8.92	128	622277m	1.09 ug/mL	
35) 4-Chloro-3-methylphenol	10.05	107	488867	3.11 ug/mL	97
42) Biphenyl	10.87	154	183892	0.42 ug/ml	98
67) Phenanthrene	13.98	178	594585	1.00 ug/mL	100
70) Di-n-butylphthalate	14.81	149	449276	0.63 ug/mL#	93
71) Fluoranthene	15.64	202	156832	0.26 ug/mL#	95
76) Butylbenzylphthalate	16.82	149	1006580	3.02 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.56	149	1530193	3.14 ug/mL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-04.D
Acq On : 6 Jun 2008 7:31 pm
Operator : SEO
Sample : 0804115-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 08 20:28:17 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:34 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-05**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/07/08	100	2.12	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2360	U	3-Nitroaniline	2360	U
Phenol	2360	U	2,4-Dinitrophenol	2360	U
2-Chlorophenol	2360	U	Dibenzofuran	2360	U
1,3-Dichlorobenzene	2360	U	2,4-Dinitrotoluene	2360	U
1,4-Dichlorobenzene	2360	U	4-Nitrophenol	2360	U
1,2-Dichlorobenzene	2360	U	Fluorene	2360	U
bis(2-Chloroisopropyl)ether	2360	U	4-Chlorophenyl-phenylether	2360	U
2-Methylphenol	2360	U	Diethylphthalate	2360	U
Hexachloroethane	2360	U	4-Nitroaniline	2360	U
n-Nitroso-di-n-propylamine	2360	U	4,6-Dinitro-2-methylphenol	2360	U
4-Methylphenol	**9060**		n-Nitrosodiphenylamine	2360	U
Nitrobenzene	2360	U	4-Bromophenyl-phenylether	2360	U
Isophorone	2360	U	Hexachlorobenzene	2360	U
2-Nitrophenol	2360	U	Pentachlorophenol	2360	U
2,4-Dimethylphenol	2360	U	Phenanthrene	**4340**	
bis(2-Chloroethoxy)methane	2360	U	Anthracene	2360	U
2,4-Dichlorophenol	2360	U	Carbazole	2360	U
1,2,4-Trichlorobenzene	2360	U	Di-n-butylphthalate	**5660**	
Naphthalene	2360	U	Fluoranthene	2360	U
4-Chloroaniline	2360	U	Pyrene	2360	U
Hexachlorobutadiene	2360	U	Butylbenzylphthalate	2360	U
4-Chloro-3-methylphenol	2360	U	3,3'-Dichlorobenzidine	2360	U
2-Methylnaphthalene	2360	U	Benz[a]anthracene	2360	U
Hexachlorocyclopentadiene	2360	U	Chrysene	2360	U
2,4,6-Trichlorophenol	2360	U	bis(2-Ethylhexyl)phthalate	**16100**	
2,4,5-Trichlorophenol	2360	U	Di-n-octylphthalate	2360	U
2-Chloronaphthalene	2360	U	Benzo[b]fluoranthene	2360	U
2-Nitroaniline	2360	U	Benzo[k]fluoranthene	2360	U
Acenaphthylene	2360	U	Benzo[a]pyrene	2360	U
Dimethylphthalate	2360	U	Indeno[1,2,3-cd]pyrene	2360	U
2,6-Dinitrotoluene	2360	U	Dibenz[a,h]anthracene	2360	U
Acenaphthene	2360	U	Benzo[g,h,i]perylene	2360	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	55	25-121
Phenol-d5	54	24-113
Nitrobenzene-d5	65	23-120
2-Fluorobiphenyl	86	30-115
2,4,6-Tribromophenol	72	19-122
Terphenyl-d14	81	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-05.D
Acq On : 7 Jun 2008 1:29 am
Operator : SEO
Sample : 0804115-05
Misc :
ALS Vial : 22 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 20:31:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

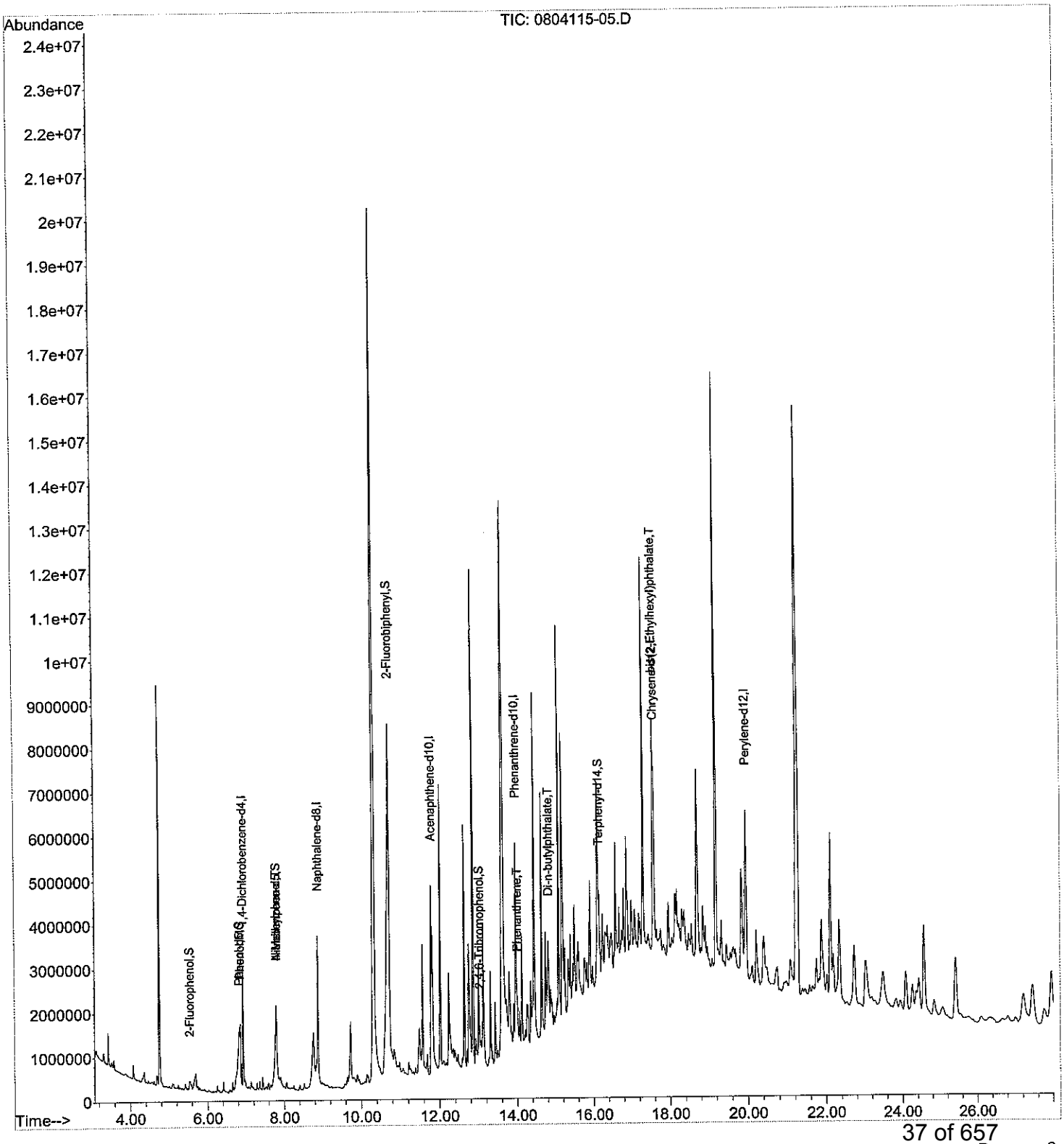
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	632611	5.00	ug/mL	0.00
21) Naphthalene-d8	8.89	136	2614904	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.80	164	1554017	5.00	ug/mL	0.02
58) Phenanthrene-d10	13.96	188	2448629	5.00	ug/mL	0.02
72) Chrysene-d12	17.60	240	2383256	5.00	ug/mL	0.02
81) Perylene-d12	19.95	264	2452516	5.00	ug/mL	0.04
System Monitoring Compounds						
4) 2-Fluorophenol	5.53	112	172783m	1.09	ug/mL	0.20
Spiked Amount 20.000	Range 21 - 100		Recovery	=	5.45%#	
8) Phenol-d5	6.82	99	215137m	1.08	ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	=	5.40%#	
22) Nitrobenzene-d5	7.80	82	208249m	1.30	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	6.50%#	
41) 2-Fluorobiphenyl	10.73	172	714455	1.72	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.60%#	
62) 2,4,6-Tribromophenol	13.03	330	71680	1.44	ug/mL	0.03
Spiked Amount 20.000	Range 10 - 123		Recovery	=	7.20%#	
75) Terphenyl-d14	16.16	244	712001	1.63	ug/mL	0.02
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.15%#	
Target Compounds						Qvalue
9) Phenol	6.86	94	54111m	0.23	ug/mL	
20) 4-Methylphenol	7.81	108	350054m	1.92	ug/mL	
67) Phenanthrene	14.00	178	578842	0.92	ug/mL	98
70) Di-n-butylphthalate	14.82	149	914684	1.20	ug/mL#	93
80) bis(2-Ethylhexyl)phthalate	17.57	149	1780998	3.42	ug/mL#	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-05.D
Acq On : 7 Jun 2008 1:29 am
Operator : SEO
Sample : 0804115-05
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 08 20:31:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:39 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-06**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/07/08	100	2.28	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	2190	U
Phenol	**3330**	
2-Chlorophenol	2190	U
1,3-Dichlorobenzene	2190	U
1,4-Dichlorobenzene	2190	U
1,2-Dichlorobenzene	2190	U
bis(2-Chloroisopropyl)ether	2190	U
2-Methylphenol	2190	U
Hexachloroethane	2190	U
n-Nitroso-di-n-propylamine	2190	U
4-Methylphenol	**59300**	
Nitrobenzene	2190	U
Isophorone	2190	U
2-Nitrophenol	2190	U
2,4-Dimethylphenol	2190	U
bis(2-Chloroethoxy)methane	2190	U
2,4-Dichlorophenol	2190	U
1,2,4-Trichlorobenzene	2190	U
Naphthalene	2190	U
4-Chloroaniline	2190	U
Hexachlorobutadiene	2190	U
4-Chloro-3-methylphenol	**10800**	
2-Methylnaphthalene	2190	U
Hexachlorocyclopentadiene	2190	U
2,4,6-Trichlorophenol	2190	U
2,4,5-Trichlorophenol	2190	U
2-Chloronaphthalene	2190	U
2-Nitroaniline	2190	U
Acenaphthylene	2190	U
Dimethylphthalate	2190	U
2,6-Dinitrotoluene	2190	U
Acenaphthene	2190	U

Parameter	Result	
3-Nitroaniline	2190	U
2,4-Dinitrophenol	2190	U
Dibenzofuran	2190	U
2,4-Dinitrotoluene	2190	U
4-Nitrophenol	2190	U
Fluorene	2190	U
4-Chlorophenyl-phenylether	2190	U
Diethylphthalate	2190	U
4-Nitroaniline	2190	U
4,6-Dinitro-2-methylphenol	2190	U
n-Nitrosodiphenylamine	2190	U
4-Bromophenyl-phenylether	2190	U
Hexachlorobenzene	2190	U
Pentachlorophenol	2190	U
Phenanthrene	**5960**	
Anthracene	2190	U
Carbazole	2190	U
Di-n-butylphthalate	**1270**	J
Fluoranthene	**4740**	
Pyrene	**2850**	
Butylbenzylphthalate	**14100**	
3,3'-Dichlorobenzidine	2190	U
Benz[a]anthracene	2190	U
Chrysene	**1320**	J
bis(2-Ethylhexyl)phthalate	**6360**	
Di-n-octylphthalate	**3550**	
Benzo[b]fluoranthene	2190	U
Benzo[k]fluoranthene	2190	U
Benzo[a]pyrene	2190	U
Indeno[1,2,3-cd]pyrene	2190	U
Dibenz[a,h]anthracene	2190	U
Benzo[g,h,i]perylene	2190	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	42	25-121
Phenol-d5	55	24-113
Nitrobenzene-d5	92	23-120
2-Fluorobiphenyl	90	30-115
2,4,6-Tribromophenol	30	19-122
Terphenyl-d14	97	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-06.D
Acq On : 7 Jun 2008 12:53 am
Operator : SEO
Sample : 0804115-06
Misc :
ALS Vial : 21 Sample Multiplier: 1

6/9/08 JB for MB 2080

Quant Time: Jun 08 20:35:20 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration

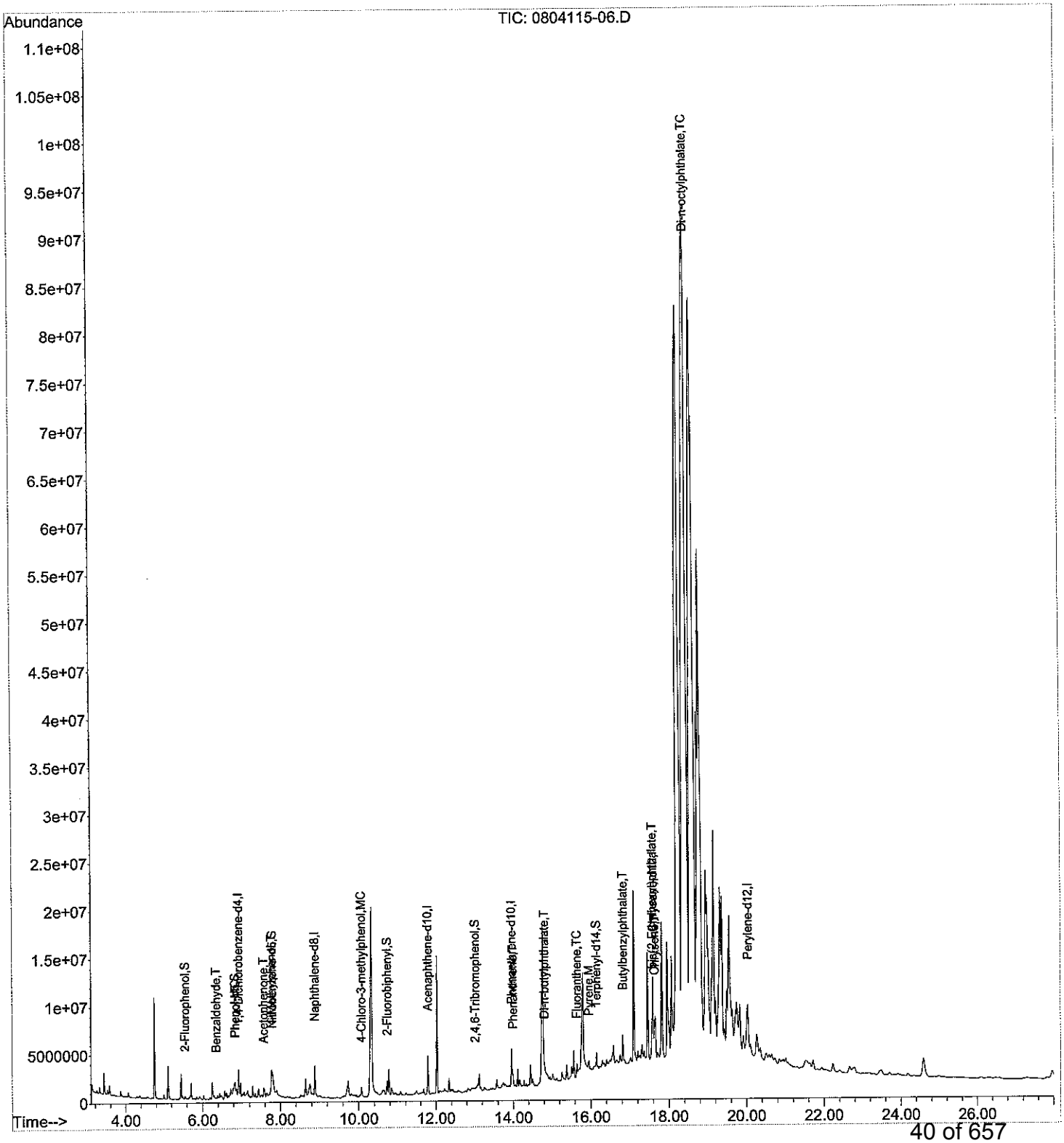
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	636206	5.00 ug/mL	0.00
21) Naphthalene-d8	8.89	136	2645927	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1500833	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.96	188	2423310	5.00 ug/mL	0.02
72) Chrysene-d12	17.60	240	2383745	5.00 ug/mL	0.02
81) Perylene-d12	20.02	264	2517836	5.00 ug/mL	0.11
System Monitoring Compounds					
4) 2-Fluorophenol	5.55	112	133689m	0.84 ug/mL	0.22
Spiked Amount 20.000	Range 21 - 100		Recovery	= 4.20%#	
8) Phenol-d5	6.83	99	220140m	1.10 ug/mL	0.22
Spiked Amount 20.000	Range 10 - 94		Recovery	= 5.50%#	
22) Nitrobenzene-d5	7.80	82	295723	1.83 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 9.15%#	
41) 2-Fluorobiphenyl	10.73	172	719554	1.80 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 9.00%#	
62) 2,4,6-Tribromophenol	13.02	330	29546	0.60 ug/mL	0.02
Spiked Amount 20.000	Range 10 - 123		Recovery	= 3.00%#	
75) Terphenyl-d14	16.15	244	847858	1.94 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 9.70%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	52163	0.48 ug/ml#	71
9) Phenol	6.85	94	182528m	0.76 ug/mL	
17) Acetophenone	7.57	105	441215	1.82 ug/ml	97
20) 4-Methylphenol	7.78	108	2473164	13.52 ug/mL#	65
35) 4-Chloro-3-methylphenol	10.08	107	399035m	2.46 ug/mL	
67) Phenanthrene	13.99	178	852002	1.36 ug/mL	99
70) Di-n-butylphthalate	14.82	149	221006	0.29 ug/mL#	88
71) Fluoranthene	15.65	202	677728	1.08 ug/mL	96
74) Pyrene	15.95	202	437913	0.65 ug/mL	98
76) Butylbenzylphthalate	16.83	149	1143270	3.21 ug/mL	99
79) Chrysene	17.63	228	181808m	0.30 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.57	149	752461	1.45 ug/mL#	83
82) Di-n-octylphthalate	18.50	149	754512m	0.81 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-06.D
Acq On : 7 Jun 2008 12:53 am
Operator : SEO
Sample : 0804115-06
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 08 20:35:20 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 08:38:50 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:46 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-07**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/07/08	100	2.32	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2150	U	3-Nitroaniline	2150	U
Phenol	2150	U	2,4-Dinitrophenol	2150	U
2-Chlorophenol	2150	U	Dibenzofuran	2150	U
1,3-Dichlorobenzene	2150	U	2,4-Dinitrotoluene	2150	U
1,4-Dichlorobenzene	2150	U	4-Nitrophenol	2150	U
1,2-Dichlorobenzene	2150	U	Fluorene	**2110**	J
bis(2-Chloroisopropyl)ether	2150	U	4-Chlorophenyl-phenylether	2150	U
2-Methylphenol	2150	U	Diethylphthalate	2150	U
Hexachloroethane	2150	U	4-Nitroaniline	2150	U
n-Nitroso-di-n-propylamine	2150	U	4,6-Dinitro-2-methylphenol	2150	U
4-Methylphenol	**4180**		n-Nitrosodiphenylamine	2150	U
Nitrobenzene	2150	U	4-Bromophenyl-phenylether	2150	U
Isophorone	**24600**		Hexachlorobenzene	2150	U
2-Nitrophenol	2150	U	Pentachlorophenol	2150	U
2,4-Dimethylphenol	2150	U	Phenanthrene	**7110**	
bis(2-Chloroethoxy)methane	2150	U	Anthracene	2150	U
2,4-Dichlorophenol	2150	U	Carbazole	2150	U
1,2,4-Trichlorobenzene	2150	U	Di-n-butylphthalate	**24400**	
Naphthalene	**29600**		Fluoranthene	**2110**	J
4-Chloroaniline	2150	U	Pyrene	**1900**	J
Hexachlorobutadiene	2150	U	Butylbenzylphthalate	**1550**	J
4-Chloro-3-methylphenol	2150	U	3,3'-Dichlorobenzidine	2150	U
2-Methylnaphthalene	**1120**	J	Benz[a]anthracene	2150	U
Hexachlorocyclopentadiene	2150	U	Chrysene	**1160**	J
2,4,6-Trichlorophenol	2150	U	bis(2-Ethylhexyl)phthalate	**1370000**	E
2,4,5-Trichlorophenol	2150	U	Di-n-octylphthalate	**19200**	
2-Chloronaphthalene	2150	U	Benzo[b]fluoranthene	2150	U
2-Nitroaniline	2150	U	Benzo[k]fluoranthene	2150	U
Acenaphthylene	2150	U	Benzo[a]pyrene	2150	U
Dimethylphthalate	2150	U	Indeno[1,2,3-cd]pyrene	2150	U
2,6-Dinitrotoluene	2150	U	Dibenz[a,h]anthracene	2150	U
Acenaphthene	2150	U	Benzo[g,h,i]perylene	2150	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	49	25-121
Phenol-d5	64	24-113
Nitrobenzene-d5	81	23-120
2-Fluorobiphenyl	76	30-115
2,4,6-Tribromophenol	56	19-122
Terphenyl-d14	109	18-137

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-07.D
Acq On : 7 Jun 2008 2:05 am
Operator : SEO
Sample : 0804115-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 20:48:33 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

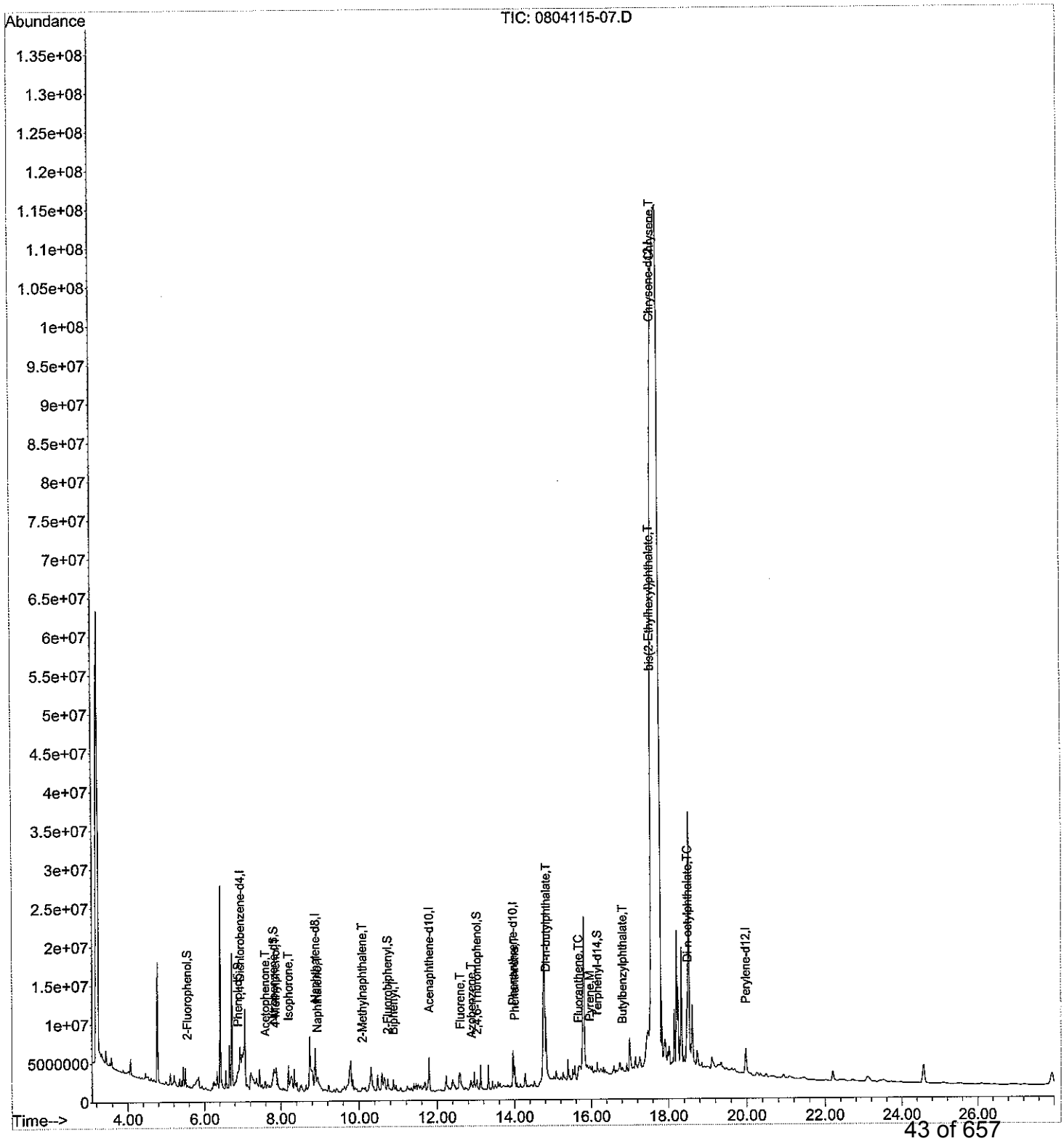
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.94	152	710352	5.00 ug/mL	0.02
21) Naphthalene-d8	8.89	136	2884474	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.80	164	1617046	5.00 ug/mL	0.02
58) Phenanthrene-d10	13.96	188	2553940	5.00 ug/mL	0.02
72) Chrysene-d12	17.60	240	1894442	5.00 ug/mL	0.02
81) Perylene-d12	19.98	264	2526044	5.00 ug/mL	0.07
System Monitoring Compounds					
4) 2-Fluorophenol	5.55	112	172700m	0.97 ug/mL	0.22
Spiked Amount 20.000	Range 21 - 100		Recovery	= 4.85%#	
8) Phenol-d5	6.87	99	284233m	1.28 ug/mL	0.26
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.40%#	
22) Nitrobenzene-d5	7.80	82	286716	1.62 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.10%#	
41) 2-Fluorobiphenyl	10.73	172	661799	1.53 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.65%#	
62) 2,4,6-Tribromophenol	13.03	330	58247	1.12 ug/mL	0.03
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.60%#	
75) Terphenyl-d14	16.16	244	759021	2.18 ug/mL	0.02
Spiked Amount 20.000	Range 33 - 141		Recovery	= 10.90%#	
Target Compounds					Qvalue
17) Acetophenone	7.58	105	265660m	0.98 ug/ml	
20) 4-Methylphenol	7.85	108	197419m	0.97 ug/mL	
24) Isophorone	8.19	82	1940888	5.71 ug/mL	99
31) Naphthalene	8.93	128	4408455	6.87 ug/mL	97
36) 2-Methylnaphthalene	10.08	142	111875m	0.26 ug/mL	
42) Biphenyl	10.88	154	1056344	2.13 ug/ml#	95
54) Fluorene	12.61	166	223884	0.49 ug/mL	99
60) Azobenzene	12.89	182	205960	1.53 ug/mL	1
67) Phenanthrene	14.00	178	1090393	1.65 ug/mL	100
70) Di-n-butylphthalate	14.82	149	4502694	5.67 ug/mL	99
71) Fluoranthene	15.66	202	327446	0.49 ug/mL	98
74) Pyrene	15.96	202	238598	0.44 ug/mL	96
76) Butylbenzylphthalate	16.83	149	102907m	0.36 ug/mL	
79) Chrysene	17.63	228	130525m	0.27 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.55	149	131557804m	318.11 ug/mL G	
82) Di-n-octylphthalate	18.48	149	4154677m	4.45 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-07.D
Acq On : 7 Jun 2008 2:05 am
Operator : SEO
Sample : 0804115-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jun 08 20:48:33 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-07E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/09/08	100	2.32	10	200	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	431000	U	3-Nitroaniline	431000	U
Phenol	431000	U	2,4-Dinitrophenol	431000	U
2-Chlorophenol	431000	U	Dibenzofuran	431000	U
1,3-Dichlorobenzene	431000	U	2,4-Dinitrotoluene	431000	U
1,4-Dichlorobenzene	431000	U	4-Nitrophenol	431000	U
1,2-Dichlorobenzene	431000	U	Fluorene	431000	U
bis(2-Chloroisopropyl)ether	431000	U	4-Chlorophenyl-phenylether	431000	U
2-Methylphenol	431000	U	Diethylphthalate	431000	U
Hexachloroethane	431000	U	4-Nitroaniline	431000	U
n-Nitroso-di-n-propylamine	431000	U	4,6-Dinitro-2-methylphenol	431000	U
4-Methylphenol	431000	U	n-Nitrosodiphenylamine	431000	U
Nitrobenzene	431000	U	4-Bromophenyl-phenylether	431000	U
Isophorone	431000	U	Hexachlorobenzene	431000	U
2-Nitrophenol	431000	U	Pentachlorophenol	431000	U
2,4-Dimethylphenol	431000	U	Phenanthrene	431000	U
bis(2-Chloroethoxy)methane	431000	U	Anthracene	431000	U
2,4-Dichlorophenol	431000	U	Carbazole	431000	U
1,2,4-Trichlorobenzene	431000	U	Di-n-butylphthalate	431000	U
Naphthalene	431000	U	Fluoranthene	431000	U
4-Chloroaniline	431000	U	Pyrene	431000	U
Hexachlorobutadiene	431000	U	Butylbenzylphthalate	431000	U
4-Chloro-3-methylphenol	431000	U	3,3'-Dichlorobenzidine	431000	U
2-Methylnaphthalene	431000	U	Benz[a]anthracene	431000	U
Hexachlorocyclopentadiene	431000	U	Chrysene	431000	U
2,4,6-Trichlorophenol	431000	U	bis(2-Ethylhexyl)phthalate	**13400000**	
2,4,5-Trichlorophenol	431000	U	Di-n-octylphthalate	431000	U
2-Chloronaphthalene	431000	U	Benzo[b]fluoranthene	431000	U
2-Nitroaniline	431000	U	Benzo[k]fluoranthene	431000	U
Acenaphthylene	431000	U	Benzo[a]pyrene	431000	U
Dimethylphthalate	431000	U	Indeno[1,2,3-cd]pyrene	431000	U
2,6-Dinitrotoluene	431000	U	Dibenz[a,h]anthracene	431000	U
Acenaphthene	431000	U	Benzo[g,h,i]perylene	431000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	DL	25-121
Phenol-d5	DL	24-113
Nitrobenzene-d5	DL	23-120
2-Fluorobiphenyl	DL	30-115
2,4,6-Tribromophenol	DL	19-122
Terphenyl-d14	DL	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
DL - Surrogate diluted out of sample.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804115-07-RE.D
Acq On : 9 Jun 2008 2:45 pm
Operator : SEO
Sample : 0804115-07-RE
Misc : ~~20x~~ 200x
ALS Vial : 5 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 15:22:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	658538	5.00 ug/mL	0.00
21) Naphthalene-d8	8.52	136	2655302	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1504087	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2405669	5.00 ug/mL	0.00
72) Chrysene-d12	17.19	240	2305582	5.00 ug/mL	0.00
81) Perylene-d12	19.35	264	2361505	5.00 ug/mL	0.00

System Monitoring Compounds

4) 2-Fluorophenol		0.00	112	0	0.00 ug/mL
Spiked Amount	20.000	Range	21 - 100	Recovery	= 0.00%#
8) Phenol-d5		0.00	99	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 94	Recovery	= 0.00%#
22) Nitrobenzene-d5		0.00	82	0d	0.00 ug/mL
Spiked Amount	20.000	Range	35 - 114	Recovery	= 0.00%#
41) 2-Fluorobiphenyl		0.00	172	0d	0.00 ug/mL
Spiked Amount	20.000	Range	43 - 116	Recovery	= 0.00%#
62) 2,4,6-Tribromophenol		0.00	330	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 123	Recovery	= 0.00%#
75) Terphenyl-d14		0.00	244	0d	0.00 ug/mL
Spiked Amount	20.000	Range	33 - 141	Recovery	= 0.00%#

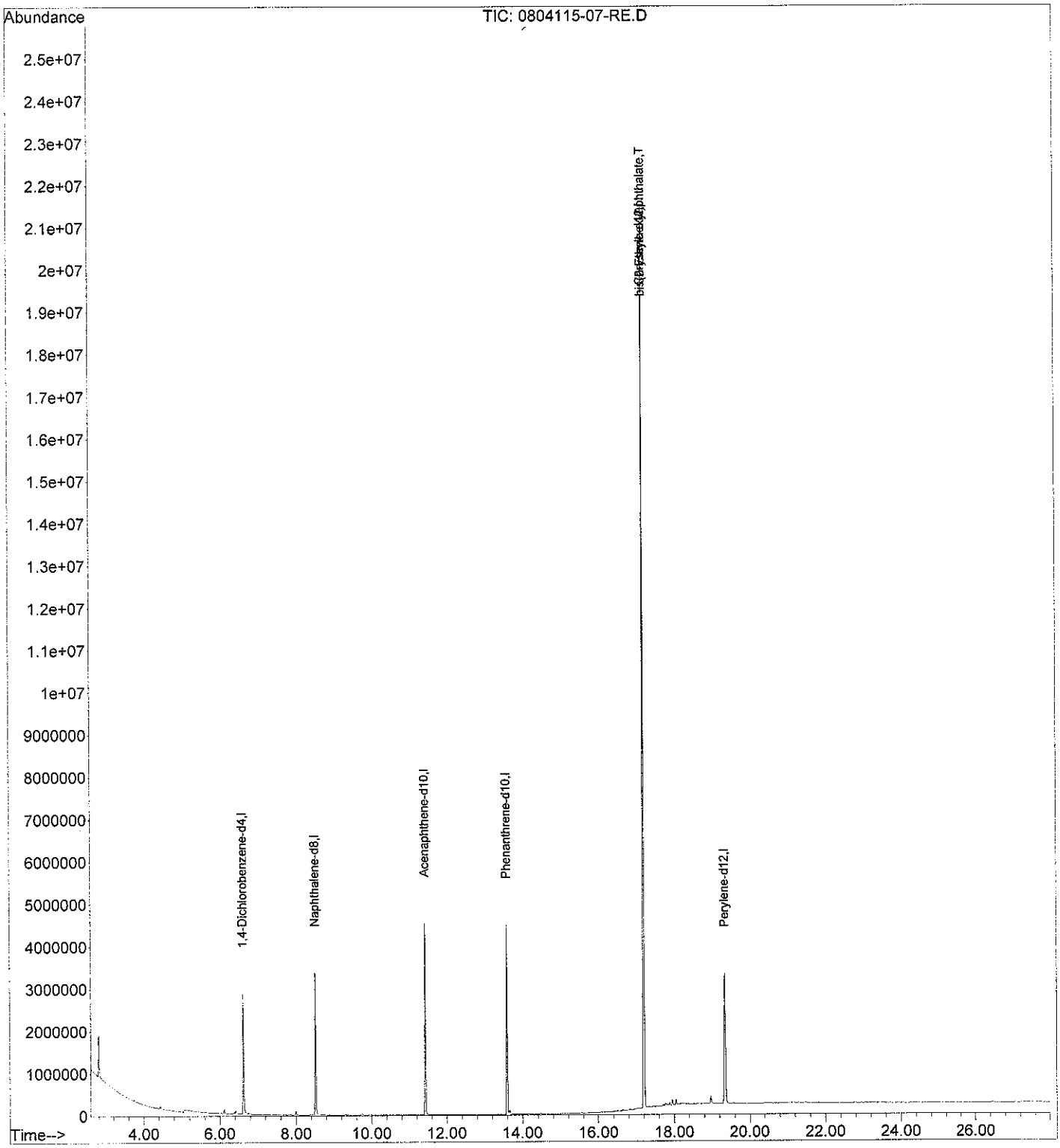
Target Compounds					Qvalue
80) bis(2-Ethylhexyl)phthalate	17.21	149	7811824m	15.52 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804115-07-RE.D
Acq On : 9 Jun 2008 2:45 pm
Operator : SEO
Sample : 0804115-07-RE
Misc : 20X
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 09 15:22:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-08**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.16	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2320	U	3-Nitroaniline	2320	U
Phenol	**3560**		2,4-Dinitrophenol	2320	U
2-Chlorophenol	2320	U	Dibenzofuran	2320	U
1,3-Dichlorobenzene	2320	U	2,4-Dinitrotoluene	2320	U
1,4-Dichlorobenzene	2320	U	4-Nitrophenol	2320	U
1,2-Dichlorobenzene	2320	U	Fluorene	**2270**	J
bis(2-Chloroisopropyl)ether	2320	U	4-Chlorophenyl-phenylether	2320	U
2-Methylphenol	2320	U	Diethylphthalate	2320	U
Hexachloroethane	2320	U	4-Nitroaniline	2320	U
n-Nitroso-di-n-propylamine	2320	U	4,6-Dinitro-2-methylphenol	2320	U
4-Methylphenol	**28800**		n-Nitrosodiphenylamine	2320	U
Nitrobenzene	2320	U	4-Bromophenyl-phenylether	2320	U
Isophorone	**13400**		Hexachlorobenzene	2320	U
2-Nitrophenol	2320	U	Pentachlorophenol	2320	U
2,4-Dimethylphenol	2320	U	Phenanthrene	**6670**	
bis(2-Chloroethoxy)methane	2320	U	Anthracene	2320	U
2,4-Dichlorophenol	2320	U	Carbazole	2320	U
1,2,4-Trichlorobenzene	2320	U	Di-n-butylphthalate	**11200**	
Naphthalene	**22200**		Fluoranthene	**1810**	J
4-Chloroaniline	2320	U	Pyrene	2320	U
Hexachlorobutadiene	2320	U	Butylbenzylphthalate	**10700**	
4-Chloro-3-methylphenol	**6020**		3,3'-Dichlorobenzidine	2320	U
2-Methylnaphthalene	2320	U	Benz[a]anthracene	2320	U
Hexachlorocyclopentadiene	2320	U	Chrysene	2320	U
2,4,6-Trichlorophenol	2320	U	bis(2-Ethylhexyl)phthalate	**884000**	E
2,4,5-Trichlorophenol	2320	U	Di-n-octylphthalate	**51600**	
2-Chloronaphthalene	2320	U	Benzo[b]fluoranthene	2320	U
2-Nitroaniline	2320	U	Benzo[k]fluoranthene	2320	U
Acenaphthylene	2320	U	Benzo[a]pyrene	2320	U
Dimethylphthalate	2320	U	Indeno[1,2,3-cd]pyrene	2320	U
2,6-Dinitrotoluene	2320	U	Dibenz[a,h]anthracene	2320	U
Acenaphthene	2320	U	Benzo[g,h,i]perylene	2320	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	46	25-121
Phenol-d5	61	24-113
Nitrobenzene-d5	76	23-120
2-Fluorobiphenyl	80	30-115
2,4,6-Tribromophenol	58	19-122
Terphenyl-d14	103	18-137

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-08.D
Acq On : 6 Jun 2008 11:06 pm
Operator : SEO
Sample : 0804115-08
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 20:52:04 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

6/9/08 JB
forms
JB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	670570	5.00 ug/mL	0.00
21) Naphthalene-d8	8.89	136	2763480	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1540457	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.96	188	2501465	5.00 ug/mL	0.02
72) Chrysene-d12	17.59	240	1980364	5.00 ug/mL	0.00
81) Perylene-d12	20.04	264	2535683	5.00 ug/mL	0.13

System Monitoring Compounds					
4) 2-Fluorophenol	5.56	112	152886m	0.91 ug/mL	0.23
Spiked Amount 20.000	Range 21 - 100		Recovery	= 4.55%#	
8) Phenol-d5	6.87	99	254659m	1.21 ug/mL	0.26
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.05%#	
22) Nitrobenzene-d5	7.80	82	256623	1.52 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.60%#	
41) 2-Fluorobiphenyl	10.73	172	654613	1.59 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.95%#	
62) 2,4,6-Tribromophenol	13.02	330	59932	1.17 ug/mL	0.02
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.85%#	
75) Terphenyl-d14	16.15	244	748328	2.06 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 10.30%#	

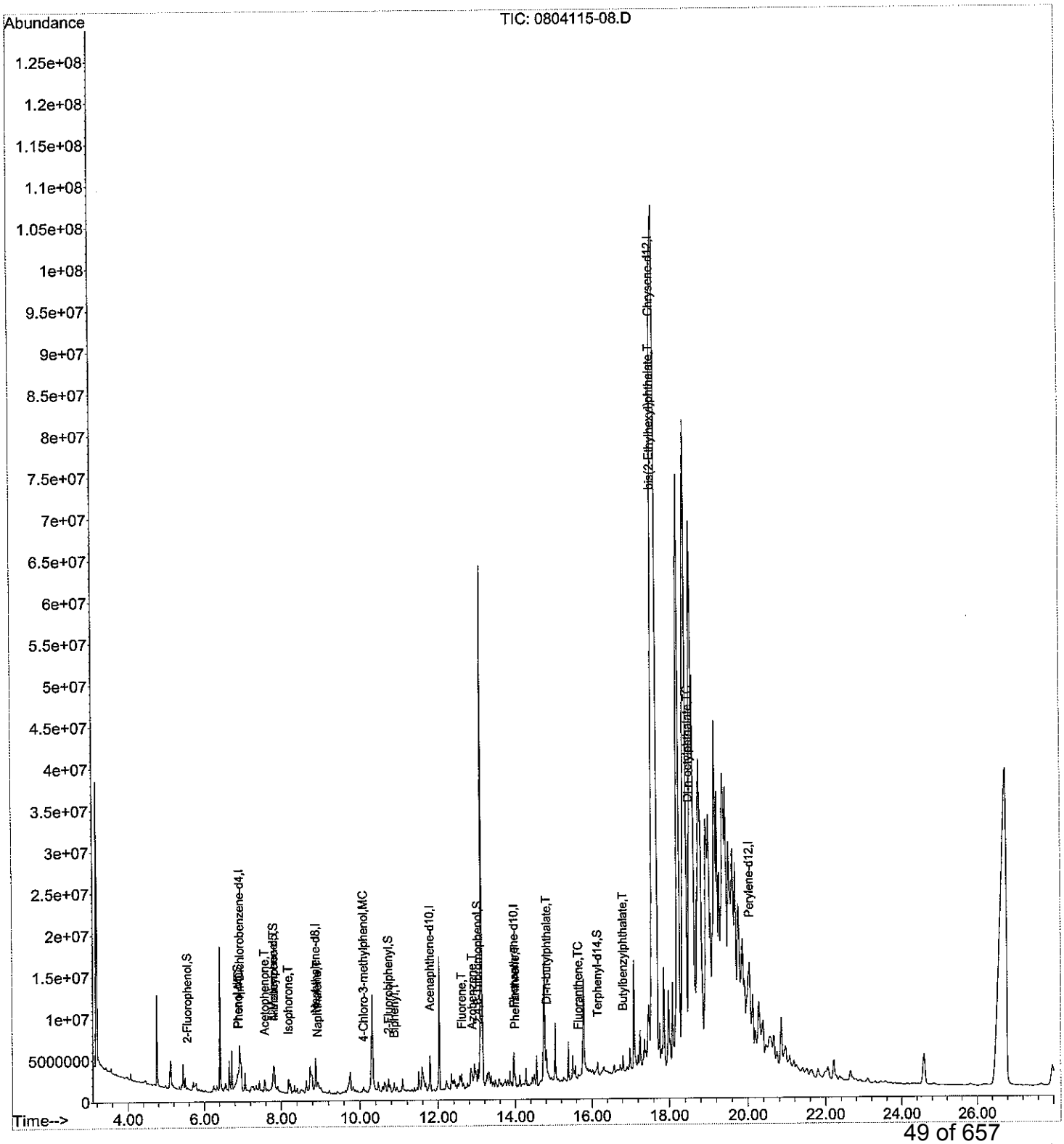
Target Compounds					Qvalue
9) Phenol	6.89	94	194324m	0.77 ug/mL	
17) Acetophenone	7.57	105	554834m	2.17 ug/ml	
20) 4-Methylphenol	7.81	108	1199331	6.22 ug/mL	81
24) Isophorone	8.18	82	945690	2.90 ug/mL	100
31) Naphthalene	8.93	128	2951403m	4.80 ug/mL	
35) 4-Chloro-3-methylphenol	10.10	107	221199m	1.30 ug/mL	
42) Biphenyl	10.88	154	732993	1.55 ug/ml#	98
54) Fluorene	12.61	166	210877	0.49 ug/mL	94
60) Azobenzene	12.89	182	120251m	0.91 ug/mL	
67) Phenanthrene	13.99	178	931530	1.44 ug/mL	100
70) Di-n-butylphthalate	14.82	149	1889879	2.43 ug/mL	99
71) Fluoranthene	15.65	202	253660	0.39 ug/mL	98
76) Butylbenzylphthalate	16.82	149	682527	2.31 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.57	149	82528161m	190.90 ug/mL E	
82) Di-n-octylphthalate	18.50	149	10446827	11.14 ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-08.D
Acq On : 6 Jun 2008 11:06 pm
Operator : SEO
Sample : 0804115-08
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 08 20:52:04 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:42:58 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-08E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/08/08	100	2.16	10	100	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	232000	U	3-Nitroaniline	232000	U
Phenol	232000	U	2,4-Dinitrophenol	232000	U
2-Chlorophenol	232000	U	Dibenzofuran	232000	U
1,3-Dichlorobenzene	232000	U	2,4-Dinitrotoluene	232000	U
1,4-Dichlorobenzene	232000	U	4-Nitrophenol	232000	U
1,2-Dichlorobenzene	232000	U	Fluorene	232000	U
bis(2-Chloroisopropyl)ether	232000	U	4-Chlorophenyl-phenylether	232000	U
2-Methylphenol	232000	U	Diethylphthalate	232000	U
Hexachloroethane	232000	U	4-Nitroaniline	232000	U
n-Nitroso-di-n-propylamine	232000	U	4,6-Dinitro-2-methylphenol	232000	U
4-Methylphenol	232000	U	n-Nitrosodiphenylamine	232000	U
Nitrobenzene	232000	U	4-Bromophenyl-phenylether	232000	U
Isophorone	232000	U	Hexachlorobenzene	232000	U
2-Nitrophenol	232000	U	Pentachlorophenol	232000	U
2,4-Dimethylphenol	232000	U	Phenanthrene	232000	U
bis(2-Chloroethoxy)methane	232000	U	Anthracene	232000	U
2,4-Dichlorophenol	232000	U	Carbazole	232000	U
1,2,4-Trichlorobenzene	232000	U	Di-n-butylphthalate	232000	U
Naphthalene	232000	U	Fluoranthene	232000	U
4-Chloroaniline	232000	U	Pyrene	232000	U
Hexachlorobutadiene	232000	U	Butylbenzylphthalate	232000	U
4-Chloro-3-methylphenol	232000	U	3,3'-Dichlorobenzidine	232000	U
2-Methylnaphthalene	232000	U	Benz[a]anthracene	232000	U
Hexachlorocyclopentadiene	232000	U	Chrysene	232000	U
2,4,6-Trichlorophenol	232000	U	bis(2-Ethylhexyl)phthalate	**5910000**	
2,4,5-Trichlorophenol	232000	U	Di-n-octylphthalate	232000	U
2-Chloronaphthalene	232000	U	Benzo[b]fluoranthene	232000	U
2-Nitroaniline	232000	U	Benzo[k]fluoranthene	232000	U
Acenaphthylene	232000	U	Benzo[a]pyrene	232000	U
Dimethylphthalate	232000	U	Indeno[1,2,3-cd]pyrene	232000	U
2,6-Dinitrotoluene	232000	U	Dibenz[a,h]anthracene	232000	U
Acenaphthene	232000	U	Benzo[g,h,i]perylene	232000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	DL	25-121
Phenol-d5	DL	24-113
Nitrobenzene-d5	DL	23-120
2-Fluorobiphenyl	DL	30-115
2,4,6-Tribromophenol	DL	19-122
Terphenyl-d14	DL	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
DL - Surrogate diluted out of sample.

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Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : 0804115-08-RE.D
Acq On : 8 Jun 2008 12:51 am
Operator : SEO
Sample : 0804115-08-RE
Misc : 100X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:48:29 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

6/9/08

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.80	152	336537	5.00 ug/mL	-0.13
21) Naphthalene-d8	8.73	136	1165907	5.00 ug/mL	-0.15
37) Acenaphthene-d10	11.64	164	870733	5.00 ug/mL	-0.14
58) Phenanthrene-d10	13.81	188	1508337	5.00 ug/mL	-0.15
72) Chrysene-d12	17.42	240	1458912m	5.00 ug/mL	-0.16
81) Perylene-d12	19.69	264	1514458	5.00 ug/mL	-0.22

System Monitoring Compounds

4) 2-Fluorophenol		0.00	112	0	0.00 ug/mL
Spiked Amount	20.000	Range	21 - 100	Recovery	= 0.00%#
8) Phenol-d5		0.00	99	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 94	Recovery	= 0.00%#
22) Nitrobenzene-d5		0.00	82	0	0.00 ug/mL
Spiked Amount	20.000	Range	35 - 114	Recovery	= 0.00%#
41) 2-Fluorobiphenyl		0.00	172	0d	0.00 ug/mL
Spiked Amount	20.000	Range	43 - 116	Recovery	= 0.00%#
62) 2,4,6-Tribromophenol		0.00	330	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 123	Recovery	= 0.00%#
75) Terphenyl-d14		0.00	244	0d	0.00 ug/mL
Spiked Amount	20.000	Range	33 - 141	Recovery	= 0.00%#

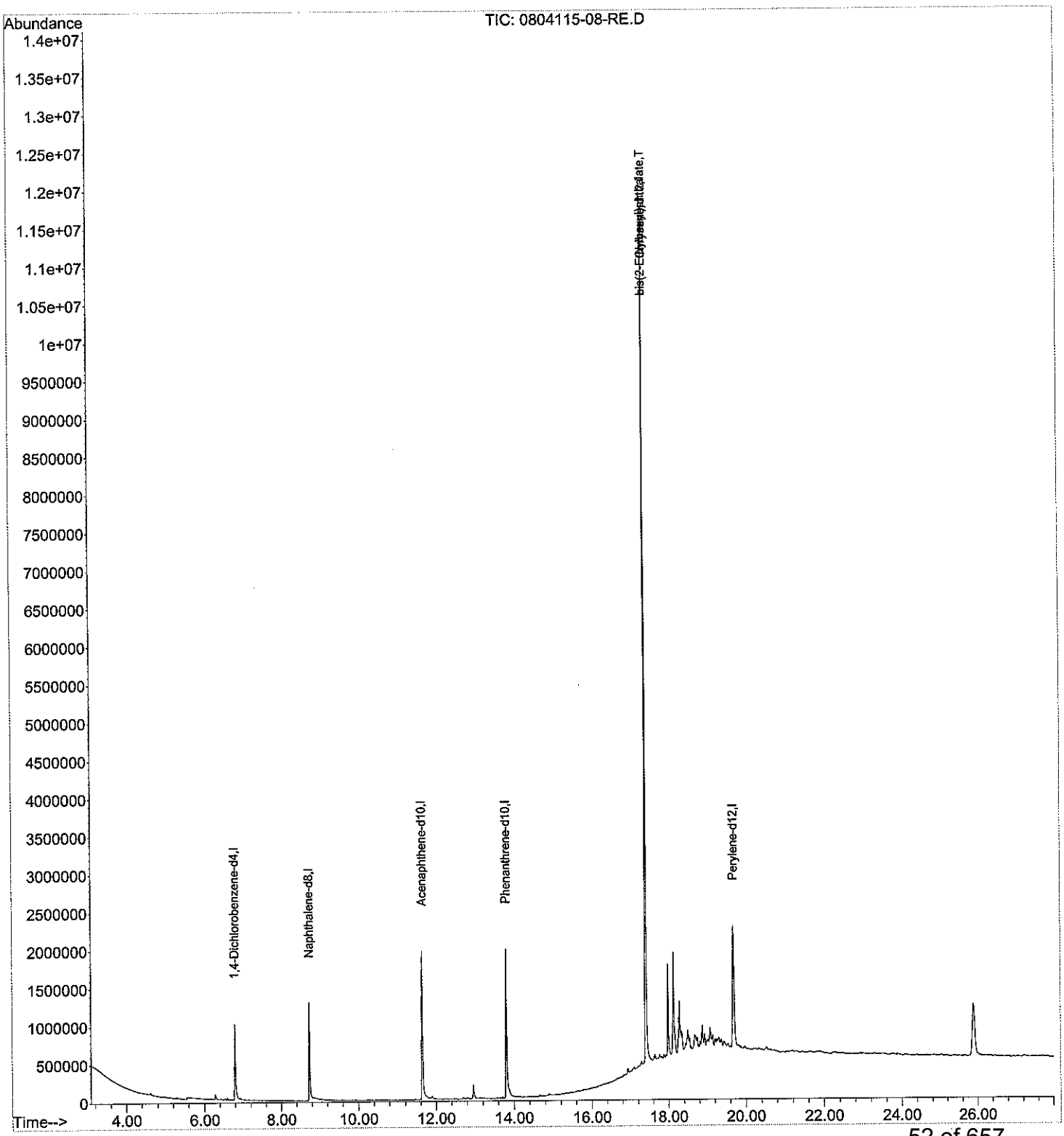
Target Compounds					Qvalue
80) bis(2-Ethylhexyl)phthalate	17.40	149	4066340m	12.77 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : 0804115-08-RE.D
Acq On : 8 Jun 2008 12:51 am
Operator : SEO
Sample : 0804115-08-RE
Misc : 100X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 09 11:48:29 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:48:39 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-09**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.15	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2330	U	3-Nitroaniline	2330	U
Phenol	**1580**	J	2,4-Dinitrophenol	2330	U
2-Chlorophenol	2330	U	Dibenzofuran	2330	U
1,3-Dichlorobenzene	2330	U	2,4-Dinitrotoluene	2330	U
1,4-Dichlorobenzene	2330	U	4-Nitrophenol	2330	U
1,2-Dichlorobenzene	2330	U	Fluorene	**1400**	J
bis(2-Chloroisopropyl)ether	2330	U	4-Chlorophenyl-phenylether	2330	U
2-Methylphenol	2330	U	Diethylphthalate	2330	U
Hexachloroethane	2330	U	4-Nitroaniline	2330	U
n-Nitroso-di-n-propylamine	2330	U	4,6-Dinitro-2-methylphenol	2330	U
4-Methylphenol	**3210**		n-Nitrosodiphenylamine	2330	U
Nitrobenzene	2330	U	4-Bromophenyl-phenylether	2330	U
Isophorone	**31100**		Hexachlorobenzene	2330	U
2-Nitrophenol	2330	U	Pentachlorophenol	2330	U
2,4-Dimethylphenol	2330	U	Phenanthrene	**4330**	
bis(2-Chloroethoxy)methane	2330	U	Anthracene	2330	U
2,4-Dichlorophenol	2330	U	Carbazole	2330	U
1,2,4-Trichlorobenzene	2330	U	Di-n-butylphthalate	**3490**	
Naphthalene	**12600**		Fluoranthene	**2140**	J
4-Chloroaniline	2330	U	Pyrene	**2190**	J
Hexachlorobutadiene	2330	U	Butylbenzylphthalate	**1860**	J
4-Chloro-3-methylphenol	2330	U	3,3'-Dichlorobenzidine	2330	U
2-Methylnaphthalene	2330	U	Benz[a]anthracene	**1160**	J
Hexachlorocyclopentadiene	2330	U	Chrysene	**1260**	J
2,4,6-Trichlorophenol	2330	U	bis(2-Ethylhexyl)phthalate	**1310000**	E
2,4,5-Trichlorophenol	2330	U	Di-n-octylphthalate	**34900**	
2-Chloronaphthalene	2330	U	Benzo[b]fluoranthene	**1950**	J
2-Nitroaniline	2330	U	Benzo[k]fluoranthene	2330	U
Acenaphthylene	2330	U	Benzo[a]pyrene	2330	U
Dimethylphthalate	2330	U	Indeno[1,2,3-cd]pyrene	2330	U
2,6-Dinitrotoluene	2330	U	Dibenz[a,h]anthracene	2330	U
Acenaphthene	2330	U	Benzo[g,h,i]perylene	**1260**	J

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	22	§	25-121
Phenol-d5	36		24-113
Nitrobenzene-d5	56		23-120
2-Fluorobiphenyl	61		30-115
2,4,6-Tribromophenol	27		19-122
Terphenyl-d14	81		18-137

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
E - Estimated value, exceeds the upper limit of calibration.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-09.D
Acq On : 6 Jun 2008 11:41 pm
Operator : SEO
Sample : 0804115-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 08 20:56:18 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

6/9/08

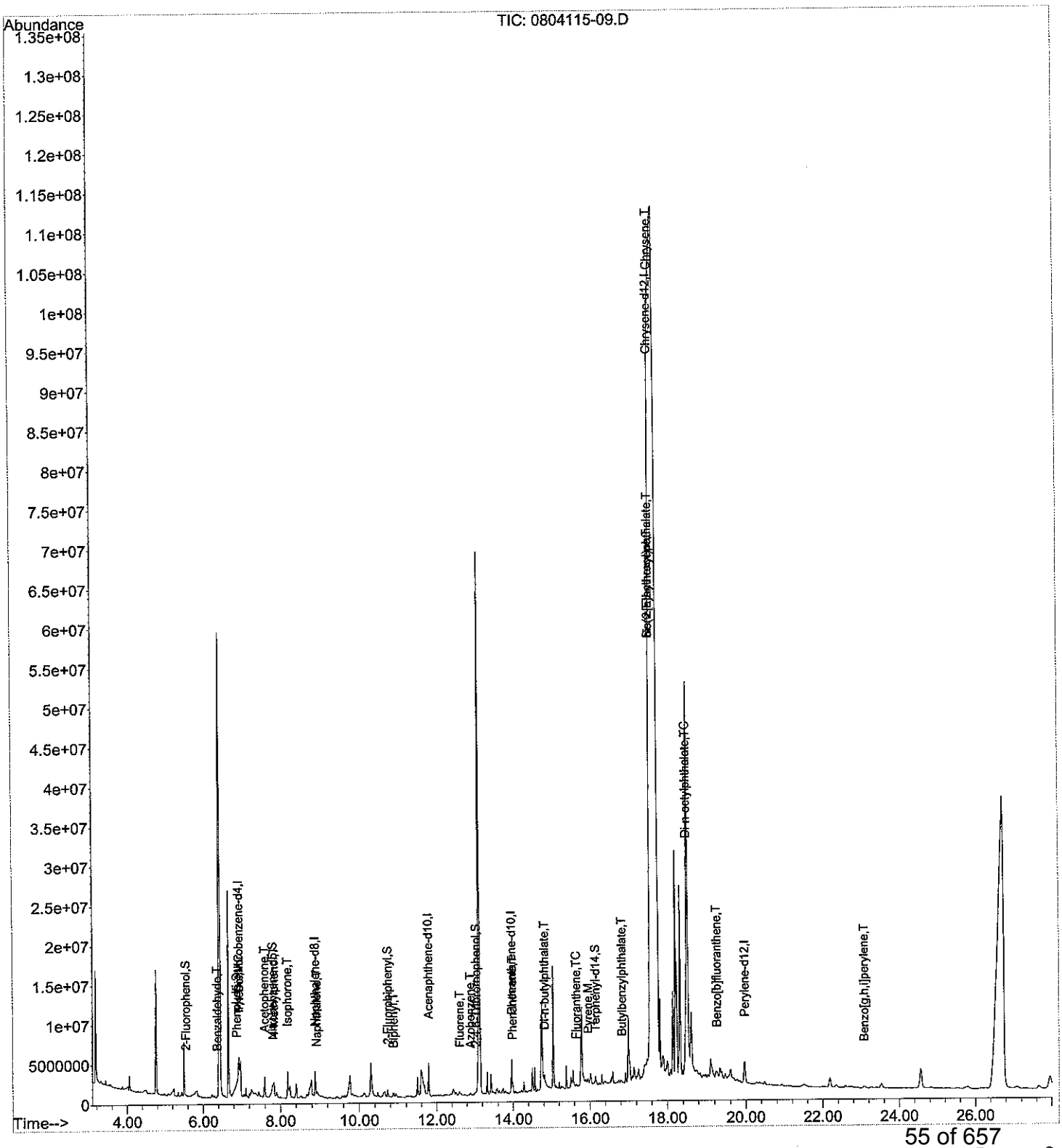
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.94	152	658896	5.00 ug/mL	0.02
21) Naphthalene-d8	8.89	136	2624614	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1474407	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.96	188	2410534	5.00 ug/mL	0.02
72) Chrysene-d12	17.59	240	1861184	5.00 ug/mL	0.00
81) Perylene-d12	19.97	264	2349369	5.00 ug/mL	0.06
System Monitoring Compounds					
4) 2-Fluorophenol	5.56	112	73191m	0.44 ug/mL	0.23
Spiked Amount 20.000	Range 21 - 100		Recovery	= 2.20%#	
8) Phenol-d5	6.87	99	148823m	0.72 ug/mL	0.26
Spiked Amount 20.000	Range 10 - 94		Recovery	= 3.60%#	
22) Nitrobenzene-d5	7.80	82	179612m	1.12 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 5.60%#	
41) 2-Fluorobiphenyl	10.73	172	475254	1.21 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 6.05%#	
62) 2,4,6-Tribromophenol	13.03	330	26350	0.54 ug/mL	0.03
Spiked Amount 20.000	Range 10 - 123		Recovery	= 2.70%#	
75) Terphenyl-d14	16.15	244	557941	1.63 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.15%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.37	77	99613	0.89 ug/ml	94
9) Phenol	6.93	94	83575m	0.34 ug/mL	
17) Acetophenone	7.58	105	231761m	0.92 ug/ml	
20) 4-Methylphenol	7.84	108	131067m	0.69 ug/mL	
24) Isophorone	8.18	82	2070554	6.69 ug/mL	100
31) Naphthalene	8.93	128	1578601	2.70 ug/mL	98
42) Biphenyl	10.88	154	443997	0.98 ug/ml#	96
54) Fluorene	12.61	166	123340m	0.30 ug/mL	
60) Azobenzene	12.89	182	86021	0.68 ug/mL	1
67) Phenanthrene	13.99	178	576340	0.93 ug/mL	99
70) Di-n-butylphthalate	14.82	149	565079m	0.75 ug/mL	
71) Fluoranthene	15.65	202	290846	0.46 ug/mL	96
74) Pyrene	15.95	202	248328	0.47 ug/mL	96
76) Butylbenzylphthalate	16.83	149	111346m	0.40 ug/mL	
78) Benz[a]anthracene	17.56	228	124360m	0.25 ug/mL	
79) Chrysene	17.62	228	127133m	0.27 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.56	149	114778351m	282.50 ug/mL E	
82) Di-n-octylphthalate	18.49	149	6527660m	7.51 ug/mL	
83) Benzo[b]fluoranthene	19.27	252	280018m	0.42 ug/mL	
88) Benzo[g,h,i]perylene	23.08	276	166767	0.27 ug/mL	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-09.D
Acq On : 6 Jun 2008 11:41 pm
Operator : SEO
Sample : 0804115-09
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 08 20:56:18 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:04 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-09E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/09/08	100	2.15	10	200	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	465000	U	3-Nitroaniline	465000	U
Phenol	465000	U	2,4-Dinitrophenol	465000	U
2-Chlorophenol	465000	U	Dibenzofuran	465000	U
1,3-Dichlorobenzene	465000	U	2,4-Dinitrotoluene	465000	U
1,4-Dichlorobenzene	465000	U	4-Nitrophenol	465000	U
1,2-Dichlorobenzene	465000	U	Fluorene	465000	U
bis(2-Chloroisopropyl)ether	465000	U	4-Chlorophenyl-phenylether	465000	U
2-Methylphenol	465000	U	Diethylphthalate	465000	U
Hexachloroethane	465000	U	4-Nitroaniline	465000	U
n-Nitroso-di-n-propylamine	465000	U	4,6-Dinitro-2-methylphenol	465000	U
4-Methylphenol	465000	U	n-Nitrosodiphenylamine	465000	U
Nitrobenzene	465000	U	4-Bromophenyl-phenylether	465000	U
Isophorone	465000	U	Hexachlorobenzene	465000	U
2-Nitrophenol	465000	U	Pentachlorophenol	465000	U
2,4-Dimethylphenol	465000	U	Phenanthrene	465000	U
bis(2-Chloroethoxy)methane	465000	U	Anthracene	465000	U
2,4-Dichlorophenol	465000	U	Carbazole	465000	U
1,2,4-Trichlorobenzene	465000	U	Di-n-butylphthalate	465000	U
Naphthalene	465000	U	Fluoranthene	465000	U
4-Chloroaniline	465000	U	Pyrene	465000	U
Hexachlorobutadiene	465000	U	Butylbenzylphthalate	465000	U
4-Chloro-3-methylphenol	465000	U	3,3'-Dichlorobenzidine	465000	U
2-Methylnaphthalene	465000	U	Benz[a]anthracene	465000	U
Hexachlorocyclopentadiene	465000	U	Chrysene	465000	U
2,4,6-Trichlorophenol	465000	U	bis(2-Ethylhexyl)phthalate	**11000000**	
2,4,5-Trichlorophenol	465000	U	Di-n-octylphthalate	465000	U
2-Chloronaphthalene	465000	U	Benzo[b]fluoranthene	465000	U
2-Nitroaniline	465000	U	Benzo[k]fluoranthene	465000	U
Acenaphthylene	465000	U	Benzo[a]pyrene	465000	U
Dimethylphthalate	465000	U	Indeno[1,2,3-cd]pyrene	465000	U
2,6-Dinitrotoluene	465000	U	Dibenz[a,h]anthracene	465000	U
Acenaphthene	465000	U	Benzo[g,h,i]perylene	465000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	DL	25-121
Phenol-d5	DL	24-113
Nitrobenzene-d5	DL	23-120
2-Fluorobiphenyl	DL	30-115
2,4,6-Tribromophenol	DL	19-122
Terphenyl-d14	DL	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
DL - Surrogate diluted out of sample.

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Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804115-09-RE.D
Acq On : 9 Jun 2008 3:22 pm
Operator : SEO
Sample : 0804115-09-RE
Misc : ~~20X~~ 200X
ALS Vial : 6 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 15:58:49 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	645783	5.00 ug/mL	0.00
21) Naphthalene-d8	8.51	136	2674470	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1483512	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2362936	5.00 ug/mL	0.00
72) Chrysene-d12	17.19	240	2287662	5.00 ug/mL	0.00
81) Perylene-d12	19.34	264	2324809	5.00 ug/mL	-0.02

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00 ug/mL	
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.00%#
8) Phenol-d5	0.00	99	0	0.00 ug/mL	
Spiked Amount 20.000	Range 10 - 94		Recovery	=	0.00%#
22) Nitrobenzene-d5	0.00	82	0	0.00 ug/mL	
Spiked Amount 20.000	Range 35 - 114		Recovery	=	0.00%#
41) 2-Fluorobiphenyl	0.00	172	0d	0.00 ug/mL	
Spiked Amount 20.000	Range 43 - 116		Recovery	=	0.00%#
62) 2,4,6-Tribromophenol	0.00	330	0	0.00 ug/mL	
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.00%#
75) Terphenyl-d14	0.00	244	0d	0.00 ug/mL	
Spiked Amount 20.000	Range 33 - 141		Recovery	=	0.00%#

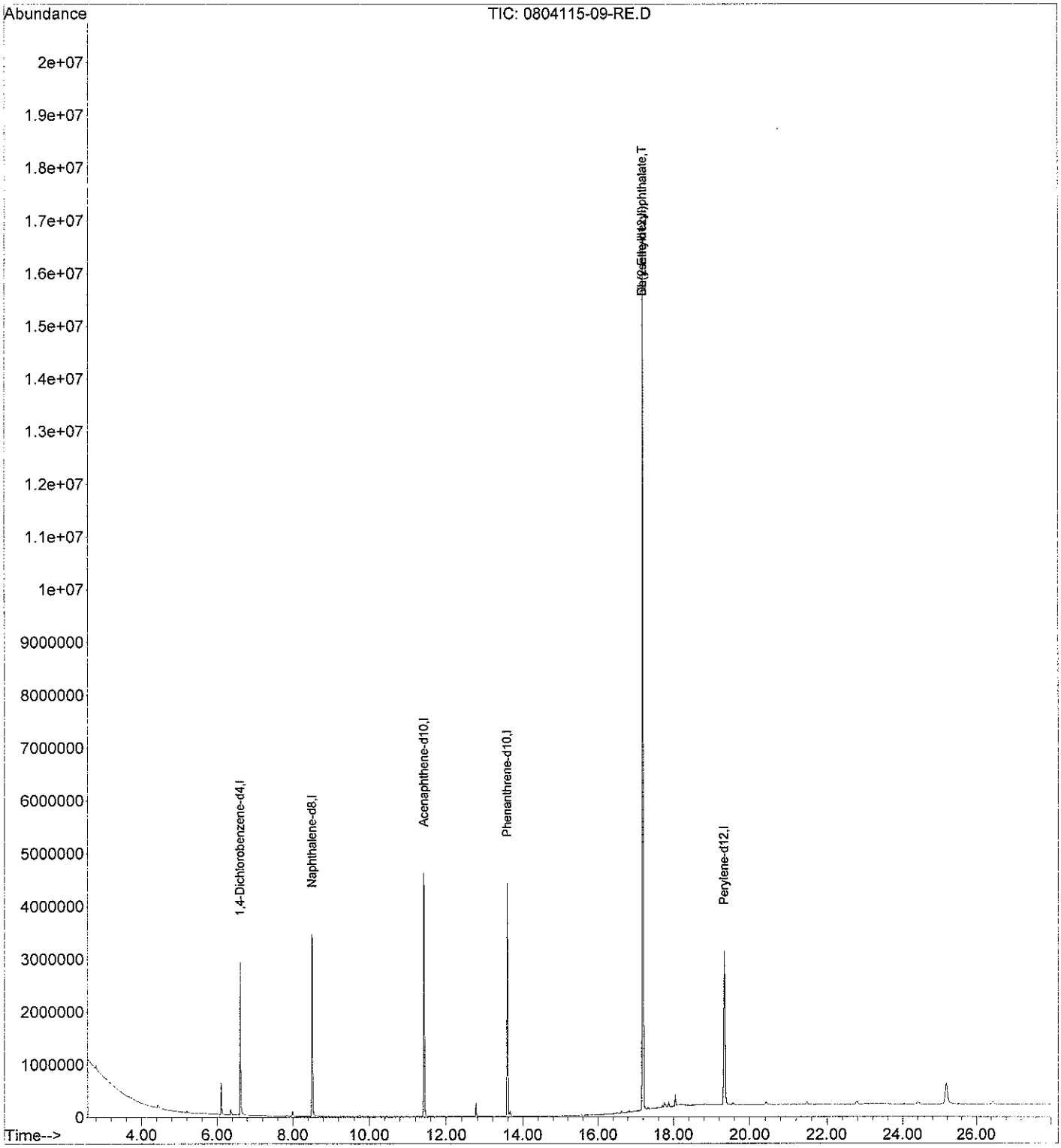
Target Compounds					Qvalue
80) bis(2-Ethylhexyl)phthalate	17.21	149	5919264m	11.85 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804115-09-RE.D
Acq On : 9 Jun 2008 3:22 pm
Operator : SEO
Sample : 0804115-09-RE
Misc : 20X
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 09 15:58:49 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-10**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/07/08	100	2.58	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	1940	U
Phenol	**2870**	
2-Chlorophenol	1940	U
1,3-Dichlorobenzene	1940	U
1,4-Dichlorobenzene	1940	U
1,2-Dichlorobenzene	1940	U
bis(2-Chloroisopropyl)ether	1940	U
2-Methylphenol	1940	U
Hexachloroethane	1940	U
n-Nitroso-di-n-propylamine	1940	U
4-Methylphenol	**59400**	
Nitrobenzene	1940	U
Isophorone	**25400**	
2-Nitrophenol	1940	U
2,4-Dimethylphenol	1940	U
bis(2-Chloroethoxy)methane	1940	U
2,4-Dichlorophenol	1940	U
1,2,4-Trichlorobenzene	1940	U
Naphthalene	**15600**	
4-Chloroaniline	1940	U
Hexachlorobutadiene	1940	U
4-Chloro-3-methylphenol	**5780**	
2-Methylnaphthalene	1940	U
Hexachlorocyclopentadiene	1940	U
2,4,6-Trichlorophenol	1940	U
2,4,5-Trichlorophenol	1940	U
2-Chloronaphthalene	1940	U
2-Nitroaniline	1940	U
Acenaphthylene	1940	U
Dimethylphthalate	1940	U
2,6-Dinitrotoluene	1940	U
Acenaphthene	1940	U

Parameter	Result	
3-Nitroaniline	1940	U
2,4-Dinitrophenol	1940	U
Dibenzofuran	1940	U
2,4-Dinitrotoluene	1940	U
4-Nitrophenol	1940	U
Fluorene	**1360**	J
4-Chlorophenyl-phenylether	1940	U
Diethylphthalate	1940	U
4-Nitroaniline	1940	U
4,6-Dinitro-2-methylphenol	1940	U
n-Nitrosodiphenylamine	1940	U
4-Bromophenyl-phenylether	1940	U
Hexachlorobenzene	1940	U
Pentachlorophenol	1940	U
Phenanthrene	**7400**	
Anthracene	1940	U
Carbazole	1940	U
Di-n-butylphthalate	**8370**	
Fluoranthene	**3330**	
Pyrene	**1820**	J
Butylbenzylphthalate	**30700**	
3,3'-Dichlorobenzidine	1940	U
Benz[a]anthracene	1940	U
Chrysene	1940	U
bis(2-Ethylhexyl)phthalate	**778000**	E
Di-n-octylphthalate	1940	U
Benzo[b]fluoranthene	1940	U
Benzo[k]fluoranthene	1940	U
Benzo[a]pyrene	1940	U
Indeno[1,2,3-cd]pyrene	1940	U
Dibenz[a,h]anthracene	1940	U
Benzo[g,h,i]perylene	1940	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	28	25-121
Phenol-d5	38	24-113
Nitrobenzene-d5	54	23-120
2-Fluorobiphenyl	58	30-115
2,4,6-Tribromophenol	37	19-122
Terphenyl-d14	88	18-137

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-10.D
Acq On : 7 Jun 2008 12:17 am
Operator : SEO
Sample : 0804115-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

6/9/08 JB for MY JB

Quant Time: Jun 08 21:04:35 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	621837	5.00 ug/mL	0.00
21) Naphthalene-d8	8.89	136	2581772	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1450958m	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.96	188	2339074m	5.00 ug/mL	0.02
72) Chrysene-d12	17.59	240	1857006	5.00 ug/mL	0.00
81) Perylene-d12	20.05	264	2396493	5.00 ug/mL	0.14
System Monitoring Compounds					
4) 2-Fluorophenol	5.56	112	89324m	0.57 ug/mL	0.23
Spiked Amount 20.000	Range 21 - 100		Recovery	= 2.85%#	
8) Phenol-d5	6.86	99	145276m	0.75 ug/mL	0.25
Spiked Amount 20.000	Range 10 - 94		Recovery	= 3.75%#	
22) Nitrobenzene-d5	7.80	82	170818m	1.08 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 5.40%#	
41) 2-Fluorobiphenyl	10.73	172	452862	1.17 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 5.85%#	
62) 2,4,6-Tribromophenol	13.03	330	35384	0.74 ug/mL	0.03
Spiked Amount 20.000	Range 10 - 123		Recovery	= 3.70%#	
75) Terphenyl-d14	16.15	244	596961	1.75 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.75%#	

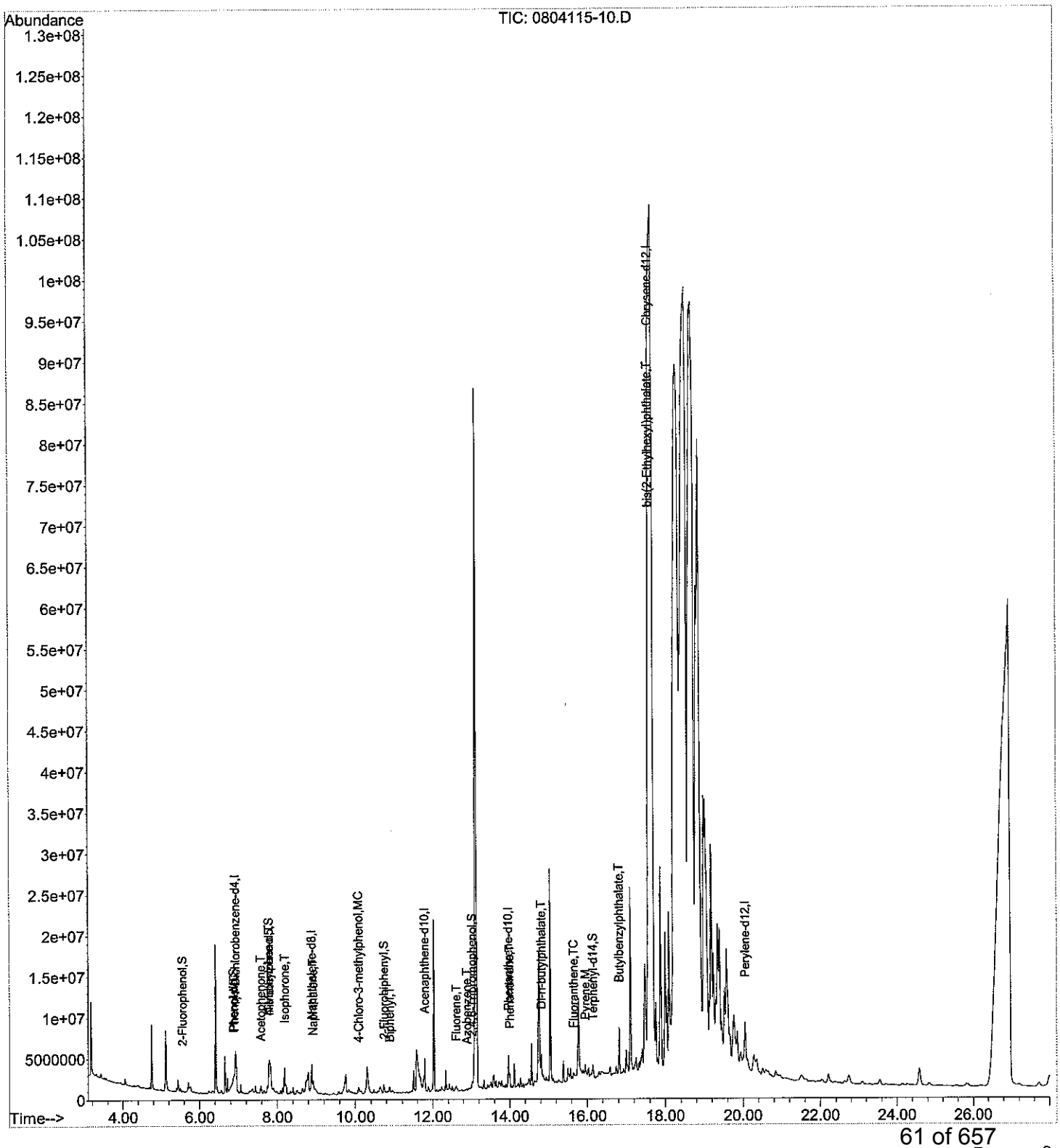
Target Compounds					Qvalue
9) Phenol	6.88	94	173215m	0.74 ug/mL	
17) Acetophenone	7.58	105	170504m	0.72 ug/ml	
20) 4-Methylphenol	7.79	108	2738678	15.32 ug/mL#	78
24) Isophorone	8.19	82	1989862	6.54 ug/mL	100
31) Naphthalene	8.92	128	2316982m	4.03 ug/mL	
35) 4-Chloro-3-methylphenol	10.10	107	235994m	1.49 ug/mL	
42) Biphenyl	10.88	154	546547	1.23 ug/ml#	96
54) Fluorene	12.61	166	141605m	0.35 ug/mL	
60) Azobenzene	12.89	182	52485m	0.42 ug/mL	
67) Phenanthrene	13.99	178	1151367	1.91 ug/mL	99
70) Di-n-butylphthalate	14.82	149	1568561m	2.16 ug/mL	
71) Fluoranthene	15.65	202	524291	0.86 ug/mL	96
74) Pyrene	15.95	202	250018	0.47 ug/mL#	96
76) Butylbenzylphthalate	16.82	149	2201175	7.93 ug/mL	97
80) bis(2-Ethylhexyl)phthalate	17.57	149	81352799m	200.68 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-10.D
Acq On : 7 Jun 2008 12:17 am
Operator : SEO
Sample : 0804115-10
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 08 21:04:35 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:10 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-10E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/08/08	100	2.58	10	100	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	194000	U	3-Nitroaniline	194000	U
Phenol	194000	U	2,4-Dinitrophenol	194000	U
2-Chlorophenol	194000	U	Dibenzofuran	194000	U
1,3-Dichlorobenzene	194000	U	2,4-Dinitrotoluene	194000	U
1,4-Dichlorobenzene	194000	U	4-Nitrophenol	194000	U
1,2-Dichlorobenzene	194000	U	Fluorene	194000	U
bis(2-Chloroisopropyl)ether	194000	U	4-Chlorophenyl-phenylether	194000	U
2-Methylphenol	194000	U	Diethylphthalate	194000	U
Hexachloroethane	194000	U	4-Nitroaniline	194000	U
n-Nitroso-di-n-propylamine	194000	U	4,6-Dinitro-2-methylphenol	194000	U
4-Methylphenol	194000	U	n-Nitrosodiphenylamine	194000	U
Nitrobenzene	194000	U	4-Bromophenyl-phenylether	194000	U
Isophorone	194000	U	Hexachlorobenzene	194000	U
2-Nitrophenol	194000	U	Pentachlorophenol	194000	U
2,4-Dimethylphenol	194000	U	Phenanthrene	194000	U
bis(2-Chloroethoxy)methane	194000	U	Anthracene	194000	U
2,4-Dichlorophenol	194000	U	Carbazole	194000	U
1,2,4-Trichlorobenzene	194000	U	Di-n-butylphthalate	194000	U
Naphthalene	194000	U	Fluoranthene	194000	U
4-Chloroaniline	194000	U	Pyrene	194000	U
Hexachlorobutadiene	194000	U	Butylbenzylphthalate	194000	U
4-Chloro-3-methylphenol	194000	U	3,3'-Dichlorobenzidine	194000	U
2-Methylnaphthalene	194000	U	Benz[a]anthracene	194000	U
Hexachlorocyclopentadiene	194000	U	Chrysene	194000	U
2,4,6-Trichlorophenol	194000	U	bis(2-Ethylhexyl)phthalate	**5040000**	
2,4,5-Trichlorophenol	194000	U	Di-n-octylphthalate	194000	U
2-Chloronaphthalene	194000	U	Benzo[b]fluoranthene	194000	U
2-Nitroaniline	194000	U	Benzo[k]fluoranthene	194000	U
Acenaphthylene	194000	U	Benzo[a]pyrene	194000	U
Dimethylphthalate	194000	U	Indeno[1,2,3-cd]pyrene	194000	U
2,6-Dinitrotoluene	194000	U	Dibenz[a,h]anthracene	194000	U
Acenaphthene	194000	U	Benzo[g,h,i]perylene	194000	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	DL	25-121
Phenol-d5	DL	24-113
Nitrobenzene-d5	DL	23-120
2-Fluorobiphenyl	DL	30-115
2,4,6-Tribromophenol	DL	19-122
Terphenyl-d14	DL	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
DL - Surrogate diluted out of sample.

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Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : 0804115-10-RE.D
Acq On : 8 Jun 2008 2:04 am
Operator : SEO
Sample : 0804115-10-RE
Misc : 100X
ALS Vial : 19 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 11:51:49 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.80	152	273356	5.00 ug/mL	-0.13
21) Naphthalene-d8	8.73	136	953584	5.00 ug/mL	-0.15
37) Acenaphthene-d10	11.64	164	734053	5.00 ug/mL	-0.14
58) Phenanthrene-d10	13.81	188	1310774	5.00 ug/mL	-0.15
72) Chrysene-d12	17.41	240	1285163m	5.00 ug/mL	-0.17
81) Perylene-d12	19.68	264	1327002	5.00 ug/mL	-0.23

System Monitoring Compounds					
4) 2-Fluorophenol		0.00	112	0	0.00 ug/mL
Spiked Amount	20.000	Range	21 - 100	Recovery	= 0.00%#
8) Phenol-d5		0.00	99	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 94	Recovery	= 0.00%#
22) Nitrobenzene-d5		0.00	82	0	0.00 ug/mL
Spiked Amount	20.000	Range	35 - 114	Recovery	= 0.00%#
41) 2-Fluorobiphenyl		0.00	172	0d	0.00 ug/mL
Spiked Amount	20.000	Range	43 - 116	Recovery	= 0.00%#
62) 2,4,6-Tribromophenol		0.00	330	0	0.00 ug/mL
Spiked Amount	20.000	Range	10 - 123	Recovery	= 0.00%#
75) Terphenyl-d14		0.00	244	0d	0.00 ug/mL
Spiked Amount	20.000	Range	33 - 141	Recovery	= 0.00%#

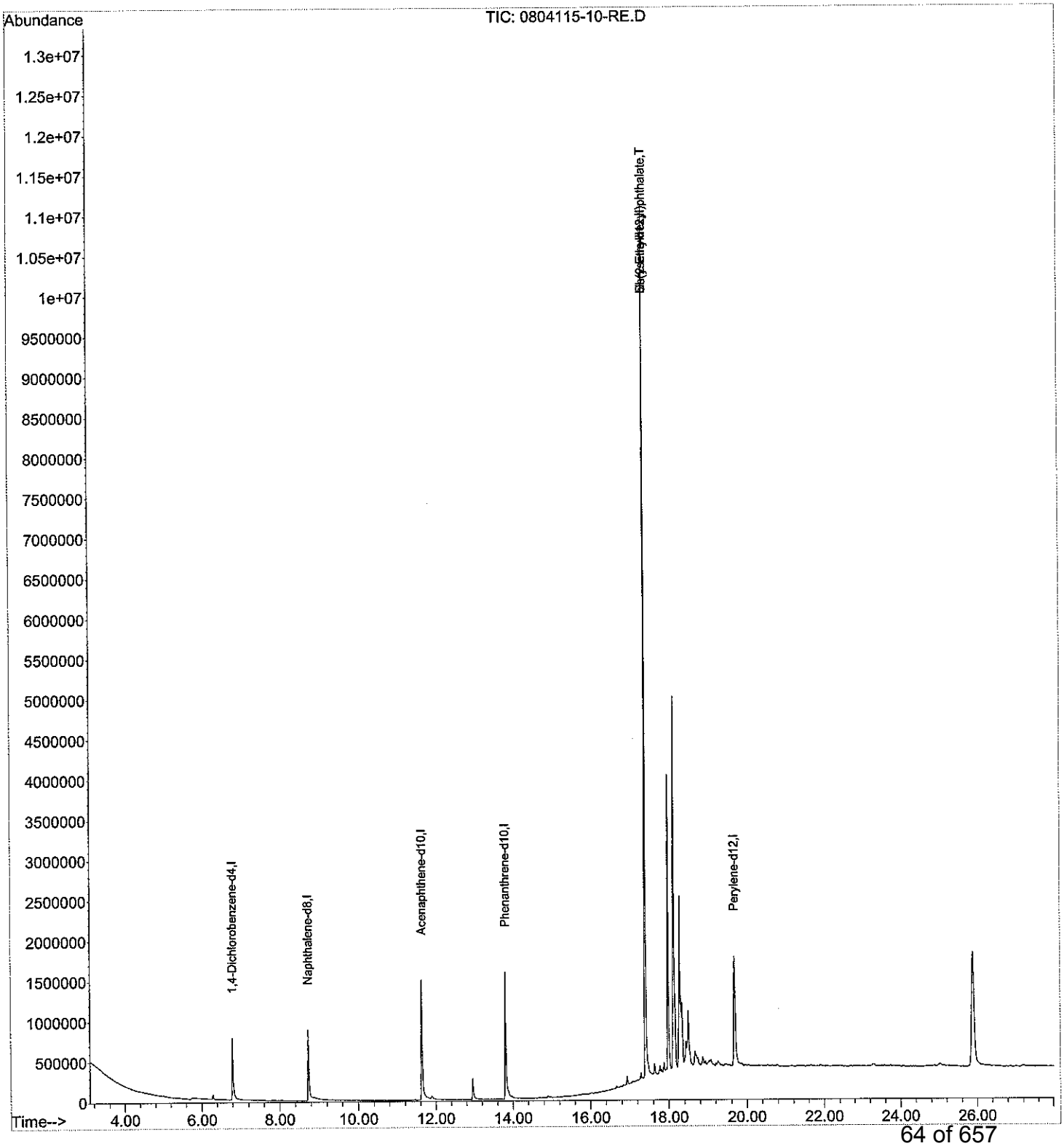
Target Compounds					Qvalue
80) bis(2-Ethylhexyl)phthalate	17.40	149	3646746m	13.00 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : 0804115-10-RE.D
Acq On : 8 Jun 2008 2:04 am
Operator : SEO
Sample : 0804115-10-RE
Misc : 100X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 09 11:51:49 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-11**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.33	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2150	U	3-Nitroaniline	2150	U
Phenol	2150	U	2,4-Dinitrophenol	2150	U
2-Chlorophenol	2150	U	Dibenzofuran	2150	U
1,3-Dichlorobenzene	2150	U	2,4-Dinitrotoluene	2150	U
1,4-Dichlorobenzene	2150	U	4-Nitrophenol	2150	U
1,2-Dichlorobenzene	2150	U	Fluorene	2150	U
bis(2-Chloroisopropyl)ether	2150	U	4-Chlorophenyl-phenylether	2150	U
2-Methylphenol	2150	U	Diethylphthalate	2150	U
Hexachloroethane	2150	U	4-Nitroaniline	2150	U
n-Nitroso-di-n-propylamine	2150	U	4,6-Dinitro-2-methylphenol	2150	U
4-Methylphenol	**1630**	J	n-Nitrosodiphenylamine	2150	U
Nitrobenzene	2150	U	4-Bromophenyl-phenylether	2150	U
Isophorone	2150	U	Hexachlorobenzene	2150	U
2-Nitrophenol	2150	U	Pentachlorophenol	2150	U
2,4-Dimethylphenol	2150	U	Phenanthrene	2150	U
bis(2-Chloroethoxy)methane	2150	U	Anthracene	2150	U
2,4-Dichlorophenol	2150	U	Carbazole	2150	U
1,2,4-Trichlorobenzene	2150	U	Di-n-butylphthalate	2150	U
Naphthalene	2150	U	Fluoranthene	2150	U
4-Chloroaniline	2150	U	Pyrene	2150	U
Hexachlorobutadiene	2150	U	Butylbenzylphthalate	2150	U
4-Chloro-3-methylphenol	2150	U	3,3'-Dichlorobenzidine	2150	U
2-Methylnaphthalene	2150	U	Benz[a]anthracene	2150	U
Hexachlorocyclopentadiene	2150	U	Chrysene	2150	U
2,4,6-Trichlorophenol	2150	U	bis(2-Ethylhexyl)phthalate	**9740**	
2,4,5-Trichlorophenol	2150	U	Di-n-octylphthalate	**5360**	
2-Chloronaphthalene	2150	U	Benzo[b]fluoranthene	2150	U
2-Nitroaniline	2150	U	Benzo[k]fluoranthene	2150	U
Acenaphthylene	2150	U	Benzo[a]pyrene	2150	U
Dimethylphthalate	2150	U	Indeno[1,2,3-cd]pyrene	2150	U
2,6-Dinitrotoluene	2150	U	Dibenz[a,h]anthracene	2150	U
Acenaphthene	2150	U	Benzo[g,h,i]perylene	2150	U

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	6	§	25-121
Phenol-d5	14	§	24-113
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	56		30-115
2,4,6-Tribromophenol	7	§	19-122
Terphenyl-d14	76		18-137

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-11.D
Acq On : 6 Jun 2008 5:43 pm
Operator : SEO
Sample : 0804115-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 21:07:24 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.92	152	559423	5.00	ug/mL	0.00
21) Naphthalene-d8	8.88	136	2303246	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.78	164	1280857	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2074793	5.00	ug/mL	0.00
72) Chrysene-d12	17.57	240	1991060	5.00	ug/mL	0.00
81) Perylene-d12	19.92	264	1997787	5.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	5.58	112	16590m	0.12	ug/mL	0.25
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.60%#	
8) Phenol-d5	6.84	99	49802m	0.28	ug/mL	0.23
Spiked Amount 20.000	Range 10 - 94		Recovery	=	1.40%#	
22) Nitrobenzene-d5	7.79	82	143475	1.02	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	5.10%#	
41) 2-Fluorobiphenyl	10.72	172	378522	1.11	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	5.55%#	
62) 2,4,6-Tribromophenol	13.02	330	5958	0.14	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.70%#	
75) Terphenyl-d14	16.14	244	559501m	1.53	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	7.65%#	

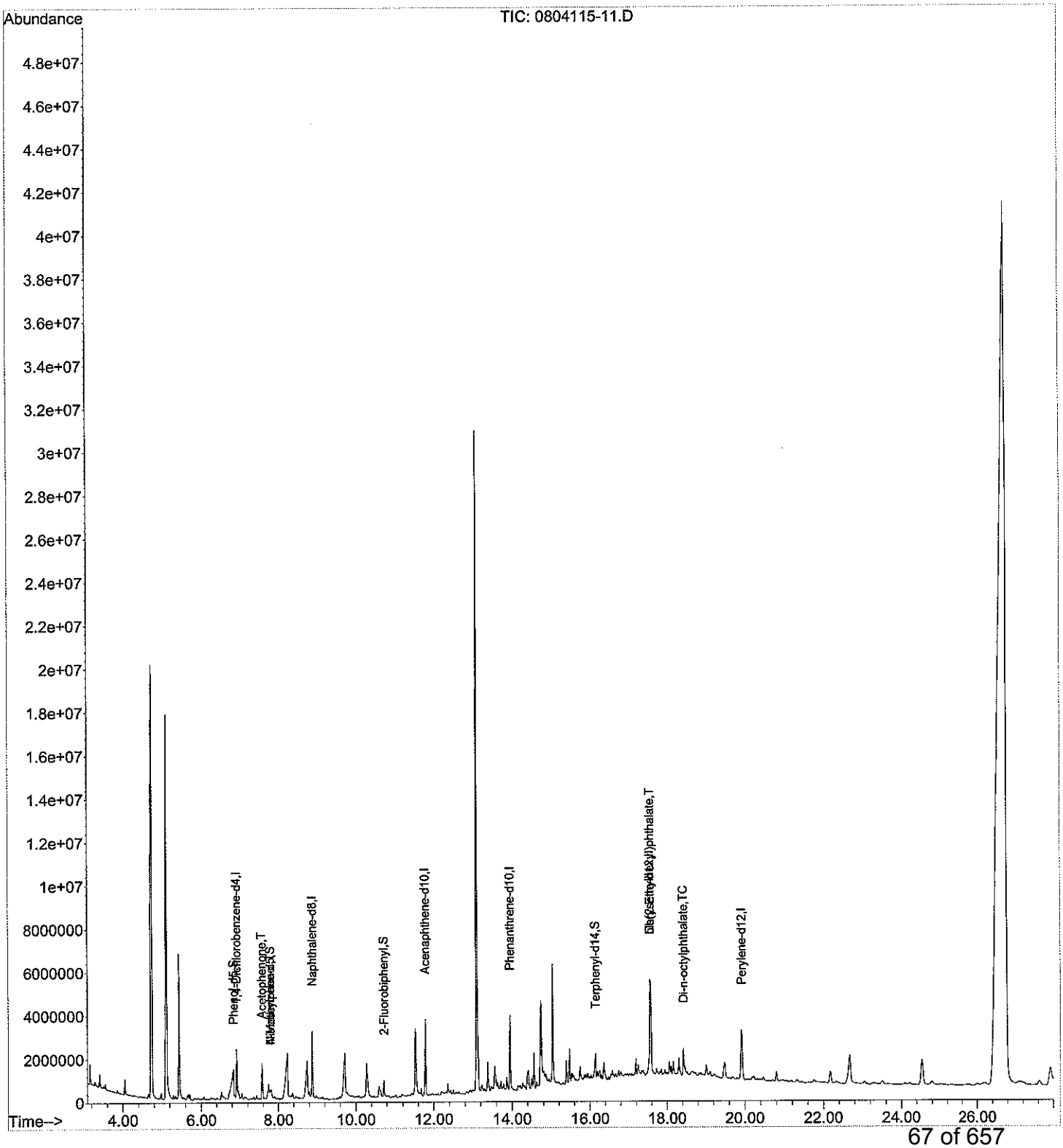
Target Compounds						Qvalue
17) Acetophenone	7.56	105	128415	0.60	ug/ml#	89
20) 4-Methylphenol	7.80	108	61436m	0.38	ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.56	149	988055m	2.27	ug/mL	
82) Di-n-octylphthalate	18.43	149	921482	1.25	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-11.D
Acq On : 6 Jun 2008 5:43 pm
Operator : SEO
Sample : 0804115-11
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 08 21:07:24 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:18 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-12**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.48	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2020	U	3-Nitroaniline	2020	U
Phenol	**3750**		2,4-Dinitrophenol	2020	U
2-Chlorophenol	2020	U	Dibenzofuran	2020	U
1,3-Dichlorobenzene	2020	U	2,4-Dinitrotoluene	2020	U
1,4-Dichlorobenzene	2020	U	4-Nitrophenol	2020	U
1,2-Dichlorobenzene	2020	U	Fluorene	2020	U
bis(2-Chloroisopropyl)ether	2020	U	4-Chlorophenyl-phenylether	2020	U
2-Methylphenol	2020	U	Diethylphthalate	2020	U
Hexachloroethane	2020	U	4-Nitroaniline	2020	U
n-Nitroso-di-n-propylamine	2020	U	4,6-Dinitro-2-methylphenol	2020	U
4-Methylphenol	**69300**		n-Nitrosodiphenylamine	2020	U
Nitrobenzene	2020	U	4-Bromophenyl-phenylether	2020	U
Isophorone	2020	U	Hexachlorobenzene	2020	U
2-Nitrophenol	2020	U	Pentachlorophenol	**2140**	
2,4-Dimethylphenol	2020	U	Phenanthrene	**1170**	J
bis(2-Chloroethoxy)methane	2020	U	Anthracene	2020	U
2,4-Dichlorophenol	2020	U	Carbazole	2020	U
1,2,4-Trichlorobenzene	2020	U	Di-n-butylphthalate	**3670**	
Naphthalene	2020	U	Fluoranthene	2020	U
4-Chloroaniline	2020	U	Pyrene	2020	U
Hexachlorobutadiene	2020	U	Butylbenzylphthalate	**7740**	
4-Chloro-3-methylphenol	**14500**		3,3'-Dichlorobenzidine	2020	U
2-Methylnaphthalene	2020	U	Benz[a]anthracene	2020	U
Hexachlorocyclopentadiene	2020	U	Chrysene	2020	U
2,4,6-Trichlorophenol	2020	U	bis(2-Ethylhexyl)phthalate	**4150**	
2,4,5-Trichlorophenol	2020	U	Di-n-octylphthalate	2020	U
2-Chloronaphthalene	2020	U	Benzo[b]fluoranthene	2020	U
2-Nitroaniline	2020	U	Benzo[k]fluoranthene	2020	U
Acenaphthylene	2020	U	Benzo[a]pyrene	2020	U
Dimethylphthalate	2020	U	Indeno[1,2,3-cd]pyrene	2020	U
2,6-Dinitrotoluene	2020	U	Dibenz[a,h]anthracene	2020	U
Acenaphthene	2020	U	Benzo[g,h,i]perylene	2020	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	58	25-121
Phenol-d5	67	24-113
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	73	30-115
2,4,6-Tribromophenol	58	19-122
Terphenyl-d14	77	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-12.D
Acq On : 6 Jun 2008 4:32 pm
Operator : SEO
Sample : 0804115-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

6/9/08

Quant Time: Jun 08 21:10:42 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

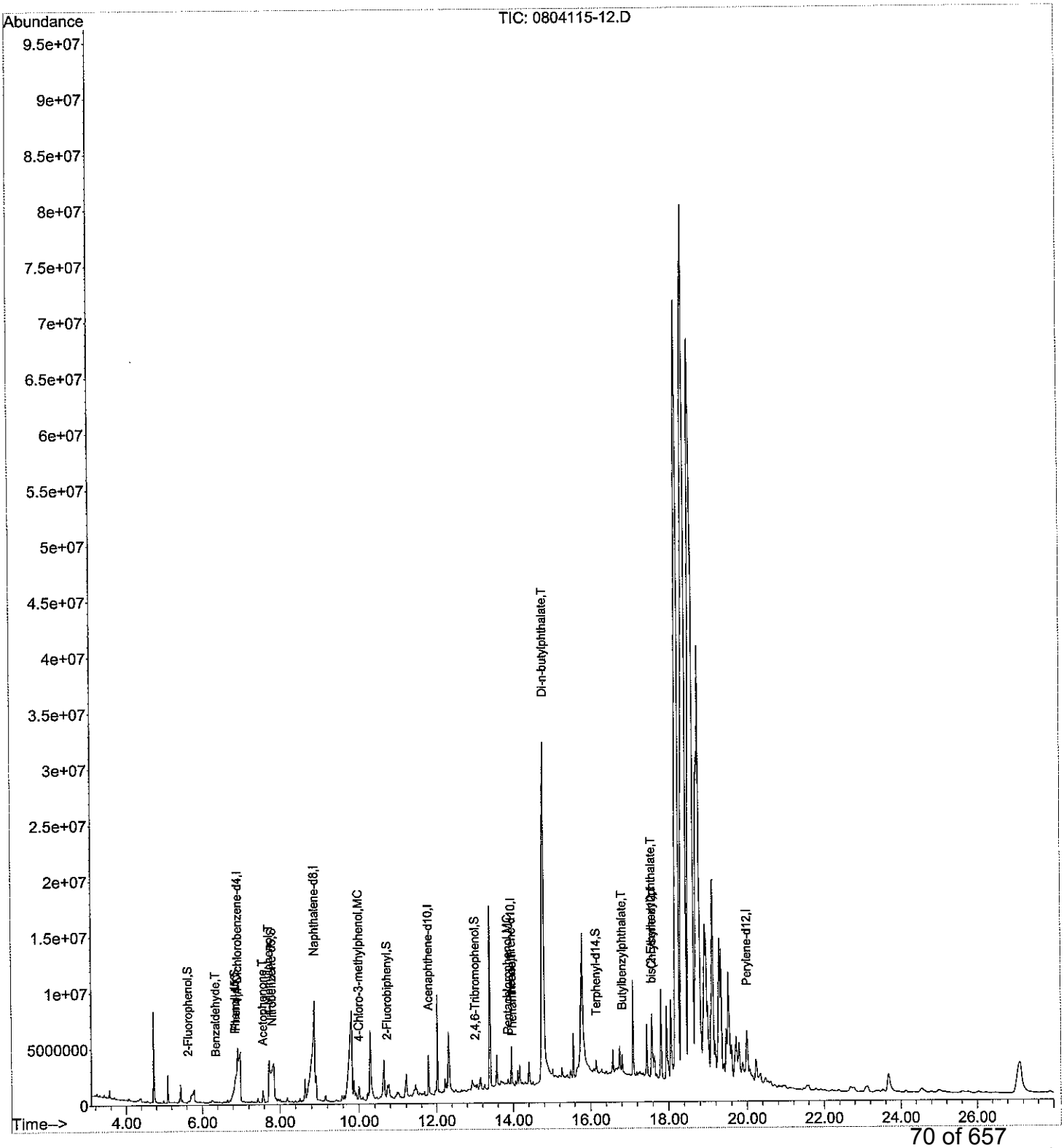
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	523283	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2189385	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1222087	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2000217	5.00 ug/mL	0.00
72) Chrysene-d12	17.58	240	1909567	5.00 ug/mL	0.00
81) Perylene-d12	19.99	264	2072503	5.00 ug/mL	0.07
System Monitoring Compounds					
4) 2-Fluorophenol	5.63	112	153398m	1.17 ug/mL	0.31
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.85%#	
8) Phenol-d5	6.85	99	218480m	1.33 ug/mL	0.24
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.65%#	
22) Nitrobenzene-d5	7.79	82	194140	1.45 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.25%#	
41) 2-Fluorobiphenyl	10.72	172	475754	1.46 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.30%#	
62) 2,4,6-Tribromophenol	13.01	330	47686	1.17 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.85%#	
75) Terphenyl-d14	16.15	244	541947	1.54 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 7.70%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.35	77	24133	0.27 ug/ml	89
9) Phenol	6.87	94	183324m	0.93 ug/mL	
17) Acetophenone	7.57	105	500386	2.51 ug/ml#	80
20) 4-Methylphenol	7.73	108	2585607	17.19 ug/mL	79
35) 4-Chloro-3-methylphenol	10.00	107	482800	3.60 ug/mL	96
66) Pentachlorophenol	13.85	266	28109	0.53 ug/mL#	76
67) Phenanthrene	13.98	178	149749	0.29 ug/mL#	94
70) Di-n-butylphthalate	14.81	149	565759m	0.91 ug/mL	
76) Butylbenzylphthalate	16.82	149	548369	1.92 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.56	149	430056	1.03 ug/mL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-12.D
Acq On : 6 Jun 2008 4:32 pm
Operator : SEO
Sample : 0804115-12
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 08 21:10:42 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:26 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-13**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.31	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2160	U	3-Nitroaniline	2160	U
Phenol	2160	U	2,4-Dinitrophenol	2160	U
2-Chlorophenol	2160	U	Dibenzofuran	2160	U
1,3-Dichlorobenzene	2160	U	2,4-Dinitrotoluene	2160	U
1,4-Dichlorobenzene	2160	U	4-Nitrophenol	2160	U
1,2-Dichlorobenzene	2160	U	Fluorene	2160	U
bis(2-Chloroisopropyl)ether	2160	U	4-Chlorophenyl-phenylether	2160	U
2-Methylphenol	2160	U	Diethylphthalate	2160	U
Hexachloroethane	2160	U	4-Nitroaniline	2160	U
n-Nitroso-di-n-propylamine	2160	U	4,6-Dinitro-2-methylphenol	2160	U
4-Methylphenol	**23300**		n-Nitrosodiphenylamine	2160	U
Nitrobenzene	2160	U	4-Bromophenyl-phenylether	2160	U
Isophorone	2160	U	Hexachlorobenzene	2160	U
2-Nitrophenol	2160	U	Pentachlorophenol	2160	U
2,4-Dimethylphenol	2160	U	Phenanthrene	**1170**	J
bis(2-Chloroethoxy)methane	2160	U	Anthracene	2160	U
2,4-Dichlorophenol	2160	U	Carbazole	2160	U
1,2,4-Trichlorobenzene	2160	U	Di-n-butylphthalate	**2080**	J
Naphthalene	2160	U	Fluoranthene	2160	U
4-Chloroaniline	2160	U	Pyrene	2160	U
Hexachlorobutadiene	2160	U	Butylbenzylphthalate	**4760**	
4-Chloro-3-methylphenol	**4290**		3,3'-Dichlorobenzidine	2160	U
2-Methylnaphthalene	2160	U	Benz[a]anthracene	2160	U
Hexachlorocyclopentadiene	2160	U	Chrysene	2160	U
2,4,6-Trichlorophenol	2160	U	bis(2-Ethylhexyl)phthalate	**3070**	
2,4,5-Trichlorophenol	2160	U	Di-n-octylphthalate	2160	U
2-Chloronaphthalene	2160	U	Benzo[b]fluoranthene	2160	U
2-Nitroaniline	2160	U	Benzo[k]fluoranthene	2160	U
Acenaphthylene	2160	U	Benzo[a]pyrene	2160	U
Dimethylphthalate	2160	U	Indeno[1,2,3-cd]pyrene	2160	U
2,6-Dinitrotoluene	2160	U	Dibenz[a,h]anthracene	2160	U
Acenaphthene	2160	U	Benzo[g,h,i]perylene	2160	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	52	25-121
Phenol-d5	54	24-113
Nitrobenzene-d5	69	23-120
2-Fluorobiphenyl	69	30-115
2,4,6-Tribromophenol	54	19-122
Terphenyl-d14	74	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-13.D
Acq On : 6 Jun 2008 8:06 pm
Operator : SEO
Sample : 0804115-13
Misc :
ALS Vial : 13 Sample Multiplier: 1

6/9/08
[illegible]

Quant Time: Jun 08 21:12:52 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	602338	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2460033	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1379342	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2264748	5.00 ug/mL	0.00
72) Chrysene-d12	17.58	240	2136151	5.00 ug/mL	0.00
81) Perylene-d12	19.97	264	2263384	5.00 ug/mL	0.06

System Monitoring Compounds					
4) 2-Fluorophenol	5.55	112	158306m	1.05 ug/mL	0.22
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.25%#	
8) Phenol-d5	6.82	99	202531m	1.07 ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	= 5.35%#	
22) Nitrobenzene-d5	7.79	82	207777	1.38 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 6.90%#	
41) 2-Fluorobiphenyl	10.72	172	510042	1.39 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 6.95%#	
62) 2,4,6-Tribromophenol	13.02	330	49244	1.07 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.35%#	
75) Terphenyl-d14	16.15	244	576100	1.47 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 7.35%#	

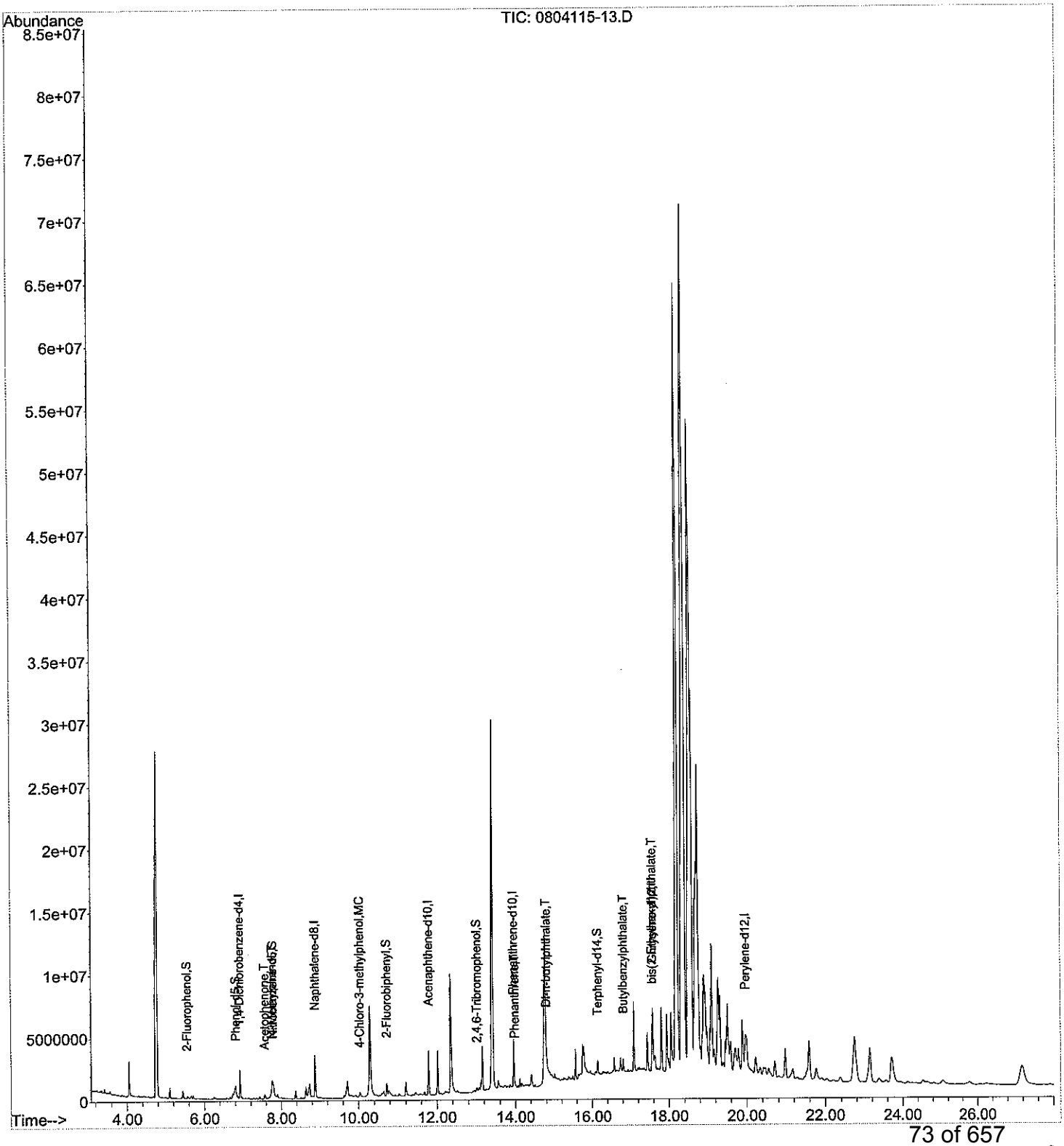
Target Compounds					Qvalue
17) Acetophenone	7.57	105	158509	0.69 ug/ml#	80
20) 4-Methylphenol	7.76	108	930768	5.37 ug/mL	82
35) 4-Chloro-3-methylphenol	10.04	107	148757	0.99 ug/mL	99
67) Phenanthrene	13.99	178	159187	0.27 ug/mL	96
70) Di-n-butylphthalate	14.81	149	336874	0.48 ug/mL#	92
76) Butylbenzylphthalate	16.82	149	352458	1.10 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.56	149	331302m	0.71 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-13.D
Acq On : 6 Jun 2008 8:06 pm
Operator : SEO
Sample : 0804115-13
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 08 21:12:52 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:34 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-14**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.13	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2350	U	3-Nitroaniline	2350	U
Phenol	**2820**		2,4-Dinitrophenol	2350	U
2-Chlorophenol	2350	U	Dibenzofuran	2350	U
1,3-Dichlorobenzene	2350	U	2,4-Dinitrotoluene	2350	U
1,4-Dichlorobenzene	2350	U	4-Nitrophenol	2350	U
1,2-Dichlorobenzene	2350	U	Fluorene	2350	U
bis(2-Chloroisopropyl)ether	2350	U	4-Chlorophenyl-phenylether	2350	U
2-Methylphenol	2350	U	Diethylphthalate	2350	U
Hexachloroethane	2350	U	4-Nitroaniline	2350	U
n-Nitroso-di-n-propylamine	2350	U	4,6-Dinitro-2-methylphenol	2350	U
4-Methylphenol	**62900**		n-Nitrosodiphenylamine	2350	U
Nitrobenzene	2350	U	4-Bromophenyl-phenylether	2350	U
Isophorone	2350	U	Hexachlorobenzene	2350	U
2-Nitrophenol	2350	U	Pentachlorophenol	2350	U
2,4-Dimethylphenol	2350	U	Phenanthrene	**1970**	J
bis(2-Chloroethoxy)methane	2350	U	Anthracene	2350	U
2,4-Dichlorophenol	2350	U	Carbazole	2350	U
1,2,4-Trichlorobenzene	2350	U	Di-n-butylphthalate	**5450**	
Naphthalene	2350	U	Fluoranthene	2350	U
4-Chloroaniline	2350	U	Pyrene	2350	U
Hexachlorobutadiene	2350	U	Butylbenzylphthalate	**11500**	
4-Chloro-3-methylphenol	**14400**		3,3'-Dichlorobenzidine	2350	U
2-Methylnaphthalene	2350	U	Benz[a]anthracene	2350	U
Hexachlorocyclopentadiene	2350	U	Chrysene	2350	U
2,4,6-Trichlorophenol	2350	U	bis(2-Ethylhexyl)phthalate	**5780**	
2,4,5-Trichlorophenol	2350	U	Di-n-octylphthalate	**1920**	J
2-Chloronaphthalene	2350	U	Benzo[b]fluoranthene	2350	U
2-Nitroaniline	2350	U	Benzo[k]fluoranthene	2350	U
Acenaphthylene	2350	U	Benzo[a]pyrene	2350	U
Dimethylphthalate	2350	U	Indeno[1,2,3-cd]pyrene	2350	U
2,6-Dinitrotoluene	2350	U	Dibenz[a,h]anthracene	2350	U
Acenaphthene	2350	U	Benzo[g,h,i]perylene	2350	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	58	25-121
Phenol-d5	64	24-113
Nitrobenzene-d5	84	23-120
2-Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	52	19-122
Terphenyl-d14	85	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-14.D
Acq On : 6 Jun 2008 6:19 pm
Operator : SEO
Sample : 0804115-14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 21:14:53 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

6/9/08

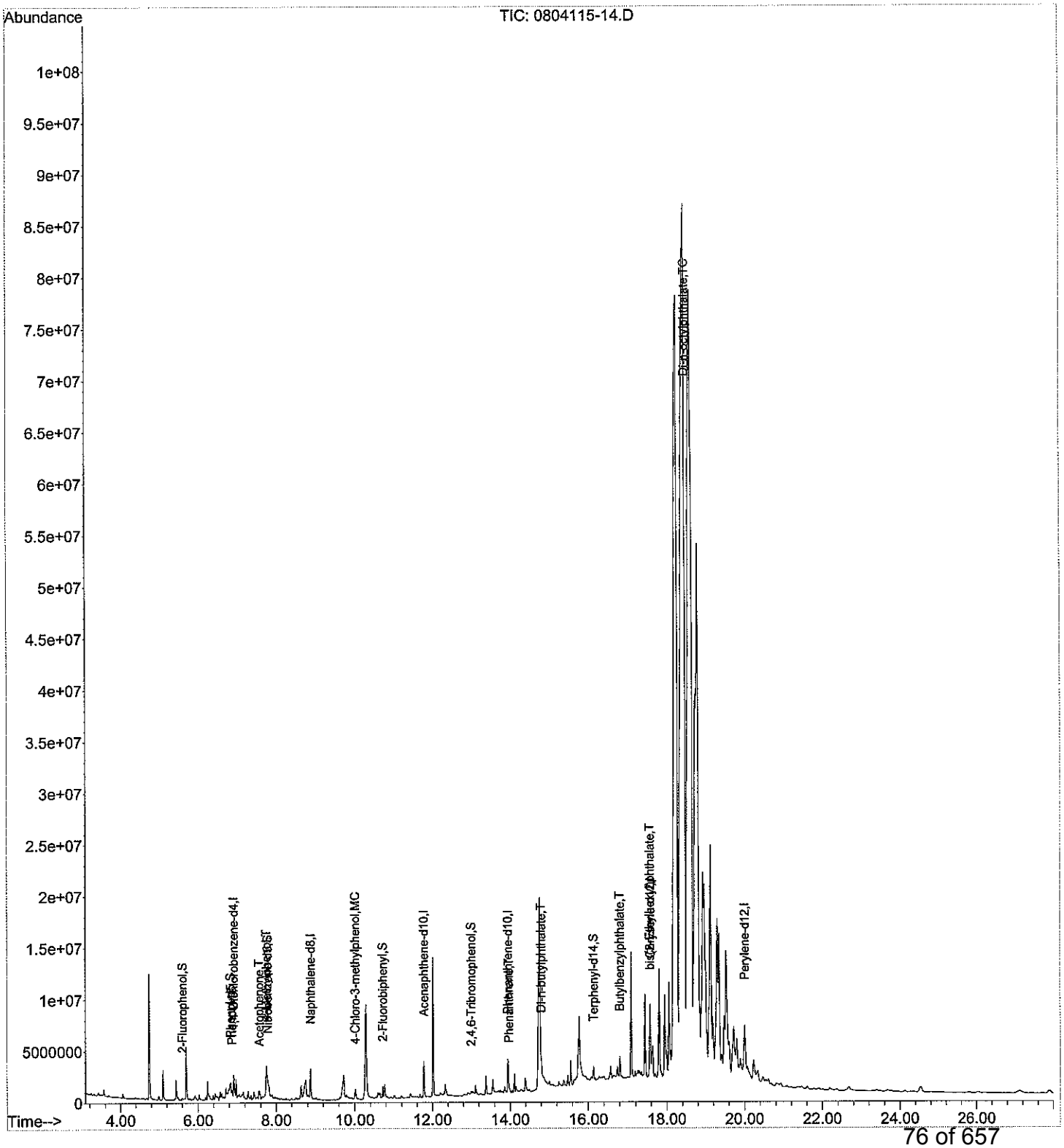
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.92	152	541432	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2256330	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.78	164	1250010	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.95	188	2039869	5.00 ug/mL	0.00
72) Chrysene-d12	17.58	240	1960310	5.00 ug/mL	0.00
81) Perylene-d12	20.00	264	2161202	5.00 ug/mL	0.08
System Monitoring Compounds					
4) 2-Fluorophenol	5.61	112	157938m	1.16 ug/mL	0.28
Spiked Amount 20.000	Range 21 - 100		Recovery	= 5.80%#	
8) Phenol-d5	6.84	99	218787m	1.29 ug/mL	0.23
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.45%#	
22) Nitrobenzene-d5	7.79	82	231898	1.68 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.40%#	
41) 2-Fluorobiphenyl	10.72	172	535751	1.61 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 8.05%#	
62) 2,4,6-Tribromophenol	13.01	330	43586	1.05 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 5.25%#	
75) Terphenyl-d14	16.14	244	607904m	1.69 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.45%#	
Target Compounds					Qvalue
9) Phenol	6.86	94	122232m	0.60 ug/mL	
17) Acetophenone	7.56	105	387975	1.88 ug/ml#	75
20) 4-Methylphenol	7.75	108	2084587	13.39 ug/mL	81
35) 4-Chloro-3-methylphenol	10.02	107	423002	3.06 ug/mL	96
67) Phenanthrene	13.98	178	223151m	0.42 ug/mL	
70) Di-n-butylphthalate	14.81	149	737032	1.16 ug/mL	99
76) Butylbenzylphthalate	16.81	149	717579	2.45 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.56	149	526724m	1.23 ug/mL	
82) Di-n-octylphthalate	18.49	149	325851	0.41 ug/mL#	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-14.D
Acq On : 6 Jun 2008 6:19 pm
Operator : SEO
Sample : 0804115-14
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 21:14:53 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:41 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-15**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.15	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2330	U	3-Nitroaniline	2330	U
Phenol	2330	U	2,4-Dinitrophenol	2330	U
2-Chlorophenol	2330	U	Dibenzofuran	2330	U
1,3-Dichlorobenzene	2330	U	2,4-Dinitrotoluene	2330	U
1,4-Dichlorobenzene	2330	U	4-Nitrophenol	2330	U
1,2-Dichlorobenzene	2330	U	Fluorene	2330	U
bis(2-Chloroisopropyl)ether	2330	U	4-Chlorophenyl-phenylether	2330	U
2-Methylphenol	2330	U	Diethylphthalate	2330	U
Hexachloroethane	2330	U	4-Nitroaniline	2330	U
n-Nitroso-di-n-propylamine	2330	U	4,6-Dinitro-2-methylphenol	2330	U
4-Methylphenol	**23500**		n-Nitrosodiphenylamine	2330	U
Nitrobenzene	2330	U	4-Bromophenyl-phenylether	2330	U
Isophorone	2330	U	Hexachlorobenzene	2330	U
2-Nitrophenol	2330	U	Pentachlorophenol	2330	U
2,4-Dimethylphenol	2330	U	Phenanthrene	**1950**	J
bis(2-Chloroethoxy)methane	2330	U	Anthracene	2330	U
2,4-Dichlorophenol	2330	U	Carbazole	2330	U
1,2,4-Trichlorobenzene	2330	U	Di-n-butylphthalate	**3630**	
Naphthalene	2330	U	Fluoranthene	**3580**	
4-Chloroaniline	2330	U	Pyrene	**3120**	
Hexachlorobutadiene	2330	U	Butylbenzylphthalate	**5950**	
4-Chloro-3-methylphenol	**4790**		3,3'-Dichlorobenzidine	2330	U
2-Methylnaphthalene	2330	U	Benz[a]anthracene	**2000**	J
Hexachlorocyclopentadiene	2330	U	Chrysene	**2840**	
2,4,6-Trichlorophenol	2330	U	bis(2-Ethylhexyl)phthalate	**3210**	
2,4,5-Trichlorophenol	2330	U	Di-n-octylphthalate	2330	U
2-Chloronaphthalene	2330	U	Benzo[b]fluoranthene	**3540**	
2-Nitroaniline	2330	U	Benzo[k]fluoranthene	**2230**	J
Acenaphthylene	2330	U	Benzo[a]pyrene	**2370**	
Dimethylphthalate	2330	U	Indeno[1,2,3-cd]pyrene	**2140**	J
2,6-Dinitrotoluene	2330	U	Dibenz[a,h]anthracene	2330	U
Acenaphthene	2330	U	Benzo[g,h,i]perylene	**2330**	

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	44	25-121
Phenol-d5	47	24-113
Nitrobenzene-d5	68	23-120
2-Fluorobiphenyl	71	30-115
2,4,6-Tribromophenol	40	19-122
Terphenyl-d14	75	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-15.D
Acq On : 6 Jun 2008 9:54 pm
Operator : SEO
Sample : 0804115-15
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 08 21:17:05 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

6/9/08

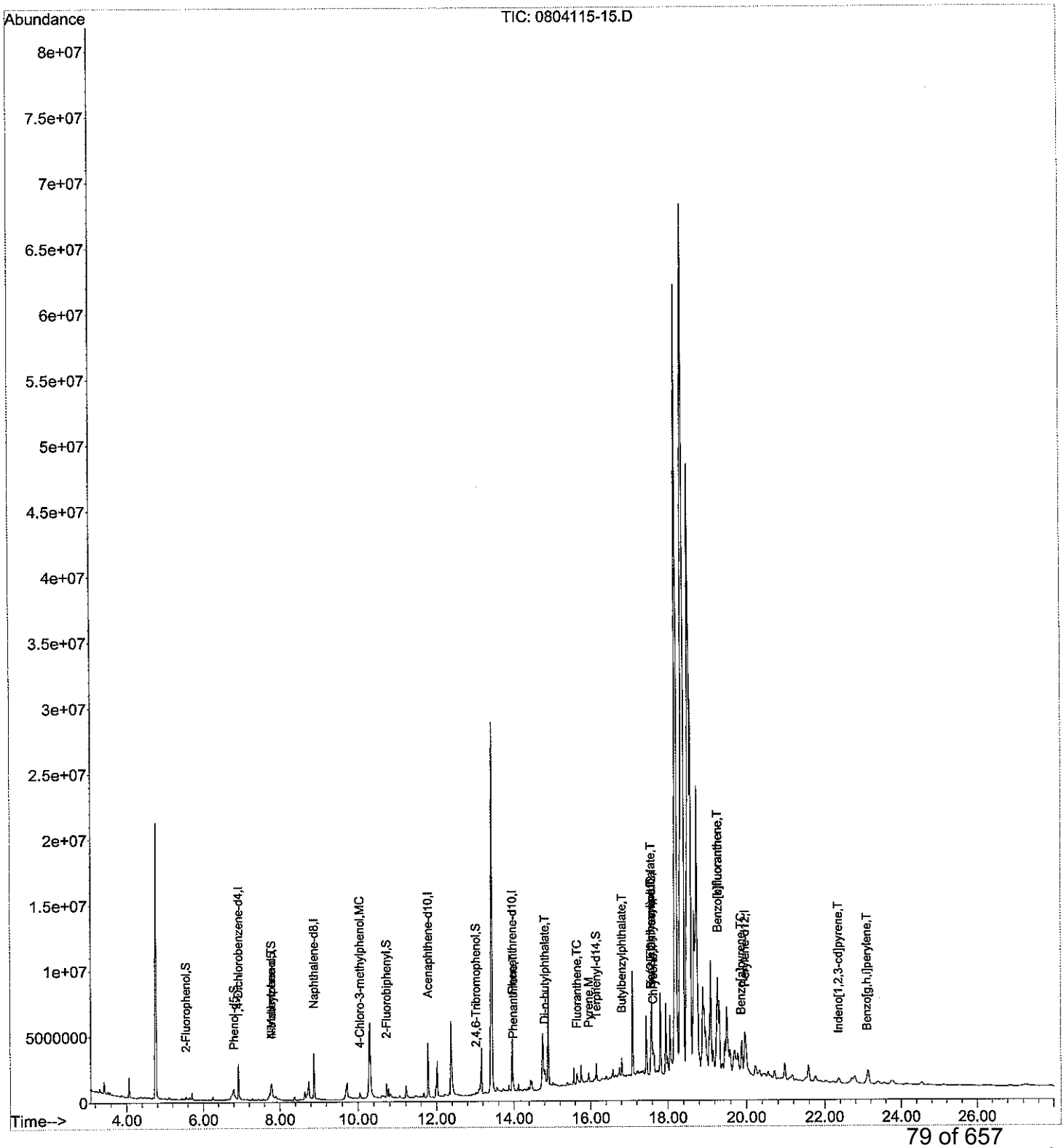
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.93	152	648091	5.00 ug/mL	0.00
21) Naphthalene-d8	8.88	136	2628673	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.79	164	1475818	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.96	188	2486285	5.00 ug/mL	0.02
72) Chrysene-d12	17.59	240	2370923m	5.00 ug/mL	0.00
81) Perylene-d12	19.97	264	2502670	5.00 ug/mL	0.06
System Monitoring Compounds					
4) 2-Fluorophenol	5.55	112	141812m	0.87 ug/mL	0.22
Spiked Amount 20.000	Range 21 - 100		Recovery	= 4.35%#	
8) Phenol-d5	6.82	99	189711m	0.93 ug/mL	0.21
Spiked Amount 20.000	Range 10 - 94		Recovery	= 4.65%#	
22) Nitrobenzene-d5	7.80	82	217641	1.35 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 6.75%#	
41) 2-Fluorobiphenyl	10.72	172	557776	1.42 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 7.10%#	
62) 2,4,6-Tribromophenol	13.02	330	39826	0.79 ug/mL	0.02
Spiked Amount 20.000	Range 10 - 123		Recovery	= 3.95%#	
75) Terphenyl-d14	16.15	244	651336m	1.50 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 7.50%#	
Target Compounds					Qvalue
20) 4-Methylphenol	7.78	108	940288	5.05 ug/mL#	78
35) 4-Chloro-3-methylphenol	10.05	107	166050	1.03 ug/mL	100
67) Phenanthrene	13.99	178	269450	0.42 ug/mL	98
70) Di-n-butylphthalate	14.81	149	603204m	0.78 ug/mL	
71) Fluoranthene	15.65	202	496812	0.77 ug/mL	97
74) Pyrene	15.95	202	452422	0.67 ug/mL	98
76) Butylbenzylphthalate	16.82	149	453384	1.28 ug/mL	98
78) Benz[a]anthracene	17.56	228	272657m	0.43 ug/mL	
79) Chrysene	17.62	228	368796	0.61 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.56	149	355969	0.69 ug/mL	95
83) Benzo[b]fluoranthene	19.27	252	534914m	0.76 ug/mL	
84) Benzo[k]fluoranthene	19.29	252	307961m	0.48 ug/mL	
85) Benzo[a]pyrene	19.86	252	330887	0.51 ug/mL	97
86) Indeno[1,2,3-cd]pyrene	22.36	276	347528	0.46 ug/mL#	91
88) Benzo[g,h,i]perylene	23.09	276	323018	0.50 ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-15.D
Acq On : 6 Jun 2008 9:54 pm
Operator : SEO
Sample : 0804115-15
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 08 21:17:05 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon Jun 09 11:43:47 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-16**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	06/06/08	100	2.53	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1980	U	3-Nitroaniline	1980	U
Phenol	**9330**		2,4-Dinitrophenol	1980	U
2-Chlorophenol	1980	U	Dibenzofuran	1980	U
1,3-Dichlorobenzene	1980	U	2,4-Dinitrotoluene	1980	U
1,4-Dichlorobenzene	1980	U	4-Nitrophenol	1980	U
1,2-Dichlorobenzene	1980	U	Fluorene	1980	U
bis(2-Chloroisopropyl)ether	1980	U	4-Chlorophenyl-phenylether	1980	U
2-Methylphenol	1980	U	Diethylphthalate	1980	U
Hexachloroethane	**33300**		4-Nitroaniline	1980	U
n-Nitroso-di-n-propylamine	1980	U	4,6-Dinitro-2-methylphenol	1980	U
4-Methylphenol	**119000**	E	n-Nitrosodiphenylamine	1980	U
Nitrobenzene	1980	U	4-Bromophenyl-phenylether	1980	U
Isophorone	**1540**	J	Hexachlorobenzene	1980	U
2-Nitrophenol	1980	U	Pentachlorophenol	1980	U
2,4-Dimethylphenol	1980	U	Phenanthrene	**2530**	
bis(2-Chloroethoxy)methane	1980	U	Anthracene	1980	U
2,4-Dichlorophenol	1980	U	Carbazole	1980	U
1,2,4-Trichlorobenzene	1980	U	Di-n-butylphthalate	**9960**	
Naphthalene	1980	U	Fluoranthene	1980	U
4-Chloroaniline	1980	U	Pyrene	1980	U
Hexachlorobutadiene	1980	U	Butylbenzylphthalate	**18500**	
4-Chloro-3-methylphenol	**31300**		3,3'-Dichlorobenzidine	1980	U
2-Methylnaphthalene	1980	U	Benz[a]anthracene	1980	U
Hexachlorocyclopentadiene	1980	U	Chrysene	1980	U
2,4,6-Trichlorophenol	1980	U	bis(2-Ethylhexyl)phthalate	**5730**	
2,4,5-Trichlorophenol	1980	U	Di-n-octylphthalate	1980	U
2-Chloronaphthalene	1980	U	Benzo[b]fluoranthene	1980	U
2-Nitroaniline	1980	U	Benzo[k]fluoranthene	1980	U
Acenaphthylene	1980	U	Benzo[a]pyrene	1980	U
Dimethylphthalate	1980	U	Indeno[1,2,3-cd]pyrene	1980	U
2,6-Dinitrotoluene	1980	U	Dibenz[a,h]anthracene	1980	U
Acenaphthene	1980	U	Benzo[g,h,i]perylene	1980	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	69	25-121
Phenol-d5	75	24-113
Nitrobenzene-d5	82	23-120
2-Fluorobiphenyl	79	30-115
2,4,6-Tribromophenol	67	19-122
Terphenyl-d14	81	18-137

N/A - Not Applicable
E - Estimated value, exceeds the upper limit of calibration.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-16.D
Acq On : 6 Jun 2008 5:07 pm
Operator : SEO
Sample : 0804115-16
Misc :
ALS Vial : 8 Sample Multiplier: 1

6/9/08 for MS

Quant Time: Jun 08 21:20:25 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration

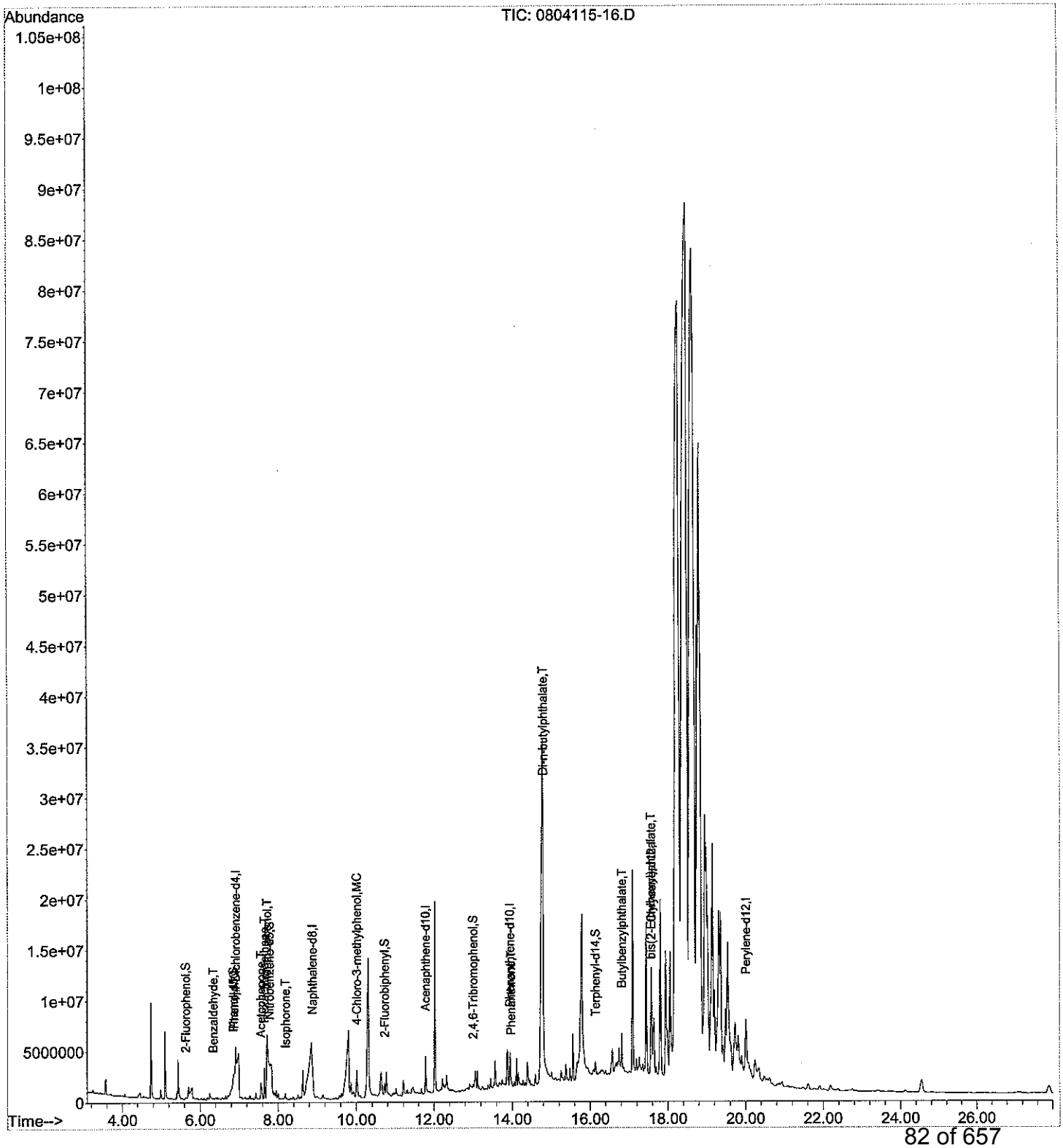
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.92	152	551917	5.00	ug/mL	0.00
21) Naphthalene-d8	8.88	136	2332094	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.78	164	1294903	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.94	188	2099957	5.00	ug/mL	0.00
72) Chrysene-d12	17.58	240	2006832	5.00	ug/mL	0.00
81) Perylene-d12	20.02	264	2135483	5.00	ug/mL	0.10
System Monitoring Compounds						
4) 2-Fluorophenol	5.62	112	190491m	1.37	ug/mL	0.30
Spiked Amount 20.000	Range 21 - 100		Recovery	=	6.85%#	
8) Phenol-d5	6.84	99	260801m	1.51	ug/mL	0.23
Spiked Amount 20.000	Range 10 - 94		Recovery	=	7.55%#	
22) Nitrobenzene-d5	7.79	82	236039m	1.65	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	8.25%#	
41) 2-Fluorobiphenyl	10.72	172	544423	1.58	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	7.90%#	
62) 2,4,6-Tribromophenol	13.01	330	56764	1.33	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	6.65%#	
75) Terphenyl-d14	16.14	244	600292m	1.63	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.15%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.34	77	47113m	0.50	ug/ml	
9) Phenol	6.86	94	490031m	2.36	ug/mL	
17) Acetophenone	7.56	105	760094	3.61	ug/ml#	80
18) Hexachloroethane	7.65	117	549406	8.43	ug/mL	98
20) 4-Methylphenol	7.72	108	4765209	30.03	ug/mL E	81
24) Isophorone	8.18	82	106019	0.39	ug/mL#	97
35) 4-Chloro-3-methylphenol	10.01	107	1132478	7.92	ug/mL	96
67) Phenanthrene	13.98	178	347996	0.64	ug/mL	98
70) Di-n-butylphthalate	14.81	149	1648312	2.52	ug/mL	99
76) Butylbenzylphthalate	16.82	149	1405403	4.69	ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.56	149	635155	1.45	ug/mL#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE06\
Data File : 0804115-16.D
Acq On : 6 Jun 2008 5:07 pm
Operator : SEO
Sample : 0804115-16
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 08 21:20:25 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Jun 07 13:45:28 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-16E**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/29/08	100	2.53	10	10	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	19800	U	3-Nitroaniline	19800	U
Phenol	19800	U	2,4-Dinitrophenol	19800	U
2-Chlorophenol	19800	U	Dibenzofuran	19800	U
1,3-Dichlorobenzene	19800	U	2,4-Dinitrotoluene	19800	U
1,4-Dichlorobenzene	19800	U	4-Nitrophenol	19800	U
1,2-Dichlorobenzene	19800	U	Fluorene	19800	U
bis(2-Chloroisopropyl)ether	19800	U	4-Chlorophenyl-phenylether	19800	U
2-Methylphenol	19800	U	Diethylphthalate	19800	U
Hexachloroethane	19800	U	4-Nitroaniline	19800	U
n-Nitroso-di-n-propylamine	19800	U	4,6-Dinitro-2-methylphenol	19800	U
4-Methylphenol	**114000**		n-Nitrosodiphenylamine	19800	U
Nitrobenzene	19800	U	4-Bromophenyl-phenylether	19800	U
Isophorone	19800	U	Hexachlorobenzene	19800	U
2-Nitrophenol	19800	U	Pentachlorophenol	19800	U
2,4-Dimethylphenol	19800	U	Phenanthrene	19800	U
bis(2-Chloroethoxy)methane	19800	U	Anthracene	19800	U
2,4-Dichlorophenol	19800	U	Carbazole	19800	U
1,2,4-Trichlorobenzene	19800	U	Di-n-butylphthalate	19800	U
Naphthalene	19800	U	Fluoranthene	19800	U
4-Chloroaniline	19800	U	Pyrene	19800	U
Hexachlorobutadiene	19800	U	Butylbenzylphthalate	19800	U
4-Chloro-3-methylphenol	19800	U	3,3'-Dichlorobenzidine	19800	U
2-Methylnaphthalene	19800	U	Benz[a]anthracene	19800	U
Hexachlorocyclopentadiene	19800	U	Chrysene	19800	U
2,4,6-Trichlorophenol	19800	U	bis(2-Ethylhexyl)phthalate	19800	U
2,4,5-Trichlorophenol	19800	U	Di-n-octylphthalate	19800	U
2-Chloronaphthalene	19800	U	Benzo[b]fluoranthene	19800	U
2-Nitroaniline	19800	U	Benzo[k]fluoranthene	19800	U
Acenaphthylene	19800	U	Benzo[a]pyrene	19800	U
Dimethylphthalate	19800	U	Indeno[1,2,3-cd]pyrene	19800	U
2,6-Dinitrotoluene	19800	U	Dibenz[a,h]anthracene	19800	U
Acenaphthene	19800	U	Benzo[g,h,i]perylene	19800	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	70	25-121
Phenol-d5	80	24-113
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	80	30-115
2,4,6-Tribromophenol	65	19-122
Terphenyl-d14	80	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : 0804115-16-D10.D
Acq On : 29 May 2008 12:02 am
Operator : JAD
Sample : 0804115-16-RE
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 12:09:23 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration

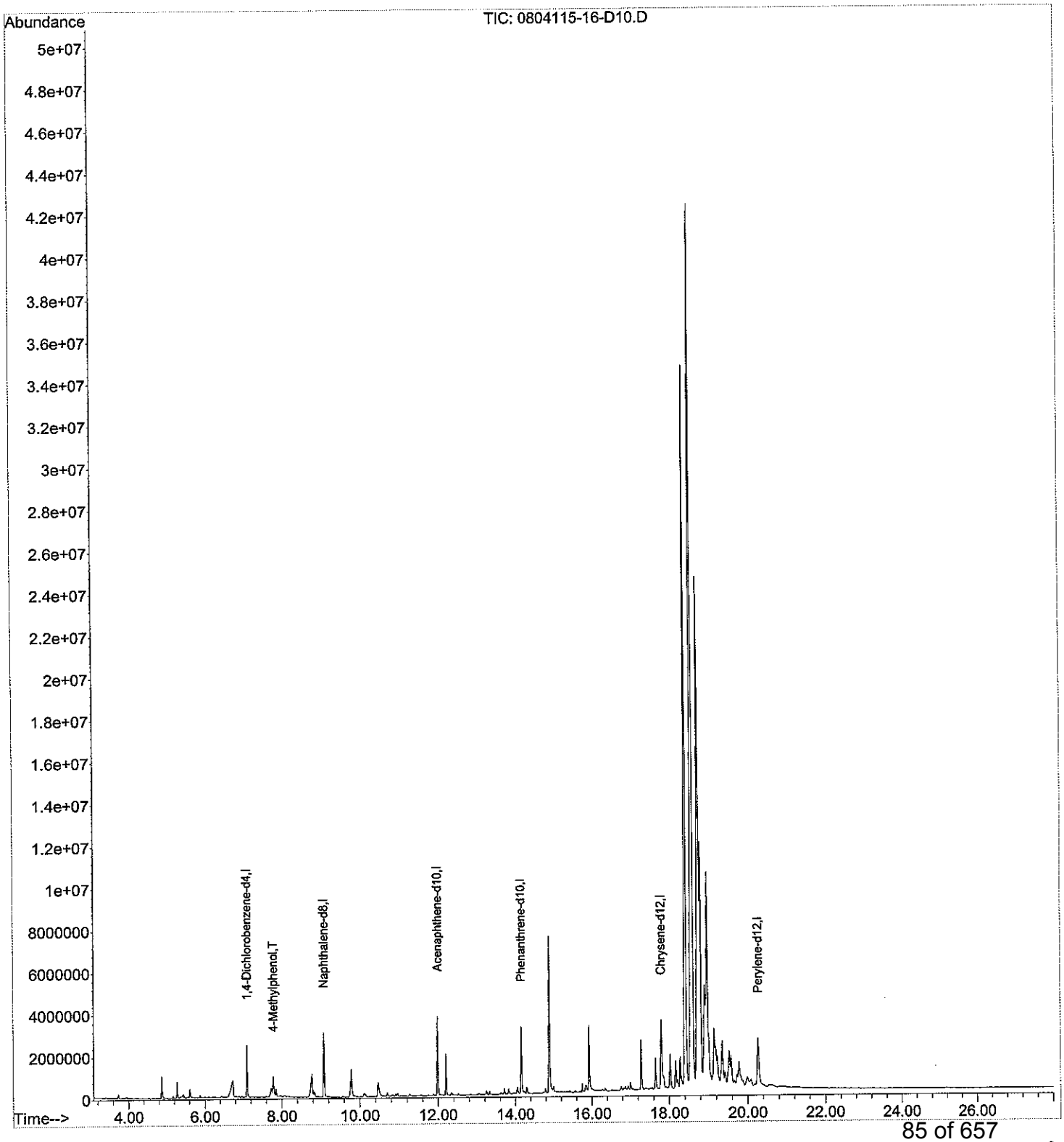
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	614161	5.00	ug/mL	0.00
21) Naphthalene-d8	9.08	136	2436597	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.98	164	1370134	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.15	188	2147129	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	2078806	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	2242812	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	21565	0.14	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.70%#	
8) Phenol-d5	6.70	99	31146m	0.16	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	0.80%#	
22) Nitrobenzene-d5	7.98	82	21841	0.15	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	0.75%#	
41) 2-Fluorobiphenyl	10.91	172	56705m	0.16	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	0.80%#	
62) 2,4,6-Tribromophenol	13.20	330	5875	0.13	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.65%#	
75) Terphenyl-d14	16.34	244	62772	0.16	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	0.80%#	
Target Compounds						Qvalue
20) 4-Methylphenol	7.78	108	509670	2.89	ug/mL	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : 0804115-16-D10.D
Acq On : 29 May 2008 12:02 am
Operator : JAD
Sample : 0804115-16-RE
Misc : 10X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 09 12:09:23 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **SS043008B17**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/28/08	100	2.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1250	U	3-Nitroaniline	1250	U
Phenol	1250	U	2,4-Dinitrophenol	1250	U
2-Chlorophenol	1250	U	Dibenzofuran	1250	U
1,3-Dichlorobenzene	1250	U	2,4-Dinitrotoluene	1250	U
1,4-Dichlorobenzene	1250	U	4-Nitrophenol	1250	U
1,2-Dichlorobenzene	1250	U	Fluorene	1250	U
bis(2-Chloroisopropyl)ether	1250	U	4-Chlorophenyl-phenylether	1250	U
2-Methylphenol	1250	U	Diethylphthalate	1250	U
Hexachloroethane	1250	U	4-Nitroaniline	1250	U
n-Nitroso-di-n-propylamine	1250	U	4,6-Dinitro-2-methylphenol	1250	U
4-Methylphenol	1250	U	n-Nitrosodiphenylamine	1250	U
Nitrobenzene	1250	U	4-Bromophenyl-phenylether	1250	U
Isophorone	1250	U	Hexachlorobenzene	1250	U
2-Nitrophenol	1250	U	Pentachlorophenol	1250	U
2,4-Dimethylphenol	1250	U	Phenanthrene	1250	U
bis(2-Chloroethoxy)methane	1250	U	Anthracene	1250	U
2,4-Dichlorophenol	1250	U	Carbazole	1250	U
1,2,4-Trichlorobenzene	1250	U	Di-n-butylphthalate	1250	U
Naphthalene	1250	U	Fluoranthene	1250	U
4-Chloroaniline	1250	U	Pyrene	1250	U
Hexachlorobutadiene	1250	U	Butylbenzylphthalate	1250	U
4-Chloro-3-methylphenol	1250	U	3,3'-Dichlorobenzidine	1250	U
2-Methylnaphthalene	1250	U	Benz[a]anthracene	1250	U
Hexachlorocyclopentadiene	1250	U	Chrysene	1250	U
2,4,6-Trichlorophenol	1250	U	bis(2-Ethylhexyl)phthalate	1250	U
2,4,5-Trichlorophenol	1250	U	Di-n-octylphthalate	1250	U
2-Chloronaphthalene	1250	U	Benzo[b]fluoranthene	1250	U
2-Nitroaniline	1250	U	Benzo[k]fluoranthene	1250	U
Acenaphthylene	1250	U	Benzo[a]pyrene	1250	U
Dimethylphthalate	1250	U	Indeno[1,2,3-cd]pyrene	1250	U
2,6-Dinitrotoluene	1250	U	Dibenz[a,h]anthracene	1250	U
Acenaphthene	1250	U	Benzo[g,h,i]perylene	1250	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	59	25-121
Phenol-d5	58	24-113
Nitrobenzene-d5	73	23-120
2-Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	21	19-122
Terphenyl-d14	96	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : SS043008B17.D
Acq On : 28 May 2008 9:37 pm
Operator : JAD
Sample : SS043008B17
Misc :
ALS Vial : 11 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 16:45:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.09	152	289483	5.00	ug/mL	0.00
21) Naphthalene-d8	9.08	136	1050362	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.98	164	622510	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	987940	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	920937	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	874652m	5.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	171373	2.36	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	11.80%#	
8) Phenol-d5	6.69	99	212750	2.34	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	11.70%	
22) Nitrobenzene-d5	7.98	82	187302	2.92	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	14.60%#	
41) 2-Fluorobiphenyl	10.92	172	538293	3.24	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	16.20%#	
62) 2,4,6-Tribromophenol	13.21	330	16761m	0.83	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	4.15%#	
75) Terphenyl-d14	16.35	244	649273	3.84	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	19.20%#	

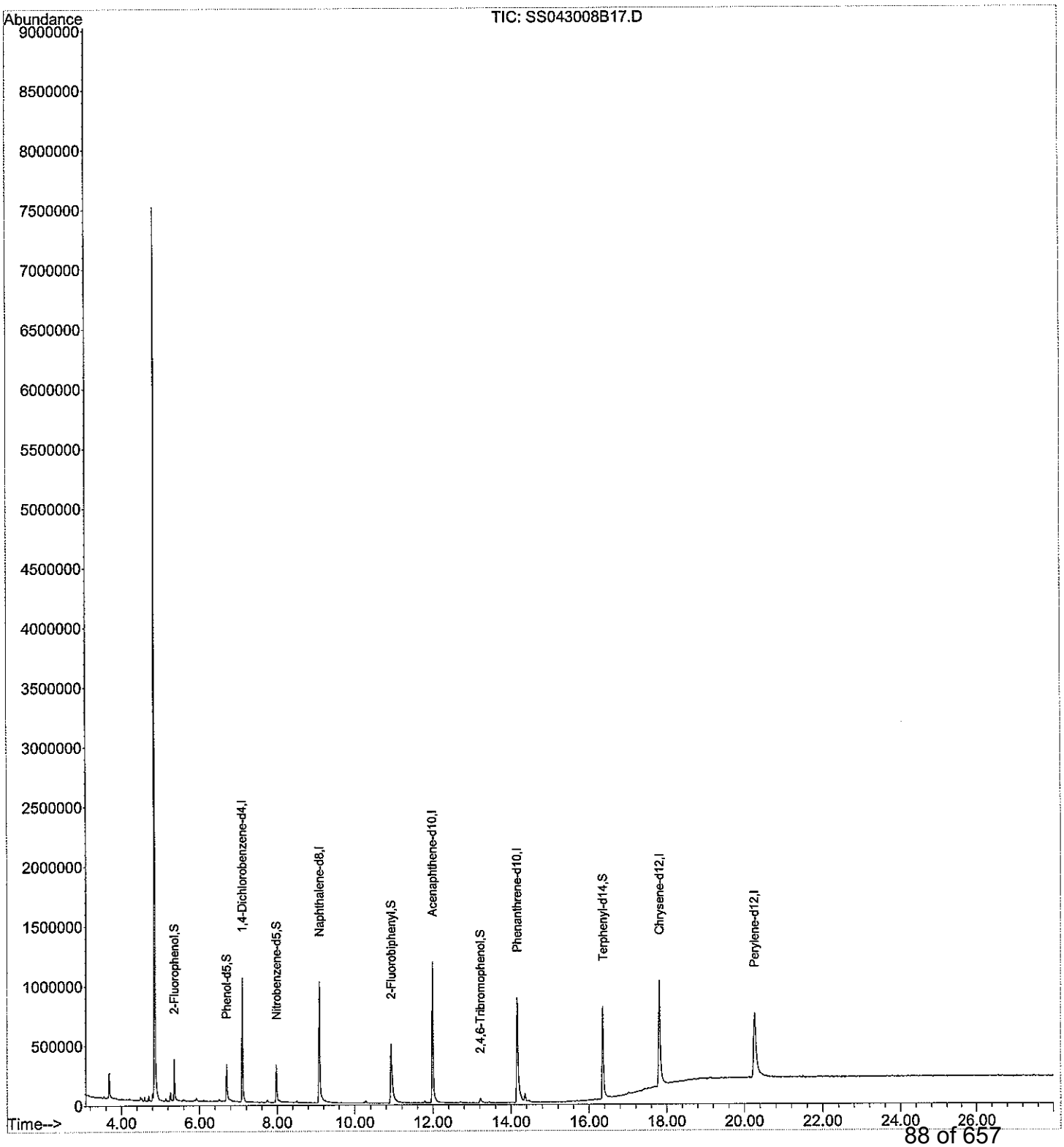
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : SS043008B17.D
Acq On : 28 May 2008 9:37 pm
Operator : JAD
Sample : SS043008B17
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 09 16:45:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration



Form III
Spike Recovery Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	04/30/08	100	JAD

Lab ID:	SS043008B17		SS043008LCS09		SS043008LCSD09				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Phenol	1250	U	4400	59	4500	60	2	30	35-90
2-Chlorophenol	1250	U	4880	65	4920	66	1	30	50-102
1,4-Dichlorobenzene	1250	U	5350	71	5100	68	5	30	27-104
n-Nitroso-di-n-propylamine	1250	U	4420	59	5620	75	24	30	38-126
1,2,4-Trichlorobenzene	1250	U	5120	68	5100	68	0	30	23-107
4-Chloro-3-methylphenol	1250	U	4080	54	4400	59	8	30	33-103
Acenaphthene	1250	U	5520	74	5520	74	0	30	19-137
2,4-Dinitrotoluene	1250	U	4470	60	5120	68	14	30	47-89
4-Nitrophenol	1250	U	1080	14[a]	2200	29[a]	69[a]	30	50-114
Pentachlorophenol	1250	U	750	10[a]	1270	17[a]	52[a]	30	47-109
Pyrene	1250	U	5650	75	5850	78	3	30	36-142

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	73	74	25-121
Phenol-d5	70	72	24-113
Nitrobenzene-d5	76	79	23-120
2-Fluorobiphenyl	84	81	30-115
2,4,6-Tribromophenol	61	62	19-122
Terphenyl-d14	88	88	18-137

N/A - Not Applicable
[a] - Value outside of QC Limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

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Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **SS043008LCS09**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/28/08	100	2.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	5100		3-Nitroaniline	2350	
Phenol	4400	S	2,4-Dinitrophenol	1000	J
2-Chlorophenol	4880	S	Dibenzofuran	5420	
1,3-Dichlorobenzene	5120		2,4-Dinitrotoluene	4470	S
1,4-Dichlorobenzene	5350	S	4-Nitrophenol	1080	JS
1,2-Dichlorobenzene	5320		Fluorene	5700	
bis(2-Chloroisopropyl)ether	5200		4-Chlorophenyl-phenylether	5380	
2-Methylphenol	3080		Diethylphthalate	5400	
Hexachloroethane	5150		4-Nitroaniline	2500	
n-Nitroso-di-n-propylamine	4420	S	4,6-Dinitro-2-methylphenol	2820	
4-Methylphenol	3150		n-Nitrosodiphenylamine	4880	
Nitrobenzene	5150		4-Bromophenyl-phenylether	4800	
Isophorone	5250		Hexachlorobenzene	5450	
2-Nitrophenol	4450		Pentachlorophenol	750	JS
2,4-Dimethylphenol	1250	U	Phenanthrene	5500	
bis(2-Chloroethoxy)methane	4850		Anthracene	5600	
2,4-Dichlorophenol	3880		Carbazole	5380	
1,2,4-Trichlorobenzene	5120	S	Di-n-butylphthalate	5800	
Naphthalene	5480		Fluoranthene	5920	
4-Chloroaniline	1450		Pyrene	5650	S
Hexachlorobutadiene	5880		Butylbenzylphthalate	5480	
4-Chloro-3-methylphenol	4080	S	3,3'-Dichlorobenzidine	2050	
2-Methylnaphthalene	5280		Benz[a]anthracene	5150	
Hexachlorocyclopentadiene	3720		Chrysene	6320	
2,4,6-Trichlorophenol	4280		bis(2-Ethylhexyl)phthalate	5650	
2,4,5-Trichlorophenol	4850		Di-n-octylphthalate	5250	
2-Chloronaphthalene	5500		Benzo[b]fluoranthene	4820	
2-Nitroaniline	4200		Benzo[k]fluoranthene	6680	
Acenaphthylene	5580		Benzo[a]pyrene	5150	
Dimethylphthalate	5280		Indeno[1,2,3-cd]pyrene	5220	
2,6-Dinitrotoluene	4780		Dibenz[a,h]anthracene	5080	
Acenaphthene	5520	S	Benzo[g,h,i]perylene	5280	

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	73	25-121
Phenol-d5	70	24-113
Nitrobenzene-d5	76	23-120
2-Fluorobiphenyl	84	30-115
2,4,6-Tribromophenol	61	19-122
Terphenyl-d14	88	18-137

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCS09.D
Acq On : 28 May 2008 10:13 pm
Operator : JAD
Sample : SS043008LCS09
Misc :
ALS Vial : 12 Sample Multiplier: 1

6/9/08 JAD for MS JAD

Quant Time: May 30 15:25:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	422220	5.00 ug/mL	0.00
21) Naphthalene-d8	9.08	136	1672769	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.98	164	937894	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.15	188	1492226	5.00 ug/mL	0.00
72) Chrysene-d12	17.80	240	1468776	5.00 ug/mL	0.00
81) Perylene-d12	20.25	264	1399701	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.37	112	307834	2.90 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	= 14.50%#	
8) Phenol-d5	6.69	99	369728	2.79 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 13.95%	
22) Nitrobenzene-d5	7.98	82	313254	3.06 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 15.30%#	
41) 2-Fluorobiphenyl	10.91	172	843761	3.37 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 16.85%#	
62) 2,4,6-Tribromophenol	13.19	330	73841	2.43 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 12.15%	
75) Terphenyl-d14	16.34	244	950511	3.52 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 17.60%#	

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.40	74	99229	2.09 ug/mL#	96
3) Pyridine	3.39	79	113061	1.20 ug/mL	100
5) Benzaldehyde	6.51	77	76230	1.06 ug/ml	96
6) Aniline	6.71	66	145631	1.24 ug/ml#	50
7) bis(2-Chloroethyl)ether	6.80	63	171330	2.04 ug/mL	90
9) Phenol	6.71	94	279701	1.76 ug/mL#	76
10) 2-Chlorophenol	6.85	128	248430	1.95 ug/mL	95
11) 1,3-Dichlorobenzene	7.05	146	289099	2.05 ug/mL	100
12) 1,4-Dichlorobenzene	7.12	146	308758m	2.14 ug/mL	
13) 1,2-Dichlorobenzene	7.40	146	286265	2.13 ug/mL	99
14) Benzyl alcohol	7.37	108	43147	0.55 ug/mL#	93
15) bis(2-chloroisopropyl)ethe	7.58	45	448070	2.08 ug/mL#	100
16) 2-Methylphenol	7.56	108	137415	1.23 ug/mL	98
17) Acetophenone	7.74	105	331082	2.06 ug/ml	90
18) Hexachloroethane	7.85	117	102424	2.06 ug/mL	100
19) N-Nitroso-di-n-propylamine	7.78	70	110709	1.77 ug/mL	100
20) 4-Methylphenol	7.77	108	152553	1.26 ug/mL	96
23) Nitrobenzene	8.00	77	233250	2.06 ug/mL	98
24) Isophorone	8.36	82	413413	2.10 ug/mL	100
25) 2-Nitrophenol	8.51	139	114588	1.78 ug/mL	99
27) Benzoic acid	8.72	105	25066	0.33 ug/mL#	88
28) bis(2-Chloroethoxy)methane	8.73	93	268820	1.94 ug/mL	97
29) 2,4-Dichlorophenol	8.89	162	150490	1.55 ug/mL	99
30) 1,2,4-Trichlorobenzene	9.02	180	212413	2.05 ug/mL	98
31) Naphthalene	9.12	128	816306	2.19 ug/mL	100
32) 4-Chloroaniline	9.28	127	85840	0.58 ug/mL	99
33) Hexachlorobutadiene	9.43	225	122347	2.35 ug/mL	98
34) Caprolactam	9.76	113	59094m	1.50 ug/ml	
35) 4-Chloro-3-methylphenol	10.10	107	166938	1.63 ug/mL	98
36) 2-Methylnaphthalene	10.27	142	531890	2.11 ug/mL	99
38) Hexachlorocyclopentadiene	10.65	237	95635	1.49 ug/mL	98
39) 2,4,6-Trichlorophenol	10.80	196	108939m	1.71 ug/mL	
40) 2,4,5-Trichlorophenol	10.87	196	135706m	1.94 ug/mL	
42) Biphenyl	11.05	154	709937	2.46 ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCS09.D
Acq On : 28 May 2008 10:13 pm
Operator : JAD
Sample : SS043008LCS09
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 30 15:25:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration

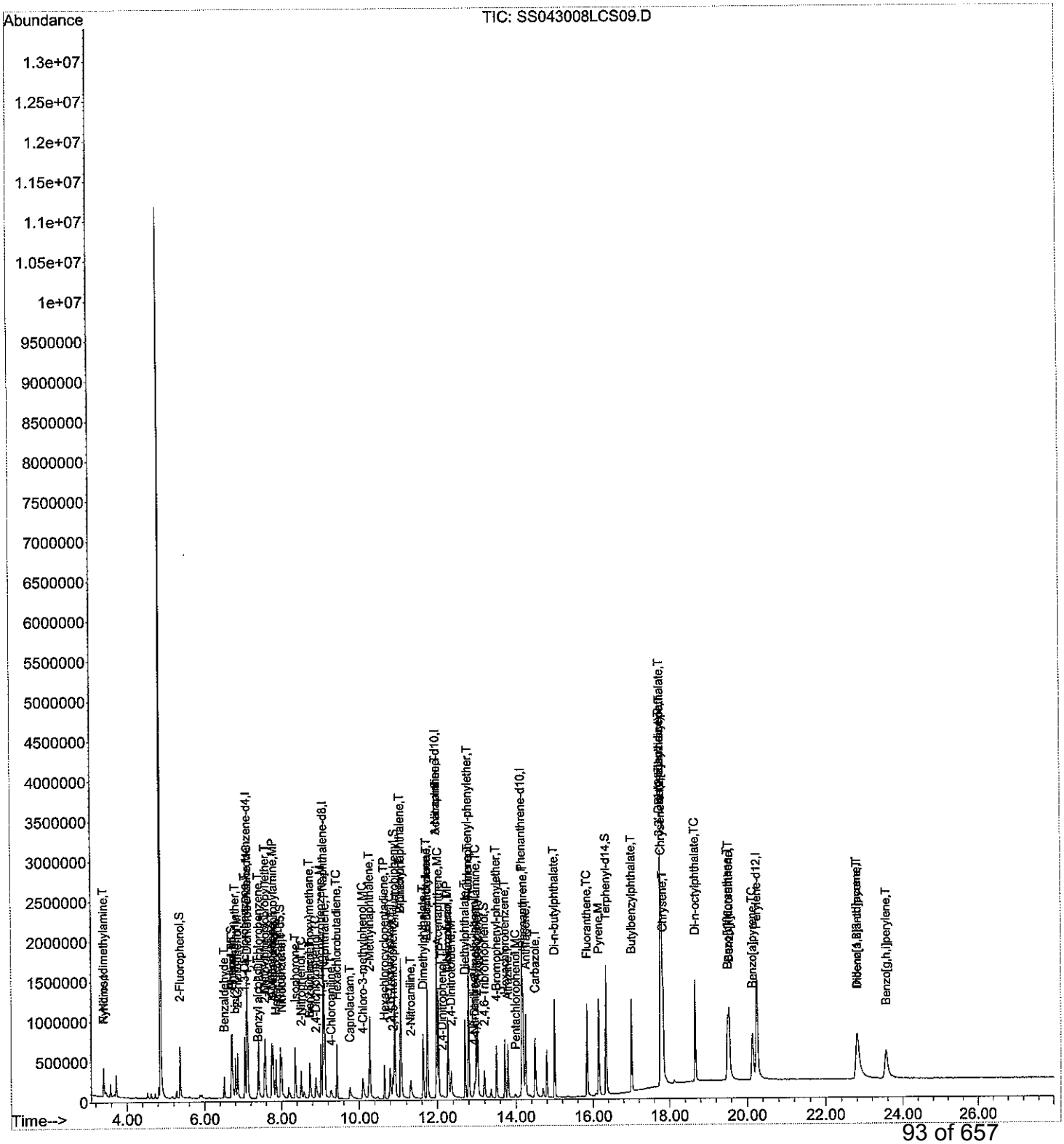
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2-Chloronaphthalene	11.07	162	495464	2.20 ug/mL	98
44) 2-Nitroaniline	11.31	65	102223m	1.68 ug/mL	
45) Acenaphthylene	11.74	152	832451	2.23 ug/mL	99
46) Dimethylphthalate	11.64	163	572253	2.11 ug/mL#	83
47) 2,6-Dinitrotoluene	11.75	165	113374	1.91 ug/mL	95
48) Acenaphthene	12.03	153	526589	2.21 ug/mL	100
49) 3-Nitroaniline	11.98	138	62484m	0.94 ug/mL	
50) 2,4-Dinitrophenol	12.13	184	11472	0.40 ug/mL#	22
51) Dibenzofuran	12.27	168	726274	2.17 ug/mL	96
52) 2,4-Dinitrotoluene	12.36	165	142001	1.79 ug/mL	97
53) 4-Nitrophenol	12.27	109	12928m	0.43 ug/mL	
54) Fluorene	12.79	166	604244	2.28 ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	260677	2.15 ug/mL	99
56) Diethylphthalate	12.71	149	591621	2.16 ug/mL	100
57) 4-Nitroaniline	12.92	138	65118m	1.00 ug/mL	
59) 4,6-Dinitro-2-methylphenol	12.95	198	51853	1.13 ug/mL#	100
60) Azobenzene	13.02	182	157830	2.00 ug/mL	92
61) n-Nitrosodiphenylamine	12.99	169	367357	1.95 ug/mL	97
63) 4-Bromophenyl-phenylether	13.51	248	125438	1.92 ug/mL	98
64) Hexachlorobenzene	13.72	284	151153	2.18 ug/mL	99
65) Atrazine	13.80	200	133292	2.09 ug/ml	98
66) Pentachlorophenol	13.98	266	11936m	0.30 ug/mL	
67) Phenanthrene	14.19	178	849308	2.20 ug/mL	99
68) Anthracene	14.25	178	867576	2.24 ug/mL	99
69) Carbazole	14.49	167	749044	2.15 ug/mL	99
70) Di-n-butylphthalate	15.00	149	1077033	2.32 ug/mL	100
71) Fluoranthene	15.84	202	920768	2.37 ug/mL	97
74) Pyrene	16.15	202	941010	2.26 ug/mL	98
76) Butylbenzylphthalate	17.01	149	480202	2.19 ug/mL	99
77) 3,3'-Dichlorobenzidine	17.76	252	108683m	0.82 ug/mL	
78) Benz[a]anthracene	17.78	228	814988	2.06 ug/mL	98
79) Chrysene	17.84	228	940573	2.53 ug/mL	97
80) bis(2-Ethylhexyl)phthalate	17.78	149	723206	2.26 ug/mL	100
82) Di-n-octylphthalate	18.67	149	1087872	2.10 ug/mL	99
83) Benzo[b]fluoranthene	19.51	252	756965	1.93 ug/mL	98
84) Benzo[k]fluoranthene	19.54	252	968762m	2.67 ug/mL	
85) Benzo[a]pyrene	20.14	252	746276	2.06 ug/mL	97
86) Indeno[1,2,3-cd]pyrene	22.80	276	892279m	2.09 ug/mL	
87) Dibenz[a,h]anthracene	22.82	278	756325m	2.03 ug/mL	
88) Benzo[g,h,i]perylene	23.57	276	766590m	2.11 ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCS09.D
Acq On : 28 May 2008 10:13 pm
Operator : JAD
Sample : SS043008LCS09
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 30 15:25:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **SS043008LCSD09**
Associated Blank: **SS043008B17**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/28/08	100	2.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	**5000**		3-Nitroaniline	**2500**	
Phenol	**4500**	S	2,4-Dinitrophenol	**1920**	
2-Chlorophenol	**4920**	S	Dibenzofuran	**5500**	
1,3-Dichlorobenzene	**5080**		2,4-Dinitrotoluene	**5120**	S
1,4-Dichlorobenzene	**5100**	S	4-Nitrophenol	**2200**	S
1,2-Dichlorobenzene	**5220**		Fluorene	**5650**	
bis(2-Chloroisopropyl)ether	**4970**		4-Chlorophenyl-phenylether	**5300**	
2-Methylphenol	**3100**		Diethylphthalate	**5400**	
Hexachloroethane	**5000**		4-Nitroaniline	**3000**	
n-Nitroso-di-n-propylamine	**5620**	S	4,6-Dinitro-2-methylphenol	**3920**	
4-Methylphenol	**3280**		n-Nitrosodiphenylamine	**4850**	
Nitrobenzene	**5050**		4-Bromophenyl-phenylether	**4850**	
Isophorone	**5320**		Hexachlorobenzene	**5420**	
2-Nitrophenol	**5000**		Pentachlorophenol	**1270**	S
2,4-Dimethylphenol	1250	U	Phenanthrene	**5580**	
bis(2-Chloroethoxy)methane	**5000**		Anthracene	**5600**	
2,4-Dichlorophenol	**4320**		Carbazole	**5520**	
1,2,4-Trichlorobenzene	**5100**	S	Di-n-butylphthalate	**5750**	
Naphthalene	**5450**		Fluoranthene	**5900**	
4-Chloroaniline	**1550**		Pyrene	**5850**	S
Hexachlorobutadiene	**5720**		Butylbenzylphthalate	**5850**	
4-Chloro-3-methylphenol	**4400**	S	3,3'-Dichlorobenzidine	**1650**	
2-Methylnaphthalene	**5200**		Benz[a]anthracene	**5300**	
Hexachlorocyclopentadiene	**4120**		Chrysene	**6250**	
2,4,6-Trichlorophenol	**4350**		bis(2-Ethylhexyl)phthalate	**5920**	
2,4,5-Trichlorophenol	**5150**		Di-n-octylphthalate	**5350**	
2-Chloronaphthalene	**5350**		Benzo[b]fluoranthene	**4950**	
2-Nitroaniline	**4750**		Benzo[k]fluoranthene	**6400**	
Acenaphthylene	**5480**		Benzo[a]pyrene	**5180**	
Dimethylphthalate	**5220**		Indeno[1,2,3-cd]pyrene	**5320**	
2,6-Dinitrotoluene	**5200**		Dibenz[a,h]anthracene	**5120**	
Acenaphthene	**5520**	S	Benzo[g,h,i]perylene	**5280**	

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	74	25-121
Phenol-d5	72	24-113
Nitrobenzene-d5	79	23-120
2-Fluorobiphenyl	81	30-115
2,4,6-Tribromophenol	62	19-122
Terphenyl-d14	88	18-137

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCSD09.D
Acq On : 28 May 2008 10:49 pm
Operator : JAD
Sample : SS043008LCSD09
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 30 15:26:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration

6/9/08 JAD for WS JAD

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	705189	5.00	ug/mL	0.00
21) Naphthalene-d8	9.08	136	2820357	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.98	164	1576495	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.15	188	2527634	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	2430104	5.00	ug/mL	0.00
81) Perylene-d12	20.25	264	2394001	5.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	5.38	112	523222	2.95	ug/mL	0.02
Spiked Amount 20.000	Range 21 - 100		Recovery	=	14.75%#	
8) Phenol-d5	6.69	99	639124	2.89	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	14.45%	
22) Nitrobenzene-d5	7.98	82	541726	3.14	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	15.70%#	
41) 2-Fluorobiphenyl	10.91	172	1352348	3.22	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	16.10%#	
62) 2,4,6-Tribromophenol	13.19	330	128175	2.49	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	12.45%	
75) Terphenyl-d14	16.34	244	1570428	3.52	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	17.60%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	191168	2.41	ug/mL#	97
3) Pyridine	3.43	79	203436	1.29	ug/mL	96
5) Benzaldehyde	6.51	77	210900	1.75	ug/ml	99
6) Aniline	6.71	66	239353	1.22	ug/ml#	45
7) bis(2-Chloroethyl)ether	6.80	63	280172	2.00	ug/mL	97
9) Phenol	6.71	94	478501	1.80	ug/mL#	74
10) 2-Chlorophenol	6.86	128	418867	1.97	ug/mL	95
11) 1,3-Dichlorobenzene	7.05	146	480222	2.03	ug/mL	100
12) 1,4-Dichlorobenzene	7.12	146	491028m	2.04	ug/mL	
13) 1,2-Dichlorobenzene	7.40	146	470060	2.09	ug/mL	99
14) Benzyl alcohol	7.40	108	29626	0.23	ug/mL#	42
15) bis(2-chloroisopropyl)ethe	7.58	45	714443	1.99	ug/mL#	100
16) 2-Methylphenol	7.56	108	232393	1.24	ug/mL	99
17) Acetophenone	7.74	105	549346	2.04	ug/ml	93
18) Hexachloroethane	7.85	117	166496	2.00	ug/mL	98
19) N-Nitroso-di-n-propylamine	7.78	70	234284	2.25	ug/mL	100
20) 4-Methylphenol	7.77	108	265165	1.31	ug/mL	97
23) Nitrobenzene	8.00	77	385921	2.02	ug/mL	100
24) Isophorone	8.36	82	708026	2.13	ug/mL	100
25) 2-Nitrophenol	8.51	139	217140	2.00	ug/mL	98
27) Benzoic acid	8.74	105	59251m	0.46	ug/mL	
28) bis(2-Chloroethoxy)methane	8.73	93	466738	2.00	ug/mL	98
29) 2,4-Dichlorophenol	8.89	162	283155	1.73	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.02	180	356263	2.04	ug/mL	98
31) Naphthalene	9.12	128	1368451	2.18	ug/mL	100
32) 4-Chloroaniline	9.27	127	156498	0.62	ug/mL	99
33) Hexachlorobutadiene	9.43	225	201234	2.29	ug/mL	98
34) Caprolactam	9.76	113	123128m	1.85	ug/ml	
35) 4-Chloro-3-methylphenol	10.10	107	304345	1.76	ug/mL	99
36) 2-Methylnaphthalene	10.27	142	884485m	2.08	ug/mL	
38) Hexachlorocyclopentadiene	10.65	237	177523	1.65	ug/mL	99
39) 2,4,6-Trichlorophenol	10.80	196	186278m	1.74	ug/mL	
40) 2,4,5-Trichlorophenol	10.87	196	242465m	2.06	ug/mL	
42) Biphenyl	11.05	154	1170943	2.42	ug/ml	98

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCSD09.D
Acq On : 28 May 2008 10:49 pm
Operator : JAD
Sample : SS043008LCSD09
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 30 15:26:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration

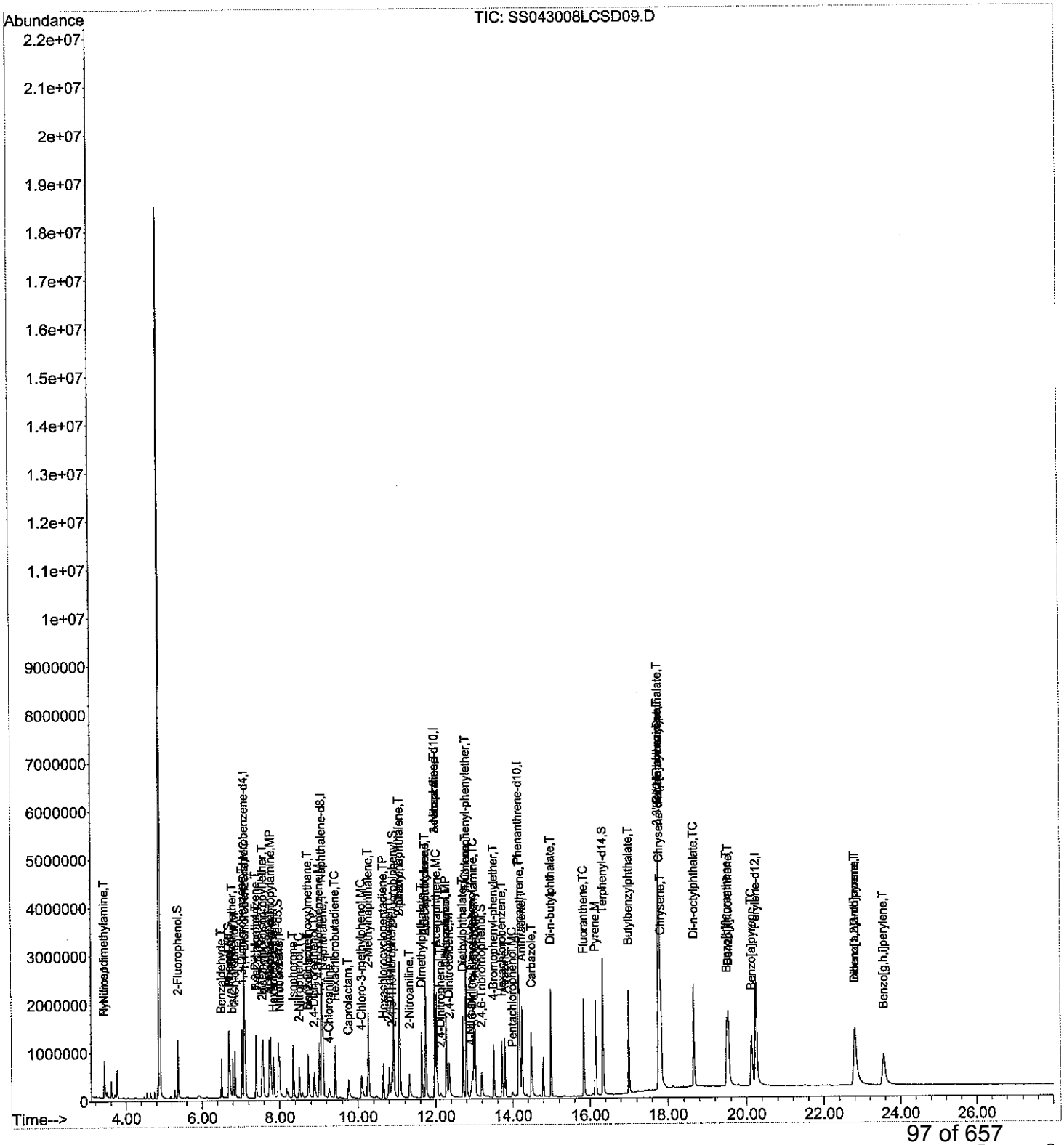
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2-Chloronaphthalene	11.07	162	809088	2.14 ug/mL	99
44) 2-Nitroaniline	11.31	65	195099	1.90 ug/mL	96
45) Acenaphthylene	11.74	152	1374220	2.19 ug/mL	100
46) Dimethylphthalate	11.64	163	952141	2.09 ug/mL#	83
47) 2,6-Dinitrotoluene	11.75	165	207625	2.08 ug/mL	98
48) Acenaphthene	12.03	153	884745	2.21 ug/mL	100
49) 3-Nitroaniline	11.97	138	112034m	1.00 ug/mL	
50) 2,4-Dinitrophenol	12.12	184	37646	0.77 ug/mL#	94
51) Dibenzofuran	12.27	168	1233017	2.20 ug/mL	92
52) 2,4-Dinitrotoluene	12.35	165	273268	2.05 ug/mL	100
53) 4-Nitrophenol	12.27	109	44198m	0.88 ug/mL	
54) Fluorene	12.79	166	1005749	2.26 ug/mL	99
55) 4-Chlorophenyl-phenylether	12.80	204	432161	2.12 ug/mL	99
56) Diethylphthalate	12.71	149	994727	2.16 ug/mL	100
57) 4-Nitroaniline	12.91	138	131251m	1.20 ug/mL	
59) 4,6-Dinitro-2-methylphenol	12.95	198	121921	1.57 ug/mL#	100
60) Azobenzene	13.02	182	269321	2.02 ug/mL	96
61) n-Nitrosodiphenylamine	12.99	169	619732	1.94 ug/mL	99
63) 4-Bromophenyl-phenylether	13.51	248	214765	1.94 ug/mL	98
64) Hexachlorobenzene	13.72	284	254771	2.17 ug/mL	99
65) Atrazine	13.80	200	230604	2.13 ug/ml	99
66) Pentachlorophenol	13.99	266	34508m	0.51 ug/mL	
67) Phenanthrene	14.19	178	1453082	2.23 ug/mL	100
68) Anthracene	14.24	178	1470610	2.24 ug/mL	99
69) Carbazole	14.49	167	1301021	2.21 ug/mL	98
70) Di-n-butylphthalate	15.00	149	1809333	2.30 ug/mL	100
71) Fluoranthene	15.84	202	1550463	2.36 ug/mL	98
74) Pyrene	16.15	202	1616036	2.34 ug/mL	97
76) Butylbenzylphthalate	17.00	149	849999	2.34 ug/mL	99
77) 3,3'-Dichlorobenzidine	17.76	252	144643	0.66 ug/mL#	94
78) Benz[a]anthracene	17.78	228	1389326	2.12 ug/mL	99
79) Chrysene	17.84	228	1539799	2.50 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	1255219	2.37 ug/mL	100
82) Di-n-octylphthalate	18.67	149	1892623	2.14 ug/mL	99
83) Benzo[b]fluoranthene	19.51	252	1328625	1.98 ug/mL	97
84) Benzo[k]fluoranthene	19.54	252	1585188m	2.56 ug/mL	
85) Benzo[a]pyrene	20.14	252	1286010	2.07 ug/mL	97
86) Indeno[1,2,3-cd]pyrene	22.80	276	1553344	2.13 ug/mL	96
87) Dibenz[a,h]anthracene	22.81	278	1310136	2.05 ug/mL	97
88) Benzo[g,h,i]perylene	23.56	276	1313952	2.11 ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\NEWFIE-MAY28\
Data File : SS043008LCSD09.D
Acq On : 28 May 2008 10:49 pm
Operator : JAD
Sample : SS043008LCSD09
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 30 15:26:00 2008
Quant Method : C:\MSDCHEM\1\DATA\BNA4\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 23 10:30:35 2008
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S4052801.S
Comment:
Operator: JAD
Data Path: C:\MSDCHEM\1\DATA\MAY\MAY28\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	1	
Datafile		S4052801
Method		8270BACK0516
2) Sample	2	
Datafile		T4052801
Method		8270BACK0516
3) Sample	7	
Datafile		C4052801
Method		8270BACK0516
4) Sample	10	
Datafile		S4052802
Method		8270BACK0516
5) Sample	2	
Datafile		T4052802 pass
Method		8270BACK0516
6) Sample	7	
Datafile		C4052802 10.0ng/mL
Method		8270BACK0516
7) Sample	10	
Datafile		S4052803
Method		8270BACK0516
8) Sample	11	
Datafile		SS043008B17 ✓
Method		8270BACK0516
9) Sample	12	
Datafile		SS043008LCS09
Method		8270BACK0516
10) Sample	13	
Datafile		SS043008LCSD09
Method		8270BACK0516
11) Sample	14	
Datafile		0804115-12-D10
Method		8270BACK0516
12) Sample	15	
Datafile		0804115-16-D10 ✓
Method		8270BACK0516
13) Sample	16	
Datafile		0804115-11-D10
Method		8270BACK0516
14) Sample	17	
Datafile		0804115-14-D10
Method		8270BACK0516
15) Sample	18	
Datafile		0804115-02-D10 ✓
Method		8270BACK0516
16) Sample	19	
Datafile		0804115-04-D10
Method		8270BACK0516
17) Sample	20	
Datafile		0804115-13-D10
Method		8270BACK0516
18) Sample	21	
Datafile		S4052804
Method		8270BACK0516

19) Sample 22
Datafile S4052805
Method 8270BACK0516
20) Sample 2
Datafile T4052803
Method 8270BACK0516
21) Sample 7
Datafile C4052803
Method 8270BACK0516
22) Sample 10
Datafile S4052806
Method 8270BACK0516
23) Sample 23
Datafile 0804115-01-D10
Method 8270BACK0516
24) Sample 24
Datafile 0804115-15-D10
Method 8270BACK0516
25) Sample 25
Datafile 0804115-01D-D10
Method 8270BACK0516
26) Sample 26
Datafile 0804115-03-D10
Method 8270BACK0516
27) Sample 27
Datafile 0804115-08-D10
Method 8270BACK0516
28) Sample 28
Datafile 0804115-09-D10
Method 8270BACK0516
29) Sample 29
Datafile 0804115-10-D10
Method 8270BACK0516
30) Sample 30
Datafile 0804115-06-D10
Method 8270BACK0516
31) Sample 31
Datafile 0804115-05-D10
Method 8270BACK0516
32) Sample 32
Datafile 0804115-07-D10
Method 8270BACK0516
33) Sample 33
Datafile S4052807
Method 8270BACK0516
34) Sample 34
Datafile S4052808
Method 8270BACK0516
35) Sample 35
Datafile S4052809
Method 8270BACK0516
36) Sample 2
Datafile T4052901
Method 8270BACK0516 V 2:34 pm
37) Sample 7
Datafile C4052901 P
Method 8270BACK0516
38) Sample 10
Datafile S4052901
Method 8270BACK0516
39) Sample 36
Datafile SS051308B02
Method 8270BACK0516
40) Sample 37
Datafile SW052708B21
Method 8270BACK0516
41) Sample 38
Datafile SW052708LCS02
Method 8270BACK0516
42) Sample 39
Datafile SW052708LCSD01
Method 8270BACK0516

```
   Sequence Name: C:\MSDChem\1\sequence\S4060601.S
         Comment:
        Operator: SEO
       Data Path: C:\MSDCHEM\1\DATA\JUNE\JUNE06\
Top                    Pre-Seq Cmd:
Instrument Control     Pre-Seq Cmd:
Data Analysis          Pre-Seq Cmd:

Top                   Post-Seq Cmd:
Instrument Control    Post-Seq Cmd:
Data Analysis         Post-Seq Cmd:

   Method Sections To Run      On A Barcode Mismatch
     (X) Full Method             (X) Inject Anyway
     ( ) Reprocessing Only       ( ) Don't Inject

   ---------------------------------------------------------------------------
   Line                      Sample Name/Misc Info
 1) Sample          1
     Datafile           PHENOLPRIME1
     Method             8270BACK2UL
 2) Sample          1
     Datafile           PHENOLPRIME2
     Method             8270BACK2UL
 3) Sample          1
     Datafile           PHENOLPRIME3
     Method             8270BACK2UL
 4) Sample          4
     Datafile           DCM1
     Method             8270BACK0516
 5) Sample          5
     Datafile           T4060601
     Method             8270BACK0516
 6) Sample          6
     Datafile           C4060601
     Method             8270BACK0516
 7) Sample          1
     Datafile           PHENOLPRIME4
     Method             8270BACK2UL
 8) Sample          1
     Datafile           PHENOLPRIME5
     Method             8270BACK2UL
 9) Sample          1
     Datafile           PHENOLPRIME6
     Method             8270BACK2UL
10) Sample          4
     Datafile           DCM2
     Method             8270BACK0516
11) Sample          5
     Datafile           T4060602  pass
     Method             8270BACK0516
12) Sample          6
     Datafile           C4060602  10.0ug/mL
     Method             8270BACK0516
13) Sample          7
     Datafile           0804115-12 ✓
     Method             8270BACK0516
14) Sample          8
     Datafile           0804115-16 ✓
     Method             8270BACK0516
15) Sample          9
     Datafile           0804115-11 ✓
     Method             8270BACK0516
16) Sample         10
     Datafile           0804115-14 ✓
     Method             8270BACK0516
17) Sample         11
     Datafile           0804115-02 ✓
     Method             8270BACK0516
18) Sample         12
     Datafile           0804115-04 ✓
     Method             8270BACK0516
```

19) Sample 13
Datafile 0804115-13 ✓
Method 8270BACK0516
20) Sample 14
Datafile 0804115-01 ✓
Method 8270BACK0516
21) Sample 15
Datafile 0804115-01D ✓
Method 8270BACK0516
22) Sample 16
Datafile 0804115-15 ✓
Method 8270BACK0516
23) Sample 17
Datafile 0804115-03 ✓
Method 8270BACK0516
24) Sample 18
Datafile 0804115-08 ✓
Method 8270BACK0516
25) Sample 19
Datafile 0804115-09 ✓
Method 8270BACK0516
26) Sample 20
Datafile 0804115-10 ✓
Method 8270BACK0516
27) Sample 21
Datafile 0804115-06 ✓
Method 8270BACK0516
28) Sample 22
Datafile 0804115-05 ✓
Method 8270BACK0516
29) Sample 23
Datafile 0804115-07 ✓
Method 8270BACK0516
30) Sample 1
Datafile PHENOLPRIME7
Method 8270BACK2UL
31) Sample 1
Datafile PHENOLPRIME8
Method 8270BACK2UL
32) Sample 1
Datafile PHENOLPRIME9
Method 8270BACK2UL
33) Sample 4
Datafile DCM3
Method 8270BACK0516
34) Sample 5
Datafile T4060603
Method 8270BACK0516
35) Sample 6
Datafile C4060603
Method 8270BACK0516

Sequence Name: C:\MSDChem\1\sequence\S4060701.S
Comment:
Operator: SEO
Data Path: C:\MSDCHEM\1\DATA\JUNE\JUNE07\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	3	
Datafile		T4060701
Method		8270BACK0516
2) Sample	4	
Datafile		C4060701
Method		8270BACK0516
3) Sample	1	
Datafile		PHENOLPRIME1
Method		8270BACK2UL
4) Sample	1	
Datafile		PHENOLPRIME2
Method		8270BACK2UL
5) Sample	1	
Datafile		PHENOLPRIME3
Method		8270BACK2UL
6) Sample	1	
Datafile		PHENOLPRIME4
Method		8270BACK2UL
7) Sample	2	
Datafile		DCM1
Method		8270BACK0516
8) Sample	3	
Datafile		T4060702
Method		8270BACK0516
9) Sample	3	
Datafile		T4060703 ✓ Pass
Method		8270BACK0516
10) Sample	4	
Datafile		C4060702 ✓ 10.0ug/mL pass for BIS dilutions
Method		8270BACK0516
11) Sample	5	
Datafile		0804116-01
Method		8270BACK0516
12) Sample	6	
Datafile		0804116-01D
Method		8270BACK0516
13) Sample	7	
Datafile		0804116-02
Method		8270BACK0516
14) Sample	8	
Datafile		0804116-03
Method		8270BACK0516
15) Sample	9	
Datafile		0804116-04
Method		8270BACK0516
16) Sample	10	
Datafile		0804116-05
Method		8270BACK0516
17) Sample	11	
Datafile		0804116-06
Method		8270BACK0516
18) Sample	12	
Datafile		0804116-07
Method		8270BACK0516

19) Sample 13
Datafile 0804116-08
Method 8270BACK0516
20) Sample 14
Datafile 0804116-09
Method 8270BACK0516
21) Sample 15
Datafile 0804116-10
Method 8270BACK0516
22) Sample 16
Datafile 0804115-07-RE
Method 8270BACK0516
23) Sample 17
Datafile 0804115-08-RE ✓
Method 8270BACK0516
24) Sample 18
Datafile 0804115-09-RE
Method 8270BACK0516
25) Sample 19
Datafile 0804115-10-RE ✓
Method 8270BACK0516

Sequence Name: C:\MSDChem\1\sequence\S4060901.S
Comment:
Operator: SEO
Data Path: C:\MSDCHEM\1\DATA\JUNE\JUNE09\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	3	
Datafile		TEST1
Method		8270BACK0516
2) Sample	2	
Datafile		T4060901
Method		8270BACK0516
3) Sample	3	
Datafile		C4060901
Method		8270BACK0516
4) Sample	1	
Datafile		PHENOLPRIME1
Method		8270BACK2UL
5) Sample	1	
Datafile		PHENOLPRIME2
Method		8270BACK2UL
6) Sample	4	
Datafile		DCM1
Method		8270BACK0516
7) Sample	2	
Datafile		T4060902 P
Method		8270BACK0516
8) Sample	3	10ul/ml pass for Bis-dilutions
Datafile		C4060902
Method		8270BACK0516
9) Sample	5	
Datafile		0804115-07-RE ✓
Method		8270BACK0516
10) Sample	6	
Datafile		0804115-09-RE ✓
Method		8270BACK0516
11) Sample	7	
Datafile		SS043008LCS09
Method		8270BACK0516
12) Sample	8	
Datafile		SS043008LCSD09
Method		8270BACK0516
13) Sample	22	
Datafile		0804115-11
Method		8270BACK0516
14) Sample	9	
Datafile		SS050108LCS03
Method		8270BACK0516
15) Sample	10	
Datafile		SS050108LCSD03
Method		8270BACK0516
16) Sample	1	
Datafile		PHENOLPRIME3
Method		8270BACK0516
17) Sample	2	
Datafile		PHENOLPRIME4
Method		8270BACK0516
18) Sample	4	
Datafile		DCM2
Method		8270BACK0516

Supporting Quality Control Results

Form IV
Method Blank Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **SS043008B17**
Date Analyzed: **05/28/08 21:37**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS043008LCS09	05/28/08 22:13
LCSD	SS043008LCSD09	05/28/08 22:49
T4-Tank 8-G	0804115-16E	05/29/08 00:02
T4-Tank 1-G	0804115-02E	05/29/08 01:51
T4-Tank 6-G	0804115-12	06/06/08 16:32
T4-Tank 8-G	0804115-16	06/06/08 17:07
T4-Tank 6	0804115-11	06/06/08 17:43
T4-Tank 7-G	0804115-14	06/06/08 18:19
T4-Tank 1-G	0804115-02	06/06/08 18:55
T4-Tank 2-G	0804115-04	06/06/08 19:31
T4-Tank 7	0804115-13	06/06/08 20:06
T4-Tank 1	0804115-01	06/06/08 20:42
T4-Tank 1	0804115-01 D	06/06/08 21:18
T4-Tank 8	0804115-15	06/06/08 21:54
T4-Tank 2	0804115-03	06/06/08 22:30
T4-Tank 4-G	0804115-08	06/06/08 23:06
T4-Tank 5	0804115-09	06/06/08 23:41
T4-Tank 5-G	0804115-10	06/07/08 00:17
T4-Tank 3-G	0804115-06	06/07/08 00:53
T4-Tank 3	0804115-05	06/07/08 01:29
T4-Tank 4	0804115-07	06/07/08 02:05
T4-Tank 4-G	0804115-08E	06/08/08 00:51
T4-Tank 5-G	0804115-10E	06/08/08 02:04
T4-Tank 4	0804115-07E	06/09/08 14:45
T4-Tank 5	0804115-09E	06/09/08 15:22

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sequence Name: C:\MSDCHEM\1\sequence\S4051601.S
Comment:
Operator: JAD
Data Path: C:\MSDCHEM\1\DATA\MAY\MAY15\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	1	
Datafile		S4051601
Method		8270BACK0516
2) Sample	2	
Datafile		T4051601
Method		8270BACK0516
3) Sample	3	
Datafile		S4051602
Method		8270BACK0516
4) Sample	4	
Datafile		I4051601 .5 ug/mL
Method		8270BACK0516
5) Sample	5	
Datafile		I4051602 2.0 ug/mL
Method		8270BACK0516
6) Sample	6	
Datafile		I4051603 5.0 ug/mL
Method		8270BACK0516
7) Sample	7	
Datafile		I4051604 10.0 ug/mL
Method		8270BACK0516
8) Sample	8	
Datafile		I4051605 15.0 ug/mL
Method		8270BACK0516
9) Sample	9	
Datafile		I4051606 20.0 ug/mL
Method		8270BACK0516
10) Sample	10	
Datafile		S4051603
Method		8270BACK0516
11) Sample	11	
Datafile		Q4051601 ← ICV - 10.0 ug/mL
Method		8270BACK0516
12) Sample	12	
Datafile		S4051604
Method		8270BACK0516
13) Sample	13	
Datafile		S4051605
Method		8270BACK0516

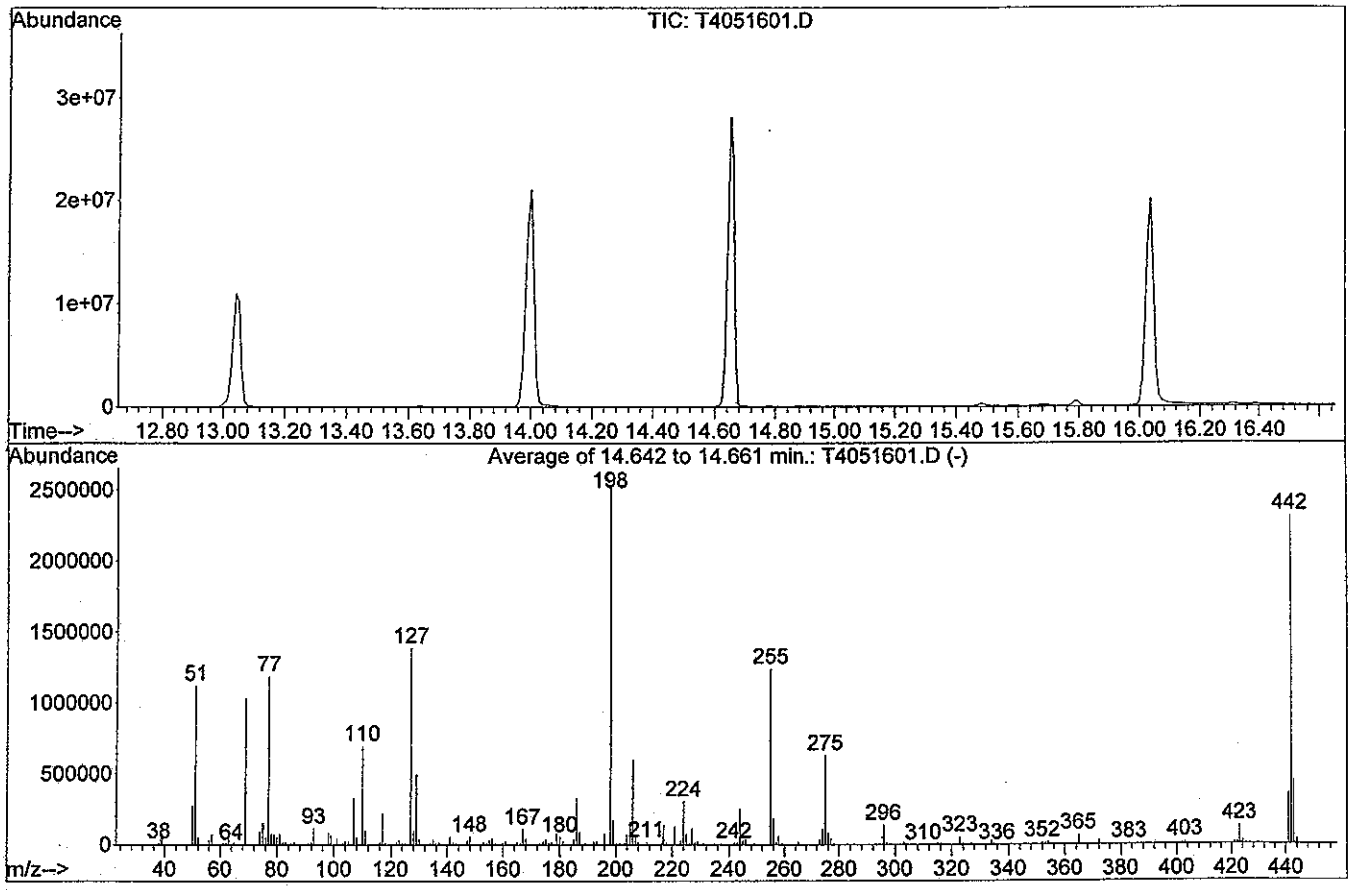
ICal SVLV0516BNA4.M

Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/16/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0515BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri May 16 11:18:06 2008



AutoFind: Scans 1244, 1245, 1246; Background Corrected with Scan 1240

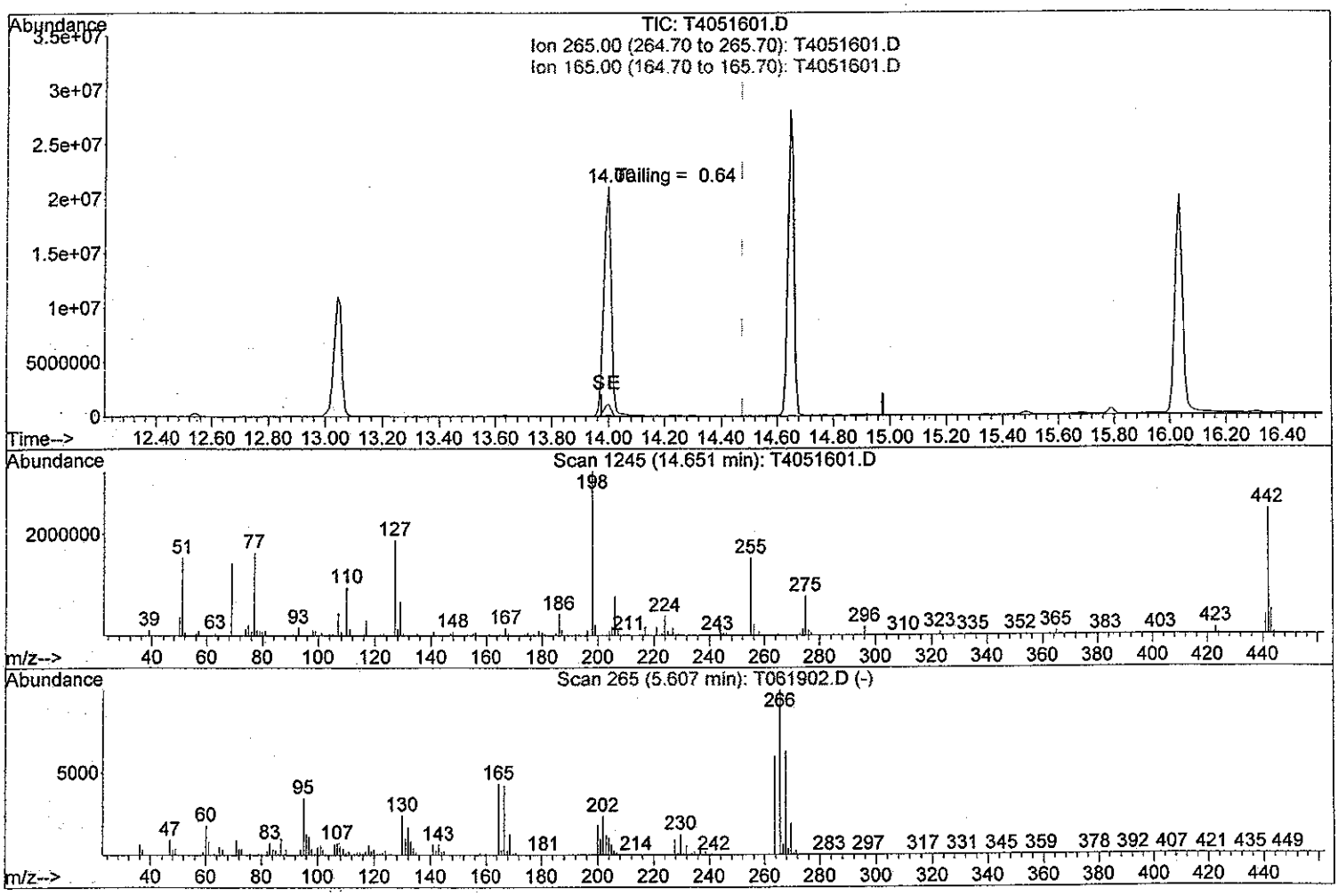
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.4	1122758	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.0	1038520	PASS
70	69	0.00	2	0.5	4891	PASS
127	198	40	60	54.9	1388473	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2530653	PASS
199	198	5	9	6.7	170435	PASS
275	198	10	30	25.0	632034	PASS
365	198	1	100	2.8	69629	PASS
441	443	0.01	100	80.6	362072	PASS
442	198	40	100	91.5	2316591	PASS
443	442	17	23	19.4	449414	PASS

Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/16/08

Quant Time: May 16 18:19:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



TIC: T4051601.D

(1) Pentachlorophenol (T)

14.651min (+0.176) 93.97ug/ml

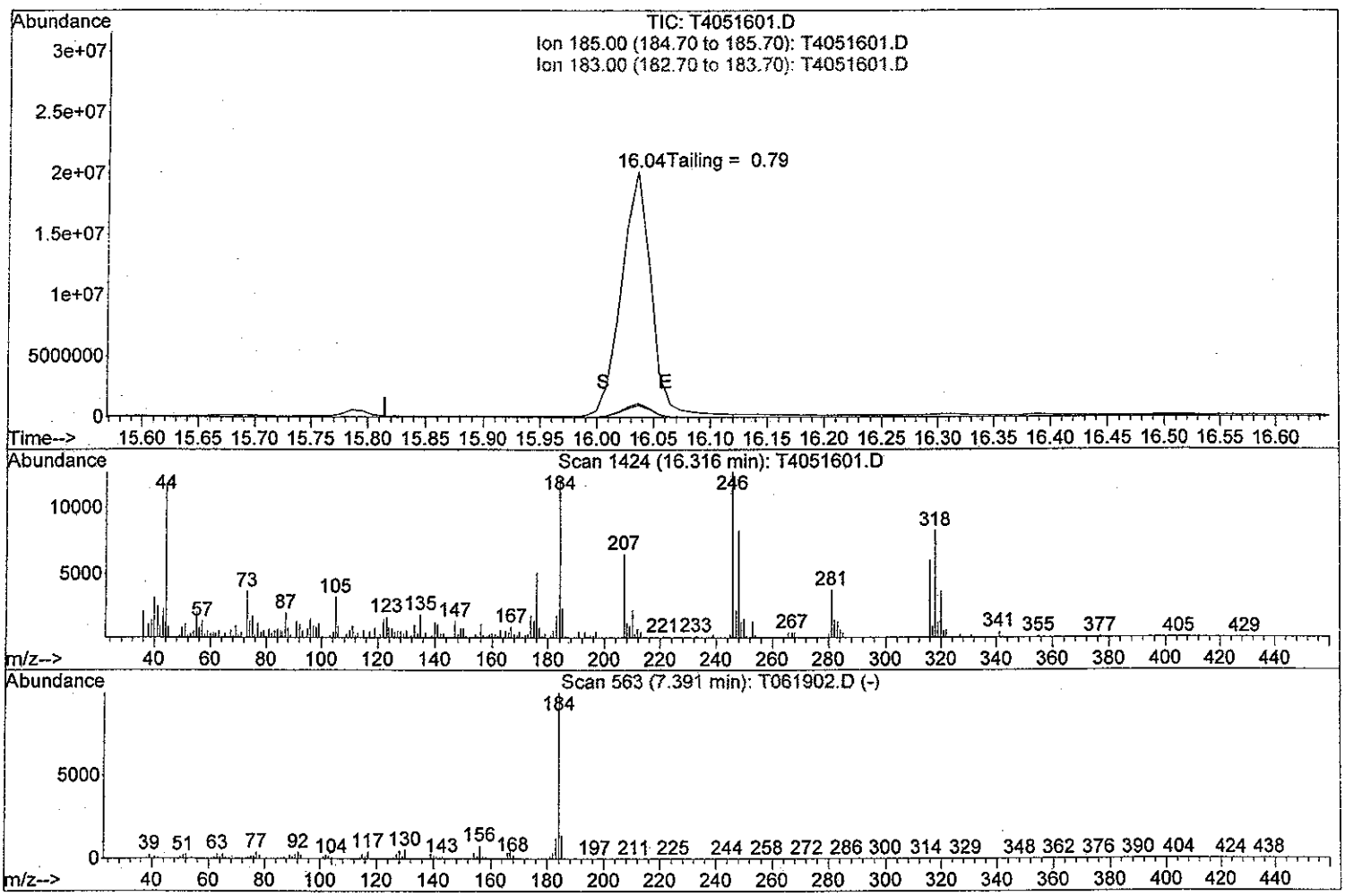
response 42162332

Signal	Exp%	Act%
TIC	100	100
265.00	0.00	0.11#
165.00	535.00	0.10#
0.00	0.00	0.00

Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/16/08

Quant Time: May 16 18:19:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



TIC: T4051601.D

(3) Benzidine (T)

16.315min (-16.315) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	567.20	0.00
183.00	508.20	0.00
0.00	0.00	0.00

Response Factor Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Calibration Files
0.5 =I4051601.D 2 =I4051602.D 5 =I4051603.D
10 =I4051604.D 15 =I4051605.D 25 =I4051606.D

		Compound	0.5	2	5	10	15	25	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------	----------	----------	ISTD	----------	----------	----------	
2)	T	N-Nitrosodimethyl	0.523	0.551	0.548	0.599	0.602	0.557	0.563	5.52
3)	t	Pyridine	1.073	1.121	1.047	1.198	1.170	1.081	1.115	5.31
4)	S	2-Fluorophenol	1.223	1.218	1.302	1.273	1.291	1.232	1.256	2.92
5)	T	Benzaldehyde	0.870	0.860	0.913	0.842	0.863	0.775	0.854	5.33
6)	T	Aniline	1.377	1.372	1.433	1.407	1.420	1.356	1.394	2.17
7)	T	bis(2-Chloroethyl	0.986	0.959	0.995	0.998	1.020	0.998	0.993	2.00
8)	S	Phenol-d5	1.528	1.521	1.622	1.595	1.610	1.531	1.568	2.94
9)	MC	Phenol	1.874	1.846	1.940	1.896	1.923	1.824	1.884	2.36#✓
10)	M	2-Chlorophenol	1.495	1.467	1.563	1.518	1.546	1.478	1.511	2.52
11)	T	1,3-Dichlorobenze	1.646	1.660	1.735	1.673	1.693	1.634	1.674	2.17
12)	MC	1,4-Dichlorobenze	1.730	1.675	1.751	1.713	1.738	1.655	1.710	2.21#✓
13)	T	1,2-Dichlorobenze	1.614	1.562	1.634	1.595	1.610	1.556	1.595	1.93
14)	T	Benzyl alcohol	0.784	0.849	0.963	0.971	0.999	0.981	0.925	9.42
15)	T	bis(2-chloroisopr	2.597	2.509	2.669	2.535	2.558	2.439	2.551	3.06
16)	T	2-Methylphenol	1.282	1.272	1.374	1.348	1.374	1.319	1.328	3.36
17)	T	Acetophenone	1.877	1.817	1.969	1.921	1.965	1.896	1.908	3.02
18)	T	Hexachloroethane	0.581	0.557	0.610	0.598	0.605	0.590	0.590	3.30
19)	MP	N-Nitroso-di-n-pr	0.692	0.729	0.713	0.780	0.784	0.735	0.739	4.95
20)	T	4-Methylphenol	1.390	1.392	1.484	1.469	1.478	1.411	1.438	3.07
21)	I	Naphthalene-d8	----------	----------	----------	ISTD	----------	----------	----------	
22)	S	Nitrobenzene-d5	0.281	0.295	0.315	0.316	0.316	0.313	0.306	4.69
23)	T	Nitrobenzene	0.313	0.333	0.352	0.349	0.350	0.339	0.339	4.39
24)	T	Isophorone	0.544	0.567	0.617	0.604	0.604	0.601	0.590	4.75
25)	TC	2-Nitrophenol	0.157	0.179	0.202	0.205	0.208	0.207	0.193	10.78#✓
26)	T	2,4-Dimethylpheno	0.323	0.334	0.350	0.344	0.337	0.327	0.336	3.02
27)	T	Benzoic acid	0.148	0.197	0.249	0.253	0.259	0.265	0.229	20.25—
28)	T	bis(2-Chloroethox	0.411	0.398	0.430	0.418	0.419	0.411	0.415	2.58
29)	TC	2,4-Dichloropheno	0.261	0.283	0.298	0.300	0.301	0.295	0.290	5.40#✓
30)	M	1,2,4-Trichlorobe	0.313	0.302	0.317	0.311	0.309	0.303	0.309	1.92
31)	T	Naphthalene	1.126	1.122	1.152	1.120	1.117	1.038	1.113	3.47
32)	T	4-Chloroaniline	0.408	0.428	0.464	0.461	0.461	0.453	0.446	5.11
33)	TC	Hexachlorobutadie	0.152	0.153	0.162	0.156	0.158	0.155	0.156	2.41#✓
34)	T	Caprolactam	0.137	0.105	0.116	0.116	0.117	0.117	0.118	8.70
35)	MC	4-Chloro-3-methyl	0.276	0.295	0.318	0.317	0.320	0.315	0.307	5.82#✓
36)	T	2-Methylnaphthale	0.747	0.744	0.780	0.760	0.757	0.733	0.754	2.12
37)	I	Acenaphthene-d10	----------	----------	----------	ISTD	----------	----------	----------	
38)	TP	Hexachlorocyclope	0.309	0.321	0.350	0.352	0.364	0.352	0.341	6.21
39)	TC	2,4,6-Trichloroph	0.308	0.329	0.350	0.349	0.353	0.347	0.339	5.21#✓
40)	T	2,4,5-Trichloroph	0.339	0.361	0.382	0.391	0.388	0.380	0.374	5.40
41)	S	2-Fluorobiphenyl	1.340	1.334	1.372	1.334	1.345	1.277	1.334	2.33
42)	T	Biphenyl	1.550	1.544	1.585	1.542	1.549	1.449	1.537	2.97
43)	T	2-Chloronaphthale	1.208	1.202	1.230	1.198	1.214	1.146	1.200	2.38
44)	T	2-Nitroaniline	0.255	0.305	0.337	0.348	0.357	0.349	0.325	11.96
45)	T	Acenaphthylene	1.963	1.987	2.060	2.032	2.039	1.859	1.990	3.69
46)	T	Dimethylphthalate	1.404	1.418	1.475	1.466	1.482	1.434	1.447	2.25
47)	T	2,6-Dinitrotoluen	0.244	0.296	0.331	0.342	0.345	0.337	0.316	12.42
48)	MC	Acenaphthene	1.299	1.252	1.308	1.260	1.276	1.218	1.269	2.60#✓
49)	T	3-Nitroaniline	0.275	0.333	0.368	0.380	0.387	0.378	0.354	12.16
50)	TP	2,4-Dinitrophenol	0.066	0.109	0.159	0.186	0.199	0.209	0.155	36.36—
51)	T	Dibenzofuran	1.795	1.773	1.821	1.790	1.802	1.701	1.780	2.35
52)	M	2,4-Dinitrotoluen	0.310	0.390	0.448	0.459	0.472	0.462	0.424	14.80
53)	MP	4-Nitrophenol	0.126	0.136	0.164	0.171	0.174	0.180	0.159	13.97
54)	T	Fluorene	1.411	1.396	1.462	1.422	1.422	1.354	1.411	2.54
55)	T	4-Chlorophenyl-ph	0.654	0.649	0.676	0.647	0.654	0.608	0.648	3.39

Response Factor Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Calibration Files
0.5 =I4051601.D 2 =I4051602.D 5 =I4051603.D
10 =I4051604.D 15 =I4051605.D 25 =I4051606.D

		Compound	0.5	2	5	10	15	25	Avg	%RSD
56)	T	Diethylphthalate	1.422	1.420	1.512	1.476	1.496	1.426	1.459	2.82
57)	T	4-Nitroaniline	0.276	0.329	0.369	0.379	0.375	0.356	0.347	11.39
58)	I	Phenanthrene-d10	----------	----------	----------	ISTD	----------	----------	----------	
59)	T	4,6-Dinitro-2-met	0.082	0.123	0.162	0.180	0.184	0.188	0.153	27.48
60)	T	Azobenzene	0.246	0.257	0.274	0.272	0.272	0.265	0.264	4.12
61)	TC	n-Nitrosodiphenyl	0.594	0.625	0.644	0.643	0.645	0.637	0.631	3.13#
62)	S	2,4,6-Tribromophe	0.091	0.093	0.105	0.107	0.107	0.107	0.102	7.47
63)	T	4-Bromophenyl-phe	0.207	0.214	0.226	0.223	0.225	0.219	0.219	3.27
64)	T	Hexachlorobenzene	0.229	0.226	0.236	0.235	0.234	0.232	0.232	1.71
65)	T	Atrazine	0.202	0.214	0.228	0.222	0.215	0.204	0.214	4.67
66)	MC	Pentachlorophenol	0.089	0.115	0.140	0.149	0.151	0.153	0.133	19.22#
67)	T	Phenanthrene	1.312	1.289	1.324	1.299	1.308	1.212	1.291	3.11
68)	T	Anthracene	1.274	1.285	1.350	1.337	1.310	1.224	1.297	3.54
69)	T	Carbazole	1.220	1.197	1.196	1.169	1.135	1.081	1.166	4.37
70)	T	Di-n-butylphthala	1.452	1.525	1.677	1.670	1.655	1.348	1.554	8.75
71)	TC	Fluoranthene	1.270	1.284	1.355	1.327	1.319	1.241	1.299	3.21#
72)	I	Chrysene-d12	----------	----------	----------	ISTD	----------	----------	----------	
73)	T	Benzidine	0.236	0.328	0.368	0.376	0.388	0.388	0.347	16.96
74)	M	Pyrene	1.409	1.420	1.461	1.441	1.449	1.340	1.420	3.07
75)	S	Terphenyl-d14	0.908	0.911	0.948	0.932	0.935	0.879	0.919	2.69
76)	T	Butylbenzylphthal	0.646	0.698	0.780	0.785	0.800	0.772	0.747	8.13
77)	T	3,3'-Dichlorobenz	0.402	0.432	0.466	0.461	0.472	0.459	0.449	5.91
78)	T	Benz[a]anthracene	1.368	1.351	1.382	1.362	1.350	1.275	1.348	2.80
79)	T	Chrysene	1.279	1.254	1.301	1.255	1.279	1.223	1.265	2.15
80)	T	bis(2-Ethylhexyl)	0.948	1.032	1.152	1.140	1.171	1.105	1.091	7.85
81)	I	Perylene-d12	----------	----------	----------	ISTD	----------	----------	----------	
82)	TC	Di-n-octylphthala	1.540	1.736	2.029	2.045	2.097	1.649	1.849	12.81#
83)	T	Benzo[b]fluoranth	1.399	1.317	1.514	1.492	1.334	1.367	1.404	5.85
84)	T	Benzo[k]fluoranth	1.189	1.331	1.287	1.266	1.425	1.271	1.295	6.06
85)	TC	Benzo[a]pyrene	1.206	1.250	1.337	1.339	1.343	1.300	1.296	4.35#
86)	T	Indeno[1,2,3-cd]p	1.412	1.471	1.585	1.565	1.577	1.536	1.524	4.50
87)	T	Dibenz[a,h]anthra	1.240	1.295	1.377	1.377	1.377	1.332	1.333	4.23
88)	T	Benzo[g,h,i]peryl	1.211	1.248	1.334	1.337	1.349	1.309	1.298	4.29

(#) = Out of Range

Compound List Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	7.11	1.000	A	1	A	B
2	T	N-Nitrosodimethylamine	74	3.43	0.482	A	2	A	B
3	T	Pyridine	79	3.39	0.477	A	1	A	B
4	S	2-Fluorophenol	112	5.36	0.754	A	2	A	B
5	T	Benzaldehyde	77	6.52	0.916	A	2	A	B
6	T	Aniline	66	6.72	0.945	A	2	A	B
7	T	bis(2-Chloroethyl)ether	63	6.81	0.958	A	2	A	B
8	S	Phenol-d5	99	6.70	0.942	A	2	A	B
9	MC	Phenol	94	6.72	0.945	A	2	A	B
10	M	2-Chlorophenol	128	6.86	0.965	A	2	A	B
11	T	1,3-Dichlorobenzene	146	7.06	0.992	A	2	A	B
12	MC	1,4-Dichlorobenzene	146	7.13	1.003	A	2	A	B
13	T	1,2-Dichlorobenzene	146	7.41	1.042	A	2	A	B
14	T	Benzyl alcohol	108	7.36	1.035	A	2	A	B
15	T	bis(2-chloroisopropyl)ether	45	7.59	1.067	A	2	A	B
16	T	2-Methylphenol	108	7.56	1.063	A	1	A	B
17	T	Acetophenone	105	7.75	1.090	A	2	A	B
18	T	Hexachloroethane	117	7.86	1.105	A	2	A	B
19	MP	N-Nitroso-di-n-propylamine	70	7.80	1.097	A	3	A	B
20	T	4-Methylphenol	108	7.77	1.093	A	1	A	B
21	I	Naphthalene-d8	136	9.10	1.000	A	1	A	B
22	S	Nitrobenzene-d5	82	7.99	0.877	A	2	A	B
23	T	Nitrobenzene	77	8.01	0.880	A	2	A	B
24	T	Isophorone	82	8.37	0.919	A	2	A	B
25	T	2-Nitrophenol	139	8.52	0.936	A	2	A	B
26	T	2,4-Dimethylphenol	107	8.59	0.944	A	2	A	B
27	T	Benzoic acid	105	8.79	0.966	A	2	A	B
28	T	bis(2-Chloroethoxy)methane	93	8.75	0.961	A	2	A	B
29	T	2,4-Dichlorophenol	162	8.89	0.977	A	2	A	B
30	M	1,2,4-Trichlorobenzene	180	9.03	0.992	A	2	A	B
31	T	Naphthalene	128	9.13	1.003	A	2	A	B
32	T	4-Chloroaniline	127	9.27	1.018	A	1	A	B
33	T	Hexachlorobutadiene	225	9.44	1.037	A	2	A	B
34	T	Caprolactam	113	9.84	1.081	A	2	A	B
35	MC	4-Chloro-3-methylphenol	107	10.10	1.109	A	2	A	B
36	T	2-Methylnaphthalene	142	10.28	1.130	A	1	A	B
37	I	Acenaphthene-d10	164	11.99	1.000	A	2	A	B
38	T	Hexachlorocyclopentadiene	237	10.66	0.889	A	2	A	B
39	T	2,4,6-Trichlorophenol	196	10.80	0.901	A	2	A	B
40	T	2,4,5-Trichlorophenol	196	10.87	0.906	A	2	A	B
41	S	2-Fluorobiphenyl	172	10.92	0.911	A	2	A	B
42	T	Biphenyl	154	11.06	0.922	A	2	A	B
43	T	2-Chloronaphthalene	162	11.08	0.924	A	2	A	B
44	T	2-Nitroaniline	65	11.31	0.943	A	2	A	B
45	T	Acenaphthylene	152	11.75	0.980	A	2	A	B
46	T	Dimethylphthalate	163	11.65	0.971	A	2	A	B
47	T	2,6-Dinitrotoluene	165	11.76	0.981	A	2	A	B
48	MC	Acenaphthene	153	12.04	1.004	A	2	A	B
49	T	3-Nitroaniline	138	11.97	0.998	A	2	A	B
50	T	2,4-Dinitrophenol	184	12.12	1.011	A	2	A	B
51	T	Dibenzofuran	168	12.28	1.024	A	1	A	B
52	M	2,4-Dinitrotoluene	165	12.36	1.030	A	2	A	B
53	MP	4-Nitrophenol	109	12.23	1.020	A	2	A	B
54	T	Fluorene	166	12.80	1.067	A	2	A	B

55	T	4-Chlorophenyl-phenylether	204	12.81	1.068	A	2	A	B
56	T	Diethylphthalate	149	12.73	1.061	A	2	A	B
57	T	4-Nitroaniline	138	12.92	1.078	A	2	A	B
58	I	Phenanthrene-d10	188	14.16	1.000	A	2	A	B
59	T	4,6-Dinitro-2-methylphenol	198	12.96	0.915	A	2	A	B
60	T	Azobenzene	182	13.03	0.921	A	1	A	B
61	T	n-Nitrosodiphenylamine	169	13.00	0.918	A	2	A	B
62	S	2,4,6-Tribromophenol	330	13.20	0.932	A	3	A	B
63	T	4-Bromophenyl-phenylether	248	13.52	0.955	A	2	A	B
64	T	Hexachlorobenzene	284	13.73	0.970	A	2	A	B
65	T	Atrazine	200	13.81	0.976	A	2	A	B
66	MC	Pentachlorophenol	266	13.99	0.988	A	2	A	B
67	T	Phenanthrene	178	14.20	1.003	A	2	A	B
68	T	Anthracene	178	14.26	1.007	A	2	A	B
69	T	Carbazole	167	14.49	1.024	A	2	A	B
70	T	Di-n-butylphthalate	149	15.00	1.060	A	2	A	B
71	T	Fluoranthene	202	15.85	1.119	A	2	A	B
72	I	Chrysene-d12	240	17.81	1.000	A	2	A	B
73	T	Benzidine	184	16.03	0.900	A	2	A	B
74	M	Pyrene	202	16.16	0.907	A	2	A	B
75	S	Terphenyl-d14	244	16.35	0.918	A	3	A	B
76	T	Butylbenzylphthalate	149	17.02	0.956	A	2	A	B
77	T	3,3'-Dichlorobenzidine	252	17.76	0.997	A	2	A	B
78	T	Benz[a]anthracene	228	17.78	0.998	A	2	A	B
79	T	Chrysene	228	17.85	1.002	A	2	A	B
80	T	bis(2-Ethylhexyl)phthalate	149	17.78	0.998	A	2	A	B
81	I	Perylene-d12	264	20.27	1.000	A	2	A	B
82	T	Di-n-octylphthalate	149	18.68	0.922	A	1	A	B
83	T	Benzo[b]fluoranthene	252	19.53	0.964	A	2	A	B
84	T	Benzo[k]fluoranthene	252	19.57	0.966	A	2	A	B
85	T	Benzo[a]pyrene	252	20.15	0.994	A	2	A	B
86	T	Indeno[1,2,3-cd]pyrene	276	22.85	1.128	A	2	A	B
87	T	Dibenz[a,h]anthracene	278	22.87	1.128	A	2	A	B
88	T	Benzo[g,h,i]perylene	276	23.62	1.166	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

SVLV0516BNA4.M Mon May 19 13:25:13 2008

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	611068	5.00	ug/mL	0.00
21) Naphthalene-d8	9.09	136	2583205	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1434766	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2321519	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	2267127	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	2284157	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	74705	0.48	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	2.40%#	
8) Phenol-d5	6.69	99	93353	0.48	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	2.40%#	
22) Nitrobenzene-d5	7.99	82	72684	0.46	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	2.30%#	
41) 2-Fluorobiphenyl	10.92	172	192251	0.47	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	2.35%#	
62) 2,4,6-Tribromophenol	13.19	330	21124	0.43	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	2.15%#	
75) Terphenyl-d14	16.34	244	205852	0.47	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	2.35%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.44	74	31949	0.43	ug/mL	99
3) Pyridine	3.44	79	65562	0.49	ug/mL	91
5) Benzaldehyde	6.52	77	53176	0.63	ug/ml	88
6) Aniline	6.71	66	84133	0.53	ug/ml#	49
7) bis(2-Chloroethyl)ether	6.81	63	60245	0.53	ug/mL#	82
9) Phenol	6.71	94	114501	0.51	ug/mL#	72
10) 2-Chlorophenol	6.86	128	91375	0.49	ug/mL	90
11) 1,3-Dichlorobenzene	7.06	146	100585	0.48	ug/mL	96
12) 1,4-Dichlorobenzene	7.13	146	105693m	0.49	ug/mL	
13) 1,2-Dichlorobenzene	7.41	146	98656	0.50	ug/mL	100
14) Benzyl alcohol	7.35	108	47890	0.49	ug/mL	86
15) bis(2-chloroisopropyl)ethe	7.59	45	158704	0.65	ug/mL#	53
16) 2-Methylphenol	7.55	108	78347	0.49	ug/mL	94
17) Acetophenone	7.75	105	114713	0.48	ug/ml#	83
18) Hexachloroethane	7.86	117	35485	0.50	ug/mL	88
19) N-Nitroso-di-n-propylamine	7.79	70	42311	0.46	ug/mL#	92
20) 4-Methylphenol	7.76	108	84951	0.50	ug/mL	91
23) Nitrobenzene	8.01	77	80727	0.48	ug/mL	91
24) Isophorone	8.37	82	140512	0.46	ug/mL#	93
25) 2-Nitrophenol	8.52	139	40494	0.40	ug/mL	87
26) 2,4-Dimethylphenol	8.58	107	83316	0.52	ug/mL	88
27) Benzoic acid	8.67	105	38303m	0.56	ug/mL	
28) bis(2-Chloroethoxy)methane	8.74	93	106278	0.49	ug/mL#	97
29) 2,4-Dichlorophenol	8.88	162	67334	0.45	ug/mL	97
30) 1,2,4-Trichlorobenzene	9.03	180	80915	0.49	ug/mL	98
31) Naphthalene	9.13	128	290956	0.49	ug/mL	98
32) 4-Chloroaniline	9.27	127	105340	0.47	ug/mL	97
33) Hexachlorobutadiene	9.44	225	39275	0.47	ug/mL	98
34) Caprolactam	9.75	113	35315m	0.63	ug/ml	
35) 4-Chloro-3-methylphenol	10.08	107	71175	0.44	ug/mL	95
36) 2-Methylnaphthalene	10.28	142	193045	0.48	ug/mL	95
38) Hexachlorocyclopentadiene	10.66	237	44340	0.46	ug/mL	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

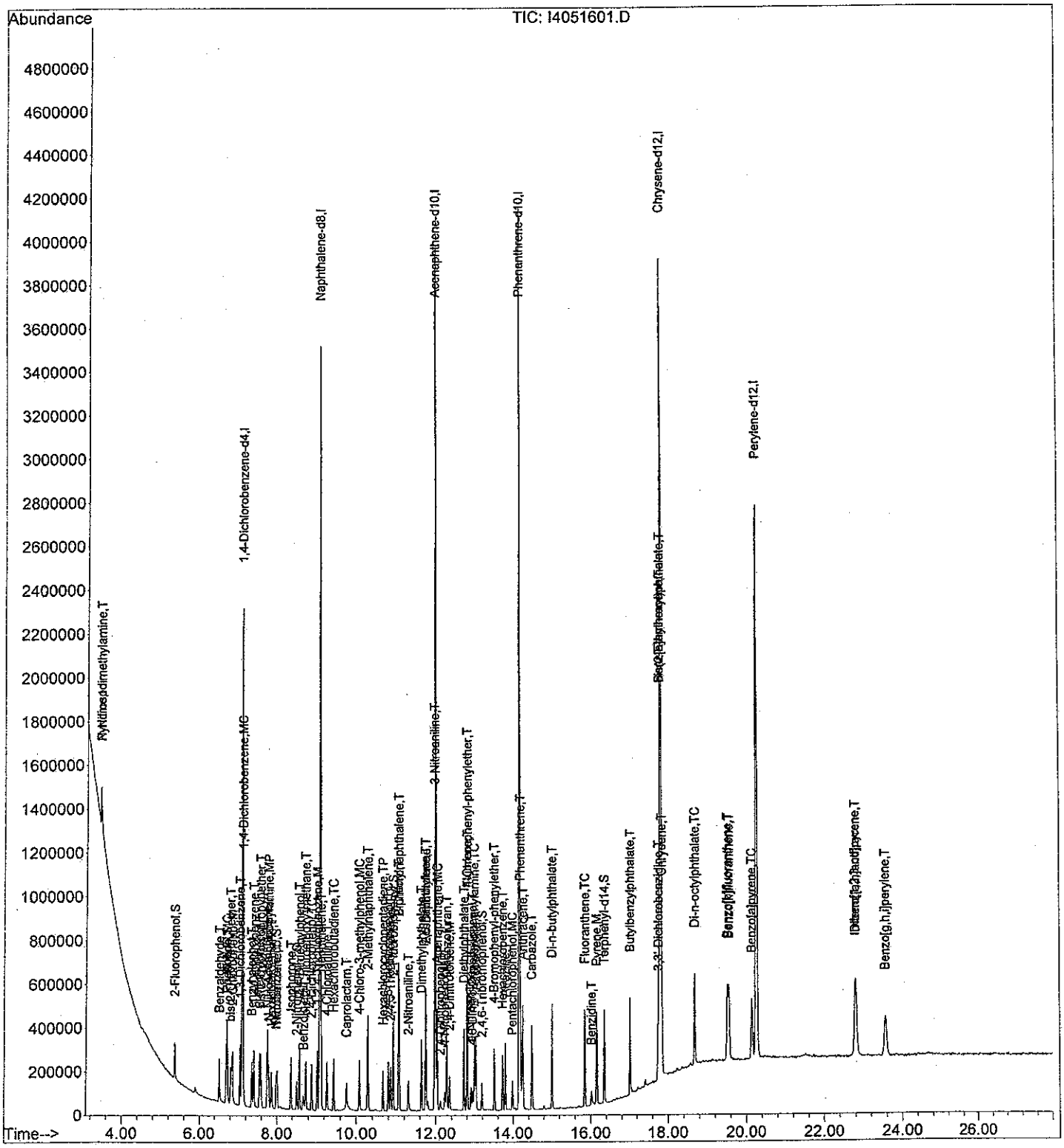
Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.79	196	44158	0.46	ug/mL	96
40) 2,4,5-Trichlorophenol	10.85	196	48567m	0.45	ug/mL	
42) Biphenyl	11.06	154	222372	0.47	ug/ml	97
43) 2-Chloronaphthalene	11.07	162	173248	0.48	ug/mL	97
44) 2-Nitroaniline	11.30	65	36579	0.43	ug/mL#	84
45) Acenaphthylene	11.75	152	281630	0.47	ug/mL	96
46) Dimethylphthalate	11.64	163	201376m	0.48	ug/mL	
47) 2,6-Dinitrotoluene	11.75	165	35080	0.40	ug/mL	88
48) Acenaphthene	12.04	153	186310	0.47	ug/mL	98
49) 3-Nitroaniline	11.96	138	39448	0.43	ug/mL#	81
50) 2,4-Dinitrophenol	12.11	184	9504	0.26	ug/mL#	84
51) Dibenzofuran	12.28	168	257600	0.48	ug/mL#	81
52) 2,4-Dinitrotoluene	12.35	165	44502	0.37	ug/mL#	48
53) 4-Nitrophenol	12.23	109	18132	0.50	ug/mL#	3
54) Fluorene	12.80	166	202442	0.47	ug/mL	97
55) 4-Chlorophenyl-phenylether	12.80	204	93771	0.48	ug/mL	92
56) Diethylphthalate	12.72	149	204002	0.47	ug/mL	99
57) 4-Nitroaniline	12.90	138	39549	0.44	ug/mL#	73
59) 4,6-Dinitro-2-methylphenol	12.95	198	19138m	0.30	ug/mL	
60) Azobenzene	13.03	182	57142	0.45	ug/mL	60
61) n-Nitrosodiphenylamine	12.99	169	137879	0.44	ug/mL	94
63) 4-Bromophenyl-phenylether	13.52	248	48167	0.43	ug/mL#	87
64) Hexachlorobenzene	13.73	284	53049	0.45	ug/mL#	87
65) Atrazine	13.80	200	46883	0.44	ug/ml#	94
66) Pentachlorophenol	13.98	266	20708	0.34	ug/mL	99
67) Phenanthrene	14.19	178	304593	0.49	ug/mL	98
68) Anthracene	14.25	178	295830	0.47	ug/mL	99
69) Carbazole	14.48	167	283180	0.49	ug/mL	95
70) Di-n-butylphthalate	15.00	149	337095	0.46	ug/mL	98
71) Fluoranthene	15.84	202	294895	0.47	ug/mL	97
73) Benzidine	16.02	184	53464m	0.37	ug/mL	
74) Pyrene	16.16	202	319417	0.49	ug/mL	97
76) Butylbenzylphthalate	17.01	149	146533	0.43	ug/mL	88
77) 3,3'-Dichlorobenzidine	17.75	252	91204	0.44	ug/mL#	95
78) Benz[a]anthracene	17.78	228	310243	0.49	ug/mL	98
79) Chrysene	17.84	228	289913	0.50	ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	214983	0.43	ug/mL	92
82) Di-n-octylphthalate	18.68	149	351669	0.42	ug/mL	99
83) Benzo[b]fluoranthene	19.51	252	319473	0.50	ug/mL	99
84) Benzo[k]fluoranthene	19.55	252	271649	0.46	ug/mL#	94
85) Benzo[a]pyrene	20.14	252	275576	0.46	ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.80	276	322611	0.46	ug/mL#	89
87) Dibenz[a,h]anthracene	22.82	278	283244	0.46	ug/mL#	94
88) Benzo[g,h,i]perylene	23.58	276	276690	0.46	ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	623044	5.00	ug/mL	0.00
21) Naphthalene-d8	9.09	136	2582032	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1426262	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2282954	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	2200435	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	2181337	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	303544	1.93	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	9.65%#	
8) Phenol-d5	6.69	99	379016	1.93	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	9.65%#	
22) Nitrobenzene-d5	7.99	82	304865	1.91	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	9.55%#	
41) 2-Fluorobiphenyl	10.92	172	760843	1.86	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	9.30%#	
62) 2,4,6-Tribromophenol	13.19	330	85369	1.77	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	8.85%#	
75) Terphenyl-d14	16.34	244	801904	1.88	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	9.40%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.42	74	137384	1.83	ug/mL	97
3) Pyridine	3.41	79	279298	2.05	ug/mL#	80
5) Benzaldehyde	6.52	77	214280	2.49	ug/ml	89
6) Aniline	6.71	66	341829	2.10	ug/ml#	50
7) bis(2-Chloroethyl)ether	6.81	63	239110	2.04	ug/mL	92
9) Phenol	6.71	94	460029	2.01	ug/mL#	72
10) 2-Chlorophenol	6.86	128	365587	1.92	ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	413741	1.92	ug/mL	97
12) 1,4-Dichlorobenzene	7.13	146	417413m	1.91	ug/mL	
13) 1,2-Dichlorobenzene	7.41	146	389181	1.95	ug/mL	100
14) Benzyl alcohol	7.35	108	211619	2.12	ug/mL	83
15) bis(2-chloroisopropyl)ethe	7.59	45	625250	2.52	ug/mL#	52
16) 2-Methylphenol	7.55	108	316971	1.93	ug/mL	94
17) Acetophenone	7.75	105	452829	1.86	ug/ml#	82
18) Hexachloroethane	7.86	117	138716	1.93	ug/mL	90
19) N-Nitroso-di-n-propylamine	7.79	70	181676	1.94	ug/mL#	95
20) 4-Methylphenol	7.76	108	347025	1.99	ug/mL	92
23) Nitrobenzene	8.00	77	343884	2.02	ug/mL	89
24) Isophorone	8.37	82	585396	1.91	ug/mL#	93
25) 2-Nitrophenol	8.52	139	184404	1.84	ug/mL#	85
26) 2,4-Dimethylphenol	8.58	107	345412	2.15	ug/mL	92
27) Benzoic acid	8.71	105	203518	2.97	ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.74	93	411217	1.89	ug/mL#	98
29) 2,4-Dichlorophenol	8.88	162	292048	1.94	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.03	180	312401	1.91	ug/mL	99
31) Naphthalene	9.13	128	1159152	1.96	ug/mL	98
32) 4-Chloroaniline	9.27	127	442127	1.98	ug/mL	98
33) Hexachlorobutadiene	9.44	225	157608	1.89	ug/mL	99
34) Caprolactam	9.77	113	108690	1.95	ug/ml	85
35) 4-Chloro-3-methylphenol	10.08	107	304361	1.88	ug/mL	91
36) 2-Methylnaphthalene	10.28	142	768645	1.89	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	183412	1.90	ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

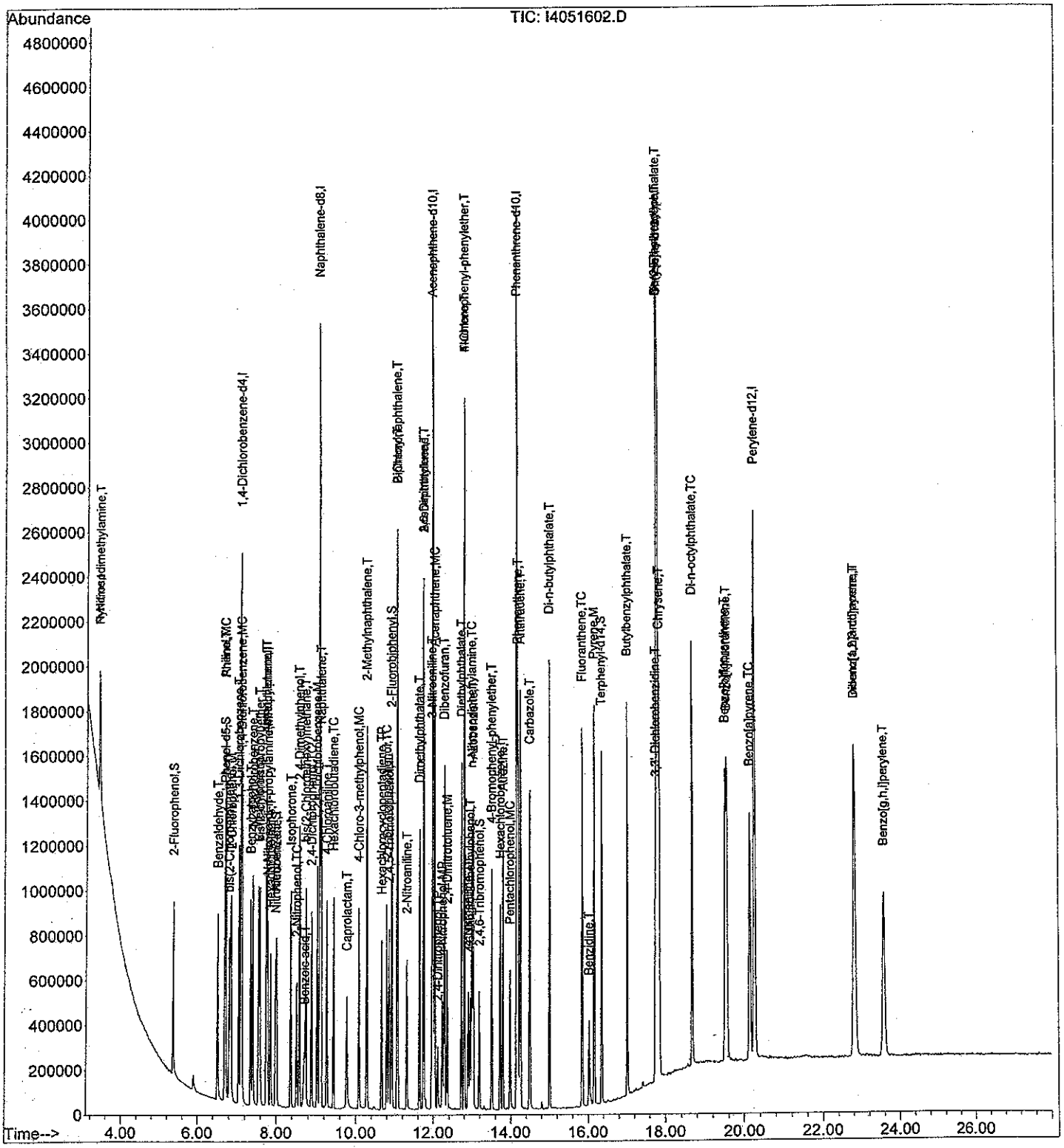
Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.79	196	187448	1.95 ug/mL	98
40) 2,4,5-Trichlorophenol	10.86	196	205940m	1.91 ug/mL	
42) Biphenyl	11.06	154	880700	1.86 ug/ml	97
43) 2-Chloronaphthalene	11.07	162	685815	1.92 ug/mL	99
44) 2-Nitroaniline	11.31	65	174029	2.08 ug/mL#	80
45) Acenaphthylene	11.75	152	1133402	1.88 ug/mL	97
46) Dimethylphthalate	11.64	163	809014	1.92 ug/mL#	82
47) 2,6-Dinitrotoluene	11.76	165	168921	1.94 ug/mL#	87
48) Acenaphthene	12.04	153	714422	1.83 ug/mL	97
49) 3-Nitroaniline	11.96	138	190048	2.07 ug/mL#	82
50) 2,4-Dinitrophenol	12.11	184	62464	1.72 ug/mL#	80
51) Dibenzofuran	12.28	168	1011259	1.90 ug/mL#	80
52) 2,4-Dinitrotoluene	12.36	165	222616	1.88 ug/mL#	44
53) 4-Nitrophenol	12.23	109	77608	2.17 ug/mL#	20
54) Fluorene	12.80	166	796210	1.86 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.80	204	370008	1.89 ug/mL	93
56) Diethylphthalate	12.72	149	810381	1.87 ug/mL	100
57) 4-Nitroaniline	12.90	138	187519	2.10 ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.95	198	112352	1.77 ug/mL#	100
60) Azobenzene	13.03	182	234315	1.86 ug/mL	59
61) n-Nitrosodiphenylamine	13.00	169	571092	1.86 ug/mL	96
63) 4-Bromophenyl-phenylether	13.52	248	195636	1.78 ug/mL#	91
64) Hexachlorobenzene	13.73	284	206780	1.79 ug/mL#	88
65) Atrazine	13.80	200	195055	1.85 ug/ml#	94
66) Pentachlorophenol	13.98	266	105047	1.75 ug/mL	97
67) Phenanthrene	14.19	178	1177000	1.93 ug/mL	99
68) Anthracene	14.25	178	1173328	1.89 ug/mL	100
69) Carbazole	14.49	167	1093387	1.92 ug/mL	97
70) Di-n-butylphthalate	15.00	149	1392720	1.94 ug/mL#	98
71) Fluoranthene	15.84	202	1172341	1.90 ug/mL	97
73) Benzidine	16.02	184	288428	2.08 ug/mL	96
74) Pyrene	16.16	202	1250203	1.98 ug/mL	96
76) Butylbenzylphthalate	17.01	149	614726	1.86 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.75	252	380191	1.90 ug/mL#	95
78) Benz[a]anthracene	17.78	228	1189452	1.95 ug/mL	98
79) Chrysene	17.84	228	1103687	1.95 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	908152	1.86 ug/mL	94
82) Di-n-octylphthalate	18.68	149	1515016	1.89 ug/mL	100
83) Benzo[b]fluoranthene	19.51	252	1148919m	1.86 ug/mL	
84) Benzo[k]fluoranthene	19.55	252	1161220	2.06 ug/mL#	97
85) Benzo[a]pyrene	20.15	252	1090808	1.89 ug/mL#	96
86) Indeno[1,2,3-cd]pyrene	22.81	276	1283859	1.91 ug/mL#	89
87) Dibenz[a,h]anthracene	22.83	278	1129904	1.94 ug/mL#	94
88) Benzo[g,h,i]perylene	23.59	276	1089013	1.90 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

TLW 5/19/0

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	599846	5.00	ug/mL	0.00
21) Naphthalene-d8	9.09	136	2520535	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1428173	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2291949	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	2244569	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	2207676	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	780711	5.15	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	25.75%	
8) Phenol-d5	6.69	99	973154	5.15	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	25.75%	
22) Nitrobenzene-d5	7.99	82	793143	5.10	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	25.50%#	
41) 2-Fluorobiphenyl	10.92	172	1959887	4.78	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	23.90%#	
62) 2,4,6-Tribromophenol	13.19	330	241628	4.98	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	24.90%	
75) Terphenyl-d14	16.34	244	2127067	4.88	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	24.40%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	328673	4.54	ug/mL	100
3) Pyridine	3.40	79	627859	4.79	ug/mL	86
5) Benzaldehyde	6.52	77	547810	6.60	ug/ml	90
6) Aniline	6.71	66	859291	5.48	ug/ml#	50
7) bis(2-Chloroethyl)ether	6.81	63	596664	5.30	ug/mL#	83
9) Phenol	6.71	94	1163455	5.28	ug/mL#	72
10) 2-Chlorophenol	6.86	128	937370	5.11	ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	1040787	5.01	ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	1050309	4.99	ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	980057	5.10	ug/mL	99
14) Benzyl alcohol	7.35	108	577858	6.03	ug/mL#	80
15) bis(2-chloroisopropyl)ethe	7.59	45	1600828	6.71	ug/mL#	48
16) 2-Methylphenol	7.56	108	824202	5.21	ug/mL	95
17) Acetophenone	7.75	105	1180985	5.03	ug/ml#	82
18) Hexachloroethane	7.86	117	365780	5.29	ug/mL	88
19) N-Nitroso-di-n-propylamine	7.79	70	427723	4.73	ug/mL#	94
20) 4-Methylphenol	7.77	108	890208	5.30	ug/mL	92
23) Nitrobenzene	8.01	77	886472	5.35	ug/mL#	87
24) Isophorone	8.37	82	1556138	5.21	ug/mL#	93
25) 2-Nitrophenol	8.52	139	510219	5.20	ug/mL#	83
26) 2,4-Dimethylphenol	8.58	107	881806	5.61	ug/mL	91
27) Benzoic acid	8.75	105	626957	9.37	ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.74	93	1084703	5.11	ug/mL#	95
29) 2,4-Dichlorophenol	8.89	162	751851	5.11	ug/mL	97
30) 1,2,4-Trichlorobenzene	9.03	180	800046	5.01	ug/mL	99
31) Naphthalene	9.13	128	2902621	5.04	ug/mL	98
32) 4-Chloroaniline	9.27	127	1168983	5.36	ug/mL	99
33) Hexachlorobutadiene	9.44	225	408113	5.02	ug/mL	99
34) Caprolactam	9.80	113	291307	5.35	ug/ml	83
35) 4-Chloro-3-methylphenol	10.09	107	800486	5.06	ug/mL	90
36) 2-Methylnaphthalene	10.28	142	1964834	4.96	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	500329	5.17	ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

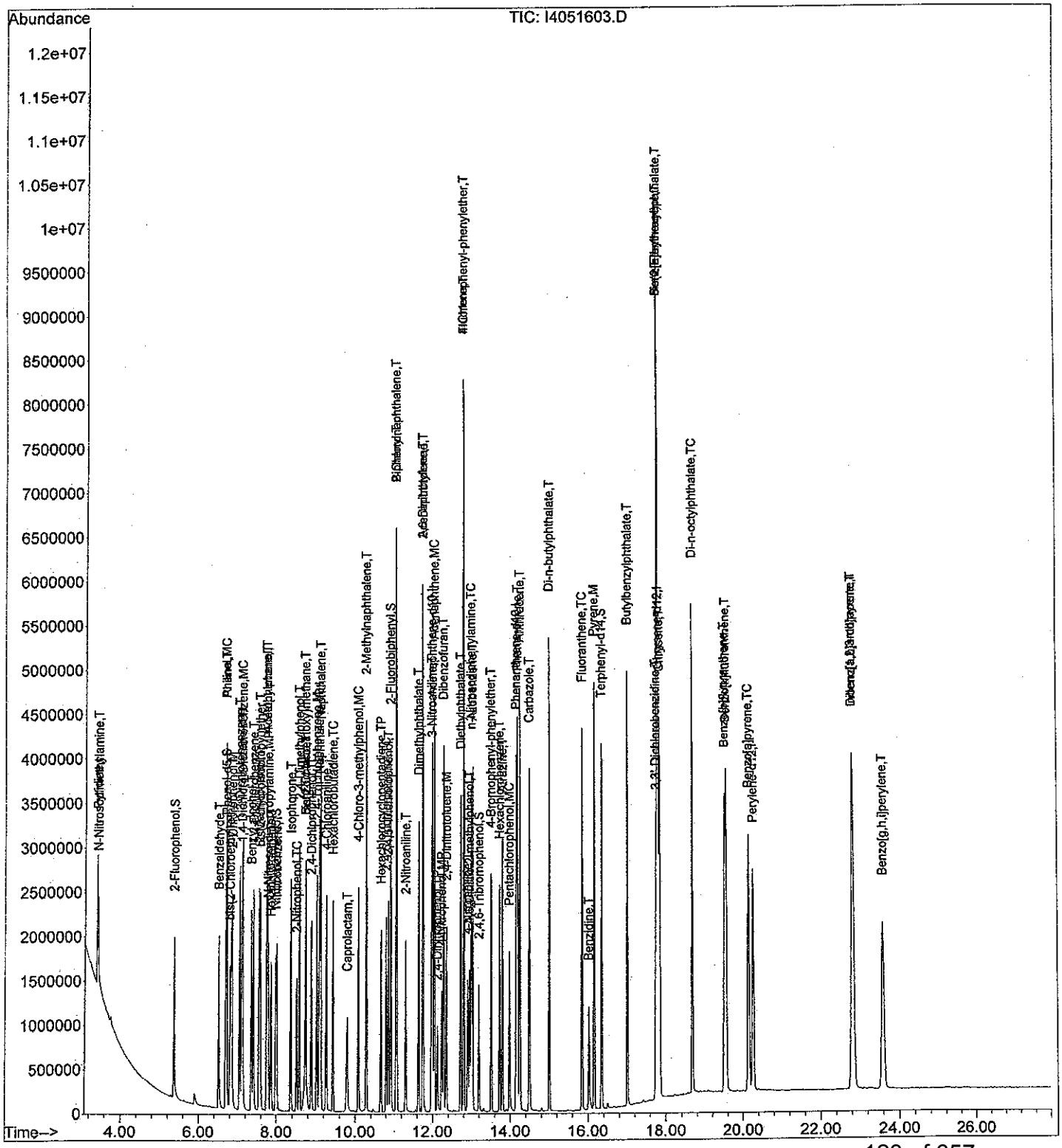
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	499851	5.19 ug/mL	97
40) 2,4,5-Trichlorophenol	10.86	196	546119m	5.05 ug/mL	
42) Biphenyl	11.06	154	2264099	4.78 ug/ml	97
43) 2-Chloronaphthalene	11.07	162	1756466	4.92 ug/mL	98
44) 2-Nitroaniline	11.31	65	480607	5.73 ug/mL#	77
45) Acenaphthylene	11.75	152	2942432	4.88 ug/mL	97
46) Dimethylphthalate	11.65	163	2107203	5.01 ug/mL	99
47) 2,6-Dinitrotoluene	11.76	165	472951	5.43 ug/mL#	86
48) Acenaphthene	12.04	153	1868068	4.78 ug/mL	98
49) 3-Nitroaniline	11.97	138	525590	5.71 ug/mL#	82
50) 2,4-Dinitrophenol	12.12	184	226375	6.23 ug/mL#	78
51) Dibenzofuran	12.28	168	2600716	4.89 ug/mL#	81
52) 2,4-Dinitrotoluene	12.36	165	640484	5.40 ug/mL#	43
53) 4-Nitrophenol	12.23	109	233998	6.54 ug/mL#	15
54) Fluorene	12.80	166	2088672	4.86 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.80	204	964996	4.93 ug/mL	93
56) Diethylphthalate	12.73	149	2159435	4.98 ug/mL	99
57) 4-Nitroaniline	12.90	138	526786	5.90 ug/mL#	73
59) 4,6-Dinitro-2-methylphenol	12.96	198	370966	5.81 ug/mL#	100
60) Azobenzene	13.03	182	627315	4.95 ug/mL	60
61) n-Nitrosodiphenylamine	13.00	169	1476064	4.79 ug/mL	95
63) 4-Bromophenyl-phenylether	13.52	248	517772	4.70 ug/mL#	90
64) Hexachlorobenzene	13.73	284	541855	4.67 ug/mL#	89
65) Atrazine	13.81	200	521826	4.92 ug/ml#	95
66) Pentachlorophenol	13.98	266	321438	5.32 ug/mL	99
67) Phenanthrene	14.20	178	3034528	4.96 ug/mL	99
68) Anthracene	14.25	178	3094537	4.97 ug/mL	99
69) Carbazole	14.49	167	2741500	4.80 ug/mL	97
70) Di-n-butylphthalate	15.00	149	3843922	5.32 ug/mL#	99
71) Fluoranthene	15.85	202	3105122	5.03 ug/mL	97
73) Benzidine	16.02	184	825187	5.84 ug/mL	96
74) Pyrene	16.16	202	3278521	5.08 ug/mL	96
76) Butylbenzylphthalate	17.01	149	1749913	5.19 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.75	252	1045695	5.11 ug/mL#	97
78) Benz[a]anthracene	17.78	228	3101058	4.97 ug/mL	99
79) Chrysene	17.85	228	2920317	5.05 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	2586476	5.19 ug/mL	94
82) Di-n-octylphthalate	18.68	149	4480002	5.53 ug/mL	100
83) Benzo[b]fluoranthene	19.52	252	3342377	5.36 ug/mL	99
84) Benzo[k]fluoranthene	19.56	252	2842217	4.97 ug/mL#	94
85) Benzo[a]pyrene	20.15	252	2951723	5.07 ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.82	276	3498346	5.14 ug/mL#	89
87) Dibenz[a,h]anthracene	22.84	278	3040507	5.16 ug/mL#	95
88) Benzo[g,h,i]perylene	23.59	276	2944237	5.08 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

TLW 5/19/08

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	633350	5.00	ug/mL	-0.05
21) Naphthalene-d8	9.10	136	2643857	5.00	ug/mL	-0.06
37) Acenaphthene-d10	11.99	164	1481468	5.00	ug/mL	-0.06
58) Phenanthrene-d10	14.16	188	2358542	5.00	ug/mL	-0.06
72) Chrysene-d12	17.81	240	2303180	5.00	ug/mL	-0.06
81) Perylene-d12	20.27	264	2254153	5.00	ug/mL	-0.08

System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	1612502	10.08	ug/mL	-0.04
Spiked Amount 20.000	Range 21 - 100		Recovery = 50.40%			
8) Phenol-d5	6.70	99	2020091	10.12	ug/mL	-0.04
Spiked Amount 20.000	Range 10 - 94		Recovery = 50.60%			
22) Nitrobenzene-d5	7.99	82	1668319	10.22	ug/mL	-0.05
Spiked Amount 20.000	Range 35 - 114		Recovery = 51.10%			
41) 2-Fluorobiphenyl	10.92	172	3953312	9.30	ug/mL	-0.06
Spiked Amount 20.000	Range 43 - 116		Recovery = 46.50%			
62) 2,4,6-Tribromophenol	13.20	330	505258	10.12	ug/mL	-0.05
Spiked Amount 20.000	Range 10 - 123		Recovery = 50.60%			
75) Terphenyl-d14	16.35	244	4291575	9.59	ug/mL	-0.05
Spiked Amount 20.000	Range 33 - 141		Recovery = 47.95%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	758666m	9.91	ug/mL	
3) Pyridine	3.39	79	1517335	10.96	ug/mL	84
5) Benzaldehyde	6.52	77	1066219	12.17	ug/ml	88
6) Aniline	6.72	66	1782079	10.75	ug/ml#	49
7) bis(2-Chloroethyl)ether	6.81	63	1264128	10.63	ug/mL	94
9) Phenol	6.72	94	2402129	10.33	ug/mL#	71
10) 2-Chlorophenol	6.86	128	1923284	9.93	ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	2118828	9.66	ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	2170259	9.76	ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	2020162	9.95	ug/mL	99
14) Benzyl alcohol	7.36	108	1229379	12.14	ug/mL#	80
15) bis(2-chloroisopropyl)ethe	7.59	45	3211566	12.75	ug/mL#	37
16) 2-Methylphenol	7.56	108	1707196	10.22	ug/mL	95
17) Acetophenone	7.75	105	2433922	9.82	ug/ml#	83
18) Hexachloroethane	7.86	117	757670	10.37	ug/mL	88
19) N-Nitroso-di-n-propylamine	7.80	70	988446	10.36	ug/mL#	95
20) 4-Methylphenol	7.77	108	1860727	10.49	ug/mL	93
23) Nitrobenzene	8.01	77	1844145	10.60	ug/mL#	88
24) Isophorone	8.37	82	3194834	10.20	ug/mL#	92
25) 2-Nitrophenol	8.52	139	1082111	10.52	ug/mL#	84
26) 2,4-Dimethylphenol	8.59	107	1817239	11.02	ug/mL	91
27) Benzoic acid	8.79	105	1338339	19.08	ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.75	93	2208546	9.93	ug/mL#	96
29) 2,4-Dichlorophenol	8.89	162	1587850	10.30	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.03	180	1644236	9.82	ug/mL	99
31) Naphthalene	9.13	128	5921168	9.80	ug/mL	98
32) 4-Chloroaniline	9.27	127	2438794	10.67	ug/mL	99
33) Hexachlorobutadiene	9.44	225	824335	9.67	ug/mL	99
34) Caprolactam	9.84	113	614862	10.76	ug/ml	84
35) 4-Chloro-3-methylphenol	10.10	107	1678349	10.11	ug/mL	90
36) 2-Methylnaphthalene	10.28	142	4019996	9.68	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	1042853	10.38	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration

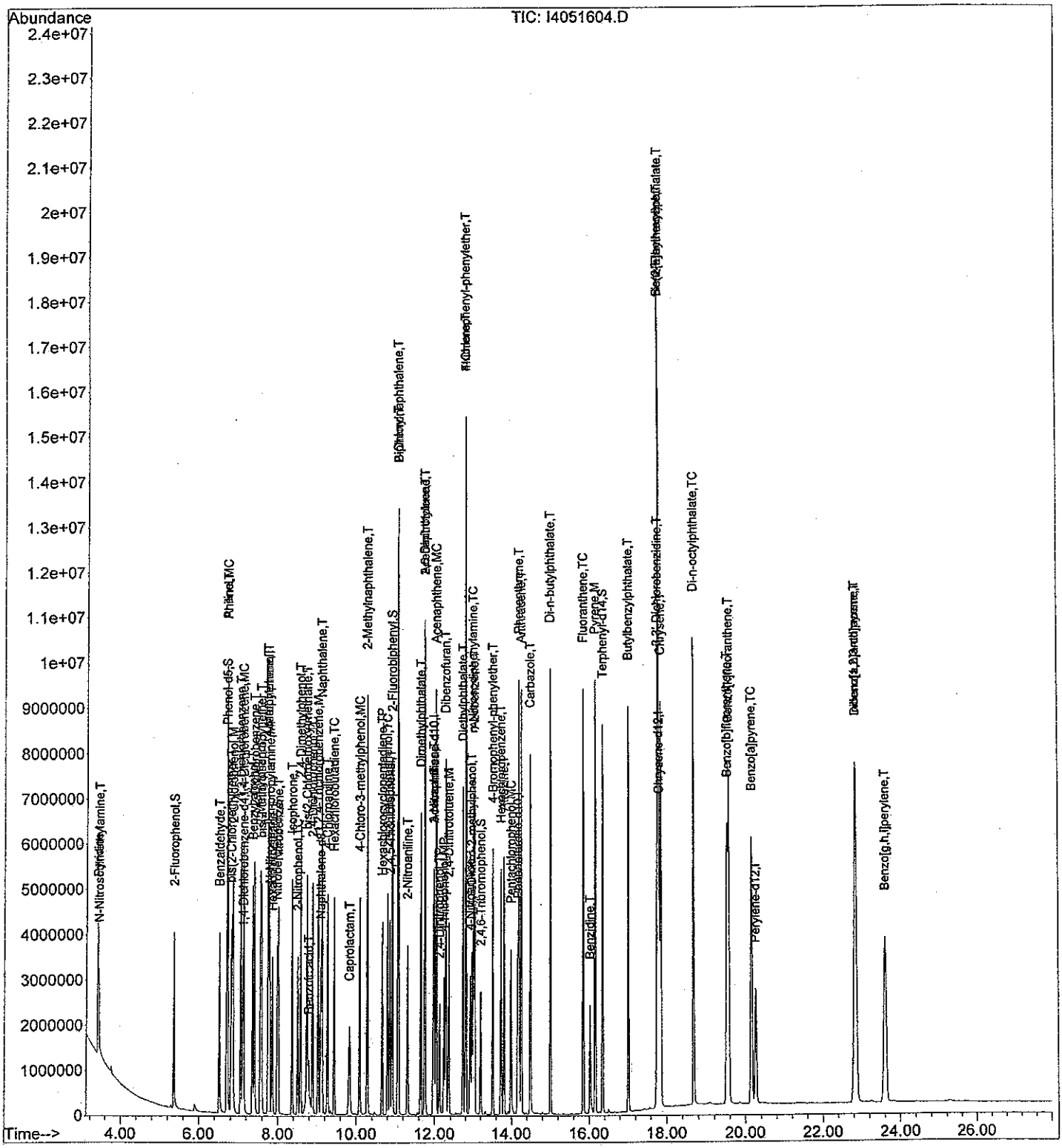
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1034112	10.34 ug/mL	97
40) 2,4,5-Trichlorophenol	10.87	196	1158920m	10.34 ug/mL	
42) Biphenyl	11.06	154	4568371	9.30 ug/ml	97
43) 2-Chloronaphthalene	11.08	162	3550092	9.59 ug/mL	97
44) 2-Nitroaniline	11.31	65	1030123	11.85 ug/mL#	76
45) Acenaphthylene	11.75	152	6019820	9.63 ug/mL	97
46) Dimethylphthalate	11.65	163	4344530	9.95 ug/mL	99
47) 2,6-Dinitrotoluene	11.76	165	1012678	11.21 ug/mL#	85
48) Acenaphthene	12.04	153	3732254	9.21 ug/mL	97
49) 3-Nitroaniline	11.97	138	1127195	11.80 ug/mL	81
50) 2,4-Dinitrophenol	12.12	184	551127	14.63 ug/mL#	76
51) Dibenzofuran	12.28	168	5304566	9.62 ug/mL#	80
52) 2,4-Dinitrotoluene	12.36	165	1359189	11.05 ug/mL#	43
53) 4-Nitrophenol	12.23	109	507155	13.66 ug/mL#	17
54) Fluorene	12.80	166	4214734	9.46 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	1915709	9.44 ug/mL	92
56) Diethylphthalate	12.73	149	4373039	9.71 ug/mL	99
57) 4-Nitroaniline	12.92	138	1123103	12.13 ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.96	198	847001	12.88 ug/mL#	100
60) Azobenzene	13.03	182	1280712	9.82 ug/mL	59
61) n-Nitrosodiphenylamine	13.00	169	3032139	9.57 ug/mL	96
63) 4-Bromophenyl-phenylether	13.52	248	1053352	9.29 ug/mL#	90
64) Hexachlorobenzene	13.73	284	1109920	9.29 ug/mL#	89
65) Atrazine	13.81	200	1046508	9.59 ug/ml#	94
66) Pentachlorophenol	13.99	266	700843	11.28 ug/mL	99
67) Phenanthrene	14.20	178	6126271	9.73 ug/mL	99
68) Anthracene	14.26	178	6305631	9.84 ug/mL	99
69) Carbazole	14.49	167	5513301	9.38 ug/mL	97
70) Di-n-butylphthalate	15.00	149	7876059	10.59 ug/mL#	99
71) Fluoranthene	15.85	202	6258960	9.84 ug/mL	96
73) Benzidine	16.03	184	1732025	11.95 ug/mL	97
74) Pyrene	16.16	202	6637533	10.02 ug/mL	96
76) Butylbenzylphthalate	17.02	149	3616488	10.46 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.76	252	2123515	10.11 ug/mL#	96
78) Benz[a]anthracene	17.78	228	6275603	9.81 ug/mL	99
79) Chrysene	17.85	228	5780084	9.75 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	5251844	10.28 ug/mL	95
82) Di-n-octylphthalate	18.68	149	9220116	11.15 ug/mL	100
83) Benzo[b]fluoranthene	19.53	252	6726353	10.56 ug/mL	99
84) Benzo[k]fluoranthene	19.57	252	5707500	9.78 ug/mL#	94
85) Benzo[a]pyrene	20.15	252	6037713	10.15 ug/mL#	96
86) Indeno[1,2,3-cd]pyrene	22.85	276	7053706	10.16 ug/mL#	89
87) Dibenz[a,h]anthracene	22.87	278	6209680	10.32 ug/mL#	95
88) Benzo[g,h,i]perylene	23.62	276	6028551	10.19 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	580071	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	2468156	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1368036	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.17	188	2185031	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	2104937	5.00	ug/mL	0.00
81) Perylene-d12	20.28	264	2077145	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	2246100	15.33	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 76.65%			
8) Phenol-d5	6.70	99	2801500	15.32	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 76.60%			
22) Nitrobenzene-d5	7.99	82	2339096	15.35	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 76.75%			
41) 2-Fluorobiphenyl	10.93	172	5518102	14.06	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 70.30%			
62) 2,4,6-Tribromophenol	13.20	330	704396	15.24	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 76.20%			
75) Terphenyl-d14	16.35	244	5906093	14.44	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 72.20%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.42	74	1048049	14.95	ug/mL#	97
3) Pyridine	3.38	79	2036305	16.06	ug/mL	85
5) Benzaldehyde	6.52	77	1501522	18.71	ug/ml	89
6) Aniline	6.72	66	2470712	16.28	ug/ml#	51
7) bis(2-Chloroethyl)ether	6.81	63	1775689	16.31	ug/mL	95
9) Phenol	6.72	94	3346404	15.71	ug/mL#	72
10) 2-Chlorophenol	6.86	128	2691124	15.17	ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	2945915	14.66	ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	3025350	14.86	ug/mL	100
13) 1,2-Dichlorobenzene	7.41	146	2801492	15.06	ug/mL	99
14) Benzyl alcohol	7.36	108	1739230	18.76	ug/mL#	79
15) bis(2-chloroisopropyl)ethe	7.59	45	4450735	19.29	ug/mL#	37
16) 2-Methylphenol	7.56	108	2390502	15.63	ug/mL	94
17) Acetophenone	7.76	105	3420276	15.06	ug/ml#	83
18) Hexachloroethane	7.86	117	1053370	15.74	ug/mL	89
19) N-Nitroso-di-n-propylamine	7.80	70	1364206	15.61	ug/mL#	94
20) 4-Methylphenol	7.78	108	2572222	15.83	ug/mL	93
23) Nitrobenzene	8.01	77	2589247	15.95	ug/mL#	87
24) Isophorone	8.38	82	4472376	15.29	ug/mL#	92
25) 2-Nitrophenol	8.52	139	1539944	16.03	ug/mL#	83
26) 2,4-Dimethylphenol	8.59	107	2491689	16.19	ug/mL	90
27) Benzoic acid	8.81	105	1918082	29.29	ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.75	93	3105002	14.95	ug/mL#	97
29) 2,4-Dichlorophenol	8.89	162	2225540	15.46	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.04	180	2289941	14.65	ug/mL	99
31) Naphthalene	9.13	128	8274354	14.67	ug/mL	98
32) 4-Chloroaniline	9.28	127	3410824	15.98	ug/mL	98
33) Hexachlorobutadiene	9.44	225	1173468	14.75	ug/mL	99
34) Caprolactam	9.85	113	863027	16.18	ug/ml	82
35) 4-Chloro-3-methylphenol	10.10	107	2369483	15.29	ug/mL	90
36) 2-Methylnaphthalene	10.28	142	5606926	14.46	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	1492206	16.09	ug/mL	99

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

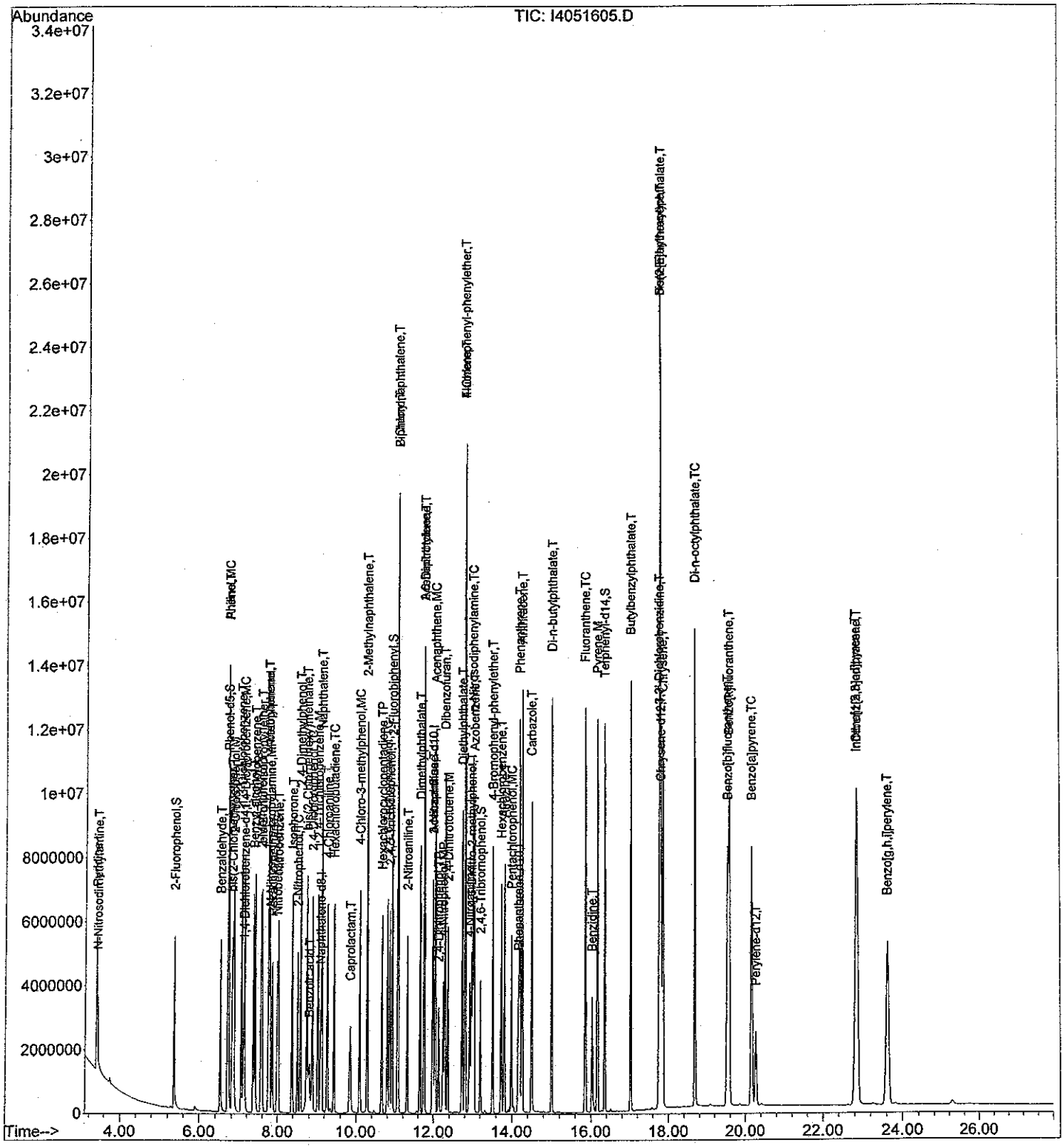
Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1448679	15.69 ug/mL	97
40) 2,4,5-Trichlorophenol	10.87	196	1592914m	15.39 ug/mL	
42) Biphenyl	11.07	154	6358955	14.02 ug/ml	97
43) 2-Chloronaphthalene	11.08	162	4981578	14.57 ug/mL	97
44) 2-Nitroaniline	11.32	65	1465959	18.26 ug/mL#	77
45) Acenaphthylene	11.75	152	8366314	14.49 ug/mL	97
46) Dimethylphthalate	11.66	163	6083708	15.09 ug/mL	99
47) 2,6-Dinitrotoluene	11.77	165	1417917	17.00 ug/mL#	86
48) Acenaphthene	12.05	153	5235780	13.99 ug/mL	98
49) 3-Nitroaniline	11.98	138	1586930	17.99 ug/mL	81
50) 2,4-Dinitrophenol	12.13	184	818100m	23.51 ug/mL	
51) Dibenzofuran	12.29	168	7394582	14.52 ug/mL#	79
52) 2,4-Dinitrotoluene	12.36	165	1937627	17.06 ug/mL#	42
53) 4-Nitrophenol	12.24	109	715757	20.87 ug/mL#	19
54) Fluorene	12.81	166	5835988	14.18 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	2683157	14.31 ug/mL	92
56) Diethylphthalate	12.74	149	6139454	14.77 ug/mL	99
57) 4-Nitroaniline	12.92	138	1540871	18.03 ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.97	198	1205889m	19.80 ug/mL	
60) Azobenzene	13.04	182	1783634	14.76 ug/mL	61
61) n-Nitrosodiphenylamine	13.01	169	4230027	14.41 ug/mL	98
63) 4-Bromophenyl-phenylether	13.52	248	1474361	14.04 ug/mL#	90
64) Hexachlorobenzene	13.73	284	1535716	13.88 ug/mL#	88
65) Atrazine	13.81	200	1407407	13.92 ug/ml#	95
66) Pentachlorophenol	13.99	266	990967	17.22 ug/mL	98
67) Phenanthrene	14.20	178	8574537	14.69 ug/mL	99
68) Anthracene	14.26	178	8590260	14.48 ug/mL	99
69) Carbazole	14.49	167	7437804	13.66 ug/mL	97
70) Di-n-butylphthalate	15.01	149	10848671	15.75 ug/mL#	98
71) Fluoranthene	15.85	202	8645196	14.68 ug/mL	96
73) Benzidine	16.03	184	2449512m	18.49 ug/mL	
74) Pyrene	16.17	202	9147695	15.12 ug/mL	95
76) Butylbenzylphthalate	17.02	149	5051362	15.99 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.76	252	2978760	15.52 ug/mL#	97
78) Benz[a]anthracene	17.78	228	8522825	14.58 ug/mL	99
79) Chrysene	17.86	228	8078687	14.91 ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	7394672	15.83 ug/mL	95
82) Di-n-octylphthalate	18.69	149	13068664	17.15 ug/mL	99
83) Benzo[b]fluoranthene	19.54	252	8314658	14.17 ug/mL#	96
84) Benzo[k]fluoranthene	19.58	252	8877149	16.50 ug/mL#	96
85) Benzo[a]pyrene	20.16	252	8366102	15.26 ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.86	276	9828079	15.36 ug/mL#	89
87) Dibenz[a,h]anthracene	22.88	278	8578189	15.47 ug/mL#	94
88) Benzo[g,h,i]perylene	23.64	276	8405221	15.42 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

TLW 5/19/08

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	604964	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	2553920	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1450598	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.17	188	2291213	5.00	ug/mL	0.00
72) Chrysene-d12	17.82	240	2256064	5.00	ug/mL	0.00
81) Perylene-d12	20.29	264	2223686	5.00	ug/mL	0.02

System Monitoring Compounds						
4) 2-Fluorophenol	5.37	112	3725817	24.38	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 121.90%#			
8) Phenol-d5	6.71	99	4632174	24.30	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 121.50%#			
22) Nitrobenzene-d5	8.00	82	3991168	25.31	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 126.55%#			
41) 2-Fluorobiphenyl	10.93	172	9263379	22.25	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 111.25%			
62) 2,4,6-Tribromophenol	13.21	330	1230066	25.37	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 126.85%#			
75) Terphenyl-d14	16.36	244	9913283	22.61	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 113.05%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	1685407	23.06	ug/mL#	95
3) Pyridine	3.39	79	3270358	24.73	ug/mL	85
5) Benzaldehyde	6.53	77	2342760	27.99	ug/ml	88
6) Aniline	6.73	66	4100294	25.90	ug/ml#	50
7) bis(2-Chloroethyl)ether	6.82	63	3017459	26.57	ug/mL	98
9) Phenol	6.73	94	5518410	24.85	ug/mL#	71
10) 2-Chlorophenol	6.87	128	4469932	24.16	ug/mL	95
11) 1,3-Dichlorobenzene	7.07	146	4943979	23.59	ug/mL	98
12) 1,4-Dichlorobenzene	7.14	146	5006060	23.57	ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	4707638	24.27	ug/mL	100
14) Benzyl alcohol	7.37	108	2967008	30.68	ug/mL#	79
15) bis(2-chloroisopropyl)ethe	7.60	45	7378209	30.65	ug/mL#	37
16) 2-Methylphenol	7.57	108	3990093	25.02	ug/mL	94
17) Acetophenone	7.77	105	5735785	24.22	ug/ml#	84
18) Hexachloroethane	7.87	117	1786144	25.59	ug/mL	89
19) N-Nitroso-di-n-propylamine	7.82	70	2222228	24.38	ug/mL#	93
20) 4-Methylphenol	7.79	108	4268668	25.19	ug/mL	93
23) Nitrobenzene	8.02	77	4330563	25.78	ug/mL#	87
24) Isophorone	8.39	82	7674109	25.36	ug/mL#	92
25) 2-Nitrophenol	8.53	139	2639585	26.56	ug/mL#	83
26) 2,4-Dimethylphenol	8.60	107	4175681	26.22	ug/mL	91
27) Benzoic acid	8.86	105	3384606m	49.94	ug/mL	
28) bis(2-Chloroethoxy)methane	8.76	93	5253917	24.44	ug/mL#	97
29) 2,4-Dichlorophenol	8.90	162	3765666	25.28	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.04	180	3864098	23.88	ug/mL	98
31) Naphthalene	9.14	128	13254698	22.71	ug/mL	98
32) 4-Chloroaniline	9.28	127	5784600	26.20	ug/mL	99
33) Hexachlorobutadiene	9.45	225	1973580	23.97	ug/mL	99
34) Caprolactam	9.90	113	1488383	26.96	ug/ml	83
35) 4-Chloro-3-methylphenol	10.11	107	4021475	25.08	ug/mL	90
36) 2-Methylnaphthalene	10.29	142	9361072	23.33	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	2554829	25.98	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

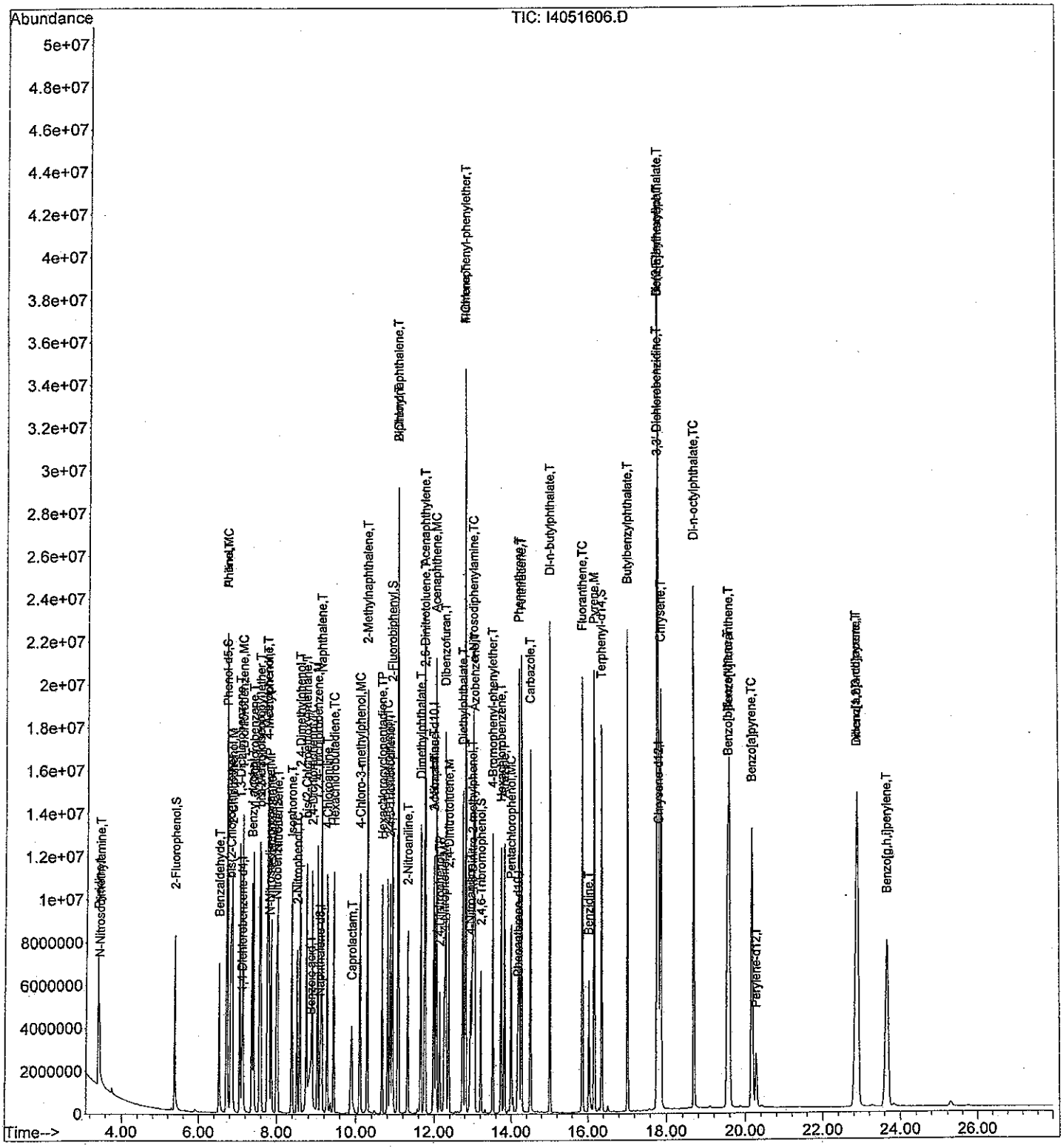
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.81	196	2513954	25.68	ug/mL	97
40) 2,4,5-Trichlorophenol	10.88	196	2758937m	25.14	ug/mL	
42) Biphenyl	11.07	154	10511163	21.85	ug/ml	98
43) 2-Chloronaphthalene	11.09	162	8311684	22.92	ug/mL	97
44) 2-Nitroaniline	11.33	65	2529857	29.72	ug/mL#	76
45) Acenaphthylene	11.76	152	13481801	22.03	ug/mL	99
46) Dimethylphthalate	11.67	163	10402149	24.33	ug/mL	99
47) 2,6-Dinitrotoluene	11.78	165	2440667	27.59	ug/mL#	86
48) Acenaphthene	12.05	153	8830730	22.25	ug/mL	97
49) 3-Nitroaniline	11.99	138	2744573	29.35	ug/mL#	79
50) 2,4-Dinitrophenol	12.14	184	1518378m	41.15	ug/mL	
51) Dibenzofuran	12.29	168	12340413	22.85	ug/mL#	78
52) 2,4-Dinitrotoluene	12.37	165	3350372	27.82	ug/mL#	41
53) 4-Nitrophenol	12.25	109	1308491	35.99	ug/mL#	21
54) Fluorene	12.81	166	9819026	22.51	ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	4411728	22.19	ug/mL	91
56) Diethylphthalate	12.75	149	10340011	23.45	ug/mL	99
57) 4-Nitroaniline	12.94	138	2582395	28.49	ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.99	198	2156567	33.77	ug/mL#	100
60) Azobenzene	13.05	182	3038099	23.98	ug/mL	68
61) n-Nitrosodiphenylamine	13.02	169	7295824	23.71	ug/mL	98
63) 4-Bromophenyl-phenylether	13.53	248	2507642	22.78	ug/mL#	90
64) Hexachlorobenzene	13.74	284	2662340	22.95	ug/mL#	89
65) Atrazine	13.82	200	2334749	22.02	ug/ml#	95
66) Pentachlorophenol	14.00	266	1750685	29.01	ug/mL	98
67) Phenanthrene	14.21	178	13889157	22.70	ug/mL	99
68) Anthracene	14.27	178	14027720	22.54	ug/mL	99
69) Carbazole	14.50	167	12386526	21.70	ug/mL	97
70) Di-n-butylphthalate	15.01	149	15442082	21.38	ug/mL#	96
71) Fluoranthene	15.86	202	14215203	23.01	ug/mL#	94
73) Benzidine	16.03	184	4374879m	30.80	ug/mL	
74) Pyrene	16.17	202	15111963	23.30	ug/mL#	94
76) Butylbenzylphthalate	17.02	149	8713770	25.74	ug/mL	87
77) 3,3'-Dichlorobenzidine	17.77	252	5177838	25.18	ug/mL#	96
78) Benz[a]anthracene	17.80	228	14381865	22.95	ug/mL	99
79) Chrysene	17.87	228	13793056	23.75	ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	12470081	24.91	ug/mL	94
82) Di-n-octylphthalate	18.69	149	18338341	22.47	ug/mL#	93
83) Benzo[b]fluoranthene	19.57	252	15199121m	24.19	ug/mL	
84) Benzo[k]fluoranthene	19.60	252	14125994m	24.53	ug/mL	
85) Benzo[a]pyrene	20.18	252	14453768	24.63	ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.92	276	17074268	24.92	ug/mL#	89
87) Dibenz[a,h]anthracene	22.93	278	14806214	24.94	ug/mL#	94
88) Benzo[g,h,i]perylene	23.69	276	14555222	24.94	ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	114	0.00
2	T	N-Nitrosodimethylamine	0.563	0.533	5.3	102	0.00
3	t	Pyridine	1.115	0.952	14.6	91	0.00
4	S	2-Fluorophenol	1.256	0.000	100.0#	0#	-5.36#
5	T	Benzaldehyde	0.854	0.502	[redacted]	68	0.00
6	T	Aniline	1.394	0.935	[redacted]	76	0.00
7	T	bis(2-Chloroethyl)ether	0.993	0.869	12.5	100	0.00
8	S	Phenol-d5	1.568	0.000	100.0#	0#	-6.70#
9	MC	Phenol	1.884	1.583	16.0#	95	0.00
10	M	2-Chlorophenol	1.511	1.322	12.5	100	0.00
11	T	1,3-Dichlorobenzene	1.674	1.431	14.5	98	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.484	13.2#	99	0.00
13	T	1,2-Dichlorobenzene	1.595	1.400	12.2	100	0.00
14	T	Benzyl alcohol	0.925	0.850	8.1	100	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.251	11.8	101	0.00
16	T	2-Methylphenol	1.328	1.156	13.0	98	0.00
17	T	Acetophenone	1.908	1.648	13.6	98	0.00
18	T	Hexachloroethane	0.590	0.519	12.0	99	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.639	13.5	94	0.00
20	T	4-Methylphenol	1.438	1.266	12.0	99	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00
22	S	Nitrobenzene-d5	0.306	0.000	100.0#	0#	-7.99#
23	T	Nitrobenzene	0.339	0.288	15.0	96	0.00
24	T	Isophorone	0.590	0.536	9.2	103	0.00
25	TC	2-Nitrophenol	0.193	0.174	9.8#	99	0.00
26	T	2,4-Dimethylphenol	0.336	0.297	11.6	100	0.00
27	T	Benzoic acid	0.229	0.193	15.7	89	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.369	11.1	103	0.00
29	TC	2,4-Dichlorophenol	0.290	0.253	12.8#	98	0.00
30	M	1,2,4-Trichlorobenzene	0.309	0.260	15.9	97	0.00
31	T	Naphthalene	1.113	0.990	11.1	103	0.00
32	T	4-Chloroaniline	0.446	0.340	[redacted]	86	0.00
33	TC	Hexachlorobutadiene	0.156	0.143	8.3#	107	0.00
34	T	Caprolactam	0.118	0.106	10.2	106	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.272	11.4#	100	0.00
36	T	2-Methylnaphthalene	0.754	0.651	13.7	99	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	117	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.284	16.7	94	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.311	8.3#	104	0.00
40	T	2,4,5-Trichlorophenol	0.374	0.329	12.0	98	0.00
41	S	2-Fluorobiphenyl	1.334	0.001	99.9#	0#	-0.06
42	T	Biphenyl	1.537	1.434	6.7	109	0.00
43	T	2-Chloronaphthalene	1.200	1.042	13.2	102	0.00
44	T	2-Nitroaniline	0.325	0.298	8.3	100	0.00
45	T	Acenaphthylene	1.990	1.779	10.6	102	0.00
46	T	Dimethylphthalate	1.447	1.246	13.9	99	0.00
47	T	2,6-Dinitrotoluene	0.316	0.285	9.8	98	0.00
48	MC	Acenaphthene	1.269	1.123	11.5#	104	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.302	14.7	93	0.00
50	TP	2,4-Dinitrophenol	0.155	0.169	-9.0	106	0.00
51	T	Dibenzofuran	1.780	1.544	13.3	101	0.00
52	M	2,4-Dinitrotoluene	0.424	0.399	5.9	102	0.00
53	MP	4-Nitrophenol	0.159	0.138	13.2	94	0.00
54	T	Fluorene	1.411	1.288	8.7	106	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.548	15.4	99	0.00
56	T	Diethylphthalate	1.459	1.300	10.9	103	0.00
57	T	4-Nitroaniline	0.347	0.269	[redacted]	83	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.143	6.5	94	0.00
60	T	Azobenzene	0.264	0.223	15.5	98	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.562	10.9#	104	0.00
62	S	2,4,6-Tribromophenol	0.102	0.000	100.0#	0#	-13.20#
63	T	4-Bromophenyl-phenylether	0.219	0.169	22.8	90	0.00
64	T	Hexachlorobenzene	0.232	0.199	14.2	100	0.00
65	T	Atrazine	0.214	0.000	100.0#	0#	-13.81#
66	MC	Pentachlorophenol	0.133	0.130	2.3#	104	0.00
67	T	Phenanthrene	1.291	1.161	10.1	106	0.00
68	T	Anthracene	1.297	1.122	13.5	100	0.00
69	T	Carbazole	1.166	0.837	[redacted]	85	0.00
70	T	Di-n-butylphthalate	1.554	1.439	7.4	102	0.00
71	TC	Fluoranthene	1.299	1.177	9.4#	105	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	116	0.00
73	T	Benzidine	0.347	0.000	100.0#	0#	-16.03#
74	M	Pyrene	1.420	1.274	10.3	103	0.00
75	S	Terphenyl-d14	0.919	0.000	100.0#	0#	-16.35#
76	T	Butylbenzylphthalate	0.747	0.708	5.2	105	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.382	14.9	96	0.00
78	T	Benz[a]anthracene	1.348	1.217	9.7	104	0.00
79	T	Chrysene	1.265	1.165	7.9	108	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.024	6.1	104	0.00
81	I	Perylene-d12	1.000	1.000	0.0	119	0.00
82	TC	Di-n-octylphthalate	1.849	1.745	5.6#	101	0.00
83	T	Benzo[b]fluoranthene	1.404	1.192	15.1	95	0.00
84	T	Benzo[k]fluoranthene	1.295	1.223	5.6	115	0.00
85	TC	Benzo[a]pyrene	1.296	1.112	14.2#	98	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.382	9.3	105	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.216	8.8	105	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.169	9.9	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	723866	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	3072159	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1733071	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2799181	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	2674106	5.00	ug/mL	0.00
81) Perylene-d12	20.28	264	2673976	5.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.00%#	
8) Phenol-d5	0.00	99	0d	0.00	ug/mL	
Spiked Amount 20.000	Range 10 - 94		Recovery	=	0.00%#	
22) Nitrobenzene-d5	0.00	82	0	0.00	ug/mL	
Spiked Amount 20.000	Range 35 - 114		Recovery	=	0.00%#	
41) 2-Fluorobiphenyl	10.87	172	2579	0.01	ug/mL	-0.06
Spiked Amount 20.000	Range 43 - 116		Recovery	=	0.05%#	
62) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.00%#	
75) Terphenyl-d14	0.00	244	0	0.00	ug/mL	
Spiked Amount 20.000	Range 33 - 141		Recovery	=	0.00%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	772241	9.47	ug/mL	97
3) Pyridine	3.40	79	1378472	8.54	ug/mL	97
5) Benzaldehyde	6.52	77	726914	5.88	ug/ml	100
6) Aniline	6.72	66	1354351	6.71	ug/ml	87
7) bis(2-Chloroethyl)ether	6.81	63	1258801	8.76	ug/mL	99
9) Phenol	6.71	94	2292402	8.41	ug/mL#	85
10) 2-Chlorophenol	6.86	128	1914194	8.75	ug/mL	96
11) 1,3-Dichlorobenzene	7.06	146	2071987	8.55	ug/mL	99
12) 1,4-Dichlorobenzene	7.13	146	2149027	8.68	ug/mL	100
13) 1,2-Dichlorobenzene	7.41	146	2027543	8.78	ug/mL	100
14) Benzyl alcohol	7.36	108	1231225	9.20	ug/mL	100
15) bis(2-chloroisopropyl)ethe	7.59	45	3258827	8.82	ug/mL#	100
16) 2-Methylphenol	7.56	108	1673177	8.70	ug/mL	99
17) Acetophenone	7.75	105	2386558	8.64	ug/ml	99
18) Hexachloroethane	7.86	117	751473	8.80	ug/mL	98
19) N-Nitroso-di-n-propylamine	7.80	70	925695	8.65	ug/mL	100
20) 4-Methylphenol	7.77	108	1833432	8.81	ug/mL	99
23) Nitrobenzene	8.01	77	1768827	8.49	ug/mL	100
24) Isophorone	8.37	82	3296036	9.10	ug/mL	100
25) 2-Nitrophenol	8.52	139	1067941	9.01	ug/mL	100
26) 2,4-Dimethylphenol	8.59	107	1824101	8.84	ug/mL	100
27) Benzoic acid	8.79	105	1185245	8.44	ug/mL	99
28) bis(2-Chloroethoxy)methane	8.75	93	2265139	8.89	ug/mL	99
29) 2,4-Dichlorophenol	8.89	162	1551950	8.72	ug/mL	99
30) 1,2,4-Trichlorobenzene	9.03	180	1596944	8.40	ug/mL	99
31) Naphthalene	9.13	128	6083845	8.90	ug/mL	100
32) 4-Chloroaniline	9.28	127	2088616	7.63	ug/mL	99
33) Hexachlorobutadiene	9.44	225	881256	9.20	ug/mL	99
34) Caprolactam	9.83	113	652511	9.01	ug/ml	99
35) 4-Chloro-3-methylphenol	10.10	107	1672883	8.88	ug/mL	99
36) 2-Methylnaphthalene	10.28	142	3998278	8.63	ug/mL	100
38) Hexachlorocyclopentadiene	10.66	237	983933	8.31	ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

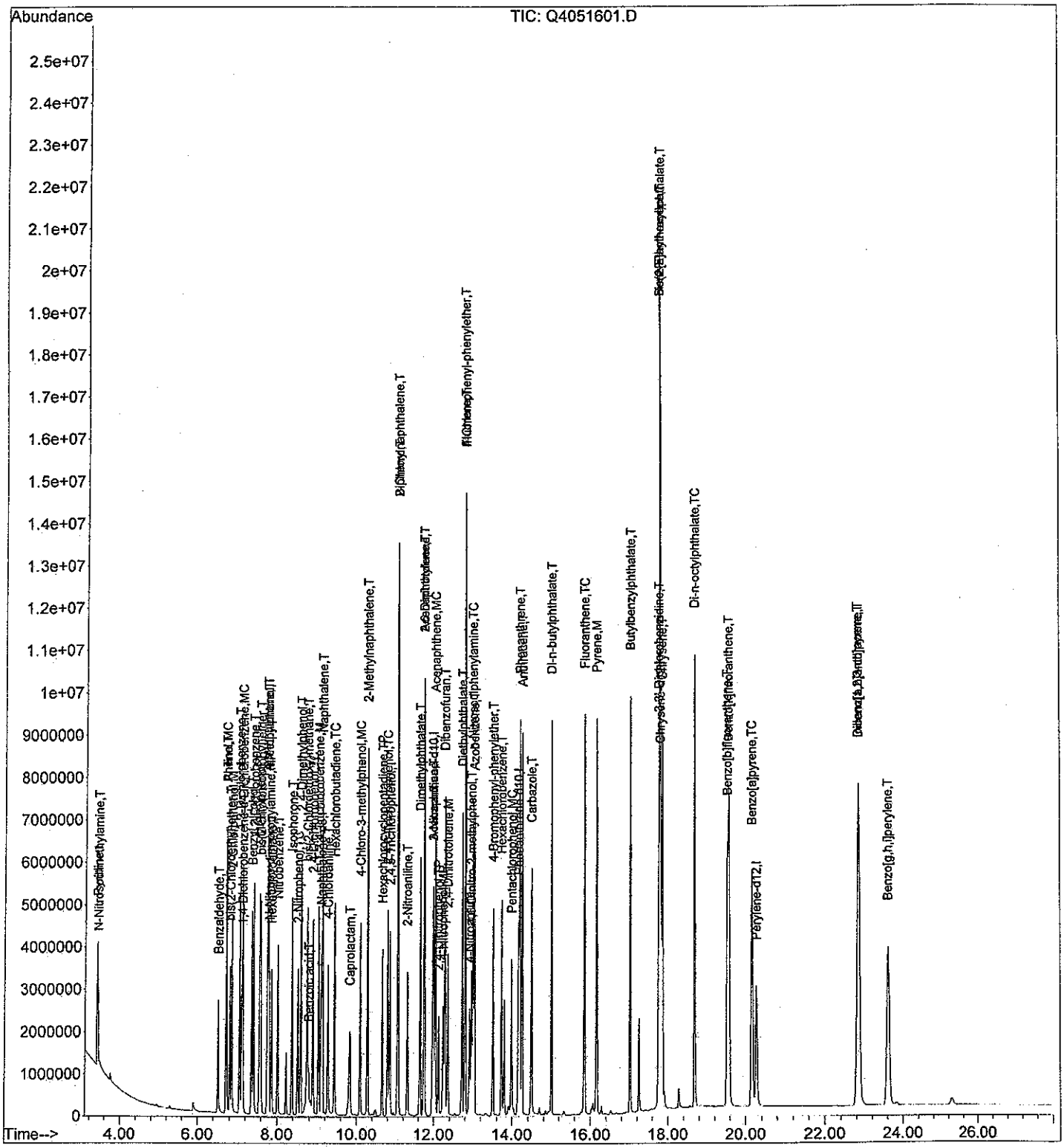
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1077013	9.16	ug/mL	100
40) 2,4,5-Trichlorophenol	10.87	196	1140700m	8.81	ug/mL	
42) Biphenyl	11.06	154	4968835	9.33	ug/ml	100
43) 2-Chloronaphthalene	11.08	162	3613315	8.69	ug/mL	100
44) 2-Nitroaniline	11.31	65	1032351	9.16	ug/mL	100
45) Acenaphthylene	11.75	152	6167068	8.94	ug/mL	100
46) Dimethylphthalate	11.65	163	4320115	8.62	ug/mL	100
47) 2,6-Dinitrotoluene	11.76	165	988757	9.03	ug/mL	100
48) Acenaphthene	12.04	153	3893737	8.85	ug/mL	100
49) 3-Nitroaniline	11.97	138	1047605	8.55	ug/mL	98
50) 2,4-Dinitrophenol	12.12	184	585519	10.91	ug/mL#	98
51) Dibenzofuran	12.28	168	5351238	8.67	ug/mL	99
52) 2,4-Dinitrotoluene	12.36	165	1384134	9.43	ug/mL	98
53) 4-Nitrophenol	12.23	109	479008	8.71	ug/mL	98
54) Fluorene	12.80	166	4463028	9.12	ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	1899558	8.46	ug/mL	100
56) Diethylphthalate	12.73	149	4505032	8.91	ug/mL	100
57) 4-Nitroaniline	12.91	138	931443	7.74	ug/mL	99
59) 4,6-Dinitro-2-methylphenol	12.96	198	799434	9.32	ug/mL#	100
60) Azobenzene	13.03	182	1249519	8.45	ug/mL	87
61) n-Nitrosodiphenylamine	13.00	169	3145450	8.90	ug/mL	97
63) 4-Bromophenyl-phenylether	13.52	248	944563	7.70	ug/mL	99
64) Hexachlorobenzene	13.73	284	1114971	8.58	ug/mL	100
66) Pentachlorophenol	13.99	266	727464	9.78	ug/mL	99
67) Phenanthrene	14.20	178	6498242	8.99	ug/mL	100
68) Anthracene	14.26	178	6282826	8.65	ug/mL	100
69) Carbazole	14.49	167	4683257	7.17	ug/mL	99
70) Di-n-butylphthalate	15.00	149	8055359	9.26	ug/mL	99
71) Fluoranthene	15.85	202	6589595	9.06	ug/mL	100
74) Pyrene	16.16	202	6815800	8.98	ug/mL	100
76) Butylbenzylphthalate	17.02	149	3787256	9.48	ug/mL	100
77) 3,3'-Dichlorobenzidine	17.76	252	2041547	8.51	ug/mL	100
78) Benz[a]anthracene	17.78	228	6509567	9.03	ug/mL	99
79) Chrysene	17.85	228	6233284	9.21	ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.78	149	5476940	9.38	ug/mL	100
82) Di-n-octylphthalate	18.69	149	9333638	9.44	ug/mL	100
83) Benzo[b]fluoranthene	19.53	252	6375494m	8.49	ug/mL	
84) Benzo[k]fluoranthene	19.57	252	6538634	9.44	ug/mL	97
85) Benzo[a]pyrene	20.16	252	5945863	8.58	ug/mL	100
86) Indeno[1,2,3-cd]pyrene	22.86	276	7388809	9.06	ug/mL	100
87) Dibenz[a,h]anthracene	22.87	278	6505782	9.13	ug/mL	100
88) Benzo[g,h,i]perylene	23.63	276	6249402	9.00	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration



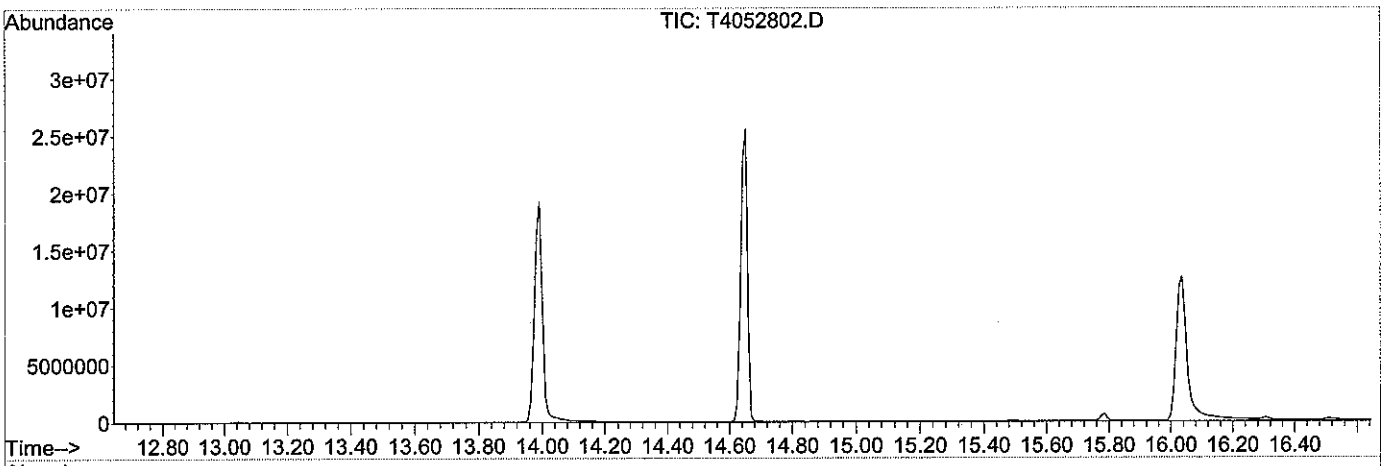
DFTPP

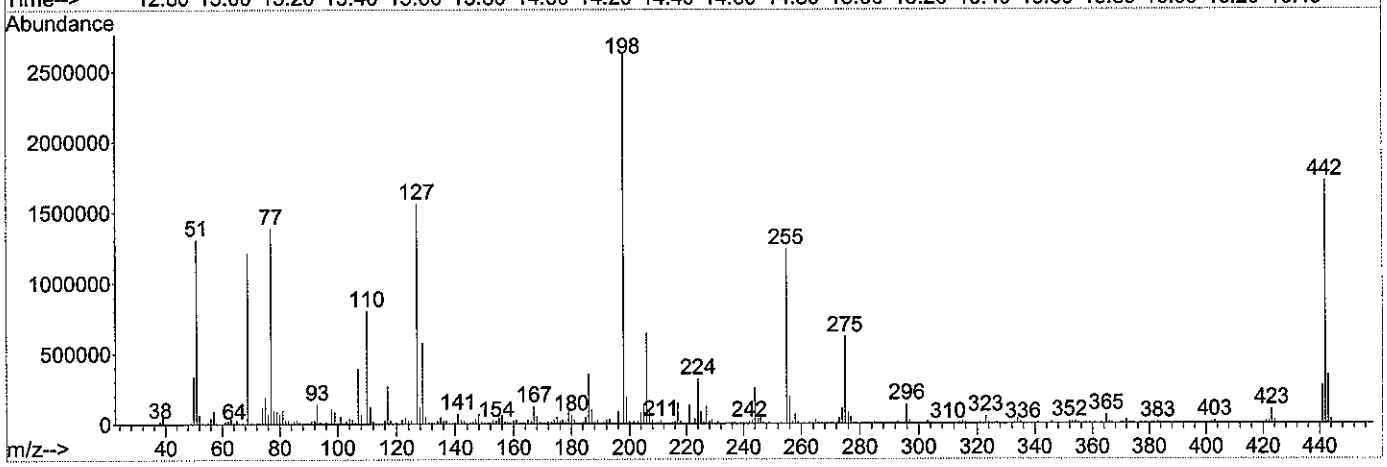
Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : T4052802.D
Acq On : 28 May 2008 7:49 pm
Operator : JAD
Sample : T4052802
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri Jun 06 08:46:54 2008





Spectrum Information: Scan 1244

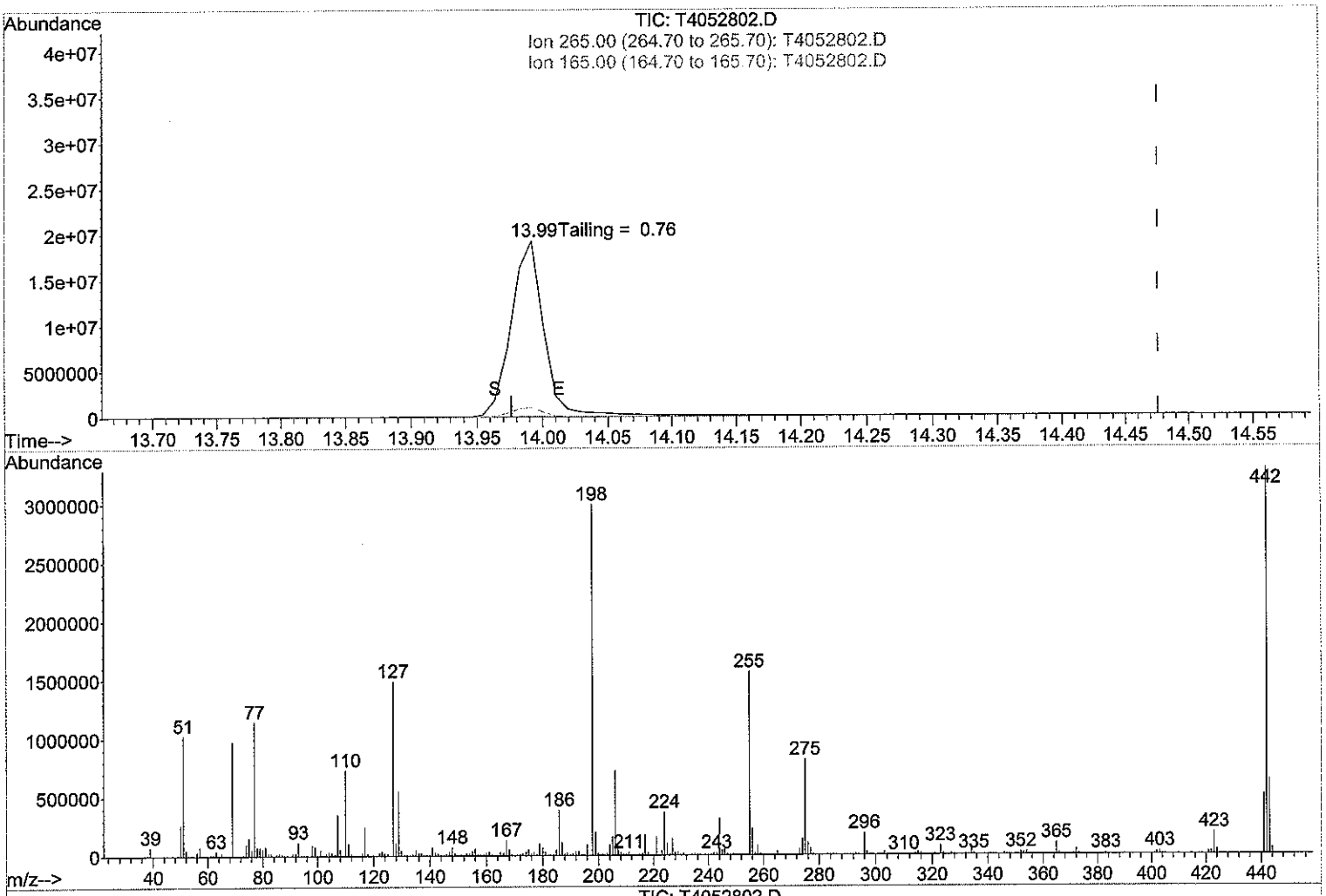
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.6	1304576	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.9	1207808	PASS
70	69	0.00	2	0.5	6201	PASS
127	198	40	60	59.3	1560576	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2631168	PASS
199	198	5	9	6.9	181632	PASS
275	198	10	30	23.4	614400	PASS
365	198	1	100	2.3	60752	PASS
441	443	0.01	100	78.3	268864	PASS
442	198	40	100	65.3	1719296	PASS
443	442	17	23	20.0	343360	PASS

Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : T4052802.D
Acq On : 28 May 2008 7:49 pm
Operator : JAD
Sample : T4052802
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Quant Time: May 28 20:30:41 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



(1) Pentachlorophenol (T)

14.652min (+0.176) 84.52ug/ml

response 37921594

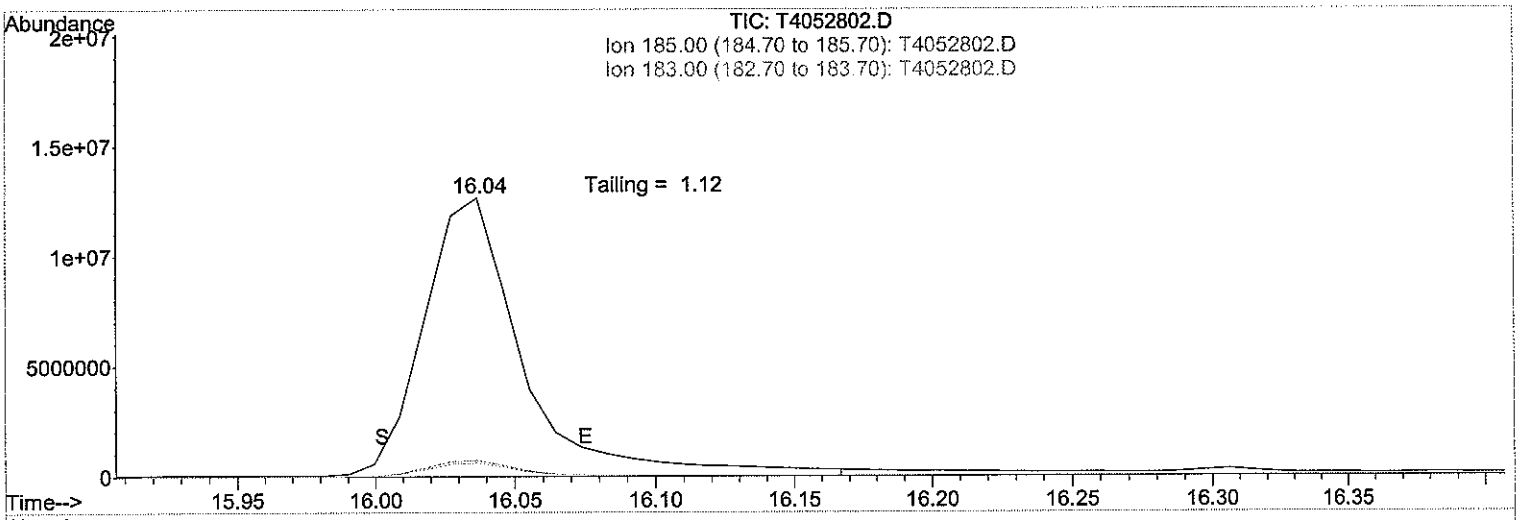
Signal	Exp%	Act%
TIC	100	100
265.00	0.00	0.11#
165.00	535.00	0.10#
0.00	0.00	0.00

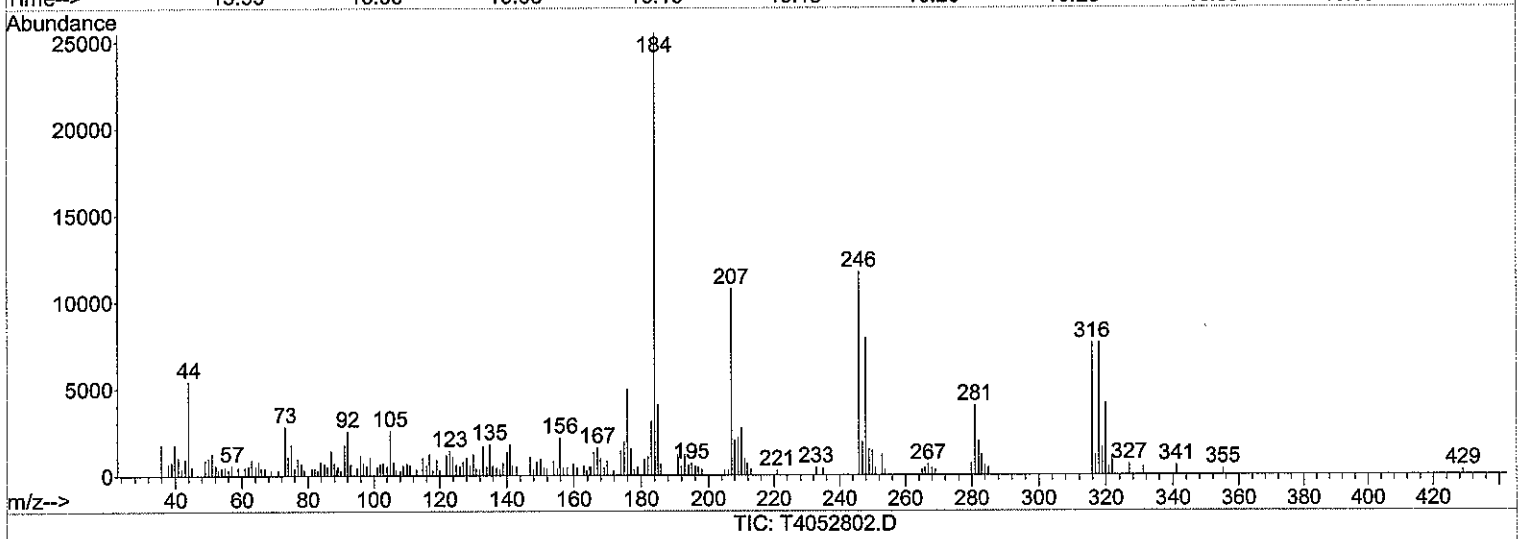
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : T4052802.D
Acq On : 28 May 2008 7:49 pm
Operator : JAD
Sample : T4052802
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Quant Time: May 28 20:30:41 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration





(3) Benzidine (T)

16.315min (-16.315) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	567.20	0.00
183.00	508.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : C4052802.D
Acq On : 28 May 2008 8:25 pm
Operator : JAD
Sample : C4052802
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 28 21:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed May 28 20:17:56 2008
Response via : Initial Calibration

6/9/08 [illegible] for JAD

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	75	0.18
2	T	N-Nitrosodimethylamine	0.563	0.508	9.8	64	0.14
3	t	Pyridine	1.115	0.953	14.5	60	0.14
4	S	2-Fluorophenol	1.256	1.193	5.0	70	0.00
5	T	Benzaldehyde	0.854	0.806	5.6	72	0.17
6	T	Aniline	1.394	1.200	13.9	64	0.17
7	T	bis(2-Chloroethyl)ether	0.993	0.903	9.1	68	0.16
8	S	Phenol-d5	1.568	1.489	5.0	70	0.06
9	MC	Phenol	1.884	1.749	7.2#	69	0.06
10	M	2-Chlorophenol	1.511	1.453	3.8	72	0.11
11	T	1,3-Dichlorobenzene	1.674	1.662	0.7	75	0.18
12	MC	1,4-Dichlorobenzene	1.710	1.709	0.1#	75	0.18
13	T	1,2-Dichlorobenzene	1.595	1.555	2.5	73	0.19
14	T	Benzyl alcohol	0.925	0.802	13.3	62	0.15
15	T	bis(2-chloroisopropyl)ether	2.551	2.396	6.1	71	0.19
16	T	2-Methylphenol	1.328	1.231	7.3	69	0.10
17	T	Acetophenone	1.908	1.808	5.2	71	0.18
18	T	Hexachloroethane	0.590	0.569	3.6	71	0.20
19	MP	N-Nitroso-di-n-propylamine	0.739	0.680	8.0	65	0.18
20	T	4-Methylphenol	1.438	1.305	9.2	67	0.10
21	I	Naphthalene-d8	1.000	1.000	0.0	73	0.21
22	S	Nitrobenzene-d5	0.306	0.305	0.3	70	0.19
23	T	Nitrobenzene	0.339	0.337	0.6	70	0.19
24	T	Isophorone	0.590	0.578	2.0	70	0.19
25	TC	2-Nitrophenol	0.193	0.193	0.0	69	0.20
26	T	2,4-Dimethylphenol	0.336	0.242	28.0#	51	0.14
27	T	Benzoic acid	0.229	0.239	-4.4	69	0.32
28	T	bis(2-Chloroethoxy)methane	0.415	0.401	3.4	70	0.20
29	TC	2,4-Dichlorophenol	0.290	0.284	2.1#	69	0.12
30	M	1,2,4-Trichlorobenzene	0.309	0.310	-0.3	73	0.20
31	T	Naphthalene	1.113	1.125	-1.1	73	0.20
32	T	4-Chloroaniline	0.446	0.410	8.1	65	0.20
33	TC	Hexachlorobutadiene	0.156	0.162	-3.8#	76	0.21
34	T	Caprolactam	0.118	0.106	10.2	66	0.15
35	MC	4-Chloro-3-methylphenol	0.307	0.299	2.6#	69	0.11
36	T	2-Methylnaphthalene	0.754	0.743	1.5	71	0.20
37	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.20
38	TP	Hexachlorocyclopentadiene	0.341	0.316	7.3	65	0.20
39	TC	2,4,6-Trichlorophenol	0.339	0.332	2.1#	69	0.14
40	T	2,4,5-Trichlorophenol	0.374	0.379	-1.3	70	0.07
41	S	2-Fluorobiphenyl	1.334	1.360	-1.9	74	0.20
42	T	Biphenyl	1.537	1.569	-2.1	74	0.20
43	T	2-Chloronaphthalene	1.200	1.203	-0.3	73	0.20
44	T	2-Nitroaniline	0.325	0.326	-0.3	68	0.19
45	T	Acenaphthylene	1.990	2.023	-1.7	72	0.20
46	T	Dimethylphthalate	1.447	1.457	-0.7	72	0.19
47	T	2,6-Dinitrotoluene	0.316	0.333	-5.4	71	0.19
48	MC	Acenaphthene	1.269	1.282	-1.0#	74	0.20
49	T	3-Nitroaniline	0.354	0.317	10.5	61	0.19
50	TP	2,4-Dinitrophenol	0.155	0.138	11.0	54	0.06

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : C4052802.D
Acq On : 28 May 2008 8:25 pm
Operator : JAD
Sample : C4052802
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 28 21:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed May 28 20:17:56 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	T	Dibenzofuran	1.780	1.801	-1.2	73	0.20
52	M	2,4-Dinitrotoluene	0.424	0.440	-3.8	70	0.20
53	MP	4-Nitrophenol	0.159	0.118	25.8#	50	0.03
54	T	Fluorene	1.411	1.433	-1.6	73	0.20
55	T	4-Chlorophenyl-phenylether	0.648	0.662	-2.2	74	0.20
56	T	Diethylphthalate	1.459	1.498	-2.7	74	0.19
57	T	4-Nitroaniline	0.347	0.268	22.8	51	0.18
58	I	Phenanthrene-d10	1.000	1.000	0.0	74	0.20
59	T	4,6-Dinitro-2-methylphenol	0.153	0.151	1.3	62	0.15
60	T	Azobenzene	0.264	0.271	-2.7	74	0.20
61	TC	n-Nitrosodiphenylamine	0.631	0.627	0.6#	✓72	0.19
62	S	2,4,6-Tribromophenol	0.102	0.102	0.0	70	0.18
63	T	4-Bromophenyl-phenylether	0.219	0.224	-2.3	74	0.20
64	T	Hexachlorobenzene	0.232	0.235	-1.3	73	0.20
65	T	Atrazine	0.214	0.159	25.7#	53	0.18
66	MC	Pentachlorophenol	0.133	0.140	-5.3#	✓69	0.12
67	T	Phenanthrene	1.291	1.284	0.5	73	0.20
68	T	Anthracene	1.297	1.321	-1.9	73	0.20
69	T	Carbazole	1.166	0.994	14.8	63	0.20
70	T	Di-n-butylphthalate	1.554	1.676	-7.9	74	0.20
71	TC	Fluoranthene	1.299	1.341	-3.2#	74	0.20
72	I	Chrysene-d12	1.000	1.000	0.0	73	0.22
73	T	Benzidine	0.347	0.027	92.2#	5#	0.21
74	M	Pyrene	1.420	1.446	-1.8	73	0.20
75	S	Terphenyl-d14	0.919	0.945	-2.8	74	0.20
76	T	Butylbenzylphthalate	0.747	0.769	-2.9	71	0.20
77	T	3,3'-Dichlorobenzidine	0.449	0.371	17.4	59	0.22
78	T	Benz[a]anthracene	1.348	1.325	1.7	71	0.22
79	T	Chrysene	1.265	1.290	-2.0	75	0.22
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.157	-6.0	74	0.22
81	I	Perylene-d12	1.000	1.000	0.0	71	0.33
82	TC	Di-n-octylphthalate	1.849	2.082	-12.6#	✓73	0.25
83	T	Benzo[b]fluoranthene	1.404	1.361	3.1	65	0.30
84	T	Benzo[k]fluoranthene	1.295	1.448	-11.8	82	0.30
85	TC	Benzo[a]pyrene	1.296	1.318	-1.7#	✓70	0.33
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.592	-4.5	73	0.46
87	T	Dibenz[a,h]anthracene	1.333	1.384	-3.8	72	0.47
88	T	Benzo[g,h,i]perylene	1.298	1.338	-3.1	71	0.51#

(#) = Out of Range SPCC's out = 0 CCC's out = 12

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : C4052802.D
Acq On : 28 May 2008 8:25 pm
Operator : JAD
Sample : C4052802
Misc :
ALS Vial : 7 Sample Multiplier: 1

6/9/08

Quant Time: May 28 21:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed May 28 20:17:56 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	475398	5.00	ug/mL	0.00
21) Naphthalene-d8	9.09	136	1925465	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.98	164	1076908	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	1735507	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	1677828	5.00	ug/mL	0.00
81) Perylene-d12	20.25	264	1607376	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	1134371	9.50	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 47.50%			
8) Phenol-d5	6.69	99	1415386	9.49	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 47.45%			
22) Nitrobenzene-d5	7.98	82	1173714	9.96	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 49.80%			
41) 2-Fluorobiphenyl	10.92	172	2928981	10.20	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 51.00%			
62) 2,4,6-Tribromophenol	13.19	330	355209	10.04	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 50.20%			
75) Terphenyl-d14	16.34	244	3170138	10.28	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 51.40%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.38	74	482861	9.01	ug/mL	95
3) Pyridine	3.36	79	905724	8.54	ug/mL	99
5) Benzaldehyde	6.51	77	766539	9.44	ug/ml	99
6) Aniline	6.71	66	1140870	8.61	ug/ml	93
7) bis(2-Chloroethyl)ether	6.80	63	858372	9.09	ug/mL	86
9) Phenol	6.71	94	1663234	9.29	ug/mL	94
10) 2-Chlorophenol	6.85	128	1381969	9.62	ug/mL	99
11) 1,3-Dichlorobenzene	7.05	146	1580376	9.93	ug/mL	99
12) 1,4-Dichlorobenzene	7.12	146	1625202	9.99	ug/mL	99
13) 1,2-Dichlorobenzene	7.40	146	1478233	9.75	ug/mL	100
14) Benzyl alcohol	7.35	108	762512	8.67	ug/mL	99
15) bis(2-chloroisopropyl)ethe	7.58	45	2278422	9.39	ug/mL#	100
16) 2-Methylphenol	7.56	108	1170415	9.27	ug/mL	97
17) Acetophenone	7.74	105	1719371	9.48	ug/ml	98
18) Hexachloroethane	7.85	117	541404	9.65	ug/mL	98
19) N-Nitroso-di-n-propylamine	7.79	70	646422	9.20	ug/mL	100
20) 4-Methylphenol	7.77	108	1240654	9.08	ug/mL	98
23) Nitrobenzene	8.00	77	1295984	9.92	ug/mL	99
24) Isophorone	8.36	82	2224332	9.80	ug/mL	99
25) 2-Nitrophenol	8.51	139	743605m	10.01	ug/mL	
26) 2,4-Dimethylphenol	8.58	107	930377	7.20	ug/mL	99
27) Benzoic acid	8.76	105	921584m	10.47	ug/mL	
28) bis(2-Chloroethoxy)methane	8.74	93	1544935	9.67	ug/mL	100
29) 2,4-Dichlorophenol	8.89	162	1092828	9.80	ug/mL	99
30) 1,2,4-Trichlorobenzene	9.02	180	1193544	10.02	ug/mL	100
31) Naphthalene	9.12	128	4331098	10.11	ug/mL	100
32) 4-Chloroaniline	9.27	127	1580699	9.21	ug/mL	97
33) Hexachlorobutadiene	9.44	225	623098	10.38	ug/mL	99
34) Caprolactam	9.82	113	407267	8.98	ug/ml	98
35) 4-Chloro-3-methylphenol	10.10	107	1152632	9.76	ug/mL	98
36) 2-Methylnaphthalene	10.27	142	2859734	9.85	ug/mL	100
38) Hexachlorocyclopentadiene	10.65	237	681351	9.26	ug/mL	98
39) 2,4,6-Trichlorophenol	10.80	196	714189	9.78	ug/mL	100
40) 2,4,5-Trichlorophenol	10.87	196	815708m	10.14	ug/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : C4052802.D
Acq On : 28 May 2008 8:25 pm
Operator : JAD
Sample : C4052802
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 28 21:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed May 28 20:17:56 2008
Response via : Initial Calibration

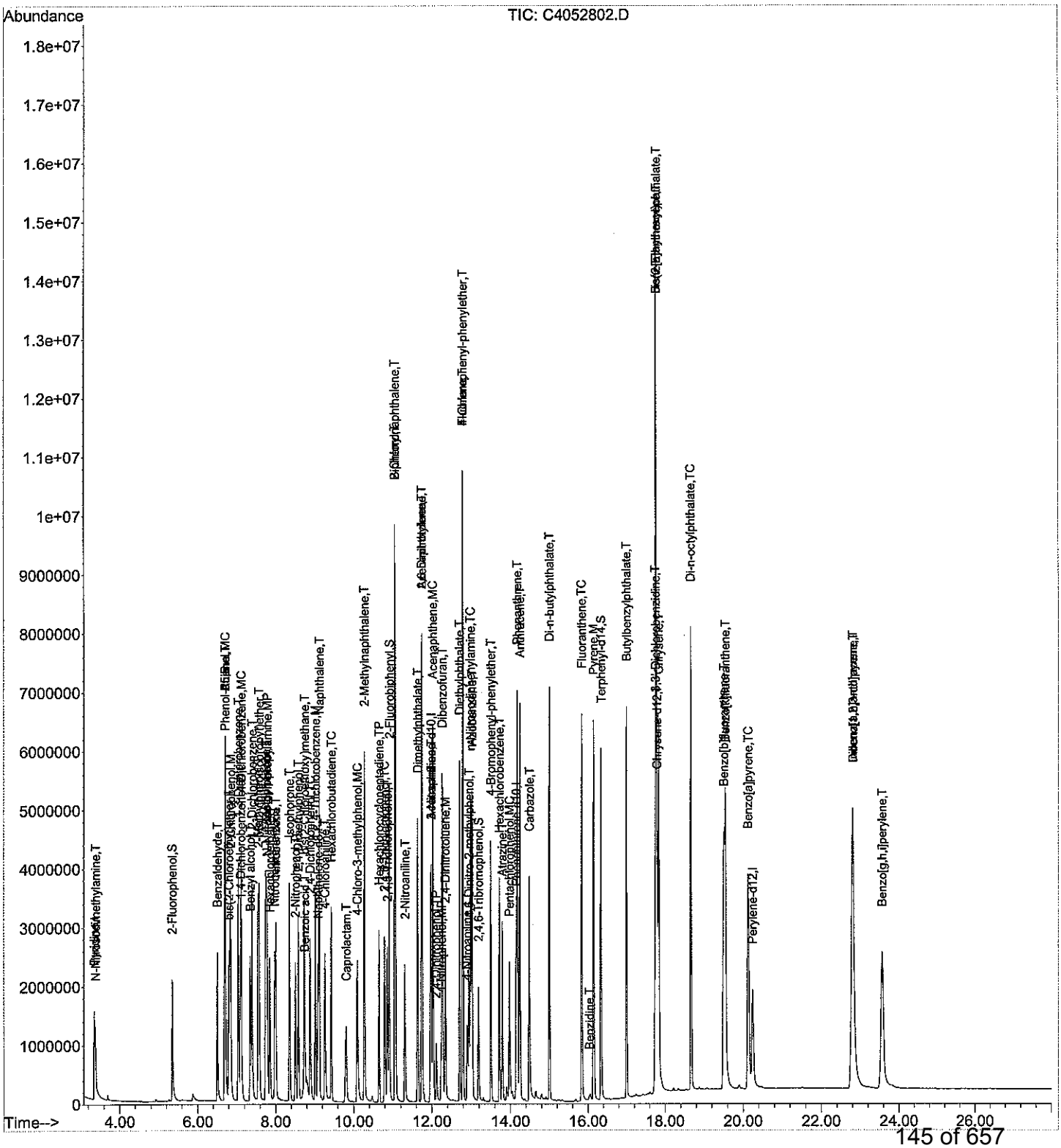
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) Biphenyl	11.06	154	3378973	10.21 ug/ml	99
43) 2-Chloronaphthalene	11.07	162	2590421	10.03 ug/mL	100
44) 2-Nitroaniline	11.31	65	702030	10.03 ug/mL	99
45) Acenaphthylene	11.74	152	4357143	10.17 ug/mL	100
46) Dimethylphthalate	11.64	163	3138541	10.07 ug/mL	100
47) 2,6-Dinitrotoluene	11.75	165	717748	10.55 ug/mL	100
48) Acenaphthene	12.03	153	2760329	10.10 ug/mL	99
49) 3-Nitroaniline	11.97	138	682906	8.97 ug/mL	98
50) 2,4-Dinitrophenol	12.12	184	296197	8.88 ug/mL#	98
51) Dibenzofuran	12.28	168	3878961	10.12 ug/mL#	79
52) 2,4-Dinitrotoluene	12.36	165	947951	10.39 ug/mL	100
53) 4-Nitrophenol	12.24	109	255146	7.46 ug/mL#	26
54) Fluorene	12.80	166	3086406	10.15 ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	1425647	10.22 ug/mL	100
56) Diethylphthalate	12.72	149	3225441	10.27 ug/mL	100
57) 4-Nitroaniline	12.90	138	576967	7.71 ug/mL	97
59) 4,6-Dinitro-2-methylphenol	12.95	198	524722m	9.87 ug/mL	
60) Azobenzene	13.03	182	941888	10.27 ug/mL	95
61) n-Nitrosodiphenylamine	12.99	169	2175869	9.93 ug/mL	99
63) 4-Bromophenyl-phenylether	13.51	248	778503	10.24 ug/mL	100
64) Hexachlorobenzene	13.72	284	815059	10.11 ug/mL	99
65) Atrazine	13.80	200	551856	7.43 ug/ml	99
66) Pentachlorophenol	13.98	266	484754	10.51 ug/mL	98
67) Phenanthrene	14.19	178	4455624m	9.95 ug/mL	
68) Anthracene	14.25	178	4584095m	10.18 ug/mL	
69) Carbazole	14.49	167	3449279	8.52 ug/mL	99
70) Di-n-butylphthalate	15.00	149	5817782	10.78 ug/mL	100
71) Fluoranthene	15.84	202	4656236	10.32 ug/mL	98
73) Benzidine	16.04	184	90739m	0.78 ug/mL	
74) Pyrene	16.15	202	4853917	10.19 ug/mL	98
76) Butylbenzylphthalate	17.01	149	2579076	10.29 ug/mL	99
77) 3,3'-Dichlorobenzidine	17.75	252	1243377m	8.26 ug/mL	
78) Benz[a]anthracene	17.77	228	4445167	9.83 ug/mL	100
79) Chrysene	17.84	228	4327434m	10.19 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.77	149	3883792	10.60 ug/mL	100
82) Di-n-octylphthalate	18.67	149	6694309	11.26 ug/mL	100
83) Benzo[b]fluoranthene	19.51	252	4375443	9.70 ug/mL	99
84) Benzo[k]fluoranthene	19.55	252	4655239	11.18 ug/mL	99
85) Benzo[a]pyrene	20.14	252	4237868	10.17 ug/mL	99
86) Indeno[1,2,3-cd]pyrene	22.81	276	5117495	10.44 ug/mL	98
87) Dibenz[a,h]anthracene	22.83	278	4449856	10.38 ug/mL	99
88) Benzo[g,h,i]perylene	23.58	276	4300307	10.31 ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May28\
Data File : C4052802.D
Acq On : 28 May 2008 8:25 pm
Operator : JAD
Sample : C4052802
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 28 21:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed May 28 20:17:56 2008
Response via : Initial Calibration



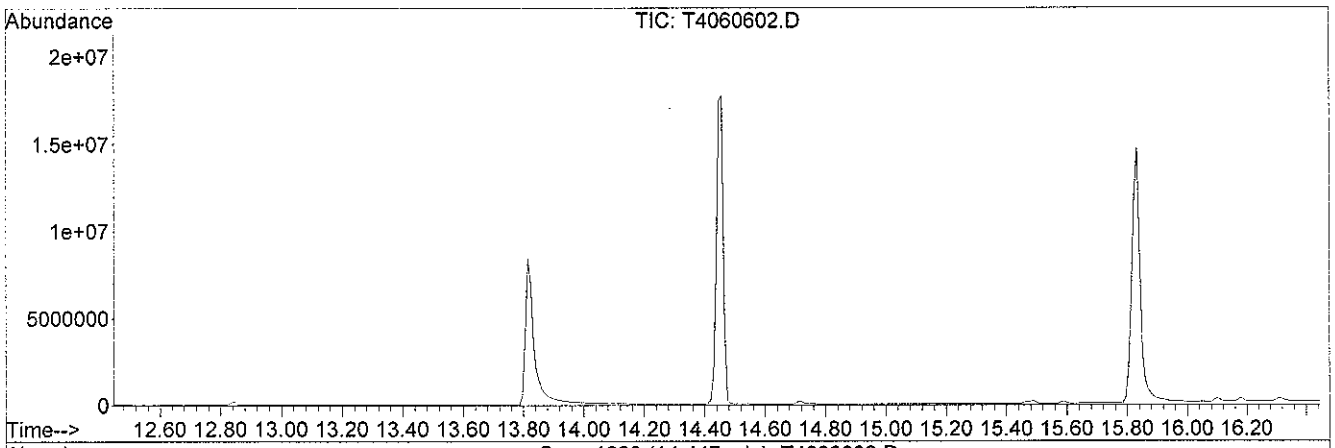
DFTPP

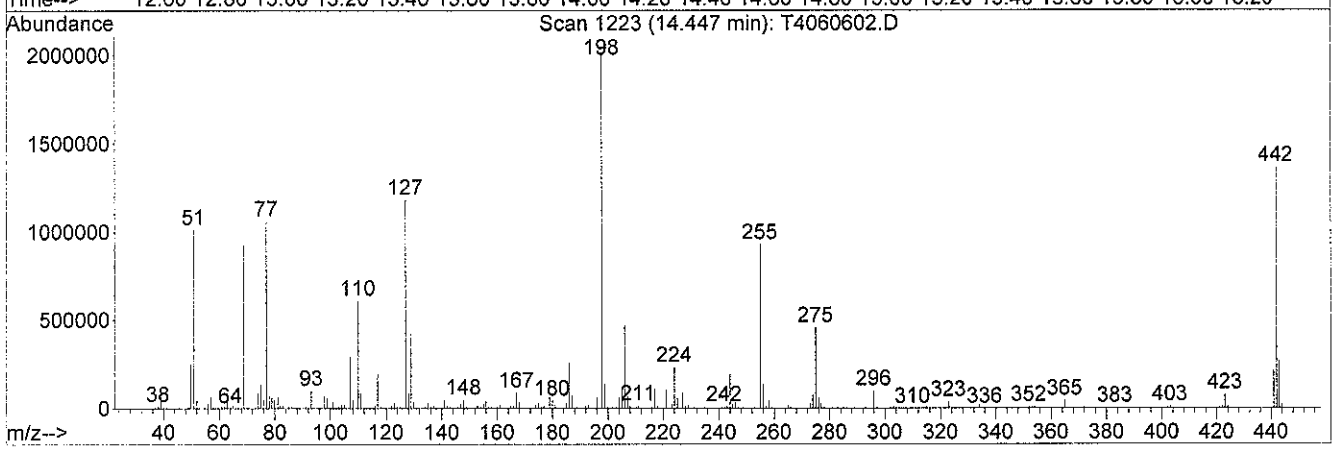
Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : T4060602.D
Acq On : 6 Jun 2008 3:02 pm
Operator : SEO
Sample : T4060602
Misc :
ALS Vial : 5 Sample Multiplier: 1

TLW 6/6/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri Jun 06 08:46:54 2008





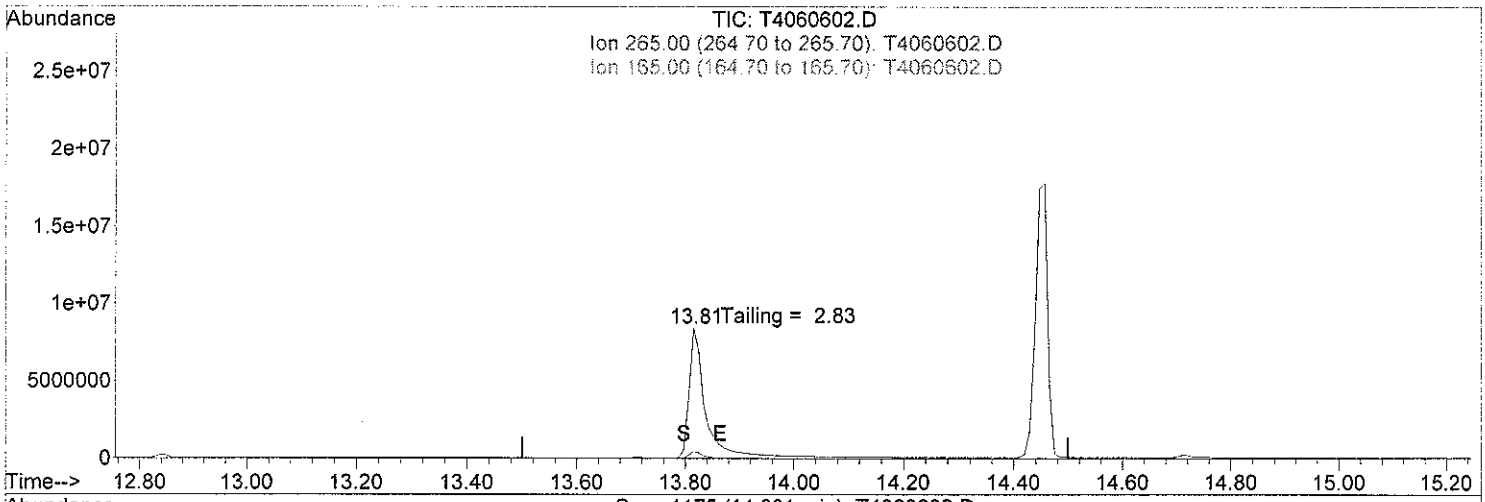
Spectrum Information: Scan 1223

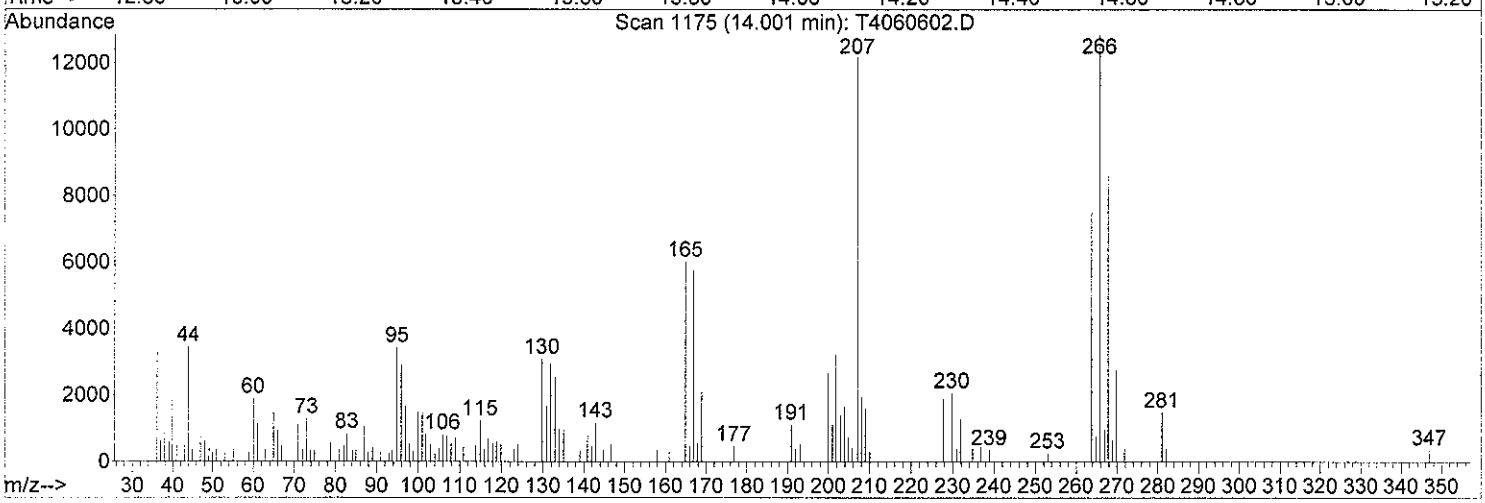
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	1015424	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.1	927808	PASS
70	69	0.00	2	0.5	4293	PASS
127	198	40	60	58.8	1184256	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2014208	PASS
199	198	5	9	6.9	138944	PASS
275	198	10	30	22.7	457600	PASS
365	198	1	100	2.2	44336	PASS
441	443	0.01	100	78.0	212032	PASS
442	198	40	100	67.8	1365504	PASS
443	442	17	23	19.9	271936	PASS

Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE06\
Data File : T4060602.D
Acq On : 6 Jun 2008 3:02 pm
Operator : SEO
Sample : T4060602
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 08:37:11 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060602.D

(1) Pentachlorophenol (T)

14.001min (-14.001) 0.00ug/ml d

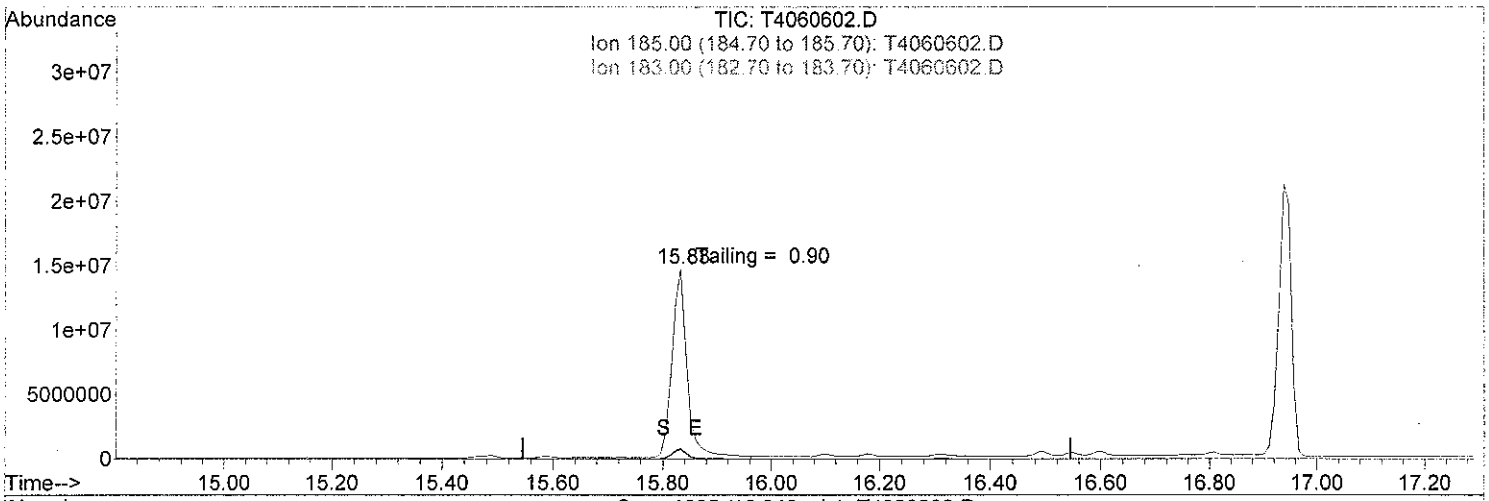
response 0

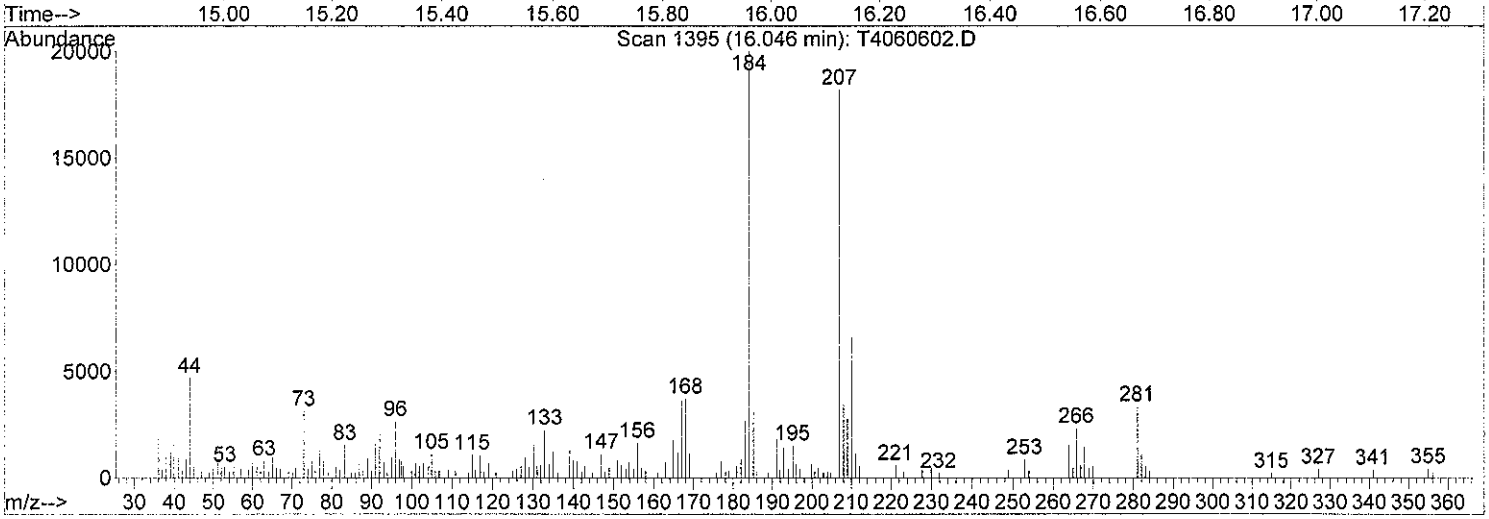
Signal	Exp%	Act%
TIC	100	0.00
265.00	64.30	0.00
165.00	541.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE06\
Data File : T4060602.D
Acq On : 6 Jun 2008 3:02 pm
Operator : SEO
Sample : T4060602
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 08:37:11 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060602.D

(3) Benzidine (T)

16.046min (-16.046) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	564.80	0.00
183.00	481.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : C4060602.D
Acq On : 6 Jun 2008 3:38 pm
Operator : SEO
Sample : C4060602
Misc :
ALS Vial : 6 Sample Multiplier: 1

6/9/08
SEO

Quant Time: Jun 06 16:36:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00
2	T	N-Nitrosodimethylamine	0.563	0.563	0.0	84	0.00
3	t	Pyridine	1.115	1.119	-0.4	84	0.00
4	S	2-Fluorophenol	1.256	1.268	-1.0	89	-0.04
5	T	Benzaldehyde	0.854	0.872	-2.1	93	0.00
6	T	Aniline	1.394	0.693	50.3#	44#	0.00
7	T	bis(2-Chloroethyl)ether	0.993	1.111	-11.9	100	0.00
8	S	Phenol-d5	1.568	1.600	-2.0	90	-0.03
9	MC	Phenol	1.884	1.829	2.9#	87	-0.02
10	M	2-Chlorophenol	1.511	1.531	-1.3	90	0.00
11	T	1,3-Dichlorobenzene	1.674	1.726	-3.1	93	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.752	-2.5#	92	0.00
13	T	1,2-Dichlorobenzene	1.595	1.618	-1.4	91	0.00
14	T	Benzyl alcohol	0.925	0.947	-2.4	88	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.518	1.3	89	0.00
16	T	2-Methylphenol	1.328	1.341	-1.0	89	0.00
17	T	Acetophenone	1.908	1.943	-1.8	91	0.00
18	T	Hexachloroethane	0.590	0.597	-1.2	90	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.813	-10.0	94	0.00
20	T	4-Methylphenol	1.438	1.426	0.8	87	-0.02
21	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00
22	S	Nitrobenzene-d5	0.306	0.320	-4.6	92	0.00
23	T	Nitrobenzene	0.339	0.353	-4.1	92	0.00
24	T	Isophorone	0.590	0.611	-3.6	92	0.00
25	TC	2-Nitrophenol	0.193	0.210	-8.8#	94	0.00
26	T	2,4-Dimethylphenol	0.336	0.264	21.4	70	0.00
27	T	Benzoic acid	0.229	0.008	96.5#	3#	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.416	-0.2	91	0.00
29	TC	2,4-Dichlorophenol	0.290	0.287	1.0#	87	-0.02
30	M	1,2,4-Trichlorobenzene	0.309	0.309	0.0	91	0.00
31	T	Naphthalene	1.113	1.132	-1.7	92	0.00
32	T	4-Chloroaniline	0.446	0.432	3.1	85	0.00
33	TC	Hexachlorobutadiene	0.156	0.160	-2.6#	94	0.00
34	T	Caprolactam	0.118	0.116	1.7	91	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.316	-2.9#	91	0.00
36	T	2-Methylnaphthalene	0.754	0.776	-2.9	93	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.229	32.8#	59	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.336	0.9#	87	-0.02
40	T	2,4,5-Trichlorophenol	0.374	0.357	4.5	83	-0.04
41	S	2-Fluorobiphenyl	1.334	1.344	-0.7	91	0.00
42	T	Biphenyl	1.537	1.579	-2.7	93	0.00
43	T	2-Chloronaphthalene	1.200	1.211	-0.9	91	0.00
44	T	2-Nitroaniline	0.325	0.362	-11.4	94	0.00
45	T	Acenaphthylene	1.990	2.037	-2.4	91	0.00
46	T	Dimethylphthalate	1.447	1.488	-2.8	92	0.00
47	T	2,6-Dinitrotoluene	0.316	0.352	-11.4	93	0.00
48	MC	Acenaphthene	1.269	1.288	-1.5#	93	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : C4060602.D
Acq On : 6 Jun 2008 3:38 pm
Operator : SEO
Sample : C4060602
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 16:36:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.378	-6.8	90	0.00
50	TP	2,4-Dinitrophenol	0.155	0.118	23.9	57	-0.07
51	T	Dibenzofuran	1.780	1.811	-1.7	91	0.00
52	M	2,4-Dinitrotoluene	0.424	0.472	-11.3	93	0.00
53	MP	4-Nitrophenol	0.159	0.123	22.6	65	-0.02
54	T	Fluorene	1.411	1.457	-3.3	93	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.663	-2.3	93	0.00
56	T	Diethylphthalate	1.459	1.522	-4.3	93	0.00
57	T	4-Nitroaniline	0.347	0.343	1.2	82	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.169	-10.5	87	0.00
60	T	Azobenzene	0.264	0.266	-0.8	91	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.653	-3.5#	94	0.00
62	S	2,4,6-Tribromophenol	0.102	0.100	2.0	87	0.00
63	T	4-Bromophenyl-phenylether	0.219	0.222	-1.4	92	0.00
64	T	Hexachlorobenzene	0.232	0.230	0.9	91	0.00
65	T	Atrazine	0.214	0.172	19.6	72	0.00
66	MC	Pentachlorophenol	0.133	0.097	27.1#	61	-0.03
67	T	Phenanthrene	1.291	1.278	1.0	91	0.00
68	T	Anthracene	1.297	1.299	-0.2	90	0.00
69	T	Carbazole	1.166	1.111	4.7	88	0.00
70	T	Di-n-butylphthalate	1.554	1.659	-6.8	92	0.00
71	TC	Fluoranthene	1.299	1.313	-1.1#	92	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	90	0.00
73	T	Benzidine	0.347	0.132	62.0#	32#	0.00
74	M	Pyrene	1.420	1.468	-3.4	92	0.00
75	S	Terphenyl-d14	0.919	0.930	-1.2	90	0.00
76	T	Butylbenzylphthalate	0.747	0.808	-8.2	93	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.456	-1.6	89	0.00
78	T	Benz[a]anthracene	1.348	1.327	1.6	88	0.00
79	T	Chrysene	1.265	1.253	0.9	90	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.181	-8.2	93	0.00
81	I	Perylene-d12	1.000	1.000	0.0	89	0.00
82	TC	Di-n-octylphthalate	1.849	2.137	-15.6#	93	0.00
83	T	Benzo[b]fluoranthene	1.404	1.436	-2.3	86	0.00
84	T	Benzo[k]fluoranthene	1.295	1.308	-1.0	92	0.00
85	TC	Benzo[a]pyrene	1.296	1.307	-0.8#	87	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.547	-1.5	88	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.355	-1.7	88	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.313	-1.2	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : C4060602.D
Acq On : 6 Jun 2008 3:38 pm
Operator : SEO
Sample : C4060602
Misc :
ALS Vial : 6 Sample Multiplier: 1

6/9/08

Quant Time: Jun 06 16:36:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.92	152	568618	5.00	ug/mL	0.00
21) Naphthalene-d8	8.88	136	2410376	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.78	164	1339967	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.94	188	2188050	5.00	ug/mL	0.00
72) Chrysene-d12	17.58	240	2074232	5.00	ug/mL	0.00
81) Perylene-d12	19.91	264	2013375	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.33	112	1442016	10.09	ug/mL	-0.04
Spiked Amount 20.000	Range 21 - 100		Recovery = 50.45%			
8) Phenol-d5	6.61	99	1819310	10.20	ug/mL	-0.03
Spiked Amount 20.000	Range 10 - 94		Recovery = 51.00%			
22) Nitrobenzene-d5	7.79	82	1541513	10.45	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 52.25%			
41) 2-Fluorobiphenyl	10.72	172	3601804	10.08	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 50.40%			
62) 2,4,6-Tribromophenol	13.01	330	437506	9.80	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 49.00%			
75) Terphenyl-d14	16.14	244	3859554	10.13	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 50.65%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.24	74	640101	9.99	ug/mL#	95
3) Pyridine	3.22	79	1272428	10.04	ug/mL	99
5) Benzaldehyde	6.34	77	992232	10.22	ug/ml	99
6) Aniline	6.55	66	788216m	4.97	ug/ml	
7) bis(2-Chloroethyl)ether	6.64	63	1263500	11.19	ug/mL	89
9) Phenol	6.64	94	2079968	9.71	ug/mL#	88
10) 2-Chlorophenol	6.73	128	1740571	10.13	ug/mL	97
11) 1,3-Dichlorobenzene	6.87	146	1962399	10.31	ug/mL	99
12) 1,4-Dichlorobenzene	6.94	146	1992811	10.25	ug/mL	98
13) 1,2-Dichlorobenzene	7.21	146	1839776	10.14	ug/mL	100
14) Benzyl alcohol	7.21	108	1076657	10.24	ug/mL	99
15) bis(2-chloroisopropyl)ethe	7.39	45	2863147	9.87	ug/mL	99
16) 2-Methylphenol	7.45	108	1524902	10.10	ug/mL	98
17) Acetophenone	7.57	105	2209870	10.19	ug/ml	96
18) Hexachloroethane	7.65	117	678729	10.11	ug/mL	93
19) N-Nitroso-di-n-propylamine	7.61	70	924282	11.00	ug/mL	97
20) 4-Methylphenol	7.65	108	1621140	9.92	ug/mL	99
23) Nitrobenzene	7.82	77	1699979	10.40	ug/mL	98
24) Isophorone	8.17	82	2945151	10.36	ug/mL	100
25) 2-Nitrophenol	8.31	139	1014645	10.91	ug/mL	99
26) 2,4-Dimethylphenol	8.43	107	1273051m	7.87	ug/mL	
27) Benzoic acid	8.43	105	37744	0.34	ug/mL	97
28) bis(2-Chloroethoxy)methane	8.54	93	2007140	10.04	ug/mL	100
29) 2,4-Dichlorophenol	8.75	162	1383709	9.91	ug/mL	99
30) 1,2,4-Trichlorobenzene	8.81	180	1490401	9.99	ug/mL	99
31) Naphthalene	8.91	128	5454862	10.17	ug/mL	100
32) 4-Chloroaniline	9.06	127	2084246	9.70	ug/mL	100
33) Hexachlorobutadiene	9.21	225	771532	10.26	ug/mL	100
34) Caprolactam	9.67	113	559299	9.85	ug/ml	98
35) 4-Chloro-3-methylphenol	9.98	107	1524849	10.31	ug/mL	97
36) 2-Methylnaphthalene	10.07	142	3739713m	10.29	ug/mL	
38) Hexachlorocyclopentadiene	10.45	237	614379m	6.71	ug/mL	

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : C4060602.D
Acq On : 6 Jun 2008 3:38 pm
Operator : SEO
Sample : C4060602
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 16:36:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

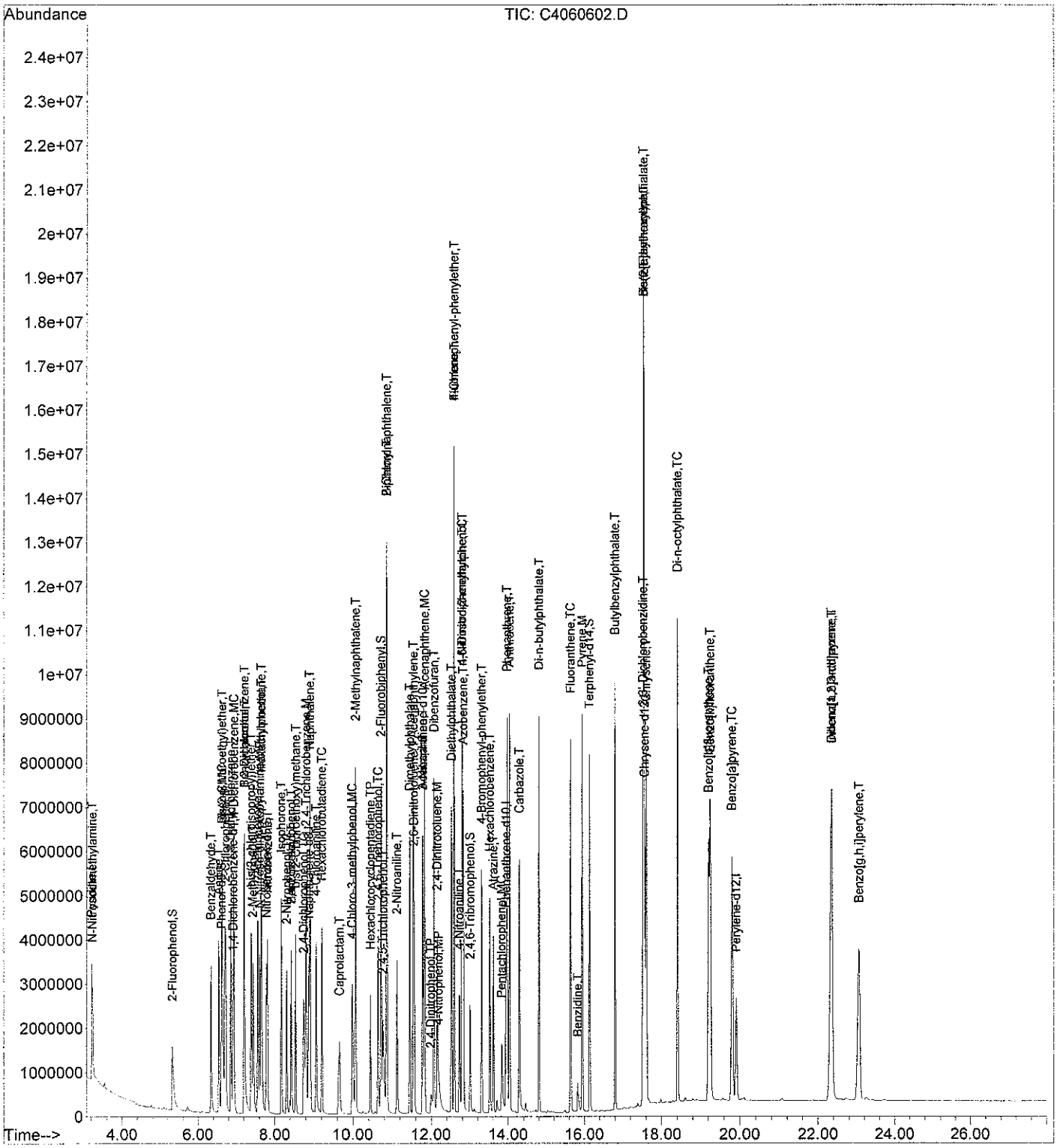
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.64	196	899346	9.89 ug/mL	99
40) 2,4,5-Trichlorophenol	10.77	196	957297	9.56 ug/mL	99
42) Biphenyl	10.86	154	4232049	10.28 ug/ml	99
43) 2-Chloronaphthalene	10.87	162	3245074	10.09 ug/mL	100
44) 2-Nitroaniline	11.13	65	969538	11.13 ug/mL	99
45) Acenaphthylene	11.55	152	5458414	10.24 ug/mL	100
46) Dimethylphthalate	11.45	163	3986680	10.28 ug/mL	100
47) 2,6-Dinitrotoluene	11.57	165	943054	11.14 ug/mL	99
48) Acenaphthene	11.83	153	3452701	10.16 ug/mL	100
49) 3-Nitroaniline	11.79	138	1013488	10.70 ug/mL	99
50) 2,4-Dinitrophenol	11.99	184	315597m	7.61 ug/mL	
51) Dibenzofuran	12.08	168	4852976	10.17 ug/mL	100
52) 2,4-Dinitrotoluene	12.16	165	1265886	11.15 ug/mL#	86
53) 4-Nitrophenol	12.20	109	328691m	7.73 ug/mL	
54) Fluorene	12.60	166	3903579m	10.32 ug/mL	
55) 4-Chlorophenyl-phenylether	12.60	204	1776274	10.23 ug/mL	97
56) Diethylphthalate	12.53	149	4078226	10.43 ug/mL	99
57) 4-Nitroaniline	12.73	138	918378	9.87 ug/mL	96
59) 4,6-Dinitro-2-methylphenol	12.79	198	740869	11.05 ug/mL#	12
60) Azobenzene	12.83	182	1164921	10.08 ug/mL	94
61) n-Nitrosodiphenylamine	12.80	169	2855431	10.33 ug/mL	99
63) 4-Bromophenyl-phenylether	13.31	248	973382	10.15 ug/mL	94
64) Hexachlorobenzene	13.52	284	1008482	9.92 ug/mL	96
65) Atrazine	13.62	200	754326	8.06 ug/ml	99
66) Pentachlorophenol	13.83	266	424477m	7.30 ug/mL	
67) Phenanthrene	13.98	178	5591228	9.90 ug/mL	99
68) Anthracene	14.05	178	5682611	10.01 ug/mL	100
69) Carbazole	14.30	167	4863693	9.53 ug/mL	99
70) Di-n-butylphthalate	14.81	149	7259330	10.67 ug/mL	100
71) Fluoranthene	15.64	202	5746760	10.11 ug/mL	100
73) Benzidine	15.82	184	547504	3.80 ug/mL	99
74) Pyrene	15.94	202	6091899	10.34 ug/mL	100
76) Butylbenzylphthalate	16.81	149	3353162	10.82 ug/mL	100
77) 3,3'-Dichlorobenzidine	17.52	252	1893207	10.17 ug/mL	98
78) Benz[a]anthracene	17.55	228	5503737	9.84 ug/mL	99
79) Chrysene	17.62	228	5198507	9.91 ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.55	149	4899997	10.82 ug/mL	99
82) Di-n-octylphthalate	18.42	149	8603827	11.55 ug/mL	100
83) Benzo[b]fluoranthene	19.22	252	5782396	10.23 ug/mL	99
84) Benzo[k]fluoranthene	19.25	252	5266606	10.10 ug/mL	98
85) Benzo[a]pyrene	19.81	252	5262759	10.09 ug/mL	100
86) Indeno[1,2,3-cd]pyrene	22.35	276	6230138	10.15 ug/mL	96
87) Dibenz[a,h]anthracene	22.36	278	5454999	10.16 ug/mL	100
88) Benzo[g,h,i]perylene	23.06	276	5286201	10.11 ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\June\JUNE06\
Data File : C4060602.D
Acq On : 6 Jun 2008 3:38 pm
Operator : SEO
Sample : C4060602
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 16:36:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration



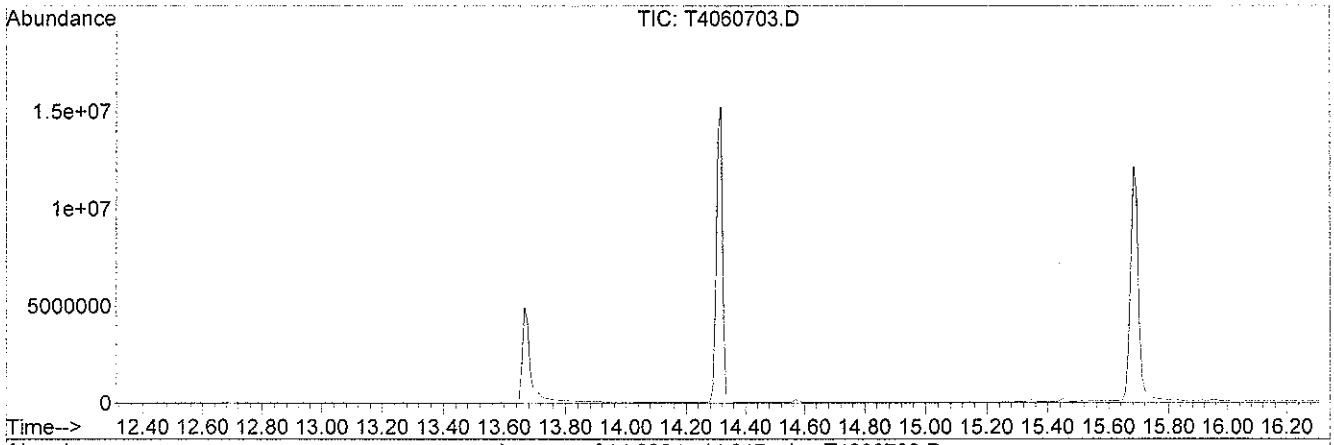
DFTPP

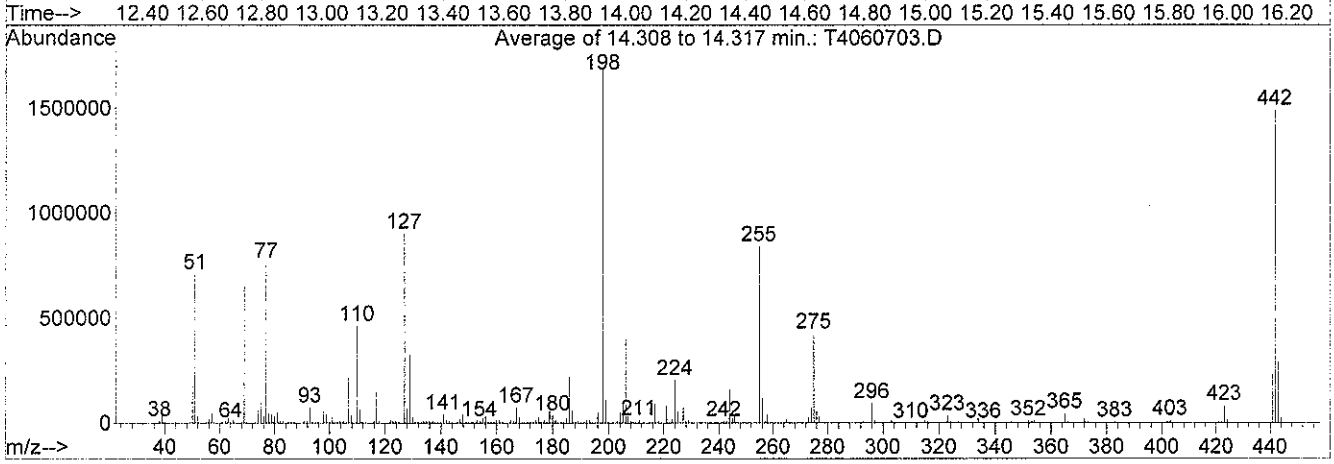
Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : T4060703.D
Acq On : 7 Jun 2008 2:17 pm
Operator : SEO
Sample : T4060703
Misc :
ALS Vial : 3 Sample Multiplier: 1

6/9/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Sat Jun 07 08:38:50 2008





Spectrum Information: Average of 14.308 to 14.317 min.

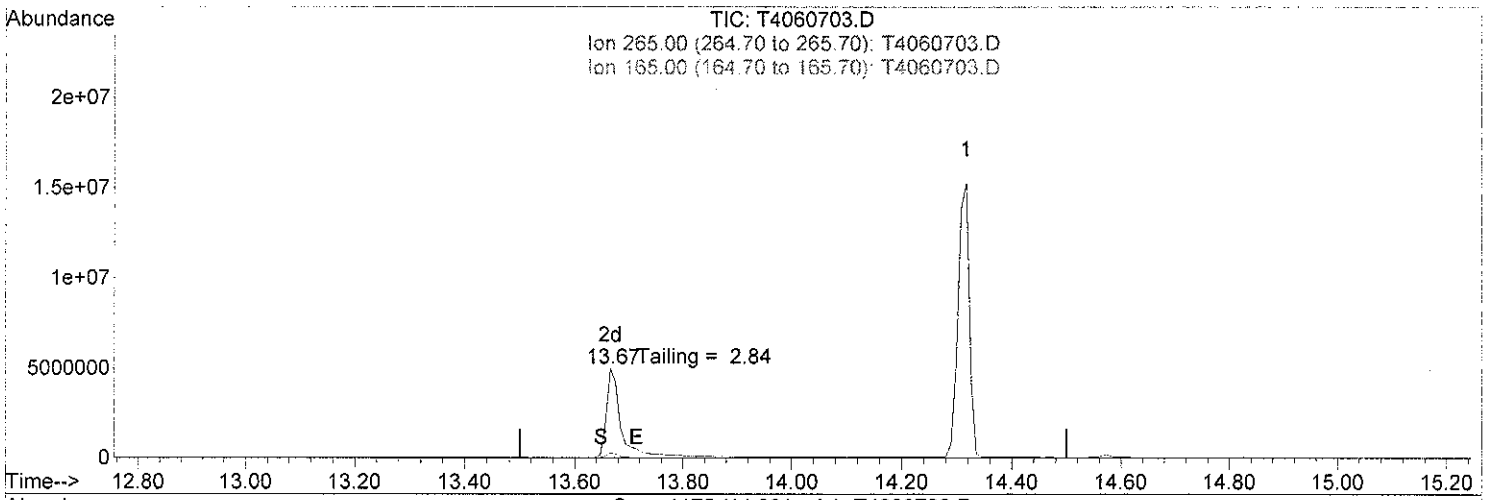
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.0	710240	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	665504	PASS
70	69	0.00	2	0.5	3335	PASS
127	198	40	60	53.3	902528	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	1692160	PASS
199	198	5	9	6.8	114368	PASS
275	198	10	30	25.2	427232	PASS
365	198	1	100	2.7	46196	PASS
441	443	0.01	100	80.3	234176	PASS
442	198	40	100	88.2	1492576	PASS
443	442	17	23	19.6	291808	PASS

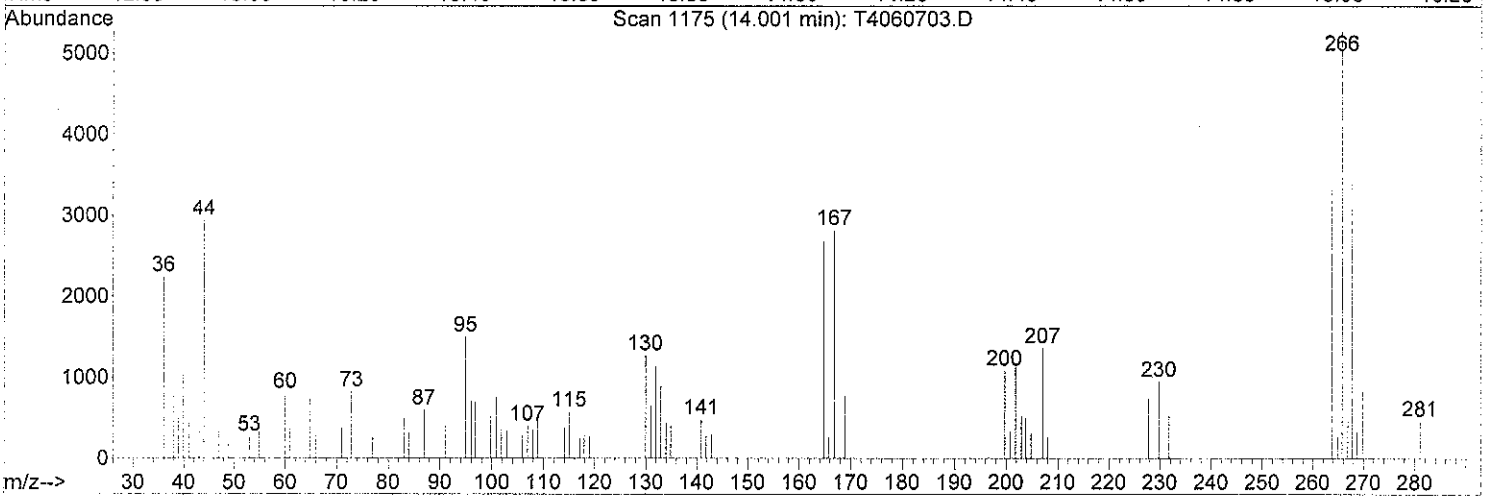
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : T4060703.D
Acq On : 7 Jun 2008 2:17 pm
Operator : SEO
Sample : T4060703
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 09 08:35:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration

6/9/08





TIC: T4060703.D

(1) Pentachlorophenol (T)

14.001min (-14.001) 0.00ug/ml d

response 0

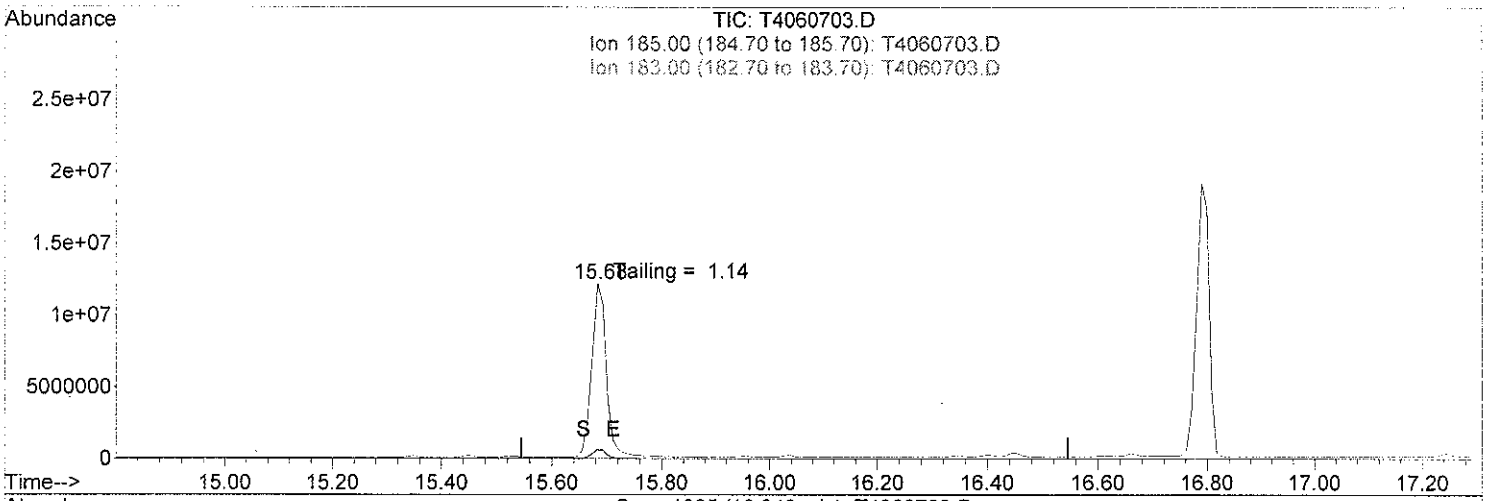
Signal	Exp%	Act%
TIC	100	0.00
265.00	64.30	0.00
165.00	541.10	0.00
0.00	0.00	0.00

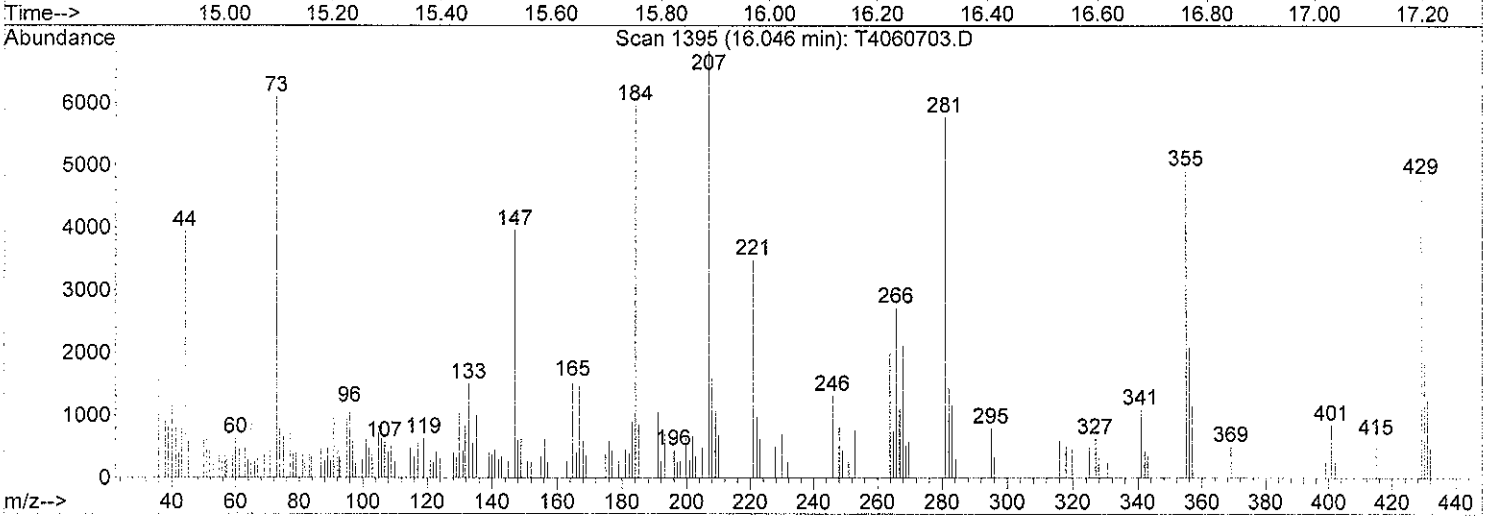
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : T4060703.D
Acq On : 7 Jun 2008 2:17 pm
Operator : SEO
Sample : T4060703
Misc :
ALS Vial : 3 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 08:35:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060703.D

(3) Benzidine (T)

16.046min (-16.046) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	564.80	0.00
183.00	481.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : C4060702.D
Acq On : 7 Jun 2008 2:54 pm
Operator : SEO
Sample : C4060702
Misc : SW051608C
ALS Vial : 4 Sample Multiplier: 1

evaluate for Bis(2-ethylhexyl)phthalate only — 6/9/08

Quant Time: Jun 09 08:42:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	61	-0.14
2	T	N-Nitrosodimethylamine	0.563	0.000	100.0#	0#	-3.24#
3	t	Pyridine	1.115	0.000	100.0#	0#	-3.22#
4	S	2-Fluorophenol	1.256	1.214	3.3	59	-0.18
5	T	Benzaldehyde	0.854	0.815	4.6	59	-0.13
6	T	Aniline	1.394	0.666	52.2#	29#	-0.12
7	T	bis(2-Chloroethyl)ether	0.993	1.076	-8.4	66	-0.13
8	S	Phenol-d5	1.568	1.521	3.0	59	-0.11
9	MC	Phenol	1.884	1.819	3.5#	59	-0.11
10	M	2-Chlorophenol	1.511	1.499	0.8	61	-0.14
11	T	1,3-Dichlorobenzene	1.674	1.704	-1.8	63	-0.14
12	MC	1,4-Dichlorobenzene	1.710	1.732	-1.3#	62	-0.13
13	T	1,2-Dichlorobenzene	1.595	1.602	-0.4	62	-0.14
14	T	Benzyl alcohol	0.925	0.788	14.8	50#	-0.12
15	T	bis(2-chloroisopropyl)ether	2.551	2.442	4.3	59	-0.13
16	T	2-Methylphenol	1.328	1.428	-7.5	65	-0.12
17	T	Acetophenone	1.908	1.916	-0.4	61	-0.14
18	T	Hexachloroethane	0.590	0.590	0.0	60	-0.14
19	MP	N-Nitroso-di-n-propylamine	0.739	0.765	-3.5	60	-0.13
20	T	4-Methylphenol	1.438	1.429	0.6	60	-0.13
21	I	Naphthalene-d8	1.000	1.000	0.0	61	-0.15
22	S	Nitrobenzene-d5	0.306	0.322	-5.2	63	-0.14
23	T	Nitrobenzene	0.339	0.354	-4.4	62	-0.14
24	T	Isophorone	0.590	0.610	-3.4	62	-0.14
25	TC	2-Nitrophenol	0.193	0.211	-9.3#	63	-0.14
26	T	2,4-Dimethylphenol	0.336	0.258	23.2	46#	-0.13
27	T	Benzoic acid	0.229	0.008	96.5#	2#	-0.13
28	T	bis(2-Chloroethoxy)methane	0.415	0.414	0.2	61	-0.14
29	TC	2,4-Dichlorophenol	0.290	0.295	-1.7#	60	-0.15
30	M	1,2,4-Trichlorobenzene	0.309	0.311	-0.6	61	-0.15
31	T	Naphthalene	1.113	1.142	-2.6	62	-0.16
32	T	4-Chloroaniline	0.446	0.393	11.9	52	-0.13
33	TC	Hexachlorobutadiene	0.156	0.160	-2.6#	63	-0.16
34	T	Caprolactam	0.118	0.114	3.4	60	-0.17
35	MC	4-Chloro-3-methylphenol	0.307	0.320	-4.2#	62	-0.13
36	T	2-Methylnaphthalene	0.754	0.800	-6.1	64	-0.15
37	I	Acenaphthene-d10	1.000	1.000	0.0	61	-0.15
38	TP	Hexachlorocyclopentadiene	0.341	0.268	21.4	46#	-0.15
39	TC	2,4,6-Trichlorophenol	0.339	0.317	6.5#	55	-0.17
40	T	2,4,5-Trichlorophenol	0.374	0.340	9.1	53	-0.19
41	S	2-Fluorobiphenyl	1.334	1.379	-3.4	63	-0.14
42	T	Biphenyl	1.537	1.592	-3.6	63	-0.15
43	T	2-Chloronaphthalene	1.200	1.214	-1.2	61	-0.15
44	T	2-Nitroaniline	0.325	0.366	-12.6	64	-0.14
45	T	Acenaphthylene	1.990	2.039	-2.5	61	-0.15
46	T	Dimethylphthalate	1.447	1.479	-2.2	61	-0.14
47	T	2,6-Dinitrotoluene	0.316	0.347	-9.8	61	-0.14
48	MC	Acenaphthene	1.269	1.296	-2.1#	62	-0.15

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : C4060702.D
Acq On : 7 Jun 2008 2:54 pm
Operator : SEO
Sample : C4060702
Misc : SW051608C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 09 08:42:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.368	-4.0	59	-0.13
50	TP	2,4-Dinitrophenol	0.155	0.086	44.5#	28#	-0.23
51	T	Dibenzofuran	1.780	1.810	-1.7	61	-0.15
52	M	2,4-Dinitrotoluene	0.424	0.458	-8.0	60	-0.13
53	MP	4-Nitrophenol	0.159	0.098	38.4#	35#	-0.10
54	T	Fluorene	1.411	1.467	-4.0	62	-0.15
55	T	4-Chlorophenyl-phenylether	0.648	0.670	-3.4	63	-0.14
56	T	Diethylphthalate	1.459	1.532	-5.0	63	-0.14
57	T	4-Nitroaniline	0.347	0.355	-2.3	57	-0.13
58	I	Phenanthrene-d10	1.000	1.000	0.0	62	-0.16
59	T	4,6-Dinitro-2-methylphenol	0.153	0.139	9.2	48#	-0.17
60	T	Azobenzene	0.264	0.266	-0.8	61	-0.14
61	TC	n-Nitrosodiphenylamine	0.631	0.654	-3.6#	63	-0.14
62	S	2,4,6-Tribromophenol	0.102	0.085	16.7	49#	-0.16
63	T	4-Bromophenyl-phenylether	0.219	0.224	-2.3	62	-0.15
64	T	Hexachlorobenzene	0.232	0.233	-0.4	61	-0.15
65	T	Atrazine	0.214	0.170	20.6	47#	-0.14
66	MC	Pentachlorophenol	0.133	0.049	63.2#	20#	-0.19
67	T	Phenanthrene	1.291	1.287	0.3	61	-0.15
68	T	Anthracene	1.297	1.319	-1.7	61	-0.15
69	T	Carbazole	1.166	1.112	4.6	59	-0.14
70	T	Di-n-butylphthalate	1.554	1.694	-9.0	63	-0.15
71	TC	Fluoranthene	1.299	1.321	-1.7#	62	-0.16
72	I	Chrysene-d12	1.000	1.000	0.0	61	-0.17
73	T	Benzidine	0.347	0.111	68.0#	18#	-0.14
74	M	Pyrene	1.420	1.462	-3.0	62	-0.16
75	S	Terphenyl-d14	0.919	0.931	-1.3	61	-0.15
76	T	Butylbenzylphthalate	0.747	0.820	-9.8	63	-0.15
77	T	3,3'-Dichlorobenzidine	0.449	0.482	-7.3	64	-0.16
78	T	Benz[a]anthracene	1.348	1.359	-0.8	61	-0.17
79	T	Chrysene	1.265	1.251	1.1	61	-0.17
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.211	-11.0	64	-0.15
81	I	Perylene-d12	1.000	1.000	0.0	59	-0.24
82	TC	Di-n-octylphthalate	1.849	2.236	-20.9#	65	-0.18
83	T	Benzo[b]fluoranthene	1.404	1.521	-8.3	61	-0.21
84	T	Benzo[k]fluoranthene	1.295	1.287	0.6	60	-0.21
85	TC	Benzo[a]pyrene	1.296	1.320	-1.9#	59	-0.24
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.596	-4.7	61	-0.34
87	T	Dibenz[a,h]anthracene	1.333	1.396	-4.7	60	-0.34
88	T	Benzo[g,h,i]perylene	1.298	1.349	-3.9	60	-0.37

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : C4060702.D
Acq On : 7 Jun 2008 2:54 pm
Operator : SEO
Sample : C4060702
Misc : SW051608C
ALS Vial : 4 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 08:42:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.79	152	388696	5.00 ug/mL	-0.14
21) Naphthalene-d8	8.73	136	1619333	5.00 ug/mL	-0.15
37) Acenaphthene-d10	11.63	164	897566	5.00 ug/mL	-0.15
58) Phenanthrene-d10	13.80	188	1461045	5.00 ug/mL	-0.16
72) Chrysene-d12	17.41	240	1398299m	5.00 ug/mL	-0.17
81) Perylene-d12	19.67	264	1340422	5.00 ug/mL	-0.24
System Monitoring Compounds					
4) 2-Fluorophenol	5.19	112	943554	9.66 ug/mL	-0.18
Spiked Amount 20.000	Range 21 - 100		Recovery = 48.30%		
8) Phenol-d5	6.53	99	1182723	9.70 ug/mL	-0.11
Spiked Amount 20.000	Range 10 - 94		Recovery = 48.50%		
22) Nitrobenzene-d5	7.65	82	1043241	10.53 ug/mL	-0.14
Spiked Amount 20.000	Range 35 - 114		Recovery = 52.65%		
41) 2-Fluorobiphenyl	10.58	172	2475211m	10.34 ug/mL	-0.14
Spiked Amount 20.000	Range 43 - 116		Recovery = 51.70%		
62) 2,4,6-Tribromophenol	12.86	330	248730	8.35 ug/mL	-0.16
Spiked Amount 20.000	Range 10 - 123		Recovery = 41.75%		
75) Terphenyl-d14	15.99	244	2605020	10.14 ug/mL	-0.15
Spiked Amount 20.000	Range 33 - 141		Recovery = 50.70%		

Target Compounds					Qvalue
5) Benzaldehyde	6.21	77	633617	9.55 ug/ml	99
6) Aniline	6.42	66	518081	4.78 ug/ml	94
7) bis(2-Chloroethyl)ether	6.51	63	836245	10.84 ug/mL	88
9) Phenol	6.55	94	1414014m	9.66 ug/mL	
10) 2-Chlorophenol	6.60	128	1165211	9.92 ug/mL	97
11) 1,3-Dichlorobenzene	6.73	146	1324877	10.18 ug/mL	100
12) 1,4-Dichlorobenzene	6.81	146	1346244	10.12 ug/mL	100
13) 1,2-Dichlorobenzene	7.07	146	1245240	10.04 ug/mL	100
14) Benzyl alcohol	7.08	108	612352	8.52 ug/mL	90
15) bis(2-chloroisopropyl)ethe	7.26	45	1898176	9.57 ug/mL#	96
16) 2-Methylphenol	7.34	108	1110059	10.75 ug/mL	96
17) Acetophenone	7.43	105	1489766	10.05 ug/ml	94
18) Hexachloroethane	7.51	117	458291	9.99 ug/mL	93
19) N-Nitroso-di-n-propylamine	7.48	70	594920	10.36 ug/mL	98
20) 4-Methylphenol	7.54	108	1110592	9.94 ug/mL	95
23) Nitrobenzene	7.68	77	1145522	10.43 ug/mL	97
24) Isophorone	8.03	82	1974790	10.34 ug/mL	100
25) 2-Nitrophenol	8.17	139	682899	10.93 ug/mL	98
26) 2,4-Dimethylphenol	8.31	107	837089	7.70 ug/mL	99
27) Benzoic acid	8.31	105	24560	0.33 ug/mL	92
28) bis(2-Chloroethoxy)methane	8.40	93	1339741	9.97 ug/mL	100
29) 2,4-Dichlorophenol	8.62	162	956311	10.20 ug/mL	99
30) 1,2,4-Trichlorobenzene	8.66	180	1008461	10.07 ug/mL	100
31) Naphthalene	8.76	128	3698088	10.26 ug/mL	100
32) 4-Chloroaniline	8.93	127	1272050m	8.81 ug/mL	
33) Hexachlorobutadiene	9.06	225	518391	10.27 ug/mL	100
34) Caprolactam	9.50	113	367969	9.64 ug/ml	98
35) 4-Chloro-3-methylphenol	9.85	107	1035181	10.42 ug/mL	90
36) 2-Methylnaphthalene	9.92	142	2591367	10.62 ug/mL	94
38) Hexachlorocyclopentadiene	10.30	237	481151	7.85 ug/mL	99
39) 2,4,6-Trichlorophenol	10.50	196	569207	9.35 ug/mL	99
40) 2,4,5-Trichlorophenol	10.62	196	611018m	9.11 ug/mL	

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : C4060702.D
Acq On : 7 Jun 2008 2:54 pm
Operator : SEO
Sample : C4060702
Misc : SW051608C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 09 08:42:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration

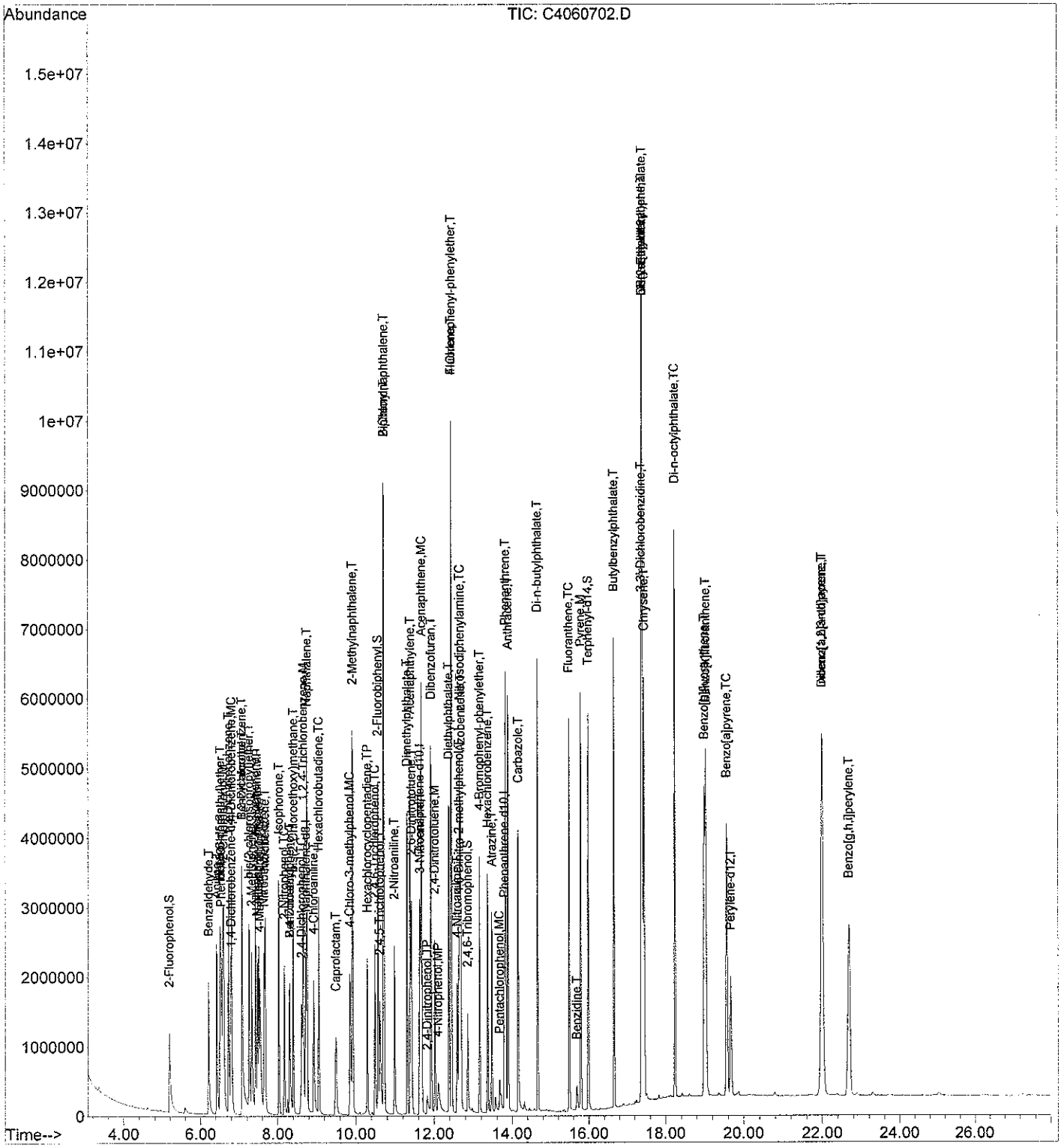
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) Biphenyl	10.71	154	2858240	10.36 ug/ml	100
43) 2-Chloronaphthalene	10.72	162	2179074	10.12 ug/mL	100
44) 2-Nitroaniline	10.99	65	656994	11.26 ug/mL	99
45) Acenaphthylene	11.40	152	3660049	10.25 ug/mL	100
46) Dimethylphthalate	11.31	163	2654692	10.22 ug/mL	100
47) 2,6-Dinitrotoluene	11.43	165	622380	10.97 ug/mL	99
48) Acenaphthene	11.69	153	2325638	10.21 ug/mL	99
49) 3-Nitroaniline	11.66	138	660683	10.41 ug/mL	100
50) 2,4-Dinitrophenol	11.83	184	154257m	5.55 ug/mL	
51) Dibenzofuran	11.93	168	3248927	10.17 ug/mL	100
52) 2,4-Dinitrotoluene	12.03	165	821922	10.81 ug/mL	97
53) 4-Nitrophenol	12.11	109	175168m	6.15 ug/mL	
54) Fluorene	12.45	166	2633909	10.40 ug/mL	99
55) 4-Chlorophenyl-phenylether	12.46	204	1202103	10.34 ug/mL	97
56) Diethylphthalate	12.39	149	2749689	10.50 ug/mL	100
57) 4-Nitroaniline	12.60	138	636595	10.21 ug/mL	97
59) 4,6-Dinitro-2-methylphenol	12.63	198	405943	9.07 ug/mL#	12
60) Azobenzene	12.69	182	776012	10.05 ug/mL	94
61) n-Nitrosodiphenylamine	12.66	169	1910170	10.35 ug/mL	99
63) 4-Bromophenyl-phenylether	13.16	248	653340	10.20 ug/mL	93
64) Hexachlorobenzene	13.37	284	680847	10.03 ug/mL	96
65) Atrazine	13.48	200	496455	7.94 ug/ml	99
66) Pentachlorophenol	13.68	266	143506m	3.70 ug/mL	
67) Phenanthrene	13.83	178	3761974	9.97 ug/mL	99
68) Anthracene	13.90	178	3854350m	10.17 ug/mL	
69) Carbazole	14.16	167	3248996	9.53 ug/mL	99
70) Di-n-butylphthalate	14.66	149	4949544	10.90 ug/mL	100
71) Fluoranthene	15.48	202	3861129	10.17 ug/mL	100
73) Benzidine	15.68	184	311820	3.21 ug/mL	99
74) Pyrene	15.79	202	4089242	10.30 ug/mL	99
76) Butylbenzylphthalate	16.66	149	2291945	10.97 ug/mL	100
77) 3,3'-Dichlorobenzidine	17.37	252	1349310	10.75 ug/mL	97
78) Benz[a]anthracene	17.38	228	3800816	10.08 ug/mL	99
79) Chrysene	17.45	228	3499913m	9.89 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.40	149	3385764	11.09 ug/mL	99
82) Di-n-octylphthalate	18.24	149	5993602m	12.09 ug/mL	
83) Benzo[b]fluoranthene	19.00	252	4077086	10.83 ug/mL	98
84) Benzo[k]fluoranthene	19.04	252	3449241m	9.94 ug/mL	
85) Benzo[a]pyrene	19.57	252	3537681	10.18 ug/mL	100
86) Indeno[1,2,3-cd]pyrene	22.00	276	4278401	10.47 ug/mL	95
87) Dibenz[a,h]anthracene	22.01	278	3741971	10.47 ug/mL	99
88) Benzo[g,h,i]perylene	22.69	276	3616785	10.39 ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE07\
Data File : C4060702.D
Acq On : 7 Jun 2008 2:54 pm
Operator : SEO
Sample : C4060702
Misc : SW051608C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 09 08:42:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Jun 06 08:46:54 2008
Response via : Initial Calibration



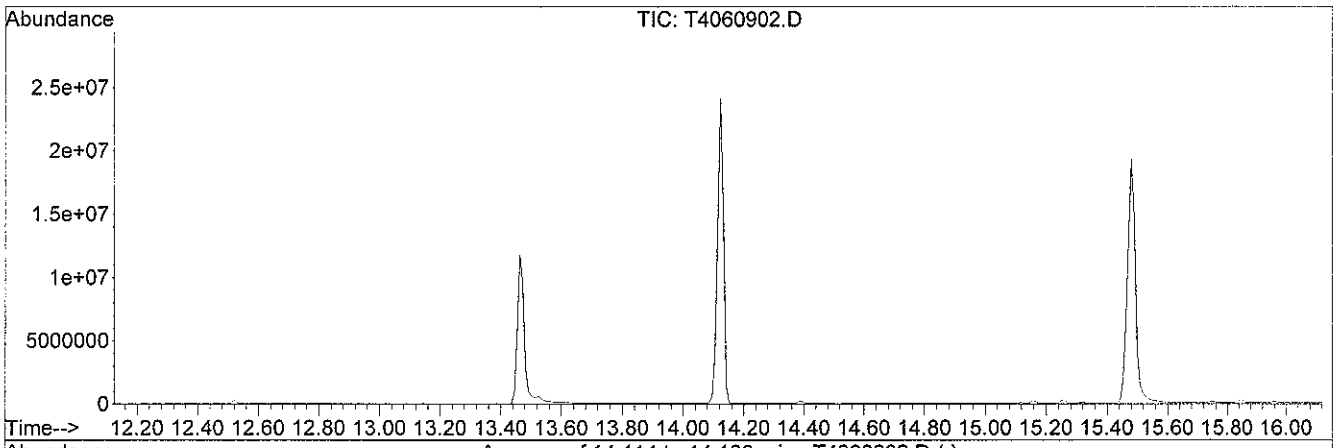
DFTPP

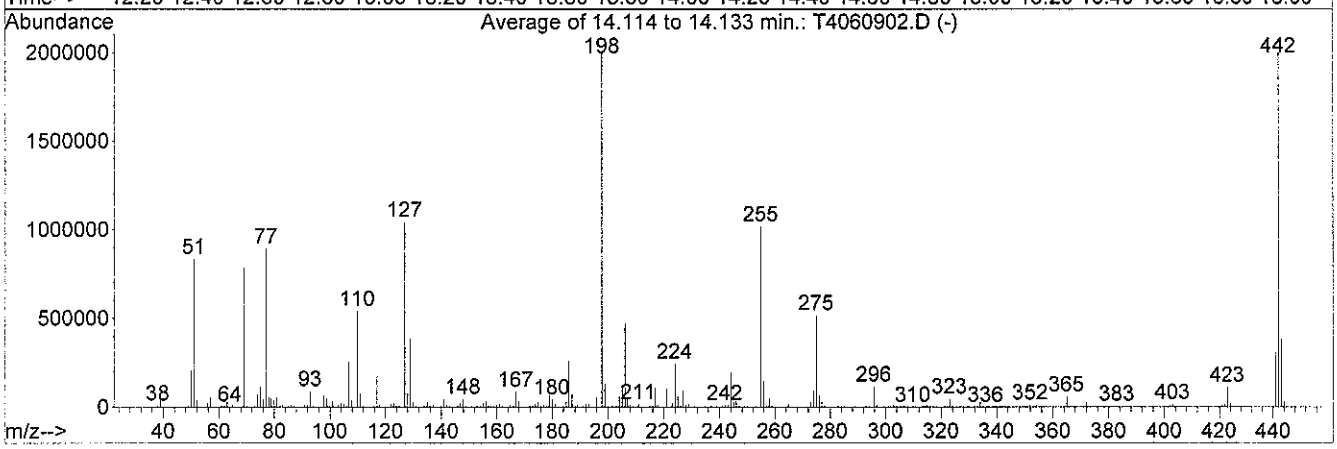
Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060902.D
Acq On : 9 Jun 2008 1:30 pm
Operator : SEO
Sample : T4060902
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon Jun 09 14:39:05 2008





AutoFind: Scans 1241, 1242, 1243; Background Corrected with Scan 1236

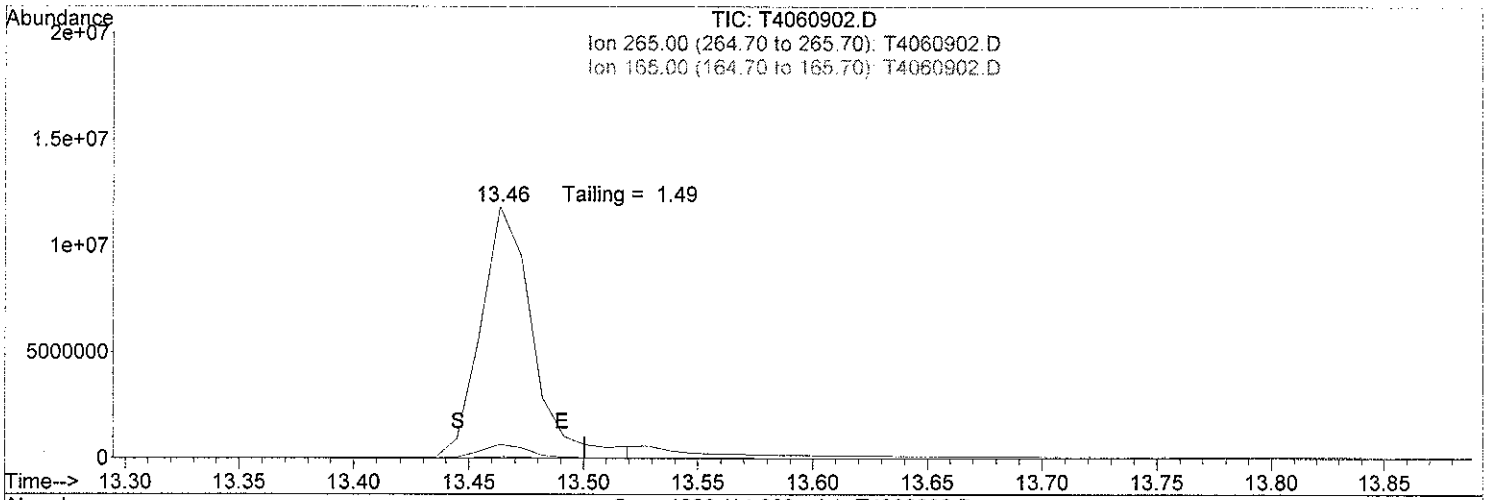
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.7	835613	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	787823	PASS
70	69	0.00	2	0.5	3884	PASS
127	198	40	60	52.1	1043837	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2005201	PASS
199	198	5	9	6.7	134312	PASS
275	198	10	30	25.8	517781	PASS
365	198	1	100	2.9	59040	PASS
441	443	0.01	100	80.7	312890	PASS
442	198	40	100	99.6	1998175	PASS
443	442	17	23	19.4	387562	PASS

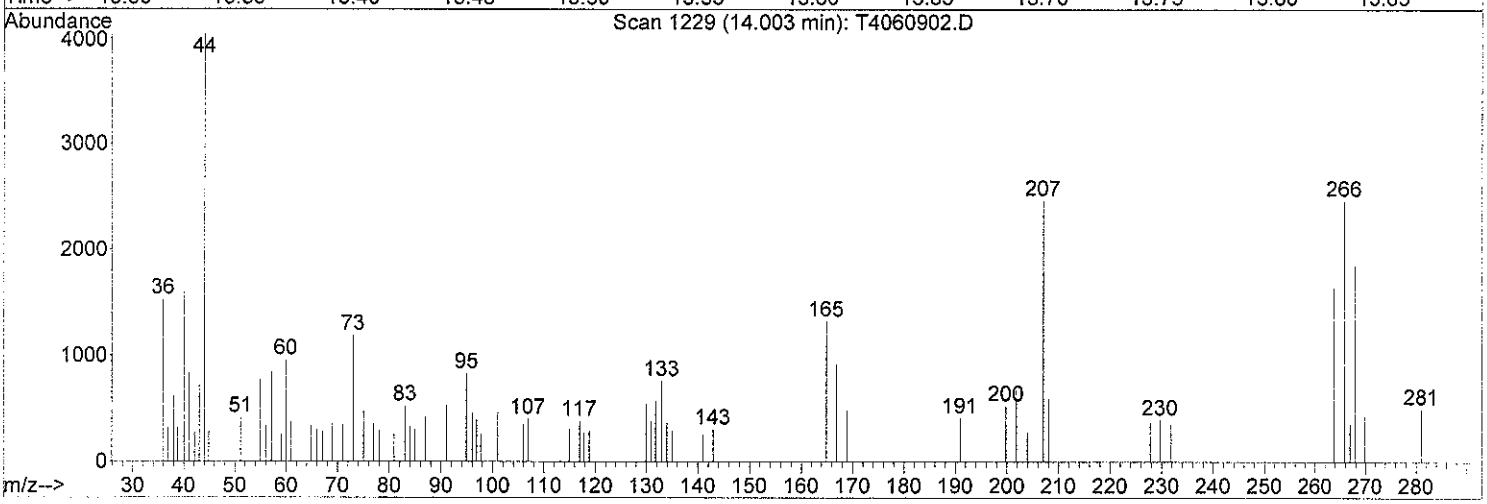
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060902.D
Acq On : 9 Jun 2008 1:30 pm
Operator : SEO
Sample : T4060902
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 14:49:47 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060902.D

(1) Pentachlorophenol (T)

14.001min (-14.001) 0.00ug/ml d

response 0

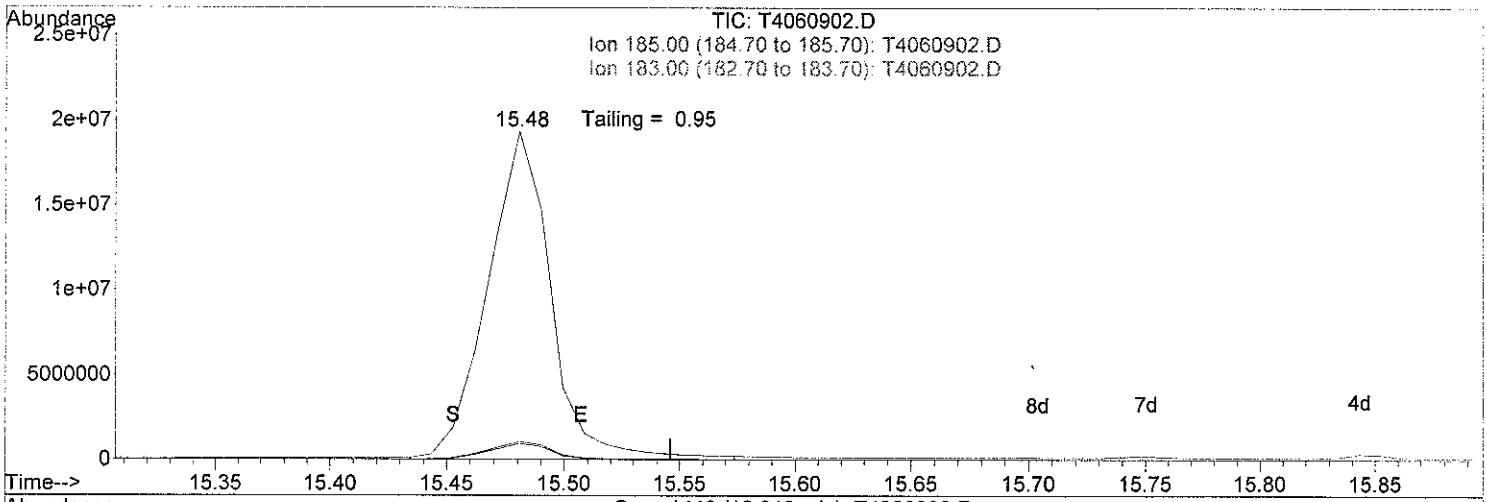
Signal	Exp%	Act%
TIC	100	0.00
265.00	64.30	0.00
165.00	541.10	0.00
0.00	0.00	0.00

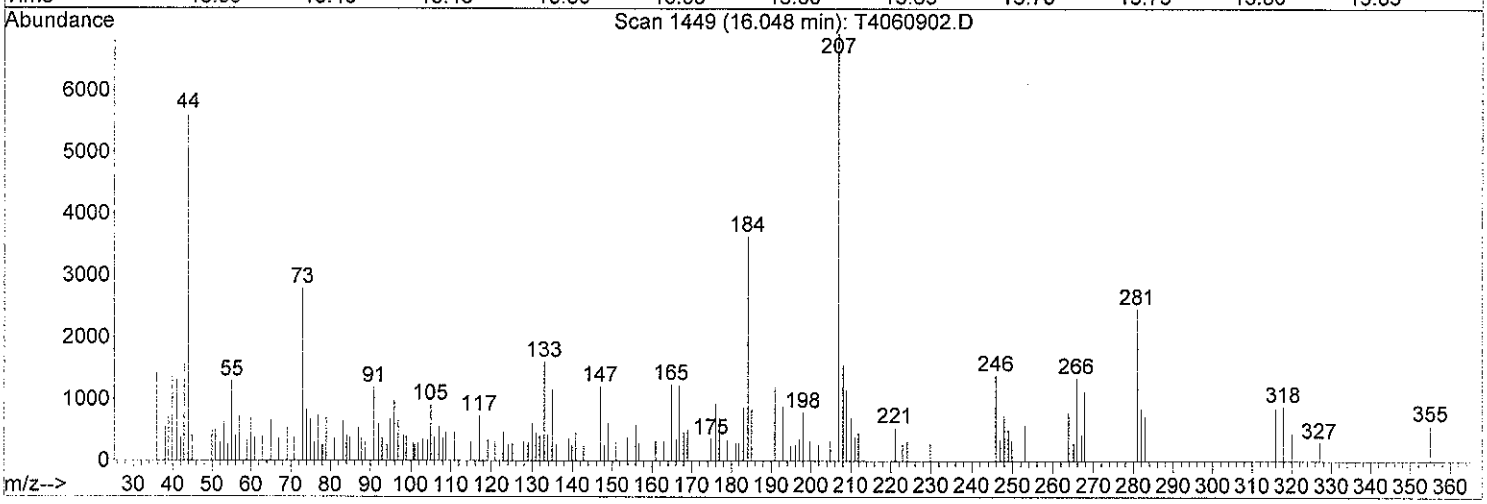
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060902.D
Acq On : 9 Jun 2008 1:30 pm
Operator : SEO
Sample : T4060902
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 14:49:47 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060902.D

(3) Benzidine (T)

16.046min (-16.046) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	564.80	0.00
183.00	481.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060902.D
Acq On : 9 Jun 2008 2:07 pm
Operator : SEO
Sample : C4060902
Misc : SW051608C
ALS Vial : 3 Sample Multiplier: 1

6/9/08 SEO

Quant Time: Jun 09 14:41:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	116	0.00
2	T	N-Nitrosodimethylamine	0.563	0.568	-0.9	110	0.00
3	t	Pyridine	1.115	1.103	1.1	107	0.00
4	S	2-Fluorophenol	1.256	1.234	1.8	112	0.00
5	T	Benzaldehyde	0.854	0.749	12.3	103	0.00
6	T	Aniline	1.394	0.655	53.0#	54	0.00
7	T	bis(2-Chloroethyl)ether	0.993	1.079	-8.7	125	0.00
8	S	Phenol-d5	1.568	1.548	1.3	112	0.00
9	MC	Phenol	1.884	1.806	4.1#	110	0.00
10	M	2-Chlorophenol	1.511	1.503	0.5	115	0.00
11	T	1,3-Dichlorobenzene	1.674	1.686	-0.7	117	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.709	0.1#	116	0.00
13	T	1,2-Dichlorobenzene	1.595	1.586	0.6	115	0.00
14	T	Benzyl alcohol	0.925	0.914	1.2	109	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.426	4.9	111	0.00
16	T	2-Methylphenol	1.328	1.366	-2.9	117	0.00
17	T	Acetophenone	1.908	1.911	-0.2	115	0.00
18	T	Hexachloroethane	0.590	0.592	-0.3	115	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.817	-10.6	121	0.00
20	T	4-Methylphenol	1.438	1.437	0.1	113	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00
22	S	Nitrobenzene-d5	0.306	0.328	-7.2	119	0.00
23	T	Nitrobenzene	0.339	0.361	-6.5	119	0.00
24	T	Isophorone	0.590	0.613	-3.9	117	0.00
25	TC	2-Nitrophenol	0.193	0.214	-10.9#	120	0.00
26	T	2,4-Dimethylphenol	0.336	0.254	24.4	85	0.00
27	T	Benzoic acid	0.229	0.007	96.9#	3#	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.420	-1.2	115	0.00
29	TC	2,4-Dichlorophenol	0.290	0.298	-2.8#	114	0.00
30	M	1,2,4-Trichlorobenzene	0.309	0.310	-0.3	114	0.00
31	T	Naphthalene	1.113	1.136	-2.1	116	0.00
32	T	4-Chloroaniline	0.446	0.414	7.2	103	0.00
33	TC	Hexachlorobutadiene	0.156	0.161	-3.2#	119	0.00
34	T	Caprolactam	0.118	0.119	-0.8	117	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.328	-6.8#	119	0.00
36	T	2-Methylnaphthalene	0.754	0.771	-2.3	116	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.292	14.4	96	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.331	2.4#	110	0.00
40	T	2,4,5-Trichlorophenol	0.374	0.363	2.9	107	0.00
41	S	2-Fluorobiphenyl	1.334	1.340	-0.4	116	0.00
42	T	Biphenyl	1.537	1.563	-1.7	117	0.00
43	T	2-Chloronaphthalene	1.200	1.193	0.6	115	0.00
44	T	2-Nitroaniline	0.325	0.370	-13.8	123	0.00
45	T	Acenaphthylene	1.990	2.030	-2.0	115	0.00
46	T	Dimethylphthalate	1.447	1.467	-1.4	116	0.00
47	T	2,6-Dinitrotoluene	0.316	0.346	-9.5	117	0.00
48	MC	Acenaphthene	1.269	1.290	-1.7#	118	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060902.D
Acq On : 9 Jun 2008 2:07 pm
Operator : SEO
Sample : C4060902
Misc : SW051608C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 09 14:41:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.378	-6.8	115	0.00
50	TP	2,4-Dinitrophenol	0.155	0.127	18.1	79	0.00
51	T	Dibenzofuran	1.780	1.798	-1.0	116	0.00
52	M	2,4-Dinitrotoluene	0.424	0.463	-9.2	117	0.00
53	MP	4-Nitrophenol	0.159	0.138	13.2	93	0.00
54	T	Fluorene	1.411	1.454	-3.0	118	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.659	-1.7	118	0.00
56	T	Diethylphthalate	1.459	1.498	-2.7	117	0.00
57	T	4-Nitroaniline	0.347	0.359	-3.5	110	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	118	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.156	-2.0	103	0.00
60	T	Azobenzene	0.264	0.274	-3.8	120	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.659	-4.4#	121	0.00
62	S	2,4,6-Tribromophenol	0.102	0.099	2.9	109	0.00
63	T	4-Bromophenyl-phenylether	0.219	0.223	-1.8	118	0.00
64	T	Hexachlorobenzene	0.232	0.232	0.0	117	0.00
65	T	Atrazine	0.214	0.146	31.8#	78	0.00
66	MC	Pentachlorophenol	0.133	0.087	34.6#	70	0.00
67	T	Phenanthrene	1.291	1.292	-0.1	118	0.00
68	T	Anthracene	1.297	1.266	2.4	112	0.00
69	T	Carbazole	1.166	1.150	1.4	117	0.00
70	T	Di-n-butylphthalate	1.554	1.591	-2.4	113	0.00
71	TC	Fluoranthene	1.299	1.289	0.8#	115	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	113	0.00
73	T	Benzidine	0.347	0.065	81.3#	19#	0.00
74	M	Pyrene	1.420	1.450	-2.1	113	0.00
75	S	Terphenyl-d14	0.919	0.929	-1.1	112	0.00
76	T	Butylbenzylphthalate	0.747	0.807	-8.0	116	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.491	-9.4	120	0.00
78	T	Benz[a]anthracene	1.348	1.343	0.4	111	0.00
79	T	Chrysene	1.265	1.272	-0.6	114	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.165	-6.8	115	0.00
81	I	Perylene-d12	1.000	1.000	0.0	116	0.00
82	TC	Di-n-octylphthalate	1.849	2.045	-10.6#	116	0.00
83	T	Benzo[b]fluoranthene	1.404	1.334	5.0	104	-0.03
84	T	Benzo[k]fluoranthene	1.295	1.364	-5.3	125	0.00
85	TC	Benzo[a]pyrene	1.296	1.286	0.8#	112	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.546	-1.4	115	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.354	-1.6	114	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.317	-1.5	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060902.D
Acq On : 9 Jun 2008 2:07 pm
Operator : SEO
Sample : C4060902
Misc : SW051608C
ALS Vial : 3 Sample Multiplier: 1

6/9/08

Quant Time: Jun 09 14:41:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	733368	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	3034545	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.44	164	1712388	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2792632	5.00	ug/mL	0.00
72) Chrysene-d12	17.20	240	2592823	5.00	ug/mL	0.00
81) Perylene-d12	19.36	264	2618146	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.01	112	1809315	9.82	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 49.10%			
8) Phenol-d5	6.34	99	2270514	9.87	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 49.35%			
22) Nitrobenzene-d5	7.47	82	1992224	10.73	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 53.65%			
41) 2-Fluorobiphenyl	10.38	172	4590124	10.05	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 50.25%			
62) 2,4,6-Tribromophenol	12.65	330	553106	9.71	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 48.55%			
75) Terphenyl-d14	15.79	244	4818616	10.11	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 50.55%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	2.89	74	832765	10.08	ug/mL	97
3) Pyridine	2.87	79	1618469	9.90	ug/mL	94
5) Benzaldehyde	6.05	77	1099206	8.78	ug/ml	97
6) Aniline	6.26	66	960911	4.70	ug/ml	97
7) bis(2-Chloroethyl)ether	6.34	63	1583182	10.87	ug/mL#	92
9) Phenol	6.36	94	2649464	9.59	ug/mL#	90
10) 2-Chlorophenol	6.43	128	2203786	9.94	ug/mL	96
11) 1,3-Dichlorobenzene	6.57	146	2473440	10.08	ug/mL	100
12) 1,4-Dichlorobenzene	6.64	146	2506783	9.99	ug/mL	99
13) 1,2-Dichlorobenzene	6.90	146	2325922	9.94	ug/mL	100
14) Benzyl alcohol	6.90	108	1340028	9.88	ug/mL	97
15) bis(2-chloroisopropyl)ethe	7.09	45	3558738	9.51	ug/mL	99
16) 2-Methylphenol	7.14	108	2003995	10.29	ug/mL	93
17) Acetophenone	7.24	105	2802379	10.02	ug/ml	99
18) Hexachloroethane	7.33	117	868346	10.03	ug/mL	93
19) N-Nitroso-di-n-propylamine	7.30	70	1198170	11.06	ug/mL	97
20) 4-Methylphenol	7.36	108	2107601	10.00	ug/mL	98
23) Nitrobenzene	7.50	77	2189852	10.64	ug/mL	97
24) Isophorone	7.84	82	3722792	10.40	ug/mL	100
25) 2-Nitrophenol	7.97	139	1300270	11.11	ug/mL	97
26) 2,4-Dimethylphenol	8.11	107	1542666	7.57	ug/mL	100
27) Benzoic acid	8.11	105	44212	0.32	ug/mL	85
28) bis(2-Chloroethoxy)methane	8.21	93	2547514	10.12	ug/mL	99
29) 2,4-Dichlorophenol	8.40	162	1807799	10.29	ug/mL	99
30) 1,2,4-Trichlorobenzene	8.46	180	1878957	10.01	ug/mL	99
31) Naphthalene	8.56	128	6891875	10.21	ug/mL	100
32) 4-Chloroaniline	8.72	127	2512590	9.29	ug/mL	99
33) Hexachlorobutadiene	8.85	225	978036	10.34	ug/mL	100
34) Caprolactam	9.32	113	721543	10.09	ug/ml	99
35) 4-Chloro-3-methylphenol	9.64	107	1992268	10.70	ug/mL	96
36) 2-Methylnaphthalene	9.72	142	4677035m	10.23	ug/mL	
38) Hexachlorocyclopentadiene	10.10	237	999452	8.55	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060902.D
Acq On : 9 Jun 2008 2:07 pm
Operator : SEO
Sample : C4060902
Misc : SW051608C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 09 14:41:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

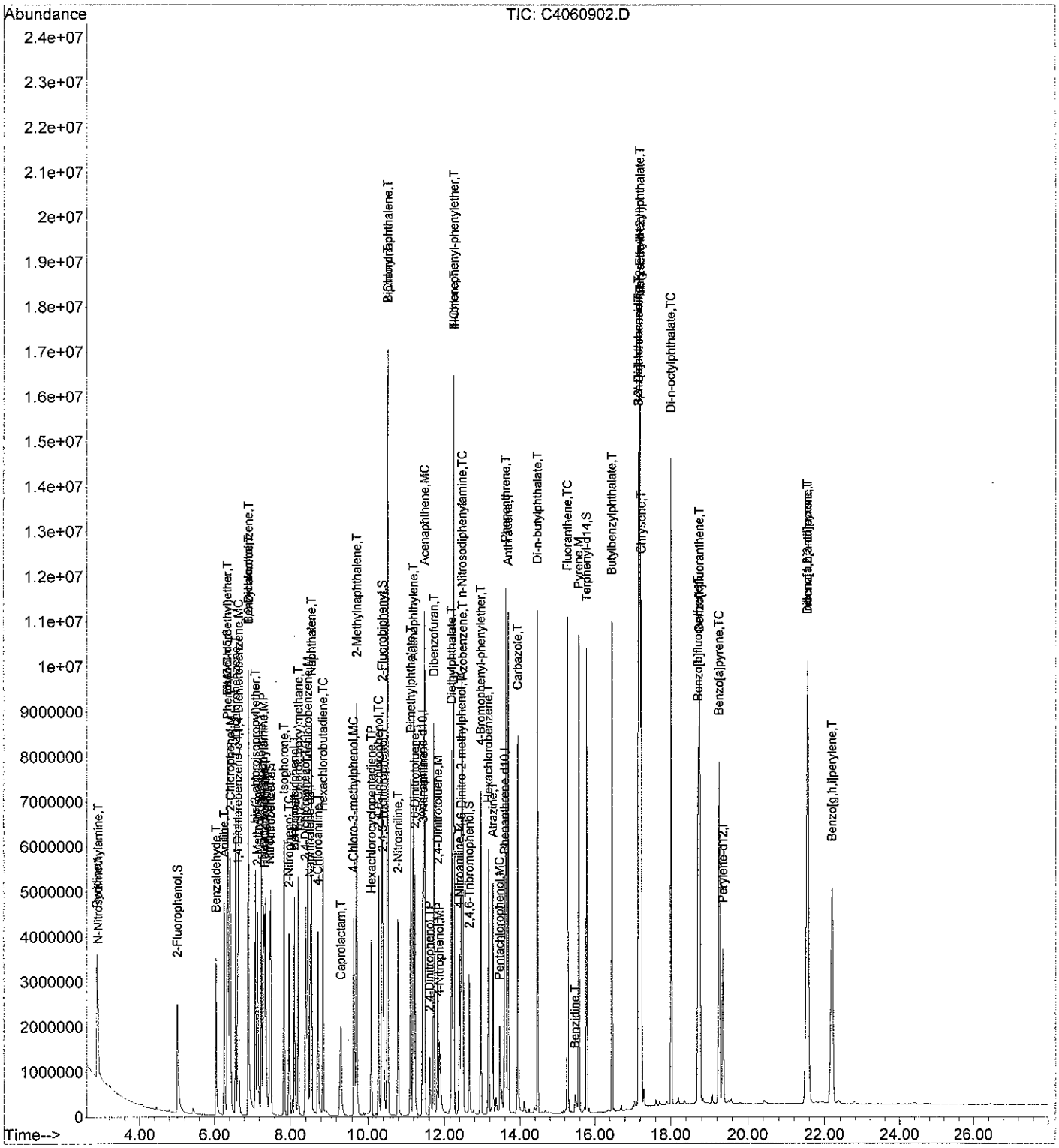
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.28	196	1133945	9.76	ug/mL	99
40) 2,4,5-Trichlorophenol	10.40	196	1244051	9.72	ug/mL	98
42) Biphenyl	10.51	154	5352110	10.17	ug/ml	100
43) 2-Chloronaphthalene	10.52	162	4086980	9.95	ug/mL	100
44) 2-Nitroaniline	10.79	65	1268572	11.40	ug/mL	96
45) Acenaphthylene	11.20	152	6952439	10.20	ug/mL	100
46) Dimethylphthalate	11.12	163	5023466	10.14	ug/mL	100
47) 2,6-Dinitrotoluene	11.23	165	1186033	10.96	ug/mL	99
48) Acenaphthene	11.48	153	4418541	10.17	ug/mL	100
49) 3-Nitroaniline	11.46	138	1293840	10.68	ug/mL	99
50) 2,4-Dinitrophenol	11.62	184	436126	8.23	ug/mL#	63
51) Dibenzofuran	11.73	168	6157859	10.10	ug/mL	97
52) 2,4-Dinitrotoluene	11.84	165	1585292	10.93	ug/mL	93
53) 4-Nitrophenol	11.87	109	472089m	8.69	ug/mL	
54) Fluorene	12.25	166	4979193	10.30	ug/mL	100
55) 4-Chlorophenyl-phenylether	12.26	204	2257577	10.18	ug/mL	94
56) Diethylphthalate	12.20	149	5131028	10.27	ug/mL	99
57) 4-Nitroaniline	12.40	138	1231188	10.35	ug/mL	97
59) 4,6-Dinitro-2-methylphenol	12.44	198	873822	10.21	ug/mL#	46
60) Azobenzene	12.50	182	1532625	10.39	ug/mL	51
61) n-Nitrosodiphenylamine	12.47	169	3681805	10.44	ug/mL	96
63) 4-Bromophenyl-phenylether	12.96	248	1245663	10.18	ug/mL	94
64) Hexachlorobenzene	13.18	284	1298128	10.01	ug/mL#	90
65) Atrazine	13.29	200	813592	6.81	ug/ml	99
66) Pentachlorophenol	13.47	266	488282m	6.58	ug/mL	
67) Phenanthrene	13.63	178	7215553	10.01	ug/mL	100
68) Anthracene	13.70	178	7069909	9.76	ug/mL	100
69) Carbazole	13.95	167	6425304	9.86	ug/mL	98
70) Di-n-butylphthalate	14.48	149	8886743	10.24	ug/mL	100
71) Fluoranthene	15.28	202	7199066m	9.92	ug/mL	
73) Benzidine	15.47	184	336414	1.87	ug/mL#	95
74) Pyrene	15.58	202	7516721	10.21	ug/mL	95
76) Butylbenzylphthalate	16.47	149	4185831	10.81	ug/mL	94
77) 3,3'-Dichlorobenzidine	17.16	252	2544524	10.94	ug/mL	98
78) Benz[a]anthracene	17.17	228	6966406	9.97	ug/mL	100
79) Chrysene	17.24	228	6594124	10.05	ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.21	149	6038781	10.67	ug/mL	99
82) Di-n-octylphthalate	18.01	149	10709532	11.06	ug/mL	99
83) Benzo[b]fluoranthene	18.73	252	6984004m	9.50	ug/mL	
84) Benzo[k]fluoranthene	18.76	252	7139964	10.53	ug/mL	100
85) Benzo[a]pyrene	19.26	252	6732642	9.92	ug/mL	99
86) Indeno[1,2,3-cd]pyrene	21.55	276	8097077	10.14	ug/mL	95
87) Dibenz[a,h]anthracene	21.56	278	7090647	10.16	ug/mL	98
88) Benzo[g,h,i]perylene	22.20	276	6896388	10.15	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060902.D
Acq On : 9 Jun 2008 2:07 pm
Operator : SEO
Sample : C4060902
Misc : SW051608C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 09 14:41:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4052802**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
Standard:		475398	7.10	1925465	9.09	1076908	11.98
Upper Limit:		950796	7.60	3850930	9.59	2153816	12.48
Lower Limit:		237699	6.60	962732	8.59	538454	11.48
Client ID	**Lab ID**						
Blank	SS043008B17	289483	7.09	1050362	9.08	622510	11.98
LCS	SS043008LCS09	422220	7.10	1672769	9.08	937894	11.98
LCSD	SS043008LCSD09	705189	7.10	2820357	9.08	1576495	11.98
T4-Tank 8-G	0804115-16E	614161	7.10	2436597	9.08	1370134	11.98
T4-Tank 1-G	0804115-02E	488735	7.10	1895911	9.08	1089380	11.98

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

5/09/08 16:53

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Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4052802**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
Standard:		1735507	14.16	1677828	17.80	1607376	20.25
Upper Limit:		3471014	14.66	3355656	18.30	3214752	20.75
Lower Limit:		867754	13.66	838914	17.30	803688	19.75
Client ID	**Lab ID**						
Blank	SS043008B17	987940	14.16	920937	17.81	874652	20.27
LCS	SS043008LCS09	1492226	14.15	1468776	17.80	1399701	20.25
LCSD	SS043008LCSD09	2527634	14.15	2430104	17.80	2394001	20.25
T4-Tank 8-G	0804115-16E	2147129	14.15	2078806	17.80	2242812	20.27
T4-Tank 1-G	0804115-02E	1718804	14.15	1647915	17.80	1764286	20.26

N/A - Not Applicable

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RT Lower Limit = -0.5 minutes of internal standard RT.

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Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060602**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
Standard:		568618	6.92	2410376	8.88	1339967	11.78
Upper Limit:		1137236	7.42	4820752	9.38	2679934	12.28
Lower Limit:		284309	6.42	1205188	8.38	669984	11.28
Client ID	**Lab ID**						
T4-Tank 6-G	0804115-12	523283	6.93	2189385	8.88	1222087	11.79
T4-Tank 8-G	0804115-16	551917	6.92	2332094	8.88	1294903	11.78
T4-Tank 6	0804115-11	559423	6.92	2303246	8.88	1280857	11.78
T4-Tank 7-G	0804115-14	541432	6.92	2256330	8.88	1250010	11.78
T4-Tank 1-G	0804115-02	547461	6.92	2305938	8.88	1306351	11.78
T4-Tank 2-G	0804115-04	613364	6.93	2566062	8.88	1424529	11.79
T4-Tank 7	0804115-13	602338	6.93	2460033	8.88	1379342	11.79
T4-Tank 1	0804115-01	576256	6.93	2413479	8.88	1348170	11.79
T4-Tank 1	0804115-01 D	629446	6.93	2627702	8.88	1486175	11.79
T4-Tank 8	0804115-15	648091	6.93	2628673	8.88	1475818	11.79
T4-Tank 2	0804115-03	592174	6.93	2482860	8.88	1411860	11.79
T4-Tank 4-G	0804115-08	670570	6.93	2763480	8.89	1540457	11.79
T4-Tank 5	0804115-09	658896	6.94	2624614	8.89	1474407	11.79
T4-Tank 5-G	0804115-10	621837	6.93	2581772	8.89	1450958	11.79
T4-Tank 3-G	0804115-06	636206	6.93	2645927	8.89	1500833	11.79
T4-Tank 3	0804115-05	632611	6.93	2614904	8.89	1554017	11.80
T4-Tank 4	0804115-07	710352	6.94	2884474	8.89	1617046	11.80

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060602**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT	Area	RT
Standard:		2188050	13.94	2074232	17.58	2013375	19.91
Upper Limit:		4376100	14.44	4148464	18.08	4026750	20.41
Lower Limit:		1094025	13.44	1037116	17.08	1006688	19.41
Client ID	**Lab ID**						
T4-Tank 6-G	0804115-12	2000217	13.95	1909567	17.58	2072503	19.99
T4-Tank 8-G	0804115-16	2099957	13.94	2006832	17.58	2135483	20.02
T4-Tank 6	0804115-11	2074793	13.95	1991060	17.57	1997787	19.92
T4-Tank 7-G	0804115-14	2039869	13.95	1960310	17.58	2161202	20.00
T4-Tank 1-G	0804115-02	2123238	13.95	2066975	17.58	2258924	19.99
T4-Tank 2-G	0804115-04	2306163	13.95	2229377	17.58	2402108	20.02
T4-Tank 7	0804115-13	2264748	13.95	2136151	17.58	2263384	19.97
T4-Tank 1	0804115-01	2183024	13.95	2116942	17.58	2316933	20.02
T4-Tank 1	0804115-01 D	2409270	13.95	2333096	17.59	2566598	20.02
T4-Tank 8	0804115-15	2486285	13.96	2370923	17.59	2502670	19.97
T4-Tank 2	0804115-03	2289288	13.95	2239961	17.59	2452235	20.00
T4-Tank 4-G	0804115-08	2501465	13.96	1980364	17.59	2535683	20.04
T4-Tank 5	0804115-09	2410534	13.96	1861184	17.59	2349369	19.97
T4-Tank 5-G	0804115-10	2339074	13.96	1857006	17.59	2396493	20.05
T4-Tank 3-G	0804115-06	2423310	13.96	2383745	17.60	2517836	20.02
T4-Tank 3	0804115-05	2448629	13.96	2383256	17.60	2452516	19.95
T4-Tank 4	0804115-07	2553940	13.96	1894442	17.60	2526044	19.98

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

06/09/08 16:58

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060702**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
Standard:		388696	6.79	1619333	8.73	897566	11.63
Upper Limit:		777392	7.29	3238666	9.23	1795132	12.13
Lower Limit:		194348	6.29	809666	8.23	448783	11.13
Client ID	**Lab ID**						
T4-Tank 4-G	0804115-08E	336537	6.80	1165907	8.73	870733	11.64
T4-Tank 5-G	0804115-10E	273356	6.80	953584	8.73	734053	11.64

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

06/09/08 16:58

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060702**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT	Area	RT
Standard:		1461045	13.80	1398299	17.41	1340422	19.67
Upper Limit:		2922090	14.30	2796598	17.91	2680844	20.17
Lower Limit:		730522	13.30	699150	16.91	670211	19.17
Client ID	**Lab ID**						
T4-Tank 4-G	0804115-08E	1508337	13.81	1458912	17.42	1514458	19.69
T4-Tank 5-G	0804115-10E	1310774	13.81	1285163	17.41	1327002	19.68

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

08/29/08 16:58
320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060902**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
Standard:		733368	6.62	3034545	8.52	1712388	11.44
Upper Limit:		1466736	7.12	6069090	9.02	3424776	11.94
Lower Limit:		366684	6.12	1517272	8.02	856194	10.94
Client ID	**Lab ID**						
T4-Tank 4	0804115-07E	658538	6.61	2655302	8.52	1504087	11.43
T4-Tank 5	0804115-09E	645783	6.61	2674470	8.51	1483512	11.43

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C4060902**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT	Area	RT
Standard:		2792632	13.59	2592823	17.20	2618146	19.36
Upper Limit:		5585264	14.09	5185646	17.70	5236292	19.86
Lower Limit:		1396316	13.09	1296412	16.70	1309073	18.86
Client ID	**Lab ID**						
T4-Tank 4	0804115-07E	2405669	13.59	2305582	17.19	2361505	19.35
T4-Tank 5	0804115-09E	2362936	13.59	2287662	17.19	2324809	19.34

N/A - Not Applicable

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320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample Preparation

Alpha Woods Hole Lab
Batch Weight Report
04/30/2008

Lab ID	QC Type	0804115P - Sample
0804115-01	D	2.43
0804115-01	SAM	2.12
0804115-02	SAM	2.36
0804115-03	SAM	2.12
0804115-04	SAM	2.31
0804115-05	SAM	2.1
0804115-06	SAM	2.29
0804115-07	SAM	2.03
0804115-08	SAM	2.19
0804115-09	SAM	2.17
0804115-10	SAM	2.18
0804115-11	SAM	2.37
0804115-12	SAM	2.36
0804115-13	SAM	2.21
0804115-14	SAM	2.35
0804115-15	SAM	2.19
0804115-16	SAM	2.24
PS043008B09	B	2
PS043008LCS07LCS	OP PCB Aroclor Low	2
PS043008LCSD07LCO	P PCB Aroclor Low	2

METHYLENE CHLORIDE (tank) E40E54
ACETONE: E31E30 HEXANE: E51E11

COPPER: E41602 SODIUM SULFATE: E40617

GLASS WOOL: H1084303302

METHYLENE CHLORIDE (bottle) E49403

Alpha Woods Hole Lab
Batch Prep Spike Report

04/30/2008 0804115P - OP PCB Aroclor Analyst: LAB Witness: MGH

Lab ID	QC Type	OP PCB Aroclor - surr	Vol OP PCB Aroclor - surr	Units OP PCB Aroclor - surr	OP PCB Aroclor - spk 1	Vol OP PCB Aroclor - spk 1	Units OP PCB Aroclor - spk 1	OP PCB Aroclor - spk 2	Vol OP PCB Aroclor - spk 2	Units OP PCB Aroclor - spk 2
0804115-01	D	PSW032808A	500	µl						
0804115-01	SAM	PSW032808A	500	µl						
0804115-02	SAM	PSW032808A	500	µl						
0804115-03	SAM	PSW032808A	500	µl						
0804115-04	SAM	PSW032808A	500	µl						
0804115-05	SAM	PSW032808A	500	µl						
0804115-06	SAM	PSW032808A	500	µl						
0804115-07	SAM	PSW032808A	500	µl						
0804115-08	SAM	PSW032808A	500	µl						
0804115-09	SAM	PSW032808A	500	µl						
0804115-10	SAM	PSW032808A	500	µl						
0804115-11	SAM	PSW032808A	500	µl						
0804115-12	SAM	PSW032808A	500	µl						
0804115-13	SAM	PSW032808A	500	µl						
0804115-14	SAM	PSW032808A	500	µl						
0804115-15	SAM	PSW032808A	500	µl						
0804115-16	SAM	PSW032808A	500	µl						
PS043008B09	B	PSW032808A	500	µl						
PS043008LCS07	LCS	PSW032808A	500	µl	PLW041008B	500	µl			
PS043008LCSD07	LCSD	PSW032808A	500	µl	PLW041008B	500	µl			

Test: PCB

Standard Type: *Surrogate* / *LCS* / *MS-MSD* / *LFB* / *Other*

ID# PSW032808A

Conc. 1000 ug/L

Test: PCB

Standard Type: *Surrogate* / *LCS* / *MS-MSD* / *LFB* / *Other*

ID# PLW041008B

Conc. 10,000 ug/L

Alpha Woods Hole Lab
Batch Prep Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume (ml)	Vialed By	Vialed Date	Cell Number
0804115-01	D	3570	LAB	4/30/08	5/14/08		2.43	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-01	SAM	3570	LAB	4/30/08	5/14/08		2.12	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-02	SAM	3570	LAB	4/30/08	5/14/08		2.36	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-03	SAM	3570	LAB	4/30/08	5/14/08		2.12	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-04	SAM	3570	LAB	4/30/08	5/14/08		2.31	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-05	SAM	3570	LAB	4/30/08	5/14/08		2.1	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-06	SAM	3570	LAB	4/30/08	5/14/08		2.29	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-07	SAM	3570	LAB	4/30/08	5/14/08		2.03	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-08	SAM	3570	LAB	4/30/08	5/14/08		2.19	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-09	SAM	3570	LAB	4/30/08	5/14/08		2.17	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-10	SAM	3570	LAB	4/30/08	5/14/08		2.18	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-11	SAM	3570	LAB	4/30/08	5/14/08		2.37	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-12	SAM	3570	LAB	4/30/08	5/14/08		2.36	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-13	SAM	3570	LAB	4/30/08	5/14/08		2.21	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-14	SAM	3570	LAB	4/30/08	5/14/08		2.35	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-15	SAM	3570	LAB	4/30/08	5/14/08		2.19	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
0804115-16	SAM	3570	LAB	4/30/08	5/14/08		2.24	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
PS043008B09	B	3570	LAB	4/30/08	5/14/08		2	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
PS043008LCS07	LCS	3570	LAB	4/30/08	5/14/08		2	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	
PS043008LCSD07	LCSD	3570	LAB	4/30/08	5/14/08		2	5	False	LAB	5/6/08	KD Flask	1	LAB	5/7/08	

Alpha Woods Hole Lab
Batch Prep Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	Notes
0804115-01	1st Prep
0804115-01	1st Prep
0804115-02	1st Prep
0804115-03	1st Prep
0804115-04	1st Prep
0804115-05	1st Prep
0804115-06	1st Prep
0804115-07	1st Prep
0804115-08	1st Prep
0804115-09	1st Prep
0804115-10	1st Prep
0804115-11	1st Prep
0804115-12	1st Prep
0804115-13	1st Prep
0804115-14	1st Prep
0804115-15	1st Prep
0804115-16	1st Prep
PS043008B09	1st Prep
PS043008LCS07	1st Prep
PS043008LCSD07	1st Prep

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefraction ation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804115-01	D	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-01	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-02	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-03	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-04	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-05	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-06	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-07	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-08	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-09	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-10	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-11	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-12	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-13	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-14	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-15	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
0804115-16	SAM	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
PS043008B09	B	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
PS043008LCS07	LCS	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1
PS043008LCSD07	LCSD	3630	MGH	5/14/08				MGH	5/14/08	True	5	1	0	1

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	Notes
0804115-01	
0804115-01	
0804115-02	
0804115-03	
0804115-04	
0804115-05	
0804115-06	
0804115-07	
0804115-08	
0804115-09	
0804115-10	
0804115-11	
0804115-12	
0804115-13	
0804115-14	
0804115-15	
0804115-16	
PS043008B09	
PS043008LCS07	
PS043008LCSD07	

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804115-01	D	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-01	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-02	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-03	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-04	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-05	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-06	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-07	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-08	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-09	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-10	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-11	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-12	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-13	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-14	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-15	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
0804115-16	SAM	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
PS043008B09	B	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
PS043008LCS07	LCS	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1
PS043008LCSD07	LCSD	3610	JFR	5/7/08				MGH	5/8/08	True	5	1	0	1

Alpha Woods Hole Lab
Batch Clean Up Report
04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	Notes
0804115-01	
0804115-01	
0804115-02	
0804115-03	
0804115-04	
0804115-05	
0804115-06	
0804115-07	
0804115-08	
0804115-09	
0804115-10	
0804115-11	
0804115-12	
0804115-13	
0804115-14	
0804115-15	
0804115-16	
PS043008B09	
PS043008LCS07	
PS043008LCSD07	

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804115-01	D	3665a	JBS	5/15/08							5	1	0	1
0804115-01	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-02	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-03	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-04	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-05	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-06	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-07	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-08	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-09	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-10	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-11	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-12	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-13	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-14	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-15	SAM	3665a	JBS	5/15/08							5	1	0	1
0804115-16	SAM	3665a	JBS	5/15/08							5	1	0	1
PS043008B09	B	3665a	JBS	5/15/08							5	1	0	1
PS043008LCS07	LCS	3665a	JBS	5/15/08							5	1	0	1
PS043008LCSD07	LCSD	3665a	JBS	5/15/08							5	1	0	1

Alpha Woods Hole Lab
Batch Clean Up Report

04/30/2008 0804115P - OP PCB Aroclor Low

Lab ID	Notes
0804115-01	
0804115-01	
0804115-02	
0804115-03	
0804115-04	
0804115-05	
0804115-06	
0804115-07	
0804115-08	
0804115-09	
0804115-10	
0804115-11	
0804115-12	
0804115-13	
0804115-14	
0804115-15	
0804115-16	
PS043008B09	
PS043008LCS07	
PS043008LCSD07	

Organics Preparation Checklist

ETR: 0804115 Client: Newfield Project: Ash Creek

Test Requested			
Aroclor	✓	RIM PAH/PCB (Reg I)	
Congener		RIM Pest (Reg I)	
Homolog		RIM PAH/PCB (Reg II)	
Pesticide		RIM Pest (Reg II)	
TPH		DAS	
PAH-SIM		EPH	
8270		Other:	

Required Cleanups	
No Cleanup Required	
Copper	
Conc. Sulfuric Acid	
GPC	
Automated Silica Fractionation	
Cartridge Silica Fractionation	
Alumina	✓

Sample Observations			
Normal Weight/Volume Extracted		Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target	
Lesser Amount Used - Strong Hydrocarbon Odor	✓	Sediment At Bottom Of Water Sample Jar	✓
Project Specific Weight Used		No Observations	

Other: Paint Chips

Extraction Notes		
Emulsions During Shake		**Identify Matrix - Circle One**
Samples Extracted Outside Of Hold Time		**Soil / Sediment / Water / Sheen / NAPL / Sludge / Solid Tissue / Product / Oil / Net / Wipe / Elutriate**
Samples Not Field Preserved		
No Observations	✓	

Other:

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate	
Precipitate Formed During Concentration		No Observations	✓

Other:

Clean Notes			
Auto-vialing not required		Auto-vialing for H_2O in extract	
Auto-vialing for precipitate in extract		No Observations	✓

Other:

Batch Reviewed

Analyst: [signature]

Date: 5/9/08

Batch Completed

Analyst: [signature]

Date: 5/9/08

Polychlorinated Biphenyls by 8082

Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.12	5	2	JBS

Parameter	Result
Aroclor 1016	94.3 U
Aroclor 1221	94.3 U
Aroclor 1232	94.3 U
Aroclor 1242	94.3 U
Aroclor 1248	94.3 U
Aroclor 1254	**5220**
Aroclor 1260	94.3 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	58	30-150
Decachlorobiphenyl	72	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JPS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-01.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-01.D\ECD2B.CH
Acq On : 16 May 2008 5:23 pm Operator: JBS
Sample : 0804115-01-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:21 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	428116	368501	26.270m	28.995m
Spiked Amount 100.000 Range 30 - 150 Recovery =					26.27%#	28.99%#
12) s DCB - Surrogate	26.35	25.21	847983	655606	33.125m	36.147m
Spiked Amount 100.000 Range 30 - 150 Recovery =					33.13%	36.15%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	778442	538866	1107.112	1041.604m
34) L6 A1254 2	14.43	14.03	1341938	923474	1115.307m(C)	1107.434m(C)
35) L6 A1254 3	15.22	14.73	1389196	729500	1095.410m	1194.794m
36) L6 A1254 4	15.91	15.28	609638	497864	1065.434m	1054.325m(C)
37) L6 A1254 5	16.89	16.46	1240422	942062	1101.613m	1132.067m
Sum A1254 1			5359636	3631766	5484.876	5530.225
Average A1254 1					1096.975	1106.045
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

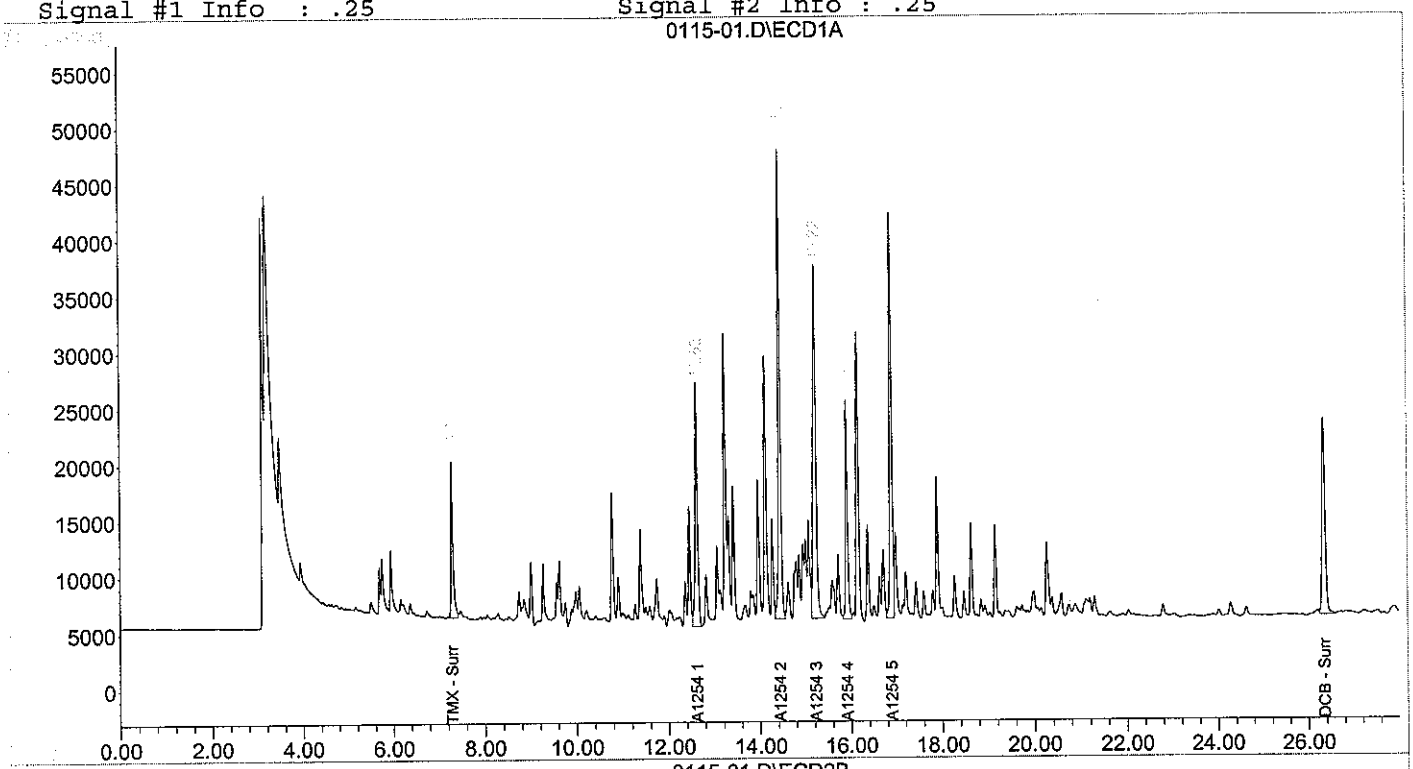
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

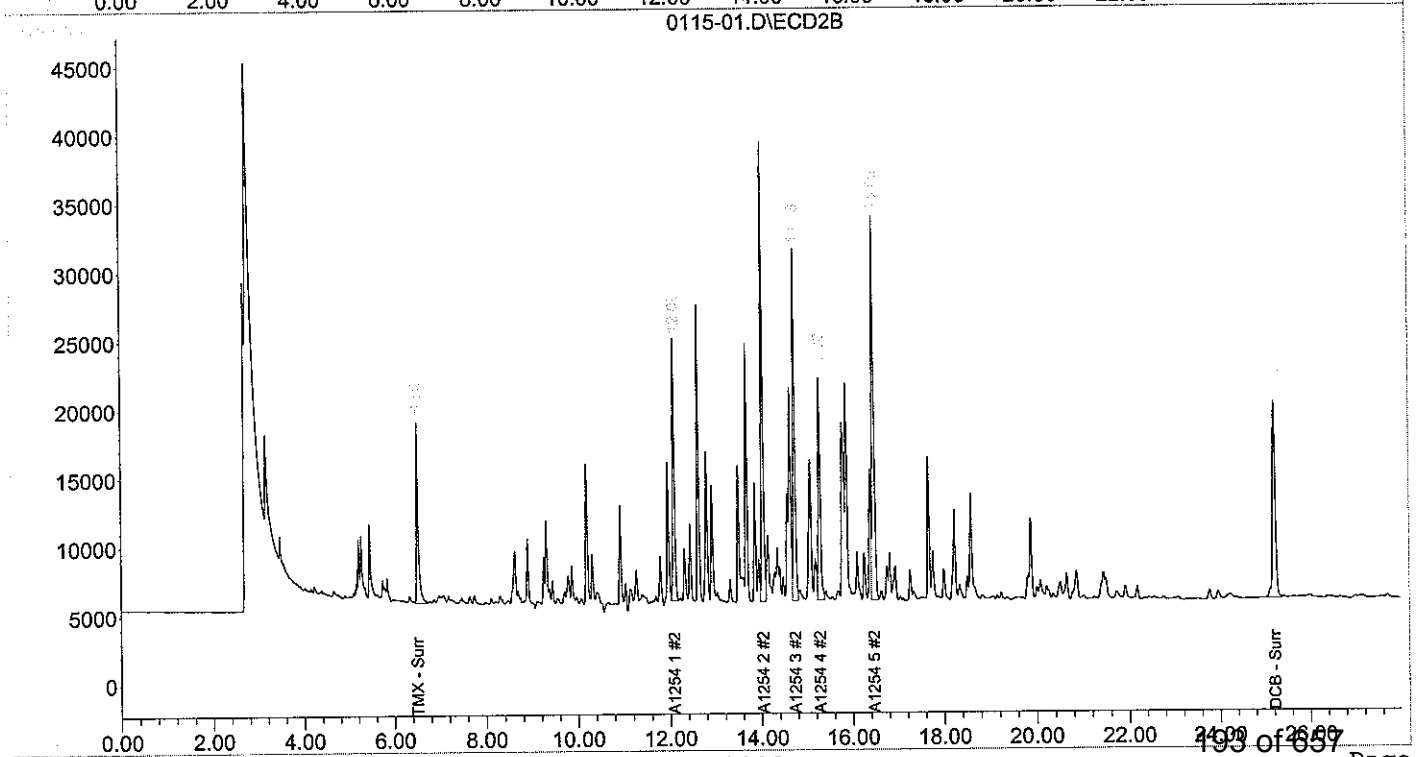
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-01.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-01.D\ECD2B.CH
Acq On : 16 May 2008 5:23 pm Operator: JBS
Sample : 0804115-01-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:21 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01 D**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.43	5	2	JBS

Parameter	Result
Aroclor 1016	82.3 U
Aroclor 1221	82.3 U
Aroclor 1232	82.3 U
Aroclor 1242	82.3 U
Aroclor 1248	82.3 U
Aroclor 1254	**5310**
Aroclor 1260	82.3 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	61	30-150
Decachlorobiphenyl	75	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-1D.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-1D.D\ECD2B.CH
Acq On : 16 May 2008 5:54 pm Operator: JBS
Sample : 0804115-01D-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	495741	378983	30.592m	29.878m
Spiked Amount 100.000 Range 30 - 150 Recovery =					30.59%	29.88%#
12) s DCB - Surrogate	26.34	25.21	910899	680010	35.790m	37.642m
Spiked Amount 100.000 Range 30 - 150 Recovery =					35.79%	37.64%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	902454	609682	1283.484	1178.488m
34) L6 A1254 2	14.43	14.03	1565314	1055652	1300.959m(C)	1265.943m(C)
35) L6 A1254 3	15.21	14.73	1630698	843678	1285.839m	1381.797m
36) L6 A1254 4	15.90	15.28	712594	608684	1245.365m	1289.008m(C)
37) L6 A1254 5	16.89	16.46	1508096	1115898	1339.333m	1340.964m
Sum A1254 1			6319156	4233594	6454.980	6456.201
Average A1254 1					1290.996	1291.240
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

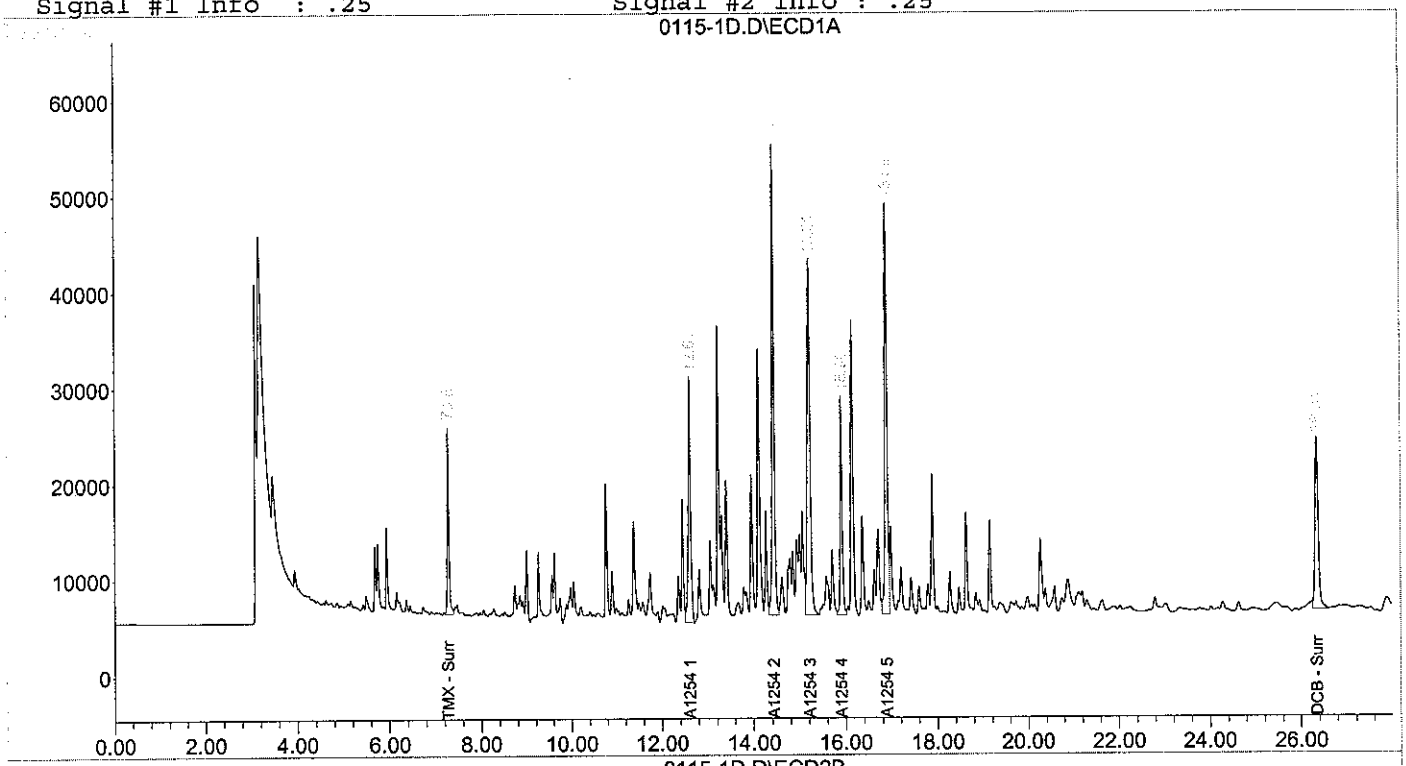
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

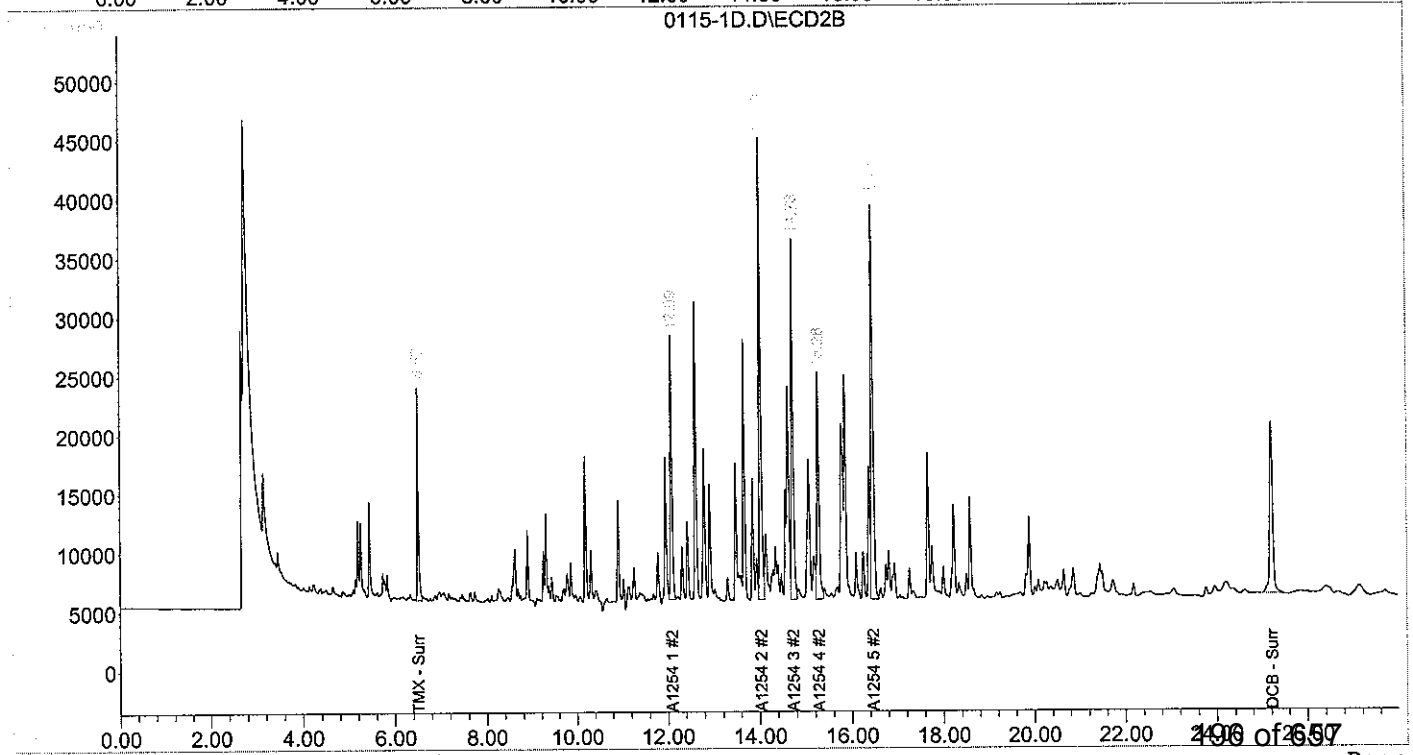
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-1D.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-1D.D\ECD2B.CH
Acq On : 16 May 2008 5:54 pm Operator: JBS
Sample : 0804115-01D-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Duplicate
Polychlorinated Biphenyls by 8082

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/17/08	03/21/08	04/30/08	100	JBS

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Aroclor 1016	94.3 U	82.3 U	N/A	50
Aroclor 1221	94.3 U	82.3 U	N/A	50
Aroclor 1232	94.3 U	82.3 U	N/A	50
Aroclor 1242	94.3 U	82.3 U	N/A	50
Aroclor 1248	94.3 U	82.3 U	N/A	50
Aroclor 1254	**5220**	**5310**	2	50
Aroclor 1260	94.3 U	82.3 U	N/A	50

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	58	61	30-150
Decachlorobiphenyl	72	75	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

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Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-02**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.36	5	2	JBS

Parameter	Result
Aroclor 1016	84.8 U
Aroclor 1221	84.8 U
Aroclor 1232	84.8 U
Aroclor 1242	84.8 U
Aroclor 1248	84.8 U
Aroclor 1254	**5120**
Aroclor 1260	**1280**

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	64	30-150
Decachlorobiphenyl	77	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

gzs 5/27/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-02.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-02.D\ECD2B.CH
Acq On : 16 May 2008 6:26 pm Operator: JBS
Sample : 0804115-02-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	506148	403781	31.261m	31.974m
Spiked Amount 100.000 Range 30 - 150 Recovery =					31.26%	31.97%
12) s DCB - Surrogate	26.35	25.21	920446	690388	36.196m	38.279m
Spiked Amount 100.000 Range 30 - 150 Recovery =					36.20%	38.28%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
7) L7 A1260 1	17.42	0.00	204160	0	236.265m	N.D. d(C) #(I) Q del
8) L7 A1260 2	18.27	16.75	182722	115190	217.400m	164.889m
9) L7 A1260 3	20.27	17.75	349252	213862	340.545m	320.298m
10) L7 A1260 4	20.74	19.88	214592	321764	315.581m	269.591m
11) L7 A1260 5	22.79	22.18	261892	98006	397.652m	183.032m #
Sum A1260 1			1212618	748822	1507.443	937.809
Average A1260 1					301.489	234.452
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	837014	571986	1190.414m	1105.624m
34) L6 A1254 2	14.43	14.03	1445778	972660	1201.610m(C)	1166.419m(C)
35) L6 A1254 3	15.21	14.73	1507206	771702	1188.463m	1263.913m
36) L6 A1254 4	15.91	15.28	687558	577758	1201.611m	1223.516m(C)
37) L6 A1254 5	16.89	16.46	1416814	1034240	1258.266m	1242.837m
Sum A1254 1			5894370	3928346	6040.365	6002.308
Average A1254 1					1208.073	1200.462
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

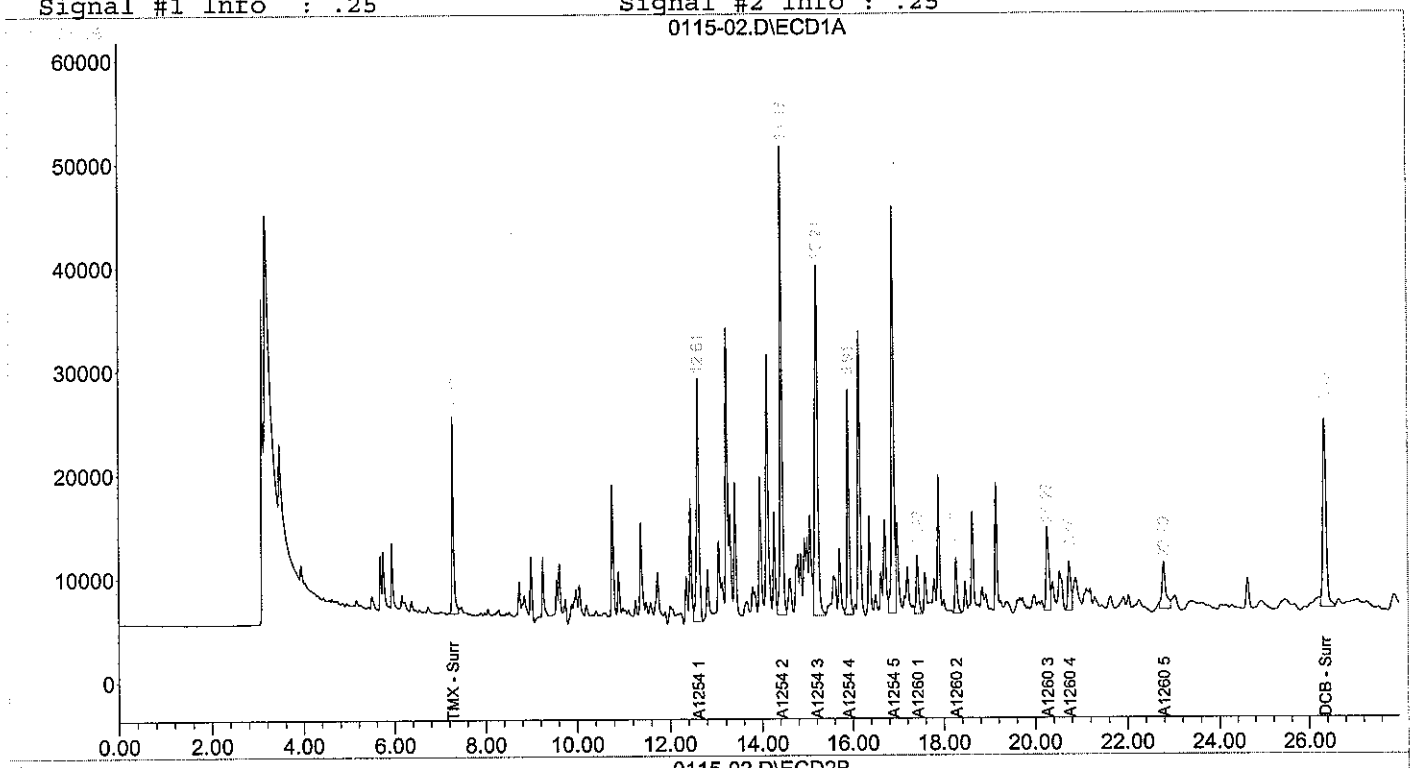
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

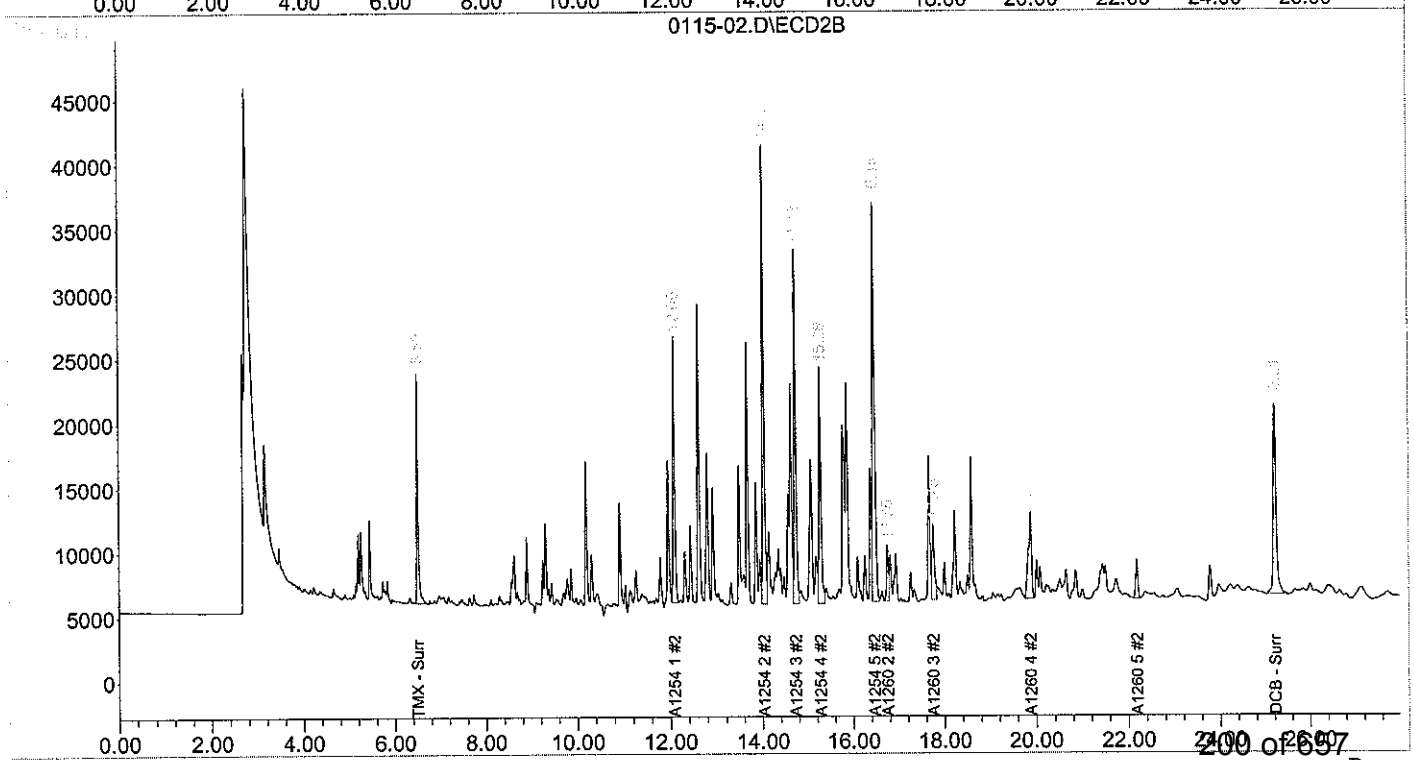
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-02.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-02.D\ECD2B.CH
Acq On : 16 May 2008 6:26 pm Operator: JBS
Sample : 0804115-02-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-03**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/15/08	100	2.12	5	1	JBS

Parameter	Result
Aroclor 1016	47.2 U
Aroclor 1221	47.2 U
Aroclor 1232	47.2 U
Aroclor 1242	47.2 U
Aroclor 1248	47.2 U
Aroclor 1254	**3630**
Aroclor 1260	47.2 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	62	30-150
Decachlorobiphenyl	93	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-03.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-03.D\ECD2B.CH
Acq On : 15 May 2008 5:26 pm Operator: JBS
Sample : 0804115-03 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	942237	744491	60.161m	61.943m
Spiked Amount 100.000 Range 30 - 150 Recovery =					60.16%	61.94%
12) s DCB - Surrogate	26.33	25.20	2155482	1363167	93.198m	82.483m
Spiked Amount 100.000 Range 30 - 150 Recovery =					93.20%	82.48%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	1037414	720876	1521.865m	1414.985m
34) L6 A1254 2	14.43	14.02	1765678	1170464	1502.886m(C)	1421.819m(C)
35) L6 A1254 3	15.21	14.72	1747188	956050	1400.017m	1597.207m
36) L6 A1254 4	15.90	15.27	787662	633022	1404.567m	1355.432m
37) L6 A1254 5	16.89	16.45	1765010	1566804	1591.611m	1914.739m
Sum A1254 1			7102952	5047216	7420.946	7704.182
Average A1254 1					1484.189	1540.836
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

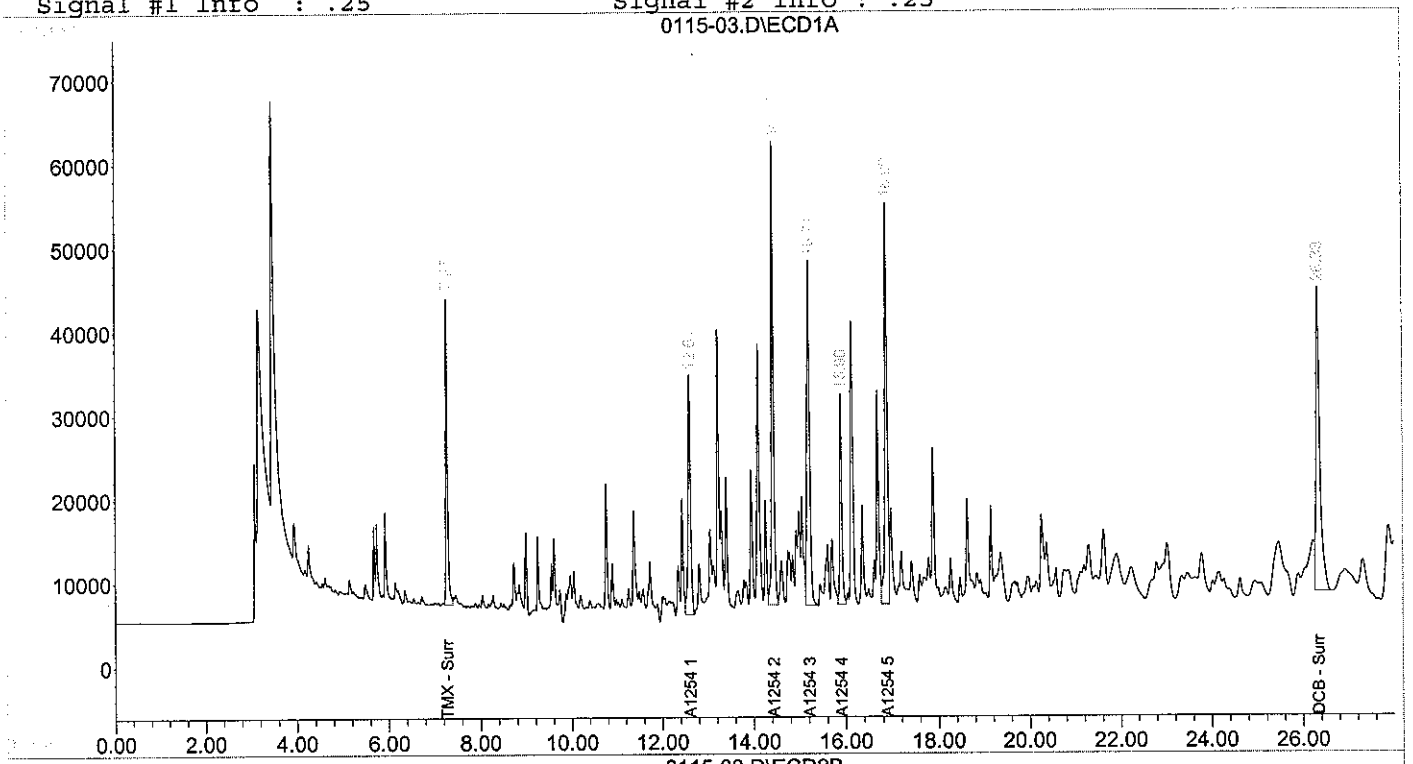
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

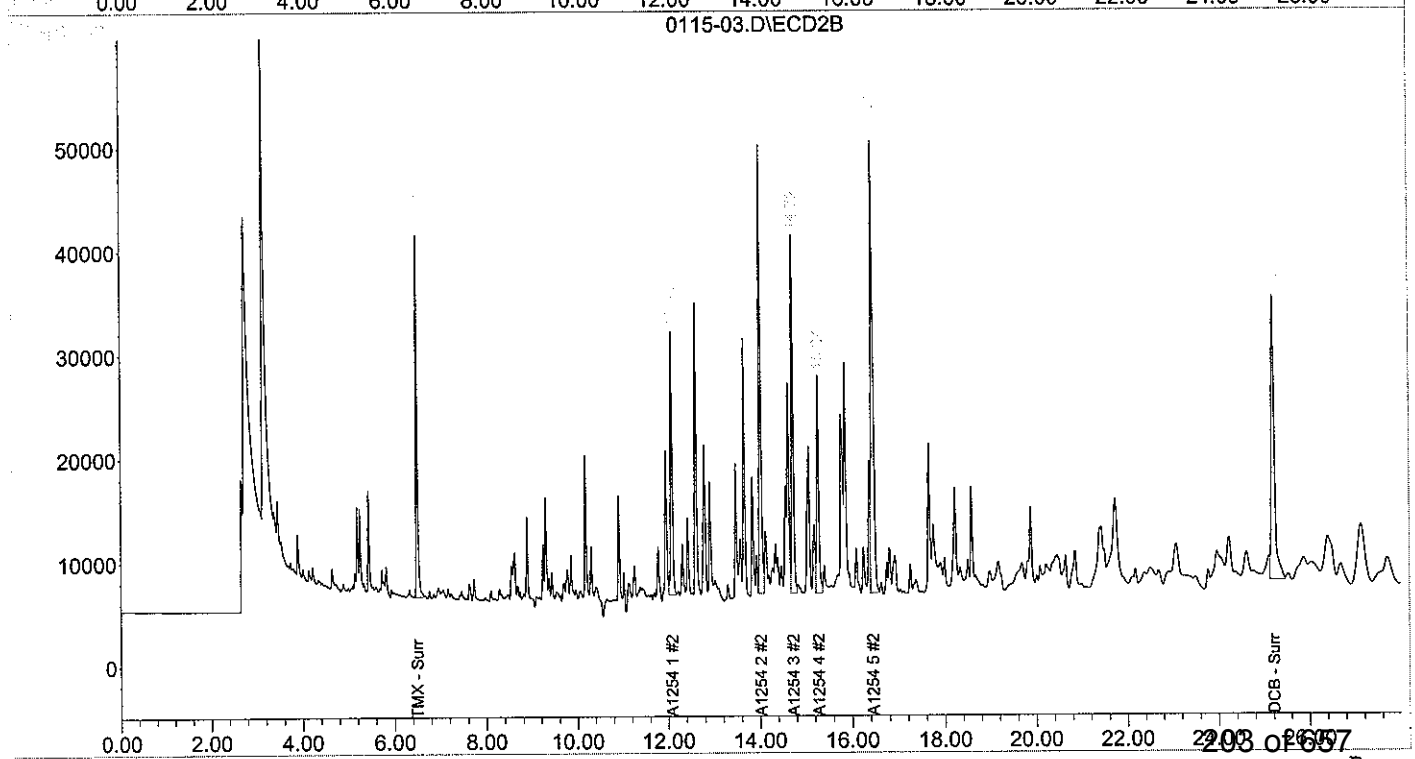
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-03.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-03.D\ECD2B.CH
Acq On : 15 May 2008 5:26 pm Operator: JBS
Sample : 0804115-03 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-04**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.31	5	2	JBS

Parameter	Result
Aroclor 1016	86.6 U
Aroclor 1221	86.6 U
Aroclor 1232	86.6 U
Aroclor 1242	86.6 U
Aroclor 1248	86.6 U
Aroclor 1254	**5550**
Aroclor 1260	86.6 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	65	30-150
Decachlorobiphenyl	101	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

MC 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-04.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-04.D\ECD2B.CH
Acq On : 16 May 2008 6:57 pm Operator: JBS
Sample : 0804115-04-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:32 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	521641	396637	32.258m	31.369m
Spiked Amount 100.000 Range 30 - 150 Recovery =					32.26%	31.37%
12) s DCB - Surrogate	26.35	25.21	1244867	737458	50.271m	41.185m
Spiked Amount 100.000 Range 30 - 150 Recovery =					50.27%	41.19%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	919874	612558	1308.259m	1184.047m
34) L6 A1254 2	14.43	14.03	1551812	1014092	1289.737m(C)	1216.104m(C)
35) L6 A1254 3	15.22	14.73	1586244	828608	1250.786m	1357.115m
36) L6 A1254 4	15.91	15.28	694558	579154	1213.845m	1226.473m(C)
37) L6 A1254 5	16.89	16.46	1472548	1185356	1307.763m	1424.431m
Sum A1254 1			6225036	4219768	6370.390	6408.171
Average A1254 1					1274.078	1281.634
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

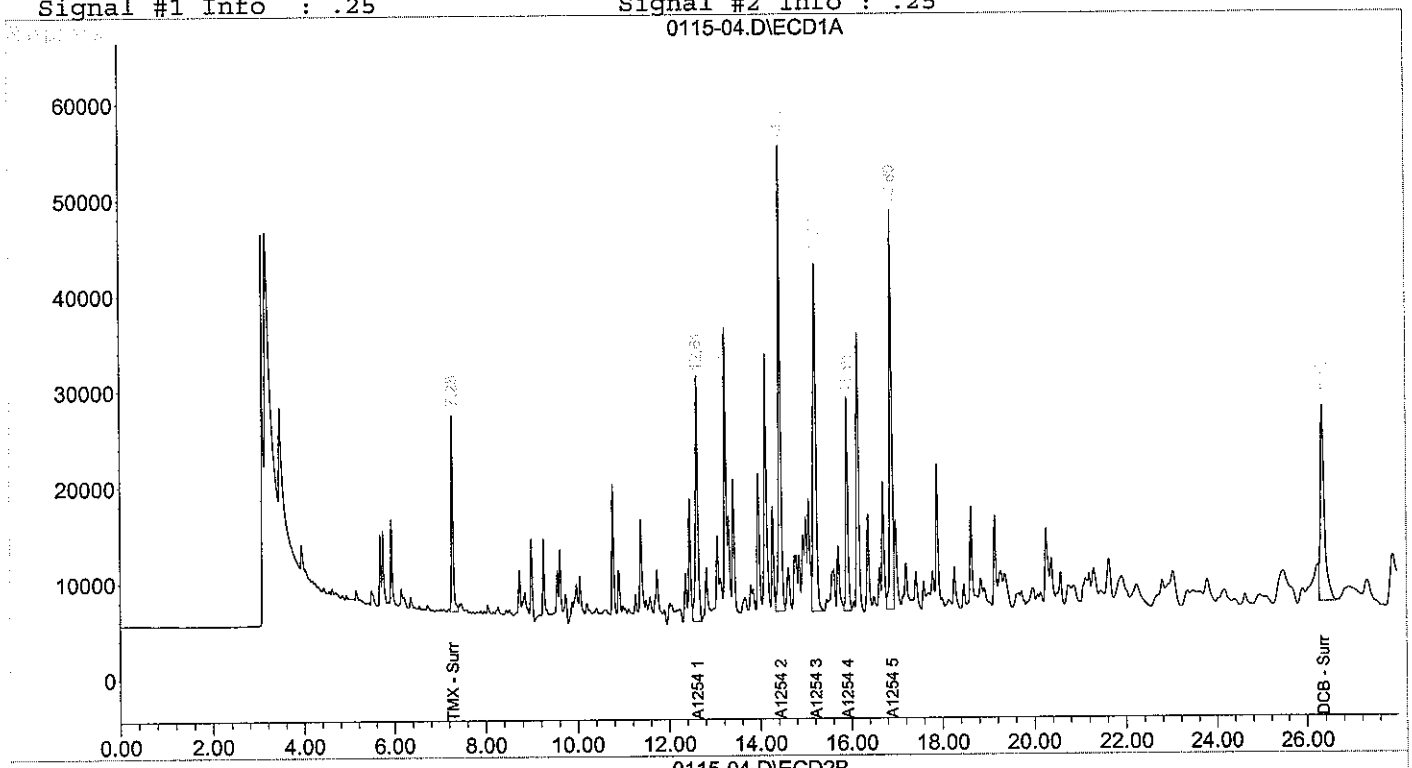
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

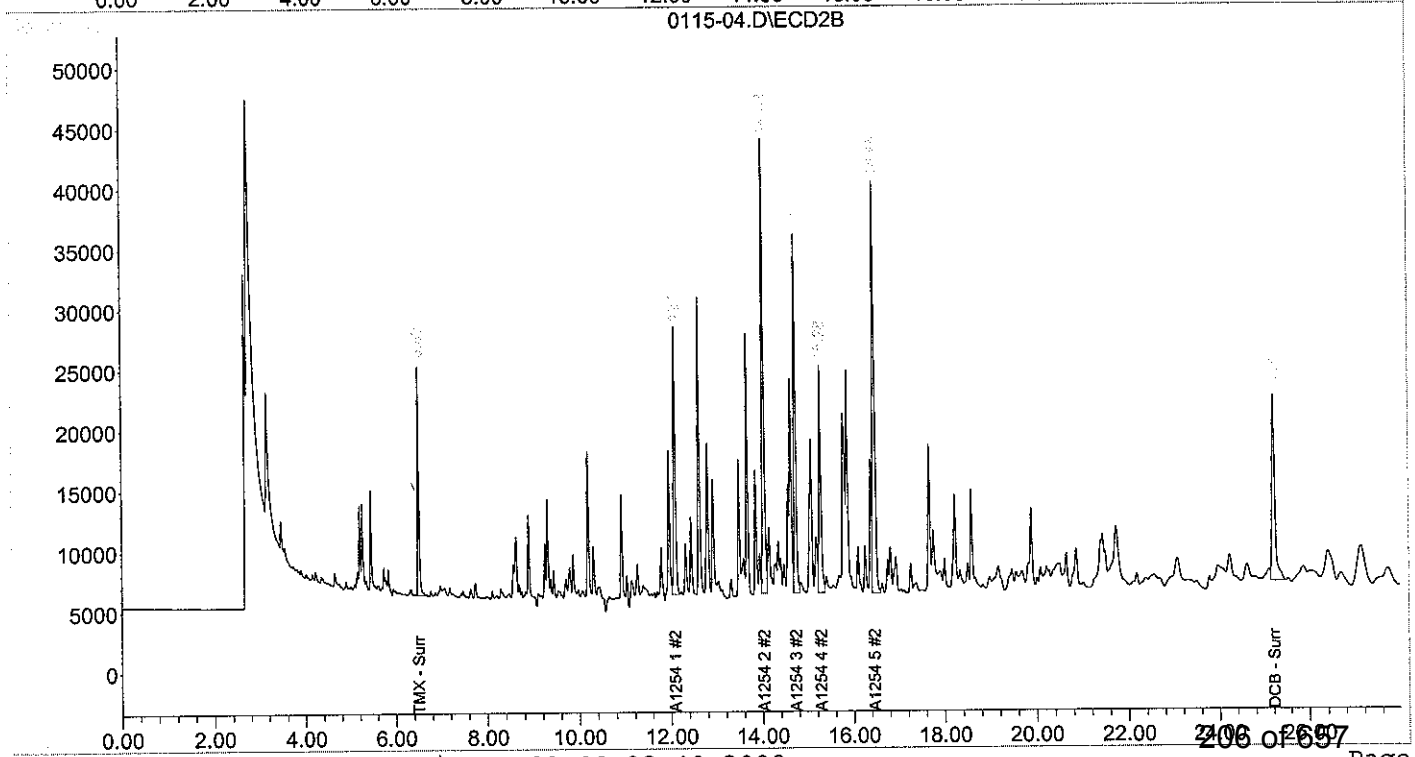
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-04.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-04.D\ECD2B.CH
Acq On : 16 May 2008 6:57 pm Operator: JBS
Sample : 0804115-04-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:32 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-05**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.10	5	20	JBS

Parameter	Result
Aroclor 1016	952 U
Aroclor 1221	952 U
Aroclor 1232	952 U
Aroclor 1242	952 U
Aroclor 1248	952 U
Aroclor 1254	**56200**
Aroclor 1260	952 U

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	56		30-150
Decachlorobiphenyl	48	I	30-150

N/A - Not Applicable
I - Due to interference, the lower value is reported.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JCS 8/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-05.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-05.D\ECD2B.CH
Acq On : 16 May 2008 7:59 pm Operator: JBS
Sample : 0804115-05-D20 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:36 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	49986	45818	2.777m	2.684m
Spiked Amount 100.000 Range 30 - 150 Recovery =					2.78%#	2.68%#
12) s DCB - Surrogate	26.34	25.21	361736	76035	13.150m	2.385m(I)#
Spiked Amount 100.000 Range 30 - 150 Recovery =					13.15%#	2.38%#
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	769842	549866	1094.881m	1062.867m
34) L6 A1254 2	14.43	14.03	1523944	1037832	1266.576m(C)	1244.573m(C)
35) L6 A1254 3	15.21	14.73	1427786	742880	1125.839m	1216.708m
36) L6 A1254 4	15.91	15.28	642430	500474	1122.743m	1059.852m(C) ✓
37) L6 A1254 5	16.89	16.46	1430242	1097484	1270.191m	1318.836m
Sum A1254 1			5794244	3928536	5880.230	5902.836
Average A1254 1					1176.046	1180.567
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

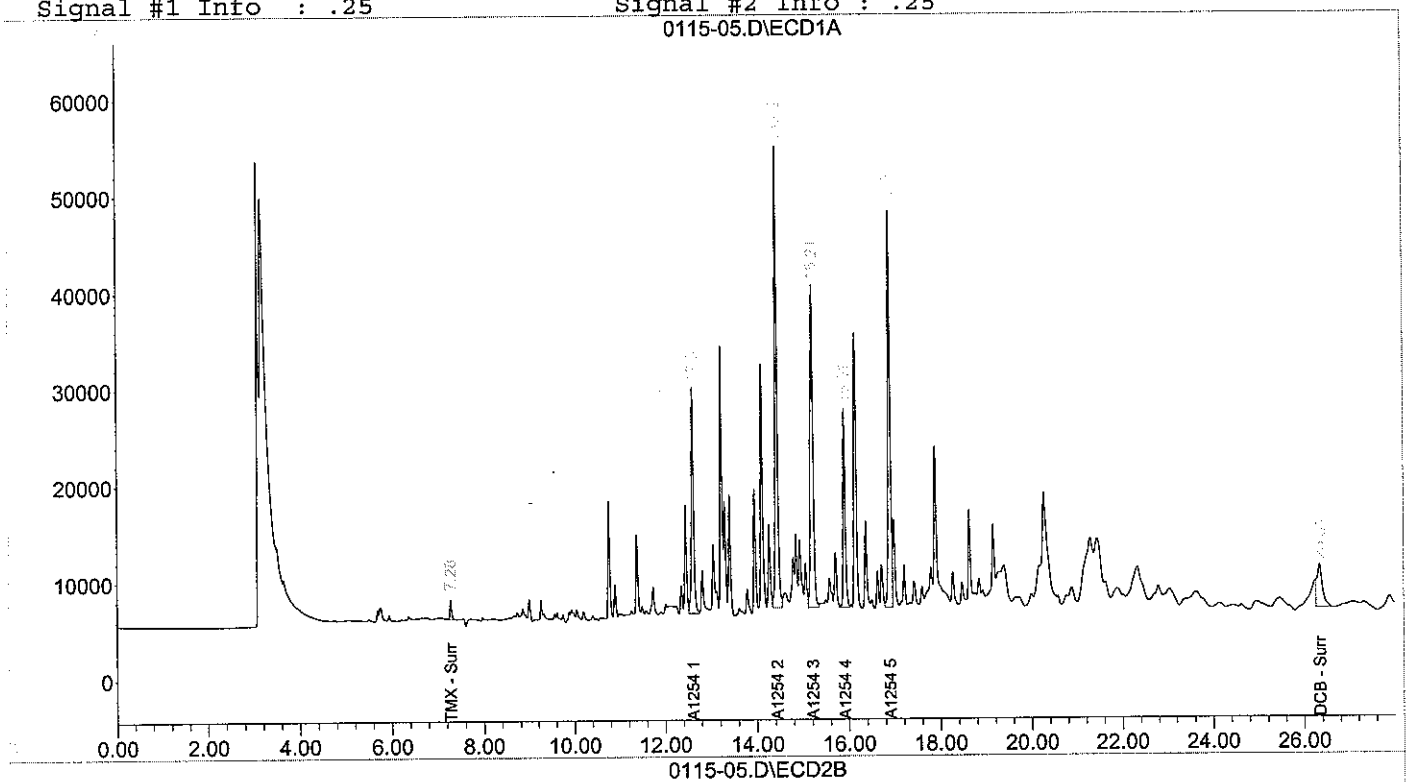
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

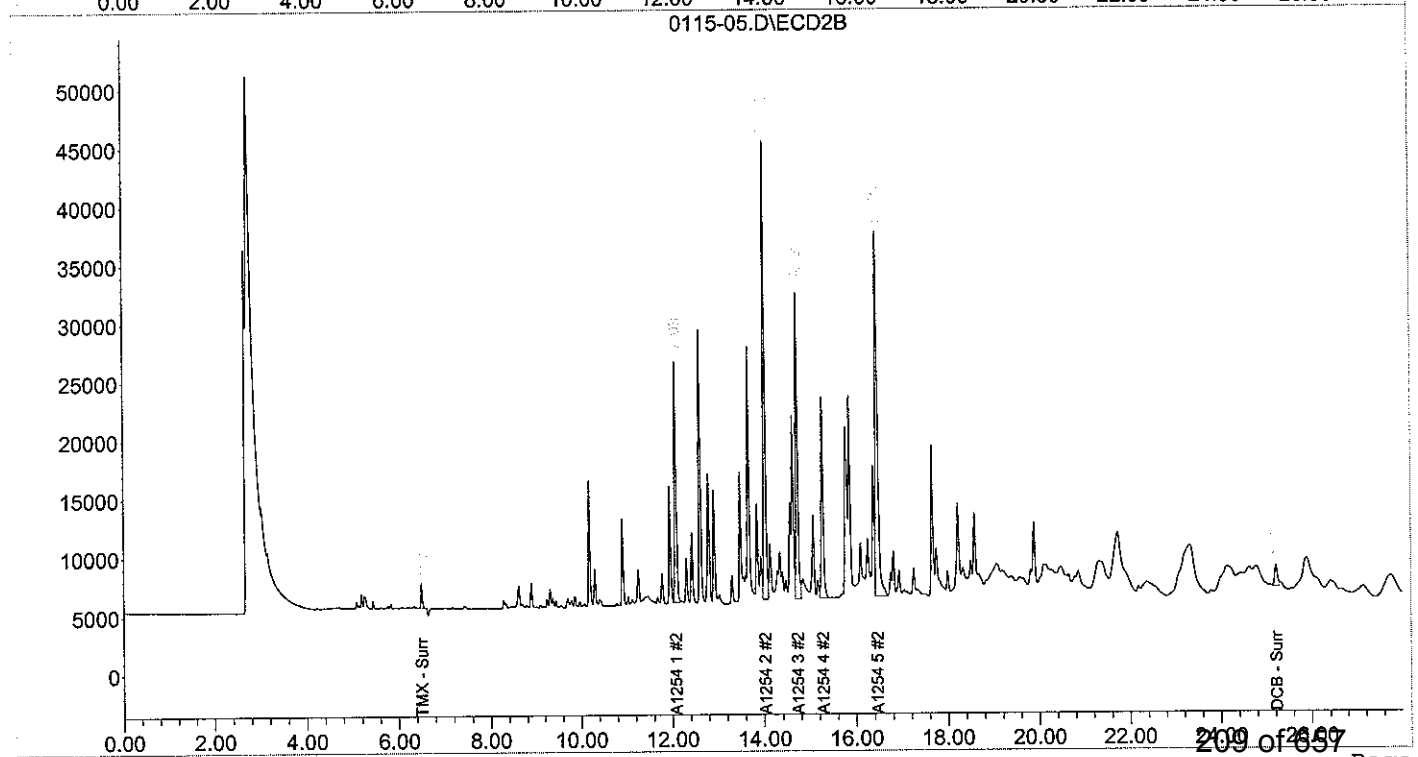
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-05.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-05.D\ECD2B.CH
Acq On : 16 May 2008 7:59 pm Operator: JBS
Sample : 0804115-05-D20 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:36 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-06**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.29	5	2	JBS

Parameter	Result
Aroclor 1016	87.3 U
Aroclor 1221	87.3 U
Aroclor 1232	87.3 U
Aroclor 1242	87.3 U
Aroclor 1248	87.3 U
Aroclor 1254	**6030**
Aroclor 1260	87.3 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	52	30-150
Decachlorobiphenyl	71	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

gps 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-06.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-06.D\ECD2B.CH
Acq On : 16 May 2008 7:28 pm Operator: JBS
Sample : 0804115-06-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	420936	331823	25.814m	25.921m
Spiked Amount 100.000 Range 30 - 150 Recovery =					25.81%#	25.92%#
12) s DCB - Surrogate	26.34	25.21	771671	641295	29.919m	35.274m
Spiked Amount 100.000 Range 30 - 150 Recovery =					29.92%#	35.27%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	896294	601584	1274.723m	1162.835m
34) L6 A1254 2	14.43	14.03	1594498	1060194	1325.214m(C)	1271.390m(C)
35) L6 A1254 3	15.22	14.73	1592708	850984	1255.883m	1393.763m
36) L6 A1254 4	15.91	15.28	743066	623342	1298.620m	1320.049m(C)
37) L6 A1254 5	16.89	16.46	1966284	1186794	1746.248m	1426.159m
Sum A1254 1			6792850	4322898	6900.688	6574.197
Average A1254 1					1380.138	1314.839
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

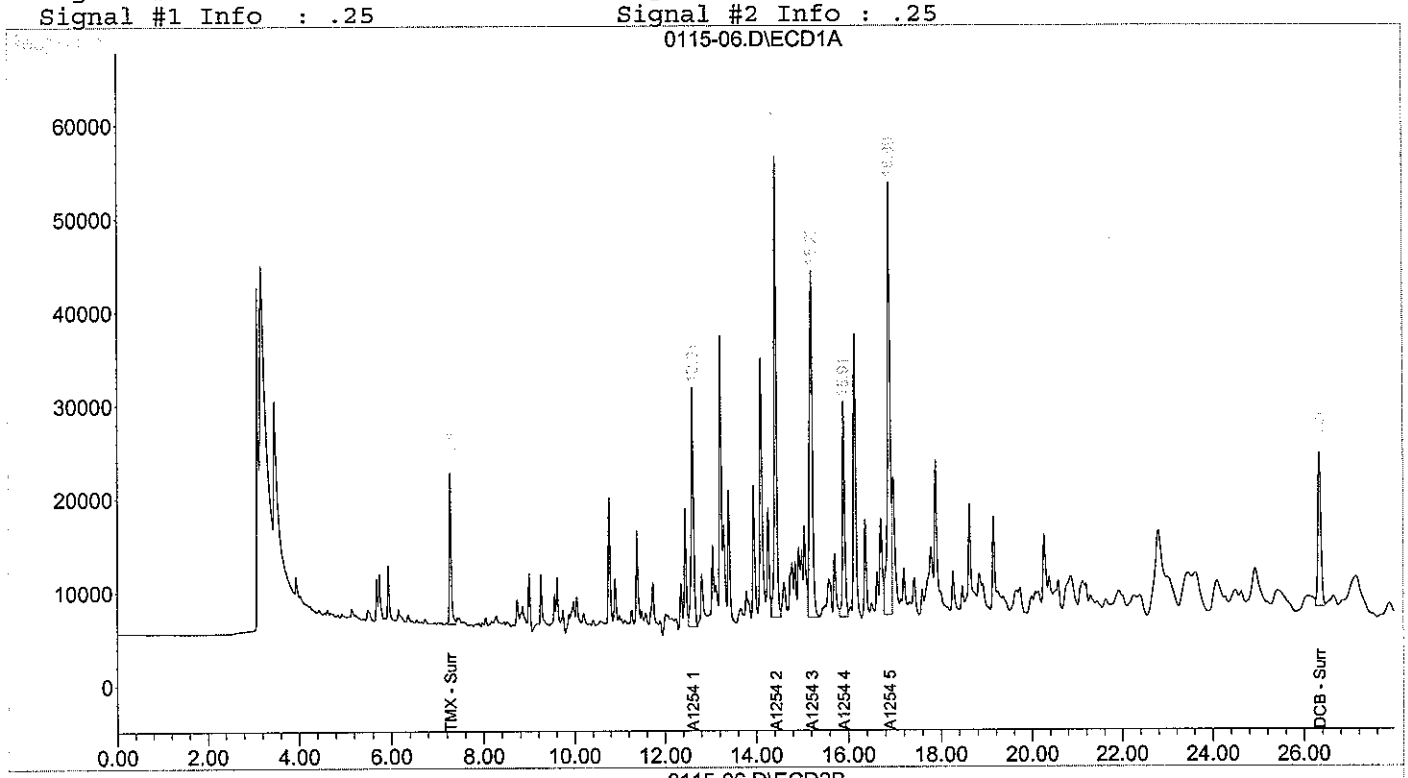
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

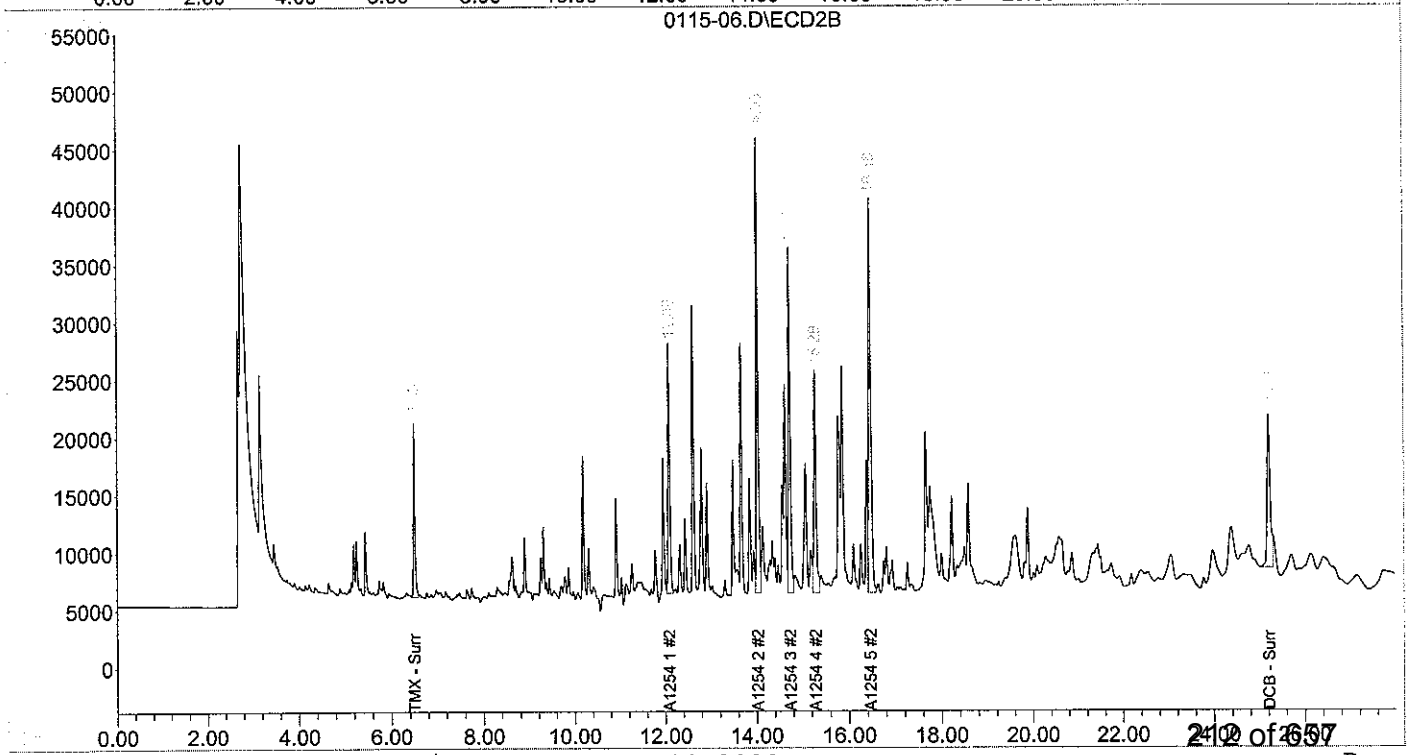
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-06.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-06.D\ECD2B.CH
Acq On : 16 May 2008 7:28 pm Operator: JBS
Sample : 0804115-06-D2 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 8:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 08:18:05 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.03	5	1	JBS

Parameter	Result
Aroclor 1016	49.3 U
Aroclor 1221	49.3 U
Aroclor 1232	49.3 U
Aroclor 1242	49.3 U
Aroclor 1248	49.3 U
Aroclor 1254	**516**
Aroclor 1260	49.3 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	46	30-150
Decachlorobiphenyl	60	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 8/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-07.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-07.D\ECD2B.CH
Acq On : 16 May 2008 4:52 pm Operator: JBS
Sample : 0804115-07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:19 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	722125	572185	45.351m	46.503m
Spiked Amount 100.000 Range 30 - 150 Recovery =					45.35%	46.50%
12) s DCB - Surrogate	26.35	25.21	1381487	1036401	56.371	60.254m
Spiked Amount 100.000 Range 30 - 150 Recovery =					56.37%	60.25%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	114306	91392	162.568m	176.657m
34) L6 A1254 2	14.44	14.03	182272	141692	151.489m(C)	169.918m(C)
35) L6 A1254 3	15.22	14.73	259834	95690	204.884m	156.724m
36) L6 A1254 4	15.91	15.28	116546	100794	203.682m	213.451m(C)
37) L6 A1254 5	16.90	16.45	170186	275828	151.141m	331.460m #
Sum A1254 1			843144	705396	873.765	1048.209
Average A1254 1					174.753	209.642
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

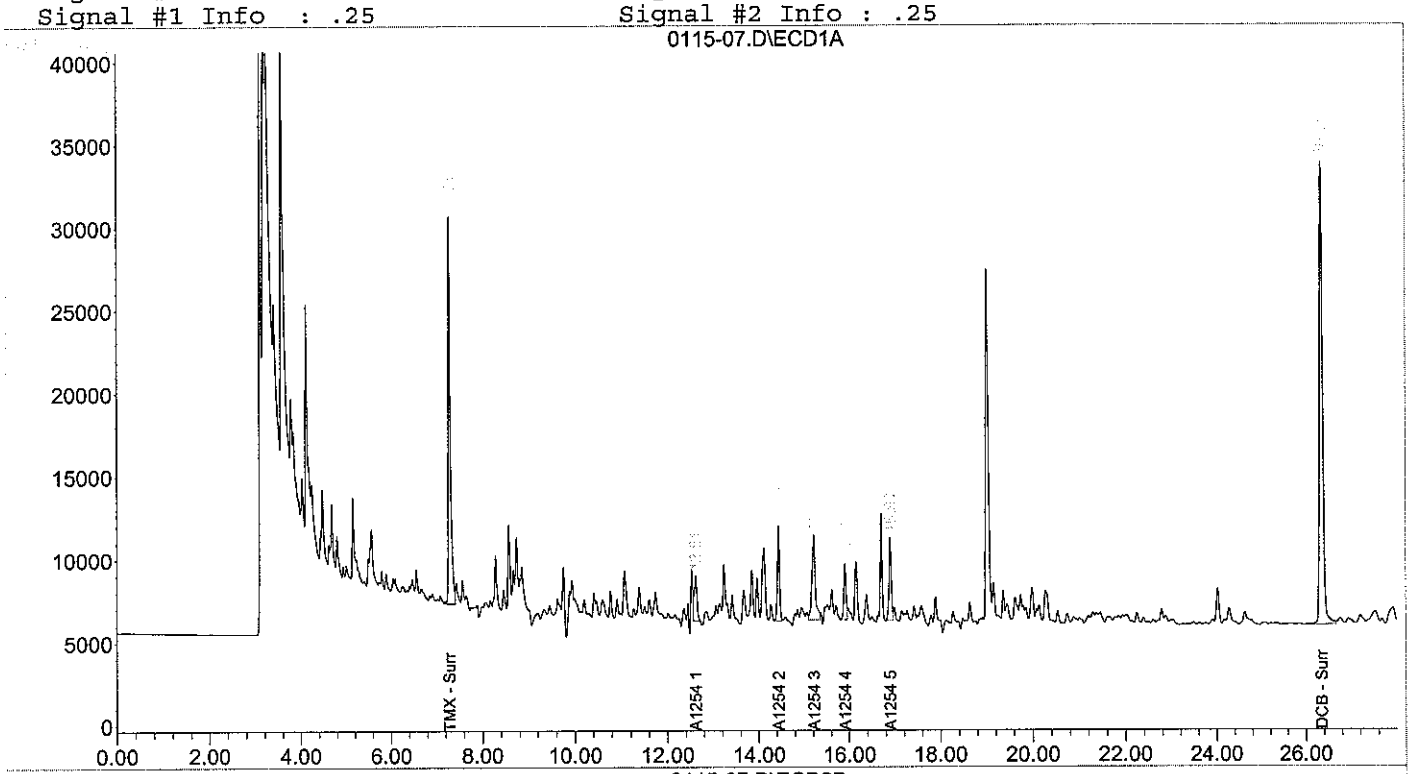
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

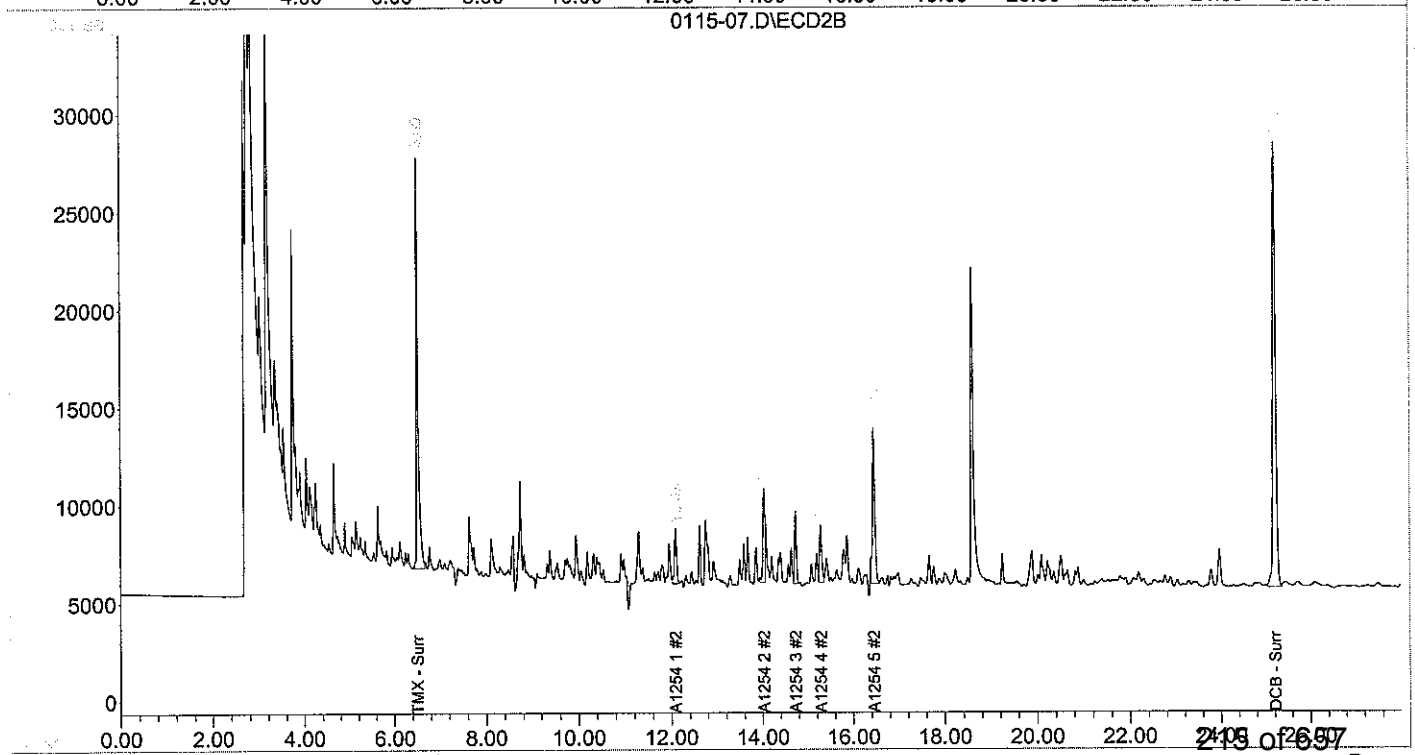
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\0115-07.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\MAY16\0115-07.D\ECD2B.CH
Acq On : 16 May 2008 4:52 pm Operator: JBS
Sample : 0804115-07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:19 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-08**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/15/08	100	2.19	5	1	JBS

Parameter	Result
Aroclor 1016	45.7 U
Aroclor 1221	45.7 U
Aroclor 1232	45.7 U
Aroclor 1242	45.7 U
Aroclor 1248	45.7 U
Aroclor 1254	**1980**
Aroclor 1260	45.7 U

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	38		30-150
Decachlorobiphenyl	45	I	30-150

N/A - Not Applicable
I - Due to interference, the lower value is reported.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-08.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-08.D\ECD2B.CH
Acq On : 15 May 2008 8:04 pm Operator: JBS
Sample : 0804115-08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 12:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	551902	479960	34.211m	38.482m
Spiked Amount 100.000 Range 30 - 150 Recovery =					34.21%	38.48%
12) s DCB - Surrogate	26.35	25.21	1391617	794076	56.827m	44.714m (I)
Spiked Amount 100.000 Range 30 - 150 Recovery =					56.83%	44.71%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	587656	402456	862.079m	789.968m
34) L6 A1254 2	14.43	14.03	964484	707416	820.936m(C)	859.332m(C)
35) L6 A1254 3	15.22	14.73	1035532	559280	829.769m	934.351m
36) L6 A1254 4	15.91	15.28	457682	354554	816.143m	759.174m
37) L6 A1254 5	16.89	16.46	960564	808472	866.196m	988.007m
Sum A1254 1			4005918	2832178	4195.124	4330.832
Average A1254 1					839.025	866.166
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

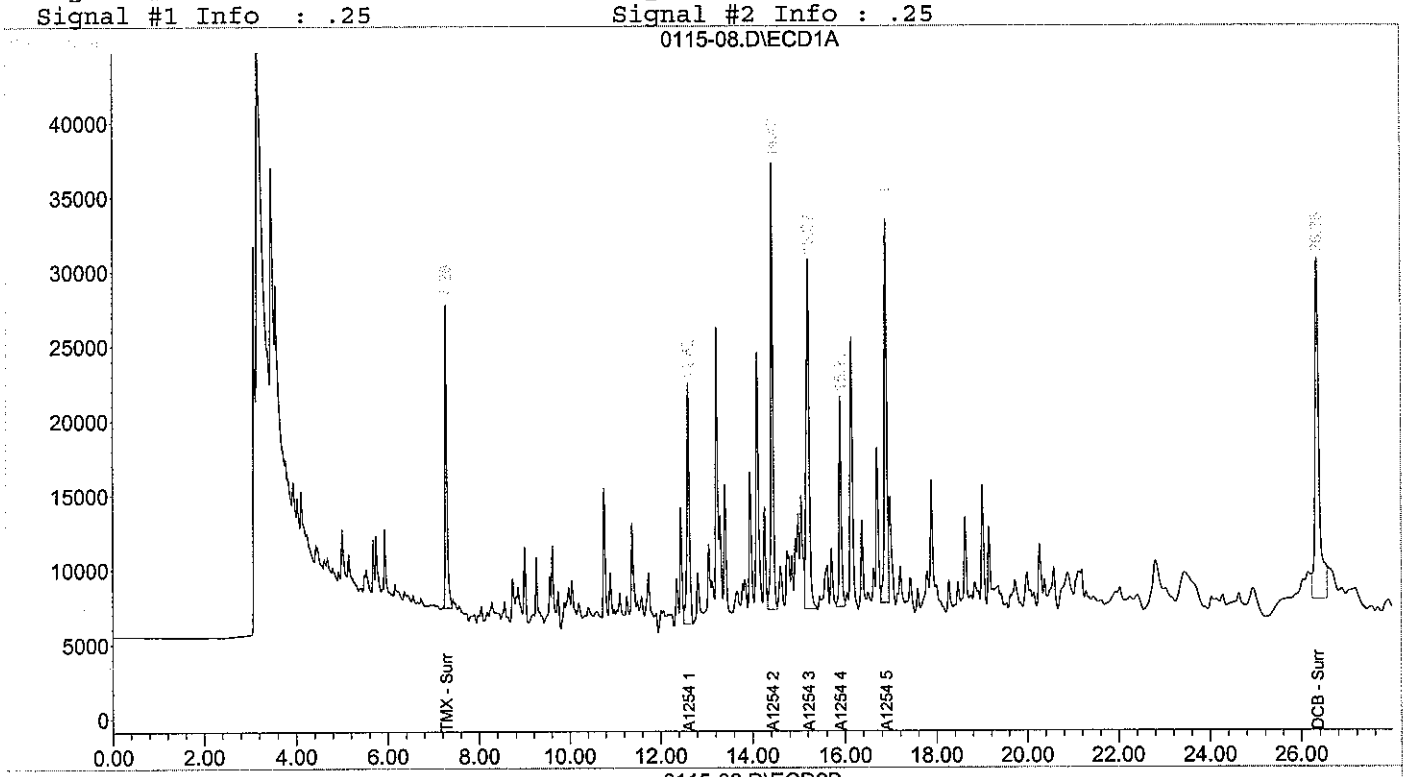
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

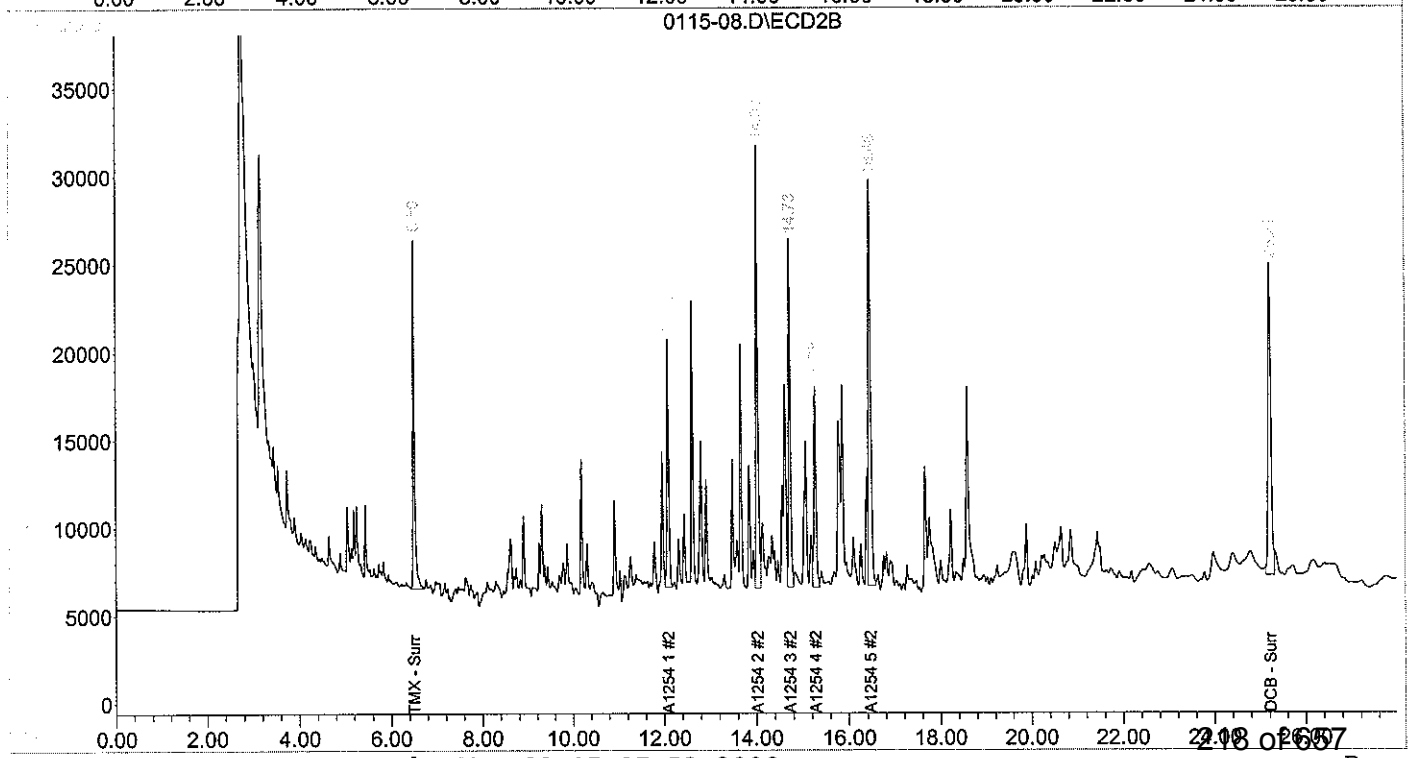
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-08.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-08.D\ECD2B.CH
Acq On : 15 May 2008 8:04 pm Operator: JBS
Sample : 0804115-08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 12:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-09**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/15/08	100	2.17	5	1	JBS

Parameter	Result
Aroclor 1016	46.1 U
Aroclor 1221	46.1 U
Aroclor 1232	46.1 U
Aroclor 1242	46.1 U
Aroclor 1248	46.1 U
Aroclor 1254	**215**
Aroclor 1260	46.1 U

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	29	§	30-150
Decachlorobiphenyl	37		30-150

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

PS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-09.D\ECD1A.CH Vial: 31
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-09.D\ECD2B.CH
Acq On : 15 May 2008 11:44 pm Operator: JBS
Sample : 0804115-09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	454877	364731	27.976m	28.678m
Spiked Amount 100.000 Range 30 - 150 Recovery =					27.98%#	28.68%#
12) s DCB - Surrogate	26.34	25.20	858947	667644	33.588m	36.884m
Spiked Amount 100.000 Range 30 - 150 Recovery =					33.59%	36.88%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	58412	44736	85.689m	87.811m
34) L6 A1254 2	14.43	14.03	96100	67444	81.797m(C)	81.927m(C)
35) L6 A1254 3	15.21	14.72	124932	54958	100.108m	91.815m
36) L6 A1254 4	15.90	15.28	64730	51964	115.427m	111.266m
37) L6 A1254 5	16.89	0.00	90522	0	81.629m	N.D. d #I
Sum A1254 1			434696	219102	464.650	372.819
Average A1254 1					92.930	93.205
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

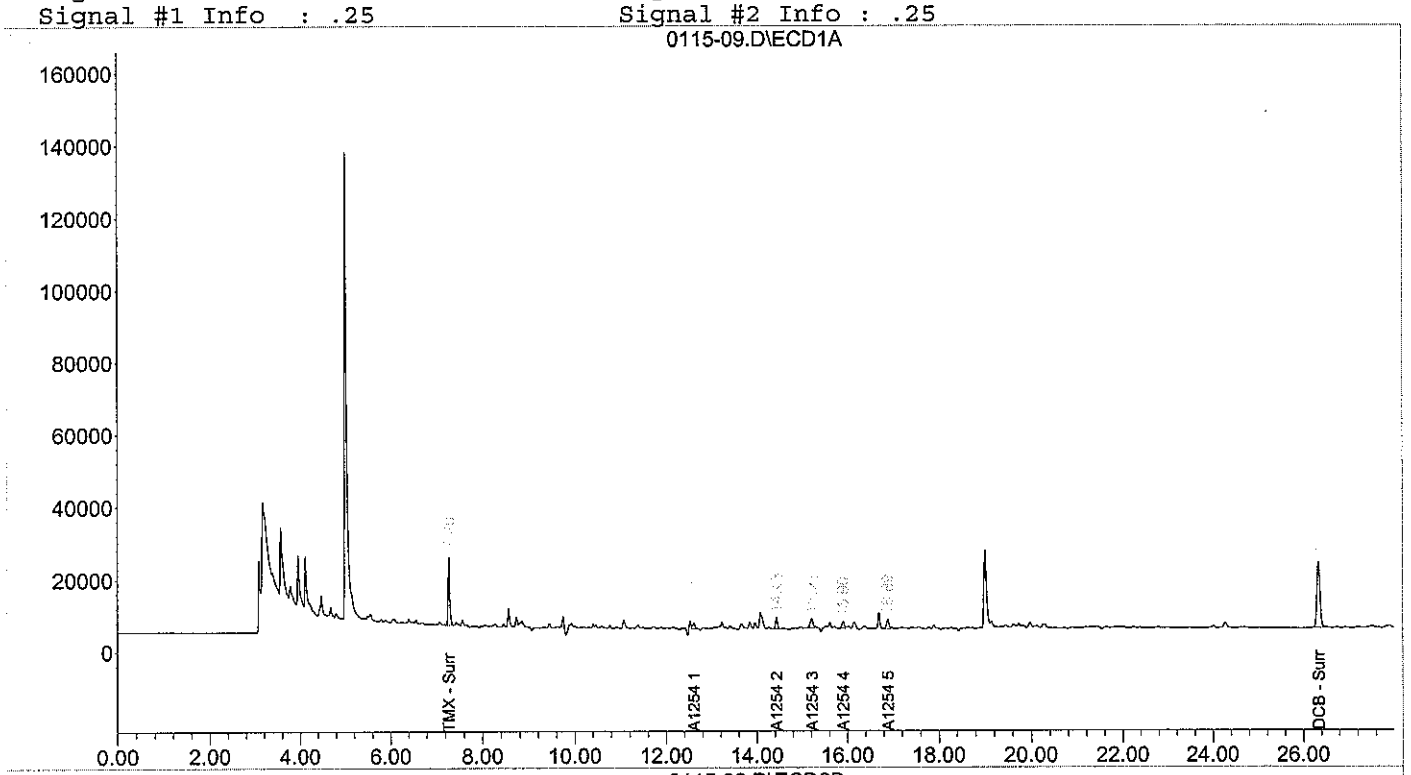
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

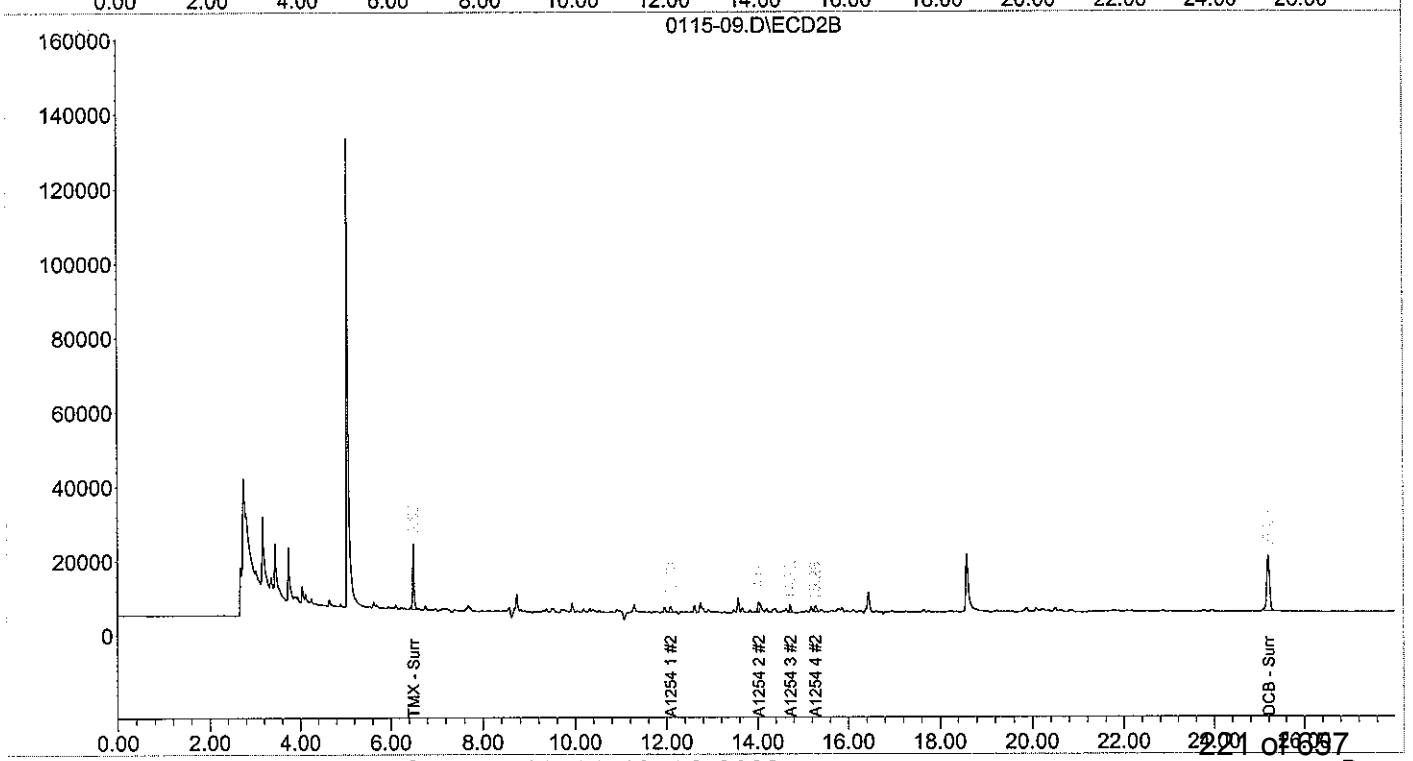
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-09.D\ECD1A.CH Vial: 31
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-09.D\ECD2B.CH
Acq On : 15 May 2008 11:44 pm Operator: JBS
Sample : 0804115-09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-10**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.18	5	1	JBS

Parameter	Result
Aroclor 1016	45.9 U
Aroclor 1221	45.9 U
Aroclor 1232	45.9 U
Aroclor 1242	45.9 U
Aroclor 1248	45.9 U
Aroclor 1254	45.9 U
Aroclor 1260	45.9 U

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	25	§	30-150
Decachlorobiphenyl	26	§	30-150

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-10.D\ECD1A.CH Vial: 32
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-10.D\ECD2B.CH
Acq On : 16 May 2008 12:15 am Operator: JBS
Sample : 0804115-10 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	408611	318344	25.031m	24.796m
Spiked Amount 100.000 Range 30 - 150 Recovery =					25.03%#	24.80%#
12) s DCB - Surrogate	26.34	25.20	640928	481804	24.490m	25.687m
Spiked Amount 100.000 Range 30 - 150 Recovery =					24.49%#	25.69%#
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

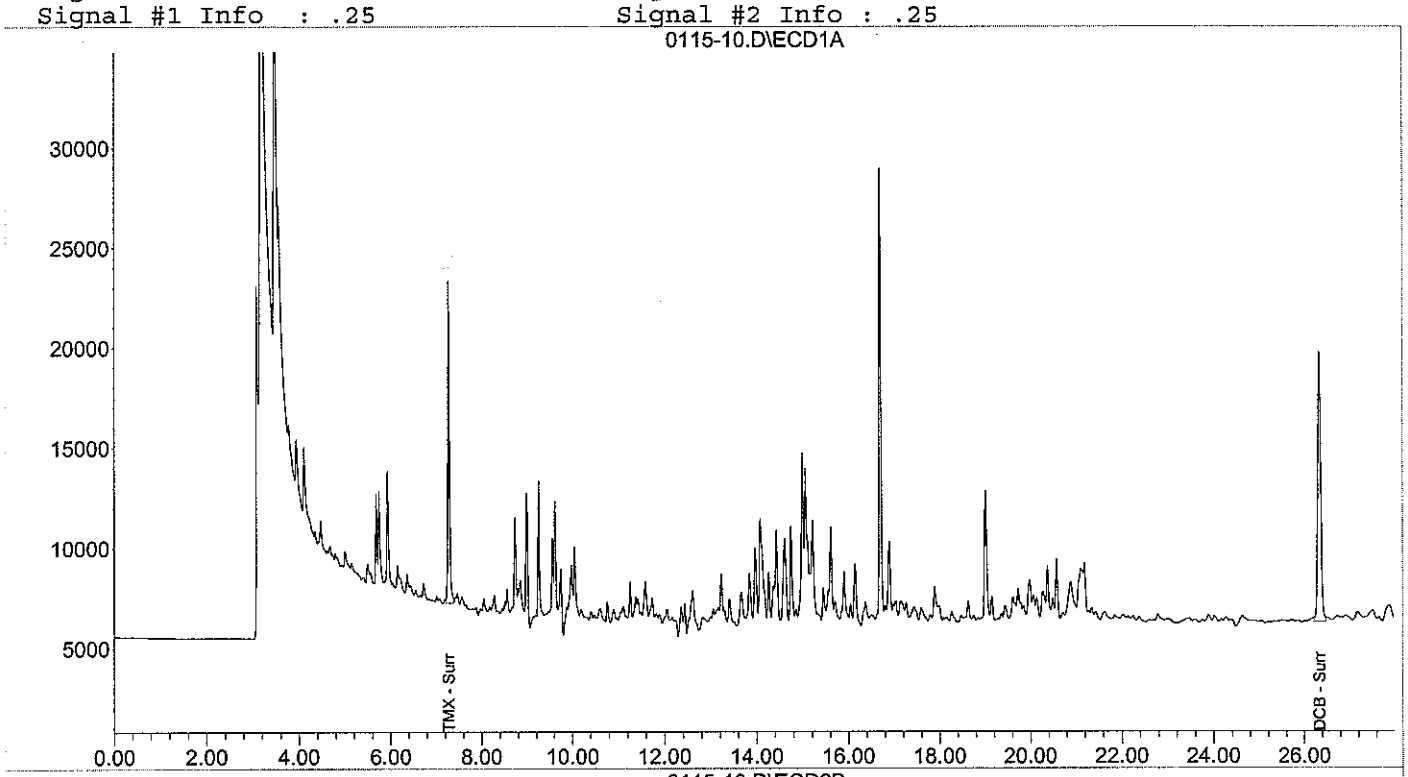
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

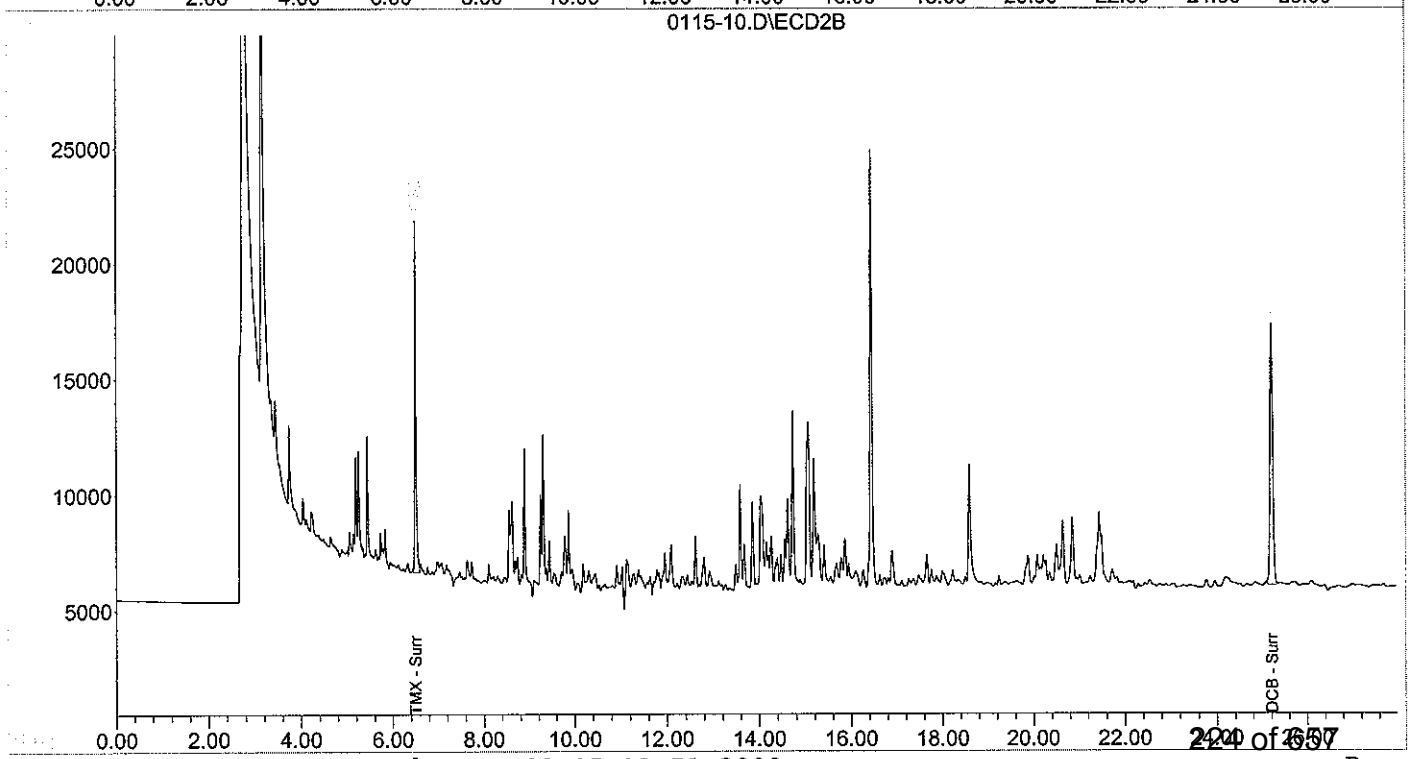
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-10.D\ECD1A.CH Vial: 32
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-10.D\ECD2B.CH
Acq On : 16 May 2008 12:15 am Operator: JBS
Sample : 0804115-10 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-11**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.37	5	1	JBS

Parameter	Result
Aroclor 1016	42.2 U
Aroclor 1221	42.2 U
Aroclor 1232	42.2 U
Aroclor 1242	**138**
Aroclor 1248	42.2 U
Aroclor 1254	**521**
Aroclor 1260	**133**

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	55	30-150
Decachlorobiphenyl	85	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 5/22/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-11.D\ECD1A.CH Vial: 33
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-11.D\ECD2B.CH
Acq On : 16 May 2008 12:46 am Operator: JBS
Sample : 0804115-11 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:37 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	824563	668480	52.184m	55.056m
Spiked Amount 100.000 Range 30 - 150 Recovery =					52.18%	55.06%
12) s DCB - Surrogate	26.34	25.20	1830494	1396437	77.225m	84.840m
Spiked Amount 100.000 Range 30 - 150 Recovery =					77.22%	84.84%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
7) L7 A1260 1	17.42	0.00	58526	0	52.372m	N.D. d #
8) L7 A1260 2	18.27	16.75	41280	30008	36.774m	23.797m #
9) L7 A1260 3	20.26	17.75	79182	70204	69.631m	88.431m #
10) L7 A1260 4	20.74	19.88	48304	105932	66.213m	75.789m
11) L7 A1260 5	22.78	22.18	52146	39450	73.227m	64.385m
Sum A1260 1			279438	245594	298.217	252.401
Average A1260 1					59.643	63.100
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.96	7.43	11288	6886	40.091m	30.751m(C)
24) L4 A1242 2	8.84	8.29	34178	17582	62.555m	42.864m #
25) L4 A1242 3	9.94	9.31	72690	74086	73.584m	94.385m #
26) L4 A1242 4	10.19	9.71	23286	33432	53.920m(C)	93.420m(C)#
27) L4 A1242 5	11.73	0.00	30380	0	66.979m	N.D. d #
Sum A1242 1			171822	131986	297.129	261.420
Average A1242 1					59.426	65.355
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	159938	89434	234.626m	175.547m #
34) L6 A1254 2	14.43	14.03	249424	151524	212.301m(C)	184.063m(C)
35) L6 A1254 3	15.21	14.72	232114	128336	185.992m	214.402m
36) L6 A1254 4	15.90	15.27	146242	102984	260.780m	220.510m
37) L6 A1254 5	16.89	16.45	277590	360574	250.319m	440.645m #
Sum A1254 1			1065308	832852	1144.019	1235.169
Average A1254 1					228.804	247.034
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

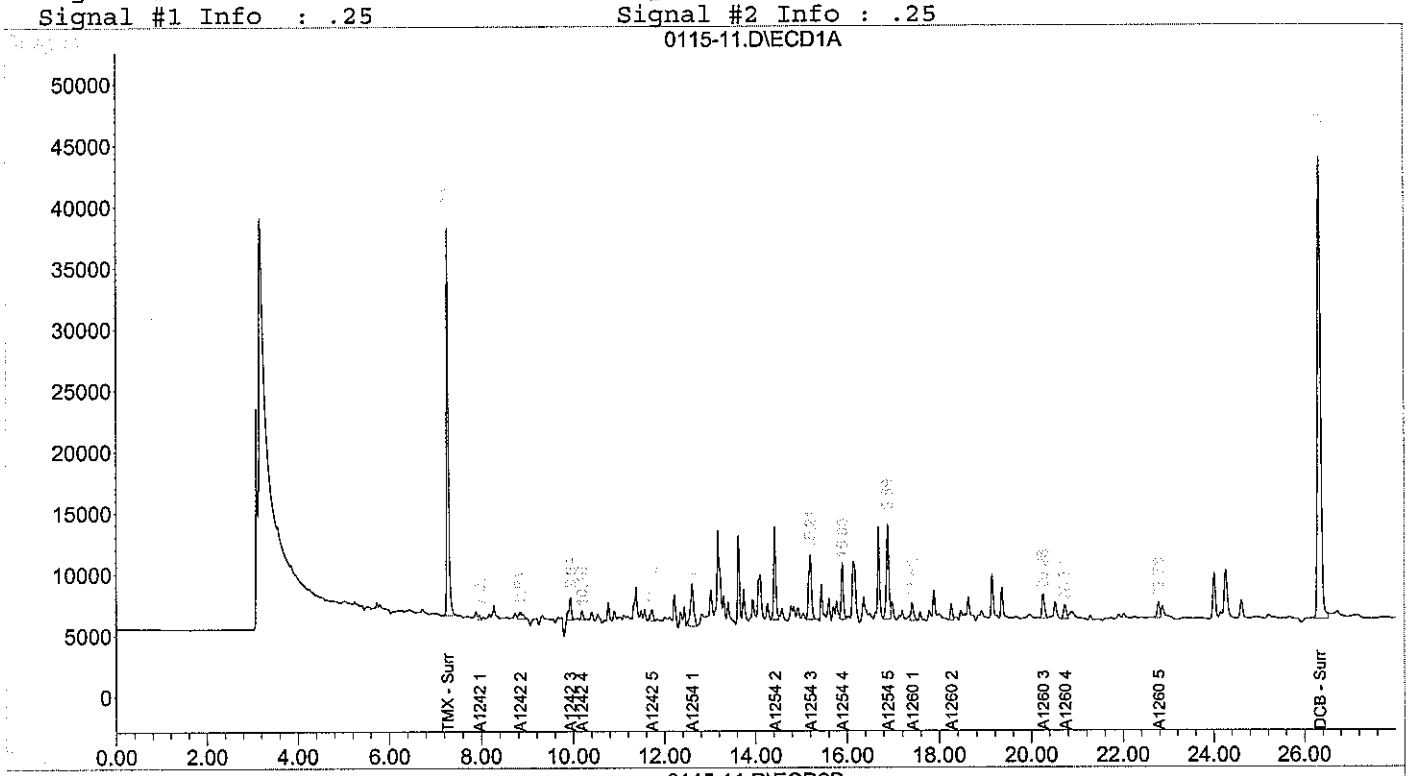
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

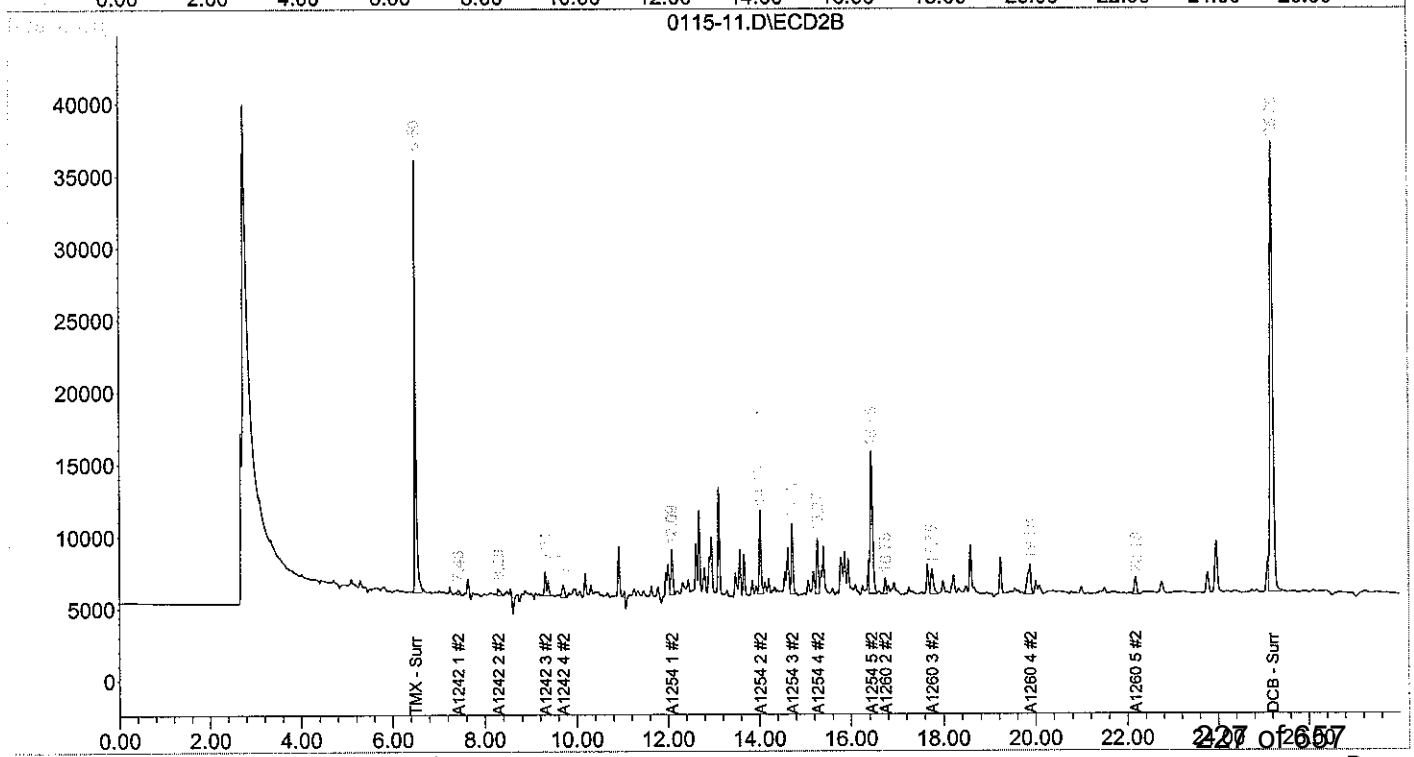
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-11.D\ECD1A.CH Vial: 33
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-11.D\ECD2B.CH
Acq On : 16 May 2008 12:46 am Operator: JBS
Sample : 0804115-11 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:37 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-12**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.36	5	1	JBS

Parameter	Result
Aroclor 1016	42.4 U
Aroclor 1221	42.4 U
Aroclor 1232	42.4 U
Aroclor 1242	42.4 U
Aroclor 1248	42.4 U
Aroclor 1254	**1220**
Aroclor 1260	42.4 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	44	30-150
Decachlorobiphenyl	62	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

PS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-12.D\ECD1A.CH Vial: 34
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-12.D\ECD2B.CH
Acq On : 16 May 2008 1:17 am Operator: JBS
Sample : 0804115-12 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	674235	544099	42.190m	44.043m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.19%	44.04%	
12) s DCB - Surrogate	26.34	25.20	1409271	1063651	57.624m	62.049m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					57.62%	62.05%	
Target Compounds							
Sum A1016 1			0	0	N.D.	N.D.	
Average A1016 1					0.000	0.000	
Sum A1260 1			0	0	N.D.	N.D.	
Average A1260 1					0.000	0.000	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
33) L6 A1254 1	12.61	12.09	347170	217014	509.291m	425.970m	
34) L6 A1254 2	14.43	14.03	589034	445610	501.366m(C)	541.304m(C)	
35) L6 A1254 3	15.21	14.73	639192	357222	512.183m	596.786m	
36) L6 A1254 4	15.90	15.28	246802	277978	440.100m	595.209m	#
37) L6 A1254 5	16.89	16.45	468406	585502	422.389m	715.522m	#
Sum A1254 1			2290604	1883326	2385.329	2874.792	
Average A1254 1					477.066	574.958	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

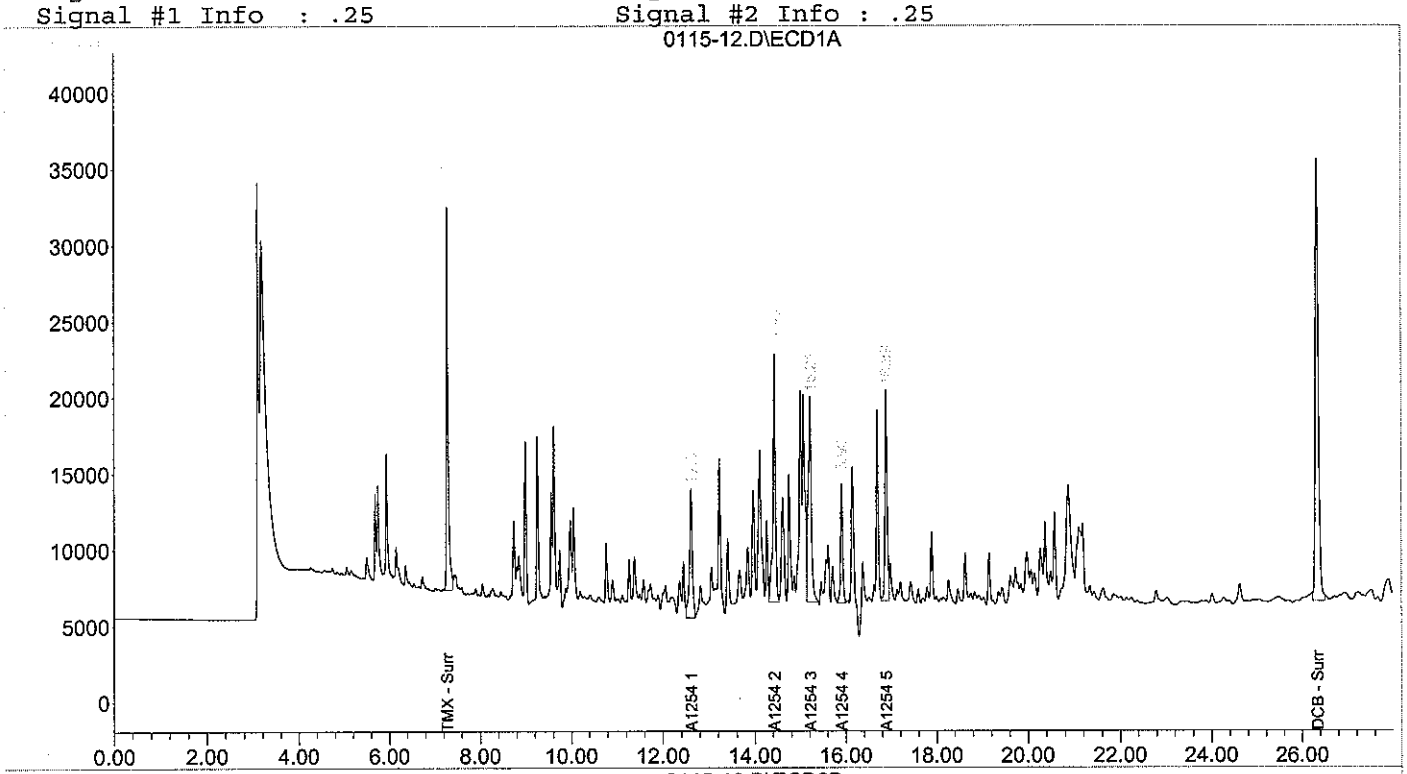
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

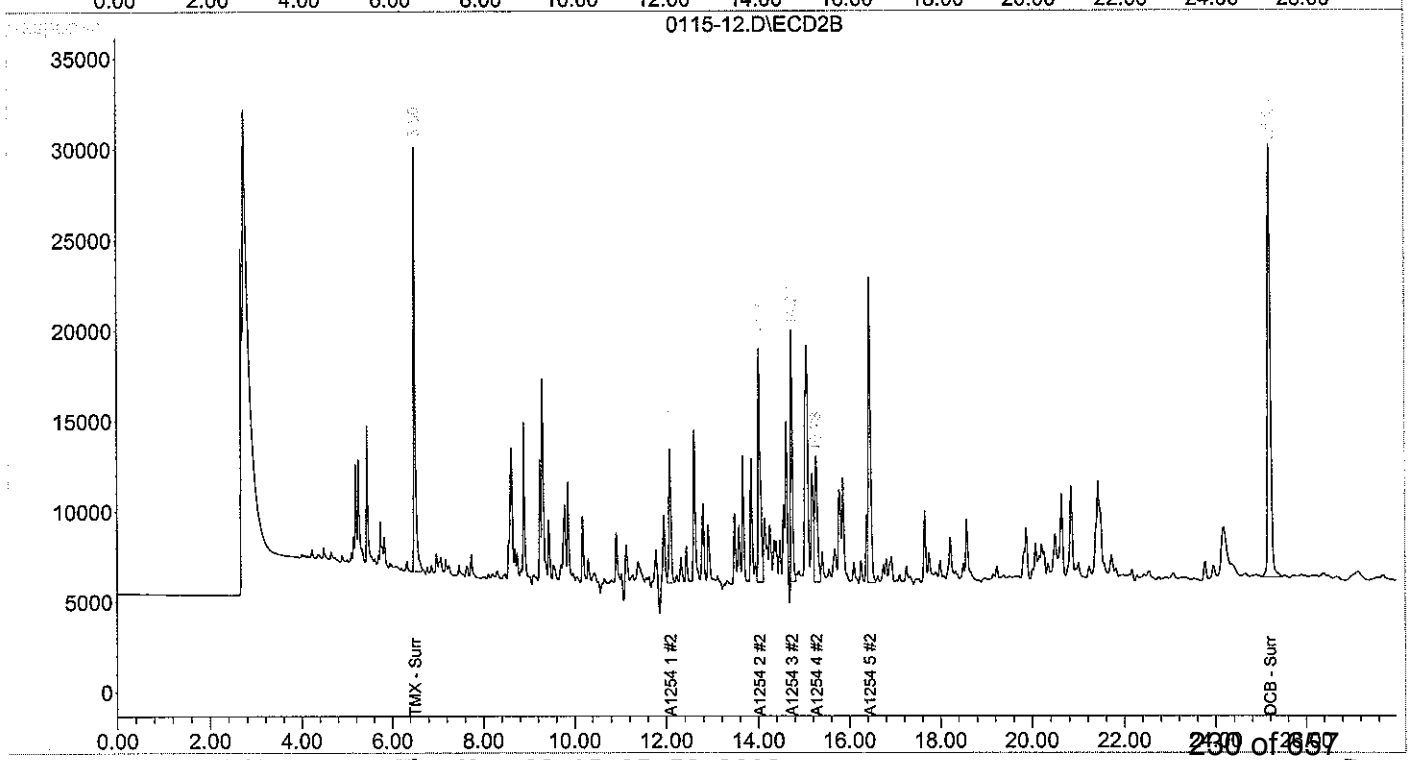
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-12.D\ECD1A.CH Vial: 34
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-12.D\ECD2B.CH
Acq On : 16 May 2008 1:17 am Operator: JBS
Sample : 0804115-12 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-13**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.21	5	1	JBS

Parameter	Result
Aroclor 1016	45.3 U
Aroclor 1221	45.3 U
Aroclor 1232	45.3 U
Aroclor 1242	45.3 U
Aroclor 1248	45.3 U
Aroclor 1254	**956**
Aroclor 1260	45.3 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	60	30-150
Decachlorobiphenyl	75	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-13.D\ECD1A.CH Vial: 35
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-13.D\ECD2B.CH
Acq On : 16 May 2008 1:49 am Operator: JBS
Sample : 0804115-13 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:33 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	929866	728478	59.316m	60.482m
Spiked Amount 100.000 Range 30 - 150 Recovery =					59.32%	60.48%
12) s DCB - Surrogate	26.34	25.20	1628282	1259203	67.672m	75.236m
Spiked Amount 100.000 Range 30 - 150 Recovery =					67.67%	75.24%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	261102	143842	383.031m	282.343m #
34) L6 A1254 2	14.43	14.03	397544	298376	338.376m(C)	362.452m(C)
35) L6 A1254 3	15.21	14.73	408566	301398	327.383m	503.525m #
36) L6 A1254 4	15.90	15.27	172558	193452	307.707m	414.221m #
37) L6 A1254 5	16.89	16.45	381522	451052	344.040m	551.216m #
Sum A1254 1			1621292	1388120	1700.538	2113.756
Average A1254 1					340.108	422.751
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

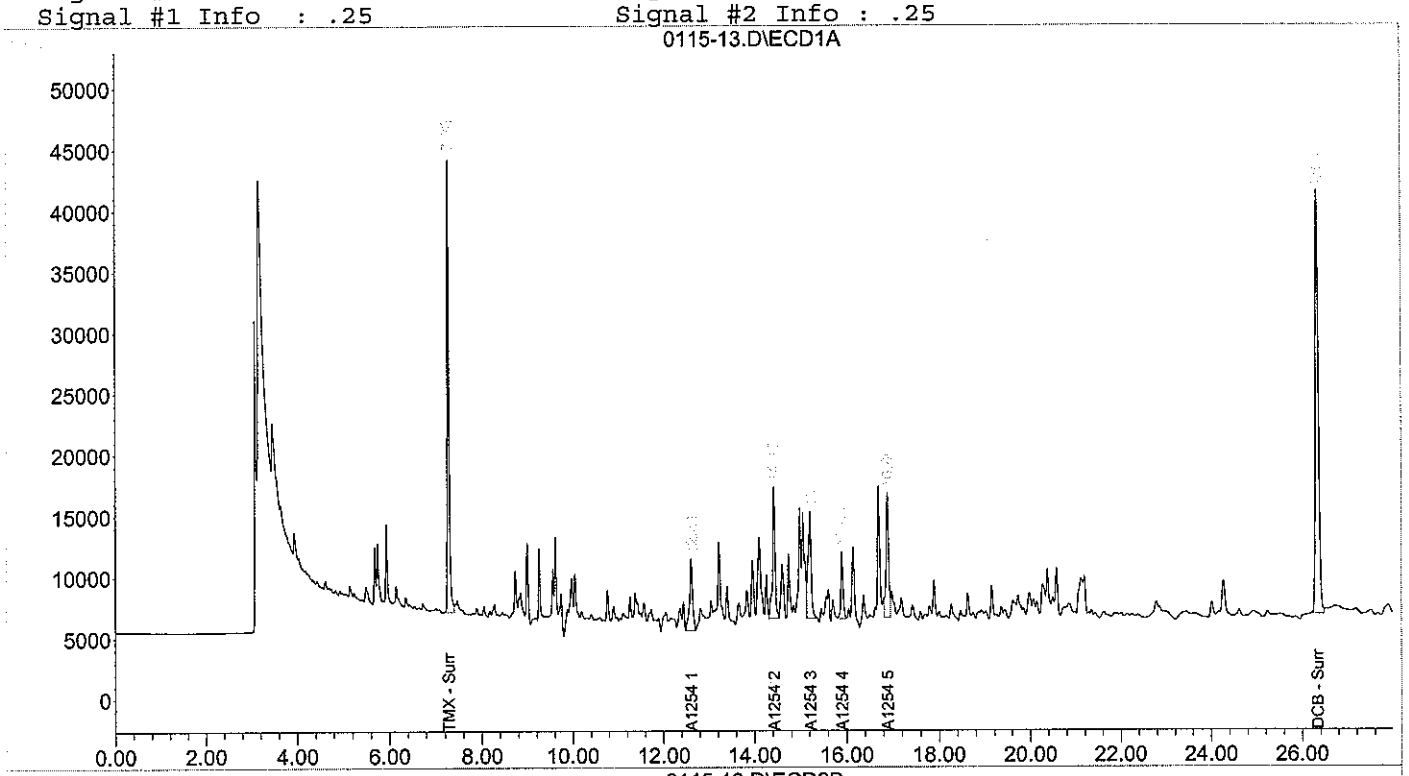
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

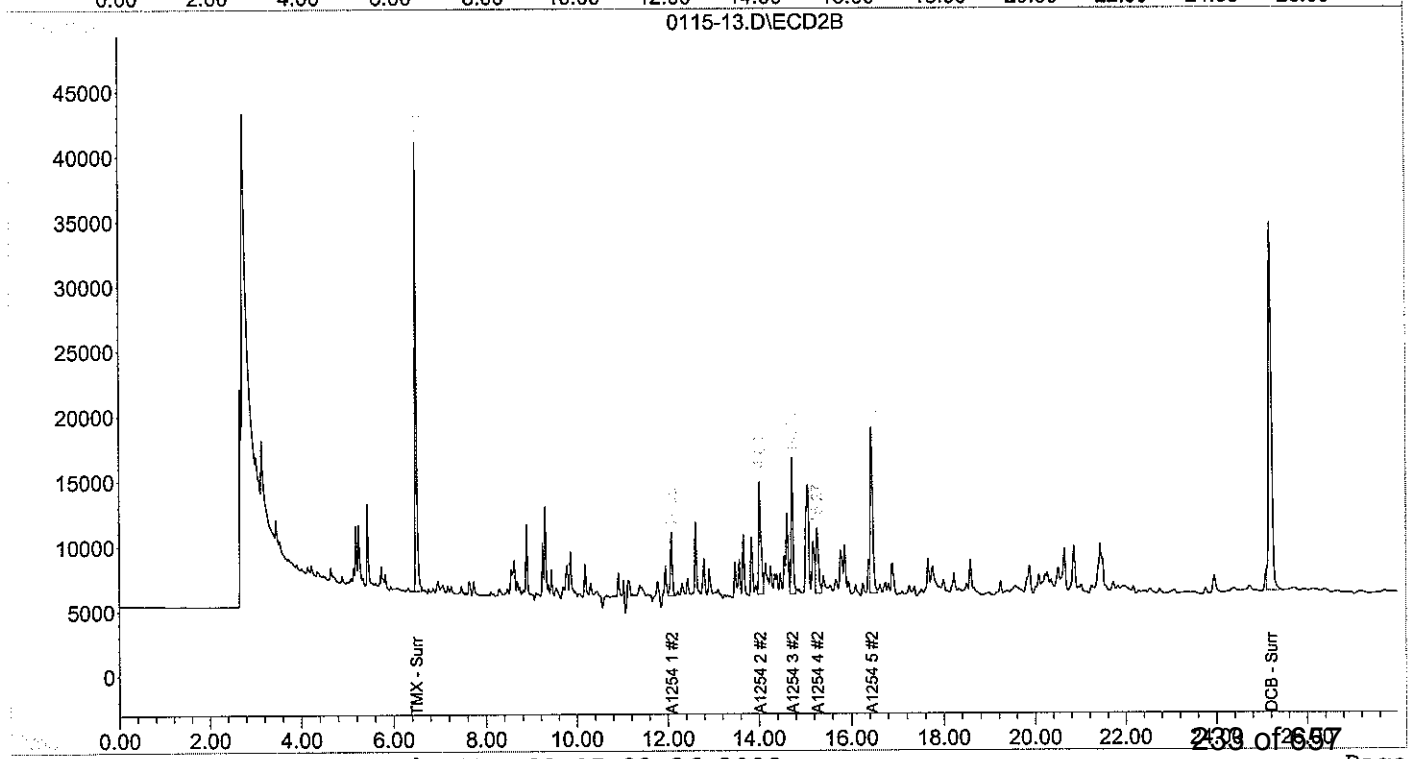
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-13.D\ECD1A.CH Vial: 35
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-13.D\ECD2B.CH
Acq On : 16 May 2008 1:49 am Operator: JBS
Sample : 0804115-13 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 22 15:33 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-14**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.35	5	1	JBS

Parameter	Result
Aroclor 1016	42.6 U
Aroclor 1221	42.6 U
Aroclor 1232	42.6 U
Aroclor 1242	42.6 U
Aroclor 1248	42.6 U
Aroclor 1254	**1420**
Aroclor 1260	42.6 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	50	30-150
Decachlorobiphenyl	51	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

05/23/08 14:22

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JBS 5/23/08

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-14.D\ECD1A.CH Vial: 36
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-14.D\ECD2B.CH
Acq On : 16 May 2008 2:20 am Operator: JBS
Sample : 0804115-14 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:15 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	747666	612013	47.045m	50.018m
Spiked Amount 100.000 Range 30 - 150 Recovery =					47.05%	50.02%
12) s DCB - Surrogate	26.33	25.20	1157031	900592	46.405m	51.455m
Spiked Amount 100.000 Range 30 - 150 Recovery =					46.41%	51.45%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	392504	236058	575.796	463.351m
34) L6 A1254 2	14.43	14.03	679286	455028	578.185m(C)	552.744m(C)
35) L6 A1254 3	15.21	14.73	701566	458564	562.163m	766.092m #
36) L6 A1254 4	15.90	15.27	301764	281204	538.109m	602.116m
37) L6 A1254 5	16.89	16.44	583076	785370	525.793m	959.774m #
Sum A1254 1			2658196	2216224	2780.046	3344.078
Average A1254 1					556.009	668.816
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

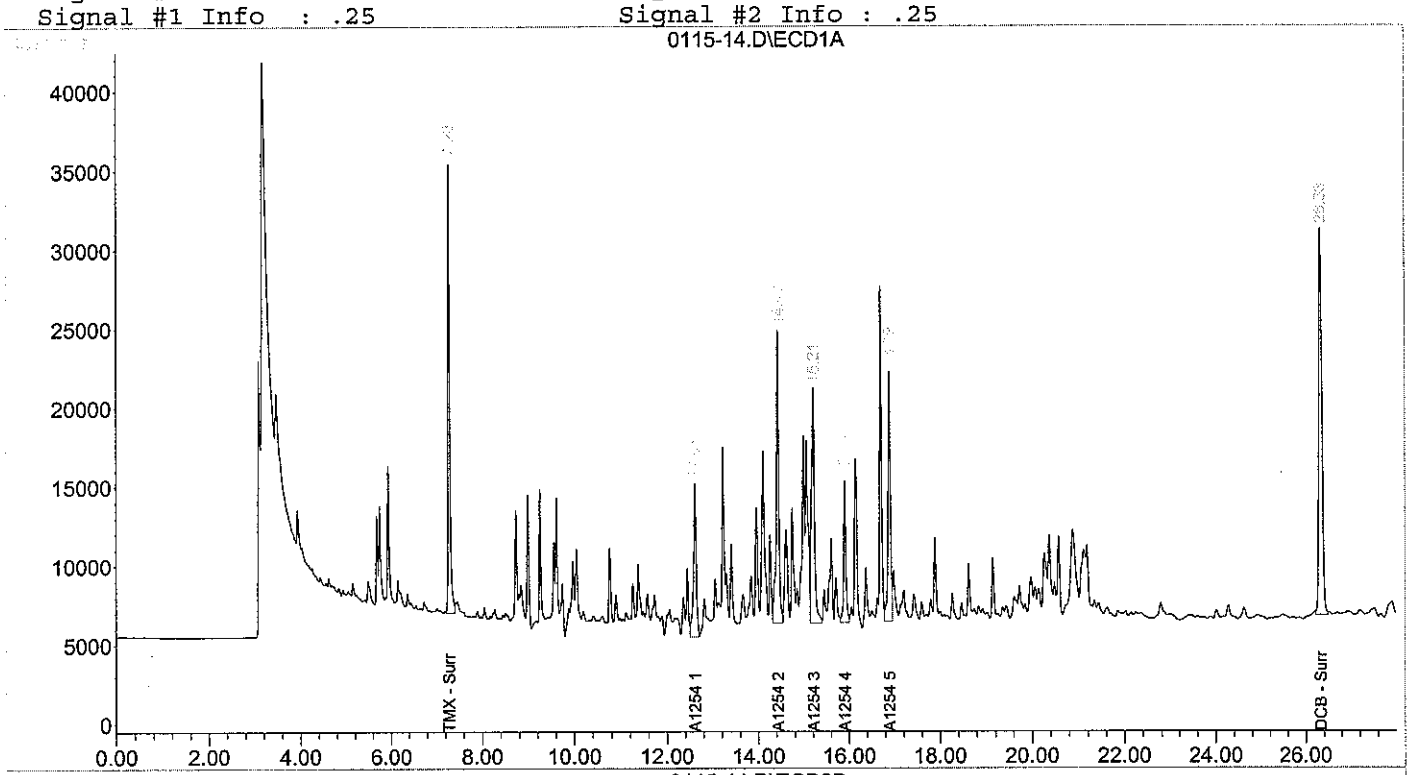
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

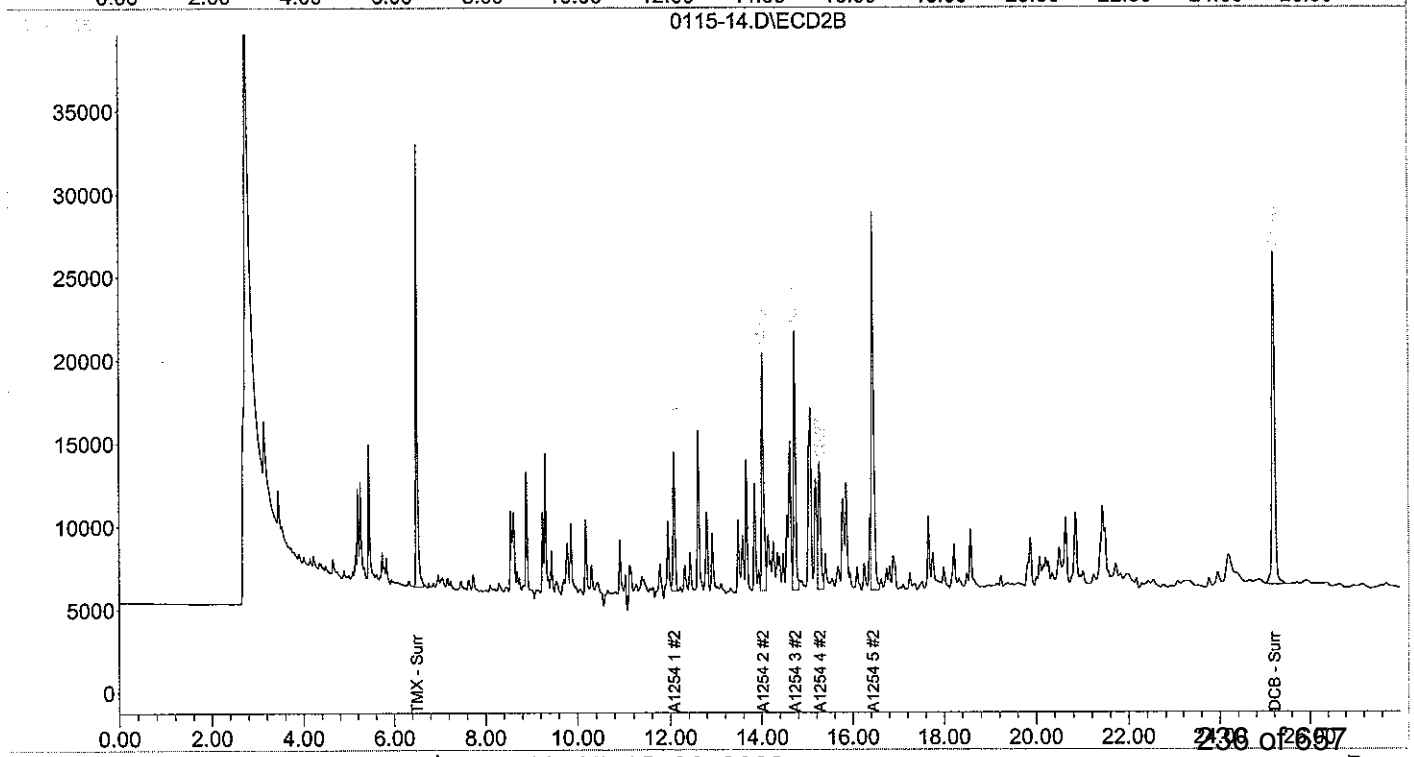
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-14.D\ECD1A.CH Vial: 36
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-14.D\ECD2B.CH
Acq On : 16 May 2008 2:20 am Operator: JBS
Sample : 0804115-14 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:15 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-15**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.19	5	1	JBS

Parameter	Result
Aroclor 1016	45.7 U
Aroclor 1221	45.7 U
Aroclor 1232	45.7 U
Aroclor 1242	45.7 U
Aroclor 1248	45.7 U
Aroclor 1254	**1380**
Aroclor 1260	45.7 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	59	30-150
Decachlorobiphenyl	80	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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JBS 5/23/8

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-15.D\ECD1A.CH Vial: 37
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-15.D\ECD2B.CH
Acq On : 16 May 2008 2:51 am Operator: JBS
Sample : 0804115-15 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:19 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.27	6.50	910399	714114	57.989m	59.176m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					57.99%	59.18%	
12) s DCB - Surrogate	26.33	25.20	1725085	1333981	72.210m	80.431m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					72.21%	80.43%	
Target Compounds							
Sum A1016 1			0	0	N.D.	N.D.	
Average A1016 1					0.000	0.000	
Sum A1260 1			0	0	N.D.	N.D.	
Average A1260 1					0.000	0.000	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
33) L6 A1254 1	12.61	12.08	328818	227308	482.369m	446.176m	
34) L6 A1254 2	14.43	14.03	610554	451276	519.683m(C)	548.187m(C)	
35) L6 A1254 3	15.21	14.73	567632	402198	454.842m	671.925m	#
36) L6 A1254 4	15.90	15.27	272846	299206	486.542m	640.662m	#
37) L6 A1254 5	16.89	16.45	582208	591408	525.010m	722.740m	#
Sum A1254 1			2362058	1971396	2468.447	3029.689	
Average A1254 1					493.689	605.938	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

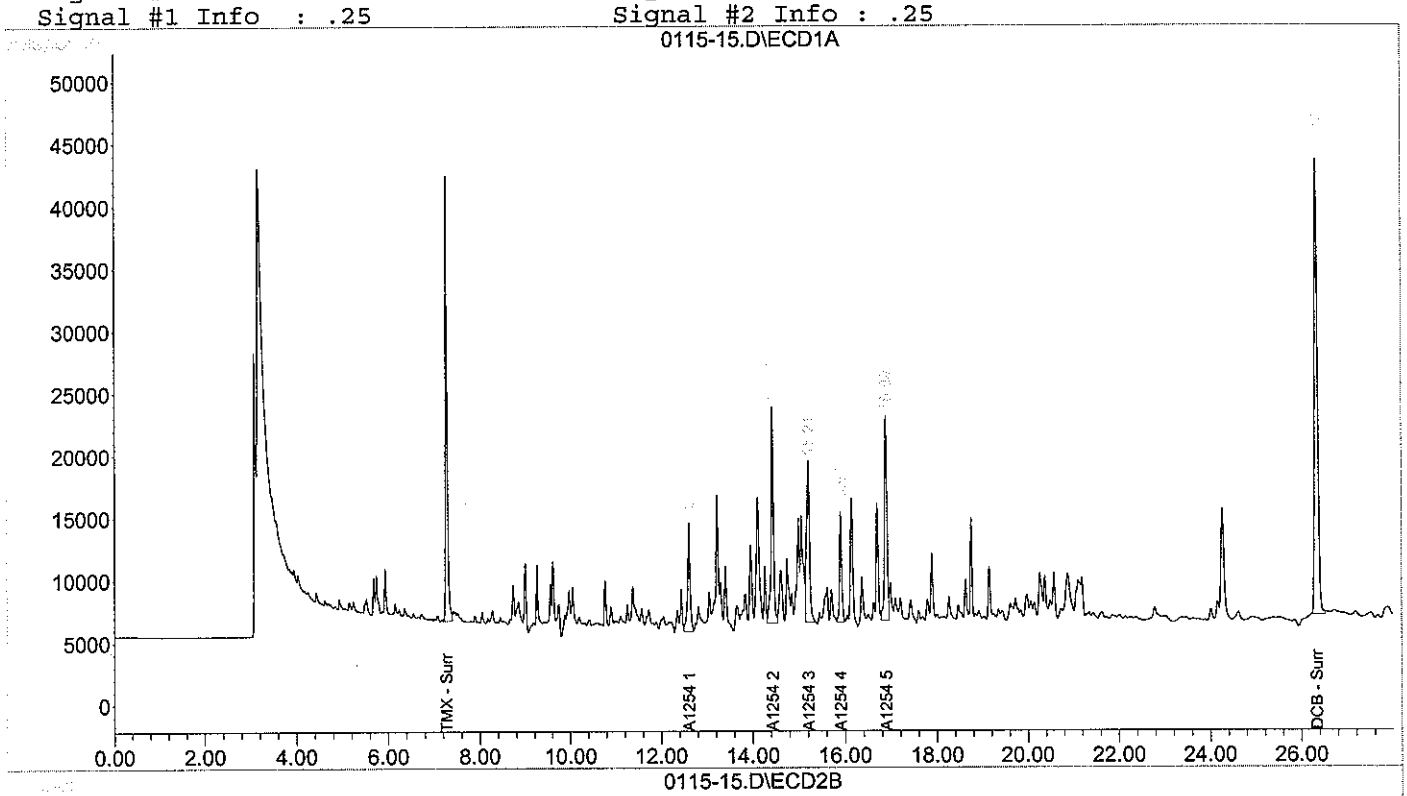
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

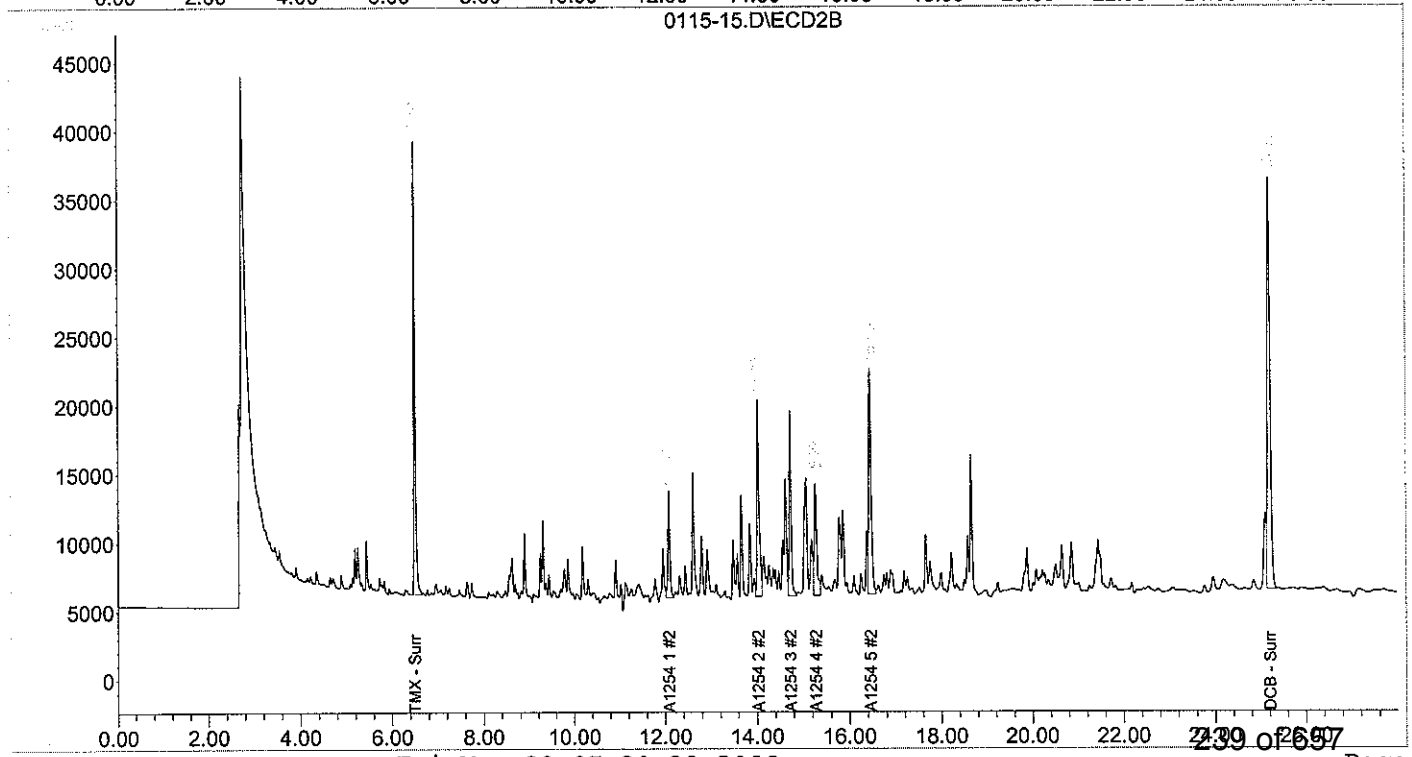
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-15.D\ECD1A.CH Vial: 37
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-15.D\ECD2B.CH
Acq On : 16 May 2008 2:51 am Operator: JBS
Sample : 0804115-15 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:19 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-16**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/17/08	03/21/08	04/30/08	05/16/08	100	2.24	5	1	JBS

Parameter	Result
Aroclor 1016	44.6 U
Aroclor 1221	44.6 U
Aroclor 1232	44.6 U
Aroclor 1242	44.6 U
Aroclor 1248	44.6 U
Aroclor 1254	**1990**
Aroclor 1260	44.6 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	42	30-150
Decachlorobiphenyl	53	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-16.D\ECD1A.CH Vial: 38
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-16.D\ECD2B.CH
Acq On : 16 May 2008 3:22 am Operator: JBS
Sample : 0804115-16 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:24 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	660985	521968	41.320	42.115m
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.32%	42.12%
12) s DCB - Surrogate	26.33	25.20	1166350	928971	46.813m	53.274m
Spiked Amount 100.000 Range 30 - 150 Recovery =					46.81%	53.27%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	572578	363524	839.960m	713.550m
34) L6 A1254 2	14.43	14.02	1024260	702562	871.816m(C)	853.436m(C)
35) L6 A1254 3	15.21	14.73	1008352	570890	807.990m	953.747m
36) L6 A1254 4	15.90	15.27	393856	348882	702.328m	747.029m
37) L6 A1254 5	16.89	16.45	858372	978812	774.043m	1196.173m #
Sum A1254 1			3857418	2964670	3996.137	4463.935
Average A1254 1					799.227	892.787
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

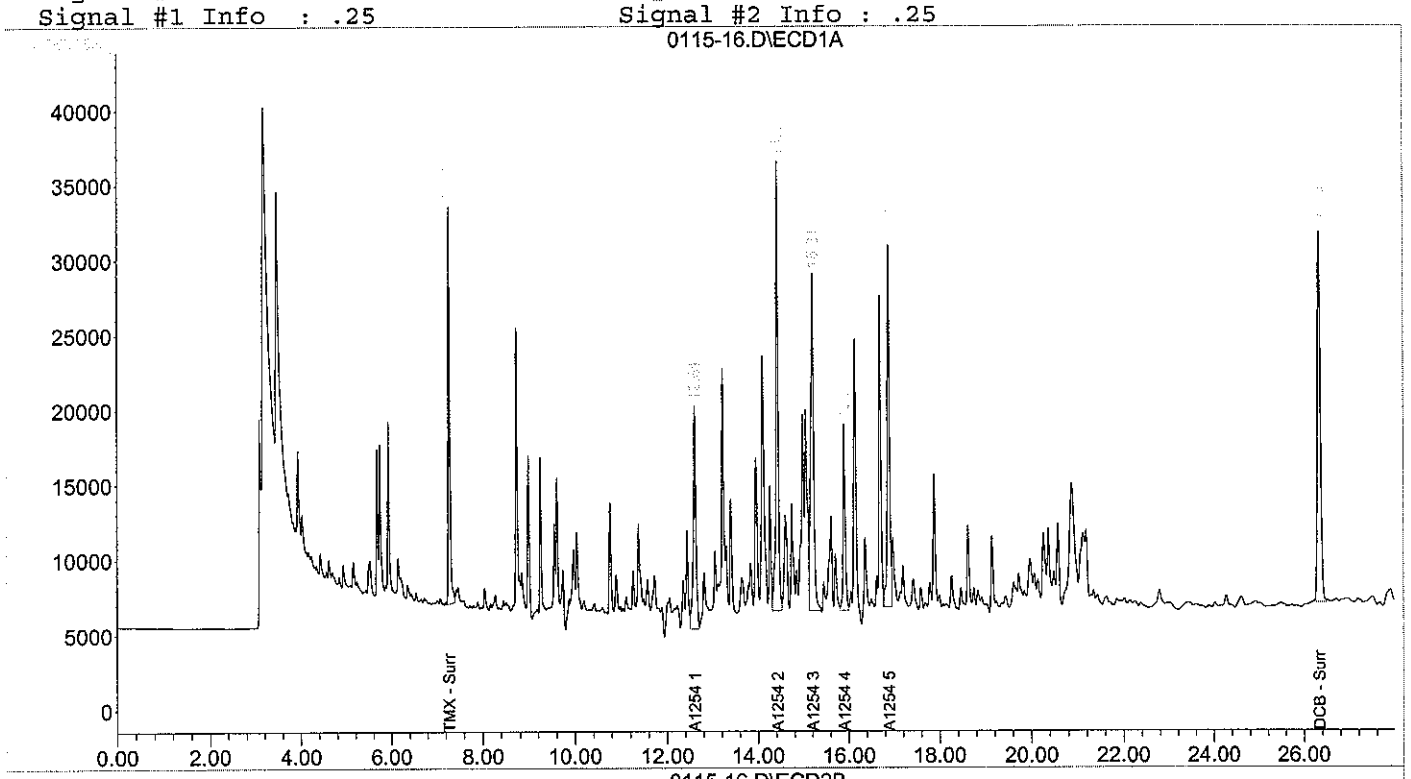
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

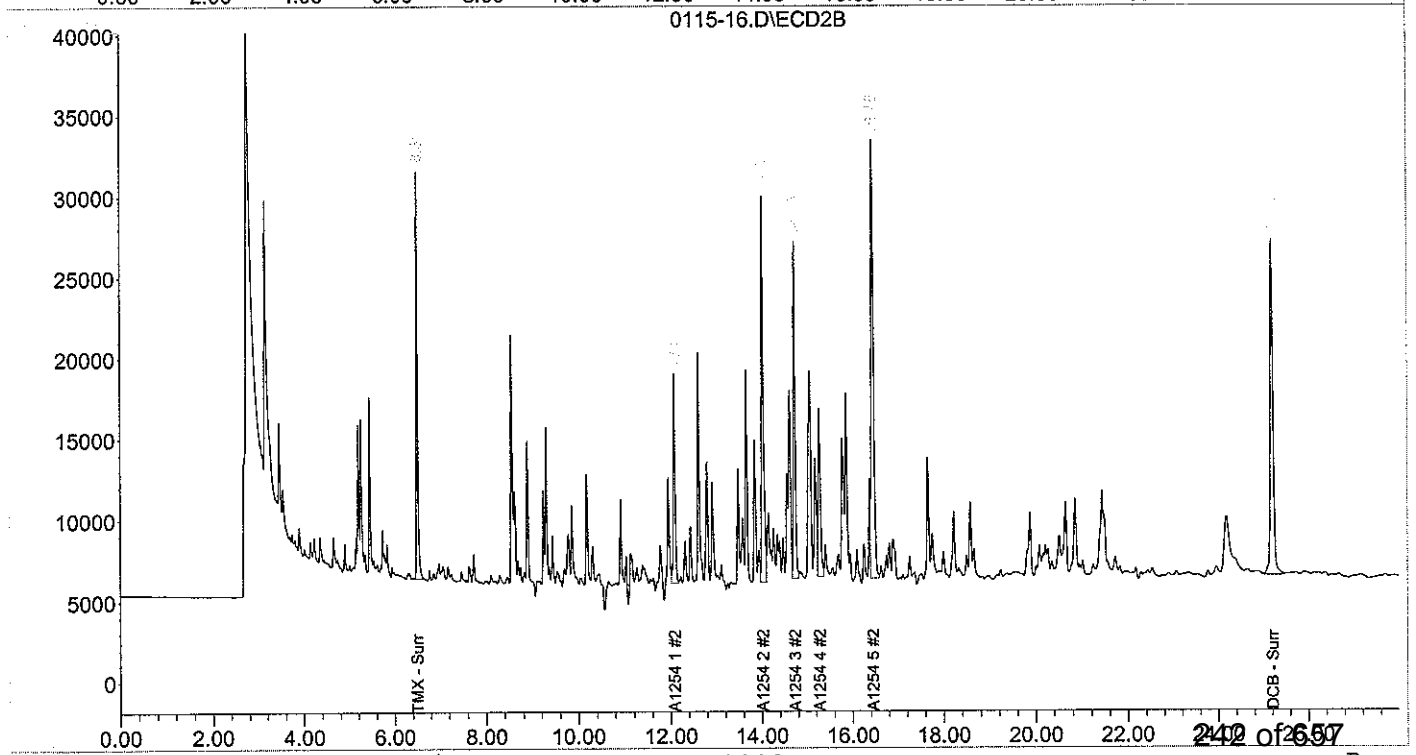
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\0115-16.D\ECD1A.CH Vial: 38
Signal #2 : D:\HPCHEM\2\DATA\MAY15\0115-16.D\ECD2B.CH
Acq On : 16 May 2008 3:22 am Operator: JBS
Sample : 0804115-16 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:24 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 22 09:49:50 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008B09**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/15/08	100	2.00	5	1	JBS

Parameter	Result
Aroclor 1016	50.0 U
Aroclor 1221	50.0 U
Aroclor 1232	50.0 U
Aroclor 1242	50.0 U
Aroclor 1248	50.0 U
Aroclor 1254	50.0 U
Aroclor 1260	50.0 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	61	30-150
Decachlorobiphenyl	83	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JBS 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430B9.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430B9.D\ECD2B.CH
Acq On : 15 May 2008 9:33 am Operator: JBS
Sample : PS043008B09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:43 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.49	895721	734543	56.991m	61.035m
Spiked Amount 100.000 Range 30 - 150 Recovery =					56.99%	61.03%
12) s DCB - Surrogate	26.34	25.20	1769903	1365050	74.333	82.616
Spiked Amount 100.000 Range 30 - 150 Recovery =					74.33%	82.62%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

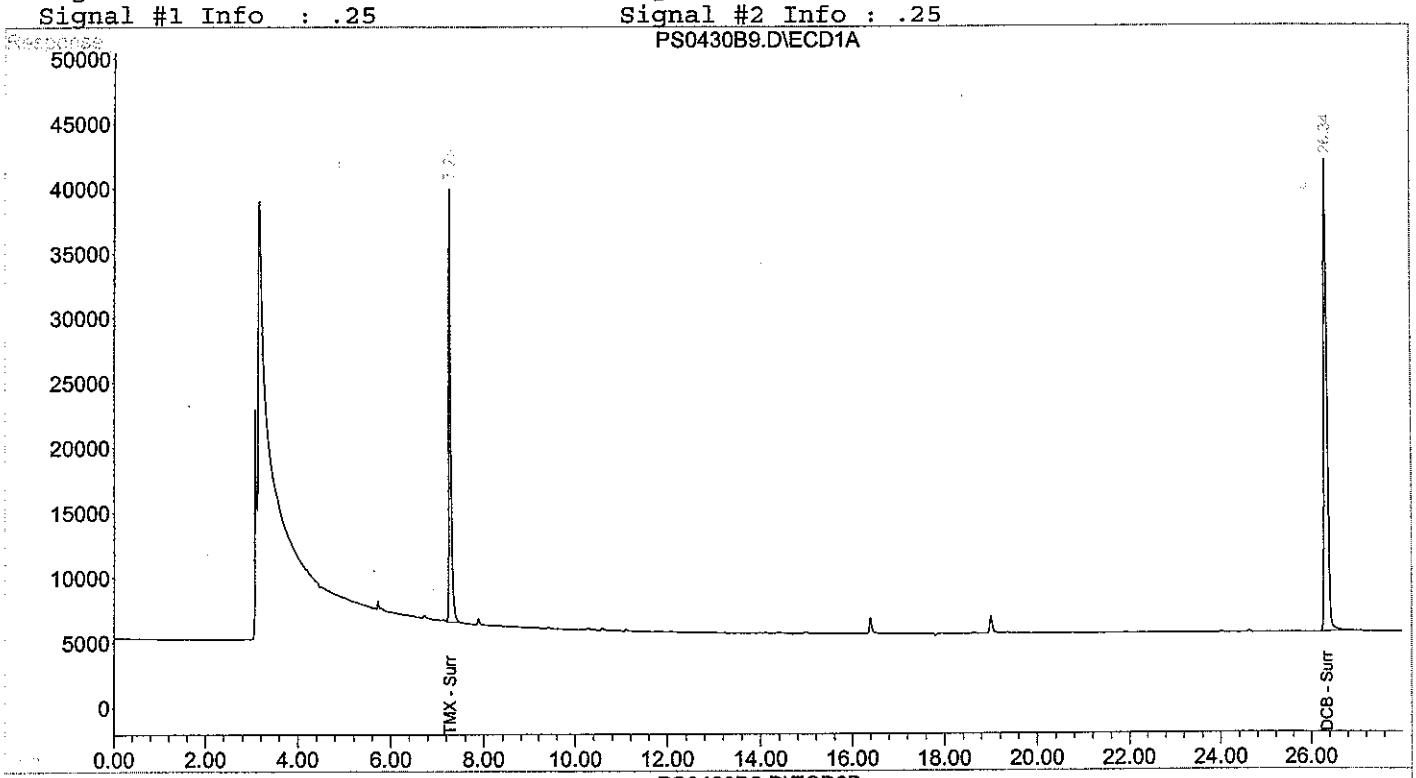
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

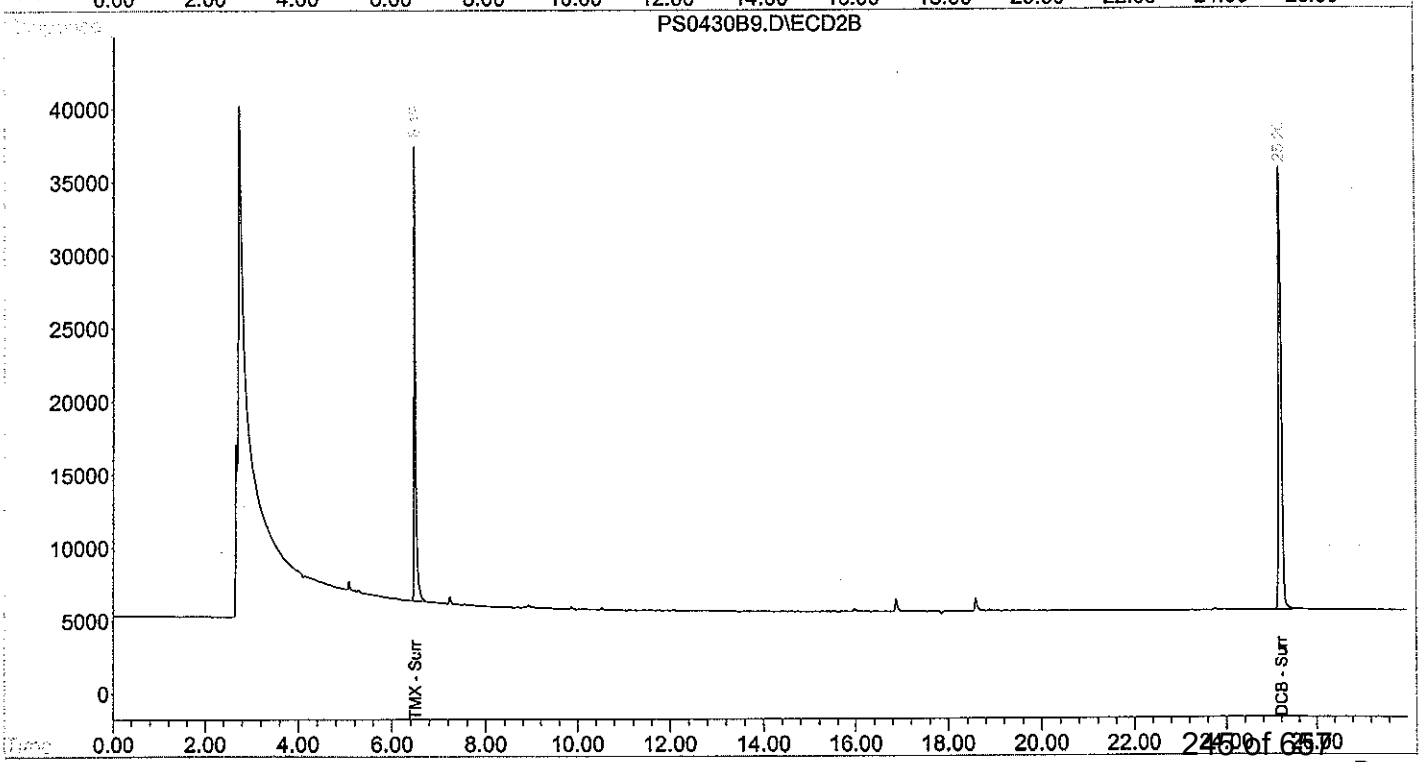
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430B9.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430B9.D\ECD2B.CH
Acq On : 15 May 2008 9:33 am Operator: JBS
Sample : PS043008B09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:43 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form III
Spike Recovery Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	04/30/08	100	JBS

Lab ID: PS043008B09 PS043008LCS07 PS043008LCSD07

Parameter	Blank Conc.		LCS Conc.	LCS % Recovery	LCSD Conc.	LCSD % Recovery	% RPD	RPD Limit	% Recovery Limits
Aroclor 1016	50.0	U	2000	80	1540	62	26	50	40-140
Aroclor 1260	50.0	U	2030	81	1750	70	15	50	40-140

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	75	54	30-150
Decachlorobiphenyl	86	76	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

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Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008LCS07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/15/08	100	2.00	5	1	JBS

Parameter	Result	
Aroclor 1016	**2000**	S
Aroclor 1221	50.0	U
Aroclor 1232	50.0	U
Aroclor 1242	50.0	U
Aroclor 1248	50.0	U
Aroclor 1254	50.0	U
Aroclor 1260	**2030**	S

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	75	30-150
Decachlorobiphenyl	86	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Yes 5/20/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430L7.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430L7.D\ECD2B.CH
Acq On : 15 May 2008 10:36 am Operator: JBS
Sample : PS043008LCS07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:47 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.27	6.49	1090077	879831	70.386m	74.526m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					70.39%	74.53%	
12) s DCB - Surrogate	26.33	25.20	1844584	1411642	77.901	85.923	
Spiked Amount 100.000 Range 30 - 150 Recovery =					77.90%	85.92%	
Target Compounds							
2) L1 A1016 1	7.96	7.42	252091	199748	699.887	702.005m	
3) L1 A1016 2	9.32	8.78	353706	128638	787.658	851.988m	
4) L1 A1016 3	10.19	9.70	423853	352918	781.139	820.832m	
5) L1 A1016 4	10.77	9.97	261949	215496	794.347	812.823m	
6) L1 A1016 5	11.38	10.91	333719	266364	787.063	814.694m	
Sum A1016 1			1625317	1163164	3850.093	4002.342	
Average A1016 1					770.019	800.468	
7) L7 A1260 1	17.42	15.27	547276	626152	704.952	892.103m	#
8) L7 A1260 2	18.27	16.75	582799	439624	768.346	756.619m	
9) L7 A1260 3	20.26	17.75	802439	483264	823.930	798.319m	
10) L7 A1260 4	20.74	19.88	438061	899942	667.969	834.077	
11) L7 A1260 5	22.78	22.18	451264	371650	705.761	779.293	
Sum A1260 1			2821839	2820632	3670.957	4060.410	
Average A1260 1					734.191	812.082	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

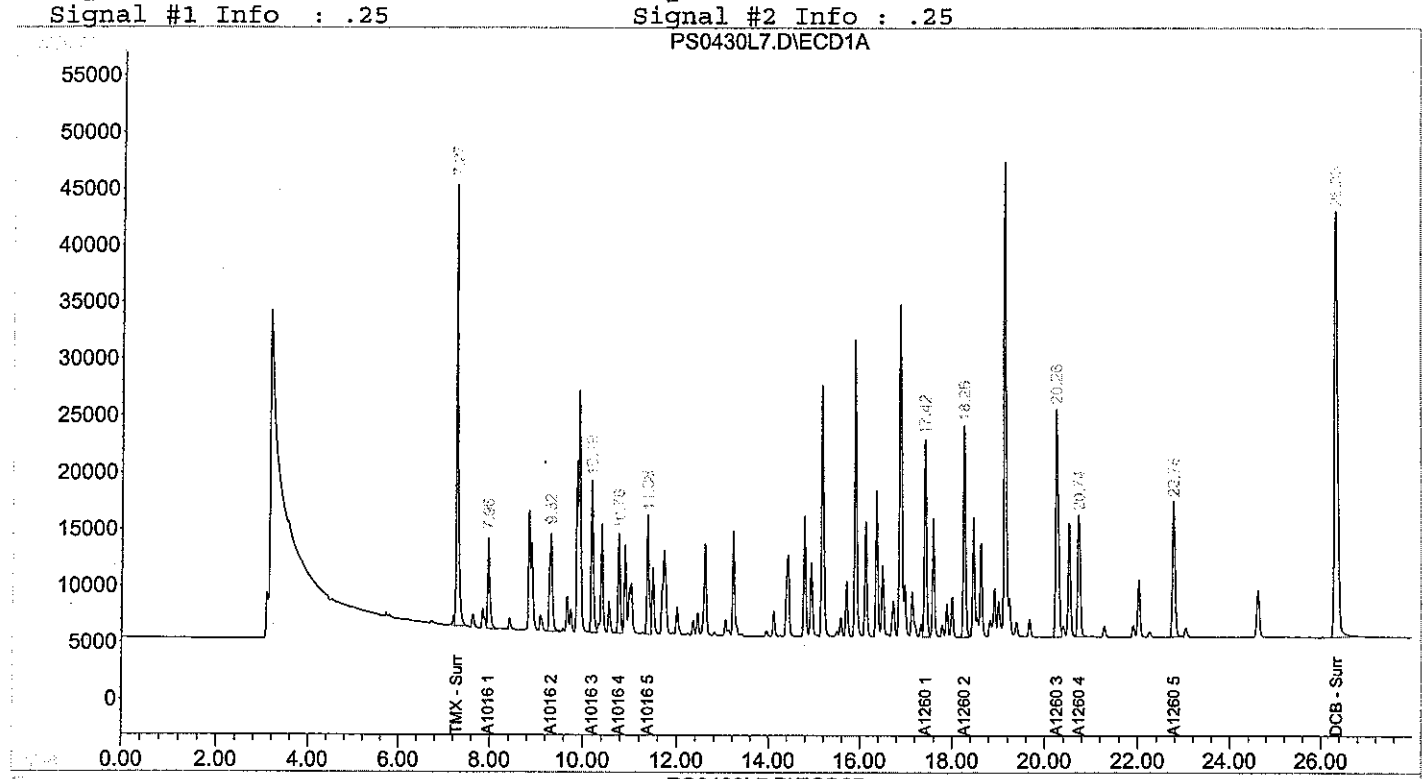
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

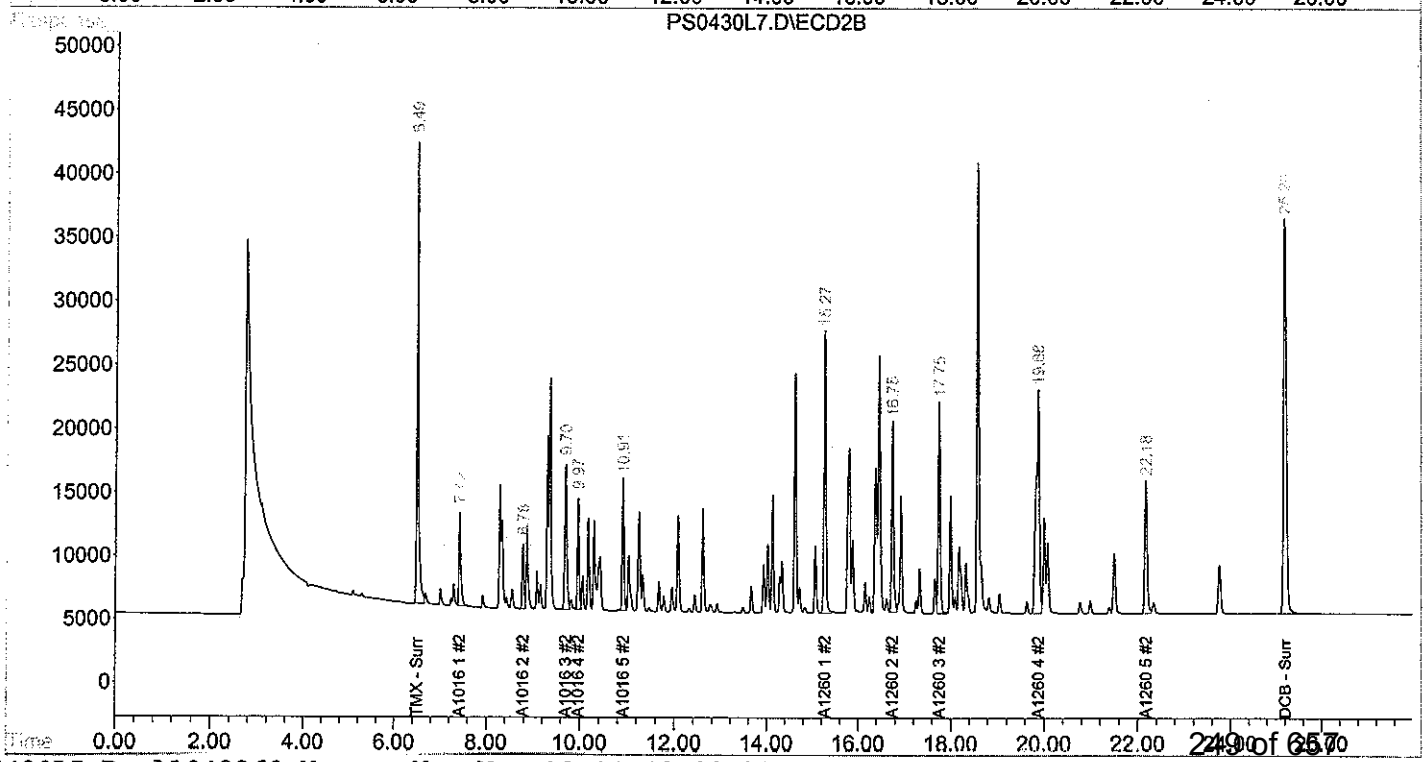
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430L7.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430L7.D\ECD2B.CH
Acq On : 15 May 2008 10:36 am Operator: JBS
Sample : PS043008LCS07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:47 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008LCSD07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	04/30/08	05/15/08	100	2.00	5	1	JBS

Parameter	Result	
Aroclor 1016	**1540**	S
Aroclor 1221	50.0	U
Aroclor 1232	50.0	U
Aroclor 1242	50.0	U
Aroclor 1248	50.0	U
Aroclor 1254	50.0	U
Aroclor 1260	**1750**	S

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	54	30-150
Decachlorobiphenyl	76	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

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Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430D7.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430D7.D\ECD2B.CH
Acq On : 15 May 2008 11:08 am Operator: JBS
Sample : PS043008LCSD07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:45 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.27	6.49	805584	660086	50.910m	54.303m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					50.91%	54.30%	
12) s DCB - Surrogate	26.33	25.20	1657594	1266950	69.039	75.770	
Spiked Amount 100.000 Range 30 - 150 Recovery =					69.04%	75.77%	
Target Compounds							
2) L1 A1016 1	7.96	7.43	192487	152784	518.728	519.197	
3) L1 A1016 2	9.32	8.79	272192	99731	588.938m	642.809	
4) L1 A1016 3	10.19	9.70	342622	280988	614.099m	633.831m	
5) L1 A1016 4	10.76	9.97	210230	172939	617.408	638.519	
6) L1 A1016 5	11.37	10.91	272008	219611	627.586	653.270	
Sum A1016 1			1289539	926054	2966.760	3087.626	
Average A1016 1					593.352	617.525	
7) L7 A1260 1	17.41	15.27	468600	545624	592.460m	758.465m	#
8) L7 A1260 2	18.26	16.75	503224	387254	653.396	654.184m	
9) L7 A1260 3	20.26	17.75	702366	418882	713.737	678.059m	
10) L7 A1260 4	20.73	19.88	389642	788479	589.781	719.312	
11) L7 A1260 5	22.78	22.18	398720	331208	618.693	686.233m	
Sum A1260 1			2462553	2471447	3168.068	3496.254	
Average A1260 1					633.614	699.251	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

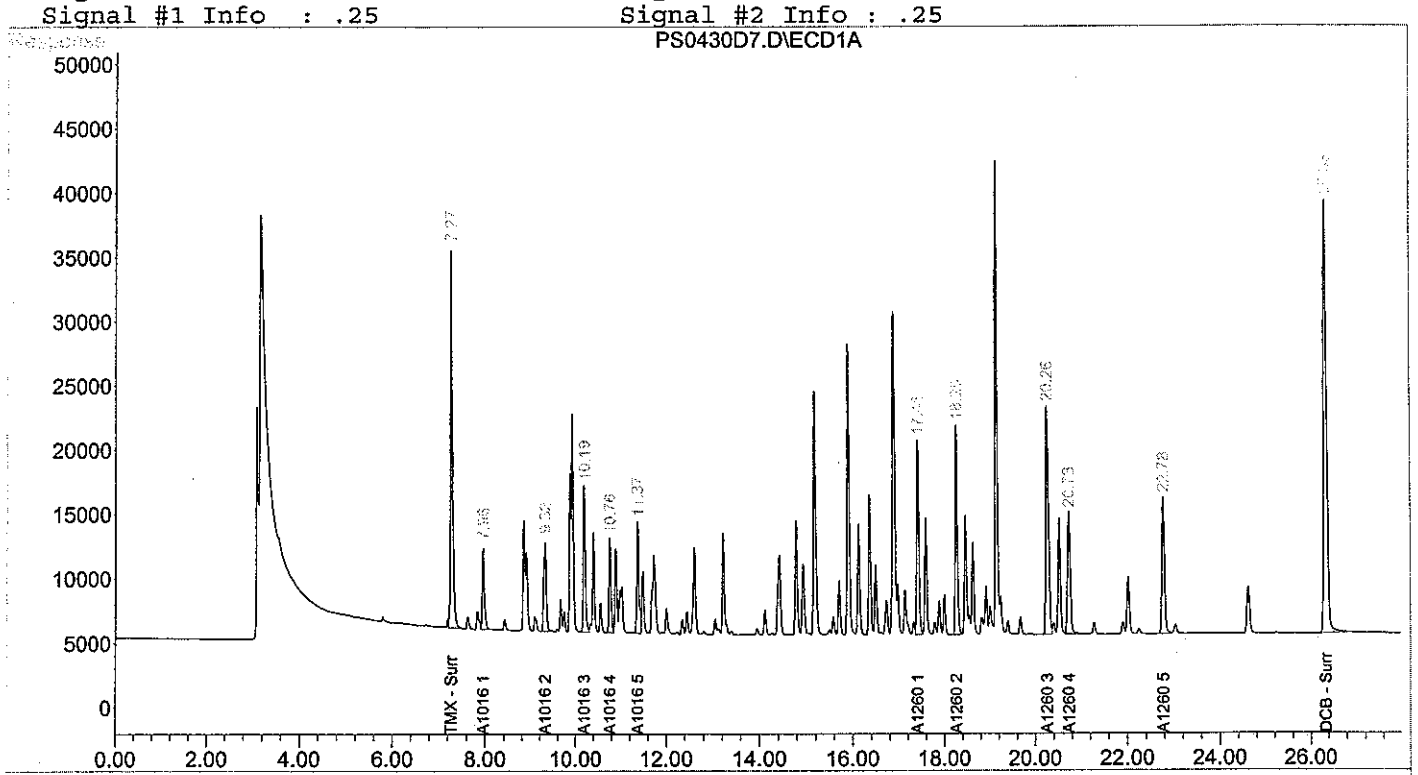
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

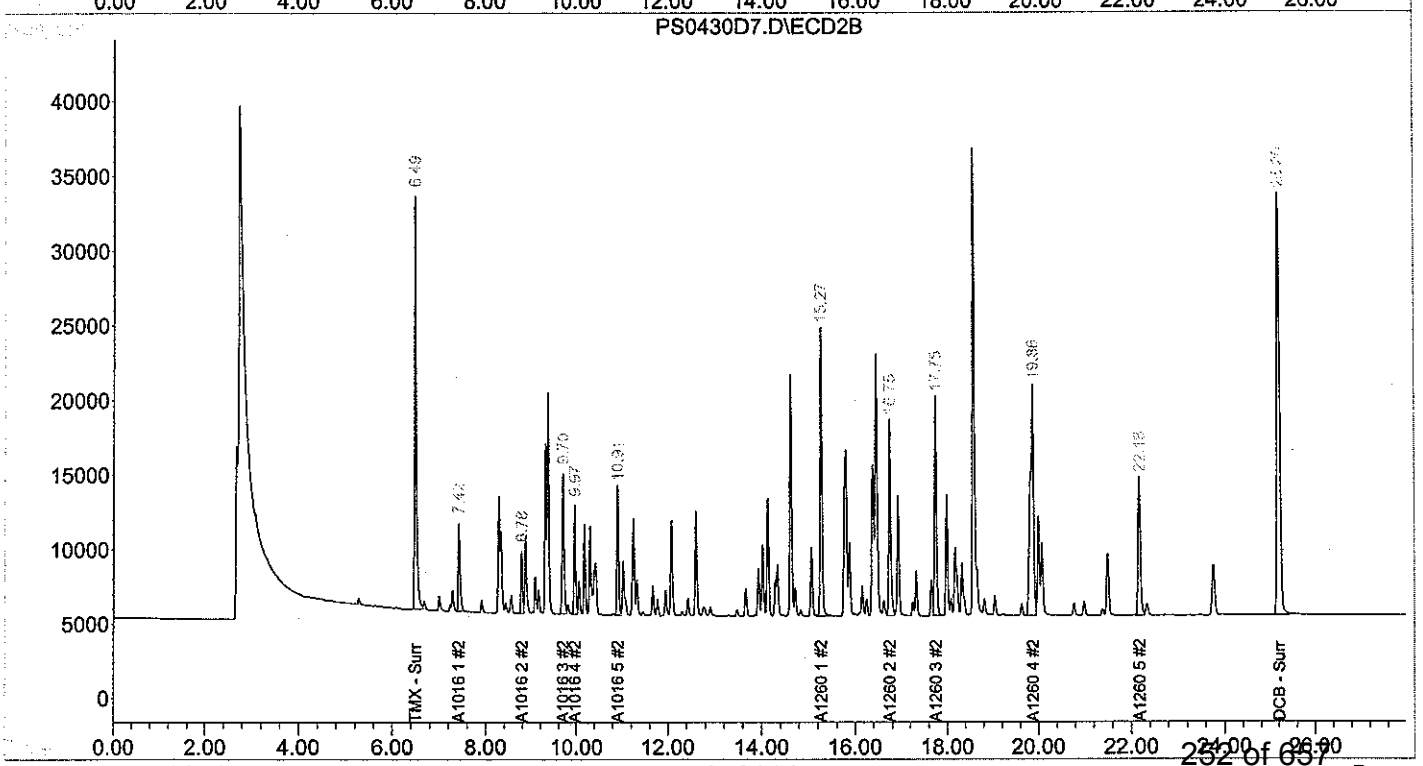
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\PS0430D7.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\MAY15\PS0430D7.D\ECD2B.CH
Acq On : 15 May 2008 11:08 am Operator: JBS
Sample : PS043008LCSD07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:45 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Sequence Name: D:\HPCHEM\2\SEQUENCE\C1051601.S
Comment:
Operator: JBS
Data Path: D:\HPCHEM\2\DATA\MAY16\
Pre-Seq Cmd:
Post-Seq Cmd:

JBS
5/23/8

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name		
1	Sample	1	PRIMER1	A1042360	primer		
2	Sample	2	C1051601	A1042360	C1051601	1660	
3	Sample	3	I1051601	A1042360	I1051601	1242	@ 1000 ppb
4	Sample	4	I1051602	A1042360	I1051602	1248	
5	Sample	5	I1051603	A1042360	I1051603	1254	
6	Sample	6	HEX3	A1042360	HEX		
7	Sample	7	0115-07	A1042360	0804115-07		
8	Sample	8	0115-01	A1042360	0804115-01-D2		
9	Sample	9	0115-1D	A1042360	0804115-01D-D2		
10	Sample	10	0115-02	A1042360	0804115-02-D2		
11	Sample	11	0115-04	A1042360	0804115-04-D2		
12	Sample	12	0115-06	A1042360	0804115-06-D2		
13	Sample	13	0115-05	A1042360	0804115-05-D20		- reported
14	Sample	14	0115-5	A1042360	0804115-05-D10		
15	Sample	15	HEX2	A1042360	HEX		
16	Sample	16	C1051602	A1042360	C1051602	1660	
17	Sample	17	C1051603	A1042360	C1051603	1242	@ 1000 ppb
18	Sample	18	C1051604	A1042360	C1051604	1248	
19	Sample	19	C1051605	A1042360	C1051605	1254	

Sequence Name: D:\HPCHEM\2\SEQUENCE\C1051501.S
Comment:
Operator: JBS
Data Path: D:\HPCHEM\2\DATA\MAY15\
Pre-Seq Cmd:
Post-Seq Cmd:

JBS 5/23/08

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name	
1	Sample	1	PRIMER1	A1042360	primer	
2	Sample	2	C1050901	A1042360	C1051501	1660
3	Sample	3	HEX1	A1042360	HEX	
4	Sample	4	PS0430B9	A1042360	PS043008B09	
5	Sample	5	PS0513B1	A1042360	PS051308B01	
6	Sample	6	PS0430L7	A1042360	PS043008LCS07	
7	Sample	7	PS0430D7	A1042360	PS043008LCSD07	
8	Sample	8	PS0513L1	A1042360	PS051308LCS01	
9	Sample	9	PS0513D1	A1042360	PS051308LCSD01	
10	Sample	10	HEX2	A1042360	HEX	
11	Sample	11	C1051502	A1042360	C1051502	1660
12	Sample	12	I1051501	A1042360	I1051501	1242 @ 1000 ppb
13	Sample	13	I1051502	A1042360	I1051502	1248
14	Sample	14	I1051503	A1042360	I1051503	1254
15	Sample	15	HEX3	A1042360	HEX	
16	Sample	16	0115-01	A1042360	0804115-01	-2X
17	Sample	17	0115-1D	A1042360	0804115-01D	2X
18	Sample	18	0115-02	A1042360	0804115-02	2X
19	Sample	19	0115-03	A1042360	0804115-03	✓ - reported
20	Sample	20	0115-04	A1042360	0804115-04	2X
21	Sample	21	0115-05	A1042360	0804115-05	10x, 20X
22	Sample	22	0115-06	A1042360	0804115-06	2X
23	Sample	23	0115-07	A1042360	0804115-07	rerun
24	Sample	24	0115-08	A1042360	0804115-08	✓ reported
25	Sample	25	HEX4	A1042360	HEX	
26	Sample	26	C1051503	A1042360	C1051503	1660
27	Sample	27	C1051504	A1042360	C1051504	1242
28	Sample	28	C1051505	A1042360	C1051505	1248
29	Sample	29	C1051506	A1042360	C1051506	1254
30	Sample	30	HEX5	A1042360	HEX	
31	Sample	31	0115-09	A1042360	0804115-09	
32	Sample	32	0115-10	A1042360	0804115-10	
33	Sample	33	0115-11	A1042360	0804115-11	
34	Sample	34	0115-12	A1042360	0804115-12	
35	Sample	35	0115-13	A1042360	0804115-13	
36	Sample	36	0115-14	A1042360	0804115-14	
37	Sample	37	0115-15	A1042360	0804115-15	
38	Sample	38	0115-16	A1042360	0804115-16	
39	Sample	39	HEX6	A1042360	HEX	
40	Sample	40	C1051507	A1042360	C1051507	1660
41	Sample	41	C1051508	A1042360	C1051508	1242
42	Sample	42	C1051509	A1042360	C1051509	1248
43	Sample	43	C1051510	A1042360	C1051510	1254

Sequence Name: D:\HPCHEM\2\SEQUENCE\C1051501.S

Line	Type	Vial	DataFile	Method	Sample Name	
44	Sample	44	HEX7	A1042360	HEX	
45	Sample	45	05058-01	A1042360	0805058-01	
46	Sample	46	05058-02	A1042360	0805058-02	
47	Sample	47	05058-03	A1042360	0805058-03	
48	Sample	48	05058-04	A1042360	0805058-04	
49	Sample	49	05058-05	A1042360	0805058-05	
50	Sample	50	HEX8	A1042360	HEX	
51	Sample	40	C1051511	A1042360	C1051511	1060
52	Sample	41	C1051512	A1042360	C1051512	1242
53	Sample	42	C1051513	A1042360	C1051513	1248
54	Sample	43	C1051514	A1042360	C1051514	1254

Supporting Quality Control Results

Form II
Surrogate Recovery
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Matrix: **Solid**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

		Column 1		Column 2	
Client ID	**Lab ID**	**TMX**	**Decachlorobiphenyl**	**TMX**	**Decachlorobiphenyl**
Blank	PS043008B09	57	74	61	83
LCS	PS043008LCS07	70	78	75	86
LCSD	PS043008LCSD07	51	69	54	76
T4-Tank 2	0804115-03	60	93	62	82
T4-Tank 4-G	0804115-08	34	57	38	45
T4-Tank 5	0804115-09	28 §	34	29 §	37
T4-Tank 5-G	0804115-10	25 §	24 §	25 §	26 §
T4-Tank 6	0804115-11	52	77	55	85
T4-Tank 6-G	0804115-12	42	58	44	62
T4-Tank 7	0804115-13	59	68	60	75
T4-Tank 7-G	0804115-14	47	46	50	51
T4-Tank 8	0804115-15	58	72	59	80
T4-Tank 8-G	0804115-16	41	47	42	53
T4-Tank 4	0804115-07	45	56	46	60
T4-Tank 1	0804115-01	53	66	58	72
T4-Tank 1	0804115-01 D	61	72	60	75
T4-Tank 1-G	0804115-02	63	72	64	77
T4-Tank 2-G	0804115-04	65	101	63	82
T4-Tank 3-G	0804115-06	52	60	52	71
T4-Tank 3	0804115-05	56	263 §	54	48

Surrogate	QC Limits
Tetrachloro-meta-xylene (TMX)	30-150
Decachlorobiphenyl	30-150

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form IV
Method Blank Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008B09**
Date Analyzed: **05/15/08 09:33**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

Client ID	Lab ID	Date/Time Analyzed
LCS	PS043008LCS07	05/15/08 10:36
LCSD	PS043008LCSD07	05/15/08 11:08
T4-Tank 2	0804115-03	05/15/08 17:26
T4-Tank 4-G	0804115-08	05/15/08 20:04
T4-Tank 5	0804115-09	05/15/08 23:44
T4-Tank 5-G	0804115-10	05/16/08 00:15
T4-Tank 6	0804115-11	05/16/08 00:46
T4-Tank 6-G	0804115-12	05/16/08 01:17
T4-Tank 7	0804115-13	05/16/08 01:49
T4-Tank 7-G	0804115-14	05/16/08 02:20
T4-Tank 8	0804115-15	05/16/08 02:51
T4-Tank 8-G	0804115-16	05/16/08 03:22
T4-Tank 4	0804115-07	05/16/08 16:52
T4-Tank 1	0804115-01	05/16/08 17:23
T4-Tank 1	0804115-01 D	05/16/08 17:54
T4-Tank 1-G	0804115-02	05/16/08 18:26
T4-Tank 2-G	0804115-04	05/16/08 18:57
T4-Tank 3-G	0804115-06	05/16/08 19:28
T4-Tank 3	0804115-05	05/16/08 19:59

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sequence Name: D:\HPCHEM\2\SEQUENCE\C1042301.S
Comment:
Operator:
Data Path: D:\HPCHEM\2\DATA\APR23\
Pre-Seq Cmd:
Post-Seq Cmd:

J 3S 4/24/8

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name	
1	Sample	1	PRIMER1	A1042360	primer	
2	Sample	2	PRIMER2	A1042360	primer	
3	Sample	3	PRIMER3	A1042360	primer	
4	Sample	4	HEX1	A1042360	HEX	
5	Sample	5	HEX2	A1042360	HEX	
6	Sample	6	I1042301	A1042360	I1042301	20 @ ppb
7	Sample	7	I1042302	A1042360	I1042302	25
8	Sample	8	I1042303	A1042360	I1042303	50
9	Sample	9	I1042304	A1042360	I1042304	100
10	Sample	10	I1042305	A1042360	I1042305	250
11	Sample	11	I1042306	A1042360	I1042306	500
12	Sample	12	I1042307	A1042360	I1042307	1000
13	Sample	13	I1042308	A1042360	I1042308	1500
14	Sample	14	I1042309	A1042360	I1042309	2000
15	Sample	15	I1042310	A1042360	I1042310	5000
16	Sample	16	HEX3	A1042360	HEX	
17	Sample	17	Q1042301	A1042360	Q2042301	@ 1000 ppb
18	Sample	18	HEX4	A1042360	HEX	
19	Sample	19	I1042311	A1042360	I1042311 21	@ 1000 ppb
20	Sample	20	I1042312	A1042360	I1042312 32	
21	Sample	21	I1042313	A1042360	I1042313 42	
22	Sample	22	I1042314	A1042360	I1042314 48	
23	Sample	23	I1042315	A1042360	I1042315 54	
24	Sample	24	I1042316	A1042360	I1042316 62	
25	Sample	25	I1042317	A1042360	I1042317 68	

Calibration Status Report HP ECD2

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration

#	ID	Conc	ISTD Conc	Path\File
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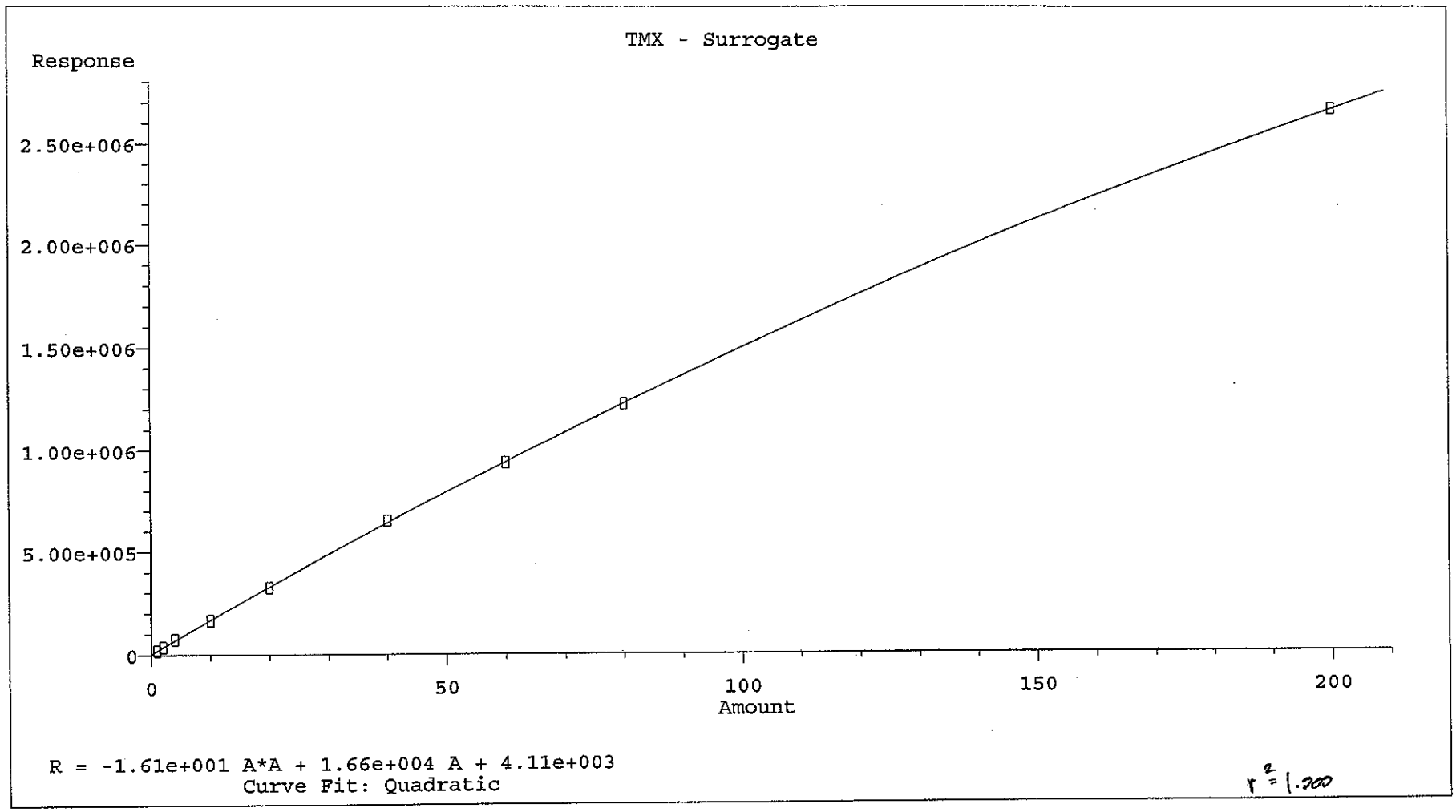
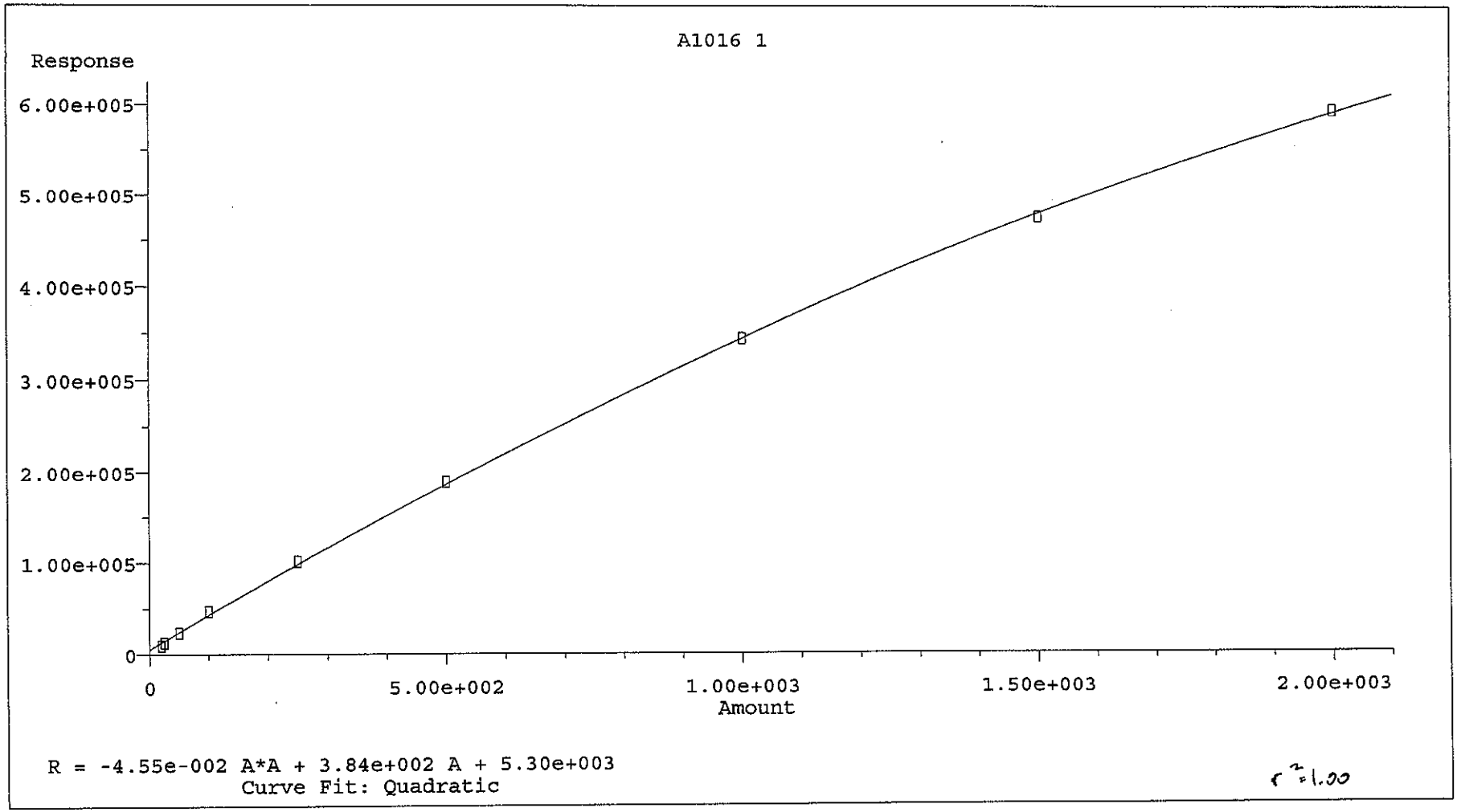
2	50	-1.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042303.D
3	100	-1.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042304.D
4	250	-1.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042305.D
5	500	-1.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042306.D
6	1000	1000.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042307.D
8	5000	5000.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042310.D
9	25	25.00	0.00	D:\HPCHEM\2\DATA\APR23\I1042302.D

#	ID	Update Time	Quant Time	Acquisition Time
1	20	Apr 24 10:19 2008	Apr 24 10:12 19108	23 Apr 2008 3:58 pm
2	50	Apr 24 10:19 2008	Apr 24 08:18 19108	23 Apr 2008 5:01 pm
3	100	Apr 24 10:19 2008	Apr 24 10:14 19108	23 Apr 2008 5:32 pm
4	250	Apr 24 10:19 2008	Apr 24 08:12 19108	23 Apr 2008 6:03 pm
5	500	Apr 24 10:19 2008	Apr 24 08:03 19108	23 Apr 2008 6:35 pm
6	1000	Apr 24 10:20 2008	Apr 24 08:03 19108	23 Apr 2008 7:06 pm
8	5000	Apr 24 10:20 2008	Apr 24 08:08 19108	23 Apr 2008 8:40 pm
9	25	Apr 24 10:19 2008	Apr 24 10:13 19108	23 Apr 2008 4:29 pm

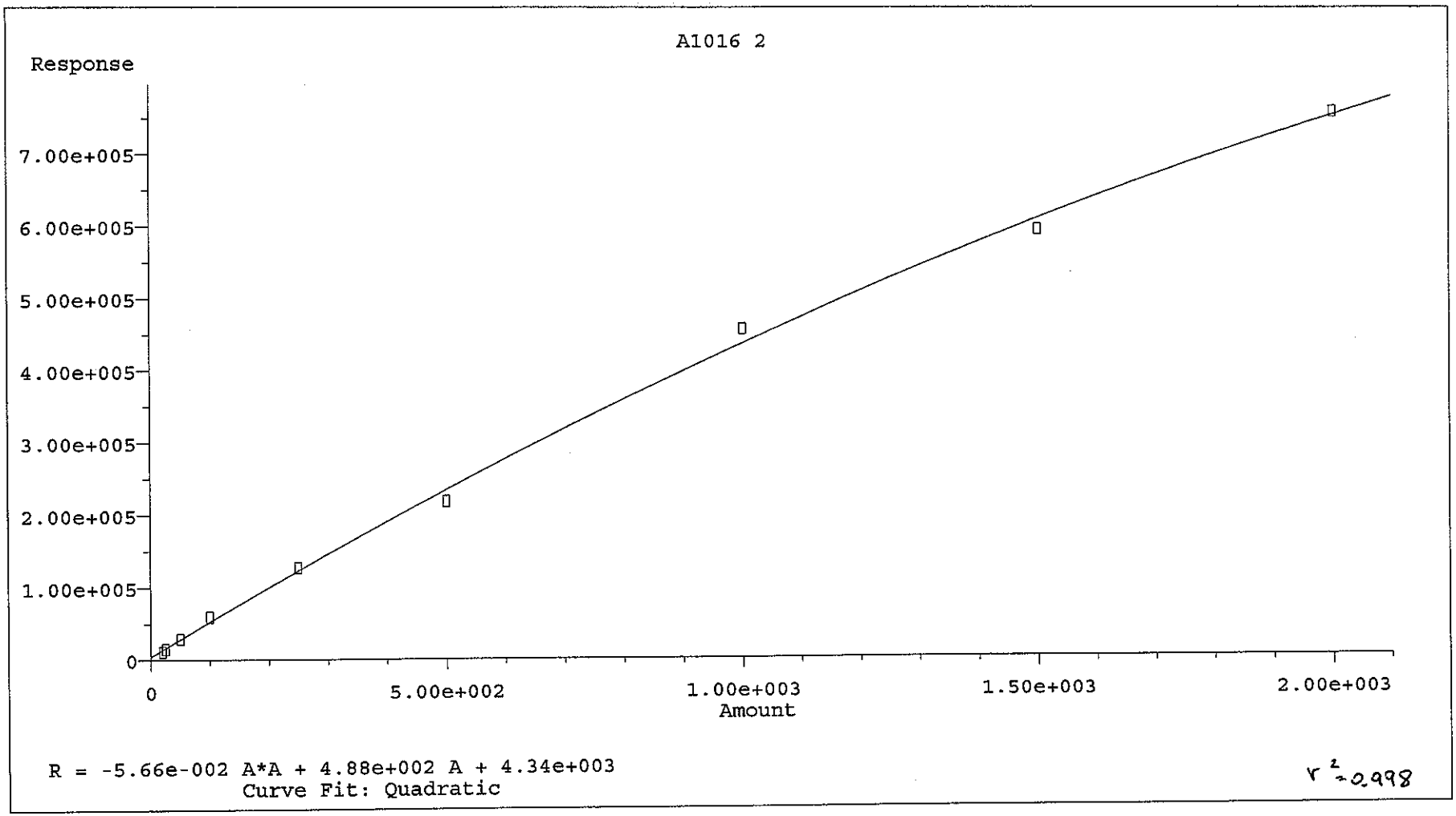
A1042360.M Thu Apr 24 10:20:33 2008



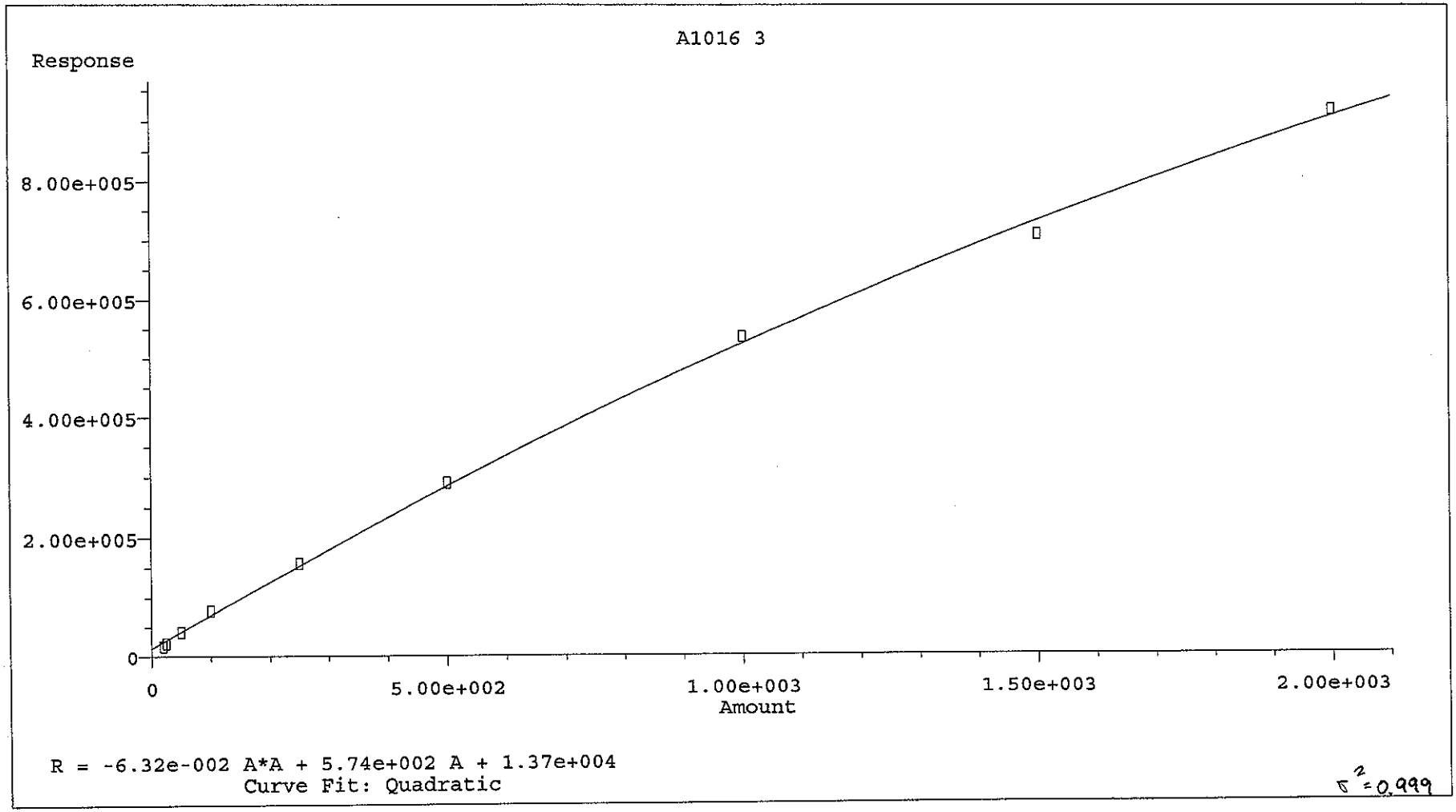
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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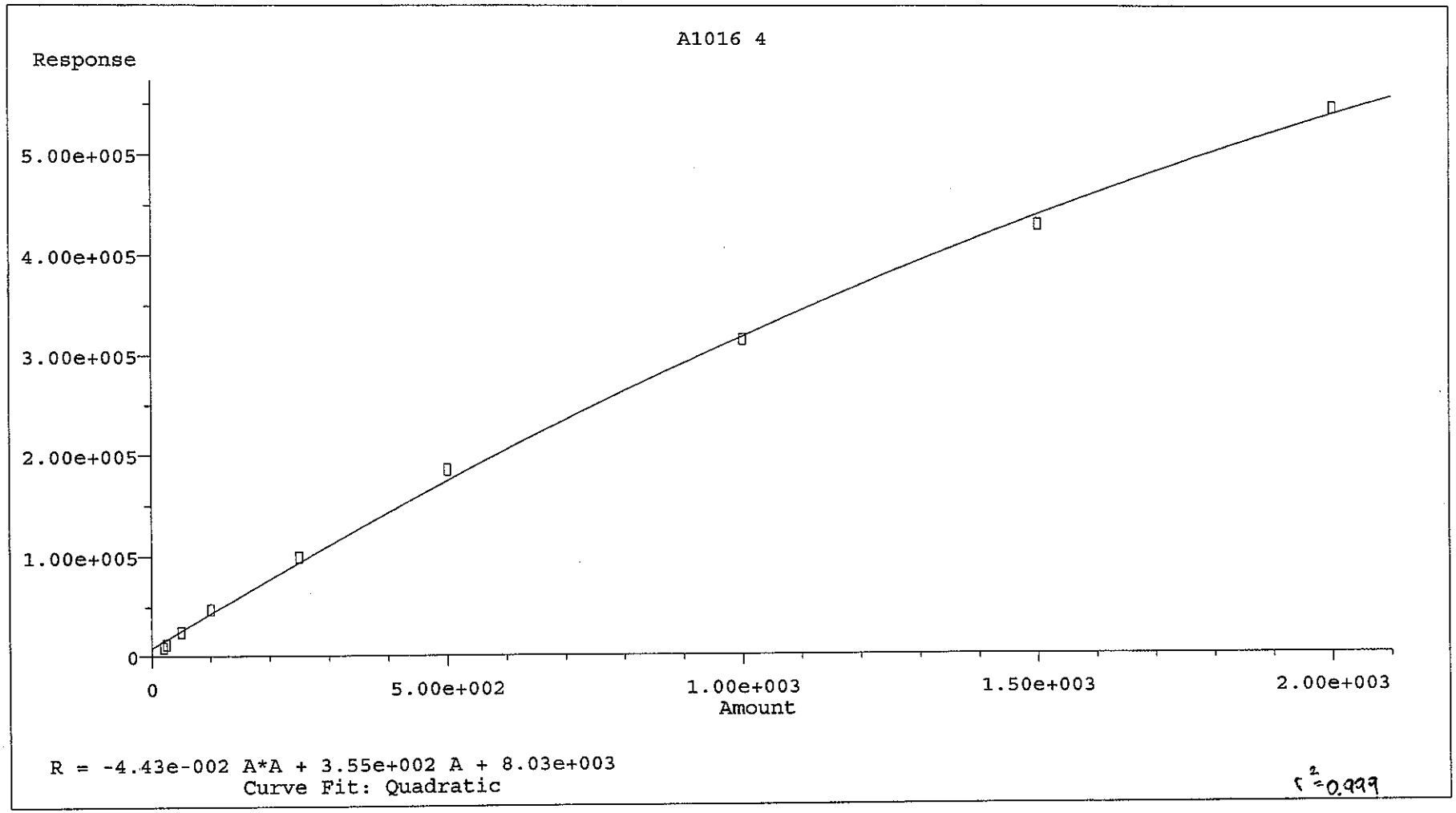
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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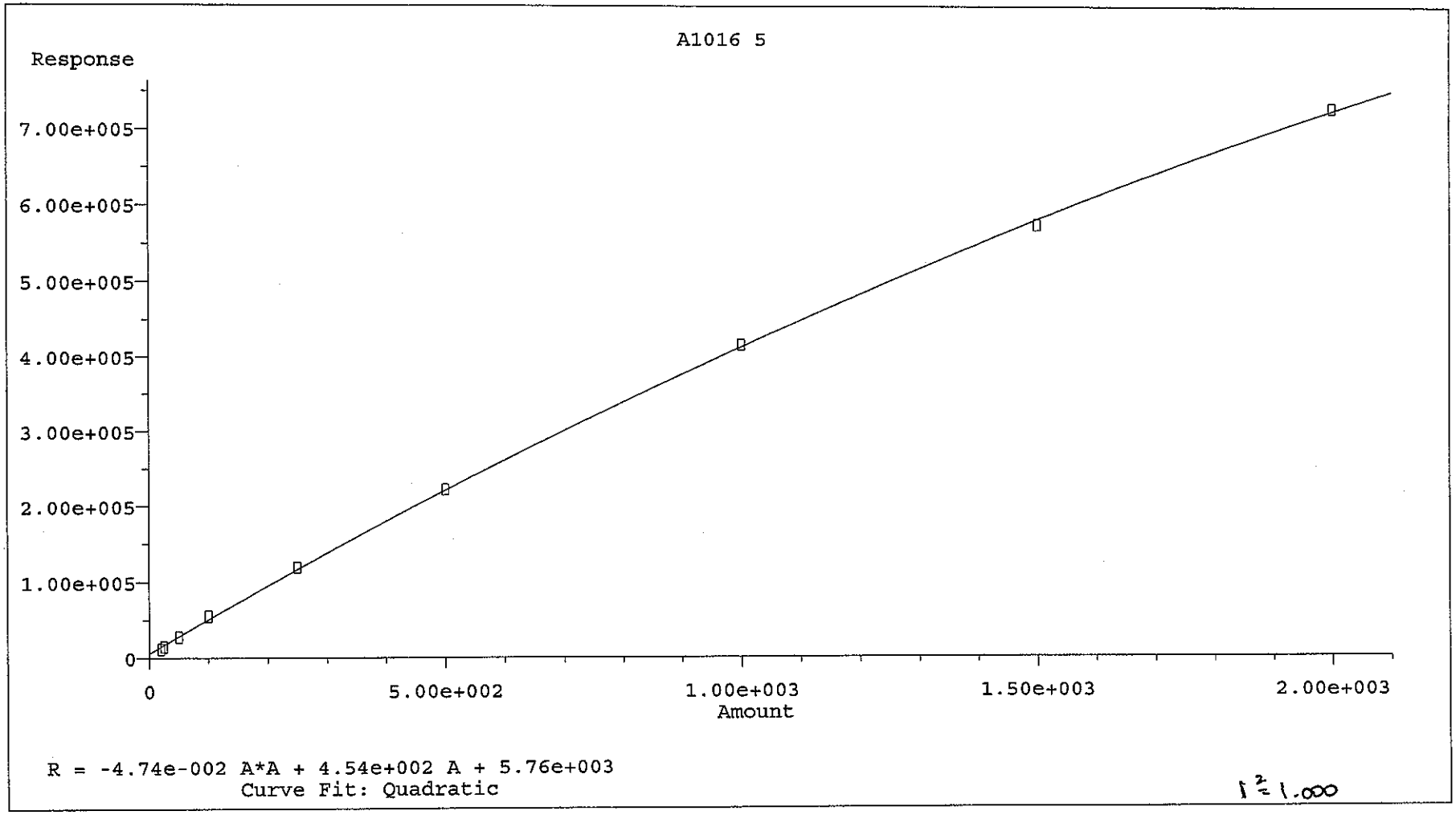
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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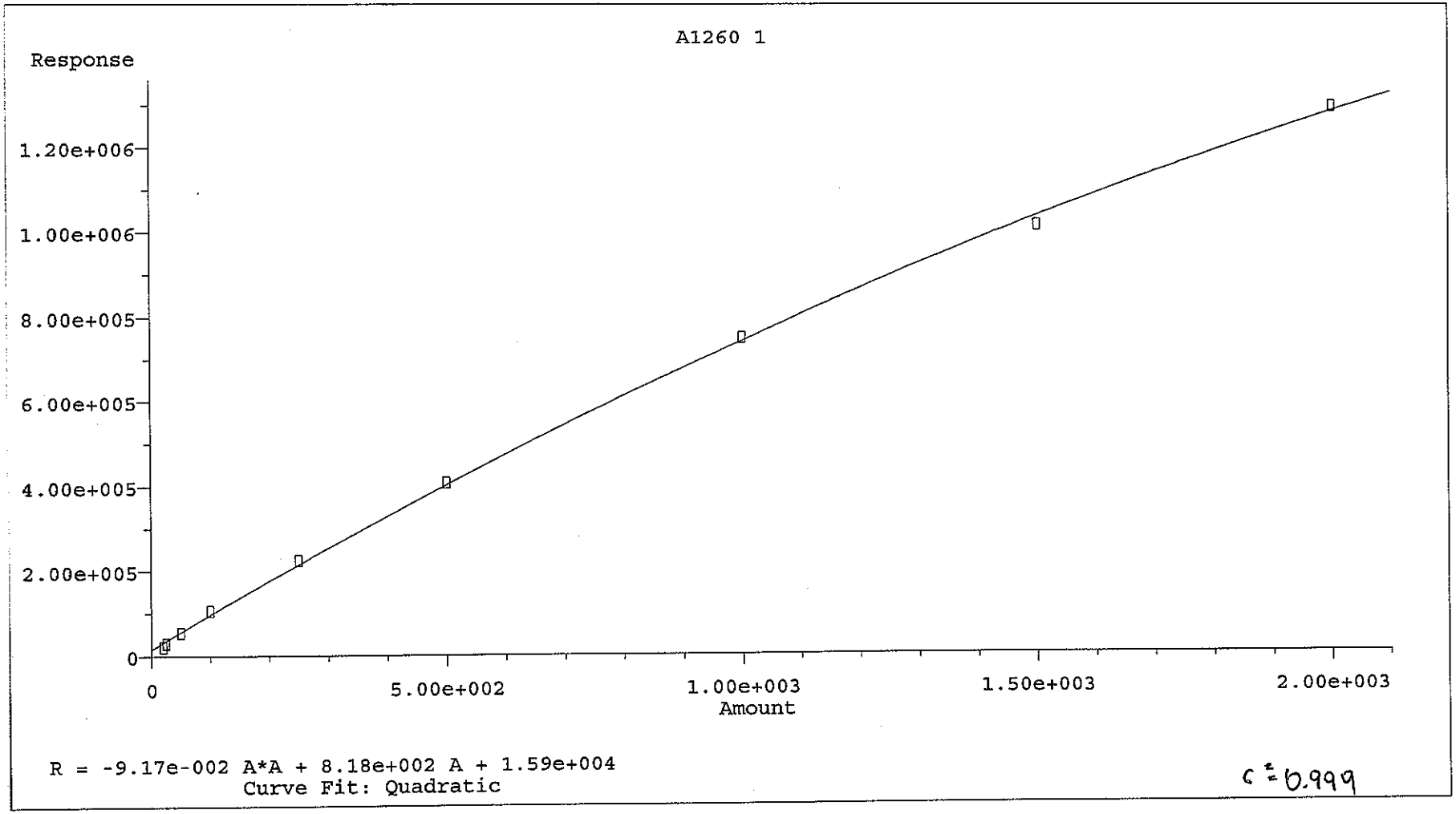
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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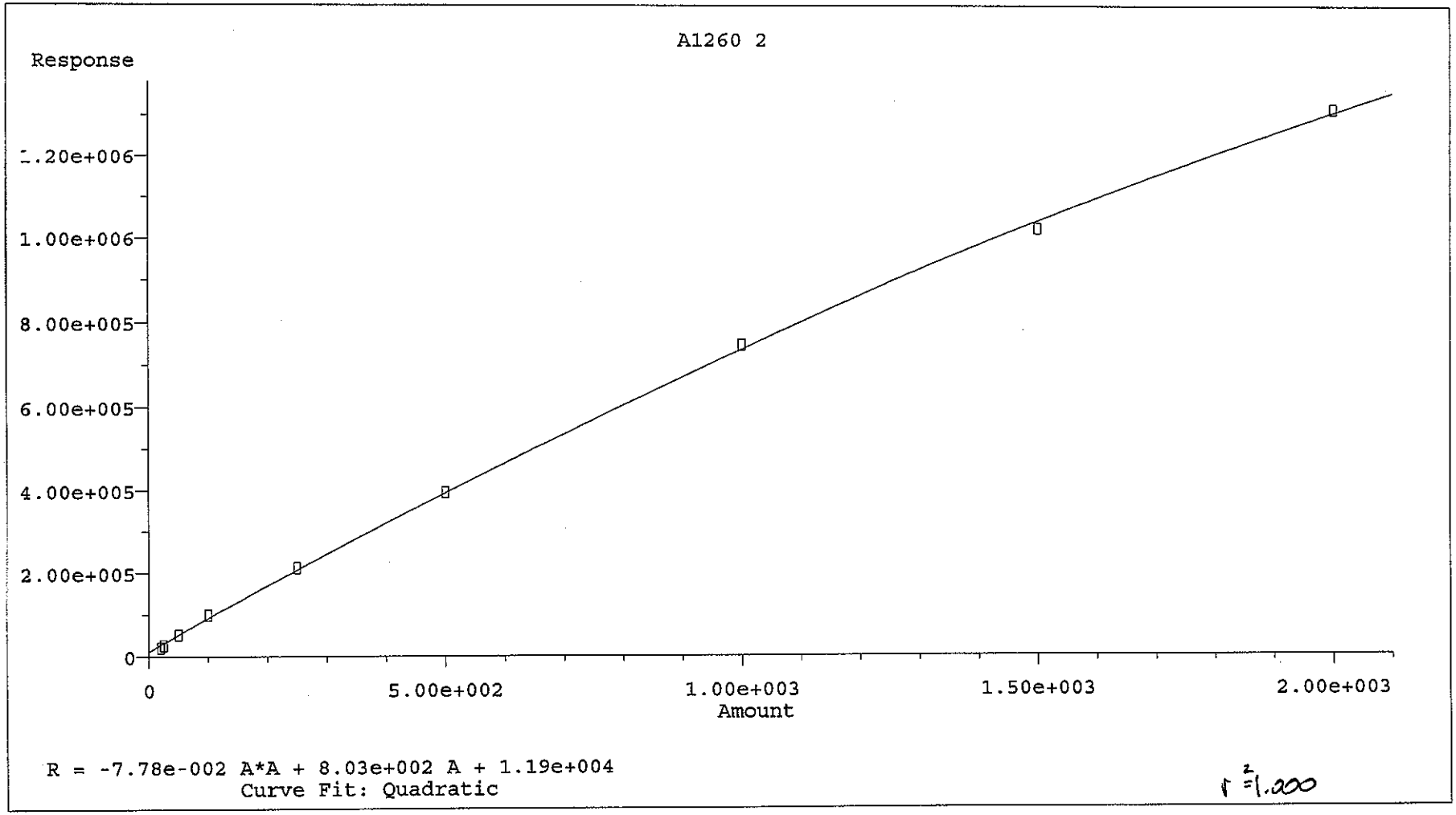
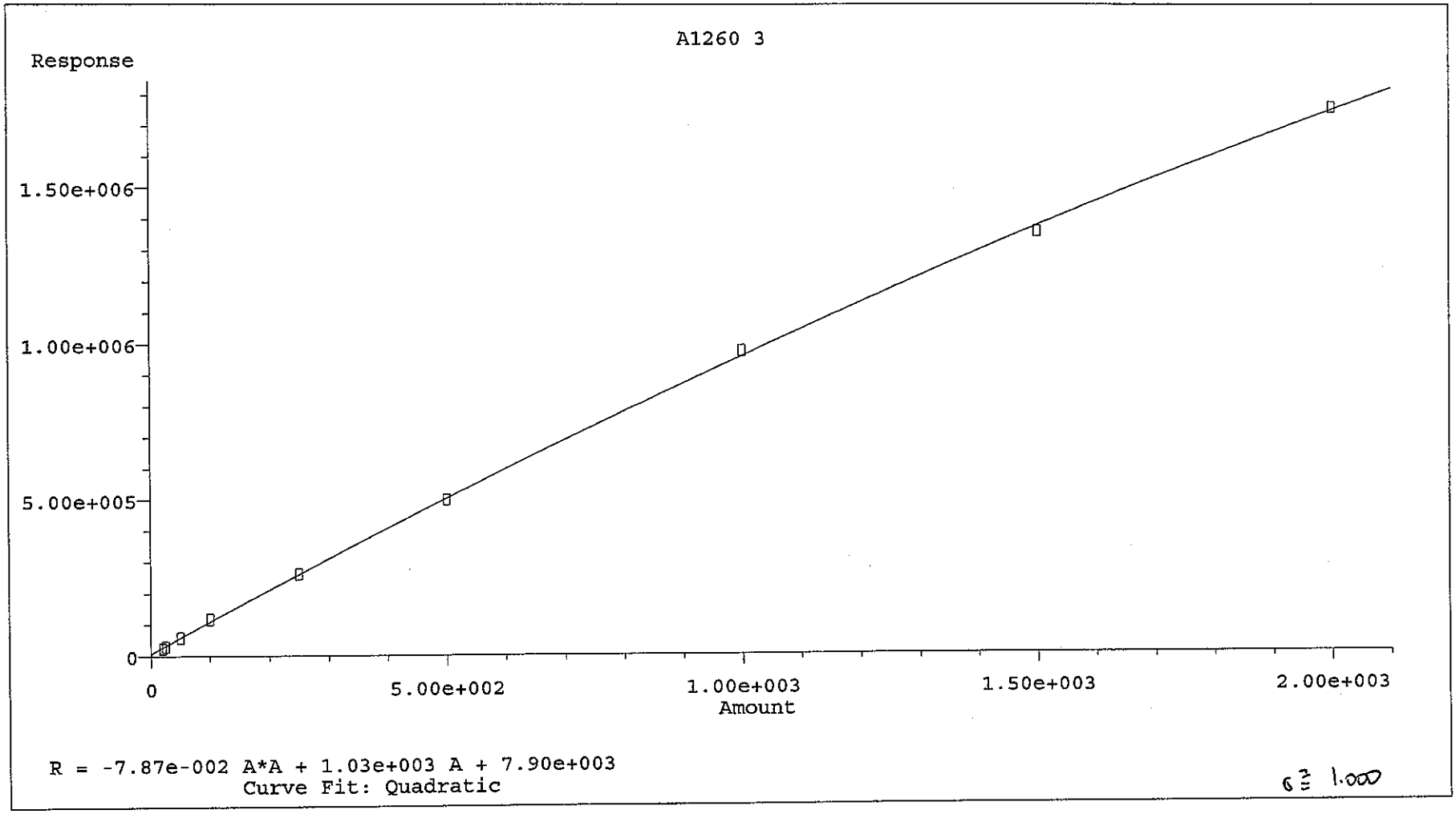
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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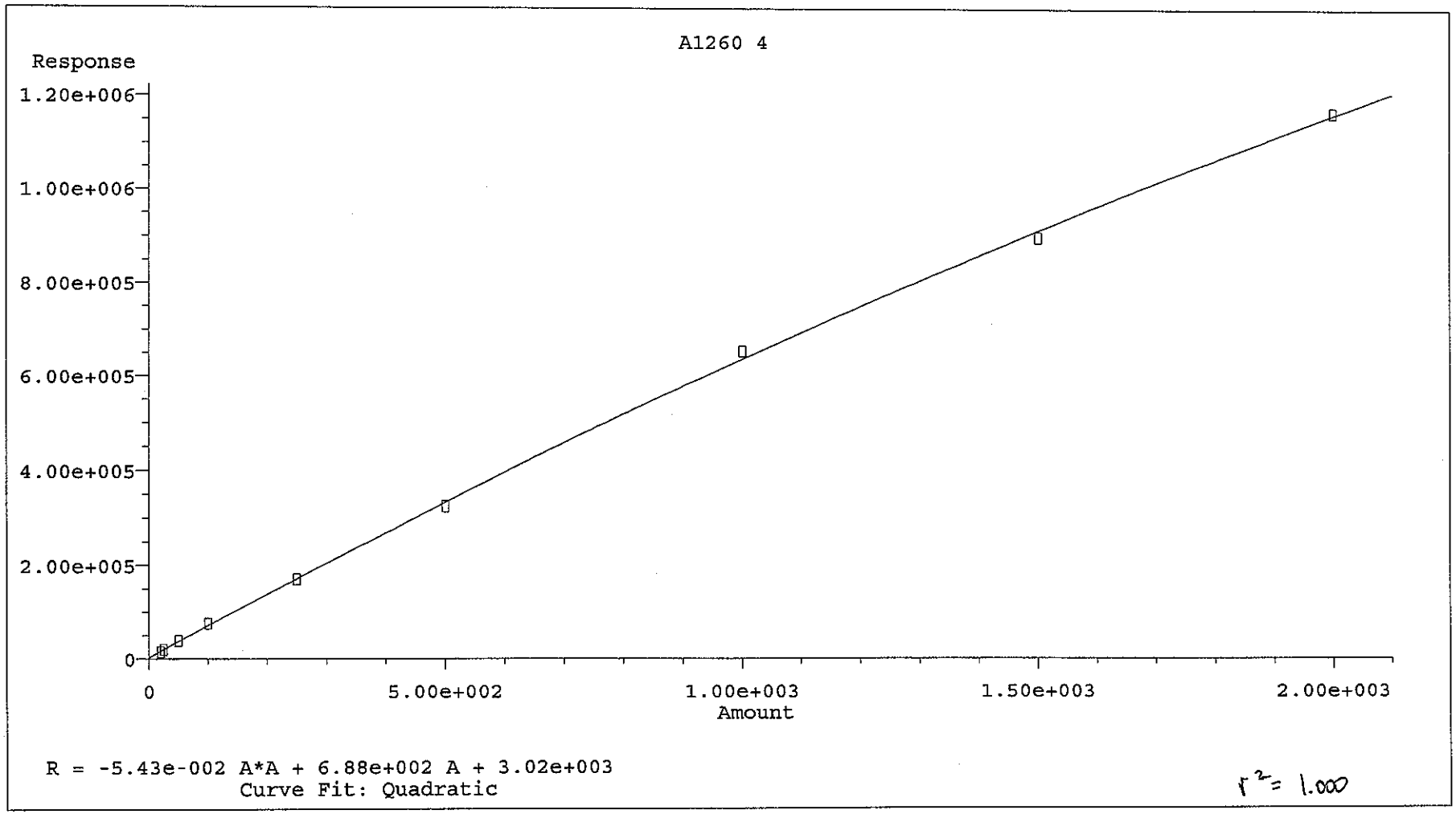
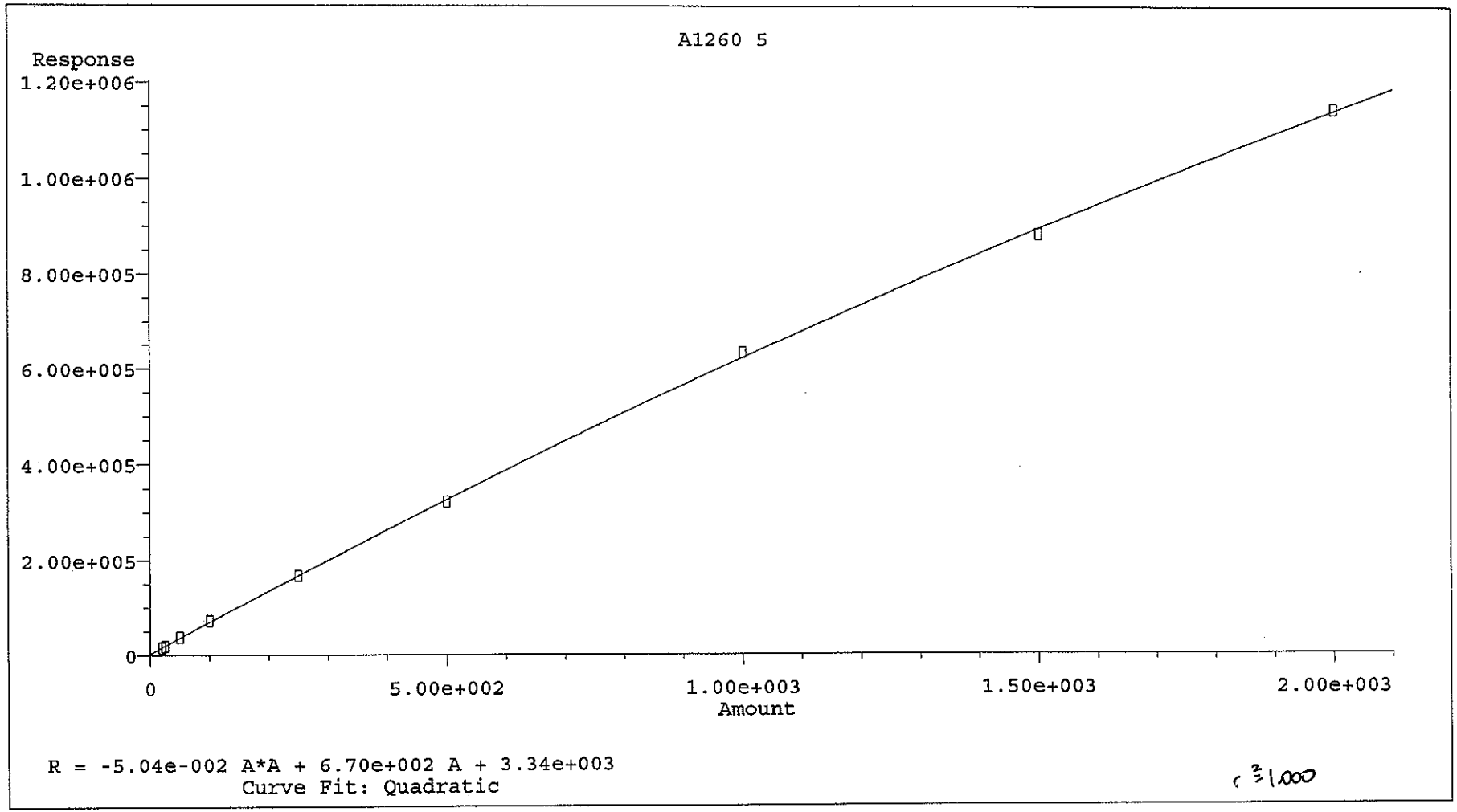
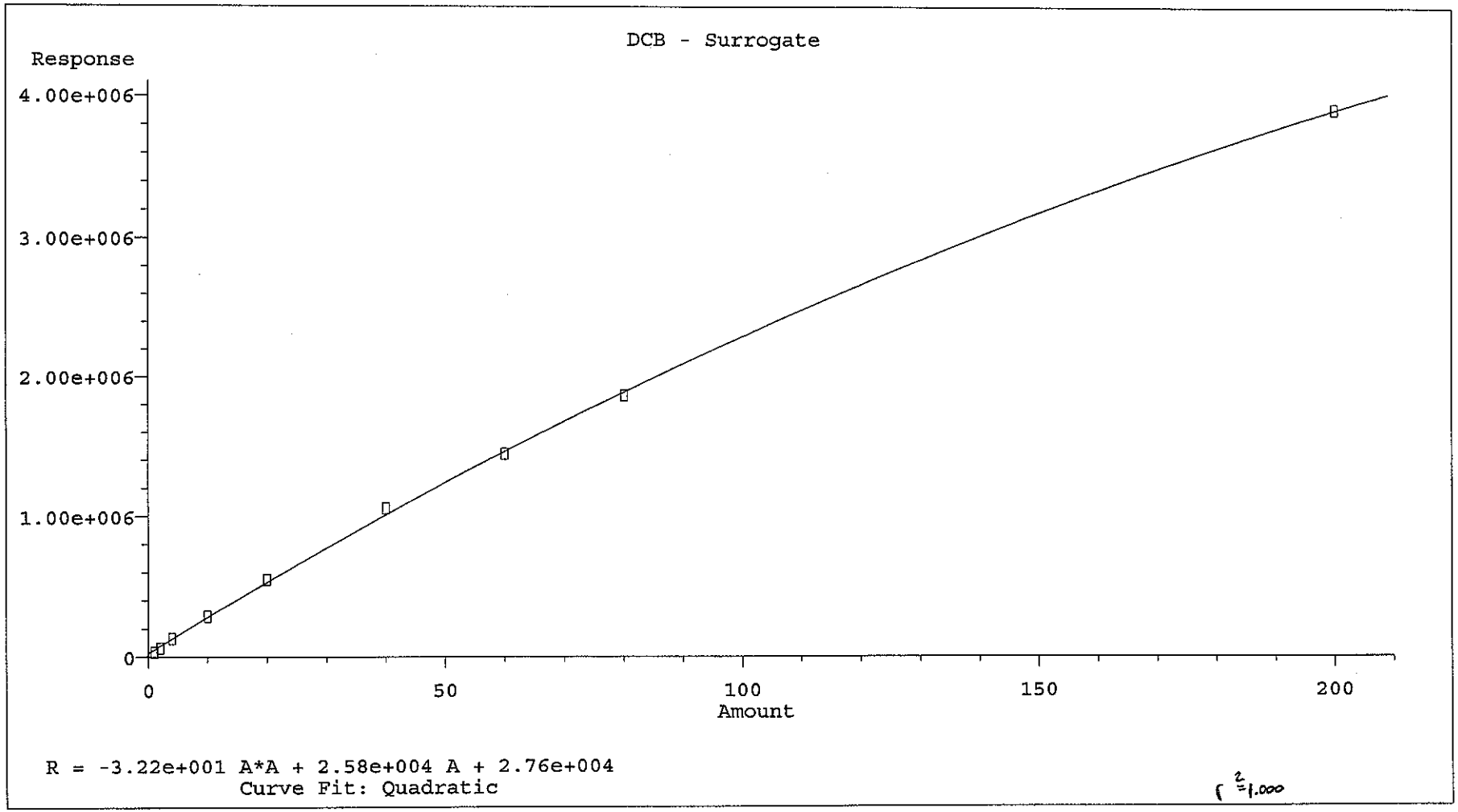
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



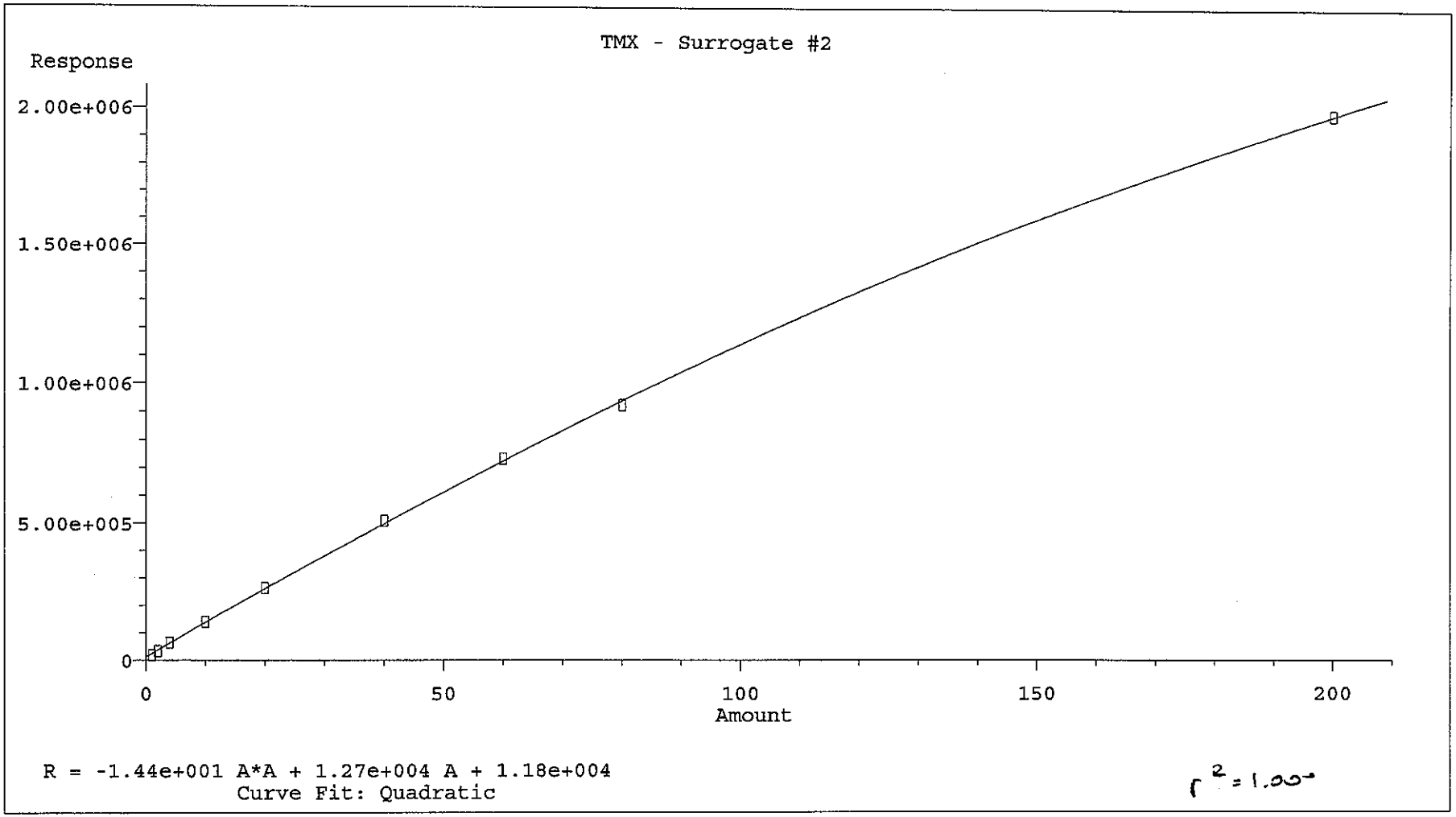
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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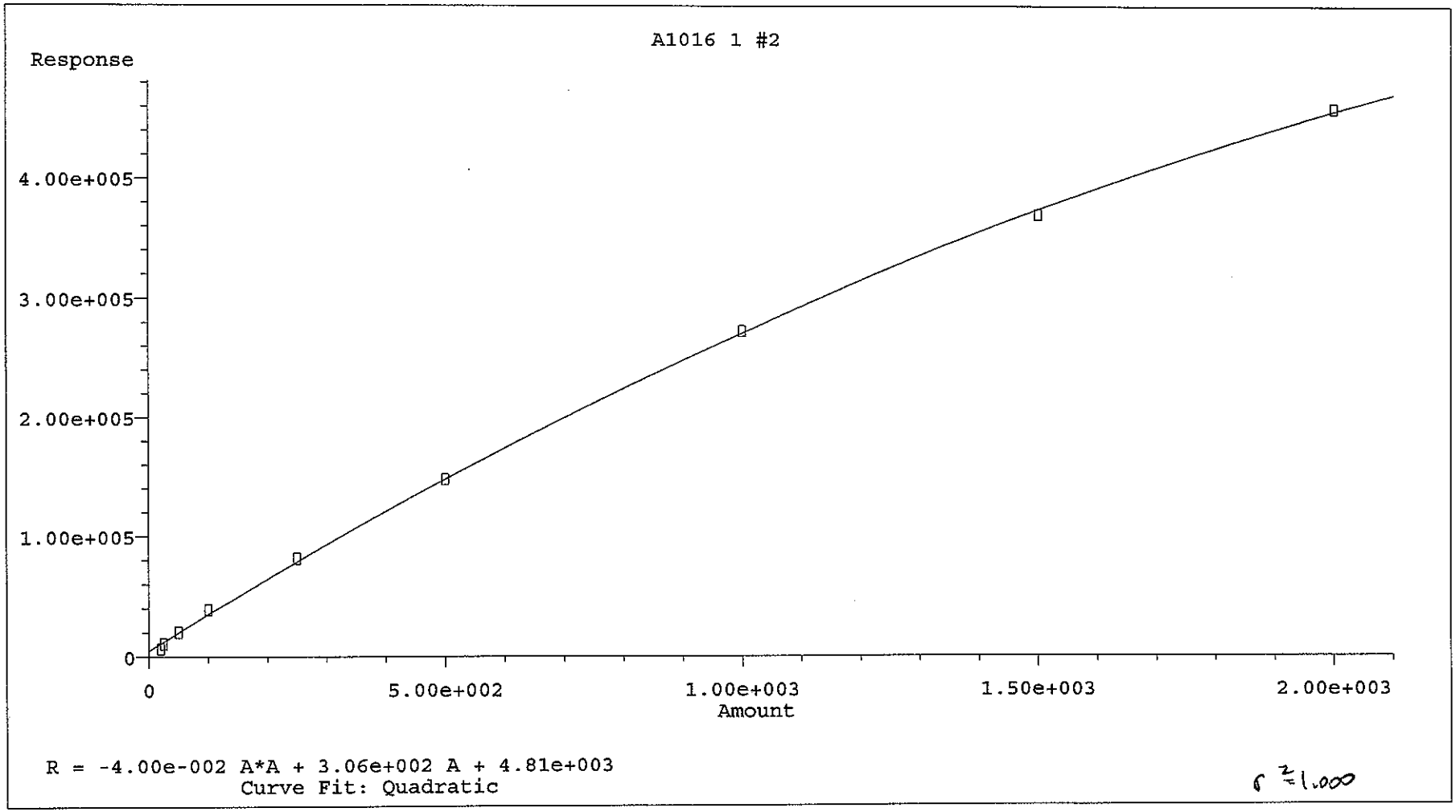
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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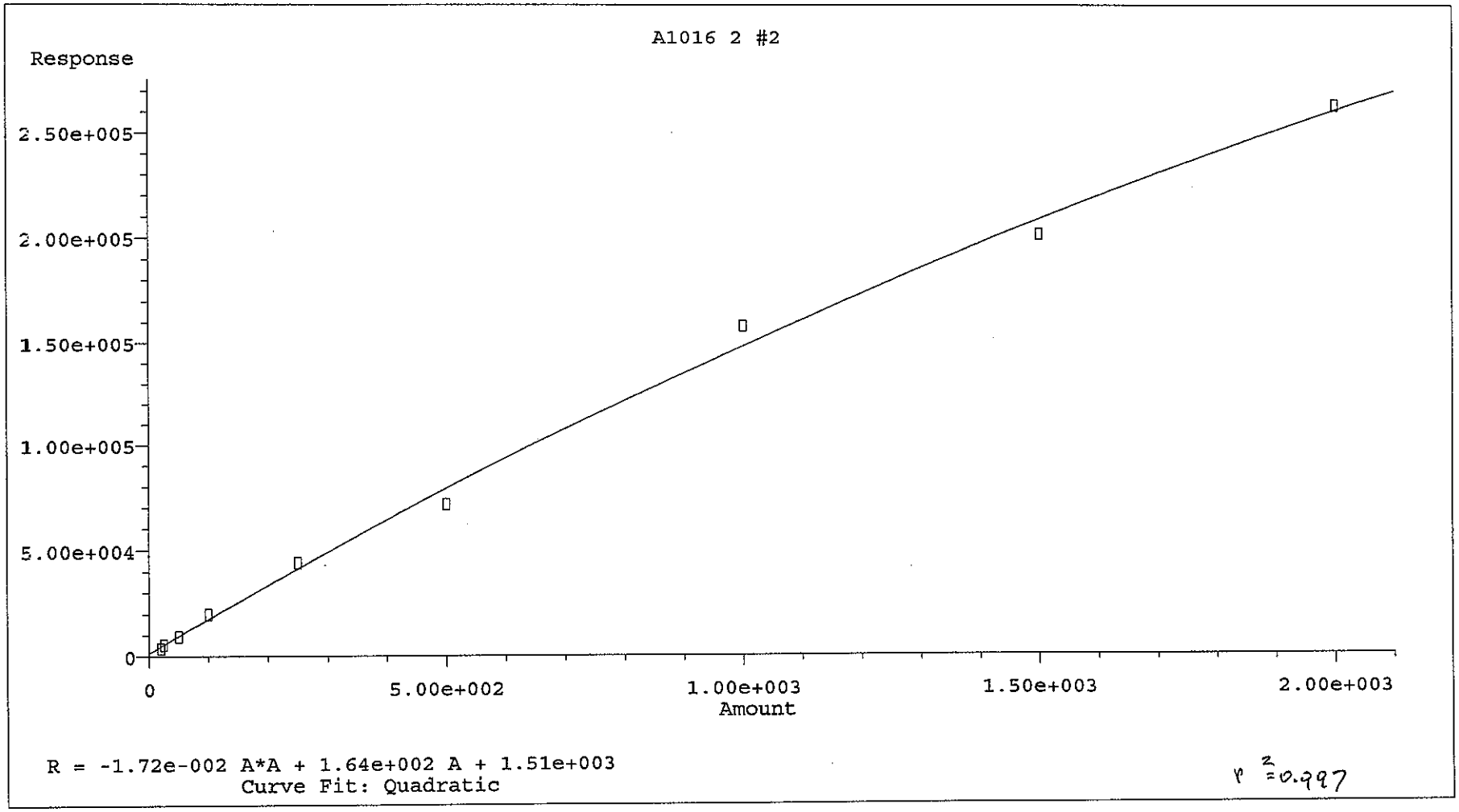
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



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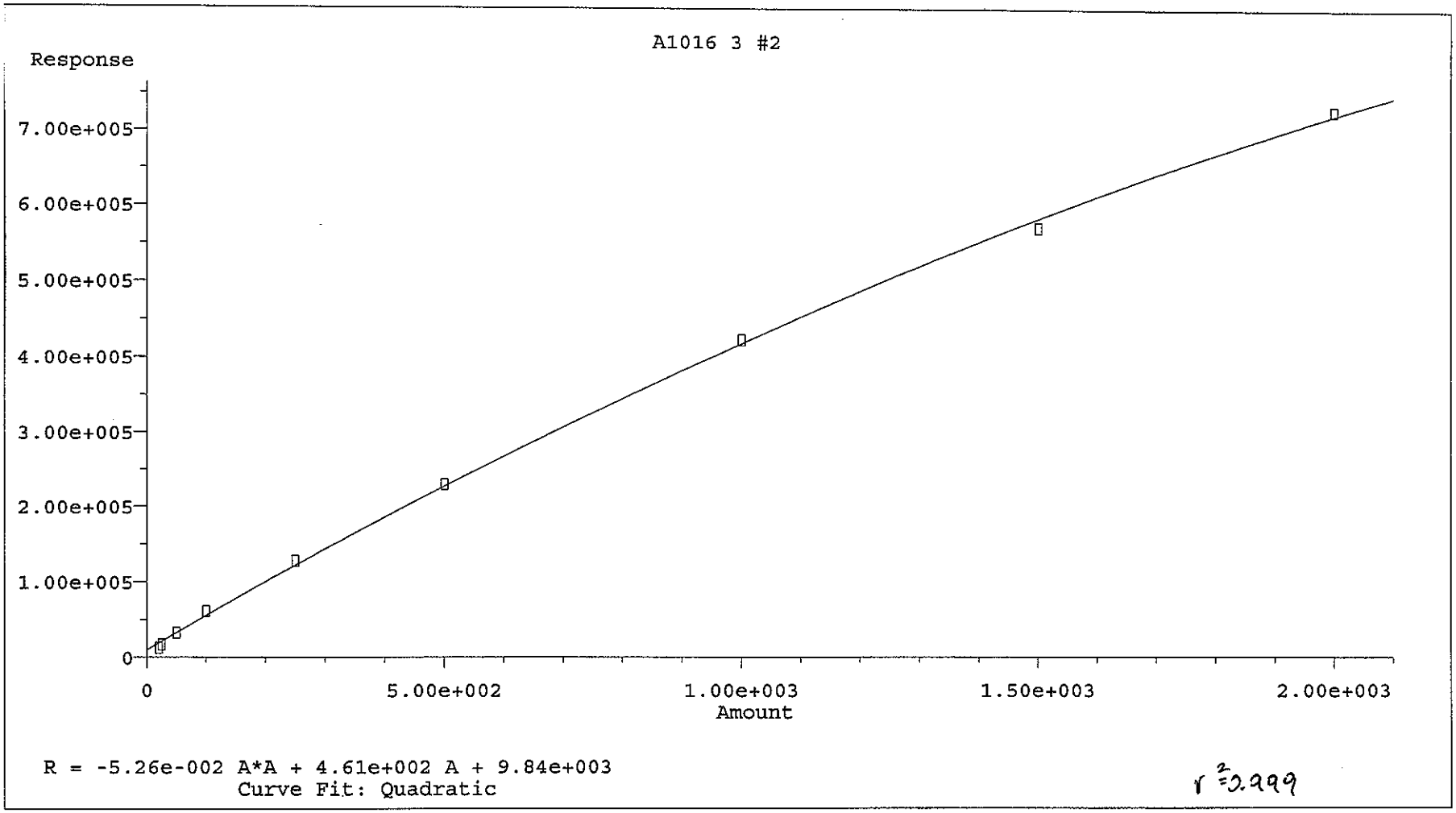
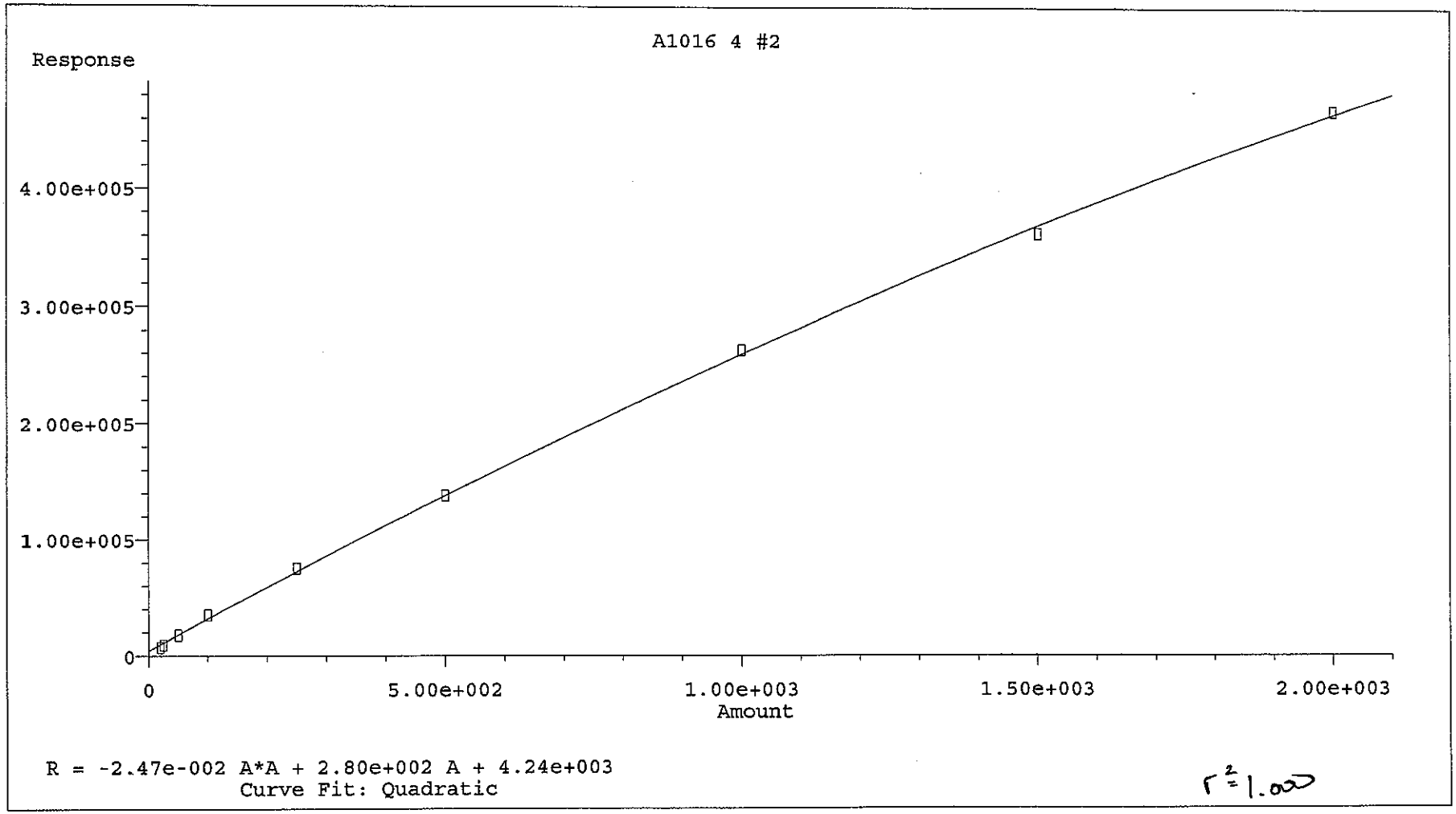
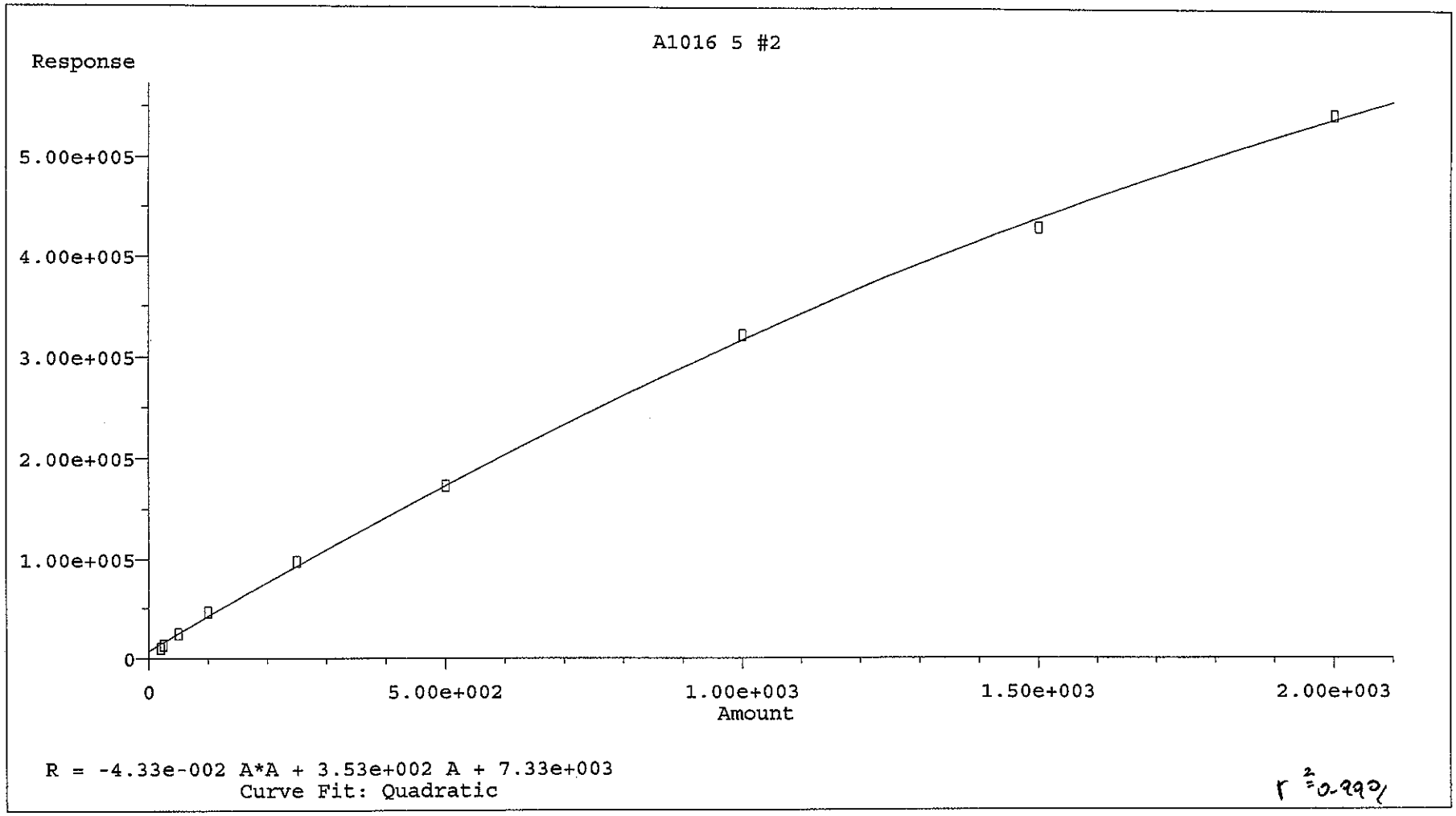
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



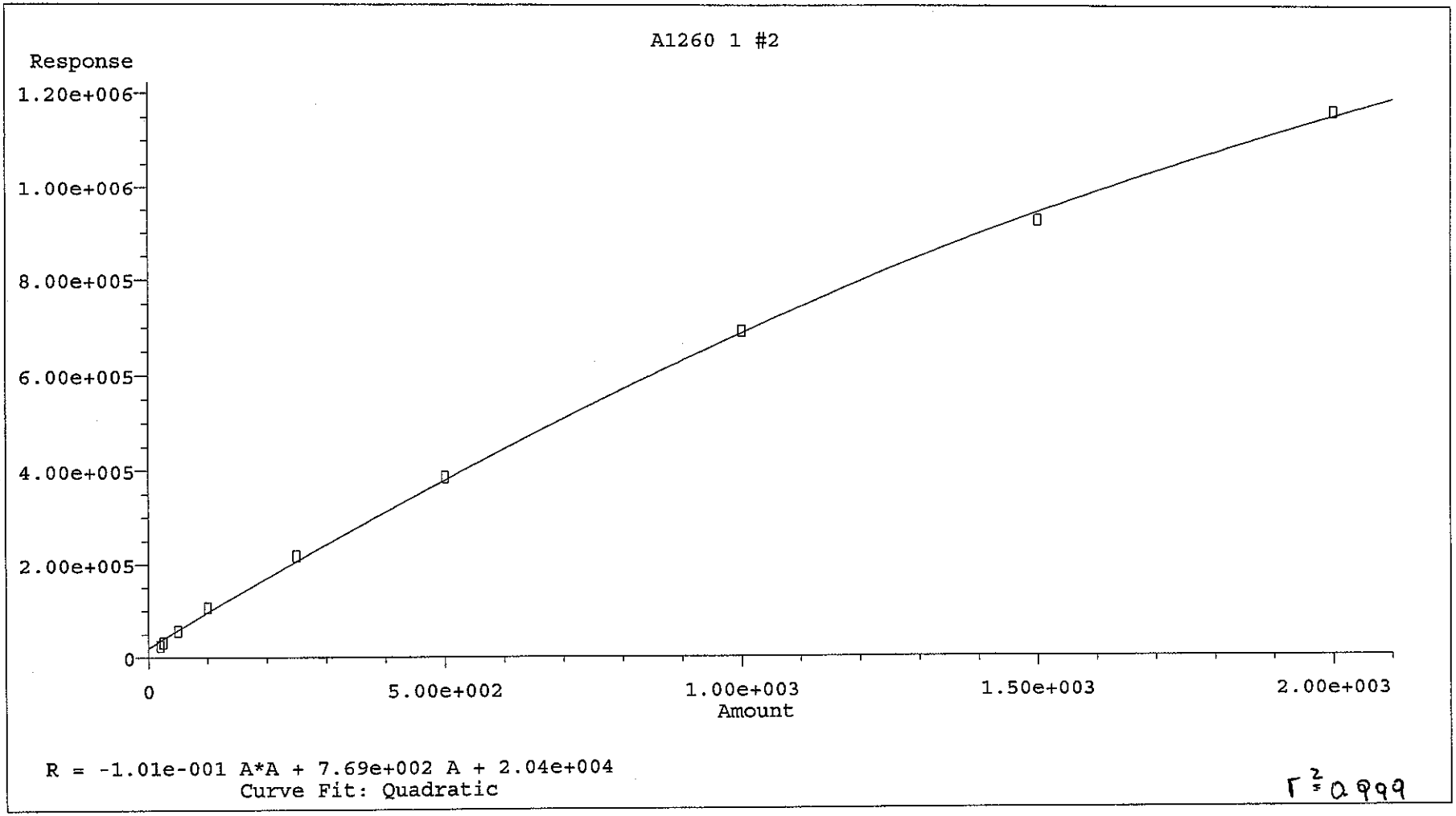
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



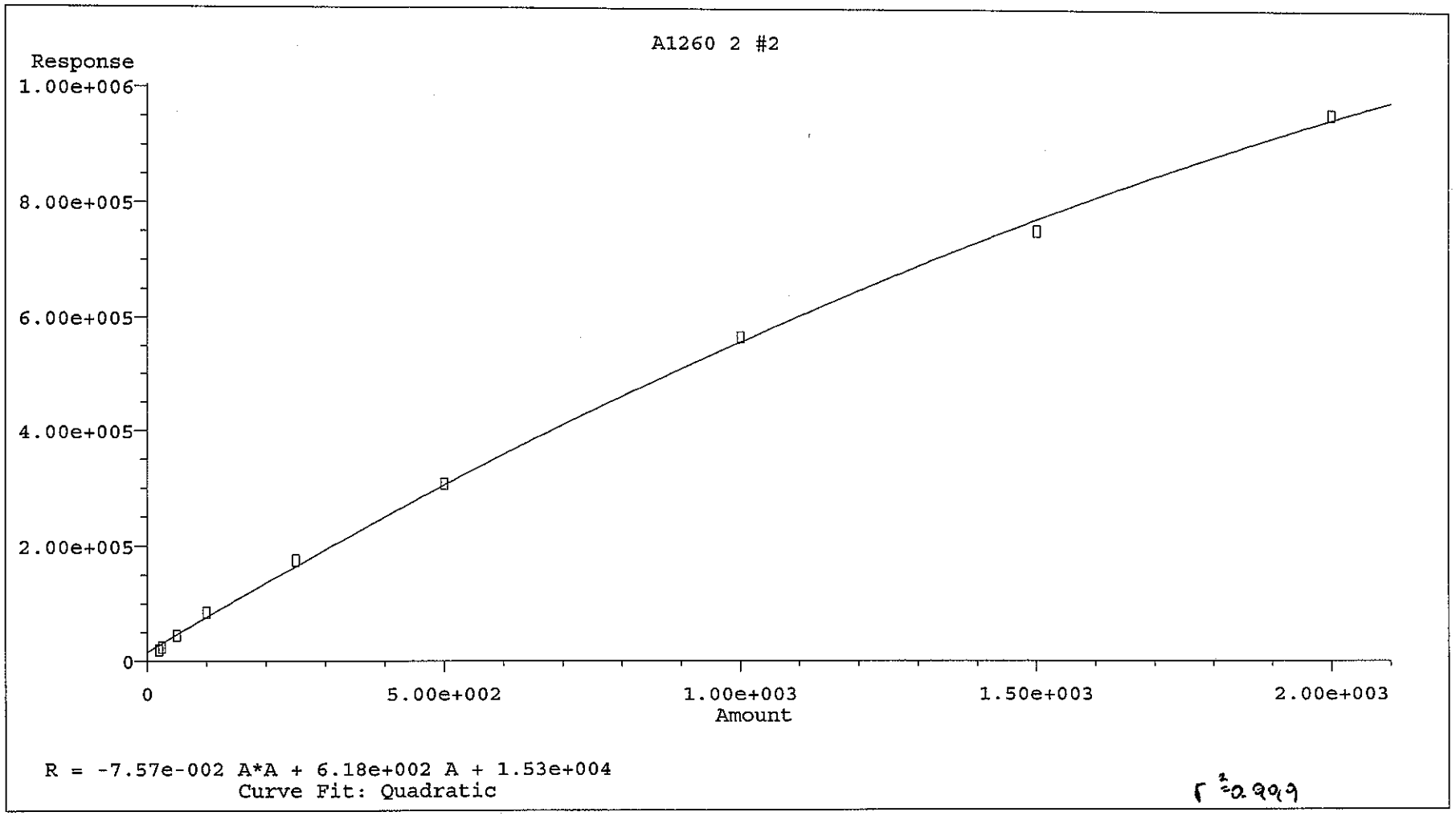
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



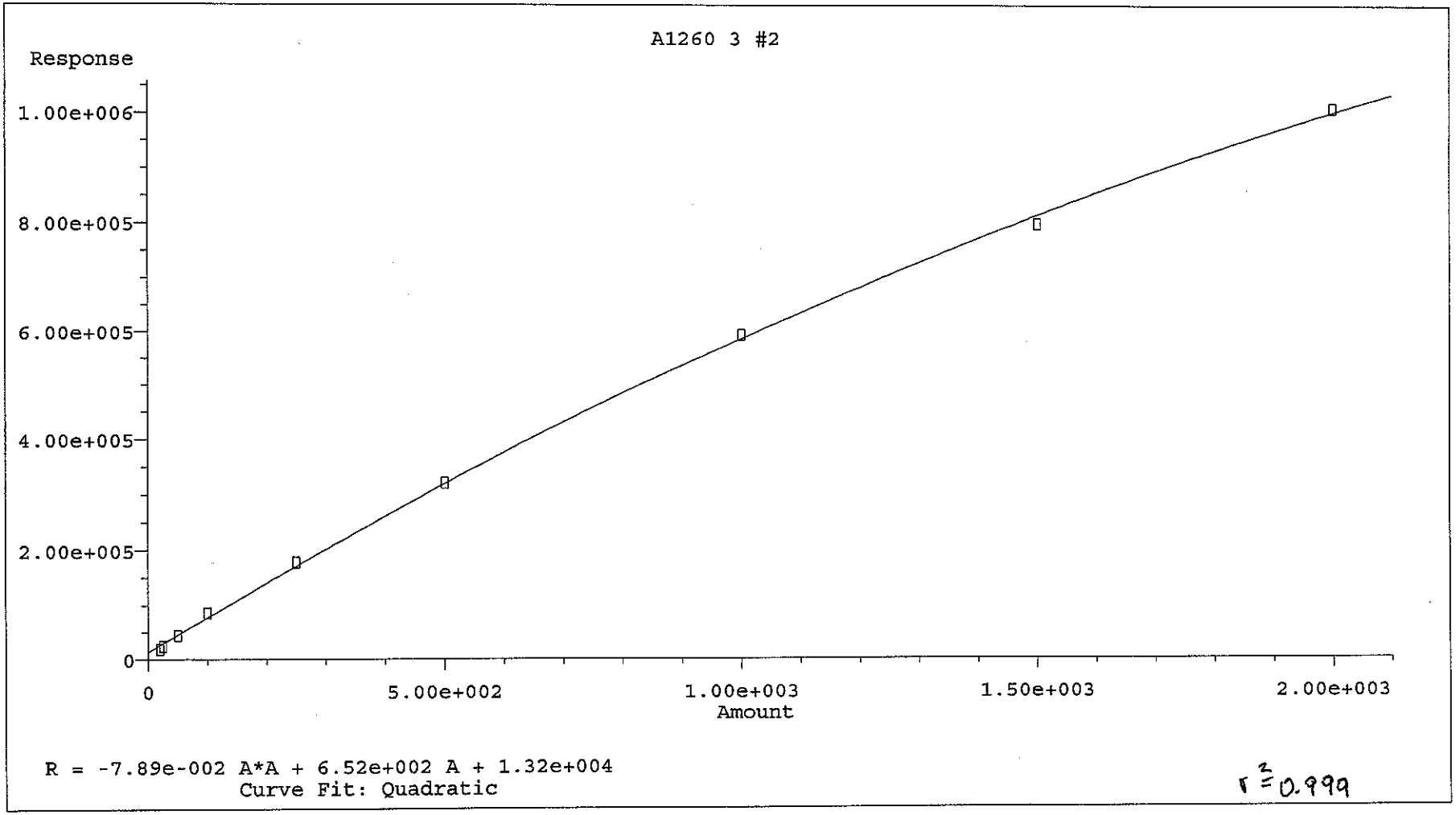
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



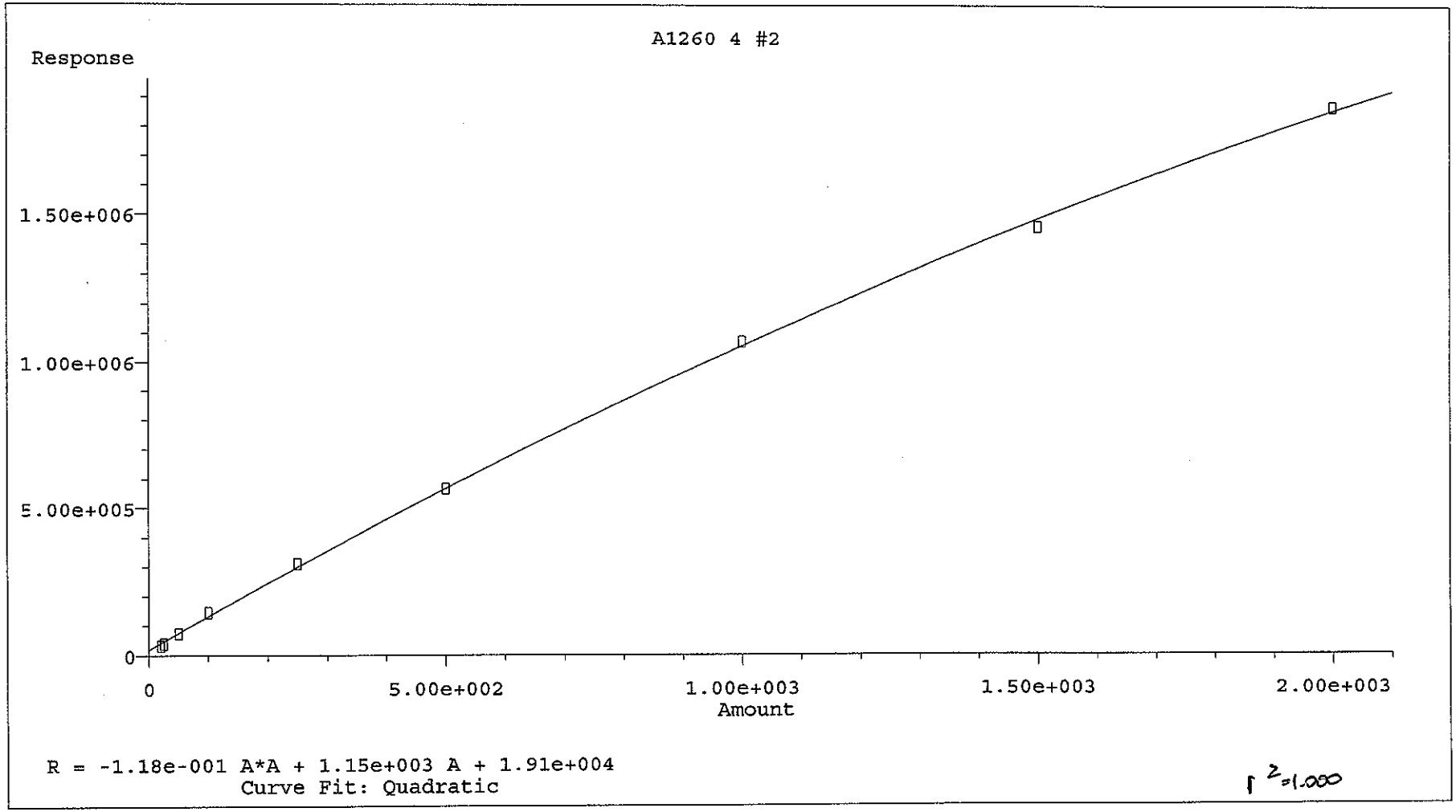
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



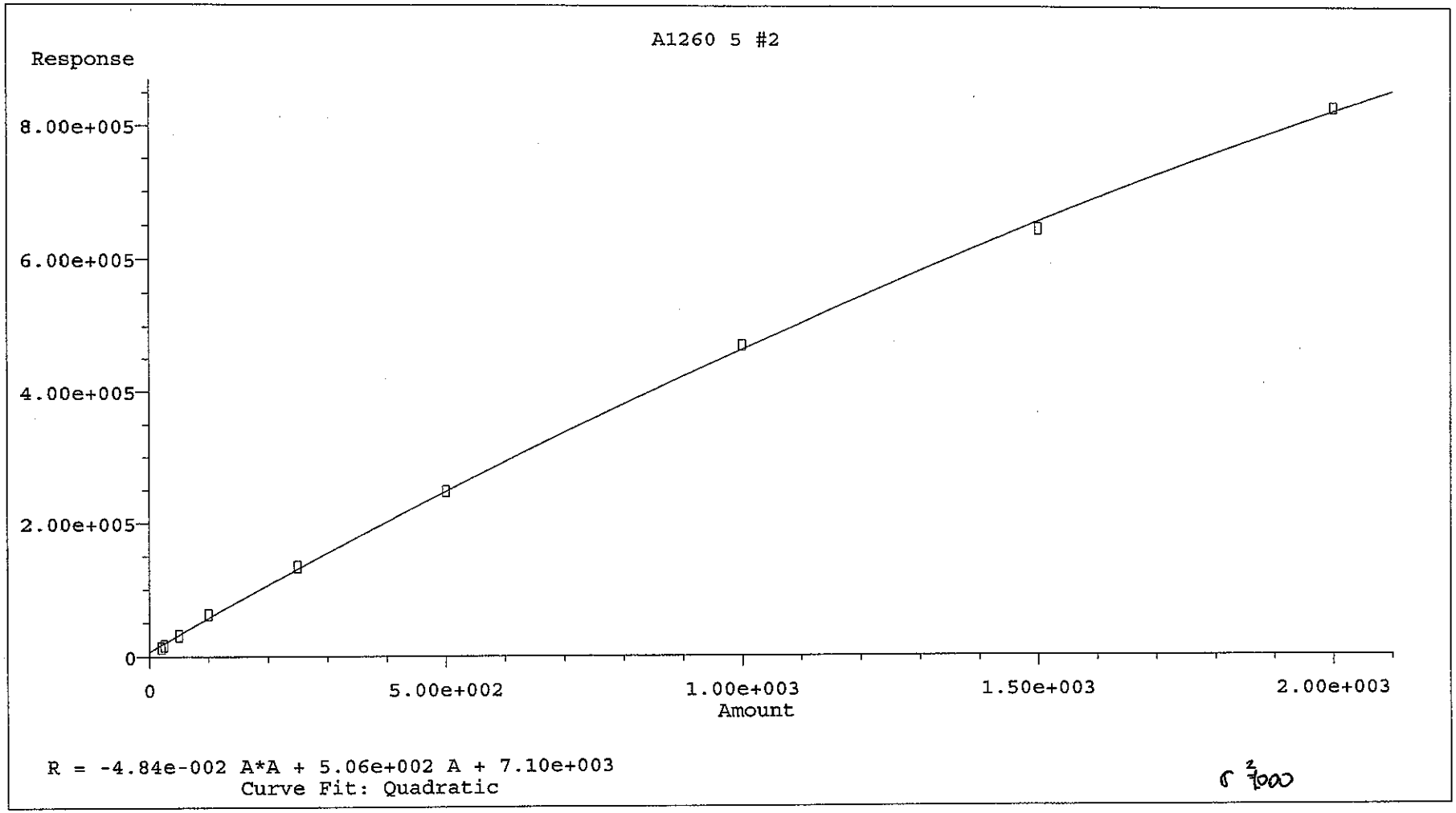
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



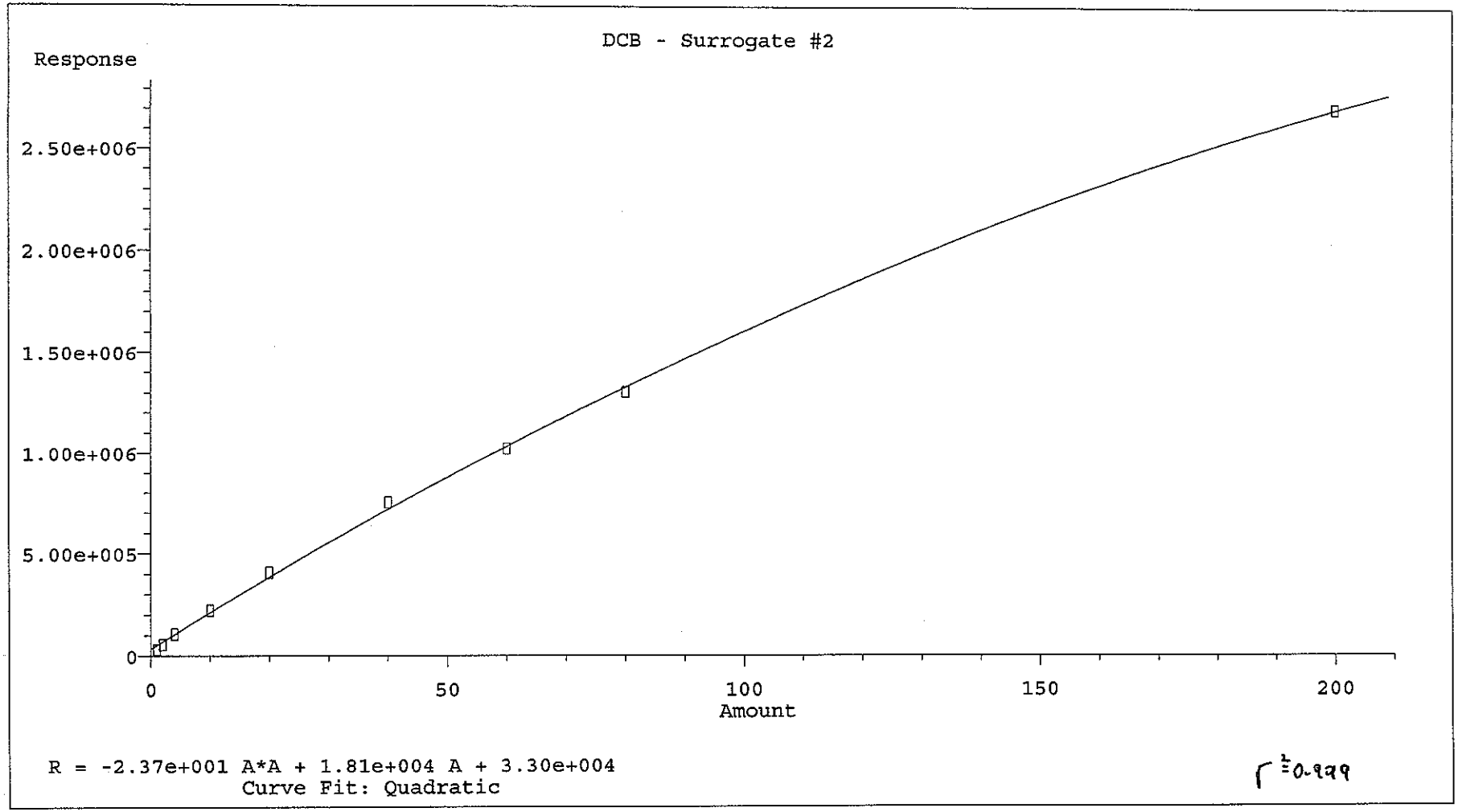
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008

Quantitation Report (QT Reviewed)

J23 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 3:58 pm Operator:
Sample : I1042301 Inst : HP ECD2
Misc : PW120407A 20PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
2) L1 A1016 1	7.95	7.42	9445	6644	10.803	4.663m(C)#
3) L1 A1016 2	9.30	8.77	11110	3588	13.753	12.870m
4) L1 A1016 3	10.17	9.69	16950	12500	5.745	5.356m
5) L1 A1016 4	10.75	9.95	8591	7078	1.295	8.692m #
6) L1 A1016 5	11.35	10.90	11386	9904	12.287m	5.831m #
Sum A1016 1			57482	39714	43.883	37.411
Average A1016 1					8.777	7.482
7) L7 A1260 1	17.39	15.26	21224	24630	6.493	5.443m(C)
8) L7 A1260 2	18.24	16.73	20866	18608	10.797m	4.238m #
9) L7 A1260 3	20.23	17.73	24020	18224	15.722m	8.150m #
10) L7 A1260 4	20.70	19.86	14532	31969	16.659	11.572 #
11) L7 A1260 5	22.74	22.16	15280	13087	16.729m	11.177 #
Sum A1260 1			95923	106517	N.D.	N.D.
Average A1260 1					13.280	8.116
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

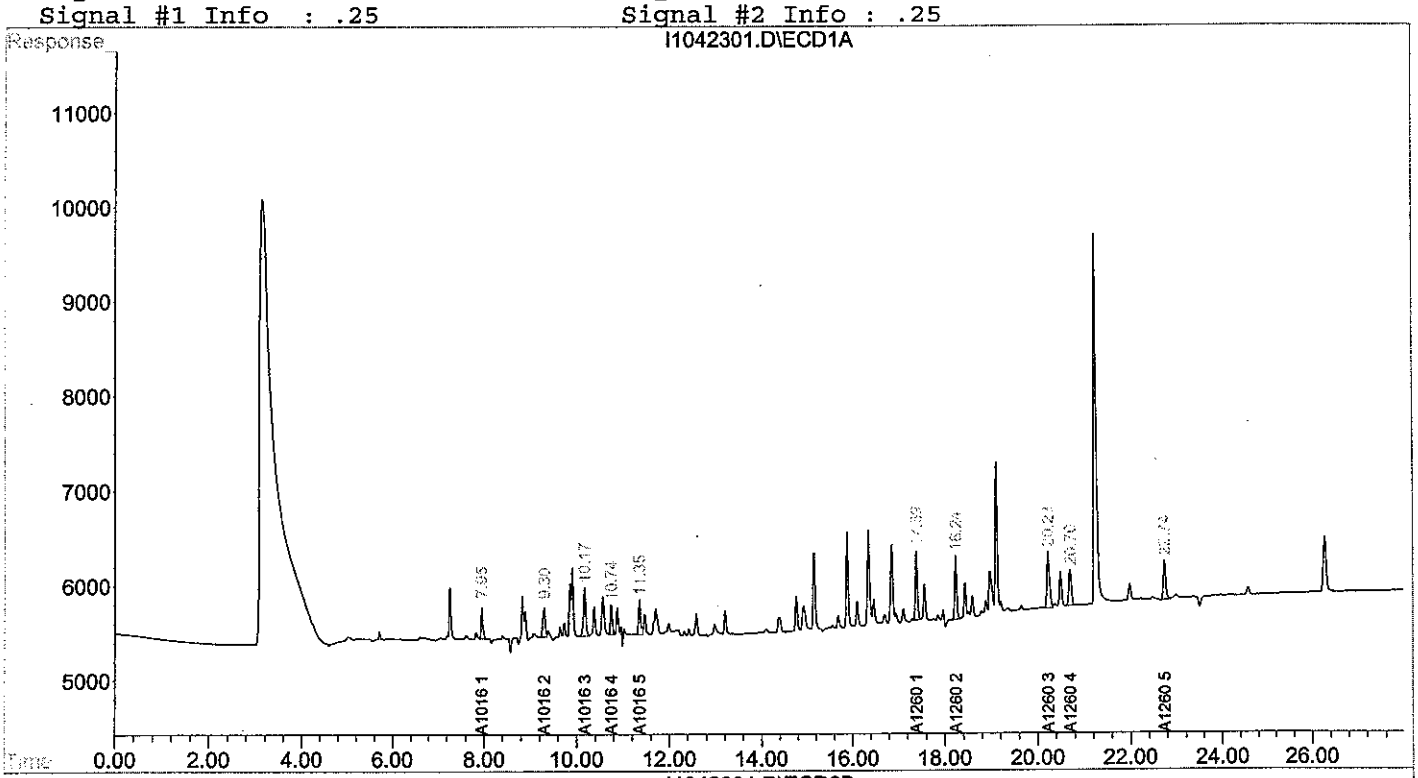
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

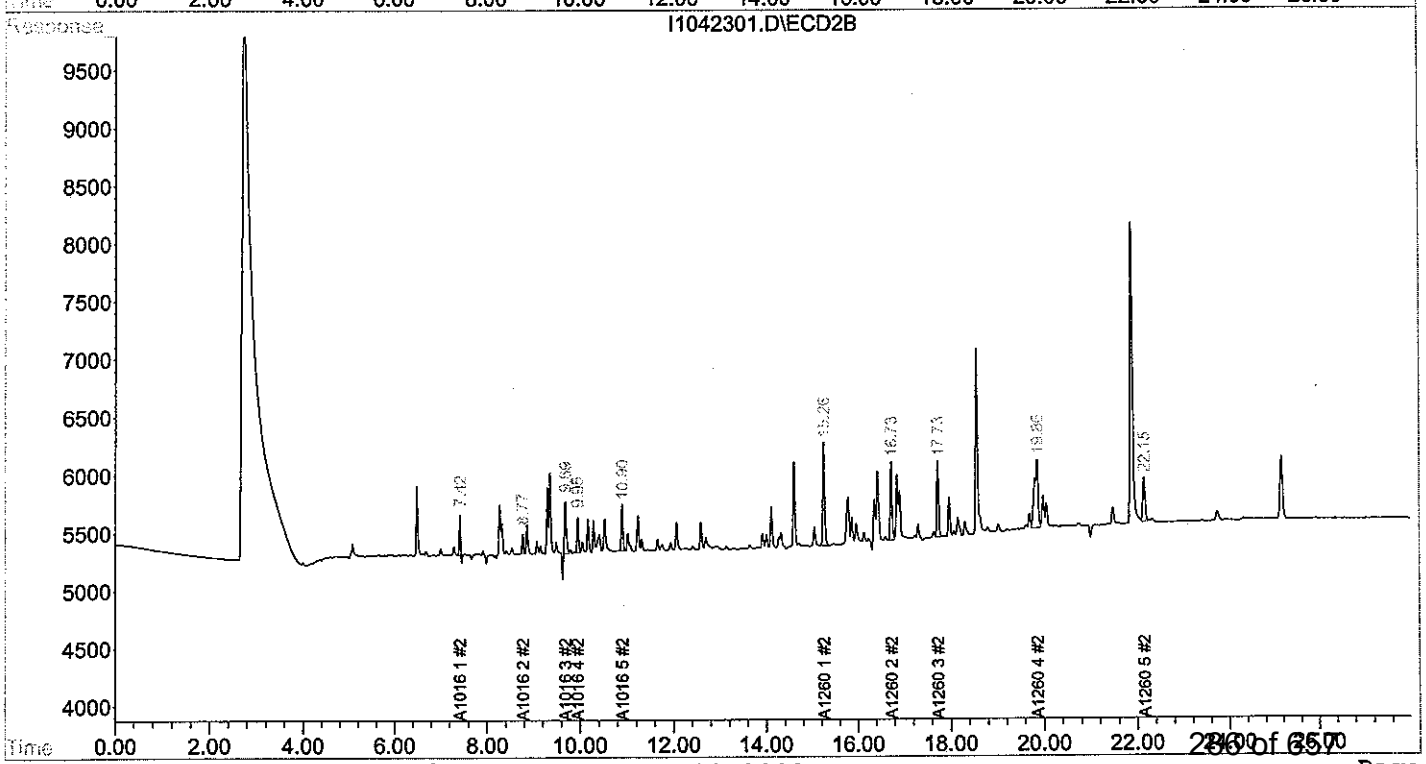
Quantitation Report

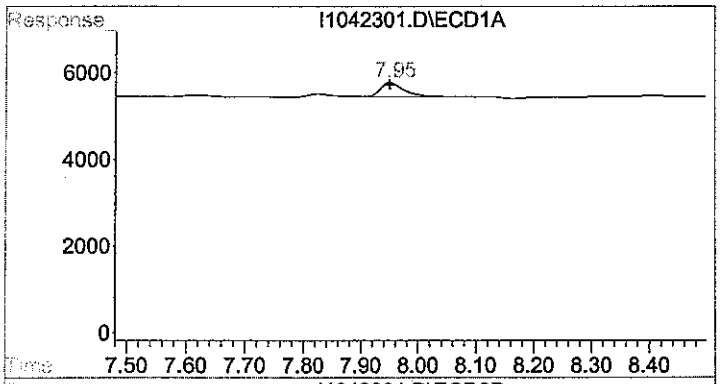
Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 3:58 pm Operator:
Sample : I1042301 Inst : HP ECD2
Misc : PW120407A 20PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

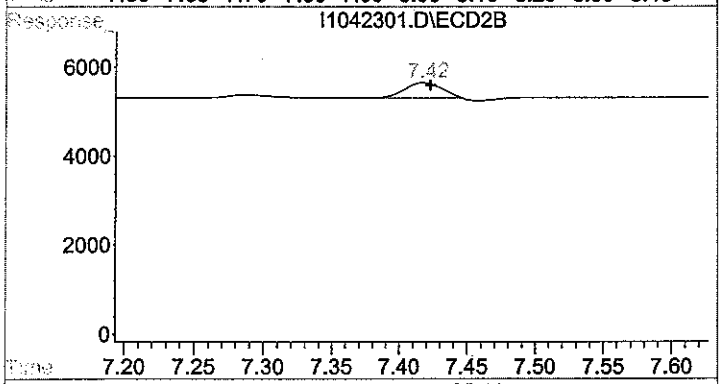






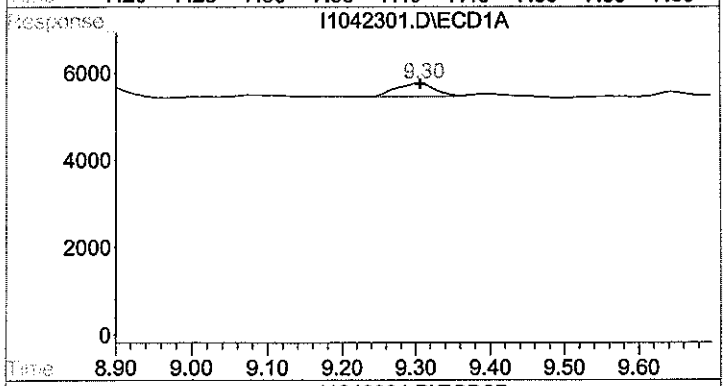
#2 A1016 1

R.T.: 7.951 min
Delta R.T.: 0.001 min
Response: 9445
Conc: 10.80 ug/L



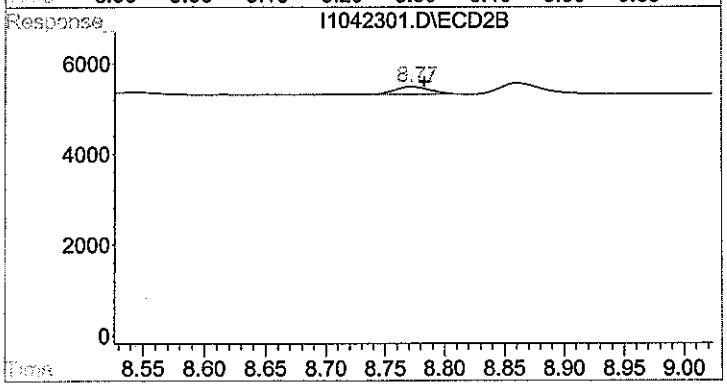
#2 A1016 1

R.T.: 7.417 min
Delta R.T.: -0.007 min
Response: 6644
Conc: 4.66 ug/L m



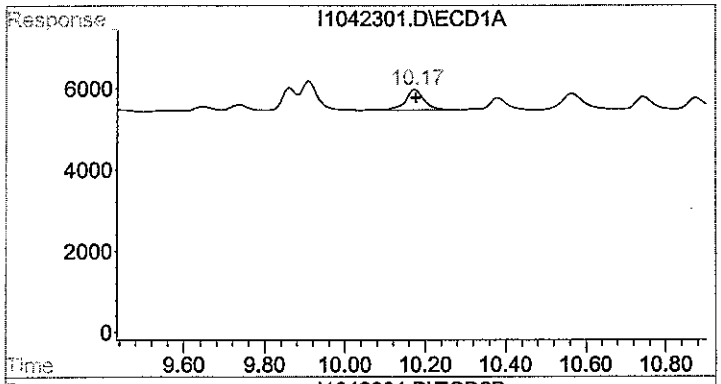
#3 A1016 2

R.T.: 9.304 min
Delta R.T.: -0.002 min
Response: 11110
Conc: 13.75 ug/L



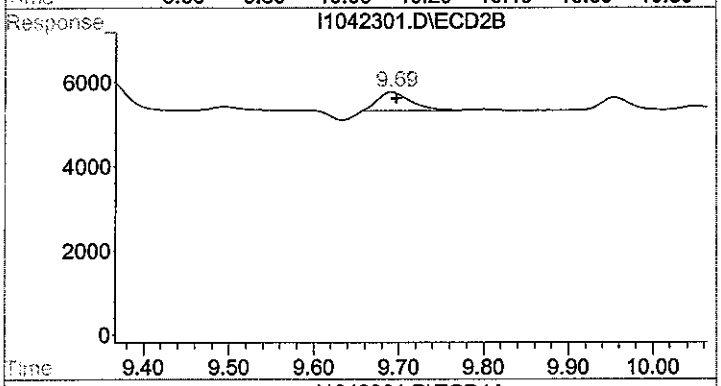
#3 A1016 2

R.T.: 8.773 min
Delta R.T.: -0.010 min
Response: 3588
Conc: 12.87 ug/L m



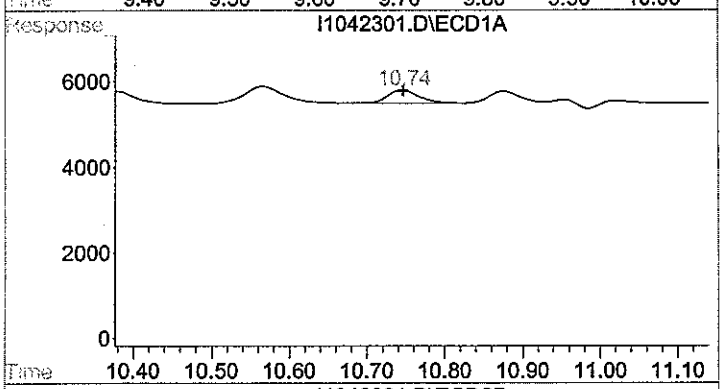
#4 A1016 3

R.T.: 10.174 min
Delta R.T.: -0.003 min
Response: 16950
Conc: 5.74 ug/L



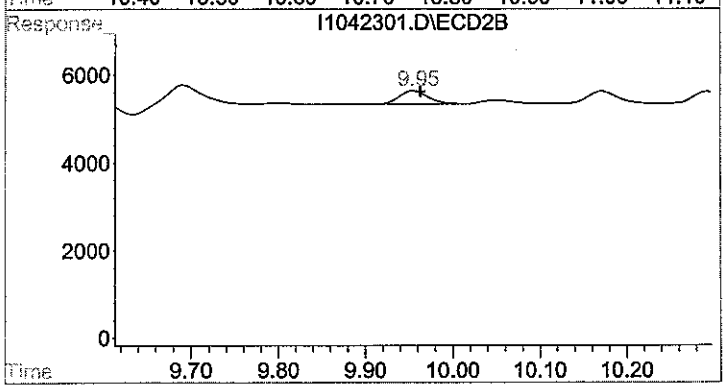
#4 A1016 3

R.T.: 9.690 min
Delta R.T.: -0.007 min
Response: 12500
Conc: 5.36 ug/L m



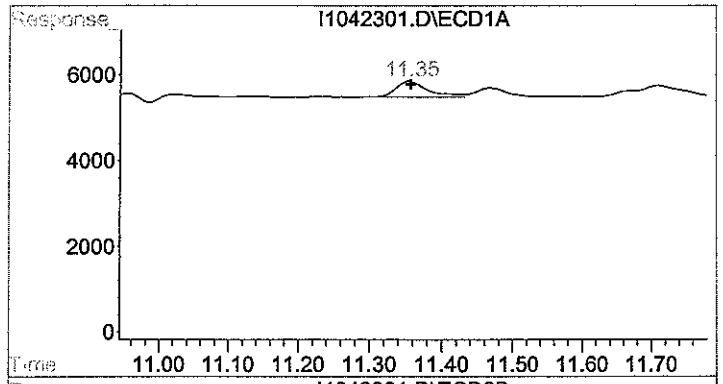
#5 A1016 4

R.T.: 10.746 min
Delta R.T.: 0.000 min
Response: 8591
Conc: 1.30 ug/L



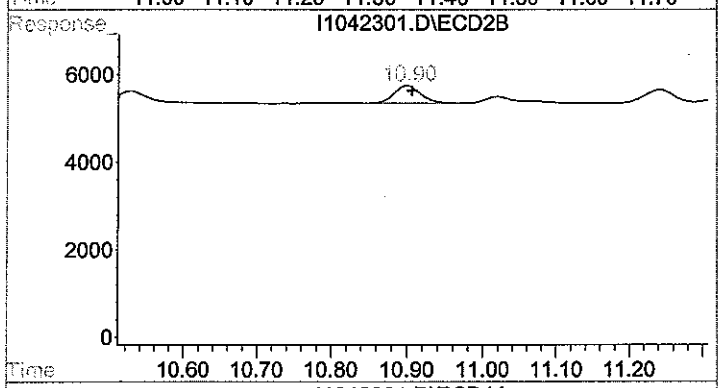
#5 A1016 4

R.T.: 9.953 min
Delta R.T.: -0.010 min
Response: 7078
Conc: 8.69 ug/L m



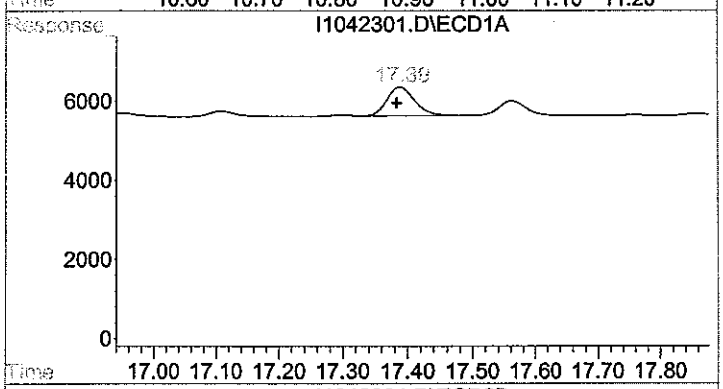
#6 A1016 5

R.T.: 11.353 min
Delta R.T.: -0.004 min
Response: 11386
Conc: 12.29 ug/L m



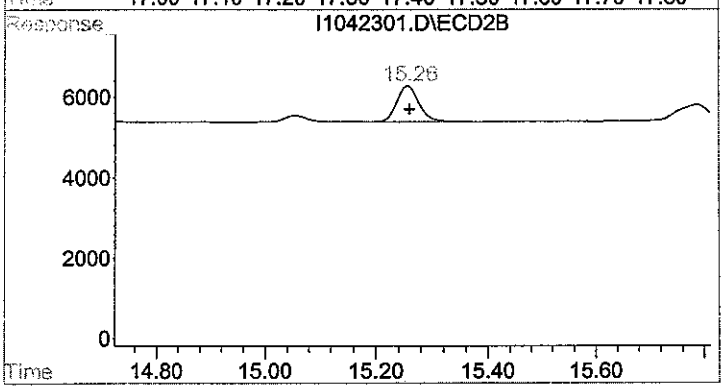
#6 A1016 5

R.T.: 10.900 min
Delta R.T.: -0.007 min
Response: 9904
Conc: 5.83 ug/L m



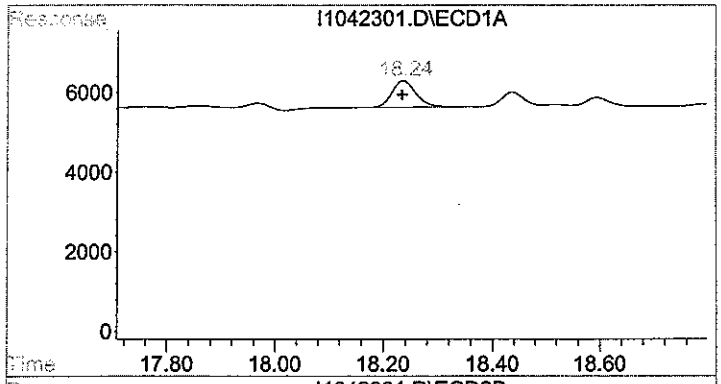
#7 A1260 1

R.T.: 17.389 min
Delta R.T.: 0.006 min
Response: 21224
Conc: 6.49 ug/L



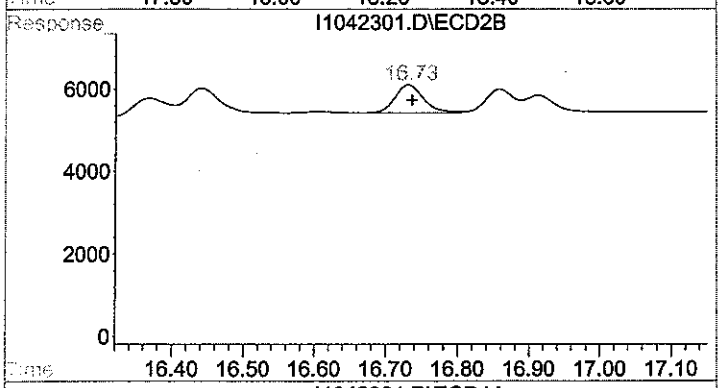
#7 A1260 1

R.T.: 15.257 min
Delta R.T.: -0.003 min
Response: 24630
Conc: 5.44 ug/L m



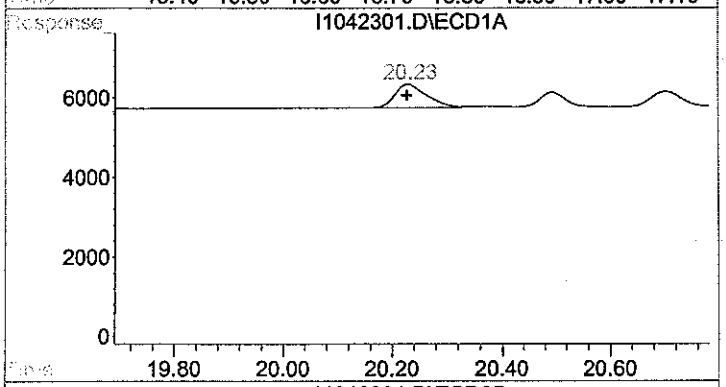
#8 A1260 2

R.T.: 18.237 min
Delta R.T.: 0.002 min
Response: 20866
Conc: 10.80 ug/L m



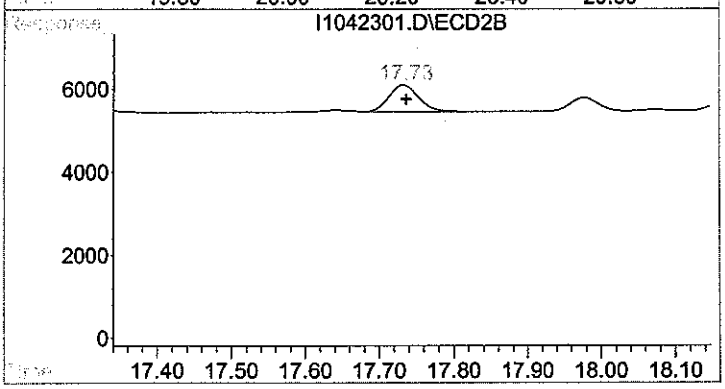
#8 A1260 2

R.T.: 16.730 min
Delta R.T.: -0.007 min
Response: 18608
Conc: 4.24 ug/L m



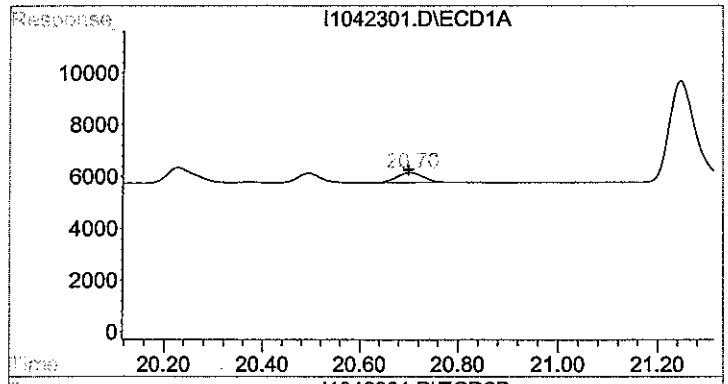
#9 A1260 3

R.T.: 20.227 min
Delta R.T.: 0.000 min
Response: 24020
Conc: 15.72 ug/L m



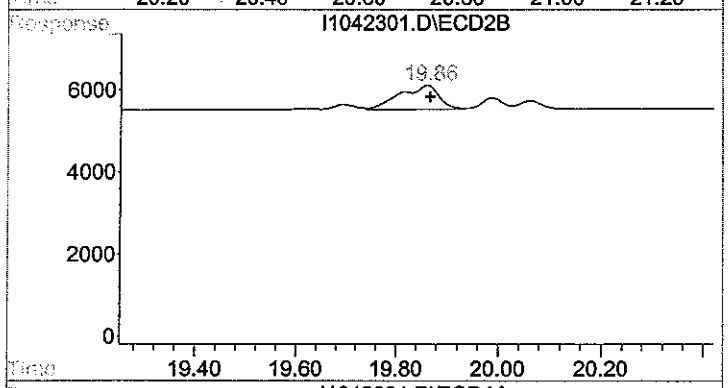
#9 A1260 3

R.T.: 17.733 min
Delta R.T.: -0.003 min
Response: 18224
Conc: 8.15 ug/L m



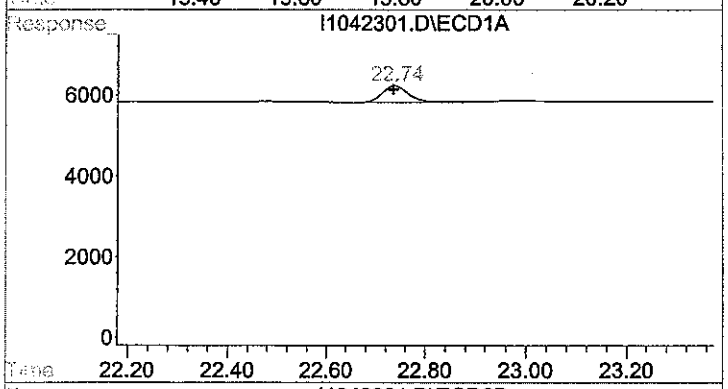
#10 A1260 4

R.T.: 20.703 min
Delta R.T.: 0.003 min
Response: 14532
Conc: 16.66 ug/L



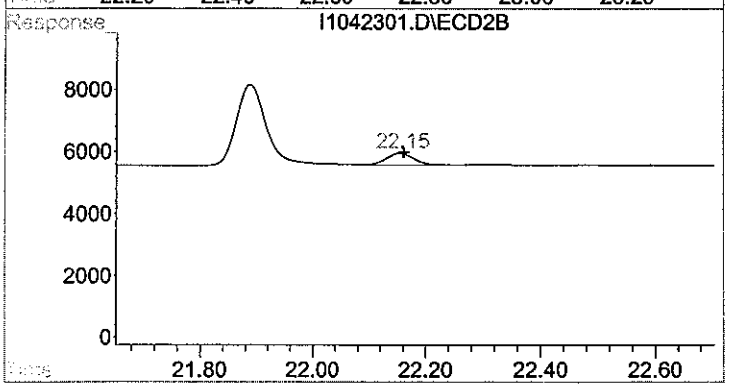
#10 A1260 4

R.T.: 19.861 min
Delta R.T.: -0.006 min
Response: 31969
Conc: 11.57 ug/L



#11 A1260 5

R.T.: 22.737 min
Delta R.T.: 0.000 min
Response: 15280
Conc: 16.73 ug/L m



#11 A1260 5

R.T.: 22.156 min
Delta R.T.: -0.006 min
Response: 13087
Conc: 11.18 ug/L

Quantitation Report (QT Reviewed)

JBS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD2B.CH
Acq On : 23 Apr 2008 4:29 pm Operator:
Sample : I1042302 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.26	6.49	18848	18095	0.892m	0.497m	#
Spiked Amount 100.000 Range 30 - 150 Recovery =					0.89%#	0.50%#	
12) s DCB - Surrogate	26.28	25.17	33958	28816	0.246	763.961	#
Spiked Amount 100.000 Range 30 - 150 Recovery =					0.25%#	763.96%#	
Target Compounds							
2) L1 A1016 1	7.95	7.42	12610	10648	19.064	17.998 (C)	
3) L1 A1016 2	9.30	8.77	14968	5356	21.691m	23.699m	
4) L1 A1016 3	10.17	9.69	22550	16808	15.514m	14.795	
5) L1 A1016 4	10.75	9.96	11721	9192	10.134	16.337	#
6) L1 A1016 5	11.36	10.90	14488	13272	19.144	15.545m	
Sum A1016 1			76337	55277	85.547	88.375	
Average A1016 1					17.109	17.675	
7) L7 A1260 1	17.39	15.26	29629	31422	16.789	14.300 (C)	
8) L7 A1260 2	18.24	16.73	26410	23876	17.728	12.860	#
9) L7 A1260 3	20.23	17.74	30502	23973	22.038	16.970	
10) L7 A1260 4	20.70	19.86	19250	39084	23.543	17.749m	
11) L7 A1260 5	22.74	22.16	18626	16280	21.748	17.521	
Sum A1260 1			124416	134635	101.845	79.400	
Average A1260 1					20.369	15.880	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

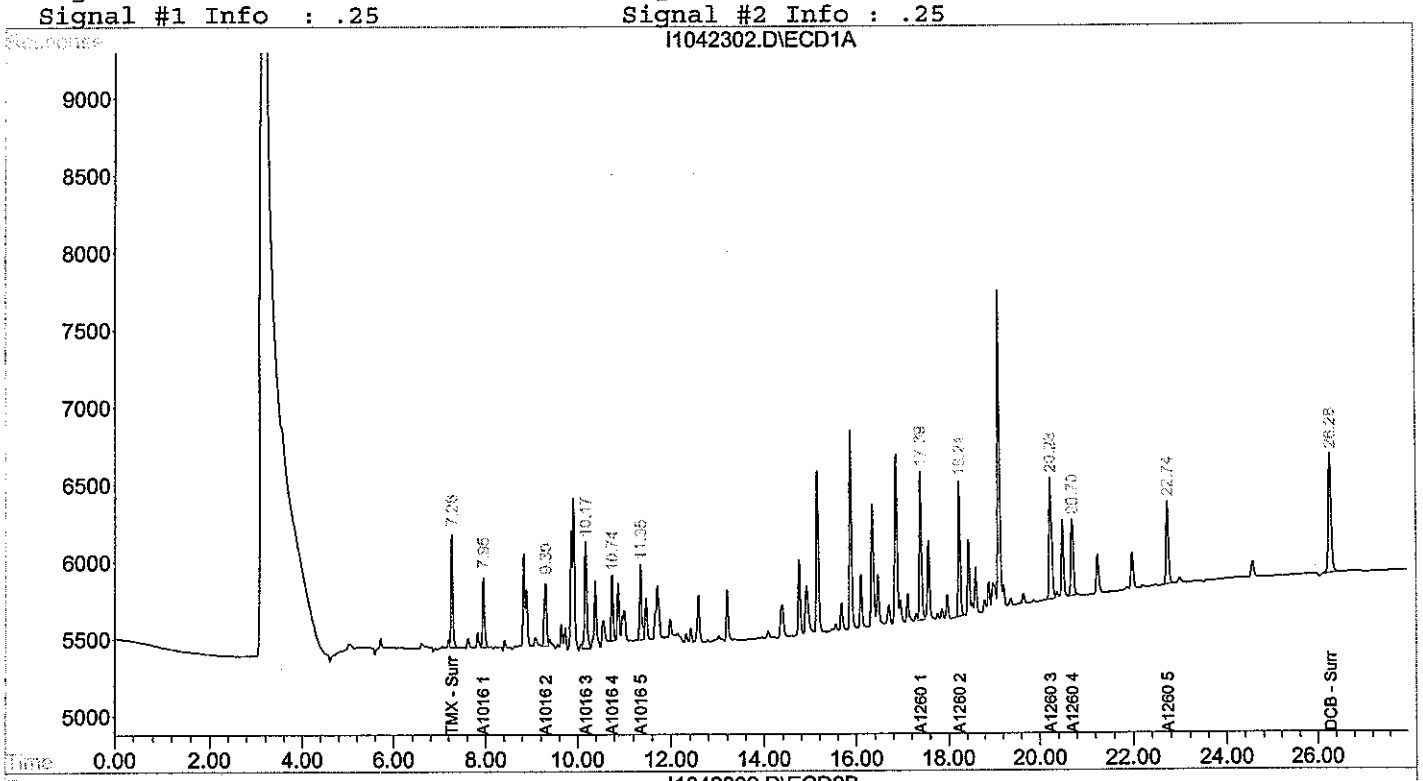
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

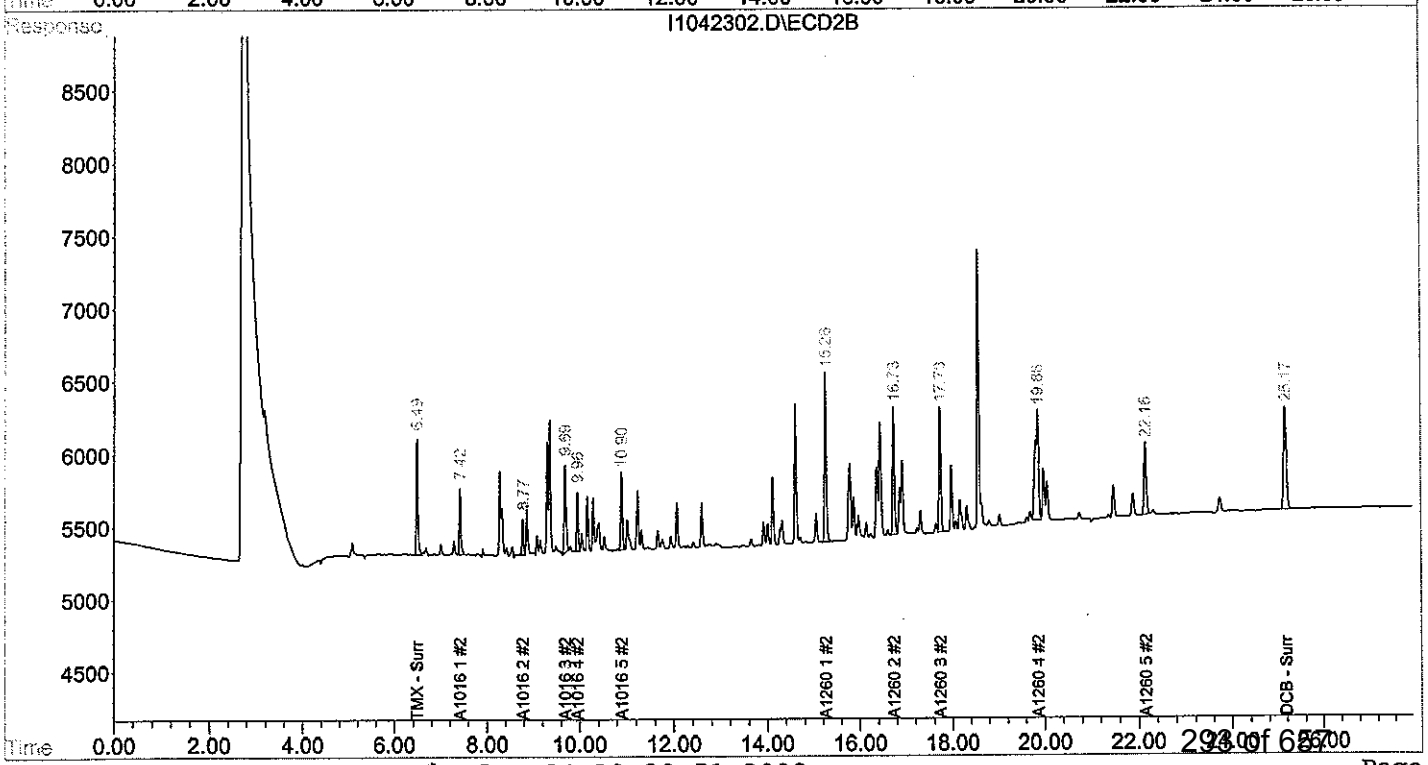
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD2B.CH
Acq On : 23 Apr 2008 4:29 pm Operator:
Sample : I1042302 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

D35 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD2B.CH
Acq On : 23 Apr 2008 5:01 pm Operator:
Sample : I1042303 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.26	6.49	36408	32932	2.077m	1.899
Spiked Amount 100.000 Range 30 - 150 Recovery =					2.08%#	1.90%#
12) s DCB - Surrogate	26.28	25.18	63644	53860	1.564	1.476
Spiked Amount 100.000 Range 30 - 150 Recovery =					1.56%#	1.48%#
Target Compounds						
2) L1 A1016 1	7.95	7.42	23330	20404	55.760	57.421 (C)
3) L1 A1016 2	9.31	8.78	28624	9244	57.815m	53.497m
4) L1 A1016 3	10.18	9.69	41508	32202	46.067m	56.366m
5) L1 A1016 4	10.75	9.96	24496	17562	54.726m	54.867m
6) L1 A1016 5	11.36	10.90	27606	24380	52.744m	53.349m
Sum A1016 1			145564	103792	267.113	275.501
Average A1016 1					53.423	55.100
7) L7 A1260 1	17.39	15.26	54575	56569	48.176	50.071 (C)
8) L7 A1260 2	18.24	16.73	51350	44166	55.042m	50.150
9) L7 A1260 3	20.23	17.74	58812	44494	55.320m	52.486
10) L7 A1260 4	20.70	19.86	38560	73940	55.873m	54.395m
11) L7 A1260 5	22.74	22.16	37358	31276	58.975m	56.928
Sum A1260 1			240655	250444	273.386	264.030
Average A1260 1					54.677	52.806
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

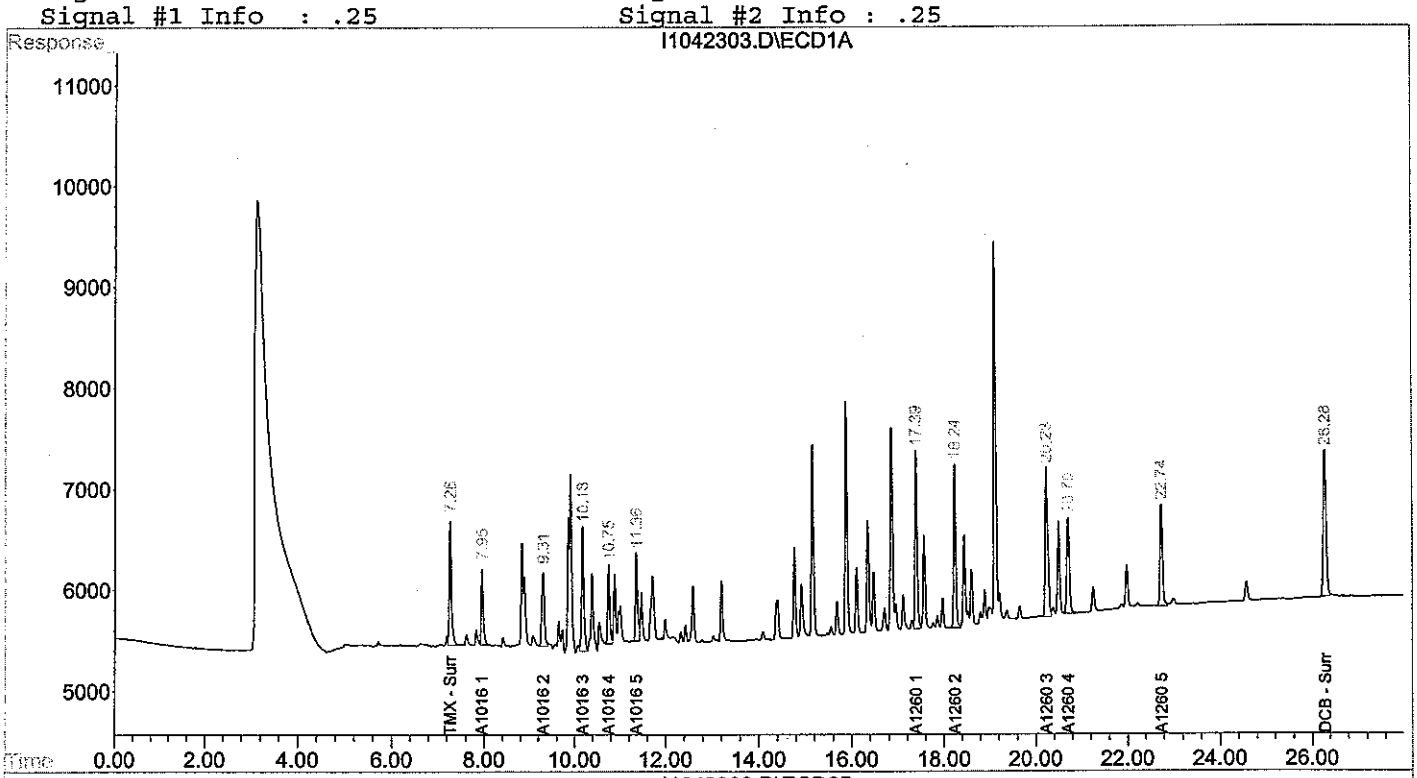
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

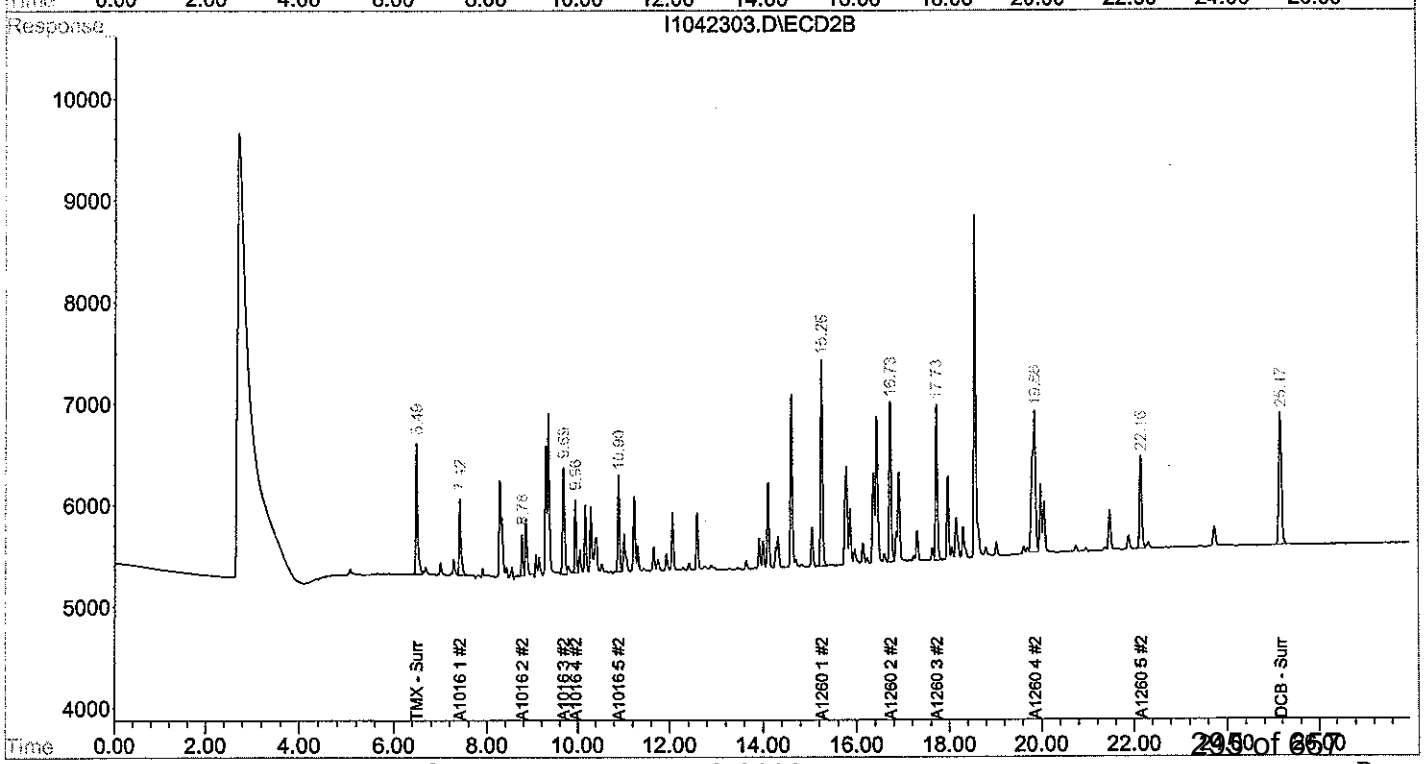
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD2B.CH
Acq On : 23 Apr 2008 5:01 pm Operator:
Sample : I1042303 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD2B.CH
Acq On : 23 Apr 2008 5:32 pm Operator:
Sample : I1042304 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:14 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	73464	64497	4.314	4.454m
Spiked Amount 100.000 Range 30 - 150 Recovery =					4.31%#	4.45%#
12) s DCB - Surrogate	26.29	25.17	129810	105528	3.972	4.194
Spiked Amount 100.000 Range 30 - 150 Recovery =					3.97%#	4.19%#
Target Compounds						
2) L1 A1016 1	7.95	7.42	47008	38856	114.724	117.647m(C)
3) L1 A1016 2	9.31	8.78	59166	19942	118.846m	115.865m
4) L1 A1016 3	10.18	9.69	77754	61280	104.723	116.879m
5) L1 A1016 4	10.75	9.96	47192	34924	115.274m	113.748m
6) L1 A1016 5	11.36	10.90	54734	46172	109.839	113.649m
Sum A1016 1			285855	201174	563.406	577.787
Average A1016 1					112.681	115.557
7) L7 A1260 1	17.39	15.26	105800	106724	101.747	110.218m(C)
8) L7 A1260 2	18.24	16.73	98551	84732	107.399	106.590
9) L7 A1260 3	20.23	17.74	117208	85900	103.674	112.177
10) L7 A1260 4	20.71	19.86	75892	145530	102.148	109.154m
11) L7 A1260 5	22.74	22.16	72990	62351	103.392	111.209
Sum A1260 1			470442	485237	518.360	549.348
Average A1260 1					103.672	109.870
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

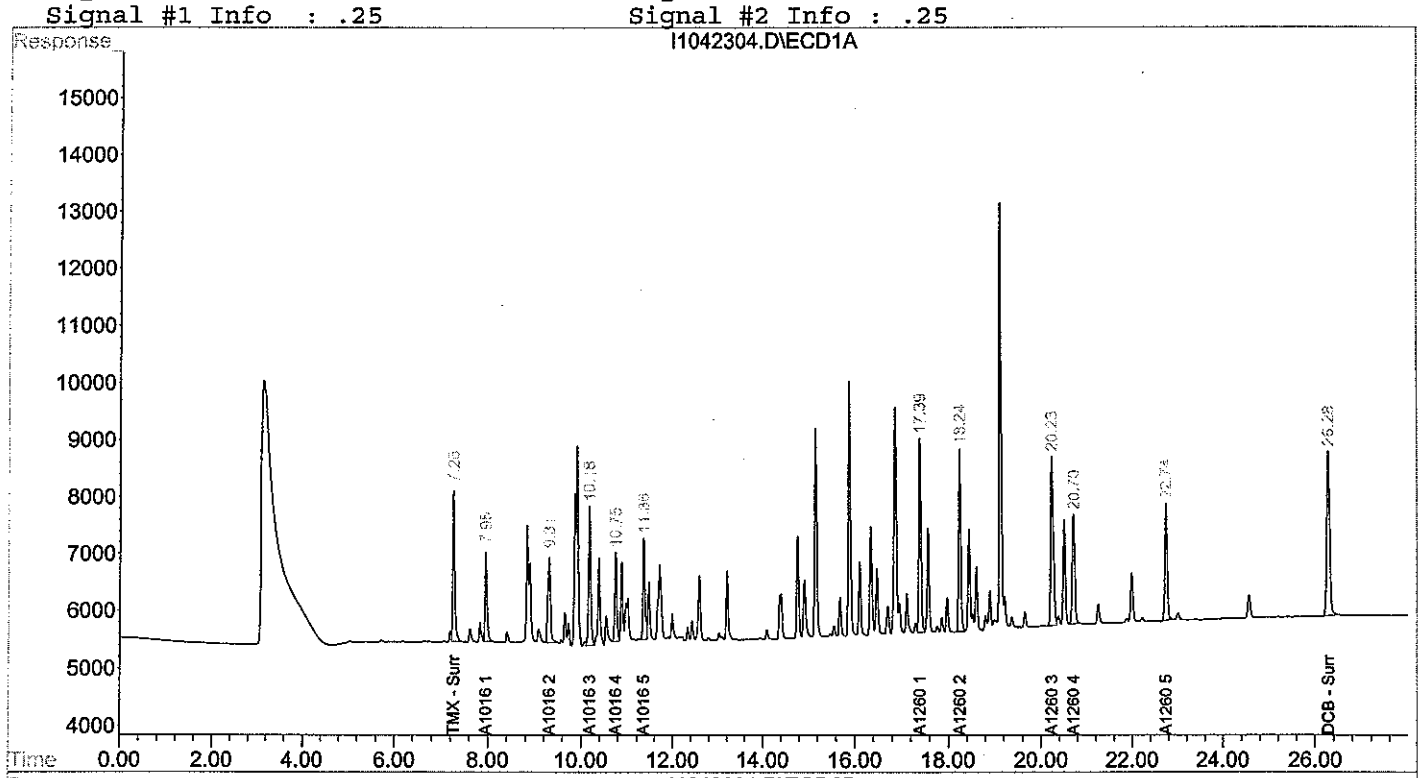
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

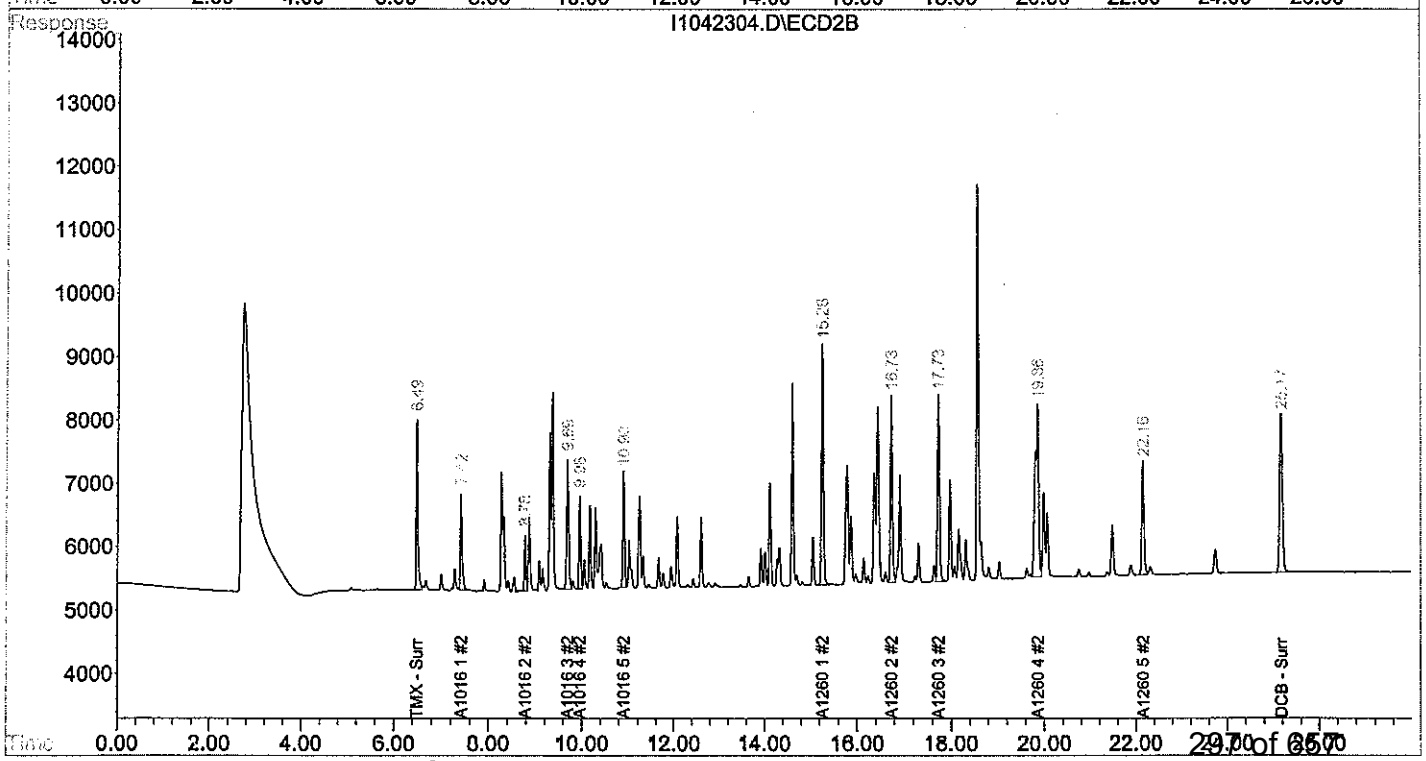
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD2B.CH
Acq On : 23 Apr 2008 5:32 pm Operator:
Sample : I1042304 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:14 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J35 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD2B.CH
Acq On : 23 Apr 2008 6:03 pm Operator:
Sample : I1042305 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	165810	139650	9.938	10.601
Spiked Amount 100.000 Range 30 - 150 Recovery =					9.94%#	10.60%#
12) s DCB - Surrogate	26.30	25.18	289314	222627	9.850	10.443
Spiked Amount 100.000 Range 30 - 150 Recovery =					9.85%#	10.44%#
Target Compounds						
2) L1 A1016 1	7.96	7.42	101546	81320	254.609	260.699m(C)
3) L1 A1016 2	9.31	8.78	127008	44178	258.279m	261.328
4) L1 A1016 3	10.18	9.69	157369	127584	237.226	258.997m
5) L1 A1016 4	10.75	9.96	99290	75388	258.721	254.499m
6) L1 A1016 5	11.36	10.90	119034	97528	248.802	260.252m
Sum A1016 1			604247	425998	1257.638	1295.774
Average A1016 1					251.528	259.155
7) L7 A1260 1	17.40	15.26	224584	217288	229.377	247.152m(C)
8) L7 A1260 2	18.25	16.74	212854	175456	237.619	236.857
9) L7 A1260 3	20.24	17.74	261332	177808	225.750	248.583
10) L7 A1260 4	20.71	19.87	170397	311038	221.844	239.208
11) L7 A1260 5	22.75	22.16	167397	134025	223.630	239.748
Sum A1260 1			1036564	1015616	1138.220	1211.548
Average A1260 1					227.644	242.310
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

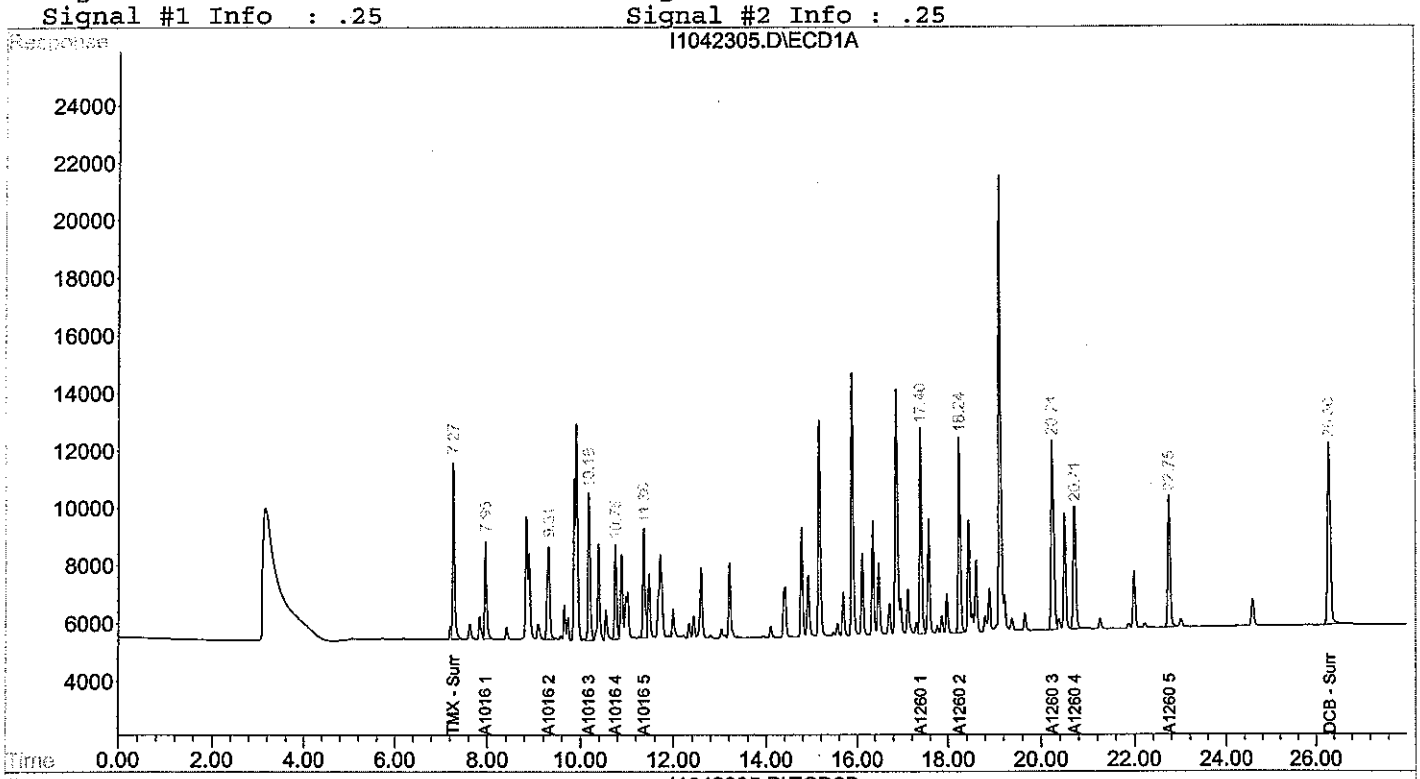
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

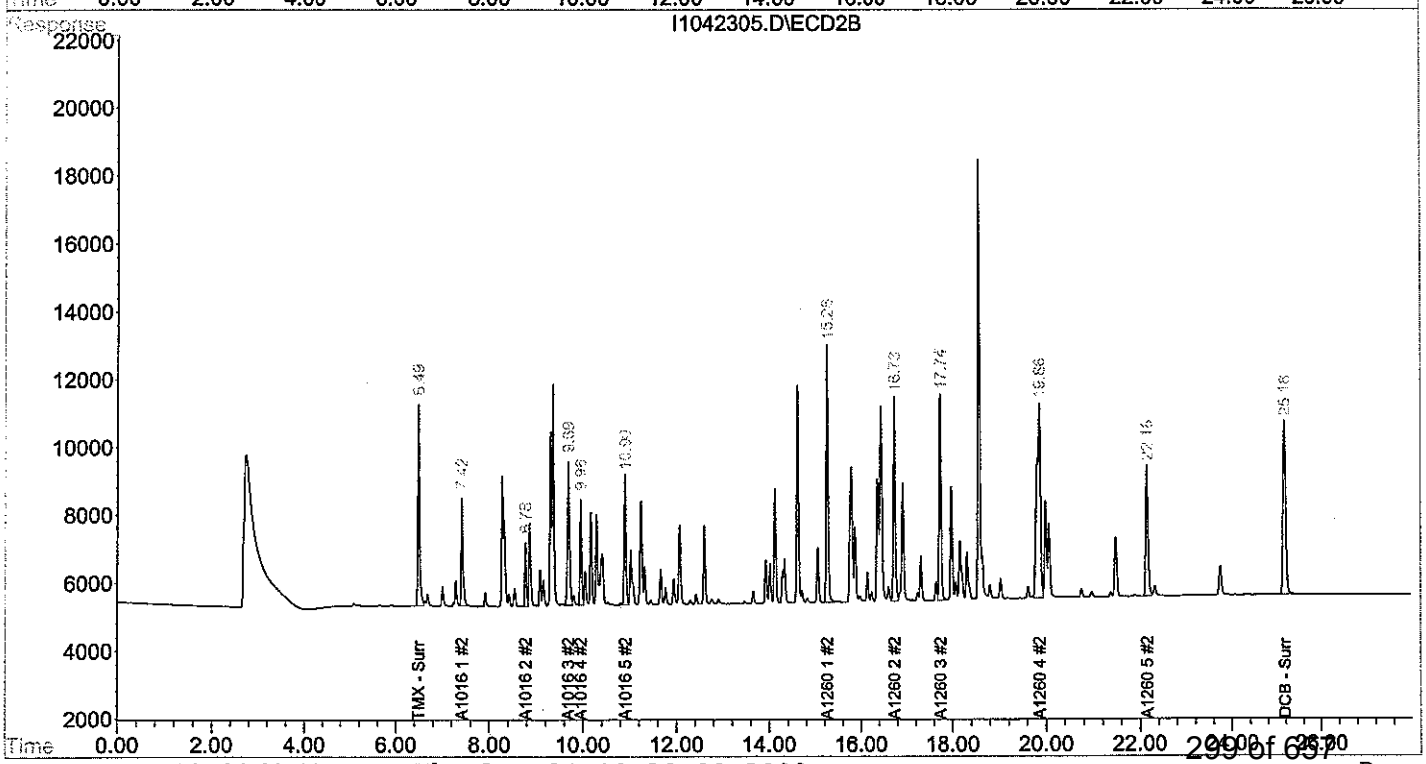
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD2B.CH
Acq On : 23 Apr 2008 6:03 pm Operator:
Sample : I1042305 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JJS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD2B.CH
Acq On : 23 Apr 2008 6:35 pm Operator:
Sample : I1042306 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	324833	262036	19.795	20.818
Spiked Amount 100.000 Range 30 - 150 Recovery =					19.80%#	20.82%#
12) s DCB - Surrogate	26.30	25.18	551189	407037	19.744	20.550
Spiked Amount 100.000 Range 30 - 150 Recovery =					19.74%#	20.55%#
Target Compounds						
2) L1 A1016 1	7.96	7.42	188675	147512	491.553	497.947m(C)
3) L1 A1016 2	9.31	8.78	218396	71436	455.566m	432.642m
4) L1 A1016 3	10.18	9.70	290580	229486	471.738	490.188m
5) L1 A1016 4	10.75	9.96	185250	138190	511.130m	483.872m
6) L1 A1016 5	11.36	10.90	221808	173208	482.884m	489.466m
Sum A1016 1			1104709	759832	2412.871	2394.113
Average A1016 1					482.574	478.823
7) L7 A1260 1	17.40	15.26	407783	385445	436.734	468.612 (C)
8) L7 A1260 2	18.25	16.74	395535	307536	457.123	437.938m
9) L7 A1260 3	20.24	17.74	498249	320720	435.800	472.845
10) L7 A1260 4	20.72	19.87	324563	566701	425.764	450.782
11) L7 A1260 5	22.76	22.16	321435	247702	428.617	454.364
Sum A1260 1			1947565	1828103	2184.038	2284.541
Average A1260 1					436.808	456.908
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

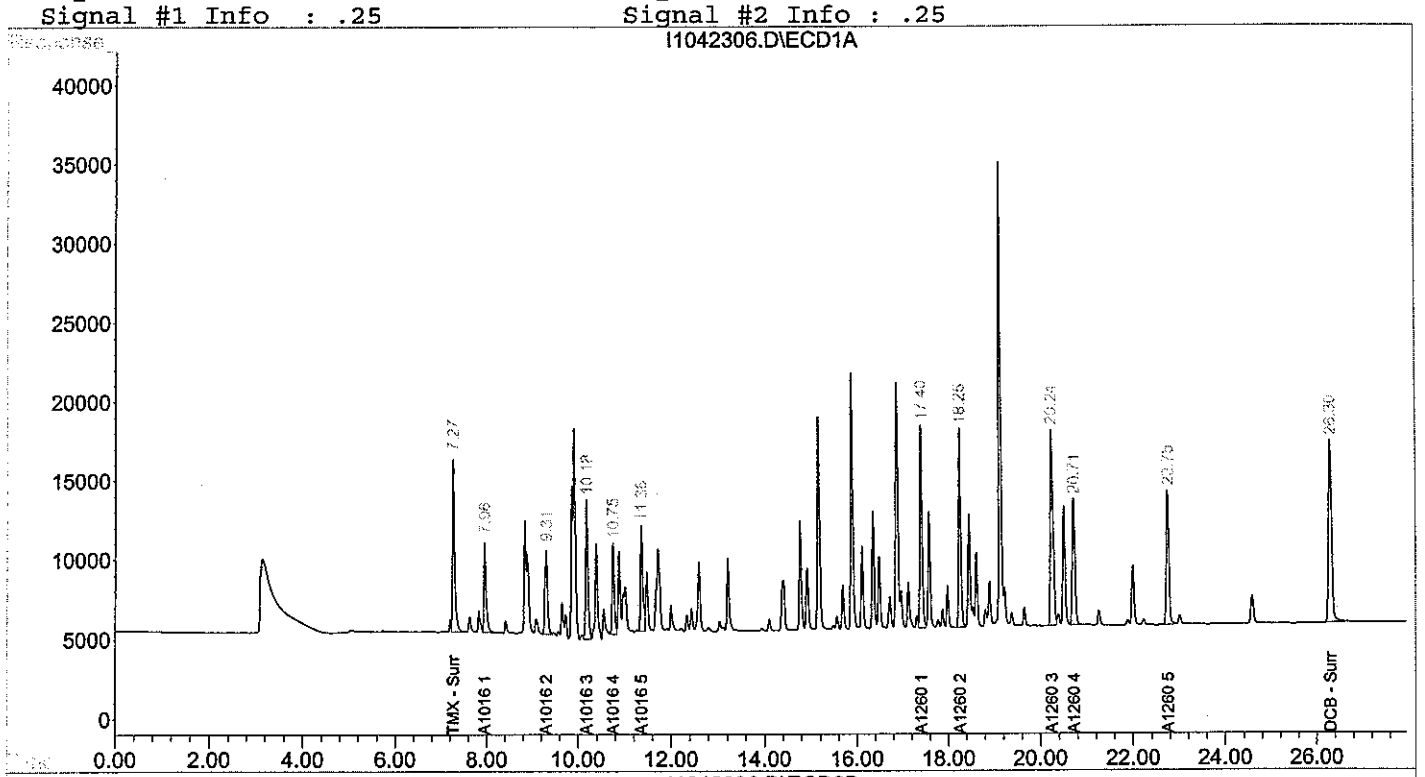
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

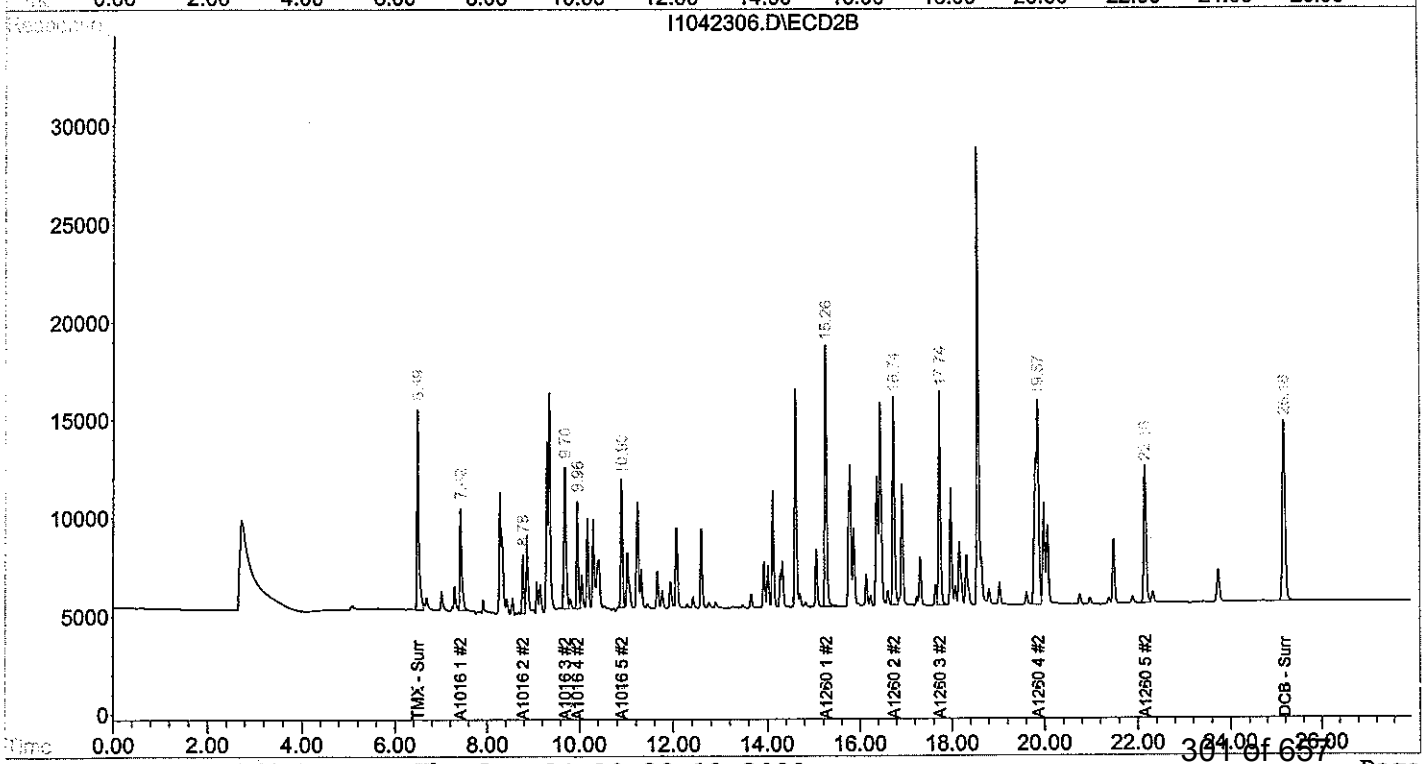
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD2B.CH
Acq On : 23 Apr 2008 6:35 pm Operator:
Sample : I1042306 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD2B.CH
Acq On : 23 Apr 2008 7:06 pm Operator:
Sample : I1042307 Inst : HP ECD2
Misc : PW030508A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.27	6.49	652361	507628	40.841	42.170	
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.84%	42.17%	
12) s DCB - Surrogate	26.30	25.18	1056003	753303	39.771	40.523	
Spiked Amount 100.000 Range 30 - 150 Recovery =					39.77%	40.52%	
Target Compounds							
2) L1 A1016 1	7.96	7.42	343848	272508	967.860	1010.621	(C)
3) L1 A1016 2	9.31	8.78	456437	157972	1037.201	1048.668	
4) L1 A1016 3	10.18	9.70	536257	423158	959.739	986.042	
5) L1 A1016 4	10.75	9.96	315544	263108	943.390	990.473m	
6) L1 A1016 5	11.37	10.91	415471	321801	975.741	1000.999	
Sum A1016 1			2067557	1438547	4883.930	5036.803	
Average A1016 1					976.786	1007.361	
7) L7 A1260 1	17.40	15.26	750376	692547	868.503	928.458	(C)
8) L7 A1260 2	18.25	16.74	746730	565602	930.387	883.174	
9) L7 A1260 3	20.24	17.74	975159	593404	903.182	954.871	
10) L7 A1260 4	20.72	19.87	653343	1070452	905.613	916.789	
11) L7 A1260 5	22.76	22.16	634524	470822	887.235	925.206	
Sum A1260 1			3760131	3392827	4494.920	4608.497	
Average A1260 1					898.984	921.699	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

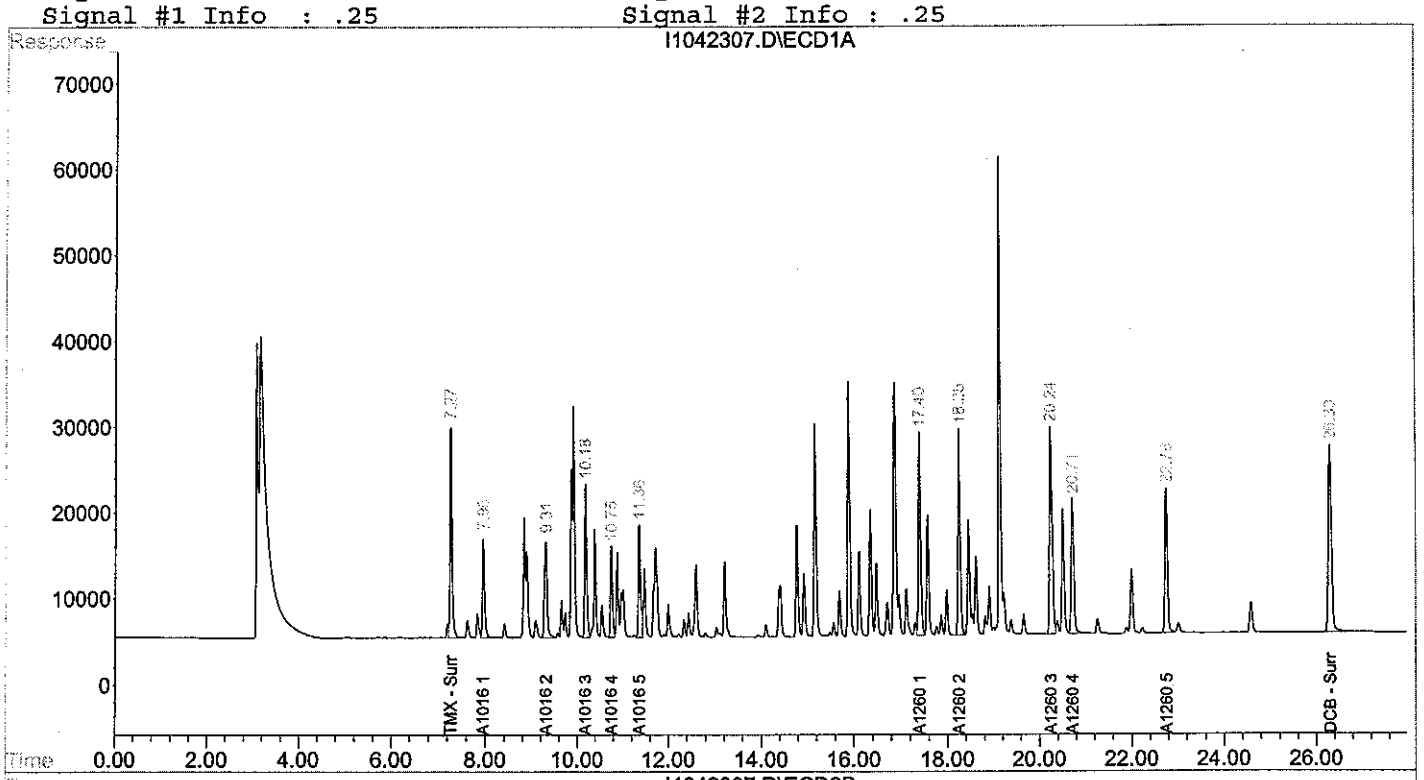
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

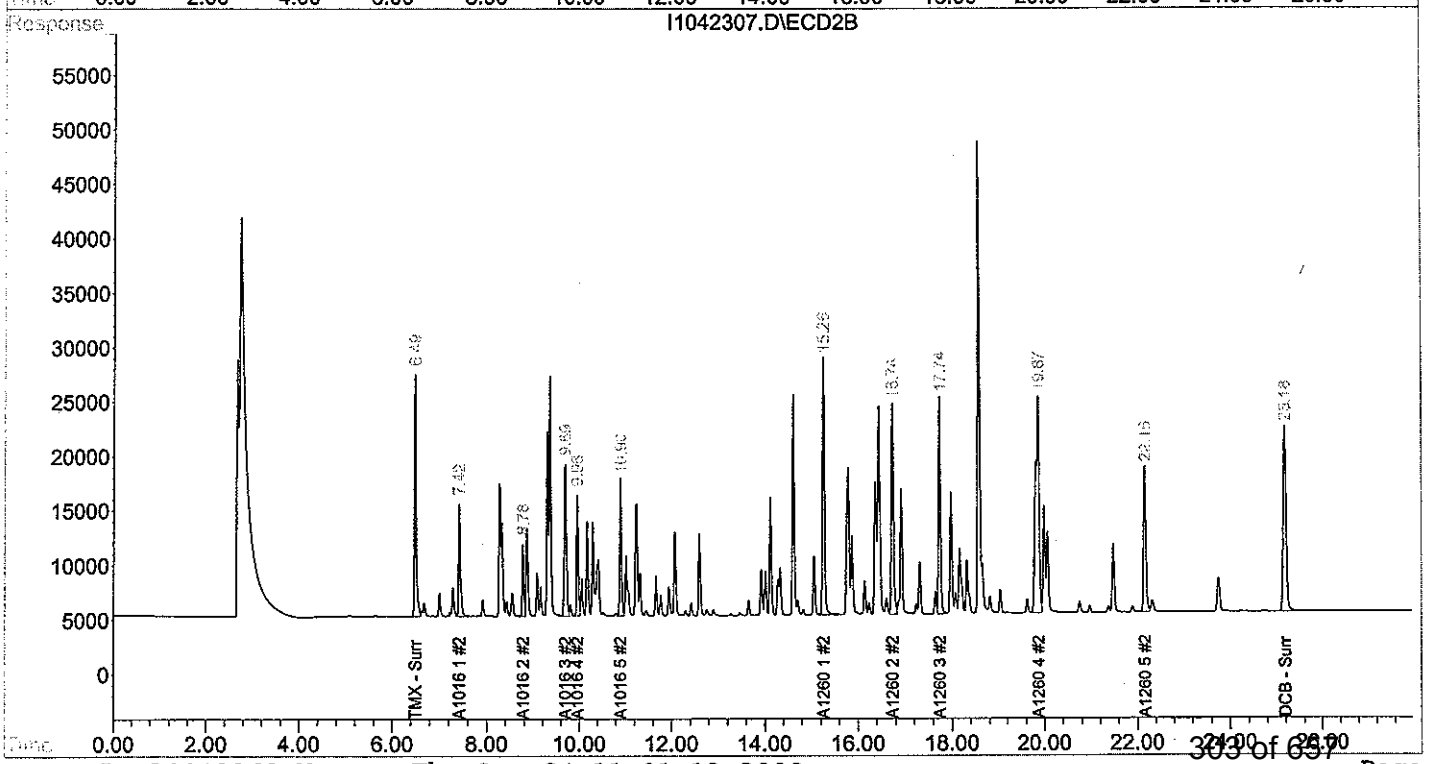
Quantitation Report

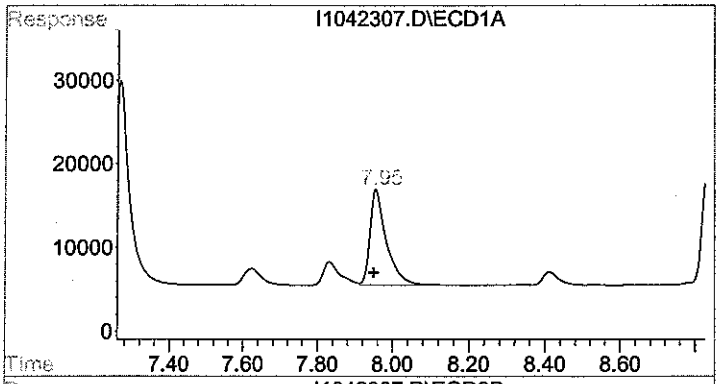
Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD2B.CH
Acq On : 23 Apr 2008 7:06 pm Operator:
Sample : I1042307 Inst : HP ECD2
Misc : PW030508A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

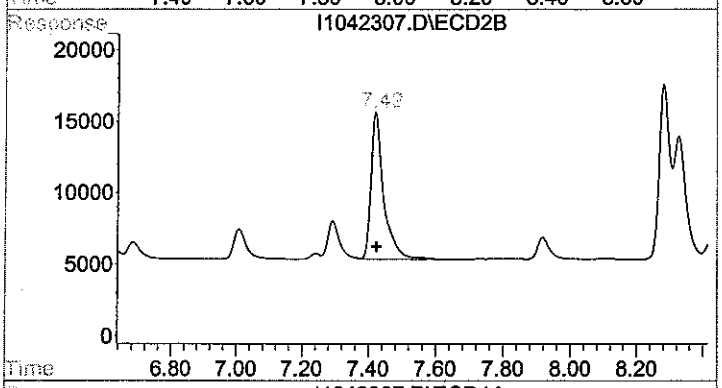






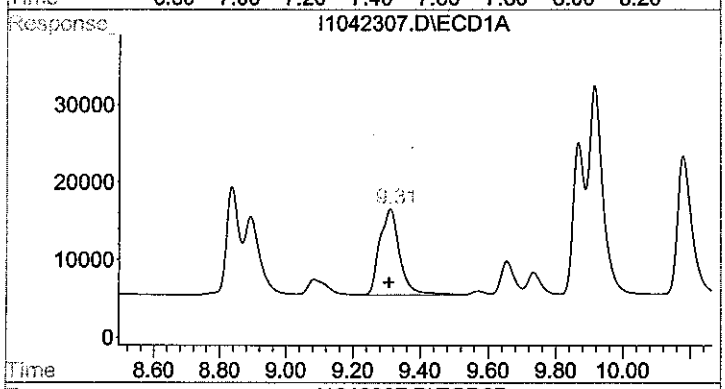
#2 A1016 1

R.T.: 7.958 min
Delta R.T.: 0.008 min
Response: 343848
Conc: 967.86 ug/L



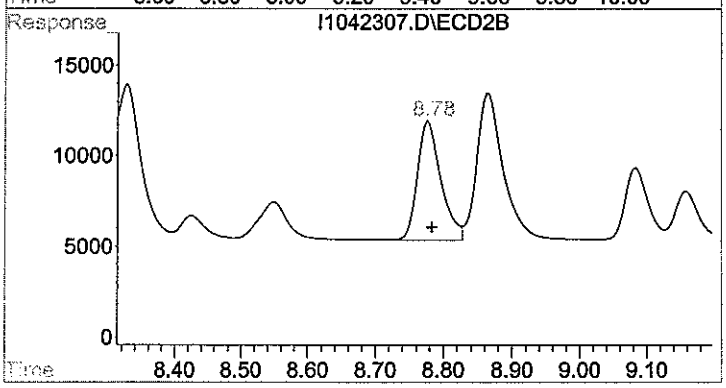
#2 A1016 1

R.T.: 7.421 min
Delta R.T.: -0.002 min
Response: 272508
Conc: 1010.62 ug/L



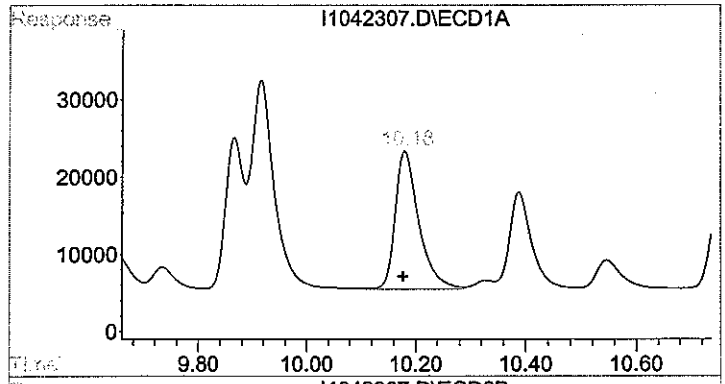
#3 A1016 2

R.T.: 9.310 min
Delta R.T.: 0.003 min
Response: 456437
Conc: 1037.20 ug/L



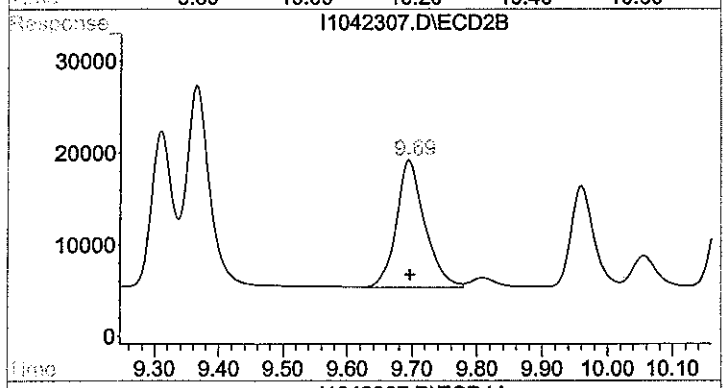
#3 A1016 2

R.T.: 8.778 min
Delta R.T.: -0.005 min
Response: 157972
Conc: 1048.67 ug/L



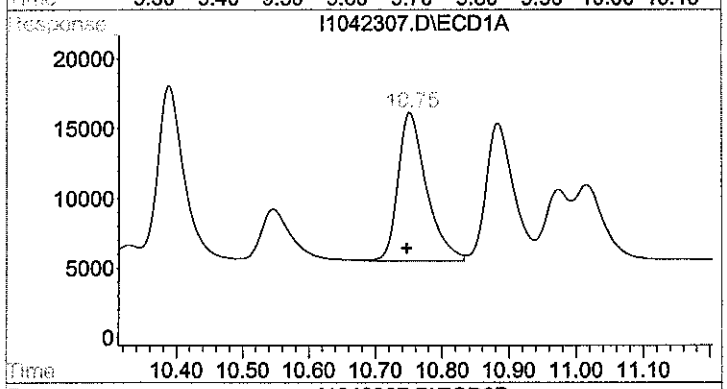
#4 A1016 3

R.T.: 10.183 min
Delta R.T.: 0.006 min
Response: 536257
Conc: 959.74 ug/L



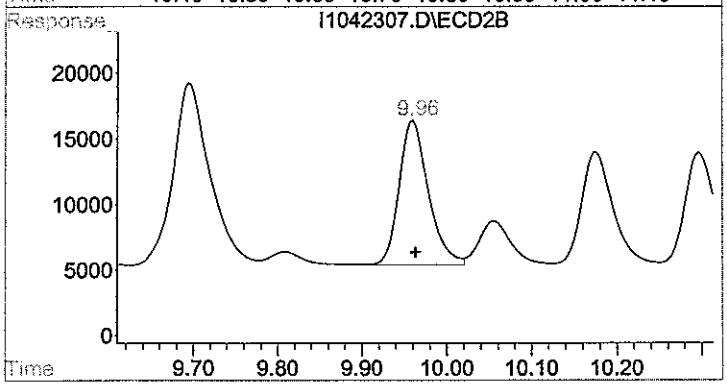
#4 A1016 3

R.T.: 9.696 min
Delta R.T.: 0.000 min
Response: 423158
Conc: 986.04 ug/L



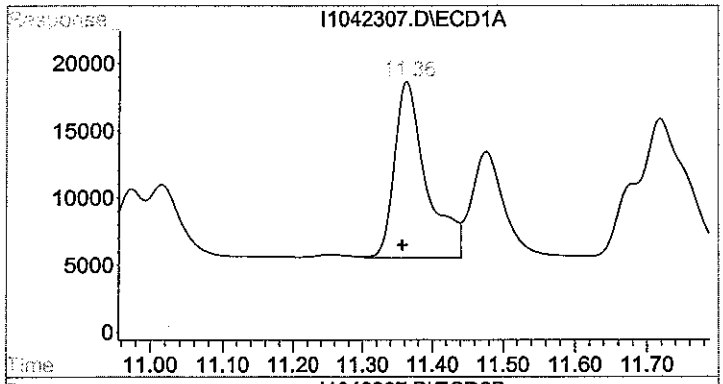
#5 A1016 4

R.T.: 10.754 min
Delta R.T.: 0.007 min
Response: 315544
Conc: 943.39 ug/L



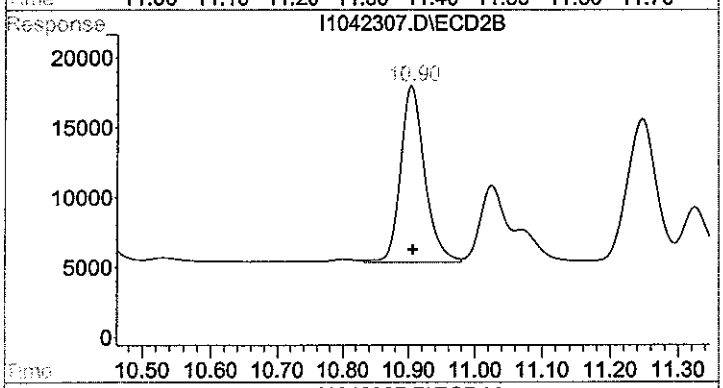
#5 A1016 4

R.T.: 9.960 min
Delta R.T.: -0.003 min
Response: 263108
Conc: 990.47 ug/L m



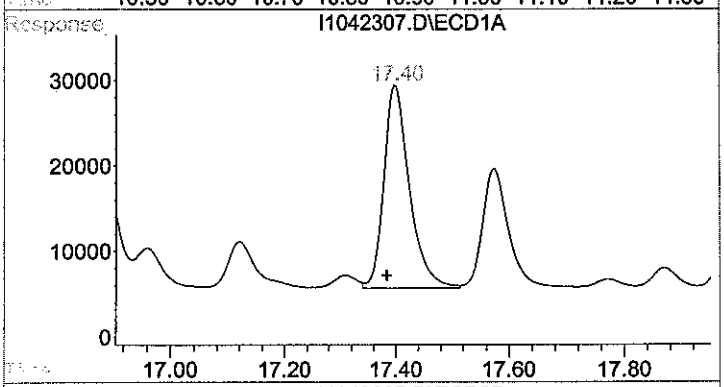
#6 A1016 5

R.T.: 11.365 min
Delta R.T.: 0.008 min
Response: 415471
Conc: 975.74 ug/L



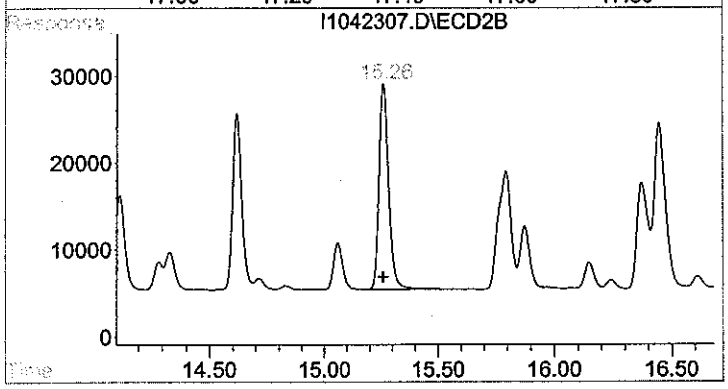
#6 A1016 5

R.T.: 10.905 min
Delta R.T.: -0.001 min
Response: 321801
Conc: 1001.00 ug/L



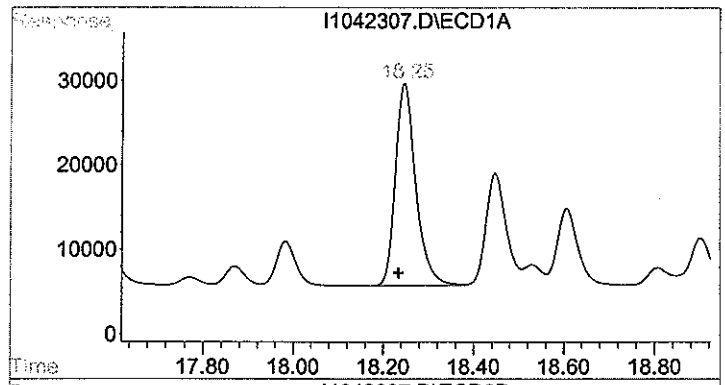
#7 A1260 1

R.T.: 17.400 min
Delta R.T.: 0.017 min
Response: 750376
Conc: 868.50 ug/L



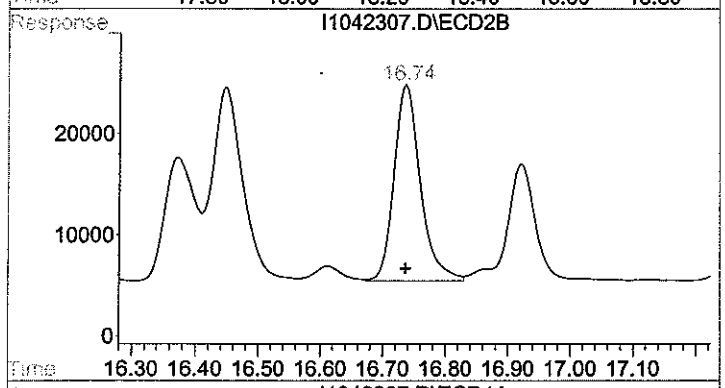
#7 A1260 1

R.T.: 15.263 min
Delta R.T.: 0.003 min
Response: 692547
Conc: 928.46 ug/L



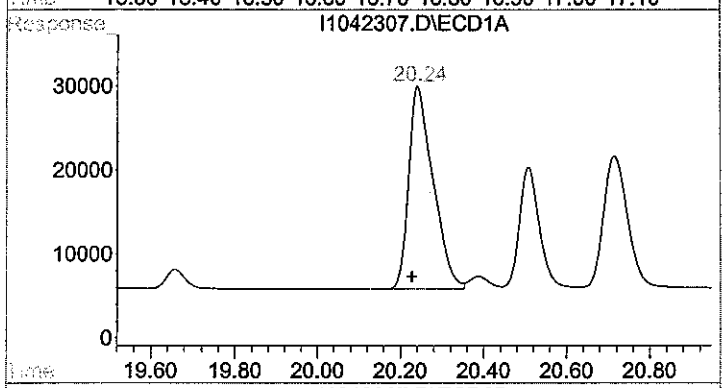
#8 A1260 2

R.T.: 18.248 min
Delta R.T.: 0.014 min
Response: 746730
Conc: 930.39 ug/L



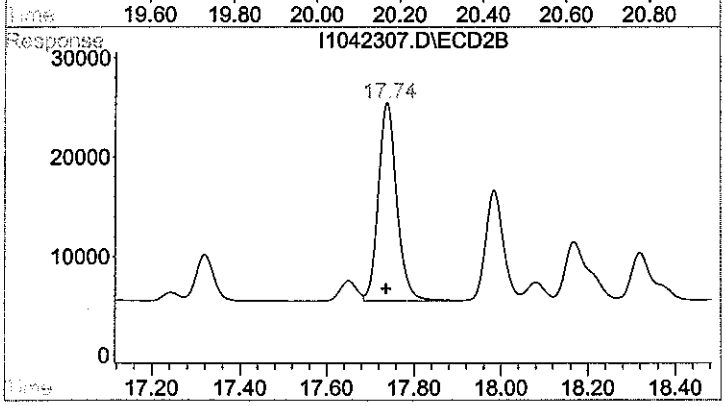
#8 A1260 2

R.T.: 16.738 min
Delta R.T.: 0.002 min
Response: 565602
Conc: 883.17 ug/L



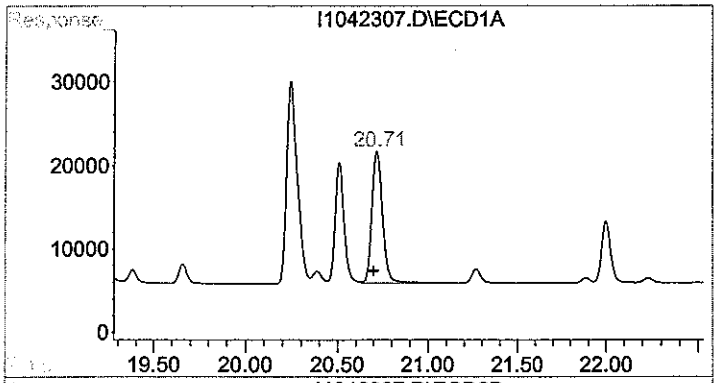
#9 A1260 3

R.T.: 20.244 min
Delta R.T.: 0.017 min
Response: 975159
Conc: 903.18 ug/L



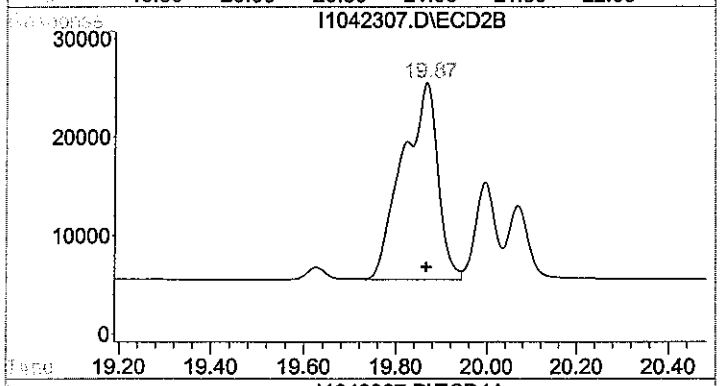
#9 A1260 3

R.T.: 17.740 min
Delta R.T.: 0.003 min
Response: 593404
Conc: 954.87 ug/L



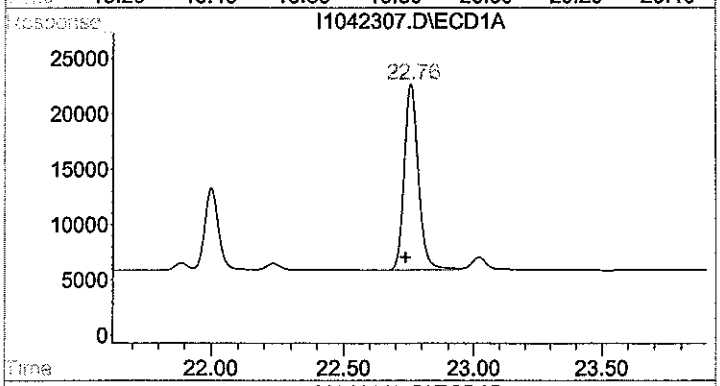
#10 A1260 4

R.T.: 20.717 min
Delta R.T.: 0.017 min
Response: 653343
Conc: 905.61 ug/L



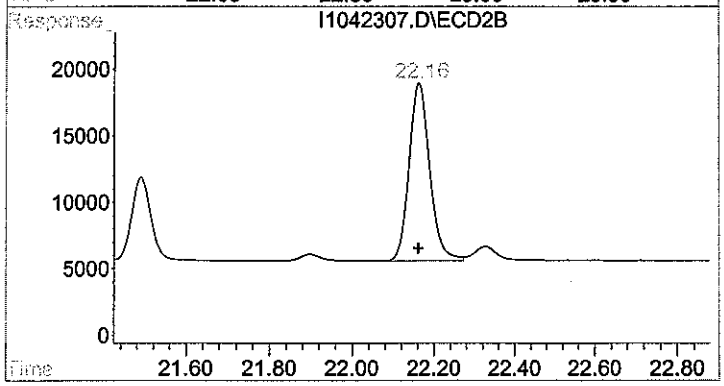
#10 A1260 4

R.T.: 19.868 min
Delta R.T.: 0.002 min
Response: 1070452
Conc: 916.79 ug/L



#11 A1260 5

R.T.: 22.758 min
Delta R.T.: 0.022 min
Response: 634524
Conc: 887.23 ug/L



#11 A1260 5

R.T.: 22.164 min
Delta R.T.: 0.003 min
Response: 470822
Conc: 925.21 ug/L

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD2B.CH
Acq On : 23 Apr 2008 7:37 pm Operator:
Sample : I1042308 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:17 2008 Quant Results File: A1042360.RES

JJS 4/24/08

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.50	936928	732101	60.043	62.823
Spiked Amount 100.000 Range 30 - 150 Recovery =					60.04%	62.82%
12) s DCB - Surrogate	26.31	25.19	1445016	1021481	56.205	57.043
Spiked Amount 100.000 Range 30 - 150 Recovery =					56.20%	57.04%
Target Compounds						
2) L1 A1016 1	7.96	7.42	475441	368854	1457.011	1500.220m(C)
3) L1 A1016 2	9.31	8.78	593730	201255	1439.724m	1418.146
4) L1 A1016 3	10.18	9.70	709350	570516	1368.719m	1439.372m
5) L1 A1016 4	10.75	9.96	430464	361792	1402.157m	1459.262m
6) L1 A1016 5	11.36	10.91	572906	430362	1450.572m	1455.777m
Sum A1016 1			2781891	1932779	7118.184	7272.778
Average A1016 1					1423.637	1454.556
7) L7 A1260 1	17.40	15.27	1014481	928320	1258.185	1358.404 (C)
8) L7 A1260 2	18.25	16.74	1022297	752472	1372.790	1272.583m
9) L7 A1260 3	20.24	17.74	1354816	797310	1335.824	1385.755m
10) L7 A1260 4	20.72	19.87	897576	1457877	1317.635m	1340.824
11) L7 A1260 5	22.76	22.17	884072	644891	1309.180	1360.234
Sum A1260 1			5173242	4580870	6593.614	6717.800
Average A1260 1					1318.723	1343.560
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

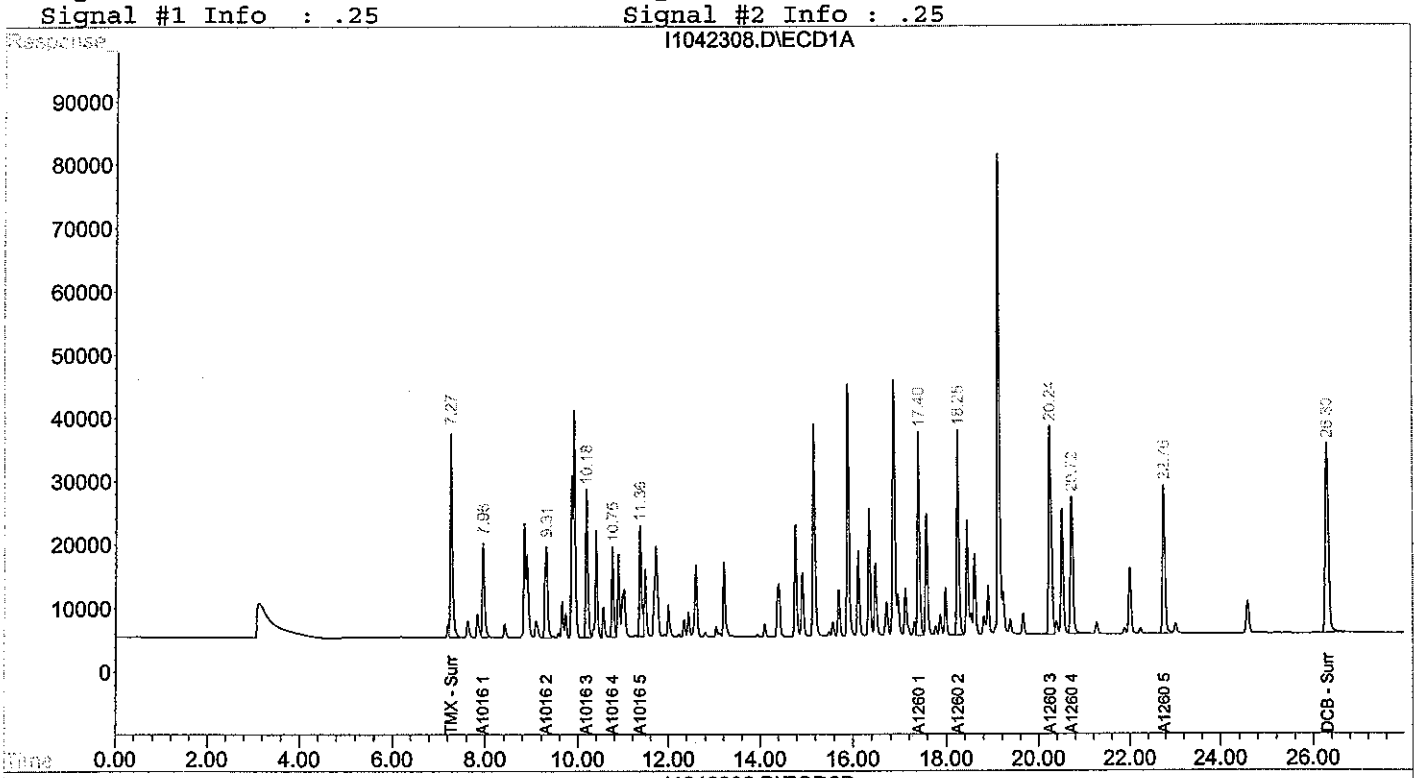
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

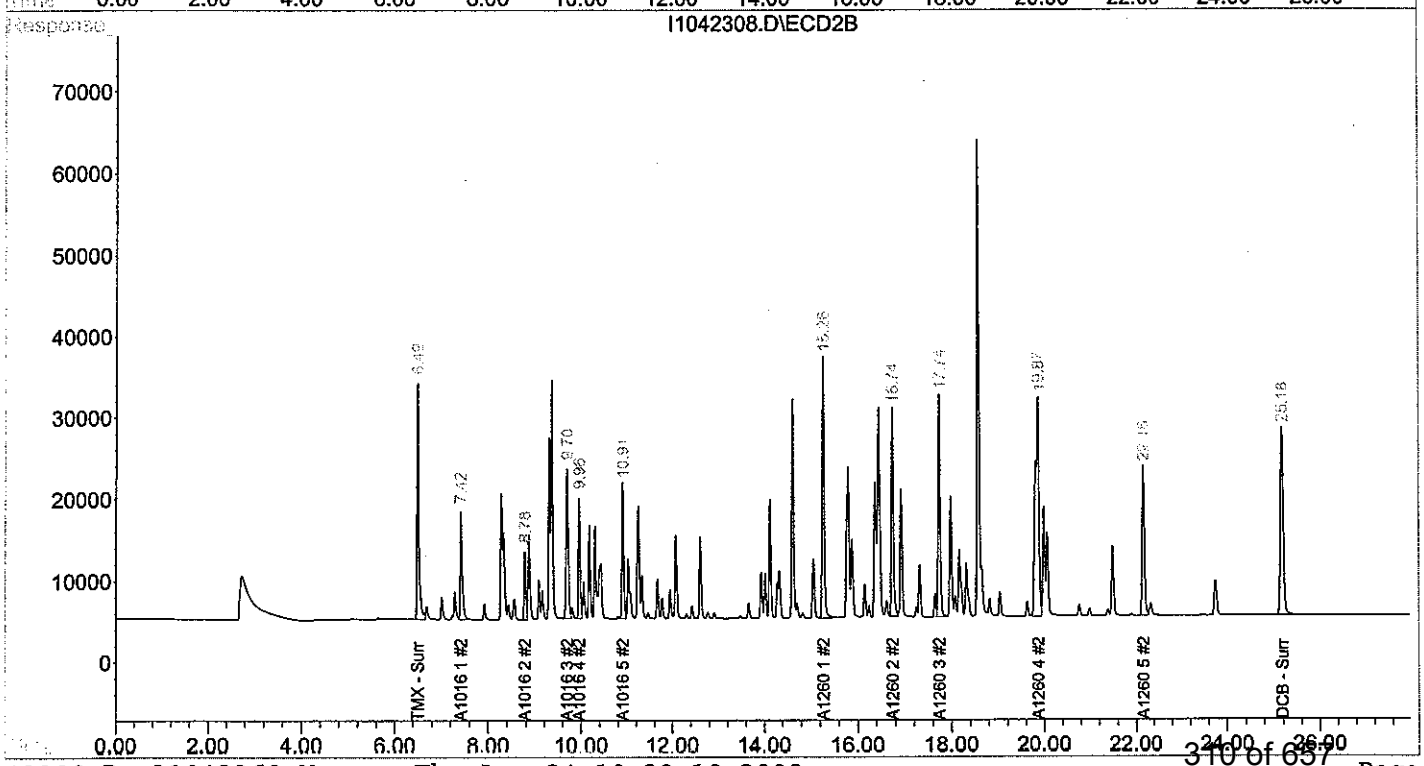
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD2B.CH
Acq On : 23 Apr 2008 7:37 pm Operator:
Sample : I1042308 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JSS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD2B.CH
Acq On : 23 Apr 2008 8:08 pm Operator:
Sample : I1042309 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	1222726	921893	80.328	81.288
Spiked Amount 100.000 Range 30 - 150 Recovery =					80.33%	81.29%
12) s DCB - Surrogate	26.30	25.19	1863960	1304796	75.091	75.719
Spiked Amount 100.000 Range 30 - 150 Recovery =					75.09%	75.72%
Target Compounds						
2) L1 A1016 1	7.96	7.42	594455	458348	2033.747	2118.201m(C)
3) L1 A1016 2	9.31	8.78	758532	262712	2047.684	2081.071
4) L1 A1016 3	10.18	9.70	920025	727522	2008.112	2066.155m
5) L1 A1016 4	10.75	9.96	546170	468388	2013.235	2086.374m
6) L1 A1016 5	11.36	10.90	727410	544490	2034.992m	2088.192m
Sum A1016 1			3546593	2461460	10137.770	10439.993
Average A1016 1					2027.554	2087.999
7) L7 A1260 1	17.40	15.26	1296066	1164193	1769.374	1927.877 (C)
8) L7 A1260 2	18.25	16.74	1314346	957430	1972.119	1831.777m
9) L7 A1260 3	20.24	17.74	1758638	1008336	1896.830	1952.829m
10) L7 A1260 4	20.72	19.87	1165434	1867822	1859.978m	1903.872
11) L7 A1260 5	22.76	22.17	1145919	829328	1840.730	1941.275
Sum A1260 1			6680402	5827109	9339.031	9557.630
Average A1260 1					1867.806	1911.526
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

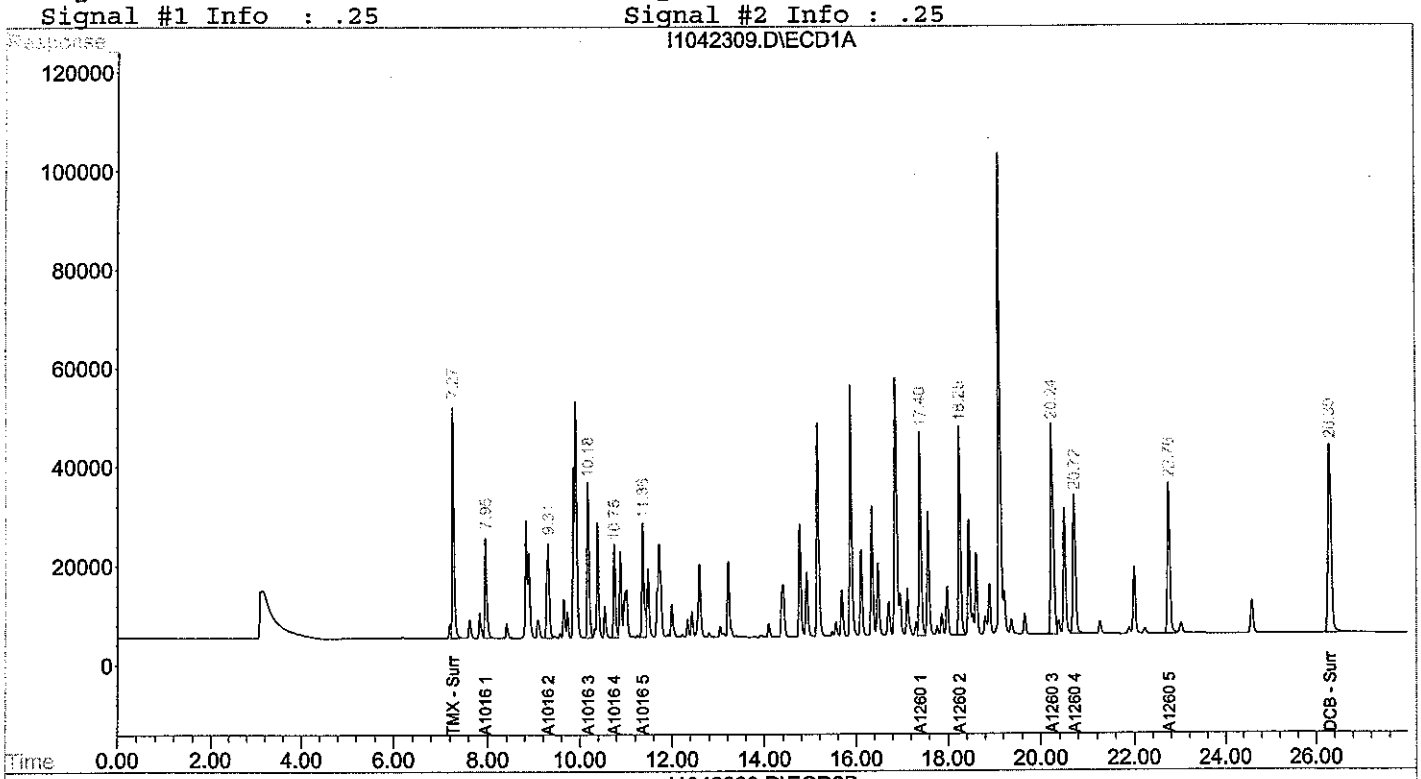
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

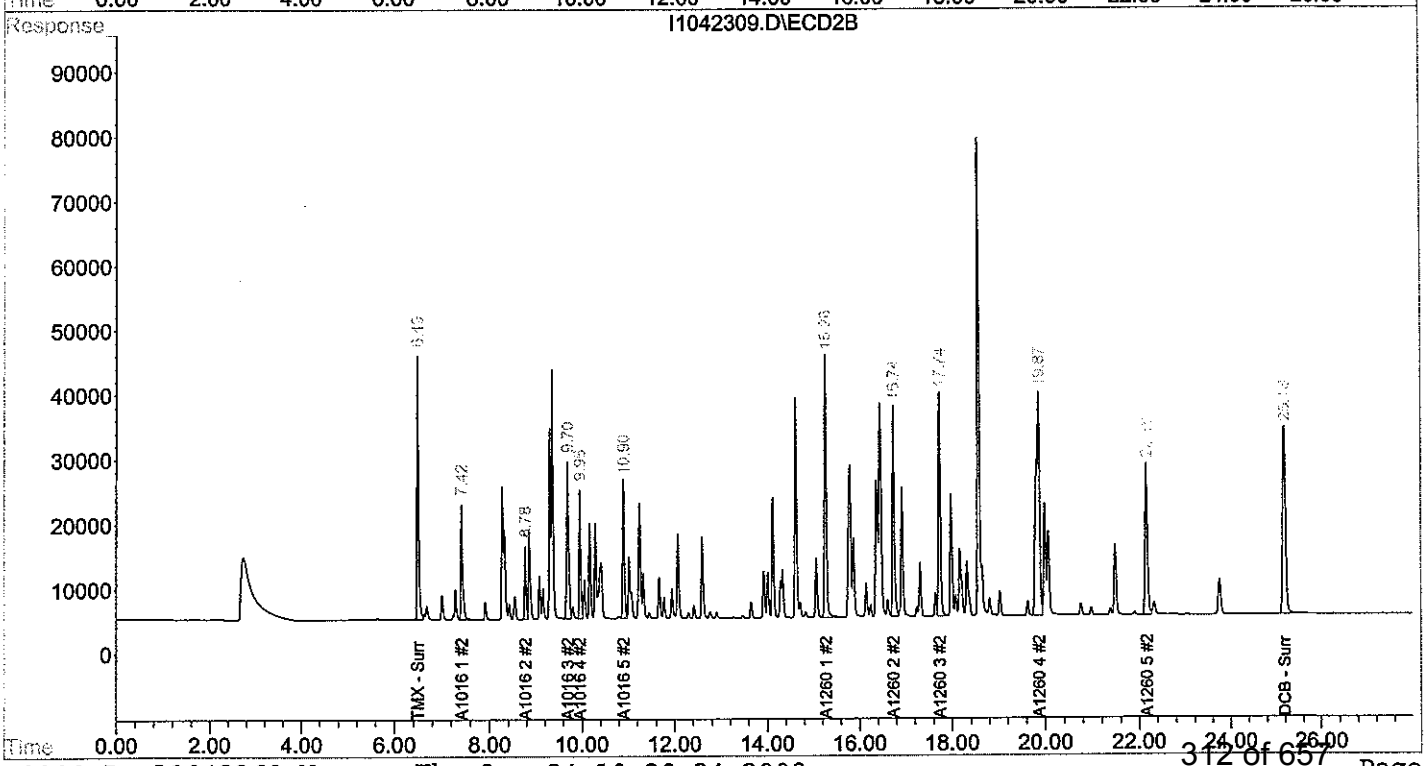
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD2B.CH
Acq On : 23 Apr 2008 8:08 pm Operator:
Sample : I1042309 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD2B.CH
Acq On : 23 Apr 2008 8:40 pm Operator:
Sample : I1042310 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	2672280	1981452	207.977	213.680
Spiked Amount 100.000 Range 30 - 150 Recovery =					207.98%#	213.68%#
12) s DCB - Surrogate	26.31	25.19	3909484	2704908	202.938	207.544
Spiked Amount 100.000 Range 30 - 150 Recovery =					202.94%#	207.54%#
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

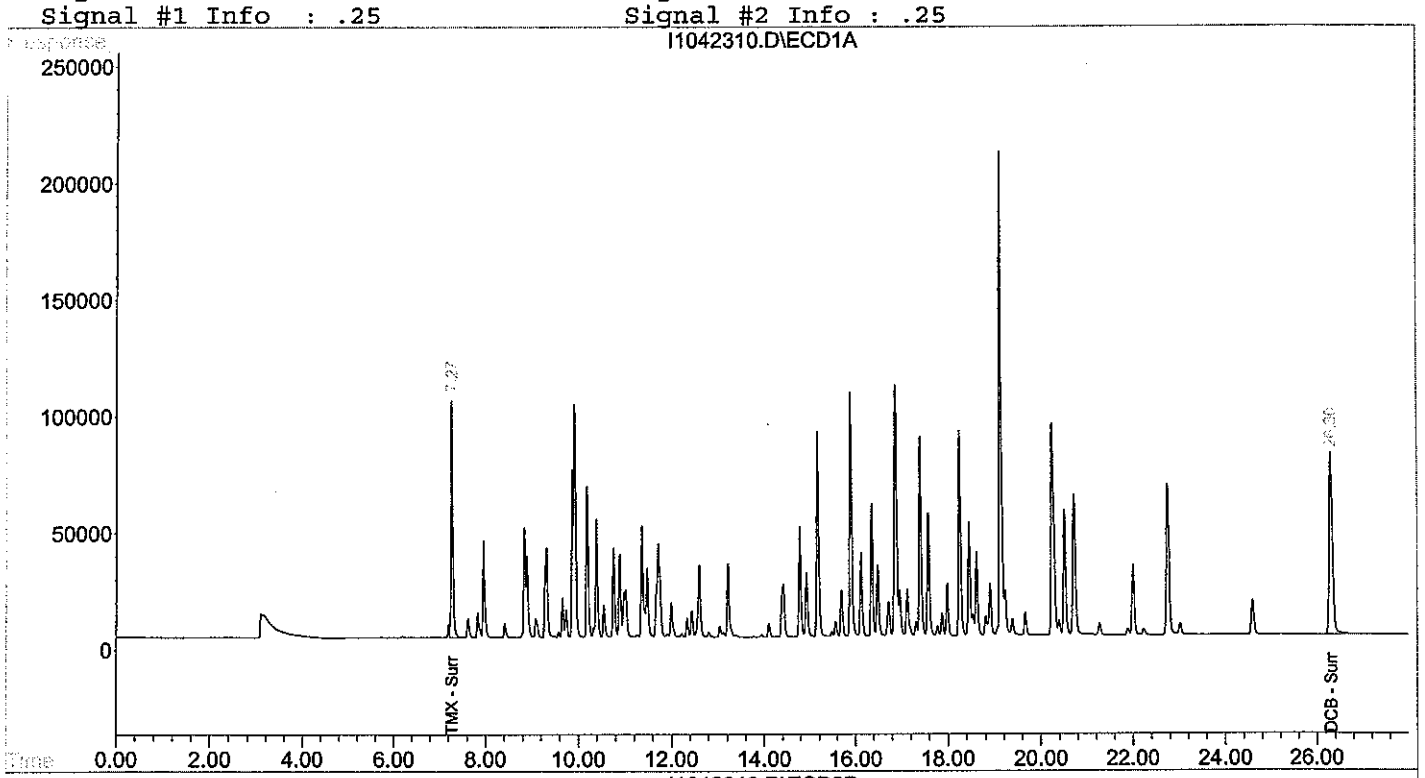
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

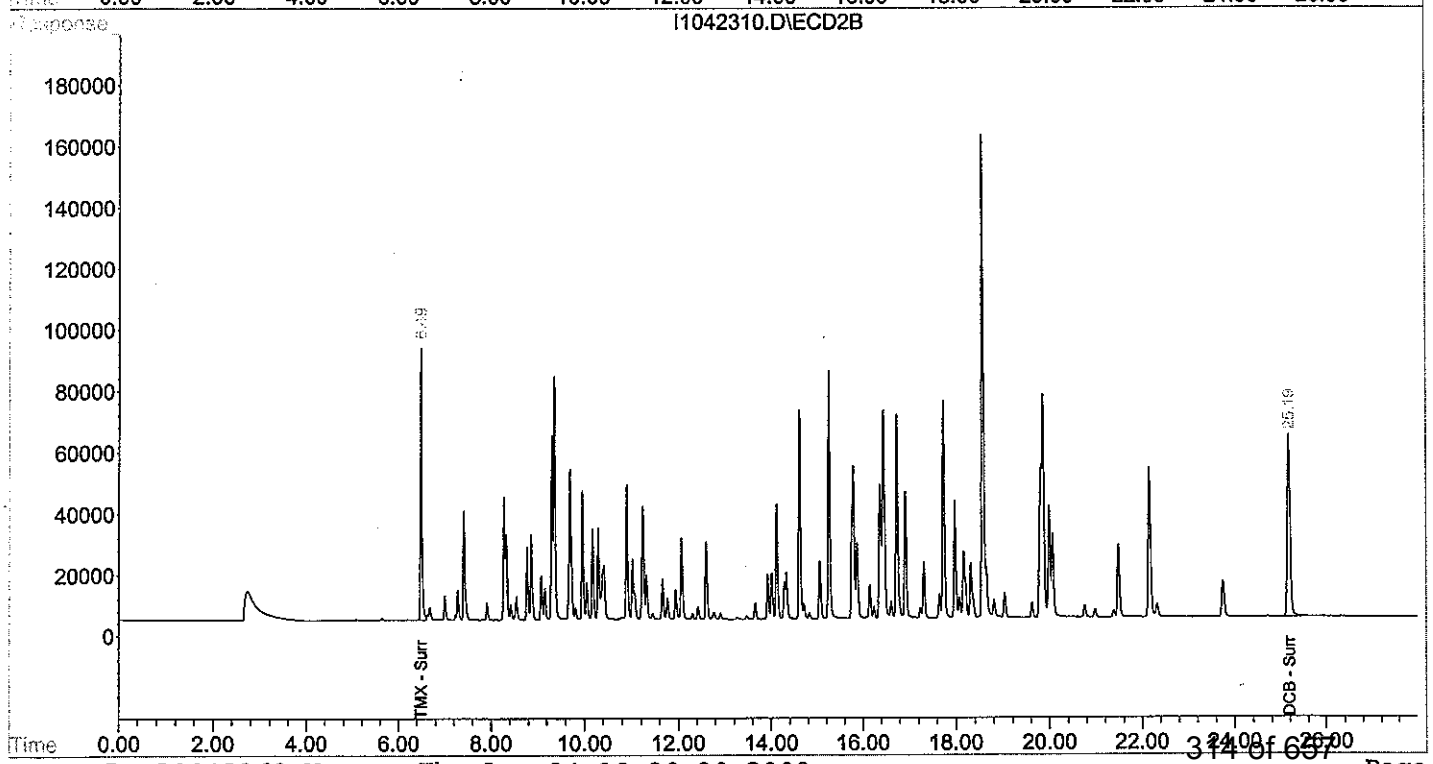
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD2B.CH
Acq On : 23 Apr 2008 8:40 pm Operator:
Sample : I1042310 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD2B.CH
Acq On : 23 Apr 2008 10:46 pm Operator:
Sample : I1042311 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:23 2008 Quant Results File: A1042360.RES

JZS 4/24/8

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
13) L2 A1221 1	6.19	5.64	157378	144484	1258.585	1408.841
14) L2 A1221 2	7.63	7.01	209205	167495	1180.489	1118.554
15) L2 A1221 3	7.83	7.29	157055	128388	364.941	360.252
16) L2 A1221 4	8.91	8.28	95128	54976	1193.602	782.132 #
17) L2 A1221 5	9.92	9.37	62688	50841	850.420 (C)	764.487 (C)
Sum A1221 1			681453	546184	4848.037	4434.266
Average A1221 1					969.607	886.853
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

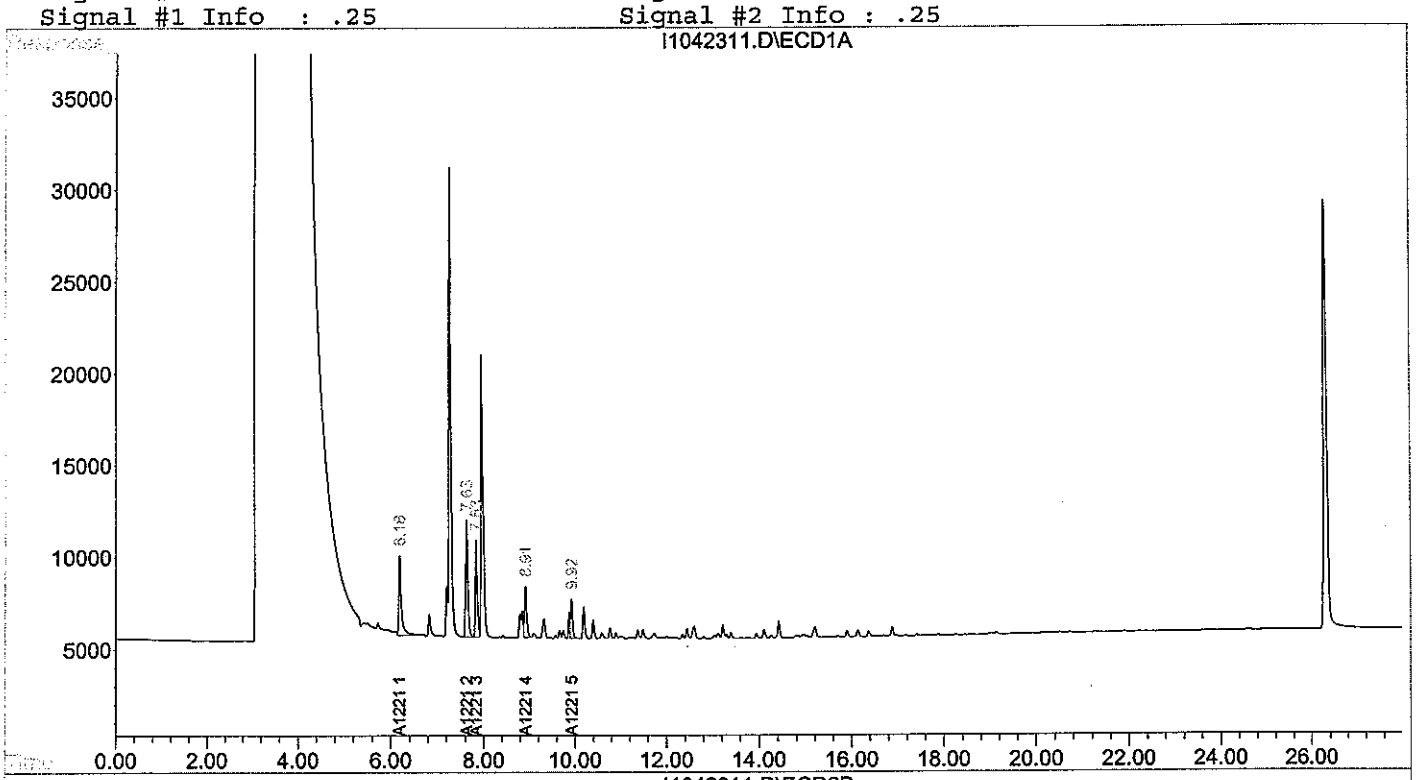
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

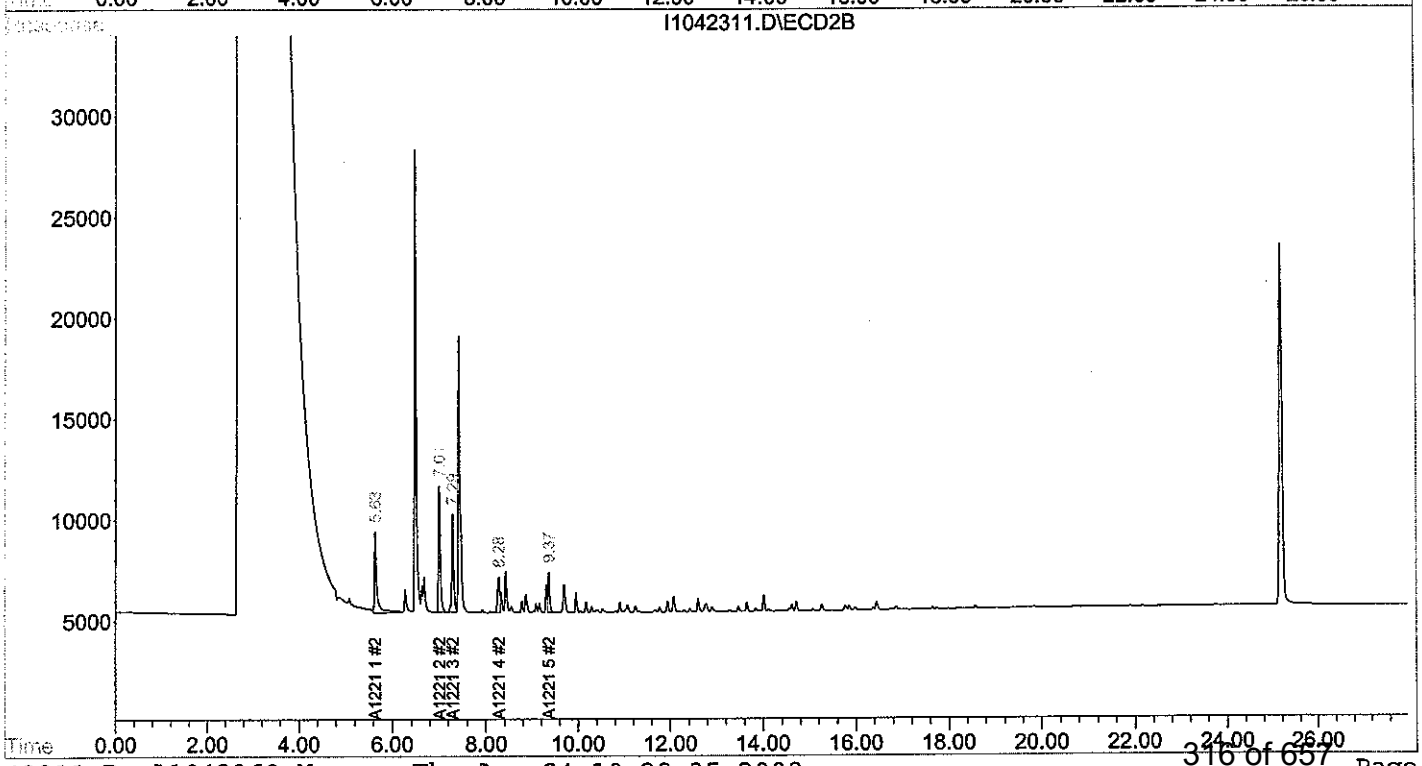
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD2B.CH
Acq On : 23 Apr 2008 10:46 pm Operator:
Sample : I1042311 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:23 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD2B.CH
Acq On : 23 Apr 2008 11:17 pm Operator:
Sample : I1042312 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:24 2008 Quant Results File: A1042360.RES

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Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
18) L3 A1232 1	7.96	7.42	402124	314681	981.388 (C)	919.617 (C)
19) L3 A1232 2	8.84	8.28	336624	234638	985.301m(C)	932.873m(C)
20) L3 A1232 3	9.92	9.37	521372	405482	996.773m(C)	945.316m(C)
21) L3 A1232 4	10.19	9.70	228384	187610	975.503 (C)	936.700 (C)
22) L3 A1232 5	11.37	10.91	176212	140687	1062.799 (C)	963.544 (C)
Sum A1232 1			1664715	1283098	5001.763	4698.049
Average A1232 1					1000.353	939.610
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

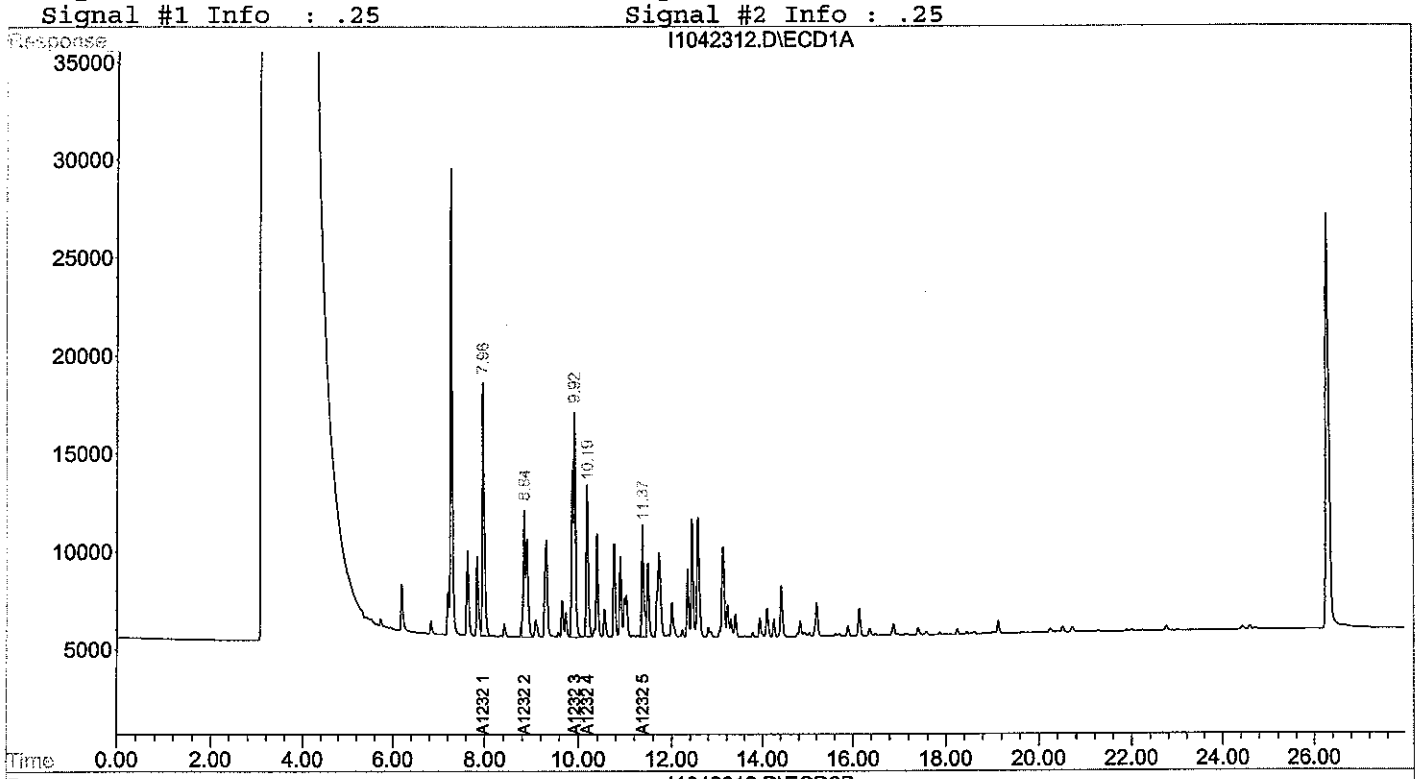
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

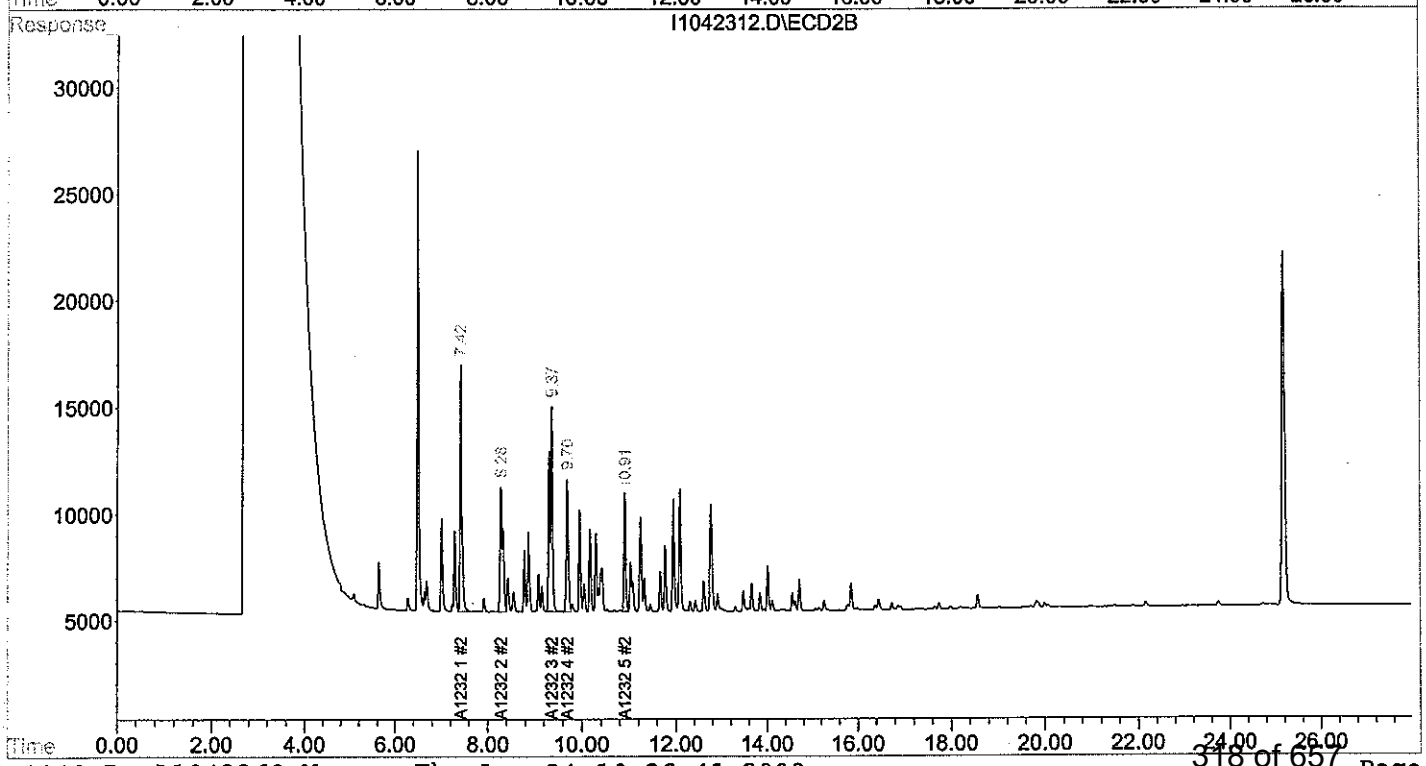
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD2B.CH
Acq On : 23 Apr 2008 11:17 pm Operator:
Sample : I1042312 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:24 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD2B.CH
Acq On : 23 Apr 2008 11:48 pm Operator:
Sample : I1042313 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.96	7.42	317490	245056	1141.030 (C)	1144.186 (C)
24) L4 A1242 2	8.84	8.28	621334	446750	1134.902m(C)	1132.113m(C)
25) L4 A1242 3	9.92	9.36	1159466	851642	1148.482m(C)	1127.364m(C)
26) L4 A1242 4	10.18	9.70	499847	393628	1125.396 (C)	1140.540 (C)
27) L4 A1242 5	11.72	12.09	517881	371386	1147.860	1129.645
Sum A1242 1			3116018	2308462	5697.669	5673.848
Average A1242 1					1139.534	1134.770
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

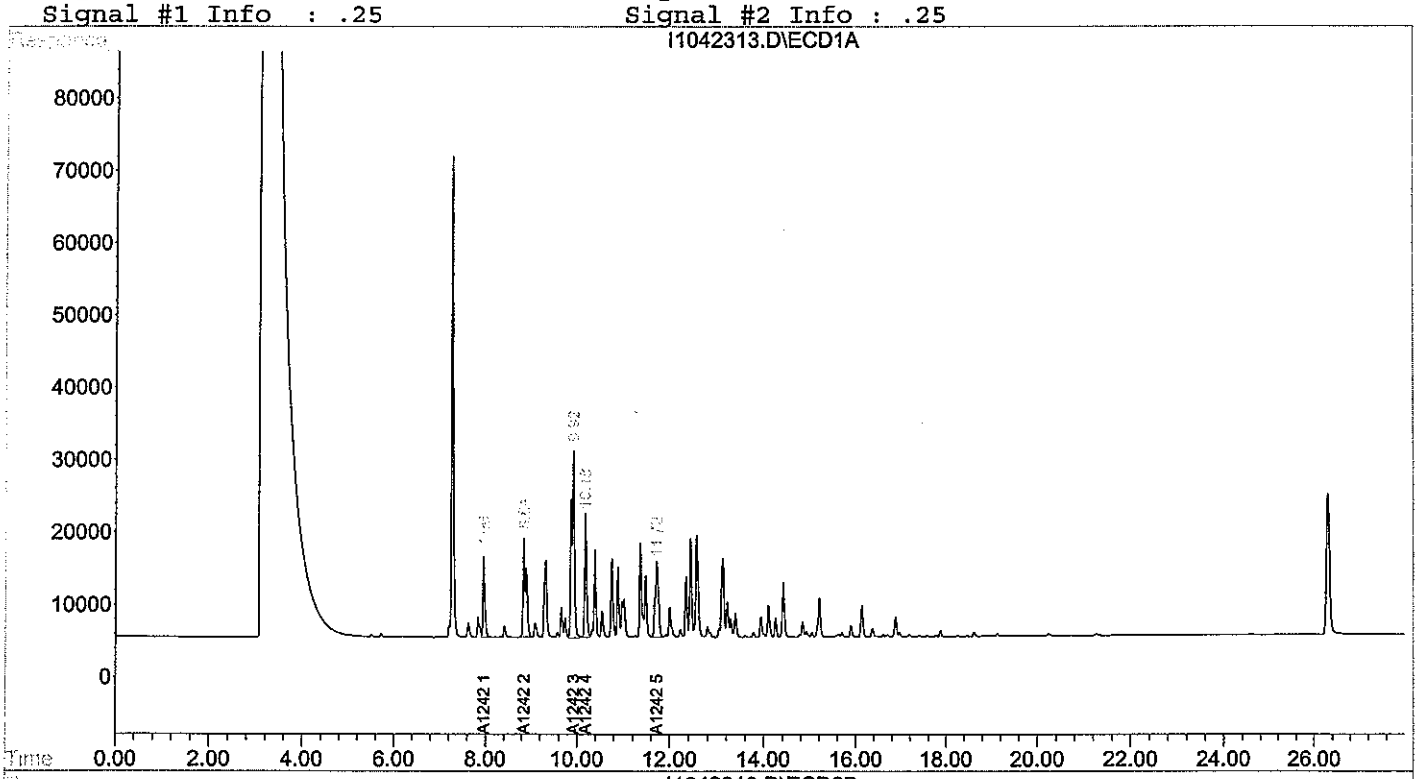
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

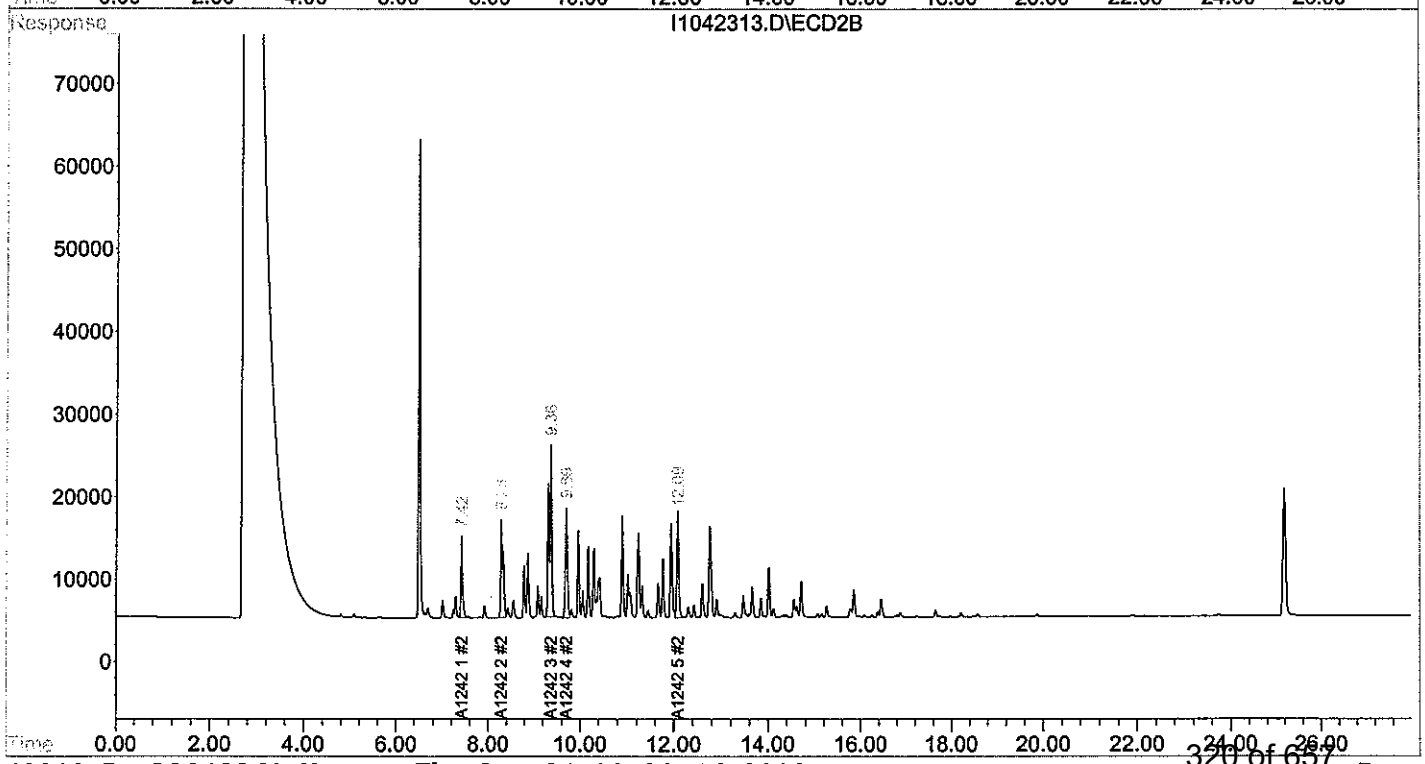
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD2B.CH
Acq On : 23 Apr 2008 11:48 pm Operator:
Sample : I1042313 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J3S 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD2B.CH
Acq On : 24 Apr 2008 12:19 am Operator:
Sample : I1042314 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

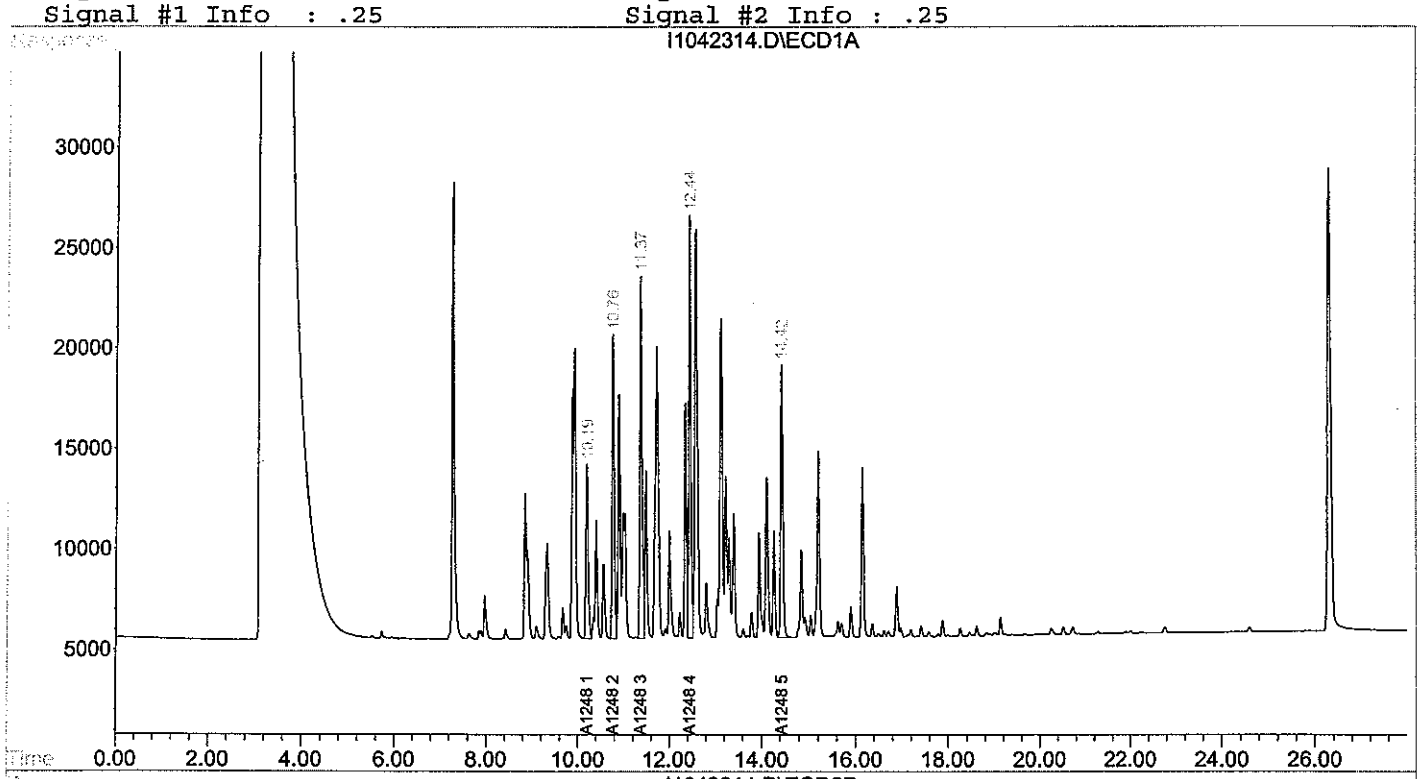
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
28) L5 A1248 1	10.19	9.70	295913	237171	950.661 (C)	968.179 (C)
29) L5 A1248 2	10.76	10.18	470440	331253	969.815	985.137
30) L5 A1248 3	11.37	10.91	574840	441514	959.425 (C)	987.070 (C)
31) L5 A1248 4	12.44	11.95	642660	491719	947.676	961.473
32) L5 A1248 5	14.42	14.02	432944	296043	947.755 (C)	961.906 (C)
Sum A1248 1			2416797	1797700	4775.332	4863.764
Average A1248 1					955.066	972.753
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

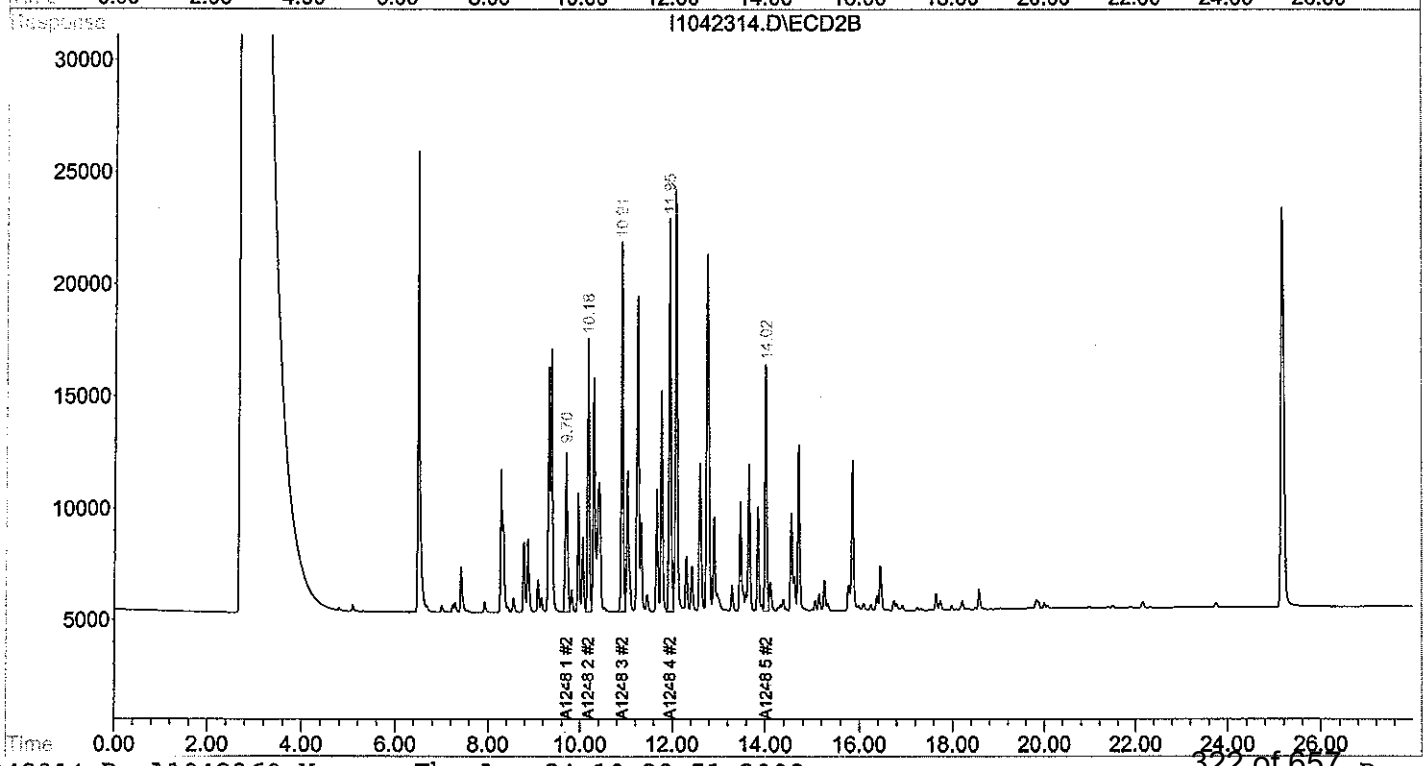
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD2B.CH
Acq On : 24 Apr 2008 12:19 am Operator:
Sample : I1042314 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JJS 4/24/

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD2B.CH
Acq On : 24 Apr 2008 12:51 am Operator:
Sample : I1042315 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.60	12.08	621673	447045	904.104	920.243
34) L6 A1254 2	14.42	14.02	1063057	708044	907.992 (C)	927.580 (C)
35) L6 A1254 3	15.20	14.71	1139528	529898	883.860	914.531
36) L6 A1254 4	15.89	15.26	519698	416991	863.004	907.568 (C)
37) L6 A1254 5	16.88	16.45	1006857	719565	890.895	911.472
Sum A1254 1			4350813	2821543	4449.854	4581.394
Average A1254 1					889.971	916.279
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

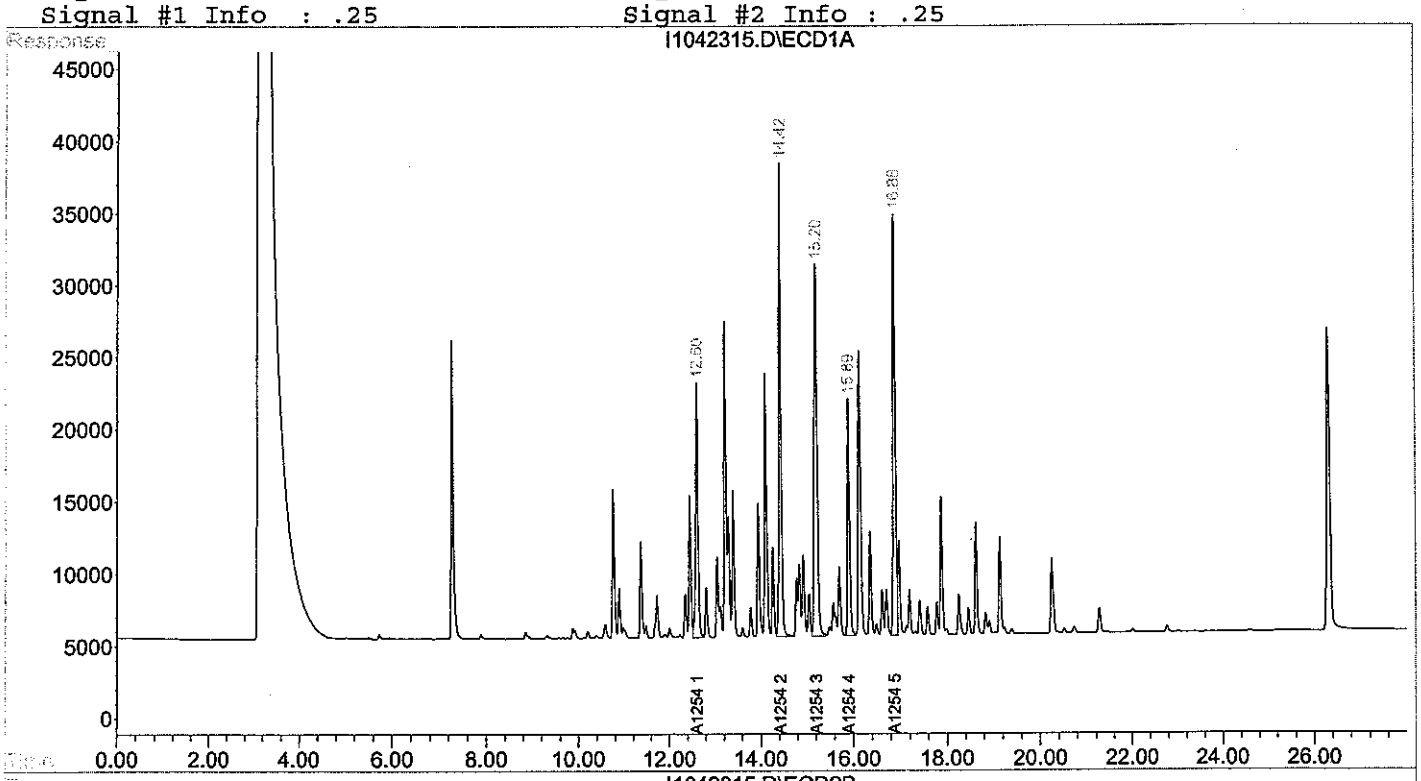
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

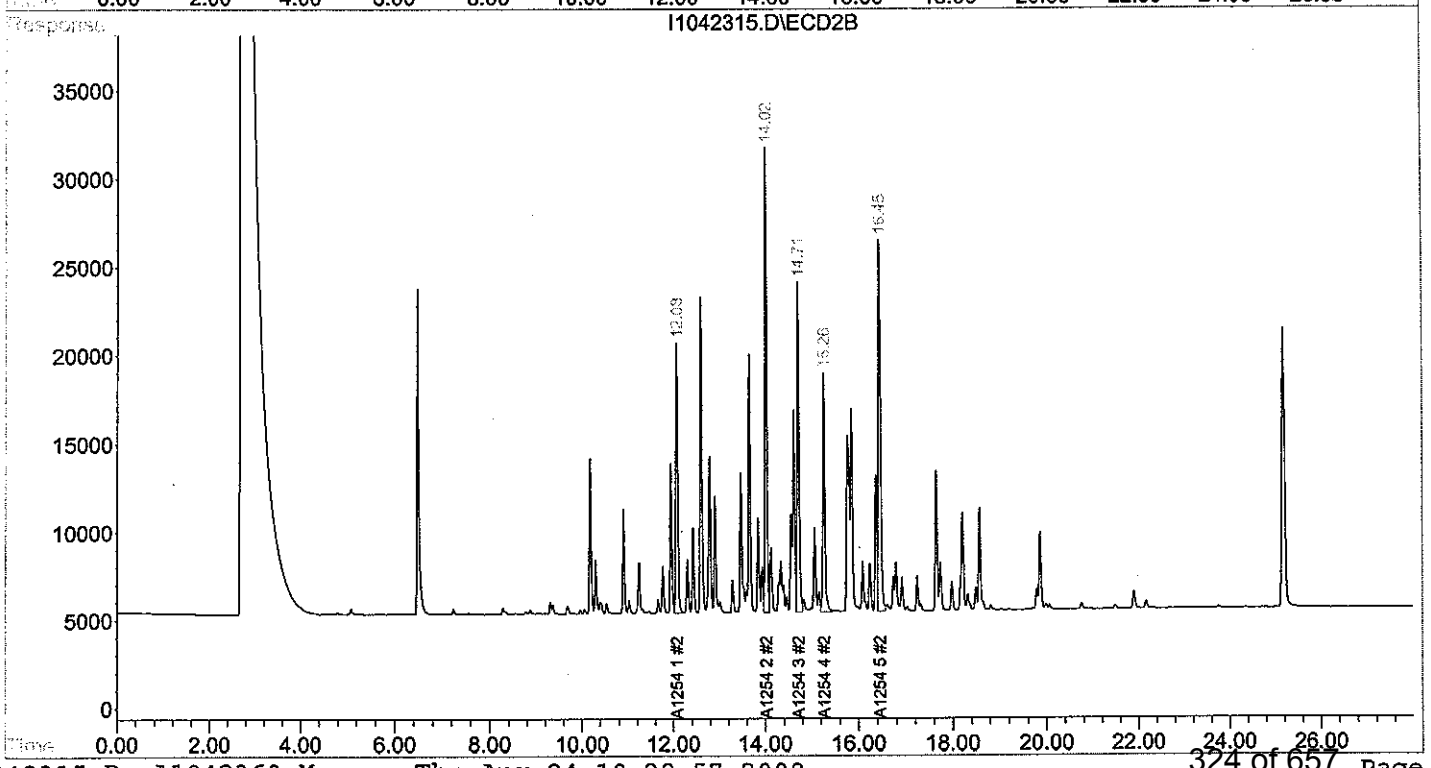
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD2B.CH
Acq On : 24 Apr 2008 12:51 am Operator:
Sample : I1042315 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD2B.CH
Acq On : 24 Apr 2008 1:22 am Operator:
Sample : I1042316 Inst : HP ECD2
Misc : PS040208A 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

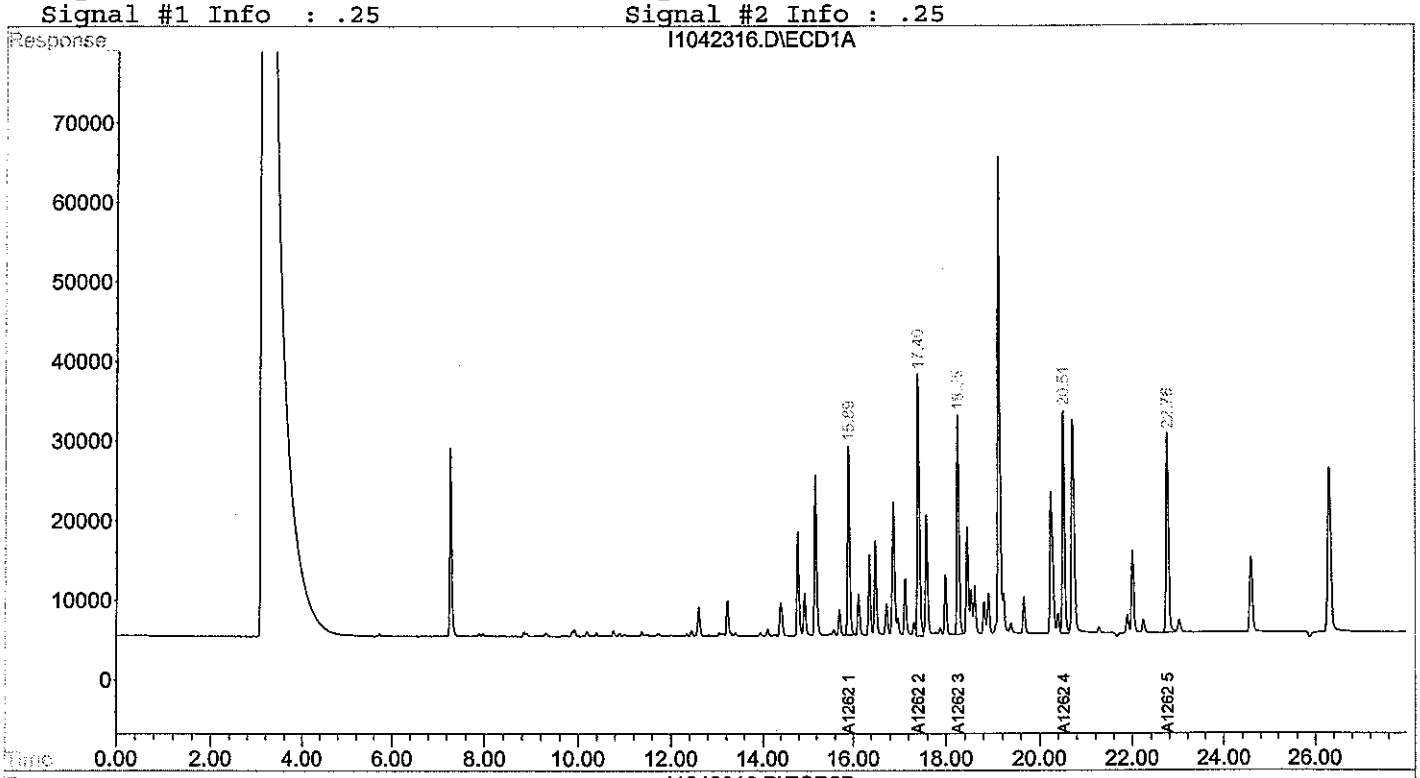
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
38) L8 A1262 1	15.89	15.26	744352	549403	1124.902m	1011.710
39) L8 A1262 2	17.40	16.74	1039182	749226	1182.138m	1037.267m
40) L8 A1262 3	18.25	17.74	858761	730580	1120.399	1018.423m
41) L8 A1262 4	20.51	19.82	952566	1221512	1010.622	1073.074m(C)
42) L8 A1262 5	22.76	22.16	963432	697076	1122.415	962.943
Sum A1262 1			4558293	3947797	5560.476	5103.416
Average A1262 1					1112.095	1020.683
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

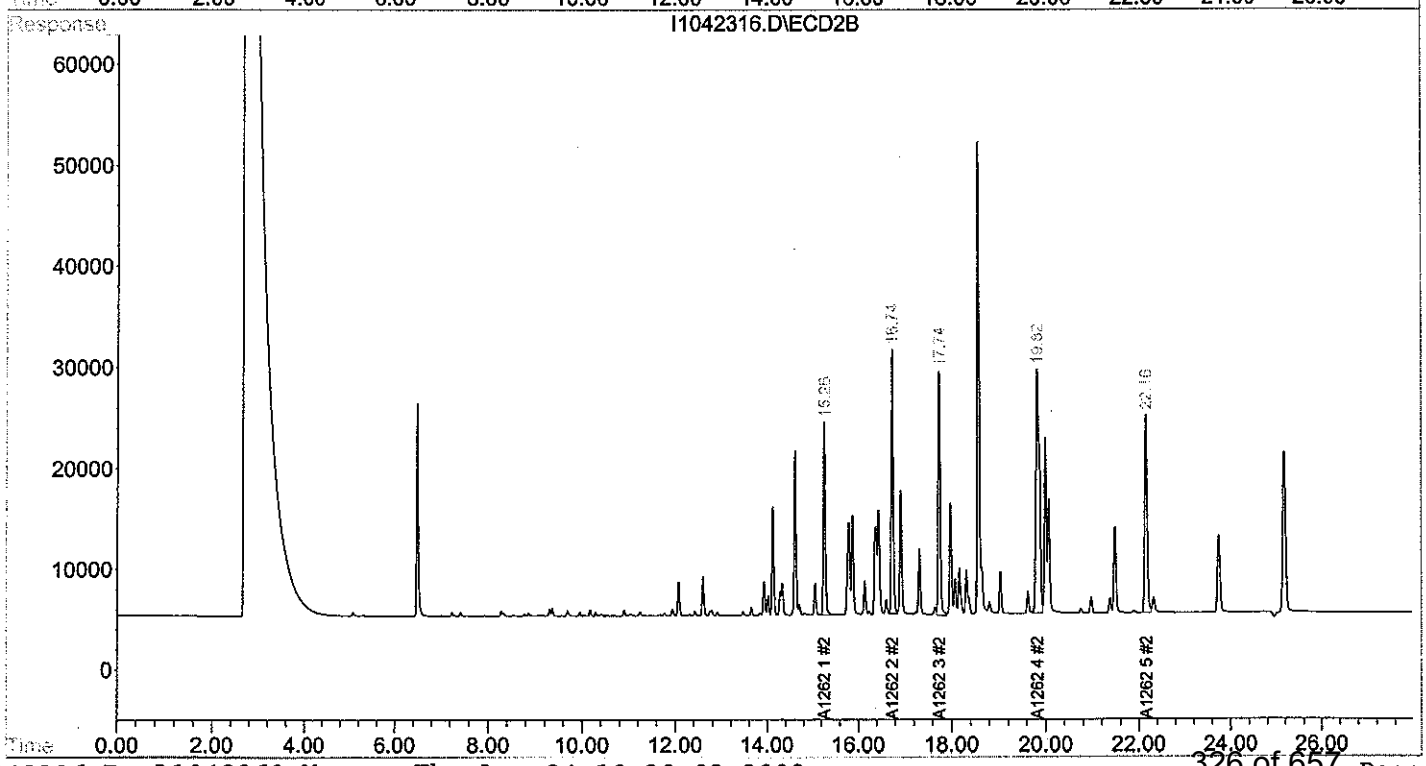
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD2B.CH
Acq On : 24 Apr 2008 1:22 am Operator:
Sample : I1042316 Inst : HP ECD2
Misc : PS040208A 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD2B.CH
Acq On : 24 Apr 2008 1:53 am Operator:
Sample : I1042317 Inst : HP ECD2
Misc : PS050107D 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:28 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

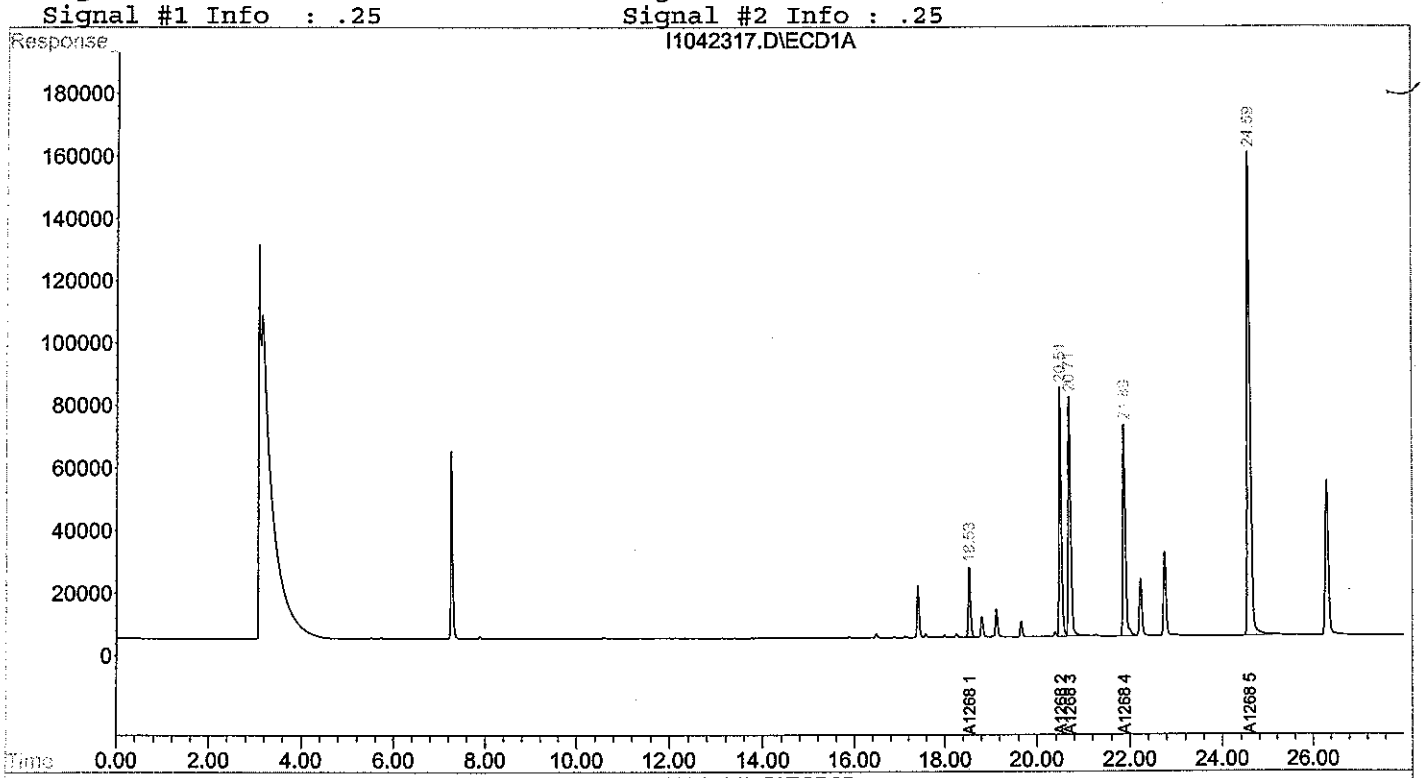
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
43) L9 A1268 1	18.53	17.75	730006	551865	1091.903	966.173
44) L9 A1268 2	20.51	19.82	2711930	1939020	1145.844m	960.274m(C)
45) L9 A1268 3	20.71	19.99	2753362	2047474	1077.525m	902.503m
46) L9 A1268 4	21.89	20.98	2529091	1769387	1163.611	932.841
47) L9 A1268 5	24.59	23.75	6913651	4853194	1066.622	883.050
Sum A1268 1			15638040	11160939	5545.504	4644.841
Average A1268 1					1109.101	928.968

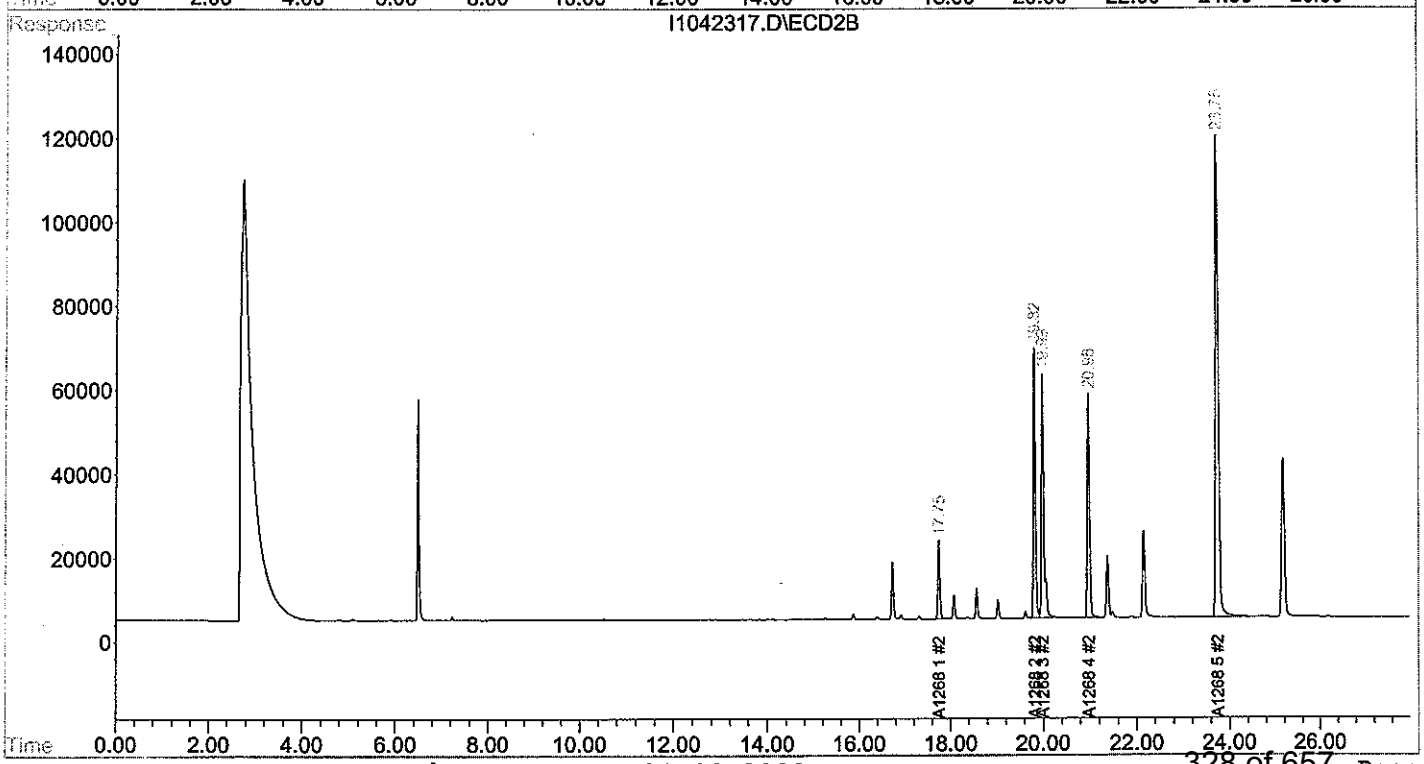
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD2B.CH
Acq On : 24 Apr 2008 1:53 am Operator:
Sample : I1042317 Inst : HP ECD2
Misc : PS050107D 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:28 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





JJS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 9:43 pm Operator:
Sample : Q2042301 Inst : HP ECD2
Misc : PLW111507A 1:10@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
2) L1 A1016 1	7.97	7.43	359480	281181	1052.287	1047.403 (C)
3) L1 A1016 2	9.32	8.78	485310	168974	1134.640m	1164.064m *
4) L1 A1016 3	10.19	9.70	585090	459312	1136.859m	1116.986
5) L1 A1016 4	10.76	9.97	349004	285658	1116.566m	1114.720
6) L1 A1016 5	11.37	10.91	442147	342033	1083.840	1094.429
Sum A1016 1			2221031	1537159	5524.192	5537.600
Average A1016 1					1104.838	1107.520
7) L7 A1260 1	17.40	15.27	713654	771708	954.706m	1150.601m(C)
8) L7 A1260 2	18.25	16.74	741837	554996	1007.607	994.244m
9) L7 A1260 3	20.25	17.74	1045693	582336	1101.086	992.361m
10) L7 A1260 4	20.72	19.87	608506	1099876	952.241	1048.504
11) L7 A1260 5	22.76	22.17	612406	449864	981.119	965.036
Sum A1260 1			3722095	3458779	N.D.	N.D.
Average A1260 1					999.352	1030.149
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

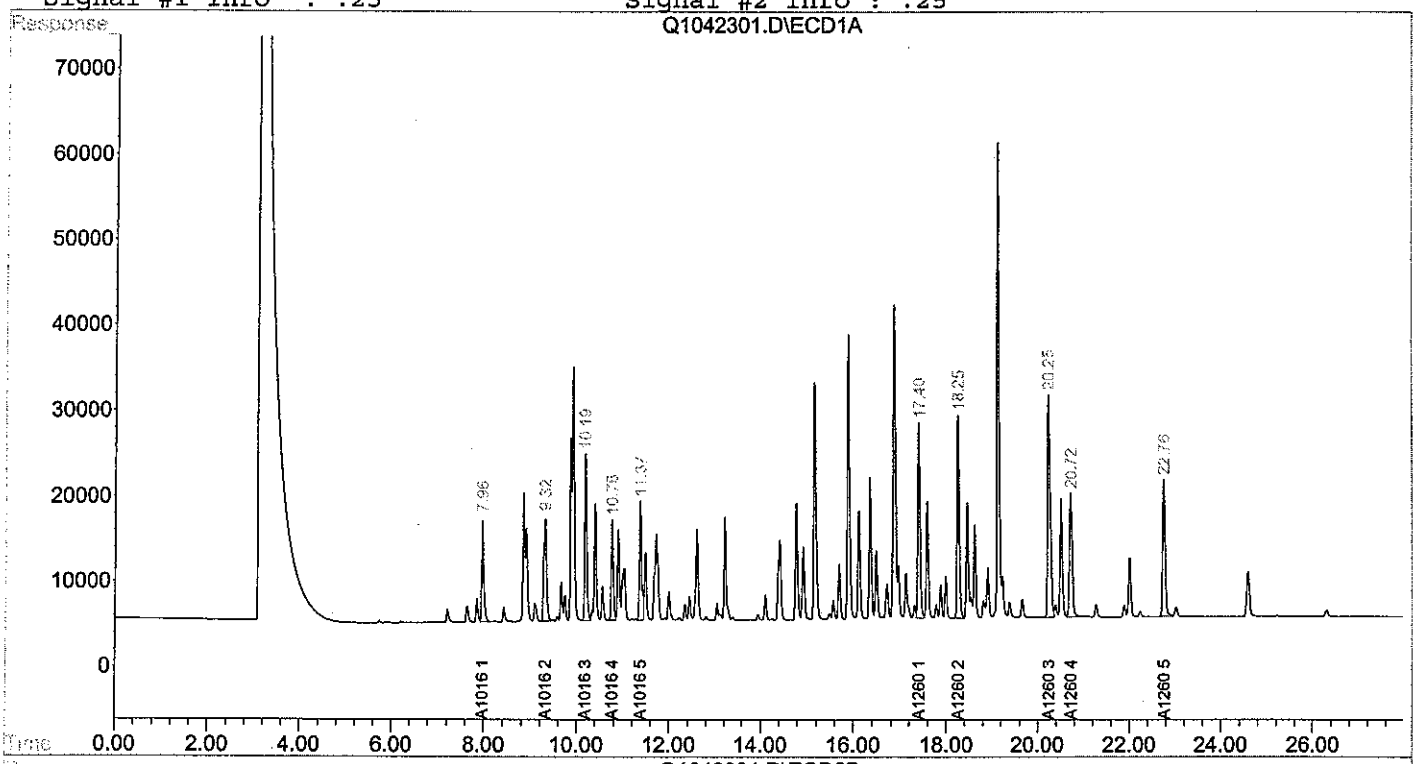
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

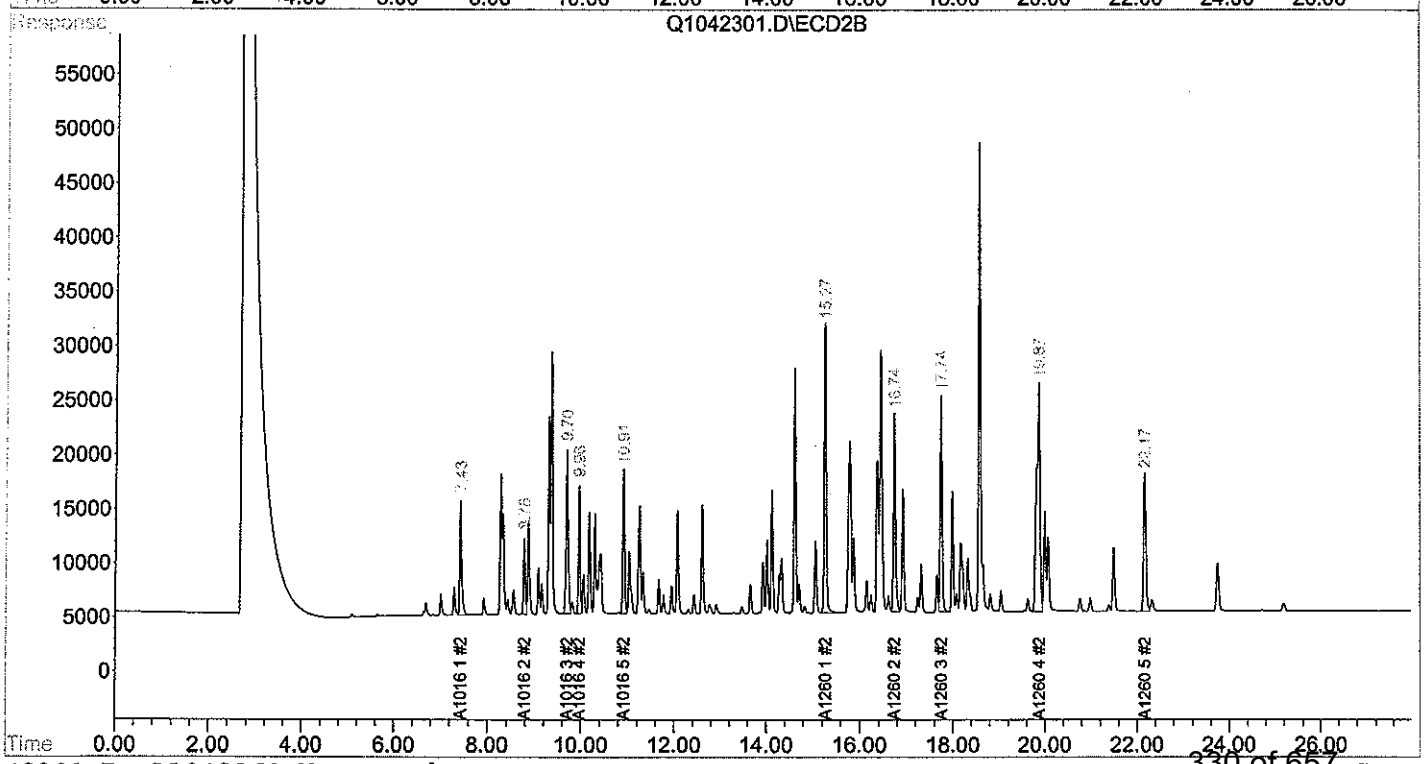
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 9:43 pm Operator:
Sample : Q2042301 Inst : HP ECD2
Misc : PLW111507A 1:10@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051501**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.92	8.02	1000.00	1005.05	0.5	15
PK #2 A1016	9.32	9.27	9.37	1000.00	1009.43	0.9	15
PK #3 A1016	10.20	10.15	10.25	1000.00	980.27	2.0	15
PK #4 A1016	10.77	10.72	10.82	1000.00	973.29	2.7	15
PK #5 A1016	11.38	11.33	11.43	1000.00	965.91	3.4	15
PK #1 A1260	17.42	17.37	17.47	1000.00	924.91	7.5	15
PK #2 A1260	18.27	18.22	18.32	1000.00	973.04	2.7	15
PK #3 A1260	20.26	20.21	20.31	1000.00	954.22	4.6	15
PK #4 A1260	20.74	20.69	20.79	1000.00	894.86	10.5	15
PK #5 A1260	22.78	22.73	22.83	1000.00	915.99	8.4	15
Tetrachloro-meta-xylene	7.28	7.23	7.33	40.00	40.38	1.0	15
Decachlorobiphenyl	26.34	26.29	26.39	40.00	39.19	2.0	15
Average % D						3.9	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051501**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.38	7.48	1000.00	1058.66	5.9	15
PK #2 A1016	8.79	8.74	8.84	1000.00	1029.73	3.0	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1035.89	3.6	15
PK #4 A1016	9.97	9.92	10.02	1000.00	1034.69	3.5	15
PK #5 A1016	10.92	10.87	10.97	1000.00	1039.42	3.9	15
PK #1 A1260	15.27	15.22	15.32	1000.00	998.48	0.2	15
PK #2 A1260	16.75	16.70	16.80	1000.00	992.19	0.8	15
PK #3 A1260	17.75	17.70	17.80	1000.00	1027.96	2.8	15
PK #4 A1260	19.88	19.83	19.93	1000.00	995.63	0.4	15
PK #5 A1260	22.18	22.13	22.23	1000.00	1007.64	0.8	15
Tetrachloro-meta-xylene	6.50	6.45	6.55	40.00	43.45	8.6	15
Decachlorobiphenyl	25.20	25.15	25.25	40.00	43.32	8.3	15
Average % D						3.5	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD2B.CH
Acq On : 15 May 2008 8:29 am Operator: JBS
Sample : C1051501 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 15 9:16 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	646702	537307	40.383	43.451	
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.38%	43.45%	
12) s DCB - Surrogate	26.34	25.20	990578	771823	39.192	43.323	
Spiked Amount 100.000 Range 30 - 150 Recovery =					39.19%	43.32%	
Target Compounds							
2) L1 A1016 1	7.97	7.43	345743	283675	1005.055	1058.661	(C)
3) L1 A1016 2	9.32	8.79	439394	152021	1009.432	1029.734	
4) L1 A1016 3	10.20	9.71	516082	431096	980.268	1035.893	(C)
5) L1 A1016 4	10.77	9.97	311432	267497	973.293	1034.691	
6) L1 A1016 5	11.38	10.92	400061	327688	965.912 (C)	1039.415	(C)
Sum A1016 1			2012711	1461978	4933.960	5198.395	
Average A1016 1					986.792	1039.679	
7) L7 A1260 1	17.42	15.27	694408	687679	924.913	998.477	
8) L7 A1260 2	18.27	16.75	719408	554036	973.037	992.192	
9) L7 A1260 3	20.26	17.75	918294	599866	954.216	1027.958	
10) L7 A1260 4	20.74	19.88	574807	1051579	894.857	995.626	
11) L7 A1260 5	22.78	22.18	574979	467334	915.986	1007.642	
Sum A1260 1			3481896	3360494	4663.008	5021.895	
Average A1260 1					932.602	1004.379	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

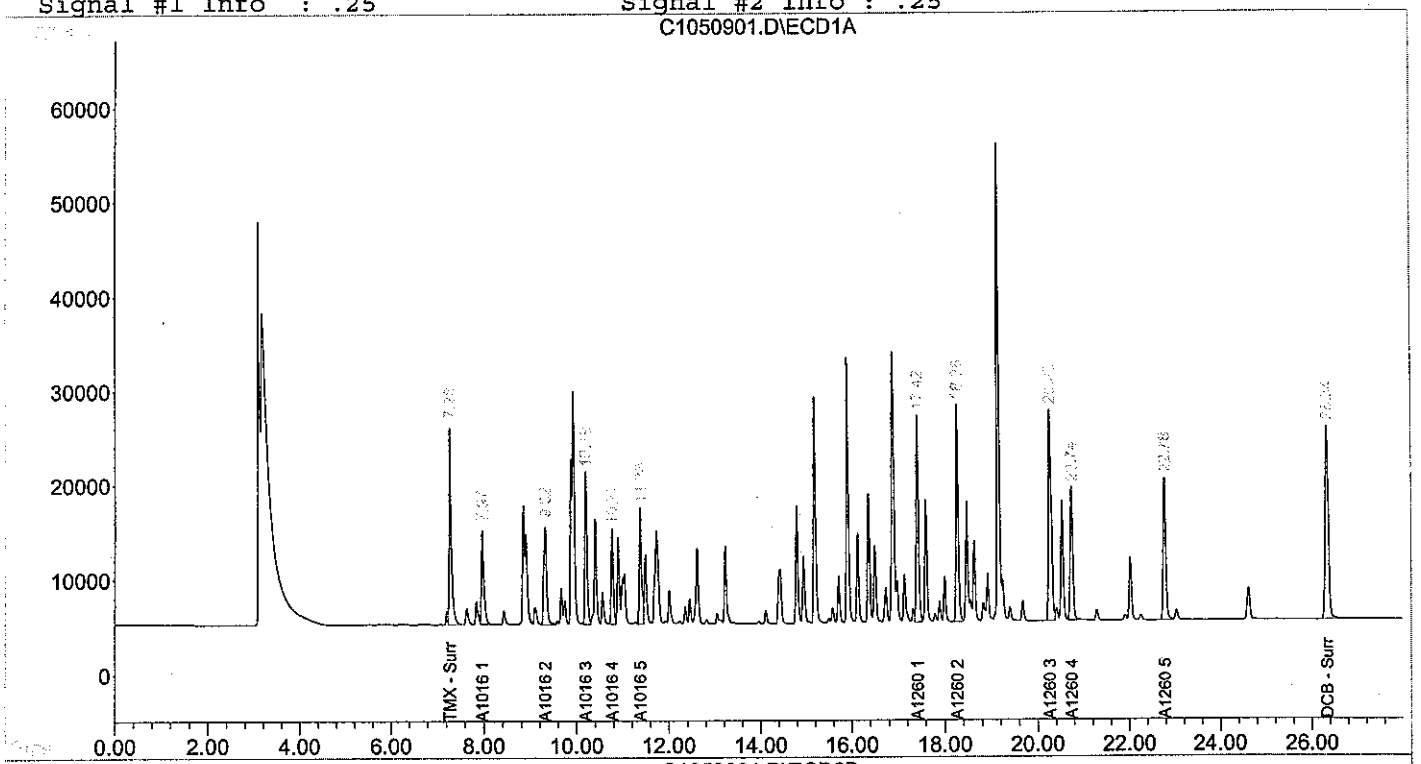
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

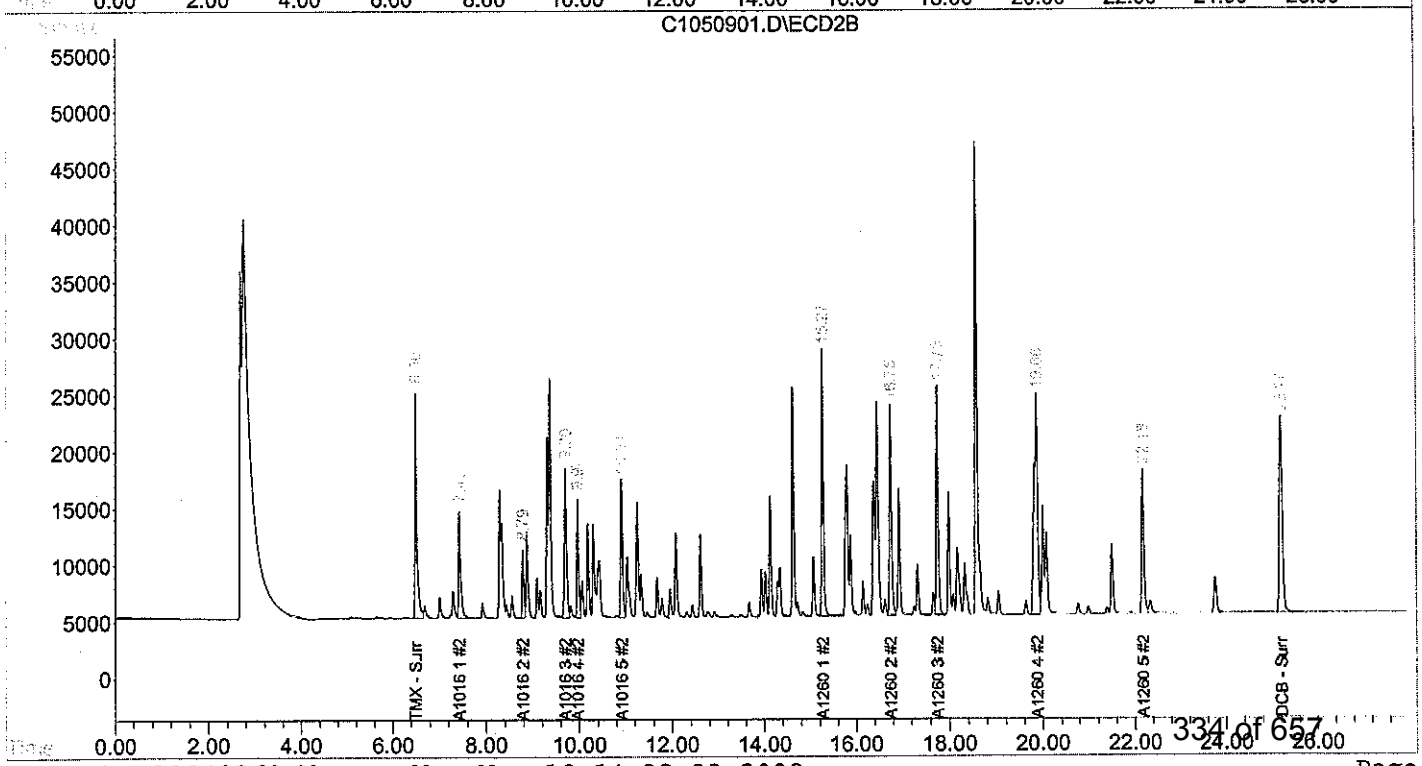
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD2B.CH
Acq On : 15 May 2008 8:29 am Operator: JBS
Sample : C1051501 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 15 9:16 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1050901.D\ECD2B.CH
Acq On : 15 May 2008 8:29 am Operator: JBS
Sample : C1051501 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	40.383	-1.0	99	0.00
2	L1	A1016 1	1000.000	1005.055	-0.5	101	0.00
3	L1	A1016 2	1000.000	1009.432	-0.9	96	0.00
4	L1	A1016 3	1000.000	980.268	2.0	96	0.00
5	L1	A1016 4	1000.000	973.293	2.7	99	0.00
6	L1	A1016 5	1000.000	965.912	3.4	96	0.00
7	L7	A1260 1	1000.000	924.913	7.5	93	0.00
8	L7	A1260 2	1000.000	973.037	2.7	96	0.00
9	L7	A1260 3	1000.000	954.216	4.6	94	0.00
10	L7	A1260 4	1000.000	894.857	10.5	88	0.00
11	L7	A1260 5	1000.000	915.986	8.4	91	0.00
12	s	DCB - Surrogate	40.000	39.192	2.0	94	0.00

Signal #2

1	s	TMX - Surrogate	40.000	43.451	-8.6	106	0.00
2	L1	A1016 1	1000.000	1058.661	-5.9	104	0.00
3	L1	A1016 2	1000.000	1029.734	-3.0	96	0.00
4	L1	A1016 3	1000.000	1035.893	-3.6	102	0.00
5	L1	A1016 4	1000.000	1034.691	-3.5	102	0.00
6	L1	A1016 5	1000.000	1039.415	-3.9	102	0.00
7	L7	A1260 1	1000.000	998.477	0.2	99	0.00
8	L7	A1260 2	1000.000	992.192	0.8	98	0.00
9	L7	A1260 3	1000.000	1027.958	-2.8	101	0.00
10	L7	A1260 4	1000.000	995.626	0.4	98	0.00
11	L7	A1260 5	1000.000	1007.642	-0.8	99	0.00
12	s	DCB - Surrogate	40.000	43.323	-8.3	102	0.00

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051502**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.92	8.02	1000.00	997.56	0.2	15
PK #2 A1016	9.32	9.27	9.37	1000.00	1039.67	4.0	15
PK #3 A1016	10.19	10.15	10.25	1000.00	1010.58	1.1	15
PK #4 A1016	10.77	10.72	10.82	1000.00	996.16	0.4	15
PK #5 A1016	11.38	11.33	11.43	1000.00	1014.95	1.5	15
PK #1 A1260	17.42	17.37	17.47	1000.00	963.93	3.6	15
PK #2 A1260	18.27	18.22	18.32	1000.00	1015.04	1.5	15
PK #3 A1260	20.26	20.21	20.31	1000.00	1009.83	1.0	15
PK #4 A1260	20.74	20.69	20.79	1000.00	941.54	5.8	15
PK #5 A1260	22.78	22.73	22.83	1000.00	969.10	3.1	15
Tetrachloro-meta-xylene	7.27	7.23	7.33	40.00	41.33	3.3	15
Decachlorobiphenyl	26.34	26.29	26.39	40.00	41.56	3.9	15
Average % D						2.4	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051502**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.42	7.38	7.48	1000.00	1026.54	2.7	15
PK #2 A1016	8.78	8.74	8.84	1000.00	1080.00	8.0	15
PK #3 A1016	9.70	9.66	9.76	1000.00	1057.43	5.7	15
PK #4 A1016	9.97	9.92	10.02	1000.00	1060.19	6.0	15
PK #5 A1016	10.91	10.87	10.97	1000.00	1055.33	5.5	15
PK #1 A1260	15.27	15.22	15.32	1000.00	1038.93	3.9	15
PK #2 A1260	16.75	16.70	16.80	1000.00	1034.52	3.5	15
PK #3 A1260	17.75	17.70	17.80	1000.00	1064.58	6.5	15
PK #4 A1260	19.88	19.83	19.93	1000.00	1051.58	5.2	15
PK #5 A1260	22.18	22.13	22.23	1000.00	1067.01	6.7	15
Tetrachloro-meta-xylene	6.49	6.45	6.55	40.00	43.47	8.7	15
Decachlorobiphenyl	25.20	25.15	25.25	40.00	45.51	13.8	15
Average % D						6.4	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JS 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD2B.CH
Acq On : 15 May 2008 1:14 pm Operator: JBS
Sample : C1051502 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:33 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	661213	537525	41.334	43.470
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.33%	43.47%
12) s DCB - Surrogate	26.34	25.20	1045663	806833	41.563	45.514
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.56%	45.51%
Target Compounds						
2) L1 A1016 1	7.97	7.42	343545	276535	997.561	1026.544 (C)
3) L1 A1016 2	9.32	8.78	450647	158438	1039.675	1080.004
4) L1 A1016 3	10.19	9.70	529680	438656	1010.575	1057.427m(C)
5) L1 A1016 4	10.77	9.97	317550	273318	996.160	1060.191m
6) L1 A1016 5	11.38	10.91	417721	331866	1014.950 (C)	1055.334m(C)
Sum A1016 1			2059143	1478812	5058.922	5279.499
Average A1016 1					1011.784	1055.900
7) L7 A1260 1	17.42	15.27	719578	710480	963.928	1038.931m
8) L7 A1260 2	18.27	16.75	746637	573706	1015.043	1034.524
9) L7 A1260 3	20.26	17.75	966934	617692	1009.829m	1064.580
10) L7 A1260 4	20.74	19.88	602248	1102663	941.538	1051.578
11) L7 A1260 5	22.78	22.18	605529	491385	969.096	1067.012
Sum A1260 1			3640925	3495925	4899.434	5256.625
Average A1260 1					979.887	1051.325
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

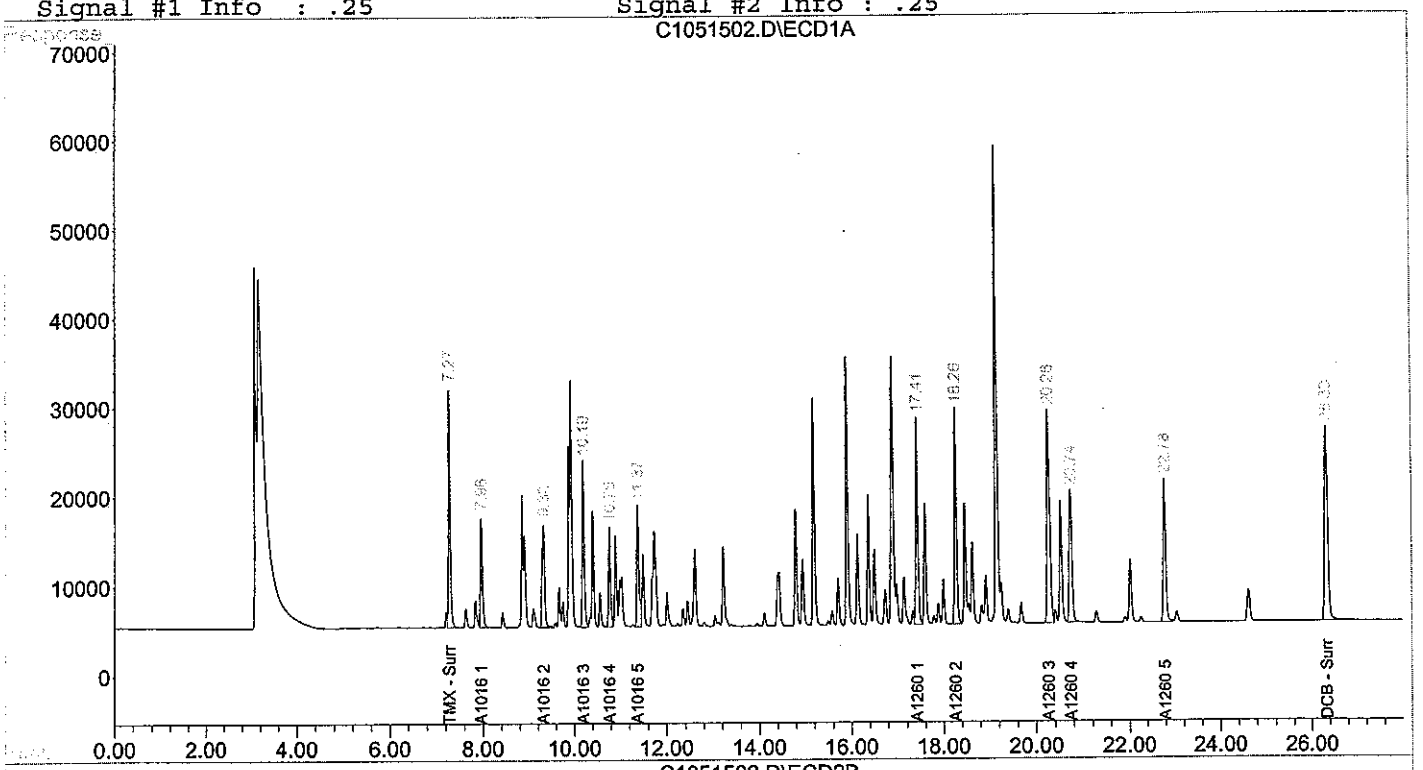
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

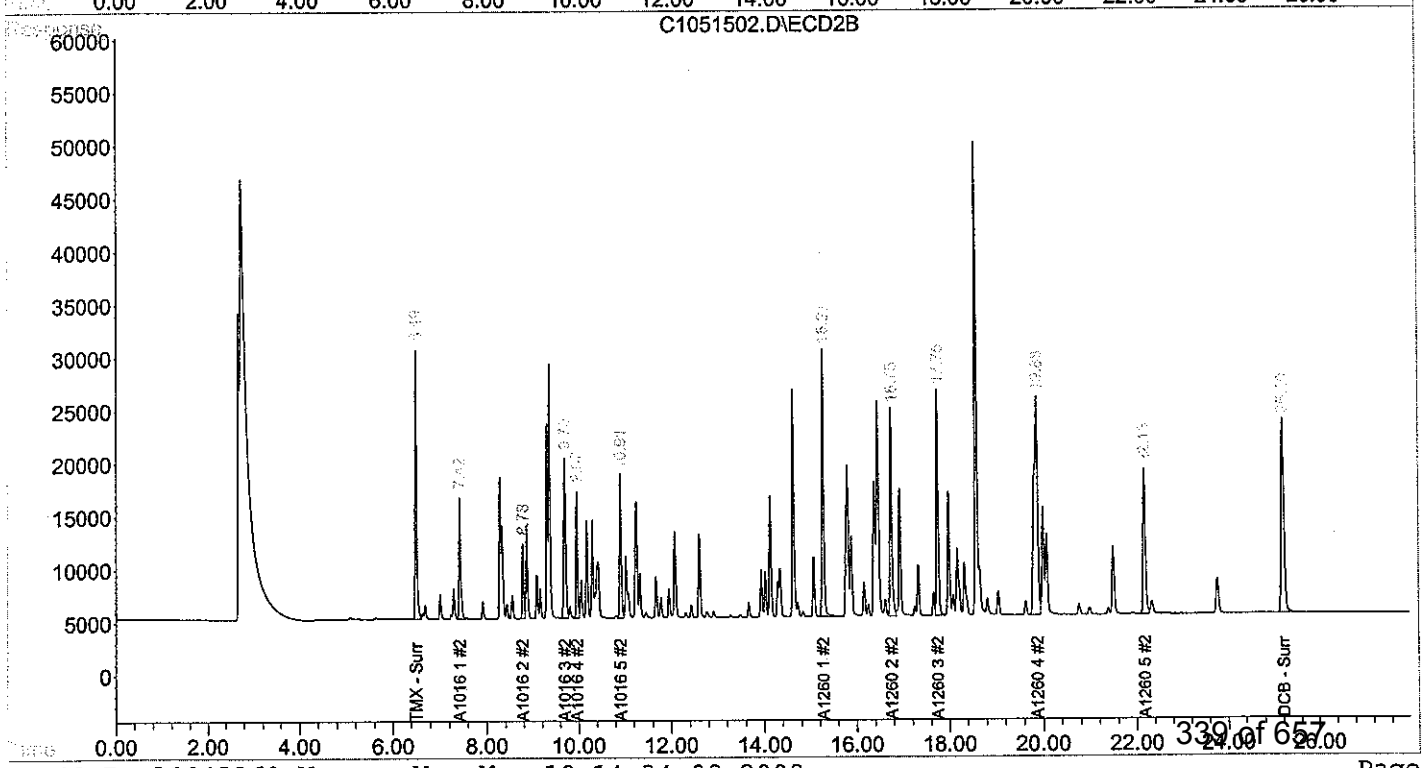
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD2B.CH
Acq On : 15 May 2008 1:14 pm Operator: JBS
Sample : C1051502 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:33 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051502.D\ECD2B.CH
Acq On : 15 May 2008 1:14 pm Operator: JBS
Sample : C1051502 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	41.334	-3.3	101	0.00
2	L1	A1016 1	1000.000	997.561	0.2	100	0.00
3	L1	A1016 2	1000.000	1039.675	-4.0	99	-0.01
4	L1	A1016 3	1000.000	1010.575	-1.1	99	0.00
5	L1	A1016 4	1000.000	996.160	0.4	101	0.00
6	L1	A1016 5	1000.000	1014.950	-1.5	101	0.00
7	L7	A1260 1	1000.000	963.928	3.6	96	0.00
8	L7	A1260 2	1000.000	1015.043	-1.5	100	0.00
9	L7	A1260 3	1000.000	1009.829	-1.0	99	0.00
10	L7	A1260 4	1000.000	941.538	5.8	92	0.00
11	L7	A1260 5	1000.000	969.096	3.1	95	0.00
12	s	DCB - Surrogate	40.000	41.563	-3.9	99	0.00

Signal #2

1	s	TMX - Surrogate	40.000	43.470	-8.7	106	-0.01
2	L1	A1016 1	1000.000	1026.544	-2.7	101	-0.01
3	L1	A1016 2	1000.000	1080.004	-8.0	100	0.00
4	L1	A1016 3	1000.000	1057.427	-5.7	104	-0.01
5	L1	A1016 4	1000.000	1060.191	-6.0	104	0.00
6	L1	A1016 5	1000.000	1055.334	-5.5	103	-0.01
7	L7	A1260 1	1000.000	1038.931	-3.9	103	0.00
8	L7	A1260 2	1000.000	1034.524	-3.5	101	0.00
9	L7	A1260 3	1000.000	1064.580	-6.5	104	0.00
10	L7	A1260 4	1000.000	1051.578	-5.2	103	0.00
11	L7	A1260 5	1000.000	1067.012	-6.7	104	0.00
12	s	DCB - Surrogate	40.000	45.514	-13.8	107	0.00

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051503**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.92	8.02	1000.00	1004.73	0.5	15
PK #2 A1016	9.33	9.28	9.38	1000.00	1017.91	1.8	15
PK #3 A1016	10.20	10.15	10.25	1000.00	938.70	6.1	15
PK #4 A1016	10.77	10.72	10.82	1000.00	984.22	1.6	15
PK #5 A1016	11.38	11.33	11.43	1000.00	1015.25	1.5	15
PK #1 A1260	17.42	17.37	17.47	1000.00	920.35	8.0	15
PK #2 A1260	18.27	18.22	18.32	1000.00	983.59	1.6	15
PK #3 A1260	20.27	20.22	20.32	1000.00	1038.83	3.9	15
PK #4 A1260	20.74	20.69	20.79	1000.00	986.99	1.3	15
PK #5 A1260	22.79	22.74	22.84	1000.00	1122.24	12.2	15
Tetrachloro-meta-xylene	7.28	7.23	7.33	40.00	42.10	5.3	15
Decachlorobiphenyl	26.35	26.30	26.40	40.00	42.89	7.2	15
Average % D						4.3	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051503**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.38	7.48	1000.00	1026.08	2.6	15
PK #2 A1016	8.79	8.74	8.84	1000.00	1082.85	8.3	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1038.88	3.9	15
PK #4 A1016	9.97	9.92	10.02	1000.00	1059.10	5.9	15
PK #5 A1016	10.92	10.87	10.97	1000.00	1043.88	4.4	15
PK #1 A1260	15.28	15.23	15.33	1000.00	1004.76	0.5	15
PK #2 A1260	16.75	16.70	16.80	1000.00	976.68	2.3	15
PK #3 A1260	17.75	17.70	17.80	1000.00	1102.53	10.3	15
PK #4 A1260	19.88	19.83	19.93	1000.00	998.24	0.2	15
PK #5 A1260	22.18	22.13	22.23	1000.00	983.44	1.7	15
Tetrachloro-meta-xylene	6.50	6.45	6.55	40.00	42.15	5.4	15
Decachlorobiphenyl	25.21	25.16	25.26	40.00	45.93	14.8	15
Average % D						5.0	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/20/08

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD2B.CH
Acq On : 15 May 2008 9:07 pm Operator: JBS
Sample : C1051503 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:36 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	672926	522314	42.104	42.146
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.10%	42.15%
12) s DCB - Surrogate	26.35	25.21	1076271	813390	42.888m	45.926m
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.89%	45.93%
Target Compounds						
2) L1 A1016 1	7.97	7.43	345648	276430	1004.731m	1026.076m(C)
3) L1 A1016 2	9.33	8.79	442558	158798	1017.908m	1082.845m
4) L1 A1016 3	10.20	9.71	497244	432148	938.702m	1038.881m(C)
5) L1 A1016 4	10.77	9.97	314360	273070	984.216m	1059.102m
6) L1 A1016 5	11.38	10.92	417828	328862	1015.248m(C)	1043.880m(C)
Sum A1016 1			2017638	1469308	4960.805	5250.784
Average A1016 1					992.161	1050.157
7) L7 A1260 1	17.42	15.28	691446	691242	920.350m	1004.760m
8) L7 A1260 2	18.27	16.75	726276	546762	983.592m	976.683m
9) L7 A1260 3	20.27	17.75	992108	635942	1038.833m	1102.531m
10) L7 A1260 4	20.74	19.88	628738	1053984	986.988m	998.242m
11) L7 A1260 5	22.79	22.18	692030	457432	1122.245m	983.441m
Sum A1260 1			3730598	3385362	5052.009	5065.657
Average A1260 1					1010.402	1013.131
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

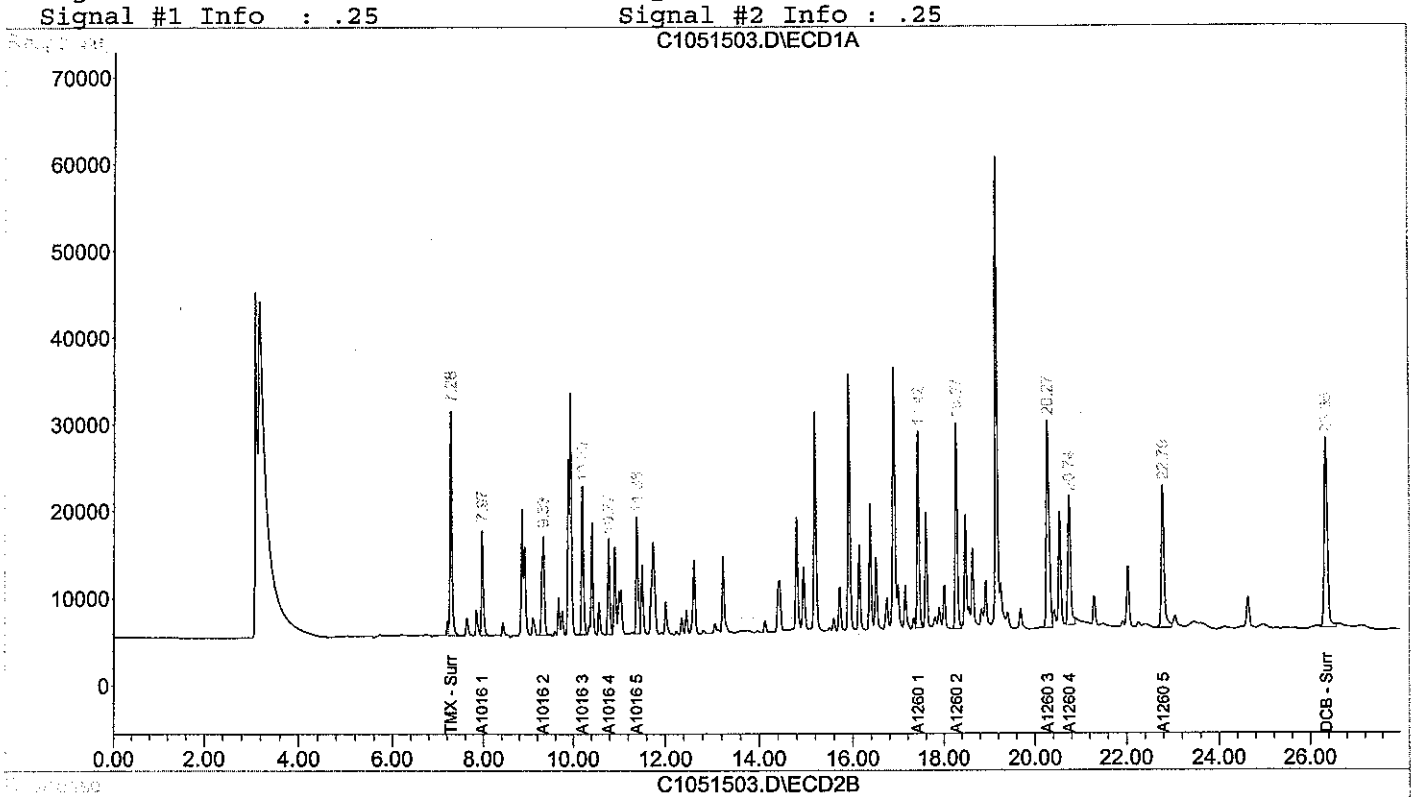
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

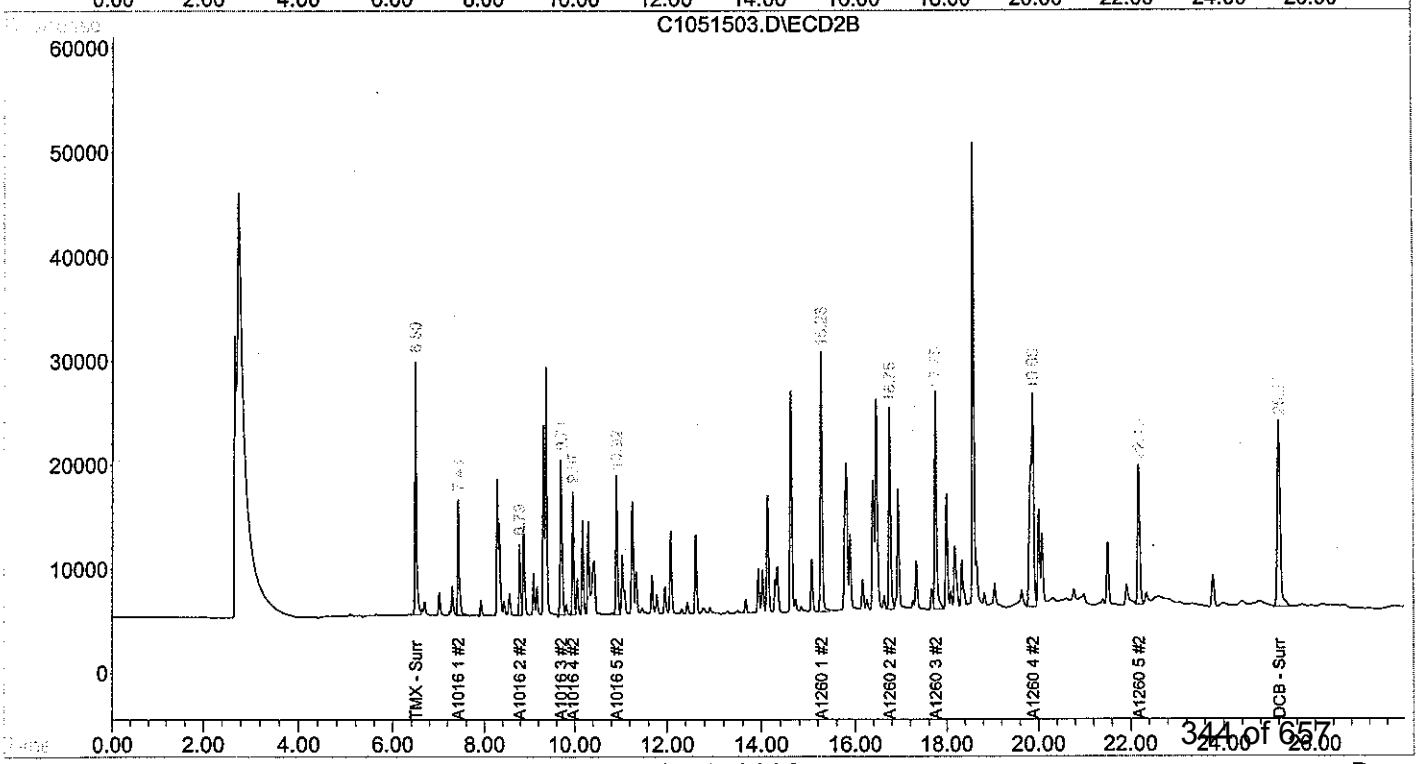
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD2B.CH
Acq On : 15 May 2008 9:07 pm Operator: JBS
Sample : C1051503 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:36 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051503.D\ECD2B.CH
Acq On : 15 May 2008 9:07 pm Operator: JBS
Sample : C1051503 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	42.104	-5.3	103	0.00
2	L1	A1016 1	1000.000	1004.731	-0.5	101	0.00
3	L1	A1016 2	1000.000	1017.908	-1.8	97	0.00
4	L1	A1016 3	1000.000	938.702	6.1	93	0.00
5	L1	A1016 4	1000.000	984.216	1.6	100	0.00
6	L1	A1016 5	1000.000	1015.248	-1.5	101	0.00
7	L7	A1260 1	1000.000	920.350	8.0	92	0.00
8	L7	A1260 2	1000.000	983.592	1.6	97	0.00
9	L7	A1260 3	1000.000	1038.833	-3.9	102	0.00
10	L7	A1260 4	1000.000	986.988	1.3	96	0.00
11	L7	A1260 5	1000.000	1122.245	-12.2	109	0.00
12	s	DCB - Surrogate	40.000	42.888	-7.2	102	0.00

Signal #2

1	s	TMX - Surrogate	40.000	42.146	-5.4	103	0.00
2	L1	A1016 1	1000.000	1026.076	-2.6	101	0.00
3	L1	A1016 2	1000.000	1082.845	-8.3	101	0.00
4	L1	A1016 3	1000.000	1038.881	-3.9	102	0.00
5	L1	A1016 4	1000.000	1059.102	-5.9	104	0.00
6	L1	A1016 5	1000.000	1043.880	-4.4	102	0.00
7	L7	A1260 1	1000.000	1004.760	-0.5	100	0.00
8	L7	A1260 2	1000.000	976.683	2.3	97	0.00
9	L7	A1260 3	1000.000	1102.531	-10.3	107	0.00
10	L7	A1260 4	1000.000	998.242	0.2	98	0.00
11	L7	A1260 5	1000.000	983.441	1.7	97	0.00
12	s	DCB - Surrogate	40.000	45.926	-14.8	108	0.00

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051507**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.92	8.02	1000.00	1121.40	12.1	15
PK #2 A1016	9.32	9.27	9.37	1000.00	1122.40	12.2	15
PK #3 A1016	10.19	10.14	10.24	1000.00	1103.20	10.3	15
PK #4 A1016	10.76	10.72	10.82	1000.00	1070.08	7.0	15
PK #5 A1016	11.38	11.33	11.43	1000.00	1088.63	8.9	15
PK #1 A1260	17.41	17.37	17.47	1000.00	1040.86	4.1	15
PK #2 A1260	18.26	18.22	18.32	1000.00	1106.54	10.7	15
PK #3 A1260	20.26	20.21	20.31	1000.00	1145.05	14.5	15
PK #4 A1260	20.73	20.69	20.79	1000.00	1053.65	5.4	15
PK #5 A1260	22.78	22.73	22.83	1000.00	1106.62	10.7	15
Tetrachloro-meta-xylene	7.28	7.22	7.32	40.00	46.52	16.3[a]	15
Decachlorobiphenyl	26.33	26.29	26.39	40.00	45.06	12.6	15
Average % D						10.4	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051507**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.37	7.47	1000.00	1123.46	12.3	15
PK #2 A1016	8.78	8.73	8.83	1000.00	1176.60	17.7[a]	15
PK #3 A1016	9.70	9.65	9.75	1000.00	1149.67	15.0	15
PK #4 A1016	9.97	9.92	10.02	1000.00	1165.17	16.5[a]	15
PK #5 A1016	10.91	10.86	10.96	1000.00	1147.57	14.8	15
PK #1 A1260	15.27	15.22	15.32	1000.00	1102.77	10.3	15
PK #2 A1260	16.75	16.70	16.80	1000.00	1107.93	10.8	15
PK #3 A1260	17.75	17.70	17.80	1000.00	1140.84	14.1	15
PK #4 A1260	19.88	19.83	19.93	1000.00	1117.11	11.7	15
PK #5 A1260	22.18	22.13	22.23	1000.00	1107.64	10.8	15
Tetrachloro-meta-xylene	6.50	6.44	6.54	40.00	47.32	18.3[a]	15
Decachlorobiphenyl	25.20	25.15	25.25	40.00	48.44	21.1[a]	15
Average % D						14.5	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD1A.CH Vial: 40
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD2B.CH
Acq On : 16 May 2008 4:25 am Operator: JBS
Sample : C1051507 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:43 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	739744	581480	46.519	47.321
Spiked Amount 100.000 Range 30 - 150 Recovery =					46.52%	47.32%
12) s DCB - Surrogate	26.33	25.20	1126229	853217	45.059m	48.440m
Spiked Amount 100.000 Range 30 - 150 Recovery =					45.06%	48.44%
Target Compounds						
2) L1 A1016 1	7.97	7.43	379217	297831	1121.402	1123.461 (C)
3) L1 A1016 2	9.32	8.78	480899	170524	1122.398	1176.596m
4) L1 A1016 3	10.19	9.70	570520	470488	1103.203	1149.667m(C)
5) L1 A1016 4	10.76	9.97	337013	296944	1070.080	1165.169m
6) L1 A1016 5	11.38	10.91	443827	355642	1088.626 (C)	1147.572m(C)
Sum A1016 1			2211475	1591429	5505.710	5762.465
Average A1016 1					1101.142	1152.493
7) L7 A1260 1	17.41	15.27	768392	745788	1040.861m	1102.766m
8) L7 A1260 2	18.26	16.75	804996	607170	1106.541m	1107.929m
9) L7 A1260 3	20.26	17.75	1083166	654134	1145.047m	1140.841m
10) L7 A1260 4	20.73	19.88	667188	1161550	1053.654m	1117.105m
11) L7 A1260 5	22.78	22.18	683314	507648	1106.622m	1107.644m
Sum A1260 1			4007056	3676290	5452.725	5576.286
Average A1260 1					1090.545	1115.257
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

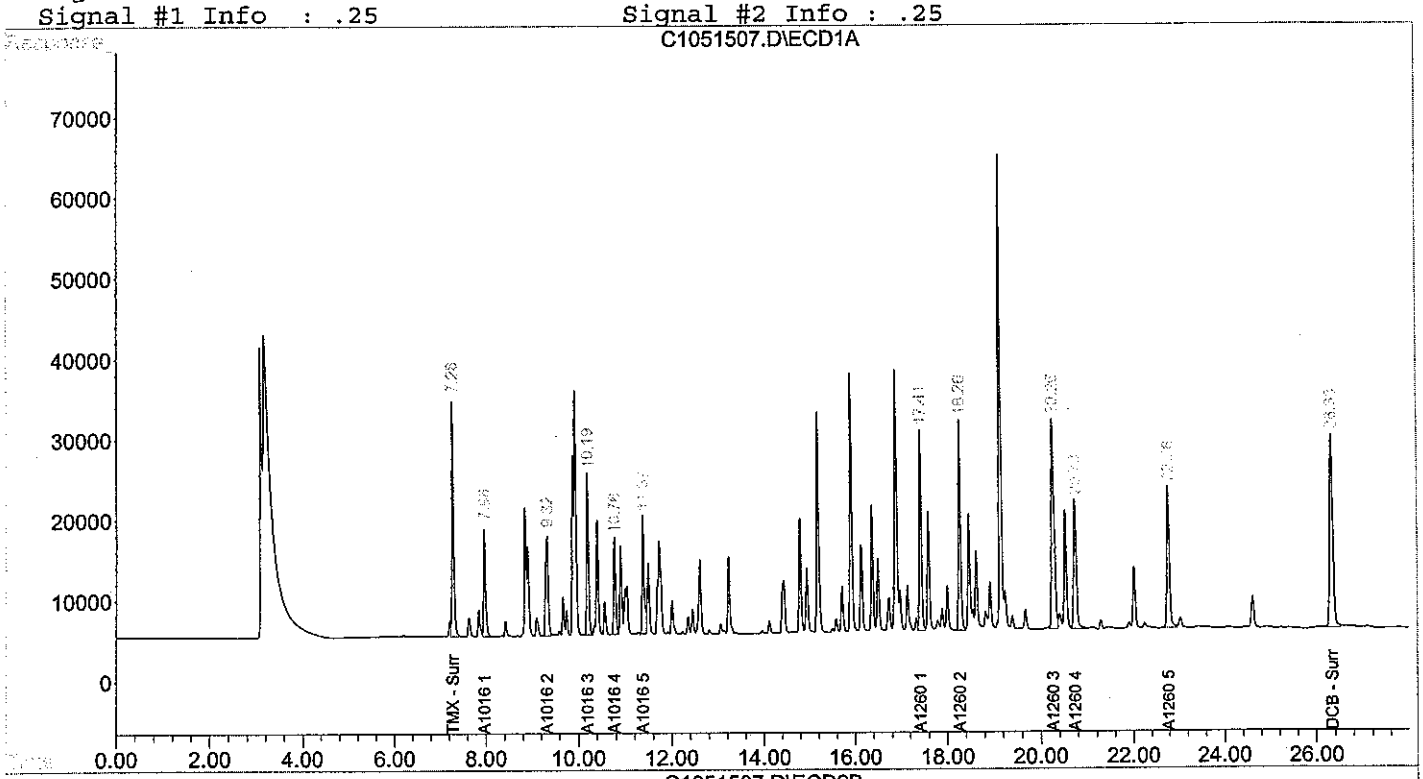
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

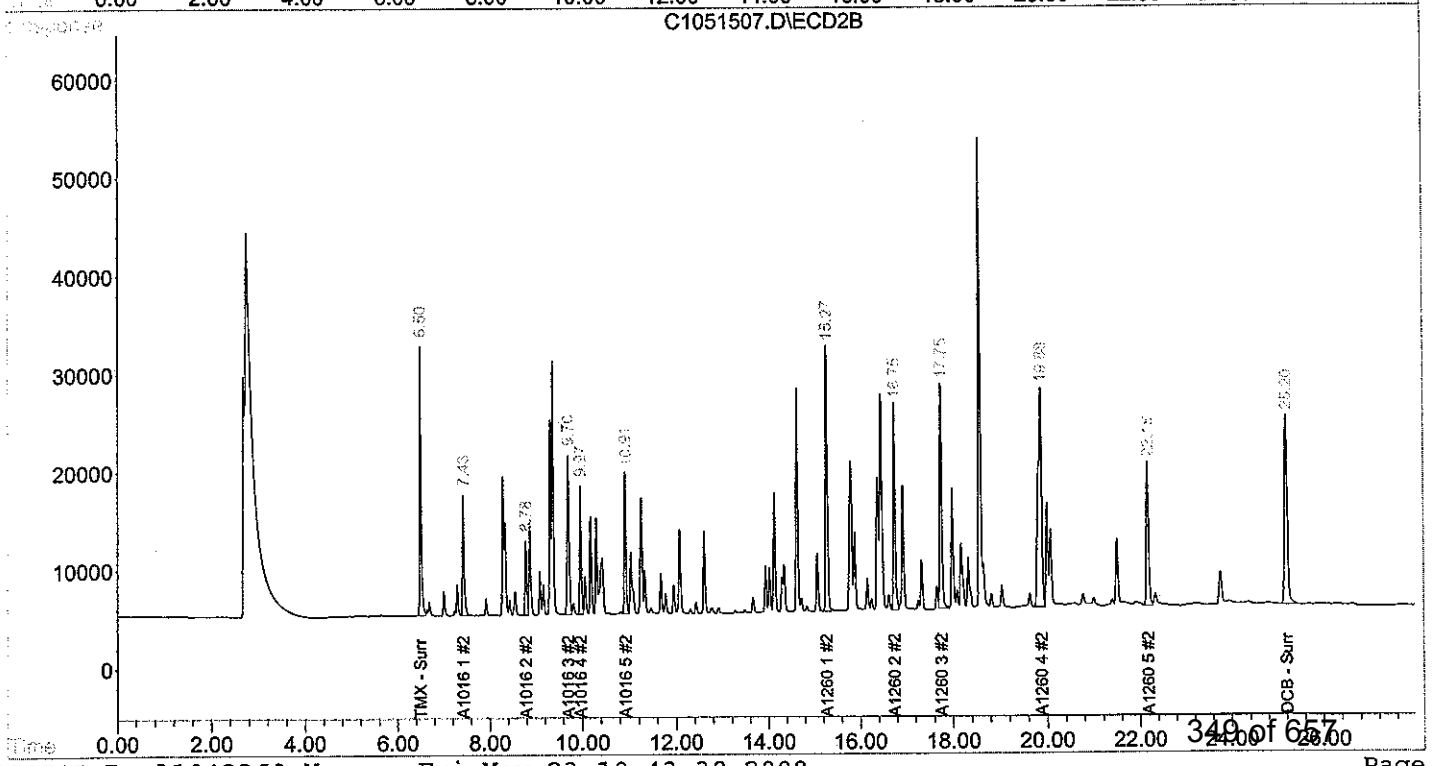
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD1A.CH Vial: 40
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD2B.CH
Acq On : 16 May 2008 4:25 am Operator: JBS
Sample : C1051507 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:43 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD1A.CH Vial: 40
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051507.D\ECD2B.CH
Acq On : 16 May 2008 4:25 am Operator: JBS
Sample : C1051507 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:34:56 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	46.519	-16.3#	113	0.00
2	L1	A1016 1	1000.000	1121.402	-12.1	110	0.00
3	L1	A1016 2	1000.000	1122.398	-12.2	105	0.00
4	L1	A1016 3	1000.000	1103.203	-10.3	106	0.00
5	L1	A1016 4	1000.000	1070.080	-7.0	107	0.00
6	L1	A1016 5	1000.000	1088.626	-8.9	107	0.00
7	L7	A1260 1	1000.000	1040.861	-4.1	102	-0.01
8	L7	A1260 2	1000.000	1106.541	-10.7	108	0.00
9	L7	A1260 3	1000.000	1145.047	-14.5	111	0.00
10	L7	A1260 4	1000.000	1053.654	-5.4	102	0.00
11	L7	A1260 5	1000.000	1106.622	-10.7	108	-0.01
12	s	DCB - Surrogate	40.000	45.059	-12.6	107	-0.01

Signal #2

1	s	TMX - Surrogate	40.000	47.321	-18.3#	115	0.00
2	L1	A1016 1	1000.000	1123.461	-12.3	109	0.00
3	L1	A1016 2	1000.000	1176.596	-17.7#	108	-0.01
4	L1	A1016 3	1000.000	1149.667	-15.0	111	0.00
5	L1	A1016 4	1000.000	1165.169	-16.5#	113	0.00
6	L1	A1016 5	1000.000	1147.572	-14.8	111	0.00
7	L7	A1260 1	1000.000	1102.766	-10.3	108	0.00
8	L7	A1260 2	1000.000	1107.929	-10.8	107	0.00
9	L7	A1260 3	1000.000	1140.841	-14.1	110	0.00
10	L7	A1260 4	1000.000	1117.105	-11.7	109	0.00
11	L7	A1260 5	1000.000	1107.644	-10.8	108	0.00
12	s	DCB - Surrogate	40.000	48.440	-21.1#	113	0.00

Quantitation Report (QT Reviewed)

JBS 5/20/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\I1051501.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\MAY15\I1051501.D\ECD2B.CH
Acq On : 15 May 2008 1:46 pm Operator: JBS
Sample : I1051501 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:38:52 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.96	7.42	281558	223926	1000.000	1000.000 (C)
24) L4 A1242 2	8.84	8.29	546368	410182	1021.650m	996.250m
25) L4 A1242 3	9.92	9.37	987856	784932	1001.111m	1005.727m
26) L4 A1242 4	10.19	9.70	431860	357869	991.898m	1000.000
27) L4 A1242 5	11.73	12.09	453572	336144	1000.000	1000.000 (C)
Sum A1242 1			2701214	2113053	5014.658	5001.977
Average A1242 1					1002.932	1000.395
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

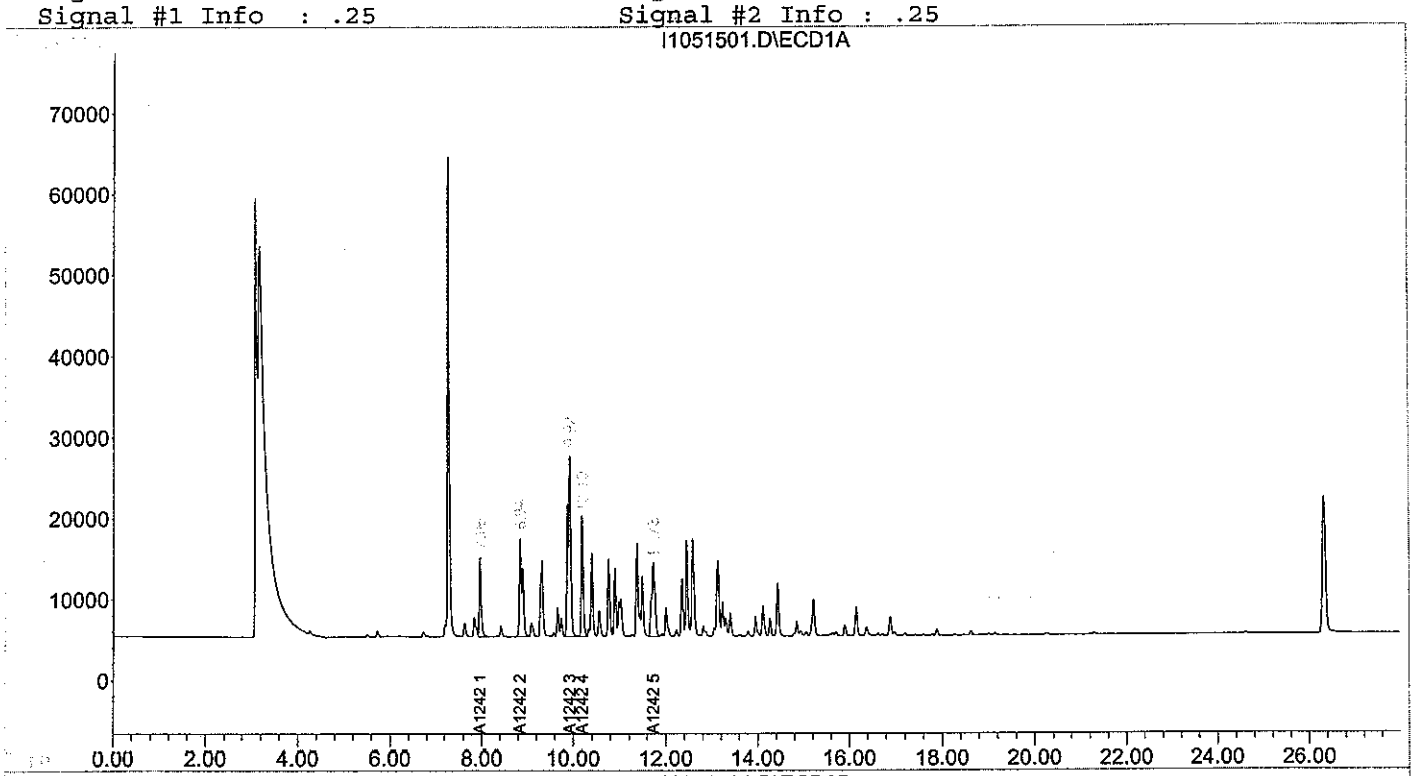
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

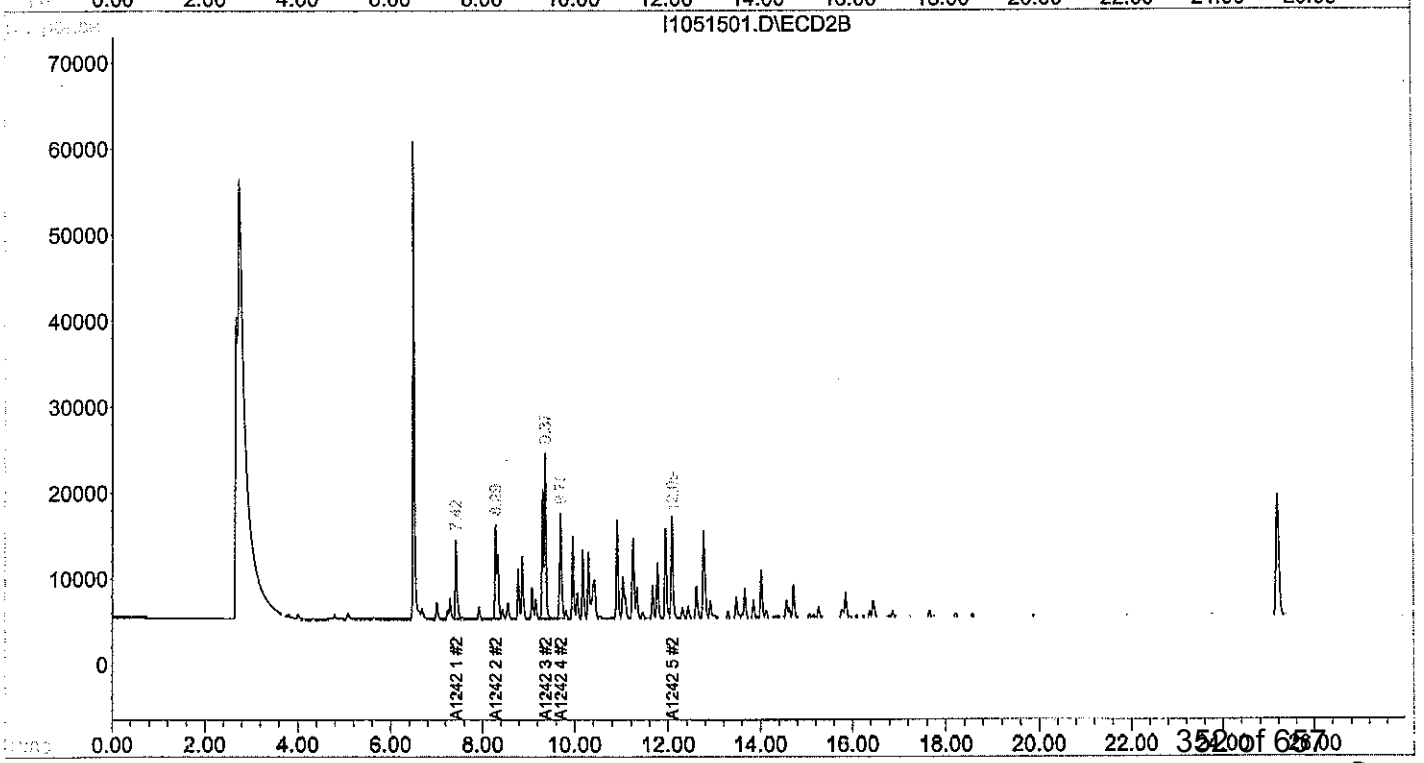
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\I1051501.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\MAY15\I1051501.D\ECD2B.CH
Acq On : 15 May 2008 1:46 pm Operator: JBS
Sample : I1051501 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:40 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:38:52 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JLS 5/23/18

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051504.D\ECD1A.CH Vial: 27
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051504.D\ECD2B.CH
Acq On : 15 May 2008 9:39 pm Operator: JBS
Sample : C1051504 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:45 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	281673	221459	1000.407	988.985 (C)
24) L4 A1242 2	8.85	8.29	550410	403878	1007.398m	984.631m
25) L4 A1242 3	9.93	9.37	988204	773884	1000.352m	985.925m
26) L4 A1242 4	10.19	9.71	425773	353501	985.905 (C)	987.795 (C)
27) L4 A1242 5	11.74	12.10	428032	321124	943.691	955.316m
Sum A1242 1			2674092	2073846	4937.754	4902.652
Average A1242 1					987.551	980.530
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

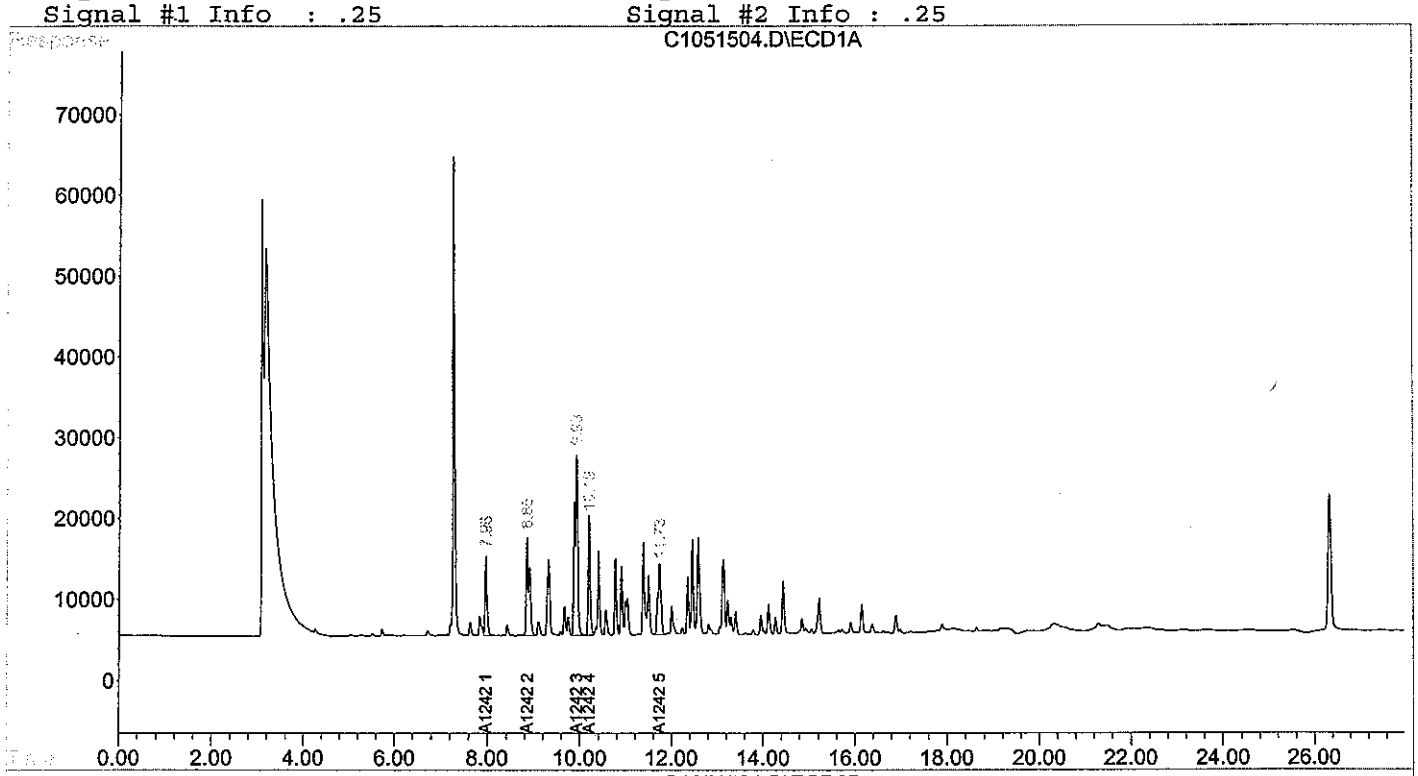
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

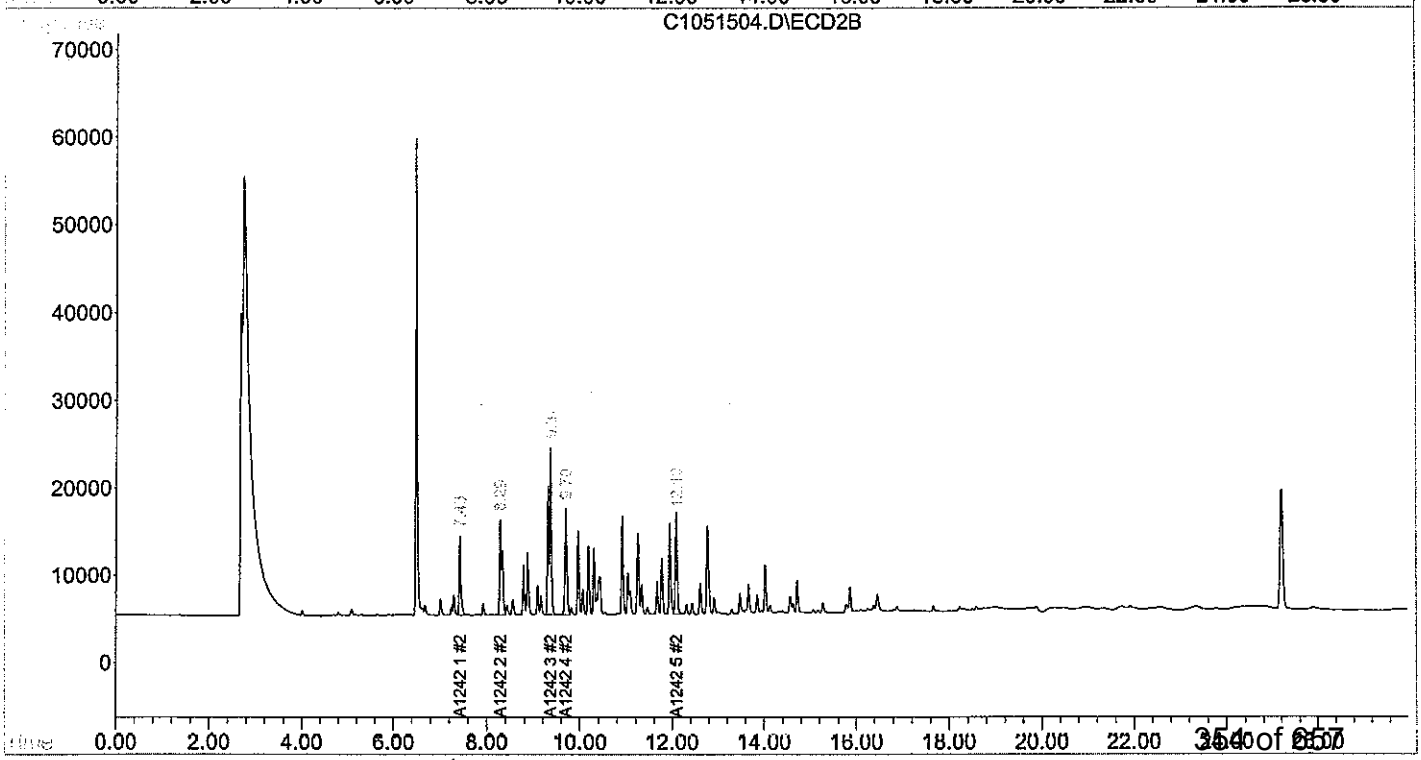
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051504.D\ECD1A.CH Vial: 27
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051504.D\ECD2B.CH
Acq On : 15 May 2008 9:39 pm Operator: JBS
Sample : C1051504 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:45 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051508.D\ECD1A.CH Vial: 41
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051508.D\ECD2B.CH
Acq On : 16 May 2008 4:56 am Operator: JBS
Sample : C1051508 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:11 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	286837	225831	1018.749	1008.505 (C)
24) L4 A1242 2	8.84	8.29	562488	413894	1029.504m	1009.050m
25) L4 A1242 3	9.93	9.37	1001410	789034	1013.721m	1005.226m
26) L4 A1242 4	10.19	9.70	435051	359581	1007.388 (C)	1004.784 (C)
27) L4 A1242 5	11.73	12.10	448953	333412	989.816	991.873
Sum A1242 1			2734739	2121752	5059.178	5019.438
Average A1242 1					1011.836	1003.888
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

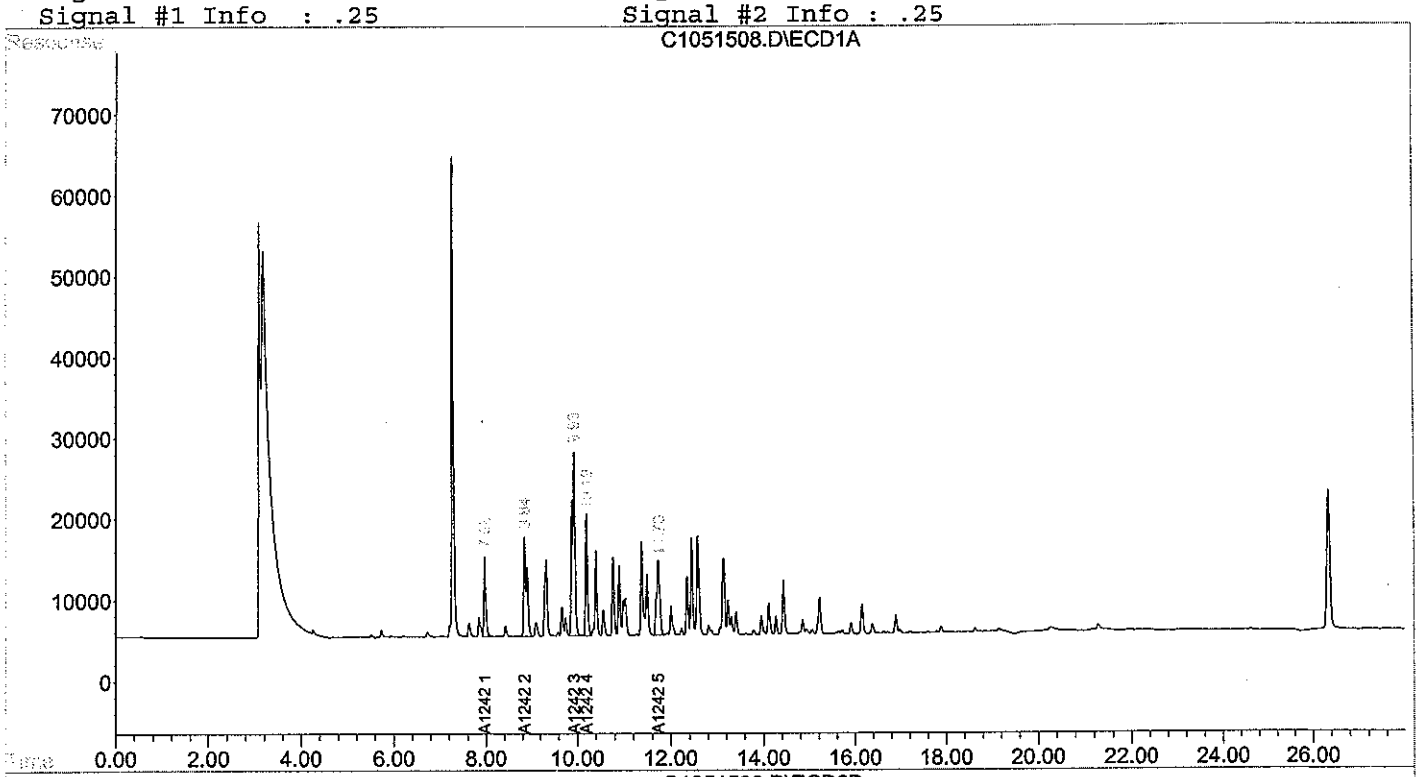
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

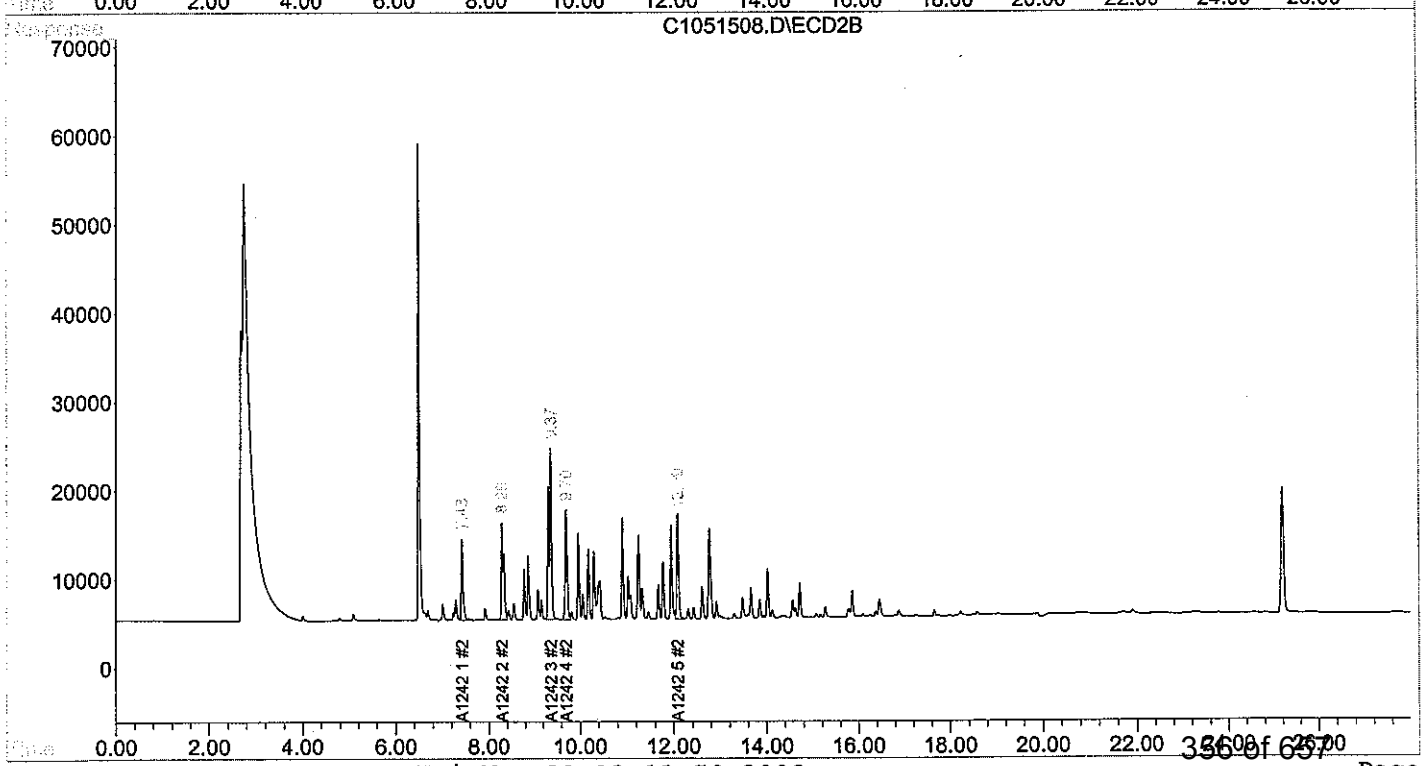
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051508.D\ECD1A.CH Vial: 41
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051508.D\ECD2B.CH
Acq On : 16 May 2008 4:56 am Operator: JBS
Sample : C1051508 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 12:11 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\I1051503.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\MAY15\I1051503.D\ECD2B.CH
Acq On : 15 May 2008 2:49 pm Operator: JBS
Sample : I1051503 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:42 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:41:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	681673	509458	943.403	947.410 (C)
34) L6 A1254 2	14.43	14.02	1174858	823216	955.807 (C)	948.279m
35) L6 A1254 3	15.21	14.72	1247976	598576	941.515	924.744m
36) L6 A1254 4	15.90	15.27	560786	467026	935.355	922.306m
37) L6 A1254 5	16.89	16.45	1108945	818286	942.139	933.863m
Sum A1254 1			4774239	3216562	4718.218	4676.602
Average A1254 1					943.644	935.320
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

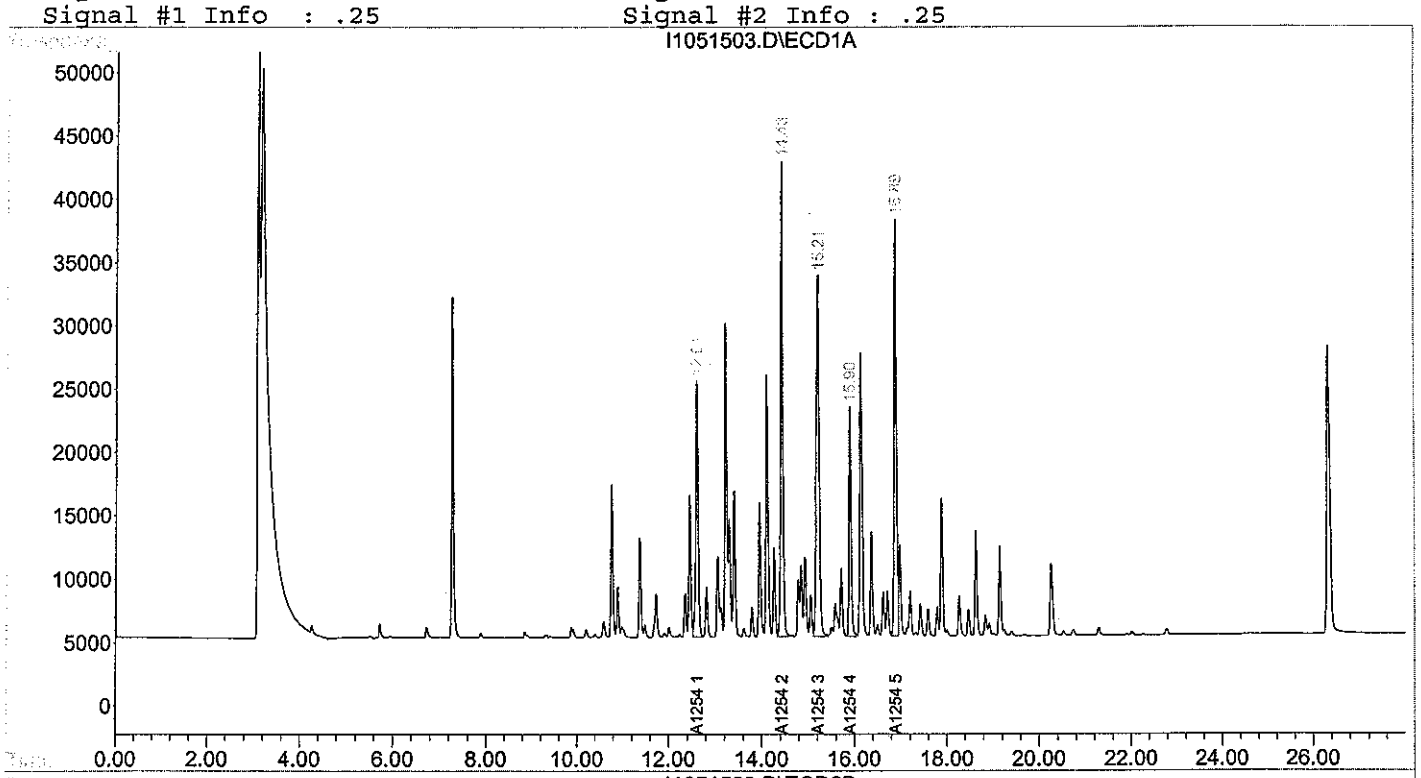
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

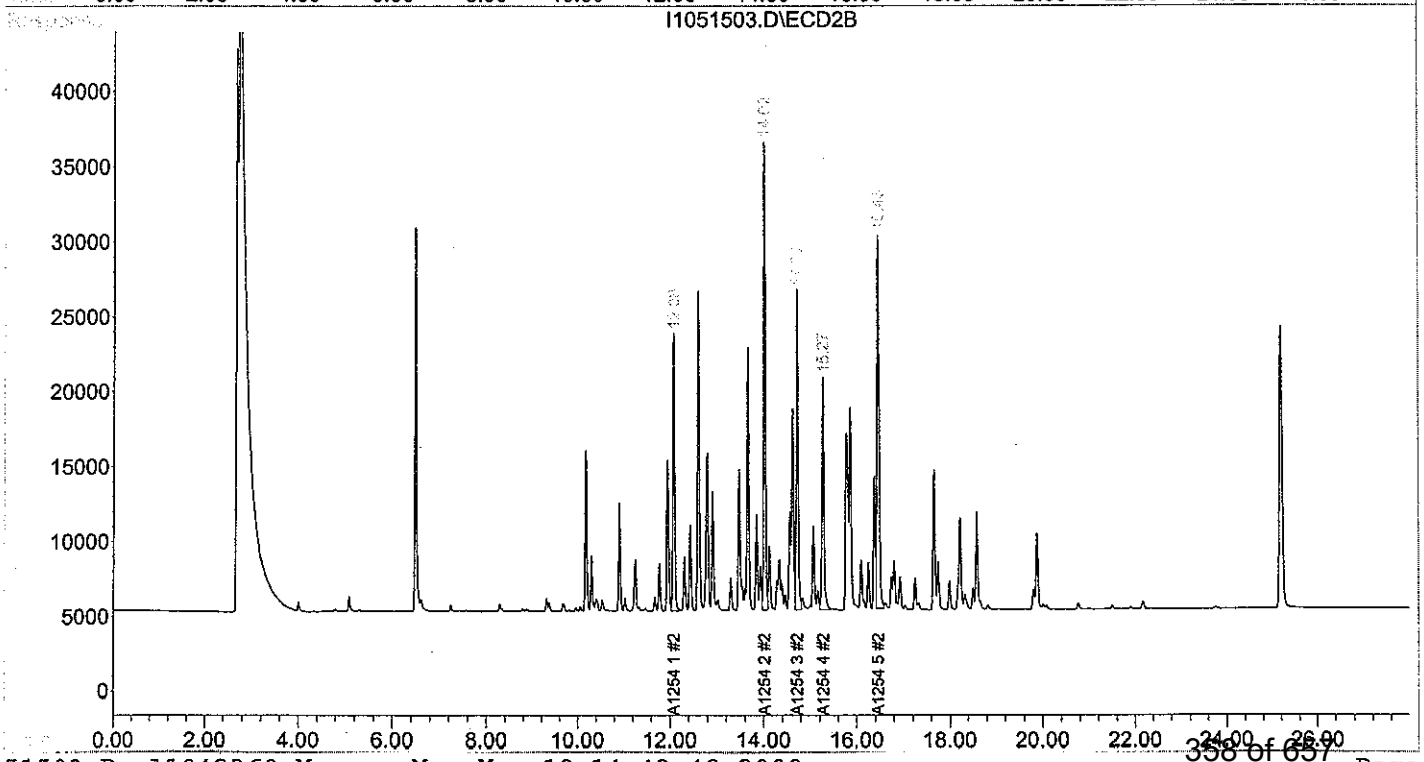
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\I1051503.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\MAY15\I1051503.D\ECD2B.CH
Acq On : 15 May 2008 2:49 pm Operator: JBS
Sample : I1051503 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 14:42 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:41:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051506.D\ECD1A.CH Vial: 29
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051506.D\ECD2B.CH
Acq On : 15 May 2008 10:41 pm Operator: JBS
Sample : C1051506 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:46 2008 Quant Results File: A1042360.RES

JBS 5/23/08

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.08	682710	502810	1001.522	986.950m
34) L6 A1254 2	14.43	14.03	1171214	818913	996.898 (C)	994.773 (C)
35) L6 A1254 3	15.21	14.72	1239265	593499	993.020	991.517
36) L6 A1254 4	15.90	15.27	553578	451152	987.145	966.010
37) L6 A1254 5	16.89	16.46	1111751	823207	1002.530	1006.014
Sum A1254 1			4758517	3189580	4981.114	4945.264
Average A1254 1					996.223	989.053
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

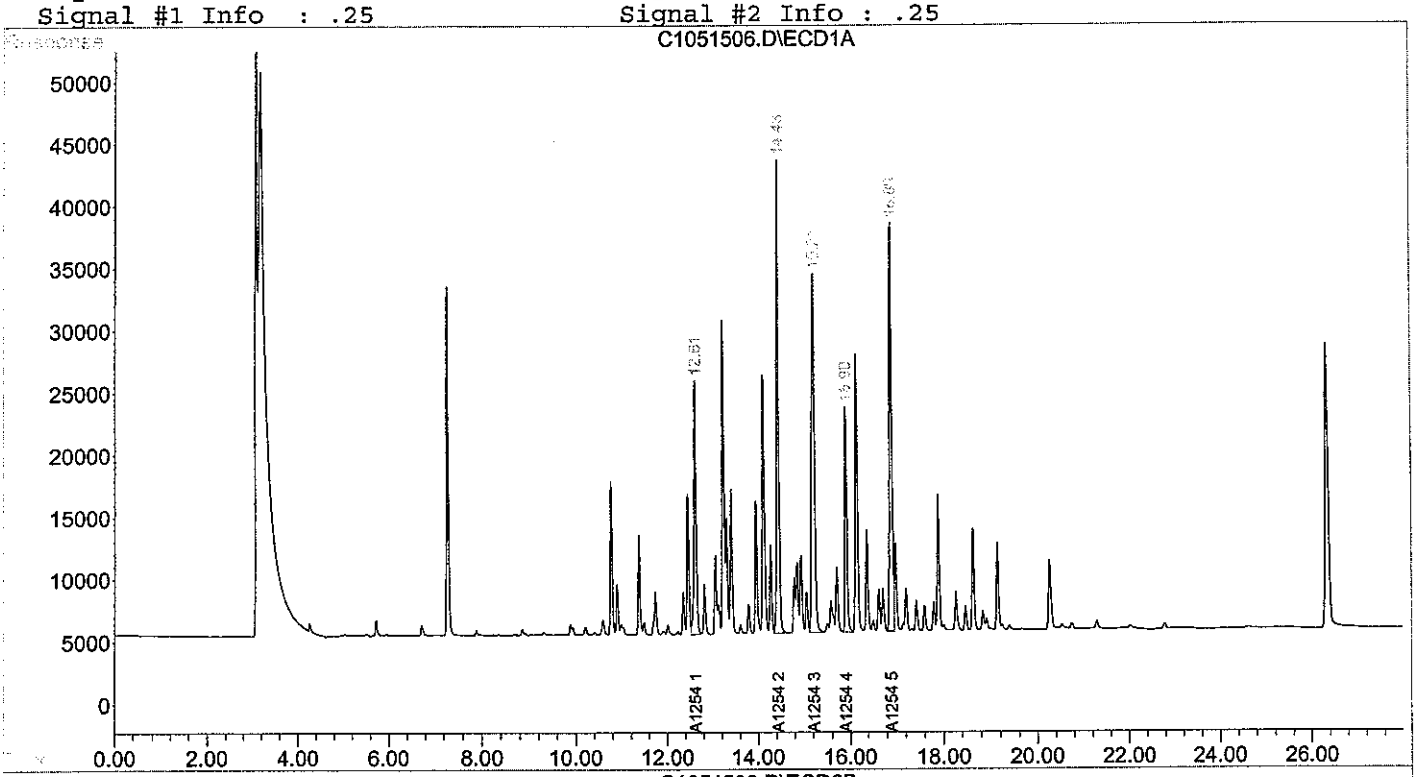
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

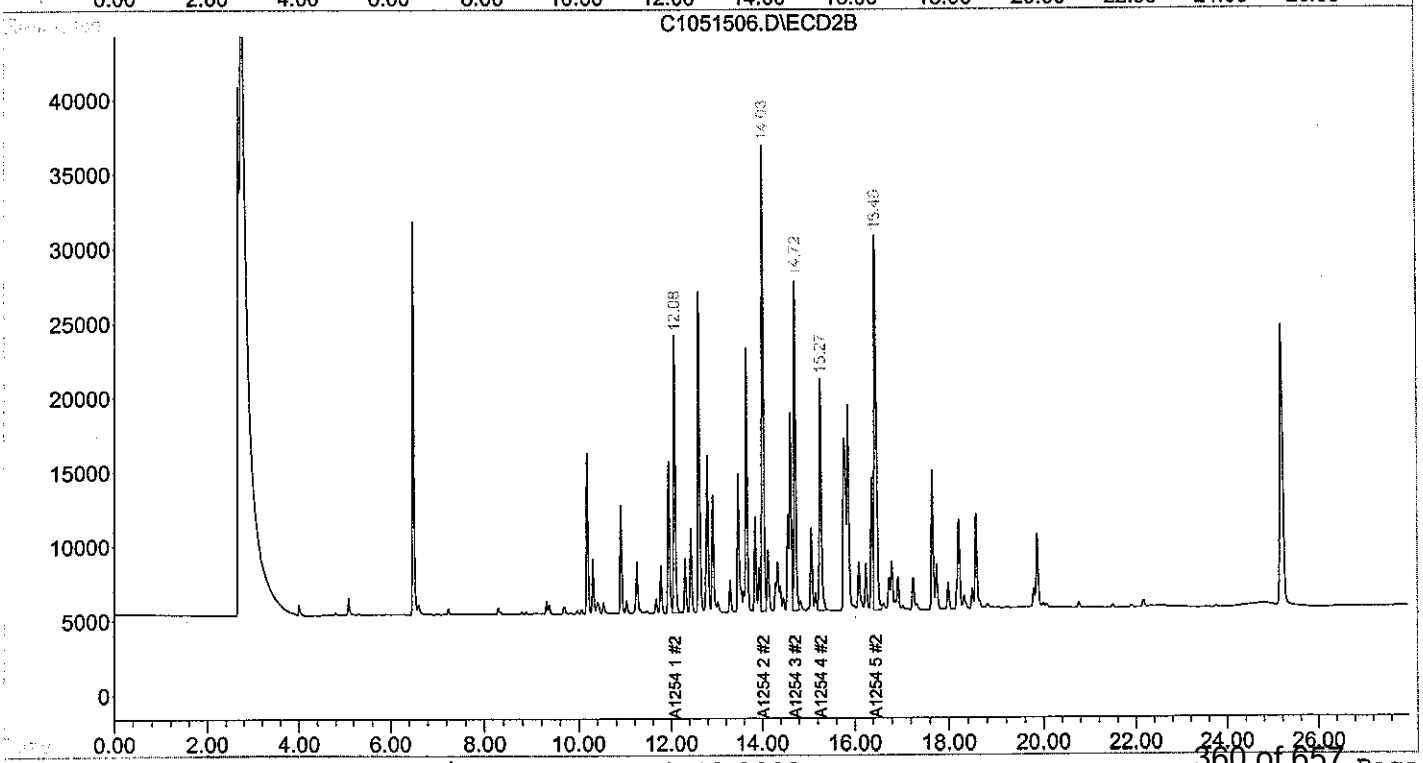
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051506.D\ECD1A.CH Vial: 29
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051506.D\ECD2B.CH
Acq On : 15 May 2008 10:41 pm Operator: JBS
Sample : C1051506 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:46 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051510.D\ECD1A.CH Vial: 43
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051510.D\ECD2B.CH
Acq On : 16 May 2008 5:59 am Operator: JBS
Sample : C1051510 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 11:29 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

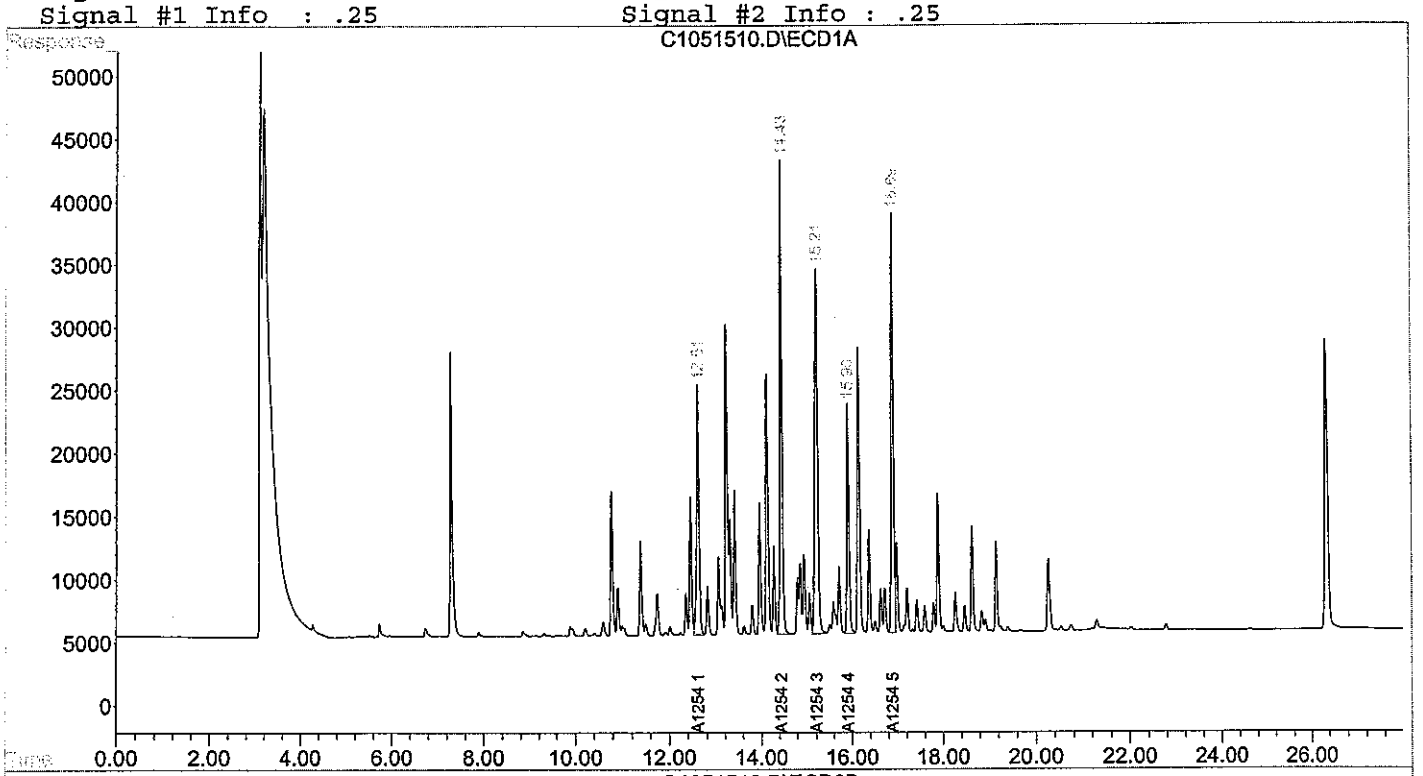
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	701085	518750	1028.477	1018.238
34) L6 A1254 2	14.43	14.03	1200873	835635	1022.143 (C)	1015.087 (C)
35) L6 A1254 3	15.21	14.72	1274257	612595	1021.059	1023.420
36) L6 A1254 4	15.90	15.27	570748	473065	1017.763	1012.931
37) L6 A1254 5	16.89	16.46	1138856	838771	1026.972	1025.035
Sum A1254 1			4885819	3278817	5116.414	5094.710
Average A1254 1					1023.283	1018.942
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

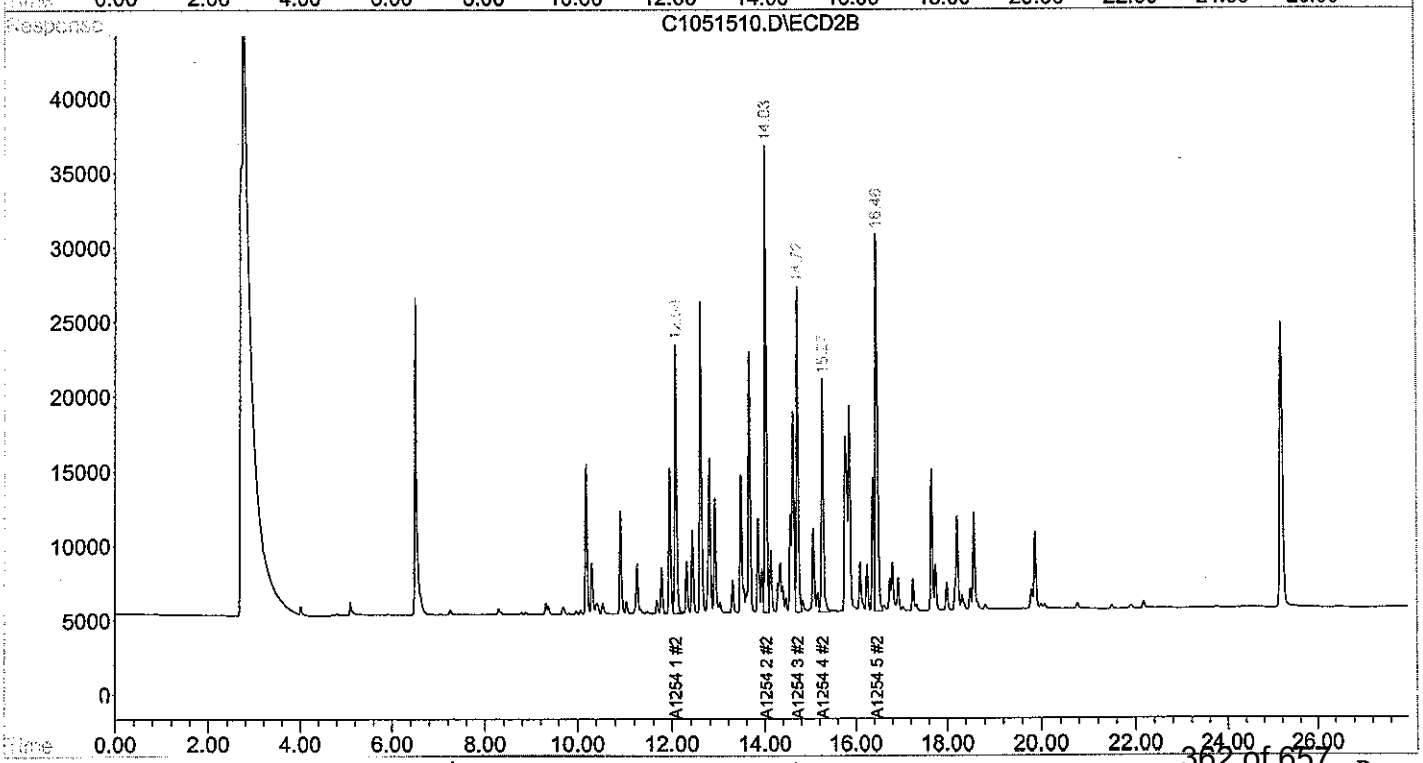
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Signal #1 : D:\HPCHEM\2\DATA\MAY15\C1051510.D\ECD1A.CH Vial: 43
Signal #2 : D:\HPCHEM\2\DATA\MAY15\C1051510.D\ECD2B.CH
Acq On : 16 May 2008 5:59 am Operator: JBS
Sample : C1051510 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 11:29 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:44:12 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051601**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.98	7.93	8.03	1000.00	1088.58	8.9	15
PK #2 A1016	9.33	9.28	9.38	1000.00	1065.57	6.6	15
PK #3 A1016	10.21	10.16	10.26	1000.00	1013.60	1.4	15
PK #4 A1016	10.78	10.73	10.83	1000.00	1021.47	2.1	15
PK #5 A1016	11.39	11.34	11.44	1000.00	1015.81	1.6	15
PK #1 A1260	17.43	17.38	17.48	1000.00	924.25	7.6	15
PK #2 A1260	18.28	18.23	18.33	1000.00	982.35	1.8	15
PK #3 A1260	20.27	20.22	20.32	1000.00	974.18	2.6	15
PK #4 A1260	20.75	20.70	20.80	1000.00	905.90	9.4	15
PK #5 A1260	22.80	22.75	22.85	1000.00	944.68	5.5	15
Tetrachloro-meta-xylene	7.29	7.24	7.34	40.00	43.37	8.4	15
Decachlorobiphenyl	26.36	26.31	26.41	40.00	40.94	2.4	15
Average % D						4.9	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051601**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.44	7.39	7.49	1000.00	1130.27	13.0	15
PK #2 A1016	8.79	8.74	8.84	1000.00	1082.89	8.3	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1059.02	5.9	15
PK #4 A1016	9.98	9.93	10.03	1000.00	1061.15	6.1	15
PK #5 A1016	10.92	10.87	10.97	1000.00	1045.13	4.5	15
PK #1 A1260	15.28	15.23	15.33	1000.00	999.34	0.1	15
PK #2 A1260	16.76	16.71	16.81	1000.00	977.35	2.3	15
PK #3 A1260	17.76	17.71	17.81	1000.00	1004.40	0.4	15
PK #4 A1260	19.89	19.84	19.94	1000.00	995.21	0.5	15
PK #5 A1260	22.19	22.14	22.24	1000.00	1005.92	0.6	15
Tetrachloro-meta-xylene	6.50	6.45	6.55	40.00	44.32	10.8	15
Decachlorobiphenyl	25.22	25.17	25.27	40.00	43.89	9.7	15
Average % D						5.2	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/23/18

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD2B.CH
Acq On : 16 May 2008 2:15 pm Operator: JBS
Sample : C1051601 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 20 8:54 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.29	6.50	692093	547292	43.366m	44.322
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.37%	44.32%
12) s DCB - Surrogate	26.36	25.22	1031295	780860	40.943	43.887
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.94%	43.89%
Target Compounds						
2) L1 A1016 1	7.98	7.44	369899	299298	1088.581	1130.268 (C)
3) L1 A1016 2	9.33	8.79	460201	158804	1065.572	1082.894
4) L1 A1016 3	10.21	9.71	531029	439212	1013.595	1059.016m(C)
5) L1 A1016 4	10.78	9.98	324270	273536	1021.473	1061.149m
6) L1 A1016 5	11.39	10.92	418029	329190	1015.809 (C)	1045.128m(C)
Sum A1016 1			2103426	1500040	5205.030	5378.455
Average A1016 1					1041.006	1075.691
7) L7 A1260 1	17.43	15.28	693980	688166	924.253m	999.335m
8) L7 A1260 2	18.28	16.76	725470	547076	982.352m	977.350m
9) L7 A1260 3	20.27	17.76	935811	588288	974.181	1004.402m
10) L7 A1260 4	20.75	19.89	581320	1051195	905.901	995.209
11) L7 A1260 5	22.80	22.19	591519	466629	944.678	1005.915
Sum A1260 1			3528100	3341354	4731.365	4982.211
Average A1260 1					946.273	996.442
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

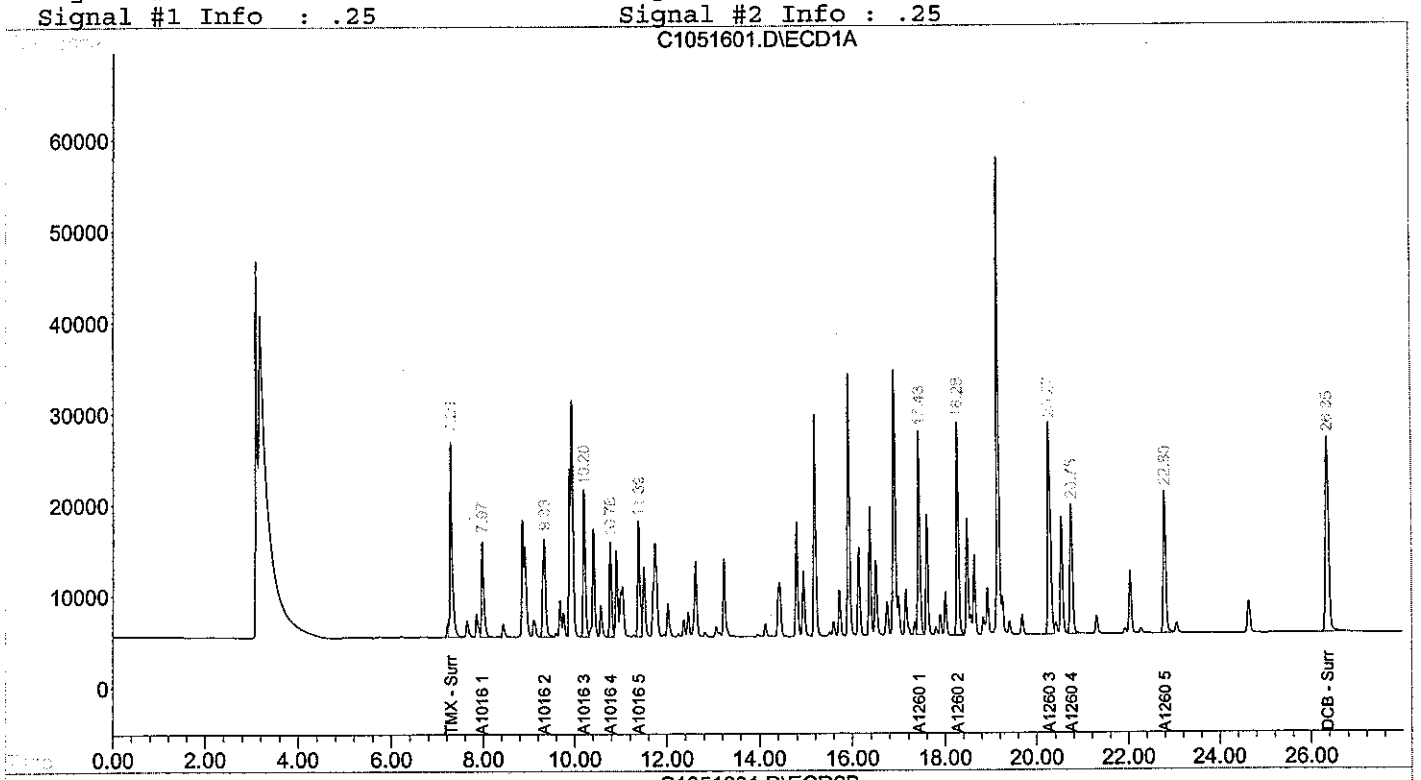
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

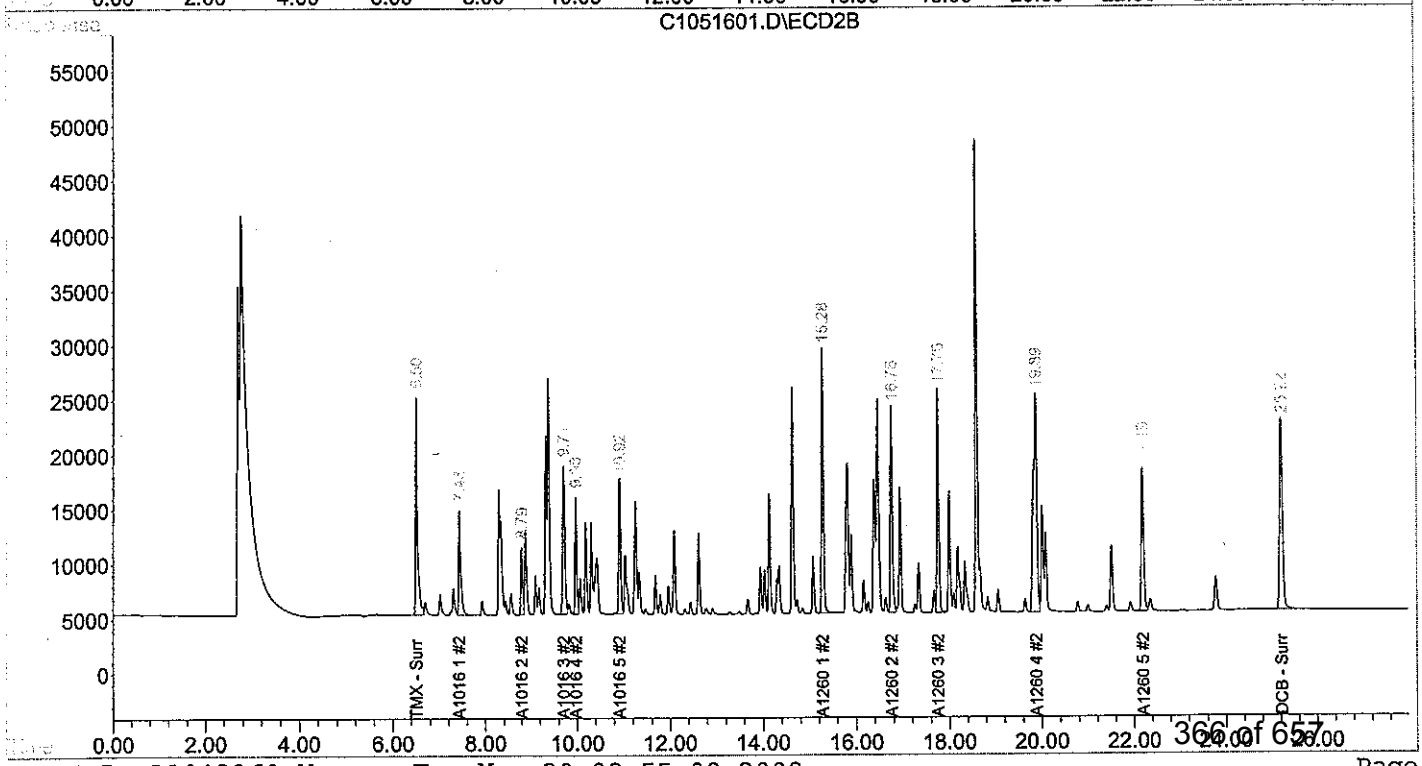
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD2B.CH
Acq On : 16 May 2008 2:15 pm Operator: JBS
Sample : C1051601 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 20 8:54 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051601.D\ECD2B.CH
Acq On : 16 May 2008 2:15 pm Operator: JBS
Sample : C1051601 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	43.366	-8.4	106	0.00
2	L1	A1016 1	1000.000	1088.581	-8.9	108	0.00
3	L1	A1016 2	1000.000	1065.572	-6.6	101	0.00
4	L1	A1016 3	1000.000	1013.595	-1.4	99	0.00
5	L1	A1016 4	1000.000	1021.473	-2.1	103	0.00
6	L1	A1016 5	1000.000	1015.809	-1.6	101	0.00
7	L7	A1260 1	1000.000	924.253	7.6	92	0.00
8	L7	A1260 2	1000.000	982.352	1.8	97	0.00
9	L7	A1260 3	1000.000	974.181	2.6	96	0.00
10	L7	A1260 4	1000.000	905.901	9.4	89	0.00
11	L7	A1260 5	1000.000	944.678	5.5	93	0.00
12	s	DCB - Surrogate	40.000	40.943	-2.4	98	0.00

Signal #2

1	s	TMX - Surrogate	40.000	44.322	-10.8	108	0.00
2	L1	A1016 1	1000.000	1130.268	-13.0	110	0.00
3	L1	A1016 2	1000.000	1082.894	-8.3	101	0.00
4	L1	A1016 3	1000.000	1059.016	-5.9	104	0.00
5	L1	A1016 4	1000.000	1061.149	-6.1	104	0.00
6	L1	A1016 5	1000.000	1045.128	-4.5	102	0.00
7	L7	A1260 1	1000.000	999.335	0.1	99	0.00
8	L7	A1260 2	1000.000	977.350	2.3	97	0.00
9	L7	A1260 3	1000.000	1004.402	-0.4	99	0.00
10	L7	A1260 4	1000.000	995.209	0.5	98	0.00
11	L7	A1260 5	1000.000	1005.915	-0.6	99	0.00
12	s	DCB - Surrogate	40.000	43.887	-9.7	104	0.00

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051602**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.93	8.03	1000.00	1060.21	6.0	15
PK #2 A1016	9.33	9.28	9.38	1000.00	1056.11	5.6	15
PK #3 A1016	10.20	10.16	10.26	1000.00	983.78	1.6	15
PK #4 A1016	10.77	10.73	10.83	1000.00	1002.89	0.3	15
PK #5 A1016	11.38	11.34	11.44	1000.00	1010.68	1.1	15
PK #1 A1260	17.42	17.38	17.48	1000.00	915.47	8.5	15
PK #2 A1260	18.27	18.23	18.33	1000.00	1002.15	0.2	15
PK #3 A1260	20.26	20.22	20.32	1000.00	995.67	0.4	15
PK #4 A1260	20.74	20.70	20.80	1000.00	929.00	7.1	15
PK #5 A1260	22.79	22.75	22.85	1000.00	938.65	6.1	15
Tetrachloro-meta-xylene	7.28	7.24	7.34	40.00	43.62	9.1	15
Decachlorobiphenyl	26.34	26.31	26.41	40.00	53.28	33.2[a]	15
Average % D						6.6	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **C1051602**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.39	7.49	1000.00	1086.23	8.6	15
PK #2 A1016	8.79	8.74	8.84	1000.00	1075.32	7.5	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1057.58	5.8	15
PK #4 A1016	9.97	9.93	10.03	1000.00	1061.03	6.1	15
PK #5 A1016	10.92	10.87	10.97	1000.00	1062.95	6.3	15
PK #1 A1260	15.27	15.23	15.33	1000.00	1004.54	0.5	15
PK #2 A1260	16.75	16.71	16.81	1000.00	1030.29	3.0	15
PK #3 A1260	17.75	17.71	17.81	1000.00	995.77	0.4	15
PK #4 A1260	19.88	19.84	19.94	1000.00	1000.45	0.0	15
PK #5 A1260	22.18	22.14	22.24	1000.00	1031.17	3.1	15
Tetrachloro-meta-xylene	6.50	6.45	6.55	40.00	43.35	8.4	15
Decachlorobiphenyl	25.20	25.17	25.27	40.00	44.18	10.5	15
Average % D						5.0	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD2B.CH
Acq On : 16 May 2008 9:33 pm Operator: JBS
Sample : C1051602 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 20 8:59 2008 Quant Results File: A1042360.RES

PS 5/23/08

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	695981	536178	43.623	43.352
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.62%	43.35%
12) s DCB - Surrogate	26.34	25.20	1312625	785548	53.283m	44.180m
Spiked Amount 100.000 Range 30 - 150 Recovery =					53.28%	44.18%
Target Compounds						
2) L1 A1016 1	7.97	7.43	361764	289738	1060.207m	1086.227m(C)
3) L1 A1016 2	9.33	8.79	456717	157844	1056.105	1075.322m
4) L1 A1016 3	10.20	9.71	517664	438710	983.780m	1057.581m(C)
5) L1 A1016 4	10.77	9.97	319342	273510	1002.889m	1061.034m
6) L1 A1016 5	11.38	10.92	416194	333858	1010.684m(C)	1062.953m(C)
Sum A1016 1			2071681	1493660	5113.666	5343.118
Average A1016 1					1022.733	1068.624
7) L7 A1260 1	17.42	15.27	688274	691116	915.470m	1004.538m
8) L7 A1260 2	18.27	16.75	738308	571750	1002.149m	1030.289m
9) L7 A1260 3	20.26	17.75	954594	584022	995.667m	995.767m
10) L7 A1260 4	20.74	19.88	594898	1056008	928.995m	1000.445m
11) L7 A1260 5	22.79	22.18	588052	476906	938.652	1031.171m
Sum A1260 1			3564126	3379802	4780.933	5062.209
Average A1260 1					956.187	1012.442
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

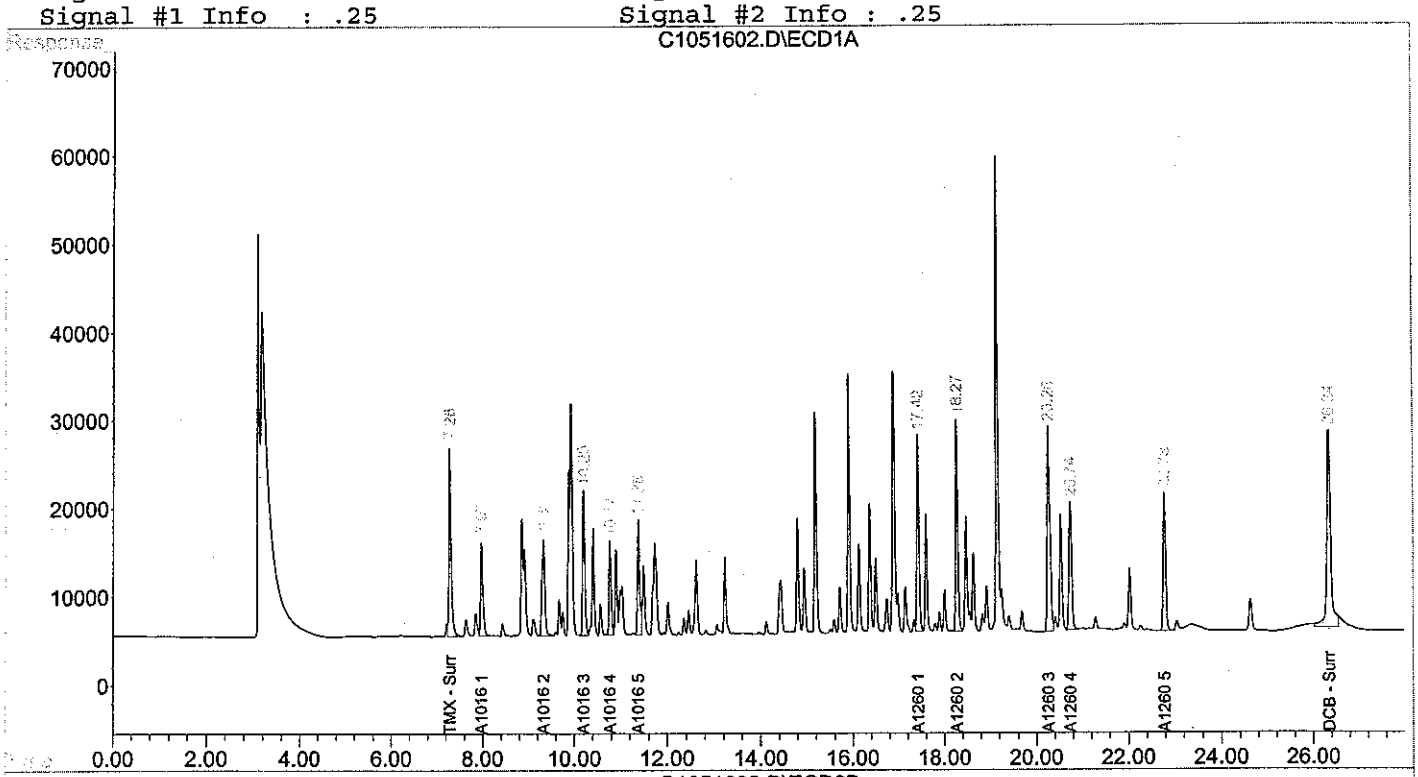
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

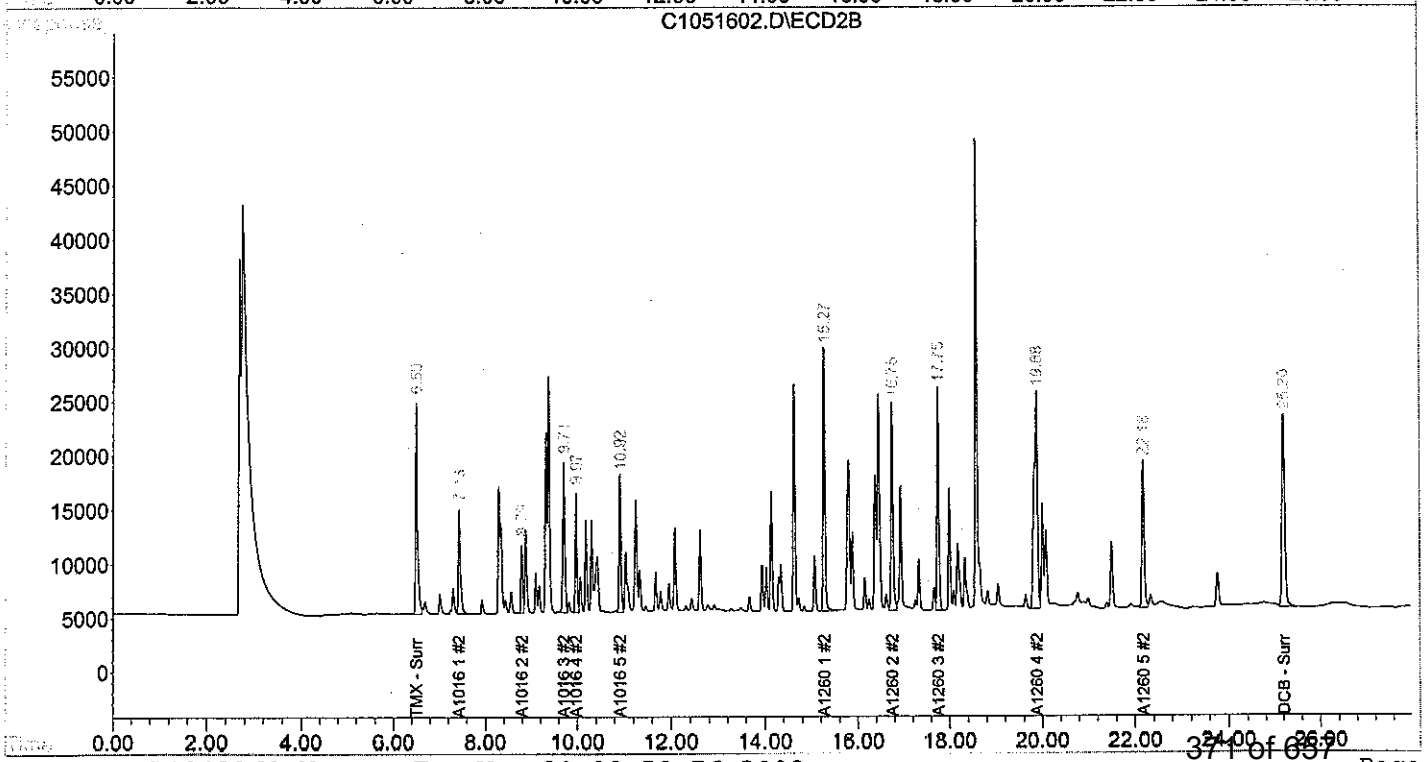
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD2B.CH
Acq On : 16 May 2008 9:33 pm Operator: JBS
Sample : C1051602 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 20 8:59 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051602.D\ECD2B.CH
Acq On : 16 May 2008 9:33 pm Operator: JBS
Sample : C1051602 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	43.623	-9.1	107	0.00
2	L1	A1016 1	1000.000	1060.207	-6.0	105	0.00
3	L1	A1016 2	1000.000	1056.105	-5.6	100	0.00
4	L1	A1016 3	1000.000	983.780	1.6	97	0.00
5	L1	A1016 4	1000.000	1002.889	-0.3	101	0.00
6	L1	A1016 5	1000.000	1010.684	-1.1	100	0.00
7	L7	A1260 1	1000.000	915.470	8.5	92	0.00
8	L7	A1260 2	1000.000	1002.149	-0.2	99	0.00
9	L7	A1260 3	1000.000	995.667	0.4	98	0.00
10	L7	A1260 4	1000.000	928.995	7.1	91	0.00
11	L7	A1260 5	1000.000	938.652	6.1	93	0.00
12	s	DCB - Surrogate	40.000	53.283	-33.2#	124	0.00

Signal #2

1	s	TMX - Surrogate	40.000	43.352	-8.4	106	0.00
2	L1	A1016 1	1000.000	1086.227	-8.6	106	0.00
3	L1	A1016 2	1000.000	1075.322	-7.5	100	0.00
4	L1	A1016 3	1000.000	1057.581	-5.8	104	0.00
5	L1	A1016 4	1000.000	1061.034	-6.1	104	0.00
6	L1	A1016 5	1000.000	1062.953	-6.3	104	0.00
7	L7	A1260 1	1000.000	1004.538	-0.5	100	0.00
8	L7	A1260 2	1000.000	1030.289	-3.0	101	0.00
9	L7	A1260 3	1000.000	995.767	0.4	98	0.00
10	L7	A1260 4	1000.000	1000.445	-0.0	99	0.00
11	L7	A1260 5	1000.000	1031.171	-3.1	101	0.00
12	s	DCB - Surrogate	40.000	44.180	-10.4	104	0.00

Quantitation Report (QT Reviewed)

JS 5/23/08

Signal #1 : D:\HPCHEM\2\DATA\MAY16\I1051601.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\2\DATA\MAY16\I1051601.D\ECD2B.CH
Acq On : 16 May 2008 2:46 pm Operator: JBS
Sample : I1051601 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:47 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	296604	237232	1053.438	1059.420 (C)
24) L4 A1242 2	8.85	8.30	564938	417418	1033.988m	1017.641m
25) L4 A1242 3	9.93	9.38	1006280	793578	1018.650m	1011.015m
26) L4 A1242 4	10.20	9.71	441038	358817	1021.252m(C)	1002.650 (C)
27) L4 A1242 5	11.74	12.10	450034	332019	992.200	987.728
Sum A1242 1			2758894	2139064	5119.529	5078.453
Average A1242 1					1023.906	1015.691
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

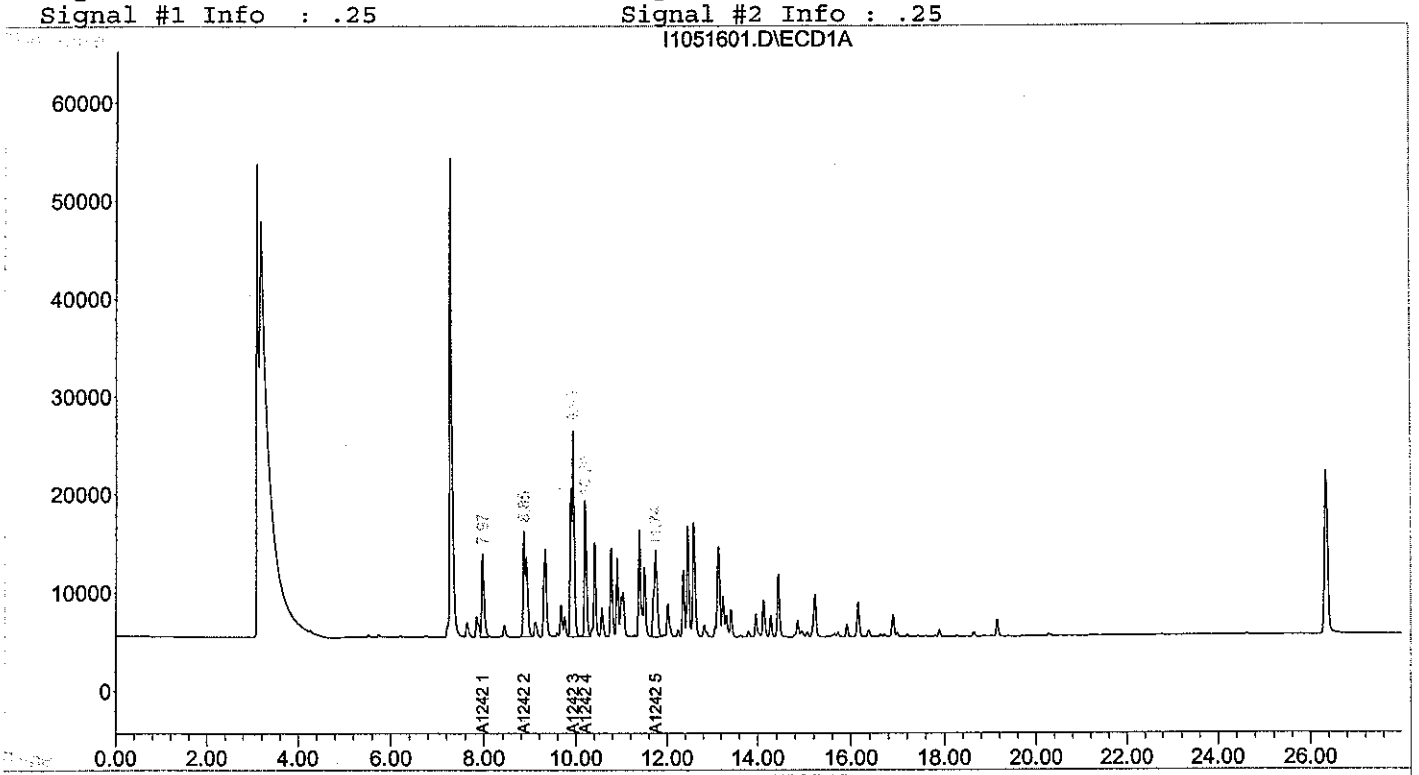
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

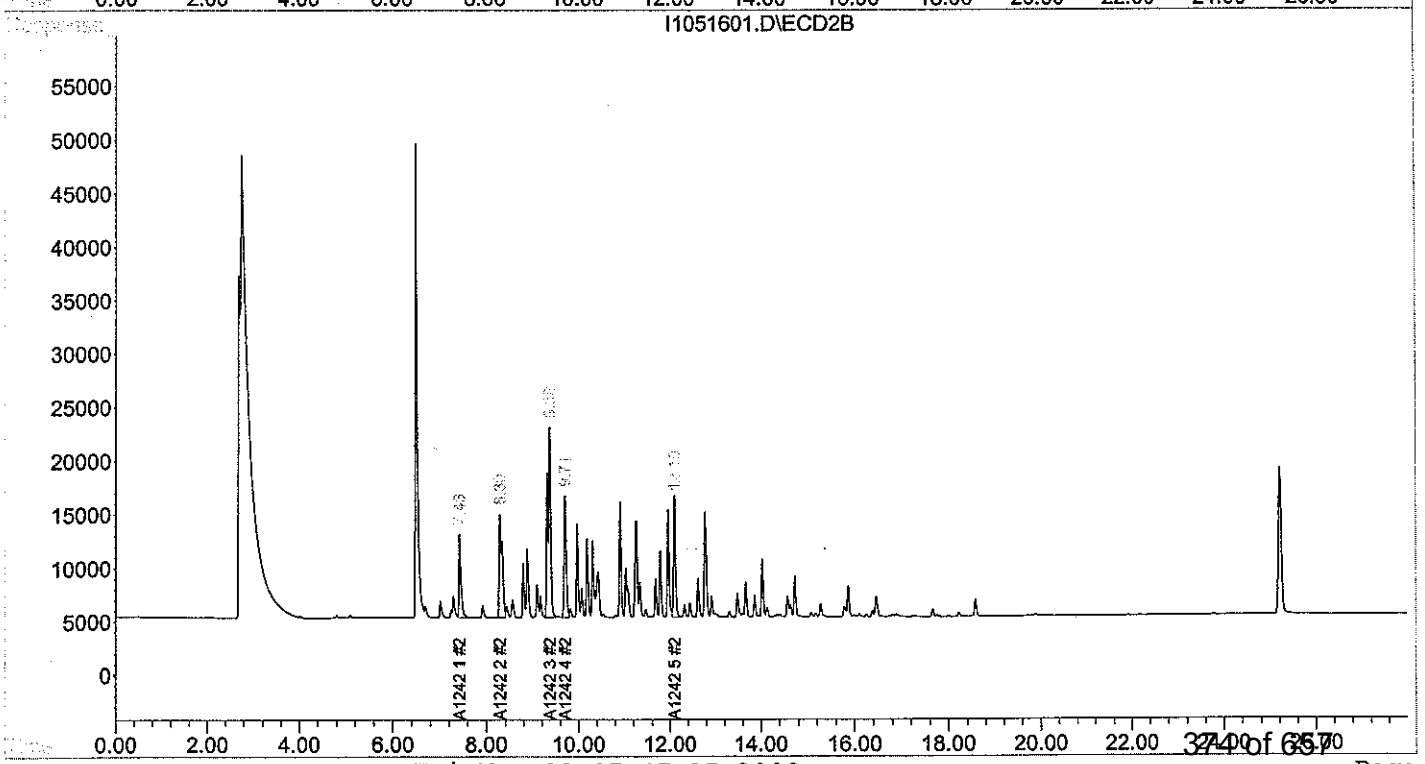
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\I1051601.D\ECD1A.CH Vial: 3
Signal #2 : D:\HPCHEM\2\DATA\MAY16\I1051601.D\ECD2B.CH
Acq On : 16 May 2008 2:46 pm Operator: JBS
Sample : I1051601 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:47 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 14:42:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

MS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051603.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051603.D\ECD2B.CH
Acq On : 16 May 2008 10:05 pm Operator: JBS
Sample : C1051603 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	296536	233367	999.770 (C)	983.710
24) L4 A1242 2	8.85	8.29	575808	414816	1019.241m	993.766m
25) L4 A1242 3	9.93	9.38	1035190	806400	1028.730m	1016.157m
26) L4 A1242 4	10.20	9.71	441948	363851	1002.062 (C)	1014.029 (C)
27) L4 A1242 5	11.74	12.10	455837	347024	1012.893	1045.193
Sum A1242 1			2805318	2165458	5062.696	5052.855
Average A1242 1					1012.539	1010.571
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

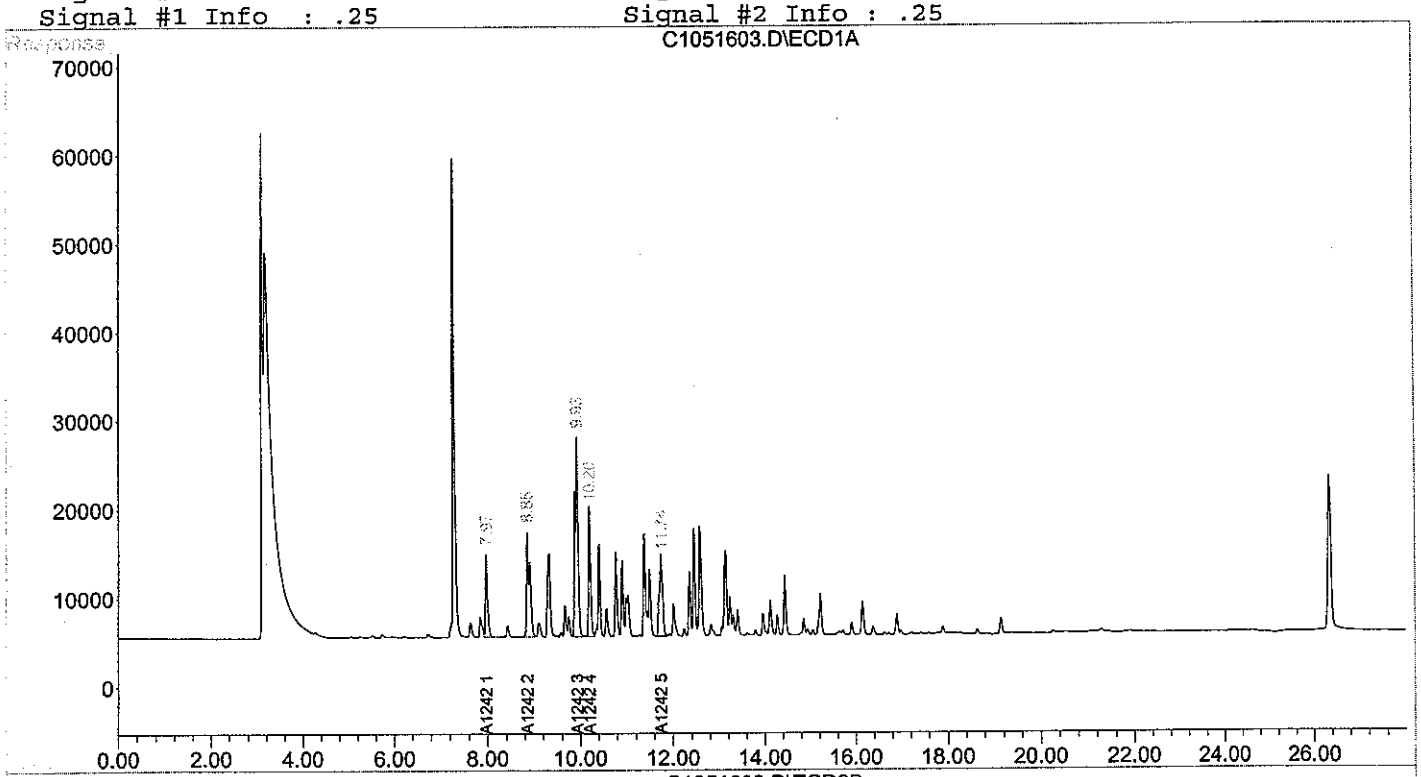
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

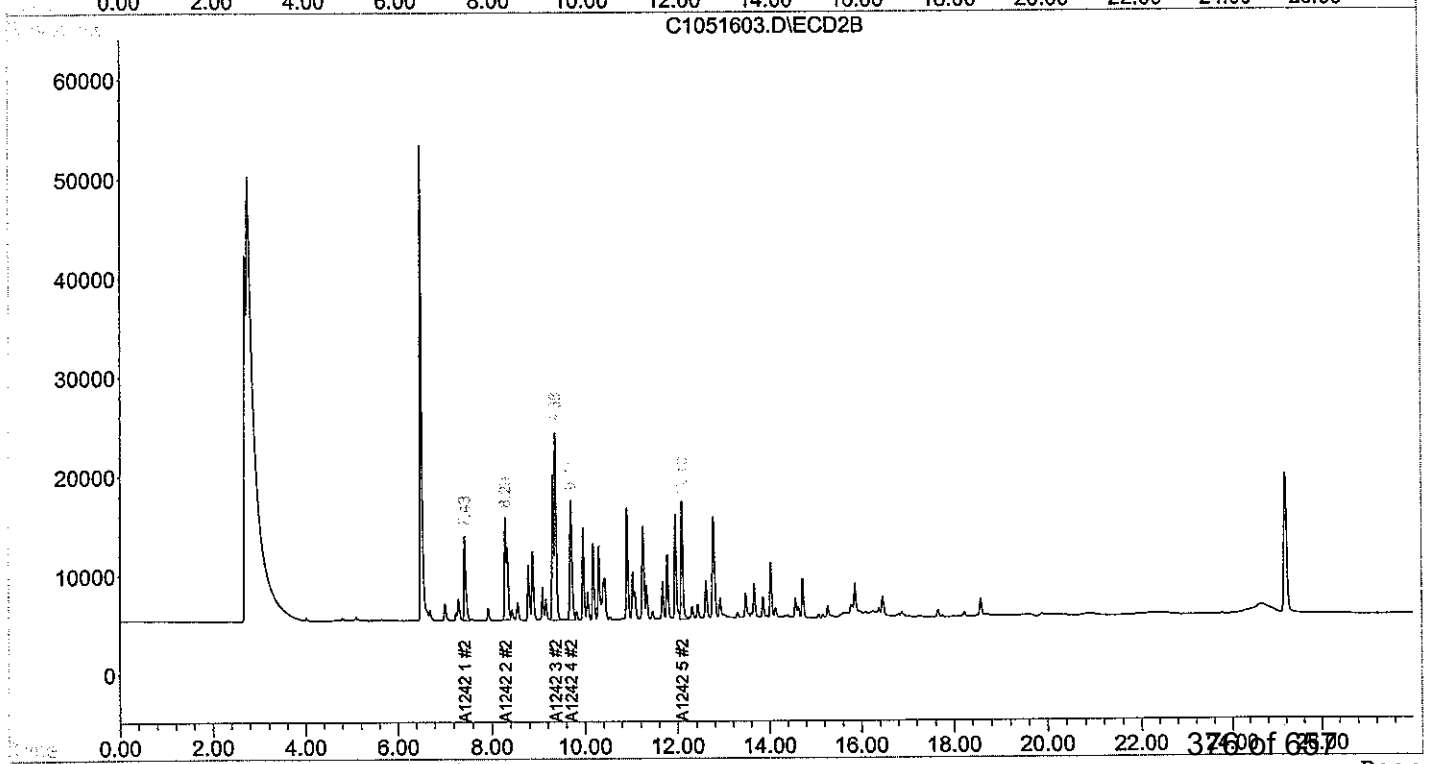
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051603.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051603.D\ECD2B.CH
Acq On : 16 May 2008 10:05 pm Operator: JBS
Sample : C1051603 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY16\I1051603.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\2\DATA\MAY16\I1051603.D\ECD2B.CH
Acq On : 16 May 2008 3:49 pm Operator: JBS
Sample : I1051603 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 7:49 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 07:48:43 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	703128	517342	1031.475	1015.475
34) L6 A1254 2	14.44	14.03	1203200	833886	1024.124	1012.961
35) L6 A1254 3	15.22	14.73	1268198	610566	1016.204	1020.030
36) L6 A1254 4	15.91	15.28	572197	472211	1020.347	1011.102
37) L6 A1254 5	16.90	16.47	1126005	832161	1015.384	1016.956
Sum A1254 1			4872728	3266166	5107.533	5076.525
Average A1254 1					1021.507	1015.305
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Quantitation Report (QT Reviewed)

JBS 5/23/8

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051605.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051605.D\ECD2B.CH
Acq On : 16 May 2008 11:07 pm Operator: JBS
Sample : C1051605 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	713423	517554	1014.642	1000.410
34) L6 A1254 2	14.43	14.03	1223110	835434	1016.547 (C)	1001.856 (C)
35) L6 A1254 3	15.21	14.72	1296004	610276	1021.926	999.526
36) L6 A1254 4	15.91	15.27	580605	465133	1014.695	985.011 (C)
37) L6 A1254 5	16.89	16.46	1157167	841086	1027.675	1010.725
Sum A1254 1			4970310	3269484	5095.485	4997.529
Average A1254 1					1019.097	999.506
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

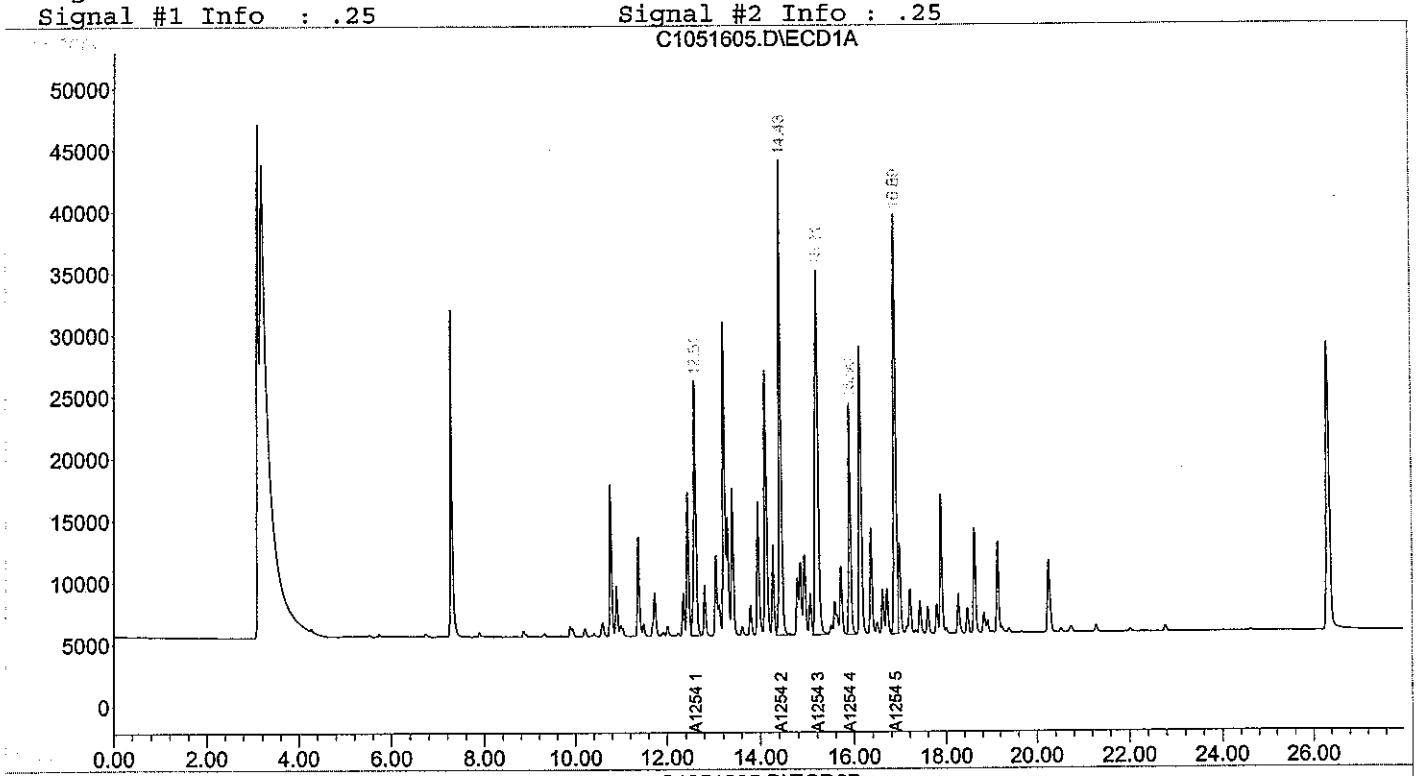
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

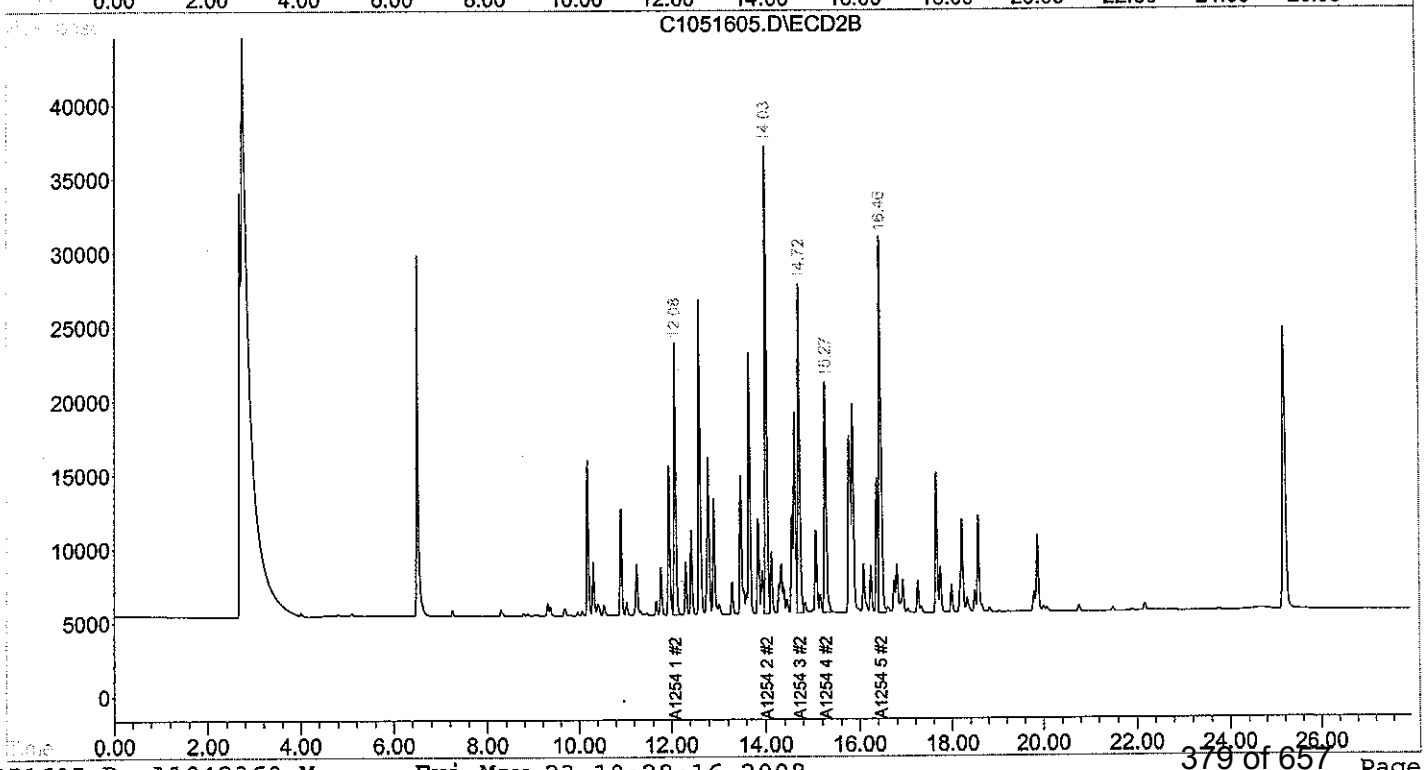
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY16\C1051605.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY16\C1051605.D\ECD2B.CH
Acq On : 16 May 2008 11:07 pm Operator: JBS
Sample : C1051605 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 23 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 23 10:15:37 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

Parameter	Column 1 Retention Time	Column 1 RT Window Low	Column 1 RT Window High	Column 1 Conc.	Column 2 Retention Time	Column 2 RT Window Low	Column 2 RT Window High	Column 2 Conc.	RPD
Aroclor 1254				5170				**5220**	1

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				5310				**5310**	0

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 1-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-02**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				**5120**				5090	1
Aroclor 1260				**1280**				993	25

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-03**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				3500				**3630**	4

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 2-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-04**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				5520				**5550**	1

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-05**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				56000				**56200**	0

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 3-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-06**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				**6030**				5740	5

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				430				**516**	18

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 4-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-08**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				1920				**1980**	3

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 5**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-09**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				214				**215**	0

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-11**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				125				**138**	10
Aroclor 1254				483				**521**	8
Aroclor 1260				126				**133**	6

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 6-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-12**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				1010				**1220**	19

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-13**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				770				**956**	22

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 7-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-14**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				1180				**1420**	18

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-15**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				1130				**1380**	20

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Laboratory Control Sample
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008LCS07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1016				1920				**2000**	4
Aroclor 1260				1840				**2030**	10

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **PS043008LCSD07**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1016				1480				**1540**	4
Aroclor 1260				1580				**1750**	10

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

METALS

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3500**		68.0	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.511**	N	0.0352	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.42**		0.340	20	05/20/08	05/02/08	6020A	EYC
Barium	**2490**		0.340	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0851**	J	0.136	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.84**		0.136	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5070**		340	20	05/20/08	05/02/08	6020A	EYC
Chromium	**10800**		6.80	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**63.4**		0.136	20	05/20/08	05/02/08	6020A	EYC
Copper	**114**		0.680	20	05/20/08	05/02/08	6020A	EYC
Iron	**8460**		136	20	05/20/08	05/02/08	6020A	EYC
Lead	**993**		0.340	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**4820**		68.0	20	05/20/08	05/02/08	6020A	EYC
Manganese	**469**	N	1.36	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.454**	¤E	0.0134	5	05/07/08	05/05/08	7474	LCP
Nickel	**10.8**		0.680	20	05/20/08	05/02/08	6020A	EYC
Potassium	**4800**		68.0	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.177	U	1.36	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.261**		0.0352	2	05/06/08	05/02/08	6020A	LMR
Sodium	**263**		68.0	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.102**	J	0.136	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**18.3**		1.36	20	05/20/08	05/02/08	6020A	EYC
Zinc	**15500**		17.0	100	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
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E - Estimated due to Interference.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

05/22/08 14:05

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 1-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-02**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**2710**		61.4	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.374**	N	0.0307	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.32**		0.307	20	05/20/08	05/02/08	6020A	EYC
Barium	**2300**		0.307	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0700**	J	0.123	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.64**		0.123	20	05/20/08	05/02/08	6020A	EYC
Calcium	**3890**		307	20	05/20/08	05/02/08	6020A	EYC
Chromium	**7660**		6.14	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**43.2**		0.123	20	05/20/08	05/02/08	6020A	EYC
Copper	**87.1**		0.613	20	05/20/08	05/02/08	6020A	EYC
Iron	**7600**		123	20	05/20/08	05/02/08	6020A	EYC
Lead	**706**		0.307	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**3600**		61.4	20	05/20/08	05/02/08	6020A	EYC
Manganese	**396**	N	1.23	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.373**	E¤	0.0121	5	05/07/08	05/05/08	7474	LCP
Nickel	**8.38**		0.613	20	05/20/08	05/02/08	6020A	EYC
Potassium	**3420**		61.4	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.160	U	1.23	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.287**		0.0307	2	05/06/08	05/02/08	6020A	LMR
Sodium	**233**		61.4	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0684**	J	0.123	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**15.0**		1.23	20	05/20/08	05/02/08	6020A	EYC
Zinc	**11100**		15.3	100	05/20/08	05/02/08	6020A	EYC

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E - Estimated due to Interference.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 2**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-03**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3710**		66.2	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.737**	N	0.0340	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.67**		0.331	20	05/20/08	05/02/08	6020A	EYC
Barium	**2340**		0.331	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0835**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**3.19**		0.132	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5690**		331	20	05/20/08	05/02/08	6020A	EYC
Chromium	**11500**		6.62	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**62.2**		0.132	20	05/20/08	05/02/08	6020A	EYC
Copper	**150**		0.662	20	05/20/08	05/02/08	6020A	EYC
Iron	**13200**		132	20	05/20/08	05/02/08	6020A	EYC
Lead	**1130**		0.331	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**5360**		66.2	20	05/20/08	05/02/08	6020A	EYC
Manganese	**533**	N	1.32	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.434**	E¤	0.0124	5	05/07/08	05/05/08	7474	LCP
Nickel	**12.9**		0.662	20	05/20/08	05/02/08	6020A	EYC
Potassium	**4910**		66.2	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.172	U	1.32	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.420**		0.0340	2	05/06/08	05/02/08	6020A	LMR
Sodium	**365**		66.2	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.102**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**15.7**		1.32	20	05/20/08	05/02/08	6020A	EYC
Zinc	**17000**		166	1000	05/20/08	05/02/08	6020A	EYC

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 2-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-04**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3160**		66.7	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.405**	N	0.0338	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.33**		0.333	20	05/20/08	05/02/08	6020A	EYC
Barium	**2510**		0.333	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0815**	J	0.133	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.80**		0.133	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5260**		333	20	05/20/08	05/02/08	6020A	EYC
Chromium	**11500**		6.67	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**62.9**		0.133	20	05/20/08	05/02/08	6020A	EYC
Copper	**114**		0.667	20	05/20/08	05/02/08	6020A	EYC
Iron	**6680**		133	20	05/20/08	05/02/08	6020A	EYC
Lead	**969**		0.333	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**5520**		66.7	20	05/20/08	05/02/08	6020A	EYC
Manganese	**271**	N	1.33	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.466**	E¤	0.0125	5	05/07/08	05/05/08	7474	LCP
Nickel	**6.69**		0.667	20	05/20/08	05/02/08	6020A	EYC
Potassium	**5100**		66.7	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.173	U	1.33	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.183**		0.0338	2	05/06/08	05/02/08	6020A	LMR
Sodium	**231**		66.7	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0997**	J	0.133	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**12.7**		1.33	20	05/20/08	05/02/08	6020A	EYC
Zinc	**16300**		16.7	100	05/20/08	05/02/08	6020A	EYC

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05/22/08 14:07

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 3**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-05**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**5520**		67.6	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.57**	N	0.0333	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.27**		0.338	20	05/20/08	05/02/08	6020A	EYC
Barium	**438**		0.338	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.146**		0.135	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**4.50**		0.135	20	05/20/08	05/02/08	6020A	EYC
Calcium	**3310**		338	20	05/20/08	05/02/08	6020A	EYC
Chromium	**3500**		3.38	50	05/20/08	05/02/08	6020A	EYC
Cobalt	**6.41**		0.135	20	05/20/08	05/02/08	6020A	EYC
Copper	**90.5**		0.676	20	05/20/08	05/02/08	6020A	EYC
Iron	**25800**		135	20	05/20/08	05/02/08	6020A	EYC
Lead	**842**		0.338	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**1970**		67.6	20	05/20/08	05/02/08	6020A	EYC
Manganese	**1120**	N	1.35	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0744**	E¤	0.0126	5	05/07/08	05/05/08	7474	LCP
Nickel	**25.2**		0.676	20	05/20/08	05/02/08	6020A	EYC
Potassium	**1680**		67.6	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.176	U	1.35	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.277**		0.0333	2	05/06/08	05/02/08	6020A	LMR
Sodium	**408**		67.6	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.131**	J	0.135	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**26.8**		1.35	20	05/20/08	05/02/08	6020A	EYC
Zinc	**5610**		8.45	50	05/20/08	05/02/08	6020A	EYC

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05/22/08 14:07

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 3-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-06**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**7680**		62.9	20	05/20/08	05/02/08	6020A	EYC
Antimony	**2.77**	N	0.0321	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.26**		0.314	20	05/20/08	05/02/08	6020A	EYC
Barium	**2450**		0.314	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0863**	J	0.126	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**7.95**		0.126	20	05/20/08	05/02/08	6020A	EYC
Calcium	**6140**		314	20	05/20/08	05/02/08	6020A	EYC
Chromium	**14100**		62.9	1000	05/20/08	05/02/08	6020A	EYC
Cobalt	**69.0**		0.126	20	05/20/08	05/02/08	6020A	EYC
Copper	**113**		0.629	20	05/20/08	05/02/08	6020A	EYC
Iron	**5460**		126	20	05/20/08	05/02/08	6020A	EYC
Lead	**1150**		0.314	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**5940**		62.9	20	05/20/08	05/02/08	6020A	EYC
Manganese	**196**	N	1.26	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.685**	E¤	0.0123	5	05/07/08	05/05/08	7474	LCP
Nickel	**7.81**		0.629	20	05/20/08	05/02/08	6020A	EYC
Potassium	**5730**		62.9	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.164	U	1.26	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.168**		0.0321	2	05/06/08	05/02/08	6020A	LMR
Sodium	**225**		62.9	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.110**	J	0.126	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**13.0**		1.26	20	05/20/08	05/02/08	6020A	EYC
Zinc	**19800**		157	1000	05/20/08	05/02/08	6020A	EYC

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05/22/08 14:07

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 4**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-07**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**5100**		67.1	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.51**	N	0.164	10	05/06/08	05/02/08	6020A	LMR
Arsenic	**2.56**		0.336	20	05/20/08	05/02/08	6020A	EYC
Barium	**562**		0.336	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0981**	J	0.134	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**4.61**		0.134	20	05/20/08	05/02/08	6020A	EYC
Calcium	**2570**		336	20	05/20/08	05/02/08	6020A	EYC
Chromium	**157**		1.34	20	05/20/08	05/02/08	6020A	EYC
Cobalt	**5.04**		0.134	20	05/20/08	05/02/08	6020A	EYC
Copper	**91.6**		0.671	20	05/20/08	05/02/08	6020A	EYC
Iron	**22700**		134	20	05/20/08	05/02/08	6020A	EYC
Lead	**90500**		16.8	1000	05/20/08	05/02/08	6020A	EYC
Magnesium	**1920**		67.1	20	05/20/08	05/02/08	6020A	EYC
Manganese	**1210**	N	1.34	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.197**	E¤	0.0125	5	05/07/08	05/05/08	7474	LCP
Nickel	**23.1**		0.671	20	05/20/08	05/02/08	6020A	EYC
Potassium	**606**		67.1	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.174	U	1.34	20	05/20/08	05/02/08	6020A	EYC
Silver	**1.25**		0.164	10	05/06/08	05/02/08	6020A	LMR
Sodium	**507**		67.1	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.158**		0.134	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**24.4**		1.34	20	05/20/08	05/02/08	6020A	EYC
Zinc	**2370**		3.36	20	05/20/08	05/02/08	6020A	EYC

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 4-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-08**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**4240**		70.4	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.885**	N	0.0352	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**2.21**		0.352	20	05/20/08	05/02/08	6020A	EYC
Barium	**2840**		0.352	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.179**		0.141	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.46**		0.141	20	05/20/08	05/02/08	6020A	EYC
Calcium	**3150**		352	20	05/20/08	05/02/08	6020A	EYC
Chromium	**5620**		3.52	50	05/20/08	05/02/08	6020A	EYC
Cobalt	**33.7**		0.141	20	05/20/08	05/02/08	6020A	EYC
Copper	**102**		0.704	20	05/20/08	05/02/08	6020A	EYC
Iron	**22200**		141	20	05/20/08	05/02/08	6020A	EYC
Lead	**30100**		17.6	1000	05/20/08	05/02/08	6020A	EYC
Magnesium	**3380**		70.4	20	05/20/08	05/02/08	6020A	EYC
Manganese	**370**	N	1.41	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.305**	E¤	0.0125	5	05/07/08	05/05/08	7474	LCP
Nickel	**21.5**		0.704	20	05/20/08	05/02/08	6020A	EYC
Potassium	**2720**		70.4	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.183	U	1.41	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.481**		0.0352	2	05/06/08	05/02/08	6020A	LMR
Sodium	**217**		70.4	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.128**	J	0.141	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**13.2**		1.41	20	05/20/08	05/02/08	6020A	EYC
Zinc	**8620**		8.80	50	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
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J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

05/22/08 14:13

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A
Client ID: **T4-Tank 5**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-09**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**8770**		66.7	20	05/20/08	05/02/08	6020A	EYC
Antimony	**2.11**	N	0.166	10	05/06/08	05/02/08	6020A	LMR
Arsenic	**6.28**		0.333	20	05/20/08	05/02/08	6020A	EYC
Barium	**1980**		0.333	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0484**	J	0.133	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.14**		0.133	20	05/20/08	05/02/08	6020A	EYC
Calcium	**994**		333	20	05/20/08	05/02/08	6020A	EYC
Chromium	**3160**		1.33	20	05/20/08	05/02/08	6020A	EYC
Cobalt	**42.5**		0.133	20	05/20/08	05/02/08	6020A	EYC
Copper	**64.2**		0.667	20	05/20/08	05/02/08	6020A	EYC
Iron	**104000**		13300	2000	05/20/08	05/02/08	6020A	EYC
Lead	**130000**		33.3	2000	05/20/08	05/02/08	6020A	EYC
Magnesium	**1570**		66.7	20	05/20/08	05/02/08	6020A	EYC
Manganese	**711**	N	1.33	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0910**	E¤	0.0124	5	05/07/08	05/05/08	7474	LCP
Nickel	**67.6**		0.667	20	05/20/08	05/02/08	6020A	EYC
Potassium	**1390**		66.7	20	05/20/08	05/02/08	6020A	EYC
Selenium	**0.478**	J	1.33	20	05/20/08	05/02/08	6020A	EYC
Silver	**1.21**		0.166	10	05/06/08	05/02/08	6020A	LMR
Sodium	**126**		66.7	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.205**		0.133	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**23.7**		1.33	20	05/20/08	05/02/08	6020A	EYC
Zinc	**4140**		8.33	50	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
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J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 5-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-10**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3740**		63.3	20	05/20/08	05/02/08	6020A	EYC
Antimony	**0.343**	N	0.0318	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**0.887**		0.316	20	05/20/08	05/02/08	6020A	EYC
Barium	**2670**		0.316	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0650**	J	0.127	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**1.02**		0.127	20	05/20/08	05/02/08	6020A	EYC
Calcium	**1290**		316	20	05/20/08	05/02/08	6020A	EYC
Chromium	**140**		1.27	20	05/20/08	05/02/08	6020A	EYC
Cobalt	**3.31**		0.127	20	05/20/08	05/02/08	6020A	EYC
Copper	**24.9**		0.633	20	05/20/08	05/02/08	6020A	EYC
Iron	**19400**		127	20	05/20/08	05/02/08	6020A	EYC
Lead	**23600**		15.8	1000	05/20/08	05/02/08	6020A	EYC
Magnesium	**3840**		63.3	20	05/20/08	05/02/08	6020A	EYC
Manganese	**356**	N	1.27	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0268**	E¤	0.0125	5	05/07/08	05/05/08	7474	LCP
Nickel	**8.68**		0.633	20	05/20/08	05/02/08	6020A	EYC
Potassium	**303**		63.3	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.165	U	1.27	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.331**		0.0318	2	05/06/08	05/02/08	6020A	LMR
Sodium	**172**		63.3	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0451**	J	0.127	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**8.59**		1.27	20	05/20/08	05/02/08	6020A	EYC
Zinc	**2400**		3.16	20	05/20/08	05/02/08	6020A	EYC

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E - Estimated due to Interference.
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U - The analyte was analyzed for but not detected at the sample specific level reported.

05/22/08 14:09

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A
Client ID: **T4-Tank 6**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-11**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**9160**		65.4	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.52**	N	0.0314	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**16.6**		0.327	20	05/20/08	05/02/08	6020A	EYC
Barium	**239**		0.327	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0929**	J	0.131	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**3.35**		0.131	20	05/20/08	05/02/08	6020A	EYC
Calcium	**13800**		327	20	05/20/08	05/02/08	6020A	EYC
Chromium	**3440**		3.27	50	05/20/08	05/02/08	6020A	EYC
Cobalt	**48.4**		0.131	20	05/20/08	05/02/08	6020A	EYC
Copper	**117**		0.654	20	05/20/08	05/02/08	6020A	EYC
Iron	**163000**		654	100	05/20/08	05/02/08	6020A	EYC
Lead	**3390**		0.817	50	05/20/08	05/02/08	6020A	EYC
Magnesium	**3990**		65.4	20	05/20/08	05/02/08	6020A	EYC
Manganese	**2040**	N	1.31	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.119**	E¤	0.0121	5	05/07/08	05/05/08	7474	LCP
Nickel	**104**		0.654	20	05/20/08	05/02/08	6020A	EYC
Potassium	**1590**		65.4	20	05/20/08	05/02/08	6020A	EYC
Selenium	**0.690**	J	1.31	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.944**		0.0314	2	05/06/08	05/02/08	6020A	LMR
Sodium	**294**		65.4	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0488**	J	0.131	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**25.3**		1.31	20	05/20/08	05/02/08	6020A	EYC
Zinc	**9580**		16.3	100	05/20/08	05/02/08	6020A	EYC

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 6-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-12**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3000**		62.5	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.55**	N	0.152	10	05/06/08	05/02/08	6020A	LMR
Arsenic	**1.40**		0.312	20	05/20/08	05/02/08	6020A	EYC
Barium	**2410**		0.312	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0581**	J	0.125	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**5.19**		0.125	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5730**		312	20	05/20/08	05/02/08	6020A	EYC
Chromium	**17200**		62.5	1000	05/20/08	05/02/08	6020A	EYC
Cobalt	**67.1**		0.125	20	05/20/08	05/02/08	6020A	EYC
Copper	**34.5**		0.625	20	05/20/08	05/02/08	6020A	EYC
Iron	**3030**		125	20	05/20/08	05/02/08	6020A	EYC
Lead	**1770**		0.312	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**4220**		62.5	20	05/20/08	05/02/08	6020A	EYC
Manganese	**164**	N	1.25	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0947**	E¤	0.0123	5	05/07/08	05/05/08	7474	LCP
Nickel	**4.13**		0.625	20	05/20/08	05/02/08	6020A	EYC
Potassium	**7180**		62.5	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.162	U	1.25	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.278**		0.152	10	05/06/08	05/02/08	6020A	LMR
Sodium	**386**		62.5	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.107**	J	0.125	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**14.2**		1.25	20	05/20/08	05/02/08	6020A	EYC
Zinc	**32800**		156	1000	05/20/08	05/02/08	6020A	EYC

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 7**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-13**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**3040**		65.8	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.28**	N	0.0316	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**4.97**		0.329	20	05/20/08	05/02/08	6020A	EYC
Barium	**2600**		0.329	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0716**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**4.17**		0.132	20	05/20/08	05/02/08	6020A	EYC
Calcium	**4470**		329	20	05/20/08	05/02/08	6020A	EYC
Chromium	**10800**		6.58	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**75.1**		0.132	20	05/20/08	05/02/08	6020A	EYC
Copper	**68.8**		0.658	20	05/20/08	05/02/08	6020A	EYC
Iron	**80200**		658	100	05/20/08	05/02/08	6020A	EYC
Lead	**1240**		0.329	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**3890**		65.8	20	05/20/08	05/02/08	6020A	EYC
Manganese	**631**	N	1.32	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0484**	E¤	0.0120	5	05/07/08	05/05/08	7474	LCP
Nickel	**69.2**		0.658	20	05/20/08	05/02/08	6020A	EYC
Potassium	**4830**		65.8	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.171	U	1.32	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.449**		0.0316	2	05/06/08	05/02/08	6020A	LMR
Sodium	**227**		65.8	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0956**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**23.8**		1.32	20	05/20/08	05/02/08	6020A	EYC
Zinc	**19300**		164	1000	05/20/08	05/02/08	6020A	EYC

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05/22/08 14:10

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 7-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-14**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**4770**		61.7	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.01**	N	0.154	10	05/06/08	05/02/08	6020A	LMR
Arsenic	**2.02**		0.309	20	05/20/08	05/02/08	6020A	EYC
Barium	**3030**		0.309	20	05/20/08	05/02/08	6020A	EYC
Beryllium	0.123	U	0.123	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**2.63**		0.123	20	05/20/08	05/02/08	6020A	EYC
Calcium	**3900**		309	20	05/20/08	05/02/08	6020A	EYC
Chromium	**9050**		61.7	1000	05/20/08	05/02/08	6020A	EYC
Cobalt	**55.0**		0.123	20	05/20/08	05/02/08	6020A	EYC
Copper	**53.7**		0.617	20	05/20/08	05/02/08	6020A	EYC
Iron	**69400**		6170	1000	05/20/08	05/02/08	6020A	EYC
Lead	**927**		0.309	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**3610**		61.7	20	05/20/08	05/02/08	6020A	EYC
Manganese	**424**	N	1.24	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0313**	E¤	0.0116	5	05/07/08	05/05/08	7474	LCP
Nickel	**57.4**		0.617	20	05/20/08	05/02/08	6020A	EYC
Potassium	**4020**		61.7	20	05/20/08	05/02/08	6020A	EYC
Selenium	1.24	U	1.24	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.255**		0.154	10	05/06/08	05/02/08	6020A	LMR
Sodium	**198**		61.7	20	05/20/08	05/02/08	6020A	EYC
Thallium	0.123	U	0.123	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**12.4**		1.24	20	05/20/08	05/02/08	6020A	EYC
Zinc	**16400**		154	1000	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 8**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-15**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**5450**		62.9	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.58**	N	0.0298	2	05/06/08	05/02/08	6020A	LMR
Arsenic	**4.25**		0.314	20	05/20/08	05/02/08	6020A	EYC
Barium	**2510**		0.314	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.103**	J	0.126	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**4.64**		0.126	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5510**		314	20	05/20/08	05/02/08	6020A	EYC
Chromium	**11600**		6.29	100	05/20/08	05/02/08	6020A	EYC
Cobalt	**71.6**		0.126	20	05/20/08	05/02/08	6020A	EYC
Copper	**54.2**		0.629	20	05/20/08	05/02/08	6020A	EYC
Iron	**38000**		629	100	05/20/08	05/02/08	6020A	EYC
Lead	**1480**		0.314	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**4870**		62.9	20	05/20/08	05/02/08	6020A	EYC
Manganese	**631**	N	1.26	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0602**	E¤	0.0117	5	05/07/08	05/05/08	7474	LCP
Nickel	**32.3**		0.629	20	05/20/08	05/02/08	6020A	EYC
Potassium	**5810**		62.9	20	05/20/08	05/02/08	6020A	EYC
Selenium	**0.179**	J	1.26	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.487**		0.0298	2	05/06/08	05/02/08	6020A	LMR
Sodium	**352**		62.9	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0993**	J	0.126	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**39.2**		1.26	20	05/20/08	05/02/08	6020A	EYC
Zinc	**22800**		157	1000	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

05/22/08 14:11

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 8-G**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-16**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**2760**		66.2	20	05/20/08	05/02/08	6020A	EYC
Antimony	**1.36**	N	0.167	10	05/06/08	05/02/08	6020A	LMR
Arsenic	**2.03**		0.331	20	05/20/08	05/02/08	6020A	EYC
Barium	**2470**		0.331	20	05/20/08	05/02/08	6020A	EYC
Beryllium	**0.0599**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Cadmium	**5.11**		0.132	20	05/20/08	05/02/08	6020A	EYC
Calcium	**5100**		331	20	05/20/08	05/02/08	6020A	EYC
Chromium	**17000**		66.2	1000	05/20/08	05/02/08	6020A	EYC
Cobalt	**78.9**		0.132	20	05/20/08	05/02/08	6020A	EYC
Copper	**10.9**		0.662	20	05/20/08	05/02/08	6020A	EYC
Iron	**4930**		132	20	05/20/08	05/02/08	6020A	EYC
Lead	**1640**		0.331	20	05/20/08	05/02/08	6020A	EYC
Magnesium	**5140**		66.2	20	05/20/08	05/02/08	6020A	EYC
Manganese	**110**	N	1.32	20	05/20/08	05/02/08	6020A	EYC
Mercury	**0.0680**	E¤	0.0119	5	05/07/08	05/05/08	7474	LCP
Nickel	**4.30**		0.662	20	05/20/08	05/02/08	6020A	EYC
Potassium	**7300**		66.2	20	05/20/08	05/02/08	6020A	EYC
Selenium	0.172	U	1.32	20	05/20/08	05/02/08	6020A	EYC
Silver	**0.287**		0.167	10	05/06/08	05/02/08	6020A	LMR
Sodium	**361**		66.2	20	05/20/08	05/02/08	6020A	EYC
Thallium	**0.0985**	J	0.132	20	05/20/08	05/02/08	6020A	EYC
Vanadium	**26.4**		1.32	20	05/20/08	05/02/08	6020A	EYC
Zinc	**30100**		166	1000	05/20/08	05/02/08	6020A	EYC

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050608C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0506 14:38			CCV 0506 15:08		CCV 0506 15:36		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Antimony	50.0	48.97	98.0	50.0	49.15	98.0	50.42	101.0	90-110
Silver	50.0	48.42	97.0	50.0	47.32	95.0	47.54	95.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050608C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
					CCV 0506 15:51		CCV 0506 16:10		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Antimony				50.0	48.65	97.0	47.52	95.0	90-110
Silver				50.0	46.24	92.0	46.99	94.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0520 11:12			CCV 0520 11:57		CCV 0520 12:40		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Aluminum	5050.0	5328.48	106.0	5050.0	4996.98	99.0	4818.50	95.0	90-110
Arsenic	50.0	50.99	102.0	50.0	49.41	99.0	49.18	98.0	90-110
Barium	50.0	50.16	100.0	50.0	49.46	99.0	48.71	97.0	90-110
Beryllium	50.0	49.33	99.0	50.0	47.77	96.0	47.62	95.0	90-110
Cadmium	50.0	49.28	99.0	50.0	48.08	96.0	48.92	98.0	90-110
Calcium	5050.0	5189.79	103.0	5050.0	5014.65	99.0	4878.84	97.0	90-110
Chromium	50.0	52.41	105.0	50.0	51.00	102.0	48.14	96.0	90-110
Cobalt	50.0	49.70	99.0	50.0	48.31	97.0	46.74	93.0	90-110
Copper	50.0	50.02	100.0	50.0	48.47	97.0	47.78	96.0	90-110
Iron	5050.0	4714.32	93.0	5050.0	4640.25	92.0	4699.60	93.0	90-110
Lead	50.0	49.56	99.0	50.0	49.13	98.0	49.92	100.0	90-110
Magnesium	5050.0	5202.13	103.0	5050.0	4937.02	98.0	4811.88	95.0	90-110
Manganese	50.0	48.76	98.0	50.0	47.30	95.0	47.26	95.0	90-110
Nickel	50.0	51.54	103.0	50.0	50.14	100.0	48.41	97.0	90-110
Potassium	5500.0	5827.85	106.0	5500.0	5552.87	101.0	5395.45	98.0	90-110
Selenium	50.0	47.52	95.0	50.0	44.98	90.0	47.05	94.0	90-110
Sodium	5050.0	5455.18	108.0	5050.0	5134.12	102.0	5040.41	100.0	90-110
Thallium	50.0	48.15	96.0	50.0	47.77	96.0	47.92	96.0	90-110
Vanadium	50.0	50.95	102.0	50.0	48.35	97.0	47.48	95.0	90-110
Zinc	50.0	49.87	100.0	50.0	49.18	98.0	48.61	97.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
				CCV 0520 13:05			CCV 0520 13:12		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Aluminum				5050.0	4914.96	97.0	4996.05	99.0	90-110
Arsenic				50.0	49.70	99.0	48.16	96.0	90-110
Barium				50.0	48.24	96.0	49.10	98.0	90-110
Beryllium				50.0	48.28	97.0	49.68	99.0	90-110
Cadmium				50.0	48.24	96.0	51.08	102.0	90-110
Calcium				5050.0	4924.14	98.0	5047.72	100.0	90-110
Chromium				50.0	49.86	100.0	50.15	100.0	90-110
Cobalt				50.0	46.28	93.0	49.11	98.0	90-110
Copper				50.0	45.70	91.0	48.23	96.0	90-110
Iron				5050.0	4476.56	89.0[a]	4556.51	90.0	90-110
Lead				50.0	49.09	98.0	48.05	96.0	90-110
Magnesium				5050.0	4857.99	96.0	4939.10	98.0	90-110
Manganese				50.0	46.50	93.0	46.50	93.0	90-110
Nickel				50.0	46.61	93.0	49.89	100.0	90-110
Potassium				5500.0	5487.73	100.0	5597.24	102.0	90-110
Selenium				50.0	44.30	89.0[a]	45.94	92.0	90-110
Sodium				5050.0	5047.99	100.0	5134.16	102.0	90-110
Thallium				50.0	46.79	94.0	45.48	91.0	90-110
Vanadium				50.0	45.31	91.0	48.59	97.0	90-110
Zinc				50.0	50.07	100.0	48.81	98.0	90-110

REVIEW
[illegible] 5/22/08

N/A - Not Applicable
[a] - Value outside of QC Limits.

05/22/08 15:25

Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0520 14:05			CCV 0520 14:39		CCV 0520 15:15		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Chromium	50.0	48.18	96.0	50.0	47.77	96.0	48.22	96.0	90-110
Iron	5050.0	4918.48	97.0	5050.0	5033.41	100.0	4860.33	96.0	90-110
Lead	50.0	49.01	98.0	50.0	48.95	98.0	49.58	99.0	90-110
Zinc	50.0	47.01	94.0	50.0	49.14	98.0	47.95	96.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
					CCV 0520 15:45		CCV 0520 16:06		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Chromium				50.0	46.58	93.0	48.51	97.0	90-110
Iron				5050.0	4817.19	95.0	4943.93	98.0	90-110
Lead				50.0	48.48	97.0	48.83	98.0	90-110
Zinc				50.0	45.82	92.0	47.75	95.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **HG050708B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **Mercury AF**

	Initial Calibration			Continuing Calibration					
	ICV 0507 13:02			CCV 0507 13:35			CCV 0507 13:54		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Mercury	5.0	5.00	100.0	5.0	4.99	100.0	5.33	107.0	90-110

N/A - Not Applicable

05/22/08 15:43

Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050608C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0506 14:40		MS042408B08 £		CCB 0506 15:10		CCB 0506 15:39		CCB 0506 15:53	
Antimony	0.15	U	0.015	U	0.15	U	0.15	U	0.15	U
Silver	0.081	U	0.0081	U	0.081	U	0.081	U	0.081	U

N/A - Not Applicable
£ - Concentration Units: mg/Kg
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050608C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	CCB 0506 16:13	
Antimony	0.15	U
Silver	0.081	U

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0520 11:15		MS042408B09 £		CCB 0520 12:01		CCB 0520 12:43		CCB 0520 13:08	
Aluminum	10	U	10	U	10	U	10	U	10	U
Arsenic	0.044	U	0.39	J	0.11	J	-0.057	J	0.044	U
Barium	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Beryllium	0.055	U	0.055	U	0.055	U	0.055	U	0.055	U
Cadmium	0.062	U	0.062	U	0.062	U	0.062	U	0.062	U
Calcium	70	U	70	U	70	U	70	U	70	U
Chromium	0.56	U	0.56	U	0.56	U	0.56	U	0.56	U
Cobalt	0.023	U	0.023	U	0.023	U	0.023	U	0.023	U
Copper	0.22	U	0.36	J	0.22	U	0.22	U	0.22	U
Iron	57	U	57	U	57	U	57	U	57	U
Lead	0.080	U	0.080	U	0.080	U	0.46	J	0.13	J
Magnesium	6.9	U	6.9	U	6.9	U	6.9	U	6.9	U
Manganese	0.66	U	0.66	U	0.66	U	0.66	U	0.66	U
Nickel	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Potassium	21	U	21	U	21	U	21	U	21	U
Selenium	-0.31	J	0.26	U	-0.95	J	-0.37	J	-1.7	J
Sodium	16	U	16	U	16	U	16	U	16	U
Thallium	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Vanadium	-0.20	J	0.27	J	-0.49	J	-1.3	J	-1.2	J
Zinc	0.82	U	0.82	U	0.88	J	0.82	U	1.3	J

REVIEW
[illegible] 5/22/08

N/A - Not Applicable
£ - Concentration Units: mg/Kg
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	CCB 0520 13:16	
Aluminum	10	U
Arsenic	0.044	U
Barium	0.10	U
Beryllium	0.055	U
Cadmium	0.062	U
Calcium	70	U
Chromium	0.56	U
Cobalt	0.023	U
Copper	0.22	U
Iron	57	U
Lead	0.093	J
Magnesium	6.9	U
Manganese	0.66	U
Nickel	0.20	U
Potassium	21	U
Selenium	-0.57	J
Sodium	16	U
Thallium	0.040	U
Vanadium	-1.0	J
Zinc	1.0	J

N/A - Not Applicable
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0520 14:07		MS042408B09 £	CCB 0520 14:41		CCB 0520 15:17		CCB 0520 15:48	
Chromium	0.56	U		0.56	U	0.56	U	0.56	U
Iron	57	U		57	U	57	U	57	U
Lead	0.080	U		0.080	U	0.080	U	0.080	U
Zinc	0.82	U		0.82	U	0.82	U	0.82	U

5/22/08

N/A - Not Applicable
£ - Concentration Units: mg/Kg
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	CCB 0520 16:09	
Chromium	0.56	U
Iron	57	U
Lead	0.080	U
Zinc	0.82	U

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **HG050708C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **Mercury AF**

Parameter	ICB 0507 14:43		MS042408B10 £		CCB 0507 15:19		CCB 0507 15:52		CCB 0507 16:00	
Mercury	-0.017	J	0.0020	U	-0.021	J	-0.021	J	-0.022	J

N/A - Not Applicable
£ - Concentration Units: mg/Kg
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050608C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0506 14:43				ICSAB 0506 14:45			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Antimony		0.12			100	98.29	98	80-120
Silver		0.10			50	48.95	98	80-120

N/A - Not Applicable

05/21/08 12:27

Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008B**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0520 11:19				ICSAB 0520 11:22			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Aluminum	20000	19947.62	100	80-120	20000	20317.30	102	80-120
Arsenic		1.57			100	103.65	104	80-120
Barium		0.31			50	49.97	100	80-120
Beryllium		0.00			100	101.08	101	80-120
Cadmium		0.78			100	95.94	96	80-120
Calcium	60000	60420.90	101	80-120	60000	59228.53	99	80-120
Chromium		0.71			100	105.40	105	80-120
Cobalt		0.07			100	100.49	100	80-120
Copper		0.80			100	101.91	102	80-120
Iron	50000	49350.57	99	80-120	50000	49352.63	99	80-120
Lead		0.07			100	95.25	95	80-120
Magnesium	20000	19905.16	100	80-120	20000	19810.67	99	80-120
Manganese		0.46			100	101.20	101	80-120
Nickel		1.56			100	104.04	104	80-120
Potassium	20000	21166.57	106	80-120	20000	21009.12	105	80-120
Selenium		0.53			100	103.57	104	80-120
Sodium	50000	50129.70	100	80-120	50000	50259.95	101	80-120
Thallium		0.00			100	94.61	95	80-120
Vanadium		2.52			100	106.14	106	80-120
Zinc		2.22			100	102.52	103	80-120

N/A - Not Applicable

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Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M052008C**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0520 14:10				ICSAB 0520 14:13			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Chromium		0.65			100	94.97	95	80-120
Iron	50000	50294.78	101	80-120	50000	47588.32	95	80-120
Lead		0.07			100	93.68	94	80-120
Zinc		1.87			100	94.69	95	80-120

N/A - Not Applicable

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Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Lab ID:	0804115-01		0804115-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Aluminum	690	3500	4240	107	75-125
Arsenic	138	1.42	113	81	75-125
Barium	138	2490	3240	539C	75-125
Beryllium	68.9	0.0851 J	69.0	100	75-125
Cadmium	68.9	1.84	70.4	99	75-125
Calcium	690	5070	5990	134C	75-125
Chromium	138	10800	11500	512C	75-125
Cobalt	138	63.4	198	97	75-125
Copper	138	114	240	91	75-125
Iron	690	8460	9440	141C	75-125
Lead	138	993	1210	155C	75-125
Magnesium	690	4820	5560	107	75-125
Manganese	138	469	673	148N	75-125
Nickel	138	10.8	154	104	75-125
Potassium	690	4800	5520	104	75-125
Selenium	138	0.177 U	131	95	75-125
Sodium	690	263	1020	109	75-125
Thallium	138	0.102 J	141	102	75-125
Vanadium	138	18.3	154	99	75-125
Zinc	138	15500	16100	435C	75-125

N/A - Not Applicable
C - Sample concentration is > 4 times the spike level, recovery limits do not apply.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/22/08 14:04

Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Lab ID:	0804115-01		0804115-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Antimony	1.38	0.511	0.889	27N	75-125
Silver	1.38	0.261	1.61	97	75-125

N/A - Not Applicable
N - Spike recovery outside control limits.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/22/08 14:04

Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Lab ID:	0804115-01		0804115-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Mercury	1.34	0.454	2.09	121	75-125

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/22/08 14:04

Form VI
Duplicates
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01D**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Sample Result	Duplicate Result	Percent RPD	Percent Limit
Aluminum	**3500**	**3430**	2	20
Antimony	**0.511**	**0.519**	2	20
Arsenic	**1.42**	**1.37**	4	20
Barium	**2490**	**2510**	0	20
Beryllium	**0.0851** J	**0.0937** J	10	20
Cadmium	**1.84**	**1.98**	7	20
Calcium	**5070**	**5100**	1	20
Chromium	**10800**	**11000**	2	20
Cobalt	**63.4**	**64.4**	2	20
Copper	**114**	**113**	1	20
Iron	**8460**	**9190**	8	20
Lead	**993**	**1040**	5	20
Magnesium	**4820**	**4770**	1	20
Manganese	**469**	**500**	6	20
Mercury	**0.454**	**0.574**	23¤	20
Nickel	**10.8**	**11.4**	5	20
Potassium	**4800**	**4660**	3	20
Selenium	0.177 U	0.178 U	N/A	20
Silver	**0.261**	**0.297**	13	20
Sodium	**263**	**276**	5	20
Thallium	**0.102** J	**0.0930** J	9	20
Vanadium	**18.3**	**18.8**	2	20
Zinc	**15500**	**15500**	0	20

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

05/22/08 14:04

Form VII
Laboratory Control Sample - High
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **MS042408LH01LH**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Aluminum	1070	107	80-120
Arsenic	212	106	80-120
Barium	208	104	80-120
Beryllium	101	101	80-120
Cadmium	100	100	80-120
Calcium	1130	113	80-120
Chromium	211	105	80-120
Cobalt	194	97	80-120
Copper	192	96	80-120
Iron	1050	105	80-120
Lead	202	101	80-120
Magnesium	1040	104	80-120
Manganese	213	107	80-120
Nickel	209	105	80-120
Potassium	1080	108	80-120
Selenium	202	101	80-120
Sodium	1110	111	80-120
Thallium	203	102	80-120
Vanadium	209	104	80-120
Zinc	206	103	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/22/08 14:26

Form VII
Laboratory Control Sample - Low
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **MS042408LL01LL**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Antimony	2.02	101	80-120
Silver	2.17	108	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/21/08 11:48

Form VII
Laboratory Control Sample
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **MS042408L02L**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Mercury	2.87	115	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/21/08 11:48

Form VIII
ICP-AES and ICP-MS Serial Dilutions
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **T4-Tank 1**
Matrix: **Solid**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-01SD**
Concentration Units: **mg/Kg**
Date Collected: **03/17/08**
Date Received: **03/21/08**

Parameter	Sample Result	Duplicate Result	Percent Difference	Limit
Aluminum	**3500**	**3480**	1	10
Antimony	**0.511**	**0.491**	4	10
Arsenic	**1.42**	**1.84**	30	10
Barium	**2490**	**2460**	1	10
Beryllium	**0.0851** J	0.187 U	X	10
Cadmium	**1.84**	**1.79**	3	10
Calcium	**5070**	**5200**	3	10
Chromium	**10800**	**11800**	9	10
Cobalt	**63.4**	**63.4**	0	10
Copper	**114**	**122**	7	10
Iron	**8460**	**8640**	2	10
Lead	**993**	**990**	0	10
Magnesium	**4820**	**4860**	1	10
Manganese	**469**	**470**	0	10
Mercury	**0.454**	**0.400**	12E	10
Nickel	**10.8**	**10.6**	2	10
Potassium	**4800**	**4810**	0	10
Selenium	0.177 U	0.884 U	N/A	10
Silver	**0.261**	**0.246**	6	10
Sodium	**263**	**272** J	3	10
Thallium	**0.102** J	0.136 U	X	10
Vanadium	**18.3**	**16.7**	9	10
Zinc	**15500**	**16000**	3	10

N/A - Not Applicable
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
U - The analyte was analyzed for but not detected at the sample specific level reported.
X - It is not possible to calculate RPD, one result is below the detection limit, the other is above reporting limit.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

05/22/08 14:04

Form IX
Method Detection Limits (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Instrument: **ICP MS**
Date: 12/2007

Parameter	Mass (amμ)	WBackground	RL (μg/L)	MDL (μg/L)
Beryllium	9.00		0.20	0.055
Calcium	44.00		500	70
Chromium	52.00		2.0	0.56
Aluminum	27.00		100	10
Cobalt	59.00		0.20	0.023
Lead	208.00		0.50	0.080
Zinc	66.00		5.0	0.82
Magnesium	24.00		100	6.9
Copper	63.00		1.0	0.22
Thallium	205.00		0.20	0.040
Antimony	121.00		0.50	0.15
Nickel	60.00		1.0	0.20
Selenium	82.00		2.0	0.26
Barium	138.00		0.50	0.10
Potassium	39.00		100	21
Silver	107.00		0.50	0.081
Sodium	23.00		100	16
Arsenic	75.00		0.50	0.044
Cadmium	114.00		0.20	0.062
Iron	57.00		200	57
Vanadium	51.00		2.0	0.10
Manganese	55.00		2.0	0.66

N/A - Not Applicable
RL - Reporting Limit

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **T4-Tank 8-G**
Case: **N/A** SDG: **N/A**
Matrix: **Solid**

Lab Code: **MA00030**
ETR: **0804115**
Lab ID: **0804115-16**
Associated Blank: **PS043008B09**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

Parameter	Column 1 Retention Time	Column 1 RT Window Low	Column 1 RT Window High	Column 1 Conc.	Column 2 Retention Time	Column 2 RT Window Low	Column 2 RT Window High	Column 2 Conc.	RPD
Aroclor 1254				1780				**1990**	11

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form IX
Method Detection Limits (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Instrument: **Mercury AF**
Date: 12/2007

Parameter	Wavelength (nm)	WBackground	RL (µg/L)	MDL (µg/L)
Mercury			0.050	0.0040

N/A - Not Applicable
RL - Reporting Limit

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Form XI
ICP-AES and ICP-MS Linear Ranges (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Instrument: **ICP MS**
Date: 01/2008

Parameter	Integration Time (seconds)	Concentration (µg/L)
Potassium	N/A	55000
Vanadium	N/A	5000
Zinc	N/A	5000
Arsenic	N/A	5000
Copper	N/A	5000
Sodium	N/A	55000
Magnesium	N/A	55000
Nickel	N/A	5000
Cadmium	N/A	5000
Iron	N/A	55000
Antimony	N/A	5000
Manganese	N/A	5000
Thallium	N/A	5000
Calcium	N/A	55000
Aluminum	N/A	55000
Chromium	N/A	5000
Cobalt	N/A	5000
Selenium	N/A	5000
Lead	N/A	5000
Silver	N/A	5000
Beryllium	N/A	5000
Barium	N/A	5000

N/A - Not Applicable

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Method: 3050:1T

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
Blank	MS042408B08	5/2/2008	1	50
Laboratory Control Sample	MS042408LL01	5/2/2008	1	50
T4-Tank 1	0804115-01	5/2/2008	1.42	50
T4-Tank 1	0804115-01 D	5/2/2008	1.47	50
T4-Tank 1	0804115-01 ML	5/2/2008	1.44	50
T4-Tank 1-G	0804115-02	5/2/2008	1.63	50
T4-Tank 2	0804115-03	5/2/2008	1.47	50
T4-Tank 2-G	0804115-04	5/2/2008	1.48	50
T4-Tank 3	0804115-05	5/2/2008	1.5	50
T4-Tank 3-G	0804115-06	5/2/2008	1.56	50
T4-Tank 4	0804115-07	5/2/2008	1.52	50
T4-Tank 4-G	0804115-08	5/2/2008	1.42	50
T4-Tank 5	0804115-09	5/2/2008	1.51	50
T4-Tank 5-G	0804115-10	5/2/2008	1.57	50
T4-Tank 6	0804115-11	5/2/2008	1.59	50
T4-Tank 6-G	0804115-12	5/2/2008	1.64	50
T4-Tank 7	0804115-13	5/2/2008	1.58	50
T4-Tank 7-G	0804115-14	5/2/2008	1.62	50
T4-Tank 7-G	0804115-14	5/2/2008	1.66	50
T4-Tank 8	0804115-15	5/2/2008	1.68	50
T4-Tank 8-G	0804115-16	5/2/2008	1.5	50

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804115**
Method: 3050:2T

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
Blank	MS042408B09	5/2/2008	1	50
Laboratory Control Sample	MS042408LH01	5/2/2008	1	50
T4-Tank 1	0804115-01	5/2/2008	1.47	50
T4-Tank 1	0804115-01 MH	5/2/2008	1.45	50
T4-Tank 1	0804115-01 D	5/2/2008	1.46	50
T4-Tank 1-G	0804115-02	5/2/2008	1.63	50
T4-Tank 2	0804115-03	5/2/2008	1.51	50
T4-Tank 2-G	0804115-04	5/2/2008	1.5	50
T4-Tank 3	0804115-05	5/2/2008	1.48	50
T4-Tank 3-G	0804115-06	5/2/2008	1.59	50
T4-Tank 4	0804115-07	5/2/2008	1.49	50
T4-Tank 4-G	0804115-08	5/2/2008	1.42	50
T4-Tank 5	0804115-09	5/2/2008	1.5	50
T4-Tank 5-G	0804115-10	5/2/2008	1.58	50
T4-Tank 6	0804115-11	5/2/2008	1.53	50
T4-Tank 6-G	0804115-12	5/2/2008	1.6	50
T4-Tank 7	0804115-13	5/2/2008	1.52	50
T4-Tank 7-G	0804115-14	5/2/2008	1.62	50
T4-Tank 8	0804115-15	5/2/2008	1.59	50
T4-Tank 8-G	0804115-16	5/2/2008	1.51	50

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A

Lab Code: **MA00030**
ETR: **0804115**
Method: 7474 Soil/Sed Prep

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
Blank	MS042408B10	5/5/2008	0.5	50
Laboratory Control Sample	MS042408L02	5/5/2008	0.5	50
T4-Tank 1	0804115-01	5/5/2008	0.93	50
T4-Tank 1	0804115-01 D	5/5/2008	0.97	50
T4-Tank 1	0804115-01 M	5/5/2008	0.93	50
T4-Tank 1-G	0804115-02	5/5/2008	1.03	50
T4-Tank 2	0804115-03	5/5/2008	1.01	50
T4-Tank 2-G	0804115-04	5/5/2008	1	50
T4-Tank 3	0804115-05	5/5/2008	0.99	50
T4-Tank 3-G	0804115-06	5/5/2008	1.02	50
T4-Tank 4	0804115-07	5/5/2008	1	50
T4-Tank 4-G	0804115-08	5/5/2008	1	50
T4-Tank 5	0804115-09	5/5/2008	1.01	50
T4-Tank 5-G	0804115-10	5/5/2008	1	50
T4-Tank 6	0804115-11	5/5/2008	1.03	50
T4-Tank 6-G	0804115-12	5/5/2008	1.02	50
T4-Tank 7	0804115-13	5/5/2008	1.04	50
T4-Tank 7-G	0804115-14	5/5/2008	1.08	50
T4-Tank 8	0804115-15	5/5/2008	1.07	50
T4-Tank 8-G	0804115-16	5/5/2008	1.05	50

N/A - Not Applicable

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M050608C**
Instrument: **ICP MS**
End Date: 05/06/2008 16:13

Start Date: 05/06/2008 14:24

Client ID	Lab ID	Dil	Analysis Time	Sb	Ag
Cal Blank	BLANK 0506 14:24	1	02:24 PM	X	X
Initial Calibration	STD 1 0506 14:26	1	02:26 PM	X	X
Initial Calibration	STD 2 0506 14:28	1	02:28 PM	X	
Initial Calibration	STD 3 0506 14:31	1	02:31 PM	X	
Initial Calibration	STD 4 0506 14:33	1	02:33 PM	X	
Initial Calibration	STD 5 0506 14:36	1	02:36 PM		X
ICV	ICV 0506 14:38	1	02:38 PM	X	X
ICB	ICB 0506 14:40	1	02:40 PM	X	X
ICSA2	ICSA 0506 14:43	1	02:43 PM	X	X
ICSAB2	ICSAB 0506 14:45	1	02:45 PM	X	X
Blank	MS042408B08	2	02:51 PM	X	X
LCS Low	MS042408LL01	2	02:54 PM	X	X
T4-Tank 1	0804115-01	2	02:56 PM	X	X
T4-Tank 1	0804115-01SD	2	02:58 PM	X	X
T4-Tank 1	0804115-01D	2	03:01 PM	X	X
T4-Tank 1	0804115-01ML	2	03:03 PM	X	X
T4-Tank 1-G	0804115-02	2	03:05 PM	X	X
CCV	CCV 0506 15:08	1	03:08 PM	X	X
CCB	CCB 0506 15:10	1	03:10 PM	X	X
T4-Tank 2	0804115-03	2	03:13 PM	X	X
T4-Tank 2-G	0804115-04	2	03:15 PM	X	X
T4-Tank 3	0804115-05	2	03:17 PM	X	X
T4-Tank 3-G	0804115-06	2	03:20 PM	X	X
T4-Tank 4	0804115-07	2	03:22 PM		
T4-Tank 4-G	0804115-08	2	03:25 PM	X	X
T4-Tank 5	0804115-09	2	03:27 PM		
T4-Tank 5-G	0804115-10	2	03:29 PM	X	X
T4-Tank 6	0804115-11	2	03:32 PM	X	X
T4-Tank 6-G	0804115-12	2	03:34 PM		
CCV	CCV 0506 15:36	1	03:36 PM	X	X
CCB	CCB 0506 15:39	1	03:39 PM	X	X
T4-Tank 7	0804115-13	2	03:41 PM	X	X
T4-Tank 7-G	0804115-14	2	03:43 PM		
T4-Tank 8	0804115-15	2	03:46 PM	X	X
T4-Tank 8-G	0804115-16	2	03:48 PM		
CCV	CCV 0506 15:51	1	03:51 PM	X	X
CCB	CCB 0506 15:53	1	03:53 PM	X	X

N/A - Not Applicable
Dil - Dilution

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M050608C**
Instrument: **ICP MS**
End Date: 05/06/2008 16:13

Start Date: 05/06/2008 14:24

Client ID	Lab ID	Dil	Analysis Time	Sb	Ag
T4-Tank 4	0804115-07	10	03:59 PM	X	X
T4-Tank 5	0804115-09	10	04:01 PM	X	X
T4-Tank 6-G	0804115-12	10	04:03 PM	X	X
T4-Tank 7-G	0804115-14	10	04:06 PM	X	X
T4-Tank 8-G	0804115-16	10	04:08 PM	X	X
CCV	CCV 0506 16:10	1	04:10 PM	X	X
CCB	CCB 0506 16:13	1	04:13 PM	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008B**
Instrument: **ICP MS**

Start Date: 05/20/2008 10:50
End Date: 05/20/2008 13:16

Client ID	Lab ID	Dil	Analysis Time	Al	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Na	Ti	V	Zn
Cal Blank	BLANK 0520 10:50	1	10:50 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 1 0520 10:54	1	10:54 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 2 0520 10:57	1	10:57 AM	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 3 0520 11:01	1	11:01 AM	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 4 0520 11:04	1	11:04 AM	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 5 0520 11:08	1	11:08 AM			X																	
ICV	ICV 0520 11:12	1	11:12 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB	ICB 0520 11:15	1	11:15 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA5	ICSA 0520 11:19	1	11:19 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB5	ICSAB 0520 11:22	1	11:22 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LRV	LRV 0520 11:26	1	11:26 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Blank	MS042408B09	20	11:36 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS High	MS042408LH01	20	11:39 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T4-Tank 1	0804115-01	20	11:43 AM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 1	0804115-01SD	20	11:46 AM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 1	0804115-01D	20	11:50 AM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 1	0804115-01MH	20	11:53 AM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
CCV	CCV 0520 11:57	1	11:57 AM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	CCB 0520 12:01	1	12:01 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T4-Tank 1-G	0804115-02	20	12:04 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 2	0804115-03	20	12:08 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 2-G	0804115-04	20	12:11 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 3	0804115-05	20	12:15 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 3-G	0804115-06	20	12:19 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 4	0804115-07	20	12:22 PM	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X
T4-Tank 4-G	0804115-08	20	12:26 PM	X	X	X	X	X	X		X	X	X		X	X	X	X	X	X	X	X	
T4-Tank 5	0804115-09	20	12:29 PM	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	
T4-Tank 5-G	0804115-10	20	12:33 PM	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X
T4-Tank 6	0804115-11	20	12:36 PM	X	X	X	X	X	X		X	X			X	X	X	X	X	X	X	X	
CCV	CCV 0520 12:40	1	12:40 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	CCB 0520 12:43	1	12:43 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
T4-Tank 6-G	0804115-12	20	12:47 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
T4-Tank 7	0804115-13	20	12:50 PM	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	
T4-Tank 7-G	0804115-14	20	12:54 PM	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	
T4-Tank 8	0804115-15	20	12:58 PM	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	
T4-Tank 8-G	0804115-16	20	01:01 PM	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
CCV	CCV 0520 13:05	1	01:05 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

N/A - Not Applicable
Dil - Dilution

05/22/08 15:29

Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008B**
Instrument: **ICP MS**

Start Date: **05/20/2008 10:50**
End Date: **05/20/2008 13:16**

Client ID	Lab ID	Dil	Analysis Time	Al	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Na	Tl	V	Zn
CCB	CCB 0520 13:08	1	01:08 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV	CCV 0520 13:12	1	01:12 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	CCB 0520 13:16	1	01:16 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008C**
Instrument: **ICP MS**
End Date: 05/20/2008 16:09

Start Date: 05/20/2008 13:52

Client ID	Lab ID	Dil	Analysis Time	Cr	Fe	Pb	Zn
Cal Blank	BLANK 0520 13:52	1	01:52 PM	X	X	X	X
Initial Calibration	STD 1 0520 13:55	1	01:55 PM	X	X	X	X
Initial Calibration	STD 2 0520 13:57	1	01:57 PM	X	X	X	X
Initial Calibration	STD 3 0520 14:00	1	02:00 PM	X	X	X	X
Initial Calibration	STD 4 0520 14:02	1	02:02 PM	X	X	X	X
ICV	ICV 0520 14:05	1	02:05 PM	X	X	X	X
ICB	ICB 0520 14:07	1	02:07 PM	X	X	X	X
ICSA5	ICSA 0520 14:10	1	02:10 PM	X	X	X	X
ICSAB5	ICSAB 0520 14:13	1	02:13 PM	X	X	X	X
LRV	LRV 0520 14:15	1	02:15 PM	X	X	X	X
Blank	MS042408B09	20	02:23 PM				
LCS High	MS042408LH01	20	02:26 PM				
T4-Tank 1	0804115-01	100	02:28 PM	X			X
T4-Tank 1	0804115-01SD	100	02:31 PM	X			X
T4-Tank 1	0804115-01D	100	02:33 PM	X			X
T4-Tank 1	0804115-01MH	100	02:36 PM	X			X
CCV	CCV 0520 14:39	1	02:39 PM	X	X	X	X
CCB	CCB 0520 14:41	1	02:41 PM	X	X	X	X
T4-Tank 1-G	0804115-02	100	02:44 PM	X			X
T4-Tank 2	0804115-03	100	02:46 PM	X			
T4-Tank 2	0804115-03	1000	02:49 PM				X
T4-Tank 2-G	0804115-04	100	02:52 PM	X			X
T4-Tank 2-G	0804115-04	1000	02:59 PM				
T4-Tank 3	0804115-05	50	03:02 PM	X			X
T4-Tank 3-G	0804115-06	50	03:04 PM				
T4-Tank 3-G	0804115-06	1000	03:07 PM	X			X
T4-Tank 4	0804115-07	1000	03:09 PM			X	
T4-Tank 4	0804115-07	2000	03:12 PM				
CCV	CCV 0520 15:15	1	03:15 PM	X	X	X	X
CCB	CCB 0520 15:17	1	03:17 PM	X	X	X	X
T4-Tank 4-G	0804115-08	50	03:20 PM	X			X
T4-Tank 4-G	0804115-08	1000	03:22 PM			X	
T4-Tank 5	0804115-09	50	03:25 PM				X
T4-Tank 5	0804115-09	2000	03:27 PM		X	X	
T4-Tank 5	0804115-09	100	03:30 PM				
T4-Tank 5-G	0804115-10	1000	03:32 PM			X	
T4-Tank 6	0804115-11	50	03:35 PM	X		X	

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008C**
Instrument: **ICP MS**
End Date: 05/20/2008 16:09

Start Date: 05/20/2008 13:52

Client ID	Lab ID	Dil	Analysis Time	Cr	Fe	Pb	Zn
T4-Tank 6	0804115-11	100	03:38 PM		X		X
T4-Tank 6	0804115-11	1000	03:40 PM				
T4-Tank 6-G	0804115-12	1000	03:43 PM	X			X
CCV	CCV 0520 15:45	1	03:45 PM	X	X	X	X
CCB	CCB 0520 15:48	1	03:48 PM	X	X	X	X
T4-Tank 7	0804115-13	100	03:51 PM	X	X		
T4-Tank 7	0804115-13	1000	03:53 PM				X
T4-Tank 7-G	0804115-14	1000	03:56 PM	X	X		X
T4-Tank 8	0804115-15	100	03:58 PM	X	X		
T4-Tank 8	0804115-15	1000	04:01 PM				X
T4-Tank 8-G	0804115-16	1000	04:03 PM	X			X
CCV	CCV 0520 16:06	1	04:06 PM	X	X	X	X
CCB	CCB 0520 16:09	1	04:09 PM	X	X	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **HG050708C**
Instrument: **Mercury AF**
End Date: 05/07/2008 16:00

Start Date: 05/07/2008 14:19

Client ID	Lab ID	Dil	Analysis Time	Hg
Cal Blank	STD0 0507 14:19	1	02:19 PM	X
Initial Calibration	STDD1 0507 14:21	1	02:21 PM	X
Initial Calibration	STDD2 0507 14:24	1	02:24 PM	X
Initial Calibration	STDD3 0507 14:27	1	02:27 PM	X
Initial Calibration	STDD4 0507 14:29	1	02:29 PM	X
Initial Calibration	STDD5 0507 14:32	1	02:32 PM	X
Initial Calibration	STDD6 0507 14:36	1	02:36 PM	X
ICV	ICV 0507 14:40	1	02:40 PM	X
ICB	ICB 0507 14:43	1	02:43 PM	X
Blank	MS042408B10	5	02:46 PM	X
LCS	MS042408L02	5	02:48 PM	X
T4-Tank 1	0804115-01	5	02:52 PM	X
T4-Tank 1	0804115-01SD	5	02:55 PM	X
T4-Tank 1	0804115-01D	5	02:58 PM	X
T4-Tank 1	0804115-01M	5	03:01 PM	X
T4-Tank 1-G	0804115-02	5	03:04 PM	X
T4-Tank 2	0804115-03	5	03:07 PM	X
T4-Tank 2-G	0804115-04	5	03:10 PM	X
T4-Tank 3	0804115-05	5	03:13 PM	X
CCV	CCV 0507 15:15	1	03:15 PM	X
CCB	CCB 0507 15:19	1	03:19 PM	X
T4-Tank 3-G	0804115-06	5	03:21 PM	X
T4-Tank 4	0804115-07	5	03:25 PM	X
T4-Tank 4-G	0804115-08	5	03:28 PM	X
T4-Tank 5	0804115-09	5	03:30 PM	X
T4-Tank 5-G	0804115-10	5	03:33 PM	X
T4-Tank 6	0804115-11	5	03:35 PM	X
T4-Tank 6-G	0804115-12	5	03:38 PM	X
T4-Tank 7	0804115-13	5	03:41 PM	X
T4-Tank 7-G	0804115-14	5	03:43 PM	X
T4-Tank 8	0804115-15	5	03:46 PM	X
CCV	CCV 0507 15:48	1	03:48 PM	X
CCB	CCB 0507 15:52	1	03:52 PM	X
T4-Tank 8-G	0804115-16	5	03:54 PM	X
CCV	CCV 0507 15:57	1	03:57 PM	X
CCB	CCB 0507 16:00	1	04:00 PM	X

N/A - Not Applicable
Dil - Dilution

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M050608C**

Start Date: **Start Date: 05/06/2008 14:24**

End Date: 05/06/2008 16:13

Client ID	Lab ID	Analysis Time	In
Calibration Blank	BLANK 0506 14:24	02:24 PM	100.00
Initial Calibration	STD 1 0506 14:26	02:26 PM	101.44
Initial Calibration	STD 2 0506 14:28	02:28 PM	101.22
Initial Calibration	STD 3 0506 14:31	02:31 PM	105.17
Initial Calibration	STD 4 0506 14:33	02:33 PM	103.02
Initial Calibration	STD 5 0506 14:36	02:36 PM	104.49
ICV	ICV 0506 14:38	02:38 PM	104.94
ICB	ICB 0506 14:40	02:40 PM	105.67
ICSA	ICSA 0506 14:43	02:43 PM	93.48
ICSAB	ICSAB 0506 14:45	02:45 PM	94.04
Blank	MS042408B08	02:51 PM	97.47
Laboratory Control Sample	MS042408LL01	02:54 PM	94.20
T4-Tank 1	0804115-01	02:56 PM	95.88
T4-Tank 1	0804115-01 SD	02:58 PM	92.34
T4-Tank 1	0804115-01 D	03:01 PM	100.90
T4-Tank 1	0804115-01 ML	03:03 PM	102.72
T4-Tank 1-G	0804115-02	03:05 PM	98.07
CCV	CCV 0506 15:08	03:08 PM	93.22
CCB	CCB 0506 15:10	03:10 PM	90.59
T4-Tank 2	0804115-03	03:13 PM	106.76
T4-Tank 2-G	0804115-04	03:15 PM	102.76
T4-Tank 3	0804115-05	03:17 PM	98.46
T4-Tank 3-G	0804115-06	03:20 PM	103.74
T4-Tank 4	0804115-07	03:22 PM	69.83
T4-Tank 4-G	0804115-08	03:25 PM	70.26
T4-Tank 5	0804115-09	03:27 PM	66.57
T4-Tank 5-G	0804115-10	03:29 PM	80.92
T4-Tank 6	0804115-11	03:32 PM	99.85
T4-Tank 6-G	0804115-12	03:34 PM	171.68[a]
CCV	CCV 0506 15:36	03:36 PM	97.17
CCB	CCB 0506 15:39	03:39 PM	91.80
T4-Tank 7	0804115-13	03:41 PM	114.23
T4-Tank 7-G	0804115-14	03:43 PM	125.53[a]
T4-Tank 8	0804115-15	03:46 PM	119.11
T4-Tank 8-G	0804115-16	03:48 PM	120.70[a]
CCV	CCV 0506 15:51	03:51 PM	100.85
CCB	CCB 0506 15:53	03:53 PM	95.03

N/A - Not Applicable
[a] - Value outside of QC Limits.

Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M050608C**

Start Date: **Start Date: 05/06/2008 14:24**

End Date: 05/06/2008 16:13

Client ID	Lab ID	Analysis Time	In
T4-Tank 4	0804115-07	03:59 PM	88.75
T4-Tank 5	0804115-09	04:01 PM	90.44
T4-Tank 6-G	0804115-12	04:03 PM	106.09
T4-Tank 7-G	0804115-14	04:06 PM	100.70
T4-Tank 8-G	0804115-16	04:08 PM	99.54
CCV	CCV 0506 16:10	04:10 PM	97.32
CCB	CCB 0506 16:13	04:13 PM	89.15

N/A - Not Applicable

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008B**

Start Date: **Start Date: 05/20/2008 10:50**

End Date: 05/20/2008 13:16

Client ID	Lab ID	Analysis Time	Li	Sc	Ge	In	Tb
Calibration Blank	BLANK 0520 10:50	10:50 AM	100.00	100.00	100.00	100.00	100.00
Initial Calibration	STD 1 0520 10:54	10:54 AM	97.64	96.13	96.70	97.78	96.81
Initial Calibration	STD 2 0520 10:57	10:57 AM	98.32	96.37	96.66	94.40	95.07
Initial Calibration	STD 3 0520 11:01	11:01 AM	94.95	97.42	94.87	94.90	94.09
Initial Calibration	STD 4 0520 11:04	11:04 AM	96.57	95.20	94.70	93.25	93.88
Initial Calibration	STD 5 0520 11:08	11:08 AM	99.80	91.38	93.70	95.21	95.04
ICV	ICV 0520 11:12	11:12 AM	101.70	92.77	95.45	96.19	96.83
ICB	ICB 0520 11:15	11:15 AM	103.34	97.73	98.96	100.24	96.01
ICSA	ICSA 0520 11:19	11:19 AM	98.23	95.37	96.30	94.52	95.82
ICSAB	ICSAB 0520 11:22	11:22 AM	93.53	95.47	93.54	93.44	94.39
Linear Range Verification	LRV 0520 11:26	11:26 AM	93.96	98.66	96.99	94.95	99.33
Blank	MS042408B09	11:36 AM	101.63	101.43	99.54	98.18	100.29
Laboratory Control Sample	MS042408LH01	11:39 AM	97.32	98.52	97.49	96.93	96.30
T4-Tank 1	0804115-01	11:43 AM	100.06	96.15	96.56	98.79	99.90
T4-Tank 1	0804115-01 SD	11:46 AM	97.42	93.84	96.05	95.07	99.68
T4-Tank 1	0804115-01 D	11:50 AM	97.07	95.50	95.29	95.84	99.29
T4-Tank 1	0804115-01 MH	11:53 AM	97.68	96.79	97.18	96.26	98.89
CCV	CCV 0520 11:57	11:57 AM	98.93	95.60	97.13	97.49	98.28
CCB	CCB 0520 12:01	12:01 PM	100.68	98.46	99.76	102.39	101.94
T4-Tank 1-G	0804115-02	12:04 PM	101.03	97.38	96.96	100.54	100.33
T4-Tank 2	0804115-03	12:08 PM	97.41	94.59	97.44	98.30	100.81
T4-Tank 2-G	0804115-04	12:11 PM	97.87	95.58	94.80	96.76	101.96
T4-Tank 3	0804115-05	12:15 PM	98.81	97.78	95.24	99.20	102.34
T4-Tank 3-G	0804115-06	12:19 PM	97.46	94.02	97.10	97.32	100.32
T4-Tank 4	0804115-07	12:22 PM	97.17	81.25	79.23	77.90	87.47
T4-Tank 4-G	0804115-08	12:26 PM	102.37	87.54	89.83	91.14	98.83
T4-Tank 5	0804115-09	12:29 PM	94.39	70.26	68.85	71.05	82.82
T4-Tank 5-G	0804115-10	12:33 PM	105.83	90.47	90.45	91.92	99.82
T4-Tank 6	0804115-11	12:36 PM	101.07	88.29	97.67	96.73	100.53
CCV	CCV 0520 12:40	12:40 PM	100.89	94.11	96.78	96.36	99.85
CCB	CCB 0520 12:43	12:43 PM	102.03	93.46	97.88	100.60	100.66
T4-Tank 6-G	0804115-12	12:47 PM	100.10	90.07	93.24	101.15	101.86
T4-Tank 7	0804115-13	12:50 PM	93.55	88.14	92.88	93.17	95.68
T4-Tank 7-G	0804115-14	12:54 PM	96.51	89.39	93.30	97.69	97.08
T4-Tank 8	0804115-15	12:58 PM	96.99	92.23	93.69	95.22	99.95
T4-Tank 8-G	0804115-16	01:01 PM	98.80	95.54	95.01	99.62	102.62
CCV	CCV 0520 13:12	01:12 PM	95.40	93.08	96.60	93.53	99.32

N/A - Not Applicable

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008B**

Start Date: **Start Date: 05/20/2008 10:50**

End Date: 05/20/2008 13:16

Client ID	Lab ID	Analysis Time	Li	Sc	Ge	In	Tb
CCB	CCB 0520 13:16	01:16 PM	96.05	95.64	95.96	96.47	97.03

N/A - Not Applicable

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008C**

Start Date: **Start Date: 05/20/2008 13:52**

End Date: 05/20/2008 16:09

Client ID	Lab ID	Analysis Time	Ge	Tb
Calibration Blank	BLANK 0520 13:52	01:52 PM	100.00	100.00
Initial Calibration	STD 1 0520 13:55	01:55 PM	99.72	102.77
Initial Calibration	STD 2 0520 13:57	01:57 PM	96.79	96.18
Initial Calibration	STD 3 0520 14:00	02:00 PM	96.33	93.20
Initial Calibration	STD 4 0520 14:02	02:02 PM	94.46	93.84
ICV	ICV 0520 14:05	02:05 PM	98.52	98.71
ICB	ICB 0520 14:07	02:07 PM	96.94	94.68
ICSA	ICSA 0520 14:10	02:10 PM	99.05	98.30
ICSAB	ICSAB 0520 14:13	02:13 PM	96.23	94.66
Linear Range Verification	LRV 0520 14:15	02:15 PM	96.04	100.54
Blank	MS042408B09	02:23 PM	96.72	97.01
Laboratory Control Sample	MS042408LH01	02:26 PM	96.42	94.96
T4-Tank 1	0804115-01	02:28 PM	98.11	95.63
T4-Tank 1	0804115-01 SD	02:31 PM	93.25	96.76
T4-Tank 1	0804115-01 D	02:33 PM	97.23	96.58
T4-Tank 1	0804115-01 MH	02:36 PM	97.08	93.85
CCV	CCV 0520 14:39	02:39 PM	96.25	94.31
CCB	CCB 0520 14:41	02:41 PM	96.04	93.69
T4-Tank 1-G	0804115-02	02:44 PM	99.15	94.90
T4-Tank 2	0804115-03	02:46 PM	94.59	95.64
T4-Tank 2	0804115-03	02:49 PM	97.64	93.67
T4-Tank 2-G	0804115-04	02:52 PM	97.52	96.91
T4-Tank 2-G	0804115-04	02:59 PM	95.26	92.81
T4-Tank 3	0804115-05	03:02 PM	98.08	95.67
T4-Tank 3-G	0804115-06	03:04 PM	98.60	95.98
T4-Tank 3-G	0804115-06	03:07 PM	92.98	93.78
T4-Tank 4	0804115-07	03:09 PM	97.64	91.47
T4-Tank 4	0804115-07	03:12 PM	98.66	95.54
CCV	CCV 0520 15:15	03:15 PM	95.82	93.97
CCB	CCB 0520 15:17	03:17 PM	96.51	95.55
T4-Tank 4-G	0804115-08	03:20 PM	98.08	95.26
T4-Tank 4-G	0804115-08	03:22 PM	92.60	92.82
T4-Tank 5	0804115-09	03:25 PM	92.02	92.32
T4-Tank 5	0804115-09	03:27 PM	101.01	98.13
T4-Tank 5	0804115-09	03:30 PM	96.18	96.82
T4-Tank 5-G	0804115-10	03:32 PM	101.94	102.55
T4-Tank 6	0804115-11	03:35 PM	98.51	98.45

N/A - Not Applicable

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A

Lab Code: **MA00030**
ETR: **0804115**
Sequence: **M052008C**

Start Date: **Start Date: 05/20/2008 13:52**

End Date: 05/20/2008 16:09

Client ID	Lab ID	Analysis Time	Ge	Tb
T4-Tank 6	0804115-11	03:38 PM	100.10	97.71
T4-Tank 6	0804115-11	03:40 PM	96.83	94.38
T4-Tank 6-G	0804115-12	03:43 PM	97.62	94.52
CCV	CCV 0520 15:45	03:45 PM	99.31	95.68
CCB	CCB 0520 15:48	03:48 PM	97.47	94.46
T4-Tank 7	0804115-13	03:51 PM	96.76	93.30
T4-Tank 7	0804115-13	03:53 PM	95.79	92.44
T4-Tank 7-G	0804115-14	03:56 PM	97.04	95.35
T4-Tank 8	0804115-15	03:58 PM	99.40	98.15
T4-Tank 8	0804115-15	04:01 PM	95.60	96.35
T4-Tank 8-G	0804115-16	04:03 PM	98.81	91.21
CCV	CCV 0520 16:06	04:06 PM	97.08	93.10
CCB	CCB 0520 16:09	04:09 PM	97.48	96.08

N/A - Not Applicable

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Sample/Batch Report

Sample File: C:\elandata\Sample\0804115.sam
Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\
Report Date/Time: Tuesday, May 06, 2008 15:57:35

A/S Loc.	Sample ID
11	MS042408B08-D2
12	MS042408LL01-D2
13	0804115-01-D2
14	0804115-01SD-D2
15	0804115-01D-D2
16	0804115-01ML-D2
17	0804115-02-D2
18	0804115-03-D2
19	0804115-04-D2
20	0804115-05-D2
21	0804115-06-D2
22	0804115-07-D2
23	0804115-08-D2
24	0804115-09-D2
25	0804115-10-D2
26	0804115-11-D2
27	0804115-12-D2
28	0804115-13-D2
29	0804115-14-D2
30	0804115-15-D2
31	0804115-16-D2
32	0804115-07-D10
33	0804115-09-D10
34	0804115-12-D10
35	0804115-14-D10
36	0804115-16-D10

Standards/Reagents
CAL STD=C050508M1
ICV=I050608M1
ICSA=042908ICSA2
ICSAB=050608ICSAB1
IS=IS050108
ACID=10%MW042908A

Lmn
5/6/08

EVC
5/6/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Blank.001
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:24:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	142.502		2.321			ug/L
>	In	115	499656.534		3.176			ug/L
	Sb	121	372.925		2.730			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115					
	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Standard 1.002
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:26:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	798.364	0.001	7.102	0.10000	11.56	ug/L
|>	In	115	506839.342	506839.342	3.192			ug/L
⌊	Sb	121	1094.220	0.001	3.715	0.10000	1.36	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Standard 2.003
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:28:54

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	142.919	-0.000	9.674	-0.00022	764.79	ug/L
|>	In	115	505734.145	505734.145	2.580			ug/L
⌊	Sb	121	63342.903	0.125	2.679	9.99987	3.27	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Standard 3.004
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:31:16

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	140.835	-0.000	3.587	-0.00133	39.26	ug/L
|>	In	115	525471.534	525471.534	3.010			ug/L
⌊	Sb	121	129471.700	0.246	1.650	19.94575	2.58	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Standard 4.005
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:33:39

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	180.420	0.000	10.096	0.00504	50.62	ug/L
|>	In	115	514731.051	514731.051	1.381			ug/L
⌊	Sb	121	639597.814	1.242	1.362	100.03843	2.58	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\Standard 5.006
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:36:04

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	634261.862	1.215	0.768	99.99999	1.02	ug/L
|>	In	115	522073.729	522073.729	1.501			ug/L
⌊	Sb	121	739.610	0.001	4.093	0.05396	5.56	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 1.007
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:38:28

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	308532.686	0.588	1.637	48.42270	2.30	ug/L
|>	In	115	524362.563	524362.563	1.333			ug/L
⌊	Sb	121	319169.627	0.608	2.708	48.96830	3.02	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	96.845				
|>	In	115		104.945			
⌊	Sb	121	97.937				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 2.008
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:40:51

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	165.419	0.000	5.570	0.00231	59.95	ug/L
|>	In	115	527992.435	527992.435	1.774			ug/L
⌊	Sb	121	378.759	-0.000	4.328	-0.00232	123.22	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		105.671			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 7.009
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:43:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	689.607	0.001	7.126	0.09808	8.65	ug/L
|>	In	115	467065.484	467065.484	1.779			ug/L
⌊	Sb	121	1032.964	0.001	4.460	0.11799	5.58	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		93.477			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 8.010
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:45:37

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	279493.803	0.595	1.710	48.95448	2.68	ug/L
|>	In	115	469863.473	469863.473	0.957			ug/L
⌊	Sb	121	573667.980	1.220	3.461	98.29428	4.26	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	97.909				
|>	In	115		94.037			
⌊	Sb	121	98.294				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 13.011
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:47:57

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	146.252	0.000	6.675	0.00145	98.15	ug/L
|>	In	115	482730.650	482730.650	1.024			ug/L
⌊	Sb	121	392.509	0.000	3.071	0.00539	49.99	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		96.612			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: MS042408B08-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\MS042408B08-D2.012
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:51:47

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	173.336	0.000	15.167	0.00577	67.61	ug/L
|>	In	115	486992.536	486992.536	1.878			ug/L
⌊	Sb	121	826.699	0.001	5.070	0.07655	5.75	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		97.465			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: MS042408LL01-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\MS042408LL01-D2.013
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:54:07

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	124013.865	0.263	0.516	21.66699	0.91	ug/L
>	In	115	470694.015	470694.015	0.476			ug/L
	Sb	121	118241.339	0.250	3.262	20.17086	3.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		94.204			
	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-01-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-01-D2.014
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:56:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	21737.578	0.045	1.271	3.71233	1.87	ug/L
|>	In	115	479062.890	479062.890	0.959			ug/L
⌊	Sb	121	43489.041	0.090	1.679	7.25139	1.72	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		95.878			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-01SD-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-01SD-D2.015
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 14:58:49

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	4049.781	0.009	2.367	0.69991	5.58	ug/L
|>	In	115	461391.077	461391.077	3.094			ug/L
[	Sb	121	8323.758	0.017	1.648	1.39354	2.81	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		92.342			
[	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-01D-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-01D-D2.016
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:01:11

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	26875.954	0.053	2.629	4.36524	2.46	ug/L
|>	In	115	504138.006	504138.006	0.897			ug/L
⌊	Sb	121	48119.317	0.095	1.647	7.62686	0.76	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		100.897			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-01ML-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-01ML-D2.017
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:03:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	144457.081	0.281	3.567	23.14391	2.41	ug/L
|>	In	115	513230.832	513230.832	1.278			ug/L
⌊	Sb	121	81976.227	0.159	1.709	12.80727	3.00	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		102.717			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-02-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-02-D2.018
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:05:56

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	28005.623	0.057	1.200	4.68223	2.03	ug/L
|>	In	115	490000.735	490000.735	0.922			ug/L
⌊	Sb	121	37423.944	0.076	3.120	6.09215	3.82	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		98.068			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 5.019
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:08:20

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	267912.183	0.575	2.588	47.32298	1.63	ug/L
>	In	115	465790.922	465790.922	1.144			ug/L
	Sb	121	284549.403	0.610	2.398	49.14655	2.85	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107	94.646				
>	In	115		93.222			
	Sb	121	98.293				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 6.020
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:10:43

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	156.669	0.000	0.921	0.00502	3.20	ug/L
|>	In	115	452616.087	452616.087	0.542			ug/L
⌊	Sb	121	255.005	-0.000	12.017	-0.01474	36.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		90.585			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-03-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-03-D2.021
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:13:04

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	40106.629	0.075	1.493	6.16680	1.80	ug/L
|>	In	115	533419.314	533419.314	1.237			ug/L
⌊	Sb	121	72135.721	0.135	0.455	10.83257	1.43	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		106.757	/		
⌊	Sb	121			/		

Method 6020 - Summary Report

Sample ID: 0804115-04-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-04-D2.022
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:15:28

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	17032.403	0.033	1.563	2.70883	3.29	ug/L
|>	In	115	513440.472	513440.472	2.661			ug/L
⌊	Sb	121	38612.927	0.074	1.824	5.99890	2.68	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		102.759			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-05-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-05-D2.023
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:17:52

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	24929.098	0.050	4.789	4.14756	2.28	ug/L
|>	In	115	491965.867	491965.867	3.816			ug/L
⌊	Sb	121	144560.386	0.293	2.799	23.61252	1.46	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		98.461			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-06-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-06-D2.024
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:20:17

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	16642.378	0.032	5.962	2.61869	2.37	ug/L
>	In	115	518338.492	518338.492	4.229			ug/L
	Sb	121	278366.562	0.537	1.501	43.22660	2.89	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		103.739			
	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-07-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-07-D2.025
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:22:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	76112.598	0.218	1.621	17.93878	2.18	ug/L
|>	In	115	348894.022	348894.022	1.689			ug/L
[	Sb	121	101903.609	0.291	0.824	23.46563	0.87	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		69.827			
[	Sb	121					

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Method 6020 - Summary Report

Sample ID: 0804115-08-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-08-D2.026
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:25:07

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	29238.936	0.083	1.087	6.83353	0.44	ug/L
|>	In	115	351044.543	351044.543	1.280			ug/L
⌊	Sb	121	55038.457	0.156	0.874	12.56946	2.17	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		70.257			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-09-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-09-D2.027
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:27:29

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	66837.948	0.201	1.970	16.52574	3.65	ug/L
|>	In	115	332632.810	332632.810	1.957			ug/L
⌊	Sb	121	134710.219	0.404	1.121	32.56127	1.32	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		66.572			
⌊	Sb	121					

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Method 6020 - Summary Report

Sample ID: 0804115-10-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-10-D2.028
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:29:48

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	25664.979	0.063	3.861	5.20120	2.19	ug/L
|>	In	115	404297.614	404297.614	1.704			ug/L
⌊	Sb	121	27359.375	0.067	2.551	5.38973	1.39	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		80.915			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-11-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-11-D2.029
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:32:07

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	91116.399	0.182	0.466	15.01177	0.42	ug/L
|>	In	115	498909.887	498909.887	0.865			ug/L
⌊	Sb	121	150042.621	0.300	2.035	24.16077	1.71	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		99.851			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-12-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-12-D2.030
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:34:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	34412.577	0.040	0.741	3.27933	1.14	ug/L
|>	In	115	857810.922	857810.922	1.232			ug/L
⌊	Sb	121	187608.257	0.218	2.380	17.55901	3.53	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		171.680			
⌊	Sb	121					

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Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 5.031
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:36:50

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	280482.776	0.577	2.608	47.53872	1.31	ug/L
|>	In	115	485493.785	485493.785	2.434			ug/L
⌊	Sb	121	304075.900	0.626	1.950	50.41917	4.40	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	95.077				
|>	In	115		97.166			
⌊	Sb	121	100.838				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 6.032
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:39:12

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	131.669	0.000	10.797	0.00015	1666.93	ug/L
|>	In	115	458677.588	458677.588	1.149			ug/L
⌊	Sb	121	262.922	-0.000	12.936	-0.01390	45.79	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		91.799			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-13-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-13-D2.033
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:41:32

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	49336.027	0.086	3.586	7.09406	3.96	ug/L
|>	In	115	570734.689	570734.689	1.622			ug/L
[	Sb	121	143379.648	0.251	3.643	20.18017	4.69	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		114.225			
[	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-14-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-14-D2.034
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:43:53

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	40234.091	0.064	2.727	5.25682	1.82	ug/L
|>	In	115	627237.382	627237.382	1.479			ug/L
[	Sb	121	117589.987	0.187	2.331	15.03834	1.61	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		125.534			
[	Sb	121					

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Method 6020 - Summary Report

Sample ID: 0804115-15-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-15-D2.035
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:46:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	59305.566	0.099	2.363	8.17982	0.94	ug/L
|>	In	115	595123.013	595123.013	1.698			ug/L
⌊	Sb	121	196067.895	0.329	2.286	26.48182	3.36	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		119.106			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-16-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-16-D2.036
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:48:36

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	31419.010	0.052	2.697	4.26482	1.16	ug/L
|>	In	115	603100.312	603100.312	1.701			ug/L
[	Sb	121	141844.120	0.234	2.668	18.88059	1.48	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		120.703			
[	Sb	121					

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Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 5.037
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:51:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	283137.078	0.562	1.754	46.23732	1.13	ug/L
|>	In	115	503920.997	503920.997	2.346			ug/L
⌊	Sb	121	304737.627	0.604	1.202	48.65381	1.36	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	92.475				
|>	In	115		100.853			
⌊	Sb	121	97.308				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 6.038
Calibration File:
Sample Date/Time: Tuesday, May 06, 2008 15:53:22

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	152.919	0.000	2.871	0.00305	36.22	ug/L
|>	In	115	474826.351	474826.351	3.415			ug/L
⌊	Sb	121	244.171	-0.000	6.065	-0.01872	5.94	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		95.031			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-07-D10

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-07-D10.039
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 15:59:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	20606.314	0.046	2.594	3.80179	1.67	ug/L
|>	In	115	443426.947	443426.947	1.057			ug/L
⌊	Sb	121	25566.448	0.057	1.156	4.58345	0.29	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		88.746			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-09-D10

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-09-D10.040
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:01:22

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	20228.686	0.044	2.253	3.66154	1.62	ug/L
>	In	115	451883.097	451883.097	0.752			ug/L
	Sb	121	36155.238	0.079	2.265	6.38333	1.55	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		90.439			
	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-12-D10

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-12-D10.041
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:03:45

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	6030.920	0.011	6.326	0.91322	6.18	ug/L
|>	In	115	530062.947	530062.947	2.093			ug/L
⌊	Sb	121	33904.279	0.063	1.388	5.09225	1.66	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		106.085			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-14-D10

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-14-D10.042
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:06:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	5187.244	0.010	1.080	0.82580	3.40	ug/L
|>	In	115	503139.823	503139.823	3.011			ug/L
⌊	Sb	121	20807.022	0.041	2.334	3.27252	3.90	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		100.697			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804115-16-D10

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\0804115-16-D10.043
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:08:32

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	5347.723	0.010	5.233	0.86223	6.81	ug/L
|>	In	115	497373.611	497373.611	1.463			ug/L
⌊	Sb	121	25503.418	0.051	1.259	4.07064	2.67	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		99.543			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 5.044
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:10:57

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	277587.851	0.571	1.468	46.98667	2.90	ug/L
|>	In	115	486276.686	486276.686	1.993			ug/L
⌊	Sb	121	287258.712	0.590	1.159	47.52186	0.84	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	93.973				
|>	In	115		97.322			
⌊	Sb	121	95.044				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050608C\QC Std 6.045
Calibration File: C:\elandata\System\C050608C.cal
Sample Date/Time: Tuesday, May 06, 2008 16:13:20

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	126.669	-0.000	20.232	-0.00006	7397.12	ug/L
>	In	115	445446.914	445446.914	0.459			ug/L
	Sb	121	260.422	-0.000	5.625	-0.01303	20.28	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		89.151			
	Sb	121					

Sample/Batch Report

Sample File: C:\elandata\Sample\0804115_2T.sam
Method File: c:\elandata\Method\6020a2crcumonisezn.mth
Dataset File: C:\elandata\Dataset\M052008\
Report Date/Time: Tuesday, May 20, 2008 09:52:24

A/S Loc.	Sample ID
11	MS042408B09-D20
12	MS042408LH01-D20
13	0804115-01-D20
14	0804115-01SD-D20
15	0804115-01D-D20
16	0804115-01MH-D20
17	0804115-02-D20
18	0804115-03-D20
19	0804115-04-D20
20	0804115-05-D20
21	0804115-06-D20
22	0804115-07-D20
23	0804115-08-D20
24	0804115-09-D20
25	0804115-10-D20
26	0804115-11-D20
27	0804115-12-D20
28	0804115-13-D20
29	0804115-14-D20
30	0804115-15-D20
31	0804115-16-D20

Standards/Reagents
CAL STD=C051908M1
ICV=I052008M2
ICSA=042908ICSA2
ICSAB=052008ICSAB2
IS=IS051208
ACID=2%MW051908C

EKC
5/20/08

5/22/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Blank.001
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 10:50:37

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	308389.503		1.995			ug/L
	Be	9	10.833		29.038			ug/L
	Na	23	18517.596		0.887			ug/L
	Mg	24	2492.326		6.711			ug/L
	Al	27	9094.656		4.764			ug/L
	K	39	655939.573		0.244			ug/L
	Ca	44	50196.050		1.643			ug/L
>	Sc	45	462049.904		1.352			ug/L
	V	51	34018.381		1.554			ug/L
	Cr	52	4115.217		2.811			ug/L
	Mn	55	811.281		4.484			ug/L
	Fe	57	7384.899		1.423			ug/L
	Co	59	208.337		5.828			ug/L
	Ni	60	121.668		8.738			ug/L
	Cu	63	624.187		1.817			ug/L
	Zn	66	486.263		1.564			ug/L
>	Ge	74	1042254.380		0.707			ug/L
	As	75	808.936		6.010			ug/L
	Se	82	-135.067		66.791			ug/L
	Cd	114	92.415		8.281			ug/L
>	In	115	878611.383		4.145			ug/L
	Ba	138	530.385		4.598			ug/L
>	Tb	159	666073.723		2.113			ug/L
	Tl	205	606.269		6.814			ug/L
	Pb	208	1072.109		1.083			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Ti	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Standard 1.002
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 10:54:09

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	301110.290	301110.290	0.782			ug/L
	Be	9	45.417	0.000	8.408	0.10000	11.90	ug/L
	Na	23	48541.183	0.069	2.566	10.00000	6.76	ug/L
	Mg	24	23068.851	0.047	2.720	10.10000	6.30	ug/L
	Al	27	53715.084	0.101	0.411	10.00000	4.16	ug/L
	K	39	714085.174	0.189	0.121	11.00000	28.36	ug/L
	Ca	44	52160.574	0.009	0.488	10.10000	43.11	ug/L
>	Sc	45	444172.573	444172.573	3.520			ug/L
	V	51	34333.719	0.001	0.897	0.10000	59.85	ug/L
	Cr	52	4684.565	0.001	0.988	0.10000	16.15	ug/L
	Mn	55	2444.400	0.002	3.376	0.10000	6.54	ug/L
	Fe	57	9202.222	0.002	1.185	10.10000	8.83	ug/L
	Co	59	1052.966	0.001	4.385	0.10000	7.51	ug/L
	Ni	60	270.005	0.000	3.956	0.10000	6.69	ug/L
	Cu	63	1108.388	0.001	11.282	0.10000	28.83	ug/L
	Zn	66	691.274	0.000	2.086	0.10000	10.61	ug/L
>	Ge	74	1007823.706	1007823.706	1.873			ug/L
	As	75	962.697	0.000	2.213	0.10000	5.38	ug/L
	Se	82	41.918	0.000	183.381	0.10000	45.15	ug/L
	Cd	114	687.703	0.001	5.685	0.10000	3.59	ug/L
>	In	115	859129.364	859129.364	2.547			ug/L
	Ba	138	2448.160	0.003	1.800	0.10000	2.95	ug/L
>	Tb	159	644822.546	644822.546	0.665			ug/L
	Tl	205	2874.068	0.004	2.307	0.10000	3.73	ug/L
	Pb	208	4086.518	0.005	1.362	0.10000	1.76	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Standard 2.003
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 10:57:41

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	303209.897	303209.897	3.868			ug/L
	Be	9	4128.555	0.014	1.470	10.00015	2.80	ug/L
	Na	23	329352.730	0.701	1.763	100.01134	6.43	ug/L
	Mg	24	239756.314	0.534	0.394	110.04504	4.08	ug/L
	Al	27	314057.790	0.686	2.033	99.53045	4.16	ug/L
	K	39	1187826.241	1.251	0.755	99.55300	7.95	ug/L
	Ca	44	69233.891	0.047	0.738	109.03690	14.04	ug/L
>	Sc	45	445257.922	445257.922	4.520			ug/L
	V	51	107852.680	0.074	2.553	9.99907	5.13	ug/L
	Cr	52	70166.132	0.066	4.247	9.99993	5.89	ug/L
	Mn	55	102438.693	0.101	1.271	9.99937	2.63	ug/L
	Fe	57	30874.058	0.024	1.691	110.04964	3.11	ug/L
	Co	59	88007.382	0.087	0.276	10.00003	1.54	ug/L
	Ni	60	19805.601	0.020	4.315	10.00023	4.51	ug/L
	Cu	63	46987.208	0.046	1.365	9.99991	0.46	ug/L
	Zn	66	13782.617	0.013	0.776	9.99934	2.12	ug/L
>	Ge	74	1007385.593	1007385.593	1.345			ug/L
	As	75	17930.771	0.017	2.404	9.99995	3.83	ug/L
	Se	82	1323.609	0.001	6.199	9.98909	4.76	ug/L
	Cd	114	61020.840	0.074	3.448	10.00005	2.74	ug/L
>	In	115	829404.615	829404.615	4.336			ug/L
	Ba	138	512.466	0.000	1.981	0.00047	330.36	ug/L
>	Tb	159	633216.424	633216.424	3.835			ug/L
	Tl	205	240858.852	0.380	0.709	10.00007	3.13	ug/L
	Pb	208	336333.238	0.530	0.419	10.00011	4.26	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Standard 3.004
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:01:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	292823.456	292823.456	1.672			ug/L
	Be	9	8171.585	0.028	1.104	20.10059	2.37	ug/L
	Na	23	2912676.960	6.431	3.623	999.10220	3.46	ug/L
	Mg	24	2084720.278	4.627	1.527	1019.18269	2.52	ug/L
	Al	27	2886290.512	6.394	2.678	999.21556	3.76	ug/L
	K	39	5342213.971	10.451	0.381	997.97501	1.93	ug/L
	Ca	44	232350.515	0.408	2.177	1019.05462	1.14	ug/L
>	Sc	45	450151.001	450151.001	2.008			ug/L
	V	51	184668.539	0.154	2.313	20.13744	4.07	ug/L
	Cr	52	131479.022	0.129	0.899	19.92504	2.10	ug/L
	Mn	55	198334.009	0.200	1.390	19.95879	0.87	ug/L
	Fe	57	223649.800	0.219	0.881	1020.03896	2.28	ug/L
	Co	59	167877.822	0.170	1.211	19.88874	1.61	ug/L
	Ni	60	37756.480	0.038	2.715	19.89331	2.48	ug/L
	Cu	63	90072.968	0.090	3.667	19.92954	2.93	ug/L
	Zn	66	27793.558	0.028	3.289	20.17717	4.19	ug/L
>	Ge	74	988749.647	988749.647	1.317			ug/L
	As	75	35209.309	0.035	1.800	20.09065	3.20	ug/L
	Se	82	2964.701	0.003	4.225	20.31145	5.07	ug/L
	Cd	114	117657.412	0.141	2.136	19.84164	7.23	ug/L
>	In	115	833822.196	833822.196	5.360			ug/L
	Ba	138	463.207	-0.000	10.879	-0.00192	127.72	ug/L
>	Tb	159	626677.239	626677.239	0.947			ug/L
	Tl	205	471954.154	0.752	1.493	19.96142	1.99	ug/L
	Pb	208	655059.091	1.044	1.958	19.93744	2.80	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Standard 4.005
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:04:48

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	297827.055	297827.055	0.063			ug/L
	Be	9	40134.616	0.135	0.377	99.85993	0.34	ug/L
	Na	23	28189884.165	64.082	1.284	9999.55518	2.74	ug/L
	Mg	24	20662651.482	47.001	2.019	10102.51963	3.73	ug/L
	Al	27	29012374.775	65.946	3.496	10002.95996	2.48	ug/L
	K	39	47706063.721	107.111	2.037	10002.23443	3.88	ug/L
	Ca	44	1750047.376	3.871	2.875	10095.51047	1.51	ug/L
>	Sc	45	439894.277	439894.277	3.510			ug/L
	V	51	763593.907	0.741	0.433	99.84447	2.91	ug/L
	Cr	52	612110.444	0.616	0.946	99.75956	2.51	ug/L
	Mn	55	946051.920	0.958	1.558	99.78547	0.93	ug/L
	Fe	57	2111195.220	2.133	0.468	10098.21080	2.86	ug/L
	Co	59	824106.882	0.835	1.054	99.89896	2.00	ug/L
	Ni	60	181532.072	0.184	2.341	99.80528	2.04	ug/L
	Cu	63	424586.199	0.430	2.615	99.73244	4.25	ug/L
	Zn	66	129547.114	0.131	2.574	99.77290	0.35	ug/L
>	Ge	74	986971.146	986971.146	2.409			ug/L
	As	75	172080.617	0.174	4.311	100.00265	2.20	ug/L
	Se	82	15115.153	0.015	3.892	100.01126	2.37	ug/L
	Cd	114	587767.252	0.717	1.988	100.03207	1.89	ug/L
>	In	115	819304.740	819304.740	0.628			ug/L
	Ba	138	789.429	0.000	2.166	0.01554	5.89	ug/L
>	Tb	159	625316.057	625316.057	0.551			ug/L
	Tl	205	2337292.497	3.736	3.353	99.95912	2.80	ug/L
	Pb	208	3151396.767	5.038	2.477	99.81398	2.82	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 5

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\Standard 5.006
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:08:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	307786.684	307786.684	1.644			ug/L
	Be	9	49.584	0.000	18.922	0.09364	26.22	ug/L
	Na	23	332724.085	0.748	1.089	116.71796	0.64	ug/L
	Mg	24	3431.280	0.003	5.368	0.58868	20.84	ug/L
	Al	27	321509.860	0.742	2.194	112.51013	1.08	ug/L
	K	39	5580418.348	11.800	0.847	1101.92614	2.69	ug/L
	Ca	44	48361.375	0.006	0.920	15.46881	48.34	ug/L
>	Sc	45	422233.825	422233.825	1.664			ug/L
	V	51	29938.759	-0.002	0.558	-0.26699	7.11	ug/L
	Cr	52	4226.918	0.000	3.126	0.06143	31.48	ug/L
	Mn	55	2187.273	0.001	1.007	0.15223	1.79	ug/L
	Fe	57	7533.311	0.001	1.224	2.97453	10.09	ug/L
	Co	59	942.957	0.001	5.265	0.09161	6.82	ug/L
	Ni	60	345.008	0.000	2.830	0.12841	3.66	ug/L
	Cu	63	1025.464	0.000	4.964	0.10466	10.64	ug/L
	Zn	66	1016.296	0.001	4.614	0.43803	8.76	ug/L
>	Ge	74	976581.862	976581.862	0.414			ug/L
	As	75	742.682	-0.000	3.059	-0.00902	145.93	ug/L
	Se	82	-127.083	-0.000	48.309	-0.00320	12711.13	ug/L
	Cd	114	688.289	0.001	5.343	0.10012	7.05	ug/L
>	In	115	836516.977	836516.977	1.202			ug/L
	Ba	138	1900129.877	3.002	1.350	100.00000	3.31	ug/L
>	Tb	159	633051.340	633051.340	2.037			ug/L
	Tl	205	1920.148	0.002	2.628	0.05679	1.63	ug/L
	Pb	208	3977.335	0.005	0.436	0.09262	3.25	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 1.007
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:12:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	313622.654	313622.654	2.840			ug/L
	Be	9	20872.947	0.067	0.511	49.33440	3.11	ug/L
	Na	23	14986341.622	34.959	1.189	5455.17852	4.51	ug/L
	Mg	24	10369563.988	24.202	2.168	5202.13095	3.49	ug/L
	Al	27	15059326.499	35.129	2.433	5328.48013	2.68	ug/L
	K	39	27361846.100	62.409	3.933	5827.84742	0.54	ug/L
	Ca	44	898761.419	1.990	0.484	5189.78743	3.37	ug/L
>	Sc	45	428660.289	428660.289	3.737			ug/L
	V	51	408425.431	0.378	3.577	50.95378	6.70	ug/L
	Cr	52	325980.549	0.324	0.520	52.41427	3.01	ug/L
	Mn	55	466086.099	0.468	1.523	48.75897	4.10	ug/L
	Fe	57	997095.194	0.996	1.597	4714.32135	3.56	ug/L
	Co	59	413081.488	0.415	3.242	49.69545	5.40	ug/L
	Ni	60	94502.959	0.095	1.594	51.54204	3.91	ug/L
	Cu	63	214901.728	0.216	4.283	50.02430	6.07	ug/L
	Zn	66	65484.603	0.065	1.954	49.86562	0.64	ug/L
>	Ge	74	994816.772	994816.772	2.587			ug/L
	As	75	88756.471	0.088	1.576	50.99106	3.02	ug/L
	Se	82	7169.171	0.007	2.706	47.52447	2.98	ug/L
	Cd	114	298728.407	0.353	1.285	49.28340	0.99	ug/L
>	In	115	845172.506	845172.506	2.131			ug/L
	Ba	138	971566.383	1.506	2.786	50.15960	3.34	ug/L
>	Tb	159	644944.555	644944.555	0.677			ug/L
	Tl	205	1161463.726	1.800	2.312	48.15128	1.97	ug/L
	Pb	208	1614331.165	2.502	1.515	49.55691	1.74	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.697			
	Be	9	98.669				
	Na	23	108.023				
	Mg	24	103.012				
	Al	27	105.514				
	K	39	105.961				
	Ca	44	102.768				
>	Sc	45		92.774			
	V	51	101.908				
	Cr	52	104.829				
	Mn	55	97.518				
	Fe	57	93.353				
	Co	59	99.391				
	Ni	60	103.084				
	Cu	63	100.049				
	Zn	66	99.731				
>	Ge	74		95.449			
	As	75	101.982				
	Se	82	95.049				
	Cd	114	98.567				
>	In	115		96.194			
	Ba	138	100.319				
>	Tb	159		96.828			
	Tl	205	96.303				
	Pb	208	99.114				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 2.008
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:15:34

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	318677.952	318677.952	1.336			ug/L
	Be	9	17.500	0.000	28.571	0.01466	79.67	ug/L
	Na	23	18065.349	-0.000	2.014	-0.01064	1124.29	ug/L
	Mg	24	2819.891	0.001	7.366	0.18367	61.40	ug/L
	Al	27	9580.808	0.002	1.700	0.23317	32.37	ug/L
	K	39	660389.498	0.043	0.369	4.01222	28.61	ug/L
	Ca	44	47600.482	-0.003	0.620	-8.38114	38.55	ug/L
>	Sc	45	451549.202	451549.202	1.199			ug/L
	V	51	32059.234	-0.002	1.547	-0.20884	28.45	ug/L
	Cr	52	4102.714	0.000	3.498	0.00534	705.51	ug/L
	Mn	55	820.032	0.000	2.246	0.00175	75.11	ug/L
	Fe	57	7769.273	0.000	1.531	2.12401	26.20	ug/L
	Co	59	229.171	0.000	15.831	0.00272	167.93	ug/L
	Ni	60	120.002	-0.000		-0.00018	904.68	ug/L
	Cu	63	595.018	-0.000	5.894	-0.00511	132.13	ug/L
	Zn	66	438.761	-0.000	8.509	-0.03090	112.25	ug/L
>	Ge	74	1031452.151	1031452.151	2.646			ug/L
	As	75	762.266	-0.000	5.552	-0.02160	60.55	ug/L
	Se	82	-183.474	-0.000	50.023	-0.31493	184.48	ug/L
	Cd	114	104.978	0.000	12.506	0.00198	113.59	ug/L
>	In	115	880735.588	880735.588	3.003			ug/L
	Ba	138	585.339	0.000	6.967	0.00399	61.41	ug/L
>	Tb	159	639467.349	639467.349	2.205			ug/L
	Tl	205	691.690	0.000	5.126	0.00461	40.95	ug/L
	Pb	208	1121.278	0.000	4.018	0.00284	26.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		103.336			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.727			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		98.964			
	As	75					
	Se	82					
	Cd	114					
>	In	115		100.242			
	Ba	138					
>	Tb	159		96.005			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 9

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 9.009
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:19:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	302920.168	302920.168	2.850			ug/L
	Be	9	11.667	0.000	43.301	0.00275	485.26	ug/L
	Na	23	141547510.971	321.255	1.886	50129.69579	3.05	ug/L
	Mg	24	40809493.211	92.607	1.838	19905.15786	1.59	ug/L
	Al	27	57944491.656	131.508	1.964	19947.61452	3.16	ug/L
	K	39	100502542.881	226.667	1.841	21166.56860	1.94	ug/L
	Ca	44	10255449.706	23.165	1.683	60420.90415	1.37	ug/L
>	Sc	45	440661.527	440661.527	1.265			ug/L
	V	51	51495.745	0.019	6.281	2.52115	21.81	ug/L
	Cr	52	8353.359	0.004	2.174	0.70889	8.85	ug/L
	Mn	55	5199.332	0.004	2.104	0.45877	3.83	ug/L
	Fe	57	10464478.730	10.424	0.436	49350.56569	2.92	ug/L
	Co	59	760.445	0.001	4.536	0.06670	2.91	ug/L
	Ni	60	3007.847	0.003	4.635	1.56426	5.48	ug/L
	Cu	63	4048.531	0.003	3.293	0.79767	6.15	ug/L
	Zn	66	3388.353	0.003	3.091	2.22170	6.34	ug/L
>	Ge	74	1003698.621	1003698.621	2.503			ug/L
	As	75	3506.457	0.003	3.141	1.56749	6.47	ug/L
	Se	82	-48.216	0.000	114.372	0.52880	66.84	ug/L
	Cd	114	4736.666	0.006	5.378	0.78055	3.83	ug/L
>	In	115	830434.062	830434.062	2.603			ug/L
	Ba	138	6433.606	0.009	3.441	0.30949	5.73	ug/L
>	Tb	159	638248.682	638248.682	2.290			ug/L
	Tl	205	508.764	-0.000	8.787	-0.00304	47.66	ug/L
	Pb	208	3179.752	0.003	2.460	0.06688	6.77	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		98.226			
	Be	9					
	Na	23	100.259				
	Mg	24	99.526				
	Al	27	99.738				
	K	39	105.833				
	Ca	44	100.702				
>	Sc	45		95.371			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57	98.701				
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		96.301			
	As	75					
	Se	82					
	Cd	114					
>	In	115		94.517			
	Ba	138					
>	Tb	159		95.823			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 10

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 10.010
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:22:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	288433.651	288433.651	0.461			ug/L
	Be	9	39343.679	0.136	2.167	101.08212	2.23	ug/L
	Na	23	142091817.088	322.089	2.088	50259.94669	2.18	ug/L
	Mg	24	40657518.006	92.167	0.608	19810.67473	0.84	ug/L
	Al	27	59093033.344	133.946	1.868	20317.29876	1.88	ug/L
	K	39	99865468.685	224.981	1.486	21009.12122	1.66	ug/L
	Ca	44	10064338.062	22.708	0.744	59228.52670	0.86	ug/L
>	Sc	45	441108.510	441108.510	0.230			ug/L
	V	51	799315.870	0.788	0.882	106.13572	4.64	ug/L
	Cr	52	638609.621	0.651	2.648	105.40364	2.57	ug/L
	Mn	55	947481.049	0.971	1.898	101.19850	1.77	ug/L
	Fe	57	10164711.857	10.424	1.430	49352.62795	2.17	ug/L
	Co	59	817776.274	0.840	3.299	100.48650	6.83	ug/L
	Ni	60	186719.494	0.192	1.989	104.03913	5.33	ug/L
	Cu	63	428376.301	0.439	1.089	101.90949	4.19	ug/L
	Zn	66	131398.316	0.134	1.278	102.51683	2.33	ug/L
>	Ge	74	974938.049	974938.049	3.588			ug/L
	As	75	175992.766	0.180	2.076	103.64788	3.18	ug/L
	Se	82	15466.734	0.016	4.281	103.56737	0.99	ug/L
	Cd	114	564733.403	0.688	2.189	95.94410	3.48	ug/L
>	In	115	820978.605	820978.605	1.294			ug/L
	Ba	138	943445.256	1.500	1.904	49.96653	2.50	ug/L
>	Tb	159	628709.112	628709.112	1.370			ug/L
	Tl	205	2224152.745	3.537	1.457	94.61475	0.20	ug/L
	Pb	208	3023197.570	4.808	1.920	95.24725	2.79	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.529			
	Be	9	101.082				
	Na	23	100.520				
	Mg	24	99.053				
	Al	27	101.586				
	K	39	105.046				
	Ca	44	98.714				
>	Sc	45		95.468			
	V	51	106.136				
	Cr	52	105.404				
	Mn	55	101.198				
	Fe	57	98.705				
	Co	59	100.486				
	Ni	60	104.039				
	Cu	63	101.909				
	Zn	66	102.517				
>	Ge	74		93.541			
	As	75	103.648				
	Se	82	103.567				
	Cd	114	95.944				
>	In	115		93.440			
	Ba	138	99.933				
>	Tb	159		94.390			
	Tl	205	94.615				
	Pb	208	95.247				

Method 6020 - Summary Report

Sample ID: QC Std 11

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 11.011
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:26:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	289757.844	289757.844	0.802			ug/L
	Be	9	1850836.339	6.387	1.169	4734.47605	0.38	ug/L
	Na	23	15418253.265	33.787	3.091	5272.23861	3.57	ug/L
	Mg	24	10583787.966	23.213	1.468	4989.52167	1.72	ug/L
	Al	27	15402188.861	33.769	1.611	5122.17451	1.69	ug/L
	K	39	250182634.605	547.428	0.769	51119.76636	1.18	ug/L
	Ca	44	935139.463	1.943	0.704	5067.77875	1.60	ug/L
>	Sc	45	455859.852	455859.852	1.006			ug/L
	V	51	37646798.123	37.212	2.150	5011.46011	2.50	ug/L
	Cr	52	32351697.752	32.001	0.886	5178.53830	1.28	ug/L
	Mn	55	49222041.593	48.691	2.200	5072.21469	1.97	ug/L
	Fe	57	1042879.974	1.025	1.695	4851.02646	2.08	ug/L
	Co	59	42507102.126	42.055	1.874	5031.29242	2.66	ug/L
	Ni	60	9584025.875	9.482	3.598	5147.75618	4.05	ug/L
	Cu	63	21981341.769	21.745	1.951	5045.38802	2.02	ug/L
	Zn	66	6440909.799	6.371	0.807	4860.45473	1.00	ug/L
>	Ge	74	1010877.964	1010877.964	0.775			ug/L
	As	75	8346872.199	8.256	4.444	4757.86767	4.26	ug/L
	Se	82	730571.350	0.723	2.546	4682.14568	3.32	ug/L
	Cd	114	30154125.939	36.141	3.758	5040.21305	2.21	ug/L
>	In	115	834199.580	834199.580	2.071			ug/L
	Ba	138	96545528.612	145.919	1.726	4860.59430	0.91	ug/L
>	Tb	159	661610.326	661610.326	0.994			ug/L
	Tl	205	116966220.451	176.792	1.587	4729.56763	1.41	ug/L
	Pb	208	156246599.162	236.193	1.172	4679.10392	2.15	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.958			
	Be	9	94.690				
	Na	23	9.586				
	Mg	24	9.072				
	Al	27	9.313				
	K	39	102.240				
	Ca	44	9.214				
>	Sc	45		98.660			
	V	51	100.229				
	Cr	52	103.571				
	Mn	55	101.444				
	Fe	57	8.820				
	Co	59	100.626				
	Ni	60	102.955				
	Cu	63	100.908				
	Zn	66	97.209				
>	Ge	74		96.990			
	As	75	95.157				
	Se	82	93.643				
	Cd	114	100.804				
>	In	115		94.945			
	Ba	138	97.212				
>	Tb	159		99.330			
	Tl	205	94.591				
	Pb	208	93.582				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 13.012
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:31:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	293666.546	293666.546	2.853			ug/L
	Be	9	50.834	0.000	5.679	0.10233	7.94	ug/L
	Na	23	27715.921	0.021	4.370	3.33416	13.01	ug/L
	Mg	24	3056.608	0.001	2.065	0.29723	14.39	ug/L
	Al	27	10375.955	0.003	1.785	0.50384	19.21	ug/L
	K	39	692724.383	0.116	1.203	10.83528	18.34	ug/L
	Ca	44	53504.715	0.010	0.846	26.04637	24.45	ug/L
>	Sc	45	451121.434	451121.434	1.220			ug/L
	V	51	39160.807	0.006	2.105	0.80780	13.64	ug/L
	Cr	52	4767.510	0.001	2.908	0.12214	12.93	ug/L
	Mn	55	1722.205	0.001	7.934	0.09590	14.10	ug/L
	Fe	57	7542.900	0.000	2.314	1.70188	85.71	ug/L
	Co	59	902.538	0.001	10.147	0.08256	11.79	ug/L
	Ni	60	241.671	0.000	11.912	0.06602	22.08	ug/L
	Cu	63	1908.480	0.001	5.125	0.29775	5.40	ug/L
	Zn	66	557.100	0.000	1.151	0.06347	17.35	ug/L
>	Ge	74	1013662.846	1013662.846	1.836			ug/L
	As	75	2203.683	0.001	9.468	0.80443	12.13	ug/L
	Se	82	-80.340	0.000	128.976	0.33387	197.34	ug/L
	Cd	114	505.404	0.000	16.029	0.06591	21.89	ug/L
>	In	115	876677.314	876677.314	2.856			ug/L
	Ba	138	1728.356	0.002	13.590	0.06024	20.04	ug/L
>	Tb	159	663735.348	663735.348	0.540			ug/L
	Tl	205	2575.258	0.003	2.509	0.07945	3.57	ug/L
	Pb	208	3218.922	0.003	7.840	0.06421	12.41	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		95.226			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.635			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.257			
	As	75					
	Se	82					
	Cd	114					
>	In	115		99.780			
	Ba	138					
>	Tb	159		99.649			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408B09-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\MS042408B09-D20.013
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:36:15

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	313422.016	313422.016	2.208			ug/L
	Be	9	16.250	0.000	30.769	0.01258	100.83	ug/L
	Na	23	26587.067	0.017	0.674	2.60338	11.03	ug/L
	Mg	24	2024.747	-0.001	2.744	-0.23060	11.39	ug/L
	Al	27	8886.604	-0.001	2.995	-0.10700	143.00	ug/L
	K	39	673345.494	0.018	0.274	1.65585	210.47	ug/L
	Ca	44	53510.149	0.006	0.537	14.59120	59.52	ug/L
>	Sc	45	468679.798	468679.798	2.731			ug/L
	V	51	35953.156	0.002	2.075	0.27175	28.57	ug/L
	Cr	52	4590.367	0.000	1.287	0.07734	28.97	ug/L
	Mn	55	1445.504	0.001	1.357	0.06411	7.19	ug/L
	Fe	57	7422.419	0.000	1.240	0.33200	185.28	ug/L
	Co	59	303.340	0.000	7.490	0.01105	20.36	ug/L
	Ni	60	128.335	0.000	9.258	0.00386	190.52	ug/L
	Cu	63	2269.786	0.002	3.085	0.36890	6.05	ug/L
	Zn	66	1177.560	0.001	3.133	0.51036	7.62	ug/L
>	Ge	74	1037460.104	1037460.104	1.819			ug/L
	As	75	1508.584	0.001	1.683	0.39098	6.46	ug/L
	Se	82	-185.020	-0.000	108.451	-0.32504	387.47	ug/L
	Cd	114	84.854	-0.000	16.570	-0.00094	251.19	ug/L
>	In	115	862625.981	862625.981	1.070			ug/L
	Ba	138	1405.777	0.001	7.516	0.04369	15.83	ug/L
>	Tb	159	668000.146	668000.146	2.943			ug/L
	Tl	205	687.107	0.000	2.785	0.00320	48.49	ug/L
	Pb	208	1732.974	0.001	1.854	0.01952	2.83	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.632			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		101.435			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		99.540			
	As	75					
	Se	82					
	Cd	114					
>	In	115		98.181			
	Ba	138					
>	Tb	159		100.289			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408LH01-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\MS042408LH01-D20.014
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:39:46

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	300132.548	300132.548	2.556			ug/L
	Be	9	40843.297	0.136	0.929	100.87770	2.15	ug/L
	Na	23	3260427.069	7.121	2.881	1111.20800	1.38	ug/L
	Mg	24	2211168.398	4.851	4.173	1042.64420	2.87	ug/L
	Al	27	3228512.519	7.072	2.626	1072.68634	1.52	ug/L
	K	39	5929000.009	11.603	2.519	1083.53763	1.13	ug/L
	Ca	44	247009.703	0.434	0.734	1132.05231	1.08	ug/L
>	Sc	45	455228.772	455228.772	1.565			ug/L
	V	51	1606473.065	1.549	0.968	208.59589	2.83	ug/L
	Cr	52	1327899.942	1.303	1.444	210.91662	3.11	ug/L
	Mn	55	2082337.030	2.049	0.370	213.45743	2.21	ug/L
	Fe	57	231958.373	0.221	4.275	1048.04411	6.30	ug/L
	Co	59	1643472.989	1.618	3.631	193.58055	5.11	ug/L
	Ni	60	391617.349	0.385	1.897	209.21789	2.62	ug/L
	Cu	63	843308.684	0.829	1.444	192.45367	1.63	ug/L
	Zn	66	274942.014	0.270	1.557	206.08896	1.76	ug/L
>	Ge	74	1016117.901	1016117.901	1.893			ug/L
	As	75	373576.703	0.367	2.612	211.51510	3.99	ug/L
	Se	82	31635.852	0.031	4.063	202.42032	2.18	ug/L
	Cd	114	612689.196	0.719	2.628	100.31873	1.83	ug/L
>	In	115	851610.361	851610.361	1.970			ug/L
	Ba	138	4000918.749	6.237	0.809	207.74560	0.26	ug/L
>	Tb	159	641432.528	641432.528	0.767			ug/L
	Tl	205	4874296.795	7.599	2.690	203.27942	2.91	ug/L
	Pb	208	6535762.219	10.189	1.832	201.85058	2.59	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.323			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		98.524			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.492			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.927			
	Ba	138					
>	Tb	159		96.301			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-01-D20.015
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:43:19

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	308574.741	308574.741	0.876			ug/L
	Be	9	62.917	0.000	3.035	0.12509	3.32	ug/L
	Na	23	1118605.370	2.480	2.393	386.92279	4.67	ug/L
	Mg	24	14637955.049	32.952	0.834	7082.71451	1.49	ug/L
	Al	27	15089588.634	33.946	2.717	5149.00467	1.22	ug/L
	K	39	34174506.042	75.541	0.781	7054.13041	3.06	ug/L
	Ca	44	1316557.039	2.856	0.704	7448.57106	1.93	ug/L
>	Sc	45	444247.780	444247.780	2.194			ug/L
	V	51	234315.992	0.200	2.084	26.96235	0.61	ug/L
	Cr	52	104699930.545	104.033	3.067	16835.04873	1.98	ug/L
	Mn	55	6657779.211	6.618	2.091	689.43471	3.80	ug/L
	Fe	57	2651085.934	2.628	2.588	12444.10014	3.92	ug/L
	Co	59	783433.942	0.779	1.990	93.14145	2.97	ug/L
	Ni	60	29569.211	0.029	2.387	15.89827	4.44	ug/L
	Cu	63	727318.991	0.722	1.084	167.63759	3.38	ug/L
	Zn	66	30178385.304	30.005	2.569	22890.01065	4.45	ug/L
>	Ge	74	1006395.536	1006395.536	2.502			ug/L
	As	75	4429.641	0.004	5.237	2.08860	4.47	ug/L
	Se	82	-268.319	-0.000	13.322	-0.88599	23.29	ug/L
	Cd	114	16929.641	0.019	2.038	2.70605	3.04	ug/L
>	In	115	867975.587	867975.587	1.406			ug/L
	Ba	138	73233765.697	110.050	2.222	3665.79041	1.52	ug/L
>	Tb	159	665410.550	665410.550	0.782			ug/L
	Tl	205	4339.869	0.006	2.280	0.15015	3.41	ug/L
	Pb	208	49015923.894	73.674	3.220	1459.52958	3.89	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		100.060			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.147			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		96.559			
	As	75					
	Se	82					
	Cd	114					
>	In	115		98.789			
	Ba	138					
>	Tb	159		99.900			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01SD-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-01SD-D20.016
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:46:51

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	300435.750	300435.750	2.072			ug/L
	Be	9	20.834	0.000	24.980	0.02532	50.01	ug/L
	Na	23	239231.991	0.512	2.840	79.88418	4.72	ug/L
	Mg	24	2881068.558	6.641	1.666	1427.36104	2.31	ug/L
	Al	27	2934194.442	6.748	1.686	1023.55893	1.22	ug/L
	K	39	7181871.331	15.148	0.730	1414.56826	2.33	ug/L
	Ca	44	301438.028	0.587	0.540	1530.22964	1.16	ug/L
>	Sc	45	433573.047	433573.047	1.517			ug/L
	V	51	69059.737	0.036	0.663	4.90850	9.19	ug/L
	Cr	52	20623642.370	20.620	2.148	3336.81087	4.00	ug/L
	Mn	55	1327233.253	1.327	0.319	138.20973	4.25	ug/L
	Fe	57	543496.916	0.537	1.456	2541.40499	6.00	ug/L
	Co	59	155862.492	0.156	3.575	18.63057	5.99	ug/L
	Ni	60	5838.755	0.006	6.490	3.10366	5.22	ug/L
	Cu	63	154753.565	0.154	0.305	35.78019	4.66	ug/L
	Zn	66	5884483.174	5.877	5.029	4483.62919	1.58	ug/L
>	Ge	74	1001029.841	1001029.841	4.425			ug/L
	As	75	1715.276	0.001	3.877	0.54255	14.99	ug/L
	Se	82	-227.892	-0.000	13.661	-0.64004	37.82	ug/L
	Cd	114	3245.484	0.004	3.097	0.52753	4.46	ug/L
>	In	115	835333.524	835333.524	3.412			ug/L
	Ba	138	14428046.752	21.728	5.715	723.76513	5.16	ug/L
>	Tb	159	663918.354	663918.354	1.497			ug/L
	Tl	205	1106.304	0.001	7.441	0.02022	14.92	ug/L
	Pb	208	9749732.949	14.685	0.330	290.92624	1.34	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.421			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		93.837			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		96.045			
	As	75					
	Se	82					
	Cd	114					
>	In	115		95.074			
	Ba	138					
>	Tb	159		99.676			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01D-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-01D-D20.017
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:50:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	299364.932	299364.932	2.578			ug/L
	Be	9	65.834	0.000	13.471	0.13675	14.08	ug/L
	Na	23	1157546.995	2.584	2.531	403.15119	2.50	ug/L
	Mg	24	14301807.686	32.410	1.148	6966.35991	0.79	ug/L
	Al	27	14565841.842	33.000	0.648	5005.50131	2.13	ug/L
	K	39	32768799.830	72.851	1.589	6802.93391	1.16	ug/L
	Ca	44	1306082.911	2.852	1.671	7438.81149	2.35	ug/L
>	Sc	45	441242.826	441242.826	1.880			ug/L
	V	51	234208.333	0.203	1.927	27.37186	3.61	ug/L
	Cr	52	103571726.755	104.289	0.749	16876.46566	0.95	ug/L
	Mn	55	6958908.764	7.006	2.183	729.84409	1.80	ug/L
	Fe	57	2822263.192	2.835	0.524	13422.86079	2.10	ug/L
	Co	59	780576.149	0.786	0.394	94.01690	1.53	ug/L
	Ni	60	30557.540	0.031	1.489	16.64318	2.28	ug/L
	Cu	63	709157.745	0.714	2.403	165.59881	3.87	ug/L
	Zn	66	30217078.243	30.433	1.377	23216.44768	2.89	ug/L
>	Ge	74	993184.011	993184.011	1.661			ug/L
	As	75	4215.823	0.003	2.261	1.99883	1.34	ug/L
	Se	82	-413.229	-0.000	27.234	-1.85107	38.42	ug/L
	Cd	114	17547.574	0.021	3.049	2.89226	2.43	ug/L
>	In	115	842047.578	842047.578	3.343			ug/L
	Ba	138	72647608.425	109.841	2.863	3658.84565	2.71	ug/L
>	Tb	159	661372.966	661372.966	0.692			ug/L
	Tl	205	3958.088	0.005	1.419	0.13575	0.86	ug/L
	Pb	208	50684012.174	76.636	1.732	1518.20434	1.96	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.074			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.497			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.292			
	As	75					
	Se	82					
	Cd	114					
>	In	115		95.838			
	Ba	138					
>	Tb	159		99.294			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01MH-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-01MH-D20.018
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:53:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	301221.534	301221.534	0.885			ug/L
	Be	9	40663.207	0.135	1.657	100.04639	2.30	ug/L
	Na	23	4242256.516	9.447	2.230	1474.13987	2.27	ug/L
	Mg	24	16759002.909	37.479	2.817	8055.93294	3.59	ug/L
	Al	27	18140690.652	40.551	1.687	6150.95146	2.20	ug/L
	K	39	38951290.544	85.694	0.295	8002.26704	1.57	ug/L
	Ca	44	1537917.910	3.330	2.034	8687.00243	1.80	ug/L
>	Sc	45	447199.189	447199.189	1.515			ug/L
	V	51	1715342.844	1.661	0.986	223.72868	2.02	ug/L
	Cr	52	106251369.153	104.892	2.905	16973.99203	1.91	ug/L
	Mn	55	9482101.879	9.363	0.316	975.33746	1.77	ug/L
	Fe	57	2933052.052	2.891	4.082	13684.71852	5.71	ug/L
	Co	59	2425644.816	2.395	2.046	286.54958	2.82	ug/L
	Ni	60	416308.851	0.411	2.779	223.10785	2.92	ug/L
	Cu	63	1518674.458	1.499	2.306	347.83392	2.94	ug/L
	Zn	66	31353150.194	30.960	1.868	23618.22331	2.38	ug/L
>	Ge	74	1012848.062	1012848.062	1.637			ug/L
	As	75	288130.688	0.284	3.533	163.46791	2.30	ug/L
	Se	82	29538.644	0.029	4.502	189.65871	2.94	ug/L
	Cd	114	618727.742	0.732	2.397	102.08007	4.69	ug/L
>	In	115	845761.593	845761.593	2.272			ug/L
	Ba	138	92753361.477	140.920	2.275	4694.08303	4.48	ug/L
>	Tb	159	658697.958	658697.958	2.877			ug/L
	Tl	205	5026600.308	7.633	1.819	204.18901	2.12	ug/L
	Pb	208	58140469.252	88.296	1.054	1749.18849	1.90	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.676			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.786			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.179			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.261			
	Ba	138					
>	Tb	159		98.893			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 5.019
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 11:57:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	305096.600	305096.600	0.909			ug/L
	Be	9	19672.901	0.064	1.223	47.76790	0.32	ug/L
	Na	23	14534049.727	32.902	1.529	5134.12114	4.95	ug/L
	Mg	24	10139655.594	22.969	0.403	4937.01536	3.51	ug/L
	Al	27	14540014.169	32.944	2.192	4996.98448	5.87	ug/L
	K	39	26861417.596	59.464	1.352	5552.87287	5.11	ug/L
	Ca	44	896436.621	1.923	0.232	5014.65025	3.83	ug/L
>	Sc	45	441734.809	441734.809	3.761			ug/L
	V	51	396351.413	0.359	1.406	48.35197	3.29	ug/L
	Cr	52	322919.304	0.315	2.018	51.00121	3.49	ug/L
	Mn	55	460340.583	0.454	1.643	47.30026	2.36	ug/L
	Fe	57	999402.960	0.980	2.302	4640.24913	0.68	ug/L
	Co	59	408820.762	0.404	1.461	48.30885	3.14	ug/L
	Ni	60	93571.418	0.092	1.401	50.13524	2.93	ug/L
	Cu	63	211952.597	0.209	3.697	48.47272	5.43	ug/L
	Zn	66	65713.556	0.064	1.568	49.17864	2.70	ug/L
>	Ge	74	1012294.977	1012294.977	1.757			ug/L
	As	75	87584.441	0.086	3.584	49.40730	2.42	ug/L
	Se	82	6900.293	0.007	3.205	44.97978	1.81	ug/L
	Cd	114	295444.131	0.345	4.122	48.08204	2.72	ug/L
>	In	115	856577.281	856577.281	2.600			ug/L
	Ba	138	972426.501	1.485	1.817	49.45512	0.39	ug/L
>	Tb	159	654602.262	654602.262	1.482			ug/L
	Tl	205	1169437.251	1.786	1.118	47.77458	1.79	ug/L
	Pb	208	1624282.876	2.480	1.455	49.12588	0.89	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		98.932			
	Be	9	95.536				
	Na	23	101.666				
	Mg	24	97.763				
	Al	27	98.950				
	K	39	100.961				
	Ca	44	99.300				
>	Sc	45		95.603			
	V	51	96.704				
	Cr	52	102.002				
	Mn	55	94.601				
	Fe	57	91.886				
	Co	59	96.618				
	Ni	60	100.270				
	Cu	63	96.945				
	Zn	66	98.357				
>	Ge	74		97.126			
	As	75	98.815				
	Se	82	89.960				
	Cd	114	96.164				
>	In	115		97.492			
	Ba	138	98.910				
>	Tb	159		98.278			
	Tl	205	95.549				
	Pb	208	98.252				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 6.020
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:01:07

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	310488.529	310488.529	1.947			ug/L
	Be	9	24.167	0.000	38.822	0.03171	70.45	ug/L
	Na	23	19718.800	0.003	1.842	0.51072	32.69	ug/L
	Mg	24	3143.711	0.002	2.645	0.32621	15.99	ug/L
	Al	27	10214.172	0.003	3.731	0.41984	27.64	ug/L
	K	39	654101.843	0.018	0.219	1.71161	118.53	ug/L
	Ca	44	45080.636	-0.010	0.663	-24.87211	15.07	ug/L
>	Sc	45	454946.887	454946.887	1.425			ug/L
	V	51	30059.442	-0.004	2.389	-0.49918	36.01	ug/L
	Cr	52	5496.112	0.001	1.900	0.21681	11.13	ug/L
	Mn	55	934.207	0.000	3.616	0.01250	6.28	ug/L
	Fe	57	7871.830	0.000	0.820	2.31452	39.51	ug/L
	Co	59	282.089	0.000	8.235	0.00854	29.61	ug/L
	Ni	60	127.085	0.000	7.950	0.00310	224.73	ug/L
	Cu	63	1565.935	0.001	3.215	0.21047	1.17	ug/L
	Zn	66	1687.200	0.001	3.549	0.88313	8.07	ug/L
>	Ge	74	1039741.904	1039741.904	2.781			ug/L
	As	75	1013.951	0.000	3.332	0.11475	11.58	ug/L
	Se	82	-289.077	-0.000	29.632	-0.95434	50.94	ug/L
	Cd	114	162.792	0.000	4.175	0.01057	9.98	ug/L
>	In	115	899606.235	899606.235	0.119			ug/L
	Ba	138	1449.581	0.001	4.352	0.04461	8.16	ug/L
>	Tb	159	678966.327	678966.327	1.024			ug/L
	Tl	205	966.709	0.001	6.088	0.01376	19.77	ug/L
	Pb	208	1828.397	0.001	5.517	0.02145	12.21	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		100.681			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		98.463			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		99.759			
	As	75					
	Se	82					
	Cd	114					
>	In	115		102.390			
	Ba	138					
>	Tb	159		101.936			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-02-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-02-D20.021
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:04:40

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	311556.674	311556.674	2.676			ug/L
	Be	9	58.751	0.000	9.274	0.11402	14.70	ug/L
	Na	23	1111831.904	2.431	0.806	379.34195	1.08	ug/L
	Mg	24	12300602.931	27.334	0.498	5875.27915	1.38	ug/L
	Al	27	13100564.298	29.097	1.863	4413.46911	1.96	ug/L
	K	39	27500308.889	59.692	2.627	5574.10759	1.79	ug/L
	Ca	44	1142009.530	2.429	1.205	6336.70173	0.98	ug/L
>	Sc	45	449957.328	449957.328	0.892			ug/L
	V	51	215703.697	0.181	0.349	24.37164	4.24	ug/L
	Cr	52	82190765.447	81.420	2.149	13175.61200	5.41	ug/L
	Mn	55	6259651.324	6.198	2.473	645.66381	4.41	ug/L
	Fe	57	2649534.212	2.616	1.210	12386.49338	3.11	ug/L
	Co	59	594922.988	0.589	1.089	70.43696	2.22	ug/L
	Ni	60	25538.900	0.025	1.510	13.66562	3.57	ug/L
	Cu	63	617900.245	0.612	2.972	141.90371	5.96	ug/L
	Zn	66	24240270.825	24.010	1.760	18316.57367	4.84	ug/L
>	Ge	74	1010593.021	1010593.021	3.219			ug/L
	As	75	4566.768	0.004	2.427	2.15745	1.56	ug/L
	Se	82	-263.516	-0.000	27.535	-0.84599	51.34	ug/L
	Cd	114	17011.504	0.019	0.428	2.67497	4.76	ug/L
>	In	115	883315.444	883315.444	4.561			ug/L
	Ba	138	75232303.140	112.599	0.922	3750.71626	2.03	ug/L
>	Tb	159	668272.146	668272.146	1.667			ug/L
	Tl	205	3393.354	0.004	3.832	0.11156	6.17	ug/L
	Pb	208	38810995.925	58.082	1.018	1150.62696	1.30	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.027			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.383			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		96.962			
	As	75					
	Se	82					
	Cd	114					
>	In	115		100.535			
	Ba	138					
>	Tb	159		100.330			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-03-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-03-D20.022
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:08:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	300394.373	300394.373	2.820			ug/L
	Be	9	61.667	0.000	3.096	0.12612	0.62	ug/L
	Na	23	1562334.917	3.535	1.518	551.60174	2.17	ug/L
	Mg	24	16460759.550	37.656	1.690	8093.85773	1.08	ug/L
	Al	27	16144088.775	36.916	3.857	5599.47320	3.47	ug/L
	K	39	35325091.840	79.406	1.463	7415.03572	1.36	ug/L
	Ca	44	1487205.097	3.294	1.655	8591.97840	1.34	ug/L
>	Sc	45	437055.606	437055.606	0.619			ug/L
	V	51	212138.107	0.176	1.431	23.76047	5.04	ug/L
	Cr	52	108484967.671	106.847	2.621	17290.27026	2.25	ug/L
	Mn	55	7843547.522	7.728	0.704	804.98408	3.12	ug/L
	Fe	57	4283578.415	4.213	0.759	19947.31595	2.87	ug/L
	Co	59	796409.317	0.784	1.120	93.84907	2.97	ug/L
	Ni	60	36584.658	0.036	1.555	19.50160	2.14	ug/L
	Cu	63	990074.515	0.975	1.085	226.19733	3.01	ug/L
	Zn	66	33490599.212	32.986	2.295	25163.48344	1.85	ug/L
>	Ge	74	1015525.714	1015525.714	2.962			ug/L
	As	75	5239.507	0.004	1.380	2.52711	2.39	ug/L
	Se	82	-316.403	-0.000	37.701	-1.16631	60.42	ug/L
	Cd	114	29947.827	0.035	1.055	4.82130	1.07	ug/L
>	In	115	863648.803	863648.803	0.899			ug/L
	Ba	138	71041577.095	105.857	3.030	3526.13737	4.24	ug/L
>	Tb	159	671484.410	671484.410	2.815			ug/L
	Tl	205	4472.412	0.006	2.885	0.15383	0.20	ug/L
	Pb	208	57754932.913	86.045	0.785	1704.59377	2.25	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.407			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		94.591			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.435			
	As	75					
	Se	82					
	Cd	114					
>	In	115		98.297			
	Ba	138					
>	Tb	159		100.812			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-04-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-04-D20.023
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:11:49

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	301828.762	301828.762	2.096			ug/L
	Be	9	60.417	0.000	18.773	0.12227	21.96	ug/L
	Na	23	999306.918	2.223	2.020	346.95075	1.27	ug/L
	Mg	24	17010058.325	38.543	3.290	8284.49519	4.77	ug/L
	Al	27	13784629.434	31.212	2.542	4734.33131	3.46	ug/L
	K	39	36803118.511	81.971	0.679	7654.62201	2.98	ug/L
	Ca	44	1384363.901	3.027	2.254	7895.62262	1.82	ug/L
>	Sc	45	441604.693	441604.693	3.237			ug/L
	V	51	171813.702	0.141	1.504	19.02934	3.05	ug/L
	Cr	52	113006653.023	114.436	2.444	18518.34503	4.32	ug/L
	Mn	55	3853962.395	3.902	4.422	406.49884	5.78	ug/L
	Fe	57	2097665.446	2.115	6.012	10012.86951	4.20	ug/L
	Co	59	778980.145	0.788	2.764	94.32525	3.52	ug/L
	Ni	60	18369.907	0.018	2.142	10.03175	2.27	ug/L
	Cu	63	726887.422	0.735	2.112	170.57870	1.96	ug/L
	Zn	66	32621090.850	33.019	1.426	25188.62578	0.89	ug/L
>	Ge	74	988046.747	988046.747	2.061			ug/L
	As	75	4198.318	0.003	1.137	2.00175	1.13	ug/L
	Se	82	-417.546	-0.000	21.964	-1.90651	34.13	ug/L
	Cd	114	16562.431	0.019	0.666	2.70229	0.75	ug/L
>	In	115	850186.755	850186.755	1.408			ug/L
	Ba	138	76686056.542	112.930	3.999	3761.74512	4.28	ug/L
>	Tb	159	679107.246	679107.246	0.293			ug/L
	Tl	205	4414.060	0.006	2.130	0.14953	2.30	ug/L
	Pb	208	49826531.436	73.371	0.770	1453.50838	1.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.873			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.575			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		94.799			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.765			
	Ba	138					
>	Tb	159		101.957			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-05-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-05-D20.024
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:15:25

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	304734.481	304734.481	0.207			ug/L
	Be	9	99.585	0.000	2.613	0.21619	2.89	ug/L
	Na	23	1764791.320	3.866	1.220	603.34198	1.68	ug/L
	Mg	24	6142998.035	13.594	1.338	2921.97268	2.44	ug/L
	Al	27	24355885.422	53.894	2.386	8174.84159	2.56	ug/L
	K	39	12634286.555	26.548	0.776	2479.08302	1.45	ug/L
	Ca	44	897636.705	1.878	0.813	4899.13141	0.50	ug/L
>	Sc	45	451787.303	451787.303	1.116			ug/L
	V	51	325088.453	0.295	1.799	39.71111	2.26	ug/L
	Cr	52	34441261.268	34.695	1.668	5614.45602	2.19	ug/L
	Mn	55	15822434.983	15.939	2.771	1660.38450	2.79	ug/L
	Fe	57	7996848.305	8.049	2.663	38104.61219	2.26	ug/L
	Co	59	78908.007	0.079	4.641	9.48490	4.16	ug/L
	Ni	60	68414.537	0.069	0.980	37.35502	1.41	ug/L
	Cu	63	573423.118	0.577	3.312	133.88953	3.06	ug/L
	Zn	66	11158189.026	11.240	2.903	8574.81256	2.85	ug/L
>	Ge	74	992651.409	992651.409	0.529			ug/L
	As	75	4006.594	0.003	2.438	1.87896	3.53	ug/L
	Se	82	-206.067	-0.000	45.443	-0.50477	121.13	ug/L
	Cd	114	41737.972	0.048	2.639	6.66361	2.37	ug/L
>	In	115	871547.579	871547.579	0.305			ug/L
	Ba	138	13252251.894	19.440	3.651	647.53639	3.61	ug/L
>	Tb	159	681689.707	681689.707	0.667			ug/L
	Tl	205	5542.798	0.007	2.235	0.19316	1.82	ug/L
	Pb	208	42880962.563	62.898	2.389	1246.03569	1.74	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		98.815			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.779			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.241			
	As	75					
	Se	82					
	Cd	114					
>	In	115		99.196			
	Ba	138					
>	Tb	159		102.344			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-06-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-06-D20.025
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:19:01

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	300560.954	300560.954	1.215			ug/L
	Be	9	66.251	0.000	11.477	0.13725	12.73	ug/L
	Na	23	1011456.949	2.290	0.563	357.29845	2.93	ug/L
	Mg	24	19069426.122	43.929	1.846	9442.17518	4.22	ug/L
	Al	27	34929601.442	80.487	3.392	12208.55210	6.14	ug/L
	K	39	42979794.515	97.608	3.902	9114.83323	5.63	ug/L
	Ca	44	1671094.888	3.741	0.814	9759.01501	4.09	ug/L
>	Sc	45	434400.553	434400.553	3.197			ug/L
	V	51	187706.257	0.153	1.209	20.59090	3.62	ug/L
	Cr	52	137072747.799	135.489	1.417	21925.26567	3.30	ug/L
	Mn	55	3020167.364	2.984	1.219	310.80570	0.68	ug/L
	Fe	57	1861024.213	1.832	3.288	8674.88851	4.10	ug/L
	Co	59	928541.367	0.918	2.719	109.79587	4.49	ug/L
	Ni	60	23277.125	0.023	4.656	12.41871	2.93	ug/L
	Cu	63	785880.003	0.776	4.390	180.00600	3.41	ug/L
	Zn	66	40877360.868	40.393	2.279	30814.22932	2.09	ug/L
>	Ge	74	1012074.004	1012074.004	1.857			ug/L
	As	75	4313.353	0.003	1.534	2.00898	1.25	ug/L
	Se	82	-123.451	0.000	46.683	0.04749	781.31	ug/L
	Cd	114	77553.449	0.091	1.045	12.63571	1.65	ug/L
>	In	115	855028.718	855028.718	1.074			ug/L
	Ba	138	78195786.286	117.153	3.190	3902.41243	5.97	ug/L
>	Tb	159	668222.508	668222.508	3.052			ug/L
	Tl	205	4962.578	0.007	0.908	0.17446	3.81	ug/L
	Pb	208	61587297.356	92.226	0.464	1827.05111	3.34	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.461			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		94.016			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.104			
	As	75					
	Se	82					
	Cd	114					
>	In	115		97.316			
	Ba	138					
>	Tb	159		100.323			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-07-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-07-D20.026
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:22:37

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	299653.554	299653.554	1.425			ug/L
	Be	9	69.584	0.000	10.526	0.14618	13.12	ug/L
	Na	23	1833323.722	4.843	1.385	755.77270	0.77	ug/L
	Mg	24	5011275.638	13.343	2.579	2867.92957	2.11	ug/L
	Al	27	18828208.372	50.137	0.430	7604.90491	1.05	ug/L
	K	39	4161123.658	9.665	2.109	902.50625	2.32	ug/L
	Ca	44	592178.157	1.469	1.062	3831.01707	0.51	ug/L
>	Sc	45	375406.155	375406.155	0.634			ug/L
	V	51	249833.517	0.270	2.086	36.34968	1.01	ug/L
	Cr	52	1198937.599	1.448	0.794	234.34501	1.00	ug/L
	Mn	55	14266127.638	17.282	2.943	1800.23828	3.97	ug/L
	Fe	57	5900675.649	7.141	1.992	33809.11392	3.37	ug/L
	Co	59	52002.097	0.063	1.726	7.51040	0.93	ug/L
	Ni	60	52456.663	0.063	1.029	34.42796	1.02	ug/L
	Cu	63	485784.657	0.588	2.399	136.41706	3.87	ug/L
	Zn	66	3821351.611	4.629	2.111	3530.99553	3.21	ug/L
>	Ge	74	825730.203	825730.203	1.514			ug/L
	As	75	6112.364	0.007	3.072	3.81796	1.74	ug/L
	Se	82	-145.289	-0.000	35.952	-0.30449	139.82	ug/L
	Cd	114	33794.528	0.049	2.165	6.87385	3.61	ug/L
>	In	115	684414.609	684414.609	1.538			ug/L
	Ba	138	14635838.676	25.120	2.115	836.74429	1.90	ug/L
>	Tb	159	582636.480	582636.480	1.213			ug/L
	Tl	205	5647.006	0.009	2.873	0.23490	1.85	ug/L
	Pb	208	S	S	S	S	S	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		97.167			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		81.248			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		79.225			
	As	75					
	Se	82					
	Cd	114					
>	In	115		77.897			
	Ba	138					
>	Tb	159		87.473			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-08-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-08-D20.027
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:26:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	315698.382	315698.382	2.048			ug/L
	Be	9	119.168	0.000	13.650	0.25425	17.00	ug/L
	Na	23	816260.350	1.978	1.501	308.66690	2.14	ug/L
	Mg	24	9024261.152	22.305	2.614	4794.29654	2.61	ug/L
	Al	27	16045100.482	39.650	0.983	6014.17576	1.45	ug/L
	K	39	17326740.722	41.418	1.071	3867.67448	1.47	ug/L
	Ca	44	737523.580	1.715	2.066	4472.28690	1.77	ug/L
>	Sc	45	404492.347	404492.347	0.616			ug/L
	V	51	160981.762	0.139	1.699	18.75917	1.49	ug/L
	Cr	52	50395777.764	53.824	0.668	8709.98616	1.12	ug/L
	Mn	55	4715523.850	5.036	1.922	524.62163	2.44	ug/L
	Fe	57	6255721.757	6.675	0.959	31600.00502	1.17	ug/L
	Co	59	374706.866	0.400	2.069	47.85216	1.37	ug/L
	Ni	60	52774.996	0.056	3.593	30.53594	3.27	ug/L
	Cu	63	586740.395	0.626	3.472	145.27979	3.81	ug/L
	Zn	66	16855050.721	18.005	2.864	13735.07902	3.54	ug/L
>	Ge	74	936278.033	936278.033	0.700			ug/L
	As	75	5825.157	0.005	1.225	3.13810	0.77	ug/L
	Se	82	-95.289	0.000	142.729	0.17576	535.76	ug/L
	Cd	114	11945.513	0.015	0.691	2.06601	1.48	ug/L
>	In	115	800748.321	800748.321	1.438			ug/L
	Ba	138	79535895.271	120.887	3.282	4026.78663	4.77	ug/L
>	Tb	159	658270.746	658270.746	1.778			ug/L
	Tl	205	5054.695	0.007	2.067	0.18109	2.20	ug/L
	Pb	208	1383411343.431	2102.144	0.489	41644.56610	2.26	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.370			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		87.543			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		89.832			
	As	75					
	Se	82					
	Cd	114					
>	In	115		91.138			
	Ba	138					
>	Tb	159		98.829			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-09-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-09-D20.028
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:29:48

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	291082.268	291082.268	1.089			ug/L
	Be	9	38.750	0.000	22.581	0.07257	30.07	ug/L
	Na	23	405545.492	1.209	0.886	188.71455	2.02	ug/L
	Mg	24	3552590.039	10.940	1.266	2351.53261	2.42	ug/L
	Al	27	28156859.780	86.732	1.567	13155.80447	2.56	ug/L
	K	39	7705598.425	22.321	1.222	2084.34830	2.31	ug/L
	Ca	44	220807.907	0.572	1.513	1490.74274	0.48	ug/L
>	Sc	45	324627.163	324627.163	1.170			ug/L
	V	51	212752.514	0.264	1.215	35.56699	4.56	ug/L
	Cr	52	20997985.541	29.273	1.378	4737.07874	2.60	ug/L
	Mn	55	7338977.296	10.232	1.278	1065.83418	2.40	ug/L
	Fe	57	22865424.756	31.848	4.644	150778.46335	1.43	ug/L
	Co	59	382497.510	0.533	4.025	63.73649	1.14	ug/L
	Ni	60	134008.009	0.187	2.413	101.34200	1.20	ug/L
	Cu	63	297964.238	0.415	0.816	96.27964	3.64	ug/L
	Zn	66	6184601.197	8.621	1.987	6576.93415	2.14	ug/L
>	Ge	74	717633.900	717633.900	3.530			ug/L
	As	75	12273.062	0.016	1.385	9.41356	2.29	ug/L
	Se	82	-14.089	0.000	287.101	0.71647	49.74	ug/L
	Cd	114	7699.827	0.012	1.068	1.70587	1.32	ug/L
>	In	115	624235.534	624235.534	2.361			ug/L
	Ba	138	49229586.446	89.264	2.675	2973.42690	2.42	ug/L
>	Tb	159	551614.290	551614.290	2.736			ug/L
	Tl	205	6853.796	0.012	0.748	0.30817	2.26	ug/L
	Pb	208	S	S	S	S	S	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		94.388			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		70.258			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		68.854			
	As	75					
	Se	82					
	Cd	114					
>	In	115		71.048			
	Ba	138					
>	Tb	159		82.816			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-10-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-10-D20.029
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:33:18

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	326365.868	326365.868	1.299			ug/L
	Be	9	56.667	0.000	10.425	0.10270	13.59	ug/L
	Na	23	743454.630	1.739	1.077	271.35468	2.36	ug/L
	Mg	24	11796297.078	28.226	1.694	6066.98008	3.29	ug/L
	Al	27	16276887.840	38.937	1.536	5906.13634	3.49	ug/L
	K	39	2733027.404	5.120	1.839	478.13812	3.41	ug/L
	Ca	44	371917.884	0.781	1.316	2037.80461	2.13	ug/L
>	Sc	45	418016.902	418016.902	2.149			ug/L
	V	51	125593.604	0.101	0.407	13.57131	5.75	ug/L
	Cr	52	1292789.966	1.369	1.097	221.55269	3.95	ug/L
	Mn	55	5080328.084	5.397	1.718	562.24844	5.50	ug/L
	Fe	57	6098523.546	6.470	0.734	30631.79656	3.88	ug/L
	Co	59	41360.202	0.044	0.678	5.23169	4.05	ug/L
	Ni	60	23911.920	0.025	3.768	13.71395	2.56	ug/L
	Cu	63	160448.592	0.170	4.892	39.35574	2.07	ug/L
	Zn	66	4684458.865	4.973	2.637	3794.07891	3.67	ug/L
>	Ge	74	942681.398	942681.398	4.694			ug/L
	As	75	3020.090	0.002	1.594	1.40085	4.36	ug/L
	Se	82	-149.199	-0.000	71.773	-0.19583	392.45	ug/L
	Cd	114	9403.051	0.012	3.484	1.61079	5.55	ug/L
>	In	115	807618.760	807618.760	3.794			ug/L
	Ba	138	84273660.899	126.753	1.659	4222.18373	1.36	ug/L
>	Tb	159	664876.685	664876.685	1.280			ug/L
	Tl	205	2376.472	0.003	3.291	0.07127	4.35	ug/L
	Pb	208	1346019795.187	2024.532	1.177	40107.02420	0.87	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		105.829			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		90.470			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		90.446			
	As	75					
	Se	82					
	Cd	114					
>	In	115		91.920			
	Ba	138					
>	Tb	159		99.820			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-11-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-11-D20.030
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:36:48

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	311697.263	311697.263	2.044			ug/L
	Be	9	70.834	0.000	22.065	0.14207	24.21	ug/L
	Na	23	1194319.354	2.888	1.843	450.63343	2.23	ug/L
	Mg	24	11582926.165	28.393	2.148	6102.78289	2.80	ug/L
	Al	27	37711305.886	92.443	2.211	14022.03728	3.15	ug/L
	K	39	11229182.256	26.114	2.829	2438.61427	4.09	ug/L
	Ca	44	3352140.084	8.108	2.140	21147.63187	0.43	ug/L
>	Sc	45	407962.905	407962.905	1.738			ug/L
	V	51	325715.418	0.287	3.189	38.71779	5.37	ug/L
	Cr	52	34266391.792	33.670	1.804	5448.59510	3.46	ug/L
	Mn	55	30519231.546	29.985	2.780	3123.57395	3.27	ug/L
	Fe	57	49088287.269	48.210	4.146	228244.43931	3.52	ug/L
	Co	59	630253.241	0.619	3.902	74.06200	4.42	ug/L
	Ni	60	297908.241	0.293	2.362	158.86067	3.46	ug/L
	Cu	63	783460.986	0.769	1.260	178.46252	1.94	ug/L
	Zn	66	19820026.519	19.468	2.654	14851.49110	1.51	ug/L
>	Ge	74	1017999.304	1017999.304	1.775			ug/L
	As	75	45563.215	0.044	1.287	25.34758	0.52	ug/L
	Se	82	33.246	0.000	248.812	1.05624	50.44	ug/L
	Cd	114	31271.928	0.037	1.458	5.11871	2.44	ug/L
>	In	115	849877.829	849877.829	2.729			ug/L
	Ba	138	7360938.561	10.992	1.454	366.13973	0.94	ug/L
>	Tb	159	669621.392	669621.392	0.963			ug/L
	Tl	205	2478.990	0.003	1.987	0.07470	3.37	ug/L
	Pb	208	184265482.516	275.195	1.855	5451.74741	2.11	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.073			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		88.294			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.673			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.730			
	Ba	138					
>	Tb	159		100.533			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 5.031
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:40:22

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	311120.046	311120.046	1.142			ug/L
	Be	9	19998.356	0.064	1.115	47.62365	1.73	ug/L
	Na	23	14062856.273	32.301	0.873	5040.40667	1.03	ug/L
	Mg	24	9736525.199	22.387	0.694	4811.87610	1.11	ug/L
	Al	27	13824699.682	31.767	3.729	4818.50477	2.74	ug/L
	K	39	25743539.543	57.778	3.675	5395.45272	3.32	ug/L
	Ca	44	860678.048	1.870	1.884	4878.84101	0.63	ug/L
>	Sc	45	434856.854	434856.854	1.357			ug/L
	V	51	388468.784	0.353	2.911	47.47582	2.60	ug/L
	Cr	52	303969.601	0.297	2.502	48.14152	3.10	ug/L
	Mn	55	458196.588	0.454	1.347	47.26137	3.21	ug/L
	Fe	57	1007847.916	0.993	0.793	4699.60412	3.47	ug/L
	Co	59	394127.057	0.391	1.869	46.73752	2.77	ug/L
	Ni	60	90052.260	0.089	2.207	48.41247	1.97	ug/L
	Cu	63	208318.669	0.206	2.833	47.77771	0.72	ug/L
	Zn	66	64756.400	0.064	3.932	48.60638	1.41	ug/L
>	Ge	74	1008736.070	1008736.070	2.729			ug/L
	As	75	86802.513	0.085	2.864	49.17953	4.87	ug/L
	Se	82	7194.427	0.007	4.134	47.04869	4.64	ug/L
	Cd	114	296955.601	0.351	2.577	48.91836	1.73	ug/L
>	In	115	846594.450	846594.450	3.655			ug/L
	Ba	138	972769.143	1.462	0.443	48.71026	2.35	ug/L
>	Tb	159	665068.835	665068.835	1.996			ug/L
	Tl	205	1191945.373	1.791	2.418	47.91863	0.46	ug/L
	Pb	208	1675967.934	2.520	1.754	49.91524	3.73	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		100.885			
	Be	9	95.247				
	Na	23	99.810				
	Mg	24	95.285				
	Al	27	95.416				
	K	39	98.099				
	Ca	44	96.611				
>	Sc	45		94.115			
	V	51	94.952				
	Cr	52	96.283				
	Mn	55	94.523				
	Fe	57	93.061				
	Co	59	93.475				
	Ni	60	96.825				
	Cu	63	95.555				
	Zn	66	97.213				
>	Ge	74		96.784			
	As	75	98.359				
	Se	82	94.097				
	Cd	114	97.837				
>	In	115		96.356			
	Ba	138	97.421				
>	Tb	159		99.849			
	Tl	205	95.837				
	Pb	208	99.830				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 6.032
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:43:55

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	314658.621	314658.621	0.437			ug/L
	Be	9	16.250	0.000	15.385	0.01223	46.91	ug/L
	Na	23	18641.926	0.003	1.237	0.48472	37.62	ug/L
	Mg	24	3112.872	0.002	7.631	0.39038	31.36	ug/L
	Al	27	10352.614	0.004	6.568	0.65062	34.75	ug/L
	K	39	652565.977	0.092	0.116	8.57383	22.54	ug/L
	Ca	44	35463.908	-0.027	1.423	-69.13993	1.87	ug/L
>	Sc	45	431808.653	431808.653	1.490			ug/L
	V	51	23445.682	-0.010	1.713	-1.30000	2.48	ug/L
	Cr	52	4309.861	0.000	4.519	0.04488	69.47	ug/L
	Mn	55	1094.636	0.000	0.367	0.03075	10.25	ug/L
	Fe	57	8315.419	0.001	0.865	5.06897	27.03	ug/L
	Co	59	287.922	0.000	3.200	0.00986	13.39	ug/L
	Ni	60	125.002	0.000	10.149	0.00330	257.65	ug/L
	Cu	63	864.201	0.000	3.801	0.05780	21.02	ug/L
	Zn	66	808.781	0.000	7.928	0.24843	14.39	ug/L
>	Ge	74	1020172.841	1020172.841	2.701			ug/L
	As	75	689.345	-0.000	3.667	-0.05792	10.49	ug/L
	Se	82	-190.222	-0.000	45.755	-0.37185	149.76	ug/L
	Cd	114	156.840	0.000	5.194	0.01007	10.58	ug/L
>	In	115	883883.271	883883.271	0.883			ug/L
	Ba	138	1107.040	0.001	1.714	0.02855	10.32	ug/L
>	Tb	159	670499.940	670499.940	3.700			ug/L
	Tl	205	879.203	0.000	4.397	0.01073	5.60	ug/L
	Pb	208	16855.283	0.024	4.117	0.46707	8.31	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.033			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		93.455			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.881			
	As	75					
	Se	82					
	Cd	114					
>	In	115		100.600			
	Ba	138					
>	Tb	159		100.665			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-12-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-12-D20.033
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:47:26

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	308689.187	308689.187	1.444			ug/L
	Be	9	49.584	0.000	5.248	0.09298	5.01	ug/L
	Na	23	1661263.407	3.954	1.796	616.94283	3.60	ug/L
	Mg	24	13064739.292	31.407	3.770	6750.73069	5.25	ug/L
	Al	27	13182775.276	31.669	0.887	4803.65819	2.72	ug/L
	K	39	51745106.855	122.987	2.299	11484.71582	4.17	ug/L
	Ca	44	1507871.537	3.515	1.201	9169.06295	1.64	ug/L
>	Sc	45	416151.120	416151.120	1.919			ug/L
	V	51	195028.245	0.168	1.760	22.63751	3.26	ug/L
	Cr	52	173344225.099	178.388	1.956	28867.33775	2.17	ug/L
	Mn	55	2441176.284	2.511	1.410	261.60269	0.56	ug/L
	Fe	57	1002076.929	1.024	2.359	4849.46276	3.24	ug/L
	Co	59	871792.925	0.897	1.146	107.31067	1.51	ug/L
	Ni	60	11948.032	0.012	1.924	6.61176	1.86	ug/L
	Cu	63	232081.646	0.238	3.902	55.26507	2.99	ug/L
	Zn	66	67325566.311	69.279	2.207	52850.26191	1.69	ug/L
>	Ge	74	971763.327	971763.327	0.982			ug/L
	As	75	4519.253	0.004	1.733	2.23317	2.99	ug/L
	Se	82	-158.401	-0.000	67.574	-0.22084	328.53	ug/L
	Cd	114	52977.350	0.060	2.919	8.29827	2.62	ug/L
>	In	115	888705.988	888705.988	0.454			ug/L
	Ba	138	78493099.673	115.851	4.046	3859.03540	7.03	ug/L
>	Tb	159	678487.521	678487.521	3.034			ug/L
	Tl	205	4967.165	0.006	5.308	0.17152	5.45	ug/L
	Pb	208	96944950.846	142.970	0.252	2832.30318	3.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		100.097			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		90.066			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		93.237			
	As	75					
	Se	82					
	Cd	114					
>	In	115		101.149			
	Ba	138					
>	Tb	159		101.864			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-13-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-13-D20.034
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:50:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	288507.626	288507.626	1.664			ug/L
	Be	9	52.501	0.000	2.381	0.10885	2.28	ug/L
	Na	23	916782.574	2.212	0.621	345.22140	2.89	ug/L
	Mg	24	11198822.602	27.505	0.844	5912.09769	2.19	ug/L
	Al	27	12399332.296	30.439	2.607	4617.08297	3.10	ug/L
	K	39	32583455.939	78.659	1.884	7345.32472	4.65	ug/L
	Ca	44	1105788.618	2.608	0.528	6802.50142	2.63	ug/L
>	Sc	45	407250.287	407250.287	3.036			ug/L
	V	51	291081.698	0.268	1.676	36.13925	4.93	ug/L
	Cr	52	103924844.826	107.380	4.266	17376.61284	3.56	ug/L
	Mn	55	8913501.834	9.209	3.570	959.28105	2.21	ug/L
	Fe	57	22527698.300	23.278	1.252	110207.48947	2.50	ug/L
	Co	59	923337.527	0.954	2.590	114.11829	1.37	ug/L
	Ni	60	187481.287	0.194	1.309	105.14263	2.57	ug/L
	Cu	63	436301.551	0.450	1.313	104.52398	3.71	ug/L
	Zn	66	37485360.667	38.757	1.147	29566.38467	3.90	ug/L
>	Ge	74	968067.816	968067.816	3.737			ug/L
	As	75	13425.780	0.013	2.709	7.55086	4.07	ug/L
	Se	82	-97.243	0.000	171.612	0.21168	508.96	ug/L
	Cd	114	37318.712	0.045	0.290	6.34321	1.18	ug/L
>	In	115	818644.994	818644.994	1.158			ug/L
	Ba	138	75556149.543	118.631	1.290	3951.64729	3.73	ug/L
>	Tb	159	637288.453	637288.453	2.491			ug/L
	Tl	205	4038.111	0.005	1.517	0.14527	4.62	ug/L
	Pb	208	60459661.565	94.895	0.946	1879.92292	1.77	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.553			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		88.140			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		92.882			
	As	75					
	Se	82					
	Cd	114					
>	In	115		93.175			
	Ba	138					
>	Tb	159		95.678			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-14-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-14-D20.035
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:54:30

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	297618.028	297618.028	1.577			ug/L
	Be	9	54.167	0.000	18.653	0.10863	21.45	ug/L
	Na	23	863709.895	2.052	1.476	320.16097	3.01	ug/L
	Mg	24	11237330.238	27.204	1.109	5847.40442	1.14	ug/L
	Al	27	21057520.787	50.977	1.868	7732.29642	2.87	ug/L
	K	39	29406807.025	69.810	3.163	6519.01391	4.65	ug/L
	Ca	44	1044492.320	2.420	1.927	6312.61676	0.68	ug/L
>	Sc	45	413019.478	413019.478	1.483			ug/L
	V	51	177113.490	0.150	1.985	20.13459	3.08	ug/L
	Cr	52	96821511.566	99.576	3.397	16113.75532	4.03	ug/L
	Mn	55	6414247.558	6.596	4.800	687.13650	5.25	ug/L
	Fe	57	21418386.728	22.019	4.332	104245.40445	4.45	ug/L
	Co	59	724626.724	0.745	1.723	89.13067	2.36	ug/L
	Ni	60	166575.968	0.171	0.654	92.93094	0.46	ug/L
	Cu	63	364893.776	0.375	1.219	86.92138	0.60	ug/L
	Zn	66	34332961.589	35.306	1.383	26933.68858	1.64	ug/L
>	Ge	74	972463.755	972463.755	0.637			ug/L
	As	75	6287.858	0.006	1.319	3.27886	0.88	ug/L
	Se	82	-222.685	-0.000	67.284	-0.64637	155.83	ug/L
	Cd	114	26307.317	0.031	3.377	4.26207	4.56	ug/L
>	In	115	858335.923	858335.923	2.824			ug/L
	Ba	138	95260368.669	147.456	0.676	4911.81721	3.36	ug/L
>	Tb	159	646603.117	646603.117	4.027			ug/L
	Tl	205	3393.772	0.004	6.642	0.11600	4.67	ug/L
	Pb	208	48967267.880	75.827	2.100	1502.16778	5.16	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.507			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		89.388			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		93.304			
	As	75					
	Se	82					
	Cd	114					
>	In	115		97.692			
	Ba	138					
>	Tb	159		97.077			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-15-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-15-D20.036
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 12:58:02

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	299097.271	299097.271	1.298			ug/L
	Be	9	76.251	0.000	11.822	0.16313	15.20	ug/L
	Na	23	1543592.355	3.590	5.581	560.24668	9.45	ug/L
	Mg	24	15318780.423	36.006	3.611	7739.19685	7.33	ug/L
	Al	27	24332485.763	57.167	2.630	8671.21908	6.32	ug/L
	K	39	42760289.202	98.999	0.836	9244.66549	3.19	ug/L
	Ca	44	1476690.116	3.360	0.419	8764.11218	4.23	ug/L
>	Sc	45	426137.657	426137.657	3.602			ug/L
	V	51	482941.315	0.463	3.576	62.31092	7.27	ug/L
	Cr	52	131838490.454	135.171	2.304	21873.76003	5.46	ug/L
	Mn	55	9405872.460	9.638	2.098	1003.99495	3.61	ug/L
	Fe	57	13256981.391	13.574	2.113	64264.07364	1.97	ug/L
	Co	59	929176.273	0.952	2.730	113.84757	2.20	ug/L
	Ni	60	92389.224	0.095	5.103	51.34742	6.41	ug/L
	Cu	63	362947.040	0.371	2.292	86.16647	4.02	ug/L
	Zn	66	49781596.298	51.044	3.679	38939.48188	6.24	ug/L
>	Ge	74	976475.619	976475.619	3.318			ug/L
	As	75	12193.411	0.012	2.433	6.75750	5.90	ug/L
	Se	82	-80.822	0.000	187.272	0.28392	362.47	ug/L
	Cd	114	44316.150	0.053	1.427	7.37494	1.53	ug/L
>	In	115	836580.739	836580.739	2.870			ug/L
	Ba	138	79782377.264	119.950	0.493	3995.57980	3.90	ug/L
>	Tb	159	665744.577	665744.577	3.598			ug/L
	Tl	205	4536.600	0.006	4.250	0.15792	1.03	ug/L
	Pb	208	78745509.618	118.392	1.928	2345.39901	4.32	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.987			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		92.228			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		93.689			
	As	75					
	Se	82					
	Cd	114					
>	In	115		95.216			
	Ba	138					
>	Tb	159		99.951			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-16-D20

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\0804115-16-D20.037
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:01:35

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	304678.341	304678.341	3.485			ug/L
	Be	9	47.917	0.000	12.328	0.09048	14.50	ug/L
	Na	23	1559461.540	3.493	2.006	545.12008	2.97	ug/L
	Mg	24	15933021.859	36.103	3.815	7760.07880	5.00	ug/L
	Al	27	12145959.620	27.500	2.334	4171.35280	3.09	ug/L
	K	39	52700173.020	117.976	4.336	11016.76393	4.55	ug/L
	Ca	44	1351249.204	2.953	3.889	7701.66560	4.25	ug/L
>	Sc	45	441464.258	441464.258	1.976			ug/L
	V	51	324524.919	0.296	2.850	39.80325	6.71	ug/L
	Cr	52	175288064.052	177.259	1.833	28684.67036	5.47	ug/L
	Mn	55	1577510.411	1.594	3.452	166.06647	5.75	ug/L
	Fe	57	1562421.216	1.572	2.987	7442.09765	4.11	ug/L
	Co	59	986071.989	0.996	3.645	119.17287	3.81	ug/L
	Ni	60	11929.683	0.012	1.876	6.48579	5.44	ug/L
	Cu	63	71046.183	0.071	2.644	16.51643	2.63	ug/L
	Zn	66	65054993.324	65.737	1.380	50148.26694	2.36	ug/L
>	Ge	74	990198.221	990198.221	3.724			ug/L
	As	75	6022.324	0.005	2.212	3.06036	4.25	ug/L
	Se	82	-212.680	-0.000	35.198	-0.55941	91.00	ug/L
	Cd	114	48515.447	0.055	1.962	7.71558	1.05	ug/L
>	In	115	875234.366	875234.366	1.541			ug/L
	Ba	138	76371663.715	111.781	1.636	3723.46273	3.60	ug/L
>	Tb	159	683543.460	683543.460	2.009			ug/L
	Tl	205	4421.145	0.006	1.598	0.14872	2.53	ug/L
	Pb	208	85478463.038	125.120	2.136	2478.69234	4.16	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		98.797			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.545			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.005			
	As	75					
	Se	82					
	Cd	114					
>	In	115		99.616			
	Ba	138					
>	Tb	159		102.623			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 5.038
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:05:10

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	298884.850	298884.850	2.770			ug/L
	Be	9	19465.948	0.065	0.363	48.27558	3.00	ug/L
	Na	23	14153492.830	32.350	0.725	5047.90269	2.43	ug/L
	Mg	24	9879735.290	22.601	1.040	4857.99096	1.61	ug/L
	Al	27	14171334.806	32.403	2.172	4914.96326	1.53	ug/L
	K	39	26303932.247	58.767	2.006	5487.73163	2.17	ug/L
	Ca	44	872917.415	1.888	3.591	4924.13991	1.07	ug/L
>	Sc	45	437149.051	437149.051	2.607			ug/L
	V	51	385585.423	0.336	3.295	45.31427	5.54	ug/L
	Cr	52	326142.967	0.308	0.602	49.86337	1.73	ug/L
	Mn	55	467456.318	0.446	3.379	46.49692	1.45	ug/L
	Fe	57	995466.116	0.946	2.411	4476.56163	3.34	ug/L
	Co	59	404382.694	0.387	2.714	46.27506	3.75	ug/L
	Ni	60	89852.661	0.086	2.055	46.61299	2.48	ug/L
	Cu	63	206493.951	0.197	1.496	45.70135	0.83	ug/L
	Zn	66	69085.828	0.066	3.789	50.07169	3.93	ug/L
>	Ge	74	1045286.620	1045286.620	2.046			ug/L
	As	75	90903.826	0.086	3.124	49.70324	5.06	ug/L
	Se	82	7012.322	0.007	1.347	44.30300	3.00	ug/L
	Cd	114	284843.333	0.346	1.999	48.23858	5.32	ug/L
>	In	115	824208.437	824208.437	3.381			ug/L
	Ba	138	964276.979	1.448	1.814	48.23923	5.40	ug/L
>	Tb	159	666341.638	666341.638	3.558			ug/L
	Tl	205	1165452.268	1.749	1.264	46.79186	2.34	ug/L
	Pb	208	1650476.443	2.478	1.250	49.08743	4.45	ug/L

Rerun Below
5/20/08
EYC

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
> Li	6		96.918			
Be	9	96.551				
Na	23	99.960				
Mg	24	96.198				
Al	27	97.326				
K	39	99.777				
Ca	44	97.508				
> Sc	45		94.611			
V	51	90.629				
Cr	52	99.727				
Mn	55	92.994				
Fe	57	88.645				
Co	59	92.550				
Ni	60	93.226				
Cu	63	91.403				
Zn	66	100.143				
> Ge	74		100.291			
As	75	99.406				
Se	82	88.606				
Cd	114	96.477				
> In	115		93.808			
Ba	138	96.478				
> Tb	159		100.040			
Tl	205	93.584				
Pb	208	98.175				

Rerun Below
5/20/08 EVE

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 6.039
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:08:44

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	304485.393	304485.393	0.895			ug/L
	Be	9	12.500	0.000	45.826	0.00431	316.66	ug/L
	Na	23	18971.959	0.004	3.988	0.56434	45.28	ug/L
	Mg	24	3558.396	0.003	5.602	0.60817	19.84	ug/L
	Al	27	10857.985	0.005	2.652	0.82008	19.86	ug/L
	K	39	671255.452	0.131	0.216	12.23487	19.40	ug/L
	Ca	44	37116.861	-0.023	0.568	-59.71008	7.46	ug/L
>	Sc	45	432961.681	432961.681	1.597			ug/L
	V	51	23939.844	-0.009	1.645	-1.26609	10.50	ug/L
	Cr	52	5786.230	0.002	2.752	0.26947	8.55	ug/L
	Mn	55	998.795	0.000	5.524	0.01997	40.73	ug/L
	Fe	57	8094.040	0.001	1.205	3.63327	14.12	ug/L
	Co	59	297.506	0.000	4.264	0.01060	6.29	ug/L
	Ni	60	136.669	0.000	7.449	0.00867	73.74	ug/L
	Cu	63	1169.226	0.001	2.139	0.12422	2.24	ug/L
	Zn	66	2363.969	0.002	2.049	1.39368	2.30	ug/L
>	Ge	74	1030946.007	1030946.007	2.562			ug/L
	As	75	726.014	-0.000	8.062	-0.04073	106.04	ug/L
	Se	82	-405.968	-0.000	20.156	-1.70348	26.76	ug/L
	Cd	114	165.418	0.000	5.204	0.01150	7.43	ug/L
>	In	115	881338.770	881338.770	2.358			ug/L
	Ba	138	1536.281	0.002	8.642	0.05084	16.41	ug/L
>	Tb	159	662637.220	662637.220	2.674			ug/L
	Tl	205	914.205	0.000	7.791	0.01253	14.95	ug/L
	Pb	208	5582.979	0.007	8.889	0.13521	12.61	ug/L

Reran below
5/20/08
EYL

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		98.734			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		93.705			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		98.915			
	As	75					
	Se	82					
	Cd	114					
>	In	115		100.310			
	Ba	138					
>	Tb	159		99.484			
	Tl	205					
	Pb	208					

Rerun below
5/20/08
EYC

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 5.040
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:12:55

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	294205.196	294205.196	1.951			ug/L
⌊	Be	9	19727.143	0.067	1.130	49.68400	1.73	ug/L
⌈	Na	23	14164243.207	32.902	0.551	5134.16052	2.34	ug/L
|	Mg	24	9880064.543	22.979	2.753	4939.09786	4.51	ug/L
|	Al	27	14173826.856	32.937	2.951	4996.05474	2.64	ug/L
|	K	39	26391101.796	59.939	3.713	5597.23957	3.11	ug/L
|	Ca	44	878939.061	1.935	2.523	5047.72300	2.80	ug/L
⌊>	Sc	45	430090.826	430090.826	1.764			ug/L
⌈	V	51	396119.586	0.361	2.534	48.58510	0.89	ug/L
|	Cr	52	315967.567	0.310	1.493	50.15028	1.44	ug/L
|	Mn	55	450085.272	0.446	1.167	46.50150	2.74	ug/L
|	Fe	57	975788.509	0.962	1.471	4556.50663	3.12	ug/L
|	Co	59	413456.867	0.411	0.143	49.11442	1.66	ug/L
|	Ni	60	92578.929	0.092	3.520	49.88649	5.20	ug/L
|	Cu	63	209837.454	0.208	0.882	48.23287	2.51	ug/L
|	Zn	66	64881.827	0.064	0.950	48.81267	1.68	ug/L
|>	Ge	74	1006819.666	1006819.666	1.727			ug/L
|	As	75	84883.102	0.084	3.016	48.15898	4.35	ug/L
⌊	Se	82	7007.242	0.007	5.576	45.93537	6.46	ug/L
⌈	Cd	114	301046.725	0.366	3.514	51.08328	3.83	ug/L
⌊>	In	115	821729.972	821729.972	1.282			ug/L
⌈	Ba	138	975292.087	1.474	2.556	49.10306	4.02	ug/L
|>	Tb	159	661530.731	661530.731	1.722			ug/L
|	Tl	205	1125009.829	1.700	0.363	45.48067	1.92	ug/L
⌊	Pb	208	1605197.383	2.426	1.781	48.05438	3.23	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		95.401			
	Be	9	99.368				
	Na	23	101.667				
	Mg	24	97.804				
	Al	27	98.932				
	K	39	101.768				
	Ca	44	99.955				
>	Sc	45		93.083			
	V	51	97.170				
	Cr	52	100.301				
	Mn	55	93.003				
	Fe	57	90.228				
	Co	59	98.229				
	Ni	60	99.773				
	Cu	63	96.466				
	Zn	66	97.625				
>	Ge	74		96.600			
	As	75	96.318				
	Se	82	91.871				
	Cd	114	102.167				
>	In	115		93.526			
	Ba	138	98.206				
>	Tb	159		99.318			
	Tl	205	90.961				
	Pb	208	96.109				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5talsoil.mth
Dataset File: C:\elandata\Dataset\M052008B\QC Std 6.041
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:16:29

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	296196.742	296196.742	0.552			ug/L
	Be	9	16.250	0.000	7.692	0.01464	22.89	ug/L
	Na	23	18717.025	0.002	1.255	0.36018	72.66	ug/L
	Mg	24	3509.216	0.003	2.290	0.54882	14.45	ug/L
	Al	27	11131.118	0.006	4.142	0.83809	26.03	ug/L
	K	39	672297.540	0.103	0.800	9.58458	49.83	ug/L
	Ca	44	37993.338	-0.023	0.968	-59.02430	8.51	ug/L
>	Sc	45	441905.272	441905.272	2.681			ug/L
	V	51	24931.559	-0.008	1.845	-1.03867	0.60	ug/L
	Cr	52	4725.829	0.001	2.650	0.12560	6.22	ug/L
	Mn	55	982.960	0.000	5.985	0.02126	23.83	ug/L
	Fe	57	7807.211	0.001	0.979	3.41413	11.86	ug/L
	Co	59	277.922	0.000	2.856	0.00933	7.65	ug/L
	Ni	60	134.585	0.000	10.725	0.00961	68.63	ug/L
	Cu	63	1072.134	0.000	4.980	0.10967	7.47	ug/L
	Zn	66	1785.129	0.001	1.841	1.00587	3.11	ug/L
>	Ge	74	1000172.152	1000172.152	1.661			ug/L
	As	75	730.597	-0.000	2.224	-0.02631	27.61	ug/L
	Se	82	-218.256	-0.000	32.109	-0.57742	80.87	ug/L
	Cd	114	136.918	0.000	16.202	0.00789	49.53	ug/L
>	In	115	847605.953	847605.953	2.028			ug/L
	Ba	138	1014.929	0.001	6.567	0.02583	16.80	ug/L
>	Tb	159	646295.981	646295.981	1.741			ug/L
	Tl	205	869.618	0.000	0.581	0.01165	6.61	ug/L
	Pb	208	4078.188	0.005	3.436	0.09310	3.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.046			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.640			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.962			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.471			
	Ba	138					
>	Tb	159		97.031			
	Tl	205					
	Pb	208					

Sample/Batch Report

Sample File: C:\elandata\Sample\0805115 DIL.sam
Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\
Report Date/Time: Tuesday, May 20, 2008 14:57:50

A/S Loc.	Sample ID
11	MS042408B09-D20
12	MS042408LH01-D20
13	0804115-01-D100
14	0804115-01SD-D100
15	0804115-01D-D100
16	0804115-01MH-D100
17	0804115-02-D100
18	0804115-03-D100
19	0804115-03-D1000
20	0804115-04-D100
21	0804115-04-D1000
22	0804115-05-D50
23	0804115-06-D50
24	0804115-06-D1000
25	0804115-07-D1000
26	0804115-07-D2000
27	0804115-08-D50
28	0804115-08-D1000
29	0804115-09-D50
30	0804115-09-D2000
31	0804115-09-D100
32	0804115-10-D1000
33	0804115-11-D50
34	0804115-11-D100
35	0804115-11-D1000
36	0804115-12-D1000
37	0804115-13-D100
38	0804115-13-D1000
39	0804115-14-D1000
40	0804115-15-D100
41	0804115-15-D1000
42	0804115-16-D1000

Standards/Reagents
CAL STD=C051908M1
ICV=I052008M2
ICSA=042908ICSA2
ICSAB=052008ICSAB2
IS=IS051208
ACID=2%MW051908C

EYC
5/20/08

LMM
5/22/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\Blank.001
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:52:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4150.645		1.894			ug/L
	Fe	57	7823.053		0.726			ug/L
	Zn	66	1215.897		5.097			ug/L
>	Ge	74	1005869.023		3.551			ug/L
>	Tb	159	645372.399		2.342			ug/L
	Pb	208	3688.136		1.615			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74					
>	Tb	159					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\Standard 1.002
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:55:05

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	4657.472	0.001	1.753	0.10000	8.03	ug/L
|	Fe	57	9861.001	0.002	0.889	10.10000	0.40	ug/L
|	Zn	66	1473.007	0.000	1.566	0.10000	10.88	ug/L
⌊>	Ge	74	1003009.342	1003009.342	0.859			ug/L
⌈>	Tb	159	663260.451	663260.451	1.987			ug/L
⌊	Pb	208	6565.231	0.004	2.313	0.10000	9.22	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\Standard 2.003
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 13:57:39

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	66939.268	0.065	2.252	10.00020	4.71	ug/L
|	Fe	57	31120.841	0.024	1.129	110.06930	1.55	ug/L
|	Zn	66	14285.617	0.013	2.067	9.99907	0.52	ug/L
⌊>	Ge	74	973616.594	973616.594	2.224			ug/L
⌈>	Tb	159	620735.440	620735.440	1.484			ug/L
⌊	Pb	208	338326.256	0.539	0.367	10.00022	1.33	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\Standard 3.004
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:00:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	131092.565	0.131	0.772	20.05692	1.64	ug/L
|	Fe	57	215577.611	0.215	2.488	1019.48170	3.02	ug/L
|	Zn	66	27305.519	0.027	2.287	20.00657	2.04	ug/L
⌊>	Ge	74	968922.480	968922.480	2.162			ug/L
⌈>	Tb	159	601485.158	601485.158	0.698			ug/L
⌊	Pb	208	647970.238	1.072	0.603	19.97319	0.15	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\Standard 4.005
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:02:48

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	615171.826	0.644	2.275	99.92477	3.06	ug/L
	Fe	57	1913550.845	2.009	1.219	10093.90078	3.97	ug/L
	Zn	66	127185.561	0.133	2.440	99.92632	3.03	ug/L
>	Ge	74	950174.312	950174.312	5.156			ug/L
>	Tb	159	605592.647	605592.647	3.233			ug/L
	Pb	208	3035252.465	5.010	1.837	99.66366	3.88	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74					
>	Tb	159					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 1.006
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:05:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	311849.770	0.311	3.701	48.18401	2.94	ug/L
	Fe	57	977817.978	0.979	2.103	4918.47542	0.78	ug/L
	Zn	66	63101.363	0.062	1.127	47.01426	1.34	ug/L
>	Ge	74	990997.820	990997.820	1.327			ug/L
>	Tb	159	637049.341	637049.341	1.827			ug/L
	Pb	208	1573121.692	2.464	1.041	49.01432	0.80	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	96.368				
	Fe	57	97.396				
	Zn	66	94.029				
>	Ge	74		98.522			
>	Tb	159		98.710			
	Pb	208	98.029				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 2.007
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:07:59

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	4156.063	0.000	3.849	0.02158	173.95	ug/L
|	Fe	57	7575.834	-0.000	1.848	-0.03775	718.37	ug/L
|	Zn	66	989.628	-0.000	3.605	-0.14608	7.18	ug/L
⌊>	Ge	74	975092.364	975092.364	2.238			ug/L
⌈>	Tb	159	611058.127	611058.127	3.973			ug/L
⌊	Pb	208	3628.962	0.000	1.865	0.00457	103.96	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		96.940			
⌈>	Tb	159		94.683			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 9

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 9.008
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:10:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	8270.393	0.004	1.944	0.64775	3.13	ug/L
	Fe	57	9981662.912	10.009	5.351	50294.78306	4.92	ug/L
	Zn	66	3679.261	0.002	4.402	1.86941	6.33	ug/L
>	Ge	74	996311.661	996311.661	0.751			ug/L
>	Tb	159	634394.301	634394.301	1.605			ug/L
	Pb	208	5870.111	0.004	3.400	0.07039	7.76	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57	100.590				
	Zn	66					
>	Ge	74		99.050			
>	Tb	159		98.299			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 10

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 10.009
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:13:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	596100.592	0.612	3.522	94.96773	3.01	ug/L
	Fe	57	9159318.202	9.471	2.035	47588.32397	6.03	ug/L
	Zn	66	122845.649	0.126	2.192	94.68530	3.51	ug/L
>	Ge	74	967918.262	967918.262	4.160			ug/L
>	Tb	159	610908.233	610908.233	3.650			ug/L
	Pb	208	2876536.137	4.709	2.031	93.67778	5.54	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	94.968				
	Fe	57	95.177				
	Zn	66	94.685				
>	Ge	74		96.227			
>	Tb	159		94.660			
	Pb	208	93.678				

Method 6020 - Summary Report

Sample ID: QC Std 11

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 11.010
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:15:39

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	29500564.999	30.532	0.442	4737.72144	0.12	ug/L
	Fe	57	962189.021	0.988	0.934	4965.50261	1.22	ug/L
	Zn	66	5793149.927	5.995	0.593	4511.98349	0.47	ug/L
>	Ge	74	966082.993	966082.993	0.321			ug/L
>	Tb	159	648871.222	648871.222	3.940			ug/L
	Pb	208	148270961.565	228.808	1.219	4551.65530	5.16	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	94.754				
	Fe	57	9.028				
	Zn	66	90.240				
>	Ge	74		96.045			
>	Tb	159		100.542			
	Pb	208	91.033				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 13.011
Calibration File:
Sample Date/Time: Tuesday, May 20, 2008 14:19:41

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	4449.487	0.000	1.465	0.04667	53.76	ug/L
|	Fe	57	7605.850	-0.000	0.862	-1.05979	95.25	ug/L
|	Zn	66	658.355	-0.001	5.372	-0.41733	2.28	ug/L
⌊>	Ge	74	1005836.905	1005836.905	3.568			ug/L
⌈>	Tb	159	647819.841	647819.841	2.754			ug/L
⌊	Pb	208	4741.600	0.002	2.261	0.03204	21.81	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		99.997			
⌈>	Tb	159		100.379			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408B09-D20

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\MS042408B09-D20.012
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:23:44

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4681.648	0.001	4.046	0.10626	16.17	ug/L
	Fe	57	7414.915	-0.000	0.970	-0.77468	68.33	ug/L
	Zn	66	1305.073	0.000	4.471	0.09956	26.32	ug/L
>	Ge	74	972831.252	972831.252	1.968			ug/L
>	Tb	159	626095.108	626095.108	2.962			ug/L
	Pb	208	3913.167	0.001	3.472	0.01070	47.35	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.715			
>	Tb	159		97.013			
	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408LH01-D20

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\MS042408LH01-D20.013
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:26:17

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	1260447.813	1.297	0.391	201.21266	3.71	ug/L
	Fe	57	217550.028	0.217	3.609	1089.05715	5.33	ug/L
	Zn	66	263333.865	0.270	3.729	203.43971	0.94	ug/L
>	Ge	74	969875.162	969875.162	3.880			ug/L
>	Tb	159	612818.034	612818.034	2.609			ug/L
	Pb	208	6217575.314	10.148	2.768	201.87761	5.00	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.422			
>	Tb	159		94.956			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-01-D100.014
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:28:50

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	20189887.401	20.454	1.815	3173.85693	0.71	ug/L
	Fe	57	548089.271	0.548	2.694	2752.15251	3.47	ug/L
	Zn	66	5993925.978	6.073	1.293	4570.16949	0.75	ug/L
>	Ge	74	986895.836	986895.836	1.652			ug/L
>	Tb	159	617166.160	617166.160	2.519			ug/L
	Pb	208	9508485.554	15.404	2.146	306.43537	2.18	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.114			
>	Tb	159		95.629			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01SD-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-01SD-D100.015
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:31:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	4192537.915	4.468	2.208	693.27339	3.73	ug/L
|	Fe	57	113339.295	0.113	3.385	568.03289	2.15	ug/L
|	Zn	66	1174398.646	1.251	4.324	941.17484	2.69	ug/L
⌊>	Ge	74	937924.291	937924.291	1.885			ug/L
⌈>	Tb	159	624481.231	624481.231	2.511			ug/L
⌊	Pb	208	1896656.578	3.033	1.265	60.32784	2.62	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		93.245			
⌈>	Tb	159		96.763			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01D-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-01D-D100.016
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:33:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	20258974.571	20.710	1.297	3213.58418	0.40	ug/L
	Fe	57	577118.458	0.582	1.103	2926.11167	1.37	ug/L
	Zn	66	5879058.381	6.011	1.210	4523.49022	1.90	ug/L
>	Ge	74	978021.095	978021.095	1.035			ug/L
>	Tb	159	623295.890	623295.890	0.445			ug/L
	Pb	208	9363256.978	15.016	0.570	298.72112	0.42	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.231			
>	Tb	159		96.579			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-01MH-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-01MH-D100.017
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:36:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	20991808.087	21.495	2.281	3335.47756	2.91	ug/L
	Fe	57	598496.586	0.605	4.517	3041.13196	5.13	ug/L
	Zn	66	6075877.783	6.221	0.352	4681.95174	1.12	ug/L
>	Ge	74	976523.648	976523.648	0.975			ug/L
>	Tb	159	605663.693	605663.693	2.758			ug/L
	Pb	208	10841431.745	17.904	1.313	356.15820	3.16	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.083			
>	Tb	159		93.847			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 5.018
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:39:10

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	301555.526	0.308	3.840	47.77352	6.90	ug/L
	Fe	57	975658.384	1.002	1.669	5033.41118	6.16	ug/L
	Zn	66	64356.604	0.065	2.816	49.13839	1.57	ug/L
>	Ge	74	968172.039	968172.039	4.316			ug/L
>	Tb	159	608650.664	608650.664	3.048			ug/L
	Pb	208	1500220.202	2.461	0.963	48.95488	3.70	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	95.547				
	Fe	57	99.672				
	Zn	66	98.277				
>	Ge	74		96.252			
>	Tb	159		94.310			
	Pb	208	97.910				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 6.019
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:41:44

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4200.243	0.000	1.492	0.03500	76.74	ug/L
	Fe	57	7449.934	-0.000	2.281	-0.30783	352.39	ug/L
	Zn	66	771.695	-0.000	8.885	-0.30890	13.64	ug/L
>	Ge	74	966019.071	966019.071	3.706			ug/L
>	Tb	159	604659.227	604659.227	3.138			ug/L
	Pb	208	3511.452	0.000	2.133	0.00187	97.00	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.038			
>	Tb	159		93.692			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-02-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-02-D100.020
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:44:18

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	16031596.078	16.091	3.402	2496.88218	5.11	ug/L
	Fe	57	512787.880	0.507	4.585	2545.79827	3.62	ug/L
	Zn	66	4795971.752	4.812	3.474	3621.48043	3.98	ug/L
>	Ge	74	997347.522	997347.522	4.873			ug/L
>	Tb	159	612448.941	612448.941	3.446			ug/L
	Pb	208	7051653.766	11.516	0.466	229.09088	3.05	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		99.153			
>	Tb	159		94.899			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-03-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-03-D100.021
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:46:54

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	21331020.286	22.415	0.674	3478.17404	0.91	ug/L
|	Fe	57	822475.564	0.857	2.887	4304.70211	3.29	ug/L
|	Zn	66	6450995.950	6.779	1.104	5101.53334	0.95	ug/L
⌊>	Ge	74	951483.470	951483.470	0.379			ug/L
⌈>	Tb	159	617202.842	617202.842	0.722			ug/L
⌊	Pb	208	10899953.977	17.655	0.833	351.20020	0.48	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		94.593			
⌈>	Tb	159		95.635			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-03-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-03-D1000.022
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:49:30

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	2139134.946	2.175	1.365	337.43350	2.90	ug/L
|	Fe	57	92783.154	0.087	3.420	435.79112	4.93	ug/L
|	Zn	66	671210.023	0.682	2.065	513.43175	1.50	ug/L
⌊>	Ge	74	982124.823	982124.823	1.512			ug/L
⌈>	Tb	159	604540.185	604540.185	4.203			ug/L
⌊	Pb	208	1114652.076	1.839	2.439	36.58795	2.63	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		97.639			
⌈>	Tb	159		93.673			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-04-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-04-D100.023
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:52:07

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	21820095.151	22.283	4.588	3457.64289	8.01	ug/L
	Fe	57	418856.878	0.420	1.251	2108.90222	4.81	ug/L
	Zn	66	6372230.017	6.496	2.628	4889.08605	0.98	ug/L
>	Ge	74	980935.160	980935.160	3.622			ug/L
>	Tb	159	625439.143	625439.143	1.638			ug/L
	Pb	208	9121669.651	14.585	2.471	290.13838	4.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.521			
>	Tb	159		96.911			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-04-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-04-D1000.024
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 14:59:37

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	2269693.067	2.366	1.710	367.13214	3.98	ug/L
	Fe	57	49976.170	0.044	3.557	223.22116	6.83	ug/L
	Zn	66	652874.231	0.680	0.719	512.09205	3.01	ug/L
>	Ge	74	958228.573	958228.573	2.339			ug/L
>	Tb	159	598955.033	598955.033	2.058			ug/L
	Pb	208	942675.534	1.568	1.366	31.19810	0.72	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		95.264			
>	Tb	159		92.808			
	Pb	208					

not needed
EVC 5/21/08

Method 6020 - Summary Report

Sample ID: 0804115-05-D50

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-05-D50.025
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:02:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	13159291.025	13.335	2.650	2069.28131	2.81	ug/L
|	Fe	57	2990560.618	3.024	2.524	15194.84625	3.17	ug/L
|	Zn	66	4350624.911	4.409	3.848	3318.47277	4.31	ug/L
⌊>	Ge	74	986536.470	986536.470	0.726			ug/L
⌈>	Tb	159	617420.725	617420.725	0.732			ug/L
⌊	Pb	208	15711302.553	25.442	0.277	506.10664	0.53	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		98.078			
⌈>	Tb	159		95.669			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-06-D50

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-06-D50.026
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:04:52

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	51867384.655	52.337	1.077	8121.25654	3.80	ug/L
	Fe	57	744158.501	0.743	3.231	3732.58841	3.20	ug/L
	Zn	66	15354526.671	15.490	3.160	11657.42407	3.95	ug/L
>	Ge	74	991833.472	991833.472	3.667			ug/L
>	Tb	159	619441.533	619441.533	2.403			ug/L
	Pb	208	21924514.907	35.401	0.173	704.23671	2.32	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.605			
>	Tb	159		95.982			
	Pb	208					

NOT REQUIRED

5/22/08

Method 6020 - Summary Report

Sample ID: 0804115-06-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-06-D1000.027
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:07:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	2706325.569	2.890	1.114	448.48034	1.55	ug/L
|	Fe	57	46069.649	0.041	2.223	208.46405	2.07	ug/L
|	Zn	66	785711.263	0.839	3.953	631.30397	2.92	ug/L
⌊>	Ge	74	935252.830	935252.830	2.384			ug/L
⌈>	Tb	159	605255.854	605255.854	1.453			ug/L
⌊	Pb	208	1202444.801	1.981	2.195	39.41044	2.33	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		92.980			
⌈>	Tb	159		93.784			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-07-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-07-D1000.028
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:09:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	33688.786	0.030	2.969	4.68919	6.85	ug/L
	Fe	57	145584.572	0.141	3.140	706.36920	5.25	ug/L
	Zn	66	90142.430	0.091	2.431	68.20170	3.52	ug/L
>	Ge	74	982123.740	982123.740	3.186			ug/L
>	Tb	159	590323.623	590323.623	3.034			ug/L
	Pb	208	79996646.022	135.603	0.909	2697.53906	3.56	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.639			
>	Tb	159		91.470			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-07-D2000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-07-D2000.029
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:12:29

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	17930.176	0.014	1.272	2.16493	3.76	ug/L
	Fe	57	73701.228	0.067	1.619	334.49962	5.58	ug/L
	Zn	66	44525.153	0.044	1.673	32.89260	5.08	ug/L
>	Ge	74	992437.963	992437.963	3.482			ug/L
>	Tb	159	616602.642	616602.642	1.189			ug/L
	Pb	208	39665411.035	64.317	2.535	1279.44993	1.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.665			
>	Tb	159		95.542			
	Pb	208					

not needed
Ever standard

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 5.030
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:15:04

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	303497.671	0.311	3.231	48.22043	1.04	ug/L
	Fe	57	939610.793	0.967	2.281	4860.33032	1.46	ug/L
	Zn	66	62574.585	0.064	3.812	47.94985	2.38	ug/L
>	Ge	74	963799.460	963799.460	2.813			ug/L
>	Tb	159	606459.287	606459.287	1.698			ug/L
	Pb	208	1514809.988	2.492	1.478	49.57962	1.51	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	96.441				
	Fe	57	96.244				
	Zn	66	95.900				
>	Ge	74		95.818			
>	Tb	159		93.970			
	Pb	208	99.159				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 6.031
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:17:39

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4335.284	0.000	1.008	0.05295	26.45	ug/L
	Fe	57	7377.812	-0.000	1.272	-0.87855	69.97	ug/L
	Zn	66	795.863	-0.000	3.099	-0.29203	12.32	ug/L
>	Ge	74	970724.233	970724.233	2.819			ug/L
>	Tb	159	616672.342	616672.342	4.311			ug/L
	Pb	208	3910.663	0.001	1.359	0.01259	35.08	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.506	✓ ✓		
>	Tb	159		95.553			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-08-D50

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-08-D50.032
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:20:11

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	20303675.317	20.583	0.773	3193.87235	2.41	ug/L
	Fe	57	2414424.667	2.441	1.007	12263.50695	3.15	ug/L
	Zn	66	6417705.781	6.505	1.252	4895.40724	1.03	ug/L
>	Ge	74	986580.294	986580.294	2.266			ug/L
>	Tb	159	614770.434	614770.434	2.850			ug/L
	Pb	208	487836973.914	794.055	0.704	15796.04199	3.54	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.082			
>	Tb	159		95.258			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-08-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-08-D1000.033
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:22:43

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	1068166.341	1.144	3.673	177.47573	5.83	ug/L
	Fe	57	137570.200	0.140	3.191	703.72476	5.75	ug/L
	Zn	66	360055.502	0.385	1.434	290.08746	1.79	ug/L
>	Ge	74	931393.922	931393.922	2.380			ug/L
>	Tb	159	599025.491	599025.491	2.931			ug/L
	Pb	208	25730674.309	42.979	2.210	854.98352	4.26	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		92.596			
>	Tb	159		92.819			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-09-D50

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-09-D50.034
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:25:16

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	10559988.532	11.403	2.370	1769.48591	1.66	ug/L
	Fe	57	12091868.824	13.053	4.651	65587.90021	3.90	ug/L
	Zn	66	3056353.089	3.300	2.553	2483.86496	1.93	ug/L
>	Ge	74	925635.294	925635.294	0.767			ug/L
>	Tb	159	595822.619	595822.619	1.049			ug/L
	Pb	208	2222780006.691	3730.991	1.195	74220.17590	1.85	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		92.023	/	/	
>	Tb	159		92.322			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-09-D2000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-09-D2000.035
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:27:50

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	283311.384	0.275	2.393	42.63875	3.34	ug/L
	Fe	57	324759.394	0.312	1.890	1567.40980	3.05	ug/L
	Zn	66	85143.852	0.083	1.228	62.16299	1.39	ug/L
>	Ge	74	1016000.439	1016000.439	1.219			ug/L
>	Tb	159	633294.922	633294.922	1.578			ug/L
	Pb	208	62023976.917	97.956	0.918	1948.63072	2.35	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		101.007			
>	Tb	159		98.129			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-09-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-09-D100.036
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:30:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4626781.273	4.781	3.080	741.93263	4.86	ug/L
	Fe	57	5192887.297	5.362	2.234	26942.42414	3.45	ug/L
	Zn	66	1347957.640	1.393	0.426	1048.08888	2.66	ug/L
>	Ge	74	967447.834	967447.834	2.223			ug/L
>	Tb	159	624850.759	624850.759	1.436			ug/L
	Pb	208	1002750984.576	1604.534	4.411	31918.80440	3.61	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.180			
>	Tb	159		96.820			
	Pb	208					

not needed
EYL 5/21/08

Method 6020 - Summary Report

Sample ID: 0804115-10-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-10-D1000.037
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:32:59

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	33256.925	0.028	1.961	4.39348	2.84	ug/L
	Fe	57	138025.131	0.127	3.691	637.57458	5.03	ug/L
	Zn	66	101216.479	0.097	3.265	73.37229	2.21	ug/L
>	Ge	74	1025352.225	1025352.225	1.611			ug/L
>	Tb	159	661813.888	661813.888	2.284			ug/L
	Pb	208	24752416.448	37.410	0.539	744.20249	2.71	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		101.937			
>	Tb	159		102.548			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-11-D50

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-11-D50.038
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:35:33

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	13452937.899	13.584	0.340	2107.84539	3.69	ug/L
	Fe	57	19133730.712	19.312	1.619	97035.76364	2.51	ug/L
	Zn	66	7376389.218	7.446	1.704	5603.70558	1.79	ug/L
>	Ge	74	990909.785	990909.785	3.509			ug/L
>	Tb	159	635345.481	635345.481	3.832			ug/L
	Pb	208	66225759.176	104.313	1.729	2075.09610	3.53	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.513			
>	Tb	159		98.446			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-11-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-11-D100.039
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:38:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	6783630.201	6.739	3.900	1045.63083	4.99	ug/L
|	Fe	57	10002648.423	9.934	1.312	49913.06430	3.03	ug/L
|	Zn	66	3920201.756	3.895	1.107	2931.16825	2.76	ug/L
⌊>	Ge	74	1006848.784	1006848.784	3.546			ug/L
⌈>	Tb	159	630575.353	630575.353	1.342			ug/L
⌊	Pb	208	34296742.003	54.390	2.204	1081.98100	2.57	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		100.097			
⌈>	Tb	159		97.707			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-11-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-11-D1000.040
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:40:43

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	710292.245	0.725	1.901	112.52809	1.05	ug/L
	Fe	57	1014912.258	1.034	3.565	5195.64769	1.35	ug/L
	Zn	66	399913.686	0.410	2.777	308.22678	3.97	ug/L
>	Ge	74	974012.810	974012.810	2.299			ug/L
>	Tb	159	609083.743	609083.743	1.144			ug/L
	Pb	208	3369301.765	5.526	0.626	109.93527	0.91	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.833			
>	Tb	159		94.377			
	Pb	208					

not needed
EVL 5/21/08

Method 6020 - Summary Report

Sample ID: 0804115-12-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-12-D1000.041
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:43:19

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	3488360.923	3.555	2.553	551.57161	6.46	ug/L
	Fe	57	29206.790	0.022	1.695	110.50006	4.57	ug/L
	Zn	66	1368373.152	1.393	2.282	1048.37296	1.94	ug/L
>	Ge	74	981927.534	981927.534	4.033			ug/L
>	Tb	159	610033.556	610033.556	2.847			ug/L
	Pb	208	1857615.871	3.038	5.263	60.44101	3.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.620			
>	Tb	159		94.524			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 5.042
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:45:56

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	303986.112	0.300	3.137	46.57714	2.75	ug/L
	Fe	57	965522.608	0.959	3.410	4817.19096	2.98	ug/L
	Zn	66	62022.094	0.061	2.314	45.81558	2.04	ug/L
>	Ge	74	998924.733	998924.733	0.471			ug/L
>	Tb	159	617511.285	617511.285	1.912			ug/L
	Pb	208	1508247.064	2.437	0.470	48.48278	1.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	93.154				
	Fe	57	95.390				
	Zn	66	91.631				
>	Ge	74		99.310			
>	Tb	159		95.683			
	Pb	208	96.966				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 6.043
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:48:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4162.315	0.000	1.158	0.01859	46.51	ug/L
	Fe	57	7769.274	0.000	1.808	0.75987	197.60	ug/L
	Zn	66	498.347	-0.001	1.849	-0.52714	1.07	ug/L
>	Ge	74	980374.332	980374.332	1.925			ug/L
>	Tb	159	609644.527	609644.527	3.634			ug/L
	Pb	208	4294.043	0.001	3.119	0.02646	7.97	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.465			
>	Tb	159		94.464			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-13-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-13-D100.044
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:51:06

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	20449195.285	21.054	0.940	3267.00259	5.32	ug/L
	Fe	57	4715607.535	4.851	0.857	24372.45948	6.50	ug/L
	Zn	66	7387216.781	7.599	4.015	5718.98596	4.08	ug/L
>	Ge	74	973230.276	973230.276	6.256			ug/L
>	Tb	159	602115.805	602115.805	1.564			ug/L
	Pb	208	11153246.417	18.522	0.453	368.44880	2.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		96.755			
>	Tb	159		93.297			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-13-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-13-D1000.045
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:53:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	2035546.629	2.109	5.902	327.26731	6.17	ug/L
|	Fe	57	478384.982	0.489	1.474	2456.78416	3.27	ug/L
|	Zn	66	753834.392	0.781	1.607	587.95185	0.78	ug/L
⌊>	Ge	74	963544.643	963544.643	2.389			ug/L
⌈>	Tb	159	596604.521	596604.521	1.194			ug/L
⌊	Pb	208	1170461.754	1.956	0.942	38.91599	1.14	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		95.792			
⌈>	Tb	159		92.443			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-14-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-14-D1000.046
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:56:19

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	1846045.390	1.889	0.955	293.11905	3.34	ug/L
|	Fe	57	444329.721	0.448	2.711	2249.86987	3.14	ug/L
|	Zn	66	688097.148	0.704	2.133	530.07964	3.34	ug/L
⌊>	Ge	74	976066.778	976066.778	4.305			ug/L
⌈>	Tb	159	615352.018	615352.018	1.968			ug/L
⌊	Pb	208	966918.692	1.566	1.964	31.14693	1.50	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		97.037			
⌈>	Tb	159		95.348			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-15-D100

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-15-D100.047
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 15:58:53

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	23677667.538	23.672	5.090	3673.19154	3.79	ug/L
	Fe	57	2409403.594	2.403	2.421	12076.77141	4.44	ug/L
	Zn	66	9284044.317	9.289	1.789	6990.86706	3.76	ug/L
>	Ge	74	999826.676	999826.676	2.073			ug/L
>	Tb	159	633409.865	633409.865	0.353			ug/L
	Pb	208	13075272.779	20.638	2.125	410.54225	2.32	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		99.399			
>	Tb	159		98.146			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-15-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-15-D1000.048
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 16:01:23

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Cr	52	2436286.338	2.532	3.279	392.96593	6.08	ug/L
|	Fe	57	251764.446	0.254	2.295	1277.58365	4.71	ug/L
|	Zn	66	927501.163	0.964	2.271	725.20572	2.24	ug/L
⌊>	Ge	74	961644.010	961644.010	3.231			ug/L
⌈>	Tb	159	621803.900	621803.900	3.956			ug/L
⌊	Pb	208	1347196.006	2.163	0.702	43.02968	3.91	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Cr	52					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		95.603			
⌈>	Tb	159		96.348			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804115-16-D1000

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\0804115-16-D1000.049
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 16:03:55

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	3301176.138	3.319	5.433	515.02186	6.71	ug/L
	Fe	57	38461.296	0.031	3.447	155.41574	5.50	ug/L
	Zn	66	1202956.673	1.209	2.325	910.19930	3.52	ug/L
>	Ge	74	993930.753	993930.753	1.255			ug/L
>	Tb	159	588673.710	588673.710	2.523			ug/L
	Pb	208	1539384.128	2.610	1.167	51.92442	2.33	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		98.813			
>	Tb	159		91.215			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 5.050
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 16:06:30

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	309341.610	0.313	0.949	48.51494	0.99	ug/L
	Fe	57	968439.082	0.984	1.873	4943.92779	1.69	ug/L
	Zn	66	63145.864	0.063	4.025	47.74980	3.65	ug/L
>	Ge	74	976533.303	976533.303	0.552			ug/L
>	Tb	159	600838.616	600838.616	0.531			ug/L
	Pb	208	1478220.371	2.455	1.720	48.82718	1.48	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52	97.030				
	Fe	57	97.900				
	Zn	66	95.500				
>	Ge	74		97.084			
>	Tb	159		93.100			
	Pb	208	97.654				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a5crfepbzn.mth
Dataset File: C:\elandata\Dataset\M052008C\QC Std 6.051
Calibration File: C:\elandata\System\C052008C.cal
Sample Date/Time: Tuesday, May 20, 2008 16:09:05

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Cr	52	4236.088	0.000	3.939	0.03079	139.30	ug/L
	Fe	57	7625.444	0.000	0.181	0.01353	6737.79	ug/L
	Zn	66	569.184	-0.001	4.773	-0.47235	6.61	ug/L
>	Ge	74	980489.917	980489.917	2.419			ug/L
>	Tb	159	620049.993	620049.993	1.130			ug/L
	Pb	208	3790.234	0.000	4.136	0.00790	49.23	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Cr	52					
	Fe	57					
	Zn	66					
>	Ge	74		97.477	/	/	
>	Tb	159		96.076			
	Pb	208					

Analysis Report - Filename: C:\Program Files\P S Analytical\Millennium\Results\HG050708C.rsf

Pos	Runs	Type	Name	ID / Action	Conc	Pk Ht	Pk Area	Baseline	Message	Flag	Slope/ CFm	Intercept	Dilutio Factor	SD	RSD	Cal	Method	Date/Time
1	1	Cal	0.00	STD0	0.00	0.102306	3.859540	-0.011679	----		0.000000	0.000000	---	---	---	D	7474	07 May 08 14:19
2	1	Cal	0.020	STD1	0.020	0.925583	60.712475	0.012957	---		41.163849	0.102306	---	---	---	D	7474	07 May 08 14:21
3	1	Cal	0.100	STD2	0.100	4.206964	277.520905	-0.008605	---		41.038208	0.103423	---	---	---	D	7474	07 May 08 14:24
4	1	Cal	0.500	STD3	0.500	20.074879	1342.956787	-0.064518	----		39.888248	0.144754	---	---	---	D	7474	07 May 08 14:27
5	1	Cal	2.000	STD4	2.000	78.688065	5269.049316	-0.253700	----		39.257885	0.228428	---	---	---	D	7474	07 May 08 14:29
6	1	Cal	5.000	STD5	5.000	192.368622	12911.640625	-0.340487	---		38.467575	0.540585	---	---	---	D	7474	07 May 08 14:32
7	1	Cal	10.000	STD6	10.000	378.568268	25644.005859	-0.268290	---		37.881687	1.065625	---	---	---	D	7474	07 May 08 14:36
8	1	QC	ICV7474	Ignore	4.767902	181.681793	12329.242188	-0.214780	Pass		37.881687	1.065625	---	---	---	D	7474	07 May 08 14:40
1	1	QC	ICB7474	Ignore	-0.017753	0.393121	-139.215744	-0.393121	Fail		37.881687	1.065625	---	---	---	D	7474	07 May 08 14:43
9	1	Sample	MS042408B10-D5		-0.021201	0.262480	8.989433	0.011786	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 14:46
10	1	Sample	MS042408L02-D5		5.738378	218.445053	14211.735352	0.016412	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 14:48
11	1	Sample	0804115-01-D5		1.689051	65.049728	4233.832031	-0.128888	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 14:52
12	1	Sample	0804115-01SD-D5		0.297835	12.348134	735.617920	-0.295008	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 14:55
13	1	Sample	0804115-01D-D5		2.225212	85.360405	5560.557617	-0.213540	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 14:58
14	1	Sample	0804115-01M-D5		7.758874	294.984863	19453.542969	-0.325471	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:01
15	1	Sample	0804115-02-D5		1.537967	59.326405	3826.359863	-0.265632	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:04
16	1	Sample	0804115-03-D5		1.752369	67.448334	4380.113770	-0.472994	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:07
17	1	Sample	0804115-04-D5		1.864212	71.685120	4622.356934	-0.454544	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:10
18	1	Sample	0804115-05-D5		0.294569	12.224380	743.593140	-0.470520	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:13
8	1	QC	CCV7474	Ignore	4.809757	183.267349	12362.601562	-0.225669	Pass		37.881687	1.065625	---	---	---	D	7474	07 May 08 15:15
1	1	QC	CCB7474	Ignore	-0.021454	0.252929	-94.531578	-0.252929	Fail		37.881687	1.065625	---	---	---	D	7474	07 May 08 15:19
19	1	Sample	0804115-06-D5		2.796161	106.988907	6994.658203	0.003366	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:21
20	1	Sample	0804115-07-D5		0.788022	30.917212	2003.267578	-0.163175	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:25
21	1	Sample	0804115-08-D5		1.220953	47.317371	3019.553955	-0.393406	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:28
22	1	Sample	0804115-09-D5		0.367814	14.999056	922.784546	-0.395605	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:30
23	1	Sample	0804115-10-D5		0.107002	5.119028	281.509308	-0.239862	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:33
24	1	Sample	0804115-11-D5		0.489858	19.622276	1295.905006	-0.091717	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:35
25	1	Sample	0804115-12-D5		0.386526	15.707879	1015.175415	-0.215868	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:38
26	1	Sample	0804115-13-D5		0.201525	8.699735	557.142456	-0.235218	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:41
27	1	Sample	0804115-14-D5		0.135425	6.195764	386.557495	-0.320946	---		37.881687	1.065625	1	---	---	D	7474	07 May 08 15:43

Printed: 5/7/2008 4:01:02 PM Generated by: YCP 5/7/08 Signature: Lmn 5/9/08

Analysis Report - Filename: C:\Program Files\P S Analytical\Millennium\Results\HG050708C.rsf

Pos	Runs	Type	Name	ID / Action	Conc	Pk Ht	Pk Area	Baseline	Message	Flag	Slope/ CFm	Intercept	Dilutio Factor	SD	RSD	Cal	Method	Date/Time
28	1	Sample	0804115-15-D5		0.257864	10.833965	650.052979	-0.120428	----		37.881687	1.065625	1	----	----	D	7474	07 May 08 15:46
8	1	QC	CCV7474	Ignore	4.620998	176.116821	11971.957031	-0.233838	Pass		37.881687	1.065625	----	----	----	D	7474	07 May 08 15:48
1	1	QC	CCB7474	Ignore	-0.021291	0.259086	-89.311150	-0.259086	Fail		37.881687	1.065625	----	----	----	D	7474	07 May 08 15:52
29	1	Sample	0804115-16-D5		0.285496	11.880692	789.996094	-0.024095	----		37.881687	1.065625	1	----	----	D	7474	07 May 08 15:54
8	1	QC	CCV7474	Ignore	5.013508	190.985764	12836.627930	-0.180209	Pass		37.881687	1.065625	----	----	----	D	7474	07 May 08 15:57
1	1	QC	CCB7474	Ignore	-0.022618	0.208826	-77.376762	-0.208826	Fail		37.881687	1.065625	----	----	----	D	7474	07 May 08 16:00

Calibration Report -

General Details

Measured By :

Calibration #: Default

Fit Type : Least Squares

Unit : ppb

Slope : 37.881687

Y Intercept : 1.065625

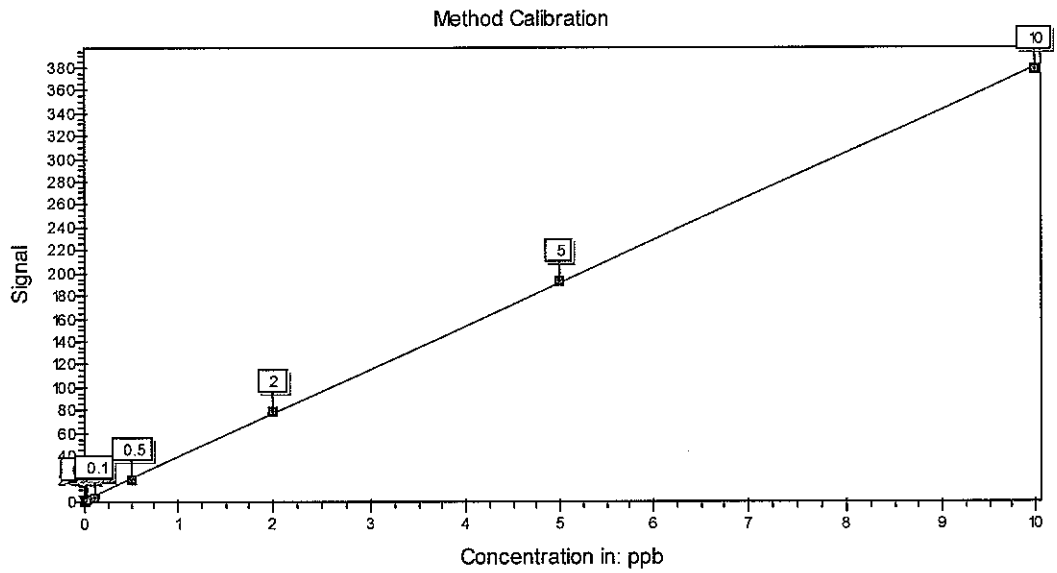
Correlation Coefficient : 0.999955

Reslope %:

Method Name: 7474

Definition of Standards

Include	*Pos*	*Runs*	*Conc*	*Pk Ht*	*Pk Area*	*Res %*	*Res Conc*	*Date/Time*
Yes	1	1	0.00	0.102306	3.859540	0.000000	-0.025430	07 May 2008 14:19
Yes	2	1	0.020	0.925583	60.712475	-118.484138	-0.023697	07 May 2008 14:21
Yes	3	1	0.100	4.206964	277.520905	-17.075001	-0.017075	07 May 2008 14:24
Yes	4	1	0.500	20.074879	1342.956787	0.361177	0.001806	07 May 2008 14:27
Yes	5	1	2.000	78.688065	5269.049316	2.453778	0.049076	07 May 2008 14:29
Yes	6	1	5.000	192.368622	12911.640625	1.000252	0.050013	07 May 2008 14:32
Yes	7	1	10.000	378.568268	25644.005859	-0.346930	-0.034693	07 May 2008 14:36



Method Set-up Report: C:\Program Files\P S Analytical\Millennium\Methods\7474.mef

Name, Time, Originator/Modifier

Method Title :	Method 7474
Method History :	33
Method Type :	Millennium Merlin
Method Name :	7474
Last Modified :	06 May 2008
Modified by :	

Method Parameters

Unit :	ppb	Idle Actions Active:	Yes
Allow Auto-Range :	No	- Idle After :	6 mins
Gain :	10	- Switch off Pump 1:	Yes
Mode :	Ratio	- Switch off Pump 2 :	Yes
Measurement Mode :	Height	- Switch off Analysis Gas :	Yes
Baseline Check Type :	Units	- Switch off Dryer Gas:	Yes
Baseline Check Value:	1		
Filter Factor :	32	Over Range Action:	Run Blank Wash
Auto Zero:	Yes	- Blank/Wash Sampler Pos:	1
Allow Negative Results:	Yes	- # Repeats:	1
Blank Subtraction:	Yes	- Blank Pk Height:	1.00

Instrument Parameters

Delay Period (s) :	15
Analysis Period (s) :	60
Memory Period (s) :	60
Pump 1 Speed (%) :	100%
Pump 2 Speed (%) :	100%
Valve Flush :	On

Notes

C050608VH1
I050608VH1
10% HCl =MW050608A
SnCl2 = MW050708A

Alpha oods Hole Lab
Batch Prep Report
04/24/2008 0804115_30502T - 3050:2T

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804115-01	D	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.46	50
0804115-01	MH	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.45	50
0804115-01	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.47	50
0804115-01	SD	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.47	50
0804115-02	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.63	50
0804115-03	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.51	50
0804115-04	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.5	50
0804115-05	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.48	50
0804115-06	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.59	50
0804115-07	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.49	50
0804115-08	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.42	50
0804115-09	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.5	50
0804115-10	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.58	50
0804115-11	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.53	50
0804115-12	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.6	50
0804115-13	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.52	50
0804115-14	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.62	50
0804115-15	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.59	50
0804115-16	SAM	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.51	50
MS042408B09	B	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1	50
MS042408LH01	LH	3050:2T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW050208A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804115_30502T - 3050:2T

Lab ID	Notes
0804115-01	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-02	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-03	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-04	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-05	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-06	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-07	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-08	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-09	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-10	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-11	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-12	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-13	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-14	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-15	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
0804115-16	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
MS042408B09	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.
MS042408LH01	1st Prep: Start time 9:30. Block/Them #1. Avg. temp 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804115_30502T - 3050:2T Analyst: EYC Witness: LCP

Lab ID	QC Type	3050:2T - spk 1	Vol 3050:2T - spk 1	Units 3050:2T - spk 1	3050:2T - spk 2	Vol 3050:2T - spk 2	Units 3050:2T - spk 2	3050:2T - spk 3	Vol 3050:2T - spk 3	Units 3050:2T - spk 3
0804115-01	D									
0804115-01	MH	MW030608S1	2	ml						
0804115-01	SAM									
0804115-01	SD									
0804115-02	SAM									
0804115-03	SAM									
0804115-04	SAM									
0804115-05	SAM									
0804115-06	SAM									
0804115-07	SAM									
0804115-08	SAM									
0804115-09	SAM									
0804115-10	SAM									
0804115-11	SAM									
0804115-12	SAM									
0804115-13	SAM									
0804115-14	SAM									
0804115-15	SAM									
0804115-16	SAM									
MS042408B09	B									
MS042408LH01	LH	MW030608S1	2	ml						

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804115_30501T - 3050:1T

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804115-01	D	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.47	50
0804115-01	ML	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.44	50
0804115-01	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.42	50
0804115-01	SD	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.42	50
0804115-02	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.63	50
0804115-03	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.47	50
0804115-04	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.48	50
0804115-05	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.5	50
0804115-06	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.56	50
0804115-07	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.52	50
0804115-08	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.42	50
0804115-09	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.51	50
0804115-10	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.57	50
0804115-11	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.59	50
0804115-12	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.64	50
0804115-13	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.58	50
0804115-14	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.66	50
0804115-15	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.68	50
0804115-16	SAM	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1.5	50
MS042408B08	B	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1	50
MS042408LL01	LL	3050:1T	EYC	2008-05-02 00:00:00	2008-05-05 00:00:00		1	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW050208A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804115_30501T - 3050:1T

Lab ID	Notes
0804115-01	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-01	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-02	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-03	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-04	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-05	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-06	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-07	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-08	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-09	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-10	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-11	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-12	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-13	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-14	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-15	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
0804115-16	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
MS042408B08	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.
MS042408LL01	1st Prep: Start time 9:30. Block/Them. #2. Avg. temp 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804115_30501T - 3050:1T Analyst: EYC Witness: LCP

Lab ID	QC Type	3050:1T - spk 1	Vol 3050:1T - spk 1	Units 3050:1T - spk 1	3050:1T - spk 2	Vol 3050:1T - spk 2	Units 3050:1T - spk 2	3050:1T - spk 3	Vol 3050:1T - spk 3	Units 3050:1T - spk 3
0804115-01	D									
0804115-01	ML	MW042508S3	0.8	ml						
0804115-01	SAM									
0804115-01	SD									
0804115-02	SAM									
0804115-03	SAM									
0804115-04	SAM									
0804115-05	SAM									
0804115-06	SAM									
0804115-07	SAM									
0804115-08	SAM									
0804115-09	SAM									
0804115-10	SAM									
0804115-11	SAM									
0804115-12	SAM									
0804115-13	SAM									
0804115-14	SAM									
0804115-15	SAM									
0804115-16	SAM									
MS042408B08	B									
MS042408LL01	LL	MW042508S3	0.8	ml						

Alpha Woods Hole Lab
Batch Prep Report

04/24/2008 0804115_7471 - 7471 Hg Prep

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804115-01	D	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.97	50
0804115-01	M	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.93	50
0804115-01	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.93	50
0804115-01	SD	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.93	50
0804115-02	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.03	50
0804115-03	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.01	50
0804115-04	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1	50
0804115-05	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.99	50
0804115-06	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.02	50
0804115-07	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1	50
0804115-08	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1	50
0804115-09	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.01	50
0804115-10	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1	50
0804115-11	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.03	50
0804115-12	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.02	50
0804115-13	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.04	50
0804115-14	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.08	50
0804115-15	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.07	50
0804115-16	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.05	50
MS042408B10	B	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.5	50
MS042408L02	L	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.5	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW032207A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report

04/24/2008 0804115_7471 - 7471 Hg Prep

Lab ID	Notes
0804115-01	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-01	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-01	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-01	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-02	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-03	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-04	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-05	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-06	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-07	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-08	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-09	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-10	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-11	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-12	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-13	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-14	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-15	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
0804115-16	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
MS042408B10	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.
MS042408L02	1st Prep: Start time 12:10. Block/Them. #2. Avg. temp. 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804115_7471 - 7471 Hg Prep Analyst: EYC Witness: LMR

Lab ID	QC Type	7471 Hg Prep - spk 1	Vol 7471 Hg Prep - spk 1	Units 7471 Hg Prep - spk 1	7471 Hg Prep - spk 2	Vol 7471 Hg Prep - spk 2	Units 7471 Hg Prep - spk 2	7471 Hg Prep - spk 3	Vol 7471 Hg Prep - spk 3	Units 7471 Hg Prep - spk 3
0804115-01	D									
0804115-01	M	I050508VH	1.25	ml						
0804115-01	SAM									
0804115-01	SD									
0804115-02	SAM									
0804115-03	SAM									
0804115-04	SAM									
0804115-05	SAM									
0804115-06	SAM									
0804115-07	SAM									
0804115-08	SAM									
0804115-09	SAM									
0804115-10	SAM									
0804115-11	SAM									
0804115-12	SAM									
0804115-13	SAM									
0804115-14	SAM									
0804115-15	SAM									
0804115-16	SAM									
MS042408B10	B									
MS042408L02	L	I050508VH	1.25	ml						

Chain of Custody Records

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

CHAIN OF CUSTODY RECORD

0804115

Client Name: Ash Creek Associates
Address: 9615 SW Allen Blvd #106
City/State/Zip: Beaverton, OR 97005

Telephone Number: 503.924.4704
Fax No.: 503.924.4707

Project Manager: Amanda Spencer
Project Name: T4 Grain Tank Demolition
Project Number: 1484-00
Sampler Name: D. Urquhart

Analytical Lab: Alpha Laboratory
Report To: Amanda Spencer
Page: 1 of 2

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Analyze: Other (specify): Paint Chips		Analyze For: SEE SPECIAL INSTRUCTIONS.										RUSH TAT (Pre-Schedule	Standard TAT	Fax Results	Send QC with report
1	T4-Tank 1	03/17/08	1326	1										X							X		X													
2	T4-Tank 1-G	03/17/08	1332	1										X							X		X													
3	T4-Tank 2	03/17/08	1341	1										X							X		X													
4	T4-Tank 2-G	03/17/08	1346	1										X							X		X													
5	T4-Tank 3	03/17/08	1424	1										X							X		X													
6	T4-Tank 3-G	03/17/08	1430	1										X							X		X													
7	T4-Tank 4	03/17/08	1436	1										X							X		X													
8	T4-Tank 4-G	03/17/08	1444	1										X							X		X													
9	T4-Tank 5	03/17/08	1513	1										X							X		X													
10	T4-Tank 5-G	03/17/08	1505	1										X							X		X													

Special Instructions: SAMPLES TO BE ARCHIVED. Await further instructions from Stephen Emsbo-Mattingly.

Method of Shipment:

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Ashleigh Fines, Ash Creek Assoc.	3/20/2008	1018	FED EX		
FED EX	3/21/08	1015	ALPHA	3/21/08	1015

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

CHAIN OF CUSTODY RECORD

Client Name: Ash Creek Associates
Address: 9615 SW Allen Blvd #106
City/State/Zip: Beaverton, OR 97005

Telephone Number: 503.924.4704
Fax No.: 503.924.4707

0804115

Project Manager: Amanda Spencer
Project Name: T4 Grain Tank Demolition
Project Number: 1484-00
Sampler Name: D. Urquhart

Analytical Lab: Alpha Laboratory
Report To: Amanda Spencer
Page: 2 of 2

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Analyze: Other (specify): Paint Chips	Analyze For: SEE SPECIAL INSTRUCTIONS.	RUSH TAT (Pre-Schedule)	Standard TAT	Fax Results	Send QC with report
11	T4-Tank 6	03/17/08	1524	1										X							X	X				
12	T4-Tank 6-G	03/17/08	1530	1										X							X	X				
13	T4-Tank 7	03/17/08	1539	1										X							X	X				
14	T4-Tank 7-G	03/17/08	1544	1										X							X	X				
15	T4-Tank 8	03/17/08	1552	1										X							X	X				
16	T4-Tank 8-G	03/17/08	1557	1										X							X	X				

Special Instructions: SAMPLES TO BE ARCHIVED. Await further instructions from Stephen Emsbo-Mattingly.

Method of Shipment:

Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Ashleigh Fines, Ash Creek Assoc.	3/20/2008	1018	FED EX		
FED EX	3/21/08	1015	ALPHA	03/21/08	1015

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Sample Receipt Checklist

Client: NEWME	**Receipt Date:** 3/21/08		
Project: Ash Creek - POP	**Log-in Date:** 4/23/08		
ETR #: 0804115	**Inspection by:** W	**Login by:** W	

ALL SECTIONS BELOW MUST BE COMPLETED

Comments / Notes

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, Alpha Analytical Courier pick-up / Hand delivered

Is bill of lading retained? Yes, Tracking #: Attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 4°C IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? (Yes) / No

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)

Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No / (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)

☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: EMP Date: ~~4/23/08~~ 4/23/08

Sample storage refrigerator #:_____

Sample storage freezer #: 1

Cooler 2:_____ Cooler 3:_____
Cooler 4:_____ Cooler 5:_____
Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?
Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

FedEx Express *US Airbill*

FedEx Tracking Number 8620 5435 3311

0200 **Recipient's Copy**

1 From

Date [redacted]

Sender's Name Ashleigh Fines Phone 924-4704

Company Ash Creek Associates INC.

Address 7015 SW Allen Blvd, Suite 106 Dept./Floor/Suite/Room

City Beaverton State OR ZIP 97005

2 Your Internal Billing Reference

3 To

Recipient's Name Liz Pokta Phone [redacted]

Company Alpha Laboratories

Recipient's Address 26 Forbes Blvd. Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address Mansfield MA 02048

To request a package be held at a specific FedEx location, print FedEx address here.

City State ZIP

8620 5435 3311

4a Express Package Service *Packages up to 150 lbs.*

- [ ] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

*To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

*Call for Confirmation:

**To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

*Declared value limit $500.

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [x] Credit Card
- [ ] Cash/Check

Obtain Recip. Acct. No. [ ]

[redacted]

Total Packages	Total Weight	Total Declared Value†
1	32	$ 100 .00

†Our liability is limited to $100 unless you declare a higher value. See back for details.

Credit Card Auth.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

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Rev. Date 10/06•Part #158281•©1994–2006 FedEx•PRINTED IN U.S.A. SRY

fedex.com 1.800.GoFedEx 1.800.463.3339

ANALYTICAL REPORT

Prepared for:
NewFields
300 Ledgewood Place, Suite 305
Rockland, MA 02370

Project:	Ash Creek Associates-Port of Portland
ETR:	0804116
Report Date:	June 12, 2008

Certifications and Accreditations
Massachusetts M-MA030
Connecticut PH-0141
New Hampshire 2206
Rhode Island LAO00289
New Jersey MA015
Maine MA0030
New York 11627
Louisiana 03090
Florida E87814
Pennsylvania 68-02089
Army Corps of Engineers
Department of the Navy

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320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample ID Cross Reference

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**

Lab Sample ID	Client Sample ID
0804116-01	B4
0804116-02	B3/4
0804116-03	B2/3
0804116-04	B1/2
0804116-05	B1
0804116-06	B5
0804116-07	B5/6
0804116-08	B6/7
0804116-09	B7/8
0804116-10	B8

Certificate/Approval Program Summary

Method numbers assume the most recent EPA revisions. For a complete listing of analytes for the referenced methods please contact your Alpha Woods Hole Lab Project Manager or the Quality Assurance Manager.

Connecticut Department of Public Health Certificate/Lab ID : PH-0141 - *Wastewater* (General Chemistry: EPA 120.1, 150.1, 160.1, 160.2, 180.1, 300.0, 310.1, 335.2; Metals: 200.8, 245.1; Organics: 608-PCB, ETPH) *Solid Waste/Soil* (General Chemistry: 1010, 9010/9014, 9045, 9060; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270, ETPH).

Florida Department of Health Certificate/Lab ID : E87814 - Primary NELAP Accreditation Authority for Air & Emissions. Secondary NELAP Accreditation for Wastwater and Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 335.2, SM2320B, SM2340B, SM2540G, SM4500NH3; Metals: 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: 9010/9014, 9045, 9050, 9056, 9065, Reactivity 7.3; Metals: 6020, 7470, 7471; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Louisiana Department of Environmental Quality Certificate/Lab ID : 03090 - Primary NELAP Accrediting Authority for Wastewater, Solid & Hazardous Waste. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1, 6020; Organics: 608-PCB, 8015-DRO, 8081, 8082, 8260, 8270). *Solid and Hazardous Waste* (General Chemistry: 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060, Reactivity 7.3; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270).

Maine Department of Human Services Certificate/Lab ID : MA0030 - *Wastewater* (General Chemistry: EPA 120.1/ SM2510B, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: 608-PCB).

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA030 - *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 335.2; Metals: EPA 245.1; Organics: EPA 608-PCB).

New Hampshire Department of Environmental Services Certificate/Lab ID: 2206 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, SM2540G; Metals: 200.8, 245.4; Organics: 608-PCB).

New Jersey Department of Environmental Protection Certificate/Lab ID : MA015 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 180.1, 300.0, 310.1/SM2320B, 335.2, 376.2, 9010/9014, 9056, SM2540G; Metals: 200.8, 245.1 6020; Organics: 608-PCB, 8081, 8082, 8260, 8270). *Solid & Hazardous Waste* (General Chemistry: EPA 1010, 1311, 9010/9014, 9040, 9045, 9056, 9060; Metals: 6020, 7196, 7470, 7471; Organics: 8015-DRO, 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

New York Department of Health Certificate/Lab ID : 11627 - Secondary NELAP Accreditation. *Wastewater* (General Chemistry: EPA 120.1/SM2510B, 150.1, 160.1/SM2540C, 160.2/SM2540D, 300.0, 310.1/SM2320B, 376.2; Metals: 200.8, 245.1; Organics: 608-PCB). *Solid and Hazardous Waste* (General Chemistry: EPA 1010, 1311; : 200.8; 6020;7041; Organics: 8081, 8082, 8260, 8270). *Air & Emissions* (Organics: EPA TO-15).

Rhode Island Department of Health Certificate/Lab ID : LAO00289 - Chemistry: *Organic and Inorganic in Non-Poratable Water, Wastewater/Sewage and Soil* (Refer to LADEQ and MADEP certificates for method numbers.)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-02089 - Registered laboratory

U.S. Army Corps of Engineers

Department of the Navy

CASE NARRATIVE
Alpha Analytical

ETR: 0804116
Project: Ash Creek Associates-Port of Portland

All analyses were performed according to Alpha Analytical quality assurance program and documented Standard Operating Procedures (SOPs). The analytical results contained in this report were performed within holding time, and with appropriate quality control measures, except where noted. A summary of all state and federal accreditations is provided within this report. Blank correction of results is not performed in the laboratory for any parameter. Alpha Analytical certifies that the test results within meet all of the requirements of NELAC, for all NELAC accredited parameters.

Sample Receipt

All samples were frozen upon receipt at the laboratory until authorized to proceed with sample extraction and analysis.

Semi-Volatile Organics by 8270

Semivolatile organic compounds were analyzed following procedures in the Alpha Analytical SOP *Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (Revision 3.2)* Method 8270C. Sediment samples were aliquoted (approximately 5g), spiked with surrogate compounds, and extracted by Microscale Extraction (Method 3570). Solvent extracts were dried over sodium sulfate and concentrated to a 10mL final volume. 9mL of the extracts were archived and the remaining 1mL was cleaned via gel permeation chromatography (GPC-Method 3640). Following sample cleanup, the extracts were re-concentrated to a 1mL final volume, spiked with internal standards, and analyzed by GC/MS. Qualitative identifications were confirmed by analyzing standards under the same conditions used for samples and comparing mass spectra and GC retention times. Quantification was based on a multi-level initial calibration.

1. The method blank SS050108B02 contained Phenol detected below the reporting limit. Associated field sample results are flagged with "B" qualifiers.

2. Method blank SS050108B02 has three internal standard compounds recovered just below the lower area limit of -50%. See the enclosed Internal Standard Area Summary Form VIII for specific details. Note that all surrogates were recovered with in the recovery limits.

3. The laboratory control sample (SS050108LCS03) and laboratory control sample duplicate (SS050108LCSD03) have Pentachlorophenol recovered below the 30% recovery limits and the RPD for n-Nitroso-di-n-propylamine above the 30% QC limit. Since all other spike compounds and the surrogates were within QC limits, the incident appears to be isolated to these laboratory control samples.

4. Sample B4 (0804116-01) has some compounds above the reporting limit while its duplicate (0804116-01D) has these compounds below the detection limit. These compounds are flagged with an "X". The integrations and calculations in the native sample and the duplicate were reviewed and found to be appropriate.

5. Sample B5/6 (0804116-07) has acid surrogate compounds 2-Fluorophenol and 2,4,6-Tribromophenol recovered below the 30% QC limit potentially due to matrix interference. Please note that all other surrogates in this sample and the surrogates in the QC samples exhibited acceptable recoveries.

6. The continuing calibration verification, C4052701, had the percent deviation for 2,4-Dimethylphenol above the 25%D QC limit at 25.3%D. This compound was not detected in the associated samples, therefore the calibration was accepted.

7. The continuing calibration verification, C4060903, had the percent deviation for 2,4-Dimethylphenol and Pentachlorophenol above the 25%D QC limit at 25.3%D and 33.1%D, respectively. These values were below 35%D and represent less than 10% of all compounds, therefore the calibration was accepted.

Polychlorinated Biphenyls by 8082

Polychlorinated Biphenyls were analyzed following procedures in the Alpha Analytical SOP *Polychlorinated Biphenyls (PCBs) as Aroclors and Congeners by Gas Chromatography/Electron Capture Detection (Revision 1.0)* Method 8082. Sediment samples (approximately 5g) are spiked with surrogate compounds and extracted by Microscale Extraction (Method 3570). Solvent extracts are dried over sodium sulfate, concentrated to a 10mL final volume and exchanged to hexane. 9mL of the extracts were archived, and the remaining 1mL was cleaned by Alumina Column (Method 3610). After re-concentration to 1mL, the extracts were acid cleaned (Method 3665a), prior to analysis. Extracts are analyzed by gas chromatography with electron capture detection (ECD). Qualitative identifications are confirmed by analyzing standards under the same conditions used for samples and comparing GC retention times on two dissimilar columns. Quantification is based on a multi-level initial calibration.

1. The continuing calibration standards, C1050801, C1050802, and C1050803 had values for one or more peaks that exceeded the 15% QC monitoring limit. The average for all peaks was below the 15% QC limit. Refer to the individual Form VII Calibration Verification for specific outliers.

2. Several samples required dilutions due to over-calibration concentrations of target compounds. The diluted analysis were identified to contain the same Aroclors as the original analysis therefore only the diluted analysis are reported.

Metals

Metals were analyzed following procedures in Alpha Analytical SOP *Inductively Coupled Plasma-Mass Spectrometry (Revision 1.0)* Method 6020A. Solid samples (approximately 1g) were digested by hot plate according to Method 3050. An aliquot of digestate was nebulized into a spray chamber where a stream of argon carried the sample aerosol through a quartz torch and injected it into the radio frequency inductively coupled plasma. The ions produced in the plasma were introduced to the mass spectrometer for quantification against a multi-level initial calibration.

Mercury was analyzed following procedures in Alpha Analytical SOP *Mercury Determination in Tissue and Soil/Sediment Samples by Cold Vapor AtomicFluorescence Technique (Revision 1.0)* Method 7474. Solid samples (approximately 1g) were digested in a Aqua Regia, and heated for 30 minutes. Mercury in the digested sample was reduced to elemental mercury and aerated from solution in a closed system. Mercury vapor passed through a cell positioned in the light path of the atomic fluorescence spectrophotometer. The emission was measured and was compared to a multi-level initial calibration for quantification.

Sample B4 (Lab ID 0804116-01) was analyzed as the batch QC sample. All QC measures were within method acceptance criteria except the following:

1. Serial Dilution: The RPD between the QC sample result and the serial dilution result was exceeded the 10% acceptance limit for aluminum, barium, calcium, cobalt, copper, magnesium and nickel. Samples are flagged (E) as estimated values and may be biased due to a matrix effect.

2. Matrix Spike: The recoveries of antimony, barium, lead, magnesium, potassium and sodium from the matrix spike sample were outside of the 75% - 125% method acceptance limits. Sample results are flagged (N) and may be biased due to a matrix effect.

3. Matrix Duplicates: The RPD between matrix duplicates exceeded the 20% acceptance limit for arsenic, chromium, copper, iron, lead, manganese, vanadium and zinc. Sample results are flagged (¤) indicating a non-homogeneous sample matrix with respect to these analytes.

The enclosed results of analyses are representative of the samples as received by the laboratory. Alpha Analytical makes no representations or certifications as to the method of sample collection, sample identification, or transporting/handling procedures used prior to the receipt of samples by Alpha Analytical. To the best of my knowledge, the information contained in this report is accurate and complete. For any questions regarding this report, please contact the signatory below at 508-822-9300.

Approved by: Elizabeth Porta Title: Forensic manager Date: 6/12/08

Elizabeth Porta **Forensic Manager**

Sample Preparation

Alpha Woods Hole Lab
Batch Prep Report
05/01/2008 0804116S - OP 8270 Full List LCS

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume (ml)	Vialed By	Vialed Date	Cell Number
0804116-01	D	3570	LAB	5/1/08	5/7/08		5.45	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-01	SAM	3570	LAB	5/1/08	5/7/08		5.12	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-02	SAM	3570	LAB	5/1/08	5/7/08		5.56	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-03	SAM	3570	LAB	5/1/08	5/7/08		5.51	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-04	SAM	3570	LAB	5/1/08	5/7/08		5.39	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-05	SAM	3570	LAB	5/1/08	5/7/08		5.32	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-06	SAM	3570	LAB	5/1/08	5/7/08		5.24	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-07	SAM	3570	LAB	5/1/08	5/7/08		5.33	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-08	SAM	3570	LAB	5/1/08	5/7/08		5.42	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-09	SAM	3570	LAB	5/1/08	5/7/08		5.43	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
0804116-10	SAM	3570	LAB	5/1/08	5/7/08		5.46	10	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
SS050108B02	B	3570	LAB	5/1/08	5/7/08		5	5	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
SS050108LCS03	LCS	3570	LAB	5/1/08	5/7/08		5	5	False	MGH	5/6/08	KD Flask		MGH	5/6/08	
SS050108LCSD03	LCSD	3570	LAB	5/1/08	5/7/08		5	5	False	MGH	5/6/08	KD Flask		MGH	5/6/08	

Alpha Woods Hole Lab
Batch Weight Report
05/01/2008

Lab ID	QC Type	0804116S - Sample
0804116-01	D	5.45
0804116-01	SAM	5.12
0804116-02	SAM	5.56
0804116-03	SAM	5.51
0804116-04	SAM	5.39
0804116-05	SAM	5.32
0804116-06	SAM	5.24
0804116-07	SAM	5.33
0804116-08	SAM	5.42
0804116-09	SAM	5.43
0804116-10	SAM	5.46
SS050108B02	B	5
SS050108LCS03LCS	OP 8270 Full List LCS	5
SS050108LCSD03LCO	P 8270 Full List LCS	5

METHYLENE CHLORIDE (tank) E40E54
ACETONE: E31E30 HEXANE: E51E11

COPPER: E41602 SODIUM SULFATE: E40617

GLASS WOOL: H1084303302

METHYLENE CHLORIDE (bottle) E49403

Alpha Woods Hole Lab
Batch Prep Spike Report

05/01/2008 0804116S - OP 8270 Full Li Analyst: LAB Witness: MGH

Lab ID	QC Type	OP 8270 Full Li - surr	Vol OP 8270 Full Li - surr	Units OP 8270 Full Li - surr	OP 8270 Full Li - spk 1	Vol OP 8270 Full Li - spk 1	Units OP 8270 Full Li - spk 1	OP 8270 Full Li - spk 2	Vol OP 8270 Full Li - spk 2	Units OP 8270 Full Li - spk 2
0804116-01	D	SSW0302808A	1	ml						
0804116-01	SAM	SSW0302808A	1	ml						
0804116-02	SAM	SSW0302808A	1	ml						
0804116-03	SAM	SSW0302808A	1	ml						
0804116-04	SAM	SSW0302808A	1	ml						
0804116-05	SAM	SSW0302808A	1	ml						
0804116-06	SAM	SSW0302808A	1	ml						
0804116-07	SAM	SSW0302808A	1	ml						
0804116-08	SAM	SSW0302808A	1	ml						
0804116-09	SAM	SSW0302808A	1	ml						
0804116-10	SAM	SSW0302808A	1	ml						
SS050108B02	B	SSW0302808A	1	ml						
SS050108LCS03	LCS	SSW0302808A	1	ml	SS030508A	75	µl			
SS050108LCSD03	LCSD	SSW0302808A	1	ml	SS030508A	75	µl			

Test: 8270

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# SSW0302808A

Conc. 20 ug/ml

Test: 8270

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# SS030508A

Conc. 2000 ppm

Alpha Woods Hole Lab
Batch Clean Up Report

05/01/2008 0804116S - OP 8270 Full List LCS

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804116-01	D	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-01	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-02	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-03	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-04	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-05	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-06	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-07	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-08	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-09	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
0804116-10	SAM	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	1	0	1
SS050108B02	B	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	2	0	1
SS050108LCS03	LCS	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	2	0	1
SS050108LCSD03	LCSD	3640	LAB	5/6/08	5	11.42	20.30	LAB	5/7/08	False	10	2	0	1

Alpha Woods Hole Lab
Batch Clean Up Report
05/01/2008 0804116S - OP 8270 Full List LCS

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804116-01	D	3660B	LAB	5/1/08									0	
0804116-01	SAM	3660B	LAB	5/1/08									0	
0804116-02	SAM	3660B	LAB	5/1/08									0	
0804116-03	SAM	3660B	LAB	5/1/08									0	
0804116-04	SAM	3660B	LAB	5/1/08									0	
0804116-05	SAM	3660B	LAB	5/1/08									0	
0804116-06	SAM	3660B	LAB	5/1/08									0	
0804116-07	SAM	3660B	LAB	5/1/08									0	
0804116-08	SAM	3660B	LAB	5/1/08									0	
0804116-09	SAM	3660B	LAB	5/1/08									0	
0804116-10	SAM	3660B	LAB	5/1/08									0	
SS050108B02	B	3660B	LAB	5/1/08									0	
SS050108LCS03	LCS	3660B	LAB	5/1/08									0	
SS050108LCSD03	LCSD	3660B	LAB	5/1/08									0	

Organics Preparation Checklist

ETR: 08021116 Client: Newfie Project: Ash creek

Test Requested			
Aroclor		RIM PAH/PCB (Reg I)	
Congener		RIM Pest (Reg I)	
Homolog		RIM PAH/PCB (Reg II)	
Pesticide		RIM Pest (Reg II)	
TPH		DAS	
PAH-SIM		EPH	
8270	✓	Other:	

Required Cleanup	
No Cleanup Required	
Copper	✓
Conc. Sulfuric Acid	
GPC	✓
Automated Silica Fractionation	
Cartridge Silica Fractionation	
Alumina	

Sample Observations			
Normal Weight/Volume Extracted	✓	Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	✓

Other: Entire batch has strong fecal odor. LAB

Extraction Notes		
Emulsions During Shake		Identify Matrix - Circle One
Samples Extracted Outside Of Hold Time		Soil / Sediment / Water / Sheen / NAPL / Sludge / Solid Tissue / Product / Oil / Net / Wipe / Elutriate
Samples Not Field Preserved	✓	
No Observations	✓	

Other:

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate	✓
Precipitate Formed During Concentration		No Observations	✓

Other:

Vialing Notes			
Auto-vialing not required		Auto-vialing for H_2O in extract	✓
Auto-vialing for precipitate in extract		No Observations	

Other:

Batch Reviewed

Analyst: JC

Date: 5/7/08

Batch Completed

Analyst: [signature]

Date: 5-7-08

Alpha Woods Hole Lab
Batch Weight Report
05/01/2008

Lab ID	QC Type	PS050108 - Pan Weight	PS050108 - Wet Weight	PS050108 - Dry Weight	PS050108 - Dry Weight #2	PS050108 - Dry Weight #3	Percent Solid	RPD
0804116-01	SAM	1.28	9.35	7.84	7.84		81.29	
0804116-02	SAM	1.28	7.51	3.31	3.31		32.58	
0804116-03	SAM	1.29	6.32	2.84	2.84		30.82	
0804116-04	SAM	1.28	6.49	4.74	4.74		66.41	
0804116-05	SAM	1.28	6.08	2.51	2.51		25.62	
0804116-06	SAM	1.3	8.86	3.86	3.86		33.86	
0804116-07	SAM	1.29	8.38	7.12	7.12		82.23	
0804116-08	SAM	1.3	8.01	5.79	5.79		66.92	
0804116-09	SAM	1.29	7.07	5.7	5.7		76.3	
0804116-10	D	1.3	6.31	3.34	3.34		40.72	0.69%
0804116-10	SAM	1.28	6.3	3.31	3.31		40.44	
PSS050108B06	B	1.29	1.29	1.29	1.29		100	

Initial: 5/1/2008 10:01:25 AM KJB
Weight #1: 5/2/2008 9:55:17 AM KJB
Weight #2: 5/2/2008 12:15:18 PM KJB

Semi-volatiles
8270
By
GC/MS

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/09/08	81.3	5.12	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1200	U	3-Nitroaniline	1200	U
Phenol	1200	U	2,4-Dinitrophenol	1200	U
2-Chlorophenol	1200	U	Dibenzofuran	1200	U
1,3-Dichlorobenzene	1200	U	2,4-Dinitrotoluene	1200	U
1,4-Dichlorobenzene	1200	U	4-Nitrophenol	1200	U
1,2-Dichlorobenzene	1200	U	Fluorene	1200	U
bis(2-Chloroisopropyl)ether	1200	U	4-Chlorophenyl-phenylether	1200	U
2-Methylphenol	1200	U	Diethylphthalate	1200	U
Hexachloroethane	1200	U	4-Nitroaniline	1200	U
n-Nitroso-di-n-propylamine	1200	U	4,6-Dinitro-2-methylphenol	1200	U
4-Methylphenol	1200	U	n-Nitrosodiphenylamine	1200	U
Nitrobenzene	1200	U	4-Bromophenyl-phenylether	1200	U
Isophorone	1200	U	Hexachlorobenzene	1200	U
2-Nitrophenol	1200	U	Pentachlorophenol	1200	U
2,4-Dimethylphenol	1200	U	Phenanthrene	1200	U
bis(2-Chloroethoxy)methane	1200	U	Anthracene	1200	U
2,4-Dichlorophenol	1200	U	Carbazole	1200	U
1,2,4-Trichlorobenzene	1200	U	Di-n-butylphthalate	1200	U
Naphthalene	1200	U	Fluoranthene	**841**	J
4-Chloroaniline	1200	U	Pyrene	**817**	J
Hexachlorobutadiene	1200	U	Butylbenzylphthalate	1200	U
4-Chloro-3-methylphenol	1200	U	3,3'-Dichlorobenzidine	1200	U
2-Methylnaphthalene	1200	U	Benz[a]anthracene	**697**	J
Hexachlorocyclopentadiene	1200	U	Chrysene	**1060**	J
2,4,6-Trichlorophenol	1200	U	bis(2-Ethylhexyl)phthalate	1200	U
2,4,5-Trichlorophenol	1200	U	Di-n-octylphthalate	1200	U
2-Chloronaphthalene	1200	U	Benzo[b]fluoranthene	**1100**	J
2-Nitroaniline	1200	U	Benzo[k]fluoranthene	**889**	J
Acenaphthylene	1200	U	Benzo[a]pyrene	**673**	J
Dimethylphthalate	1200	U	Indeno[1,2,3-cd]pyrene	1200	U
2,6-Dinitrotoluene	1200	U	Dibenz[a,h]anthracene	1200	U
Acenaphthene	1200	U	Benzo[g,h,i]perylene	**625**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	62	30-130
Phenol-d5	67	30-130
Nitrobenzene-d5	82	30-130
2-Fluorobiphenyl	84	30-130
2,4,6-Tribromophenol	49	30-130
Terphenyl-d14	84	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-01.D
Acq On : 9 Jun 2008 10:10 pm
Operator : SEO
Sample : 0804116-01
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 10:53:59 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

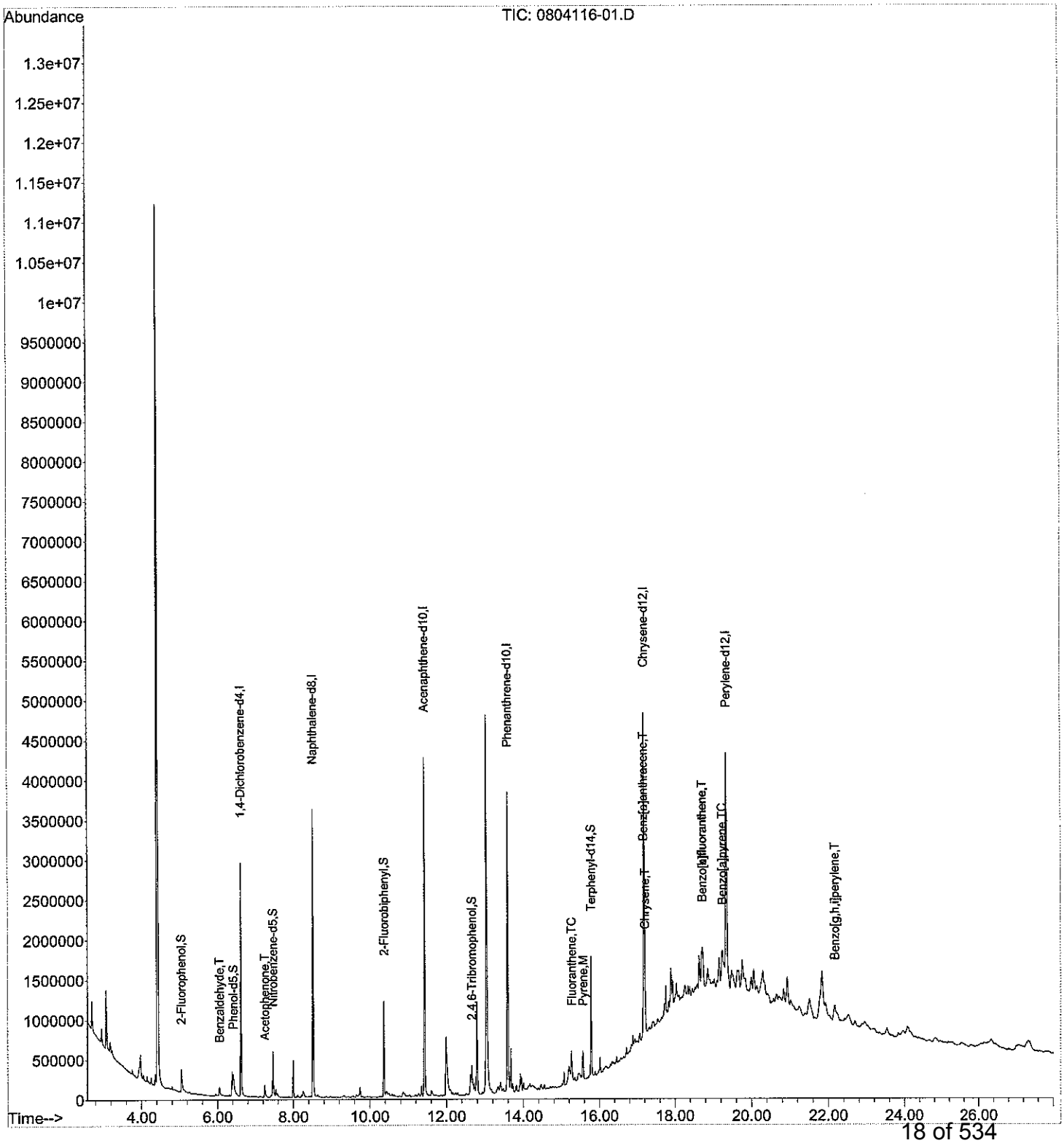
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	643647	5.00 ug/mL	0.00
21) Naphthalene-d8	8.51	136	2605725	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1449724	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2364782	5.00 ug/mL	0.00
72) Chrysene-d12	17.19	240	2195544	5.00 ug/mL	0.00
81) Perylene-d12	19.35	264	2287371	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.05	112	199358	1.23 ug/mL	0.04
Spiked Amount 20.000	Range 21 - 100		Recovery	= 6.15%#	
8) Phenol-d5	6.41	99	268714	1.33 ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	= 6.65%#	
22) Nitrobenzene-d5	7.46	82	262708	1.65 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.25%#	
41) 2-Fluorobiphenyl	10.37	172	649824	1.68 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 8.40%#	
62) 2,4,6-Tribromophenol	12.65	330	47388	0.98 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 4.90%#	
75) Terphenyl-d14	15.78	244	677124	1.68 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 8.40%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.05	77	35462	0.32 ug/ml	97
17) Acetophenone	7.24	105	73532	0.30 ug/ml	99
71) Fluoranthene	15.27	202	217078	0.35 ug/mL	97
74) Pyrene	15.57	202	212654	0.34 ug/mL	96
78) Benz[a]anthracene	17.16	228	174408m	0.29 ug/mL	
79) Chrysene	17.22	228	244554	0.44 ug/mL	98
83) Benzo[b]fluoranthene	18.71	252	296858m	0.46 ug/mL	
84) Benzo[k]fluoranthene	18.72	252	221371m	0.37 ug/mL	
85) Benzo[a]pyrene	19.25	252	165975	0.28 ug/mL	97
88) Benzo[g,h,i]perylene	22.16	276	156023	0.26 ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-01.D
Acq On : 9 Jun 2008 10:10 pm
Operator : SEO
Sample : 0804116-01
Misc : 1X
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 10 10:53:59 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 11:17:14 2008

Form I
Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01 D**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/09/08	81.3	5.45	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1130	U	3-Nitroaniline	1130	U
Phenol	1130	U	2,4-Dinitrophenol	1130	U
2-Chlorophenol	1130	U	Dibenzofuran	1130	U
1,3-Dichlorobenzene	1130	U	2,4-Dinitrotoluene	1130	U
1,4-Dichlorobenzene	1130	U	4-Nitrophenol	1130	U
1,2-Dichlorobenzene	1130	U	Fluorene	1130	U
bis(2-Chloroisopropyl)ether	1130	U	4-Chlorophenyl-phenylether	1130	U
2-Methylphenol	1130	U	Diethylphthalate	1130	U
Hexachloroethane	1130	U	4-Nitroaniline	1130	U
n-Nitroso-di-n-propylamine	1130	U	4,6-Dinitro-2-methylphenol	1130	U
4-Methylphenol	1130	U	n-Nitrosodiphenylamine	1130	U
Nitrobenzene	1130	U	4-Bromophenyl-phenylether	1130	U
Isophorone	1130	U	Hexachlorobenzene	1130	U
2-Nitrophenol	1130	U	Pentachlorophenol	1130	U
2,4-Dimethylphenol	1130	U	Phenanthrene	1130	U
bis(2-Chloroethoxy)methane	1130	U	Anthracene	1130	U
2,4-Dichlorophenol	1130	U	Carbazole	1130	U
1,2,4-Trichlorobenzene	1130	U	Di-n-butylphthalate	1130	U
Naphthalene	1130	U	Fluoranthene	1130	U
4-Chloroaniline	1130	U	Pyrene	1130	U
Hexachlorobutadiene	1130	U	Butylbenzylphthalate	1130	U
4-Chloro-3-methylphenol	1130	U	3,3'-Dichlorobenzidine	1130	U
2-Methylnaphthalene	1130	U	Benz[a]anthracene	1130	U
Hexachlorocyclopentadiene	1130	U	Chrysene	1130	U
2,4,6-Trichlorophenol	1130	U	bis(2-Ethylhexyl)phthalate	767	J
2,4,5-Trichlorophenol	1130	U	Di-n-octylphthalate	1130	U
2-Chloronaphthalene	1130	U	Benzo[b]fluoranthene	1130	U
2-Nitroaniline	1130	U	Benzo[k]fluoranthene	1130	U
Acenaphthylene	1130	U	Benzo[a]pyrene	1130	U
Dimethylphthalate	1130	U	Indeno[1,2,3-cd]pyrene	1130	U
2,6-Dinitrotoluene	1130	U	Dibenz[a,h]anthracene	1130	U
Acenaphthene	1130	U	Benzo[g,h,i]perylene	1130	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	61	30-130
Phenol-d5	69	30-130
Nitrobenzene-d5	86	30-130
2-Fluorobiphenyl	89	30-130
2,4,6-Tribromophenol	47	30-130
Terphenyl-d14	94	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-01D.D
Acq On : 9 Jun 2008 10:47 pm
Operator : SEO
Sample : 0804116-01D
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 10:56:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

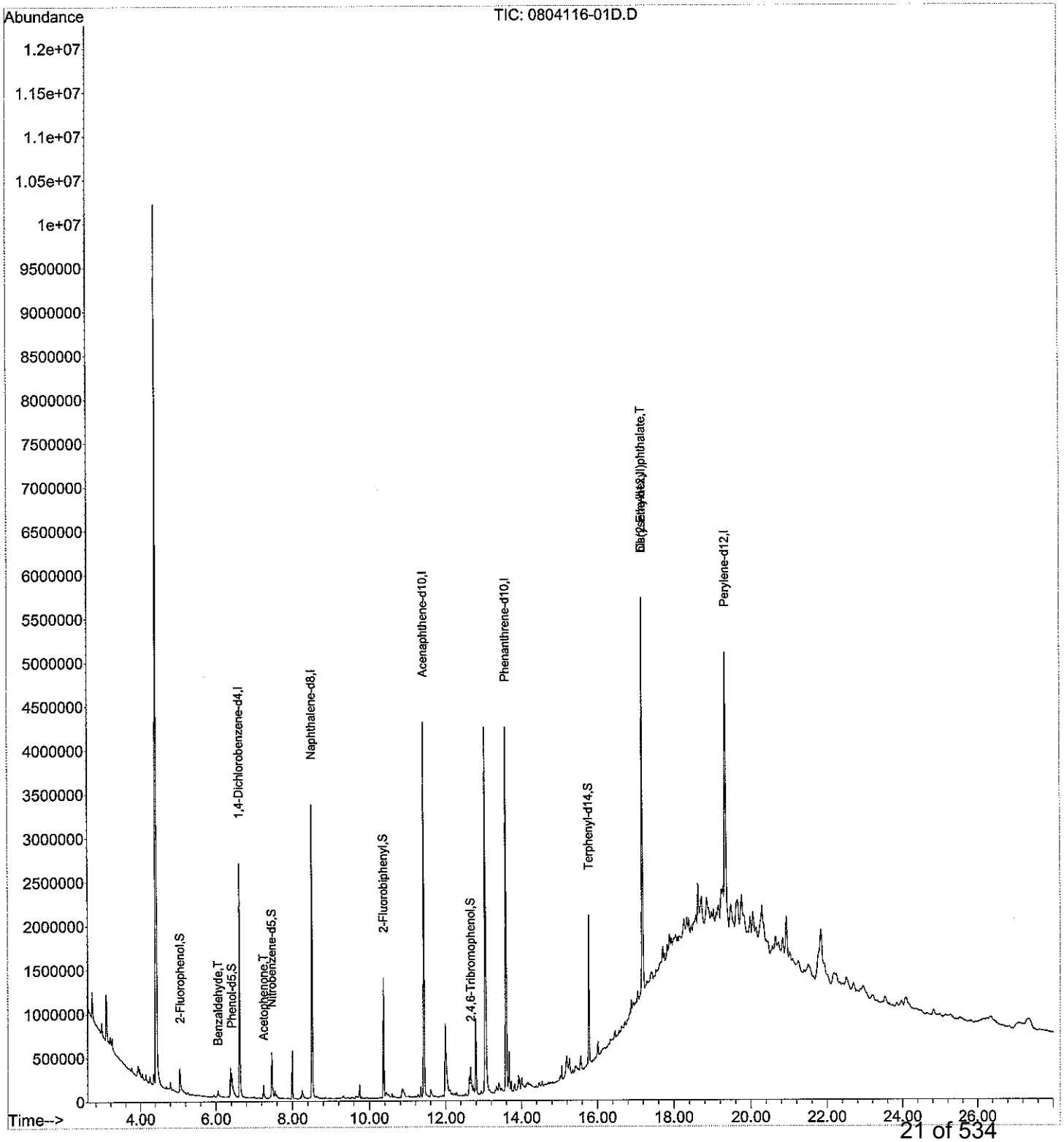
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	624143	5.00	ug/mL	0.00
21) Naphthalene-d8	8.51	136	2543580	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1431272	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2365824	5.00	ug/mL	0.00
72) Chrysene-d12	17.19	240	2235589	5.00	ug/mL	0.00
81) Perylene-d12	19.35	264	2391975	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.05	112	191896	1.22	ug/mL	0.04
Spiked Amount 20.000	Range 21 - 100		Recovery	=	6.10%#	
8) Phenol-d5	6.41	99	272061	1.39	ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	=	6.95%#	
22) Nitrobenzene-d5	7.46	82	266324	1.71	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	8.55%#	
41) 2-Fluorobiphenyl	10.37	172	683268	1.79	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.95%#	
62) 2,4,6-Tribromophenol	12.65	330	45551	0.94	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	4.70%#	
75) Terphenyl-d14	15.78	244	773036	1.88	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	9.40%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.05	77	27623	0.26	ug/ml	89
17) Acetophenone	7.24	105	82301	0.35	ug/ml	94
80) bis(2-Ethylhexyl)phthalate	17.20	149	166903m	0.34	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-01D.D
Acq On : 9 Jun 2008 10:47 pm
Operator : SEO
Sample : 0804116-01D
Misc : 1X
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 10 10:56:32 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/26/08	03/28/08	05/01/08	81.3	SEO

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
bis(2-Chloroethyl)ether	1200 U	1130 U	N/A	30
Phenol	1200 U	1130 U	N/A	30
2-Chlorophenol	1200 U	1130 U	N/A	30
1,3-Dichlorobenzene	1200 U	1130 U	N/A	30
1,4-Dichlorobenzene	1200 U	1130 U	N/A	30
1,2-Dichlorobenzene	1200 U	1130 U	N/A	30
bis(2-Chloroisopropyl)ether	1200 U	1130 U	N/A	30
2-Methylphenol	1200 U	1130 U	N/A	30
Hexachloroethane	1200 U	1130 U	N/A	30
n-Nitroso-di-n-propylamine	1200 U	1130 U	N/A	30
4-Methylphenol	1200 U	1130 U	N/A	30
Nitrobenzene	1200 U	1130 U	N/A	30
Isophorone	1200 U	1130 U	N/A	30
2-Nitrophenol	1200 U	1130 U	N/A	30
2,4-Dimethylphenol	1200 U	1130 U	N/A	30
bis(2-Chloroethoxy)methane	1200 U	1130 U	N/A	30
2,4-Dichlorophenol	1200 U	1130 U	N/A	30
1,2,4-Trichlorobenzene	1200 U	1130 U	N/A	30
Naphthalene	1200 U	1130 U	N/A	30
4-Chloroaniline	1200 U	1130 U	N/A	30
Hexachlorobutadiene	1200 U	1130 U	N/A	30
4-Chloro-3-methylphenol	1200 U	1130 U	N/A	30
2-Methylnaphthalene	1200 U	1130 U	N/A	30
Hexachlorocyclopentadiene	1200 U	1130 U	N/A	30
2,4,6-Trichlorophenol	1200 U	1130 U	N/A	30
2,4,5-Trichlorophenol	1200 U	1130 U	N/A	30
2-Chloronaphthalene	1200 U	1130 U	N/A	30
2-Nitroaniline	1200 U	1130 U	N/A	30
Acenaphthylene	1200 U	1130 U	N/A	30
Dimethylphthalate	1200 U	1130 U	N/A	30
2,6-Dinitrotoluene	1200 U	1130 U	N/A	30
Acenaphthene	1200 U	1130 U	N/A	30
3-Nitroaniline	1200 U	1130 U	N/A	30
2,4-Dinitrophenol	1200 U	1130 U	N/A	30
Dibenzofuran	1200 U	1130 U	N/A	30

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Duplicate
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/26/08	03/28/08	05/01/08	81.3	SEO

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
2,4-Dinitrotoluene	1200 U	1130 U	N/A	30
4-Nitrophenol	1200 U	1130 U	N/A	30
Fluorene	1200 U	1130 U	N/A	30
4-Chlorophenyl-phenylether	1200 U	1130 U	N/A	30
Diethylphthalate	1200 U	1130 U	N/A	30
4-Nitroaniline	1200 U	1130 U	N/A	30
4,6-Dinitro-2-methylphenol	1200 U	1130 U	N/A	30
n-Nitrosodiphenylamine	1200 U	1130 U	N/A	30
4-Bromophenyl-phenylether	1200 U	1130 U	N/A	30
Hexachlorobenzene	1200 U	1130 U	N/A	30
Pentachlorophenol	1200 U	1130 U	N/A	30
Phenanthrene	1200 U	1130 U	N/A	30
Anthracene	1200 U	1130 U	N/A	30
Carbazole	1200 U	1130 U	N/A	30
Di-n-butylphthalate	1200 U	1130 U	N/A	30
Fluoranthene	**841** J	1130 U	X	30
Pyrene	**817** J	1130 U	X	30
Butylbenzylphthalate	1200 U	1130 U	N/A	30
3,3'-Dichlorobenzidine	1200 U	1130 U	N/A	30
Benz[a]anthracene	**697** J	1130 U	X	30
Chrysene	**1060** J	1130 U	X	30
bis(2-Ethylhexyl)phthalate	1200 U	**767** J	X	30
Di-n-octylphthalate	1200 U	1130 U	N/A	30
Benzo[b]fluoranthene	**1100** J	1130 U	X	30
Benzo[k]fluoranthene	**889** J	1130 U	X	30
Benzo[a]pyrene	**673** J	1130 U	X	30
Indeno[1,2,3-cd]pyrene	1200 U	1130 U	N/A	30
Dibenz[a,h]anthracene	1200 U	1130 U	N/A	30
Benzo[g,h,i]perylene	**625** J	1130 U	X	30

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	62	61	30-130
Phenol-d5	67	69	30-130
Nitrobenzene-d5	82	86	30-130
2-Fluorobiphenyl	84	89	30-130
2,4,6-Tribromophenol	49	47	30-130
Terphenyl-d14	84	94	30-130

N/A - Not Applicable
X - It is not possible to calculate RPD, one result is below the detection limit, the other is above reporting limit.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B3/4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-02**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/09/08	32.6	5.56	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2760	U	3-Nitroaniline	2760	U
Phenol	2760	U	2,4-Dinitrophenol	2760	U
2-Chlorophenol	2760	U	Dibenzofuran	2760	U
1,3-Dichlorobenzene	2760	U	2,4-Dinitrotoluene	2760	U
1,4-Dichlorobenzene	2760	U	4-Nitrophenol	2760	U
1,2-Dichlorobenzene	2760	U	Fluorene	2760	U
bis(2-Chloroisopropyl)ether	2760	U	4-Chlorophenyl-phenylether	2760	U
2-Methylphenol	2760	U	Diethylphthalate	2760	U
Hexachloroethane	2760	U	4-Nitroaniline	2760	U
n-Nitroso-di-n-propylamine	2760	U	4,6-Dinitro-2-methylphenol	2760	U
4-Methylphenol	**6240**		n-Nitrosodiphenylamine	2760	U
Nitrobenzene	2760	U	4-Bromophenyl-phenylether	2760	U
Isophorone	2760	U	Hexachlorobenzene	2760	U
2-Nitrophenol	2760	U	Pentachlorophenol	2760	U
2,4-Dimethylphenol	2760	U	Phenanthrene	**1820**	J
bis(2-Chloroethoxy)methane	2760	U	Anthracene	2760	U
2,4-Dichlorophenol	2760	U	Carbazole	2760	U
1,2,4-Trichlorobenzene	2760	U	Di-n-butylphthalate	2760	U
Naphthalene	2760	U	Fluoranthene	**4250**	
4-Chloroaniline	2760	U	Pyrene	**3860**	
Hexachlorobutadiene	2760	U	Butylbenzylphthalate	2760	U
4-Chloro-3-methylphenol	2760	U	3,3'-Dichlorobenzidine	2760	U
2-Methylnaphthalene	2760	U	Benz[a]anthracene	**2040**	J
Hexachlorocyclopentadiene	2760	U	Chrysene	**3530**	
2,4,6-Trichlorophenol	2760	U	bis(2-Ethylhexyl)phthalate	**5020**	
2,4,5-Trichlorophenol	2760	U	Di-n-octylphthalate	2760	U
2-Chloronaphthalene	2760	U	Benzo[b]fluoranthene	**3260**	
2-Nitroaniline	2760	U	Benzo[k]fluoranthene	**2540**	J
Acenaphthylene	2760	U	Benzo[a]pyrene	**2540**	J
Dimethylphthalate	2760	U	Indeno[1,2,3-cd]pyrene	**1990**	J
2,6-Dinitrotoluene	2760	U	Dibenz[a,h]anthracene	2760	U
Acenaphthene	2760	U	Benzo[g,h,i]perylene	**2320**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	75	30-130
Phenol-d5	75	30-130
Nitrobenzene-d5	79	30-130
2-Fluorobiphenyl	83	30-130
2,4,6-Tribromophenol	70	30-130
Terphenyl-d14	80	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

06/10/08 12:28
320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-02.D
Acq On : 9 Jun 2008 11:24 pm
Operator : SEO
Sample : 0804116-02
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 10 11:02:02 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

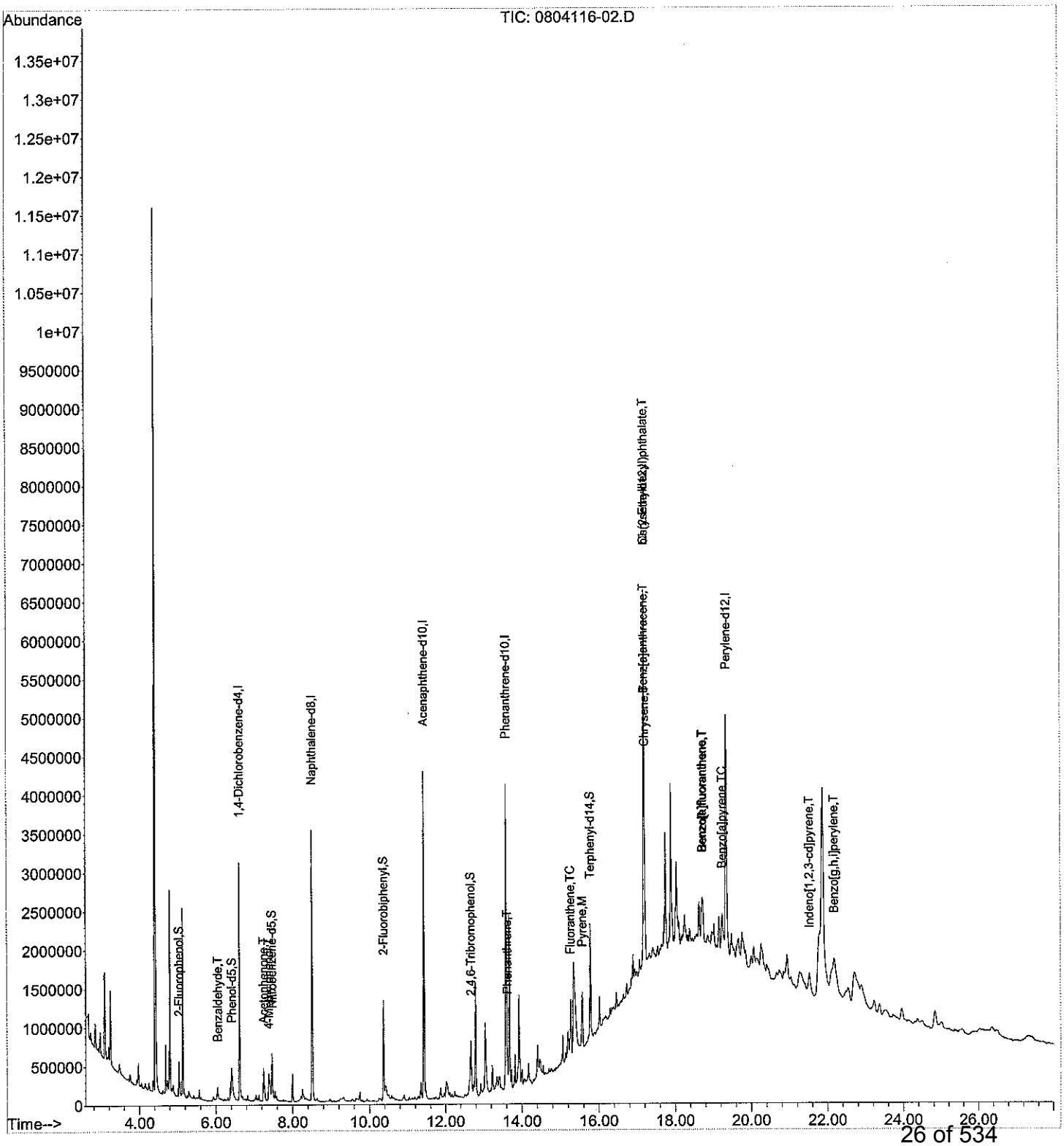
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	667846	5.00 ug/mL	0.00
21) Naphthalene-d8	8.51	136	2688535	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1526430	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2471120	5.00 ug/mL	0.00
72) Chrysene-d12	17.19	240	2344476	5.00 ug/mL	0.00
81) Perylene-d12	19.36	264	2434091	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.04	112	249599	1.49 ug/mL	0.03
Spiked Amount 20.000	Range 21 - 100		Recovery	= 7.45%#	
8) Phenol-d5	6.41	99	316794	1.51 ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	= 7.55%#	
22) Nitrobenzene-d5	7.46	82	259623	1.58 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 7.90%#	
41) 2-Fluorobiphenyl	10.37	172	681758	1.67 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 8.35%#	
62) 2,4,6-Tribromophenol	12.65	330	71107	1.41 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 7.05%#	
75) Terphenyl-d14	15.78	244	687023	1.59 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 7.95%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.05	77	53256	0.47 ug/ml#	76
17) Acetophenone	7.24	105	173404	0.68 ug/ml	97
20) 4-Methylphenol	7.37	108	217822	1.13 ug/mL	95
67) Phenanthrene	13.62	178	212466	0.33 ug/mL	99
71) Fluoranthene	15.27	202	492451m	0.77 ug/mL	
74) Pyrene	15.57	202	463757	0.70 ug/mL	97
78) Benz[a]anthracene	17.17	228	236536	0.37 ug/mL#	88
79) Chrysene	17.22	228	378373	0.64 ug/mL#	95
80) bis(2-Ethylhexyl)phthalate	17.20	149	465657	0.91 ug/mL#	91
83) Benzo[b]fluoranthene	18.72	252	405362m	0.59 ug/mL	
84) Benzo[k]fluoranthene	18.73	252	292996m	0.46 ug/mL	
85) Benzo[a]pyrene	19.26	252	289035	0.46 ug/mL	98
86) Indeno[1,2,3-cd]pyrene	21.52	276	270294	0.36 ug/mL#	88
88) Benzo[g,h,i]perylene	22.17	276	262526	0.42 ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-02.D
Acq On : 9 Jun 2008 11:24 pm
Operator : SEO
Sample : 0804116-02
Misc : 1X
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 10 11:02:02 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B2/3**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-03**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	30.8	5.51	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2940	U	3-Nitroaniline	2940	U
Phenol	2940	U	2,4-Dinitrophenol	2940	U
2-Chlorophenol	2940	U	Dibenzofuran	2940	U
1,3-Dichlorobenzene	2940	U	2,4-Dinitrotoluene	2940	U
1,4-Dichlorobenzene	2940	U	4-Nitrophenol	2940	U
1,2-Dichlorobenzene	2940	U	Fluorene	2940	U
bis(2-Chloroisopropyl)ether	2940	U	4-Chlorophenyl-phenylether	2940	U
2-Methylphenol	2940	U	Diethylphthalate	2940	U
Hexachloroethane	2940	U	4-Nitroaniline	2940	U
n-Nitroso-di-n-propylamine	2940	U	4,6-Dinitro-2-methylphenol	2940	U
4-Methylphenol	**27700**		n-Nitrosodiphenylamine	2940	U
Nitrobenzene	2940	U	4-Bromophenyl-phenylether	2940	U
Isophorone	2940	U	Hexachlorobenzene	2940	U
2-Nitrophenol	2940	U	Pentachlorophenol	2940	U
2,4-Dimethylphenol	2940	U	Phenanthrene	**1940**	J
bis(2-Chloroethoxy)methane	2940	U	Anthracene	2940	U
2,4-Dichlorophenol	2940	U	Carbazole	2940	U
1,2,4-Trichlorobenzene	2940	U	Di-n-butylphthalate	2940	U
Naphthalene	2940	U	Fluoranthene	**3710**	
4-Chloroaniline	2940	U	Pyrene	**3890**	
Hexachlorobutadiene	2940	U	Butylbenzylphthalate	**1770**	J
4-Chloro-3-methylphenol	2940	U	3,3'-Dichlorobenzidine	2940	U
2-Methylnaphthalene	2940	U	Benz[a]anthracene	**2470**	J
Hexachlorocyclopentadiene	2940	U	Chrysene	**5650**	
2,4,6-Trichlorophenol	2940	U	bis(2-Ethylhexyl)phthalate	**17700**	
2,4,5-Trichlorophenol	2940	U	Di-n-octylphthalate	2940	U
2-Chloronaphthalene	2940	U	Benzo[b]fluoranthene	**5590**	
2-Nitroaniline	2940	U	Benzo[k]fluoranthene	**2240**	J
Acenaphthylene	2940	U	Benzo[a]pyrene	**2940**	
Dimethylphthalate	2940	U	Indeno[1,2,3-cd]pyrene	**1880**	J
2,6-Dinitrotoluene	2940	U	Dibenz[a,h]anthracene	2940	U
Acenaphthene	2940	U	Benzo[g,h,i]perylene	**2060**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	68	30-130
Phenol-d5	73	30-130
Nitrobenzene-d5	62	30-130
2-Fluorobiphenyl	80	30-130
2,4,6-Tribromophenol	69	30-130
Terphenyl-d14	77	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

06/10/08 12:28
320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-03.D
Acq On : 10 Jun 2008 12:00 am
Operator : SEO
Sample : 0804116-03
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 11:06:17 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

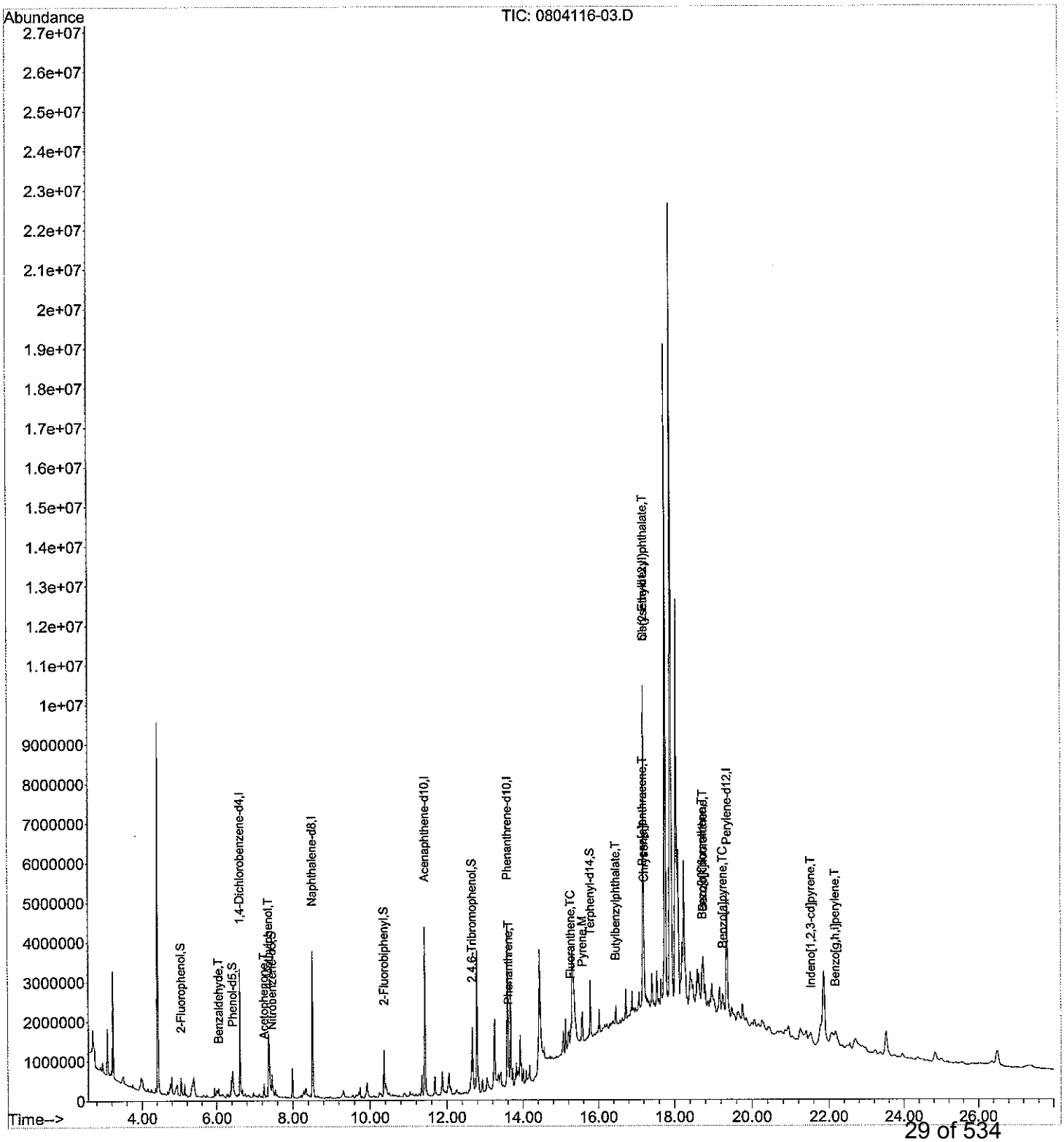
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	685939	5.00	ug/mL	0.00
21) Naphthalene-d8	8.51	136	2800725	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1564283	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2528229	5.00	ug/mL	0.00
72) Chrysene-d12	17.19	240	2394209	5.00	ug/mL	0.00
81) Perylene-d12	19.37	264	2519070	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.04	112	232537	1.35	ug/mL	0.03
Spiked Amount 20.000	Range 21 - 100		Recovery	=	6.75%#	
8) Phenol-d5	6.41	99	313045	1.46	ug/mL	0.06
Spiked Amount 20.000	Range 10 - 94		Recovery	=	7.30%#	
22) Nitrobenzene-d5	7.46	82	214943	1.25	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	6.25%#	
41) 2-Fluorobiphenyl	10.37	172	664799	1.59	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	7.95%#	
62) 2,4,6-Tribromophenol	12.65	330	70796	1.37	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	6.85%#	
75) Terphenyl-d14	15.79	244	679706	1.55	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	7.75%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.04	77	50921	0.43	ug/ml#	82
17) Acetophenone	7.24	105	160989	0.62	ug/ml	93
20) 4-Methylphenol	7.37	108	927271	4.70	ug/mL	93
67) Phenanthrene	13.62	178	217811	0.33	ug/mL	98
71) Fluoranthene	15.27	202	412662	0.63	ug/mL	97
74) Pyrene	15.57	202	449269	0.66	ug/mL	97
76) Butylbenzylphthalate	16.46	149	108848	0.30	ug/mL#	85
78) Benz[a]anthracene	17.17	228	269028m	0.42	ug/mL	
79) Chrysene	17.23	228	584419	0.96	ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.20	149	1568539	3.00	ug/mL	96
83) Benzo[b]fluoranthene	18.73	252	673320m	0.95	ug/mL	
84) Benzo[k]fluoranthene	18.74	252	251139m	0.38	ug/mL	
85) Benzo[a]pyrene	19.26	252	325846	0.50	ug/mL	97
86) Indeno[1,2,3-cd]pyrene	21.52	276	246714	0.32	ug/mL#	86
88) Benzo[g,h,i]perylene	22.18	276	227187	0.35	ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-03.D
Acq On : 10 Jun 2008 12:00 am
Operator : SEO
Sample : 0804116-03
Misc : 1X
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 10 11:06:17 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1/2**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-04**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	66.4	5.39	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1400	U	3-Nitroaniline	1400	U
Phenol	1400	U	2,4-Dinitrophenol	1400	U
2-Chlorophenol	1400	U	Dibenzofuran	1400	U
1,3-Dichlorobenzene	1400	U	2,4-Dinitrotoluene	1400	U
1,4-Dichlorobenzene	1400	U	4-Nitrophenol	1400	U
1,2-Dichlorobenzene	1400	U	Fluorene	1400	U
bis(2-Chloroisopropyl)ether	1400	U	4-Chlorophenyl-phenylether	1400	U
2-Methylphenol	1400	U	Diethylphthalate	1400	U
Hexachloroethane	1400	U	4-Nitroaniline	1400	U
n-Nitroso-di-n-propylamine	1400	U	4,6-Dinitro-2-methylphenol	1400	U
4-Methylphenol	1400	U	n-Nitrosodiphenylamine	1400	U
Nitrobenzene	1400	U	4-Bromophenyl-phenylether	1400	U
Isophorone	1400	U	Hexachlorobenzene	1400	U
2-Nitrophenol	1400	U	Pentachlorophenol	1400	U
2,4-Dimethylphenol	1400	U	Phenanthrene	1400	U
bis(2-Chloroethoxy)methane	1400	U	Anthracene	1400	U
2,4-Dichlorophenol	1400	U	Carbazole	1400	U
1,2,4-Trichlorobenzene	1400	U	Di-n-butylphthalate	1400	U
Naphthalene	1400	U	Fluoranthene	**726**	J
4-Chloroaniline	1400	U	Pyrene	1400	U
Hexachlorobutadiene	1400	U	Butylbenzylphthalate	1400	U
4-Chloro-3-methylphenol	1400	U	3,3'-Dichlorobenzidine	1400	U
2-Methylnaphthalene	1400	U	Benz[a]anthracene	1400	U
Hexachlorocyclopentadiene	1400	U	Chrysene	**838**	J
2,4,6-Trichlorophenol	1400	U	bis(2-Ethylhexyl)phthalate	**11600**	
2,4,5-Trichlorophenol	1400	U	Di-n-octylphthalate	1400	U
2-Chloronaphthalene	1400	U	Benzo[b]fluoranthene	**810**	J
2-Nitroaniline	1400	U	Benzo[k]fluoranthene	1400	U
Acenaphthylene	1400	U	Benzo[a]pyrene	1400	U
Dimethylphthalate	1400	U	Indeno[1,2,3-cd]pyrene	1400	U
2,6-Dinitrotoluene	1400	U	Dibenz[a,h]anthracene	1400	U
Acenaphthene	1400	U	Benzo[g,h,i]perylene	1400	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	52	30-130
Phenol-d5	63	30-130
Nitrobenzene-d5	85	30-130
2-Fluorobiphenyl	85	30-130
2,4,6-Tribromophenol	32	30-130
Terphenyl-d14	88	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-04.D
Acq On : 10 Jun 2008 12:37 am
Operator : SEO
Sample : 0804116-04
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 11:09:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

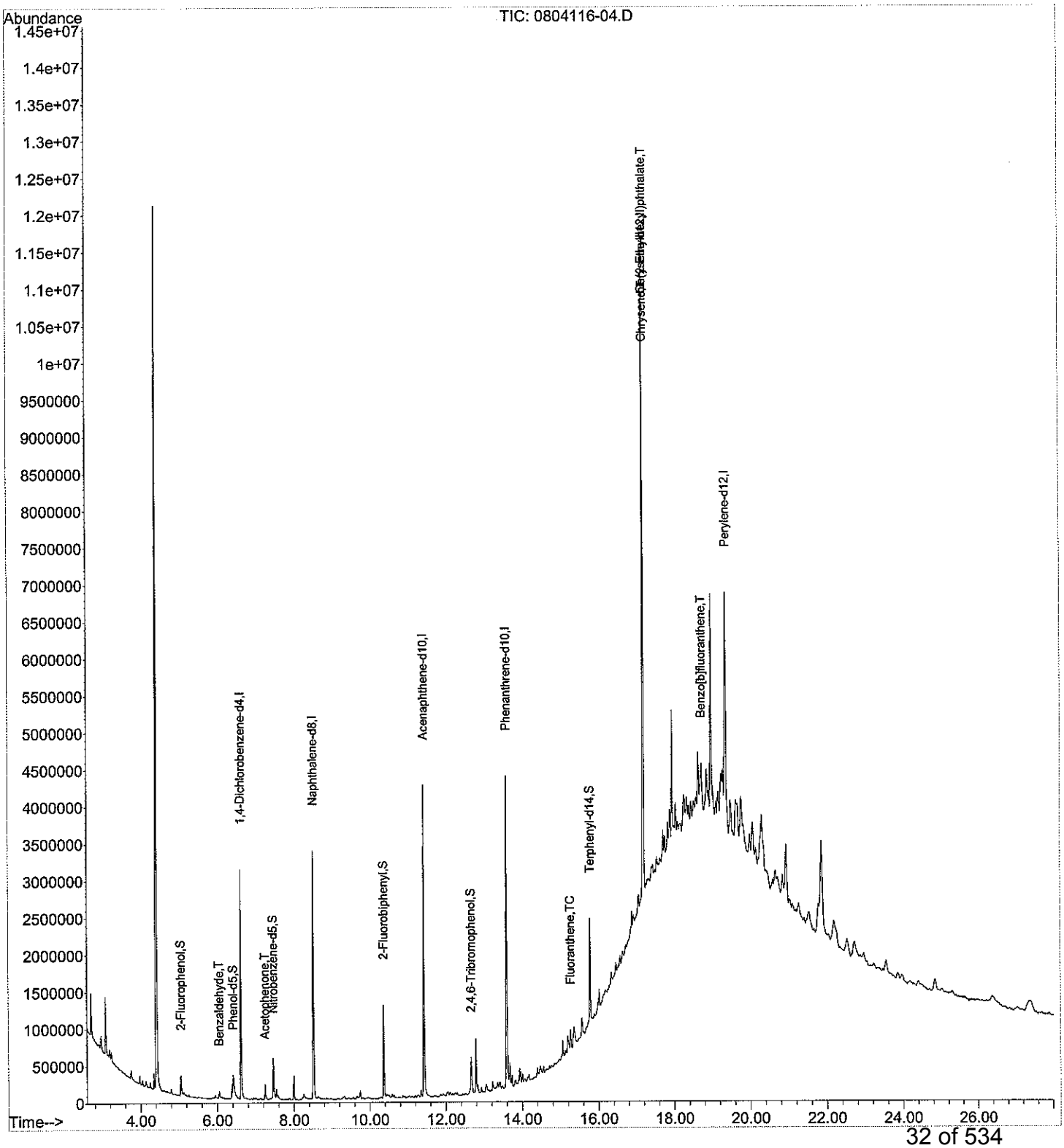
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	677093	5.00	ug/mL	0.00
21) Naphthalene-d8	8.51	136	2671420	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1528331	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2452985	5.00	ug/mL	0.00
72) Chrysene-d12	17.19	240	2329954	5.00	ug/mL	0.00
81) Perylene-d12	19.37	264	2526839	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.05	112	178736	1.05	ug/mL	0.04
Spiked Amount 20.000	Range 21 - 100		Recovery	=	5.25%#	
8) Phenol-d5	6.41	99	269316	1.27	ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	=	6.35%#	
22) Nitrobenzene-d5	7.46	82	275472	1.69	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	8.45%#	
41) 2-Fluorobiphenyl	10.37	172	692029	1.70	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.50%#	
62) 2,4,6-Tribromophenol	12.65	330	32286	0.65	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	3.25%#	
75) Terphenyl-d14	15.79	244	751831	1.76	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.80%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.05	77	34022	0.29	ug/ml	97
17) Acetophenone	7.24	105	108311	0.42	ug/ml	93
71) Fluoranthene	15.27	202	165660	0.26	ug/mL	98
79) Chrysene	17.22	228	177144m	0.30	ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.21	149	2119237	4.17	ug/mL	98
83) Benzo[b]fluoranthene	18.72	252	205295m	0.29	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-04.D
Acq On : 10 Jun 2008 12:37 am
Operator : SEO
Sample : 0804116-04
Misc : 1X
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 10 11:09:10 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 11:17:56 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-05**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	25.6	5.32	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	3670	U
Phenol	3670	U
2-Chlorophenol	3670	U
1,3-Dichlorobenzene	3670	U
1,4-Dichlorobenzene	3670	U
1,2-Dichlorobenzene	3670	U
bis(2-Chloroisopropyl)ether	3670	U
2-Methylphenol	3670	U
Hexachloroethane	3670	U
n-Nitroso-di-n-propylamine	3670	U
4-Methylphenol	**99000**	
Nitrobenzene	3670	U
Isophorone	3670	U
2-Nitrophenol	3670	U
2,4-Dimethylphenol	3670	U
bis(2-Chloroethoxy)methane	3670	U
2,4-Dichlorophenol	3670	U
1,2,4-Trichlorobenzene	3670	U
Naphthalene	3670	U
4-Chloroaniline	3670	U
Hexachlorobutadiene	3670	U
4-Chloro-3-methylphenol	3670	U
2-Methylnaphthalene	3670	U
Hexachlorocyclopentadiene	3670	U
2,4,6-Trichlorophenol	3670	U
2,4,5-Trichlorophenol	3670	U
2-Chloronaphthalene	3670	U
2-Nitroaniline	3670	U
Acenaphthylene	3670	U
Dimethylphthalate	3670	U
2,6-Dinitrotoluene	3670	U
Acenaphthene	3670	U

Parameter	Result	
3-Nitroaniline	3670	U
2,4-Dinitrophenol	3670	U
Dibenzofuran	3670	U
2,4-Dinitrotoluene	3670	U
4-Nitrophenol	3670	U
Fluorene	3670	U
4-Chlorophenyl-phenylether	3670	U
Diethylphthalate	3670	U
4-Nitroaniline	3670	U
4,6-Dinitro-2-methylphenol	3670	U
n-Nitrosodiphenylamine	3670	U
4-Bromophenyl-phenylether	3670	U
Hexachlorobenzene	3670	U
Pentachlorophenol	3670	U
Phenanthrene	3670	U
Anthracene	3670	U
Carbazole	3670	U
Di-n-butylphthalate	3670	U
Fluoranthene	**2790**	J
Pyrene	**2200**	J
Butylbenzylphthalate	3670	U
3,3'-Dichlorobenzidine	3670	U
Benz[a]anthracene	3670	U
Chrysene	**2350**	J
bis(2-Ethylhexyl)phthalate	**10100**	
Di-n-octylphthalate	3670	U
Benzo[b]fluoranthene	**2200**	J
Benzo[k]fluoranthene	3670	U
Benzo[a]pyrene	3670	U
Indeno[1,2,3-cd]pyrene	3670	U
Dibenz[a,h]anthracene	3670	U
Benzo[g,h,i]perylene	3670	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	75	30-130
Phenol-d5	74	30-130
Nitrobenzene-d5	62	30-130
2-Fluorobiphenyl	81	30-130
2,4,6-Tribromophenol	78	30-130
Terphenyl-d14	80	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-05.D
Acq On : 10 Jun 2008 1:13 am
Operator : SEO
Sample : 0804116-05
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 11:44:53 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

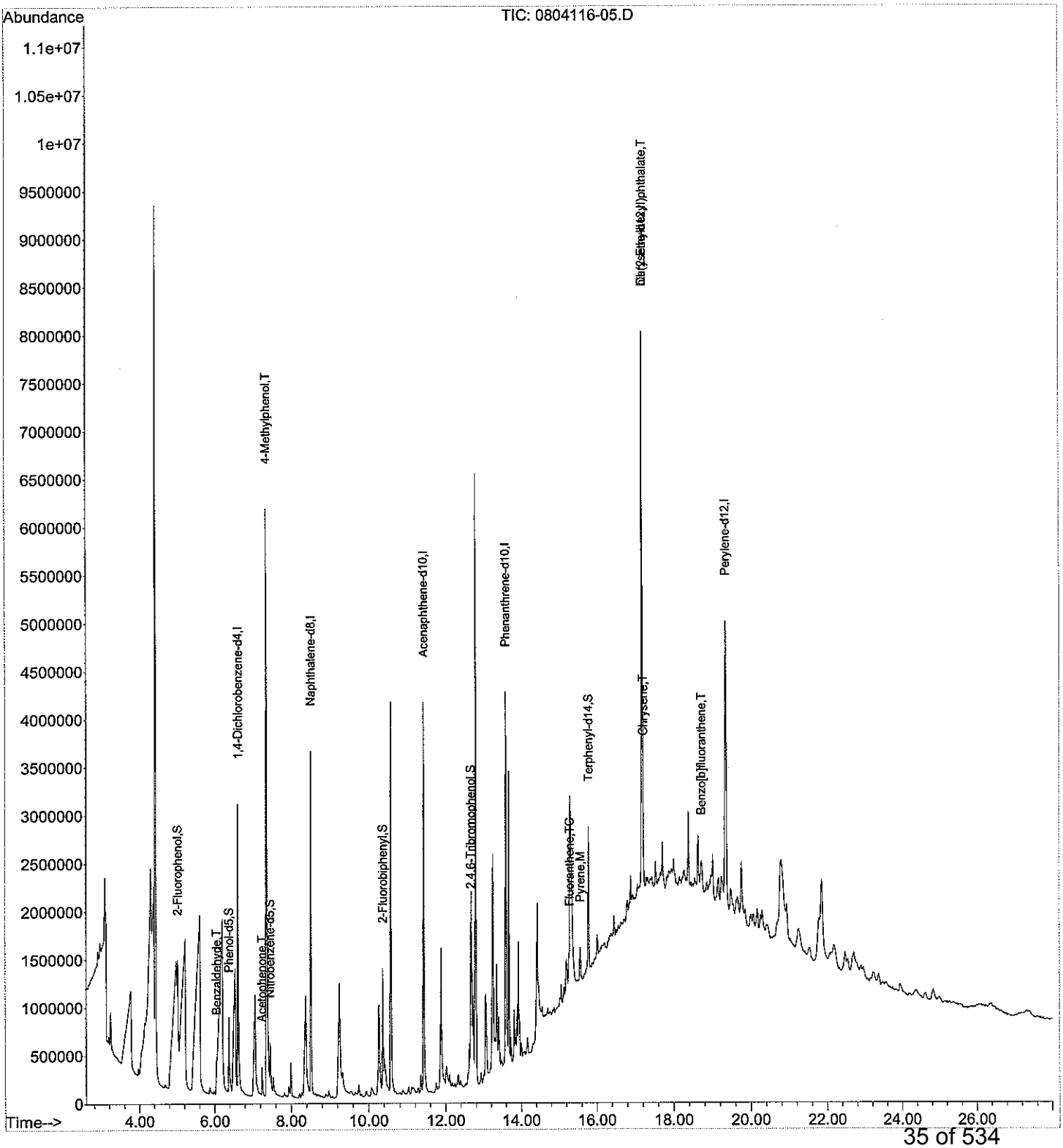
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	670269	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	2737165	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1533685	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2480644	5.00	ug/mL	0.00
72) Chrysene-d12	17.20	240	2345883	5.00	ug/mL	0.00
81) Perylene-d12	19.36	264	2439806	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.03	112	251818	1.50	ug/mL	0.02
Spiked Amount 20.000	Range 21 - 100		Recovery	=	7.50%#	
8) Phenol-d5	6.38	99	310846	1.48	ug/mL	0.04
Spiked Amount 20.000	Range 10 - 94		Recovery	=	7.40%#	
22) Nitrobenzene-d5	7.46	82	206757	1.23	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	6.15%#	
41) 2-Fluorobiphenyl	10.37	172	662602	1.62	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.10%#	
62) 2,4,6-Tribromophenol	12.65	330	78717	1.56	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	7.80%#	
75) Terphenyl-d14	15.79	244	688294	1.60	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.00%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.05	77	46587	0.41	ug/ml	98
17) Acetophenone	7.24	105	124143	0.49	ug/ml#	83
20) 4-Methylphenol	7.37	108	2601411	13.50	ug/mL	99
71) Fluoranthene	15.28	202	242266	0.38	ug/mL	96
74) Pyrene	15.58	202	199073	0.30	ug/mL#	94
79) Chrysene	17.23	228	188595m	0.32	ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.21	149	705105	1.38	ug/mL	94
83) Benzo[b]fluoranthene	18.72	252	207420m	0.30	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-05.D
Acq On : 10 Jun 2008 1:13 am
Operator : SEO
Sample : 0804116-05
Misc : 1X
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 10 11:44:53 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 12:07:45 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-06**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	33.9	5.24	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	2820	U
Phenol	**2590**	JB
2-Chlorophenol	2820	U
1,3-Dichlorobenzene	2820	U
1,4-Dichlorobenzene	2820	U
1,2-Dichlorobenzene	2820	U
bis(2-Chloroisopropyl)ether	2820	U
2-Methylphenol	2820	U
Hexachloroethane	2820	U
n-Nitroso-di-n-propylamine	2820	U
4-Methylphenol	**56400**	
Nitrobenzene	2820	U
Isophorone	2820	U
2-Nitrophenol	2820	U
2,4-Dimethylphenol	2820	U
bis(2-Chloroethoxy)methane	2820	U
2,4-Dichlorophenol	2820	U
1,2,4-Trichlorobenzene	2820	U
Naphthalene	2820	U
4-Chloroaniline	2820	U
Hexachlorobutadiene	2820	U
4-Chloro-3-methylphenol	2820	U
2-Methylnaphthalene	2820	U
Hexachlorocyclopentadiene	2820	U
2,4,6-Trichlorophenol	2820	U
2,4,5-Trichlorophenol	2820	U
2-Chloronaphthalene	2820	U
2-Nitroaniline	2820	U
Acenaphthylene	2820	U
Dimethylphthalate	2820	U
2,6-Dinitrotoluene	2820	U
Acenaphthene	2820	U

Parameter	Result	
3-Nitroaniline	2820	U
2,4-Dinitrophenol	2820	U
Dibenzofuran	2820	U
2,4-Dinitrotoluene	2820	U
4-Nitrophenol	2820	U
Fluorene	2820	U
4-Chlorophenyl-phenylether	2820	U
Diethylphthalate	2820	U
4-Nitroaniline	2820	U
4,6-Dinitro-2-methylphenol	2820	U
n-Nitrosodiphenylamine	2820	U
4-Bromophenyl-phenylether	2820	U
Hexachlorobenzene	2820	U
Pentachlorophenol	2820	U
Phenanthrene	2820	U
Anthracene	2820	U
Carbazole	2820	U
Di-n-butylphthalate	2820	U
Fluoranthene	**2250**	J
Pyrene	**1860**	J
Butylbenzylphthalate	2820	U
3,3'-Dichlorobenzidine	2820	U
Benz[a]anthracene	2820	U
Chrysene	**1970**	J
bis(2-Ethylhexyl)phthalate	**9980**	
Di-n-octylphthalate	2820	U
Benzo[b]fluoranthene	**1690**	J
Benzo[k]fluoranthene	2820	U
Benzo[a]pyrene	2820	U
Indeno[1,2,3-cd]pyrene	2820	U
Dibenz[a,h]anthracene	2820	U
Benzo[g,h,i]perylene	2820	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	70	30-130
Phenol-d5	69	30-130
Nitrobenzene-d5	62	30-130
2-Fluorobiphenyl	79	30-130
2,4,6-Tribromophenol	73	30-130
Terphenyl-d14	78	30-130

N/A - Not Applicable
B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-06.D
Acq On : 10 Jun 2008 1:50 am
Operator : SEO
Sample : 0804116-06
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 11:48:51 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

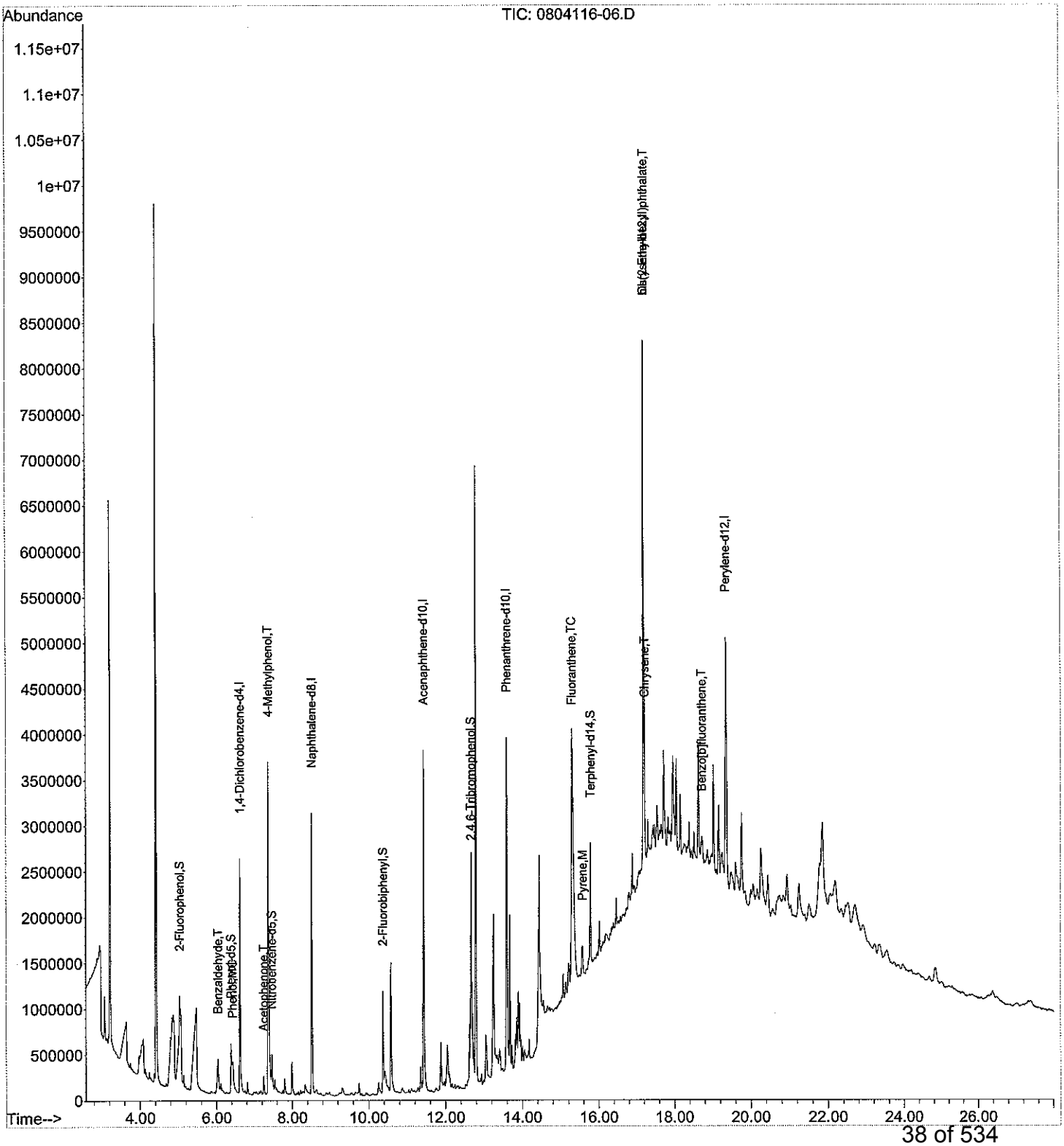
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	598746	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	2379093	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1362672	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2229721	5.00	ug/mL	0.00
72) Chrysene-d12	17.20	240	2105208	5.00	ug/mL	0.00
81) Perylene-d12	19.37	264	2206173	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.03	112	212367	1.41	ug/mL	0.02
Spiked Amount 20.000	Range 21 - 100		Recovery	=	7.05%#	
8) Phenol-d5	6.38	99	260853	1.39	ug/mL	0.04
Spiked Amount 20.000	Range 10 - 94		Recovery	=	6.95%#	
22) Nitrobenzene-d5	7.46	82	181890	1.25	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	6.25%#	
41) 2-Fluorobiphenyl	10.37	172	570787	1.57	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	7.85%#	
62) 2,4,6-Tribromophenol	12.65	330	66428	1.46	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	7.30%#	
75) Terphenyl-d14	15.79	244	603039	1.56	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	7.80%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.05	77	35354	0.35	ug/ml#	83
9) Phenol	6.41	94	103478	0.46	ug/mL#	88
17) Acetophenone	7.24	105	99072	0.43	ug/ml	92
20) 4-Methylphenol	7.37	108	1722290	10.01	ug/mL	100
71) Fluoranthene	15.28	202	234151	0.40	ug/mL#	95
74) Pyrene	15.57	202	196097	0.33	ug/mL#	93
79) Chrysene	17.23	228	184983	0.35	ug/mL#	95
80) bis(2-Ethylhexyl)phthalate	17.21	149	811464	1.77	ug/mL	95
83) Benzo[b]fluoranthene	18.72	252	182814m	0.30	ug/mL	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-06.D
Acq On : 10 Jun 2008 1:50 am
Operator : SEO
Sample : 0804116-06
Misc : 1X
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 10 11:48:51 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5/6**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-07**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	82.2	5.33	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1140	U	3-Nitroaniline	1140	U
Phenol	1140	U	2,4-Dinitrophenol	1140	U
2-Chlorophenol	1140	U	Dibenzofuran	1140	U
1,3-Dichlorobenzene	1140	U	2,4-Dinitrotoluene	1140	U
1,4-Dichlorobenzene	1140	U	4-Nitrophenol	1140	U
1,2-Dichlorobenzene	1140	U	Fluorene	1140	U
bis(2-Chloroisopropyl)ether	1140	U	4-Chlorophenyl-phenylether	1140	U
2-Methylphenol	1140	U	Diethylphthalate	1140	U
Hexachloroethane	1140	U	4-Nitroaniline	1140	U
n-Nitroso-di-n-propylamine	1140	U	4,6-Dinitro-2-methylphenol	1140	U
4-Methylphenol	1140	U	n-Nitrosodiphenylamine	1140	U
Nitrobenzene	1140	U	4-Bromophenyl-phenylether	1140	U
Isophorone	1140	U	Hexachlorobenzene	1140	U
2-Nitrophenol	1140	U	Pentachlorophenol	1140	U
2,4-Dimethylphenol	1140	U	Phenanthrene	1140	U
bis(2-Chloroethoxy)methane	1140	U	Anthracene	1140	U
2,4-Dichlorophenol	1140	U	Carbazole	1140	U
1,2,4-Trichlorobenzene	1140	U	Di-n-butylphthalate	1140	U
Naphthalene	1140	U	Fluoranthene	1140	U
4-Chloroaniline	1140	U	Pyrene	1140	U
Hexachlorobutadiene	1140	U	Butylbenzylphthalate	1140	U
4-Chloro-3-methylphenol	1140	U	3,3'-Dichlorobenzidine	1140	U
2-Methylnaphthalene	1140	U	Benz[a]anthracene	1140	U
Hexachlorocyclopentadiene	1140	U	Chrysene	1140	U
2,4,6-Trichlorophenol	1140	U	bis(2-Ethylhexyl)phthalate	**4950**	
2,4,5-Trichlorophenol	1140	U	Di-n-octylphthalate	1140	U
2-Chloronaphthalene	1140	U	Benzo[b]fluoranthene	1140	U
2-Nitroaniline	1140	U	Benzo[k]fluoranthene	1140	U
Acenaphthylene	1140	U	Benzo[a]pyrene	1140	U
Dimethylphthalate	1140	U	Indeno[1,2,3-cd]pyrene	1140	U
2,6-Dinitrotoluene	1140	U	Dibenz[a,h]anthracene	1140	U
Acenaphthene	1140	U	Benzo[g,h,i]perylene	1140	U

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	22	§	30-130
Phenol-d5	34		30-130
Nitrobenzene-d5	78		30-130
2-Fluorobiphenyl	82		30-130
2,4,6-Tribromophenol	9	§	30-130
Terphenyl-d14	87		30-130

N/A - Not Applicable
§ - Surrogate value outside of acceptable range.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-07.D
Acq On : 10 Jun 2008 2:26 am
Operator : SEO
Sample : 0804116-07
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 10 11:55:04 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

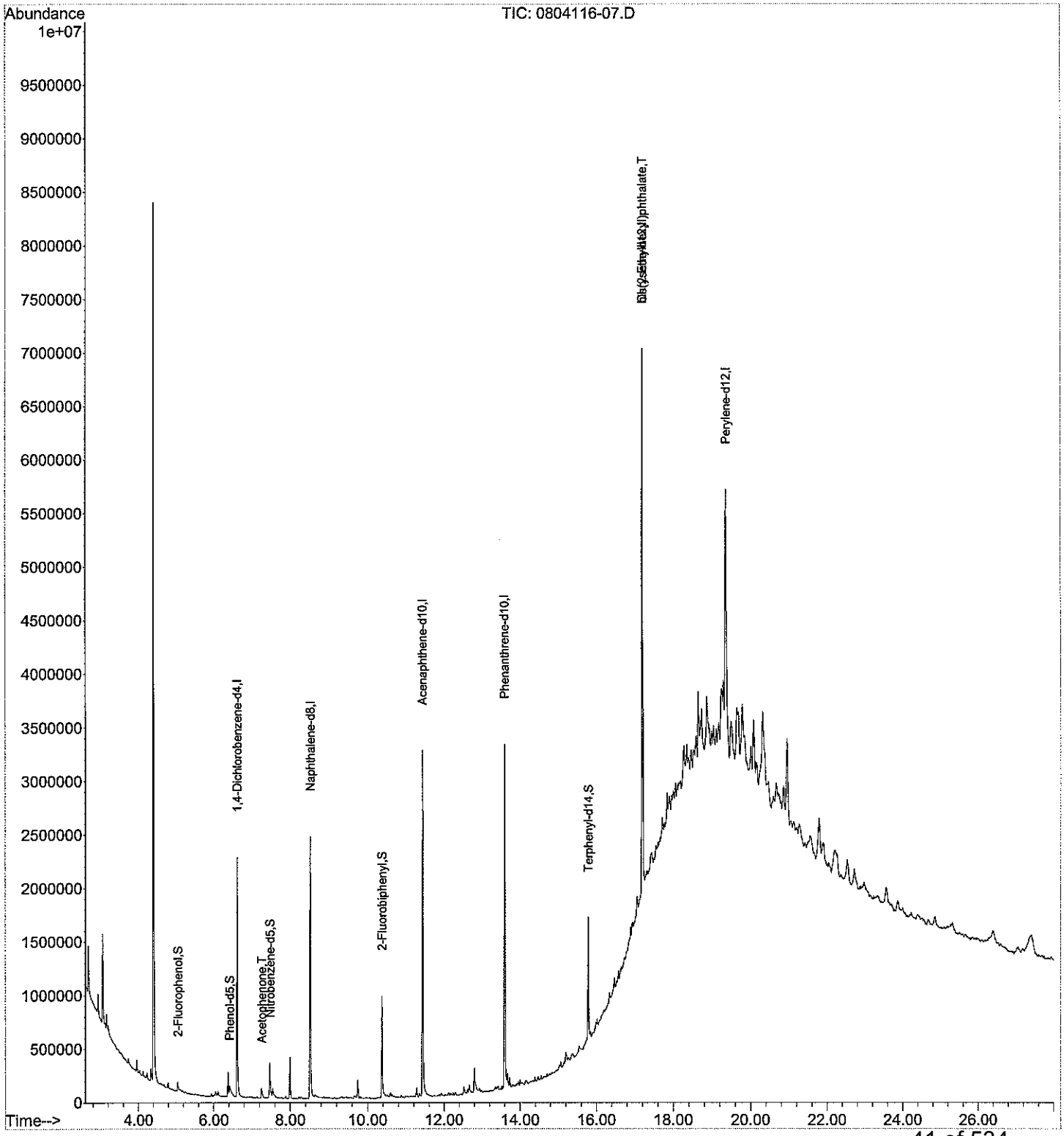
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.61	152	519291	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	1953587	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1178678	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	1860683	5.00	ug/mL	0.00
72) Chrysene-d12	17.20	240	1827330	5.00	ug/mL	0.00
81) Perylene-d12	19.37	264	1954845	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.05	112	58886	0.45	ug/mL	0.04
Spiked Amount 20.000	Range 21 - 100		Recovery	=	2.25%#	
8) Phenol-d5	6.42	99	111602	0.69	ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	=	3.45%#	
22) Nitrobenzene-d5	7.47	82	186002	1.56	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	7.80%#	
41) 2-Fluorobiphenyl	10.37	172	514572	1.64	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.20%#	
62) 2,4,6-Tribromophenol	12.66	330	6797	0.18	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.90%#	
75) Terphenyl-d14	15.79	244	582501	1.73	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	8.65%#	
Target Compounds						Qvalue
17) Acetophenone	7.25	105	61131	0.31	ug/ml	93
80) bis(2-Ethylhexyl)phthalate	17.21	149	865178	2.17	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-07.D
Acq On : 10 Jun 2008 2:26 am
Operator : SEO
Sample : 0804116-07
Misc : 1X
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 10 11:55:04 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 12:08:06 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B6/7**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-08**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	66.9	5.42	10	1	SEO

Parameter	Result	
bis(2-Chloroethyl)ether	1380	U
Phenol	1380	U
2-Chlorophenol	1380	U
1,3-Dichlorobenzene	1380	U
1,4-Dichlorobenzene	1380	U
1,2-Dichlorobenzene	1380	U
bis(2-Chloroisopropyl)ether	1380	U
2-Methylphenol	1380	U
Hexachloroethane	1380	U
n-Nitroso-di-n-propylamine	1380	U
4-Methylphenol	**4960**	
Nitrobenzene	1380	U
Isophorone	1380	U
2-Nitrophenol	1380	U
2,4-Dimethylphenol	1380	U
bis(2-Chloroethoxy)methane	1380	U
2,4-Dichlorophenol	1380	U
1,2,4-Trichlorobenzene	1380	U
Naphthalene	1380	U
4-Chloroaniline	1380	U
Hexachlorobutadiene	1380	U
4-Chloro-3-methylphenol	1380	U
2-Methylnaphthalene	1380	U
Hexachlorocyclopentadiene	1380	U
2,4,6-Trichlorophenol	1380	U
2,4,5-Trichlorophenol	1380	U
2-Chloronaphthalene	1380	U
2-Nitroaniline	1380	U
Acenaphthylene	1380	U
Dimethylphthalate	1380	U
2,6-Dinitrotoluene	1380	U
Acenaphthene	1380	U

Parameter	Result	
3-Nitroaniline	1380	U
2,4-Dinitrophenol	1380	U
Dibenzofuran	1380	U
2,4-Dinitrotoluene	1380	U
4-Nitrophenol	1380	U
Fluorene	1380	U
4-Chlorophenyl-phenylether	1380	U
Diethylphthalate	1380	U
4-Nitroaniline	1380	U
4,6-Dinitro-2-methylphenol	1380	U
n-Nitrosodiphenylamine	1380	U
4-Bromophenyl-phenylether	1380	U
Hexachlorobenzene	1380	U
Pentachlorophenol	1380	U
Phenanthrene	**827**	J
Anthracene	1380	U
Carbazole	1380	U
Di-n-butylphthalate	1380	U
Fluoranthene	**1880**	
Pyrene	**1600**	
Butylbenzylphthalate	1380	U
3,3'-Dichlorobenzidine	1380	U
Benz[a]anthracene	**937**	J
Chrysene	**1600**	
bis(2-Ethylhexyl)phthalate	**4160**	
Di-n-octylphthalate	1380	U
Benzo[b]fluoranthene	**1540**	
Benzo[k]fluoranthene	**1300**	J
Benzo[a]pyrene	**1350**	J
Indeno[1,2,3-cd]pyrene	**1080**	J
Dibenz[a,h]anthracene	1380	U
Benzo[g,h,i]perylene	**1240**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	76	30-130
Phenol-d5	74	30-130
Nitrobenzene-d5	82	30-130
2-Fluorobiphenyl	89	30-130
2,4,6-Tribromophenol	68	30-130
Terphenyl-d14	90	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

06/10/08 12:29
320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-08.D
Acq On : 10 Jun 2008 3:02 am
Operator : SEO
Sample : 0804116-08
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 11:57:54 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

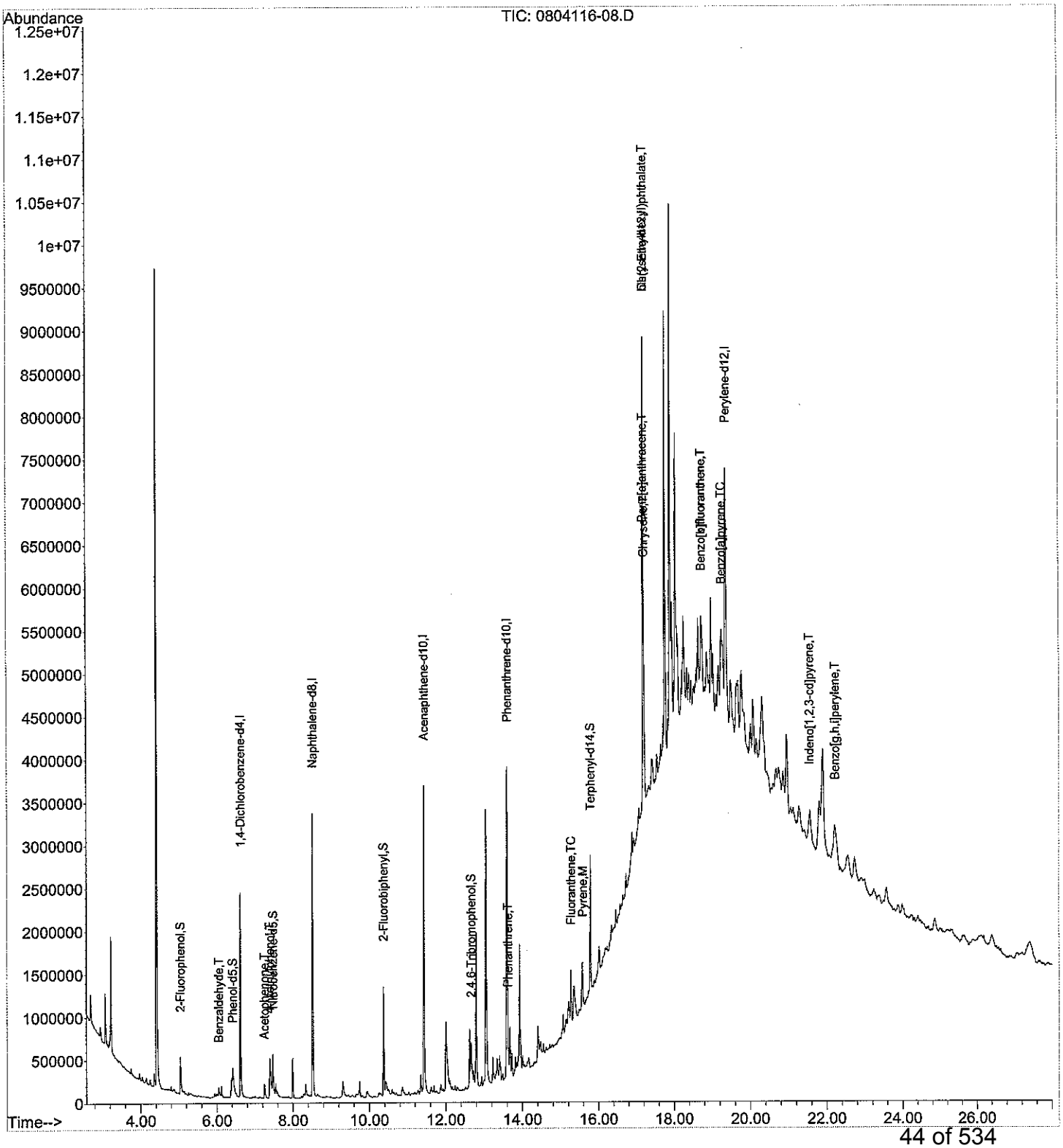
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	624299	5.00 ug/mL	0.00
21) Naphthalene-d8	8.52	136	2429808	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.44	164	1439505	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.60	188	2302345	5.00 ug/mL	0.00
72) Chrysene-d12	17.20	240	2210628	5.00 ug/mL	0.00
81) Perylene-d12	19.38	264	2374399	5.00 ug/mL	0.02
System Monitoring Compounds					
4) 2-Fluorophenol	5.04	112	239670	1.53 ug/mL	0.03
Spiked Amount 20.000	Range 21 - 100		Recovery	= 7.65%#	
8) Phenol-d5	6.41	99	288827	1.48 ug/mL	0.07
Spiked Amount 20.000	Range 10 - 94		Recovery	= 7.40%#	
22) Nitrobenzene-d5	7.47	82	245111	1.65 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.25%#	
41) 2-Fluorobiphenyl	10.37	172	687214	1.79 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 8.95%#	
62) 2,4,6-Tribromophenol	12.65	330	63631	1.36 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 6.80%#	
75) Terphenyl-d14	15.79	244	729498	1.80 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 9.00%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.05	77	37574	0.35 ug/ml	99
17) Acetophenone	7.25	105	90688	0.38 ug/ml	99
20) 4-Methylphenol	7.39	108	323476	1.80 ug/mL	91
67) Phenanthrene	13.63	178	178510	0.30 ug/mL	98
71) Fluoranthene	15.28	202	405827	0.68 ug/mL	97
74) Pyrene	15.58	202	361015	0.58 ug/mL	97
78) Benz[a]anthracene	17.18	228	202543m	0.34 ug/mL	
79) Chrysene	17.23	228	322099	0.58 ug/mL	97
80) bis(2-Ethylhexyl)phthalate	17.21	149	726880	1.51 ug/mL	97
83) Benzo[b]fluoranthene	18.73	252	371794m	0.56 ug/mL	
84) Benzo[k]fluoranthene	18.74	252	289079m	0.47 ug/mL	
85) Benzo[a]pyrene	19.27	252	302286	0.49 ug/mL#	92
86) Indeno[1,2,3-cd]pyrene	21.56	276	280262	0.39 ug/mL	93
88) Benzo[g,h,i]perylene	22.22	276	277329	0.45 ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-08.D
Acq On : 10 Jun 2008 3:02 am
Operator : SEO
Sample : 0804116-08
Misc : 1X
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 10 11:57:54 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 12:08:18 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B7/8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-09**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	76.3	5.43	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1210	U	3-Nitroaniline	1210	U
Phenol	1210	U	2,4-Dinitrophenol	1210	U
2-Chlorophenol	1210	U	Dibenzofuran	1210	U
1,3-Dichlorobenzene	1210	U	2,4-Dinitrotoluene	1210	U
1,4-Dichlorobenzene	1210	U	4-Nitrophenol	1210	U
1,2-Dichlorobenzene	1210	U	Fluorene	1210	U
bis(2-Chloroisopropyl)ether	1210	U	4-Chlorophenyl-phenylether	1210	U
2-Methylphenol	1210	U	Diethylphthalate	1210	U
Hexachloroethane	1210	U	4-Nitroaniline	1210	U
n-Nitroso-di-n-propylamine	1210	U	4,6-Dinitro-2-methylphenol	1210	U
4-Methylphenol	1210	U	n-Nitrosodiphenylamine	1210	U
Nitrobenzene	1210	U	4-Bromophenyl-phenylether	1210	U
Isophorone	1210	U	Hexachlorobenzene	1210	U
2-Nitrophenol	1210	U	Pentachlorophenol	1210	U
2,4-Dimethylphenol	1210	U	Phenanthrene	1210	U
bis(2-Chloroethoxy)methane	1210	U	Anthracene	1210	U
2,4-Dichlorophenol	1210	U	Carbazole	1210	U
1,2,4-Trichlorobenzene	1210	U	Di-n-butylphthalate	1210	U
Naphthalene	1210	U	Fluoranthene	1210	U
4-Chloroaniline	1210	U	Pyrene	1210	U
Hexachlorobutadiene	1210	U	Butylbenzylphthalate	1210	U
4-Chloro-3-methylphenol	1210	U	3,3'-Dichlorobenzidine	1210	U
2-Methylnaphthalene	1210	U	Benz[a]anthracene	1210	U
Hexachlorocyclopentadiene	1210	U	Chrysene	1210	U
2,4,6-Trichlorophenol	1210	U	bis(2-Ethylhexyl)phthalate	**821**	J
2,4,5-Trichlorophenol	1210	U	Di-n-octylphthalate	1210	U
2-Chloronaphthalene	1210	U	Benzo[b]fluoranthene	1210	U
2-Nitroaniline	1210	U	Benzo[k]fluoranthene	1210	U
Acenaphthylene	1210	U	Benzo[a]pyrene	1210	U
Dimethylphthalate	1210	U	Indeno[1,2,3-cd]pyrene	1210	U
2,6-Dinitrotoluene	1210	U	Dibenz[a,h]anthracene	1210	U
Acenaphthene	1210	U	Benzo[g,h,i]perylene	1210	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	59	30-130
Phenol-d5	59	30-130
Nitrobenzene-d5	81	30-130
2-Fluorobiphenyl	86	30-130
2,4,6-Tribromophenol	43	30-130
Terphenyl-d14	93	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-09.D
Acq On : 10 Jun 2008 3:39 am
Operator : SEO
Sample : 0804116-09
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 12:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

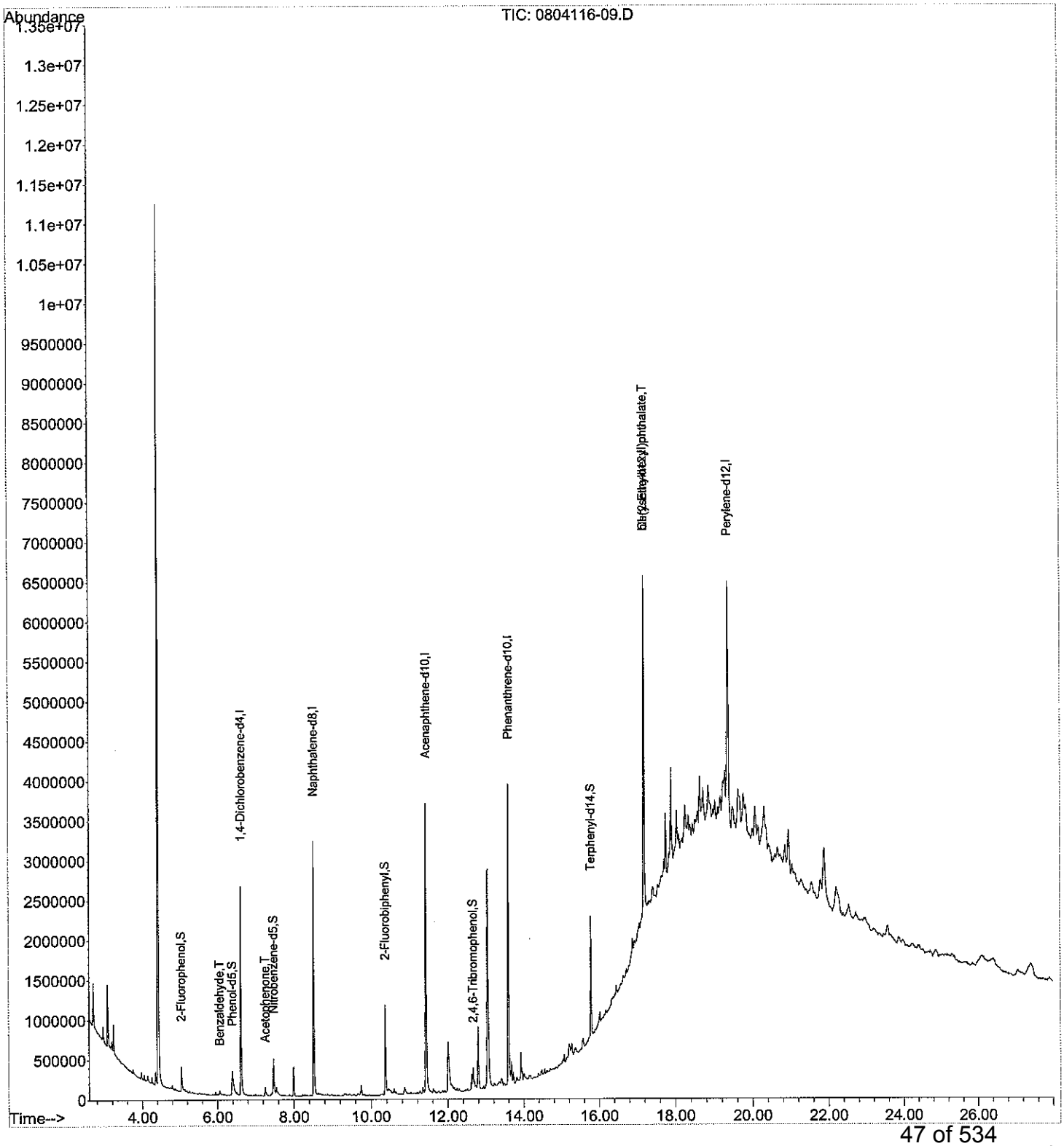
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	625567	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	2418238	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.44	164	1462501	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.60	188	2368604	5.00	ug/mL	0.00
72) Chrysene-d12	17.20	240	2262396	5.00	ug/mL	0.00
81) Perylene-d12	19.38	264	2438937	5.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-Fluorophenol	5.04	112	185018	1.18	ug/mL	0.03
Spiked Amount 20.000	Range 21 - 100		Recovery	=	5.90%#	
8) Phenol-d5	6.39	99	231844	1.18	ug/mL	0.05
Spiked Amount 20.000	Range 10 - 94		Recovery	=	5.90%#	
22) Nitrobenzene-d5	7.47	82	240007	1.62	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	8.10%#	
41) 2-Fluorobiphenyl	10.37	172	666151	1.71	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	8.55%#	
62) 2,4,6-Tribromophenol	12.66	330	41476	0.86	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	4.30%#	
75) Terphenyl-d14	15.79	244	770316	1.85	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	9.25%#	
Target Compounds						Qvalue
5) Benzaldehyde	6.05	77	23466	0.22	ug/ml	98
17) Acetophenone	7.25	105	63716	0.27	ug/ml	99
80) bis(2-Ethylhexyl)phthalate	17.21	149	167796	0.34	ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-09.D
Acq On : 10 Jun 2008 3:39 am
Operator : SEO
Sample : 0804116-09
Misc : 1X
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 10 12:00:52 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



SVLV0516BNA4.M Tue Jun 10 12:08:28 2008

Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-10**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	06/10/08	40.4	5.46	10	1	SEO

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	2260	U	3-Nitroaniline	2260	U
Phenol	2260	U	2,4-Dinitrophenol	2260	U
2-Chlorophenol	2260	U	Dibenzofuran	2260	U
1,3-Dichlorobenzene	2260	U	2,4-Dinitrotoluene	2260	U
1,4-Dichlorobenzene	2260	U	4-Nitrophenol	2260	U
1,2-Dichlorobenzene	2260	U	Fluorene	2260	U
bis(2-Chloroisopropyl)ether	2260	U	4-Chlorophenyl-phenylether	2260	U
2-Methylphenol	2260	U	Diethylphthalate	2260	U
Hexachloroethane	2260	U	4-Nitroaniline	2260	U
n-Nitroso-di-n-propylamine	2260	U	4,6-Dinitro-2-methylphenol	2260	U
4-Methylphenol	**46100**		n-Nitrosodiphenylamine	2260	U
Nitrobenzene	2260	U	4-Bromophenyl-phenylether	2260	U
Isophorone	2260	U	Hexachlorobenzene	2260	U
2-Nitrophenol	2260	U	Pentachlorophenol	2260	U
2,4-Dimethylphenol	2260	U	Phenanthrene	**2080**	J
bis(2-Chloroethoxy)methane	2260	U	Anthracene	2260	U
2,4-Dichlorophenol	2260	U	Carbazole	2260	U
1,2,4-Trichlorobenzene	2260	U	Di-n-butylphthalate	2260	U
Naphthalene	2260	U	Fluoranthene	**3530**	
4-Chloroaniline	2260	U	Pyrene	**3080**	
Hexachlorobutadiene	2260	U	Butylbenzylphthalate	2260	U
4-Chloro-3-methylphenol	2260	U	3,3'-Dichlorobenzidine	2260	U
2-Methylnaphthalene	2260	U	Benz[a]anthracene	**1270**	J
Hexachlorocyclopentadiene	2260	U	Chrysene	**2540**	
2,4,6-Trichlorophenol	2260	U	bis(2-Ethylhexyl)phthalate	**2670**	
2,4,5-Trichlorophenol	2260	U	Di-n-octylphthalate	2260	U
2-Chloronaphthalene	2260	U	Benzo[b]fluoranthene	**2220**	J
2-Nitroaniline	2260	U	Benzo[k]fluoranthene	**1950**	J
Acenaphthylene	2260	U	Benzo[a]pyrene	**1810**	J
Dimethylphthalate	2260	U	Indeno[1,2,3-cd]pyrene	**1400**	J
2,6-Dinitrotoluene	2260	U	Dibenz[a,h]anthracene	2260	U
Acenaphthene	2260	U	Benzo[g,h,i]perylene	**1630**	J

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	81	30-130
Phenol-d5	81	30-130
Nitrobenzene-d5	85	30-130
2-Fluorobiphenyl	94	30-130
2,4,6-Tribromophenol	92	30-130
Terphenyl-d14	96	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-10.D
Acq On : 10 Jun 2008 4:15 am
Operator : SEO
Sample : 0804116-10
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 12:06:57 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

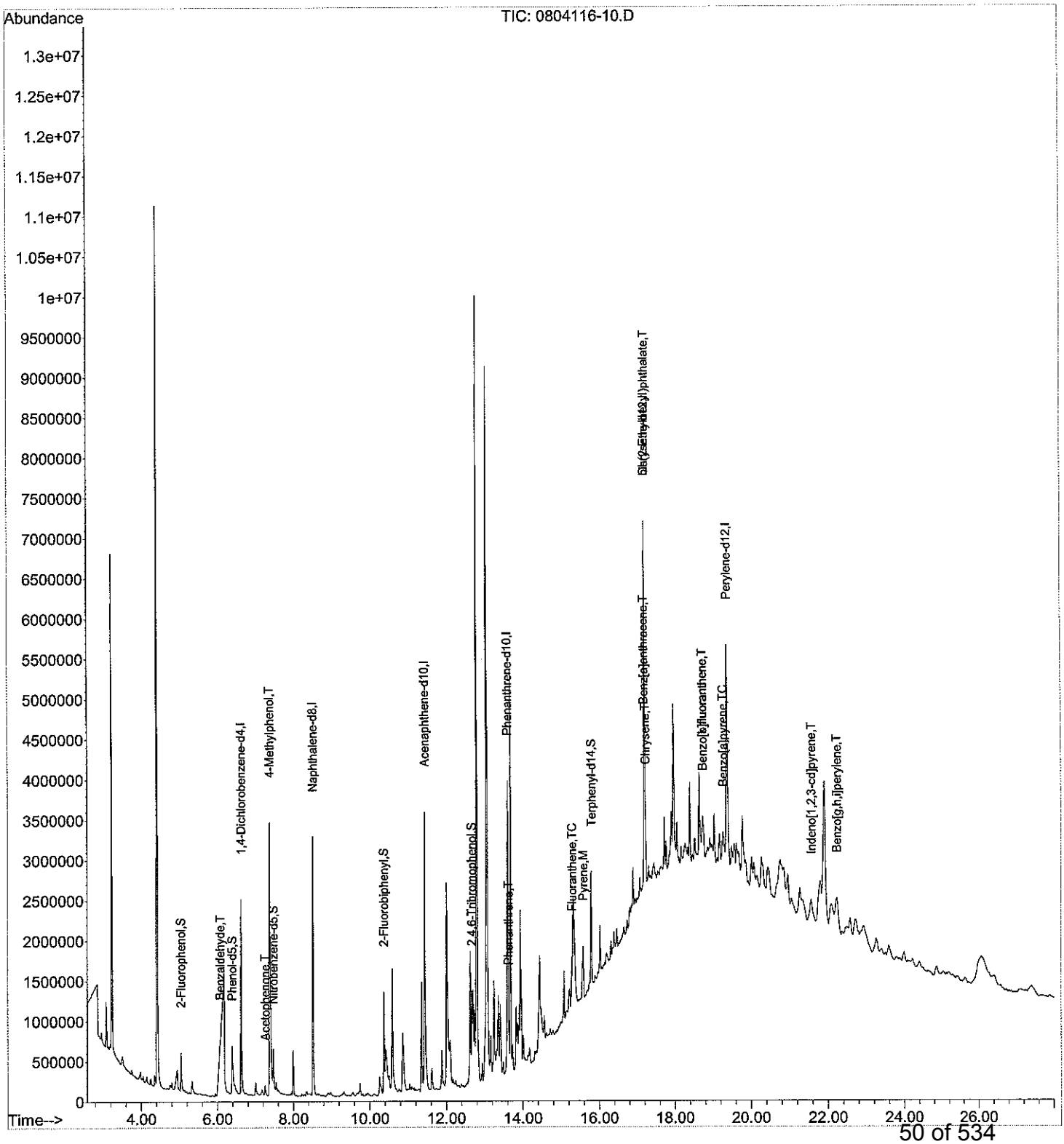
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	591408	5.00 ug/mL	0.00
21) Naphthalene-d8	8.52	136	2375753	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.44	164	1396457	5.00 ug/mL	0.00
58) Phenanthrene-d10	13.60	188	2258248	5.00 ug/mL	0.00
72) Chrysene-d12	17.21	240	2142972	5.00 ug/mL	0.00
81) Perylene-d12	19.38	264	2214174	5.00 ug/mL	0.02
System Monitoring Compounds					
4) 2-Fluorophenol	5.04	112	240281	1.62 ug/mL	0.03
Spiked Amount 20.000	Range 21 - 100		Recovery	= 8.10%#	
8) Phenol-d5	6.39	99	299946	1.62 ug/mL	0.05
Spiked Amount 20.000	Range 10 - 94		Recovery	= 8.10%#	
22) Nitrobenzene-d5	7.47	82	247788	1.70 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 8.50%#	
41) 2-Fluorobiphenyl	10.37	172	705764	1.89 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 9.45%#	
62) 2,4,6-Tribromophenol	12.66	330	84933	1.84 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 9.20%#	
75) Terphenyl-d14	15.80	244	754440	1.92 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 9.60%#	
Target Compounds					Qvalue
5) Benzaldehyde	6.05	77	34089	0.34 ug/ml	96
17) Acetophenone	7.25	105	68689	0.30 ug/ml#	21
20) 4-Methylphenol	7.37	108	1730884	10.18 ug/mL	99
67) Phenanthrene	13.63	178	265834	0.46 ug/mL	99
71) Fluoranthene	15.29	202	456863	0.78 ug/mL	97
74) Pyrene	15.58	202	414499	0.68 ug/mL	98
78) Benz[a]anthracene	17.18	228	161577m	0.28 ug/mL	
79) Chrysene	17.24	228	302746m	0.56 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.21	149	274755	0.59 ug/mL	96
83) Benzo[b]fluoranthene	18.73	252	303086m	0.49 ug/mL	
84) Benzo[k]fluoranthene	18.74	252	247120m	0.43 ug/mL	
85) Benzo[a]pyrene	19.27	252	228517	0.40 ug/mL	98
86) Indeno[1,2,3-cd]pyrene	21.56	276	210121	0.31 ug/mL#	90
88) Benzo[g,h,i]perylene	22.23	276	207642	0.36 ug/mL	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\ORGANICS\DATA\BNA4\2008\JUNE\JUNE09\
Data File : 0804116-10.D
Acq On : 10 Jun 2008 4:15 am
Operator : SEO
Sample : 0804116-10
Misc : 1X
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 10 12:06:57 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **SS050108B02**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/27/08	100	5.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	500	U	3-Nitroaniline	500	U
Phenol	**340**	J	2,4-Dinitrophenol	500	U
2-Chlorophenol	500	U	Dibenzofuran	500	U
1,3-Dichlorobenzene	500	U	2,4-Dinitrotoluene	500	U
1,4-Dichlorobenzene	500	U	4-Nitrophenol	500	U
1,2-Dichlorobenzene	500	U	Fluorene	500	U
bis(2-Chloroisopropyl)ether	500	U	4-Chlorophenyl-phenylether	500	U
2-Methylphenol	500	U	Diethylphthalate	500	U
Hexachloroethane	500	U	4-Nitroaniline	500	U
n-Nitroso-di-n-propylamine	500	U	4,6-Dinitro-2-methylphenol	500	U
4-Methylphenol	500	U	n-Nitrosodiphenylamine	500	U
Nitrobenzene	500	U	4-Bromophenyl-phenylether	500	U
Isophorone	500	U	Hexachlorobenzene	500	U
2-Nitrophenol	500	U	Pentachlorophenol	500	U
2,4-Dimethylphenol	500	U	Phenanthrene	500	U
bis(2-Chloroethoxy)methane	500	U	Anthracene	500	U
2,4-Dichlorophenol	500	U	Carbazole	500	U
1,2,4-Trichlorobenzene	500	U	Di-n-butylphthalate	500	U
Naphthalene	500	U	Fluoranthene	500	U
4-Chloroaniline	500	U	Pyrene	500	U
Hexachlorobutadiene	500	U	Butylbenzylphthalate	500	U
4-Chloro-3-methylphenol	500	U	3,3'-Dichlorobenzidine	500	U
2-Methylnaphthalene	500	U	Benz[a]anthracene	500	U
Hexachlorocyclopentadiene	500	U	Chrysene	500	U
2,4,6-Trichlorophenol	500	U	bis(2-Ethylhexyl)phthalate	500	U
2,4,5-Trichlorophenol	500	U	Di-n-octylphthalate	500	U
2-Chloronaphthalene	500	U	Benzo[b]fluoranthene	500	U
2-Nitroaniline	500	U	Benzo[k]fluoranthene	500	U
Acenaphthylene	500	U	Benzo[a]pyrene	500	U
Dimethylphthalate	500	U	Indeno[1,2,3-cd]pyrene	500	U
2,6-Dinitrotoluene	500	U	Dibenz[a,h]anthracene	500	U
Acenaphthene	500	U	Benzo[g,h,i]perylene	500	U

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	82	30-130
Phenol-d5	78	30-130
Nitrobenzene-d5	82	30-130
2-Fluorobiphenyl	89	30-130
2,4,6-Tribromophenol	40	30-130
Terphenyl-d14	96	30-130

N/A - Not Applicable
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108B02.D
Acq On : 27 May 2008 9:05 pm
Operator : JAD
Sample : SS050108B02
Misc :
ALS Vial : 17 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 13:02:05 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

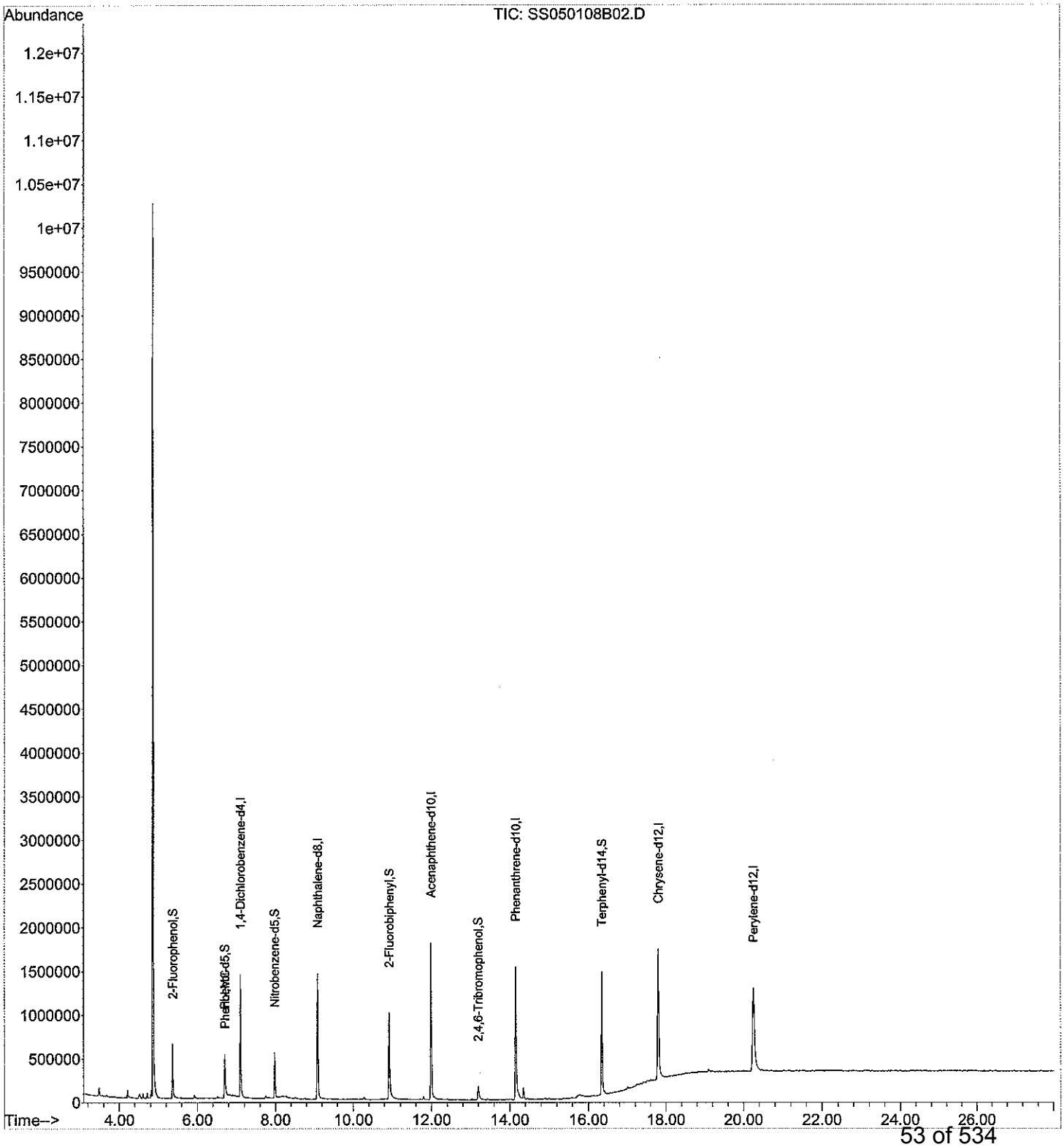
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	345296m	5.00 ug/mL	0.00
21) Naphthalene-d8	9.09	136	1363790m	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.98	164	769128m	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	1261207m	5.00 ug/mL	0.00
72) Chrysene-d12	17.80	240	1159470m	5.00 ug/mL	0.00
81) Perylene-d12	20.26	264	1121402m	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.37	112	284405	3.28 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	= 16.40%#	
8) Phenol-d5	6.70	99	337105	3.11 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 15.55%	
22) Nitrobenzene-d5	7.98	82	273111	3.27 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 16.35%#	
41) 2-Fluorobiphenyl	10.92	172	728853	3.55 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 17.75%#	
62) 2,4,6-Tribromophenol	13.20	330	41202	1.60 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 8.00%#	
75) Terphenyl-d14	16.34	244	817987	3.84 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 19.20%#	
Target Compounds					Qvalue
9) Phenol	6.72	94	43725	0.34 ug/mL#	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108B02.D
Acq On : 27 May 2008 9:05 pm
Operator : JAD
Sample : SS050108B02
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 10 13:02:05 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration



Form III
Spike Recovery Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	05/01/08	100	JAD

Lab ID:	SS050108B02		SS050108LCS03		SS050108LCSD03				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Phenol	340		2370	79	2040	68	15	30	30-130
2-Chlorophenol	500	U	2340	78	1800	60	26	30	30-130
1,4-Dichlorobenzene	500	U	2360	79	1880	63	23	30	40-140
n-Nitroso-di-n-propylamine	500	U	2540	85	1420	47	57[a]	30	30-130
1,2,4-Trichlorobenzene	500	U	2340	78	1850	62	23	30	40-140
4-Chloro-3-methylphenol	500	U	2180	73	1810	60	19	30	30-130
Acenaphthene	500	U	2460	82	2060	69	18	30	40-140
2,4-Dinitrotoluene	500	U	2240	75	1680	56	29	30	40-140
4-Nitrophenol	500	U	1690	56	1190	40	35[a]	30	30-130
Pentachlorophenol	500	U	660	22[a]	410	14[a]	47[a]	30	30-130
Pyrene	500	U	2450	82	2140	71	14	30	40-140

Surrogate	% Recovery		Acceptance Range (%)
2-Fluorophenol	87	68	30-130
Phenol-d5	86	65	30-130
Nitrobenzene-d5	90	69	30-130
2-Fluorobiphenyl	92	74	30-130
2,4,6-Tribromophenol	81	65	30-130
Terphenyl-d14	94	81	30-130

N/A - Not Applicable
[a] - Value outside of QC Limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

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Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **SS050108LCS03**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/27/08	100	5.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	**2270**		3-Nitroaniline	**1380**	
Phenol	**2370**	BS	2,4-Dinitrophenol	**920**	
2-Chlorophenol	**2340**	S	Dibenzofuran	**2480**	
1,3-Dichlorobenzene	**2300**		2,4-Dinitrotoluene	**2240**	S
1,4-Dichlorobenzene	**2360**	S	4-Nitrophenol	**1690**	S
1,2-Dichlorobenzene	**2360**		Fluorene	**2530**	
bis(2-Chloroisopropyl)ether	**2200**		4-Chlorophenyl-phenylether	**2390**	
2-Methylphenol	**2300**		Diethylphthalate	**2110**	
Hexachloroethane	**2210**		4-Nitroaniline	**1860**	
n-Nitroso-di-n-propylamine	**2540**	S	4,6-Dinitro-2-methylphenol	**1550**	
4-Methylphenol	**2120**		n-Nitrosodiphenylamine	**2490**	
Nitrobenzene	**2240**		4-Bromophenyl-phenylether	**2220**	
Isophorone	**2190**		Hexachlorobenzene	**2430**	
2-Nitrophenol	**2270**		Pentachlorophenol	**660**	S
2,4-Dimethylphenol	**1780**		Phenanthrene	**2470**	
bis(2-Chloroethoxy)methane	**2270**		Anthracene	**2570**	
2,4-Dichlorophenol	**2060**		Carbazole	**2650**	
1,2,4-Trichlorobenzene	**2340**	S	Di-n-butylphthalate	**2370**	
Naphthalene	**2430**		Fluoranthene	**2620**	
4-Chloroaniline	**560**		Pyrene	**2450**	S
Hexachlorobutadiene	**2550**		Butylbenzylphthalate	**2250**	
4-Chloro-3-methylphenol	**2180**	S	3,3'-Dichlorobenzidine	**1420**	
2-Methylnaphthalene	**2370**		Benz[a]anthracene	**2370**	
Hexachlorocyclopentadiene	500	U	Chrysene	**2680**	
2,4,6-Trichlorophenol	**2120**		bis(2-Ethylhexyl)phthalate	**2490**	
2,4,5-Trichlorophenol	**2320**		Di-n-octylphthalate	**2440**	
2-Chloronaphthalene	**2460**		Benzo[b]fluoranthene	**1960**	
2-Nitroaniline	**2200**		Benzo[k]fluoranthene	**3070**	
Acenaphthylene	**2470**		Benzo[a]pyrene	**2390**	
Dimethylphthalate	**2120**		Indeno[1,2,3-cd]pyrene	**2440**	
2,6-Dinitrotoluene	**2180**		Dibenz[a,h]anthracene	**2450**	
Acenaphthene	**2460**	S	Benzo[g,h,i]perylene	**2410**	

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	87	30-130
Phenol-d5	86	30-130
Nitrobenzene-d5	90	30-130
2-Fluorobiphenyl	92	30-130
2,4,6-Tribromophenol	81	30-130
Terphenyl-d14	94	30-130

N/A - Not Applicable
B - Found in associated blank as well as sample.
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCS03.D
Acq On : 27 May 2008 9:42 pm
Operator : JAD
Sample : SS050108LCS03
Misc :
ALS Vial : 18 Sample Multiplier: 1

6/9/08

Quant Time: May 30 15:23:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	561070	5.00 ug/mL	0.00
21) Naphthalene-d8	9.08	136	2239227	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.98	164	1230773	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	1925575	5.00 ug/mL	0.00
72) Chrysene-d12	17.80	240	1932464	5.00 ug/mL	0.00
81) Perylene-d12	20.26	264	1868174	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.38	112	489135	3.47 ug/mL	0.02
Spiked Amount 20.000	Range 21 - 100		Recovery	= 17.35%#	
8) Phenol-d5	6.69	99	603585	3.43 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 17.15%	
22) Nitrobenzene-d5	7.98	82	496218	3.62 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 18.10%#	
41) 2-Fluorobiphenyl	10.91	172	1211250	3.69 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 18.45%#	
62) 2,4,6-Tribromophenol	13.19	330	127730	3.25 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 16.25%	
75) Terphenyl-d14	16.34	244	1342640	3.78 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 18.90%#	
Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.43	74	181273	2.87 ug/mL	96
3) Pyridine	3.43	79	81285	0.65 ug/mL	99
5) Benzaldehyde	6.51	77	221555	2.31 ug/ml	99
6) Aniline	6.71	66	212430	1.36 ug/ml#	24
7) bis(2-Chloroethyl)ether	6.80	63	252985	2.27 ug/mL	97
9) Phenol	6.71	94	501476	2.37 ug/mL#	67
10) 2-Chlorophenol	6.86	128	396214	2.34 ug/mL	95
11) 1,3-Dichlorobenzene	7.05	146	432473	2.30 ug/mL	99
12) 1,4-Dichlorobenzene	7.12	146	452931	2.36 ug/mL	98
13) 1,2-Dichlorobenzene	7.40	146	421896	2.36 ug/mL	100
14) Benzyl alcohol	7.36	108	141868	1.37 ug/mL	94
15) bis(2-chloroisopropyl)ethe	7.58	45	630320	2.20 ug/mL#	100
16) 2-Methylphenol	7.56	108	343447m	2.30 ug/mL	
17) Acetophenone	7.74	105	517466	2.42 ug/ml	96
18) Hexachloroethane	7.86	117	146419	2.21 ug/mL	96
19) N-Nitroso-di-n-propylamine	7.78	70	210552	2.54 ug/mL	99
20) 4-Methylphenol	7.77	108	341351m	2.12 ug/mL	
23) Nitrobenzene	8.00	77	339630	2.24 ug/mL	98
24) Isophorone	8.36	82	577375	2.19 ug/mL	100
25) 2-Nitrophenol	8.51	139	195652	2.27 ug/mL	99
26) 2,4-Dimethylphenol	8.58	107	267579	1.78 ug/mL	98
27) Benzoic acid	8.69	105	73641	0.72 ug/mL	96
28) bis(2-Chloroethoxy)methane	8.74	93	422175	2.27 ug/mL	98
29) 2,4-Dichlorophenol	8.89	162	267294	2.06 ug/mL	99
30) 1,2,4-Trichlorobenzene	9.02	180	323743	2.34 ug/mL	100
31) Naphthalene	9.12	128	1213221	2.43 ug/mL	100
32) 4-Chloroaniline	9.28	127	110929	0.56 ug/mL	97
33) Hexachlorobutadiene	9.44	225	177739	2.55 ug/mL	99
34) Caprolactam	9.76	113	74802m	1.42 ug/ml	
35) 4-Chloro-3-methylphenol	10.10	107	300079m	2.18 ug/mL	
36) 2-Methylnaphthalene	10.27	142	798825	2.37 ug/mL	99
39) 2,4,6-Trichlorophenol	10.80	196	176749	2.12 ug/mL	100
40) 2,4,5-Trichlorophenol	10.87	196	213240m	2.32 ug/mL	
42) Biphenyl	11.05	154	1041915	2.75 ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCS03.D
Acq On : 27 May 2008 9:42 pm
Operator : JAD
Sample : SS050108LCS03
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 30 15:23:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

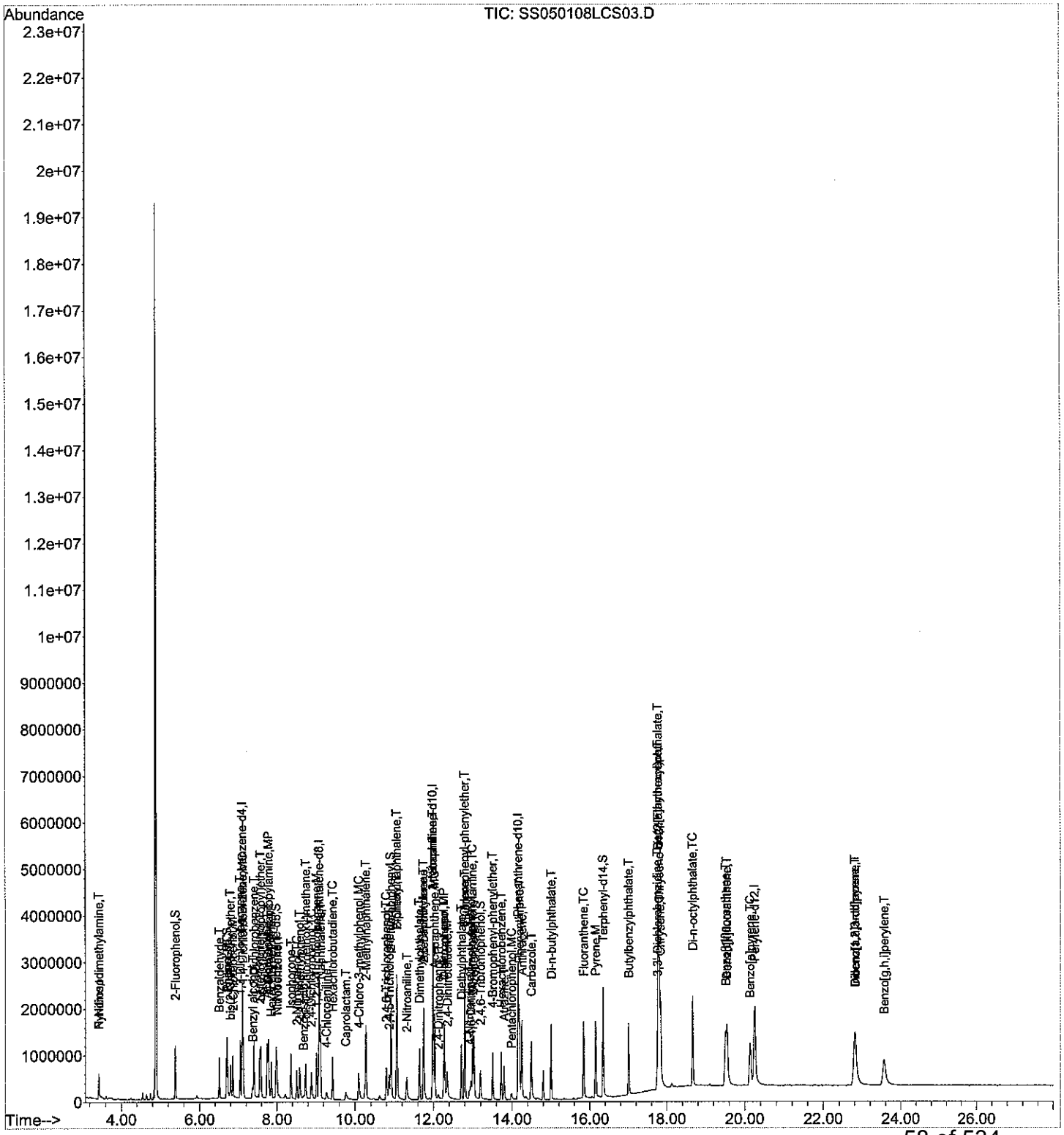
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2-Chloronaphthalene	11.07	162	727430	2.46 ug/mL	99
44) 2-Nitroaniline	11.31	65	176378	2.20 ug/mL	95
45) Acenaphthylene	11.74	152	1208817	2.47 ug/mL	100
46) Dimethylphthalate	11.64	163	755254	2.12 ug/mL#	83
47) 2,6-Dinitrotoluene	11.75	165	169761	2.18 ug/mL	96
48) Acenaphthene	12.03	153	769072	2.46 ug/mL	99
49) 3-Nitroaniline	11.97	138	120278	1.38 ug/mL#	95
50) 2,4-Dinitrophenol	12.12	184	35197	0.92 ug/mL#	87
51) Dibenzofuran	12.27	168	1088980	2.48 ug/mL#	82
52) 2,4-Dinitrotoluene	12.36	165	233549	2.24 ug/mL	99
53) 4-Nitrophenol	12.27	109	66112m	1.69 ug/mL	
54) Fluorene	12.79	166	877742	2.53 ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	380283	2.39 ug/mL	98
56) Diethylphthalate	12.72	149	757232	2.11 ug/mL	100
57) 4-Nitroaniline	12.91	138	159022	1.86 ug/mL	95
59) 4,6-Dinitro-2-methylphenol	12.95	198	91349m	1.55 ug/mL	
60) Azobenzene	13.02	182	238029	2.34 ug/mL	97
61) n-Nitrosodiphenylamine	12.99	169	606421	2.49 ug/mL	99
63) 4-Bromophenyl-phenylether	13.51	248	187548	2.22 ug/mL	98
64) Hexachlorobenzene	13.72	284	217730	2.43 ug/mL	100
65) Atrazine	13.80	200	134260	1.63 ug/ml	99
66) Pentachlorophenol	13.98	266	33947m	0.66 ug/mL	
67) Phenanthrene	14.19	178	1227036m	2.47 ug/mL	
68) Anthracene	14.25	178	1285975m	2.57 ug/mL	
69) Carbazole	14.49	167	1191220	2.65 ug/mL	98
70) Di-n-butylphthalate	15.00	149	1417282	2.37 ug/mL	99
71) Fluoranthene	15.84	202	1309963	2.62 ug/mL	98
74) Pyrene	16.15	202	1344627	2.45 ug/mL	98
76) Butylbenzylphthalate	17.01	149	649934	2.25 ug/mL	100
77) 3,3'-Dichlorobenzidine	17.75	252	245982	1.42 ug/mL	96
78) Benz[a]anthracene	17.77	228	1235027	2.37 ug/mL	98
79) Chrysene	17.84	228	1309768m	2.68 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.77	149	1052377	2.49 ug/mL	100
82) Di-n-octylphthalate	18.67	149	1687576	2.44 ug/mL	99
83) Benzo[b]fluoranthene	19.51	252	1030148	1.96 ug/mL	97
84) Benzo[k]fluoranthene	19.55	252	1487336m	3.07 ug/mL	
85) Benzo[a]pyrene	20.14	252	1156647	2.39 ug/mL	99
86) Indeno[1,2,3-cd]pyrene	22.80	276	1387666	2.44 ug/mL	98
87) Dibenz[a,h]anthracene	22.82	278	1221272	2.45 ug/mL	99
88) Benzo[g,h,i]perylene	23.57	276	1168883	2.41 ug/mL	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCS03.D
Acq On : 27 May 2008 9:42 pm
Operator : JAD
Sample : SS050108LCS03
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 30 15:23:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration



Form I
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **SS050108LCSD03**
Associated Blank: **SS050108B02**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/27/08	100	5.00	5	1	JAD

Parameter	Result		Parameter	Result	
bis(2-Chloroethyl)ether	1780		3-Nitroaniline	1110	
Phenol	2040	BS	2,4-Dinitrophenol	480	J
2-Chlorophenol	1800	S	Dibenzofuran	2060	
1,3-Dichlorobenzene	1840		2,4-Dinitrotoluene	1680	S
1,4-Dichlorobenzene	1880	S	4-Nitrophenol	1190	S
1,2-Dichlorobenzene	1920		Fluorene	2130	
bis(2-Chloroisopropyl)ether	1800		4-Chlorophenyl-phenylether	2050	
2-Methylphenol	1680		Diethylphthalate	2050	
Hexachloroethane	1810		4-Nitroaniline	1280	
n-Nitroso-di-n-propylamine	1420	S	4,6-Dinitro-2-methylphenol	1170	
4-Methylphenol	1630		n-Nitrosodiphenylamine	2060	
Nitrobenzene	1780		4-Bromophenyl-phenylether	1820	
Isophorone	1910		Hexachlorobenzene	2060	
2-Nitrophenol	1700		Pentachlorophenol	410	JS
2,4-Dimethylphenol	1300		Phenanthrene	2130	
bis(2-Chloroethoxy)methane	1760		Anthracene	2110	
2,4-Dichlorophenol	1560		Carbazole	2130	
1,2,4-Trichlorobenzene	1850	S	Di-n-butylphthalate	2170	
Naphthalene	2050		Fluoranthene	2220	
4-Chloroaniline	620		Pyrene	2140	S
Hexachlorobutadiene	2150		Butylbenzylphthalate	2150	
4-Chloro-3-methylphenol	1810	S	3,3'-Dichlorobenzidine	1120	
2-Methylnaphthalene	1970		Benz[a]anthracene	1990	
Hexachlorocyclopentadiene	500	U	Chrysene	2320	
2,4,6-Trichlorophenol	1630		bis(2-Ethylhexyl)phthalate	2210	
2,4,5-Trichlorophenol	1810		Di-n-octylphthalate	2030	
2-Chloronaphthalene	1950		Benzo[b]fluoranthene	2160	
2-Nitroaniline	1600		Benzo[k]fluoranthene	1970	
Acenaphthylene	2010		Benzo[a]pyrene	1960	
Dimethylphthalate	2030		Indeno[1,2,3-cd]pyrene	2040	
2,6-Dinitrotoluene	1810		Dibenz[a,h]anthracene	1980	
Acenaphthene	2060	S	Benzo[g,h,i]perylene	2000	

Surrogate	% Recovery	Acceptance Range (%)
2-Fluorophenol	68	30-130
Phenol-d5	65	30-130
Nitrobenzene-d5	69	30-130
2-Fluorobiphenyl	74	30-130
2,4,6-Tribromophenol	65	30-130
Terphenyl-d14	81	30-130

N/A - Not Applicable
B - Found in associated blank as well as sample.
J - Estimated value, below quantitation limit.
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCSD03.D
Acq On : 27 May 2008 10:19 pm
Operator : JAD
Sample : SS050108LCSD03
Misc :
ALS Vial : 19 Sample Multiplier: 1

6/9/08

Quant Time: May 30 15:24:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	395596	5.00 ug/mL	0.00
21) Naphthalene-d8	9.09	136	1554479	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.98	164	901387	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	1432550	5.00 ug/mL	0.00
72) Chrysene-d12	17.80	240	1387107	5.00 ug/mL	0.00
81) Perylene-d12	20.26	264	1371394	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.37	112	268371	2.70 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	= 13.50%#	
8) Phenol-d5	6.70	99	324947	2.62 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 13.10%	
22) Nitrobenzene-d5	7.98	82	260135	2.74 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 13.70%#	
41) 2-Fluorobiphenyl	10.91	172	708017	2.94 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 14.70%#	
62) 2,4,6-Tribromophenol	13.19	330	76123	2.61 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 13.05%	
75) Terphenyl-d14	16.34	244	831586	3.26 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 16.30%#	

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.40	74	78942	1.77 ug/mL#	96
3) Pyridine	3.39	79	94707	1.07 ug/mL	88
5) Benzaldehyde	6.51	77	134167	1.99 ug/ml	98
6) Aniline	6.71	66	140439	1.27 ug/ml#	43
7) bis(2-Chloroethyl)ether	6.81	63	139977m	1.78 ug/mL	
9) Phenol	6.71	94	303516	2.04 ug/mL#	71
10) 2-Chlorophenol	6.86	128	215262	1.80 ug/mL	96
11) 1,3-Dichlorobenzene	7.05	146	243134	1.84 ug/mL	99
12) 1,4-Dichlorobenzene	7.13	146	254155m	1.88 ug/mL	
13) 1,2-Dichlorobenzene	7.40	146	241971	1.92 ug/mL	99
14) Benzyl alcohol	7.36	108	71815	0.98 ug/mL	93
15) bis(2-chloroisopropyl)ethe	7.58	45	363338	1.80 ug/mL#	100
16) 2-Methylphenol	7.56	108	176281m	1.68 ug/mL	
17) Acetophenone	7.74	105	293481	1.94 ug/ml	93
18) Hexachloroethane	7.86	117	84666	1.81 ug/mL	98
19) N-Nitroso-di-n-propylamine	7.79	70	83196	1.42 ug/mL	99
20) 4-Methylphenol	7.77	108	185268m	1.63 ug/mL	
23) Nitrobenzene	8.00	77	187474	1.78 ug/mL	99
24) Isophorone	8.36	82	349184	1.91 ug/mL	99
25) 2-Nitrophenol	8.51	139	101856	1.70 ug/mL	98
26) 2,4-Dimethylphenol	8.58	107	135769	1.30 ug/mL	98
27) Benzoic acid	8.71	105	45925	0.65 ug/mL	98
28) bis(2-Chloroethoxy)methane	8.74	93	226589	1.76 ug/mL	97
29) 2,4-Dichlorophenol	8.89	162	140410	1.56 ug/mL	100
30) 1,2,4-Trichlorobenzene	9.03	180	178370	1.85 ug/mL	98
31) Naphthalene	9.12	128	709309	2.05 ug/mL	99
32) 4-Chloroaniline	9.28	127	86391	0.62 ug/mL	99
33) Hexachlorobutadiene	9.44	225	104151	2.15 ug/mL	98
34) Caprolactam	9.77	113	59359m	1.62 ug/ml	
35) 4-Chloro-3-methylphenol	10.10	107	172950	1.81 ug/mL	98
36) 2-Methylnaphthalene	10.27	142	461284m	1.97 ug/mL	
39) 2,4,6-Trichlorophenol	10.80	196	99593	1.63 ug/mL	99
40) 2,4,5-Trichlorophenol	10.87	196	121773m	1.81 ug/mL	
42) Biphenyl	11.06	154	610318	2.20 ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCSD03.D
Acq On : 27 May 2008 10:19 pm
Operator : JAD
Sample : SS050108LCSD03
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 30 15:24:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration

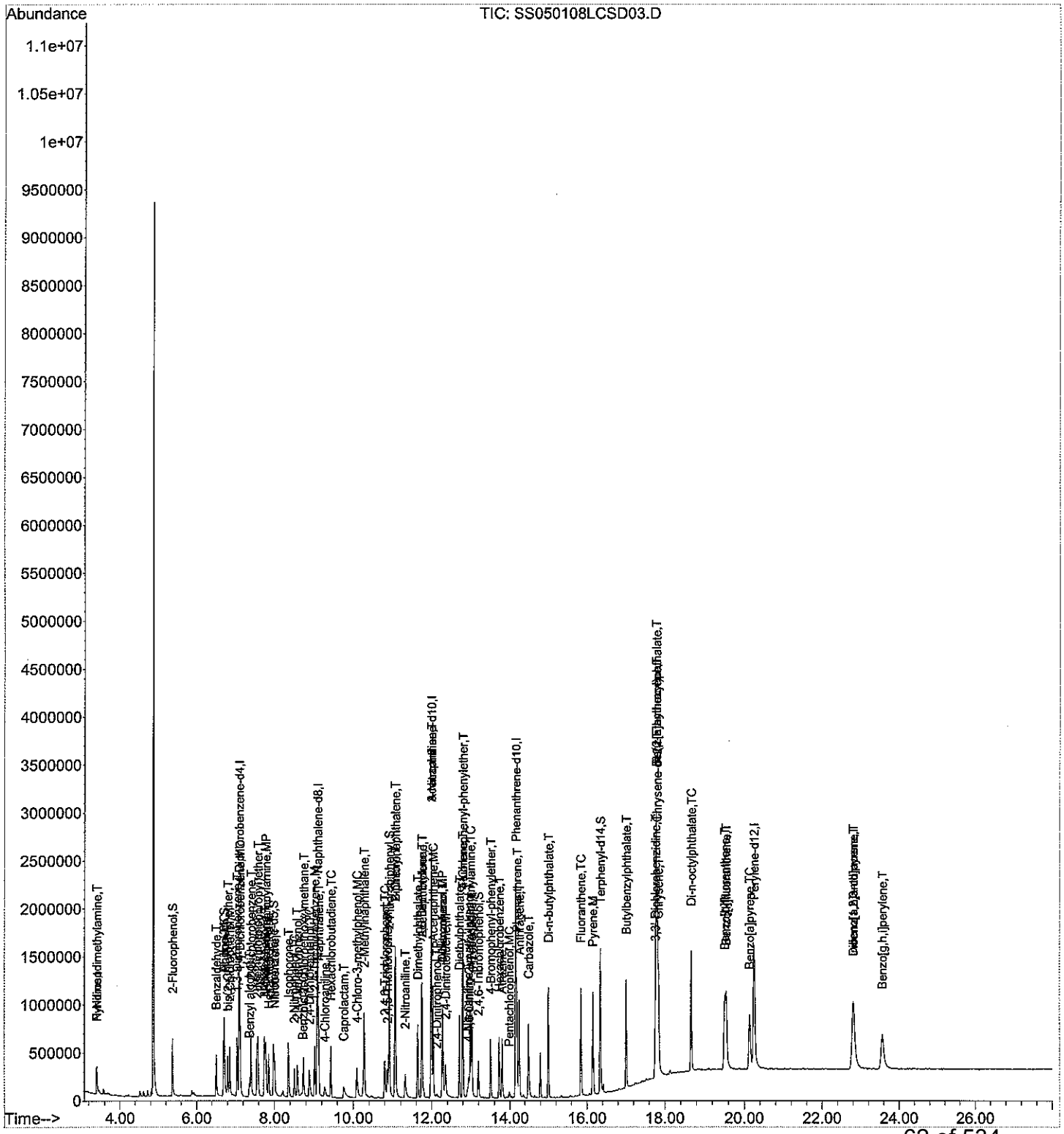
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
43) 2-Chloronaphthalene	11.07	162	420832	1.95 ug/mL	99
44) 2-Nitroaniline	11.31	65	93699m	1.60 ug/mL	
45) Acenaphthylene	11.74	152	720283	2.01 ug/mL	99
46) Dimethylphthalate	11.64	163	528509	2.03 ug/mL#	83
47) 2,6-Dinitrotoluene	11.75	165	102997	1.81 ug/mL	98
48) Acenaphthene	12.03	153	472177	2.06 ug/mL	97
49) 3-Nitroaniline	11.98	138	70936	1.11 ug/mL#	95
50) 2,4-Dinitrophenol	12.12	184	13494	0.48 ug/mL#	22
51) Dibenzofuran	12.27	168	660232	2.06 ug/mL#	87
52) 2,4-Dinitrotoluene	12.36	165	128462	1.68 ug/mL	99
53) 4-Nitrophenol	12.27	109	34020m	1.19 ug/mL	
54) Fluorene	12.79	166	542017	2.13 ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	239907	2.05 ug/mL	98
56) Diethylphthalate	12.71	149	537773	2.05 ug/mL	99
57) 4-Nitroaniline	12.92	138	80332m	1.28 ug/mL	
59) 4,6-Dinitro-2-methylphenol	12.95	198	51399m	1.17 ug/mL	
60) Azobenzene	13.02	182	147503	1.95 ug/mL	100
61) n-Nitrosodiphenylamine	12.99	169	372957	2.06 ug/mL	99
63) 4-Bromophenyl-phenylether	13.51	248	114420	1.82 ug/mL	100
64) Hexachlorobenzene	13.72	284	137274	2.06 ug/mL	98
65) Atrazine	13.80	200	119776	1.95 ug/ml	98
66) Pentachlorophenol	13.98	266	15789	0.41 ug/mL	93
67) Phenanthrene	14.19	178	789231m	2.13 ug/mL	
68) Anthracene	14.25	178	785149m	2.11 ug/mL	
69) Carbazole	14.49	167	713357	2.13 ug/mL	98
70) Di-n-butylphthalate	15.00	149	967655	2.17 ug/mL	100
71) Fluoranthene	15.84	202	824923	2.22 ug/mL	98
74) Pyrene	16.15	202	842786	2.14 ug/mL	98
76) Butylbenzylphthalate	17.01	149	445234	2.15 ug/mL	99
77) 3,3'-Dichlorobenzidine	17.75	252	139344	1.12 ug/mL	93
78) Benz[a]anthracene	17.78	228	744919	1.99 ug/mL	99
79) Chrysene	17.84	228	812502m	2.32 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.78	149	668932	2.21 ug/mL	100
82) Di-n-octylphthalate	18.67	149	1031652	2.03 ug/mL	100
83) Benzo[b]fluoranthene	19.51	252	830759m	2.16 ug/mL	
84) Benzo[k]fluoranthene	19.55	252	697990m	1.97 ug/mL	
85) Benzo[a]pyrene	20.14	252	695117	1.96 ug/mL	97
86) Indeno[1,2,3-cd]pyrene	22.80	276	854827	2.04 ug/mL	97
87) Dibenz[a,h]anthracene	22.81	278	725186	1.98 ug/mL	98
88) Benzo[g,h,i]perylene	23.57	276	710321	2.00 ug/mL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\NEWFIE-May27\
Data File : SS050108LCSD03.D
Acq On : 27 May 2008 10:19 pm
Operator : JAD
Sample : SS050108LCSD03
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 30 15:24:00 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu May 29 15:29:30 2008
Response via : Initial Calibration



Sequence Name: C:\MSDChem\1\sequence\S4052701.S
Comment:
Operator: JAD
Data Path: C:\MSDCHEM\1\DATA\MAY\MAY27\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

JAD 5/28/08

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	1	
Datafile		S4052701
Method		8270BACK0516
2) Sample	2	
Datafile		T4052701 5/27/08 @3:37pm
Method		8270BACK0516
3) Sample	7	
Datafile		C4052701
Method		8270BACK0516 @4:14pm
4) Sample	10	
Datafile		S4052702
Method		8270BACK0516
5) Sample	11	
Datafile		SS041108MDL-08
Method		8270BACK0516
6) Sample	12	
Datafile		SS041108MDL-09
Method		8270BACK0516
7) Sample	13	
Datafile		SS041108MDL-10
Method		8270BACK0516
8) Sample	14	
Datafile		S4052703
Method		8270BACK0516
9) Sample	15	
Datafile		0805058-03-RE-D5
Method		8270BACK0516
10) Sample	16	
Datafile		S4052704
Method		8270BACK0516
11) Sample	17	
Datafile		SS050108B02 ✓
Method		8270BACK0516
12) Sample	18	
Datafile		SS050108LCS03 ✓
Method		8270BACK0516
13) Sample	19	
Datafile		SS050108LCSD03 ✓
Method		8270BACK0516
14) Sample	20	
Datafile		0804116-01-D10
Method		8270BACK0516
15) Sample	21	
Datafile		0804116-01D-D10
Method		8270BACK0516
16) Sample	22	
Datafile		0804116-04-D10
Method		8270BACK0516
17) Sample	23	
Datafile		0804116-09-D10
Method		8270BACK0516
18) Sample	24	
Datafile		0804116-~~04-D107~~ Should have been -07-D10 @1:18am
Method		8270BACK0516

19) Sample 2
Datafile T4060903 pg8
Method 8270BACK0516
20) Sample 3
Datafile C4060903 10 ug/mL PCB (PCP=33%)
Method 8270BACK0516
21) Sample 11
Datafile 0804116-01
Method 8270BACK0516
22) Sample 12
Datafile 0804116-01D
Method 8270BACK0516
23) Sample 13
Datafile 0804116-02
Method 8270BACK0516
24) Sample 14
Datafile 0804116-03
Method 8270BACK0516
25) Sample 15
Datafile 0804116-04
Method 8270BACK0516
26) Sample 16
Datafile 0804116-05
Method 8270BACK0516
27) Sample 17
Datafile 0804116-06
Method 8270BACK0516
28) Sample 18
Datafile 0804116-07
Method 8270BACK0516
29) Sample 19
Datafile 0804116-08
Method 8270BACK0516
30) Sample 20
Datafile 0804116-09
Method 8270BACK0516
31) Sample 21
Datafile 0804116-10
Method 8270BACK0516

Supporting Quality Control Results

Form IV
Method Blank Summary
Semi-Volatile Organics by 8270

ALPHA WOODS HOLE LABS

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **SS050108B02**
Date Analyzed: **05/27/08 21:05**

Client ID	Lab ID	Date/Time Analyzed
LCS	SS050108LCS03	05/27/08 21:42
LCSD	SS050108LCSD03	05/27/08 22:19
B4	0804116-01	06/09/08 22:10
B4	0804116-01 D	06/09/08 22:47
B3/4	0804116-02	06/09/08 23:24
B2/3	0804116-03	06/10/08 00:00
B1/2	0804116-04	06/10/08 00:37
B1	0804116-05	06/10/08 01:13
B5	0804116-06	06/10/08 01:50
B5/6	0804116-07	06/10/08 02:26
B6/7	0804116-08	06/10/08 03:02
B7/8	0804116-09	06/10/08 03:39
B8	0804116-10	06/10/08 04:15

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sequence Name: C:\MSDChem\1\sequence\S4051601.S
Comment:
Operator: JAD
Data Path: C:\MSDCHEM\1\DATA\MAY\MAY15\

Top Pre-Seq Cmd:
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Top Post-Seq Cmd:
Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line		Sample Name/Misc Info
1) Sample	1	
Datafile		S4051601
Method		8270BACK0516
2) Sample	2	
Datafile		T4051601
Method		8270BACK0516
3) Sample	3	
Datafile		S4051602
Method		8270BACK0516
4) Sample	4	
Datafile		I4051601 .5 µg/mL
Method		8270BACK0516
5) Sample	5	
Datafile		I4051602 2.0 µg/mL
Method		8270BACK0516
6) Sample	6	
Datafile		I4051603 5.0 µg/mL
Method		8270BACK0516
7) Sample	7	
Datafile		I4051604 10.0 µg/mL
Method		8270BACK0516
8) Sample	8	
Datafile		I4051605 15.0 µg/mL
Method		8270BACK0516
9) Sample	9	
Datafile		I4051606 25.0 µg/mL
Method		8270BACK0516
10) Sample	10	
Datafile		S4051603
Method		8270BACK0516
11) Sample	11	
Datafile		Q4051601 ICV - 10.0 µg/mL
Method		8270BACK0516
12) Sample	12	
Datafile		S4051604
Method		8270BACK0516
13) Sample	13	
Datafile		S4051605
Method		8270BACK0516

Ical SVLVOSILEBNA14.y

6/9/08

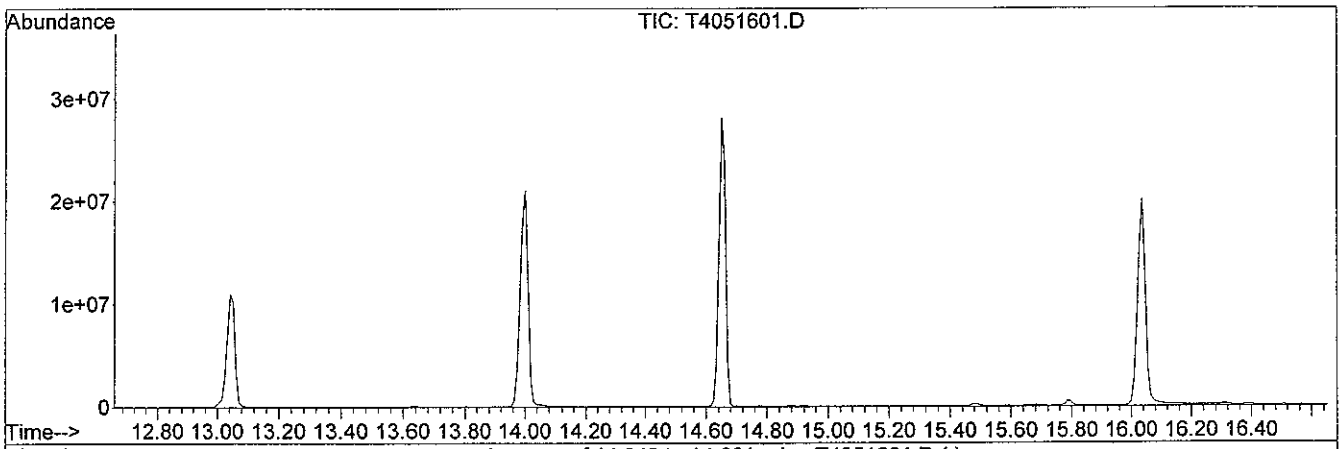
DFTPP

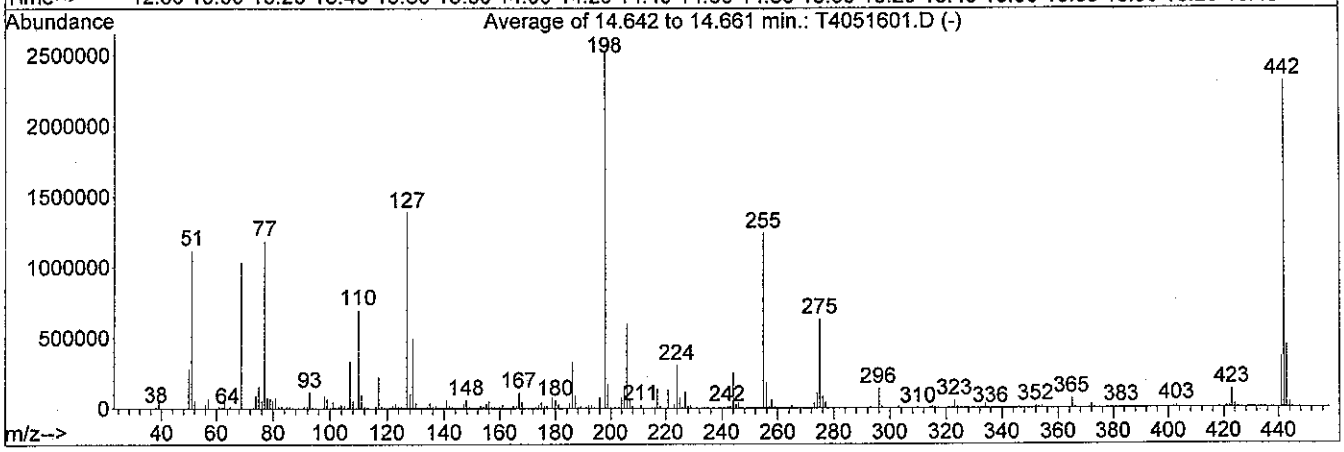
Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/16/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0515BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri May 16 11:18:06 2008





AutoFind: Scans 1244, 1245, 1246; Background Corrected with Scan 1240

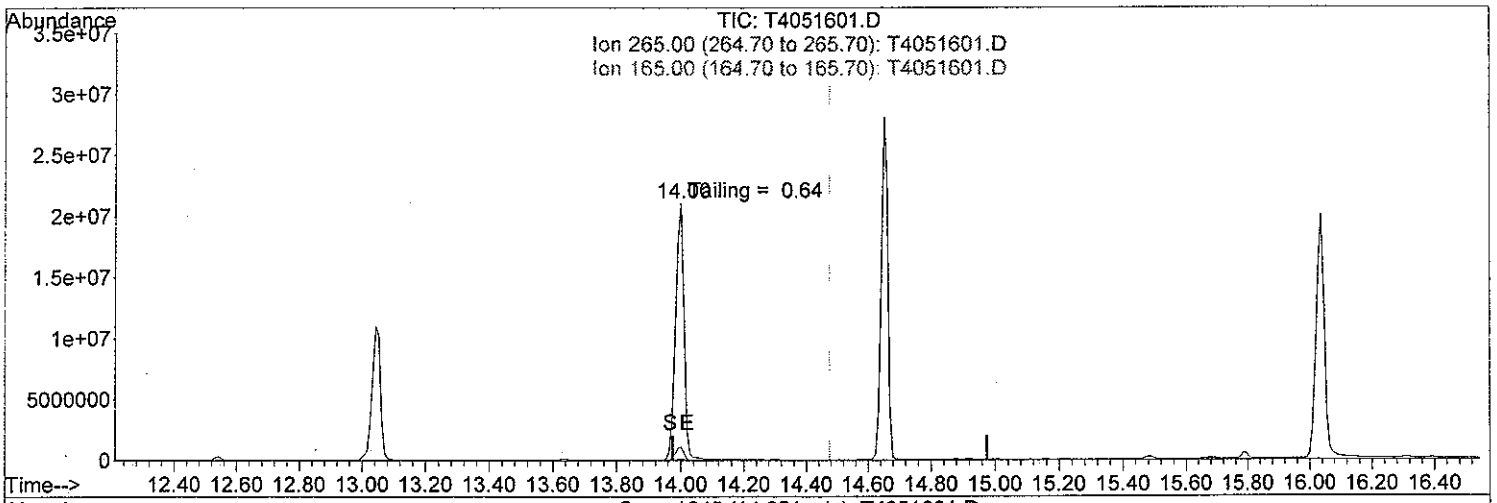
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.4	1122758	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.0	1038520	PASS
70	69	0.00	2	0.5	4891	PASS
127	198	40	60	54.9	1388473	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2530653	PASS
199	198	5	9	6.7	170435	PASS
275	198	10	30	25.0	632034	PASS
365	198	1	100	2.8	69629	PASS
441	443	0.01	100	80.6	362072	PASS
442	198	40	100	91.5	2316591	PASS
443	442	17	23	19.4	449414	PASS

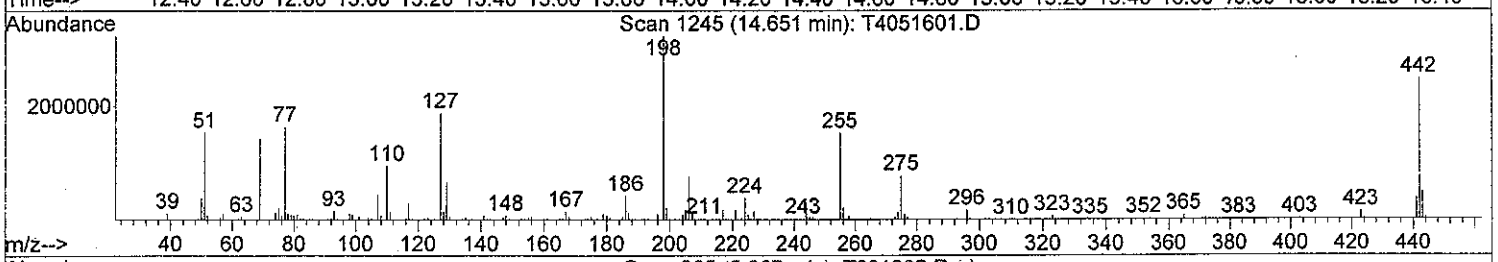
Quantitation Report (Qedit)

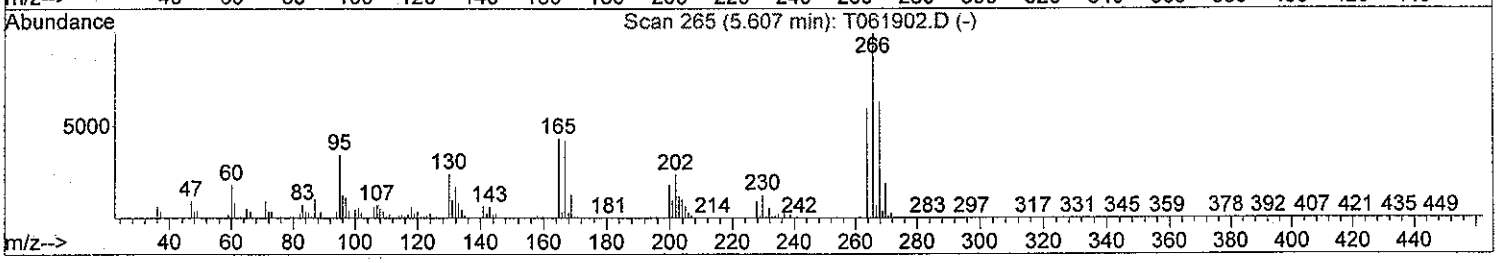
Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/16/08

Quant Time: May 16 18:19:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration







TIC: T4051601.D

(1) Pentachlorophenol (T)

14.651min (+0.176) 93.97ug/ml

response 42162332

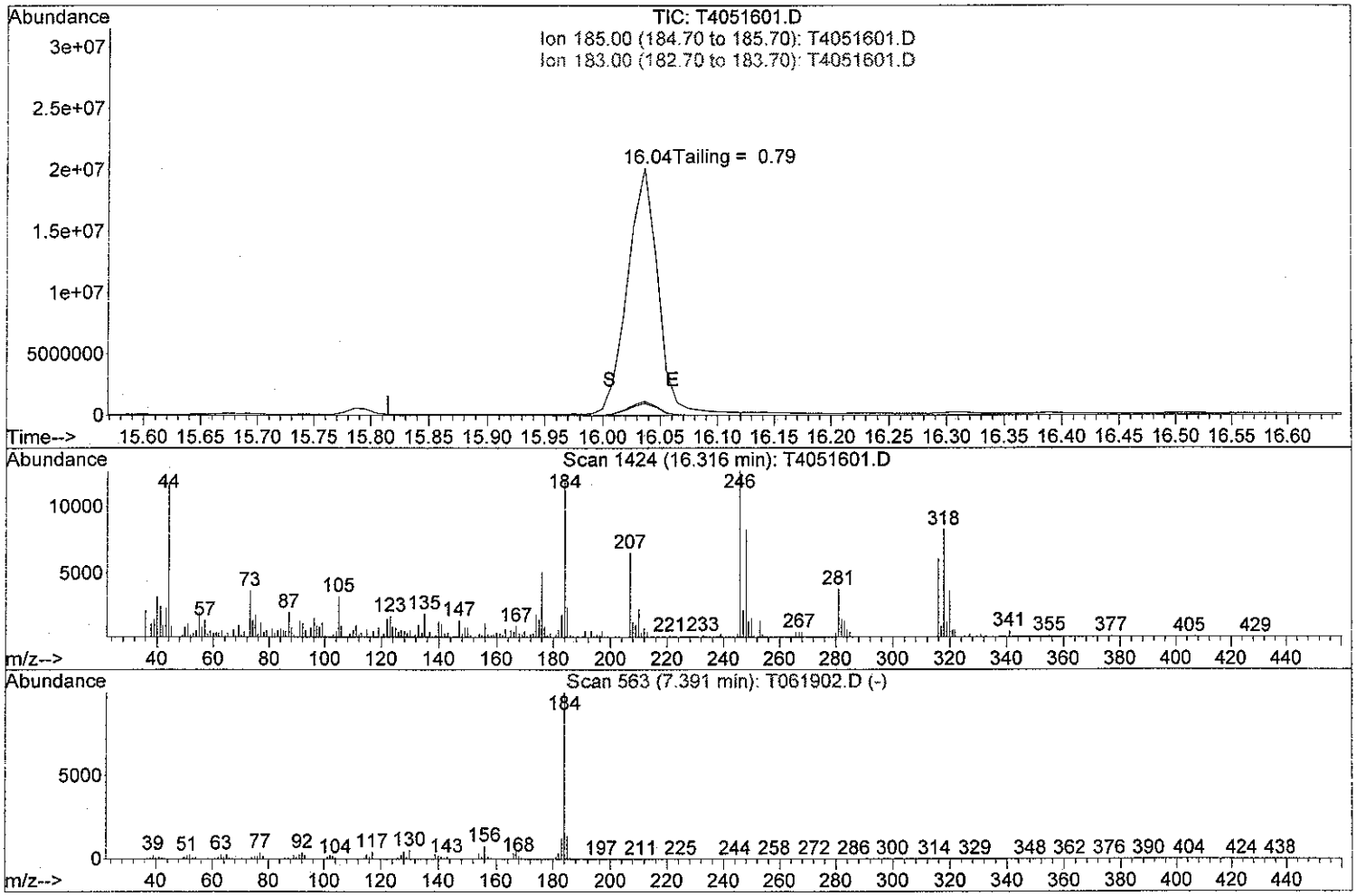
Signal	Exp%	Act%
TIC	100	100
265.00	0.00	0.11#
165.00	535.00	0.10#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\May\MAY16\
Data File : T4051601.D
Acq On : 16 May 2008 5:30 pm
Operator : JAD
Sample : T4051601
Misc :
ALS Vial : 2 Sample Multiplier: 1

T405/16/08

Quant Time: May 16 18:19:30 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



TIC: T4051601.D

(3) Benzidine (T)

16.315min (-16.315) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	567.20	0.00
183.00	508.20	0.00
0.00	0.00	0.00

Response Factor Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Calibration Files
0.5 =I4051601.D 2 =I4051602.D 5 =I4051603.D
10 =I4051604.D 15 =I4051605.D 25 =I4051606.D

		Compound	0.5	2	5	10	15	25	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	T	N-Nitrosodimethyl	0.523	0.551	0.548	0.599	0.602	0.557	0.563	5.52
3)	t	Pyridine	1.073	1.121	1.047	1.198	1.170	1.081	1.115	5.31
4)	S	2-Fluorophenol	1.223	1.218	1.302	1.273	1.291	1.232	1.256	2.92
5)	T	Benzaldehyde	0.870	0.860	0.913	0.842	0.863	0.775	0.854	5.33
6)	T	Aniline	1.377	1.372	1.433	1.407	1.420	1.356	1.394	2.17
7)	T	bis(2-Chloroethyl	0.986	0.959	0.995	0.998	1.020	0.998	0.993	2.00
8)	S	Phenol-d5	1.528	1.521	1.622	1.595	1.610	1.531	1.568	2.94
9)	MC	Phenol	1.874	1.846	1.940	1.896	1.923	1.824	1.884	2.36#✓
10)	M	2-Chlorophenol	1.495	1.467	1.563	1.518	1.546	1.478	1.511	2.52
11)	T	1,3-Dichlorobenze	1.646	1.660	1.735	1.673	1.693	1.634	1.674	2.17
12)	MC	1,4-Dichlorobenze	1.730	1.675	1.751	1.713	1.738	1.655	1.710	2.21#✓
13)	T	1,2-Dichlorobenze	1.614	1.562	1.634	1.595	1.610	1.556	1.595	1.93
14)	T	Benzyl alcohol	0.784	0.849	0.963	0.971	0.999	0.981	0.925	9.42
15)	T	bis(2-chloroisopr	2.597	2.509	2.669	2.535	2.558	2.439	2.551	3.06
16)	T	2-Methylphenol	1.282	1.272	1.374	1.348	1.374	1.319	1.328	3.36
17)	T	Acetophenone	1.877	1.817	1.969	1.921	1.965	1.896	1.908	3.02
18)	T	Hexachloroethane	0.581	0.557	0.610	0.598	0.605	0.590	0.590	3.30
19)	MP	N-Nitroso-di-n-pr	0.692	0.729	0.713	0.780	0.784	0.735	0.739	4.95
20)	T	4-Methylphenol	1.390	1.392	1.484	1.469	1.478	1.411	1.438	3.07
21)	I	Naphthalene-d8	ISTD							
22)	S	Nitrobenzene-d5	0.281	0.295	0.315	0.316	0.316	0.313	0.306	4.69
23)	T	Nitrobenzene	0.313	0.333	0.352	0.349	0.350	0.339	0.339	4.39
24)	T	Isophorone	0.544	0.567	0.617	0.604	0.604	0.601	0.590	4.75
25)	TC	2-Nitrophenol	0.157	0.179	0.202	0.205	0.208	0.207	0.193	10.78#✓
26)	T	2,4-Dimethylpheno	0.323	0.334	0.350	0.344	0.337	0.327	0.336	3.02
27)	T	Benzoic acid	0.148	0.197	0.249	0.253	0.259	0.265	0.229	20.25—
28)	T	bis(2-Chloroethox	0.411	0.398	0.430	0.418	0.419	0.411	0.415	2.58
29)	TC	2,4-Dichloropheno	0.261	0.283	0.298	0.300	0.301	0.295	0.290	5.40#✓
30)	M	1,2,4-Trichlorobe	0.313	0.302	0.317	0.311	0.309	0.303	0.309	1.92
31)	T	Naphthalene	1.126	1.122	1.152	1.120	1.117	1.038	1.113	3.47
32)	T	4-Chloroaniline	0.408	0.428	0.464	0.461	0.461	0.453	0.446	5.11
33)	TC	Hexachlorobutadie	0.152	0.153	0.162	0.156	0.158	0.155	0.156	2.41#✓
34)	T	Caprolactam	0.137	0.105	0.116	0.116	0.117	0.117	0.118	8.70
35)	MC	4-Chloro-3-methyl	0.276	0.295	0.318	0.317	0.320	0.315	0.307	5.82#✓
36)	T	2-Methylnaphthale	0.747	0.744	0.780	0.760	0.757	0.733	0.754	2.12
37)	I	Acenaphthene-d10	ISTD							
38)	TP	Hexachlorocyclope	0.309	0.321	0.350	0.352	0.364	0.352	0.341	6.21
39)	TC	2,4,6-Trichloroph	0.308	0.329	0.350	0.349	0.353	0.347	0.339	5.21#✓
40)	T	2,4,5-Trichloroph	0.339	0.361	0.382	0.391	0.388	0.380	0.374	5.40
41)	S	2-Fluorobiphenyl	1.340	1.334	1.372	1.334	1.345	1.277	1.334	2.33
42)	T	Biphenyl	1.550	1.544	1.585	1.542	1.549	1.449	1.537	2.97
43)	T	2-Chloronaphthale	1.208	1.202	1.230	1.198	1.214	1.146	1.200	2.38
44)	T	2-Nitroaniline	0.255	0.305	0.337	0.348	0.357	0.349	0.325	11.96
45)	T	Acenaphthylene	1.963	1.987	2.060	2.032	2.039	1.859	1.990	3.69
46)	T	Dimethylphthalate	1.404	1.418	1.475	1.466	1.482	1.434	1.447	2.25
47)	T	2,6-Dinitrotoluen	0.244	0.296	0.331	0.342	0.345	0.337	0.316	12.42
48)	MC	Acenaphthene	1.299	1.252	1.308	1.260	1.276	1.218	1.269	2.60#✓
49)	T	3-Nitroaniline	0.275	0.333	0.368	0.380	0.387	0.378	0.354	12.16
50)	TP	2,4-Dinitrophenol	0.066	0.109	0.159	0.186	0.199	0.209	0.155	36.36—
51)	T	Dibenzofuran	1.795	1.773	1.821	1.790	1.802	1.701	1.780	2.35
52)	M	2,4-Dinitrotoluen	0.310	0.390	0.448	0.459	0.472	0.462	0.424	14.80
53)	MP	4-Nitrophenol	0.126	0.136	0.164	0.171	0.174	0.180	0.159	13.97
54)	T	Fluorene	1.411	1.396	1.462	1.422	1.422	1.354	1.411	2.54
55)	T	4-Chlorophenyl-ph	0.654	0.649	0.676	0.647	0.654	0.608	0.648	3.39

Response Factor Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Calibration Files
0.5 =I4051601.D 2 =I4051602.D 5 =I4051603.D
10 =I4051604.D 15 =I4051605.D 25 =I4051606.D

		Compound	0.5	2	5	10	15	25	Avg	%RSD
56)	T	Diethylphthalate	1.422	1.420	1.512	1.476	1.496	1.426	1.459	2.82
57)	T	4-Nitroaniline	0.276	0.329	0.369	0.379	0.375	0.356	0.347	11.39
58)	I	Phenanthrene-d10	----------ISTD----------							
59)	T	4,6-Dinitro-2-met	0.082	0.123	0.162	0.180	0.184	0.188	0.153	27.48
60)	T	Azobenzene	0.246	0.257	0.274	0.272	0.272	0.265	0.264	4.12
61)	TC	n-Nitrosodiphenyl	0.594	0.625	0.644	0.643	0.645	0.637	0.631	3.13#
62)	S	2,4,6-Tribromophe	0.091	0.093	0.105	0.107	0.107	0.107	0.102	7.47
63)	T	4-Bromophenyl-phe	0.207	0.214	0.226	0.223	0.225	0.219	0.219	3.27
64)	T	Hexachlorobenzene	0.229	0.226	0.236	0.235	0.234	0.232	0.232	1.71
65)	T	Atrazine	0.202	0.214	0.228	0.222	0.215	0.204	0.214	4.67
66)	MC	Pentachlorophenol	0.089	0.115	0.140	0.149	0.151	0.153	0.133	19.22#
67)	T	Phenanthrene	1.312	1.289	1.324	1.299	1.308	1.212	1.291	3.11
68)	T	Anthracene	1.274	1.285	1.350	1.337	1.310	1.224	1.297	3.54
69)	T	Carbazole	1.220	1.197	1.196	1.169	1.135	1.081	1.166	4.37
70)	T	Di-n-butylphthala	1.452	1.525	1.677	1.670	1.655	1.348	1.554	8.75
71)	TC	Fluoranthene	1.270	1.284	1.355	1.327	1.319	1.241	1.299	3.21#
72)	I	Chrysene-d12	----------ISTD----------							
73)	T	Benzidine	0.236	0.328	0.368	0.376	0.388	0.388	0.347	16.96
74)	M	Pyrene	1.409	1.420	1.461	1.441	1.449	1.340	1.420	3.07
75)	S	Terphenyl-d14	0.908	0.911	0.948	0.932	0.935	0.879	0.919	2.69
76)	T	Butylbenzylphthal	0.646	0.698	0.780	0.785	0.800	0.772	0.747	8.13
77)	T	3,3'-Dichlorobenz	0.402	0.432	0.466	0.461	0.472	0.459	0.449	5.91
78)	T	Benz[a]anthracene	1.368	1.351	1.382	1.362	1.350	1.275	1.348	2.80
79)	T	Chrysene	1.279	1.254	1.301	1.255	1.279	1.223	1.265	2.15
80)	T	bis(2-Ethylhexyl)	0.948	1.032	1.152	1.140	1.171	1.105	1.091	7.85
81)	I	Perylene-d12	----------ISTD----------							
82)	TC	Di-n-octylphthala	1.540	1.736	2.029	2.045	2.097	1.649	1.849	12.81#
83)	T	Benzo[b]fluoranth	1.399	1.317	1.514	1.492	1.334	1.367	1.404	5.85
84)	T	Benzo[k]fluoranth	1.189	1.331	1.287	1.266	1.425	1.271	1.295	6.06
85)	TC	Benzo[a]pyrene	1.206	1.250	1.337	1.339	1.343	1.300	1.296	4.35#
86)	T	Indeno[1,2,3-cd]p	1.412	1.471	1.585	1.565	1.577	1.536	1.524	4.50
87)	T	Dibenz[a,h]anthra	1.240	1.295	1.377	1.377	1.377	1.332	1.333	4.23
88)	T	Benzo[g,h,i]peryl	1.211	1.248	1.334	1.337	1.349	1.309	1.298	4.29

(#) = Out of Range

Compound List Report BNA4

Method Path : O:\ORGANICS\METHODS\BNA4\2008\
Method File : SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon May 19 13:02:56 2008
Response Via : Initial Calibration

Total Cpnds : 88

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	7.11	1.000	A	1	A	B
2	T	N-Nitrosodimethylamine	74	3.43	0.482	A	2	A	B
3	T	Pyridine	79	3.39	0.477	A	1	A	B
4	S	2-Fluorophenol	112	5.36	0.754	A	2	A	B
5	T	Benzaldehyde	77	6.52	0.916	A	2	A	B
6	T	Aniline	66	6.72	0.945	A	2	A	B
7	T	bis(2-Chloroethyl)ether	63	6.81	0.958	A	2	A	B
8	S	Phenol-d5	99	6.70	0.942	A	2	A	B
9	MC	Phenol	94	6.72	0.945	A	2	A	B
10	M	2-Chlorophenol	128	6.86	0.965	A	2	A	B
11	T	1,3-Dichlorobenzene	146	7.06	0.992	A	2	A	B
12	MC	1,4-Dichlorobenzene	146	7.13	1.003	A	2	A	B
13	T	1,2-Dichlorobenzene	146	7.41	1.042	A	2	A	B
14	T	Benzyl alcohol	108	7.36	1.035	A	2	A	B
15	T	bis(2-chloroisopropyl)ether	45	7.59	1.067	A	2	A	B
16	T	2-Methylphenol	108	7.56	1.063	A	1	A	B
17	T	Acetophenone	105	7.75	1.090	A	2	A	B
18	T	Hexachloroethane	117	7.86	1.105	A	2	A	B
19	MP	N-Nitroso-di-n-propylamine	70	7.80	1.097	A	3	A	B
20	T	4-Methylphenol	108	7.77	1.093	A	1	A	B
21	I	Naphthalene-d8	136	9.10	1.000	A	1	A	B
22	S	Nitrobenzene-d5	82	7.99	0.877	A	2	A	B
23	T	Nitrobenzene	77	8.01	0.880	A	2	A	B
24	T	Isophorone	82	8.37	0.919	A	2	A	B
25	T	2-Nitrophenol	139	8.52	0.936	A	2	A	B
26	T	2,4-Dimethylphenol	107	8.59	0.944	A	2	A	B
27	T	Benzoic acid	105	8.79	0.966	A	2	A	B
28	T	bis(2-Chloroethoxy)methane	93	8.75	0.961	A	2	A	B
29	T	2,4-Dichlorophenol	162	8.89	0.977	A	2	A	B
30	M	1,2,4-Trichlorobenzene	180	9.03	0.992	A	2	A	B
31	T	Naphthalene	128	9.13	1.003	A	2	A	B
32	T	4-Chloroaniline	127	9.27	1.018	A	1	A	B
33	T	Hexachlorobutadiene	225	9.44	1.037	A	2	A	B
34	T	Caprolactam	113	9.84	1.081	A	2	A	B
35	MC	4-Chloro-3-methylphenol	107	10.10	1.109	A	2	A	B
36	T	2-Methylnaphthalene	142	10.28	1.130	A	1	A	B
37	I	Acenaphthene-d10	164	11.99	1.000	A	2	A	B
38	T	Hexachlorocyclopentadiene	237	10.66	0.889	A	2	A	B
39	T	2,4,6-Trichlorophenol	196	10.80	0.901	A	2	A	B
40	T	2,4,5-Trichlorophenol	196	10.87	0.906	A	2	A	B
41	S	2-Fluorobiphenyl	172	10.92	0.911	A	2	A	B
42	T	Biphenyl	154	11.06	0.922	A	2	A	B
43	T	2-Chloronaphthalene	162	11.08	0.924	A	2	A	B
44	T	2-Nitroaniline	65	11.31	0.943	A	2	A	B
45	T	Acenaphthylene	152	11.75	0.980	A	2	A	B
46	T	Dimethylphthalate	163	11.65	0.971	A	2	A	B
47	T	2,6-Dinitrotoluene	165	11.76	0.981	A	2	A	B
48	MC	Acenaphthene	153	12.04	1.004	A	2	A	B
49	T	3-Nitroaniline	138	11.97	0.998	A	2	A	B
50	T	2,4-Dinitrophenol	184	12.12	1.011	A	2	A	B
51	T	Dibenzofuran	168	12.28	1.024	A	1	A	B
52	M	2,4-Dinitrotoluene	165	12.36	1.030	A	2	A	B
53	MP	4-Nitrophenol	109	12.23	1.020	A	2	A	B
54	T	Fluorene	166	12.80	1.067	A	2	A	B

55	T	4-Chlorophenyl-phenylether	204	12.81	1.068	A	2	A	B
56	T	Diethylphthalate	149	12.73	1.061	A	2	A	B
57	T	4-Nitroaniline	138	12.92	1.078	A	2	A	B
58	I	Phenanthrene-d10	188	14.16	1.000	A	2	A	B
59	T	4,6-Dinitro-2-methylphenol	198	12.96	0.915	A	2	A	B
60	T	Azobenzene	182	13.03	0.921	A	1	A	B
61	T	n-Nitrosodiphenylamine	169	13.00	0.918	A	2	A	B
62	S	2,4,6-Tribromophenol	330	13.20	0.932	A	3	A	B
63	T	4-Bromophenyl-phenylether	248	13.52	0.955	A	2	A	B
64	T	Hexachlorobenzene	284	13.73	0.970	A	2	A	B
65	T	Atrazine	200	13.81	0.976	A	2	A	B
66	MC	Pentachlorophenol	266	13.99	0.988	A	2	A	B
67	T	Phenanthrene	178	14.20	1.003	A	2	A	B
68	T	Anthracene	178	14.26	1.007	A	2	A	B
69	T	Carbazole	167	14.49	1.024	A	2	A	B
70	T	Di-n-butylphthalate	149	15.00	1.060	A	2	A	B
71	T	Fluoranthene	202	15.85	1.119	A	2	A	B
72	I	Chrysene-d12	240	17.81	1.000	A	2	A	B
73	T	Benzidine	184	16.03	0.900	A	2	A	B
74	M	Pyrene	202	16.16	0.907	A	2	A	B
75	S	Terphenyl-d14	244	16.35	0.918	A	3	A	B
76	T	Butylbenzylphthalate	149	17.02	0.956	A	2	A	B
77	T	3,3'-Dichlorobenzidine	252	17.76	0.997	A	2	A	B
78	T	Benz[a]anthracene	228	17.78	0.998	A	2	A	B
79	T	Chrysene	228	17.85	1.002	A	2	A	B
80	T	bis(2-Ethylhexyl)phthalate	149	17.78	0.998	A	2	A	B
81	I	Perylene-d12	264	20.27	1.000	A	2	A	B
82	T	Di-n-octylphthalate	149	18.68	0.922	A	1	A	B
83	T	Benzo[b]fluoranthene	252	19.53	0.964	A	2	A	B
84	T	Benzo[k]fluoranthene	252	19.57	0.966	A	2	A	B
85	T	Benzo[a]pyrene	252	20.15	0.994	A	2	A	B
86	T	Indeno[1,2,3-cd]pyrene	276	22.85	1.128	A	2	A	B
87	T	Dibenz[a,h]anthracene	278	22.87	1.128	A	2	A	B
88	T	Benzo[g,h,i]perylene	276	23.62	1.166	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
#Qual = number of qualifiers
A/H = Area or Height
ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

SVLV0516BNA4.M Mon May 19 13:25:13 2008

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	611068	5.00	ug/mL	0.00
21) Naphthalene-d8	9.09	136	2583205	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1434766	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2321519	5.00	ug/mL	0.00
72) Chrysene-d12	17.80	240	2267127	5.00	ug/mL	0.00
81) Perylene-d12	20.27	264	2284157	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	74705	0.48	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	=	2.40%#	
8) Phenol-d5	6.69	99	93353	0.48	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	=	2.40%#	
22) Nitrobenzene-d5	7.99	82	72684	0.46	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	=	2.30%#	
41) 2-Fluorobiphenyl	10.92	172	192251	0.47	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	=	2.35%#	
62) 2,4,6-Tribromophenol	13.19	330	21124	0.43	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	=	2.15%#	
75) Terphenyl-d14	16.34	244	205852	0.47	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	=	2.35%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.44	74	31949	0.43	ug/mL	99
3) Pyridine	3.44	79	65562	0.49	ug/mL	91
5) Benzaldehyde	6.52	77	53176	0.63	ug/ml	88
6) Aniline	6.71	66	84133	0.53	ug/ml#	49
7) bis(2-Chloroethyl)ether	6.81	63	60245	0.53	ug/mL#	82
9) Phenol	6.71	94	114501	0.51	ug/mL#	72
10) 2-Chlorophenol	6.86	128	91375	0.49	ug/mL	90
11) 1,3-Dichlorobenzene	7.06	146	100585	0.48	ug/mL	96
12) 1,4-Dichlorobenzene	7.13	146	105693m	0.49	ug/mL	
13) 1,2-Dichlorobenzene	7.41	146	98656	0.50	ug/mL	100
14) Benzyl alcohol	7.35	108	47890	0.49	ug/mL	86
15) bis(2-chloroisopropyl)ethe	7.59	45	158704	0.65	ug/mL#	53
16) 2-Methylphenol	7.55	108	78347	0.49	ug/mL	94
17) Acetophenone	7.75	105	114713	0.48	ug/ml#	83
18) Hexachloroethane	7.86	117	35485	0.50	ug/mL	88
19) N-Nitroso-di-n-propylamine	7.79	70	42311	0.46	ug/mL#	92
20) 4-Methylphenol	7.76	108	84951	0.50	ug/mL	91
23) Nitrobenzene	8.01	77	80727	0.48	ug/mL	91
24) Isophorone	8.37	82	140512	0.46	ug/mL#	93
25) 2-Nitrophenol	8.52	139	40494	0.40	ug/mL	87
26) 2,4-Dimethylphenol	8.58	107	83316	0.52	ug/mL	88
27) Benzoic acid	8.67	105	38303m	0.56	ug/mL	
28) bis(2-Chloroethoxy)methane	8.74	93	106278	0.49	ug/mL#	97
29) 2,4-Dichlorophenol	8.88	162	67334	0.45	ug/mL	97
30) 1,2,4-Trichlorobenzene	9.03	180	80915	0.49	ug/mL	98
31) Naphthalene	9.13	128	290956	0.49	ug/mL	98
32) 4-Chloroaniline	9.27	127	105340	0.47	ug/mL	97
33) Hexachlorobutadiene	9.44	225	39275	0.47	ug/mL	98
34) Caprolactam	9.75	113	35315m	0.63	ug/ml	
35) 4-Chloro-3-methylphenol	10.08	107	71175	0.44	ug/mL	95
36) 2-Methylnaphthalene	10.28	142	193045	0.48	ug/mL	95
38) Hexachlorocyclopentadiene	10.66	237	44340	0.46	ug/mL	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

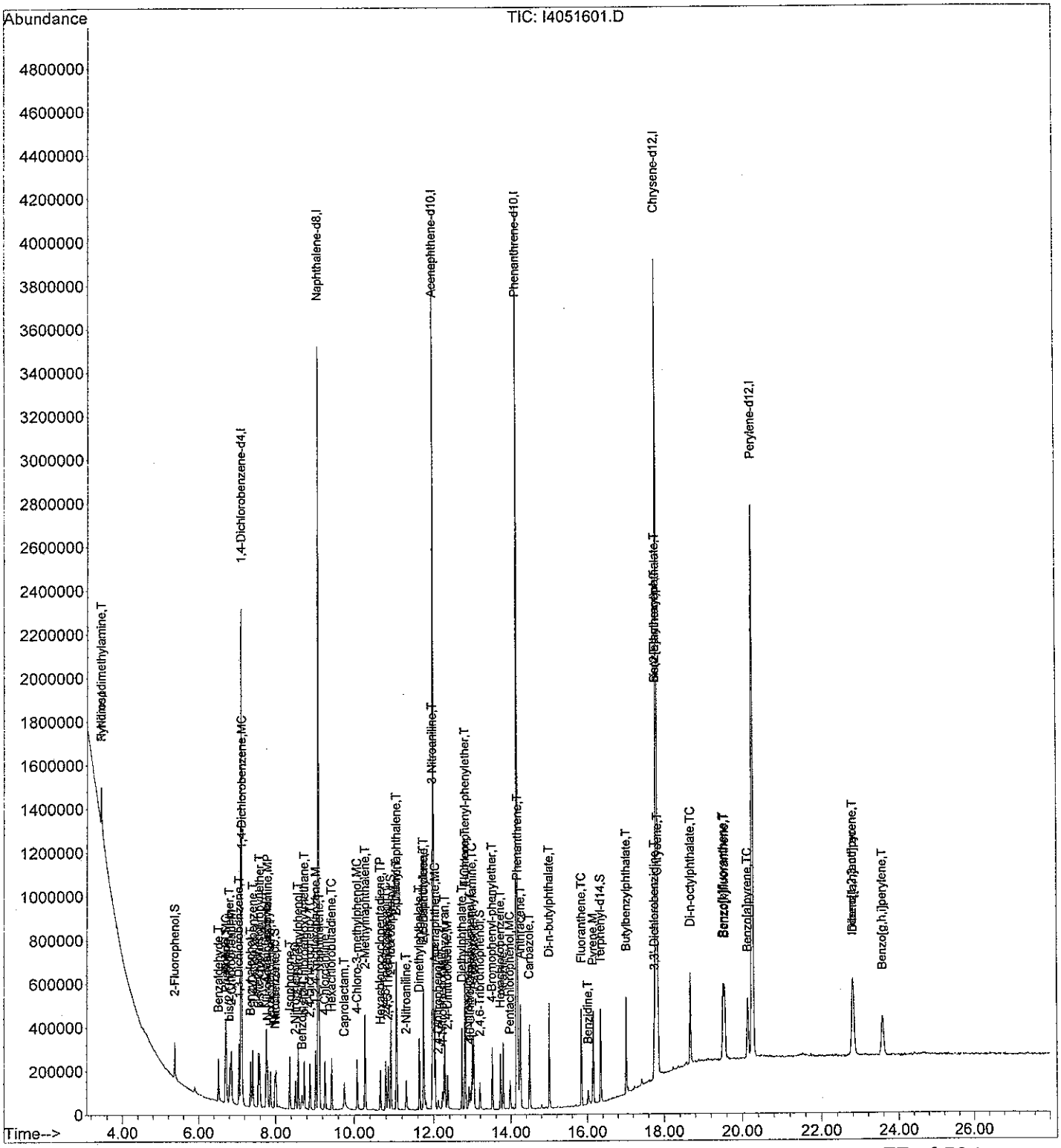
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.79	196	44158	0.46 ug/mL	96
40) 2,4,5-Trichlorophenol	10.85	196	48567m	0.45 ug/mL	
42) Biphenyl	11.06	154	222372	0.47 ug/ml	97
43) 2-Chloronaphthalene	11.07	162	173248	0.48 ug/mL	97
44) 2-Nitroaniline	11.30	65	36579	0.43 ug/mL#	84
45) Acenaphthylene	11.75	152	281630	0.47 ug/mL	96
46) Dimethylphthalate	11.64	163	201376m	0.48 ug/mL	
47) 2,6-Dinitrotoluene	11.75	165	35080	0.40 ug/mL	88
48) Acenaphthene	12.04	153	186310	0.47 ug/mL	98
49) 3-Nitroaniline	11.96	138	39448	0.43 ug/mL#	81
50) 2,4-Dinitrophenol	12.11	184	9504	0.26 ug/mL#	84
51) Dibenzofuran	12.28	168	257600	0.48 ug/mL#	81
52) 2,4-Dinitrotoluene	12.35	165	44502	0.37 ug/mL#	48
53) 4-Nitrophenol	12.23	109	18132	0.50 ug/mL#	3
54) Fluorene	12.80	166	202442	0.47 ug/mL	97
55) 4-Chlorophenyl-phenylether	12.80	204	93771	0.48 ug/mL	92
56) Diethylphthalate	12.72	149	204002	0.47 ug/mL	99
57) 4-Nitroaniline	12.90	138	39549	0.44 ug/mL#	73
59) 4,6-Dinitro-2-methylphenol	12.95	198	19138m	0.30 ug/mL	
60) Azobenzene	13.03	182	57142	0.45 ug/mL	60
61) n-Nitrosodiphenylamine	12.99	169	137879	0.44 ug/mL	94
63) 4-Bromophenyl-phenylether	13.52	248	48167	0.43 ug/mL#	87
64) Hexachlorobenzene	13.73	284	53049	0.45 ug/mL#	87
65) Atrazine	13.80	200	46883	0.44 ug/ml#	94
66) Pentachlorophenol	13.98	266	20708	0.34 ug/mL	99
67) Phenanthrene	14.19	178	304593	0.49 ug/mL	98
68) Anthracene	14.25	178	295830	0.47 ug/mL	99
69) Carbazole	14.48	167	283180	0.49 ug/mL	95
70) Di-n-butylphthalate	15.00	149	337095	0.46 ug/mL	98
71) Fluoranthene	15.84	202	294895	0.47 ug/mL	97
73) Benzidine	16.02	184	53464m	0.37 ug/mL	
74) Pyrene	16.16	202	319417	0.49 ug/mL	97
76) Butylbenzylphthalate	17.01	149	146533	0.43 ug/mL	88
77) 3,3'-Dichlorobenzidine	17.75	252	91204	0.44 ug/mL#	95
78) Benz[a]anthracene	17.78	228	310243	0.49 ug/mL	98
79) Chrysene	17.84	228	289913	0.50 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	214983	0.43 ug/mL	92
82) Di-n-octylphthalate	18.68	149	351669	0.42 ug/mL	99
83) Benzo[b]fluoranthene	19.51	252	319473	0.50 ug/mL	99
84) Benzo[k]fluoranthene	19.55	252	271649	0.46 ug/mL#	94
85) Benzo[a]pyrene	20.14	252	275576	0.46 ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.80	276	322611	0.46 ug/mL#	89
87) Dibenz[a,h]anthracene	22.82	278	283244	0.46 ug/mL#	94
88) Benzo[g,h,i]perylene	23.58	276	276690	0.46 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051601.D
Acq On : 16 May 2008 6:43 pm
Operator : JAD
Sample : I4051601
Misc : SW051608F
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 12:56:25 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon May 19 13:17:30 2008 Page: 3

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	623044	5.00 ug/mL	0.00
21) Naphthalene-d8	9.09	136	2582032	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1426262	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2282954	5.00 ug/mL	0.00
72) Chrysene-d12	17.80	240	2200435	5.00 ug/mL	0.00
81) Perylene-d12	20.27	264	2181337	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.36	112	303544	1.93 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	= 9.65%#	
8) Phenol-d5	6.69	99	379016	1.93 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 9.65%#	
22) Nitrobenzene-d5	7.99	82	304865	1.91 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 9.55%#	
41) 2-Fluorobiphenyl	10.92	172	760843	1.86 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 9.30%#	
62) 2,4,6-Tribromophenol	13.19	330	85369	1.77 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 8.85%#	
75) Terphenyl-d14	16.34	244	801904	1.88 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 9.40%#	

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.42	74	137384	1.83 ug/mL	97
3) Pyridine	3.41	79	279298	2.05 ug/mL#	80
5) Benzaldehyde	6.52	77	214280	2.49 ug/ml	89
6) Aniline	6.71	66	341829	2.10 ug/ml#	50
7) bis(2-Chloroethyl)ether	6.81	63	239110	2.04 ug/mL	92
9) Phenol	6.71	94	460029	2.01 ug/mL#	72
10) 2-Chlorophenol	6.86	128	365587	1.92 ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	413741	1.92 ug/mL	97
12) 1,4-Dichlorobenzene	7.13	146	417413m	1.91 ug/mL	
13) 1,2-Dichlorobenzene	7.41	146	389181	1.95 ug/mL	100
14) Benzyl alcohol	7.35	108	211619	2.12 ug/mL	83
15) bis(2-chloroisopropyl)ethe	7.59	45	625250	2.52 ug/mL#	52
16) 2-Methylphenol	7.55	108	316971	1.93 ug/mL	94
17) Acetophenone	7.75	105	452829	1.86 ug/ml#	82
18) Hexachloroethane	7.86	117	138716	1.93 ug/mL	90
19) N-Nitroso-di-n-propylamine	7.79	70	181676	1.94 ug/mL#	95
20) 4-Methylphenol	7.76	108	347025	1.99 ug/mL	92
23) Nitrobenzene	8.00	77	343884	2.02 ug/mL	89
24) Isophorone	8.37	82	585396	1.91 ug/mL#	93
25) 2-Nitrophenol	8.52	139	184404	1.84 ug/mL#	85
26) 2,4-Dimethylphenol	8.58	107	345412	2.15 ug/mL	92
27) Benzoic acid	8.71	105	203518	2.97 ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.74	93	411217	1.89 ug/mL#	98
29) 2,4-Dichlorophenol	8.88	162	292048	1.94 ug/mL	98
30) 1,2,4-Trichlorobenzene	9.03	180	312401	1.91 ug/mL	99
31) Naphthalene	9.13	128	1159152	1.96 ug/mL	98
32) 4-Chloroaniline	9.27	127	442127	1.98 ug/mL	98
33) Hexachlorobutadiene	9.44	225	157608	1.89 ug/mL	99
34) Caprolactam	9.77	113	108690	1.95 ug/ml	85
35) 4-Chloro-3-methylphenol	10.08	107	304361	1.88 ug/mL	91
36) 2-Methylnaphthalene	10.28	142	768645	1.89 ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	183412	1.90 ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

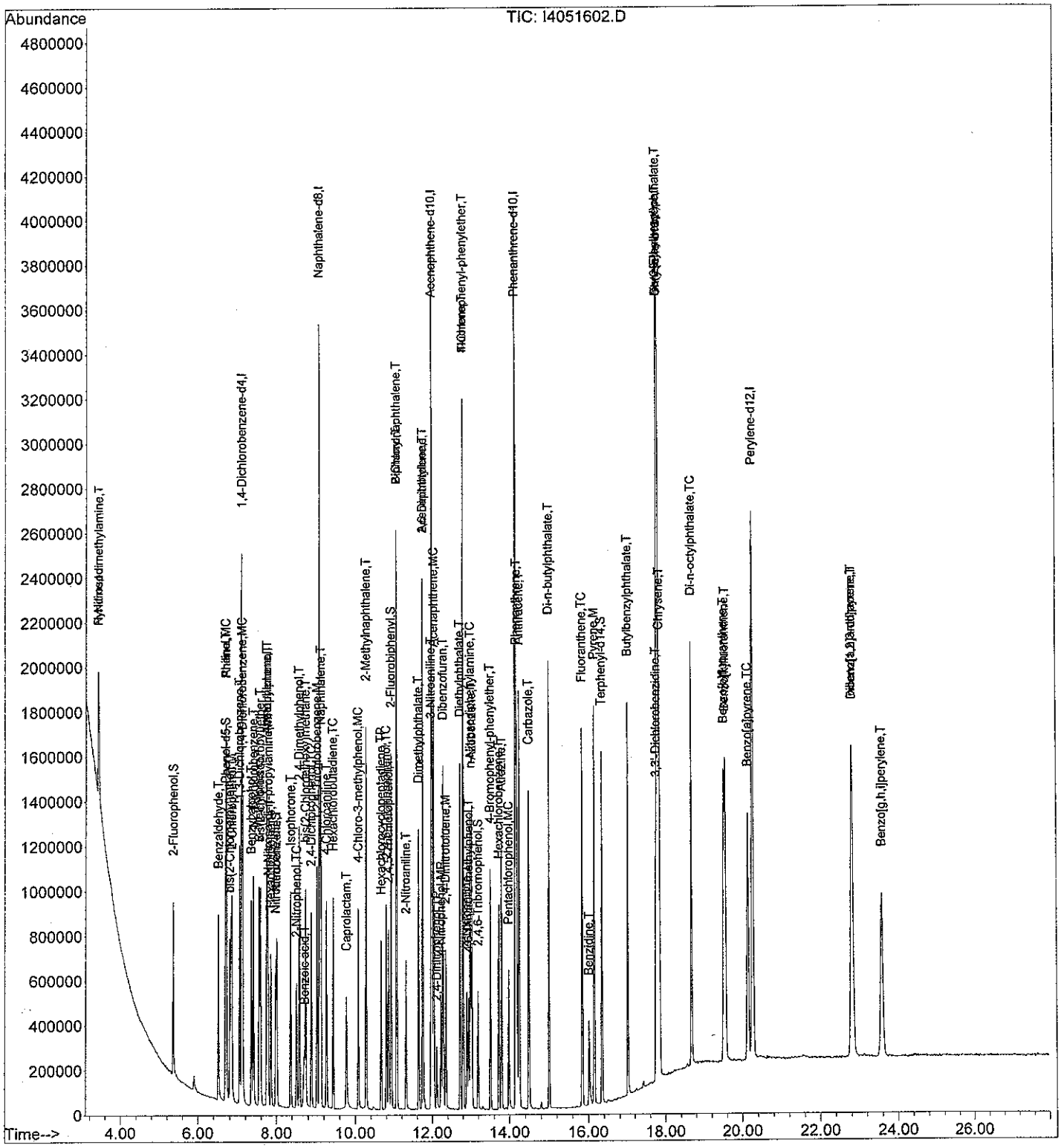
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.79	196	187448	1.95 ug/mL	98
40) 2,4,5-Trichlorophenol	10.86	196	205940m	1.91 ug/mL	
42) Biphenyl	11.06	154	880700	1.86 ug/ml	97
43) 2-Chloronaphthalene	11.07	162	685815	1.92 ug/mL	99
44) 2-Nitroaniline	11.31	65	174029	2.08 ug/mL#	80
45) Acenaphthylene	11.75	152	1133402	1.88 ug/mL	97
46) Dimethylphthalate	11.64	163	809014	1.92 ug/mL#	82
47) 2,6-Dinitrotoluene	11.76	165	168921	1.94 ug/mL#	87
48) Acenaphthene	12.04	153	714422	1.83 ug/mL	97
49) 3-Nitroaniline	11.96	138	190048	2.07 ug/mL#	82
50) 2,4-Dinitrophenol	12.11	184	62464	1.72 ug/mL#	80
51) Dibenzofuran	12.28	168	1011259	1.90 ug/mL#	80
52) 2,4-Dinitrotoluene	12.36	165	222616	1.88 ug/mL#	44
53) 4-Nitrophenol	12.23	109	77608	2.17 ug/mL#	20
54) Fluorene	12.80	166	796210	1.86 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.80	204	370008	1.89 ug/mL	93
56) Diethylphthalate	12.72	149	810381	1.87 ug/mL	100
57) 4-Nitroaniline	12.90	138	187519	2.10 ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.95	198	112352	1.77 ug/mL#	100
60) Azobenzene	13.03	182	234315	1.86 ug/mL	59
61) n-Nitrosodiphenylamine	13.00	169	571092	1.86 ug/mL	96
63) 4-Bromophenyl-phenylether	13.52	248	195636	1.78 ug/mL#	91
64) Hexachlorobenzene	13.73	284	206780	1.79 ug/mL#	88
65) Atrazine	13.80	200	195055	1.85 ug/ml#	94
66) Pentachlorophenol	13.98	266	105047	1.75 ug/mL	97
67) Phenanthrene	14.19	178	1177000	1.93 ug/mL	99
68) Anthracene	14.25	178	1173328	1.89 ug/mL	100
69) Carbazole	14.49	167	1093387	1.92 ug/mL	97
70) Di-n-butylphthalate	15.00	149	1392720	1.94 ug/mL#	98
71) Fluoranthene	15.84	202	1172341	1.90 ug/mL	97
73) Benzidine	16.02	184	288428	2.08 ug/mL	96
74) Pyrene	16.16	202	1250203	1.98 ug/mL	96
76) Butylbenzylphthalate	17.01	149	614726	1.86 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.75	252	380191	1.90 ug/mL#	95
78) Benz[a]anthracene	17.78	228	1189452	1.95 ug/mL	98
79) Chrysene	17.84	228	1103687	1.95 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	908152	1.86 ug/mL	94
82) Di-n-octylphthalate	18.68	149	1515016	1.89 ug/mL	100
83) Benzo[b]fluoranthene	19.51	252	1148919m	1.86 ug/mL	
84) Benzo[k]fluoranthene	19.55	252	1161220	2.06 ug/mL#	97
85) Benzo[a]pyrene	20.15	252	1090808	1.89 ug/mL#	96
86) Indeno[1,2,3-cd]pyrene	22.81	276	1283859	1.91 ug/mL#	89
87) Dibenz[a,h]anthracene	22.83	278	1129904	1.94 ug/mL#	94
88) Benzo[g,h,i]perylene	23.59	276	1089013	1.90 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051602.D
Acq On : 16 May 2008 7:19 pm
Operator : JAD
Sample : I4051602
Misc : SW051608E
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:13:28 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	599846	5.00 ug/mL	0.00
21) Naphthalene-d8	9.09	136	2520535	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1428173	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2291949	5.00 ug/mL	0.00
72) Chrysene-d12	17.81	240	2244569	5.00 ug/mL	0.00
81) Perylene-d12	20.27	264	2207676	5.00 ug/mL	0.00
System Monitoring Compounds					
4) 2-Fluorophenol	5.36	112	780711	5.15 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery	= 25.75%	
8) Phenol-d5	6.69	99	973154	5.15 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery	= 25.75%	
22) Nitrobenzene-d5	7.99	82	793143	5.10 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery	= 25.50%#	
41) 2-Fluorobiphenyl	10.92	172	1959887	4.78 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery	= 23.90%#	
62) 2,4,6-Tribromophenol	13.19	330	241628	4.98 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery	= 24.90%	
75) Terphenyl-d14	16.34	244	2127067	4.88 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery	= 24.40%#	

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.43	74	328673	4.54 ug/mL	100
3) Pyridine	3.40	79	627859	4.79 ug/mL	86
5) Benzaldehyde	6.52	77	547810	6.60 ug/ml	90
6) Aniline	6.71	66	859291	5.48 ug/ml#	50
7) bis(2-Chloroethyl)ether	6.81	63	596664	5.30 ug/mL#	83
9) Phenol	6.71	94	1163455	5.28 ug/mL#	72
10) 2-Chlorophenol	6.86	128	937370	5.11 ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	1040787	5.01 ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	1050309	4.99 ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	980057	5.10 ug/mL	99
14) Benzyl alcohol	7.35	108	577858	6.03 ug/mL#	80
15) bis(2-chloroisopropyl)ethe	7.59	45	1600828	6.71 ug/mL#	48
16) 2-Methylphenol	7.56	108	824202	5.21 ug/mL	95
17) Acetophenone	7.75	105	1180985	5.03 ug/ml#	82
18) Hexachloroethane	7.86	117	365780	5.29 ug/mL	88
19) N-Nitroso-di-n-propylamine	7.79	70	427723	4.73 ug/mL#	94
20) 4-Methylphenol	7.77	108	890208	5.30 ug/mL	92
23) Nitrobenzene	8.01	77	886472	5.35 ug/mL#	87
24) Isophorone	8.37	82	1556138	5.21 ug/mL#	93
25) 2-Nitrophenol	8.52	139	510219	5.20 ug/mL#	83
26) 2,4-Dimethylphenol	8.58	107	881806	5.61 ug/mL	91
27) Benzoic acid	8.75	105	626957	9.37 ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.74	93	1084703	5.11 ug/mL#	95
29) 2,4-Dichlorophenol	8.89	162	751851	5.11 ug/mL	97
30) 1,2,4-Trichlorobenzene	9.03	180	800046	5.01 ug/mL	99
31) Naphthalene	9.13	128	2902621	5.04 ug/mL	98
32) 4-Chloroaniline	9.27	127	1168983	5.36 ug/mL	99
33) Hexachlorobutadiene	9.44	225	408113	5.02 ug/mL	99
34) Caprolactam	9.80	113	291307	5.35 ug/ml	83
35) 4-Chloro-3-methylphenol	10.09	107	800486	5.06 ug/mL	90
36) 2-Methylnaphthalene	10.28	142	1964834	4.96 ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	500329	5.17 ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

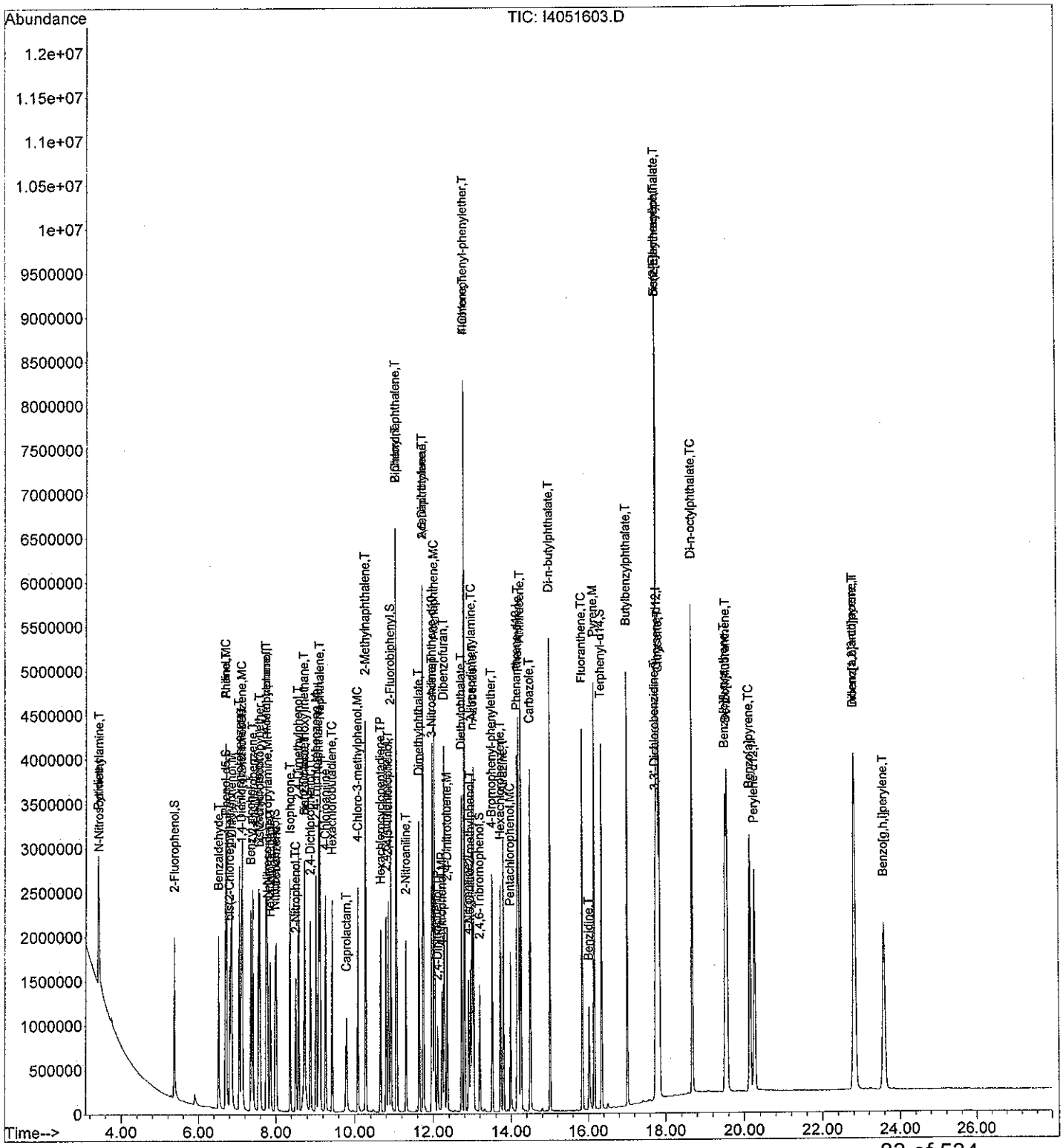
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	499851	5.19 ug/mL	97
40) 2,4,5-Trichlorophenol	10.86	196	546119m	5.05 ug/mL	
42) Biphenyl	11.06	154	2264099	4.78 ug/ml	97
43) 2-Chloronaphthalene	11.07	162	1756466	4.92 ug/mL	98
44) 2-Nitroaniline	11.31	65	480607	5.73 ug/mL#	77
45) Acenaphthylene	11.75	152	2942432	4.88 ug/mL	97
46) Dimethylphthalate	11.65	163	2107203	5.01 ug/mL	99
47) 2,6-Dinitrotoluene	11.76	165	472951	5.43 ug/mL#	86
48) Acenaphthene	12.04	153	1868068	4.78 ug/mL	98
49) 3-Nitroaniline	11.97	138	525590	5.71 ug/mL#	82
50) 2,4-Dinitrophenol	12.12	184	226375	6.23 ug/mL#	78
51) Dibenzofuran	12.28	168	2600716	4.89 ug/mL#	81
52) 2,4-Dinitrotoluene	12.36	165	640484	5.40 ug/mL#	43
53) 4-Nitrophenol	12.23	109	233998	6.54 ug/mL#	15
54) Fluorene	12.80	166	2088672	4.86 ug/mL	96
55) 4-Chlorophenyl-phenylether	12.80	204	964996	4.93 ug/mL	93
56) Diethylphthalate	12.73	149	2159435	4.98 ug/mL	99
57) 4-Nitroaniline	12.90	138	526786	5.90 ug/mL#	73
59) 4,6-Dinitro-2-methylphenol	12.96	198	370966	5.81 ug/mL#	100
60) Azobenzene	13.03	182	627315	4.95 ug/mL	60
61) n-Nitrosodiphenylamine	13.00	169	1476064	4.79 ug/mL	95
63) 4-Bromophenyl-phenylether	13.52	248	517772	4.70 ug/mL#	90
64) Hexachlorobenzene	13.73	284	541855	4.67 ug/mL#	89
65) Atrazine	13.81	200	521826	4.92 ug/ml#	95
66) Pentachlorophenol	13.98	266	321438	5.32 ug/mL	99
67) Phenanthrene	14.20	178	3034528	4.96 ug/mL	99
68) Anthracene	14.25	178	3094537	4.97 ug/mL	99
69) Carbazole	14.49	167	2741500	4.80 ug/mL	97
70) Di-n-butylphthalate	15.00	149	3843922	5.32 ug/mL#	99
71) Fluoranthene	15.85	202	3105122	5.03 ug/mL	97
73) Benzidine	16.02	184	825187	5.84 ug/mL	96
74) Pyrene	16.16	202	3278521	5.08 ug/mL	96
76) Butylbenzylphthalate	17.01	149	1749913	5.19 ug/mL	87
77) 3,3'-Dichlorobenzidine	17.75	252	1045695	5.11 ug/mL#	97
78) Benz[a]anthracene	17.78	228	3101058	4.97 ug/mL	99
79) Chrysene	17.85	228	2920317	5.05 ug/mL	98
80) bis(2-Ethylhexyl)phthalate	17.78	149	2586476	5.19 ug/mL	94
82) Di-n-octylphthalate	18.68	149	4480002	5.53 ug/mL	100
83) Benzo[b]fluoranthene	19.52	252	3342377	5.36 ug/mL	99
84) Benzo[k]fluoranthene	19.56	252	2842217	4.97 ug/mL#	94
85) Benzo[a]pyrene	20.15	252	2951723	5.07 ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.82	276	3498346	5.14 ug/mL#	89
87) Dibenz[a,h]anthracene	22.84	278	3040507	5.16 ug/mL#	95
88) Benzo[g,h,i]perylene	23.59	276	2944237	5.08 ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051603.D
Acq On : 16 May 2008 7:56 pm
Operator : JAD
Sample : I4051603
Misc : SW051608D
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 19 12:19:12 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon May 19 13:16:42 2008 Page: 3

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	633350	5.00 ug/mL	-0.05
21) Naphthalene-d8	9.10	136	2643857	5.00 ug/mL	-0.06
37) Acenaphthene-d10	11.99	164	1481468	5.00 ug/mL	-0.06
58) Phenanthrene-d10	14.16	188	2358542	5.00 ug/mL	-0.06
72) Chrysene-d12	17.81	240	2303180	5.00 ug/mL	-0.06
81) Perylene-d12	20.27	264	2254153	5.00 ug/mL	-0.08
System Monitoring Compounds					
4) 2-Fluorophenol	5.36	112	1612502	10.08 ug/mL	-0.04
Spiked Amount 20.000	Range 21 - 100		Recovery = 50.40%		
8) Phenol-d5	6.70	99	2020091	10.12 ug/mL	-0.04
Spiked Amount 20.000	Range 10 - 94		Recovery = 50.60%		
22) Nitrobenzene-d5	7.99	82	1668319	10.22 ug/mL	-0.05
Spiked Amount 20.000	Range 35 - 114		Recovery = 51.10%		
41) 2-Fluorobiphenyl	10.92	172	3953312	9.30 ug/mL	-0.06
Spiked Amount 20.000	Range 43 - 116		Recovery = 46.50%		
62) 2,4,6-Tribromophenol	13.20	330	505258	10.12 ug/mL	-0.05
Spiked Amount 20.000	Range 10 - 123		Recovery = 50.60%		
75) Terphenyl-d14	16.35	244	4291575	9.59 ug/mL	-0.05
Spiked Amount 20.000	Range 33 - 141		Recovery = 47.95%		

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.43	74	758666m	9.91 ug/mL	
3) Pyridine	3.39	79	1517335	10.96 ug/mL	84
5) Benzaldehyde	6.52	77	1066219	12.17 ug/ml	88
6) Aniline	6.72	66	1782079	10.75 ug/ml#	49
7) bis(2-Chloroethyl)ether	6.81	63	1264128	10.63 ug/mL	94
9) Phenol	6.72	94	2402129	10.33 ug/mL#	71
10) 2-Chlorophenol	6.86	128	1923284	9.93 ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	2118828	9.66 ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	2170259	9.76 ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	2020162	9.95 ug/mL	99
14) Benzyl alcohol	7.36	108	1229379	12.14 ug/mL#	80
15) bis(2-chloroisopropyl)ethe	7.59	45	3211566	12.75 ug/mL#	37
16) 2-Methylphenol	7.56	108	1707196	10.22 ug/mL	95
17) Acetophenone	7.75	105	2433922	9.82 ug/ml#	83
18) Hexachloroethane	7.86	117	757670	10.37 ug/mL	88
19) N-Nitroso-di-n-propylamine	7.80	70	988446	10.36 ug/mL#	95
20) 4-Methylphenol	7.77	108	1860727	10.49 ug/mL	93
23) Nitrobenzene	8.01	77	1844145	10.60 ug/mL#	88
24) Isophorone	8.37	82	3194834	10.20 ug/mL#	92
25) 2-Nitrophenol	8.52	139	1082111	10.52 ug/mL#	84
26) 2,4-Dimethylphenol	8.59	107	1817239	11.02 ug/mL	91
27) Benzoic acid	8.79	105	1338339	19.08 ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.75	93	2208546	9.93 ug/mL#	96
29) 2,4-Dichlorophenol	8.89	162	1587850	10.30 ug/mL	98
30) 1,2,4-Trichlorobenzene	9.03	180	1644236	9.82 ug/mL	99
31) Naphthalene	9.13	128	5921168	9.80 ug/mL	98
32) 4-Chloroaniline	9.27	127	2438794	10.67 ug/mL	99
33) Hexachlorobutadiene	9.44	225	824335	9.67 ug/mL	99
34) Caprolactam	9.84	113	614862	10.76 ug/ml	84
35) 4-Chloro-3-methylphenol	10.10	107	1678349	10.11 ug/mL	90
36) 2-Methylnaphthalene	10.28	142	4019996	9.68 ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	1042853	10.38 ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration

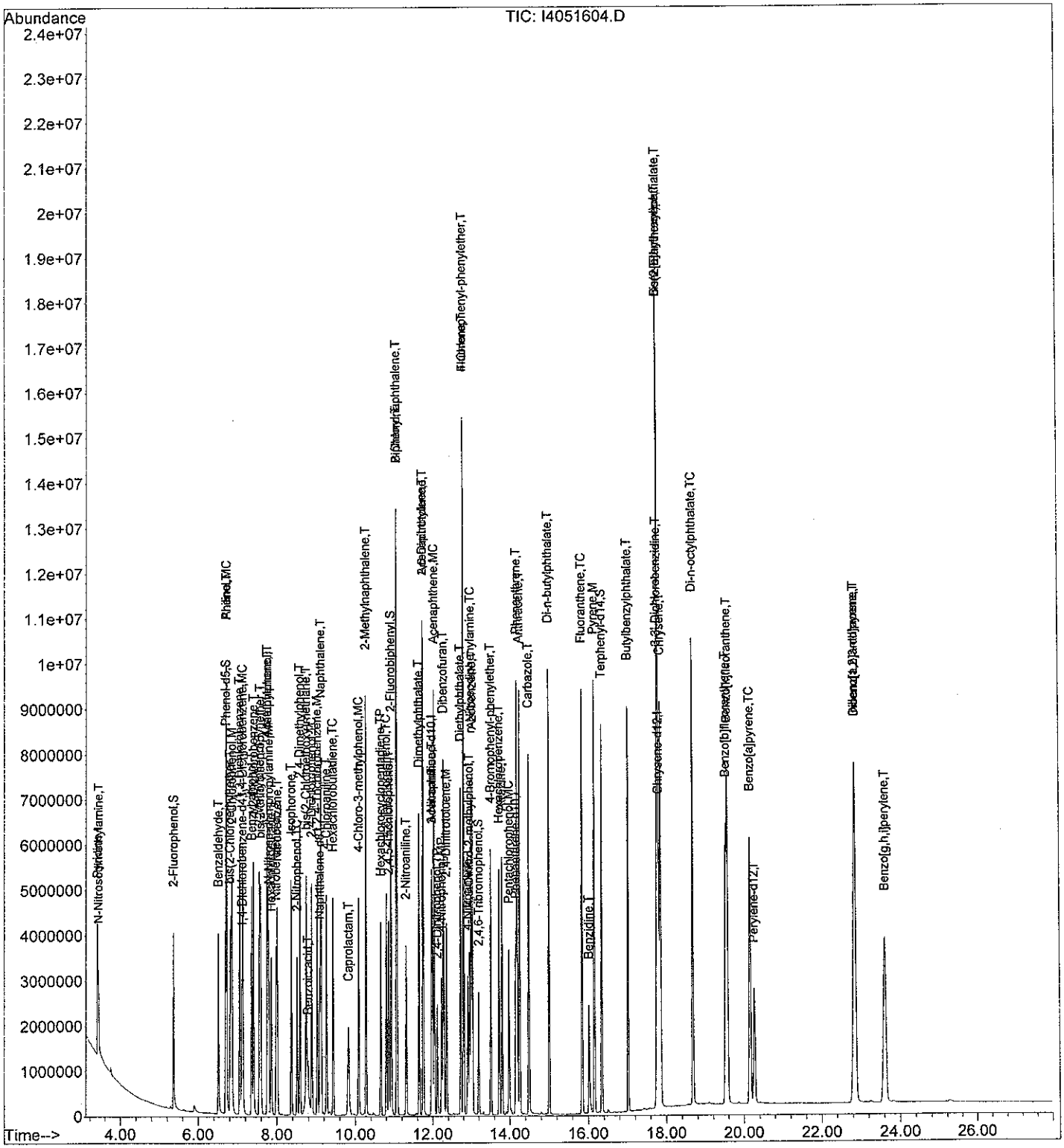
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1034112	10.34	ug/mL	97
40) 2,4,5-Trichlorophenol	10.87	196	1158920m	10.34	ug/mL	
42) Biphenyl	11.06	154	4568371	9.30	ug/ml	97
43) 2-Chloronaphthalene	11.08	162	3550092	9.59	ug/mL	97
44) 2-Nitroaniline	11.31	65	1030123	11.85	ug/mL#	76
45) Acenaphthylene	11.75	152	6019820	9.63	ug/mL	97
46) Dimethylphthalate	11.65	163	4344530	9.95	ug/mL	99
47) 2,6-Dinitrotoluene	11.76	165	1012678	11.21	ug/mL#	85
48) Acenaphthene	12.04	153	3732254	9.21	ug/mL	97
49) 3-Nitroaniline	11.97	138	1127195	11.80	ug/mL	81
50) 2,4-Dinitrophenol	12.12	184	551127	14.63	ug/mL#	76
51) Dibenzofuran	12.28	168	5304566	9.62	ug/mL#	80
52) 2,4-Dinitrotoluene	12.36	165	1359189	11.05	ug/mL#	43
53) 4-Nitrophenol	12.23	109	507155	13.66	ug/mL#	17
54) Fluorene	12.80	166	4214734	9.46	ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	1915709	9.44	ug/mL	92
56) Diethylphthalate	12.73	149	4373039	9.71	ug/mL	99
57) 4-Nitroaniline	12.92	138	1123103	12.13	ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.96	198	847001	12.88	ug/mL#	100
60) Azobenzene	13.03	182	1280712	9.82	ug/mL	59
61) n-Nitrosodiphenylamine	13.00	169	3032139	9.57	ug/mL	96
63) 4-Bromophenyl-phenylether	13.52	248	1053352	9.29	ug/mL#	90
64) Hexachlorobenzene	13.73	284	1109920	9.29	ug/mL#	89
65) Atrazine	13.81	200	1046508	9.59	ug/ml#	94
66) Pentachlorophenol	13.99	266	700843	11.28	ug/mL	99
67) Phenanthrene	14.20	178	6126271	9.73	ug/mL	99
68) Anthracene	14.26	178	6305631	9.84	ug/mL	99
69) Carbazole	14.49	167	5513301	9.38	ug/mL	97
70) Di-n-butylphthalate	15.00	149	7876059	10.59	ug/mL#	99
71) Fluoranthene	15.85	202	6258960	9.84	ug/mL	96
73) Benzidine	16.03	184	1732025	11.95	ug/mL	97
74) Pyrene	16.16	202	6637533	10.02	ug/mL	96
76) Butylbenzylphthalate	17.02	149	3616488	10.46	ug/mL	87
77) 3,3'-Dichlorobenzidine	17.76	252	2123515	10.11	ug/mL#	96
78) Benz[a]anthracene	17.78	228	6275603	9.81	ug/mL	99
79) Chrysene	17.85	228	5780084	9.75	ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	5251844	10.28	ug/mL	95
82) Di-n-octylphthalate	18.68	149	9220116	11.15	ug/mL	100
83) Benzo[b]fluoranthene	19.53	252	6726353	10.56	ug/mL	99
84) Benzo[k]fluoranthene	19.57	252	5707500	9.78	ug/mL#	94
85) Benzo[a]pyrene	20.15	252	6037713	10.15	ug/mL#	96
86) Indeno[1,2,3-cd]pyrene	22.85	276	7053706	10.16	ug/mL#	89
87) Dibenz[a,h]anthracene	22.87	278	6209680	10.32	ug/mL#	95
88) Benzo[g,h,i]perylene	23.62	276	6028551	10.19	ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051604.D
Acq On : 16 May 2008 8:32 pm
Operator : JAD
Sample : I4051604
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 19 12:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri May 16 11:18:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	580071	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	2468156	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1368036	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.17	188	2185031	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	2104937	5.00	ug/mL	0.00
81) Perylene-d12	20.28	264	2077145	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.36	112	2246100	15.33	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 76.65%			
8) Phenol-d5	6.70	99	2801500	15.32	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 76.60%			
22) Nitrobenzene-d5	7.99	82	2339096	15.35	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 76.75%			
41) 2-Fluorobiphenyl	10.93	172	5518102	14.06	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 70.30%			
62) 2,4,6-Tribromophenol	13.20	330	704396	15.24	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 76.20%			
75) Terphenyl-d14	16.35	244	5906093	14.44	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 72.20%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.42	74	1048049	14.95	ug/mL#	97
3) Pyridine	3.38	79	2036305	16.06	ug/mL	85
5) Benzaldehyde	6.52	77	1501522	18.71	ug/ml	89
6) Aniline	6.72	66	2470712	16.28	ug/ml#	51
7) bis(2-Chloroethyl)ether	6.81	63	1775689	16.31	ug/mL	95
9) Phenol	6.72	94	3346404	15.71	ug/mL#	72
10) 2-Chlorophenol	6.86	128	2691124	15.17	ug/mL	93
11) 1,3-Dichlorobenzene	7.06	146	2945915	14.66	ug/mL	98
12) 1,4-Dichlorobenzene	7.13	146	3025350	14.86	ug/mL	100
13) 1,2-Dichlorobenzene	7.41	146	2801492	15.06	ug/mL	99
14) Benzyl alcohol	7.36	108	1739230	18.76	ug/mL#	79
15) bis(2-chloroisopropyl)ethe	7.59	45	4450735	19.29	ug/mL#	37
16) 2-Methylphenol	7.56	108	2390502	15.63	ug/mL	94
17) Acetophenone	7.76	105	3420276	15.06	ug/ml#	83
18) Hexachloroethane	7.86	117	1053370	15.74	ug/mL	89
19) N-Nitroso-di-n-propylamine	7.80	70	1364206	15.61	ug/mL#	94
20) 4-Methylphenol	7.78	108	2572222	15.83	ug/mL	93
23) Nitrobenzene	8.01	77	2589247	15.95	ug/mL#	87
24) Isophorone	8.38	82	4472376	15.29	ug/mL#	92
25) 2-Nitrophenol	8.52	139	1539944	16.03	ug/mL#	83
26) 2,4-Dimethylphenol	8.59	107	2491689	16.19	ug/mL	90
27) Benzoic acid	8.81	105	1918082	29.29	ug/mL#	1
28) bis(2-Chloroethoxy)methane	8.75	93	3105002	14.95	ug/mL#	97
29) 2,4-Dichlorophenol	8.89	162	2225540	15.46	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.04	180	2289941	14.65	ug/mL	99
31) Naphthalene	9.13	128	8274354	14.67	ug/mL	98
32) 4-Chloroaniline	9.28	127	3410824	15.98	ug/mL	98
33) Hexachlorobutadiene	9.44	225	1173468	14.75	ug/mL	99
34) Caprolactam	9.85	113	863027	16.18	ug/ml	82
35) 4-Chloro-3-methylphenol	10.10	107	2369483	15.29	ug/mL	90
36) 2-Methylnaphthalene	10.28	142	5606926	14.46	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	1492206	16.09	ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

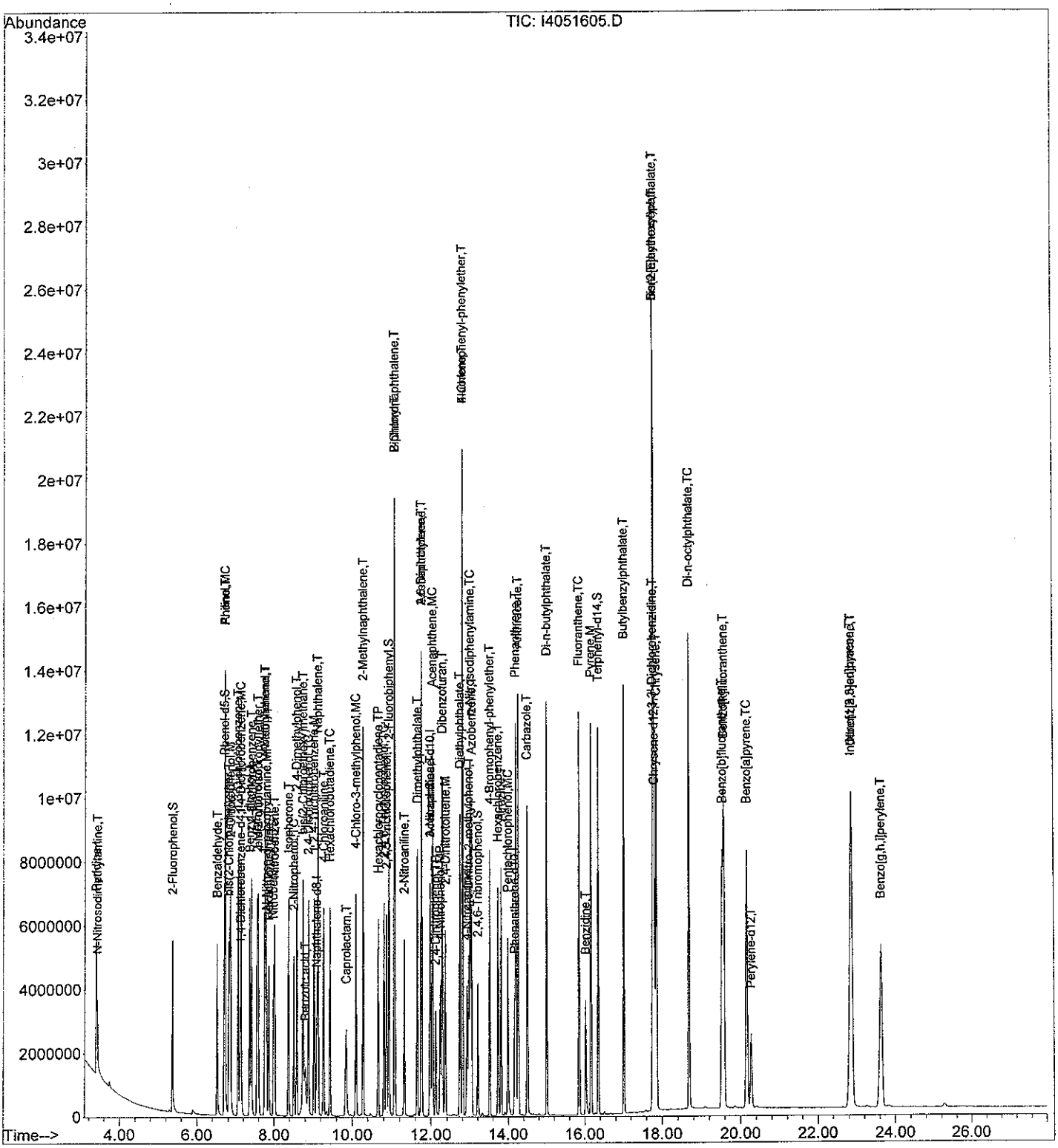
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1448679	15.69	ug/mL	97
40) 2,4,5-Trichlorophenol	10.87	196	1592914m	15.39	ug/mL	
42) Biphenyl	11.07	154	6358955	14.02	ug/ml	97
43) 2-Chloronaphthalene	11.08	162	4981578	14.57	ug/mL	97
44) 2-Nitroaniline	11.32	65	1465959	18.26	ug/mL#	77
45) Acenaphthylene	11.75	152	8366314	14.49	ug/mL	97
46) Dimethylphthalate	11.66	163	6083708	15.09	ug/mL	99
47) 2,6-Dinitrotoluene	11.77	165	1417917	17.00	ug/mL#	86
48) Acenaphthene	12.05	153	5235780	13.99	ug/mL	98
49) 3-Nitroaniline	11.98	138	1586930	17.99	ug/mL	81
50) 2,4-Dinitrophenol	12.13	184	818100m	23.51	ug/mL	
51) Dibenzofuran	12.29	168	7394582	14.52	ug/mL#	79
52) 2,4-Dinitrotoluene	12.36	165	1937627	17.06	ug/mL#	42
53) 4-Nitrophenol	12.24	109	715757	20.87	ug/mL#	19
54) Fluorene	12.81	166	5835988	14.18	ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	2683157	14.31	ug/mL	92
56) Diethylphthalate	12.74	149	6139454	14.77	ug/mL	99
57) 4-Nitroaniline	12.92	138	1540871	18.03	ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.97	198	1205889m	19.80	ug/mL	
60) Azobenzene	13.04	182	1783634	14.76	ug/mL	61
61) n-Nitrosodiphenylamine	13.01	169	4230027	14.41	ug/mL	98
63) 4-Bromophenyl-phenylether	13.52	248	1474361	14.04	ug/mL#	90
64) Hexachlorobenzene	13.73	284	1535716	13.88	ug/mL#	88
65) Atrazine	13.81	200	1407407	13.92	ug/ml#	95
66) Pentachlorophenol	13.99	266	990967	17.22	ug/mL	98
67) Phenanthrene	14.20	178	8574537	14.69	ug/mL	99
68) Anthracene	14.26	178	8590260	14.48	ug/mL	99
69) Carbazole	14.49	167	7437804	13.66	ug/mL	97
70) Di-n-butylphthalate	15.01	149	10848671	15.75	ug/mL#	98
71) Fluoranthene	15.85	202	8645196	14.68	ug/mL	96
73) Benzidine	16.03	184	2449512m	18.49	ug/mL	
74) Pyrene	16.17	202	9147695	15.12	ug/mL	95
76) Butylbenzylphthalate	17.02	149	5051362	15.99	ug/mL	87
77) 3,3'-Dichlorobenzidine	17.76	252	2978760	15.52	ug/mL#	97
78) Benz[a]anthracene	17.78	228	8522825	14.58	ug/mL	99
79) Chrysene	17.86	228	8078687	14.91	ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	7394672	15.83	ug/mL	95
82) Di-n-octylphthalate	18.69	149	13068664	17.15	ug/mL	99
83) Benzo[b]fluoranthene	19.54	252	8314658	14.17	ug/mL#	96
84) Benzo[k]fluoranthene	19.58	252	8877149	16.50	ug/mL#	96
85) Benzo[a]pyrene	20.16	252	8366102	15.26	ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.86	276	9828079	15.36	ug/mL#	89
87) Dibenz[a,h]anthracene	22.88	278	8578189	15.47	ug/mL#	94
88) Benzo[g,h,i]perylene	23.64	276	8405221	15.42	ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051605.D
Acq On : 16 May 2008 9:09 pm
Operator : JAD
Sample : I4051605
Misc : SW051608B
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 19 12:58:43 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

TLW 5/19/08

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	604964	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	2553920	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1450598	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.17	188	2291213	5.00	ug/mL	0.00
72) Chrysene-d12	17.82	240	2256064	5.00	ug/mL	0.00
81) Perylene-d12	20.29	264	2223686	5.00	ug/mL	0.02
System Monitoring Compounds						
4) 2-Fluorophenol	5.37	112	3725817	24.38	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery =	121.90%#		
8) Phenol-d5	6.71	99	4632174	24.30	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery =	121.50%#		
22) Nitrobenzene-d5	8.00	82	3991168	25.31	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery =	126.55%#		
41) 2-Fluorobiphenyl	10.93	172	9263379	22.25	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery =	111.25%		
62) 2,4,6-Tribromophenol	13.21	330	1230066	25.37	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery =	126.85%#		
75) Terphenyl-d14	16.36	244	9913283	22.61	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery =	113.05%		

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	1685407	23.06	ug/mL#	95
3) Pyridine	3.39	79	3270358	24.73	ug/mL	85
5) Benzaldehyde	6.53	77	2342760	27.99	ug/ml	88
6) Aniline	6.73	66	4100294	25.90	ug/ml#	50
7) bis(2-Chloroethyl)ether	6.82	63	3017459	26.57	ug/mL	98
9) Phenol	6.73	94	5518410	24.85	ug/mL#	71
10) 2-Chlorophenol	6.87	128	4469932	24.16	ug/mL	95
11) 1,3-Dichlorobenzene	7.07	146	4943979	23.59	ug/mL	98
12) 1,4-Dichlorobenzene	7.14	146	5006060	23.57	ug/mL	99
13) 1,2-Dichlorobenzene	7.41	146	4707638	24.27	ug/mL	100
14) Benzyl alcohol	7.37	108	2967008	30.68	ug/mL#	79
15) bis(2-chloroisopropyl)ethe	7.60	45	7378209	30.65	ug/mL#	37
16) 2-Methylphenol	7.57	108	3990093	25.02	ug/mL	94
17) Acetophenone	7.77	105	5735785	24.22	ug/ml#	84
18) Hexachloroethane	7.87	117	1786144	25.59	ug/mL	89
19) N-Nitroso-di-n-propylamine	7.82	70	2222228	24.38	ug/mL#	93
20) 4-Methylphenol	7.79	108	4268668	25.19	ug/mL	93
23) Nitrobenzene	8.02	77	4330563	25.78	ug/mL#	87
24) Isophorone	8.39	82	7674109	25.36	ug/mL#	92
25) 2-Nitrophenol	8.53	139	2639585	26.56	ug/mL#	83
26) 2,4-Dimethylphenol	8.60	107	4175681	26.22	ug/mL	91
27) Benzoic acid	8.86	105	3384606m	49.94	ug/mL	
28) bis(2-Chloroethoxy)methane	8.76	93	5253917	24.44	ug/mL#	97
29) 2,4-Dichlorophenol	8.90	162	3765666	25.28	ug/mL	98
30) 1,2,4-Trichlorobenzene	9.04	180	3864098	23.88	ug/mL	98
31) Naphthalene	9.14	128	13254698	22.71	ug/mL	98
32) 4-Chloroaniline	9.28	127	5784600	26.20	ug/mL	99
33) Hexachlorobutadiene	9.45	225	1973580	23.97	ug/mL	99
34) Caprolactam	9.90	113	1488383	26.96	ug/ml	83
35) 4-Chloro-3-methylphenol	10.11	107	4021475	25.08	ug/mL	90
36) 2-Methylnaphthalene	10.29	142	9361072	23.33	ug/mL	96
38) Hexachlorocyclopentadiene	10.66	237	2554829	25.98	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration

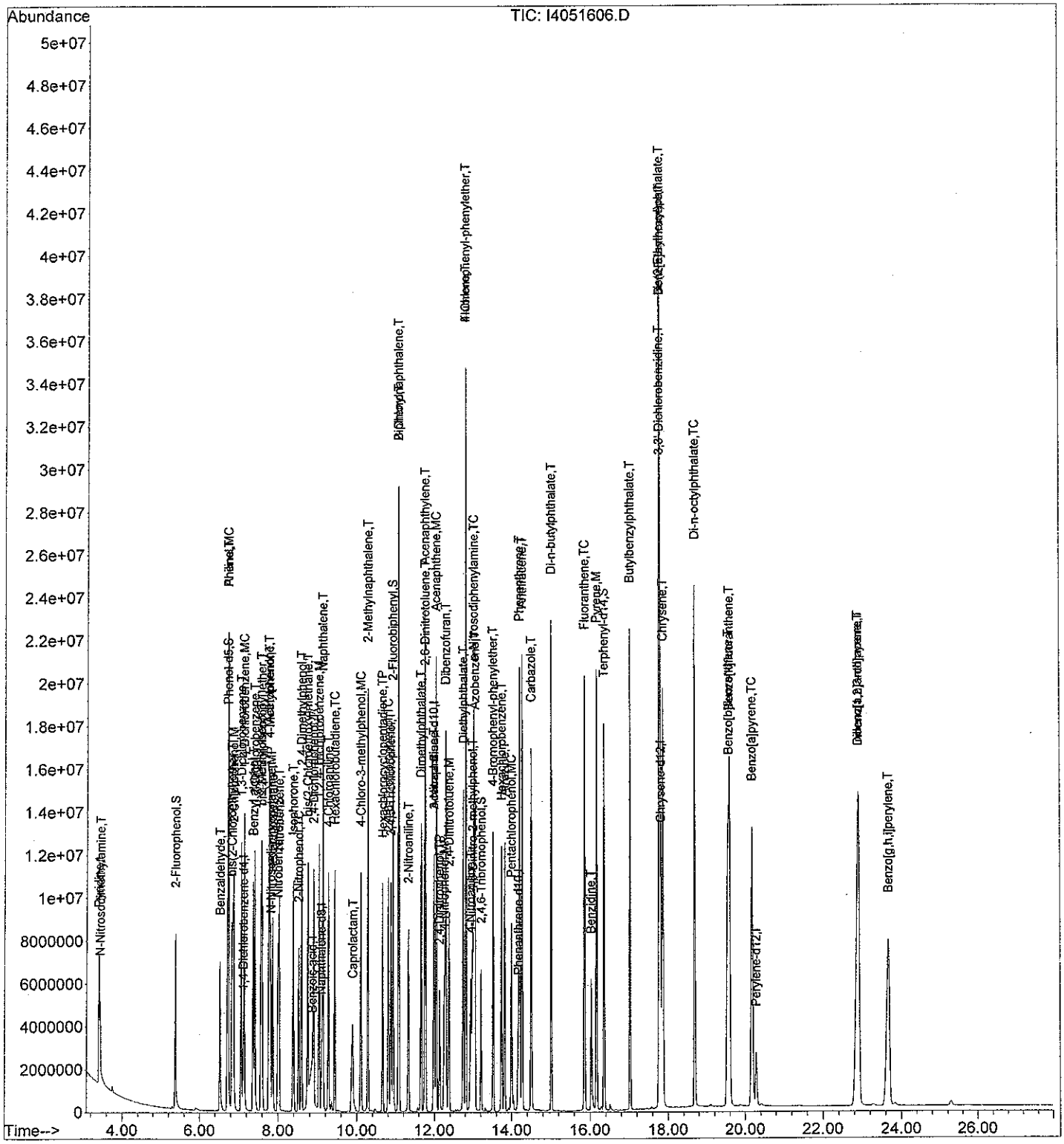
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.81	196	2513954	25.68	ug/mL	97
40) 2,4,5-Trichlorophenol	10.88	196	2758937m	25.14	ug/mL	
42) Biphenyl	11.07	154	10511163	21.85	ug/ml	98
43) 2-Chloronaphthalene	11.09	162	8311684	22.92	ug/mL	97
44) 2-Nitroaniline	11.33	65	2529857	29.72	ug/mL#	76
45) Acenaphthylene	11.76	152	13481801	22.03	ug/mL	99
46) Dimethylphthalate	11.67	163	10402149	24.33	ug/mL	99
47) 2,6-Dinitrotoluene	11.78	165	2440667	27.59	ug/mL#	86
48) Acenaphthene	12.05	153	8830730	22.25	ug/mL	97
49) 3-Nitroaniline	11.99	138	2744573	29.35	ug/mL#	79
50) 2,4-Dinitrophenol	12.14	184	1518378m	41.15	ug/mL	
51) Dibenzofuran	12.29	168	12340413	22.85	ug/mL#	78
52) 2,4-Dinitrotoluene	12.37	165	3350372	27.82	ug/mL#	41
53) 4-Nitrophenol	12.25	109	1308491	35.99	ug/mL#	21
54) Fluorene	12.81	166	9819026	22.51	ug/mL	96
55) 4-Chlorophenyl-phenylether	12.81	204	4411728	22.19	ug/mL	91
56) Diethylphthalate	12.75	149	10340011	23.45	ug/mL	99
57) 4-Nitroaniline	12.94	138	2582395	28.49	ug/mL#	72
59) 4,6-Dinitro-2-methylphenol	12.99	198	2156567	33.77	ug/mL#	100
60) Azobenzene	13.05	182	3038099	23.98	ug/mL	68
61) n-Nitrosodiphenylamine	13.02	169	7295824	23.71	ug/mL	98
63) 4-Bromophenyl-phenylether	13.53	248	2507642	22.78	ug/mL#	90
64) Hexachlorobenzene	13.74	284	2662340	22.95	ug/mL#	89
65) Atrazine	13.82	200	2334749	22.02	ug/ml#	95
66) Pentachlorophenol	14.00	266	1750685	29.01	ug/mL	98
67) Phenanthrene	14.21	178	13889157	22.70	ug/mL	99
68) Anthracene	14.27	178	14027720	22.54	ug/mL	99
69) Carbazole	14.50	167	12386526	21.70	ug/mL	97
70) Di-n-butylphthalate	15.01	149	15442082	21.38	ug/mL#	96
71) Fluoranthene	15.86	202	14215203	23.01	ug/mL#	94
73) Benzidine	16.03	184	4374879m	30.80	ug/mL	
74) Pyrene	16.17	202	15111963	23.30	ug/mL#	94
76) Butylbenzylphthalate	17.02	149	8713770	25.74	ug/mL	87
77) 3,3'-Dichlorobenzidine	17.77	252	5177838	25.18	ug/mL#	96
78) Benz[a]anthracene	17.80	228	14381865	22.95	ug/mL	99
79) Chrysene	17.87	228	13793056	23.75	ug/mL	99
80) bis(2-Ethylhexyl)phthalate	17.78	149	12470081	24.91	ug/mL	94
82) Di-n-octylphthalate	18.69	149	18338341	22.47	ug/mL#	93
83) Benzo[b]fluoranthene	19.57	252	15199121m	24.19	ug/mL	
84) Benzo[k]fluoranthene	19.60	252	14125994m	24.53	ug/mL	
85) Benzo[a]pyrene	20.18	252	14453768	24.63	ug/mL#	95
86) Indeno[1,2,3-cd]pyrene	22.92	276	17074268	24.92	ug/mL#	89
87) Dibenz[a,h]anthracene	22.93	278	14806214	24.94	ug/mL#	94
88) Benzo[g,h,i]perylene	23.69	276	14555222	24.94	ug/mL#	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : I4051606.D
Acq On : 16 May 2008 9:45 pm
Operator : JAD
Sample : I4051606
Misc : SW051608A
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 19 13:02:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 12:04:06 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	114	0.00
2	T	N-Nitrosodimethylamine	0.563	0.533	5.3	102	0.00
3	t	Pyridine	1.115	0.952	14.6	91	0.00
4	S	2-Fluorophenol	1.256	0.000	100.0#	0#	-5.36#
5	T	Benzaldehyde	0.854	0.502	[illegible]#	68	0.00
6	T	Aniline	1.394	0.935	[illegible]#	76	0.00
7	T	bis(2-Chloroethyl)ether	0.993	0.869	12.5	100	0.00
8	S	Phenol-d5	1.568	0.000	100.0#	0#	-6.70#
9	MC	Phenol	1.884	1.583	16.0#	95	0.00
10	M	2-Chlorophenol	1.511	1.322	12.5	100	0.00
11	T	1,3-Dichlorobenzene	1.674	1.431	14.5	98	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.484	13.2#	99	0.00
13	T	1,2-Dichlorobenzene	1.595	1.400	12.2	100	0.00
14	T	Benzyl alcohol	0.925	0.850	8.1	100	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.251	11.8	101	0.00
16	T	2-Methylphenol	1.328	1.156	13.0	98	0.00
17	T	Acetophenone	1.908	1.648	13.6	98	0.00
18	T	Hexachloroethane	0.590	0.519	12.0	99	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.639	13.5	94	0.00
20	T	4-Methylphenol	1.438	1.266	12.0	99	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00
22	S	Nitrobenzene-d5	0.306	0.000	100.0#	0#	-7.99#
23	T	Nitrobenzene	0.339	0.288	15.0	96	0.00
24	T	Isophorone	0.590	0.536	9.2	103	0.00
25	TC	2-Nitrophenol	0.193	0.174	9.8#	99	0.00
26	T	2,4-Dimethylphenol	0.336	0.297	11.6	100	0.00
27	T	Benzoic acid	0.229	0.193	15.7	89	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.369	11.1	103	0.00
29	TC	2,4-Dichlorophenol	0.290	0.253	12.8#	98	0.00
30	M	1,2,4-Trichlorobenzene	0.309	0.260	15.9	97	0.00
31	T	Naphthalene	1.113	0.990	11.1	103	0.00
32	T	4-Chloroaniline	0.446	0.340	[illegible]	86	0.00
33	TC	Hexachlorobutadiene	0.156	0.143	8.3#	107	0.00
34	T	Caprolactam	0.118	0.106	10.2	106	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.272	11.4#	100	0.00
36	T	2-Methylnaphthalene	0.754	0.651	13.7	99	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	117	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.284	16.7	94	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.311	8.3#	104	0.00
40	T	2,4,5-Trichlorophenol	0.374	0.329	12.0	98	0.00
41	S	2-Fluorobiphenyl	1.334	0.001	99.9#	0#	-0.06
42	T	Biphenyl	1.537	1.434	6.7	109	0.00
43	T	2-Chloronaphthalene	1.200	1.042	13.2	102	0.00
44	T	2-Nitroaniline	0.325	0.298	8.3	100	0.00
45	T	Acenaphthylene	1.990	1.779	10.6	102	0.00
46	T	Dimethylphthalate	1.447	1.246	13.9	99	0.00
47	T	2,6-Dinitrotoluene	0.316	0.285	9.8	98	0.00
48	MC	Acenaphthene	1.269	1.123	11.5#	104	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.302	14.7	93	0.00
50	TP	2,4-Dinitrophenol	0.155	0.169	-9.0	106	0.00
51	T	Dibenzofuran	1.780	1.544	13.3	101	0.00
52	M	2,4-Dinitrotoluene	0.424	0.399	5.9	102	0.00
53	MP	4-Nitrophenol	0.159	0.138	13.2	94	0.00
54	T	Fluorene	1.411	1.288	8.7	106	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.548	15.4	99	0.00
56	T	Diethylphthalate	1.459	1.300	10.9	103	0.00
57	T	4-Nitroaniline	0.347	0.269	[illegible]	83	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.143	6.5	94	0.00
60	T	Azobenzene	0.264	0.223	15.5	98	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.562	10.9#	104	0.00
62	S	2,4,6-Tribromophenol	0.102	0.000	100.0#	0#	-13.20#
63	T	4-Bromophenyl-phenylether	0.219	0.169	22.8	90	0.00
64	T	Hexachlorobenzene	0.232	0.199	14.2	100	0.00
65	T	Atrazine	0.214	0.000	100.0#	0#	-13.81#
66	MC	Pentachlorophenol	0.133	0.130	2.3#	104	0.00
67	T	Phenanthrene	1.291	1.161	10.1	106	0.00
68	T	Anthracene	1.297	1.122	13.5	100	0.00
69	T	Carbazole	1.166	0.837	[illegible]	85	0.00
70	T	Di-n-butylphthalate	1.554	1.439	7.4	102	0.00
71	TC	Fluoranthene	1.299	1.177	9.4#	105	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	116	0.00
73	T	Benzidine	0.347	0.000	100.0#	0#	-16.03#
74	M	Pyrene	1.420	1.274	10.3	103	0.00
75	S	Terphenyl-d14	0.919	0.000	100.0#	0#	-16.35#
76	T	Butylbenzylphthalate	0.747	0.708	5.2	105	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.382	14.9	96	0.00
78	T	Benz[a]anthracene	1.348	1.217	9.7	104	0.00
79	T	Chrysene	1.265	1.165	7.9	108	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.024	6.1	104	0.00
81	I	Perylene-d12	1.000	1.000	0.0	119	0.00
82	TC	Di-n-octylphthalate	1.849	1.745	5.6#	101	0.00
83	T	Benzo[b]fluoranthene	1.404	1.192	15.1	95	0.00
84	T	Benzo[k]fluoranthene	1.295	1.223	5.6	115	0.00
85	TC	Benzo[a]pyrene	1.296	1.112	14.2#	98	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.382	9.3	105	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.216	8.8	105	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.169	9.9	104	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

TLW 5/19/08

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.11	152	723866	5.00	ug/mL	0.00
21) Naphthalene-d8	9.10	136	3072159	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1733071	5.00	ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2799181	5.00	ug/mL	0.00
72) Chrysene-d12	17.81	240	2674106	5.00	ug/mL	0.00
81) Perylene-d12	20.28	264	2673976	5.00	ug/mL	0.00

System Monitoring Compounds						
4) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	
Spiked Amount 20.000	Range 21 - 100		Recovery	=	0.00%#	
8) Phenol-d5	0.00	99	0d	0.00	ug/mL	
Spiked Amount 20.000	Range 10 - 94		Recovery	=	0.00%#	
22) Nitrobenzene-d5	0.00	82	0	0.00	ug/mL	
Spiked Amount 20.000	Range 35 - 114		Recovery	=	0.00%#	
41) 2-Fluorobiphenyl	10.87	172	2579	0.01	ug/mL	-0.06
Spiked Amount 20.000	Range 43 - 116		Recovery	=	0.05%#	
62) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	
Spiked Amount 20.000	Range 10 - 123		Recovery	=	0.00%#	
75) Terphenyl-d14	0.00	244	0	0.00	ug/mL	
Spiked Amount 20.000	Range 33 - 141		Recovery	=	0.00%#	

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	3.43	74	772241	9.47	ug/mL	97
3) Pyridine	3.40	79	1378472	8.54	ug/mL	97
5) Benzaldehyde	6.52	77	726914	5.88	ug/ml	100
6) Aniline	6.72	66	1354351	6.71	ug/ml	87
7) bis(2-Chloroethyl)ether	6.81	63	1258801	8.76	ug/mL	99
9) Phenol	6.71	94	2292402	8.41	ug/mL#	85
10) 2-Chlorophenol	6.86	128	1914194	8.75	ug/mL	96
11) 1,3-Dichlorobenzene	7.06	146	2071987	8.55	ug/mL	99
12) 1,4-Dichlorobenzene	7.13	146	2149027	8.68	ug/mL	100
13) 1,2-Dichlorobenzene	7.41	146	2027543	8.78	ug/mL	100
14) Benzyl alcohol	7.36	108	1231225	9.20	ug/mL	100
15) bis(2-chloroisopropyl)ethe	7.59	45	3258827	8.82	ug/mL#	100
16) 2-Methylphenol	7.56	108	1673177	8.70	ug/mL	99
17) Acetophenone	7.75	105	2386558	8.64	ug/ml	99
18) Hexachloroethane	7.86	117	751473	8.80	ug/mL	98
19) N-Nitroso-di-n-propylamine	7.80	70	925695	8.65	ug/mL	100
20) 4-Methylphenol	7.77	108	1833432	8.81	ug/mL	99
23) Nitrobenzene	8.01	77	1768827	8.49	ug/mL	100
24) Isophorone	8.37	82	3296036	9.10	ug/mL	100
25) 2-Nitrophenol	8.52	139	1067941	9.01	ug/mL	100
26) 2,4-Dimethylphenol	8.59	107	1824101	8.84	ug/mL	100
27) Benzoic acid	8.79	105	1185245	8.44	ug/mL	99
28) bis(2-Chloroethoxy)methane	8.75	93	2265139	8.89	ug/mL	99
29) 2,4-Dichlorophenol	8.89	162	1551950	8.72	ug/mL	99
30) 1,2,4-Trichlorobenzene	9.03	180	1596944	8.40	ug/mL	99
31) Naphthalene	9.13	128	6083845	8.90	ug/mL	100
32) 4-Chloroaniline	9.28	127	2088616	7.63	ug/mL	99
33) Hexachlorobutadiene	9.44	225	881256	9.20	ug/mL	99
34) Caprolactam	9.83	113	652511	9.01	ug/ml	99
35) 4-Chloro-3-methylphenol	10.10	107	1672883	8.88	ug/mL	99
36) 2-Methylnaphthalene	10.28	142	3998278	8.63	ug/mL	100
38) Hexachlorocyclopentadiene	10.66	237	983933	8.31	ug/mL	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration

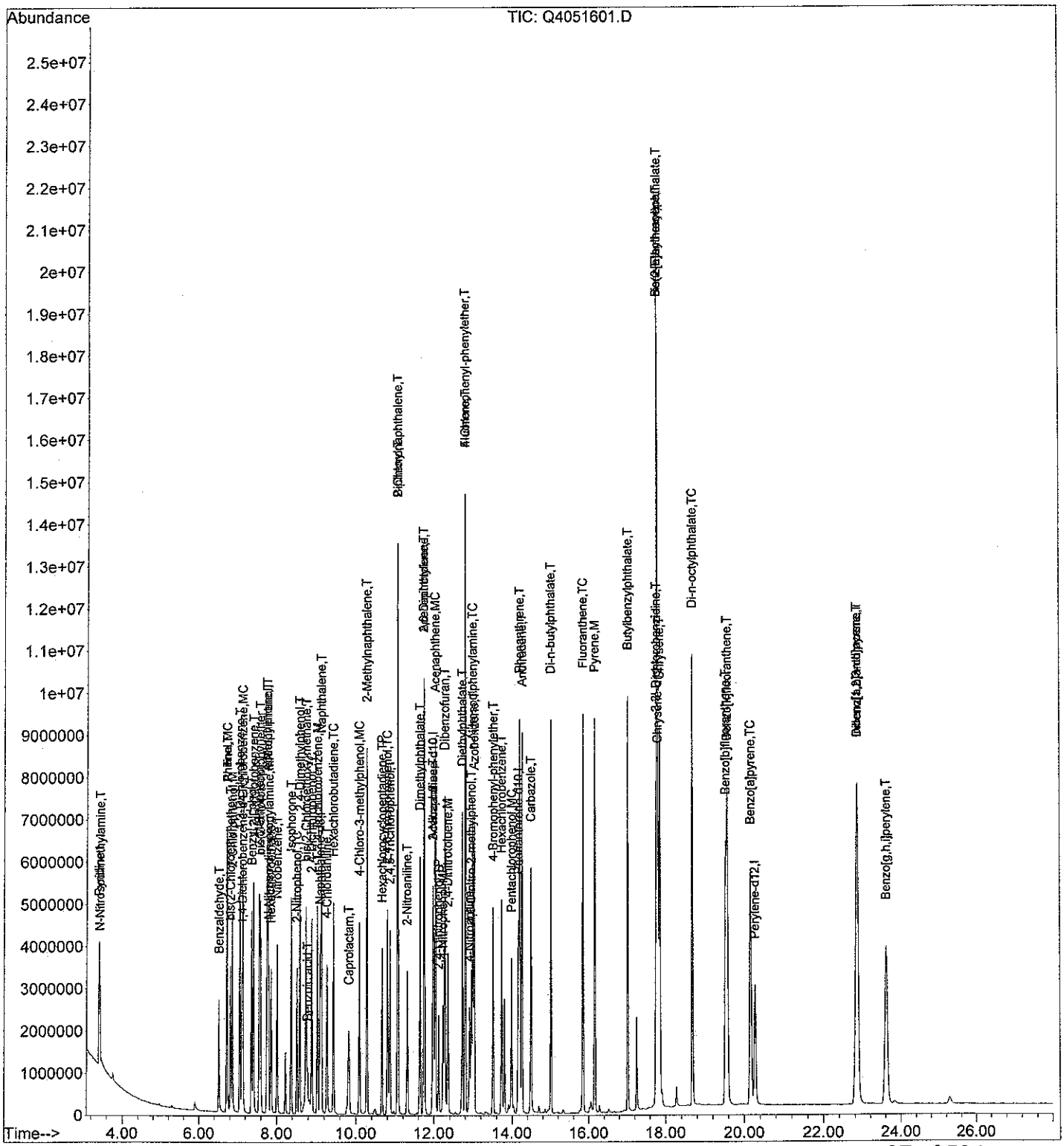
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1077013	9.16	ug/mL	100
40) 2,4,5-Trichlorophenol	10.87	196	1140700m	8.81	ug/mL	
42) Biphenyl	11.06	154	4968835	9.33	ug/ml	100
43) 2-Chloronaphthalene	11.08	162	3613315	8.69	ug/mL	100
44) 2-Nitroaniline	11.31	65	1032351	9.16	ug/mL	100
45) Acenaphthylene	11.75	152	6167068	8.94	ug/mL	100
46) Dimethylphthalate	11.65	163	4320115	8.62	ug/mL	100
47) 2,6-Dinitrotoluene	11.76	165	988757	9.03	ug/mL	100
48) Acenaphthene	12.04	153	3893737	8.85	ug/mL	100
49) 3-Nitroaniline	11.97	138	1047605	8.55	ug/mL	98
50) 2,4-Dinitrophenol	12.12	184	585519	10.91	ug/mL#	98
51) Dibenzofuran	12.28	168	5351238	8.67	ug/mL	99
52) 2,4-Dinitrotoluene	12.36	165	1384134	9.43	ug/mL	98
53) 4-Nitrophenol	12.23	109	479008	8.71	ug/mL	98
54) Fluorene	12.80	166	4463028	9.12	ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	1899558	8.46	ug/mL	100
56) Diethylphthalate	12.73	149	4505032	8.91	ug/mL	100
57) 4-Nitroaniline	12.91	138	931443	7.74	ug/mL	99
59) 4,6-Dinitro-2-methylphenol	12.96	198	799434	9.32	ug/mL#	100
60) Azobenzene	13.03	182	1249519	8.45	ug/mL	87
61) n-Nitrosodiphenylamine	13.00	169	3145450	8.90	ug/mL	97
63) 4-Bromophenyl-phenylether	13.52	248	944563	7.70	ug/mL	99
64) Hexachlorobenzene	13.73	284	1114971	8.58	ug/mL	100
66) Pentachlorophenol	13.99	266	727464	9.78	ug/mL	99
67) Phenanthrene	14.20	178	6498242	8.99	ug/mL	100
68) Anthracene	14.26	178	6282826	8.65	ug/mL	100
69) Carbazole	14.49	167	4683257	7.17	ug/mL	99
70) Di-n-butylphthalate	15.00	149	8055359	9.26	ug/mL	99
71) Fluoranthene	15.85	202	6589595	9.06	ug/mL	100
74) Pyrene	16.16	202	6815800	8.98	ug/mL	100
76) Butylbenzylphthalate	17.02	149	3787256	9.48	ug/mL	100
77) 3,3'-Dichlorobenzidine	17.76	252	2041547	8.51	ug/mL	100
78) Benz[a]anthracene	17.78	228	6509567	9.03	ug/mL	99
79) Chrysene	17.85	228	6233284	9.21	ug/mL	100
80) bis(2-Ethylhexyl)phthalate	17.78	149	5476940	9.38	ug/mL	100
82) Di-n-octylphthalate	18.69	149	9333638	9.44	ug/mL	100
83) Benzo[b]fluoranthene	19.53	252	6375494m	8.49	ug/mL	
84) Benzo[k]fluoranthene	19.57	252	6538634	9.44	ug/mL	97
85) Benzo[a]pyrene	20.16	252	5945863	8.58	ug/mL	100
86) Indeno[1,2,3-cd]pyrene	22.86	276	7388809	9.06	ug/mL	100
87) Dibenz[a,h]anthracene	22.87	278	6505782	9.13	ug/mL	100
88) Benzo[g,h,i]perylene	23.63	276	6249402	9.00	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\MAY\MAY16\
Data File : Q4051601.D
Acq On : 16 May 2008 10:58 pm
Operator : JAD
Sample : Q4051601
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 19 13:51:15 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon May 19 13:02:56 2008
Response via : Initial Calibration



SVLV0516BNA4.M Mon May 19 13:52:54 2008

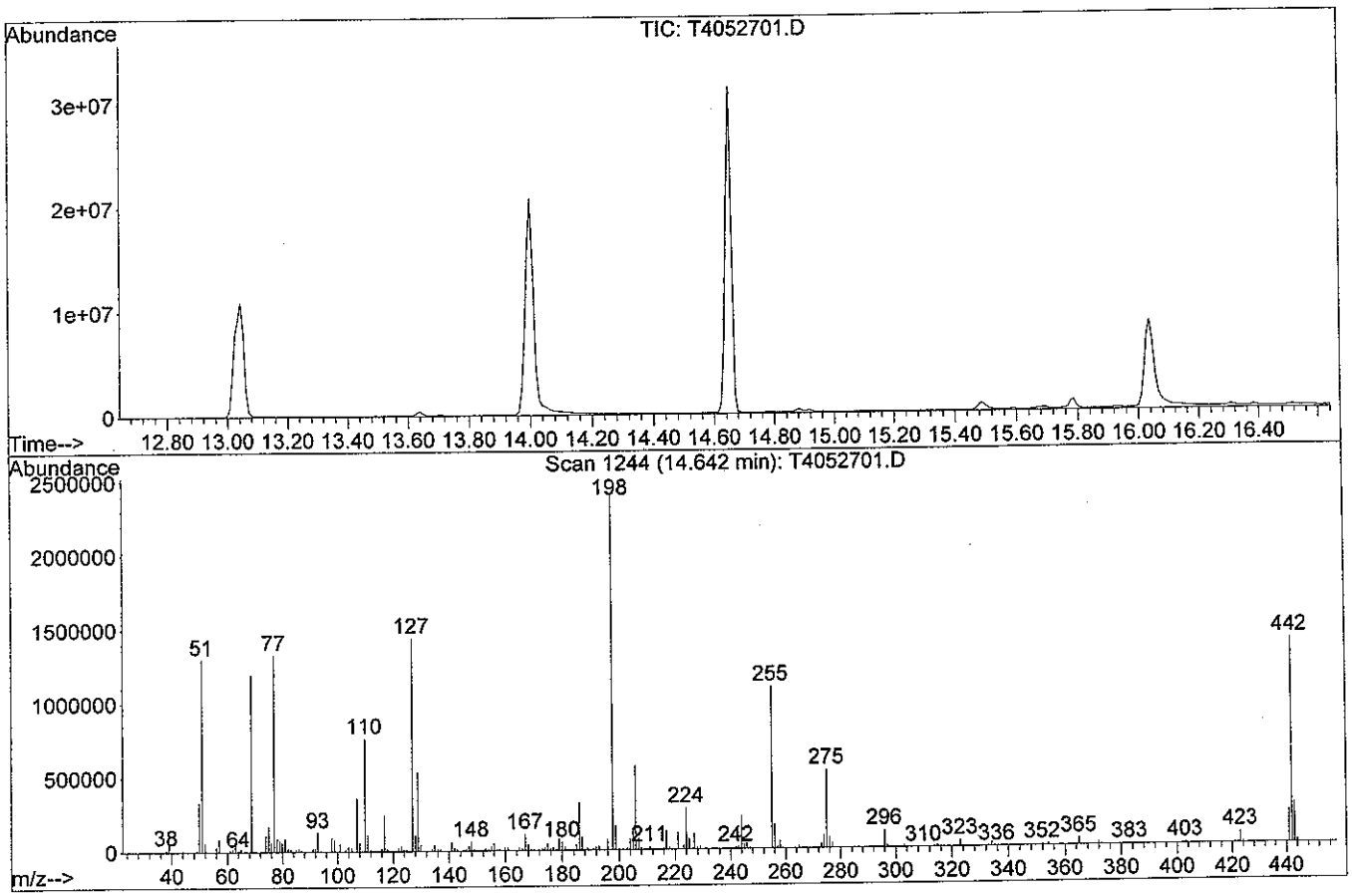
DFTPP

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : T4052701.D
Acq On : 27 May 2008 3:37 pm
Operator : JAD
Sample : T4052701
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/27/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue May 27 16:12:43 2008



Spectrum Information: Scan 1244

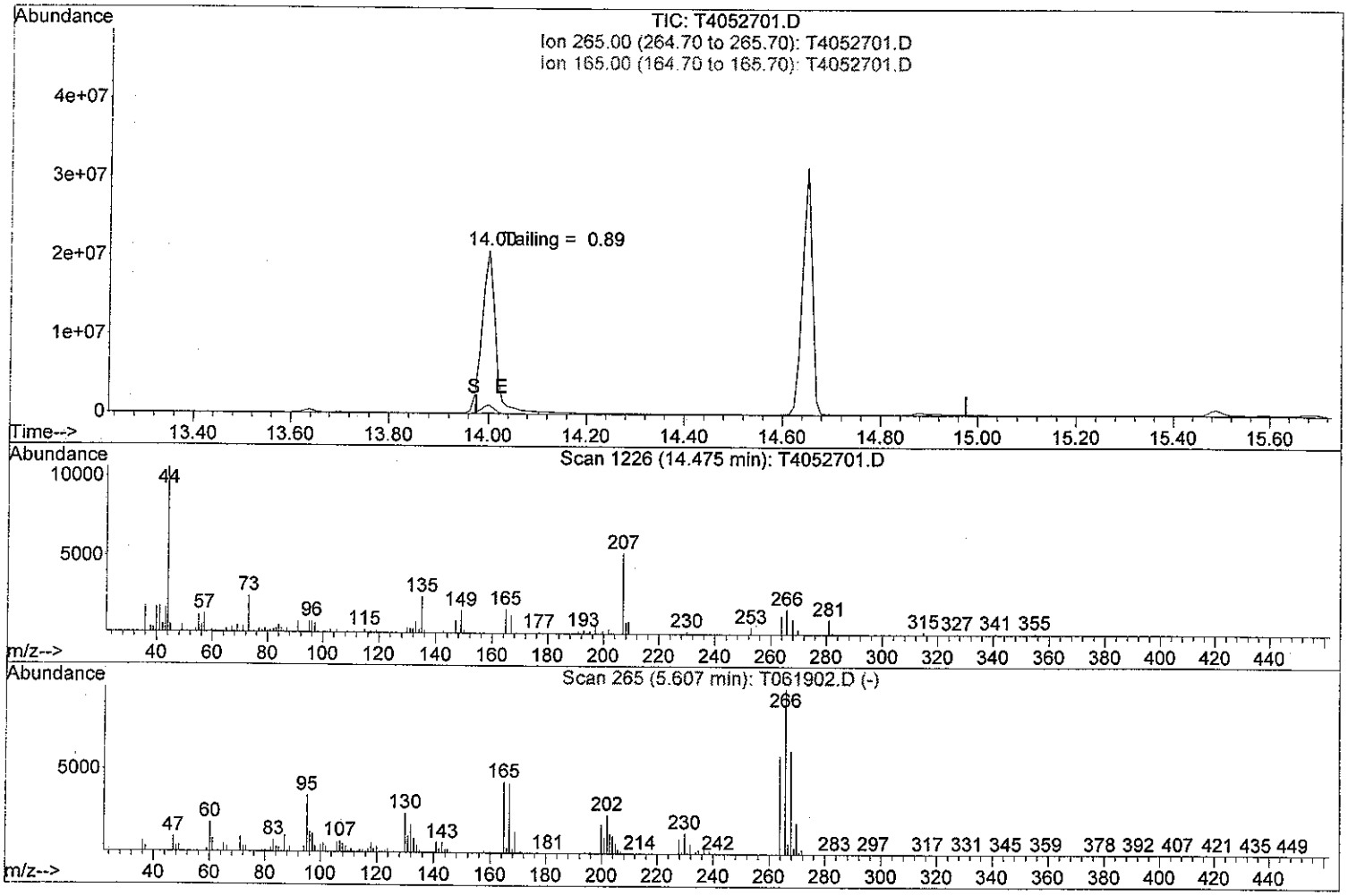
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.1	1302528	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.7	1197056	PASS
70	69	0.00	2	0.4	4949	PASS
127	198	40	60	59.8	1440256	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	2407936	PASS
199	198	5	9	6.9	166720	PASS
275	198	10	30	22.0	530880	PASS
365	198	1	100	2.1	49584	PASS
441	443	0.01	100	80.9	222336	PASS
442	198	40	100	57.7	1389056	PASS
443	442	17	23	19.8	274688	PASS

Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : T4052701.D
Acq On : 27 May 2008 3:37 pm
Operator : JAD
Sample : T4052701
Misc :
ALS Vial : 2 Sample Multiplier: 1

JAD 5/27/08

Quant Time: May 27 18:40:42 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



TIC: T4052701.D

(1) Pentachlorophenol (T)

14.476min (-14.476) 0.00ug/ml d

response 0

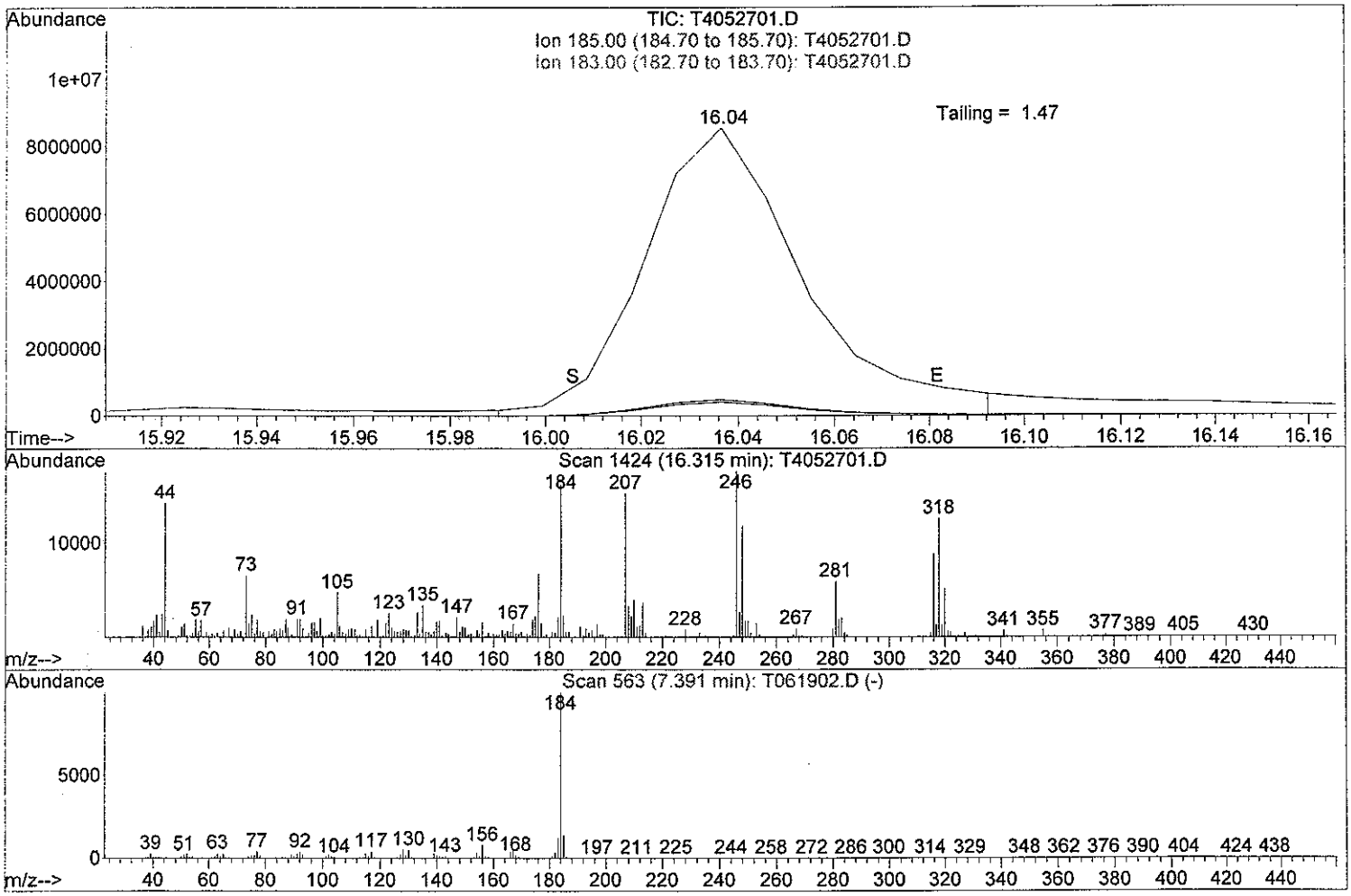
Signal	Exp%	Act%
TIC	100	0.00
265.00	0.00	0.00
165.00	535.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : T4052701.D
Acq On : 27 May 2008 3:37 pm
Operator : JAD
Sample : T4052701
Misc :
ALS Vial : 2 Sample Multiplier: 1

1005/27/08

Quant Time: May 27 18:40:42 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Tue Aug 01 16:17:56 2006
Response via : Initial Calibration



TIC: T4052701.D

(3) Benzidine (T)

16.315min (-16.315) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	567.20	0.00
183.00	508.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : C4052701.D
Acq On : 27 May 2008 4:14 pm
Operator : JAD
Sample : C4052701
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 27 18:25:09 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue May 27 16:12:43 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00
2	T	N-Nitrosodimethylamine	0.563	0.523	7.1	90	0.00
3	t	Pyridine	1.115	1.032	7.4	89	0.00
4	S	2-Fluorophenol	1.256	1.220	2.9	99	0.00
5	T	Benzaldehyde	0.854	0.841	1.5	103	0.00
6	T	Aniline	1.394	1.251	10.3	91	0.00
7	T	bis(2-Chloroethyl)ether	0.993	0.939	5.4	97	0.00
8	S	Phenol-d5	1.568	1.544	1.5	99	0.00
9	MC	Phenol	1.884	1.801	4.4#	98	0.00
10	M	2-Chlorophenol	1.511	1.483	1.9	100	0.00
11	T	1,3-Dichlorobenzene	1.674	1.698	-1.4	104	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.726	-0.9#	104	0.00
13	T	1,2-Dichlorobenzene	1.595	1.591	0.3	103	0.00
14	T	Benzyl alcohol	0.925	0.868	6.2	92	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.460	3.6	100	0.00
16	T	2-Methylphenol	1.328	1.301	2.0	99	0.00
17	T	Acetophenone	1.908	1.879	1.5	100	0.00
18	T	Hexachloroethane	0.590	0.590	0.0	101	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.673	8.9	89	0.00
20	T	4-Methylphenol	1.438	1.370	4.7	96	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
22	S	Nitrobenzene-d5	0.306	0.308	-0.7	99	0.00
23	T	Nitrobenzene	0.339	0.340	-0.3	99	0.00
24	T	Isophorone	0.590	0.591	-0.2	100	0.00
25	TC	2-Nitrophenol	0.193	0.196	-1.6#	97	0.00
26	T	2,4-Dimethylphenol	0.336	0.251	25.3#	74	0.00
27	T	Benzoic acid	0.229	0.242	-5.7	97	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.413	0.5	101	0.00
29	TC	2,4-Dichlorophenol	0.290	0.293	-1.0#	100	0.00
30	M	1,2,4-Trichlorobenzene	0.309	0.314	-1.6	103	0.00
31	T	Naphthalene	1.113	1.126	-1.2	102	0.00
32	T	4-Chloroaniline	0.446	0.420	5.8	93	0.00
33	TC	Hexachlorobutadiene	0.156	0.163	-4.5#	106	0.00
34	T	Caprolactam	0.118	0.112	5.1	98	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.310	-1.0#	100	0.00
36	T	2-Methylnaphthalene	0.754	0.760	-0.8	102	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.317	7.0	94	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.335	1.2#	100	0.00
40	T	2,4,5-Trichlorophenol	0.374	0.384	-2.7	103	0.00
41	S	2-Fluorobiphenyl	1.334	1.330	0.3	104	0.00
42	T	Biphenyl	1.537	1.545	-0.5	105	0.00
43	T	2-Chloronaphthalene	1.200	1.195	0.4	104	0.00
44	T	2-Nitroaniline	0.325	0.328	-0.9	99	0.00
45	T	Acenaphthylene	1.990	2.001	-0.6	103	0.00
46	T	Dimethylphthalate	1.447	1.454	-0.5	104	0.00
47	T	2,6-Dinitrotoluene	0.316	0.333	-5.4	102	0.00
48	MC	Acenaphthene	1.269	1.266	0.2#	105	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : C4052701.D
Acq On : 27 May 2008 4:14 pm
Operator : JAD
Sample : C4052701
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 27 18:25:09 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue May 27 16:12:43 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.334	5.6	92	0.00
50	TP	2,4-Dinitrophenol	0.155	0.147	5.2	82	0.00
51	T	Dibenzofuran	1.780	1.782	-0.1	104	0.00
52	M	2,4-Dinitrotoluene	0.424	0.443	-4.5	101	0.00
53	MP	4-Nitrophenol	0.159	0.132	17.0	81	0.00
54	T	Fluorene	1.411	1.407	0.3	103	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.659	-1.7	107	0.00
56	T	Diethylphthalate	1.459	1.482	-1.6	105	0.00
57	T	4-Nitroaniline	0.347	0.299	13.8	82	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.155	-1.3	92	0.00
60	T	Azobenzene	0.264	0.268	-1.5	105	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.626	0.8#	104	0.00
62	S	2,4,6-Tribromophenol	0.102	0.105	-2.9	105	0.00
63	T	4-Bromophenyl-phenylether	0.219	0.222	-1.4	106	0.00
64	T	Hexachlorobenzene	0.232	0.235	-1.3	107	0.00
65	T	Atrazine	0.214	0.160	25.2#	77	0.00
66	MC	Pentachlorophenol	0.133	0.144	-8.3#	103	0.00
67	T	Phenanthrene	1.291	1.282	0.7	105	0.00
68	T	Anthracene	1.297	1.296	0.1	103	0.00
69	T	Carbazole	1.166	1.023	12.3	93	0.00
70	T	Di-n-butylphthalate	1.554	1.637	-5.3	104	0.00
71	TC	Fluoranthene	1.299	1.334	-2.7#	107	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	105	0.00
73	T	Benzidine	0.347	0.040	88.5#	11#	0.00
74	M	Pyrene	1.420	1.451	-2.2	106	0.00
75	S	Terphenyl-d14	0.919	0.934	-1.6	105	0.00
76	T	Butylbenzylphthalate	0.747	0.778	-4.1	104	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.371	17.4	84	0.00
78	T	Benz[a]anthracene	1.348	1.296	3.9	100	0.00
79	T	Chrysene	1.265	1.277	-0.9	107	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.146	-5.0	105	0.00
81	I	Perylene-d12	1.000	1.000	0.0	105	0.00
82	TC	Di-n-octylphthalate	1.849	2.059	-11.4#	105	0.00
83	T	Benzo[b]fluoranthene	1.404	1.361	3.1	95	0.00
84	T	Benzo[k]fluoranthene	1.295	1.329	-2.6	110	0.00
85	TC	Benzo[a]pyrene	1.296	1.292	0.3#	101	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.520	0.3	102	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.297	2.7	98	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.318	-1.5	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : C4052701.D
Acq On : 27 May 2008 4:14 pm
Operator : JAD
Sample : C4052701
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

JAD 5/27/08

Quant Time: May 27 18:25:09 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue May 27 16:12:43 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.10	152	650959	5.00 ug/mL	0.00
21) Naphthalene-d8	9.09	136	2694732	5.00 ug/mL	0.00
37) Acenaphthene-d10	11.99	164	1549547	5.00 ug/mL	0.00
58) Phenanthrene-d10	14.16	188	2513403	5.00 ug/mL	0.00
72) Chrysene-d12	17.81	240	2412891	5.00 ug/mL	0.00
81) Perylene-d12	20.26	264	2357662	5.00 ug/mL	0.00

System Monitoring Compounds					
4) 2-Fluorophenol	5.36	112	1588453	9.71 ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 48.55%		
8) Phenol-d5	6.70	99	2009563	9.85 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 49.25%		
22) Nitrobenzene-d5	7.99	82	1658477	10.06 ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 50.30%		
41) 2-Fluorobiphenyl	10.92	172	4123343	9.98 ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 49.90%		
62) 2,4,6-Tribromophenol	13.20	330	528041	10.30 ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 51.50%		
75) Terphenyl-d14	16.34	244	4507185	10.17 ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 50.85%		

Target Compounds					Qvalue
2) N-Nitrosodimethylamine	3.41	74	681109	9.29 ug/mL	97
3) Pyridine	3.38	79	1342993	9.25 ug/mL	100
5) Benzaldehyde	6.52	77	1094600	9.85 ug/ml	99
6) Aniline	6.72	66	1629138	8.98 ug/ml	95
7) bis(2-Chloroethyl)ether	6.81	63	1222005	9.46 ug/mL	97
9) Phenol	6.72	94	2344849	9.56 ug/mL	94
10) 2-Chlorophenol	6.86	128	1930931	9.81 ug/mL	99
11) 1,3-Dichlorobenzene	7.06	146	2211230	10.15 ug/mL	100
12) 1,4-Dichlorobenzene	7.13	146	2246922	10.09 ug/mL	99
13) 1,2-Dichlorobenzene	7.40	146	2071133	9.97 ug/mL	100
14) Benzyl alcohol	7.36	108	1130323	9.39 ug/mL	98
15) bis(2-chloroisopropyl)ethe	7.59	45	3203282	9.64 ug/mL#	100
16) 2-Methylphenol	7.56	108	1693262	9.79 ug/mL	97
17) Acetophenone	7.75	105	2446047	9.85 ug/ml	99
18) Hexachloroethane	7.86	117	767700	9.99 ug/mL	97
19) N-Nitroso-di-n-propylamine	7.79	70	876455	9.11 ug/mL	99
20) 4-Methylphenol	7.77	108	1783826	9.53 ug/mL	99
23) Nitrobenzene	8.01	77	1832188	10.02 ug/mL	100
24) Isophorone	8.37	82	3184494	10.02 ug/mL	100
25) 2-Nitrophenol	8.52	139	1054502m	10.15 ug/mL	
26) 2,4-Dimethylphenol	8.59	107	1353132	7.48 ug/mL	100
27) Benzoic acid	8.78	105	1303401m	10.58 ug/mL	
28) bis(2-Chloroethoxy)methane	8.74	93	2224109	9.95 ug/mL	99
29) 2,4-Dichlorophenol	8.89	162	1581628	10.13 ug/mL	100
30) 1,2,4-Trichlorobenzene	9.03	180	1694643	10.17 ug/mL	100
31) Naphthalene	9.13	128	6066780	10.12 ug/mL	100
32) 4-Chloroaniline	9.27	127	2262368	9.42 ug/mL	99
33) Hexachlorobutadiene	9.44	225	877168	10.44 ug/mL	99
34) Caprolactam	9.83	113	601564	9.47 ug/ml	99
35) 4-Chloro-3-methylphenol	10.10	107	1670891	10.11 ug/mL	99
36) 2-Methylnaphthalene	10.28	142	4097624	10.09 ug/mL	100
38) Hexachlorocyclopentadiene	10.65	237	982430	9.28 ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : C4052701.D
Acq On : 27 May 2008 4:14 pm
Operator : JAD
Sample : C4052701
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 27 18:25:09 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue May 27 16:12:43 2008
Response via : Initial Calibration

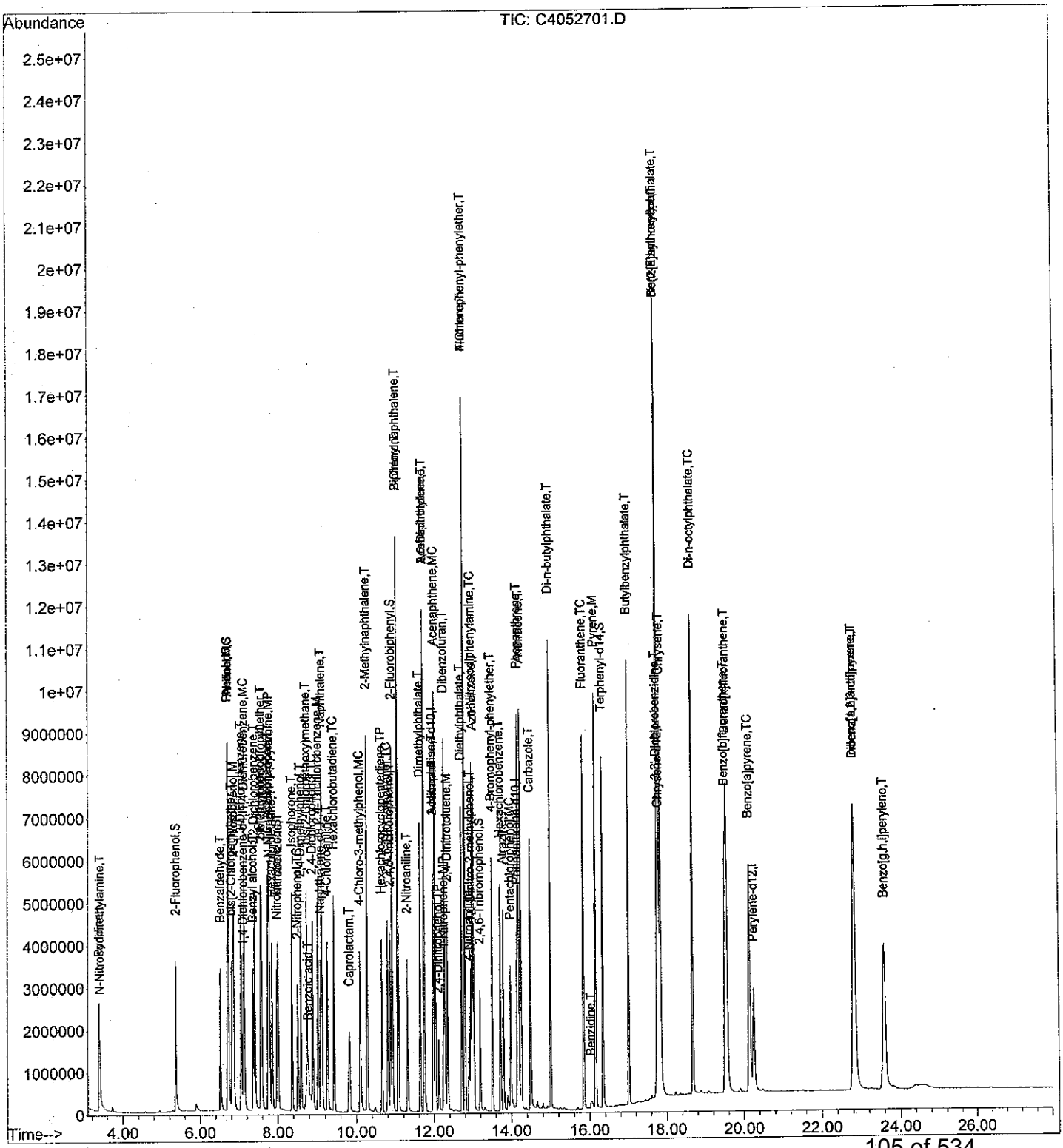
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.80	196	1039061m	9.89 ug/mL	
40) 2,4,5-Trichlorophenol	10.87	196	1188822m	10.27 ug/mL	
42) Biphenyl	11.06	154	4787436	10.05 ug/ml	99
43) 2-Chloronaphthalene	11.07	162	3704166	9.96 ug/mL	99
44) 2-Nitroaniline	11.31	65	1015730	10.08 ug/mL	98
45) Acenaphthylene	11.75	152	6200300	10.05 ug/mL	100
46) Dimethylphthalate	11.65	163	4505642	10.05 ug/mL	100
47) 2,6-Dinitrotoluene	11.76	165	1031258	10.53 ug/mL	100
48) Acenaphthene	12.04	153	3923509	9.98 ug/mL	99
49) 3-Nitroaniline	11.97	138	1035320	9.45 ug/mL	97
50) 2,4-Dinitrophenol	12.12	184	454474	9.47 ug/mL#	99
51) Dibenzofuran	12.28	168	5522227	10.01 ug/mL#	75
52) 2,4-Dinitrotoluene	12.36	165	1372328	10.45 ug/mL	99
53) 4-Nitrophenol	12.25	109	410453m	8.35 ug/mL	
54) Fluorene	12.80	166	4359877	9.97 ug/mL	100
55) 4-Chlorophenyl-phenylether	12.80	204	2041275	10.17 ug/mL	100
56) Diethylphthalate	12.72	149	4591647	10.16 ug/mL	100
57) 4-Nitroaniline	12.91	138	925479	8.60 ug/mL	98
59) 4,6-Dinitro-2-methylphenol	12.96	198	777794m	10.10 ug/mL	
60) Azobenzene	13.03	182	1345923	10.13 ug/mL	95
61) n-Nitrosodiphenylamine	13.00	169	3144926	9.91 ug/mL	99
63) 4-Bromophenyl-phenylether	13.52	248	1115243	10.12 ug/mL	100
64) Hexachlorobenzene	13.73	284	1183129	10.14 ug/mL	99
65) Atrazine	13.81	200	806707	7.50 ug/ml	99
66) Pentachlorophenol	13.99	266	724895	10.86 ug/mL	97
67) Phenanthrene	14.20	178	6442916m	9.93 ug/mL	
68) Anthracene	14.25	178	6513998m	9.99 ug/mL	
69) Carbazole	14.49	167	5142245	8.77 ug/mL	99
70) Di-n-butylphthalate	15.00	149	8229940	10.53 ug/mL	100
71) Fluoranthene	15.85	202	6705001	10.27 ug/mL	99
73) Benzidine	16.04	184	193430m	1.15 ug/mL	
74) Pyrene	16.16	202	7004318	10.22 ug/mL	99
76) Butylbenzylphthalate	17.01	149	3756087	10.42 ug/mL	99
77) 3,3'-Dichlorobenzidine	17.75	252	1791801	8.28 ug/mL	99
78) Benz[a]anthracene	17.78	228	6254454m	9.61 ug/mL	
79) Chrysene	17.85	228	6164078m	10.10 ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.77	149	5532487	10.50 ug/mL	100
82) Di-n-octylphthalate	18.68	149	9710247	11.13 ug/mL	100
83) Benzo[b]fluoranthene	19.52	252	6419090	9.70 ug/mL	98
84) Benzo[k]fluoranthene	19.56	252	6267994m	10.27 ug/mL	
85) Benzo[a]pyrene	20.15	252	6090992	9.97 ug/mL	100
86) Indeno[1,2,3-cd]pyrene	22.83	276	7169200	9.97 ug/mL	99
87) Dibenz[a,h]anthracene	22.85	278	6115435	9.73 ug/mL	100
88) Benzo[g,h,i]perylene	23.60	276	6217138	10.16 ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\May\MAY27\
Data File : C4052701.D
Acq On : 27 May 2008 4:14 pm
Operator : JAD
Sample : C4052701
Misc : SW051608C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 27 18:25:09 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue May 27 16:12:43 2008
Response via : Initial Calibration



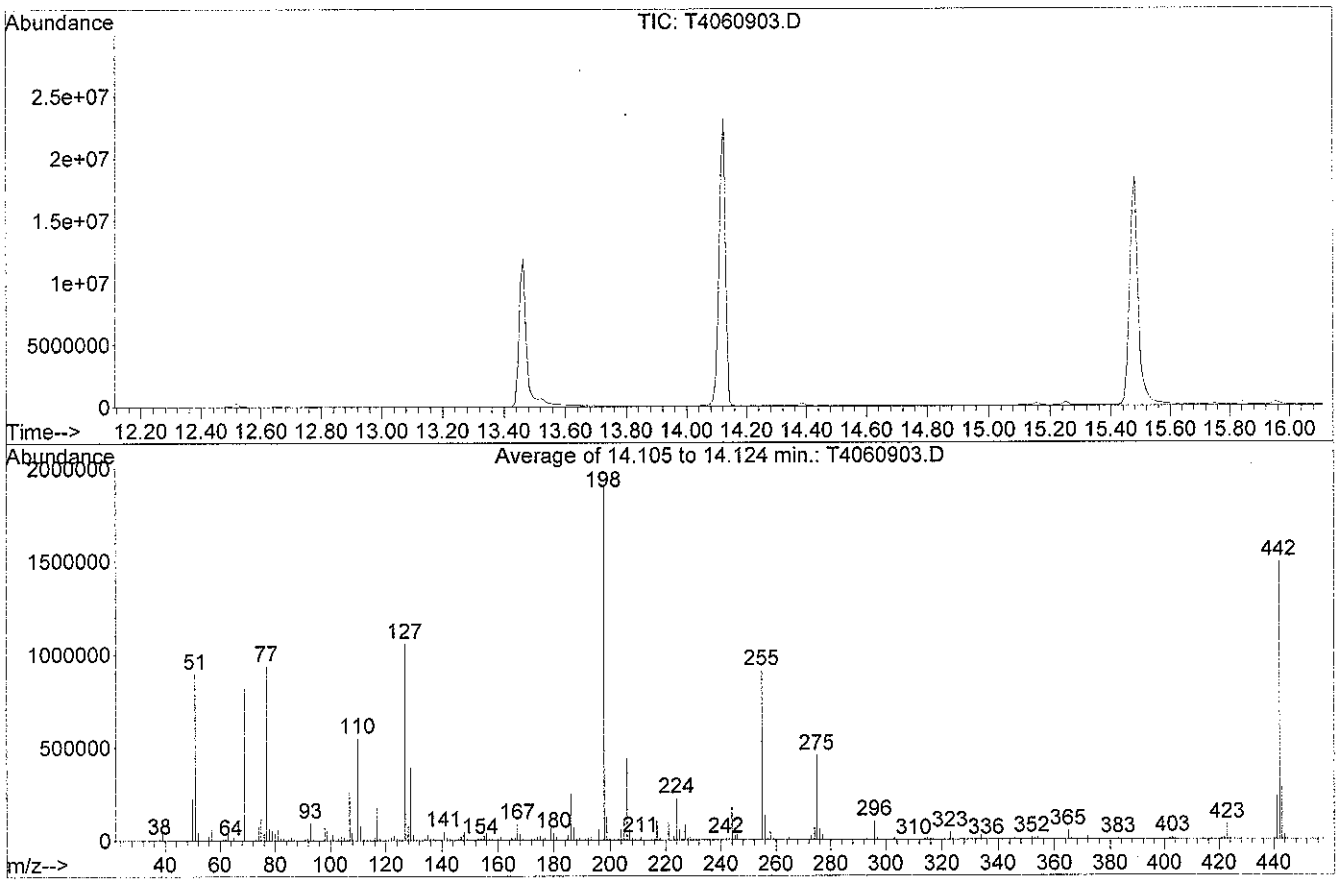
SVLV0516BNA4.M Tue May 27 18:29:36 2008

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060903.D
Acq On : 9 Jun 2008 8:57 pm
Operator : SEO
Sample : T4060903
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/10/08

Integration File: RTEINT.P

Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Mon Jun 09 14:39:05 2008



Spectrum Information: Average of 14.105 to 14.124 min.

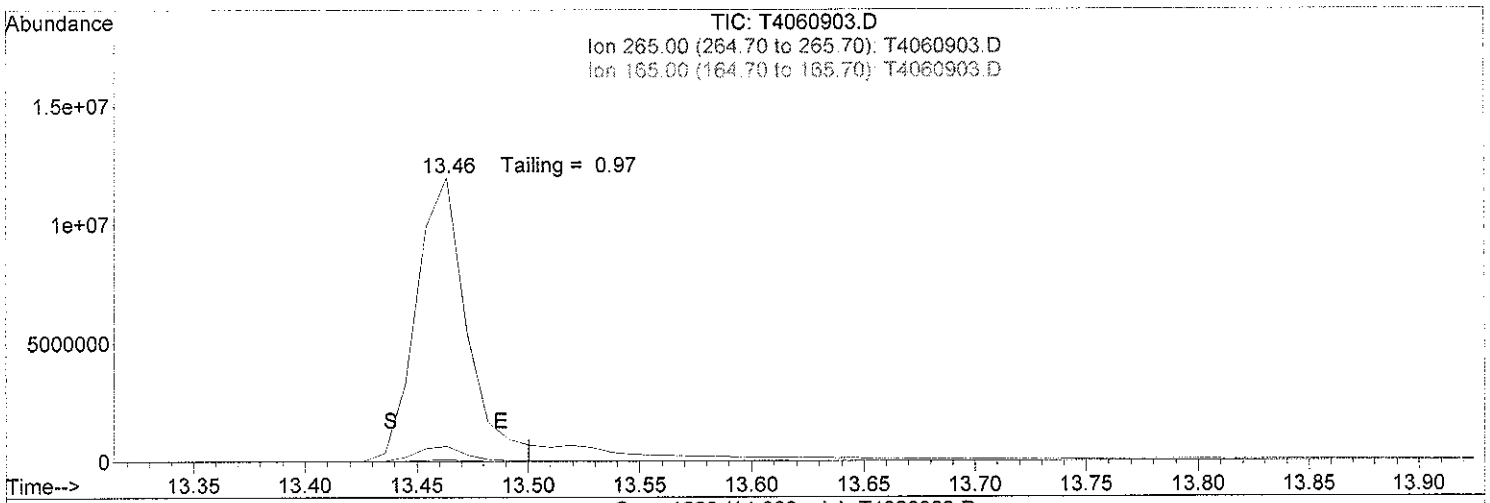
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.0	896234	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.0	820800	PASS
70	69	0.00	2	0.5	3894	PASS
127	198	40	60	55.5	1058176	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	1906773	PASS
199	198	5	9	6.7	128186	PASS
275	198	10	30	23.9	455232	PASS
365	198	1	100	2.5	48391	PASS
441	443	0.01	100	79.4	233453	PASS
442	198	40	100	78.3	1492586	PASS
443	442	17	23	19.7	294040	PASS

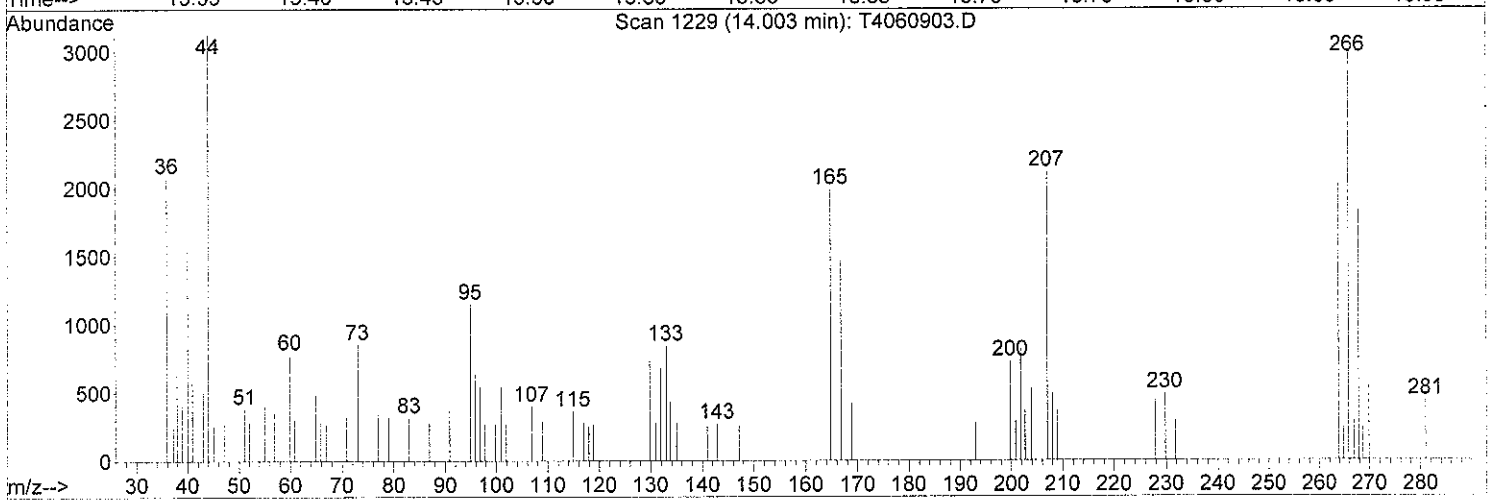
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060903.D
Acq On : 9 Jun 2008 8:57 pm
Operator : SEO
Sample : T4060903
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 08:41:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060903.D

(1) Pentachlorophenol (T)

14.001min (-14.001) 0.00ug/ml d

response 0

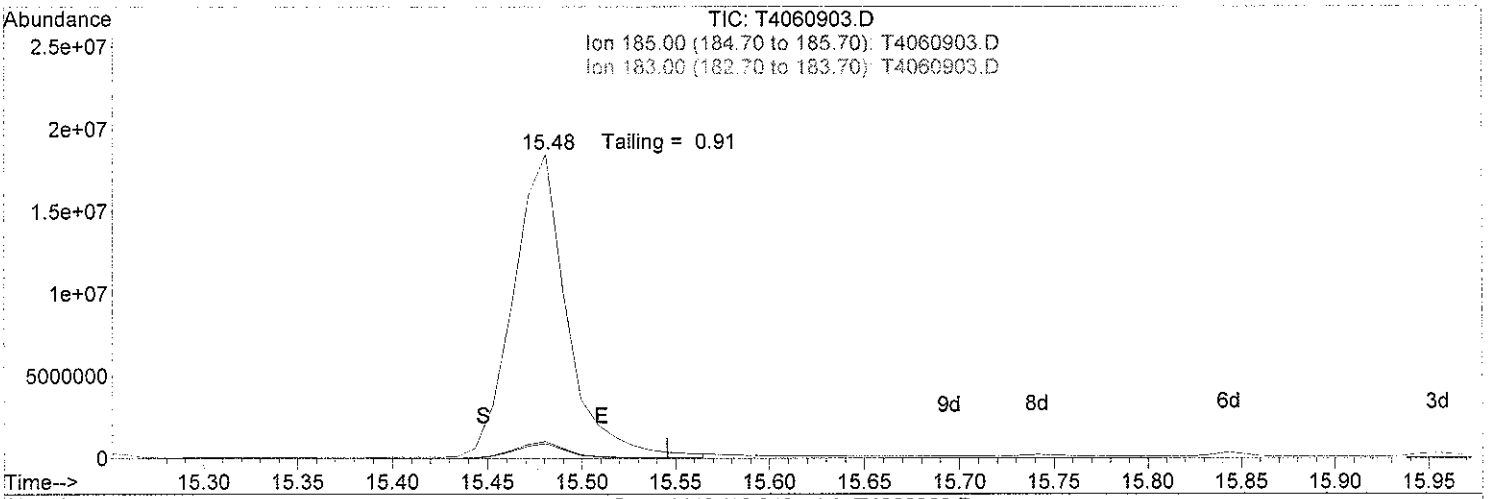
Signal	Exp%	Act%
TIC	100	0.00
265.00	64.30	0.00
165.00	541.10	0.00
0.00	0.00	0.00

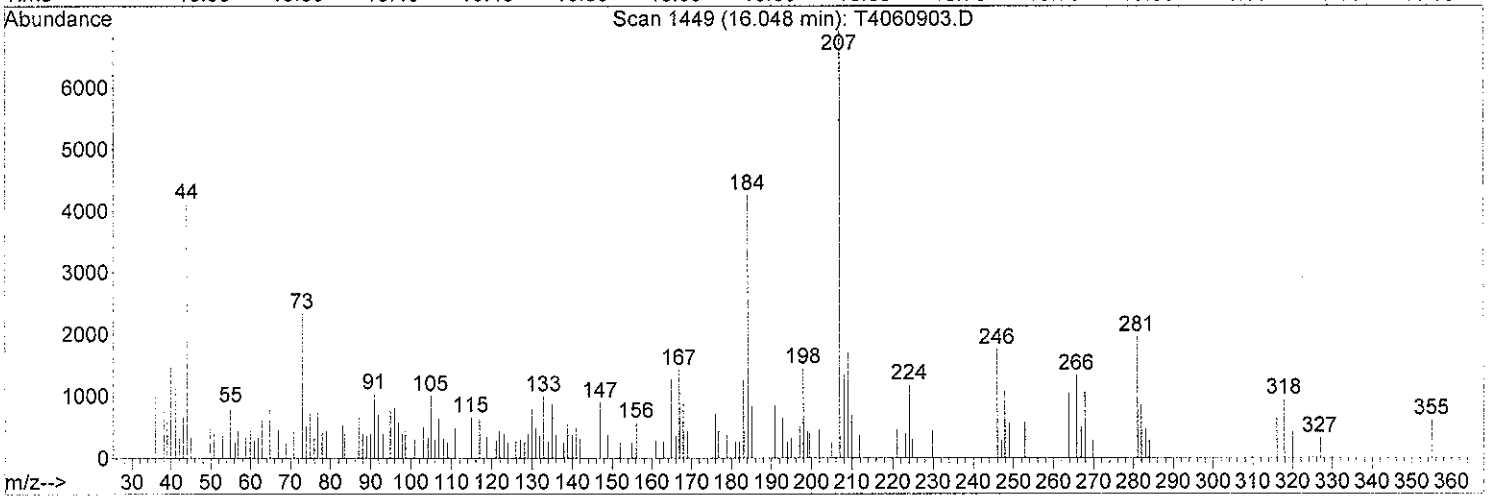
Quantitation Report (Qedit)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : T4060903.D
Acq On : 9 Jun 2008 8:57 pm
Operator : SEO
Sample : T4060903
Misc :
ALS Vial : 2 Sample Multiplier: 1

6/10/08

Quant Time: Jun 10 08:41:46 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2007\DFTPPBNA4.M
Quant Title : DFTPP
QLast Update : Thu May 29 15:32:16 2008
Response via : Initial Calibration





TIC: T4060903.D

(3) Benzidine (T)

16.046min (-16.046) 0.00ug/ml d

response 0

Signal	Exp%	Act%
TIC	100	0.00
185.00	564.80	0.00
183.00	481.20	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060903.D
Acq On : 9 Jun 2008 9:33 pm
Operator : SEO
Sample : C4060903
Misc :
ALS Vial : 3 Sample Multiplier: 1

6/18/08

Quant Time: Jun 10 08:40:56 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
2	T	N-Nitrosodimethylamine	0.563	0.575	-2.1	105	0.00
3	t	Pyridine	1.115	0.938	15.9	86	0.00
4	S	2-Fluorophenol	1.256	1.215	3.3	105	0.00
5	T	Benzaldehyde	0.854	0.750	12.2	98	0.00
6	T	Aniline	1.394	0.651	53.3#	51	0.00
7	T	bis(2-Chloroethyl)ether	0.993	1.089	-9.7	120	0.00
8	S	Phenol-d5	1.568	1.549	1.2	107	0.00
9	MC	Phenol	1.884	1.814	3.7#	105	0.00
10	M	2-Chlorophenol	1.511	1.519	-0.5	110	0.00
11	T	1,3-Dichlorobenzene	1.674	1.710	-2.2	112	0.00
12	MC	1,4-Dichlorobenzene	1.710	1.725	-0.9#	110	0.00
13	T	1,2-Dichlorobenzene	1.595	1.596	-0.1	110	0.00
14	T	Benzyl alcohol	0.925	0.827	10.6	93	0.00
15	T	bis(2-chloroisopropyl)ether	2.551	2.506	1.8	108	0.00
16	T	2-Methylphenol	1.328	1.405	-5.8	114	0.00
17	T	Acetophenone	1.908	1.951	-2.3	111	0.00
18	T	Hexachloroethane	0.590	0.596	-1.0	109	0.00
19	MP	N-Nitroso-di-n-propylamine	0.739	0.805	-8.9	113	0.00
20	T	4-Methylphenol	1.438	1.424	1.0	106	0.00
21	I	Naphthalene-d8	1.000	1.000	0.0	110	0.00
22	S	Nitrobenzene-d5	0.306	0.328	-7.2	114	0.00
23	T	Nitrobenzene	0.339	0.361	-6.5	114	0.00
24	T	Isophorone	0.590	0.616	-4.4	112	0.00
25	TC	2-Nitrophenol	0.193	0.213	-10.4#	114	0.00
26	T	2,4-Dimethylphenol	0.336	0.251	25.3#	80	0.00
27	T	Benzoic acid	0.229	0.007	96.9#	3#	0.00
28	T	bis(2-Chloroethoxy)methane	0.415	0.422	-1.7	111	0.00
29	TC	2,4-Dichlorophenol	0.290	0.301	-3.8#	110	0.00
30	M	1,2,4-Trichlorobenzene	0.309	0.312	-1.0	110	0.00
31	T	Naphthalene	1.113	1.142	-2.6	112	0.00
32	T	4-Chloroaniline	0.446	0.389	12.8	92	0.00
33	TC	Hexachlorobutadiene	0.156	0.161	-3.2#	113	0.00
34	T	Caprolactam	0.118	0.119	-0.8	112	0.00
35	MC	4-Chloro-3-methylphenol	0.307	0.327	-6.5#	113	0.00
36	T	2-Methylnaphthalene	0.754	0.781	-3.6	113	0.00
37	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00
38	TP	Hexachlorocyclopentadiene	0.341	0.288	15.5	91	0.00
39	TC	2,4,6-Trichlorophenol	0.339	0.324	4.4#	103	0.00
40	T	2,4,5-Trichlorophenol	0.374	0.361	3.5	102	0.00
41	S	2-Fluorobiphenyl	1.334	1.343	-0.7	112	0.00
42	T	Biphenyl	1.537	1.569	-2.1	113	0.00
43	T	2-Chloronaphthalene	1.200	1.190	0.8	110	0.00
44	T	2-Nitroaniline	0.325	0.372	-14.5	119	0.00
45	T	Acenaphthylene	1.990	2.033	-2.2	111	0.00
46	T	Dimethylphthalate	1.447	1.466	-1.3	111	0.00
47	T	2,6-Dinitrotoluene	0.316	0.346	-9.5	112	0.00
48	MC	Acenaphthene	1.269	1.285	-1.3#	113	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060903.D
Acq On : 9 Jun 2008 9:33 pm
Operator : SEO
Sample : C4060903
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 10 08:40:56 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	3-Nitroaniline	0.354	0.374	-5.6	109	0.00
50	TP	2,4-Dinitrophenol	0.155	0.139	10.3	83	0.00
51	T	Dibenzofuran	1.780	1.803	-1.3	112	0.00
52	M	2,4-Dinitrotoluene	0.424	0.471	-11.1	114	0.00
53	MP	4-Nitrophenol	0.159	0.133	16.4	86	0.00
54	T	Fluorene	1.411	1.452	-2.9	113	0.00
55	T	4-Chlorophenyl-phenylether	0.648	0.667	-2.9	114	0.00
56	T	Diethylphthalate	1.459	1.506	-3.2	113	0.00
57	T	4-Nitroaniline	0.347	0.351	-1.2	103	0.00
58	I	Phenanthrene-d10	1.000	1.000	0.0	113	0.00
59	T	4,6-Dinitro-2-methylphenol	0.153	0.166	-8.5	104	0.00
60	T	Azobenzene	0.264	0.275	-4.2	114	0.00
61	TC	n-Nitrosodiphenylamine	0.631	0.659	-4.4#	116	0.00
62	S	2,4,6-Tribromophenol	0.102	0.098	3.9	104	0.00
63	T	4-Bromophenyl-phenylether	0.219	0.225	-2.7	114	0.00
64	T	Hexachlorobenzene	0.232	0.234	-0.9	112	0.00
65	T	Atrazine	0.214	0.138	35.5#	70	0.00
66	MC	Pentachlorophenol	0.133	0.089	33.1#	68	0.00
67	T	Phenanthrene	1.291	1.302	-0.9	113	0.00
68	T	Anthracene	1.297	1.293	0.3	109	0.00
69	T	Carbazole	1.166	1.065	8.7	103	0.00
70	T	Di-n-butylphthalate	1.554	1.601	-3.0	108	0.00
71	TC	Fluoranthene	1.299	1.316	-1.3#	112	0.00
72	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
73	T	Benzidine	0.347	0.071	79.5#	20#	0.00
74	M	Pyrene	1.420	1.485	-4.6	112	0.00
75	S	Terphenyl-d14	0.919	0.926	-0.8	108	0.00
76	T	Butylbenzylphthalate	0.747	0.809	-8.3	112	0.00
77	T	3,3'-Dichlorobenzidine	0.449	0.477	-6.2	112	0.00
78	T	Benz[a]anthracene	1.348	1.349	-0.1	107	0.00
79	T	Chrysene	1.265	1.283	-1.4	111	0.00
80	T	bis(2-Ethylhexyl)phthalate	1.091	1.183	-8.4	112	0.00
81	I	Perylene-d12	1.000	1.000	0.0	111	0.00
82	TC	Di-n-octylphthalate	1.849	2.063	-11.6#	112	0.00
83	T	Benzo[b]fluoranthene	1.404	1.498	-6.7	112	-0.04
84	T	Benzo[k]fluoranthene	1.295	1.218	5.9	107	0.00
85	TC	Benzo[a]pyrene	1.296	1.277	1.5#	106	0.00
86	T	Indeno[1,2,3-cd]pyrene	1.524	1.541	-1.1	109	0.00
87	T	Dibenz[a,h]anthracene	1.333	1.352	-1.4	109	0.00
88	T	Benzo[g,h,i]perylene	1.298	1.305	-0.5	108	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 13

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060903.D
Acq On : 9 Jun 2008 9:33 pm
Operator : SEO
Sample : C4060903
Misc :
ALS Vial : 3 Sample Multiplier: 1

6/19/08

Quant Time: Jun 10 08:40:56 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.62	152	694821	5.00	ug/mL	0.00
21) Naphthalene-d8	8.52	136	2896444	5.00	ug/mL	0.00
37) Acenaphthene-d10	11.43	164	1641866	5.00	ug/mL	0.00
58) Phenanthrene-d10	13.59	188	2665951	5.00	ug/mL	0.00
72) Chrysene-d12	17.19	240	2493617	5.00	ug/mL	0.00
81) Perylene-d12	19.35	264	2505576	5.00	ug/mL	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.00	112	1688355	9.67	ug/mL	0.00
Spiked Amount 20.000	Range 21 - 100		Recovery = 48.35%			
8) Phenol-d5	6.33	99	2152904	9.88	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 94		Recovery = 49.40%			
22) Nitrobenzene-d5	7.47	82	1902623	10.74	ug/mL	0.00
Spiked Amount 20.000	Range 35 - 114		Recovery = 53.70%			
41) 2-Fluorobiphenyl	10.37	172	4410107	10.07	ug/mL	0.00
Spiked Amount 20.000	Range 43 - 116		Recovery = 50.35%			
62) 2,4,6-Tribromophenol	12.65	330	523179	9.62	ug/mL	0.00
Spiked Amount 20.000	Range 10 - 123		Recovery = 48.10%			
75) Terphenyl-d14	15.78	244	4616278	10.07	ug/mL	0.00
Spiked Amount 20.000	Range 33 - 141		Recovery = 50.35%			

Target Compounds						Qvalue
2) N-Nitrosodimethylamine	2.89	74	799441	10.21	ug/mL	97
3) Pyridine	2.86	79	1303174	8.41	ug/mL	99
5) Benzaldehyde	6.04	77	1042189	8.78	ug/ml	97
6) Aniline	6.25	66	904291	4.67	ug/ml	97
7) bis(2-Chloroethyl)ether	6.34	63	1513457	10.97	ug/mL	94
9) Phenol	6.35	94	2520189	9.63	ug/mL#	90
10) 2-Chlorophenol	6.42	128	2110648	10.05	ug/mL	95
11) 1,3-Dichlorobenzene	6.57	146	2376218	10.22	ug/mL	100
12) 1,4-Dichlorobenzene	6.64	146	2396822	10.08	ug/mL	99
13) 1,2-Dichlorobenzene	6.90	146	2217572	10.00	ug/mL	100
14) Benzyl alcohol	6.90	108	1149043	8.94	ug/mL	96
15) bis(2-chloroisopropyl)ethe	7.09	45	3482541	9.82	ug/mL	97
16) 2-Methylphenol	7.14	108	1953126	10.58	ug/mL	90
17) Acetophenone	7.24	105	2711268	10.23	ug/ml	99
18) Hexachloroethane	7.32	117	828811	10.11	ug/mL	93
19) N-Nitroso-di-n-propylamine	7.30	70	1119239	10.90	ug/mL	97
20) 4-Methylphenol	7.36	108	1979228	9.91	ug/mL	97
23) Nitrobenzene	7.49	77	2093136	10.65	ug/mL	97
24) Isophorone	7.84	82	3567419	10.45	ug/mL	99
25) 2-Nitrophenol	7.97	139	1236302	11.07	ug/mL	98
26) 2,4-Dimethylphenol	8.10	107	1455951	7.49	ug/mL	100
27) Benzoic acid	8.10	105	43286	0.33	ug/mL	98
28) bis(2-Chloroethoxy)methane	8.21	93	2442549	10.17	ug/mL	99
29) 2,4-Dichlorophenol	8.40	162	1742879	10.39	ug/mL	100
30) 1,2,4-Trichlorobenzene	8.45	180	1808622	10.09	ug/mL	99
31) Naphthalene	8.55	128	6613554	10.26	ug/mL	100
32) 4-Chloroaniline	8.71	127	2255295	8.73	ug/mL	99
33) Hexachlorobutadiene	8.85	225	934868	10.35	ug/mL	99
34) Caprolactam	9.32	113	687094	10.07	ug/ml	98
35) 4-Chloro-3-methylphenol	9.63	107	1892586	10.65	ug/mL	91
36) 2-Methylnaphthalene	9.71	142	4524361	10.36	ug/mL	97
38) Hexachlorocyclopentadiene	10.09	237	944635	8.43	ug/mL	100

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060903.D
Acq On : 9 Jun 2008 9:33 pm
Operator : SEO
Sample : C4060903
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 10 08:40:56 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration

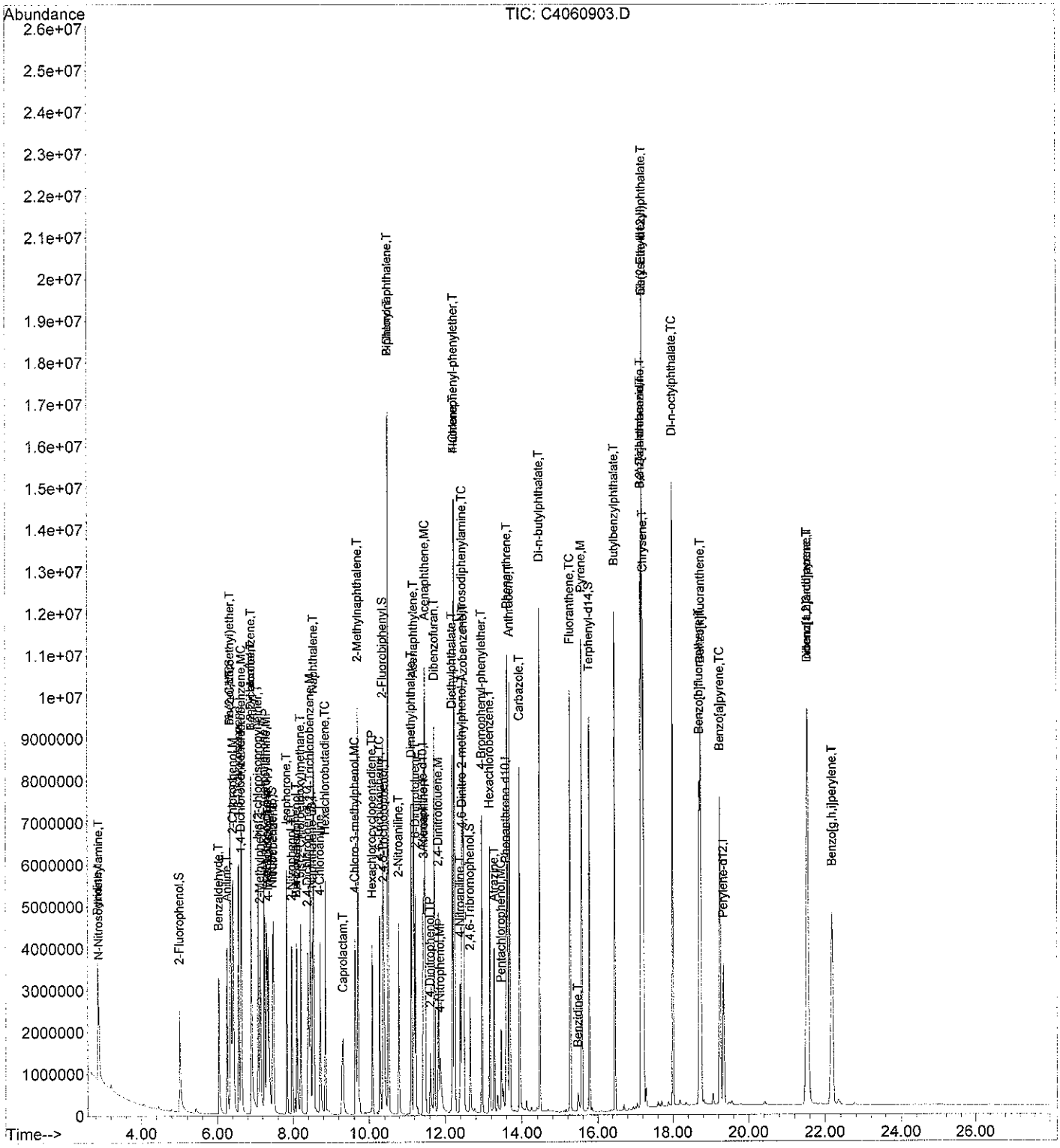
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
39) 2,4,6-Trichlorophenol	10.28	196	1062805	9.54	ug/mL	99
40) 2,4,5-Trichlorophenol	10.40	196	1185972	9.67	ug/mL	99
42) Biphenyl	10.51	154	5151632	10.21	ug/ml	100
43) 2-Chloronaphthalene	10.52	162	3908740	9.92	ug/mL	100
44) 2-Nitroaniline	10.79	65	1222729	11.46	ug/mL	97
45) Acenaphthylene	11.19	152	6675923	10.22	ug/mL	100
46) Dimethylphthalate	11.12	163	4812568	10.13	ug/mL	100
47) 2,6-Dinitrotoluene	11.23	165	1136877	10.96	ug/mL	98
48) Acenaphthene	11.48	153	4218253	10.13	ug/mL	99
49) 3-Nitroaniline	11.46	138	1228202	10.58	ug/mL#	99
50) 2,4-Dinitrophenol	11.61	184	457726	9.00	ug/mL#	64
51) Dibenzofuran	11.73	168	5921287	10.13	ug/mL	97
52) 2,4-Dinitrotoluene	11.83	165	1545657	11.11	ug/mL	94
53) 4-Nitrophenol	11.87	109	437137m	8.39	ug/mL	
54) Fluorene	12.25	166	4768967	10.29	ug/mL	99
55) 4-Chlorophenyl-phenylether	12.26	204	2188923	10.29	ug/mL	95
56) Diethylphthalate	12.20	149	4946496	10.33	ug/mL	99
57) 4-Nitroaniline	12.40	138	1152790	10.11	ug/mL	96
59) 4,6-Dinitro-2-methylphenol	12.44	198	882685	10.81	ug/mL#	46
60) Azobenzene	12.49	182	1464333	10.39	ug/mL	49
61) n-Nitrosodiphenylamine	12.46	169	3511291	10.43	ug/mL	95
63) 4-Bromophenyl-phenylether	12.96	248	1202069	10.29	ug/mL	94
64) Hexachlorobenzene	13.17	284	1247625	10.08	ug/mL#	90
65) Atrazine	13.29	200	736076m	6.45	ug/ml	
66) Pentachlorophenol	13.46	266	474155m	6.69	ug/mL	
67) Phenanthrene	13.63	178	6939911	10.08	ug/mL	100
68) Anthracene	13.69	178	6892453m	9.97	ug/mL	
69) Carbazole	13.95	167	5677402	9.13	ug/mL	99
70) Di-n-butylphthalate	14.47	149	8535219	10.30	ug/mL	100
71) Fluoranthene	15.27	202	7015397	10.13	ug/mL	99
73) Benzidine	15.47	184	354953	2.05	ug/mL	94
74) Pyrene	15.57	202	7407821	10.46	ug/mL	95
76) Butylbenzylphthalate	16.46	149	4034932	10.83	ug/mL	94
77) 3,3'-Dichlorobenzidine	17.15	252	2380786	10.64	ug/mL	98
78) Benz[a]anthracene	17.17	228	6729669	10.01	ug/mL	99
79) Chrysene	17.23	228	6399643m	10.14	ug/mL	
80) bis(2-Ethylhexyl)phthalate	17.20	149	5899165	10.84	ug/mL	98
82) Di-n-octylphthalate	18.01	149	10339958	11.16	ug/mL	99
83) Benzo[b]fluoranthene	18.72	252	7505699m	10.67	ug/mL	
84) Benzo[k]fluoranthene	18.75	252	6105773m	9.41	ug/mL	
85) Benzo[a]pyrene	19.26	252	6400147	9.86	ug/mL	99
86) Indeno[1,2,3-cd]pyrene	21.54	276	7723081	10.11	ug/mL	96
87) Dibenz[a,h]anthracene	21.56	278	6775796	10.14	ug/mL	98
88) Benzo[g,h,i]perylene	22.19	276	6539087	10.05	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Organics\DATA\BNA4\2008\JUNE\JUNE09\
Data File : C4060903.D
Acq On : 9 Jun 2008 9:33 pm
Operator : SEO
Sample : C4060903
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 10 08:40:56 2008
Quant Method : O:\ORGANICS\METHODS\BNA4\2008\SVLV0516BNA4.M\SVLV0516BNA4.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Mon Jun 09 14:39:05 2008
Response via : Initial Calibration



Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C4052701**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
Standard:		650959	7.10	2694732	9.09	1549547	11.99
Upper Limit:		1301918	7.60	5389464	9.59	3099094	12.49
Lower Limit:		325480	6.60	1347366	8.59	774774	11.49
Client ID	**Lab ID**						
Blank	SS050108B02	345296	7.10	1363790	9.09	769128 [a]	11.98
LCS	SS050108LCS03	561070	7.10	2239227	9.08	1230773	11.98
LCSD	SS050108LCSD03	395596	7.10	1554479	9.09	901387	11.98

N/A - Not Applicable
[a] - Value outside of QC Limits.

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C4052701**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
Standard:		2513403	14.16	2412891	17.81	2357662	20.26
Upper Limit:		5026806	14.66	4825782	18.31	4715324	20.76
Lower Limit:		1256702	13.66	1206446	17.31	1178831	19.76
Client ID	**Lab ID**						
Blank	SS050108B02	1261207	14.16	1159470 [a]	17.80	1121402 [a]	20.26
LCS	SS050108LCS03	1925575	14.16	1932464	17.80	1868174	20.26
LCSD	SS050108LCSD03	1432550	14.16	1387107	17.80	1371394	20.26

N/A - Not Applicable
[a] - Value outside of QC Limits.

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C4060903**

		1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
		Area	RT	Area	RT	Area	RT
Standard:		694821	6.62	2896444	8.52	1641866	11.43
Upper Limit:		1389642	7.12	5792888	9.02	3283732	11.93
Lower Limit:		347410	6.12	1448222	8.02	820933	10.93
Client ID	**Lab ID**						
B4	0804116-01	643647	6.61	2605725	8.51	1449724	11.43
B4	0804116-01 D	624143	6.61	2543580	8.51	1431272	11.43
B3/4	0804116-02	667846	6.61	2688535	8.51	1526430	11.43
B2/3	0804116-03	685939	6.61	2800725	8.51	1564283	11.43
B1/2	0804116-04	677093	6.61	2671420	8.51	1528331	11.43
B1	0804116-05	670269	6.62	2737165	8.52	1533685	11.43
B5	0804116-06	598746	6.61	2379093	8.52	1362672	11.43
B5/6	0804116-07	519291	6.61	1953587	8.52	1178678	11.43
B6/7	0804116-08	624299	6.62	2429808	8.52	1439505	11.44
B7/8	0804116-09	625567	6.62	2418238	8.52	1462501	11.44
B8	0804116-10	591408	6.62	2375753	8.52	1396457	11.44

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

Form VIII
Internal Standard Summary
Semi-Volatile Organics by 8270

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C4060903**

		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT	Area	RT
Standard:		2665951	13.59	2493617	17.19	2505576	19.35
Upper Limit:		5331902	14.09	4987234	17.69	5011152	19.85
Lower Limit:		1332976	13.09	1246808	16.69	1252788	18.85
Client ID	**Lab ID**						
B4	0804116-01	2364782	13.59	2195544	17.19	2287371	19.35
B4	0804116-01 D	2365824	13.59	2235589	17.19	2391975	19.35
B3/4	0804116-02	2471120	13.59	2344476	17.19	2434091	19.36
B2/3	0804116-03	2528229	13.59	2394209	17.19	2519070	19.37
B1/2	0804116-04	2452985	13.59	2329954	17.19	2526839	19.37
B1	0804116-05	2480644	13.59	2345883	17.20	2439806	19.36
B5	0804116-06	2229721	13.59	2105208	17.20	2206173	19.37
B5/6	0804116-07	1860683	13.59	1827330	17.20	1954845	19.37
B6/7	0804116-08	2302345	13.60	2210628	17.20	2374399	19.38
B7/8	0804116-09	2368604	13.60	2262396	17.20	2438937	19.38
B8	0804116-10	2258248	13.60	2142972	17.21	2214174	19.38

N/A - Not Applicable

Area Upper Limit = +100% of internal standard.
Area Lower Limit = -50% of internal standard.
RT = Retention Time.
RT Upper Limit = +0.5 minutes of internal standard RT.
RT Lower Limit = -0.5 minutes of internal standard RT.

Sample Preparation

Alpha Woods Hole Lab
Batch Weight Report
05/01/2008

Lab ID	QC Type	0804116PCB - Sample
0804116-01	D	5.33
0804116-01	SAM	5.45
0804116-02	SAM	5.34
0804116-03	SAM	5.43
0804116-04	SAM	5.38
0804116-05	SAM	5.47
0804116-06	SAM	5.41
0804116-07	SAM	5.36
0804116-08	SAM	5.39
0804116-09	SAM	5.38
0804116-10	SAM	5.38
PS050108B01	B	5
PS050108LCS01LCS	OP PCB Aroclor Low	5
PS050108LCSD01LCO	P PCB Aroclor Low	5

Alpha Woods Hole Lab
Batch Prep Spike Report

05/01/2008 0804116PCB - OP PCB Aroclor Analyst: LAB Witness: MGH

Lab ID	QC Type	OP PCB Aroclor - surr	Vol OP PCB Aroclor - surr	Units OP PCB Aroclor - surr	OP PCB Aroclor - spk 1	Vol OP PCB Aroclor - spk 1	Units OP PCB Aroclor - spk 1	OP PCB Aroclor - spk 2	Vol OP PCB Aroclor - spk 2	Units OP PCB Aroclor - spk 2
0804116-01	D	PSW032808A	1	ml						
0804116-01	SAM	PSW032808A	1	ml						
0804116-02	SAM	PSW032808A	1	ml						
0804116-03	SAM	PSW032808A	1	ml						
0804116-04	SAM	PSW032808A	1	ml						
0804116-05	SAM	PSW032808A	1	ml						
0804116-06	SAM	PSW032808A	1	ml						
0804116-07	SAM	PSW032808A	1	ml						
0804116-08	SAM	PSW032808A	1	ml						
0804116-09	SAM	PSW032808A	1	ml						
0804116-10	SAM	PSW032808A	1	ml						
PS050108B01	B	PSW032808A	1	ml						
PS050108LCS01	LCS	PSW032808A	1	ml	PLW041008B	1	ml			
PS050108LCSD01	LCSD	PSW032808A	1	ml	PLW041008B	1	ml			

Test: PCB

Standard Type: *Surrogate* / *LCS* / *MS-MSD*

LFB / *Other* _____

ID# PSW032808A

Conc. 1000 g/ml

Test: PCB

Standard Type: *Surrogate* *LCS* / *MS-MSD*

LFB / *Other* _____

ID# PLW041008B

Conc. 10,000 g/ml

Alpha Woods Hole Lab
Batch Prep Report
05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)	Solvent Ex	Conc. Analyst	Conc. Date	Conc. Method	Transfer Volume (ml)	Vialed By	Vialed Date	Cell Number
0804116-01	D	3570	LAB	5/1/08	5/7/08		5.33	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-01	SAM	3570	LAB	5/1/08	5/7/08		5.45	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-02	SAM	3570	LAB	5/1/08	5/7/08		5.34	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-03	SAM	3570	LAB	5/1/08	5/7/08		5.43	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-04	SAM	3570	LAB	5/1/08	5/7/08		5.38	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-05	SAM	3570	LAB	5/1/08	5/7/08		5.47	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-06	SAM	3570	LAB	5/1/08	5/7/08		5.41	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-07	SAM	3570	LAB	5/1/08	5/7/08		5.36	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-08	SAM	3570	LAB	5/1/08	5/7/08		5.39	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-09	SAM	3570	LAB	5/1/08	5/7/08		5.38	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
0804116-10	SAM	3570	LAB	5/1/08	5/7/08		5.38	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
PS050108B01	B	3570	LAB	5/1/08	5/7/08		5	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
PS050108LCS01	LCS	3570	LAB	5/1/08	5/7/08		5	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	
PS050108LCSD01	LCSD	3570	LAB	5/1/08	5/7/08		5	10	True	MGH	5/6/08	KD Flask	1	LAB	5/6/08	

Alpha Woods Hole Lab
Batch Prep Report
05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	Notes
0804116-01	1st Prep
0804116-01	1st Prep
0804116-02	1st Prep
0804116-03	1st Prep
0804116-04	1st Prep
0804116-05	1st Prep
0804116-06	1st Prep
0804116-07	1st Prep
0804116-08	1st Prep
0804116-09	1st Prep
0804116-10	1st Prep
PS050108B01	1st Prep
PS050108LCS01	1st Prep
PS050108LCSD01	1st Prep

Alpha Woods Hole Lab
Batch Clean Up Report

05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804116-01	D	3660B	LAB	5/1/08										1
0804116-01	SAM	3660B	LAB	5/1/08										1
0804116-02	SAM	3660B	LAB	5/1/08										1
0804116-03	SAM	3660B	LAB	5/1/08										1
0804116-04	SAM	3660B	LAB	5/1/08										1
0804116-05	SAM	3660B	LAB	5/1/08										1
0804116-06	SAM	3660B	LAB	5/1/08										1
0804116-07	SAM	3660B	LAB	5/1/08										1
0804116-08	SAM	3660B	LAB	5/1/08										1
0804116-09	SAM	3660B	LAB	5/1/08										1
0804116-10	SAM	3660B	LAB	5/1/08										1
PS050108B01	B	3660B	LAB	5/1/08										1
PS050108LCS01	LCS	3660B	LAB	5/1/08										1
PS050108LCSD01	LCSD	3660B	LAB	5/1/08										1

Alpha Woods Hole Lab
Batch Clean Up Report
05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	Notes
0804116-01	
0804116-01	
0804116-02	
0804116-03	
0804116-04	
0804116-05	
0804116-06	
0804116-07	
0804116-08	
0804116-09	
0804116-10	
PS050108B01	
PS050108LCS01	
PS050108LCSD01	

Alpha Woods Hole Lab
Batch Clean Up Report

05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	QC Type	Clean Up Method	Analyst	Clean Up Date	Flow Rate	Coll. Start	Coll. End	Concentration Analyst	Conc. Date	Solvent Ex.	Prefractionation Volume (ml)	Fractionation Amount (ml)	Fractionation Factor	Transfer Volume (ml)
0804116-01	D	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-01	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-02	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-03	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-04	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-05	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-06	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-07	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-08	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-09	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
0804116-10	SAM	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
PS050108B01	B	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
PS050108LCS01	LCS	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1
PS050108LCSD01	LCSD	3610	LAB	5/6/08				LAB	5/7/08	True	10	1	0	1

Alpha Woods Hole Lab
Batch Clean Up Report
05/01/2008 0804116PCB - OP PCB Aroclor Low

Lab ID	Notes
0804116-01	
0804116-01	
0804116-02	
0804116-03	
0804116-04	
0804116-05	
0804116-06	
0804116-07	
0804116-08	
0804116-09	
0804116-10	
PS050108B01	
PS050108LCS01	
PS050108LCSD01	

Organics Preparation Checklist

ETR: 08041116 Client: Newfile Project: Ash Creek

Test Requested			
Aroclor	✓	RIM PAH/PCB (Reg I)	
Congener		RIM Pest (Reg I)	
Homolog		RIM PAH/PCB (Reg II)	
Pesticide		RIM Pest (Reg II)	
TPH		DAS	
PAH-SIM		EPH	
8270		Other:	

Required Cleanup	
No Cleanup Required	
Copper	✓
Conc. Sulfuric Acid	
GPC	
Automated Silica Fractionation	
Cartridge Silica Fractionation	
Alumina	✓

Sample Observations			
Normal Weight/Volume Extracted	✓	Lesser Amount Used - Sheen Present On Sample	
Lesser Amount Used - Low Sample Volume Provided		Lesser Amount Used - Suspected High Target	
Lesser Amount Used - Strong Hydrocarbon Odor		Sediment At Bottom Of Water Sample Jar	
Project Specific Weight Used		No Observations	✓

Other:

Extraction Notes		
Emulsions During Shake		**Identify Matrix - Circle One**
Samples Extracted Outside Of Hold Time		**Soil / (Sediment) / Water / Sheen / NAPL / Sludge / Solid Tissue / Product / Oil / Net / Wipe / Elutriate**
Samples Not Field Preserved		
No Observations	✓	

Other:

Concentration Notes			
Greater Final Volume - High Viscosity		Greater Final Volume - Inability To Concentrate	
Precipitate Formed During Concentration		No Observations	✓

Other:

Clean-ups			
Auto-vialing not required		Auto-vialing for H_2O in extract	
Auto-vialing for precipitate in extract		No Observations	✓

Other:

Batch Reviewed

Analyst: [signature]

Date: 5/7/08

Batch Completed

Analyst: [signature]

Date: 5/7/08

PCB
By
8082

Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	81.3	5.45	10	1	JBS

Parameter	Result
Aroclor 1016	45.1 U
Aroclor 1221	45.1 U
Aroclor 1232	45.1 U
Aroclor 1242	45.1 U
Aroclor 1248	45.1 U
Aroclor 1254	**156**
Aroclor 1260	45.1 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	83	30-150
Decachlorobiphenyl	80	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-01.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-01.D\ECD2B.CH
Acq On : 8 May 2008 5:02 pm Operator: JBS
Sample : 0804116-01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:07 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1183515	969090	76.971	83.065
Spiked Amount 100.000 Range 30 - 150 Recovery =					76.97%	83.06%
12) s DCB - Surrogate	26.34	25.21	1727901	1332740	72.343	80.344m
Spiked Amount 100.000 Range 30 - 150 Recovery =					72.34%	80.34%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	38828	33860	53.736m	62.967m
34) L6 A1254 2	14.44	14.03	67272	52846	54.729m	60.874m(C)
35) L6 A1254 3	15.22	14.73	78906	42388	59.529m	65.486m
36) L6 A1254 4	15.91	15.28	44670	35172	74.507m	69.459m
37) L6 A1254 5	16.90	16.46	81216	76602	68.999	87.421m #
Sum A1254 1			310892	240868	311.501	346.208
Average A1254 1					62.300	69.242
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

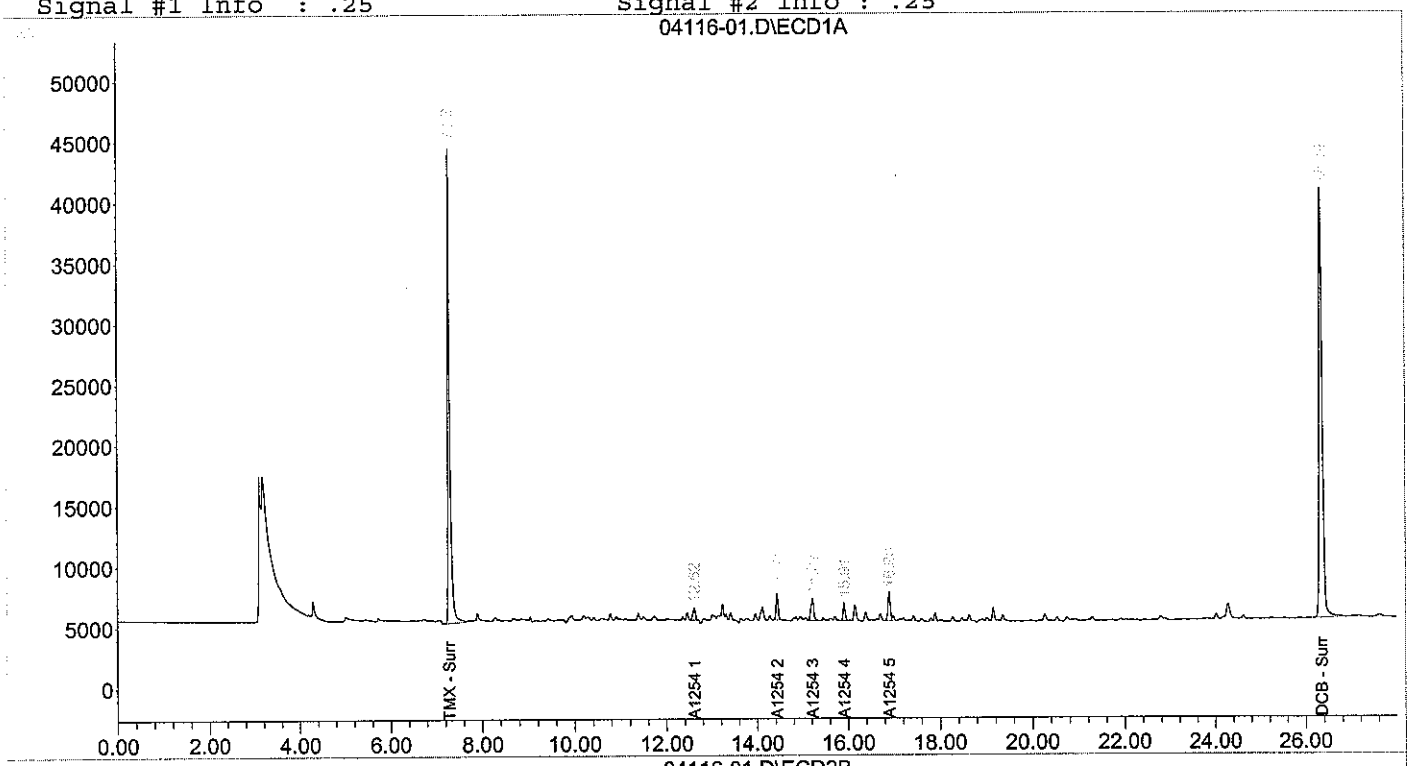
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

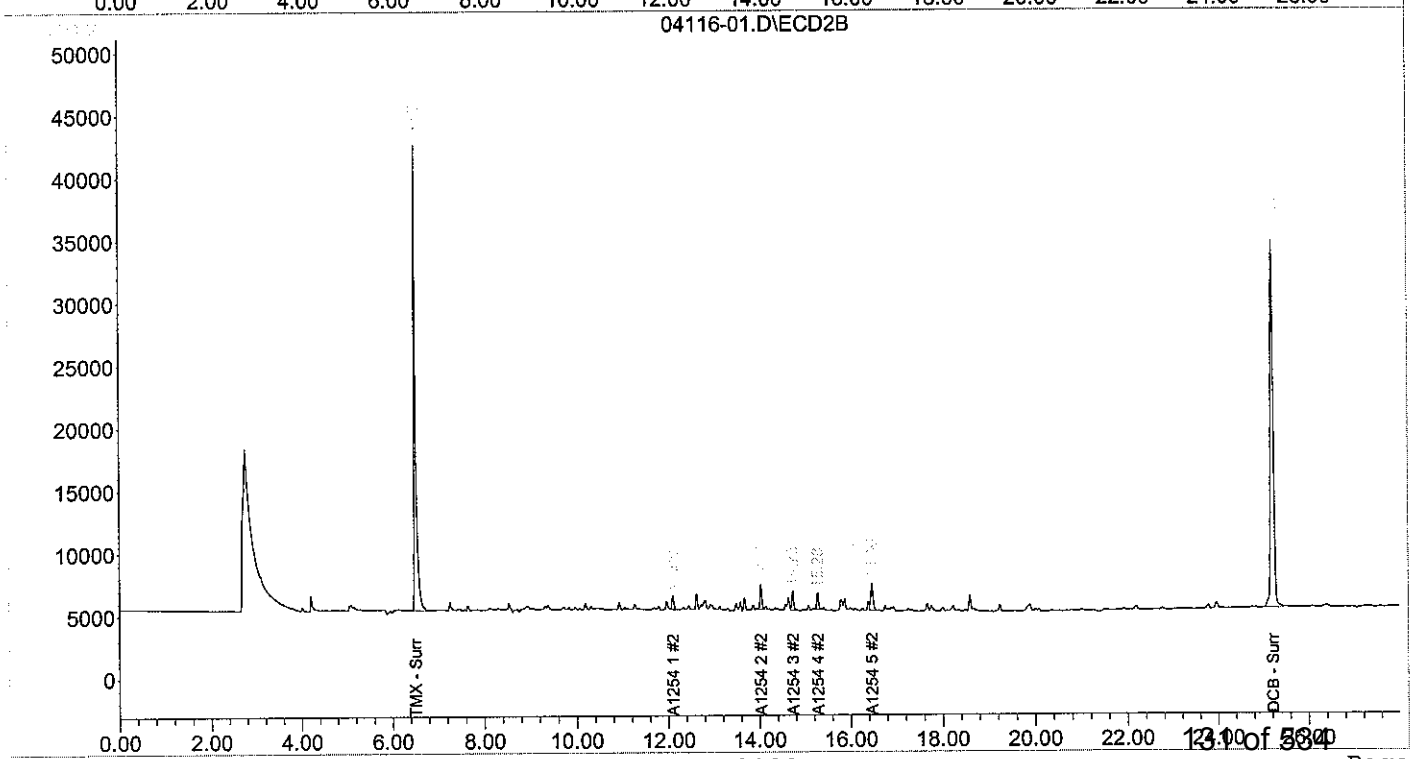
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-01.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-01.D\ECD2B.CH
Acq On : 8 May 2008 5:02 pm Operator: JBS
Sample : 0804116-01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:07 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01 D**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	81.3	5.33	10	1	JBS

Parameter	Result
Aroclor 1016	46.2 U
Aroclor 1221	46.2 U
Aroclor 1232	46.2 U
Aroclor 1242	46.2 U
Aroclor 1248	46.2 U
Aroclor 1254	**165**
Aroclor 1260	46.2 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	87	30-150
Decachlorobiphenyl	83	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Quantitation Report (QT Reviewed)

JJS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-1D.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-1D.D\ECD2B.CH
Acq On : 8 May 2008 5:33 pm Operator: JBS
Sample : 0804116-01D Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1191850	1010755	77.564	87.122
Spiked Amount 100.000 Range 30 - 150 Recovery =					77.56%	87.12%
12) s DCB - Surrogate	26.34	25.21	1782782	1375923	74.945	83.385m
Spiked Amount 100.000 Range 30 - 150 Recovery =					74.94%	83.39%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	45490	34832	62.956m	64.775m
34) L6 A1254 2	14.43	14.03	70550	54466	57.396m	62.740m(C)
35) L6 A1254 3	15.21	14.73	78086	41308	58.911m	63.817m
36) L6 A1254 4	15.91	15.28	55358	36636	92.334m	72.351m
37) L6 A1254 5	16.89	16.46	82850	82230	70.388m	93.844m #
Sum A1254 1			332334	249472	341.984	357.527
Average A1254 1					68.397	71.505
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

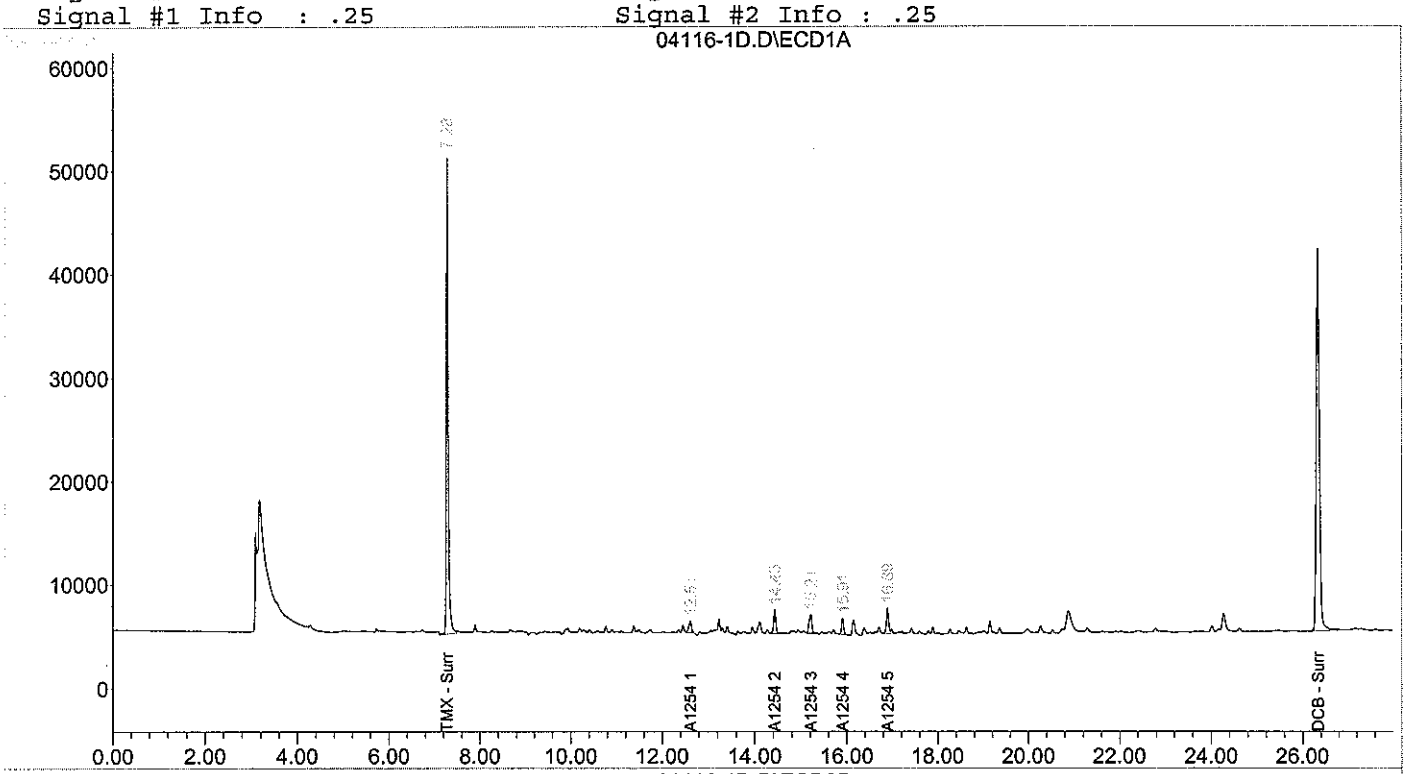
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

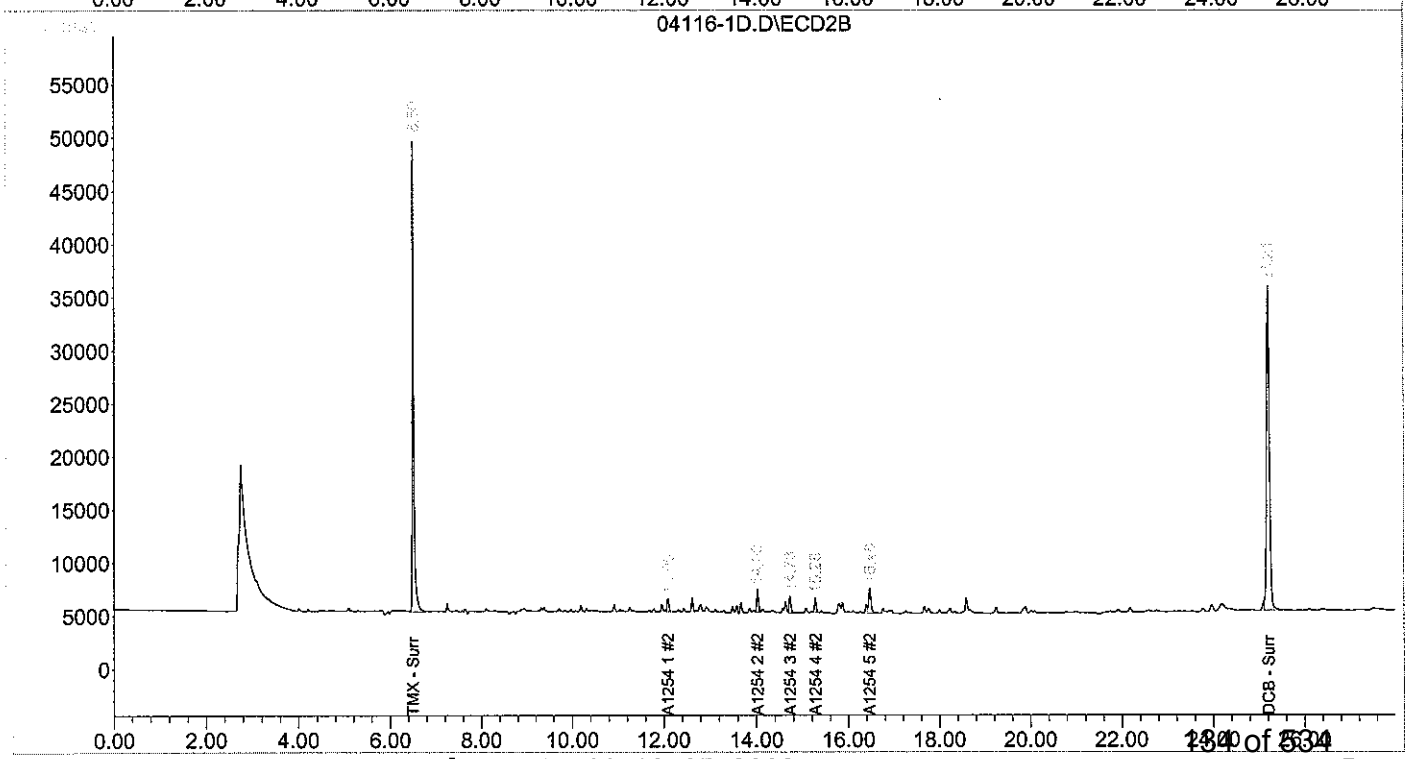
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-1D.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-1D.D\ECD2B.CH
Acq On : 8 May 2008 5:33 pm Operator: JBS
Sample : 0804116-01D Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
03/26/08	03/28/08	05/01/08	81.3	JBS

Parameter	Sample Result	Duplicate Result	RPD	RPD Limit
Aroclor 1016	45.1 U	46.2 U	N/A	50
Aroclor 1221	45.1 U	46.2 U	N/A	50
Aroclor 1232	45.1 U	46.2 U	N/A	50
Aroclor 1242	45.1 U	46.2 U	N/A	50
Aroclor 1248	45.1 U	46.2 U	N/A	50
Aroclor 1254	**156**	**165**	5	50
Aroclor 1260	45.1 U	46.2 U	N/A	50

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	83	87	30-150
Decachlorobiphenyl	80	83	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

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Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B3/4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-02**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	32.6	5.34	10	1	JBS

Parameter	Result
Aroclor 1016	115 U
Aroclor 1221	115 U
Aroclor 1232	115 U
Aroclor 1242	**398**
Aroclor 1248	115 U
Aroclor 1254	**1310**
Aroclor 1260	**277**

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	80	30-150
Decachlorobiphenyl	71	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-02.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-02.D\ECD2B.CH
Acq On : 8 May 2008 6:05 pm Operator: JBS
Sample : 0804116-02 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:42 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1119558	937270	72.453	79.998m
Spiked Amount 100.000 Range 30 - 150 Recovery =					72.45%	80.00%
12) s DCB - Surrogate	26.34	25.21	1540912	1202518	63.628	71.356m
Spiked Amount 100.000 Range 30 - 150 Recovery =					63.63%	71.36%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
7) L7 A1260 1	17.42	0.00	39238	0	28.590m	N.D. d (I)#
8) L7 A1260 2	18.27	16.75	37466	28178	31.991m	20.820m #
9) L7 A1260 3	20.27	17.76	64456	55774	55.185m	65.871m
10) L7 A1260 4	20.75	19.88	40649	86248	54.972	58.500m
11) L7 A1260 5	22.79	22.18	36654	31076	49.898m	47.640m
Sum A1260 1			218463	201276	220.635	192.831
Average A1260 1					44.127	48.208
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	0.00	8316	0	26.973m	N.D. d(C)# <RL
24) L4 A1242 2	8.85	8.30	30286	21986	51.137m	49.114m
25) L4 A1242 3	9.94	9.38	78132	69596	74.415m	82.281m
26) L4 A1242 4	10.20	9.71	36458	29388	78.978m(C)	76.299m
Sum A1242 1			153192	120970	231.503	207.694 Pk 4 5 - Qdel - I
Average A1242 1					57.876	69.231
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	153182	119482	211.997m	222.194m
34) L6 A1254 2	14.44	14.03	257710	182174	209.660m	209.850m(C)
35) L6 A1254 3	15.22	14.73	272154	142996	205.322m	220.916m
36) L6 A1254 4	15.91	15.28	142730	108192	238.064m	213.663m
37) L6 A1254 5	16.90	16.46	262752	235756	223.229m	269.055m
Sum A1254 1			1088528	788600	1088.272	1135.677
Average A1254 1					217.654	227.135
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

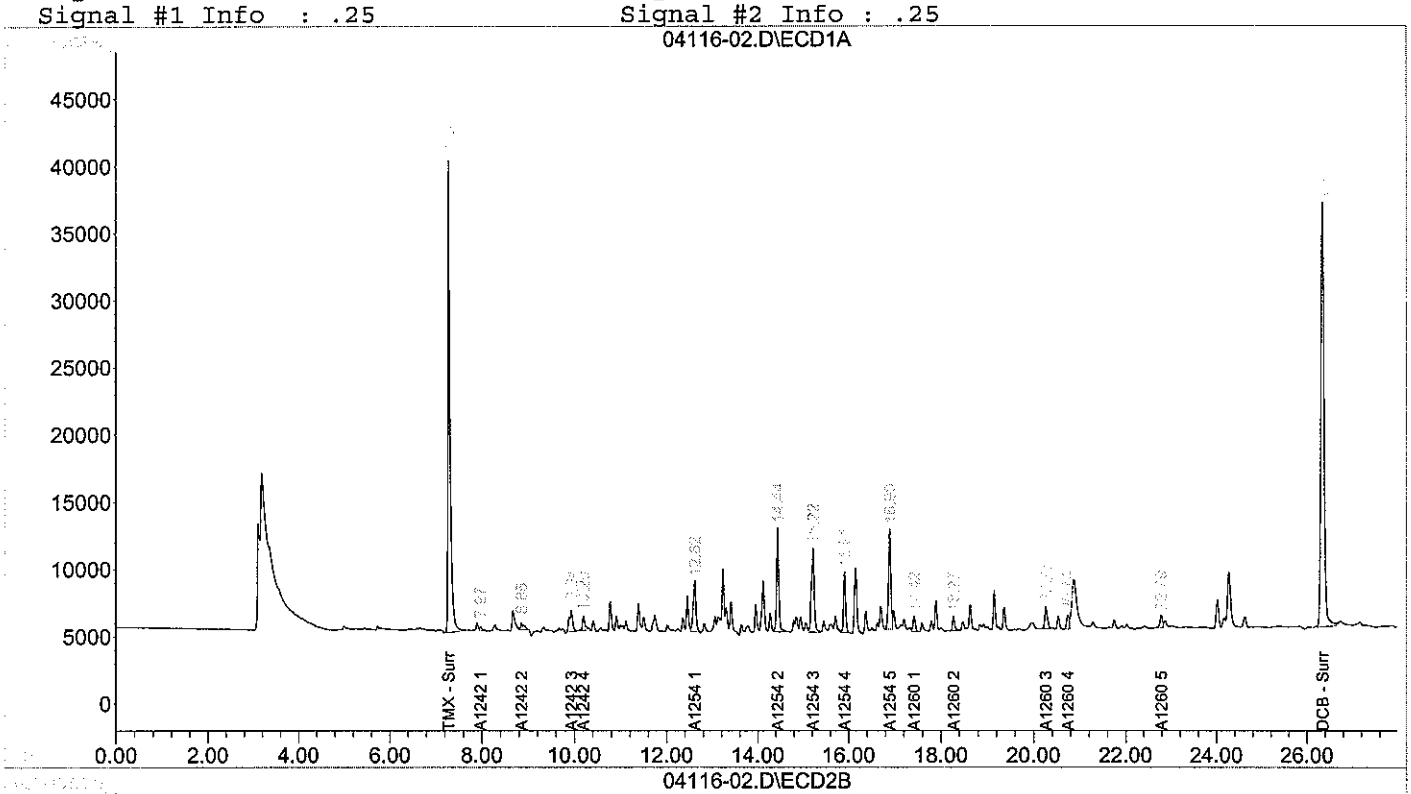
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

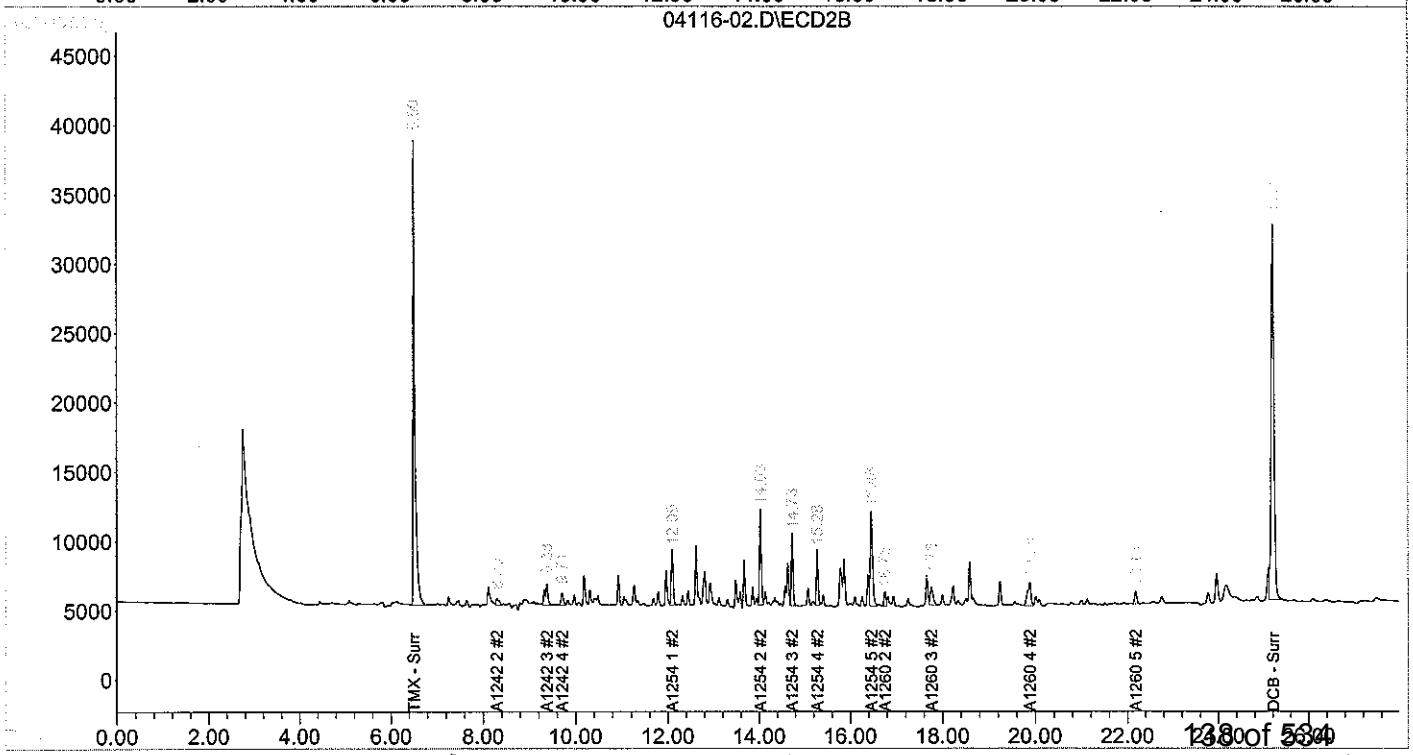
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-02.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-02.D\ECD2B.CH
Acq On : 8 May 2008 6:05 pm Operator: JBS
Sample : 0804116-02 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 9:42 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B2/3**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-03**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	30.8	5.43	10	1	JBS

Parameter	Result
Aroclor 1016	120 U
Aroclor 1221	120 U
Aroclor 1232	120 U
Aroclor 1242	**545**
Aroclor 1248	120 U
Aroclor 1254	**1320**
Aroclor 1260	**364**

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	85	30-150
Decachlorobiphenyl	73	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-03.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-03.D\ECD2B.CH
Acq On : 8 May 2008 6:36 pm Operator: JBS
Sample : 0804116-03 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 12:53 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1176940	986750	76.505m	84.779m
Spiked Amount 100.000 Range 30 - 150 Recovery =					76.50%	84.78%
12) s DCB - Surrogate	26.35	25.21	1626662	1227709	67.596m	73.074m
Spiked Amount 100.000 Range 30 - 150 Recovery =					67.60%	73.07%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
7) L7 A1260 1	17.43	0.00	44070	0	34.536m	N.D. d(I)#
8) L7 A1260 2	18.27	16.75	43498	34632	39.557m	31.330m
9) L7 A1260 3	20.27	17.76	85070	56740	75.417m	67.377m
10) L7 A1260 4	20.74	19.88	58704	98890	81.517m	69.597m
11) L7 A1260 5	22.79	22.19	52416	38524	73.634m	62.530m
Sum A1260 1			283758	228786	304.661	230.835
Average A1260 1					60.932	57.709
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	0.00	9702	0	31.469m	N.D. d(C)#< RL
24) L4 A1242 2	8.85	8.30	33538	27068	56.628m	60.467m
25) L4 A1242 3	9.93	9.38	95342	89308	90.807m	105.585m
26) L4 A1242 4	10.20	9.71	39972	41490	86.590m(C)	107.718m
Sum A1242 1			178554	157866	265.493	273.771 PK#5 -Qdel -I
Average A1242 1					66.373	91.257
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	142934	119942	197.814m	223.049m
34) L6 A1254 2	14.44	14.03	243744	171198	198.298m	197.206m(C)
35) L6 A1254 3	15.22	14.73	260416	139326	196.467m	215.246m
36) L6 A1254 4	15.91	15.28	148724	108256	248.062m	213.789m
37) L6 A1254 5	16.90	16.46	263314	226122	223.707m	258.060m
Sum A1254 1			1059132	764844	1064.347	1107.350
Average A1254 1					212.869	221.470
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

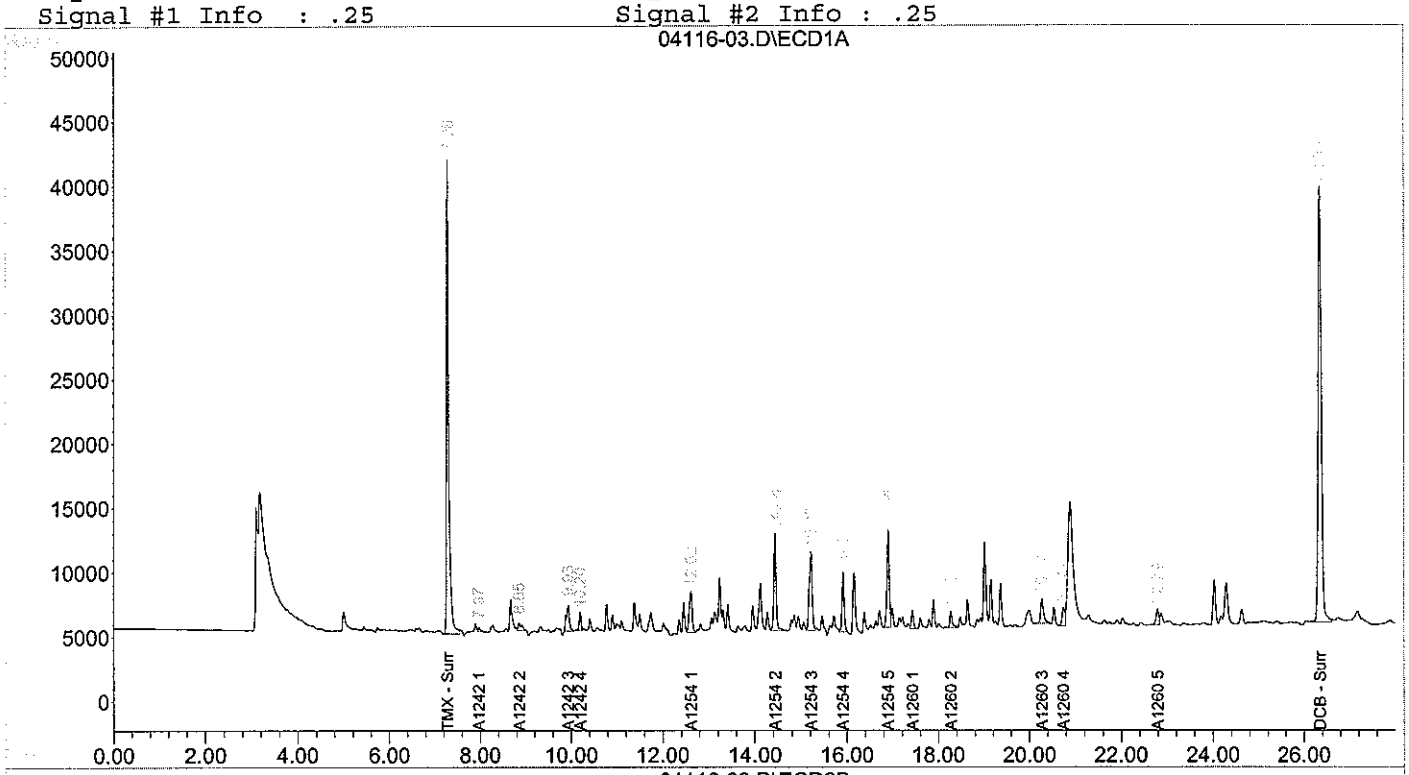
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

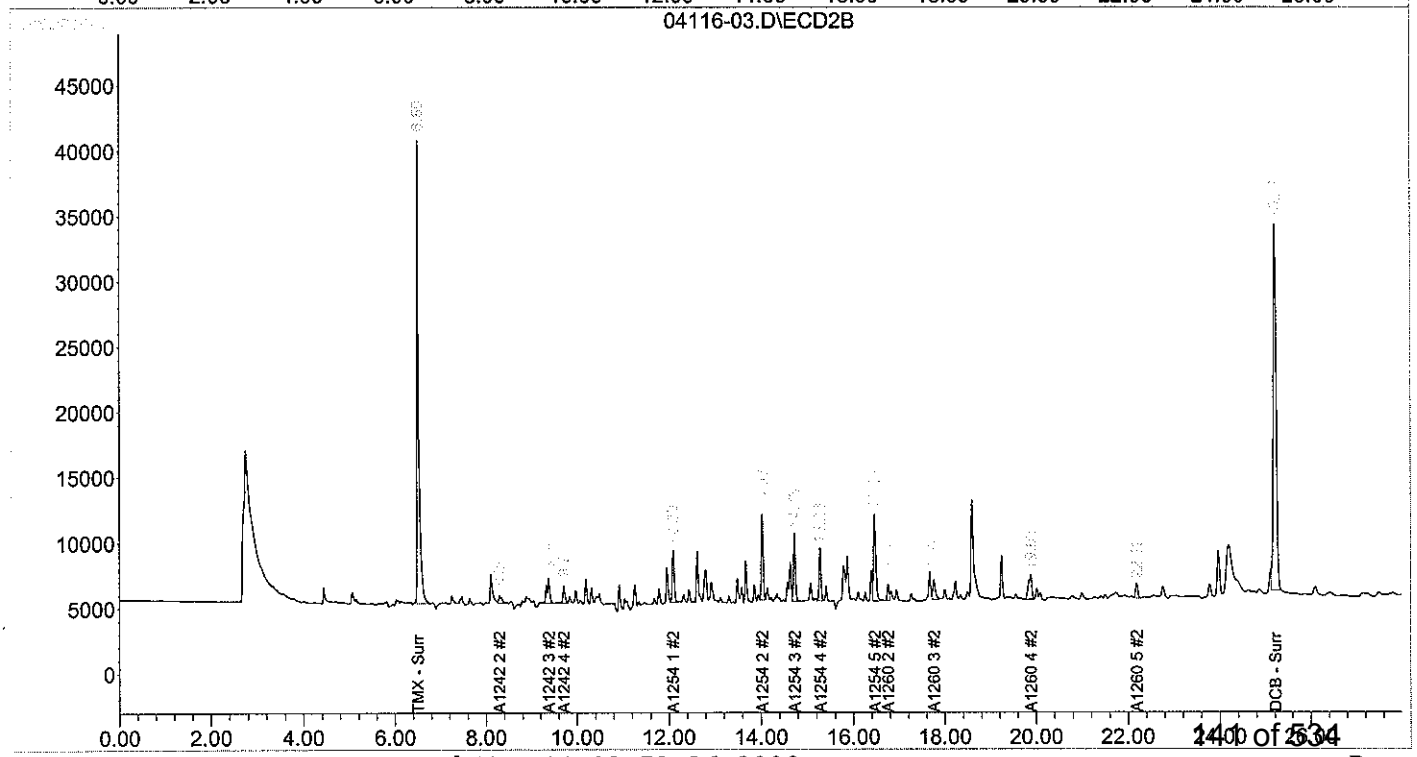
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-03.D\ECD1A.CH Vial: 16
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-03.D\ECD2B.CH
Acq On : 8 May 2008 6:36 pm Operator: JBS
Sample : 0804116-03 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 14 12:53 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Wed May 14 09:43:18 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1/2**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-04**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	66.4	5.38	10	1	JBS

Parameter	Result
Aroclor 1016	56.0 U
Aroclor 1221	56.0 U
Aroclor 1232	56.0 U
Aroclor 1242	**182**
Aroclor 1248	56.0 U
Aroclor 1254	**408**
Aroclor 1260	56.0 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	69	30-150
Decachlorobiphenyl	61	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-04.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-04.D\ECD2B.CH
Acq On : 8 May 2008 7:07 pm Operator: JBS
Sample : 0804116-04 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:52 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	962582	825468	61.554	69.420	
Spiked Amount 100.000 Range 30 - 150 Recovery =					61.55%	69.42%	
12) s DCB - Surrogate	26.35	25.21	1315282	1055208	53.402m	61.491m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					53.40%	61.49%	
Target Compounds							
Sum A1016 1			0	0	N.D.	N.D.	
Average A1016 1					0.000	0.000	
Sum A1260 1			0	0	N.D.	N.D.	
Average A1260 1					0.000	0.000	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
					PK#1 < RL - Qdel		
24) L4 A1242 2	8.85	8.30	17110	16896	28.890m	37.744m	#
25) L4 A1242 3	9.94	9.38	72484	59962	69.036m	70.891m	
26) L4 A1242 4	10.20	9.71	35240	26956	76.339m(C)	69.984m	
27) L4 A1242 5	11.74	0.00	40280	0	85.438m	N.D. d(I)	#
Sum A1242 1			165114	103814	259.703	178.619	
Average A1242 1					64.926	59.540	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
33) L6 A1254 1	12.61	12.10	106890	70988	147.931m	132.012m	
34) L6 A1254 2	14.44	14.03	139100	98804	113.165m	113.814m(C)	
35) L6 A1254 3	15.22	14.73	159092	86440	120.024m	133.542m	
36) L6 A1254 4	15.91	15.28	110988	61982	185.121m	122.405m	#
37) L6 A1254 5	16.90	16.46	192534	155630	163.573m	177.612m	
Sum A1254 1			708604	473844	729.814	679.385	
Average A1254 1					145.963	135.877	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

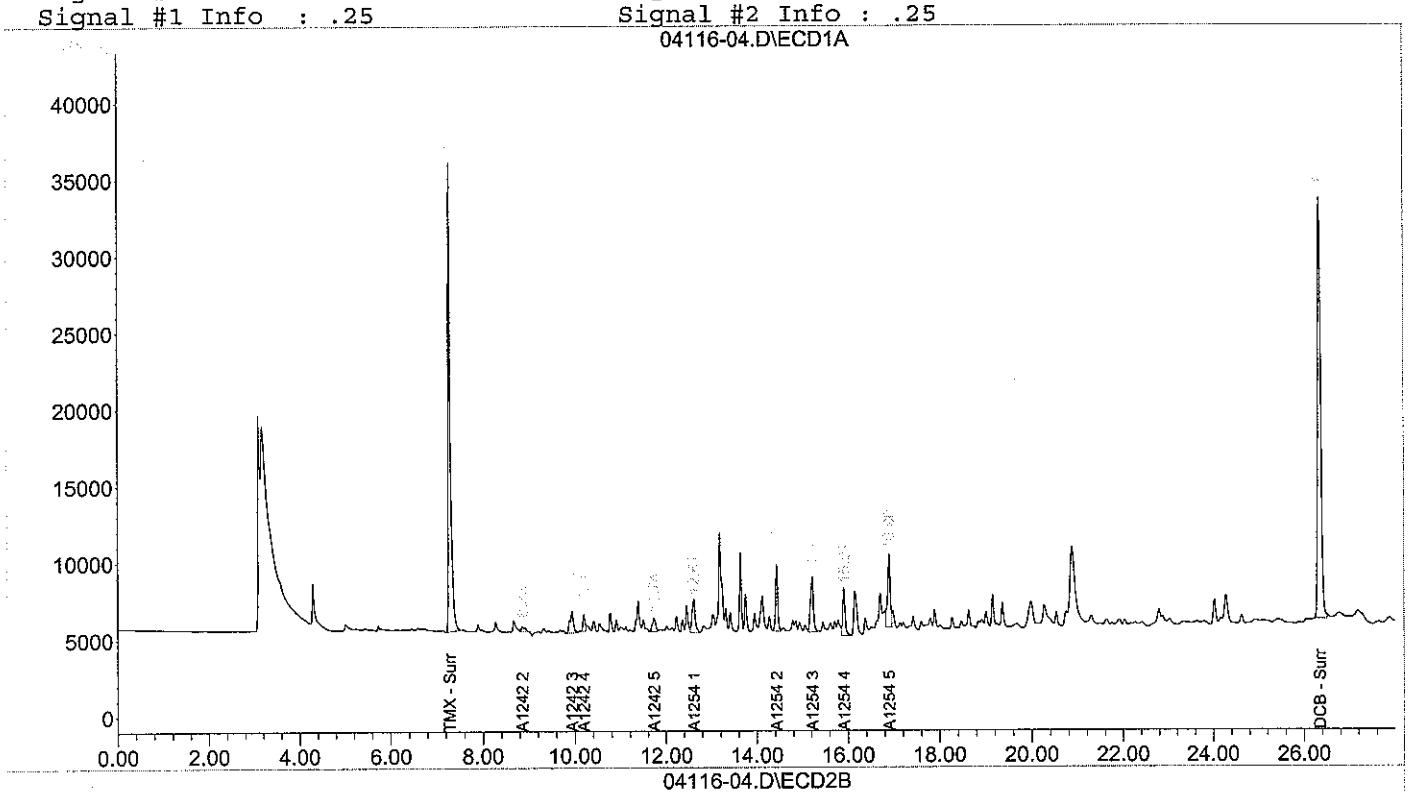
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

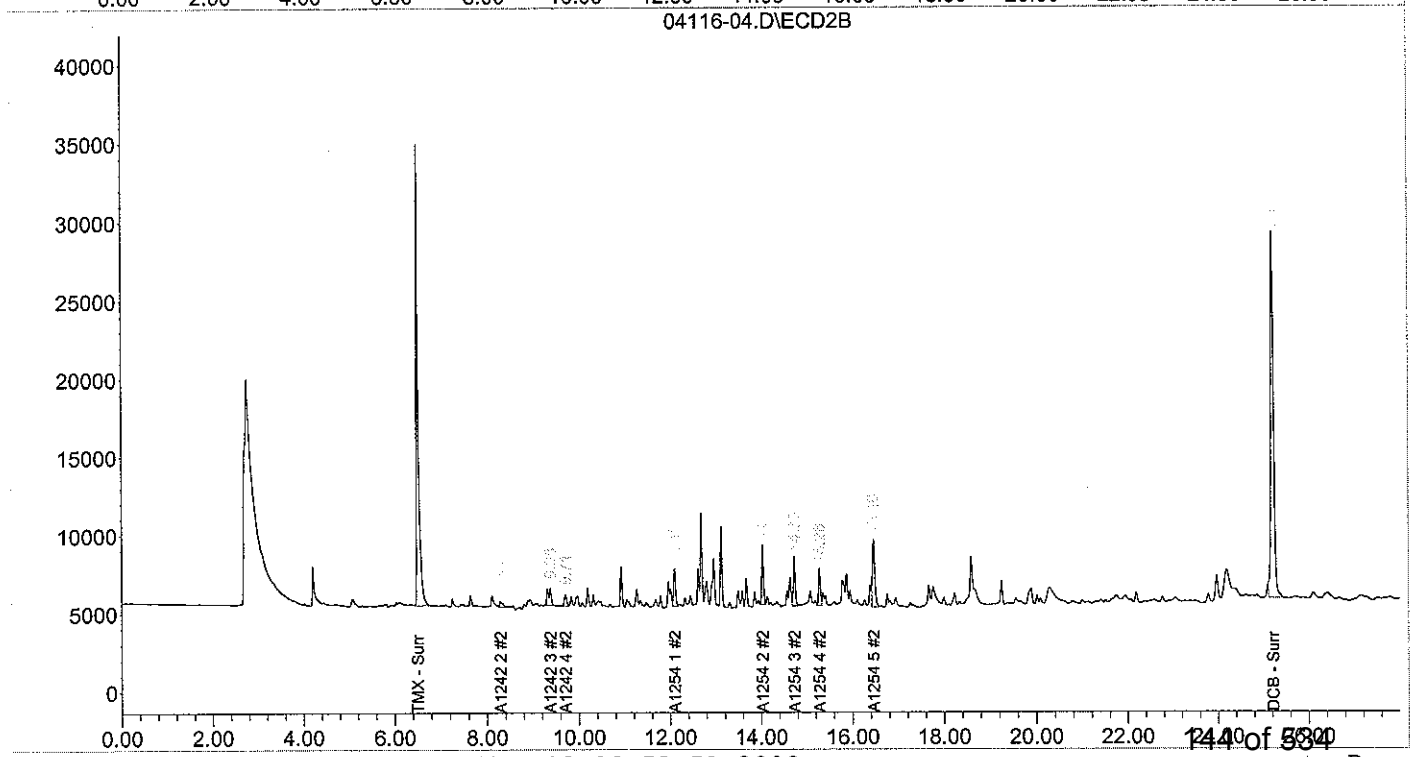
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-04.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-04.D\ECD2B.CH
Acq On : 8 May 2008 7:07 pm Operator: JBS
Sample : 0804116-04 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:52 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-05**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	25.6	5.47	10	1	JBS

Parameter	Result
Aroclor 1016	143 U
Aroclor 1221	143 U
Aroclor 1232	143 U
Aroclor 1242	**501**
Aroclor 1248	143 U
Aroclor 1254	**926**
Aroclor 1260	143 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	78	30-150
Decachlorobiphenyl	66	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JJS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-05.D\ECD1A.CH Vial: 18
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-05.D\ECD2B.CH
Acq On : 8 May 2008 7:39 pm Operator: JBS
Sample : 0804116-05 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 14:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1080030	917855	69.683m	78.139m
Spiked Amount 100.000 Range 30 - 150 Recovery =					69.68%	78.14%
12) s DCB - Surrogate	26.35	25.21	1467011	1117380	60.244m	65.617m
Spiked Amount 100.000 Range 30 - 150 Recovery =					60.24%	65.62%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	12256	8108	39.753m	31.233m(C)
24) L4 A1242 2	8.85	8.29	30868	20634	52.120m	46.094m
25) L4 A1242 3	9.93	9.38	74530	69876	70.985m	82.612m
26) L4 A1242 4	10.20	9.71	38708	30670	83.852m(C)	79.627m
27) L4 A1242 5	11.74	0.00	49344	0	104.664m	N.D. d(I)#
Sum A1242 1			205706	129288	351.373	239.566
Average A1242 1					70.275	59.891
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.10	99154	73752	137.224m	137.152m
34) L6 A1254 2	14.44	14.03	135690	99756	110.391m	114.911m(C)
35) L6 A1254 3	15.22	14.73	141858	82092	107.022m	126.825m
36) L6 A1254 4	15.91	15.28	78318	61304	130.629m	121.066m
37) L6 A1254 5	16.90	16.46	183808	130224	156.160m	148.617m
Sum A1254 1			638828	447128	641.427	648.571
Average A1254 1					128.285	129.714
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

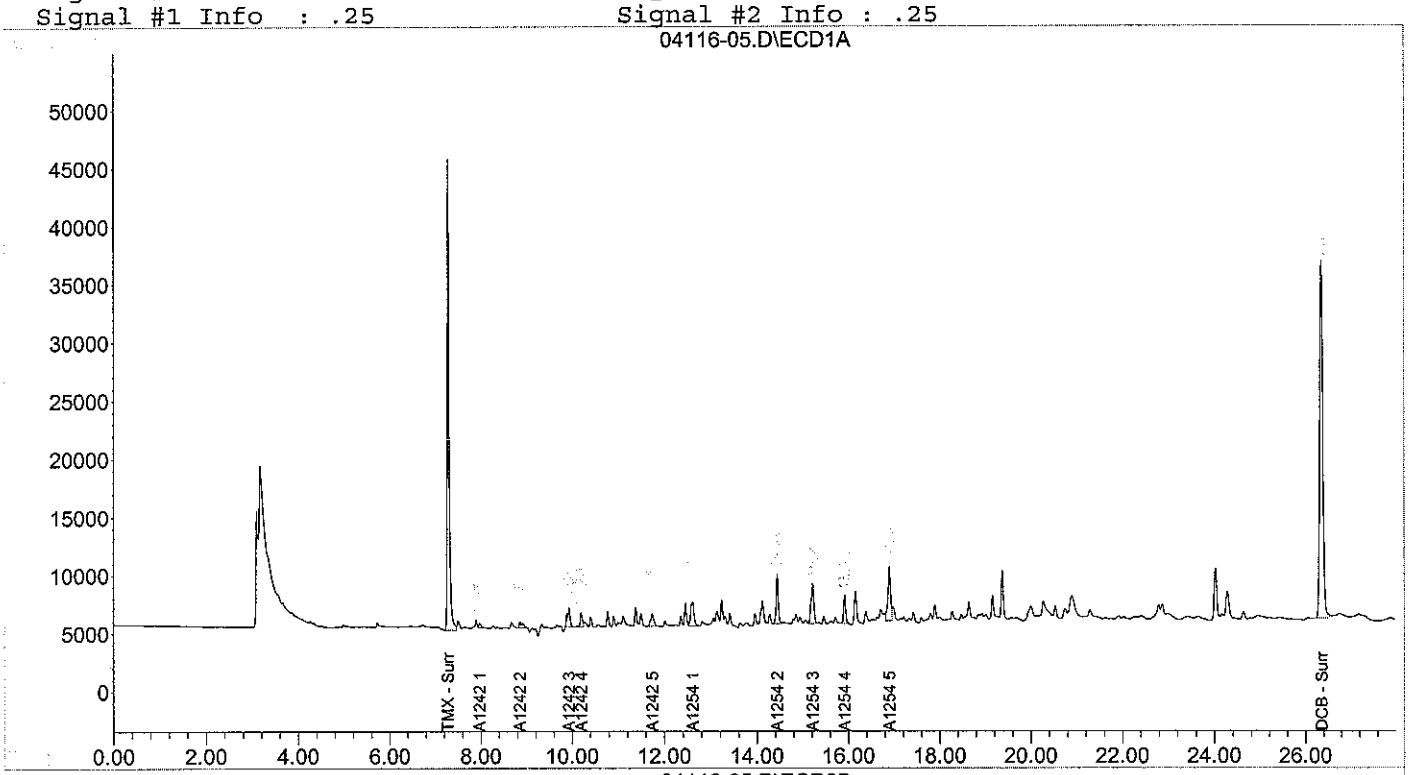
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

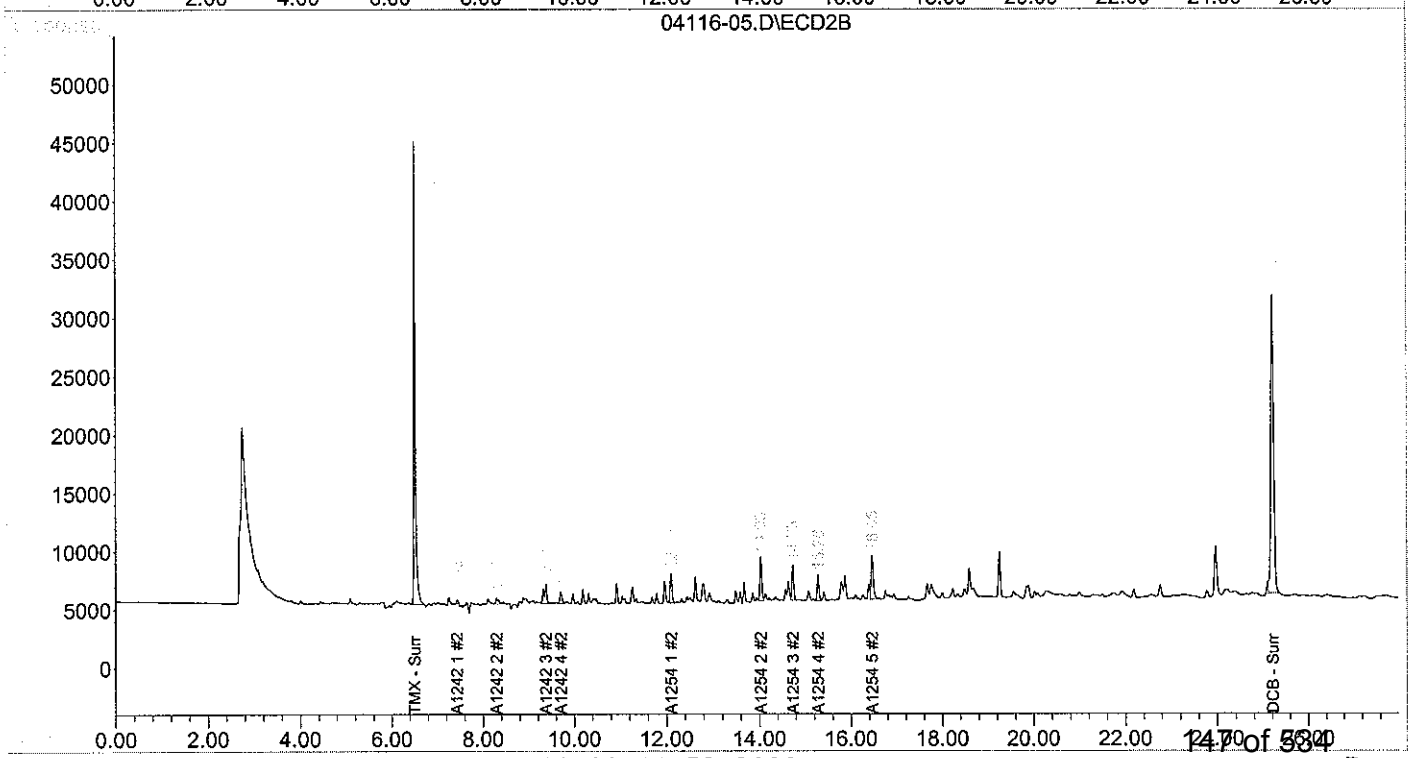
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-05.D\ECD1A.CH Vial: 18
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-05.D\ECD2B.CH
Acq On : 8 May 2008 7:39 pm Operator: JBS
Sample : 0804116-05 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 14:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-06**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	33.9	5.41	10	1	JBS

Parameter	Result
Aroclor 1016	109 U
Aroclor 1221	109 U
Aroclor 1232	109 U
Aroclor 1242	**394**
Aroclor 1248	109 U
Aroclor 1254	**640**
Aroclor 1260	109 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	80	30-150
Decachlorobiphenyl	67	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-06.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-06.D\ECD2B.CH
Acq On : 8 May 2008 8:10 pm Operator: JBS
Sample : 0804116-06 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1125614	933028	72.879	79.591m
Spiked Amount 100.000 Range 30 - 150 Recovery =					72.88%	79.59%
12) s DCB - Surrogate	26.35	25.21	1426711	1140289	58.414m	67.151m
Spiked Amount 100.000 Range 30 - 150 Recovery =					58.41%	67.15%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	8438	6226	27.369m	23.983m(C)
24) L4 A1242 2	8.85	8.30	32472	21694	54.828m	48.462m
25) L4 A1242 3	9.93	9.38	80228	72542	76.412m	85.764m
26) L4 A1242 4	10.20	9.71	42196	35600	91.408m(C)	92.426m
27) L4 A1242 5	11.74	0.00	52042	0	110.386m	N.D. d(I)#
Sum A1242 1			215376	136062	360.403	250.635
Average A1242 1					72.081	62.659
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.10	83292	70880	115.272m	131.811m
34) L6 A1254 2	14.44	14.03	120232	89448	97.815m	103.037m(C)
35) L6 A1254 3	15.22	14.73	125484	72100	94.669m	111.388m
36) L6 A1254 4	15.91	15.28	69216	51846	115.448m	102.388m
37) L6 A1254 5	16.90	16.46	144360	120866	122.645m	137.937m
Sum A1254 1			542584	405140	545.850	586.562
Average A1254 1					109.170	117.312
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

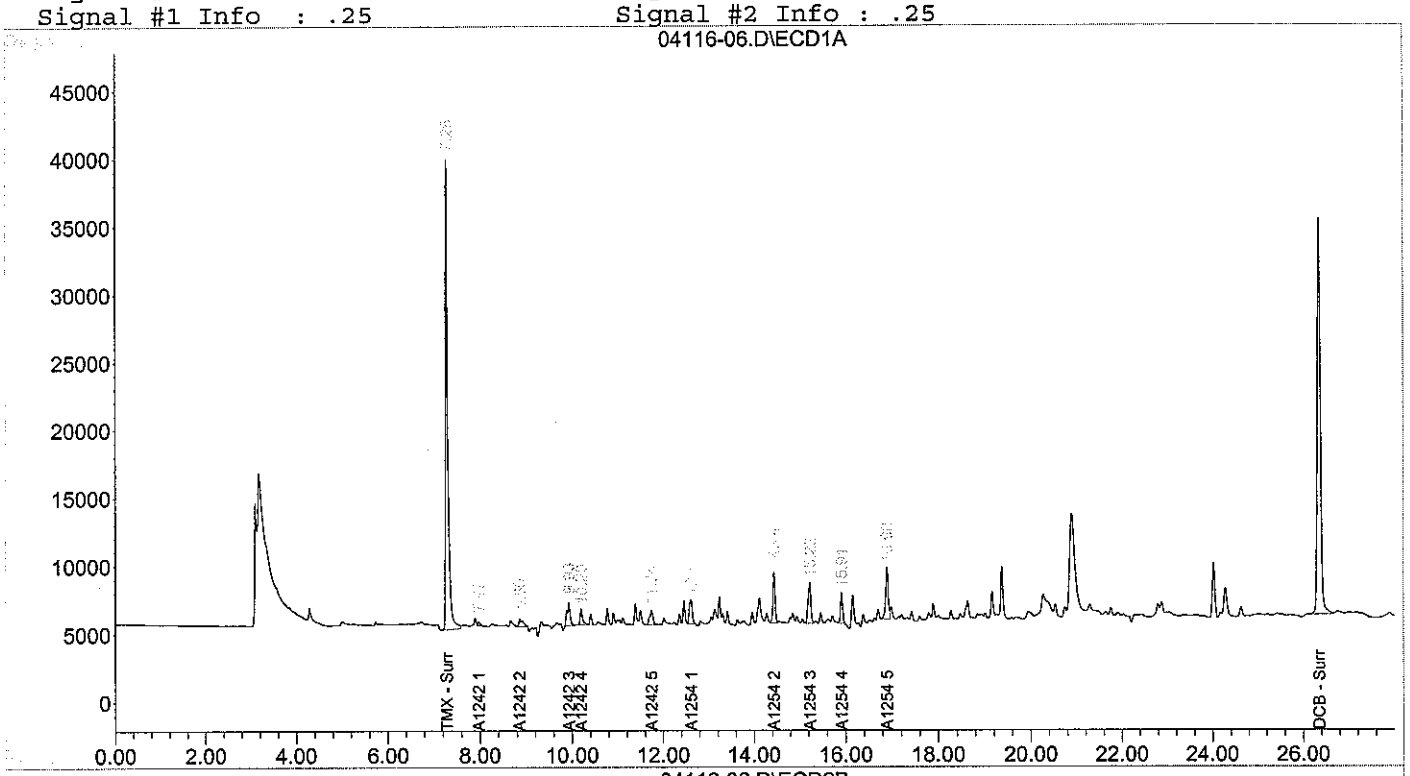
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

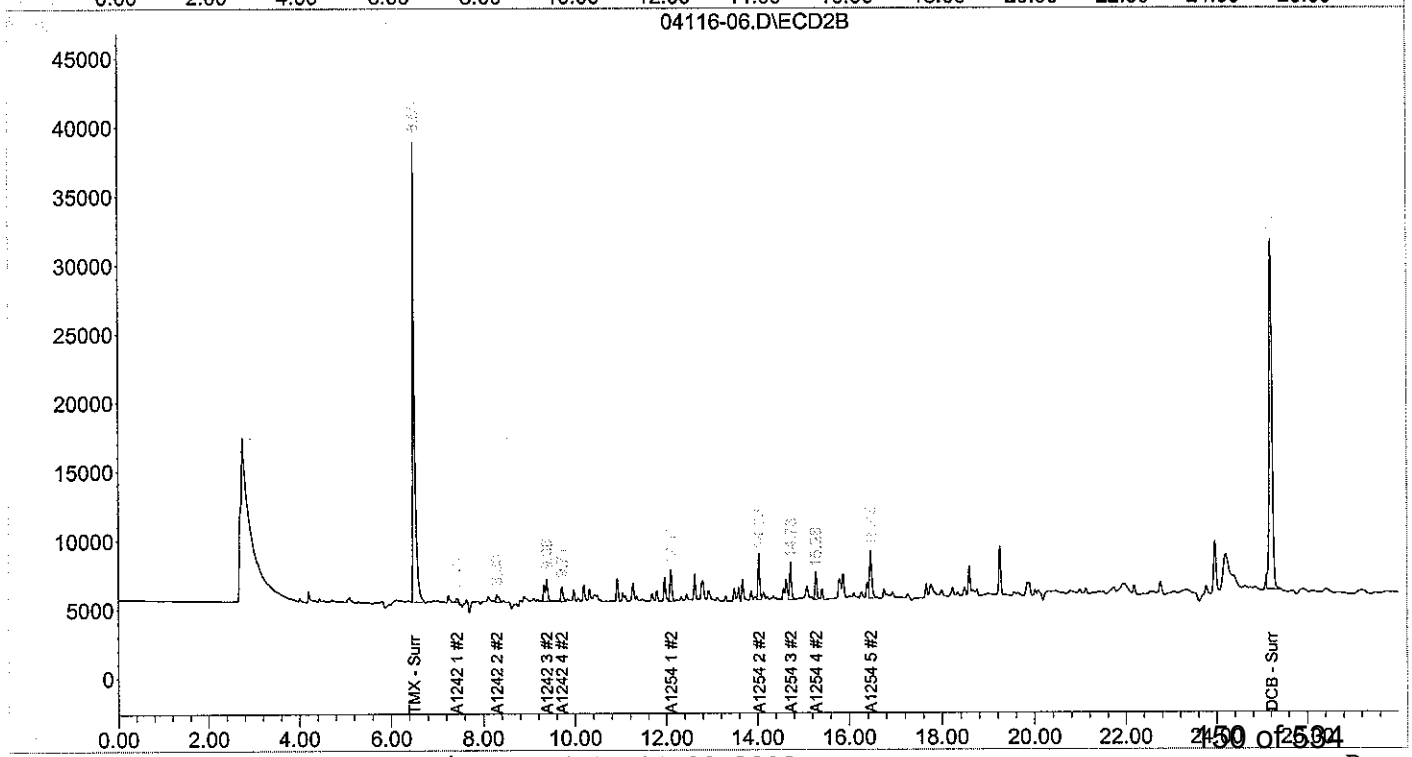
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-06.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-06.D\ECD2B.CH
Acq On : 8 May 2008 8:10 pm Operator: JBS
Sample : 0804116-06 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5/6**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-07**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	82.2	5.36	10	1	JBS

Parameter	Result
Aroclor 1016	45.4 U
Aroclor 1221	45.4 U
Aroclor 1232	45.4 U
Aroclor 1242	45.4 U
Aroclor 1248	45.4 U
Aroclor 1254	**108**
Aroclor 1260	45.4 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	86	30-150
Decachlorobiphenyl	74	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-07.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-07.D\ECD2B.CH
Acq On : 8 May 2008 8:41 pm Operator: JBS
Sample : 0804116-07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:51 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1196370	1001937	77.885	86.259m
Spiked Amount 100.000 Range 30 - 150 Recovery =					77.89%	86.26%
12) s DCB - Surrogate	26.35	25.21	1648501	1234488	68.614	73.538m
Spiked Amount 100.000 Range 30 - 150 Recovery =					68.61%	73.54%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	26794	24360	37.082m	45.301m
34) L6 A1254 2	14.43	14.03	43400	34370	35.308m	39.591m(C)
35) L6 A1254 3	15.22	14.73	51770	27212	39.057m	42.040m
36) L6 A1254 4	15.91	15.28	29672	21414	49.491m	42.289m
37) L6 A1254 5	0.00	16.46	0	60610	N.D. d	69.171m #
Sum A1254 1			151636	167966	160.938	238.392
Average A1254 1					40.234	47.678
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

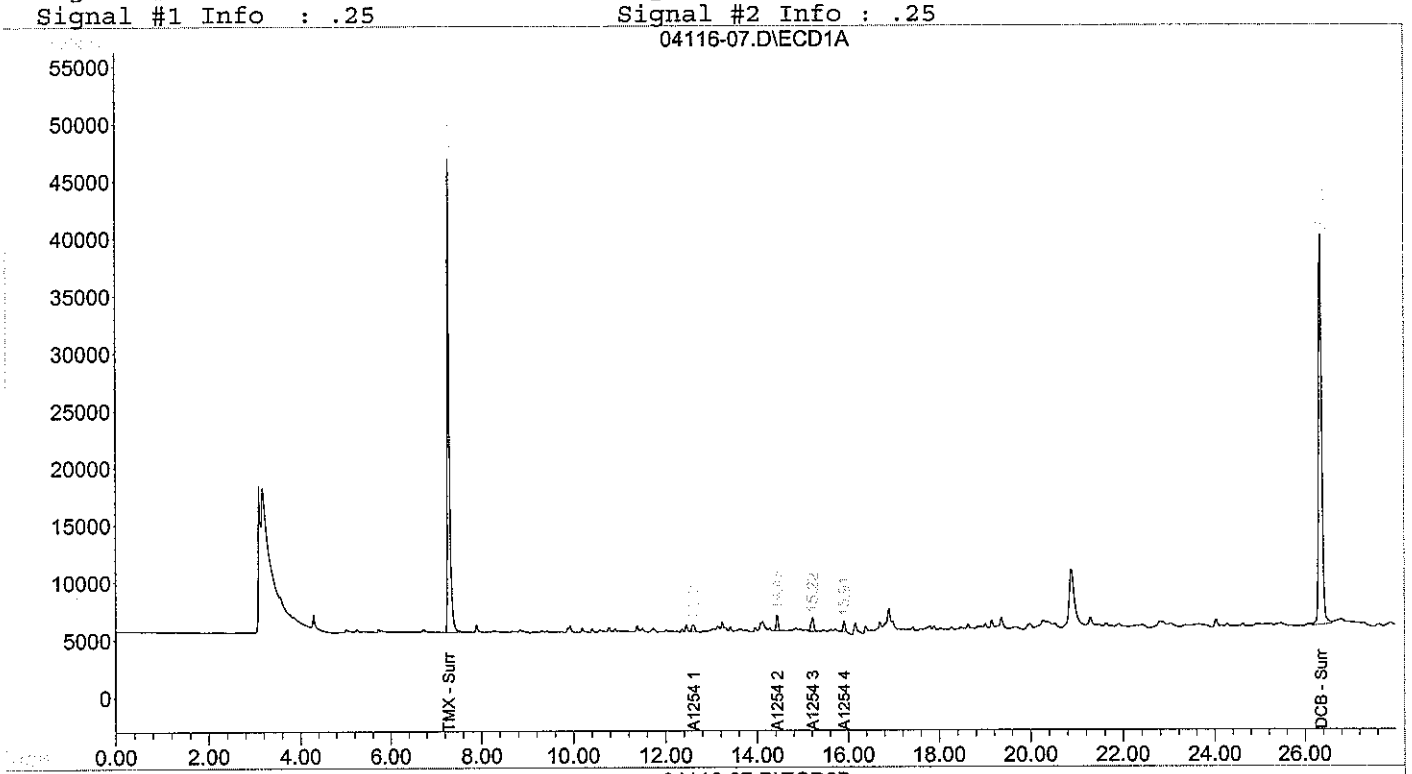
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

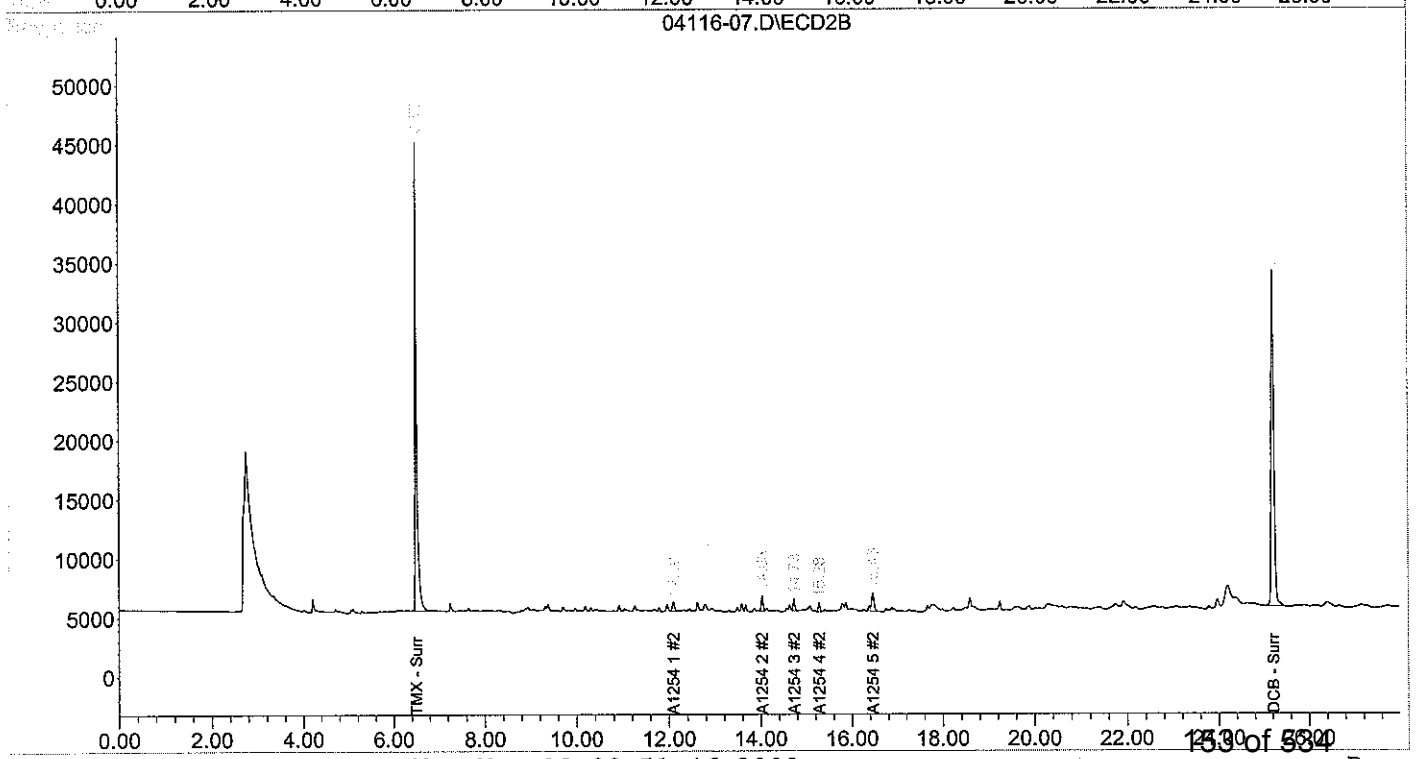
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-07.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-07.D\ECD2B.CH
Acq On : 8 May 2008 8:41 pm Operator: JBS
Sample : 0804116-07 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:51 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri May 16 14:41:22 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B6/7**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-08**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	66.9	5.39	10	1	JBS

Parameter	Result
Aroclor 1016	55.4 U
Aroclor 1221	55.4 U
Aroclor 1232	55.4 U
Aroclor 1242	55.4 U
Aroclor 1248	55.4 U
Aroclor 1254	**193**
Aroclor 1260	55.4 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	78	30-150
Decachlorobiphenyl	72	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-08.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-08.D\ECD2B.CH
Acq On : 8 May 2008 9:13 pm Operator: JBS
Sample : 0804116-08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	1094771	916229	70.714m	77.984m
Spiked Amount 100.000 Range 30 - 150 Recovery =					70.71%	77.98%
12) s DCB - Surrogate	26.35	25.21	1581210	1209144	65.487	71.807m
Spiked Amount 100.000 Range 30 - 150 Recovery =					65.49%	71.81%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	51190	36494	70.845m	67.866m
34) L6 A1254 2	14.43	14.03	82726	56020	67.302m	64.531m(C)
35) L6 A1254 3	15.22	14.73	81108	44514	61.191m	68.770m
36) L6 A1254 4	15.91	15.28	47716	34000	79.587m	67.145m
Sum A1254 1			262740	171028	278.924	268.311
Average A1254 1					69.731	67.078
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

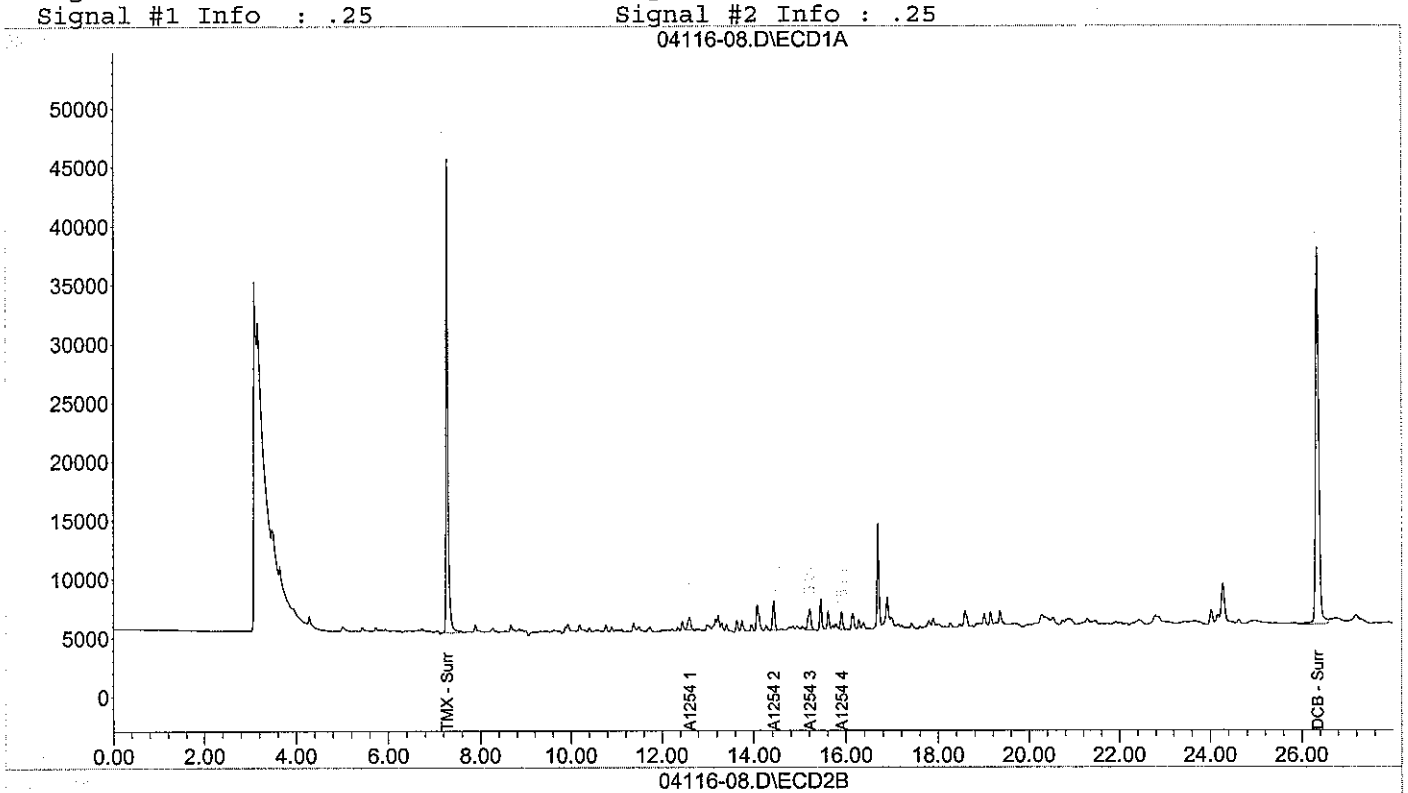
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

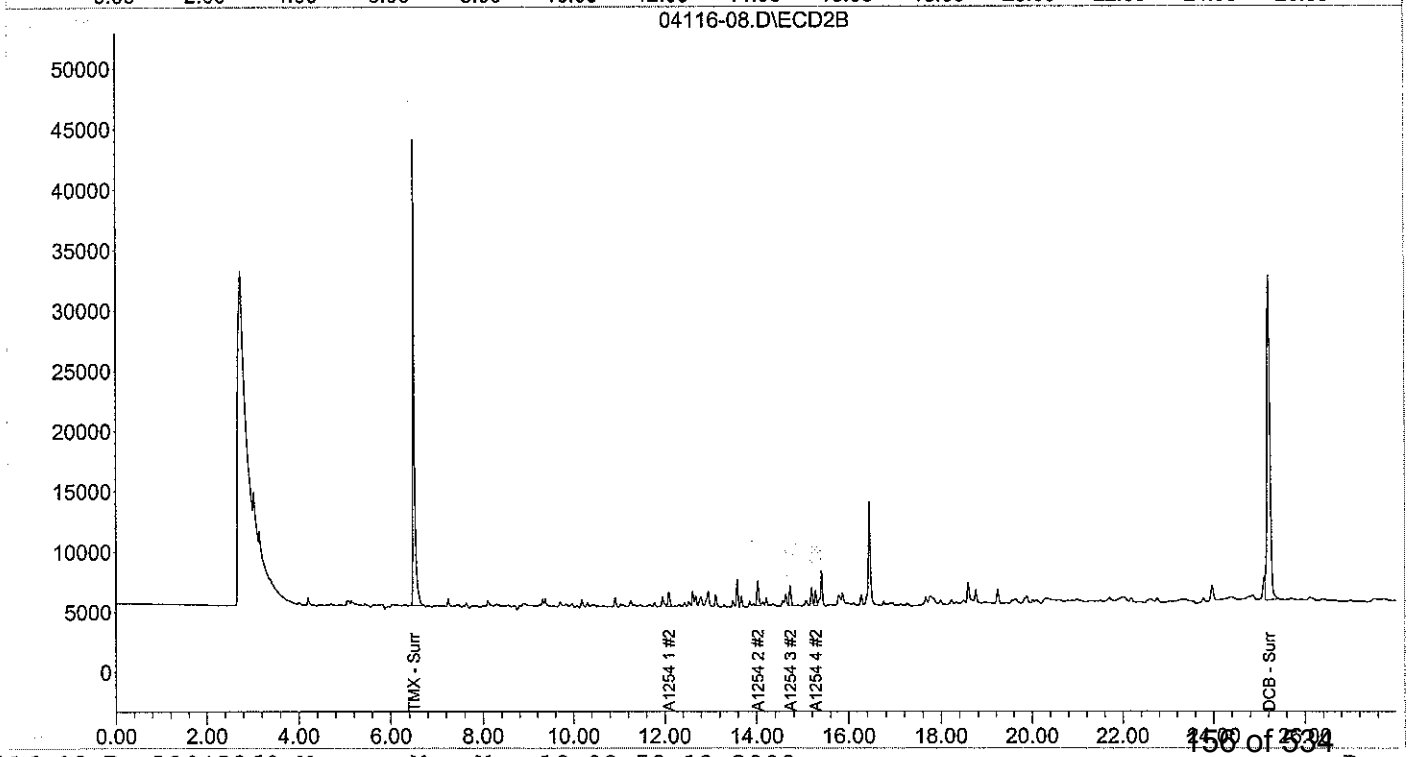
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-08.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-08.D\ECD2B.CH
Acq On : 8 May 2008 9:13 pm Operator: JBS
Sample : 0804116-08 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 8:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B7/8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-09**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	76.3	5.38	10	1	JBS

Parameter	Result
Aroclor 1016	48.7 U
Aroclor 1221	48.7 U
Aroclor 1232	48.7 U
Aroclor 1242	48.7 U
Aroclor 1248	48.7 U
Aroclor 1254	**120**
Aroclor 1260	48.7 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	86	30-150
Decachlorobiphenyl	72	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-09.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-09.D\ECD2B.CH
Acq On : 8 May 2008 9:44 pm Operator: JBS
Sample : 0804116-09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 9:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	1186073	999421	77.153	86.014m
Spiked Amount 100.000 Range 30 - 150 Recovery =					77.15%	86.01%
12) s DCB - Surrogate	26.35	25.21	1623189	1210757	67.434m	71.917m
Spiked Amount 100.000 Range 30 - 150 Recovery =					67.43%	71.92%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	30730	24026	42.529m	44.680m
34) L6 A1254 2	14.43	14.03	49078	36762	39.927m	42.347m(C)
35) L6 A1254 3	15.22	14.73	50862	27104	38.372m	41.873m
36) L6 A1254 4	15.91	15.28	32400	20970	54.041m	41.413m
37) L6 A1254 5	16.89	16.45	54370	66644	46.192m	76.057m #
Sum A1254 1			217440	175506	221.061	246.369
Average A1254 1					44.212	49.274
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

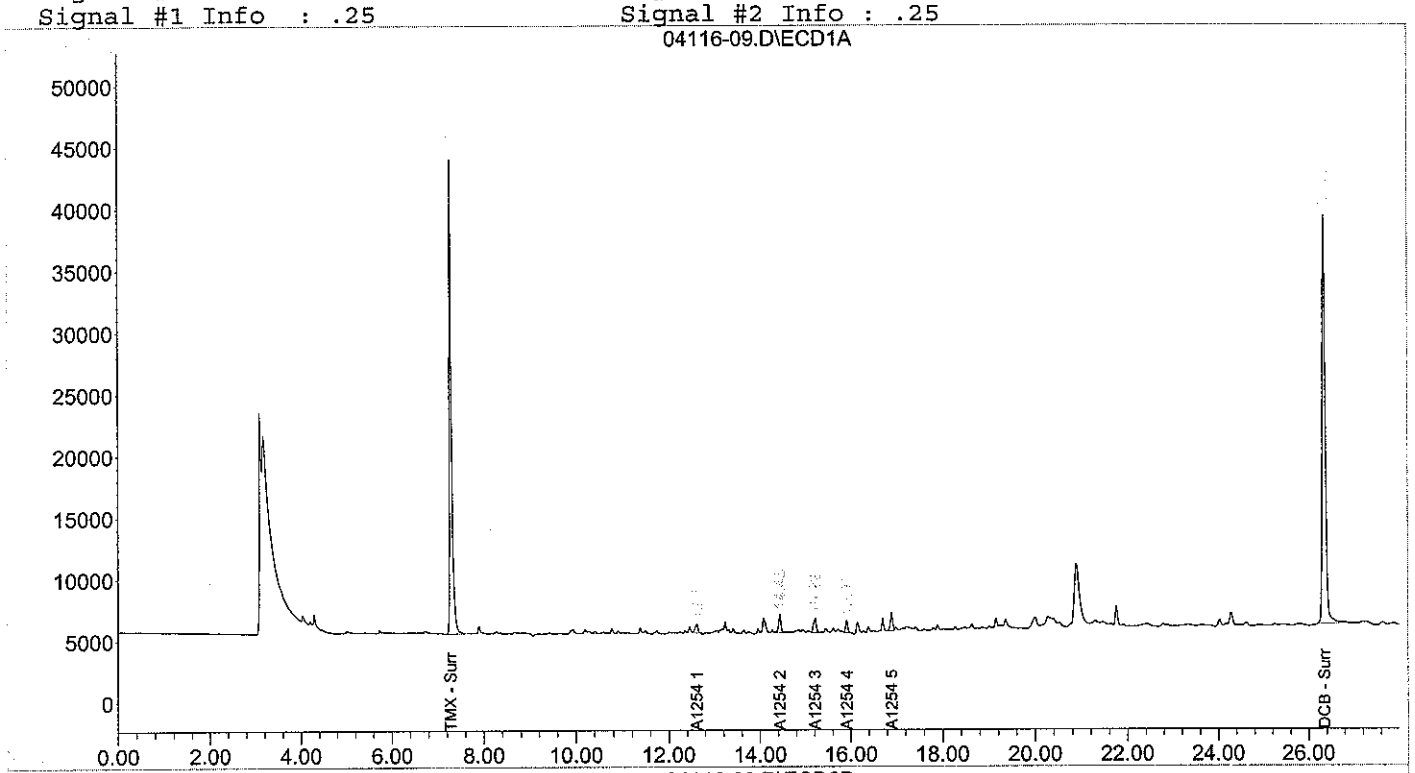
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

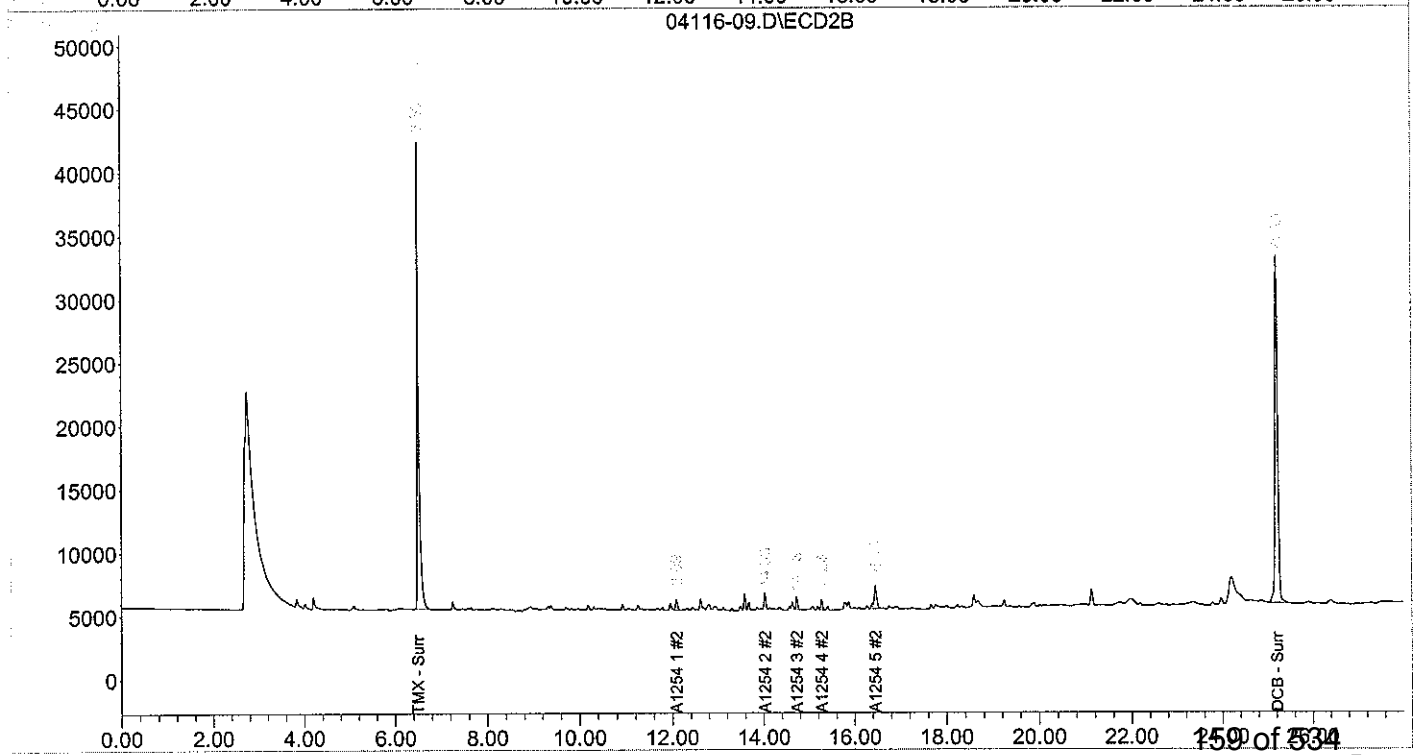
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-09.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-09.D\ECD2B.CH
Acq On : 8 May 2008 9:44 pm Operator: JBS
Sample : 0804116-09 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 9:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-10**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
03/26/08	03/28/08	05/01/08	05/08/08	40.4	5.38	10	1	JBS

Parameter	Result
Aroclor 1016	91.9 U
Aroclor 1221	91.9 U
Aroclor 1232	91.9 U
Aroclor 1242	**177**
Aroclor 1248	91.9 U
Aroclor 1254	**408**
Aroclor 1260	91.9 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	83	30-150
Decachlorobiphenyl	72	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JDS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-10.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-10.D\ECD2B.CH
Acq On : 8 May 2008 10:15 pm Operator: JBS
Sample : 0804116-10 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 9:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	1141107	963926	73.970	82.566m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					73.97%	82.57%	
12) s DCB - Surrogate	26.34	25.21	1583489	1216140	65.592m	72.284m	
Spiked Amount 100.000 Range 30 - 150 Recovery =					65.59%	72.28%	
Target Compounds							
Sum A1016 1			0	0	N.D.	N.D.	
Average A1016 1					0.000	0.000	
Sum A1260 1			0	0	N.D.	N.D.	
Average A1260 1					0.000	0.000	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
					Pk #1 < RL - Qdel		
24) L4 A1242 2	8.84	8.29	18972	10190	32.034m	22.763m	#
25) L4 A1242 3	9.93	9.38	28288	31016	26.942m	36.669m	#
26) L4 A1242 4	10.19	9.70	24598	15134	53.286m(C)	39.292m	#
27) L4 A1242 5	11.73	0.00	19568	0	41.506m	N.D. d(I)	#
Sum A1242 1			91426	56340	153.768	98.724	
Average A1242 1					38.442	32.908	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
33) L6 A1254 1	12.61	12.09	70038	46702	96.929m	86.849m	
34) L6 A1254 2	14.43	14.03	89962	72826	73.189m	83.890m(C)	
35) L6 A1254 3	15.22	14.73	100620	51442	75.911m	79.473m	
36) L6 A1254 4	15.91	15.28	57514	43838	95.930m	86.573m	
37) L6 A1254 5	16.89	16.46	119900	90900	101.865m	103.739m	
Sum A1254 1			438034	305708	443.823	440.524	
Average A1254 1					88.765	88.105	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

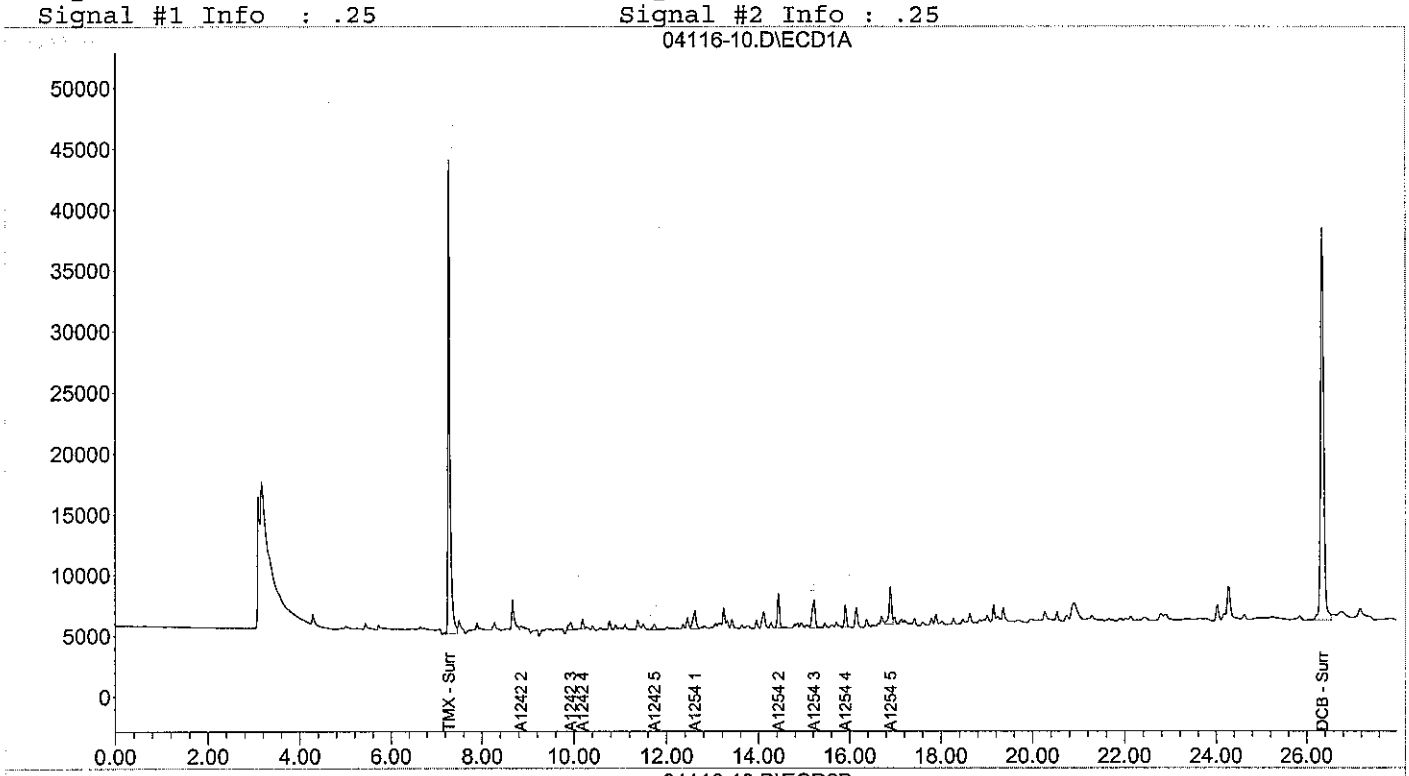
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

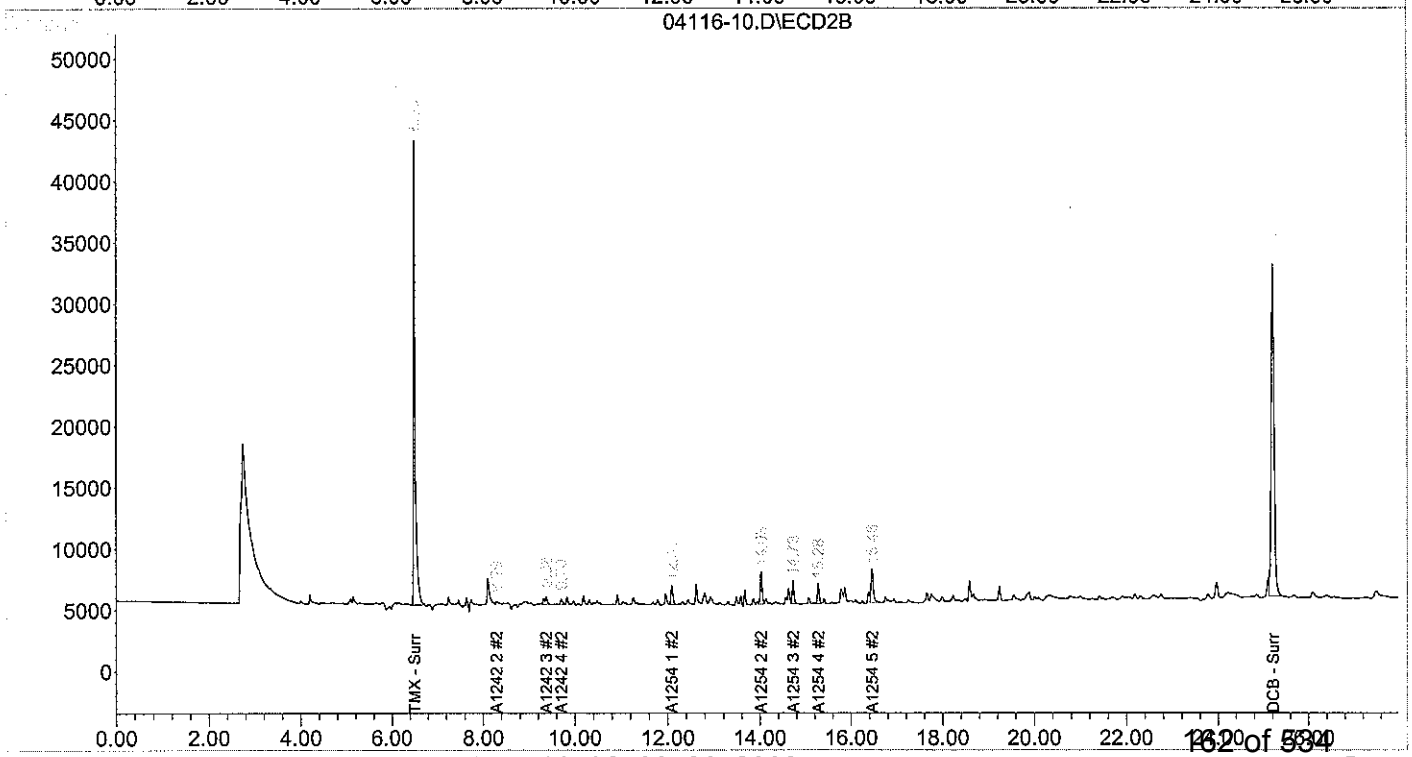
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\04116-10.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\MAY08\04116-10.D\ECD2B.CH
Acq On : 8 May 2008 10:15 pm Operator: JBS
Sample : 0804116-10 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 19 9:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Mon May 19 08:48:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Blank**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108B01**
Associated Blank: **N/A**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/08/08	100	5.00	10	1	JBS

Parameter	Result
Aroclor 1016	40 U
Aroclor 1221	40 U
Aroclor 1232	40 U
Aroclor 1242	40 U
Aroclor 1248	40 U
Aroclor 1254	40 U
Aroclor 1260	40 U

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	55	30-150
Decachlorobiphenyl	60	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501B1.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501B1.D\ECD2B.CH
Acq On : 8 May 2008 11:33 am Operator: JBS
Sample : PS050108B01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.29	6.51	795755	672769	50.252	55.441m
Spiked Amount 100.000 Range 30 - 150 Recovery =					50.25%	55.44%
12) s DCB - Surrogate	26.35	25.21	1341561	1030876	54.577	59.891m
Spiked Amount 100.000 Range 30 - 150 Recovery =					54.58%	59.89%
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

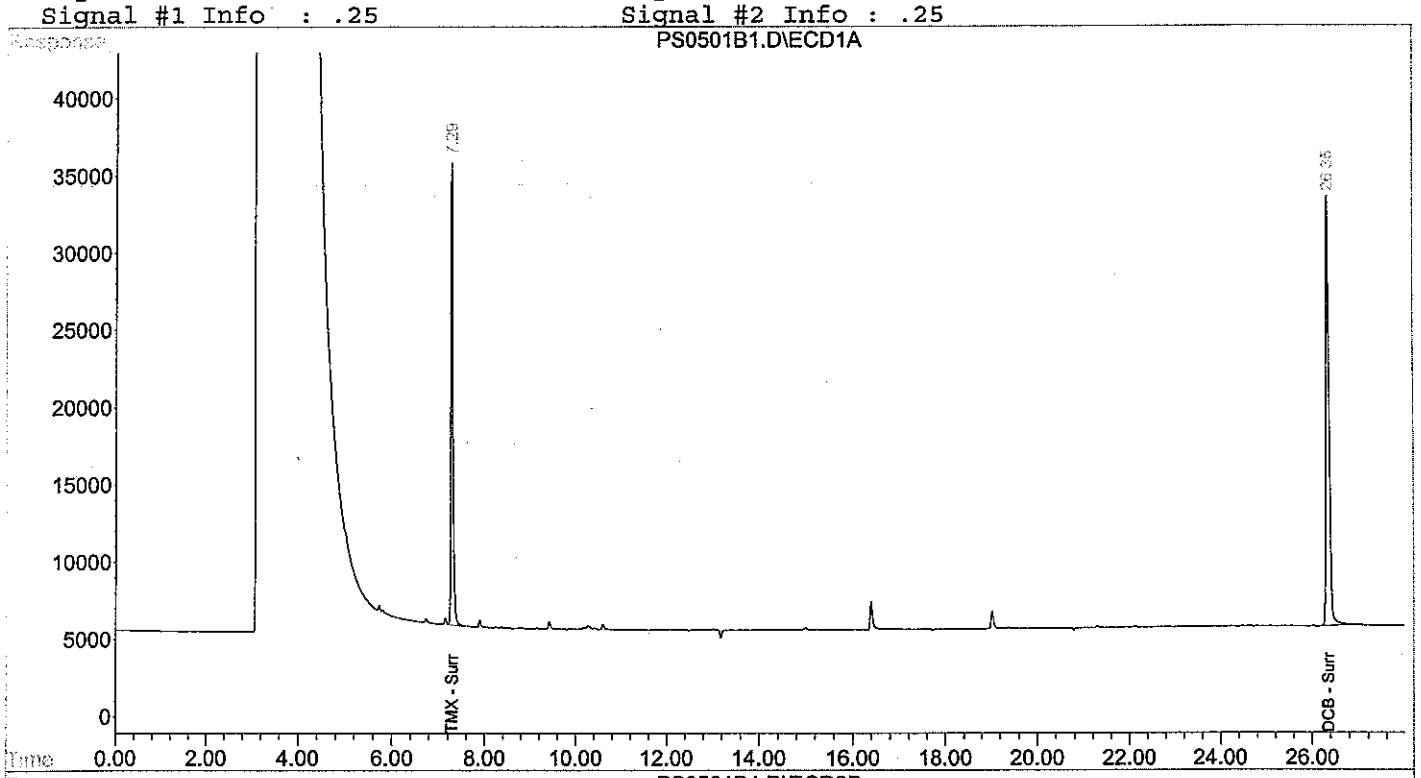
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

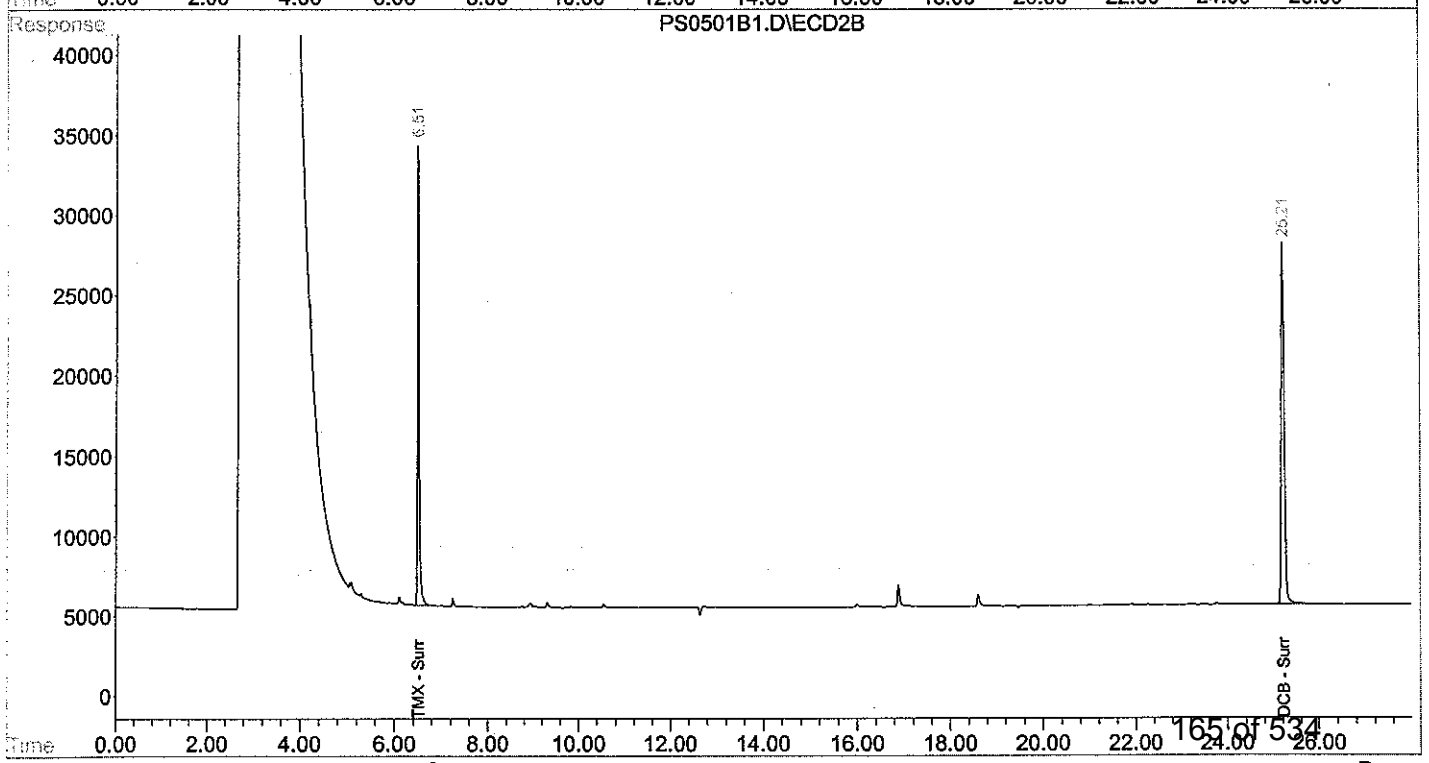
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501B1.D\ECD1A.CH Vial: 4
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501B1.D\ECD2B.CH
Acq On : 8 May 2008 11:33 am Operator: JBS
Sample : PS050108B01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:57 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form III
Spike Recovery Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Percent Solid	Analyst
N/A	N/A	05/01/08	100	JBS

Lab ID:	PS050108B01		PS050108LCS01		PS050108LCSD01				
Parameter	**Blank Conc.**		**LCS Conc.**	**LCS % Recovery**	**LCSD Conc.**	**LCSD % Recovery**	**% RPD**	**RPD Limit**	**% Recovery Limits**
Aroclor 1016	40.0	U	1800	90	1480	74	19	50	40-140
Aroclor 1260	40.0	U	1720	86	1440	72	17	50	40-140

Surrogate	% Recovery		Acceptance Range (%)
Tetrachloro-meta-xylene	86	70	30-150
Decachlorobiphenyl	88	75	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded result.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108LCS01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/08/08	100	5.00	10	1	JBS

Parameter	Result	
Aroclor 1016	**1800**	S
Aroclor 1221	40.0	U
Aroclor 1232	40.0	U
Aroclor 1242	40.0	U
Aroclor 1248	40.0	U
Aroclor 1254	40.0	U
Aroclor 1260	**1720**	S

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	86	30-150
Decachlorobiphenyl	88	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501L1.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501L1.D\ECD2B.CH
Acq On : 8 May 2008 12:04 pm Operator: JBS
Sample : PS050108LCS01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 14:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	1229345	994172	80.238	85.502	
Spiked Amount 100.000 Range 30 - 150 Recovery =					80.24%	85.50%	
12) s DCB - Surrogate	26.34	25.21	1898335	1446338	80.493	88.410	
Spiked Amount 100.000 Range 30 - 150 Recovery =					80.49%	88.41%	
Target Compounds							
2) L1 A1016 1	7.97	7.43	278751	224611	784.003 (C)	803.266	
3) L1 A1016 2	9.33	8.79	395690	143730	894.521	965.757	
4) L1 A1016 3	10.20	9.71	471405	385491	882.455	908.820	
5) L1 A1016 4	10.77	9.97	280269	241441	859.413	922.223	
6) L1 A1016 5	11.38	10.92	351444	289026	834.057	895.888	
Sum A1016 1			1777560	1284299	4254.449	4495.954	
Average A1016 1					850.890	899.191	
7) L7 A1260 1	17.42	15.28	573691	656274	743.482	943.689	#
8) L7 A1260 2	18.27	16.76	587035	474192	774.550	825.997	
9) L7 A1260 3	20.27	17.76	827192	498095	851.516	826.641	
10) L7 A1260 4	20.74	19.89	473803	941581	726.384	877.791	
11) L7 A1260 5	22.79	22.19	482621	389778	758.335	821.647	
Sum A1260 1			2944342	2959921	3854.267	4295.766	
Average A1260 1					770.853	859.153	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

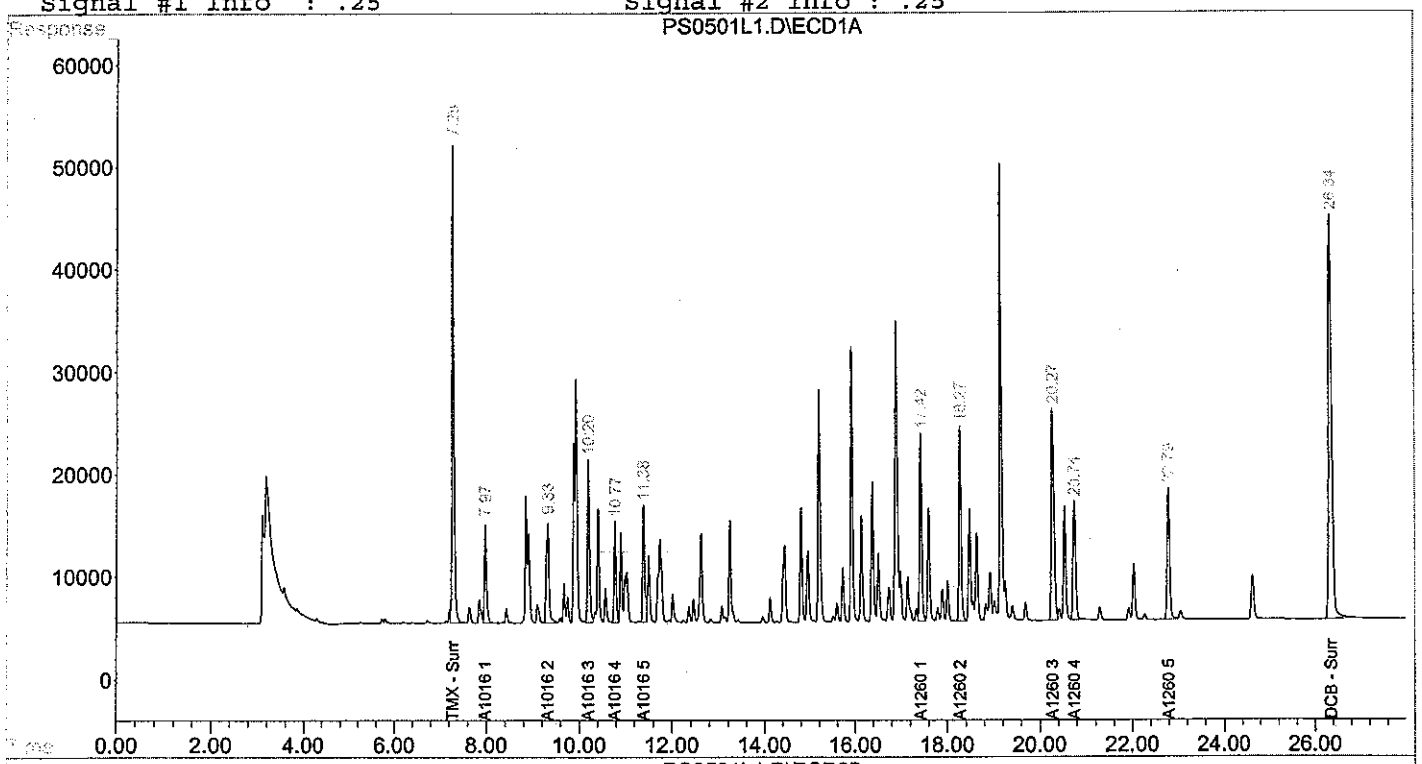
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

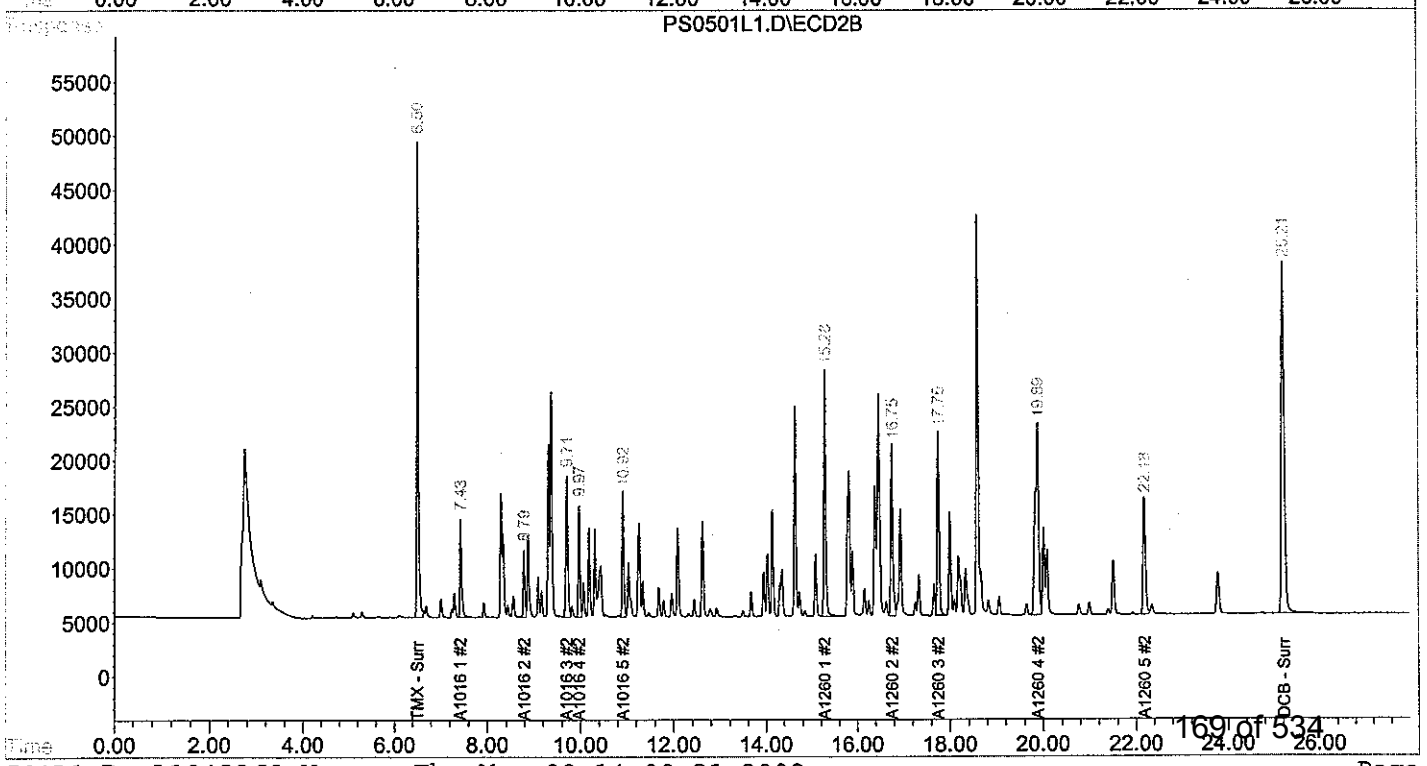
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501L1.D\ECD1A.CH Vial: 5
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501L1.D\ECD2B.CH
Acq On : 8 May 2008 12:04 pm Operator: JBS
Sample : PS050108LCS01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 14:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form I
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108LCSD01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Date Collected	Date Received	Date Extracted	Date Analyzed	Percent Solid	Sample Amount (g)	Final Volume (ml)	Dilution Factor	Analyst
N/A	N/A	05/01/08	05/08/08	100	5.00	10	1	JBS

Parameter	Result	
Aroclor 1016	**1480**	S
Aroclor 1221	40.0	U
Aroclor 1232	40.0	U
Aroclor 1242	40.0	U
Aroclor 1248	40.0	U
Aroclor 1254	40.0	U
Aroclor 1260	**1440**	S

Surrogate	% Recovery	Acceptance Range (%)
Tetrachloro-meta-xylene	70	30-150
Decachlorobiphenyl	75	30-150

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.
S - Spike compound.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501D1.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501D1.D\ECD2B.CH
Acq On : 8 May 2008 12:36 pm Operator: JBS
Sample : PS050108LCSD01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:59 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.28	6.50	1021882	833337	65.640	70.155	
Spiked Amount 100.000 Range 30 - 150 Recovery =					65.64%	70.16%	
12) s DCB - Surrogate	26.34	25.21	1645663	1250662	68.482	74.648	
Spiked Amount 100.000 Range 30 - 150 Recovery =					68.48%	74.65%	
Target Compounds							
2) L1 A1016 1	7.97	7.44	240420	199000	663.688 (C)	699.011	
3) L1 A1016 2	9.33	8.79	314518	118813	690.761m	779.659	
4) L1 A1016 3	10.20	9.71	398513	324243	728.246	745.132	
5) L1 A1016 4	10.78	9.98	239639	200920	716.852	752.427	
6) L1 A1016 5	11.39	10.92	294329	243894	684.554	736.137m	
Sum A1016 1			1487418	1086869	3484.102	3712.364	
Average A1016 1					696.820	742.473	
7) L7 A1260 1	17.42	15.28	485286	565205	616.043m	790.417	#
8) L7 A1260 2	18.27	16.75	502381	405134	652.193	688.809	
9) L7 A1260 3	20.27	17.76	704829	427558	716.424	694.020	
10) L7 A1260 4	20.74	19.89	404566	807199	613.766	738.364	
11) L7 A1260 5	22.79	22.19	408523	334203	634.842	693.060	
Sum A1260 1			2505585	2539299	3233.268	3604.671	
Average A1260 1					646.654	720.934	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

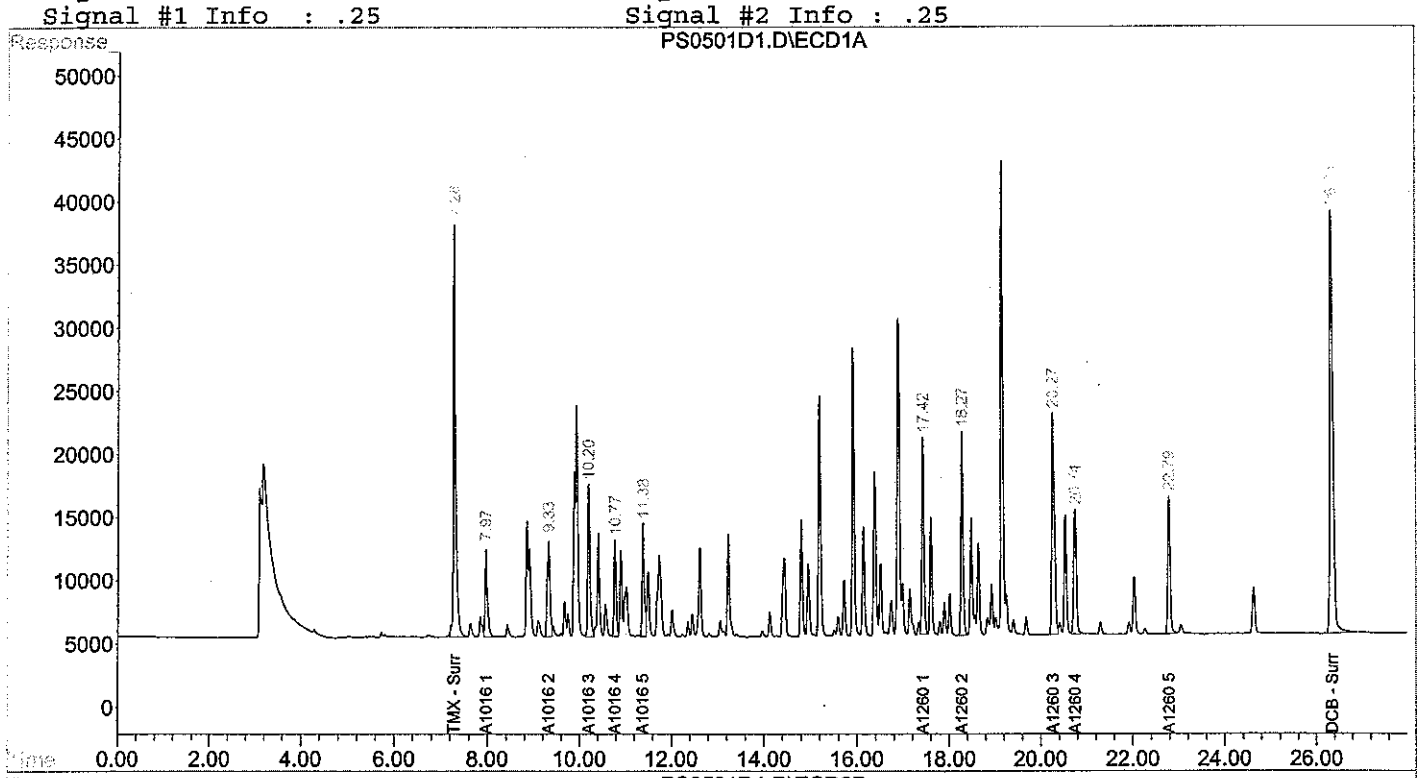
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

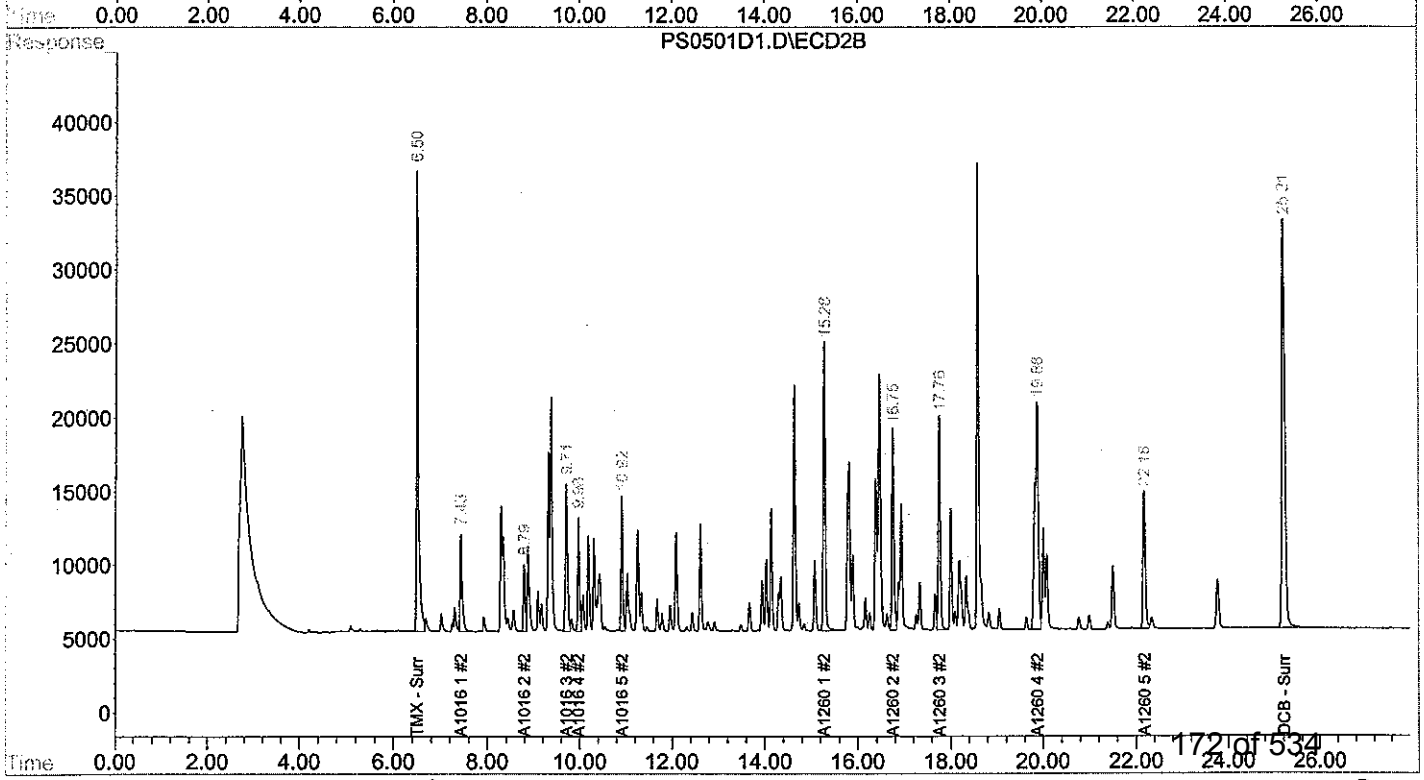
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\PS0501D1.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\MAY08\PS0501D1.D\ECD2B.CH
Acq On : 8 May 2008 12:36 pm Operator: JBS
Sample : PS050108LCSD01 Inst : HP ECD2
Misc : Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:59 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Sequence Name: D:\HPCHEM\2\SEQUENCE\C1050801.S
Comment:
Operator: JBS
Data Path: D:\HPCHEM\2\DATA\MAY08\
Pre-Seq Cmd:
Post-Seq Cmd:

JBS 5/19/08

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name	
1	Sample	1	PRIMER1	A1042360	primer	
2	Sample	2	C1050801	A1042360	C1050801	1660
3	Sample	3	HEX1	A1042360	HEX	
4	Sample	4	PS0501B1	A1042360	PS050108B01	
5	Sample	5	PS0501L1	A1042360	PS050108LCS01	
6	Sample	6	PS0501D1	A1042360	PS050108LCSD01	
7	Sample	7	HEX2	A1042360	HEX	
8	Sample	8	C1050802	A1042360	C1050802	1666
9	Sample	9	I1050801	A1042360	I1050801	1242
10	Sample	10	I1050802	A1042360	I1050802	1248
11	Sample	11	I1050803	A1042360	I1050803	1254
12	Sample	12	HEX3	A1042360	HEX	
13	Sample	13	04116-01	A1042360	0804116-01	
14	Sample	14	04116-1D	A1042360	0804116-01D	
15	Sample	15	04116-02	A1042360	0804116-02	
16	Sample	16	04116-03	A1042360	0804116-03	
17	Sample	17	04116-04	A1042360	0804116-04	
18	Sample	18	04116-05	A1042360	0804116-05	
19	Sample	19	04116-06	A1042360	0804116-06	
20	Sample	20	04116-07	A1042360	0804116-07	
21	Sample	21	04116-08	A1042360	0804116-08	
22	Sample	22	04116-09	A1042360	0804116-09	
23	Sample	23	04116-10	A1042360	0804116-10	
24	Sample	24	HEX4	A1042360	HEX	
25	Sample	25	C1050803	A1042360	C1050803	1660
26	Sample	26	C1050804	A1042360	C1050804	1242
27	Sample	27	C1050805	A1042360	C1050805	1248
28	Sample	28	C1050806	A1042360	C1050806	1254

1000 ppb

Supporting Quality Control Results

Form II
Surrogate Recovery
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Matrix: **Sediment**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

		Column 1		Column 2	
Client ID	**Lab ID**	**TMX**	**Decachlorobiphenyl**	**TMX**	**Decachlorobiphenyl**
Blank	PS050108B01	50	55	55	60
LCS	PS050108LCS01	80	80	86	88
LCSD	PS050108LCSD01	66	68	70	75
B4	0804116-01	77	72	83	80
B4	0804116-01 D	78	75	87	83
B3/4	0804116-02	72	64	80	71
B2/3	0804116-03	76	68	85	73
B1/2	0804116-04	62	53	69	61
B1	0804116-05	70	60	78	66
B5	0804116-06	73	58	80	67
B5/6	0804116-07	78	69	86	74
B6/7	0804116-08	71	65	78	72
B7/8	0804116-09	77	67	86	72
B8	0804116-10	74	66	83	72

N/A - Not Applicable

Surrogate	QC Limits
Tetrachloro-meta-xylene (TMX)	30-150
Decachlorobiphenyl	30-150

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form IV
Method Blank Summary
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108B01**
Date Analyzed: **05/08/08 11:33**

Column 1: RTx-5 ID: 0.25 mm Column 2: CLP-II ID: 0.25 mm

Client ID	Lab ID	Date/Time Analyzed
LCS	PS050108LCS01	05/08/08 12:04
LCSD	PS050108LCSD01	05/08/08 12:36
B4	0804116-01	05/08/08 17:02
B4	0804116-01 D	05/08/08 17:33
B3/4	0804116-02	05/08/08 18:05
B2/3	0804116-03	05/08/08 18:36
B1/2	0804116-04	05/08/08 19:07
B1	0804116-05	05/08/08 19:39
B5	0804116-06	05/08/08 20:10
B5/6	0804116-07	05/08/08 20:41
B6/7	0804116-08	05/08/08 21:13
B7/8	0804116-09	05/08/08 21:44
B8	0804116-10	05/08/08 22:15

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

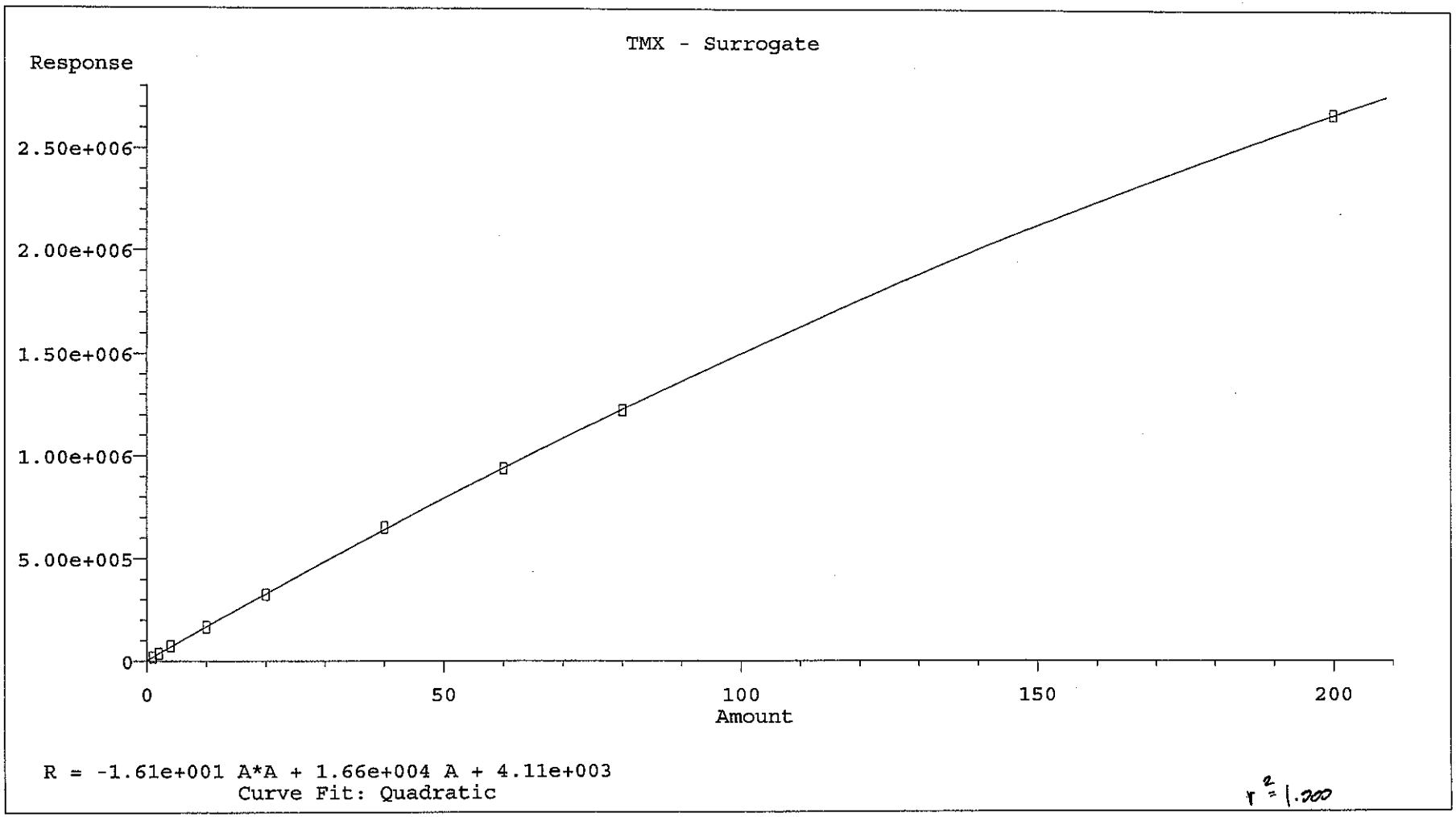
Sequence Name: D:\HPCHEM\2\SEQUENCE\C1042301.S
Comment:
Operator:
Data Path: D:\HPCHEM\2\DATA\APR23\
Pre-Seq Cmd:
Post-Seq Cmd:

JSS 4/24/8

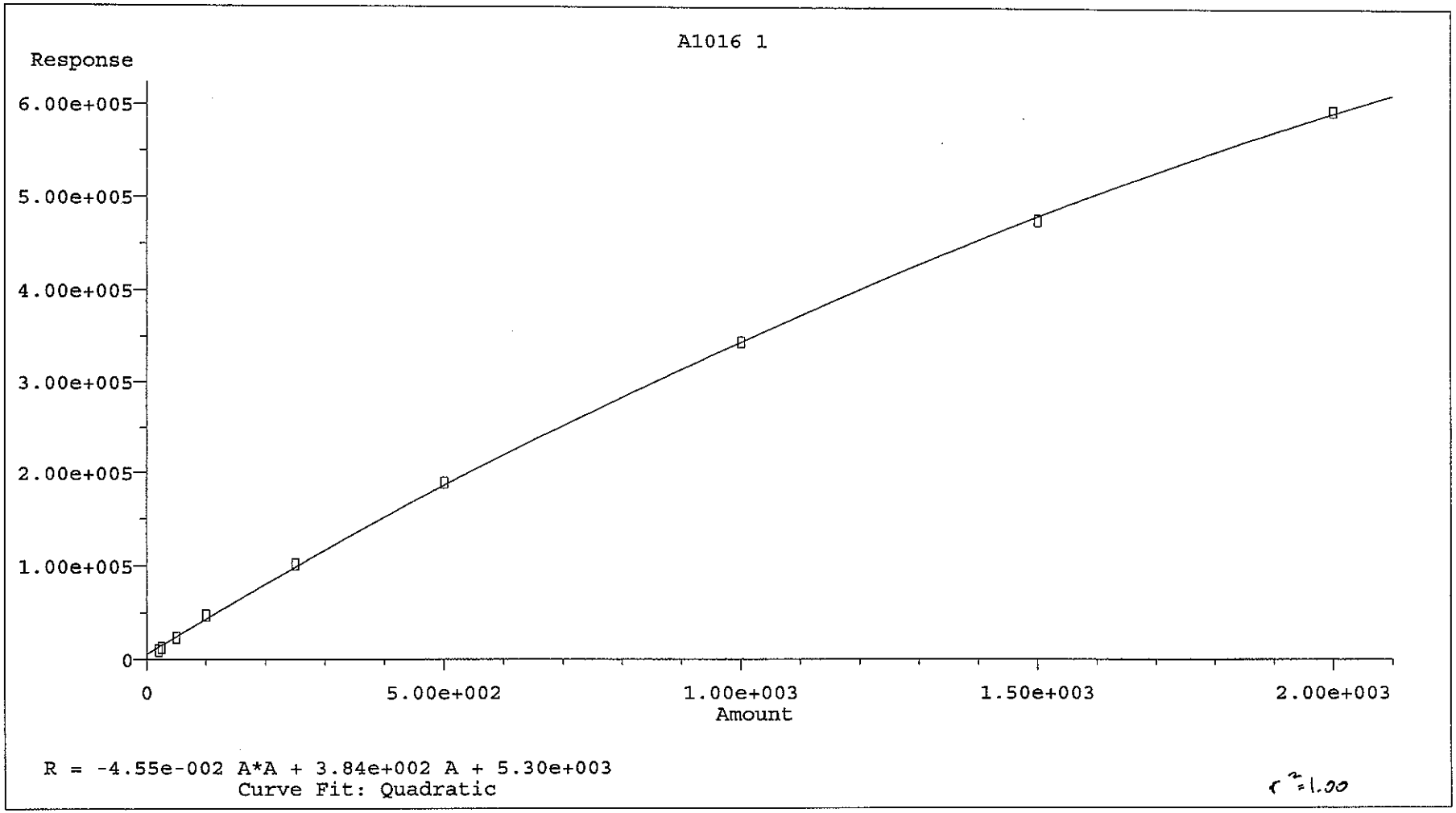
Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

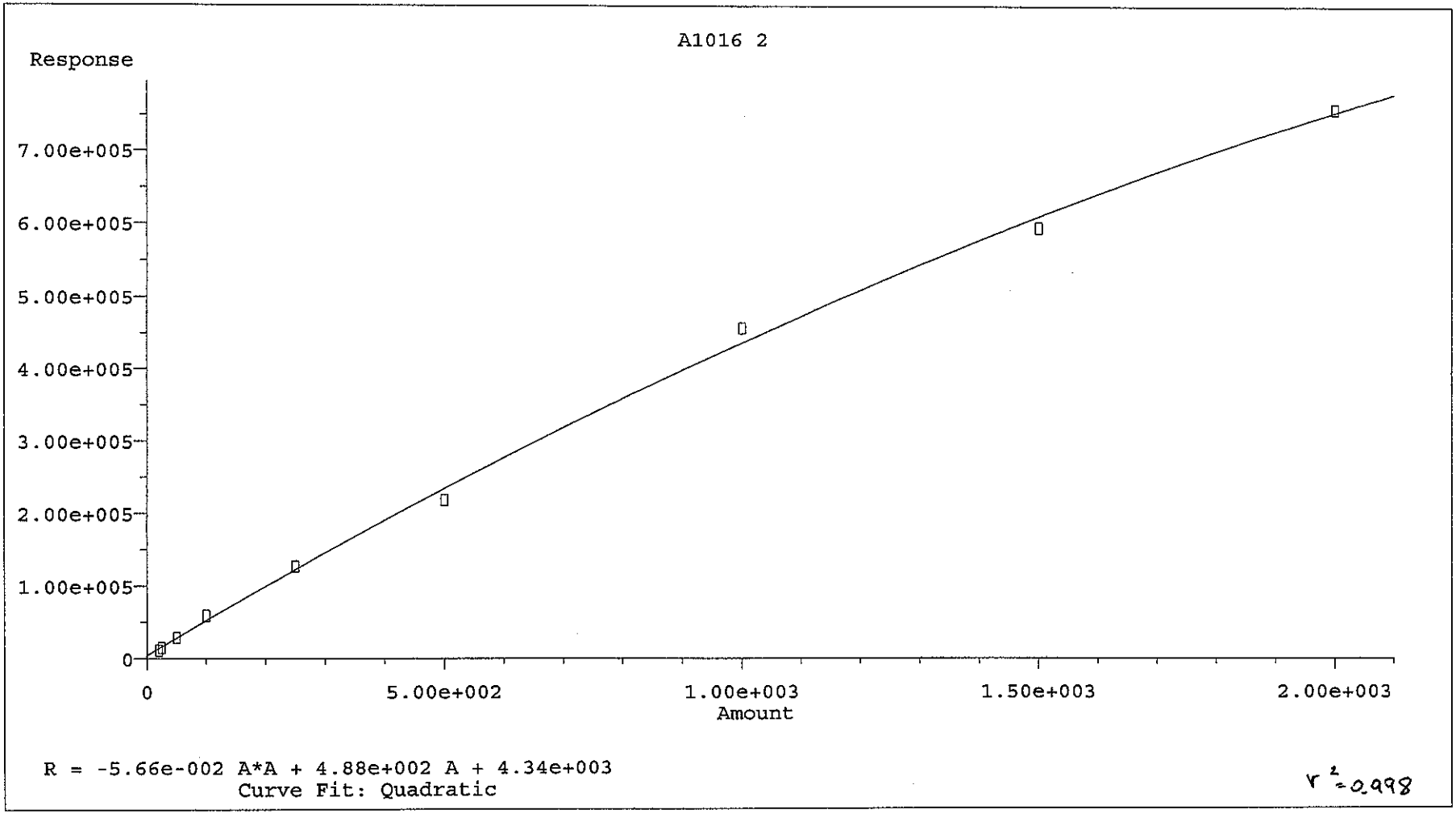
Line	Type	Vial	DataFile	Method	Sample Name	
1	Sample	1	PRIMER1	A1042360	primer	
2	Sample	2	PRIMER2	A1042360	primer	
3	Sample	3	PRIMER3	A1042360	primer	
4	Sample	4	HEX1	A1042360	HEX	
5	Sample	5	HEX2	A1042360	HEX	
6	Sample	6	I1042301	A1042360	I1042301	20 @ ppb
7	Sample	7	I1042302	A1042360	I1042302	25
8	Sample	8	I1042303	A1042360	I1042303	50
9	Sample	9	I1042304	A1042360	I1042304	100
10	Sample	10	I1042305	A1042360	I1042305	250
11	Sample	11	I1042306	A1042360	I1042306	500
12	Sample	12	I1042307	A1042360	I1042307	1000
13	Sample	13	I1042308	A1042360	I1042308	1500
14	Sample	14	I1042309	A1042360	I1042309	2000
15	Sample	15	I1042310	A1042360	I1042310	5000
16	Sample	16	HEX3	A1042360	HEX	
17	Sample	17	Q1042301	A1042360	Q2042301	@ 1000 ppb
18	Sample	18	HEX4	A1042360	HEX	
19	Sample	19	I1042311	A1042360	I1042311 21	@ 1000 ppb
20	Sample	20	I1042312	A1042360	I1042312 32	
21	Sample	21	I1042313	A1042360	I1042313 42	
22	Sample	22	I1042314	A1042360	I1042314 48	
23	Sample	23	I1042315	A1042360	I1042315 54	
24	Sample	24	I1042316	A1042360	I1042316 62	
25	Sample	25	I1042317	A1042360	I1042317 68	



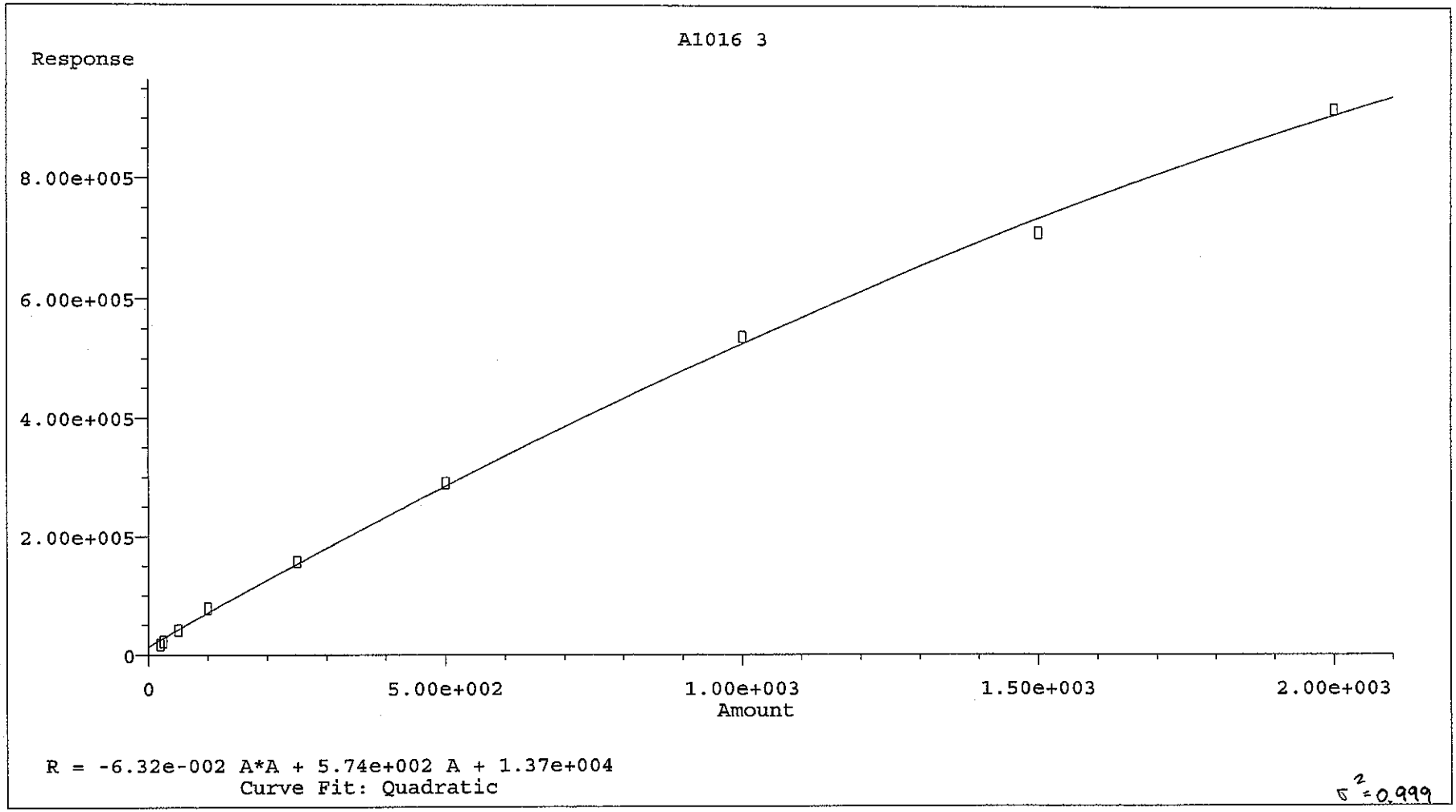
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



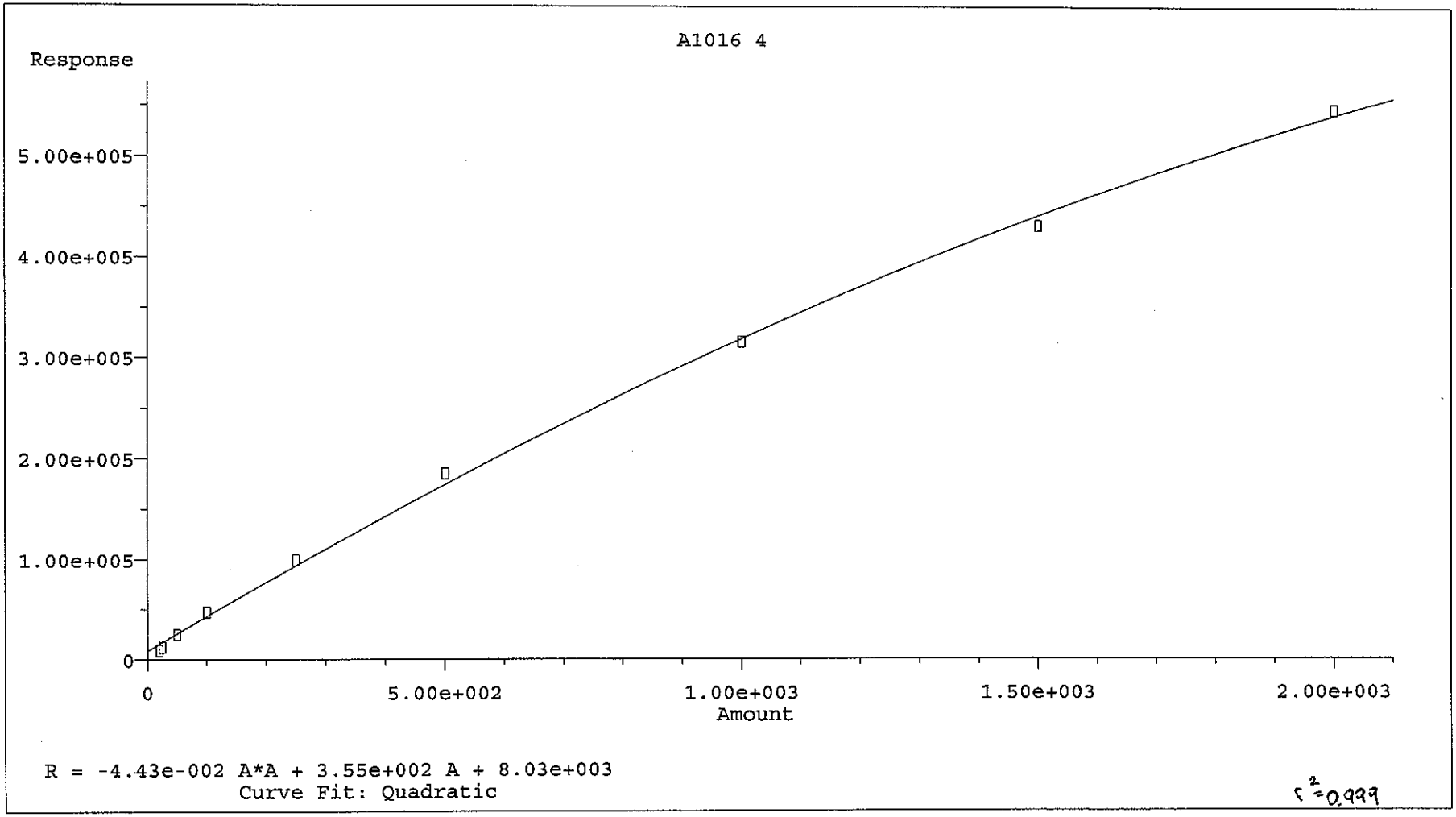
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



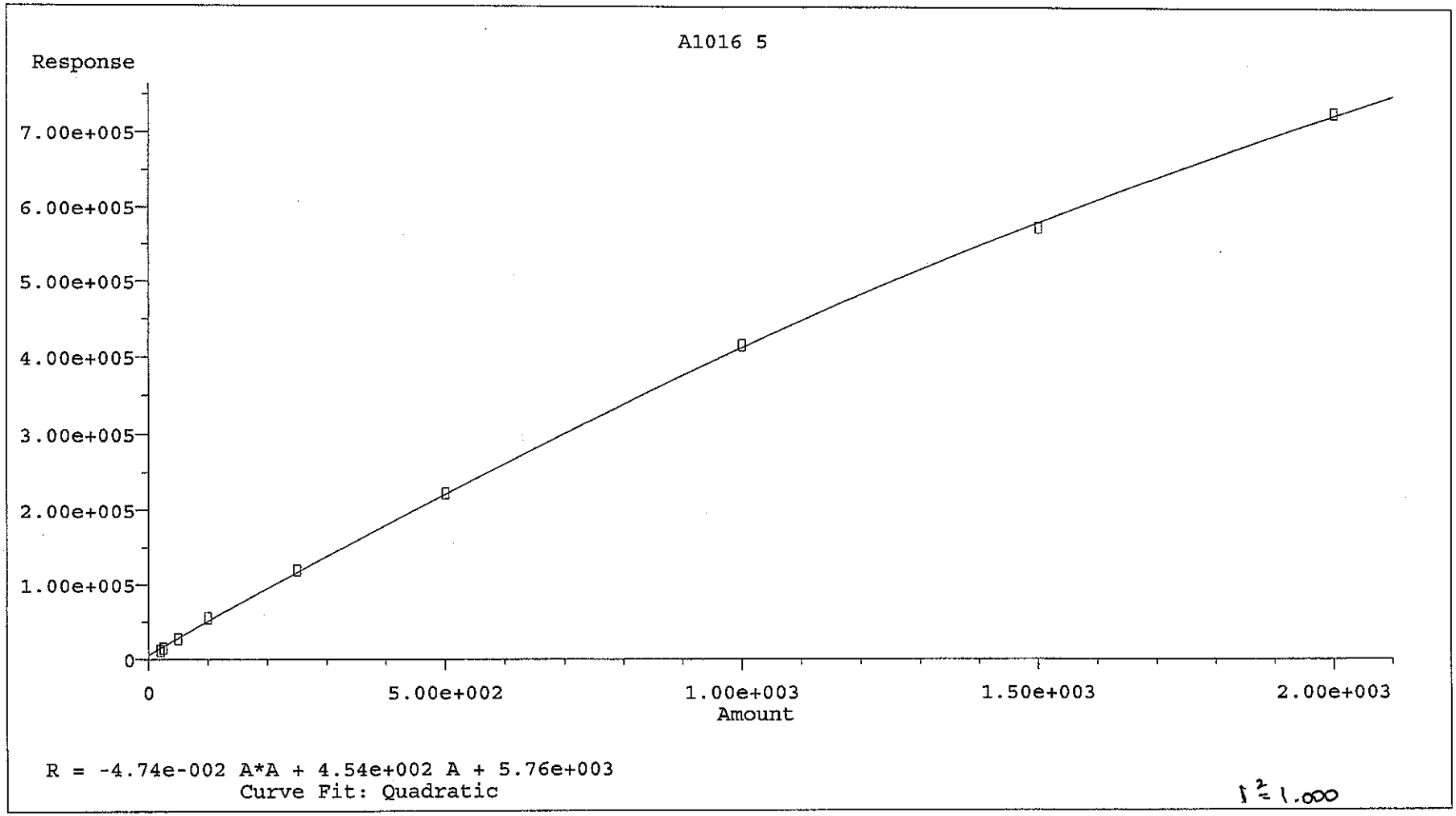
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



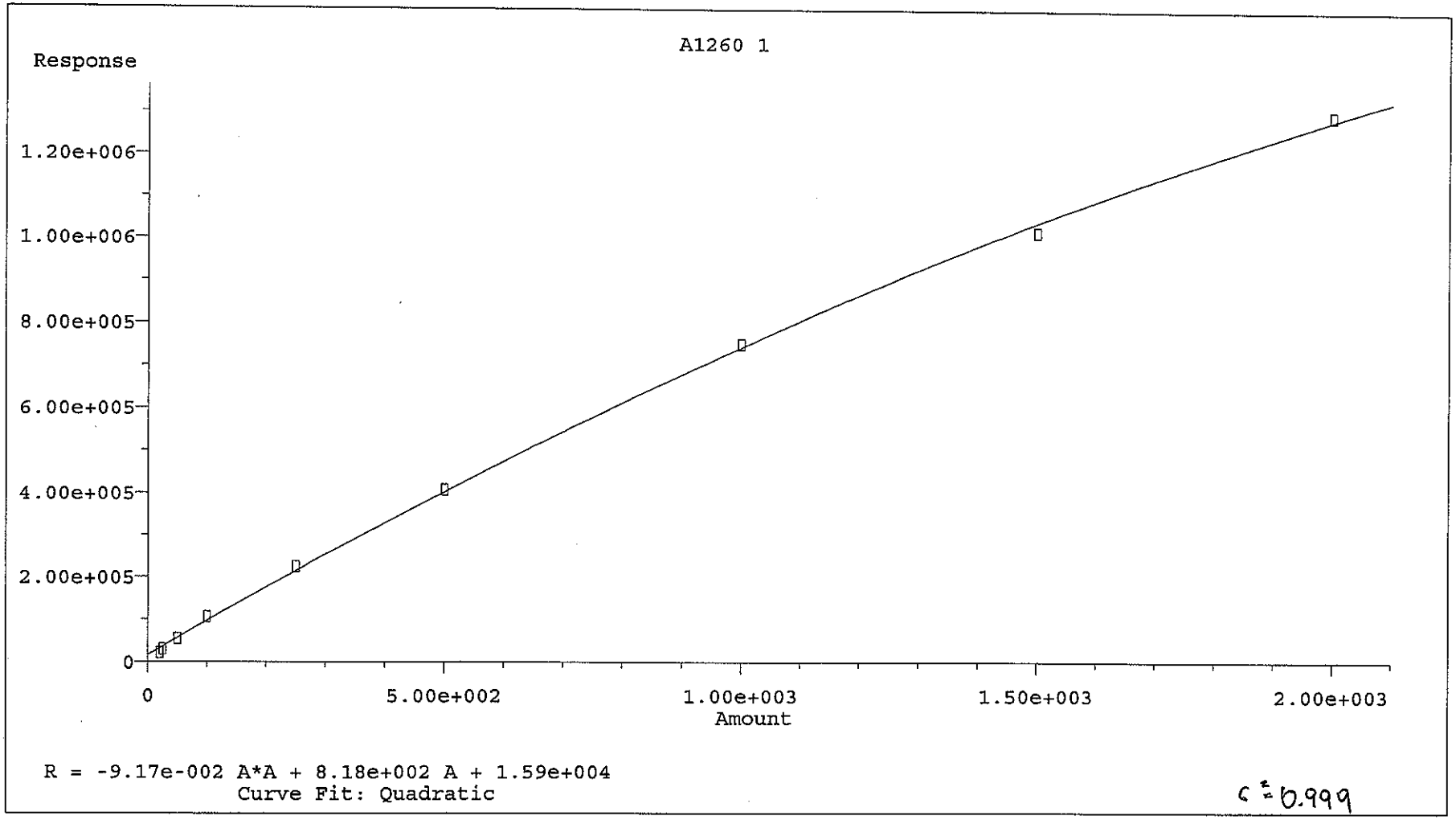
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



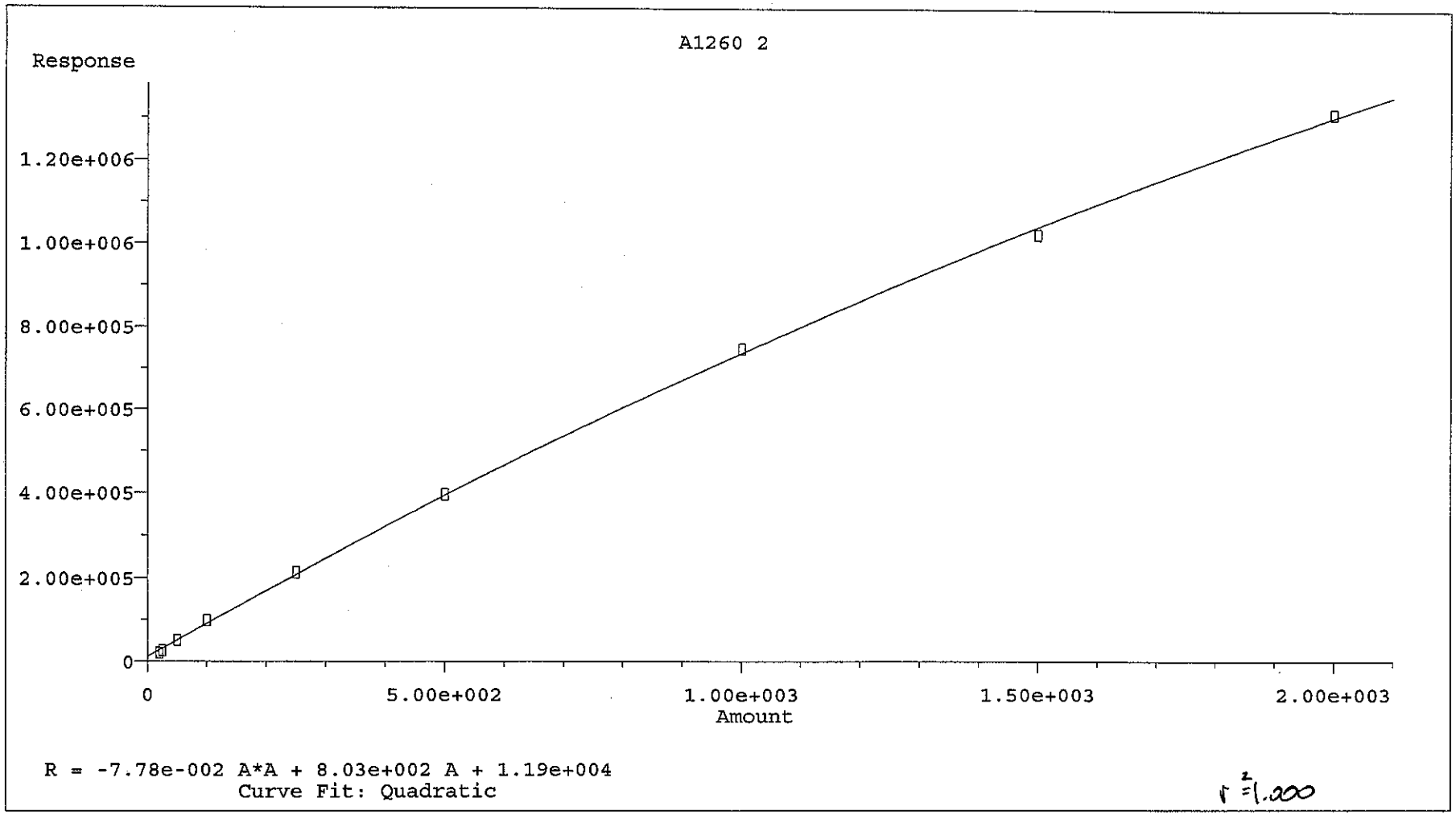
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



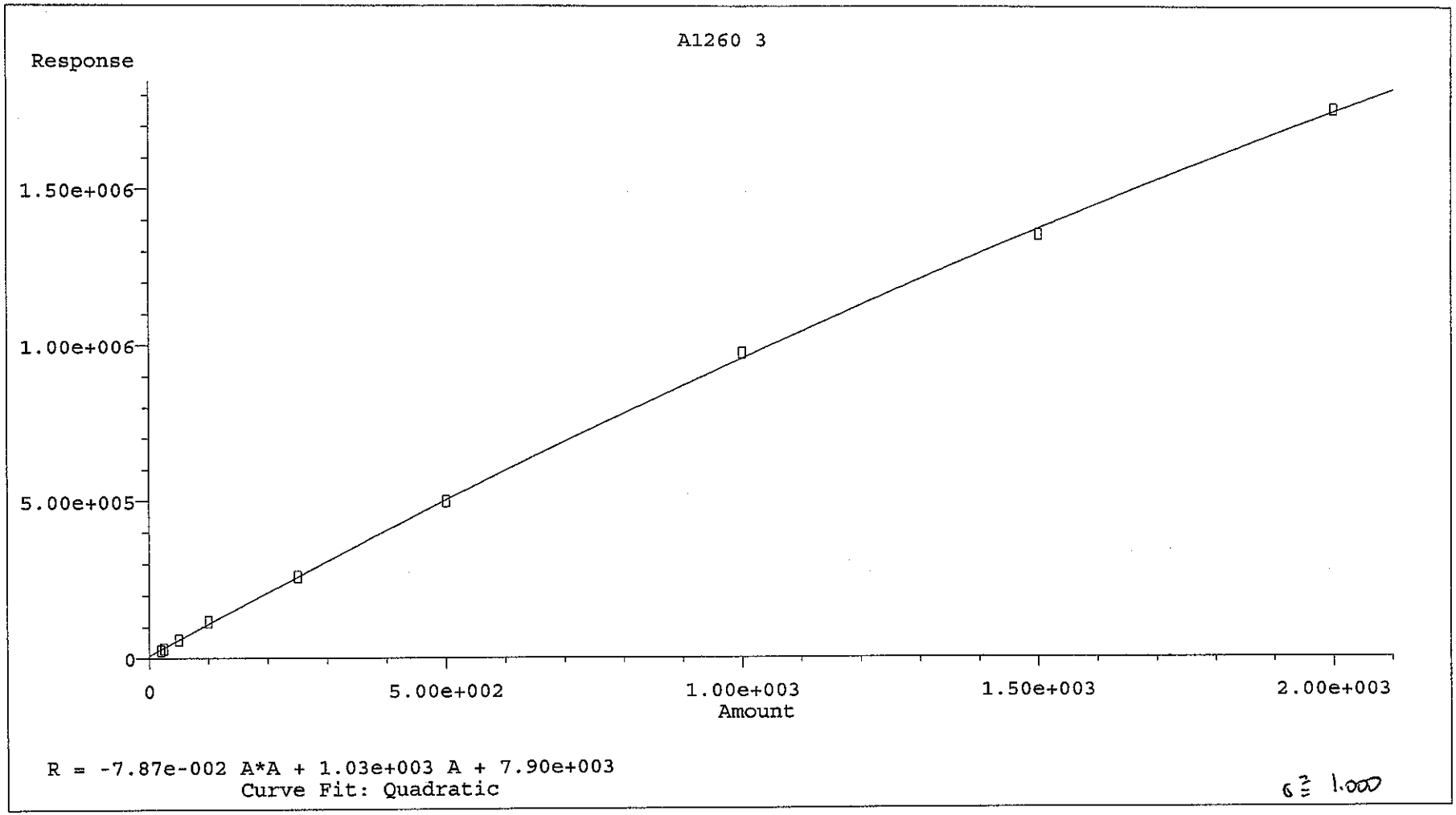
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



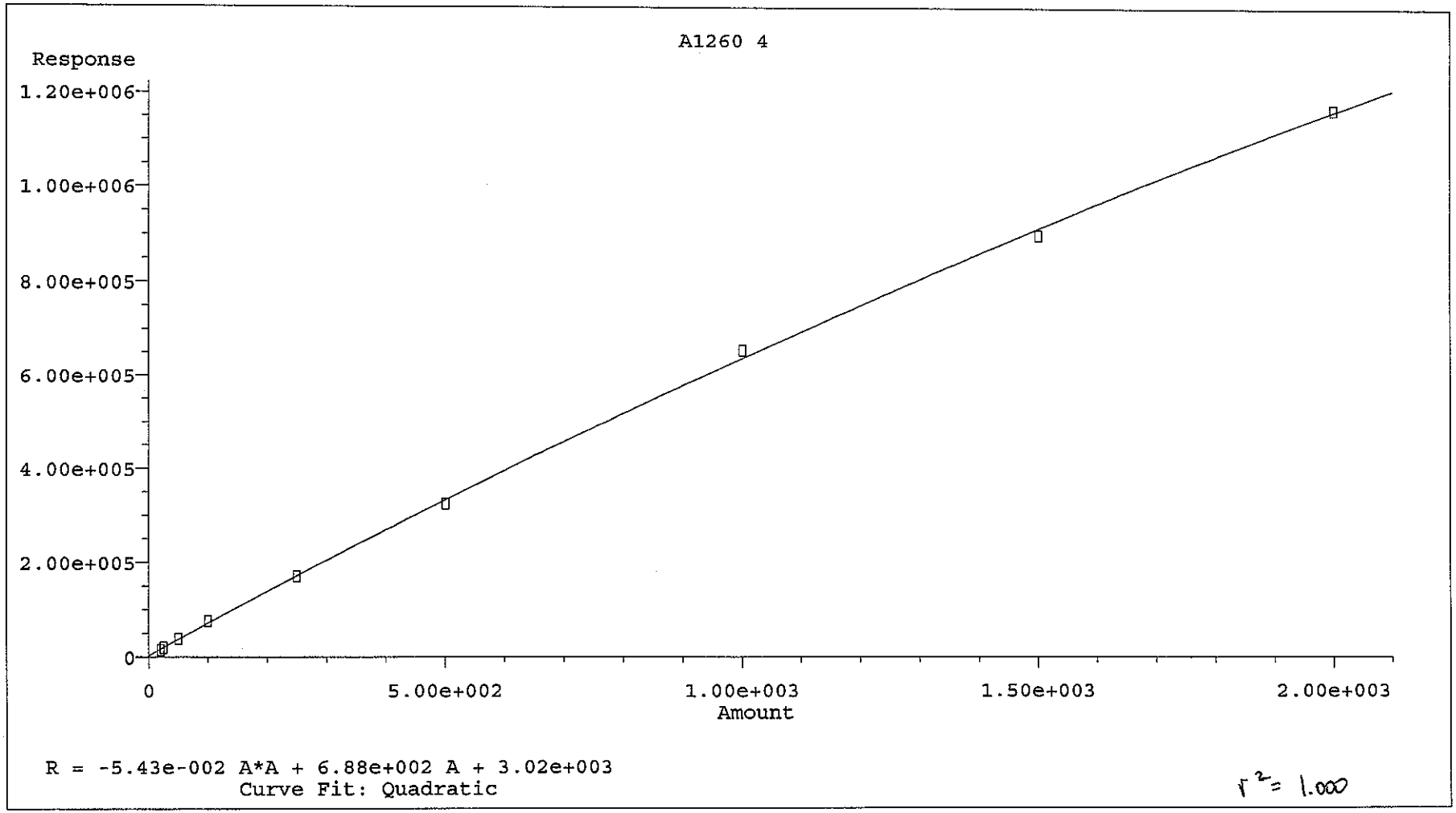
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



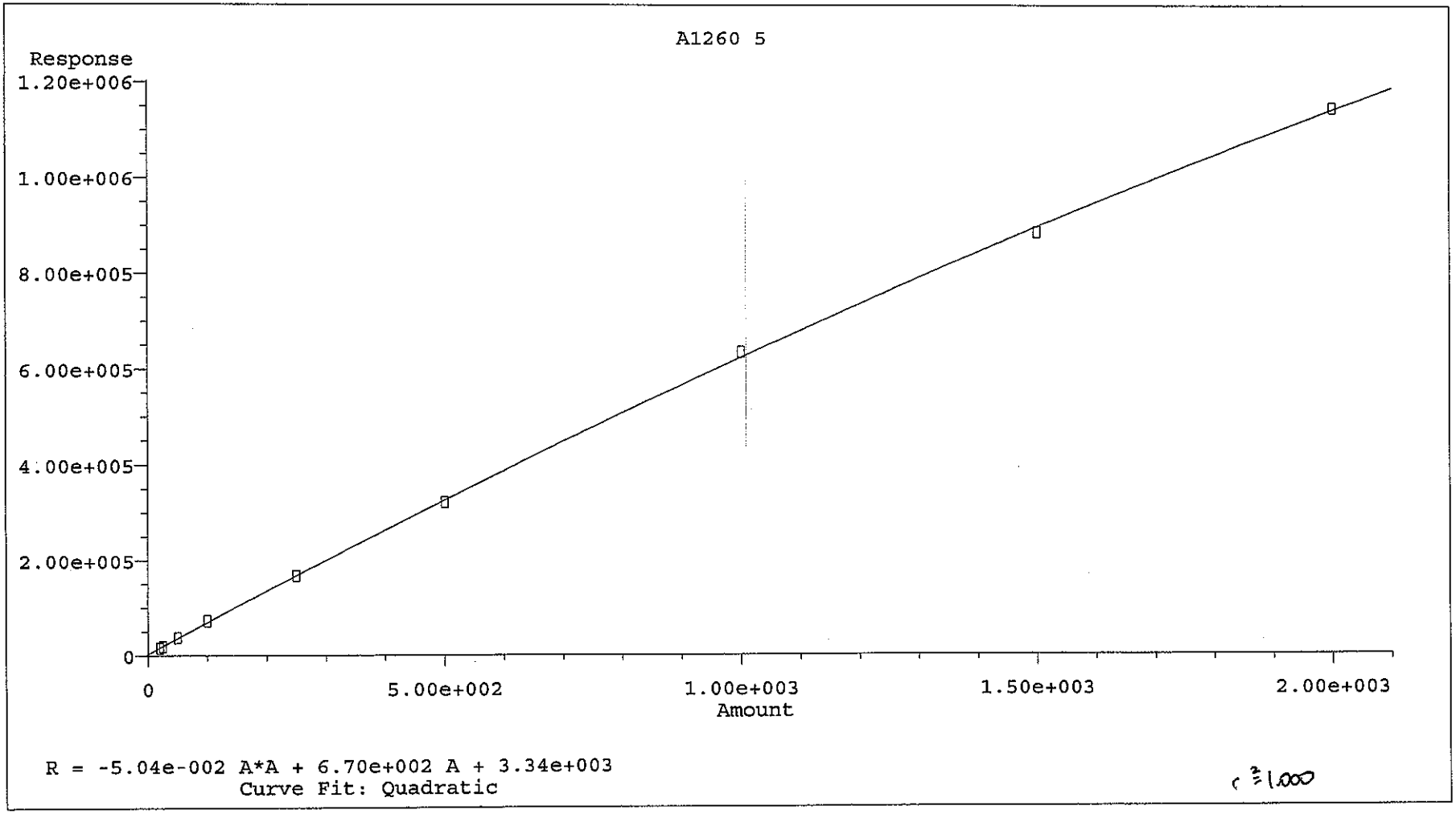
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



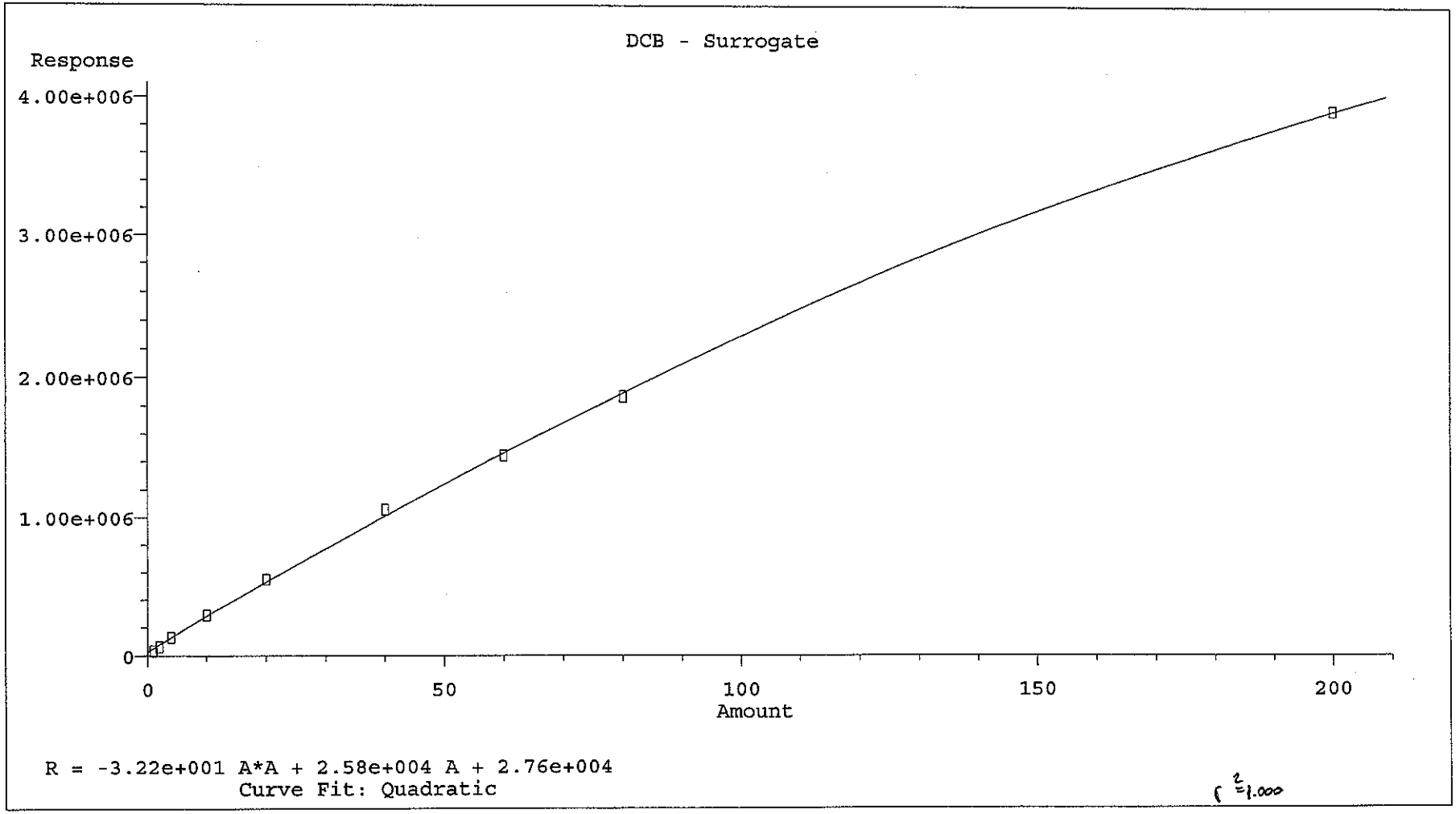
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



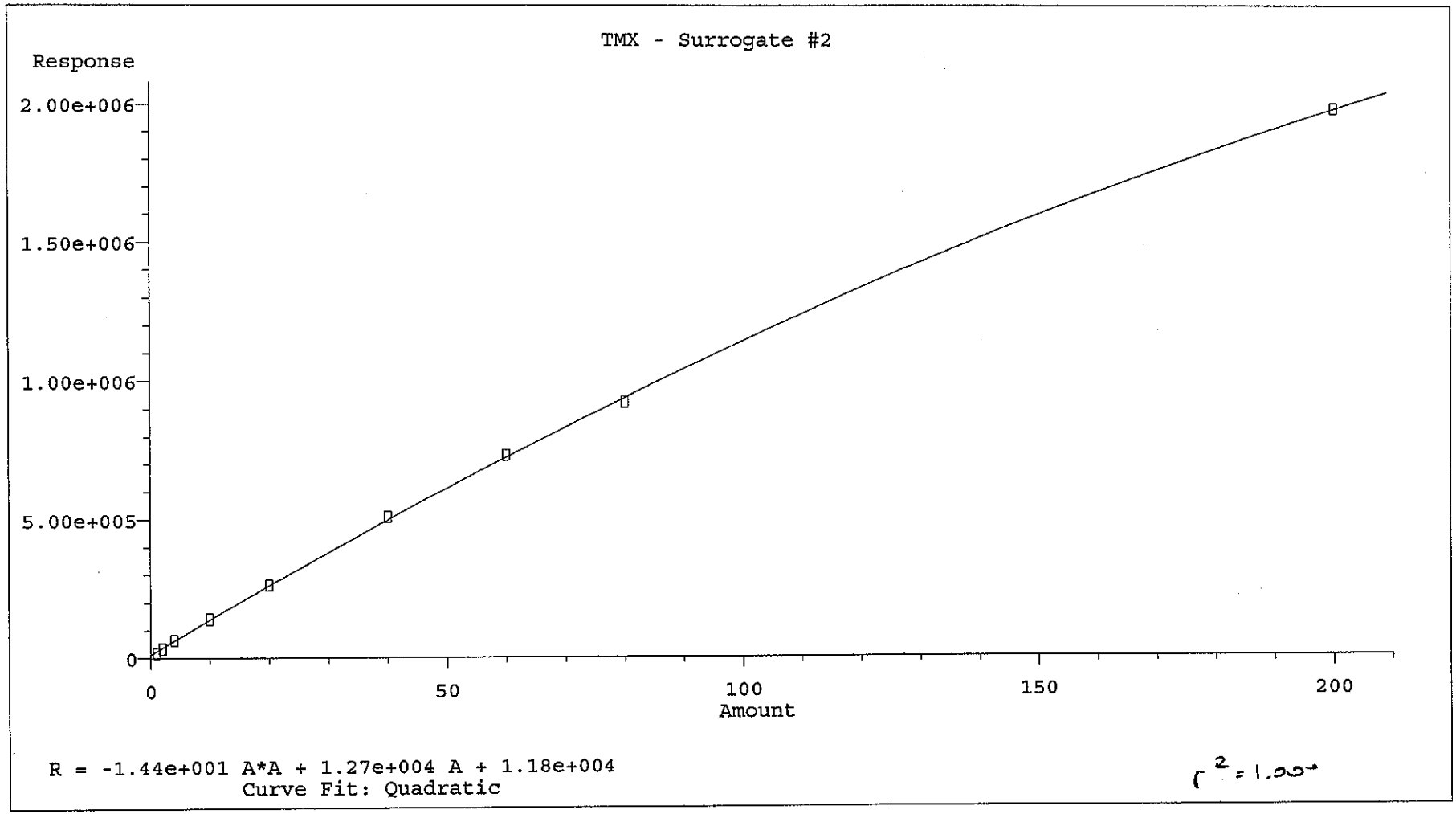
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



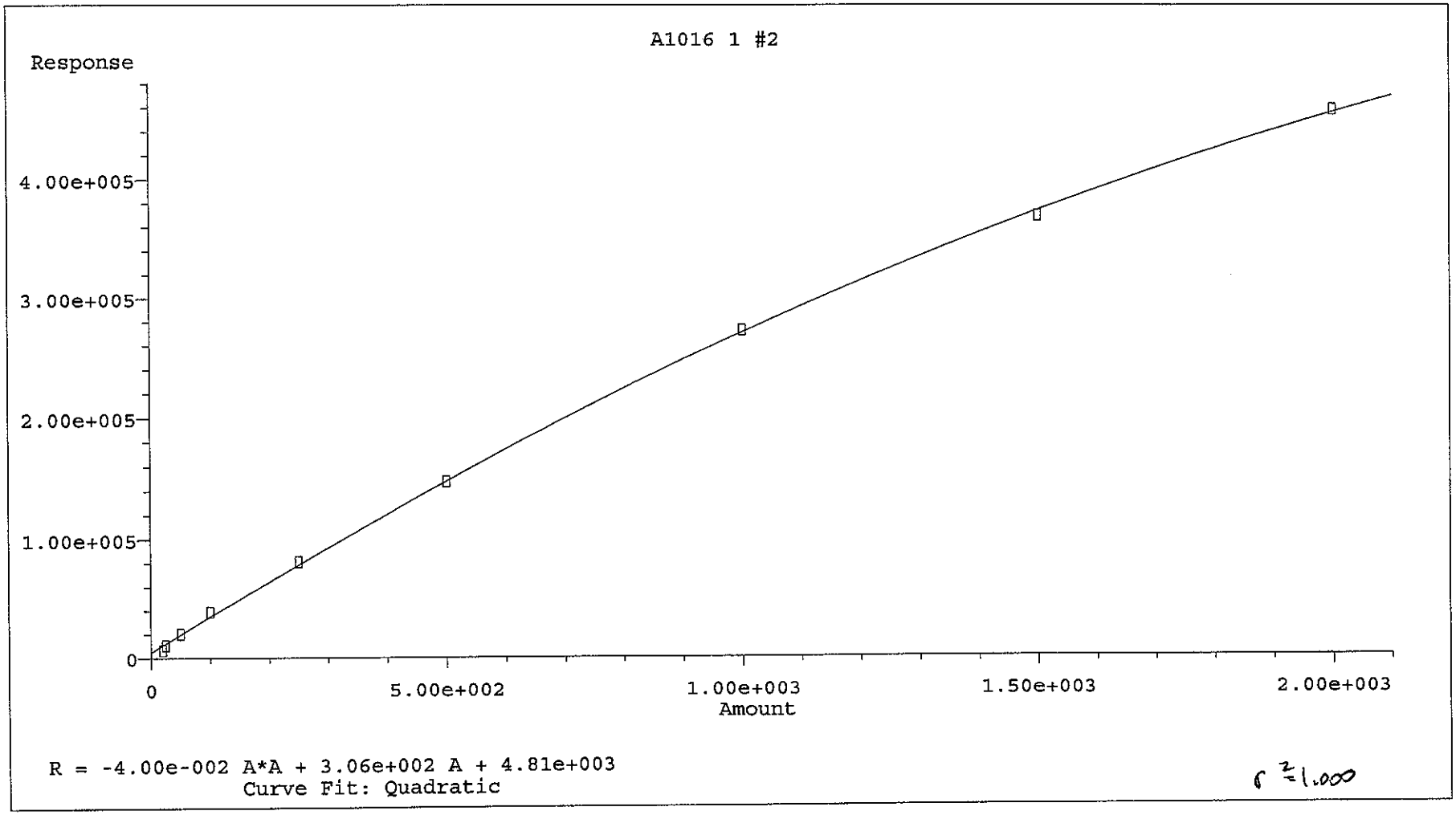
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



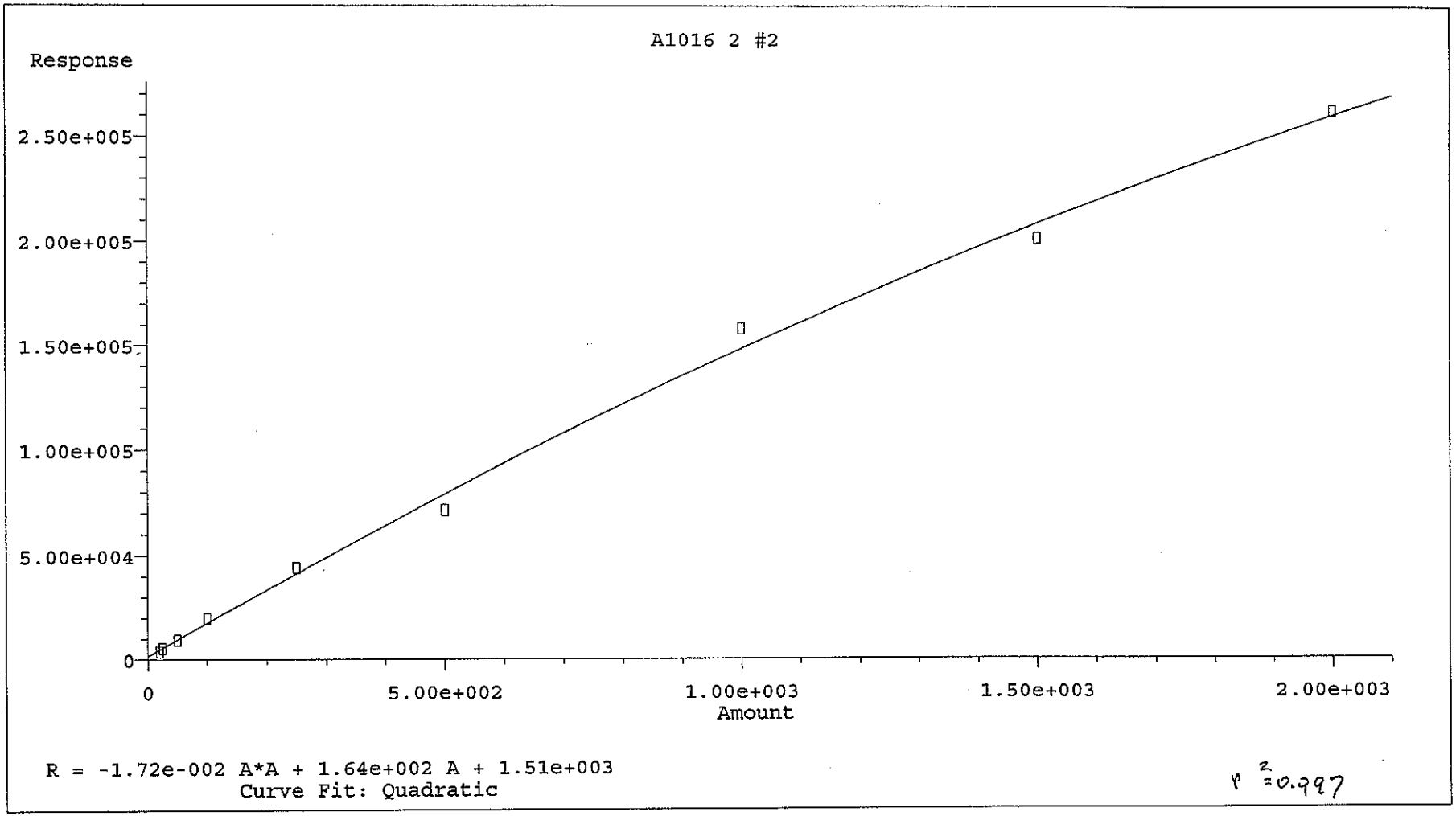
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



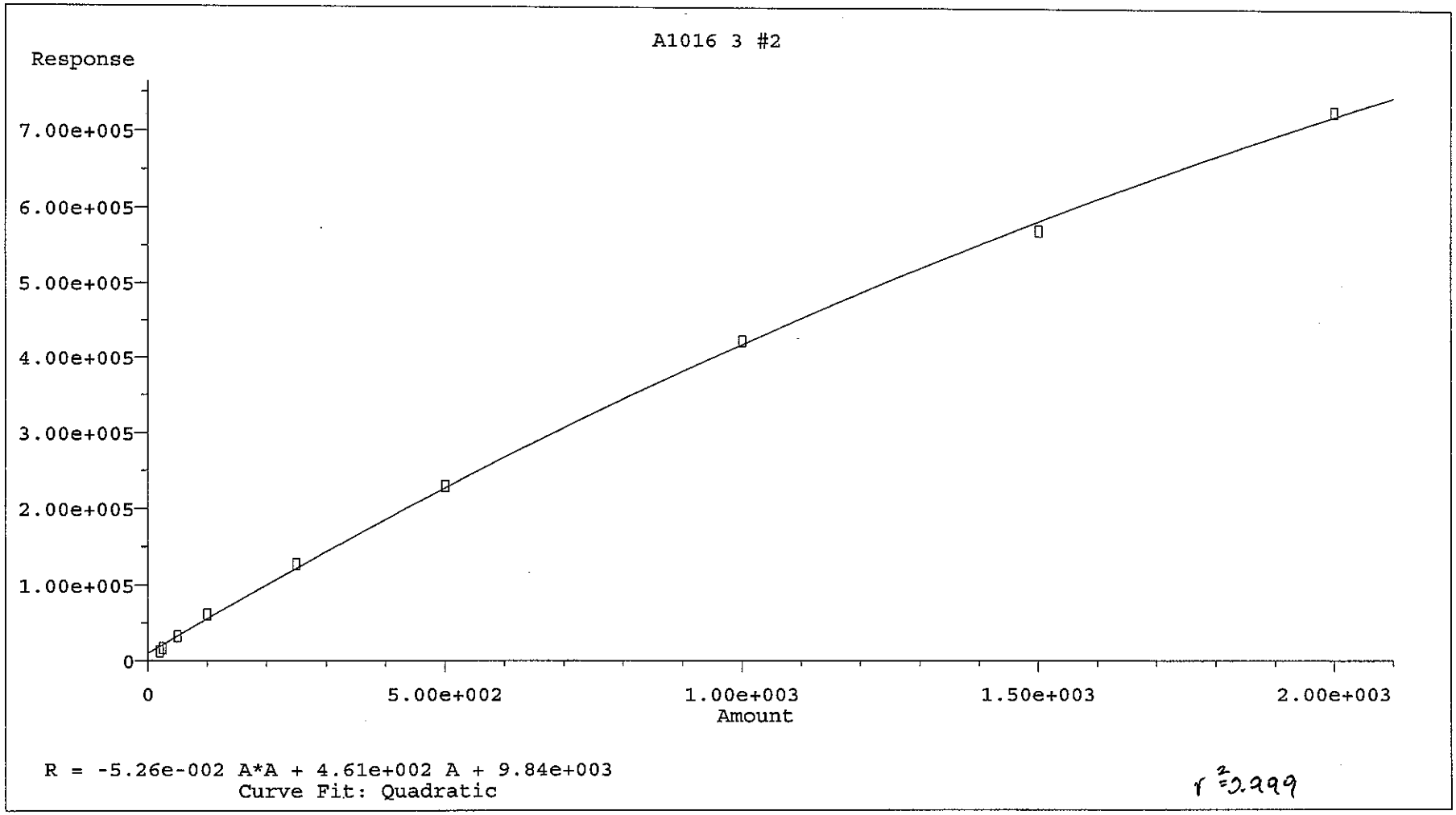
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



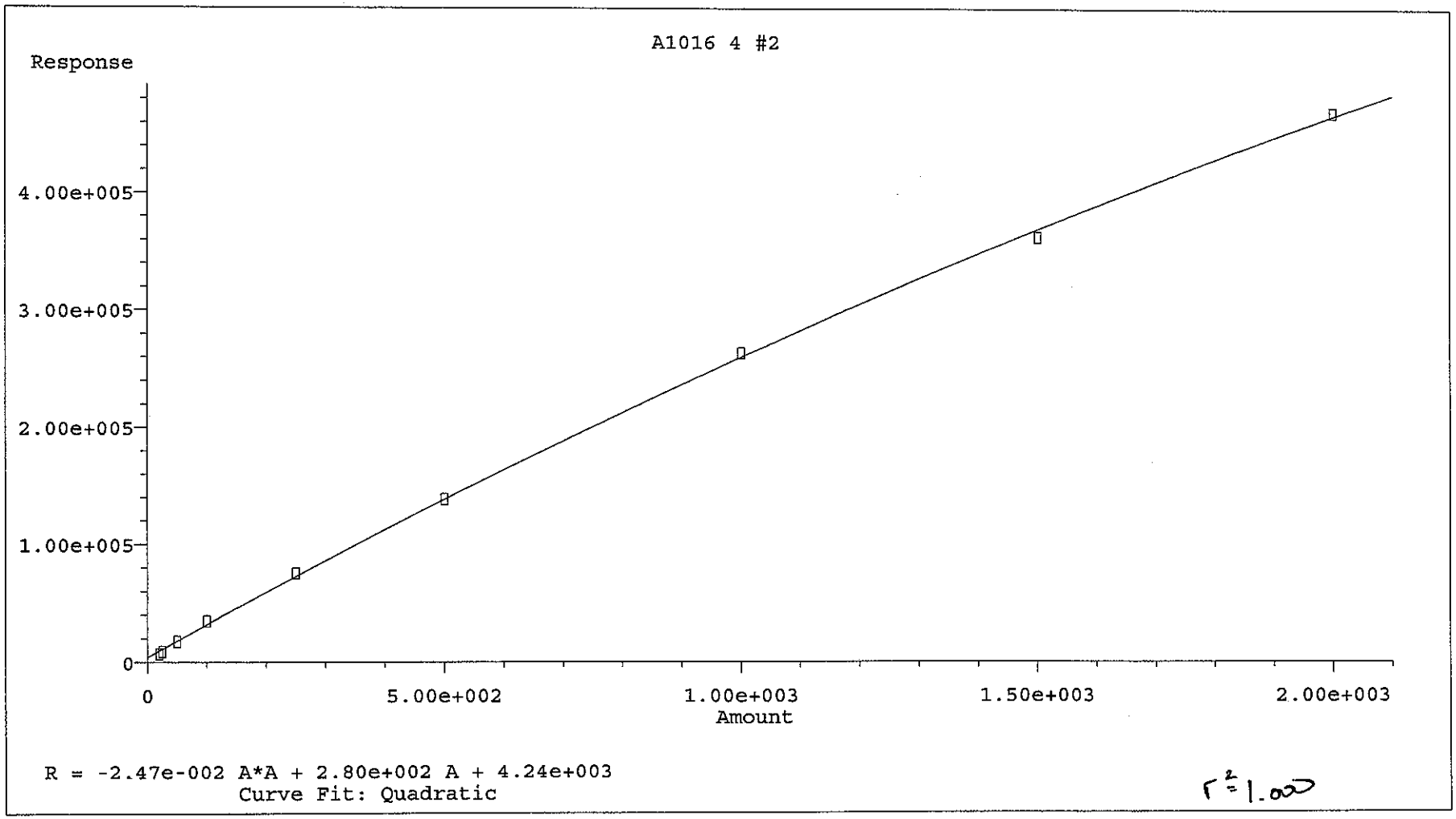
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



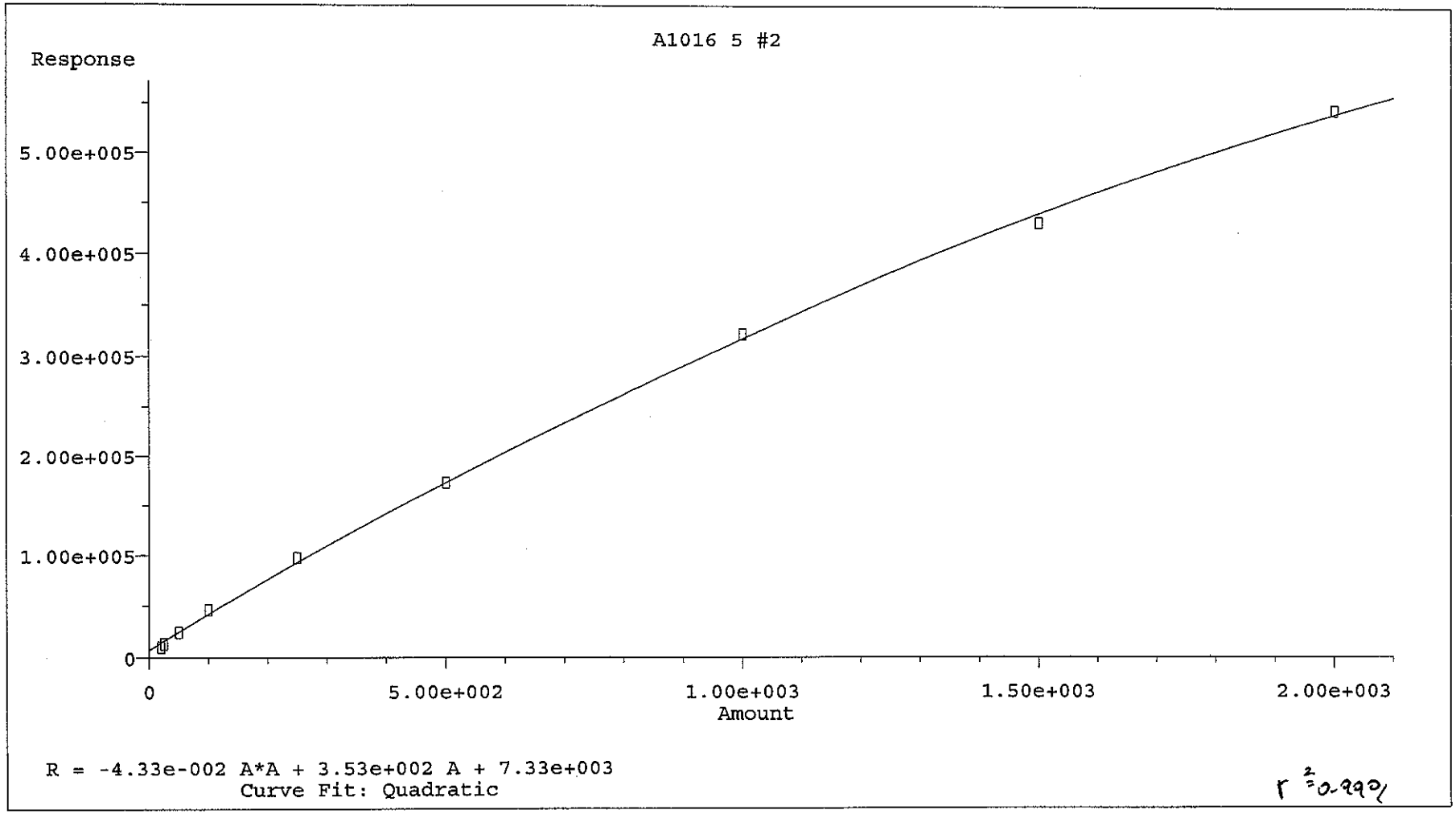
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



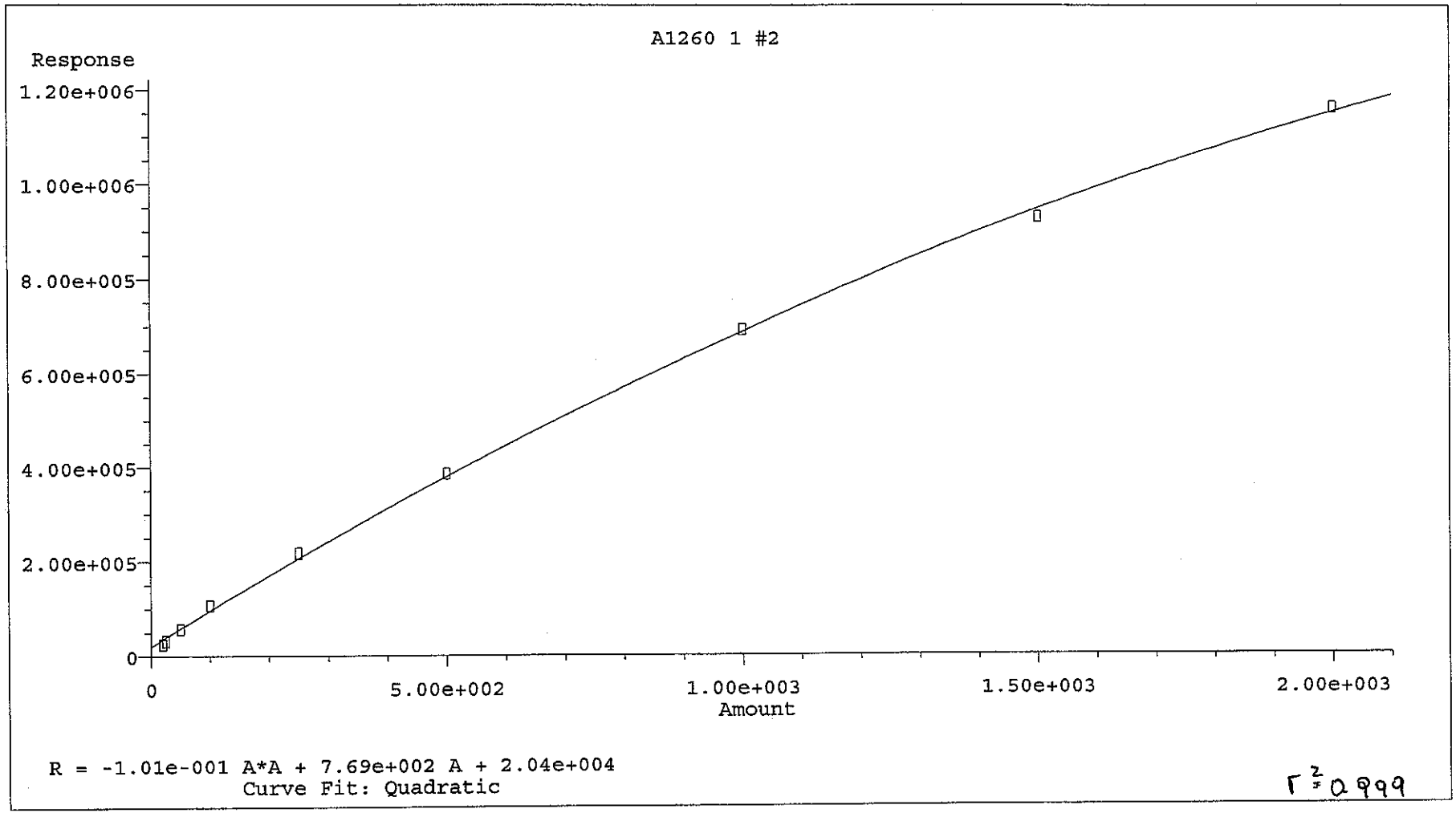
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



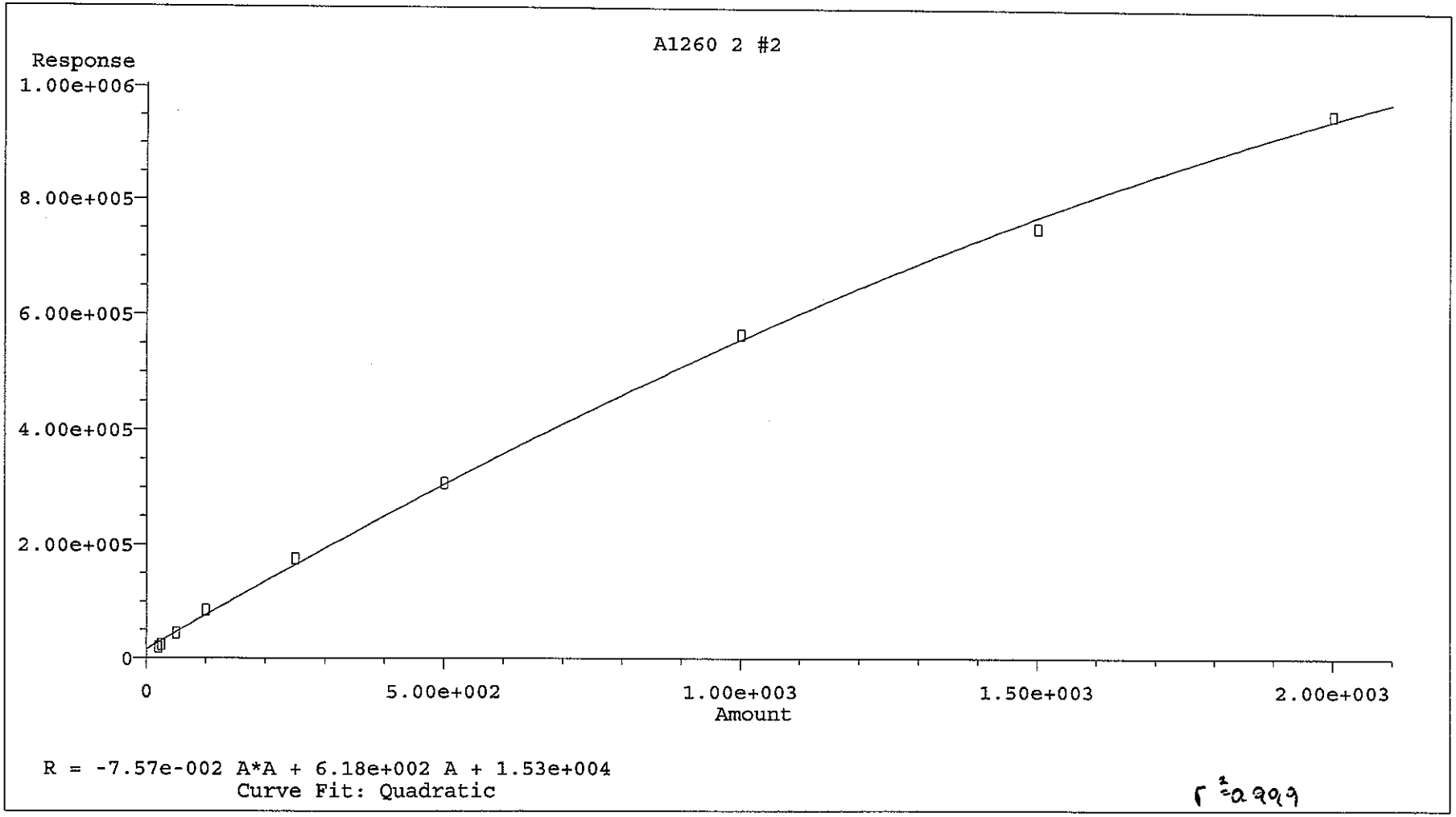
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



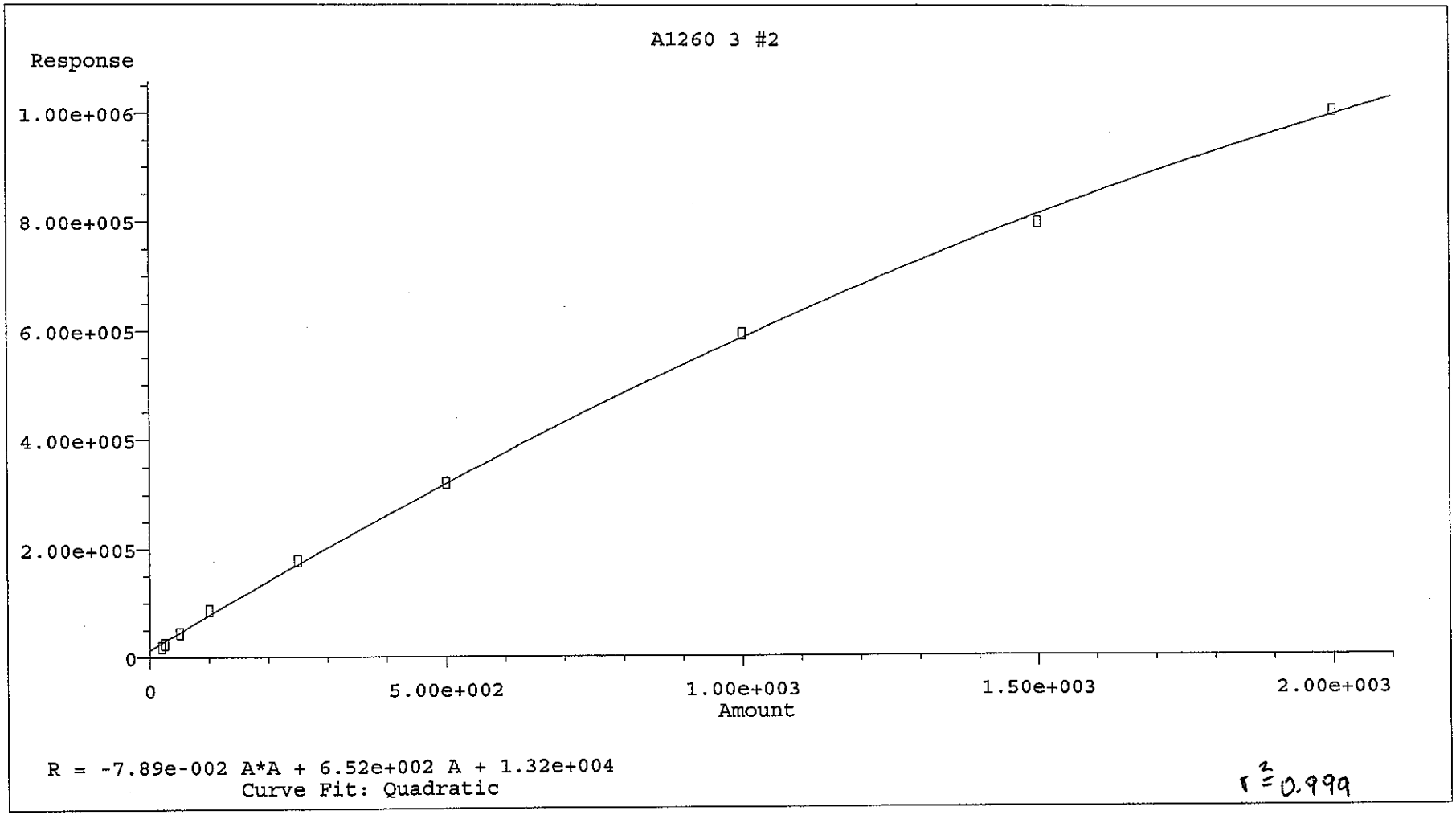
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



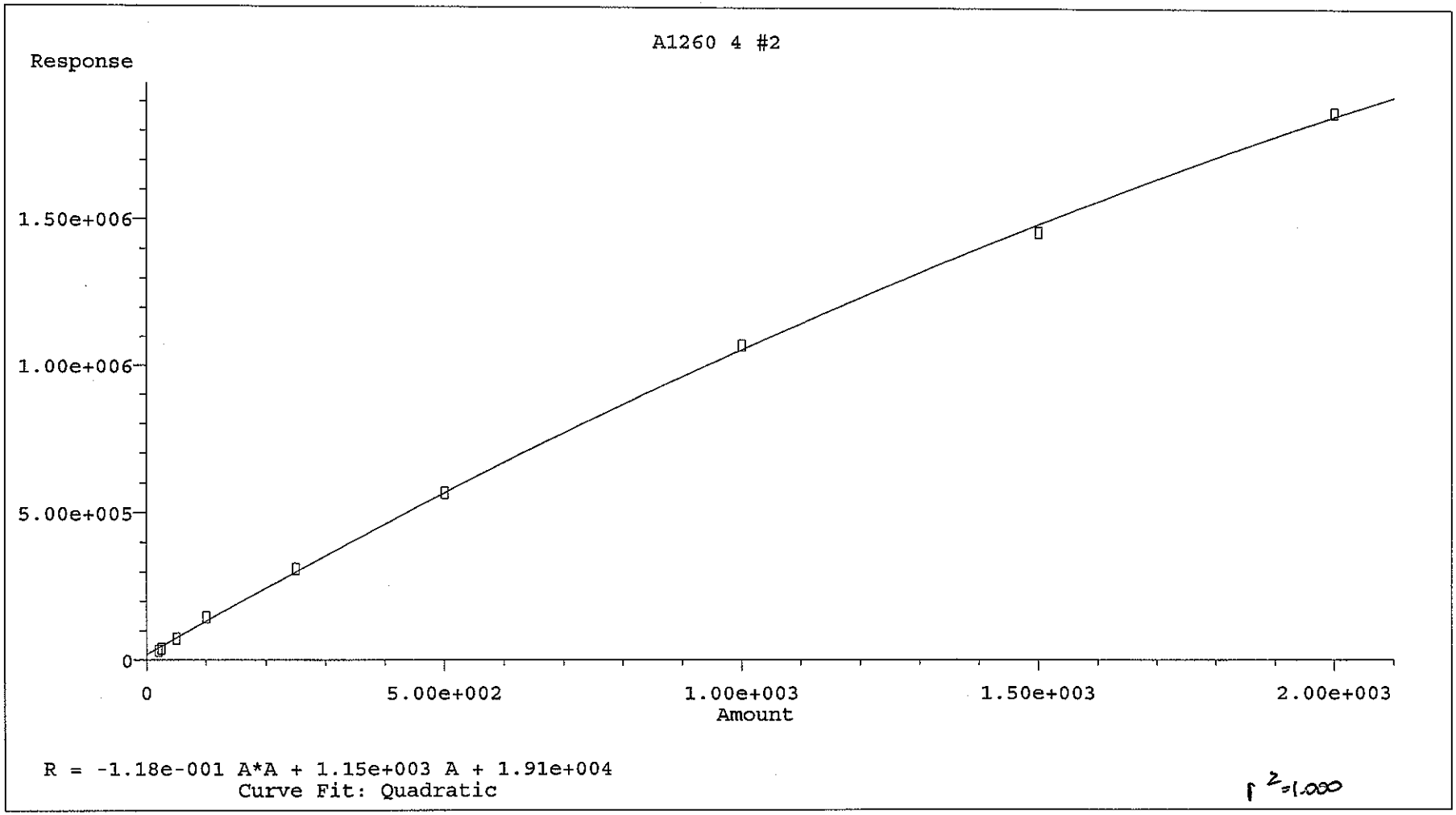
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



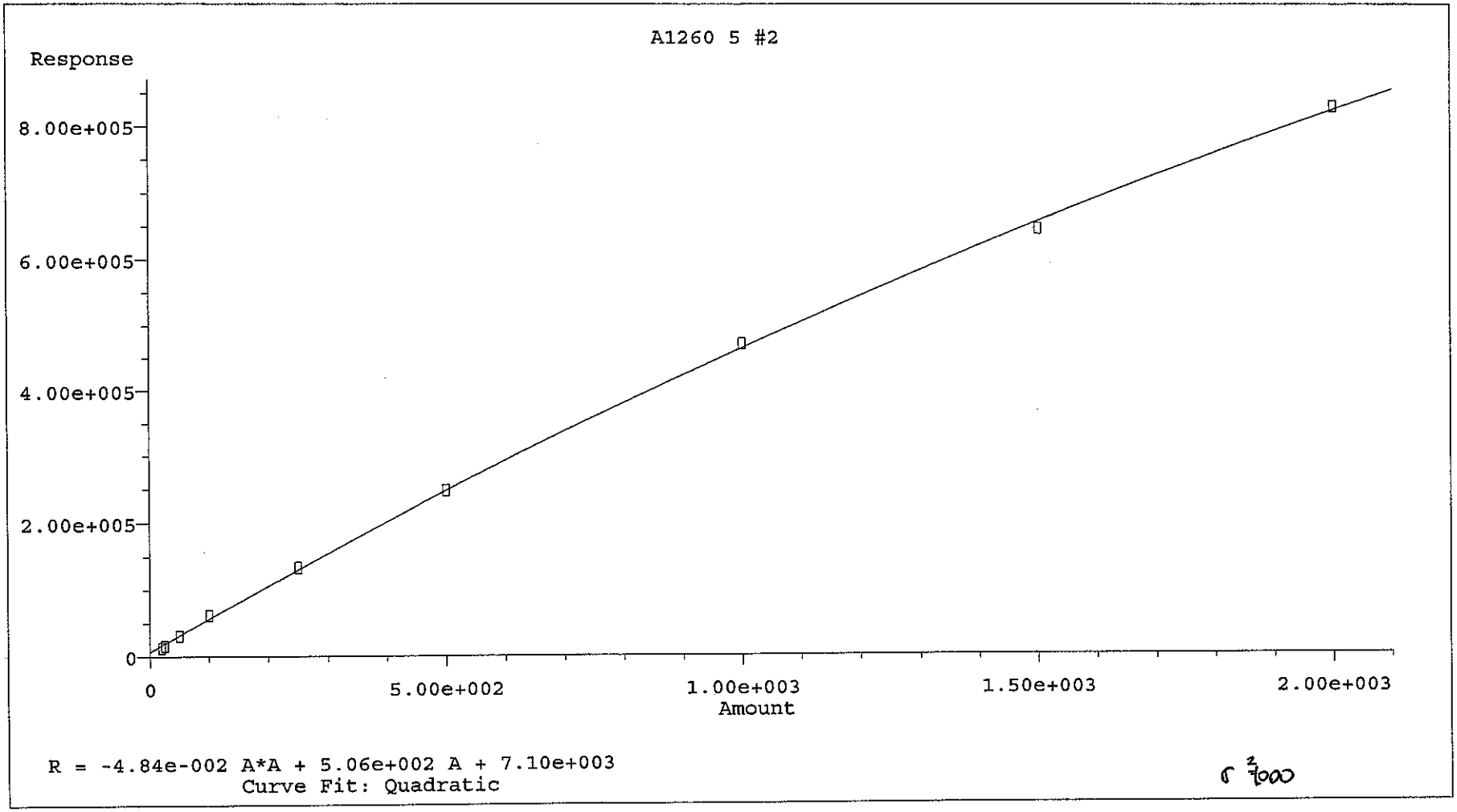
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



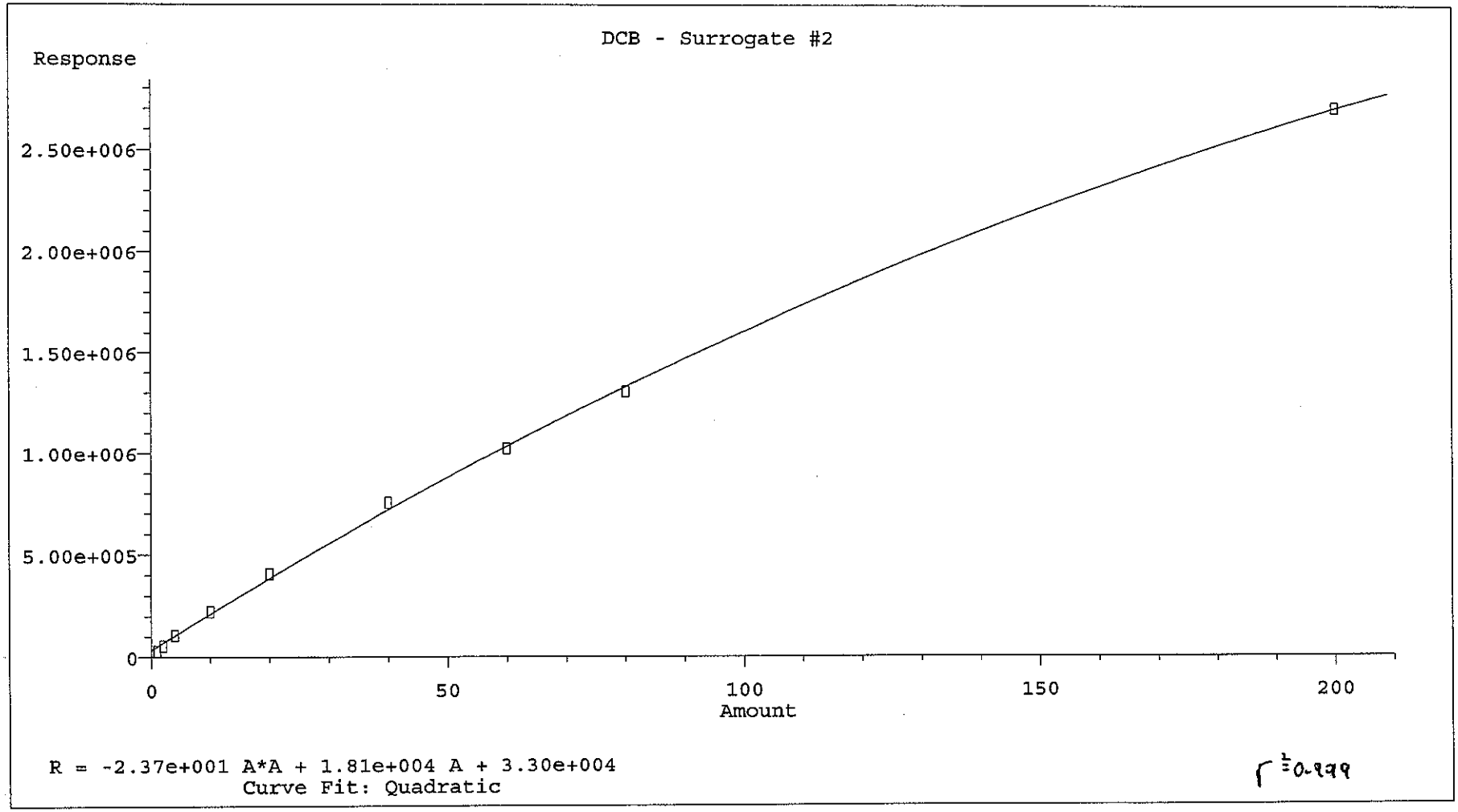
Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008



Method Name: D:\HPCHEM\2\METHODS\A1042360.M
Calibration Table Last Updated: Thu Apr 24 10:20:26 2008

Quantitation Report (QT Reviewed)

J23 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 3:58 pm Operator:
Sample : I1042301 Inst : HP ECD2
Misc : PW120407A 20PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
Target Compounds							
2) L1 A1016 1	7.95	7.42	9445	6644	10.803	4.663m(C)	#
3) L1 A1016 2	9.30	8.77	11110	3588	13.753	12.870m	
4) L1 A1016 3	10.17	9.69	16950	12500	5.745	5.356m	
5) L1 A1016 4	10.75	9.95	8591	7078	1.295	8.692m	#
6) L1 A1016 5	11.35	10.90	11386	9904	12.287m	5.831m	#
Sum A1016 1			57482	39714	43.883	37.411	
Average A1016 1					8.777	7.482	
7) L7 A1260 1	17.39	15.26	21224	24630	6.493	5.443m(C)	
8) L7 A1260 2	18.24	16.73	20866	18608	10.797m	4.238m	#
9) L7 A1260 3	20.23	17.73	24020	18224	15.722m	8.150m	#
10) L7 A1260 4	20.70	19.86	14532	31969	16.659	11.572	#
11) L7 A1260 5	22.74	22.16	15280	13087	16.729m	11.177	#
Sum A1260 1			95923	106517	N.D.	N.D.	
Average A1260 1					13.280	8.116	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

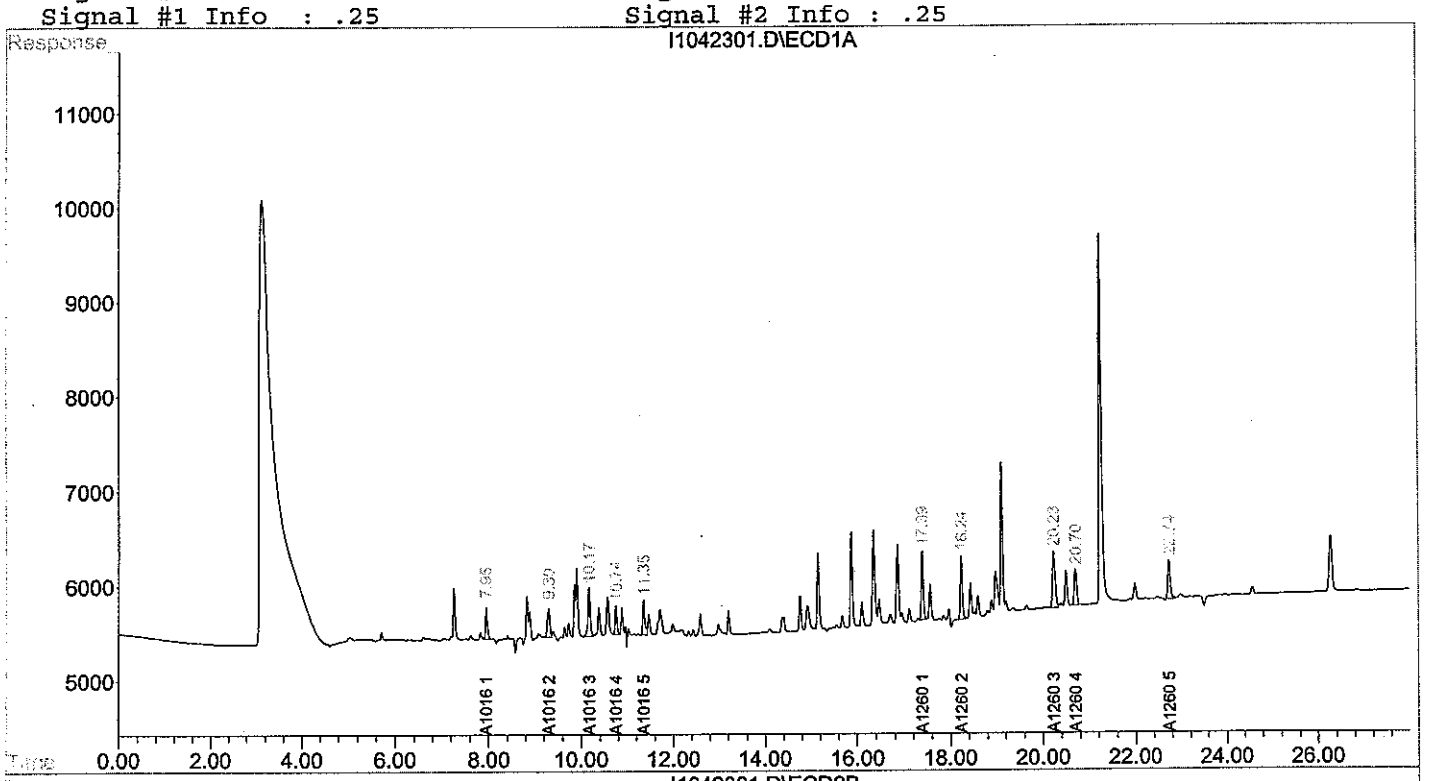
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

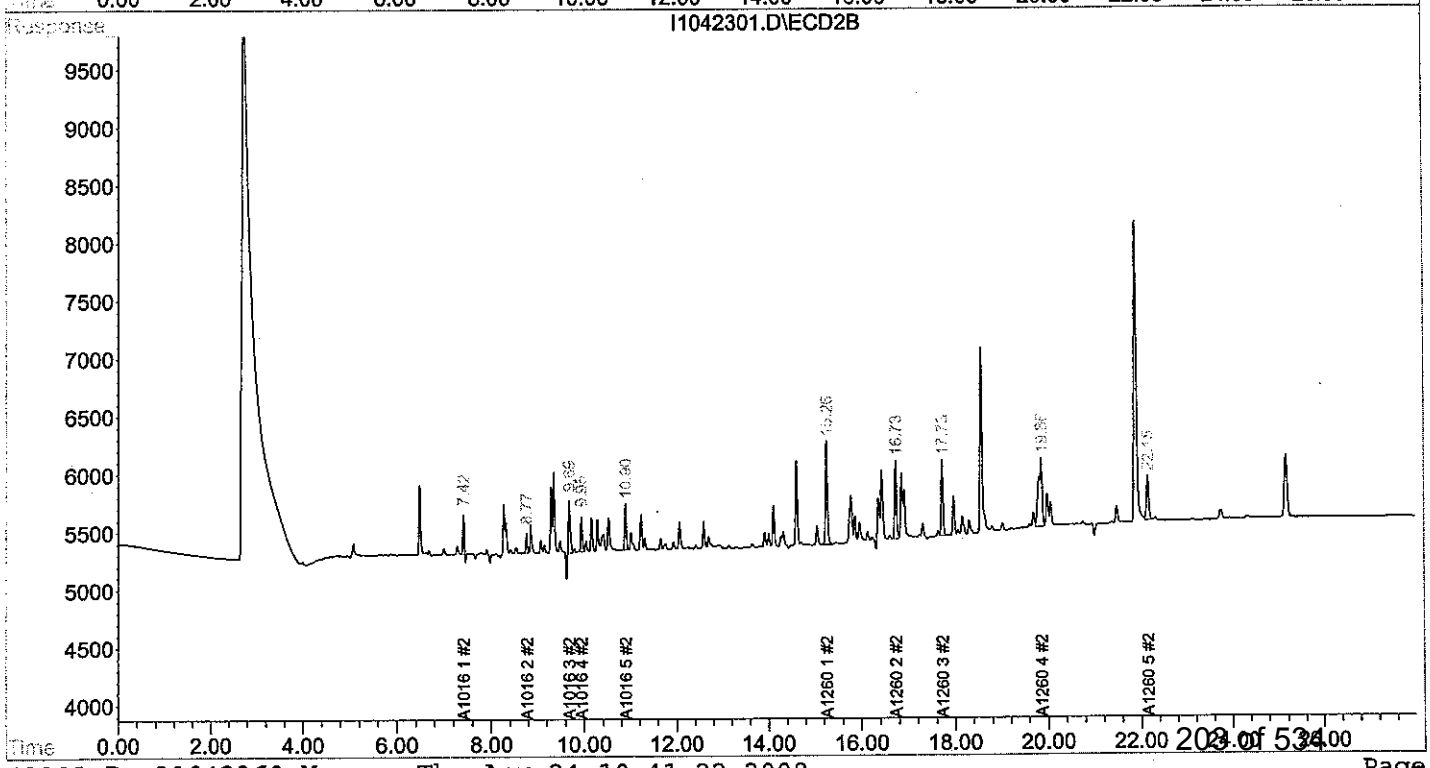
Quantitation Report

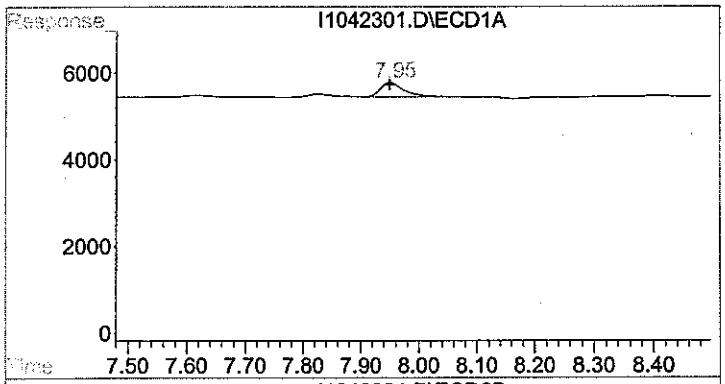
Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD1A.CH Vial: 6
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 3:58 pm Operator:
Sample : I1042301 Inst : HP ECD2
Misc : PW120407A 20PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

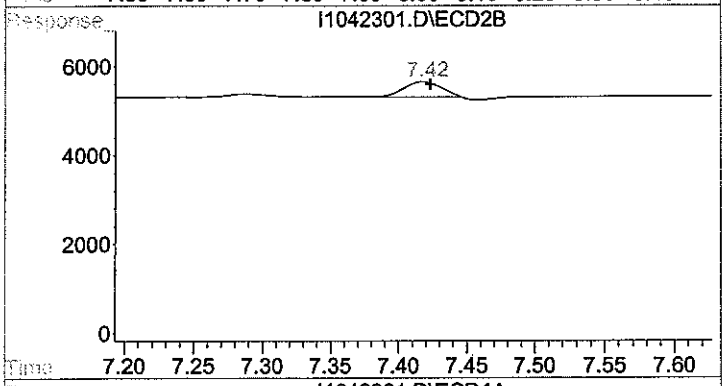






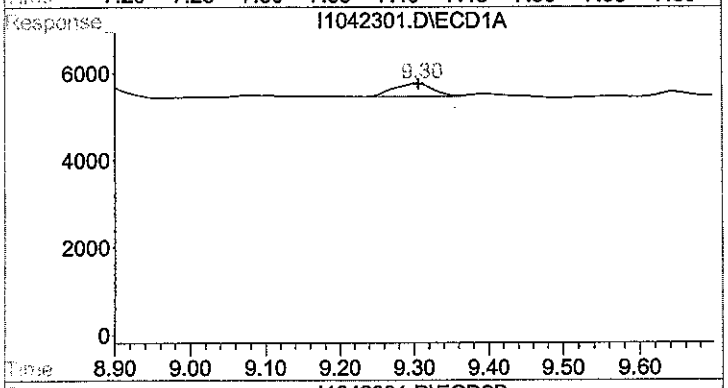
#2 A1016 1

R.T.: 7.951 min
Delta R.T.: 0.001 min
Response: 9445
Conc: 10.80 ug/L



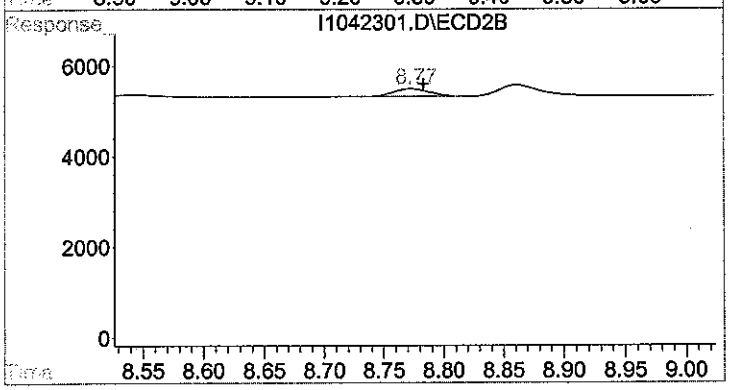
#2 A1016 1

R.T.: 7.417 min
Delta R.T.: -0.007 min
Response: 6644
Conc: 4.66 ug/L m



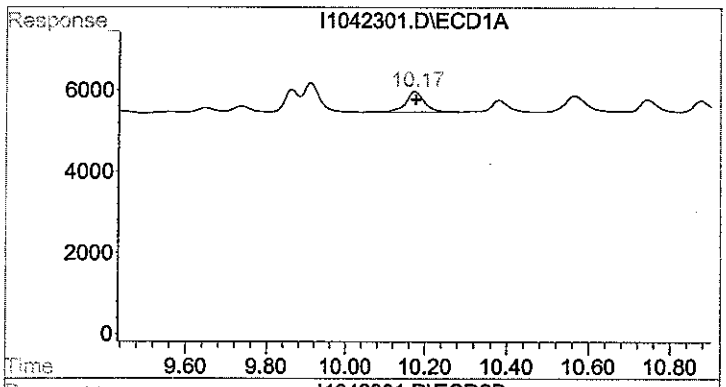
#3 A1016 2

R.T.: 9.304 min
Delta R.T.: -0.002 min
Response: 11110
Conc: 13.75 ug/L



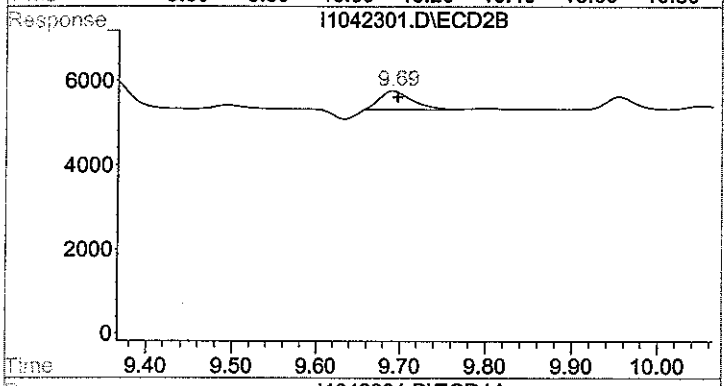
#3 A1016 2

R.T.: 8.773 min
Delta R.T.: -0.010 min
Response: 3588
Conc: 12.87 ug/L m



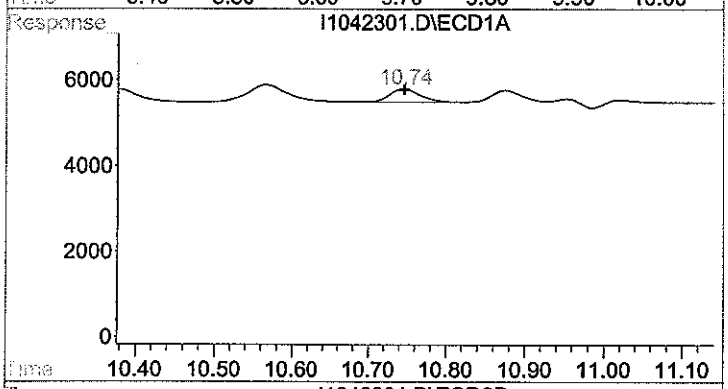
#4 A1016 3

R.T.: 10.174 min
Delta R.T.: -0.003 min
Response: 16950
Conc: 5.74 ug/L



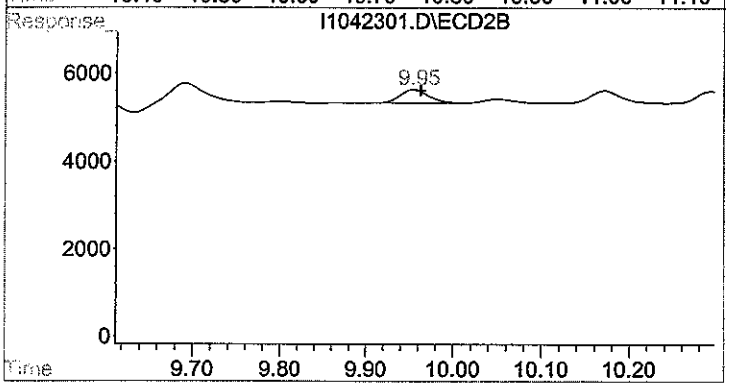
#4 A1016 3

R.T.: 9.690 min
Delta R.T.: -0.007 min
Response: 12500
Conc: 5.36 ug/L m



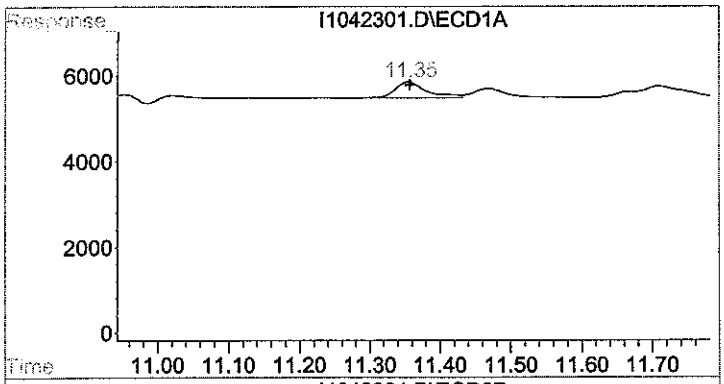
#5 A1016 4

R.T.: 10.746 min
Delta R.T.: 0.000 min
Response: 8591
Conc: 1.30 ug/L



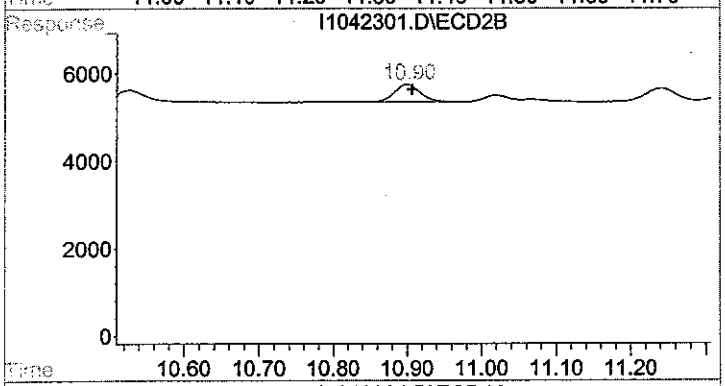
#5 A1016 4

R.T.: 9.953 min
Delta R.T.: -0.010 min
Response: 7078
Conc: 8.69 ug/L m



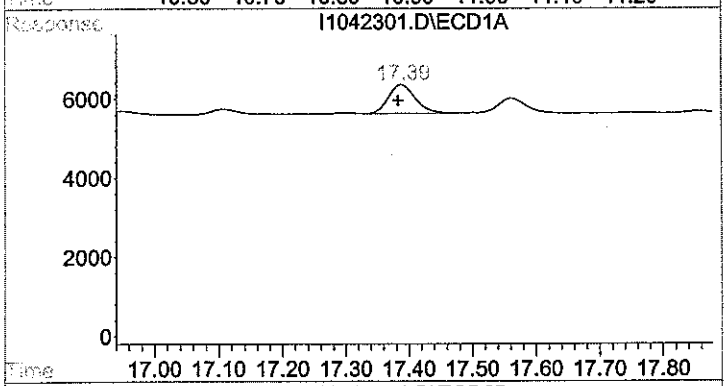
#6 A1016 5

R.T.: 11.353 min
Delta R.T.: -0.004 min
Response: 11386
Conc: 12.29 ug/L m



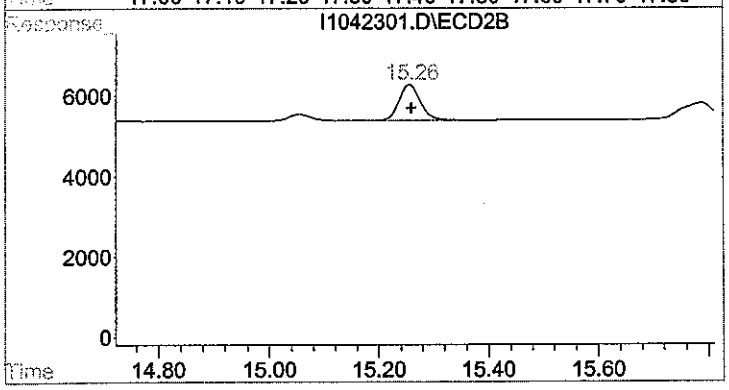
#6 A1016 5

R.T.: 10.900 min
Delta R.T.: -0.007 min
Response: 9904
Conc: 5.83 ug/L m



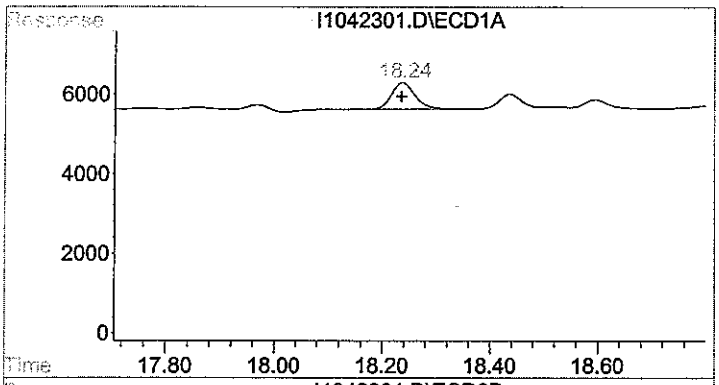
#7 A1260 1

R.T.: 17.389 min
Delta R.T.: 0.006 min
Response: 21224
Conc: 6.49 ug/L



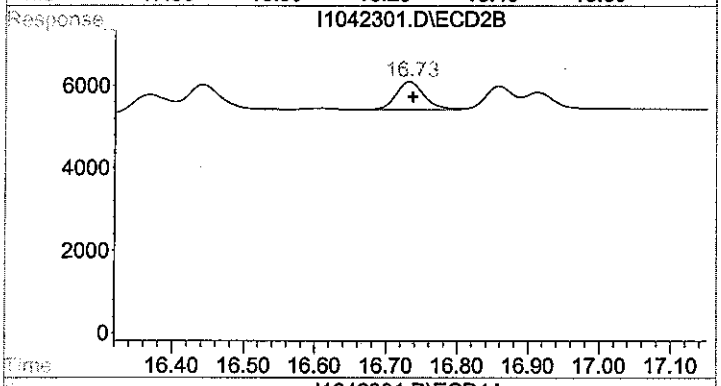
#7 A1260 1

R.T.: 15.257 min
Delta R.T.: -0.003 min
Response: 24630
Conc: 5.44 ug/L m



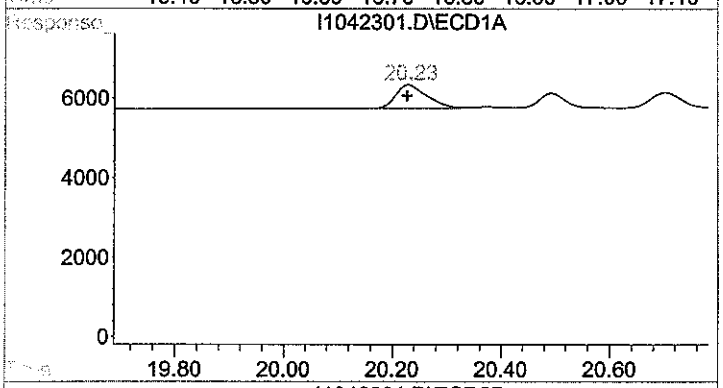
#8 A1260 2

R.T.: 18.237 min
Delta R.T.: 0.002 min
Response: 20866
Conc: 10.80 ug/L m



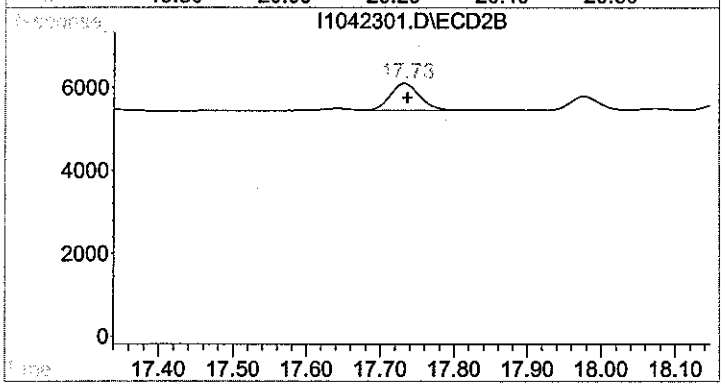
#8 A1260 2

R.T.: 16.730 min
Delta R.T.: -0.007 min
Response: 18608
Conc: 4.24 ug/L m



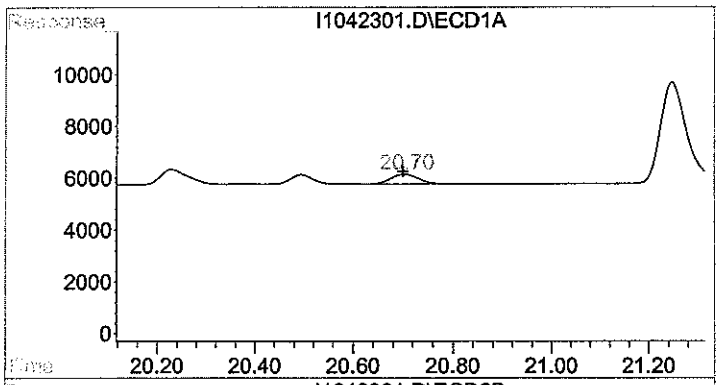
#9 A1260 3

R.T.: 20.227 min
Delta R.T.: 0.000 min
Response: 24020
Conc: 15.72 ug/L m



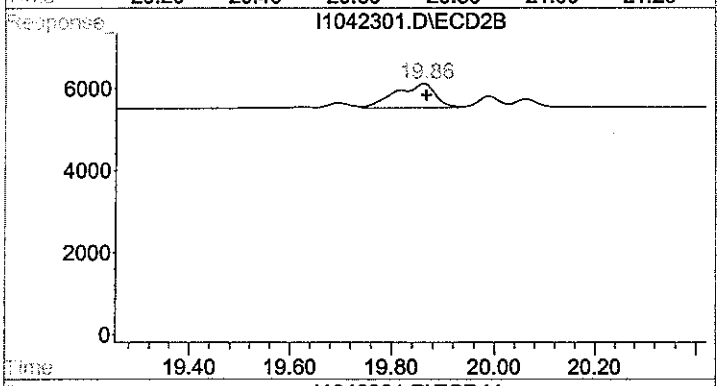
#9 A1260 3

R.T.: 17.733 min
Delta R.T.: -0.003 min
Response: 18224
Conc: 8.15 ug/L m



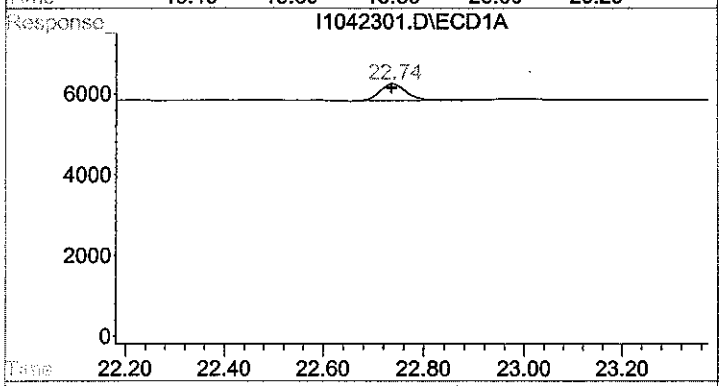
#10 A1260 4

R.T.: 20.703 min
Delta R.T.: 0.003 min
Response: 14532
Conc: 16.66 ug/L



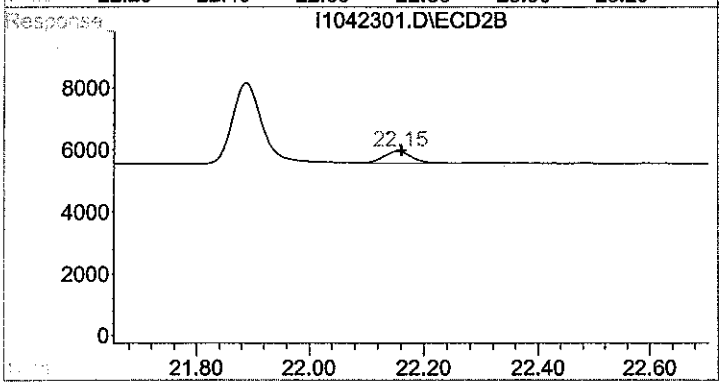
#10 A1260 4

R.T.: 19.861 min
Delta R.T.: -0.006 min
Response: 31969
Conc: 11.57 ug/L



#11 A1260 5

R.T.: 22.737 min
Delta R.T.: 0.000 min
Response: 15280
Conc: 16.73 ug/L m



#11 A1260 5

R.T.: 22.156 min
Delta R.T.: -0.006 min
Response: 13087
Conc: 11.18 ug/L

Quantitation Report (QT Reviewed)

JBS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD2B.CH
Acq On : 23 Apr 2008 4:29 pm Operator:
Sample : I1042302 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.26	6.49	18848	18095	0.892m	0.497m	#
Spiked Amount 100.000 Range 30 - 150 Recovery =					0.89%#	0.50%#	
12) s DCB - Surrogate	26.28	25.17	33958	28816	0.246	763.961	#
Spiked Amount 100.000 Range 30 - 150 Recovery =					0.25%#	763.96%#	
Target Compounds							
2) L1 A1016 1	7.95	7.42	12610	10648	19.064	17.998 (C)	
3) L1 A1016 2	9.30	8.77	14968	5356	21.691m	23.699m	
4) L1 A1016 3	10.17	9.69	22550	16808	15.514m	14.795	
5) L1 A1016 4	10.75	9.96	11721	9192	10.134	16.337	#
6) L1 A1016 5	11.36	10.90	14488	13272	19.144	15.545m	
Sum A1016 1			76337	55277	85.547	88.375	
Average A1016 1					17.109	17.675	
7) L7 A1260 1	17.39	15.26	29629	31422	16.789	14.300 (C)	
8) L7 A1260 2	18.24	16.73	26410	23876	17.728	12.860	#
9) L7 A1260 3	20.23	17.74	30502	23973	22.038	16.970	
10) L7 A1260 4	20.70	19.86	19250	39084	23.543	17.749m	
11) L7 A1260 5	22.74	22.16	18626	16280	21.748	17.521	
Sum A1260 1			124416	134635	101.845	79.400	
Average A1260 1					20.369	15.880	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

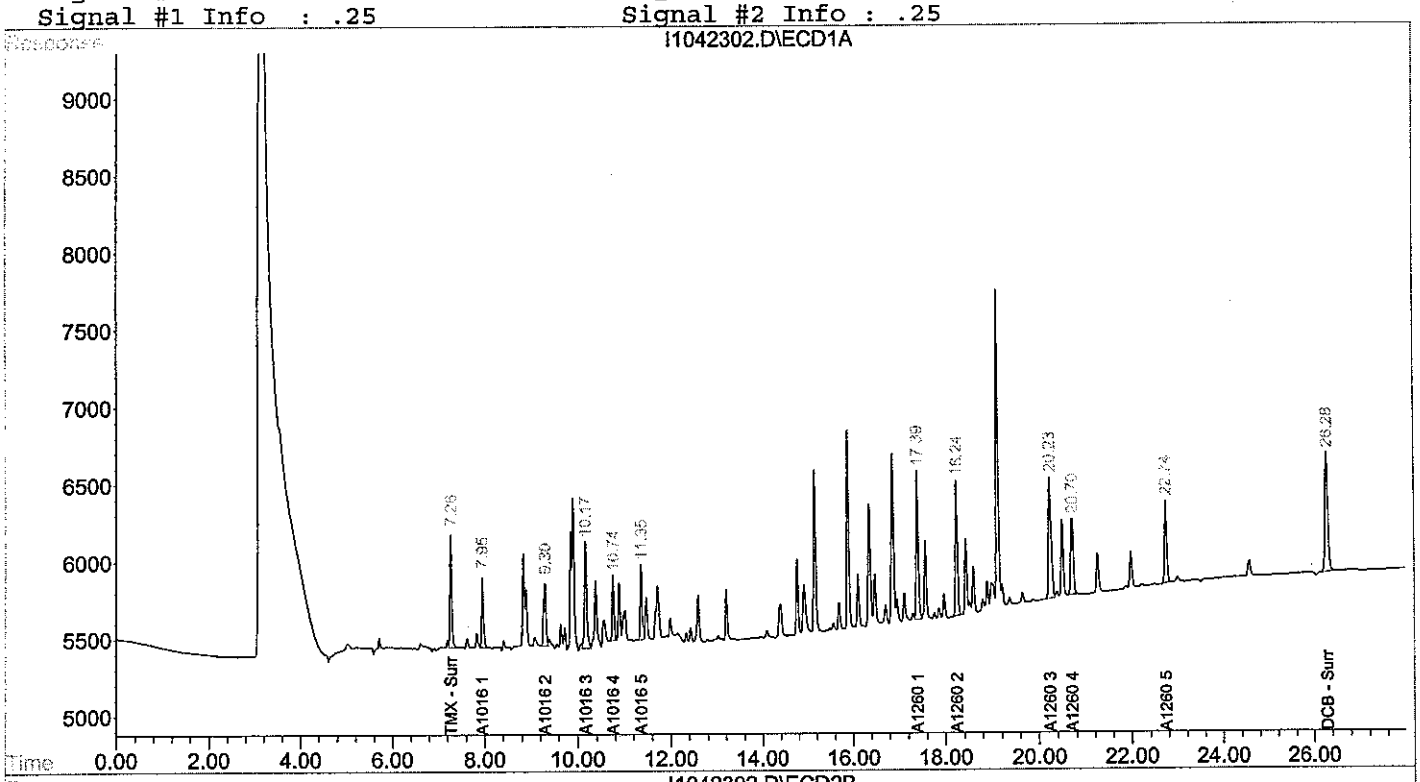
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

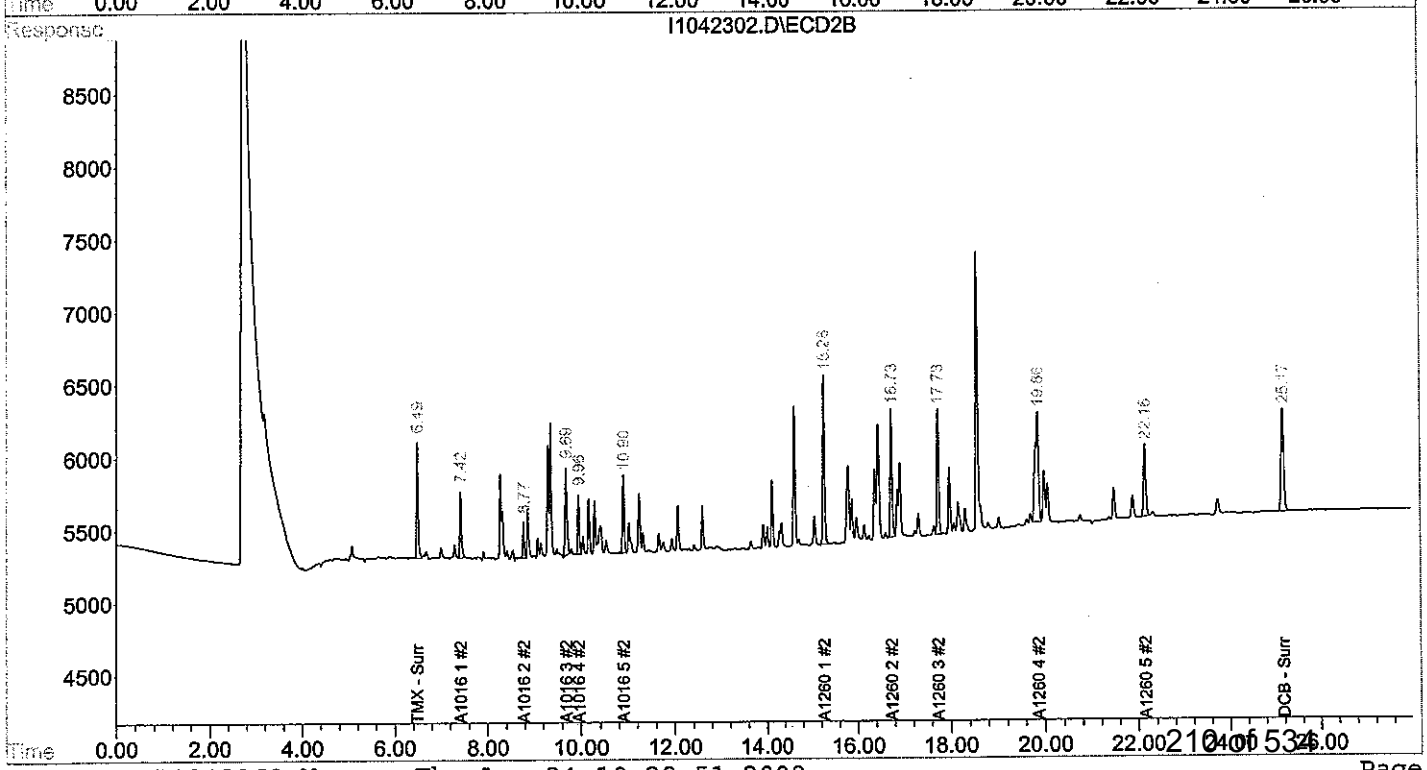
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD1A.CH Vial: 7
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042302.D\ECD2B.CH
Acq On : 23 Apr 2008 4:29 pm Operator:
Sample : I1042302 Inst : HP ECD2
Misc : PW120407B 25PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:13 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 08:20:24 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

D35 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD2B.CH
Acq On : 23 Apr 2008 5:01 pm Operator:
Sample : I1042303 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.26	6.49	36408	32932	2.077m	1.899
Spiked Amount 100.000 Range 30 - 150 Recovery =					2.08%#	1.90%#
12) s DCB - Surrogate	26.28	25.18	63644	53860	1.564	1.476
Spiked Amount 100.000 Range 30 - 150 Recovery =					1.56%#	1.48%#
Target Compounds						
2) L1 A1016 1	7.95	7.42	23330	20404	55.760	57.421 (C)
3) L1 A1016 2	9.31	8.78	28624	9244	57.815m	53.497m
4) L1 A1016 3	10.18	9.69	41508	32202	46.067m	56.366m
5) L1 A1016 4	10.75	9.96	24496	17562	54.726m	54.867m
6) L1 A1016 5	11.36	10.90	27606	24380	52.744m	53.349m
Sum A1016 1			145564	103792	267.113	275.501
Average A1016 1					53.423	55.100
7) L7 A1260 1	17.39	15.26	54575	56569	48.176	50.071 (C)
8) L7 A1260 2	18.24	16.73	51350	44166	55.042m	50.150
9) L7 A1260 3	20.23	17.74	58812	44494	55.320m	52.486
10) L7 A1260 4	20.70	19.86	38560	73940	55.873m	54.395m
11) L7 A1260 5	22.74	22.16	37358	31276	58.975m	56.928
Sum A1260 1			240655	250444	273.386	264.030
Average A1260 1					54.677	52.806
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

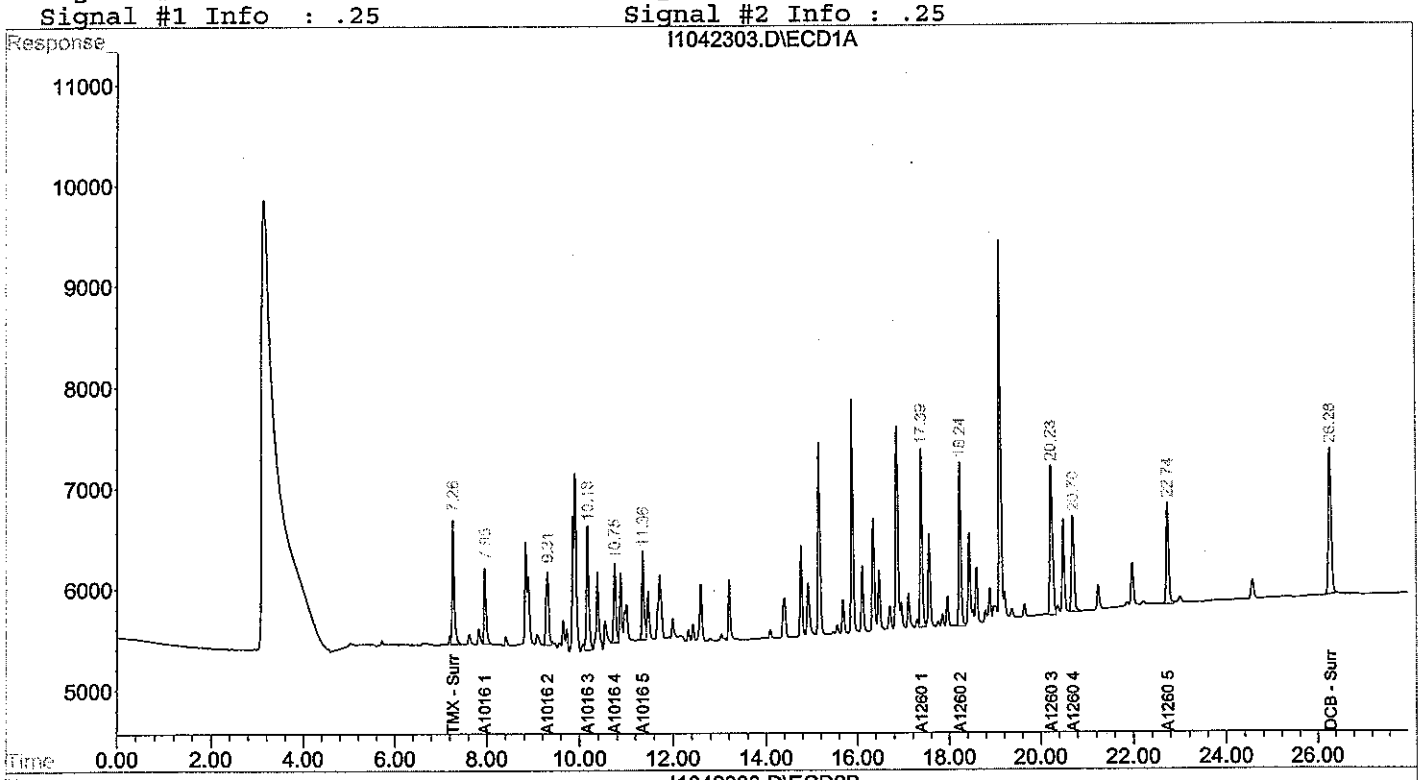
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

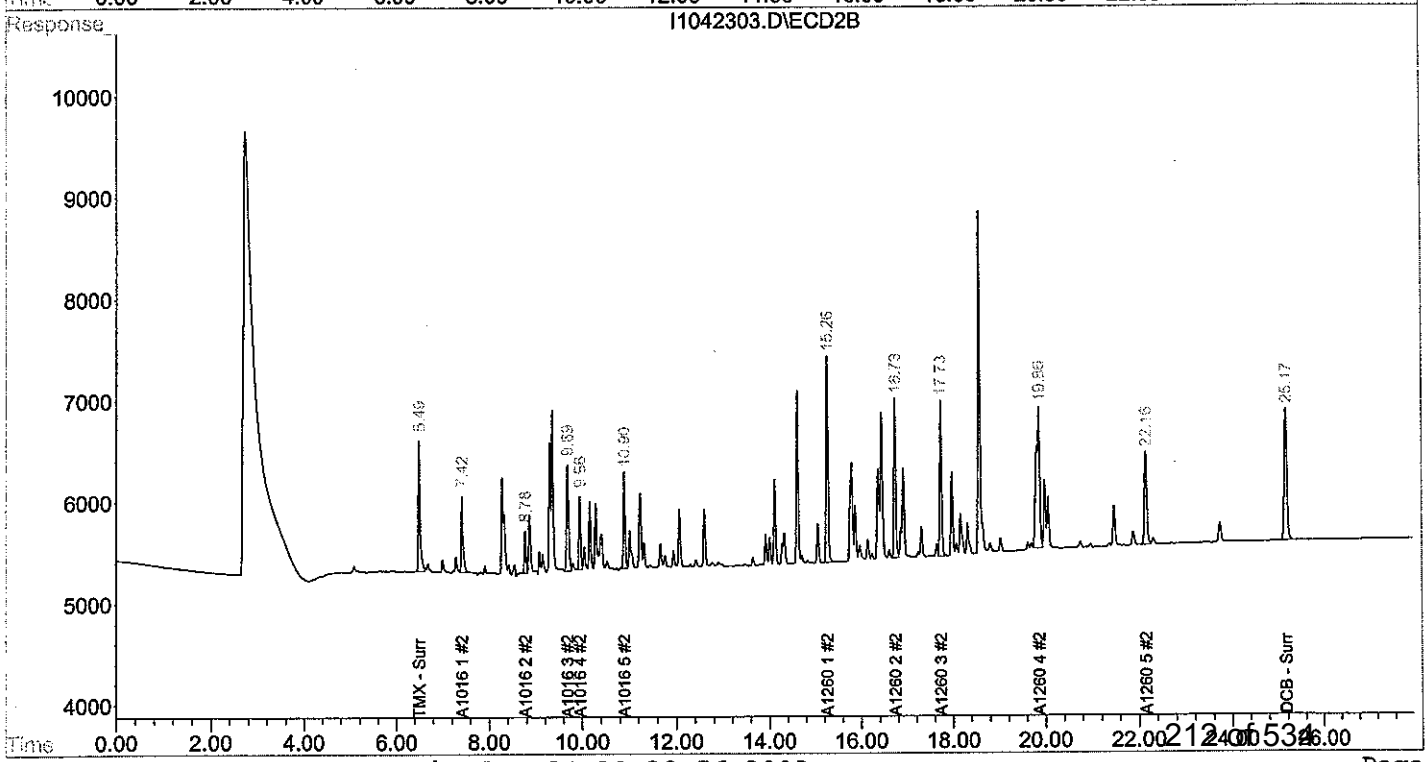
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042303.D\ECD2B.CH
Acq On : 23 Apr 2008 5:01 pm Operator:
Sample : I1042303 Inst : HP ECD2
Misc : PW120407C 50PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD2B.CH
Acq On : 23 Apr 2008 5:32 pm Operator:
Sample : I1042304 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:14 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	73464	64497	4.314	4.454m
Spiked Amount 100.000 Range 30 - 150 Recovery =					4.31%#	4.45%#
12) s DCB - Surrogate	26.29	25.17	129810	105528	3.972	4.194
Spiked Amount 100.000 Range 30 - 150 Recovery =					3.97%#	4.19%#
Target Compounds						
2) L1 A1016 1	7.95	7.42	47008	38856	114.724	117.647m(C)
3) L1 A1016 2	9.31	8.78	59166	19942	118.846m	115.865m
4) L1 A1016 3	10.18	9.69	77754	61280	104.723	116.879m
5) L1 A1016 4	10.75	9.96	47192	34924	115.274m	113.748m
6) L1 A1016 5	11.36	10.90	54734	46172	109.839	113.649m
Sum A1016 1			285855	201174	563.406	577.787
Average A1016 1					112.681	115.557
7) L7 A1260 1	17.39	15.26	105800	106724	101.747	110.218m(C)
8) L7 A1260 2	18.24	16.73	98551	84732	107.399	106.590
9) L7 A1260 3	20.23	17.74	117208	85900	103.674	112.177
10) L7 A1260 4	20.71	19.86	75892	145530	102.148	109.154m
11) L7 A1260 5	22.74	22.16	72990	62351	103.392	111.209
Sum A1260 1			470442	485237	518.360	549.348
Average A1260 1					103.672	109.870
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

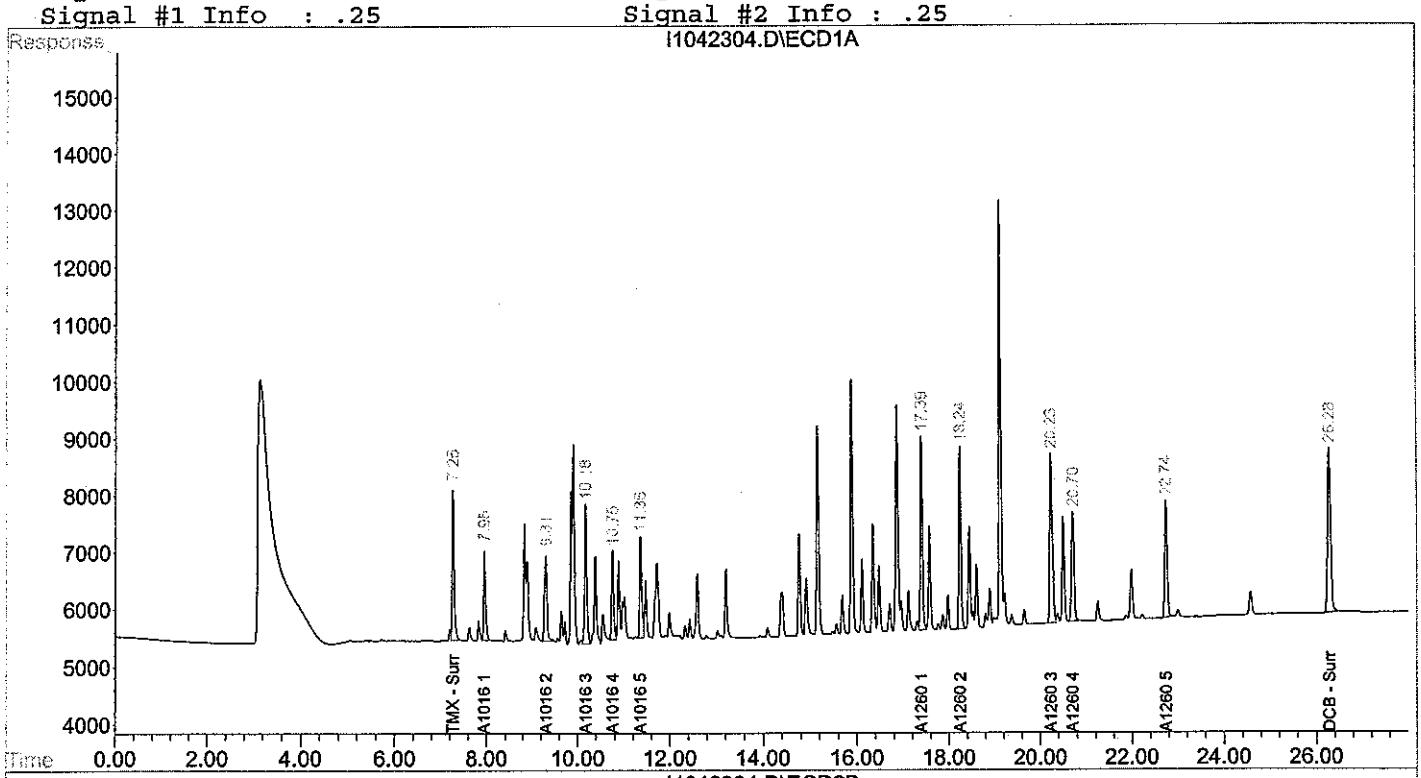
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

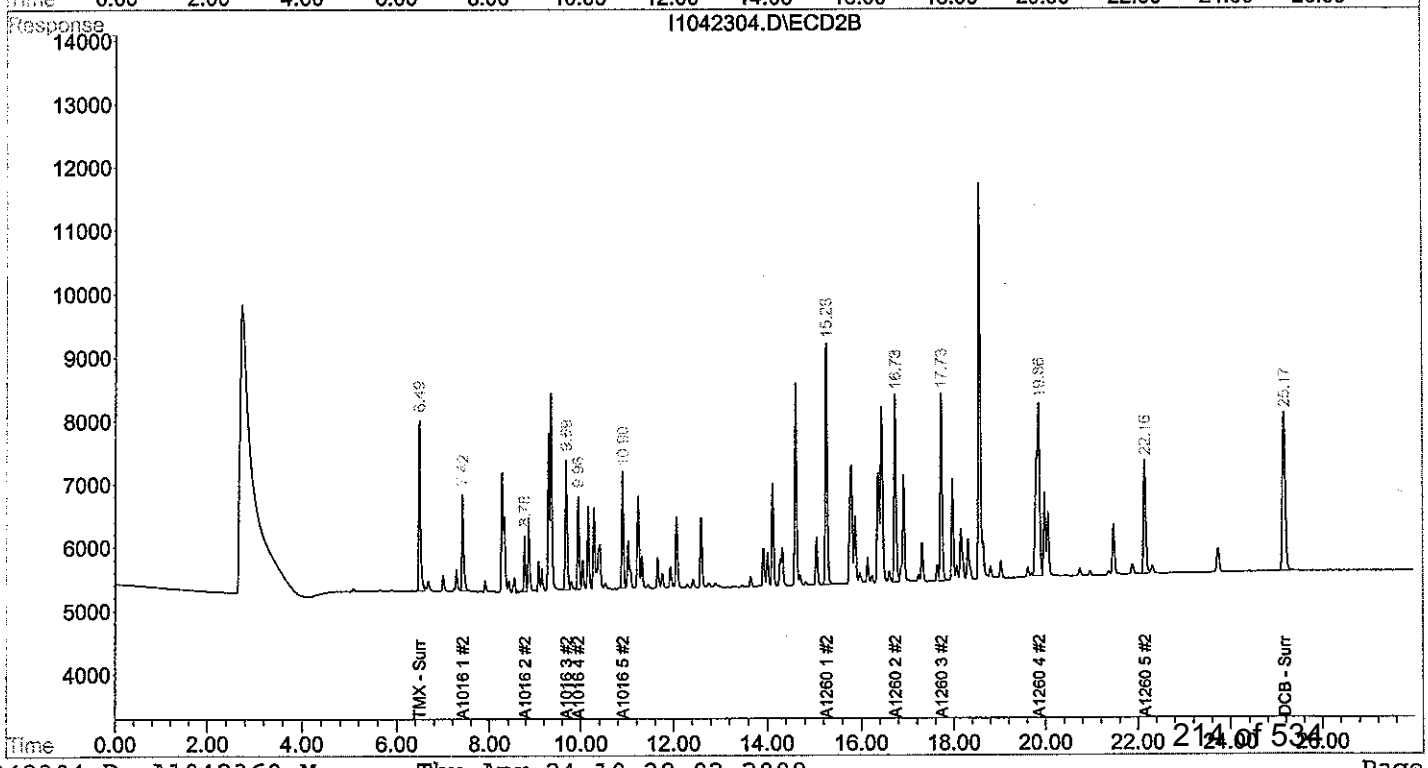
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042304.D\ECD2B.CH
Acq On : 23 Apr 2008 5:32 pm Operator:
Sample : I1042304 Inst : HP ECD2
Misc : PW120407D 100PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:14 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J3S 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD2B.CH
Acq On : 23 Apr 2008 6:03 pm Operator:
Sample : I1042305 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	165810	139650	9.938	10.601
Spiked Amount 100.000 Range 30 - 150 Recovery =					9.94%#	10.60%#
12) s DCB - Surrogate	26.30	25.18	289314	222627	9.850	10.443
Spiked Amount 100.000 Range 30 - 150 Recovery =					9.85%#	10.44%#
Target Compounds						
2) L1 A1016 1	7.96	7.42	101546	81320	254.609	260.699m(C)
3) L1 A1016 2	9.31	8.78	127008	44178	258.279m	261.328
4) L1 A1016 3	10.18	9.69	157369	127584	237.226	258.997m
5) L1 A1016 4	10.75	9.96	99290	75388	258.721	254.499m
6) L1 A1016 5	11.36	10.90	119034	97528	248.802	260.252m
Sum A1016 1			604247	425998	1257.638	1295.774
Average A1016 1					251.528	259.155
7) L7 A1260 1	17.40	15.26	224584	217288	229.377	247.152m(C)
8) L7 A1260 2	18.25	16.74	212854	175456	237.619	236.857
9) L7 A1260 3	20.24	17.74	261332	177808	225.750	248.583
10) L7 A1260 4	20.71	19.87	170397	311038	221.844	239.208
11) L7 A1260 5	22.75	22.16	167397	134025	223.630	239.748
Sum A1260 1			1036564	1015616	1138.220	1211.548
Average A1260 1					227.644	242.310
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

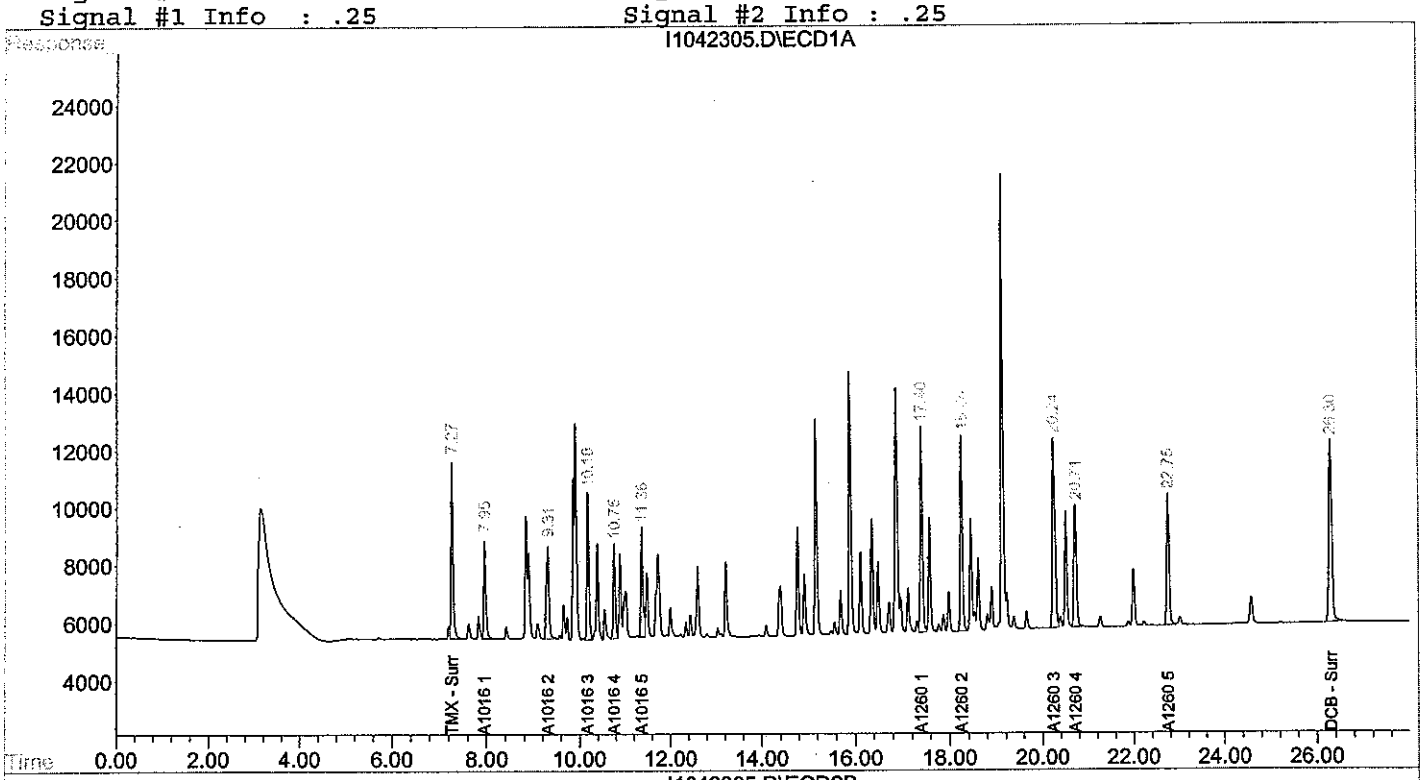
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

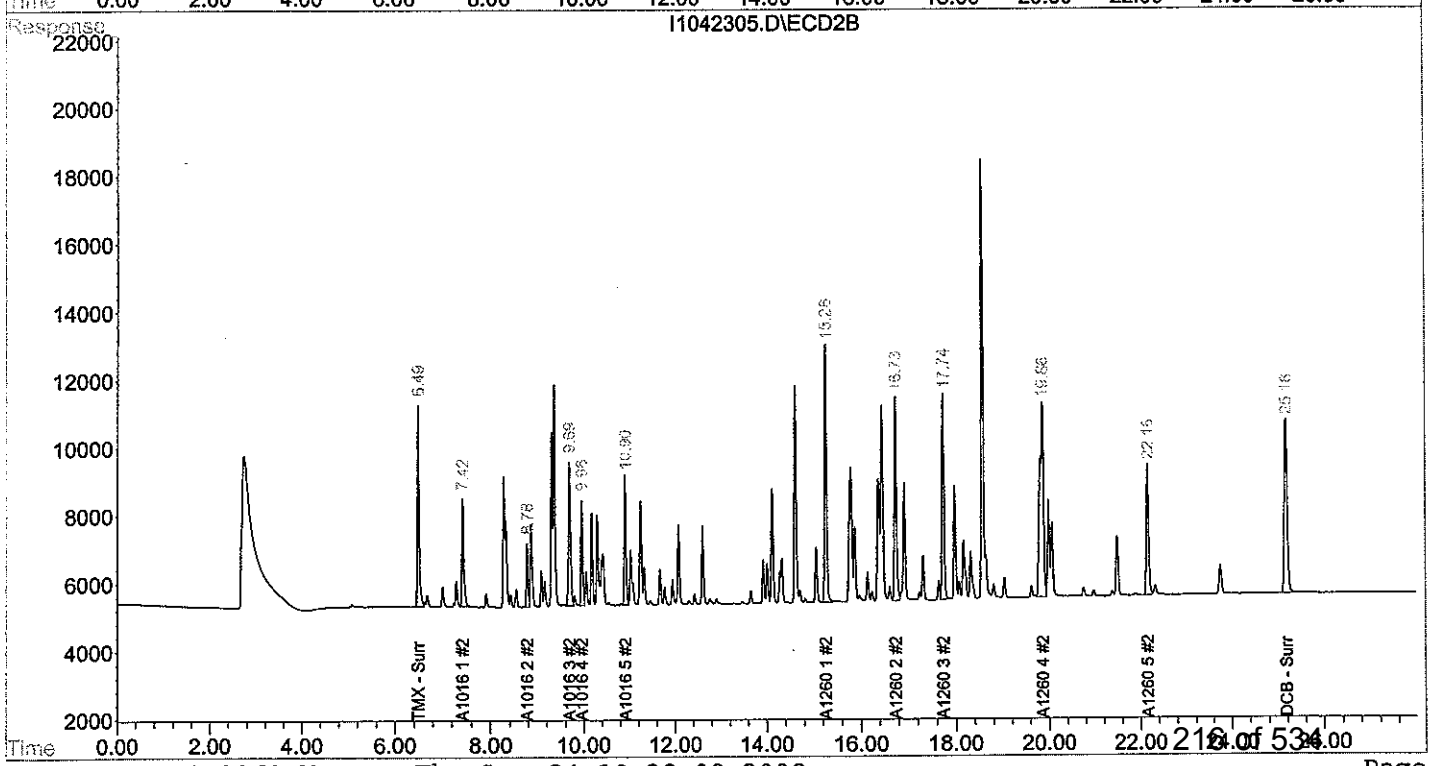
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042305.D\ECD2B.CH
Acq On : 23 Apr 2008 6:03 pm Operator:
Sample : I1042305 Inst : HP ECD2
Misc : PW120407E 250PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:12 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JJS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD2B.CH
Acq On : 23 Apr 2008 6:35 pm Operator:
Sample : I1042306 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	324833	262036	19.795	20.818
Spiked Amount 100.000 Range 30 - 150 Recovery =					19.80%#	20.82%#
12) s DCB - Surrogate	26.30	25.18	551189	407037	19.744	20.550
Spiked Amount 100.000 Range 30 - 150 Recovery =					19.74%#	20.55%#
Target Compounds						
2) L1 A1016 1	7.96	7.42	188675	147512	491.553	497.947m(C)
3) L1 A1016 2	9.31	8.78	218396	71436	455.566m	432.642m
4) L1 A1016 3	10.18	9.70	290580	229486	471.738	490.188m
5) L1 A1016 4	10.75	9.96	185250	138190	511.130m	483.872m
6) L1 A1016 5	11.36	10.90	221808	173208	482.884m	489.466m
Sum A1016 1			1104709	759832	2412.871	2394.113
Average A1016 1					482.574	478.823
7) L7 A1260 1	17.40	15.26	407783	385445	436.734	468.612 (C)
8) L7 A1260 2	18.25	16.74	395535	307536	457.123	437.938m
9) L7 A1260 3	20.24	17.74	498249	320720	435.800	472.845
10) L7 A1260 4	20.72	19.87	324563	566701	425.764	450.782
11) L7 A1260 5	22.76	22.16	321435	247702	428.617	454.364
Sum A1260 1			1947565	1828103	2184.038	2284.541
Average A1260 1					436.808	456.908
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

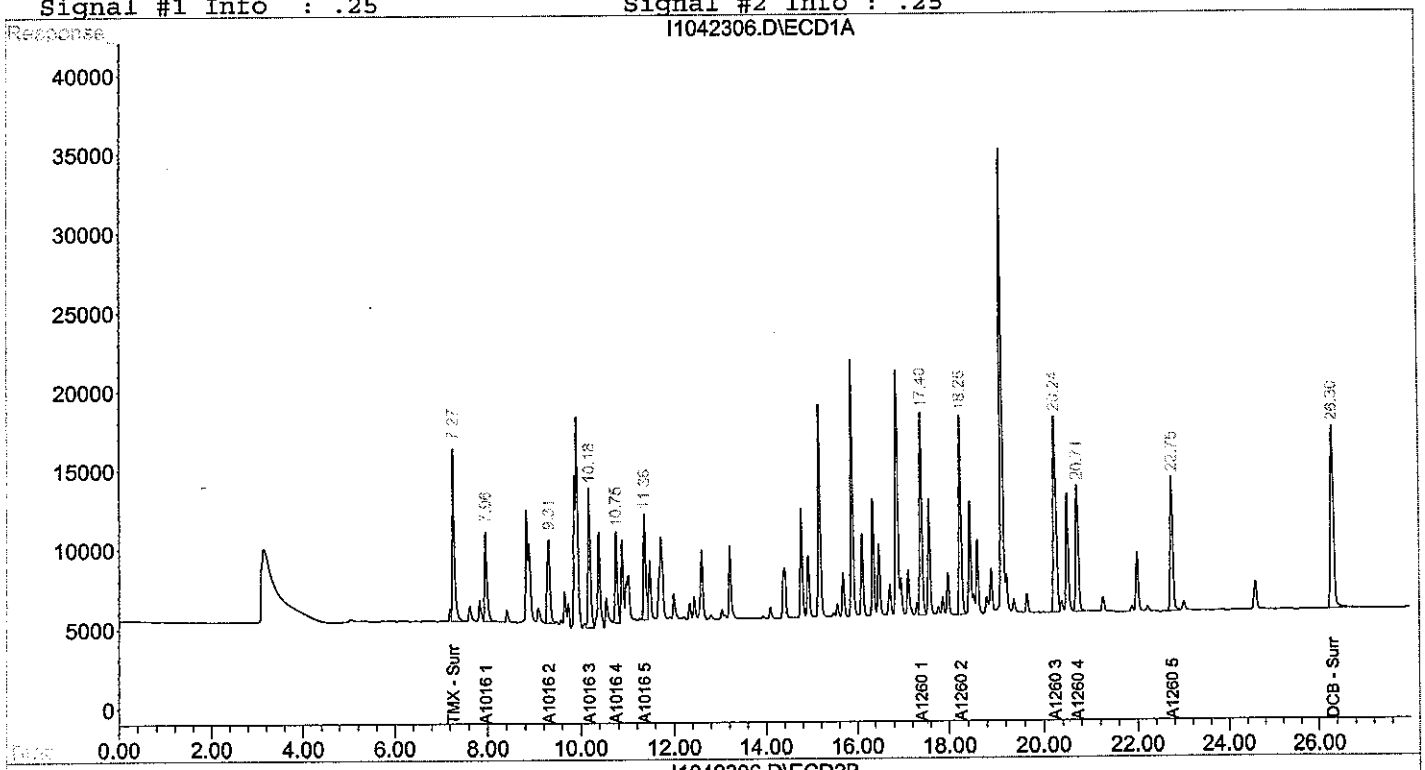
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

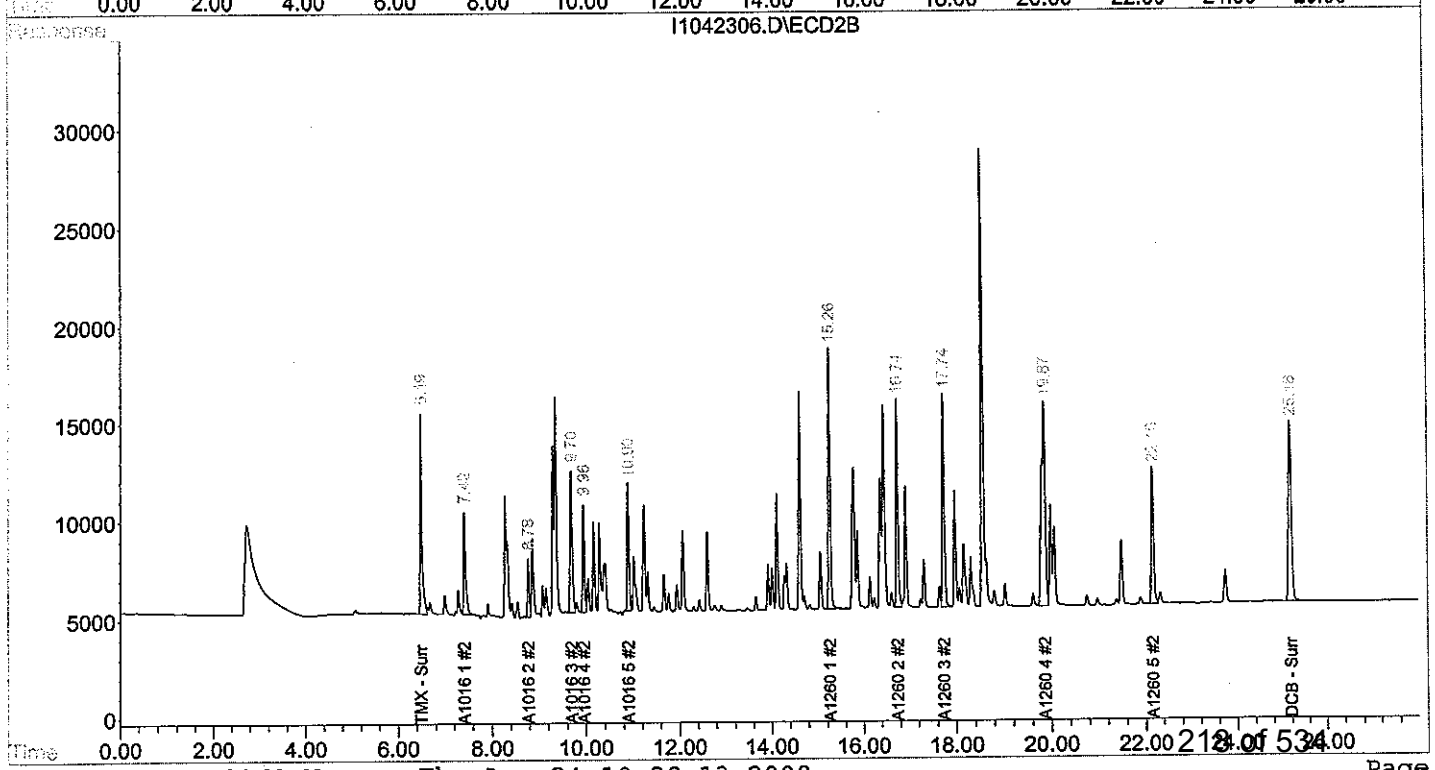
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042306.D\ECD2B.CH
Acq On : 23 Apr 2008 6:35 pm Operator:
Sample : I1042306 Inst : HP ECD2
Misc : PW120407F 500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD2B.CH
Acq On : 23 Apr 2008 7:06 pm Operator:
Sample : I1042307 Inst : HP ECD2
Misc : PW030508A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
System Monitoring Compounds							
1) s TMX - Surrogate	7.27	6.49	652361	507628	40.841	42.170	
Spiked Amount 100.000 Range 30 - 150 Recovery =					40.84%	42.17%	
12) s DCB - Surrogate	26.30	25.18	1056003	753303	39.771	40.523	
Spiked Amount 100.000 Range 30 - 150 Recovery =					39.77%	40.52%	
Target Compounds							
2) L1 A1016 1	7.96	7.42	343848	272508	967.860	1010.621	(C)
3) L1 A1016 2	9.31	8.78	456437	157972	1037.201	1048.668	
4) L1 A1016 3	10.18	9.70	536257	423158	959.739	986.042	
5) L1 A1016 4	10.75	9.96	315544	263108	943.390	990.473m	
6) L1 A1016 5	11.37	10.91	415471	321801	975.741	1000.999	
Sum A1016 1			2067557	1438547	4883.930	5036.803	
Average A1016 1					976.786	1007.361	
7) L7 A1260 1	17.40	15.26	750376	692547	868.503	928.458	(C)
8) L7 A1260 2	18.25	16.74	746730	565602	930.387	883.174	
9) L7 A1260 3	20.24	17.74	975159	593404	903.182	954.871	
10) L7 A1260 4	20.72	19.87	653343	1070452	905.613	916.789	
11) L7 A1260 5	22.76	22.16	634524	470822	887.235	925.206	
Sum A1260 1			3760131	3392827	4494.920	4608.497	
Average A1260 1					898.984	921.699	
Sum A1221 1			0	0	N.D.	N.D.	
Average A1221 1					0.000	0.000	
Sum A1232 1			0	0	N.D.	N.D.	
Average A1232 1					0.000	0.000	
Sum A1242 1			0	0	N.D.	N.D.	
Average A1242 1					0.000	0.000	
Sum A1248 1			0	0	N.D.	N.D.	
Average A1248 1					0.000	0.000	
Sum A1254 1			0	0	N.D.	N.D.	
Average A1254 1					0.000	0.000	
Sum A1262 1			0	0	N.D.	N.D.	
Average A1262 1					0.000	0.000	
Sum A1268 1			0	0	N.D.	N.D.	
Average A1268 1					0.000	0.000	

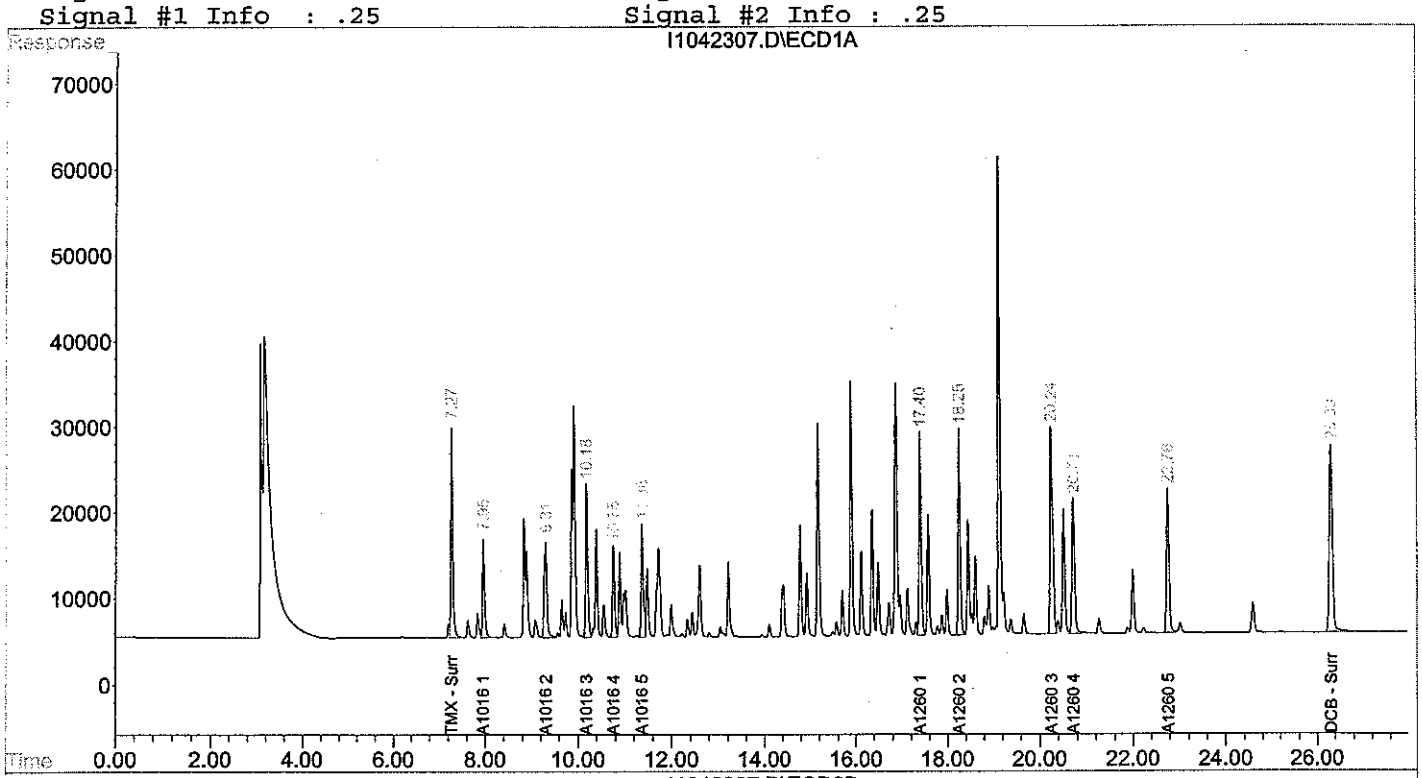
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

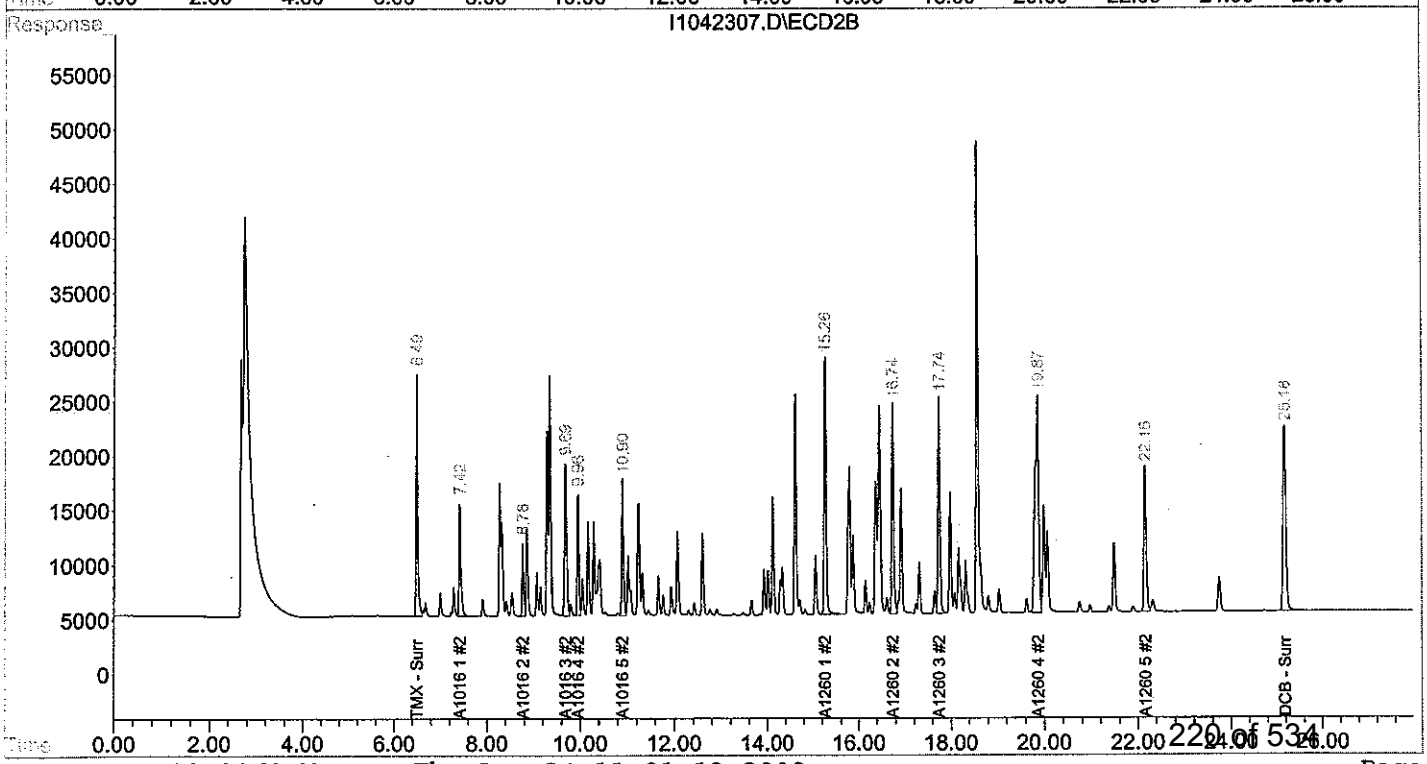
Quantitation Report

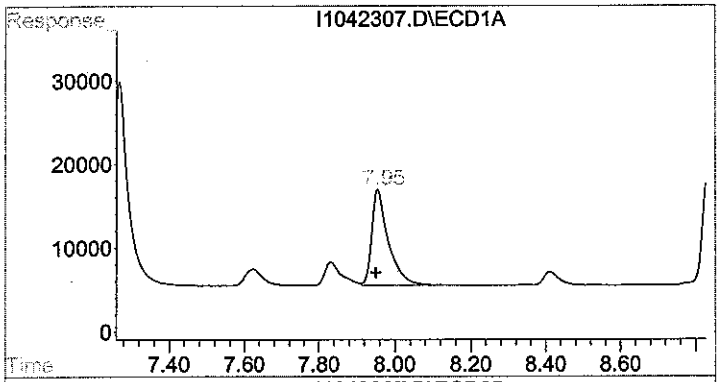
Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD1A.CH Vial: 12
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042307.D\ECD2B.CH
Acq On : 23 Apr 2008 7:06 pm Operator:
Sample : I1042307 Inst : HP ECD2
Misc : PW030508A 1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:03 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

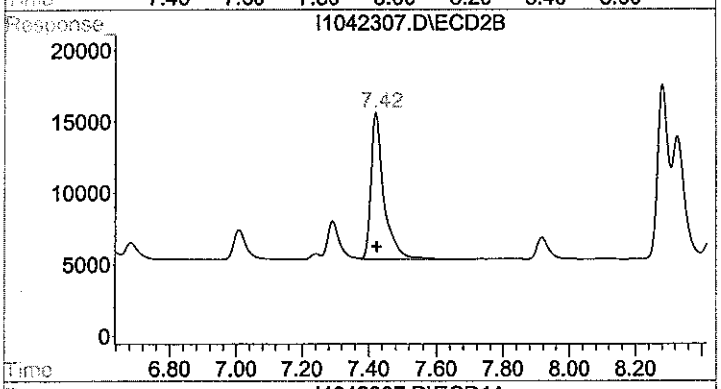






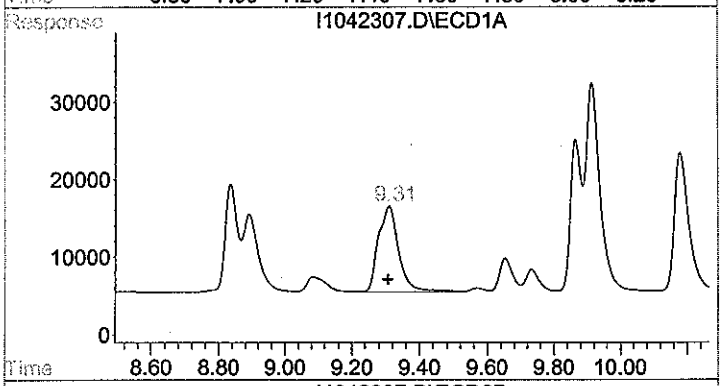
#2 A1016 1

R.T.: 7.958 min
Delta R.T.: 0.008 min
Response: 343848
Conc: 967.86 ug/L



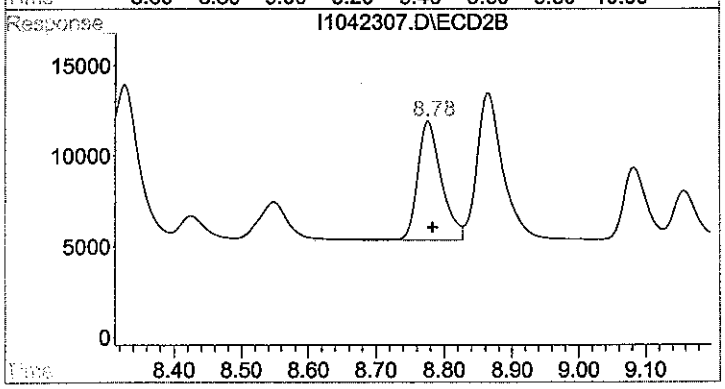
#2 A1016 1

R.T.: 7.421 min
Delta R.T.: -0.002 min
Response: 272508
Conc: 1010.62 ug/L



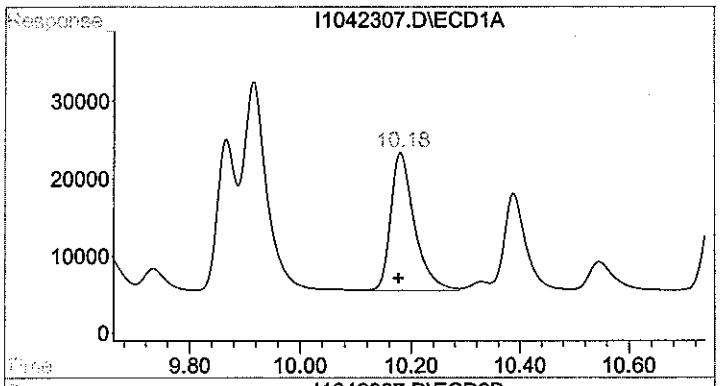
#3 A1016 2

R.T.: 9.310 min
Delta R.T.: 0.003 min
Response: 456437
Conc: 1037.20 ug/L



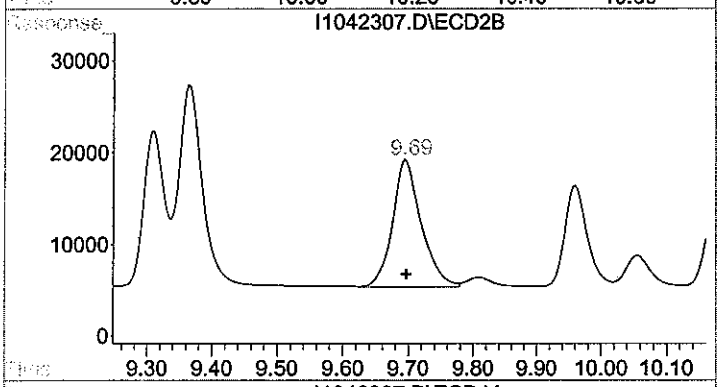
#3 A1016 2

R.T.: 8.778 min
Delta R.T.: -0.005 min
Response: 157972
Conc: 1048.67 ug/L



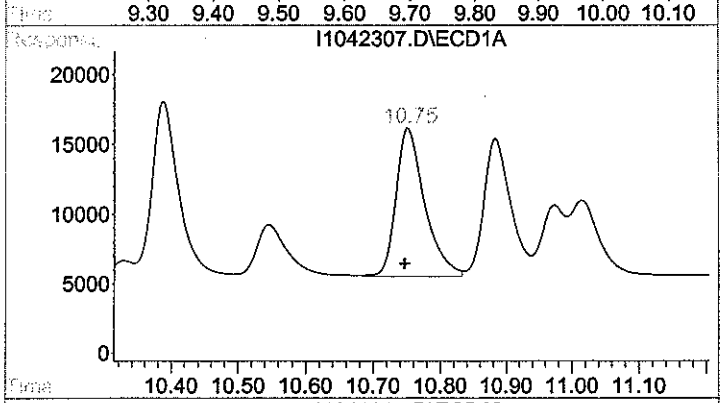
#4 A1016 3

R.T.: 10.183 min
Delta R.T.: 0.006 min
Response: 536257
Conc: 959.74 ug/L



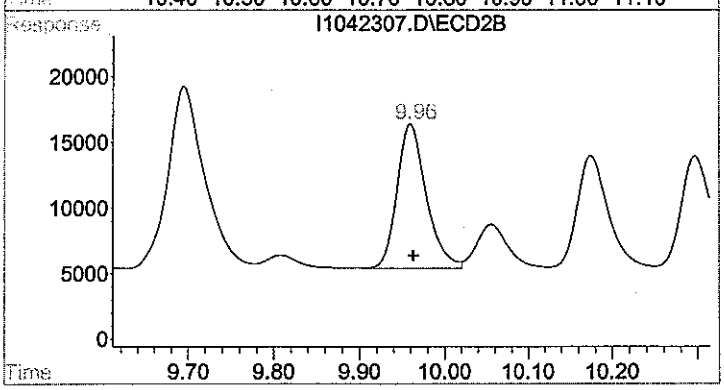
#4 A1016 3

R.T.: 9.696 min
Delta R.T.: 0.000 min
Response: 423158
Conc: 986.04 ug/L



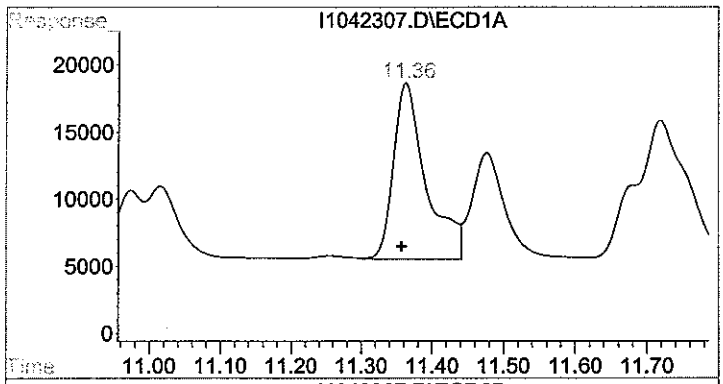
#5 A1016 4

R.T.: 10.754 min
Delta R.T.: 0.007 min
Response: 315544
Conc: 943.39 ug/L



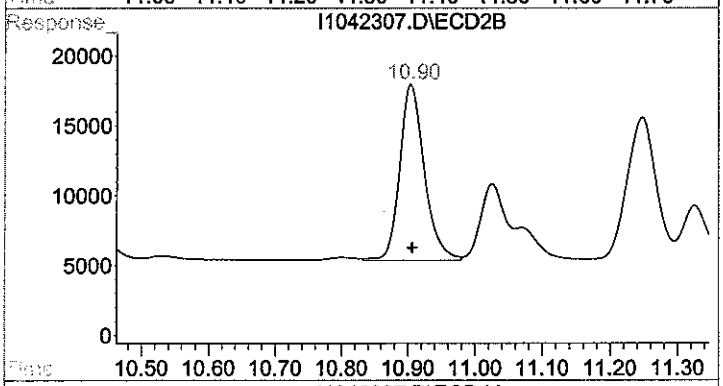
#5 A1016 4

R.T.: 9.960 min
Delta R.T.: -0.003 min
Response: 263108
Conc: 990.47 ug/L m



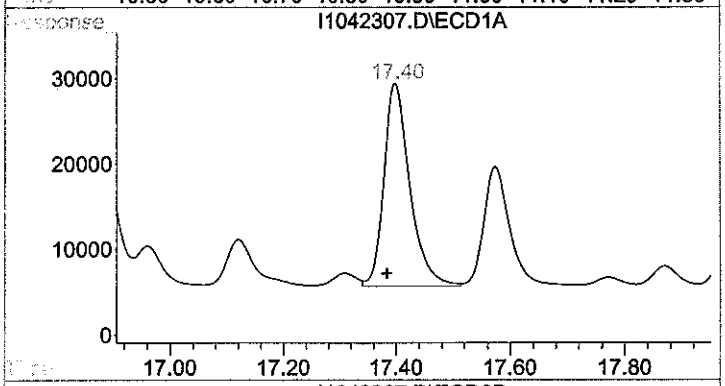
#6 A1016 5

R.T.: 11.365 min
Delta R.T.: 0.008 min
Response: 415471
Conc: 975.74 ug/L



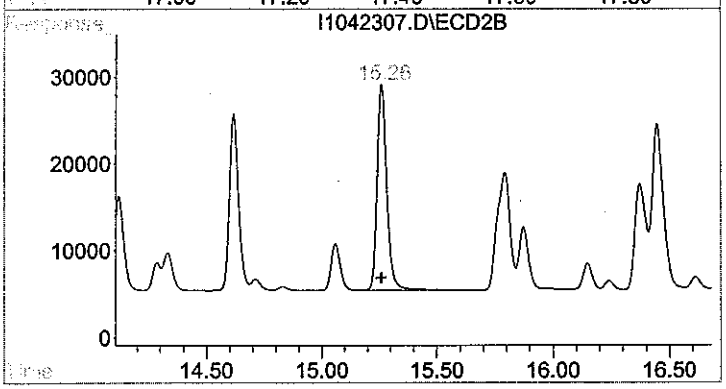
#6 A1016 5

R.T.: 10.905 min
Delta R.T.: -0.001 min
Response: 321801
Conc: 1001.00 ug/L



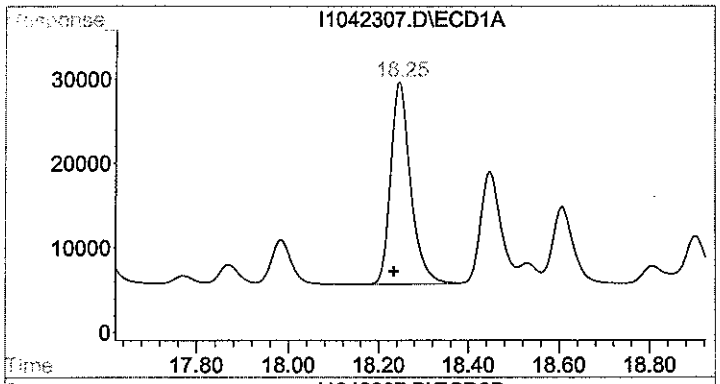
#7 A1260 1

R.T.: 17.400 min
Delta R.T.: 0.017 min
Response: 750376
Conc: 868.50 ug/L



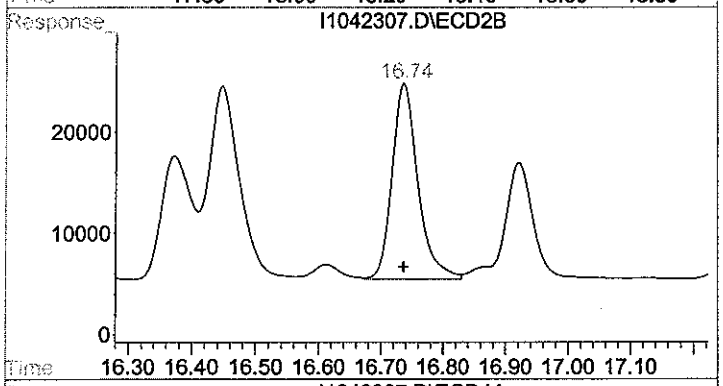
#7 A1260 1

R.T.: 15.263 min
Delta R.T.: 0.003 min
Response: 692547
Conc: 928.46 ug/L



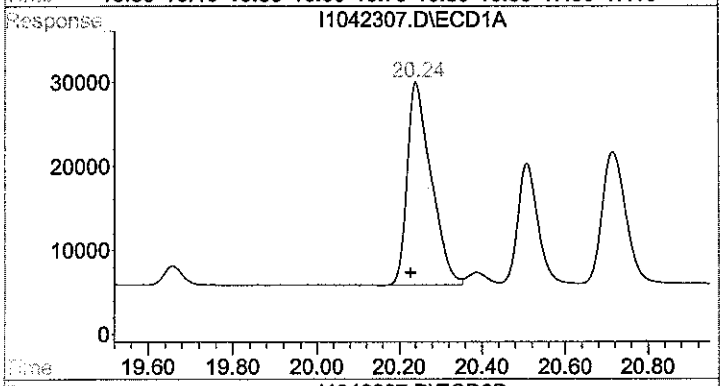
#8 A1260 2

R.T.: 18.248 min
Delta R.T.: 0.014 min
Response: 746730
Conc: 930.39 ug/L



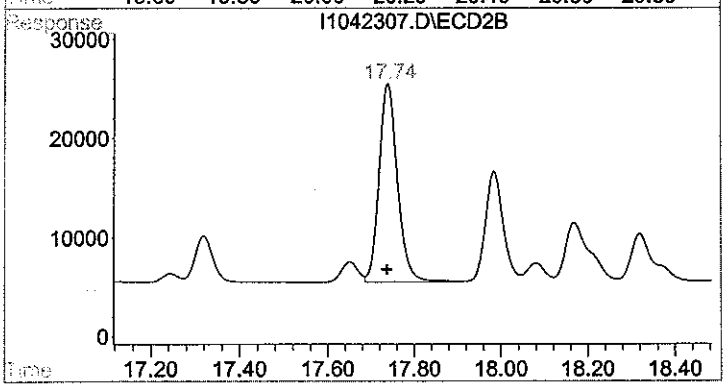
#8 A1260 2

R.T.: 16.738 min
Delta R.T.: 0.002 min
Response: 565602
Conc: 883.17 ug/L



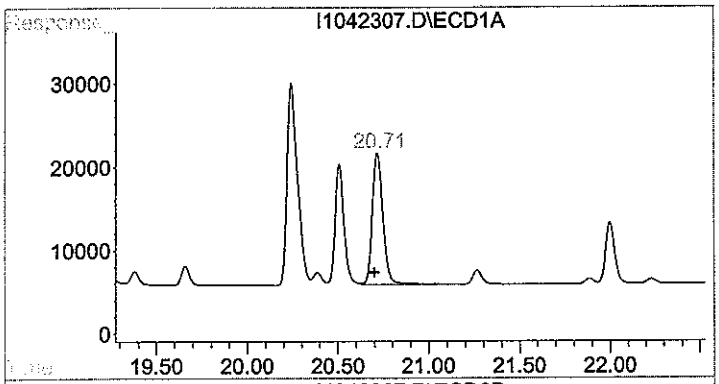
#9 A1260 3

R.T.: 20.244 min
Delta R.T.: 0.017 min
Response: 975159
Conc: 903.18 ug/L



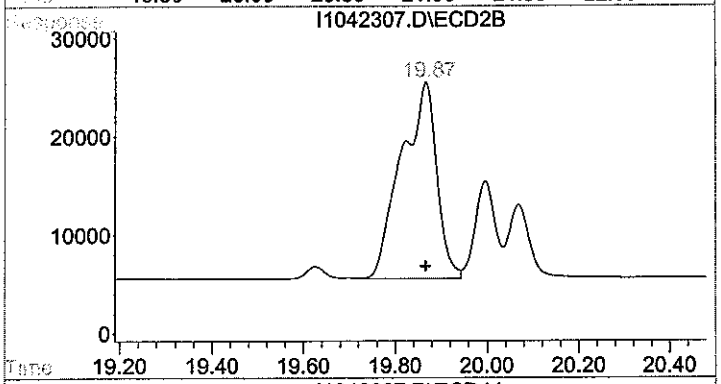
#9 A1260 3

R.T.: 17.740 min
Delta R.T.: 0.003 min
Response: 593404
Conc: 954.87 ug/L



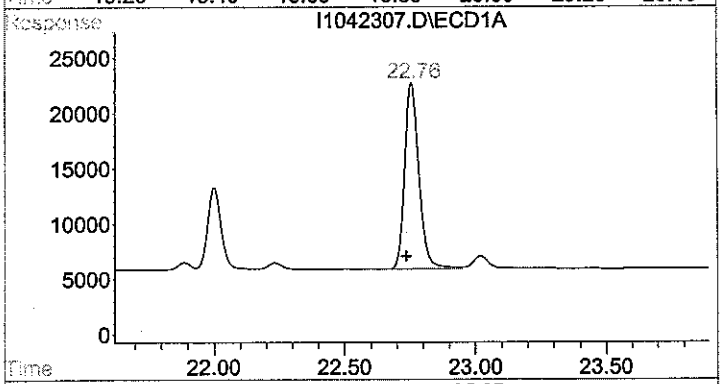
#10 A1260 4

R.T.: 20.717 min
Delta R.T.: 0.017 min
Response: 653343
Conc: 905.61 ug/L



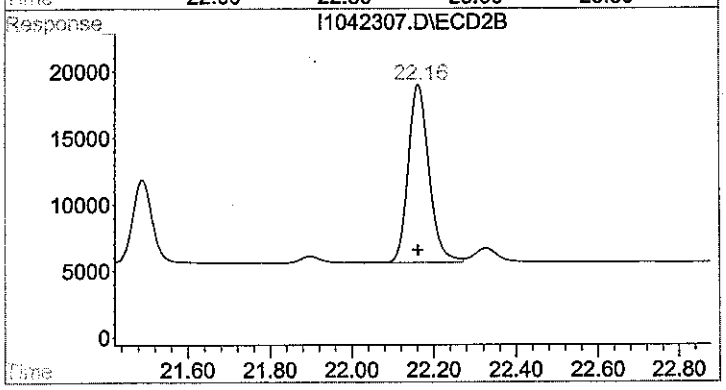
#10 A1260 4

R.T.: 19.868 min
Delta R.T.: 0.002 min
Response: 1070452
Conc: 916.79 ug/L



#11 A1260 5

R.T.: 22.758 min
Delta R.T.: 0.022 min
Response: 634524
Conc: 887.23 ug/L



#11 A1260 5

R.T.: 22.164 min
Delta R.T.: 0.003 min
Response: 470822
Conc: 925.21 ug/L

Quantitation Report (QT Reviewed)

JJS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD2B.CH
Acq On : 23 Apr 2008 7:37 pm Operator:
Sample : I1042308 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.50	936928	732101	60.043	62.823
Spiked Amount 100.000 Range 30 - 150 Recovery =					60.04%	62.82%
12) s DCB - Surrogate	26.31	25.19	1445016	1021481	56.205	57.043
Spiked Amount 100.000 Range 30 - 150 Recovery =					56.20%	57.04%
Target Compounds						
2) L1 A1016 1	7.96	7.42	475441	368854	1457.011	1500.220m(C)
3) L1 A1016 2	9.31	8.78	593730	201255	1439.724m	1418.146
4) L1 A1016 3	10.18	9.70	709350	570516	1368.719m	1439.372m
5) L1 A1016 4	10.75	9.96	430464	361792	1402.157m	1459.262m
6) L1 A1016 5	11.36	10.91	572906	430362	1450.572m	1455.777m
Sum A1016 1			2781891	1932779	7118.184	7272.778
Average A1016 1					1423.637	1454.556
7) L7 A1260 1	17.40	15.27	1014481	928320	1258.185	1358.404 (C)
8) L7 A1260 2	18.25	16.74	1022297	752472	1372.790	1272.583m
9) L7 A1260 3	20.24	17.74	1354816	797310	1335.824	1385.755m
10) L7 A1260 4	20.72	19.87	897576	1457877	1317.635m	1340.824
11) L7 A1260 5	22.76	22.17	884072	644891	1309.180	1360.234
Sum A1260 1			5173242	4580870	6593.614	6717.800
Average A1260 1					1318.723	1343.560
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

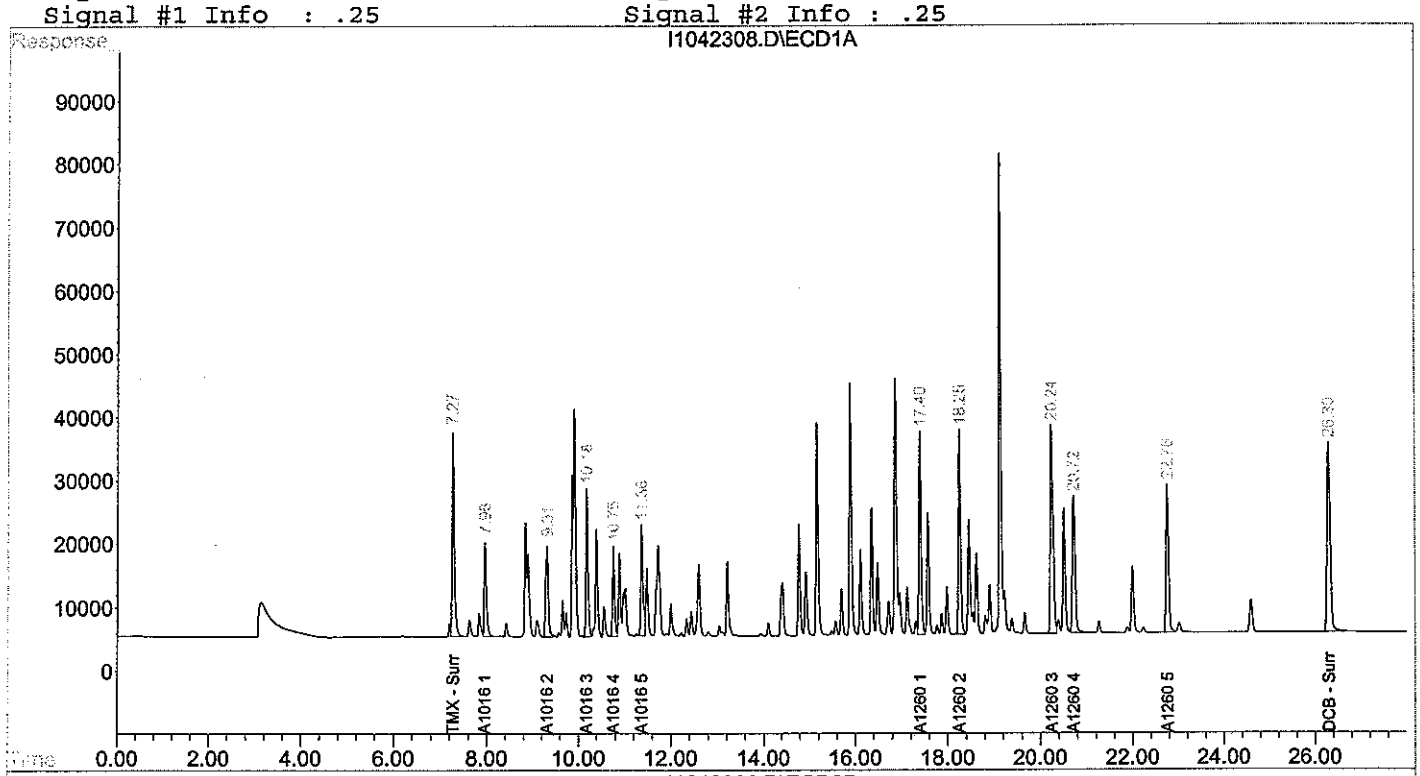
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

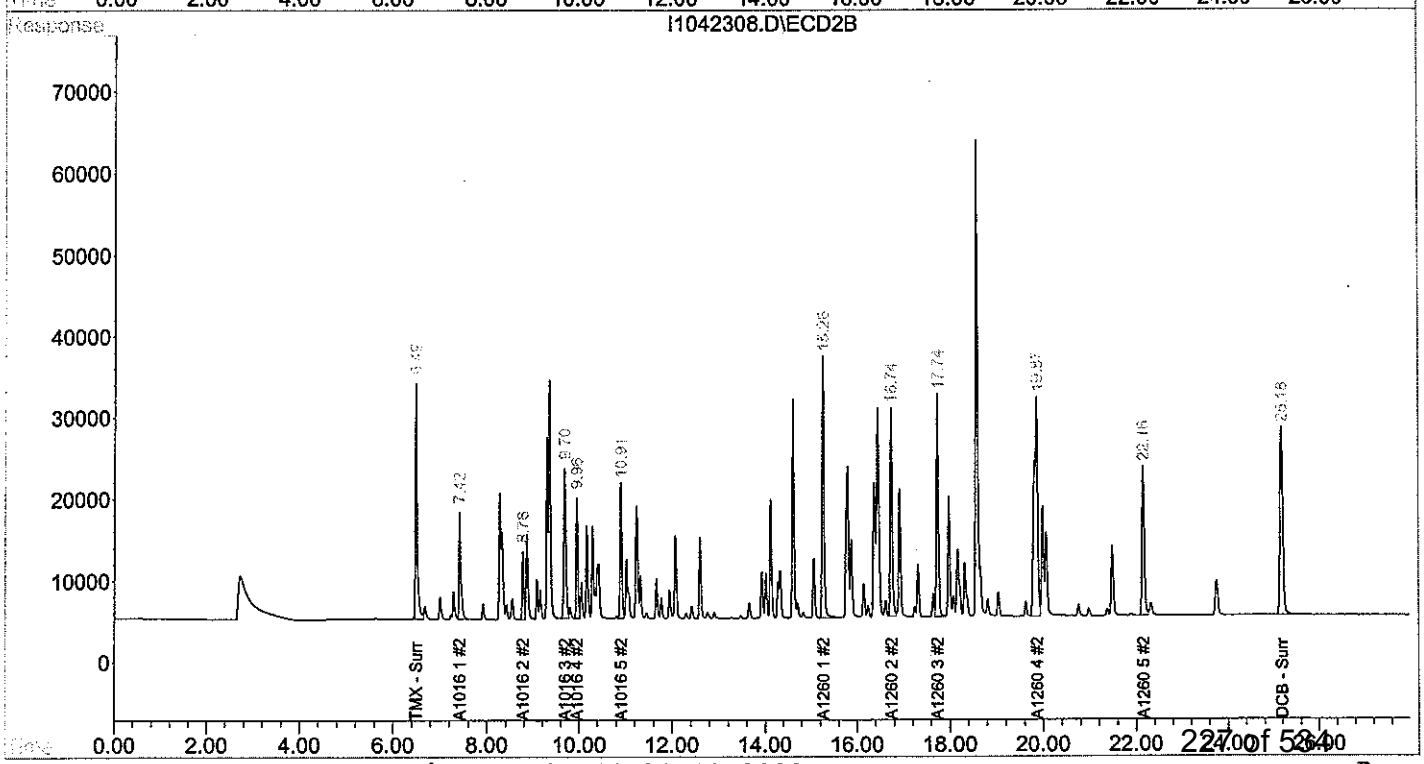
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD1A.CH Vial: 13
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042308.D\ECD2B.CH
Acq On : 23 Apr 2008 7:37 pm Operator:
Sample : I1042308 Inst : HP ECD2
Misc : PW120407G 1500PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:17 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JSS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD2B.CH
Acq On : 23 Apr 2008 8:08 pm Operator:
Sample : I1042309 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	1222726	921893	80.328	81.288
Spiked Amount 100.000 Range 30 - 150 Recovery =					80.33%	81.29%
12) s DCB - Surrogate	26.30	25.19	1863960	1304796	75.091	75.719
Spiked Amount 100.000 Range 30 - 150 Recovery =					75.09%	75.72%
Target Compounds						
2) L1 A1016 1	7.96	7.42	594455	458348	2033.747	2118.201m(C)
3) L1 A1016 2	9.31	8.78	758532	262712	2047.684	2081.071
4) L1 A1016 3	10.18	9.70	920025	727522	2008.112	2066.155m
5) L1 A1016 4	10.75	9.96	546170	468388	2013.235	2086.374m
6) L1 A1016 5	11.36	10.90	727410	544490	2034.992m	2088.192m
Sum A1016 1			3546593	2461460	10137.770	10439.993
Average A1016 1					2027.554	2087.999
7) L7 A1260 1	17.40	15.26	1296066	1164193	1769.374	1927.877 (C)
8) L7 A1260 2	18.25	16.74	1314346	957430	1972.119	1831.777m
9) L7 A1260 3	20.24	17.74	1758638	1008336	1896.830	1952.829m
10) L7 A1260 4	20.72	19.87	1165434	1867822	1859.978m	1903.872
11) L7 A1260 5	22.76	22.17	1145919	829328	1840.730	1941.275
Sum A1260 1			6680402	5827109	9339.031	9557.630
Average A1260 1					1867.806	1911.526
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

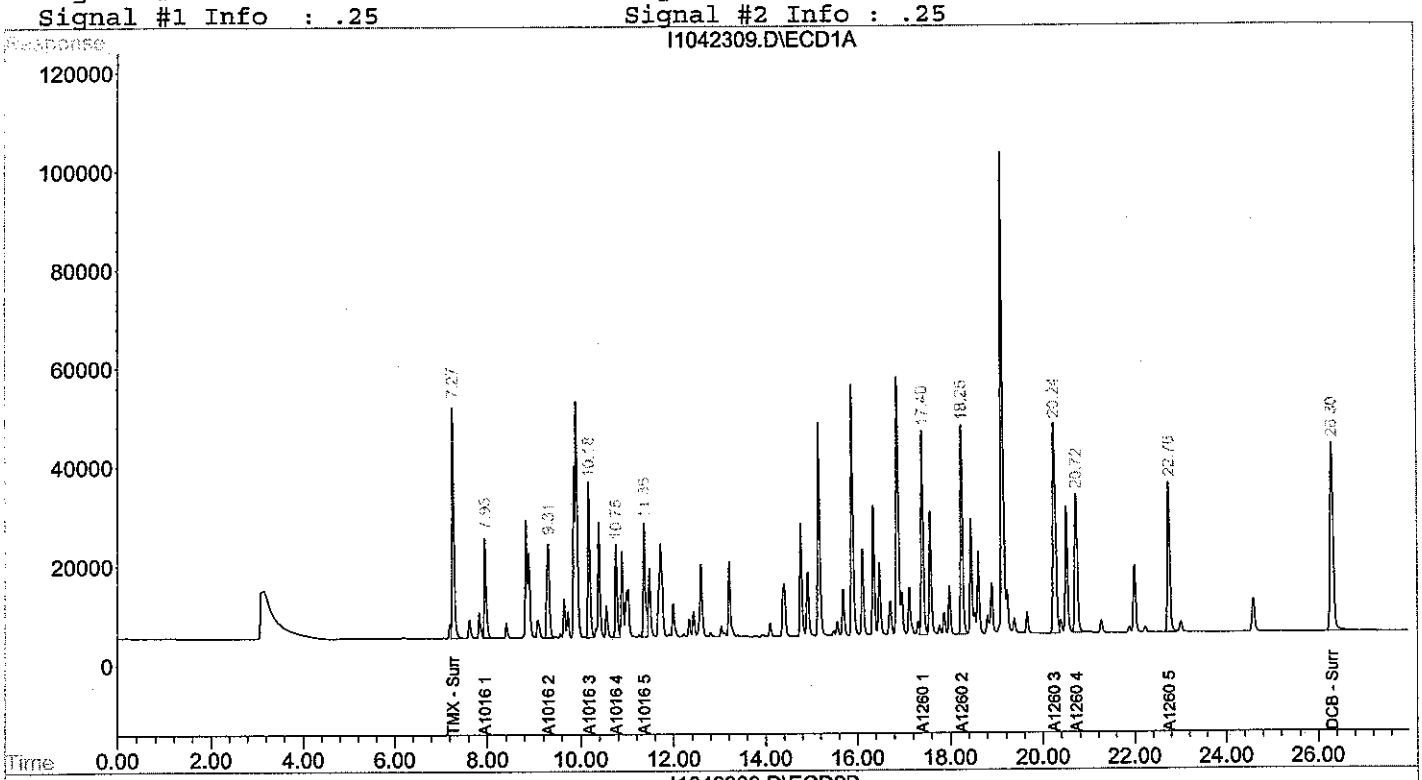
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

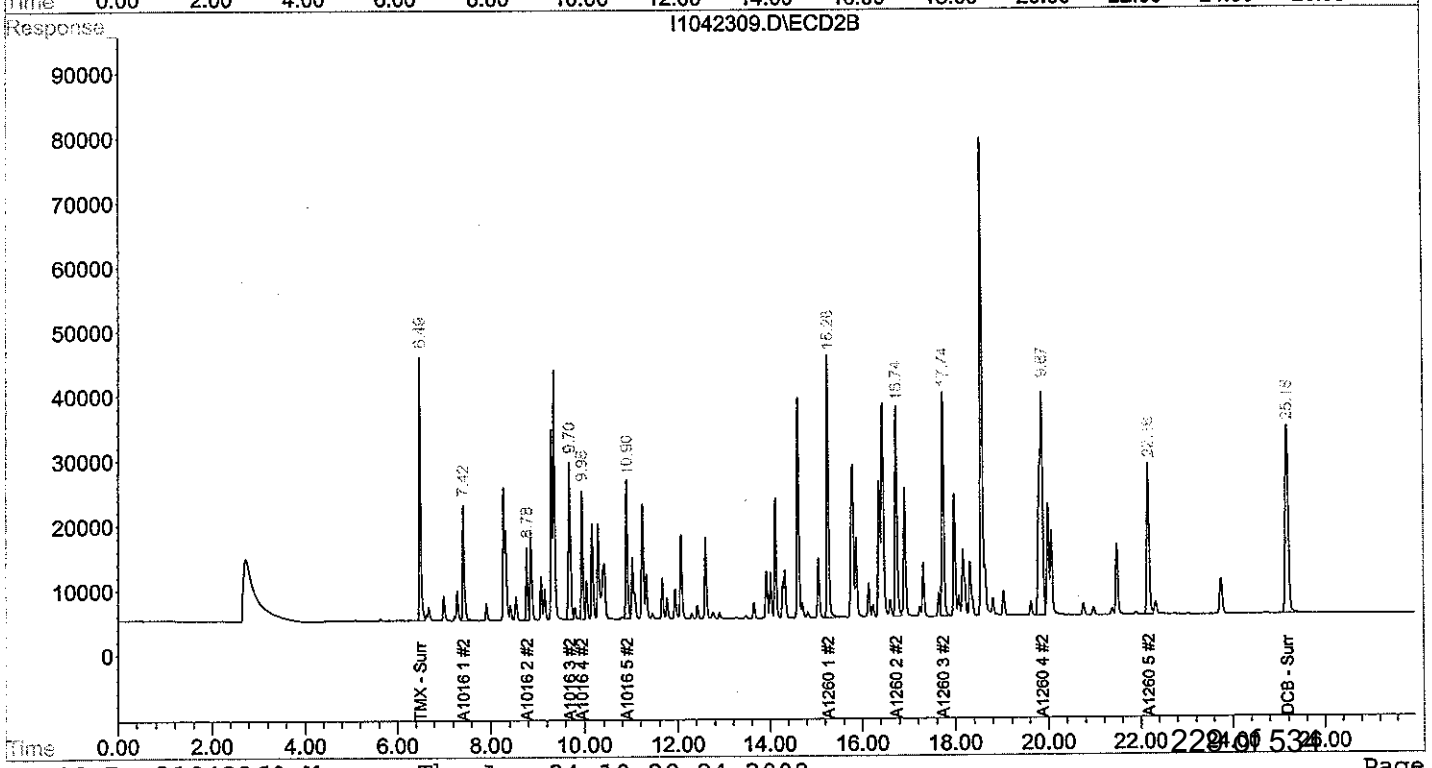
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD1A.CH Vial: 14
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042309.D\ECD2B.CH
Acq On : 23 Apr 2008 8:08 pm Operator:
Sample : I1042309 Inst : HP ECD2
Misc : PW120407H 2000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:18 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/08

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD2B.CH
Acq On : 23 Apr 2008 8:40 pm Operator:
Sample : I1042310 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.27	6.49	2672280	1981452	207.977	213.680
Spiked Amount 100.000 Range 30 - 150 Recovery =					207.98%#	213.68%#
12) s DCB - Surrogate	26.31	25.19	3909484	2704908	202.938	207.544
Spiked Amount 100.000 Range 30 - 150 Recovery =					202.94%#	207.54%#
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

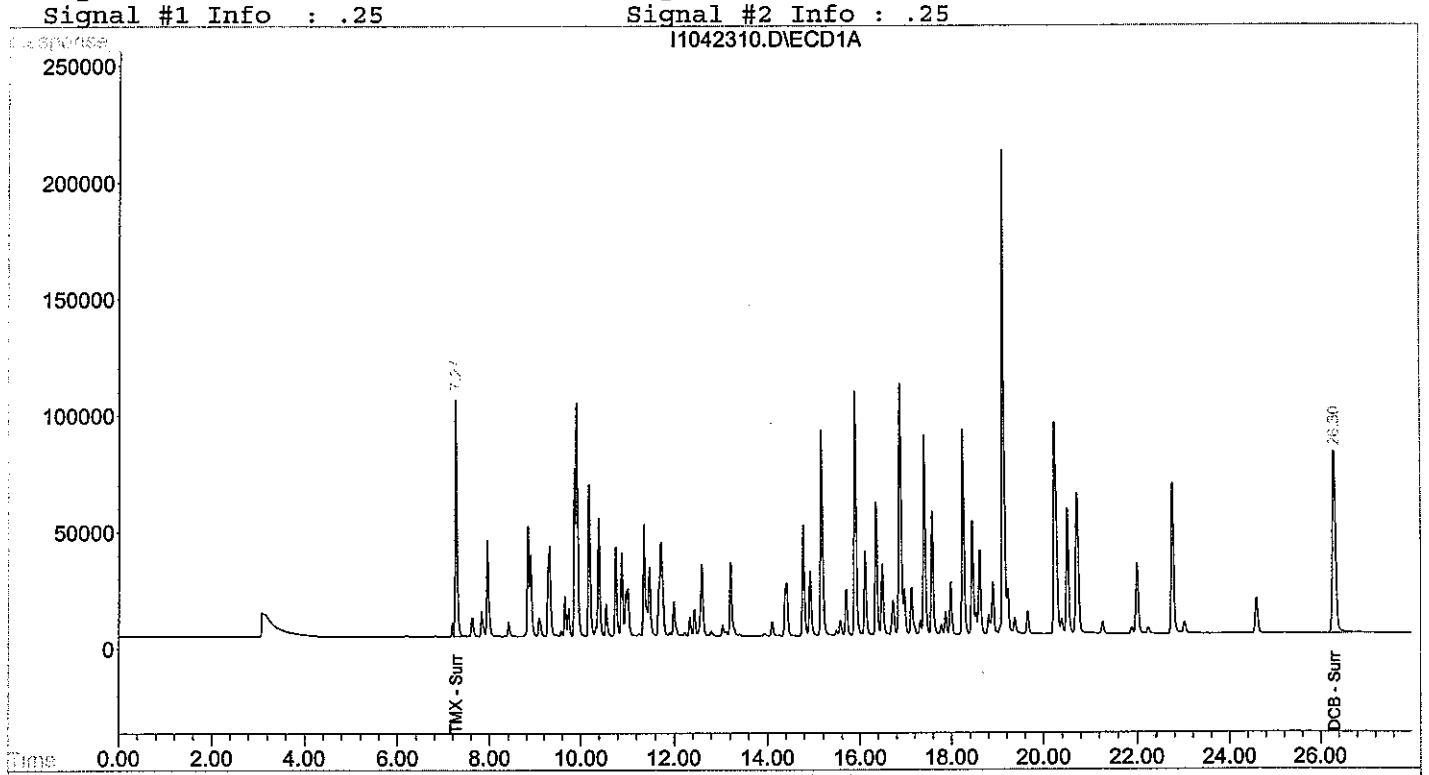
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

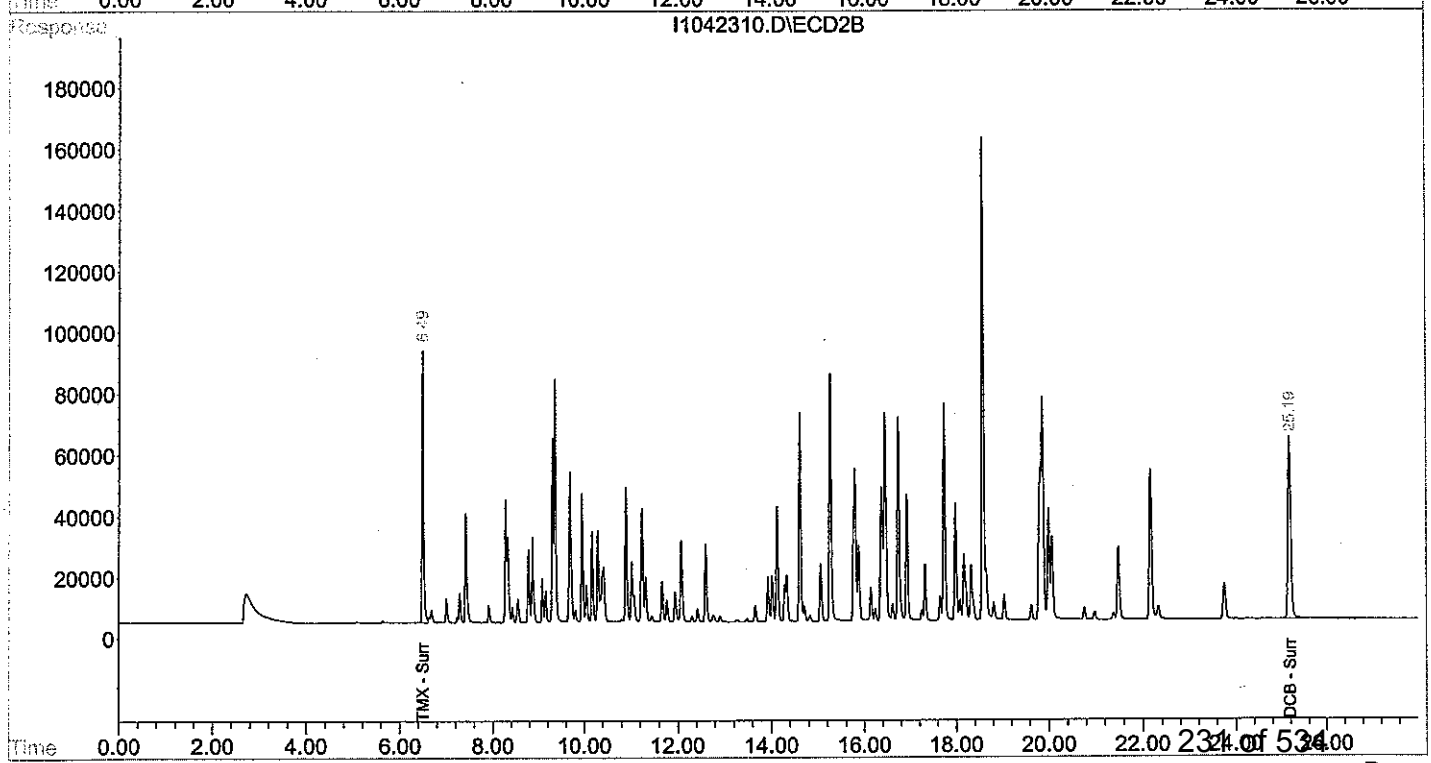
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD1A.CH Vial: 15
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042310.D\ECD2B.CH
Acq On : 23 Apr 2008 8:40 pm Operator:
Sample : I1042310 Inst : HP ECD2
Misc : PW120407I 5000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 8:08 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Fri Apr 04 11:18:28 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD2B.CH
Acq On : 23 Apr 2008 10:46 pm Operator:
Sample : I1042311 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:23 2008 Quant Results File: A1042360.RES

JZS 4/24/8

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
13) L2 A1221 1	6.19	5.64	157378	144484	1258.585	1408.841
14) L2 A1221 2	7.63	7.01	209205	167495	1180.489	1118.554
15) L2 A1221 3	7.83	7.29	157055	128388	364.941	360.252
16) L2 A1221 4	8.91	8.28	95128	54976	1193.602	782.132 #
17) L2 A1221 5	9.92	9.37	62688	50841	850.420 (C)	764.487 (C)
Sum A1221 1			681453	546184	4848.037	4434.266
Average A1221 1					969.607	886.853
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

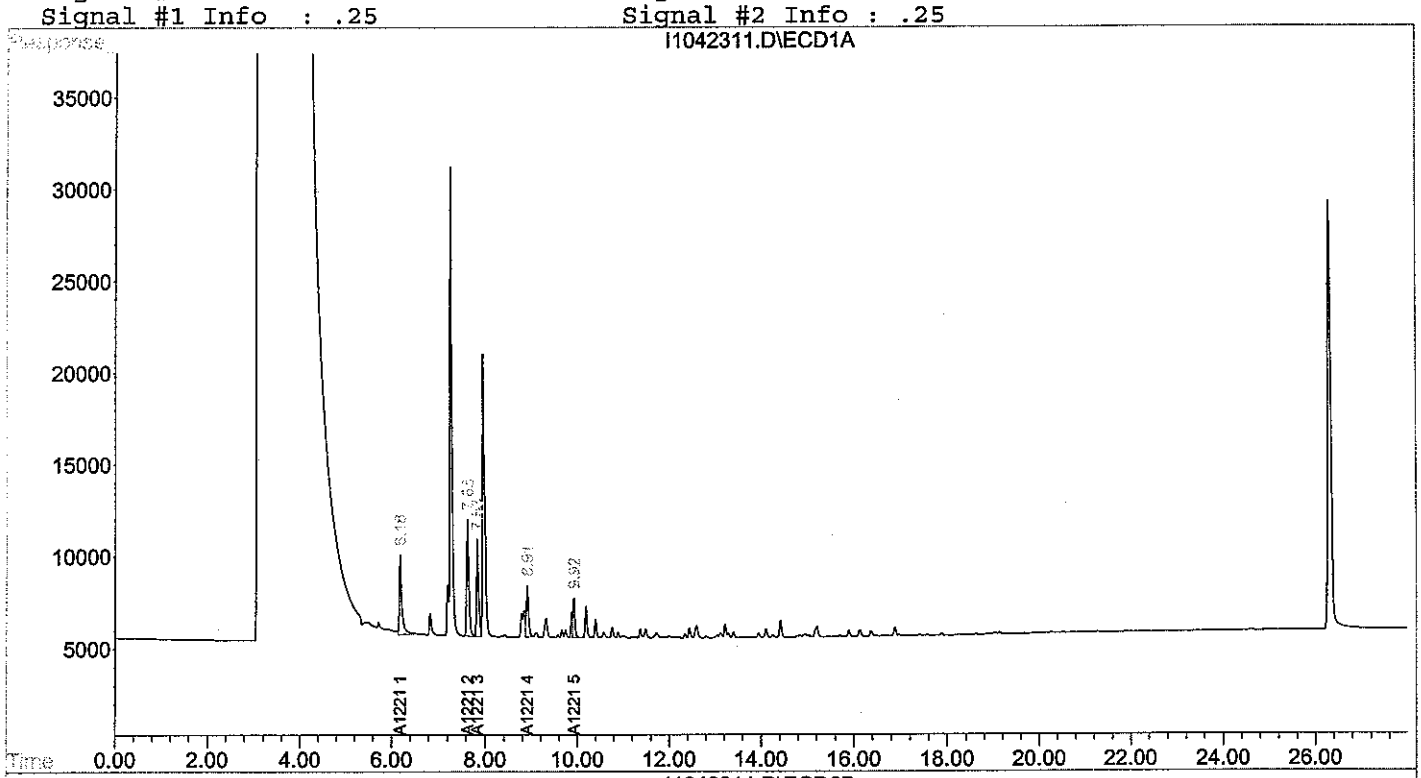
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

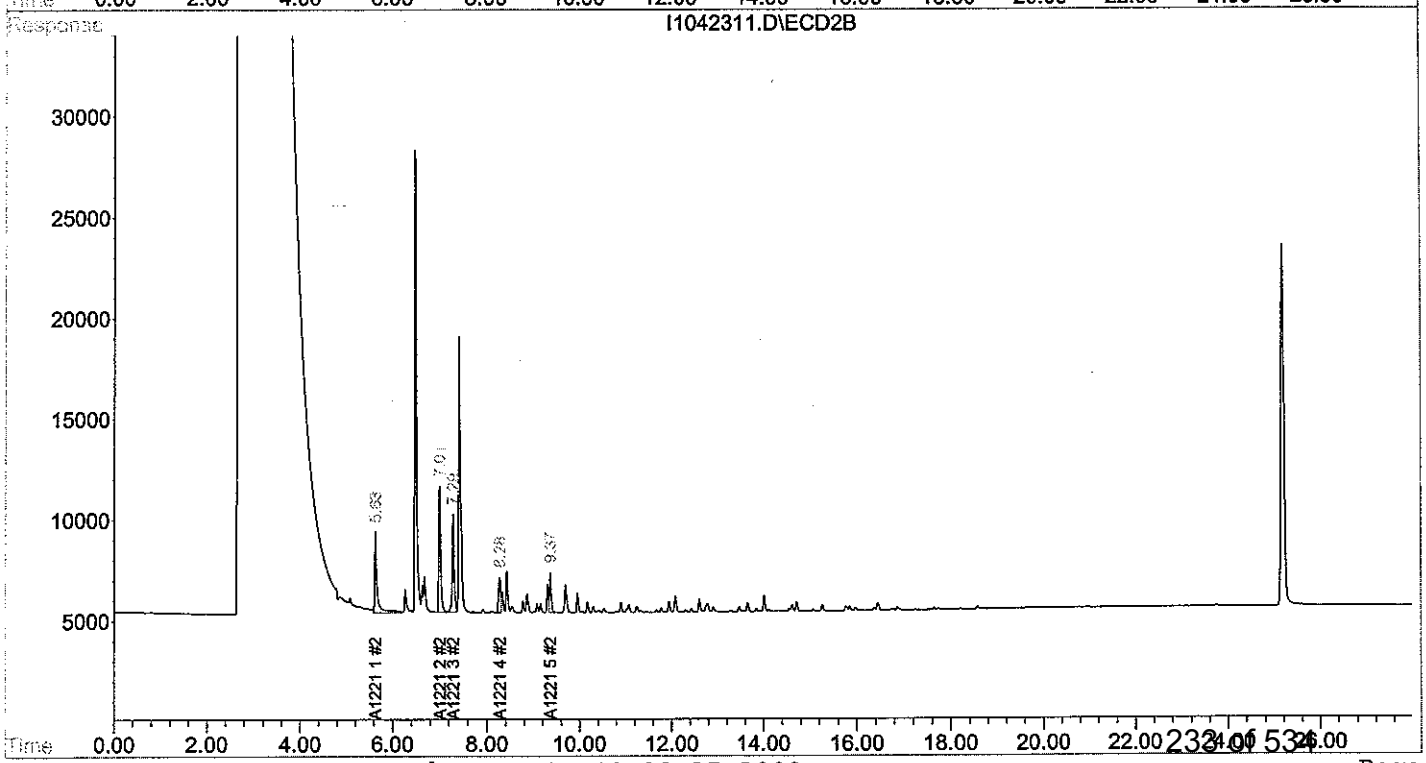
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD1A.CH Vial: 19
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042311.D\ECD2B.CH
Acq On : 23 Apr 2008 10:46 pm Operator:
Sample : I1042311 Inst : HP ECD2
Misc : P090507A 1:10 1221@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:23 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD2B.CH
Acq On : 23 Apr 2008 11:17 pm Operator:
Sample : I1042312 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:24 2008 Quant Results File: A1042360.RES

JS 4/24/8

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
18) L3 A1232 1	7.96	7.42	402124	314681	981.388 (C)	919.617 (C)
19) L3 A1232 2	8.84	8.28	336624	234638	985.301m(C)	932.873m(C)
20) L3 A1232 3	9.92	9.37	521372	405482	996.773m(C)	945.316m(C)
21) L3 A1232 4	10.19	9.70	228384	187610	975.503 (C)	936.700 (C)
22) L3 A1232 5	11.37	10.91	176212	140687	1062.799 (C)	963.544 (C)
Sum A1232 1			1664715	1283098	5001.763	4698.049
Average A1232 1					1000.353	939.610
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

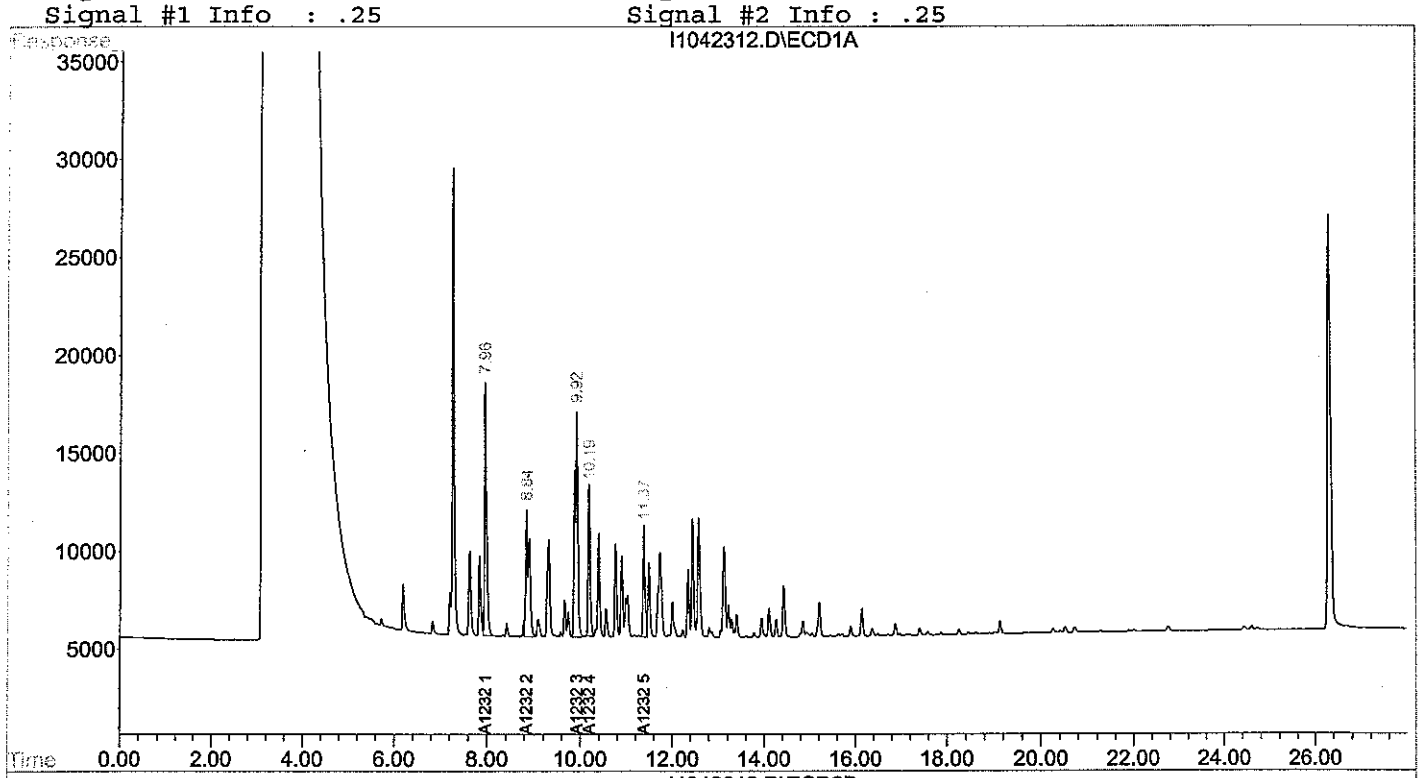
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

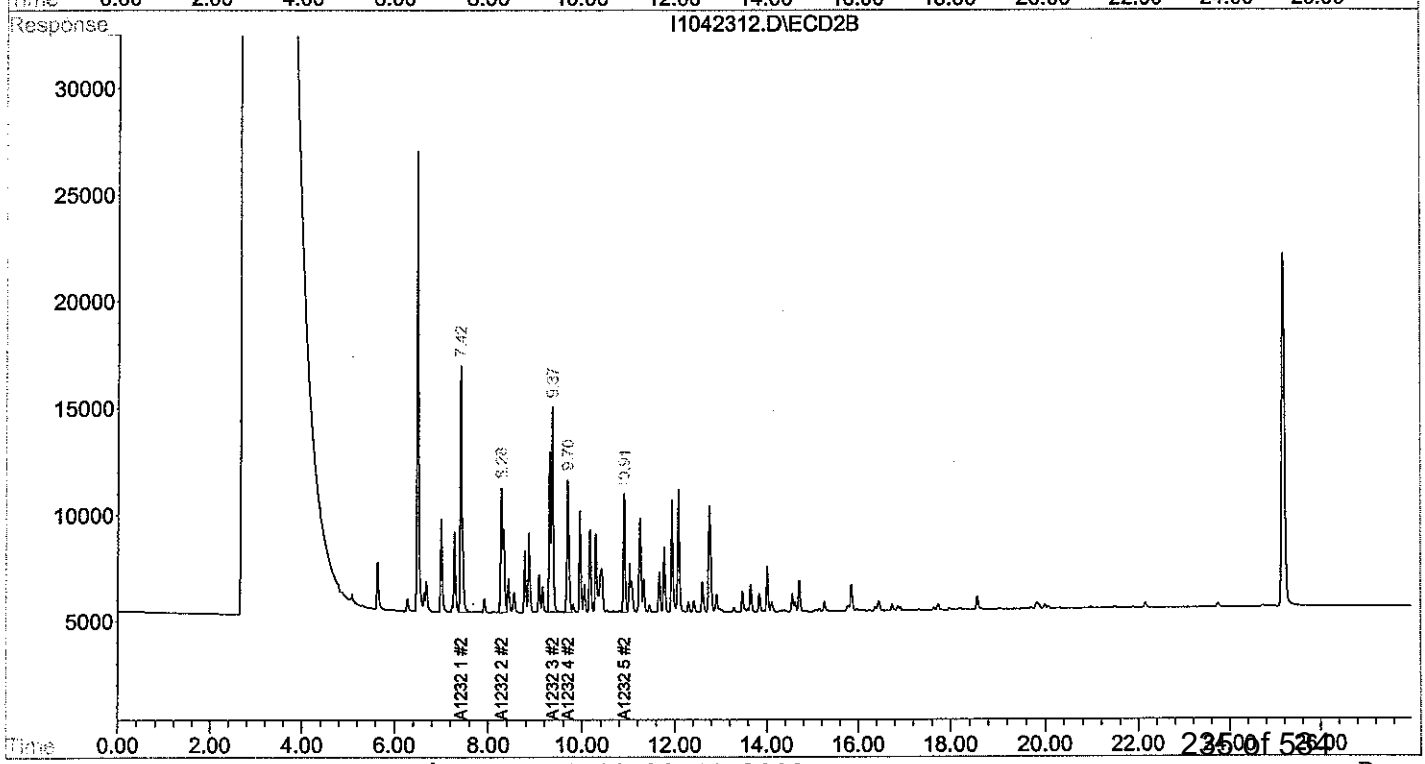
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD1A.CH Vial: 20
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042312.D\ECD2B.CH
Acq On : 23 Apr 2008 11:17 pm Operator:
Sample : I1042312 Inst : HP ECD2
Misc : P090507C 1:10 1232@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:24 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD2B.CH
Acq On : 23 Apr 2008 11:48 pm Operator:
Sample : I1042313 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.96	7.42	317490	245056	1141.030 (C)	1144.186 (C)
24) L4 A1242 2	8.84	8.28	621334	446750	1134.902m(C)	1132.113m(C)
25) L4 A1242 3	9.92	9.36	1159466	851642	1148.482m(C)	1127.364m(C)
26) L4 A1242 4	10.18	9.70	499847	393628	1125.396 (C)	1140.540 (C)
27) L4 A1242 5	11.72	12.09	517881	371386	1147.860	1129.645
Sum A1242 1			3116018	2308462	5697.669	5673.848
Average A1242 1					1139.534	1134.770
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

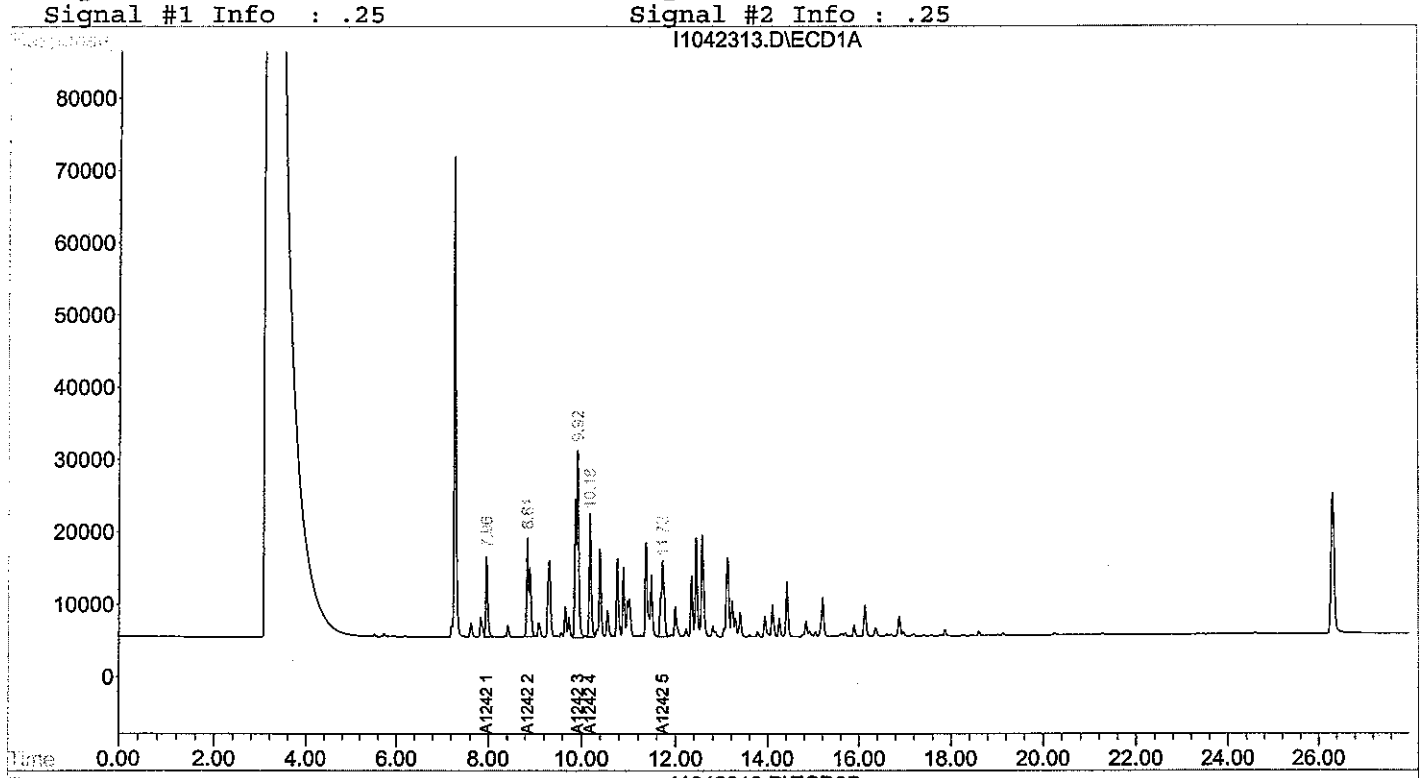
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

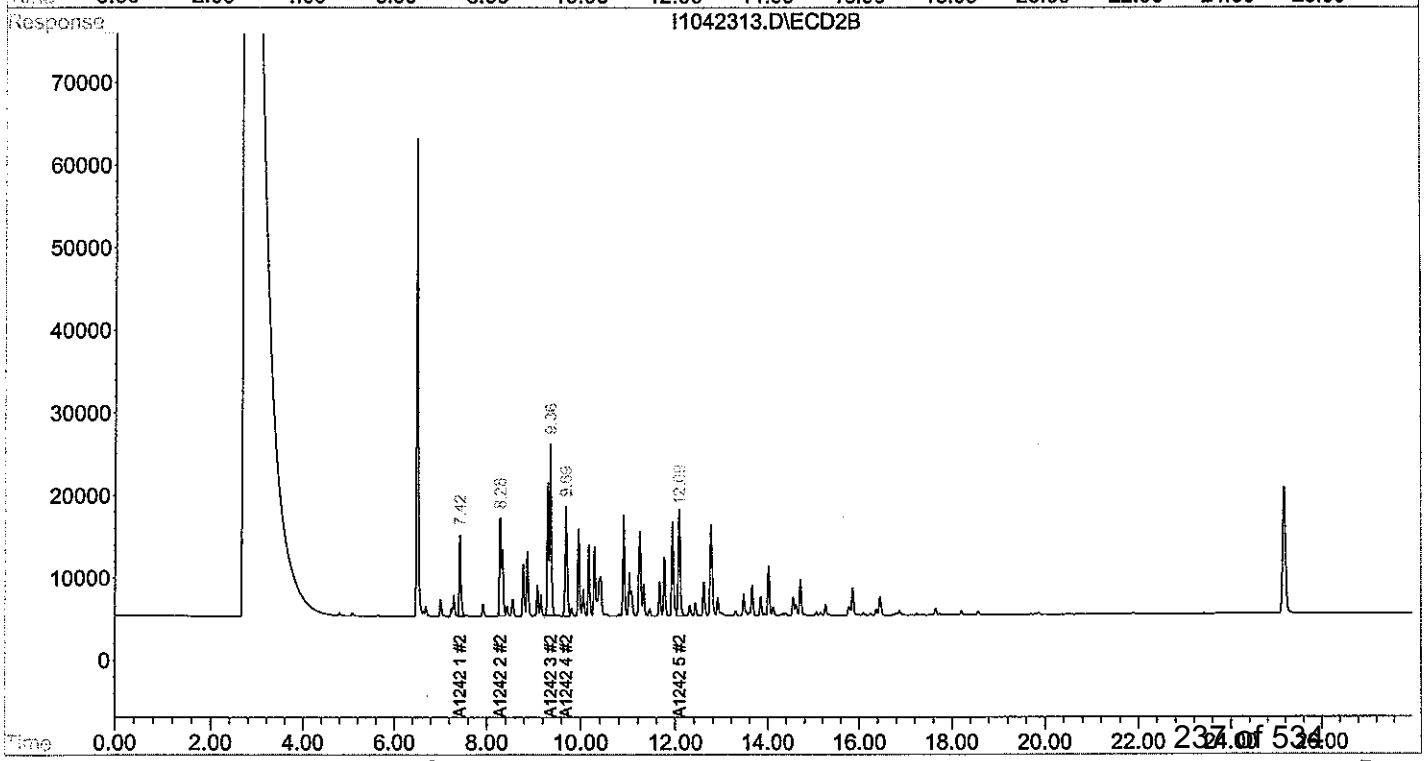
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD1A.CH Vial: 21
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042313.D\ECD2B.CH
Acq On : 23 Apr 2008 11:48 pm Operator:
Sample : I1042313 Inst : HP ECD2
Misc : PS050107B 1:10 1242@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

J3S 4/24/18

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD2B.CH
Acq On : 24 Apr 2008 12:19 am Operator:
Sample : I1042314 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
28) L5 A1248 1	10.19	9.70	295913	237171	950.661 (C)	968.179 (C)
29) L5 A1248 2	10.76	10.18	470440	331253	969.815	985.137
30) L5 A1248 3	11.37	10.91	574840	441514	959.425 (C)	987.070 (C)
31) L5 A1248 4	12.44	11.95	642660	491719	947.676	961.473
32) L5 A1248 5	14.42	14.02	432944	296043	947.755 (C)	961.906 (C)
Sum A1248 1			2416797	1797700	4775.332	4863.764
Average A1248 1					955.066	972.753
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

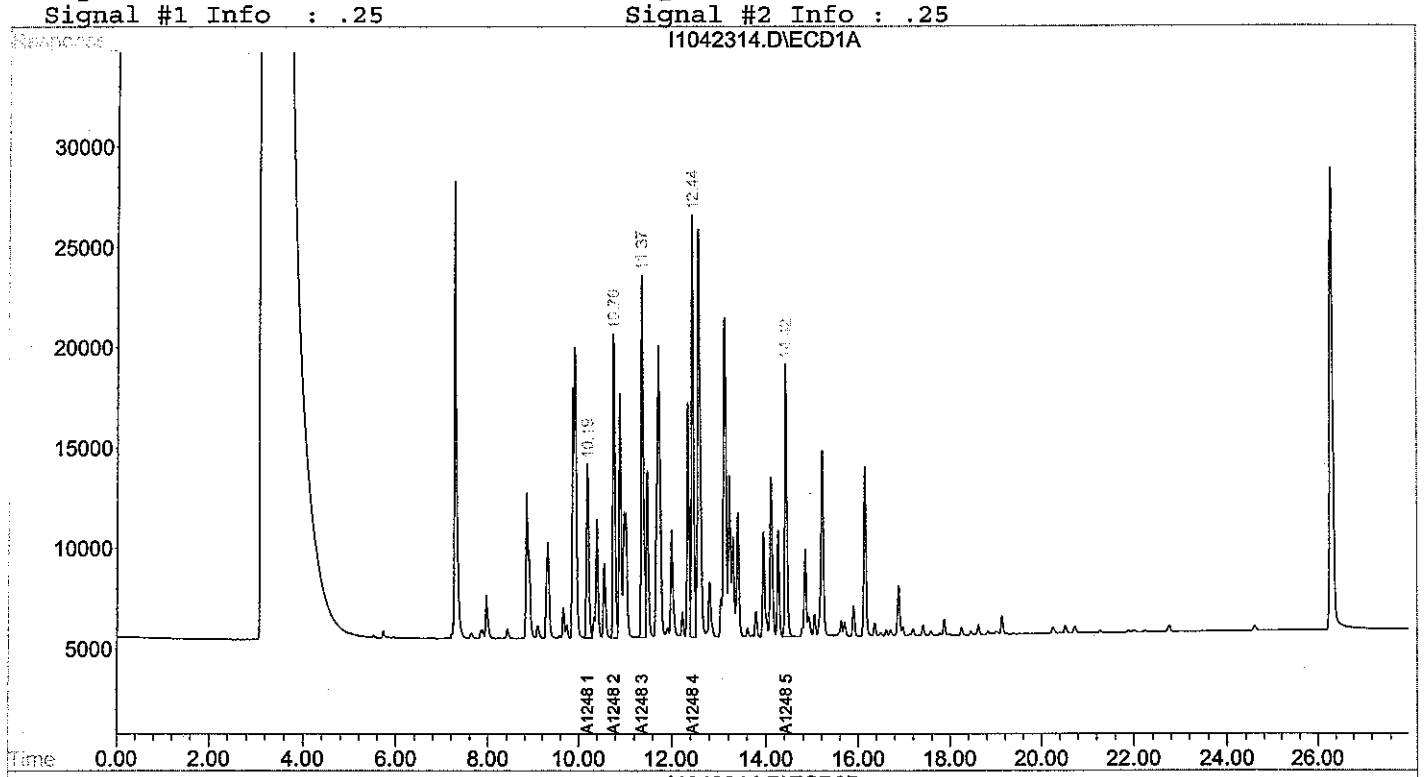
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

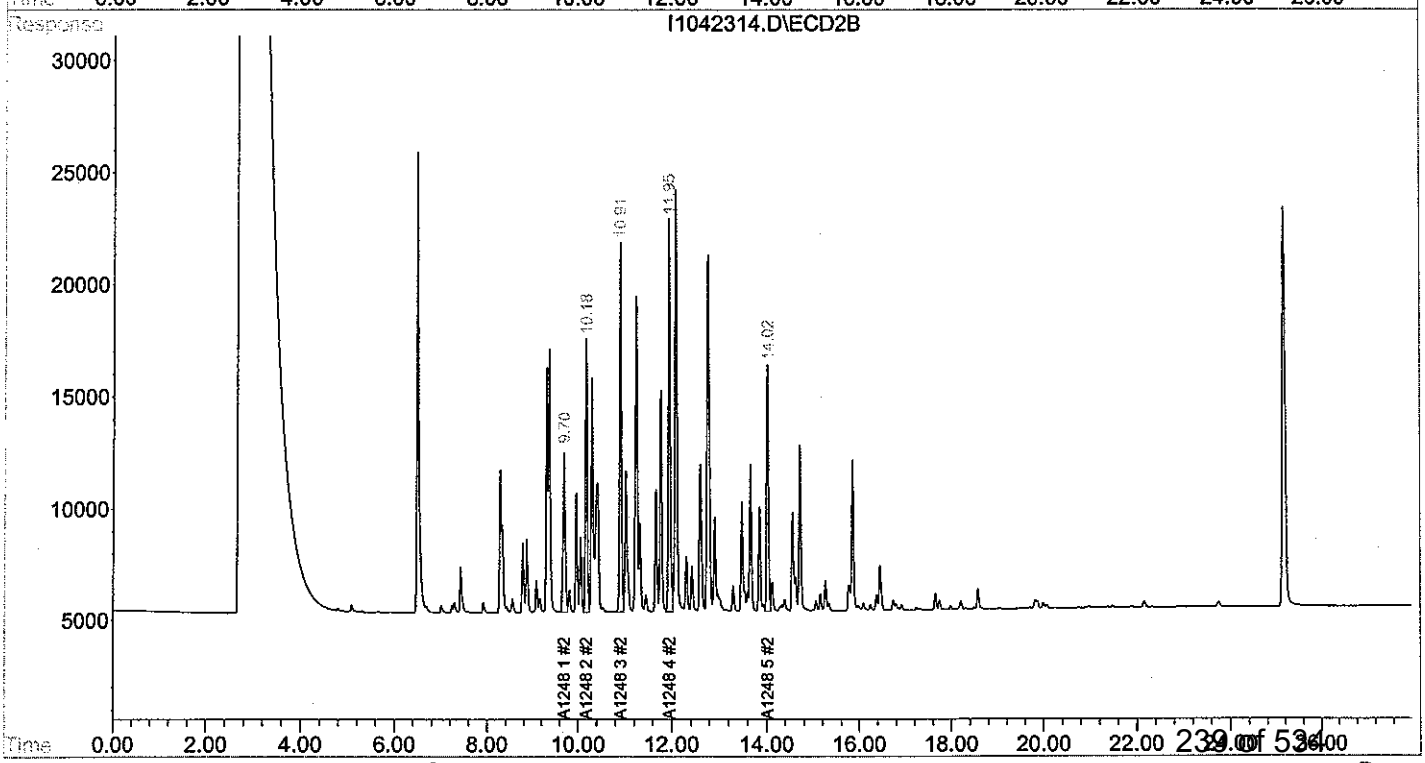
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD1A.CH Vial: 22
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042314.D\ECD2B.CH
Acq On : 24 Apr 2008 12:19 am Operator:
Sample : I1042314 Inst : HP ECD2
Misc : PS090507B 1:10 1248@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:25 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JPS 4/24

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD2B.CH
Acq On : 24 Apr 2008 12:51 am Operator:
Sample : I1042315 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L		ug/L	
System Monitoring Compounds								
Target Compounds								
Sum A1016 1			0	0	N.D.		N.D.	
Average A1016 1					0.000		0.000	
Sum A1260 1			0	0	N.D.		N.D.	
Average A1260 1					0.000		0.000	
Sum A1221 1			0	0	N.D.		N.D.	
Average A1221 1					0.000		0.000	
Sum A1232 1			0	0	N.D.		N.D.	
Average A1232 1					0.000		0.000	
Sum A1242 1			0	0	N.D.		N.D.	
Average A1242 1					0.000		0.000	
Sum A1248 1			0	0	N.D.		N.D.	
Average A1248 1					0.000		0.000	
33) L6 A1254 1	12.60	12.08	621673	447045	904.104		920.243	
34) L6 A1254 2	14.42	14.02	1063057	708044	907.992	(C)	927.580	(C)
35) L6 A1254 3	15.20	14.71	1139528	529898	883.860		914.531	
36) L6 A1254 4	15.89	15.26	519698	416991	863.004		907.568	(C)
37) L6 A1254 5	16.88	16.45	1006857	719565	890.895		911.472	
Sum A1254 1			4350813	2821543	4449.854		4581.394	
Average A1254 1					889.971		916.279	
Sum A1262 1			0	0	N.D.		N.D.	
Average A1262 1					0.000		0.000	
Sum A1268 1			0	0	N.D.		N.D.	
Average A1268 1					0.000		0.000	

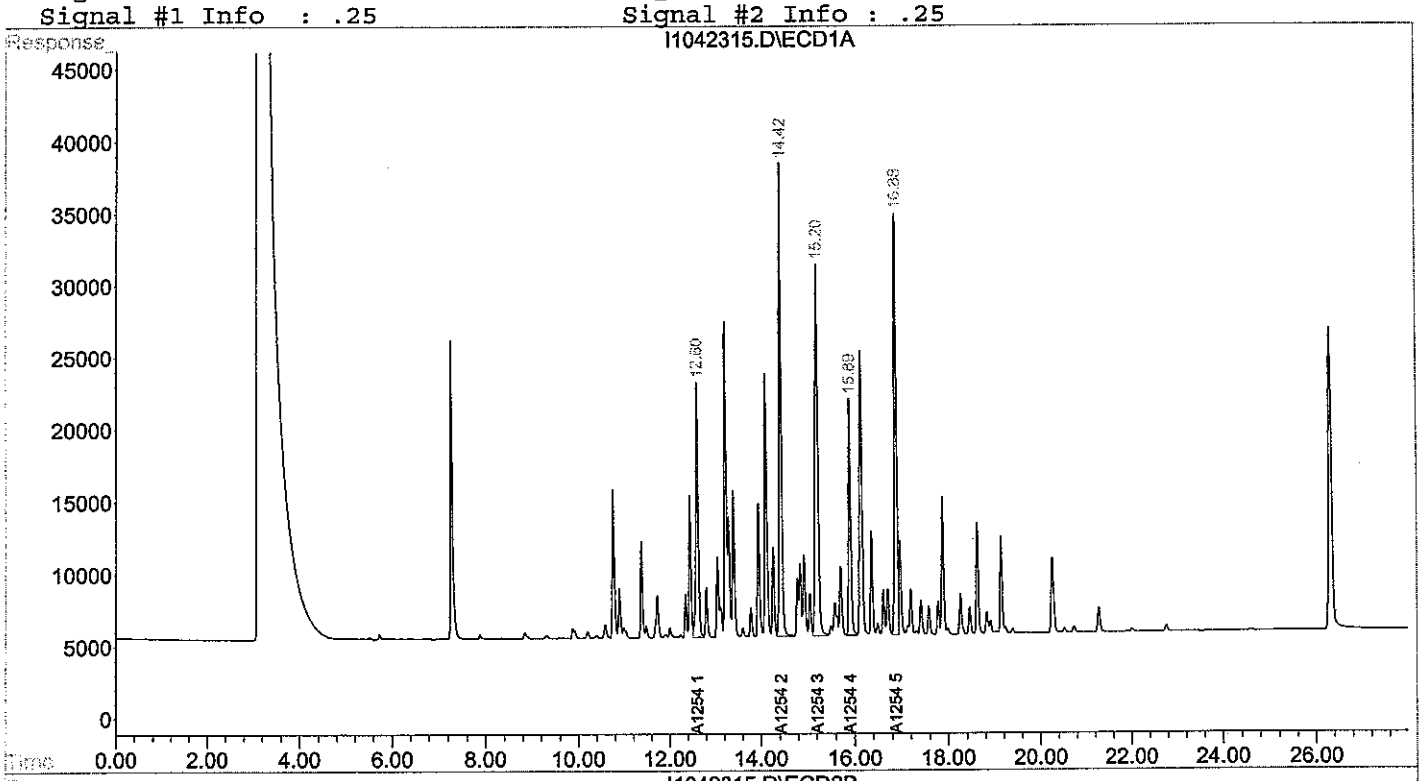
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

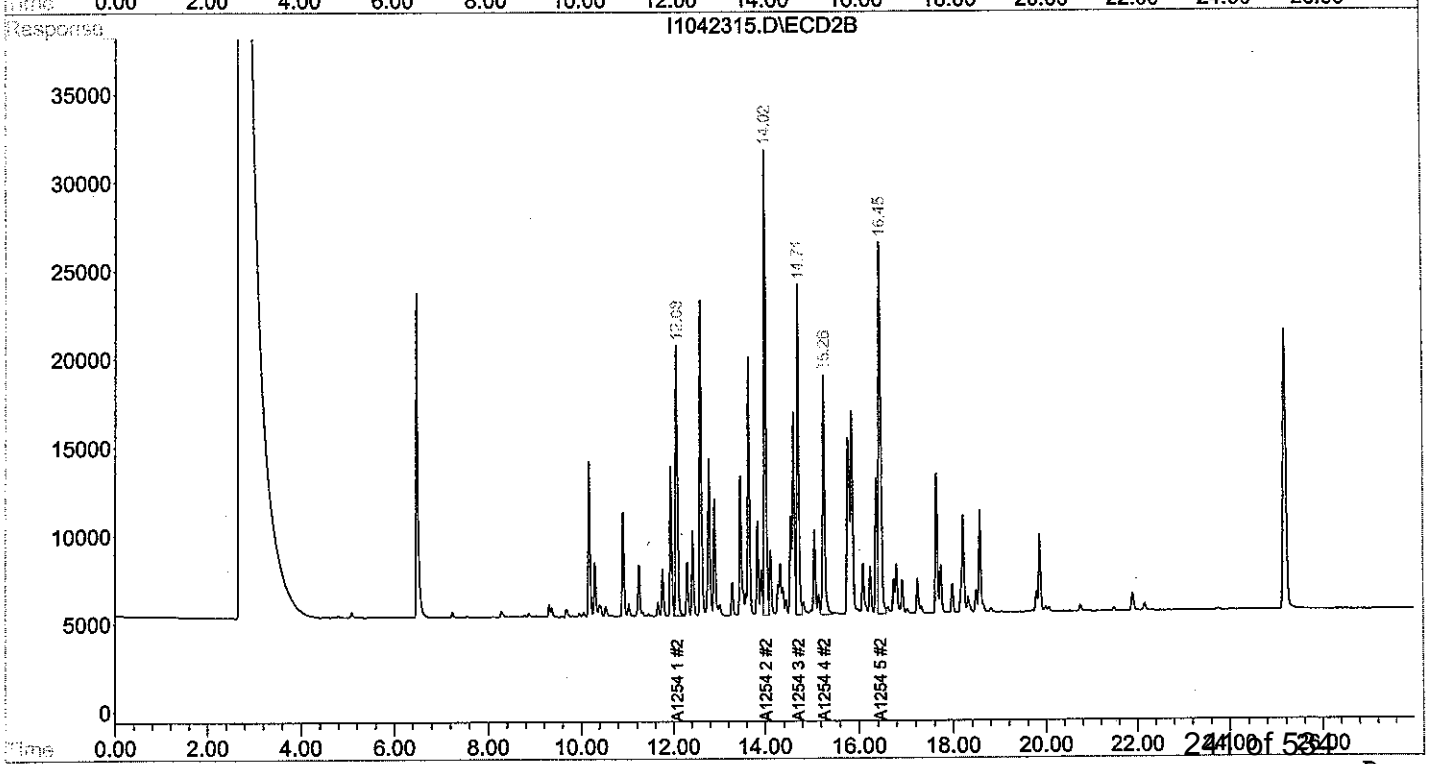
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD1A.CH Vial: 23
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042315.D\ECD2B.CH
Acq On : 24 Apr 2008 12:51 am Operator:
Sample : I1042315 Inst : HP ECD2
Misc : PS090507D 1:10 1254@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:26 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD2B.CH
Acq On : 24 Apr 2008 1:22 am Operator:
Sample : I1042316 Inst : HP ECD2
Misc : PS040208A 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
38) L8 A1262 1	15.89	15.26	744352	549403	1124.902m	1011.710
39) L8 A1262 2	17.40	16.74	1039182	749226	1182.138m	1037.267m
40) L8 A1262 3	18.25	17.74	858761	730580	1120.399	1018.423m
41) L8 A1262 4	20.51	19.82	952566	1221512	1010.622	1073.074m(C)
42) L8 A1262 5	22.76	22.16	963432	697076	1122.415	962.943
Sum A1262 1			4558293	3947797	5560.476	5103.416
Average A1262 1					1112.095	1020.683
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

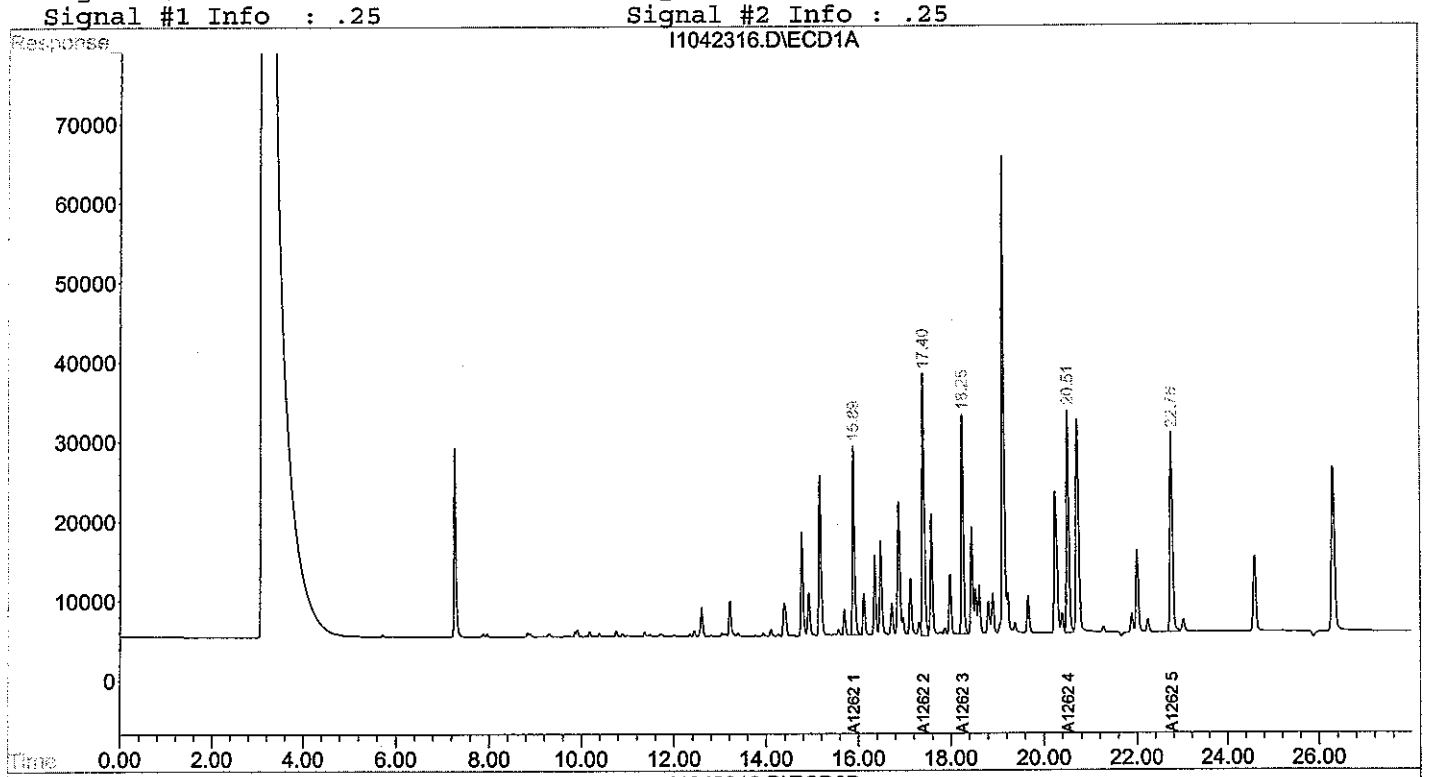
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

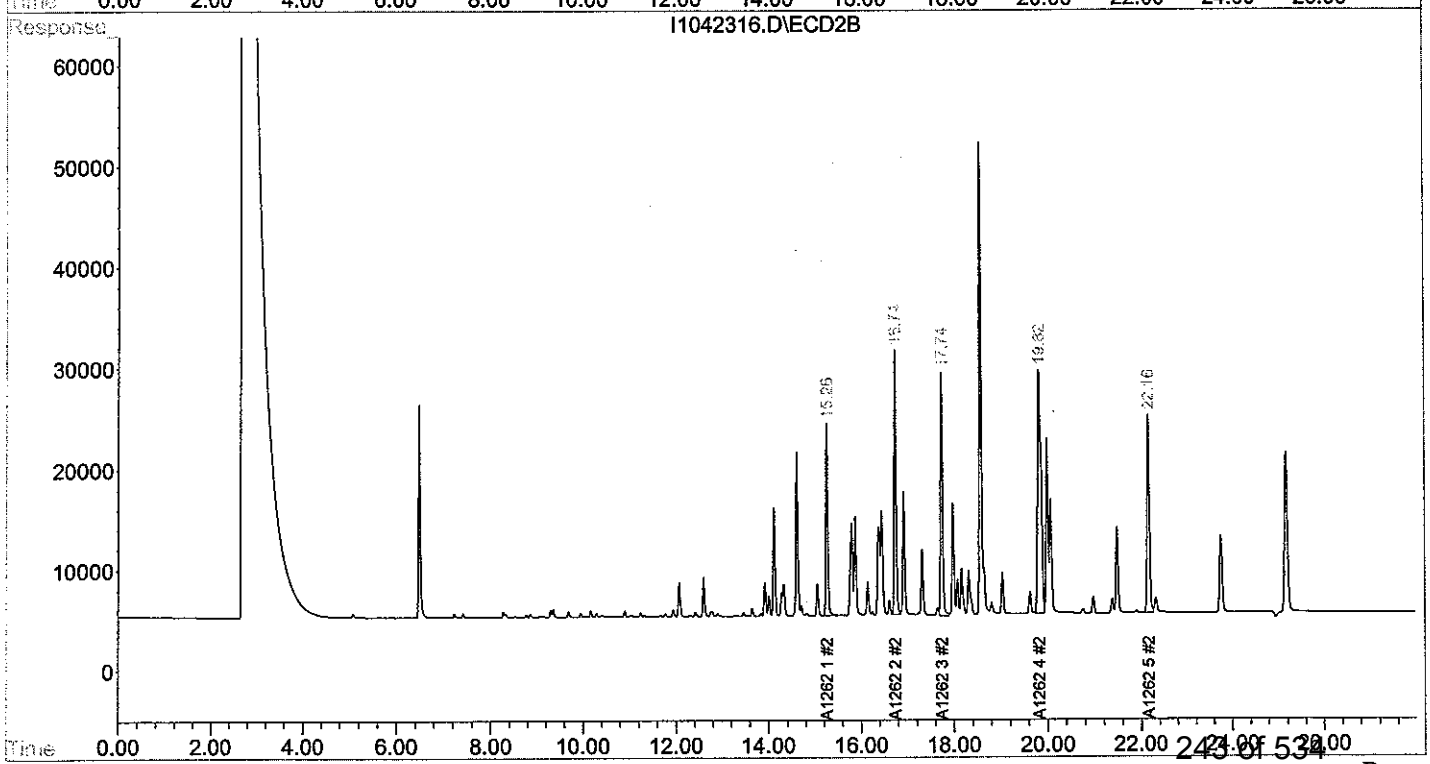
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD1A.CH Vial: 24
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042316.D\ECD2B.CH
Acq On : 24 Apr 2008 1:22 am Operator:
Sample : I1042316 Inst : HP ECD2
Misc : PS040208A 1:10 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:27 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD2B.CH
Acq On : 24 Apr 2008 1:53 am Operator:
Sample : I1042317 Inst : HP ECD2
Misc : PS050107D 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:28 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
43) L9 A1268 1	18.53	17.75	730006	551865	1091.903	966.173
44) L9 A1268 2	20.51	19.82	2711930	1939020	1145.844m	960.274m(C)
45) L9 A1268 3	20.71	19.99	2753362	2047474	1077.525m	902.503m
46) L9 A1268 4	21.89	20.98	2529091	1769387	1163.611	932.841
47) L9 A1268 5	24.59	23.75	6913651	4853194	1066.622	883.050
Sum A1268 1			15638040	11160939	5545.504	4644.841
Average A1268 1					1109.101	928.968

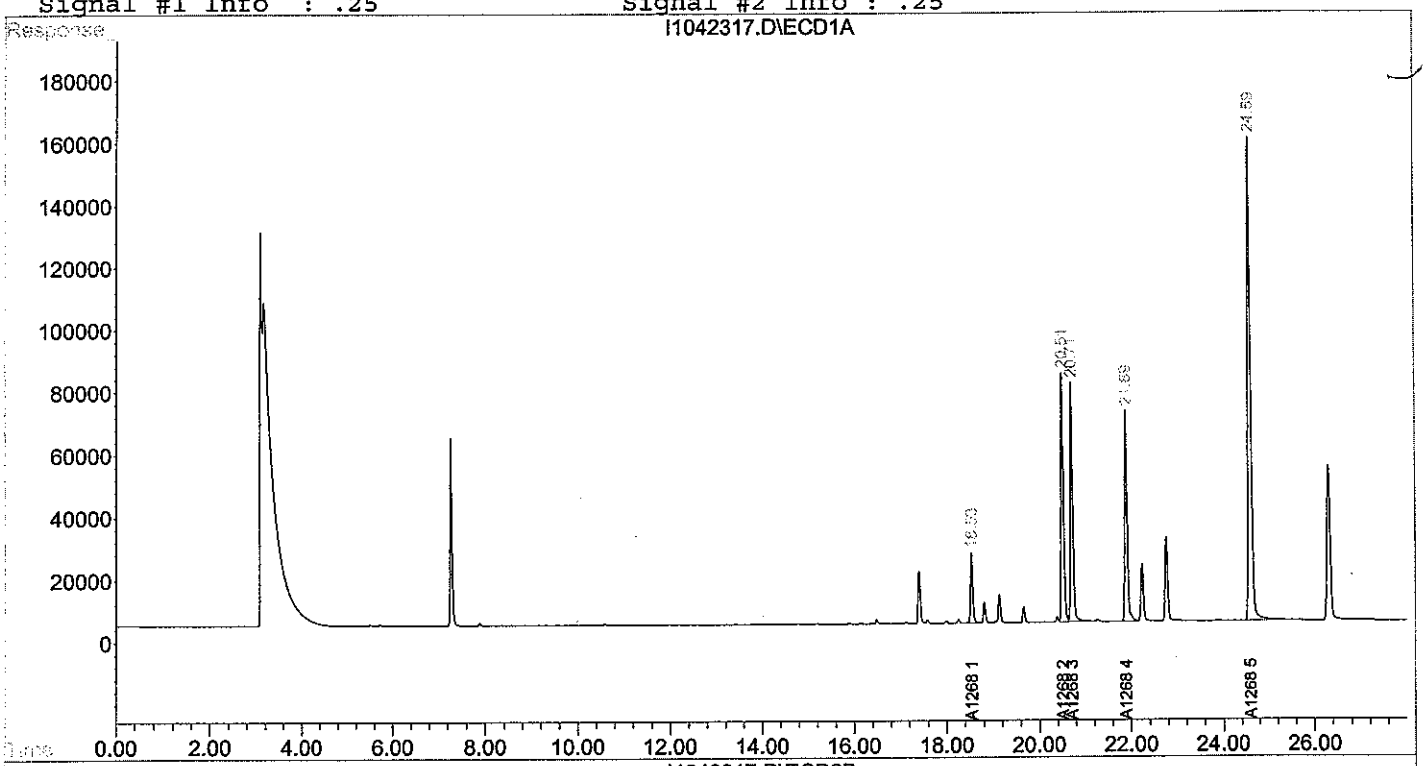
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

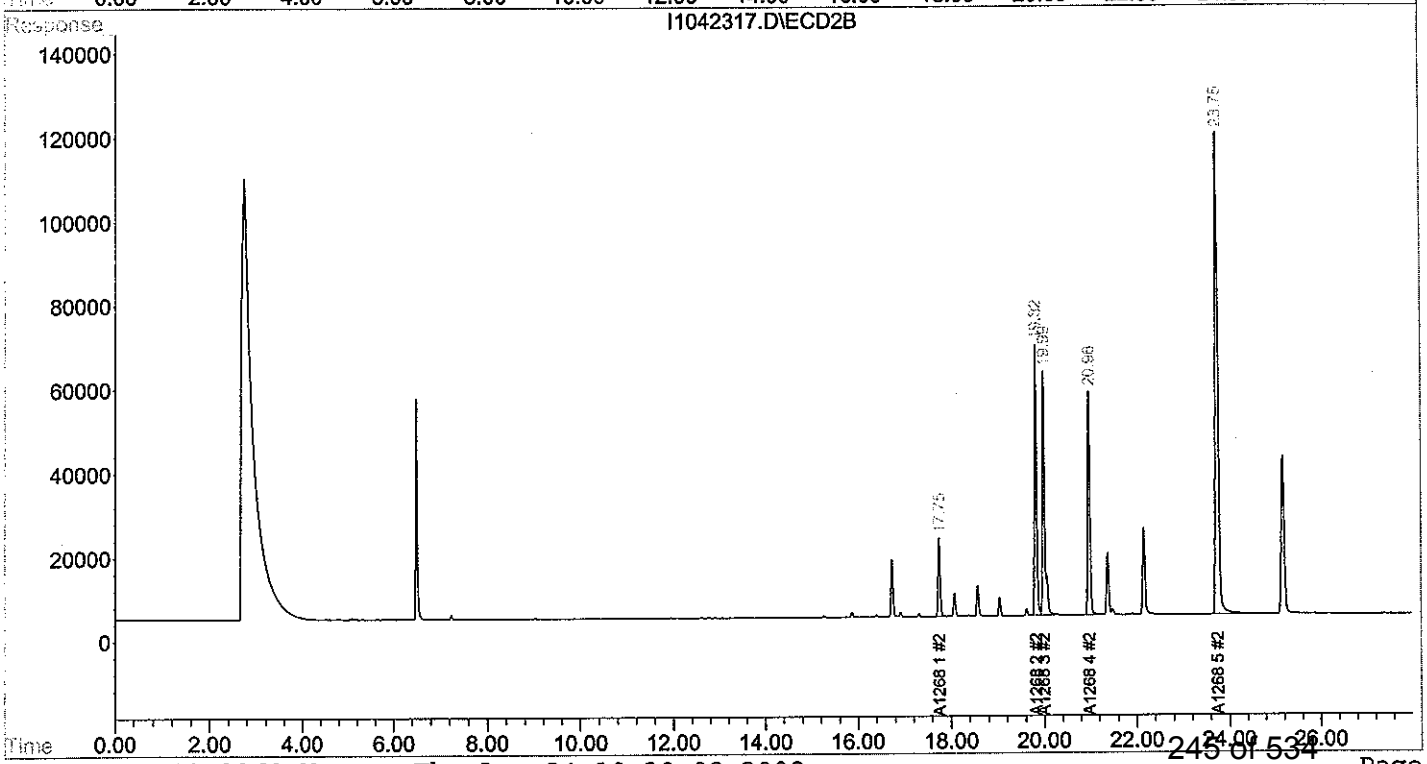
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\APR23\I1042317.D\ECD2B.CH
Acq On : 24 Apr 2008 1:53 am Operator:
Sample : I1042317 Inst : HP ECD2
Misc : PS050107D 1262@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:28 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 4/24/8

Signal #1 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 9:43 pm Operator:
Sample : Q2042301 Inst : HP ECD2
Misc : PLW111507A 1:10@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
2) L1 A1016 1	7.97	7.43	359480	281181	1052.287	1047.403 (C)
3) L1 A1016 2	9.32	8.78	485310	168974	1134.640m	1164.064m *
4) L1 A1016 3	10.19	9.70	585090	459312	1136.859m	1116.986
5) L1 A1016 4	10.76	9.97	349004	285658	1116.566m	1114.720
6) L1 A1016 5	11.37	10.91	442147	342033	1083.840	1094.429
Sum A1016 1			2221031	1537159	5524.192	5537.600
Average A1016 1					1104.838	1107.520
7) L7 A1260 1	17.40	15.27	713654	771708	954.706m	1150.601m(C)
8) L7 A1260 2	18.25	16.74	741837	554996	1007.607	994.244m
9) L7 A1260 3	20.25	17.74	1045693	582336	1101.086	992.361m
10) L7 A1260 4	20.72	19.87	608506	1099876	952.241	1048.504
11) L7 A1260 5	22.76	22.17	612406	449864	981.119	965.036
Sum A1260 1			3722095	3458779	N.D.	N.D.
Average A1260 1					999.352	1030.149
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

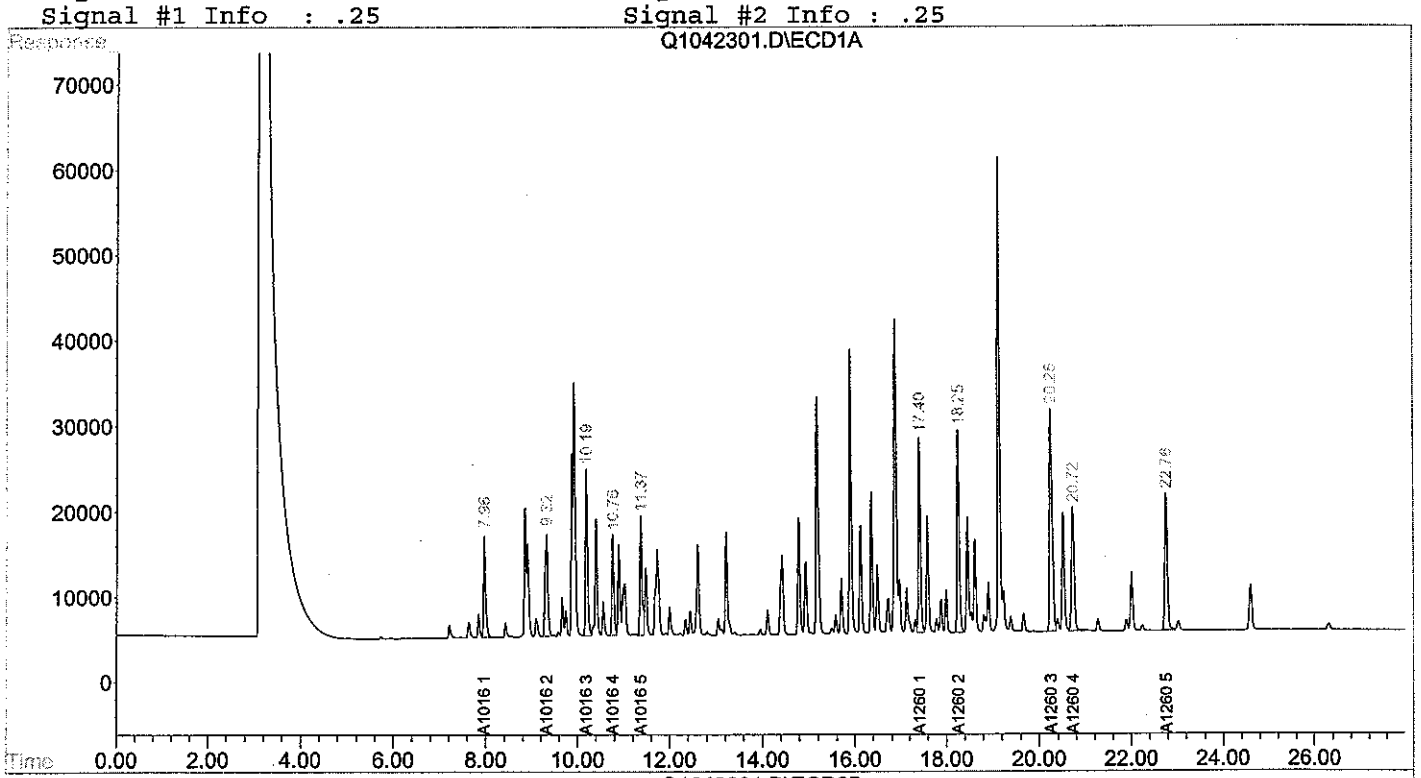
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

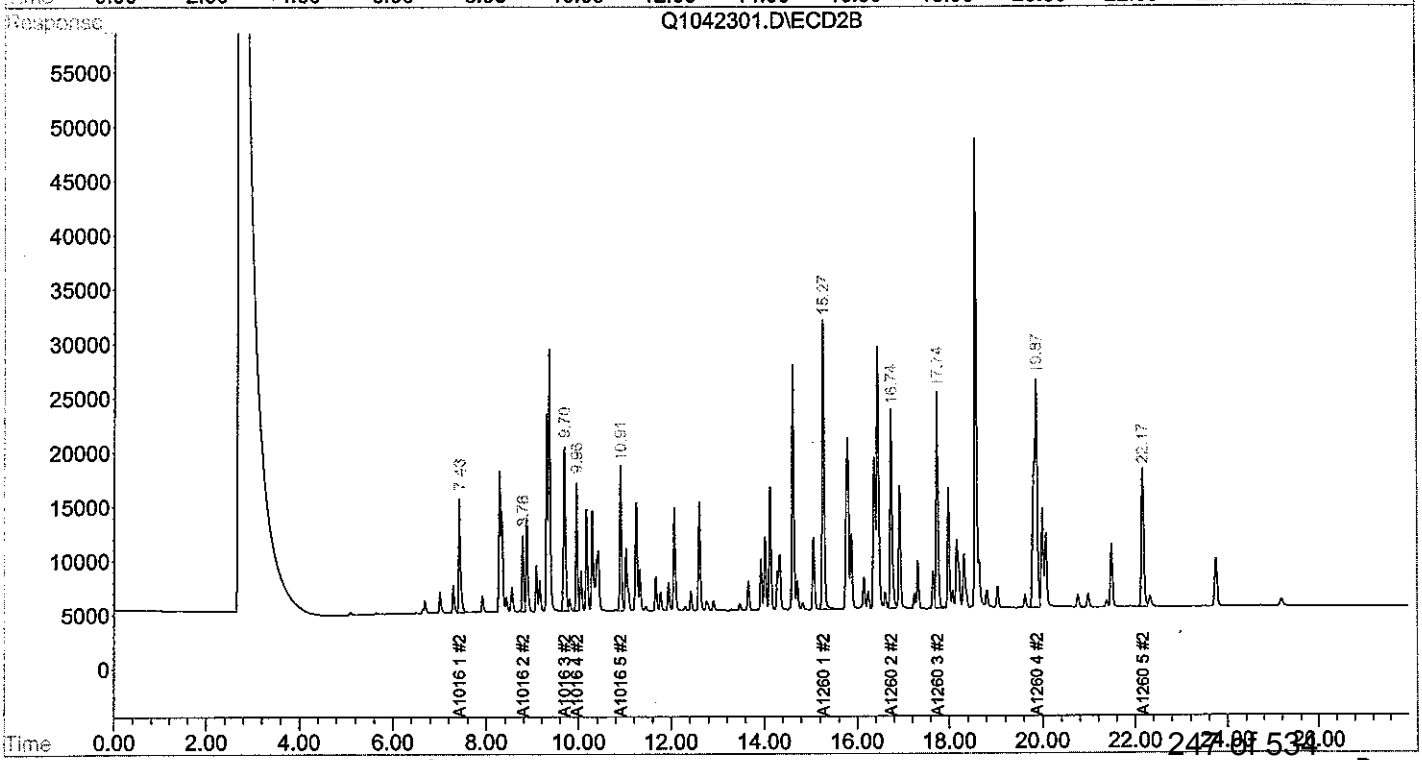
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD1A.CH Vial: 17
Signal #2 : D:\HPCHEM\2\DATA\APR23\Q1042301.D\ECD2B.CH
Acq On : 23 Apr 2008 9:43 pm Operator:
Sample : Q2042301 Inst : HP ECD2
Misc : PLW111507A 1:10@1000PPB Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 24 10:22 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu Apr 24 10:20:26 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050801**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.98	7.93	8.03	1000.00	1068.56	6.9	15
PK #2 A1016	9.34	9.29	9.39	1000.00	1082.87	8.3	15
PK #3 A1016	10.21	10.16	10.26	1000.00	1012.65	1.3	15
PK #4 A1016	10.78	10.73	10.83	1000.00	981.86	1.8	15
PK #5 A1016	11.39	11.34	11.44	1000.00	982.92	1.7	15
PK #1 A1260	17.43	17.38	17.48	1000.00	999.29	0.1	15
PK #2 A1260	18.28	18.23	18.33	1000.00	1021.10	2.1	15
PK #3 A1260	20.28	20.23	20.33	1000.00	1036.96	3.7	15
PK #4 A1260	20.75	20.70	20.80	1000.00	1023.92	2.4	15
PK #5 A1260	22.80	22.75	22.85	1000.00	1042.53	4.3	15
Tetrachloro-meta-xylene	7.29	7.24	7.34	40.00	42.34	5.9	15
Decachlorobiphenyl	26.36	26.31	26.41	40.00	42.39	6.0	15
Average % D						3.7	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050801**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.44	7.39	7.49	1000.00	1132.28	13.2	15
PK #2 A1016	8.80	8.75	8.85	1000.00	1108.75	10.9	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1082.85	8.3	15
PK #4 A1016	9.98	9.93	10.03	1000.00	1071.86	7.2	15
PK #5 A1016	10.93	10.88	10.98	1000.00	1075.38	7.5	15
PK #1 A1260	15.28	15.23	15.33	1000.00	1062.29	6.2	15
PK #2 A1260	16.76	16.71	16.81	1000.00	1077.74	7.8	15
PK #3 A1260	17.76	17.71	17.81	1000.00	1076.40	7.6	15
PK #4 A1260	19.89	19.84	19.94	1000.00	1101.84	10.2	15
PK #5 A1260	22.19	22.14	22.24	1000.00	1132.14	13.2	15
Tetrachloro-meta-xylene	6.51	6.46	6.56	40.00	45.21	13.0	15
Decachlorobiphenyl	25.22	25.17	25.27	40.00	46.39	16.0[a]	15
Average % D						10.1	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD2B.CH
Acq On : 8 May 2008 10:30 am Operator: JBS
Sample : C1050801 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:54 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.29	6.51	676531	557413	42.341	45.207m
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.34%	45.21%
12) s DCB - Surrogate	26.36	25.22	1064895	820793	42.395	46.392
Spiked Amount 100.000 Range 30 - 150 Recovery =					42.40%	46.39%
Target Compounds						
2) L1 A1016 1	7.98	7.44	364167	299732	1068.563 (C)	1132.283m
3) L1 A1016 2	9.34	8.80	466539	162068	1082.866	1108.748m
4) L1 A1016 3	10.21	9.71	530608	447518	1012.653m	1082.848m
5) L1 A1016 4	10.78	9.98	313730	275970	981.862m	1071.855m
6) L1 A1016 5	11.39	10.93	406210	337096	982.915m	1075.380m
Sum A1016 1			2081254	1522384	5128.859	5471.114
Average A1016 1					1025.772	1094.223
7) L7 A1260 1	17.43	15.28	742150	723496	999.290m	1062.291m
8) L7 A1260 2	18.28	16.76	750540	593506	1021.100	1077.740m
9) L7 A1260 3	20.28	17.76	990490	623402	1036.964	1076.403m
10) L7 A1260 4	20.75	19.89	650097	1147925	1023.917	1101.843
11) L7 A1260 5	22.80	22.19	647304	517375	1042.535	1132.139
Sum A1260 1			3780581	3605704	5123.807	5450.417
Average A1260 1					1024.761	1090.083
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

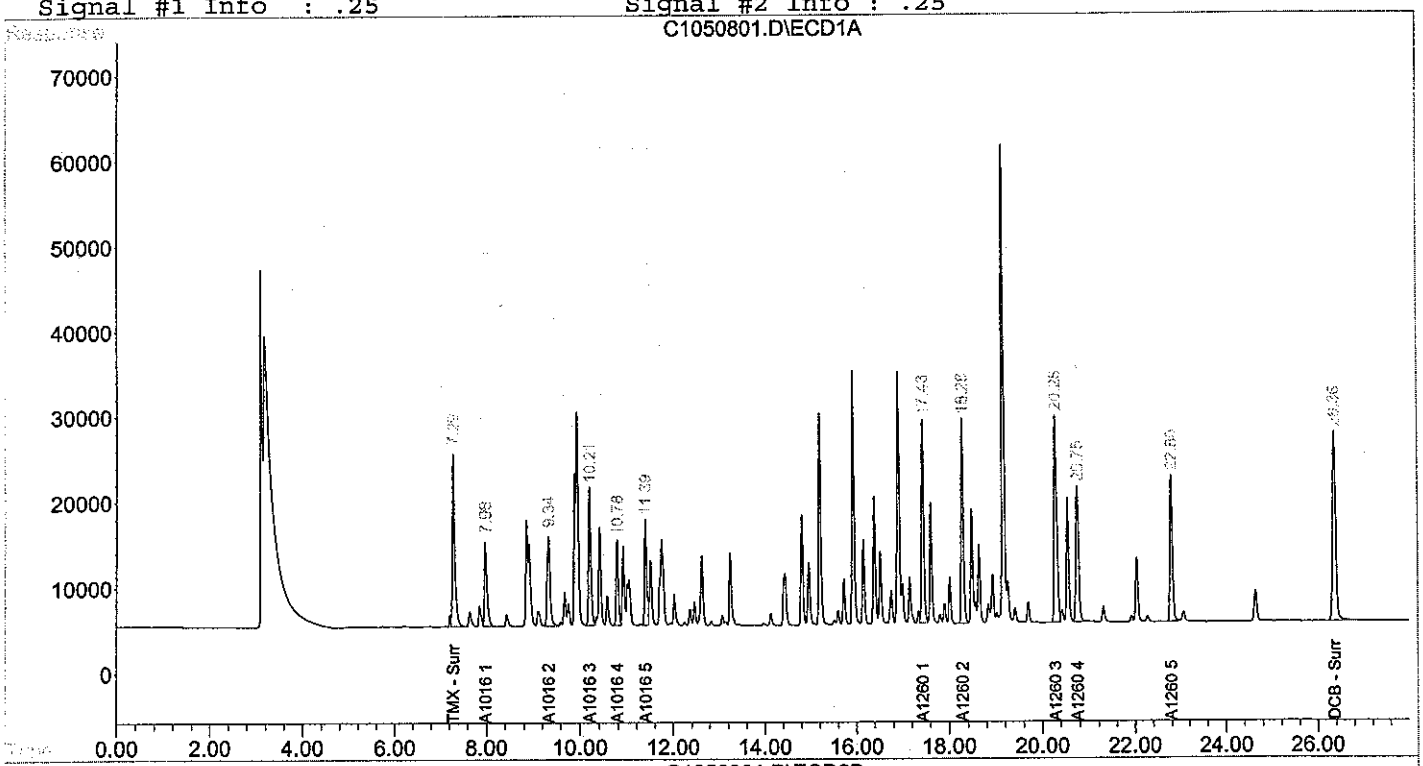
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.
C1050801.D A1042360.M Thu May 08 13:54:56 2008

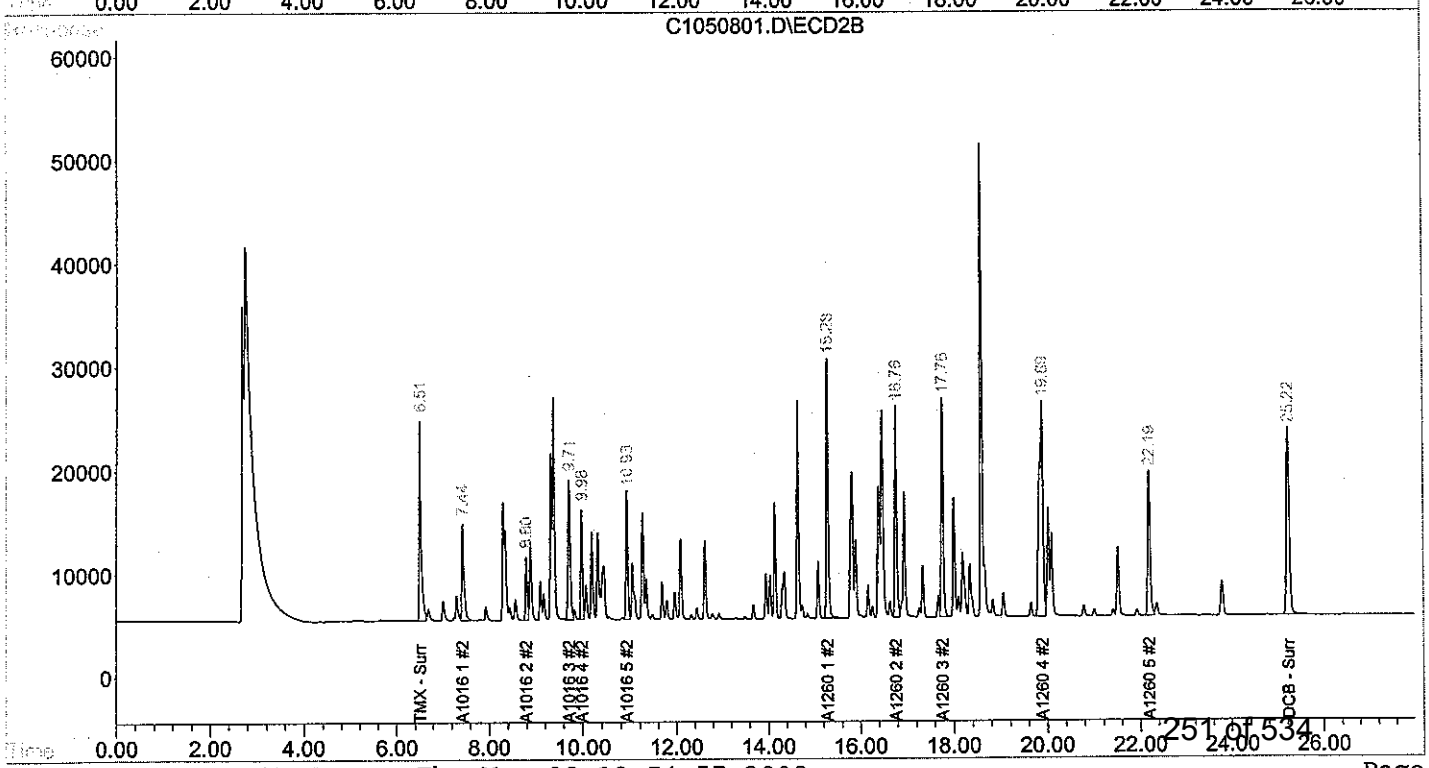
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD2B.CH
Acq On : 8 May 2008 10:30 am Operator: JBS
Sample : C1050801 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 8 13:54 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD1A.CH Vial: 2
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050801.D\ECD2B.CH
Acq On : 8 May 2008 10:30 am Operator: JBS
Sample : C1050801 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	42.341	-5.9	104	0.00
2	L1	A1016 1	1000.000	1068.563	-6.9	106	0.00
3	L1	A1016 2	1000.000	1082.866	-8.3	102	0.00
4	L1	A1016 3	1000.000	1012.653	-1.3	99	0.00
5	L1	A1016 4	1000.000	981.862	1.8	99	0.00
6	L1	A1016 5	1000.000	982.915	1.7	98	0.00
7	L7	A1260 1	1000.000	999.290	0.1	99	0.00
8	L7	A1260 2	1000.000	1021.100	-2.1	101	0.00
9	L7	A1260 3	1000.000	1036.964	-3.7	102	0.01
10	L7	A1260 4	1000.000	1023.917	-2.4	100	0.01
11	L7	A1260 5	1000.000	1042.535	-4.3	102	0.01
12	s	DCB - Surrogate	40.000	42.395	-6.0	101	0.01

Signal #2

1	s	TMX - Surrogate	40.000	45.207	-13.0	110	0.00
2	L1	A1016 1	1000.000	1132.283	-13.2	110	0.00
3	L1	A1016 2	1000.000	1108.748	-10.9	103	0.00
4	L1	A1016 3	1000.000	1082.848	-8.3	106	0.00
5	L1	A1016 4	1000.000	1071.855	-7.2	105	0.00
6	L1	A1016 5	1000.000	1075.380	-7.5	105	0.00
7	L7	A1260 1	1000.000	1062.291	-6.2	104	0.00
8	L7	A1260 2	1000.000	1077.740	-7.8	105	0.00
9	L7	A1260 3	1000.000	1076.403	-7.6	105	0.00
10	L7	A1260 4	1000.000	1101.843	-10.2	107	0.00
11	L7	A1260 5	1000.000	1132.139	-13.2	110	0.00
12	s	DCB - Surrogate	40.000	46.392	-16.0#	109	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C1050801.D A1042360.M Thu May 08 13:58:09 2008

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050802**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.97	7.93	8.03	1000.00	1068.25	6.8	15
PK #2 A1016	9.33	9.29	9.39	1000.00	1097.53	9.8	15
PK #3 A1016	10.20	10.16	10.26	1000.00	1039.61	4.0	15
PK #4 A1016	10.78	10.73	10.83	1000.00	1014.13	1.4	15
PK #5 A1016	11.39	11.34	11.44	1000.00	1026.37	2.6	15
PK #1 A1260	17.43	17.38	17.48	1000.00	1036.67	3.7	15
PK #2 A1260	18.28	18.23	18.33	1000.00	1048.29	4.8	15
PK #3 A1260	20.27	20.23	20.33	1000.00	1069.08	6.9	15
PK #4 A1260	20.75	20.70	20.80	1000.00	1065.71	6.6	15
PK #5 A1260	22.79	22.75	22.85	1000.00	1076.74	7.7	15
Tetrachloro-meta-xylene	7.28	7.24	7.34	40.00	43.22	8.1	15
Decachlorobiphenyl	26.35	26.31	26.41	40.00	43.99	10.0	15
Average % D						6.0	

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050802**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.39	7.49	1000.00	1127.96	12.8	15
PK #2 A1016	8.79	8.75	8.85	1000.00	1140.62	14.1	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1103.29	10.3	15
PK #4 A1016	9.98	9.93	10.03	1000.00	1121.26	12.1	15
PK #5 A1016	10.92	10.88	10.98	1000.00	1084.93	8.5	15
PK #1 A1260	15.28	15.23	15.33	1000.00	1084.77	8.5	15
PK #2 A1260	16.75	16.71	16.81	1000.00	1102.44	10.2	15
PK #3 A1260	17.76	17.71	17.81	1000.00	1098.25	9.8	15
PK #4 A1260	19.89	19.84	19.94	1000.00	1132.59	13.3	15
PK #5 A1260	22.18	22.14	22.24	1000.00	1159.51	16.0[a]	15
Tetrachloro-meta-xylene	6.51	6.46	6.56	40.00	46.28	15.7[a]	15
Decachlorobiphenyl	25.21	25.17	25.27	40.00	47.61	19.0[a]	15
Average % D						12.5	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD2B.CH
Acq On : 8 May 2008 2:25 pm Operator: JBS
Sample : C1050802 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 8:53 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.51	689929	569601	43.224m	46.276
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.22%	46.28%
12) s DCB - Surrogate	26.35	25.21	1101558	840122	43.985	47.611
Spiked Amount 100.000 Range 30 - 150 Recovery =					43.98%	47.61%
Target Compounds						
2) L1 A1016 1	7.97	7.43	364078	298802	1068.253m(C)	1127.964m
3) L1 A1016 2	9.33	8.79	471886	166060	1097.531	1140.621m
4) L1 A1016 3	10.20	9.71	542600	454595	1039.613	1103.289
5) L1 A1016 4	10.78	9.98	322326	287129	1014.129	1121.265
6) L1 A1016 5	11.39	10.92	421800	339574	1026.365	1084.925m
Sum A1016 1			2122690	1546160	5245.891	5578.064
Average A1016 1					1049.178	1115.613
7) L7 A1260 1	17.43	15.28	765760	735918	1036.668	1084.772m
8) L7 A1260 2	18.28	16.75	767992	604696	1048.288	1102.440m
9) L7 A1260 3	20.27	17.76	1018220	633894	1069.081m	1098.248m
10) L7 A1260 4	20.75	19.89	674088	1175321	1065.707m	1132.594
11) L7 A1260 5	22.79	22.18	666577	528174	1076.743	1159.506m
Sum A1260 1			3892636	3678003	5296.488	5577.560
Average A1260 1					1059.298	1115.512
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

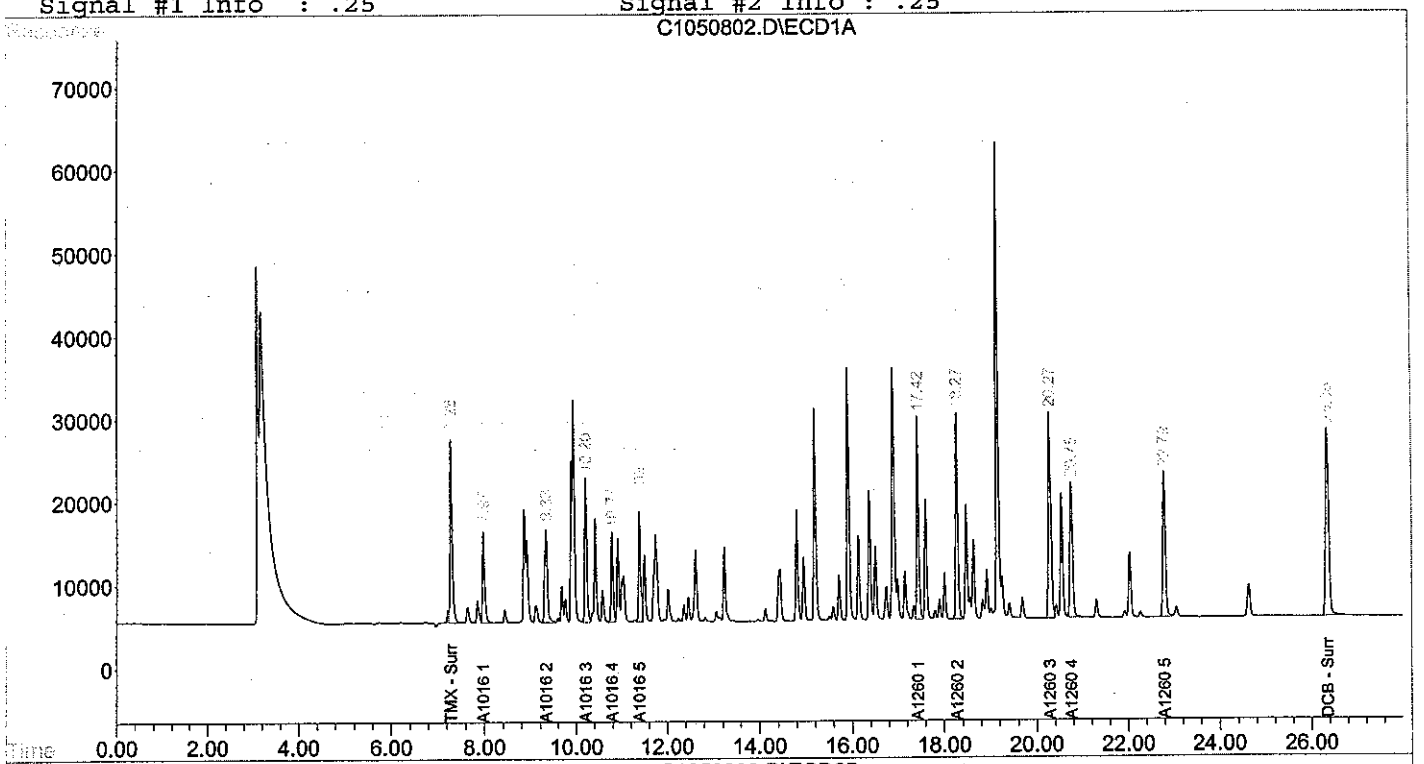
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

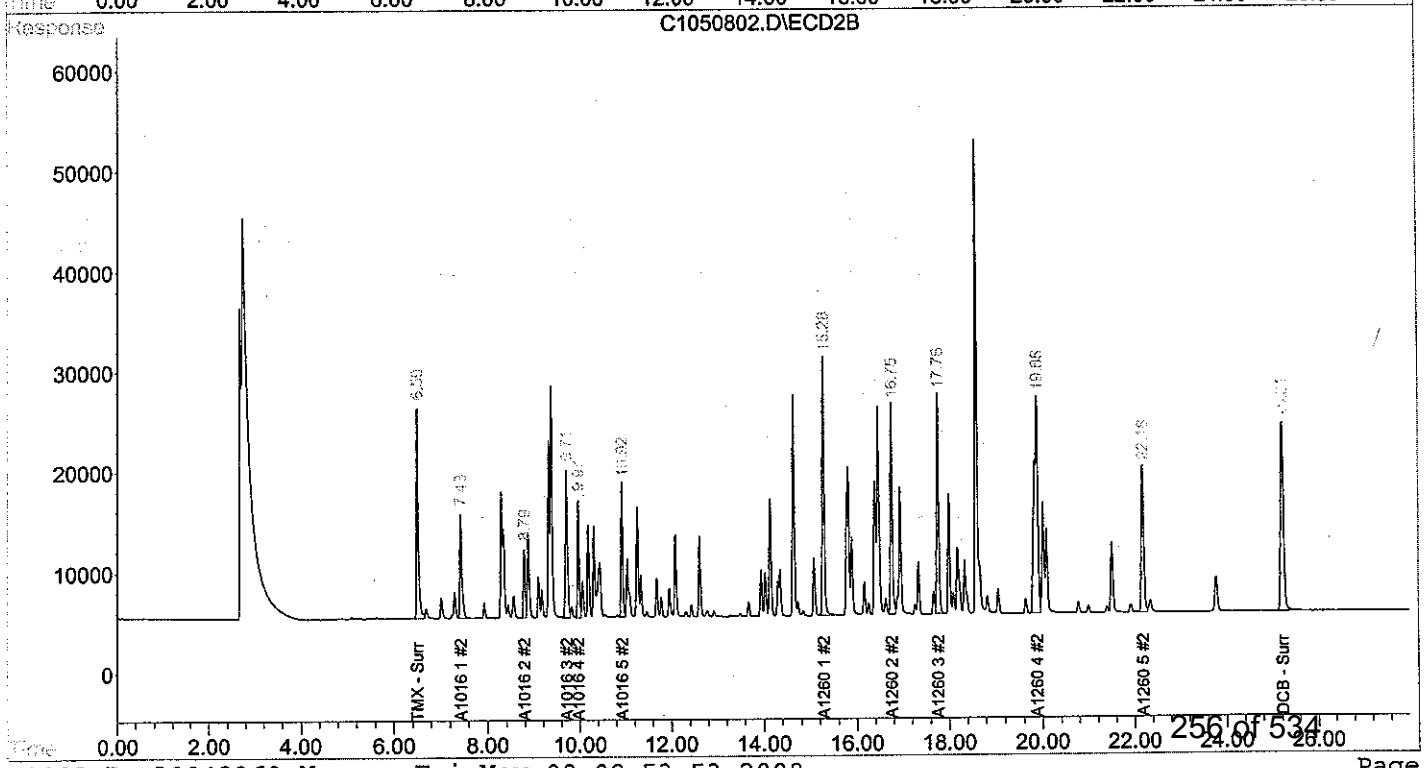
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD2B.CH
Acq On : 8 May 2008 2:25 pm Operator: JBS
Sample : C1050802 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 8:53 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD1A.CH Vial: 8
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050802.D\ECD2B.CH
Acq On : 8 May 2008 2:25 pm Operator: JBS
Sample : C1050802 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	43.224	-8.1	106	0.00
2	L1	A1016 1	1000.000	1068.253	-6.8	106	0.00
3	L1	A1016 2	1000.000	1097.531	-9.8	103	0.00
4	L1	A1016 3	1000.000	1039.613	-4.0	101	0.00
5	L1	A1016 4	1000.000	1014.129	-1.4	102	0.00
6	L1	A1016 5	1000.000	1026.365	-2.6	102	0.00
7	L7	A1260 1	1000.000	1036.668	-3.7	102	0.00
8	L7	A1260 2	1000.000	1048.288	-4.8	103	0.00
9	L7	A1260 3	1000.000	1069.081	-6.9	104	0.00
10	L7	A1260 4	1000.000	1065.707	-6.6	103	0.00
11	L7	A1260 5	1000.000	1076.743	-7.7	105	0.00
12	s	DCB - Surrogate	40.000	43.985	-10.0	104	0.00

Signal #2

1	s	TMX - Surrogate	40.000	46.276	-15.7#	112	0.00
2	L1	A1016 1	1000.000	1127.964	-12.8	110	0.00
3	L1	A1016 2	1000.000	1140.621	-14.1	105	0.00
4	L1	A1016 3	1000.000	1103.289	-10.3	107	0.00
5	L1	A1016 4	1000.000	1121.265	-12.1	109	0.00
6	L1	A1016 5	1000.000	1084.925	-8.5	106	0.00
7	L7	A1260 1	1000.000	1084.772	-8.5	106	0.00
8	L7	A1260 2	1000.000	1102.440	-10.2	107	0.00
9	L7	A1260 3	1000.000	1098.248	-9.8	107	0.00
10	L7	A1260 4	1000.000	1132.594	-13.3	110	0.00
11	L7	A1260 5	1000.000	1159.506	-16.0#	112	0.00
12	s	DCB - Surrogate	40.000	47.611	-19.0#	112	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C1050802.D A1042360.M Fri May 09 08:53:55 2008

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050803**

Case: **N/A** SDG: **N/A**

Column 1: RTx-5 ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.96	7.92	8.02	1000.00	1003.58	0.4	15
PK #2 A1016	9.32	9.28	9.38	1000.00	1003.24	0.3	15
PK #3 A1016	10.19	10.15	10.25	1000.00	970.86	2.9	15
PK #4 A1016	10.77	10.73	10.83	1000.00	921.50	7.9	15
PK #5 A1016	11.38	11.34	11.44	1000.00	924.79	7.5	15
PK #1 A1260	17.42	17.38	17.48	1000.00	856.65	14.3	15
PK #2 A1260	18.27	18.23	18.33	1000.00	842.24	15.8[a]	15
PK #3 A1260	20.27	20.22	20.32	1000.00	882.55	11.7	15
PK #4 A1260	20.74	20.70	20.80	1000.00	888.97	11.1	15
PK #5 A1260	22.79	22.74	22.84	1000.00	932.80	6.7	15
Tetrachloro-meta-xylene	7.28	7.23	7.33	40.00	41.10	2.7	15
Decachlorobiphenyl	26.35	26.30	26.40	40.00	38.25	4.4	15
Average % D						7.1	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form VII
Calibration Verification
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **C1050803**

Case: **N/A** SDG: **N/A**

Column 2: CLP-II ID: 0.25 mm

Parameter	RT	RT Window Low	RT Window High	True Value	CCV Value	% D	Deviation Limit
PK #1 A1016	7.43	7.38	7.48	1000.00	1069.88	7.0	15
PK #2 A1016	8.79	8.74	8.84	1000.00	1083.42	8.3	15
PK #3 A1016	9.71	9.66	9.76	1000.00	1031.64	3.2	15
PK #4 A1016	9.97	9.93	10.03	1000.00	1041.47	4.1	15
PK #5 A1016	10.92	10.87	10.97	1000.00	997.09	0.3	15
PK #1 A1260	15.28	15.23	15.33	1000.00	936.84	6.3	15
PK #2 A1260	16.75	16.70	16.80	1000.00	958.77	4.1	15
PK #3 A1260	17.76	17.71	17.81	1000.00	967.87	3.2	15
PK #4 A1260	19.89	19.84	19.94	1000.00	937.30	6.3	15
PK #5 A1260	22.19	22.13	22.23	1000.00	970.82	2.9	15
Tetrachloro-meta-xylene	6.50	6.46	6.56	40.00	43.10	7.7	15
Decachlorobiphenyl	25.22	25.16	25.26	40.00	41.33	3.3	15
Average % D						4.7	

N/A - Not Applicable
[a] - Value outside of QC Limits.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD2B.CH
Acq On : 8 May 2008 11:18 pm Operator: JBS
Sample : C1050803 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 8:51 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) s TMX - Surrogate	7.28	6.50	657604	533264	41.098	43.098
Spiked Amount 100.000 Range 30 - 150 Recovery =					41.10%	43.10%
12) s DCB - Surrogate	26.35	25.22	968646	739755	38.252	41.328
Spiked Amount 100.000 Range 30 - 150 Recovery =					38.25%	41.33%
Target Compounds						
2) L1 A1016 1	7.96	7.43	345312	286150	1003.584 (C)	1069.879
3) L1 A1016 2	9.32	8.79	437078	158871	1003.242	1083.425
4) L1 A1016 3	10.19	9.71	511836	429598	970.856	1031.642
5) L1 A1016 4	10.77	9.97	297401	269048	921.497	1041.473
6) L1 A1016 5	11.38	10.92	385075	316472	924.789	997.089
Sum A1016 1			1976701	1460139	4823.969	5223.506
Average A1016 1					964.794	1044.701
7) L7 A1260 1	17.42	15.28	649697	652305	856.649	936.838
8) L7 A1260 2	18.27	16.75	632864	538317	842.236	958.774
9) L7 A1260 3	20.27	17.76	854900	570158	882.554m	967.868
10) L7 A1260 4	20.74	19.89	571332	997544	888.975m	937.302
11) L7 A1260 5	22.79	22.19	584682	452244	932.801	970.817
Sum A1260 1			3293475	3210568	4403.214	4771.600
Average A1260 1					880.643	954.320
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

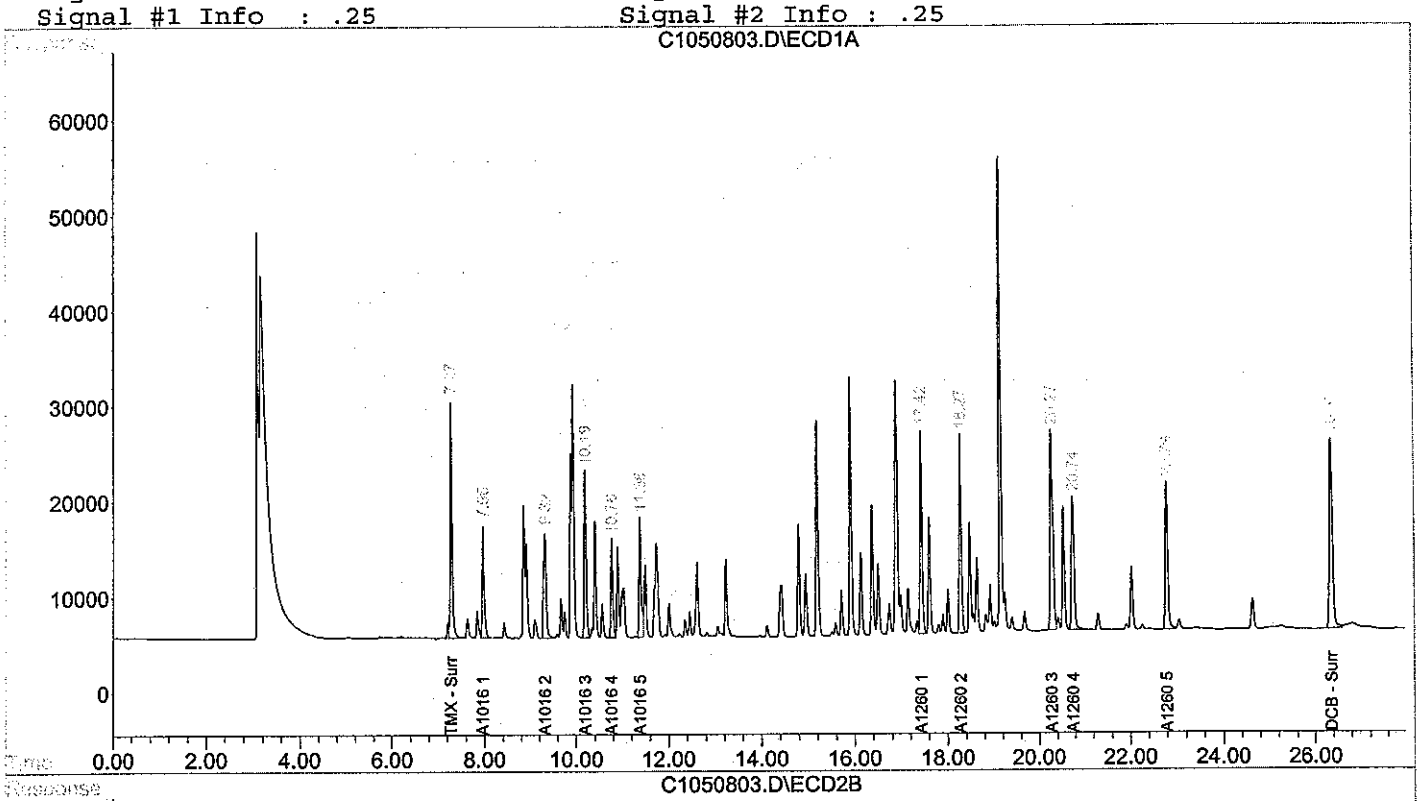
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

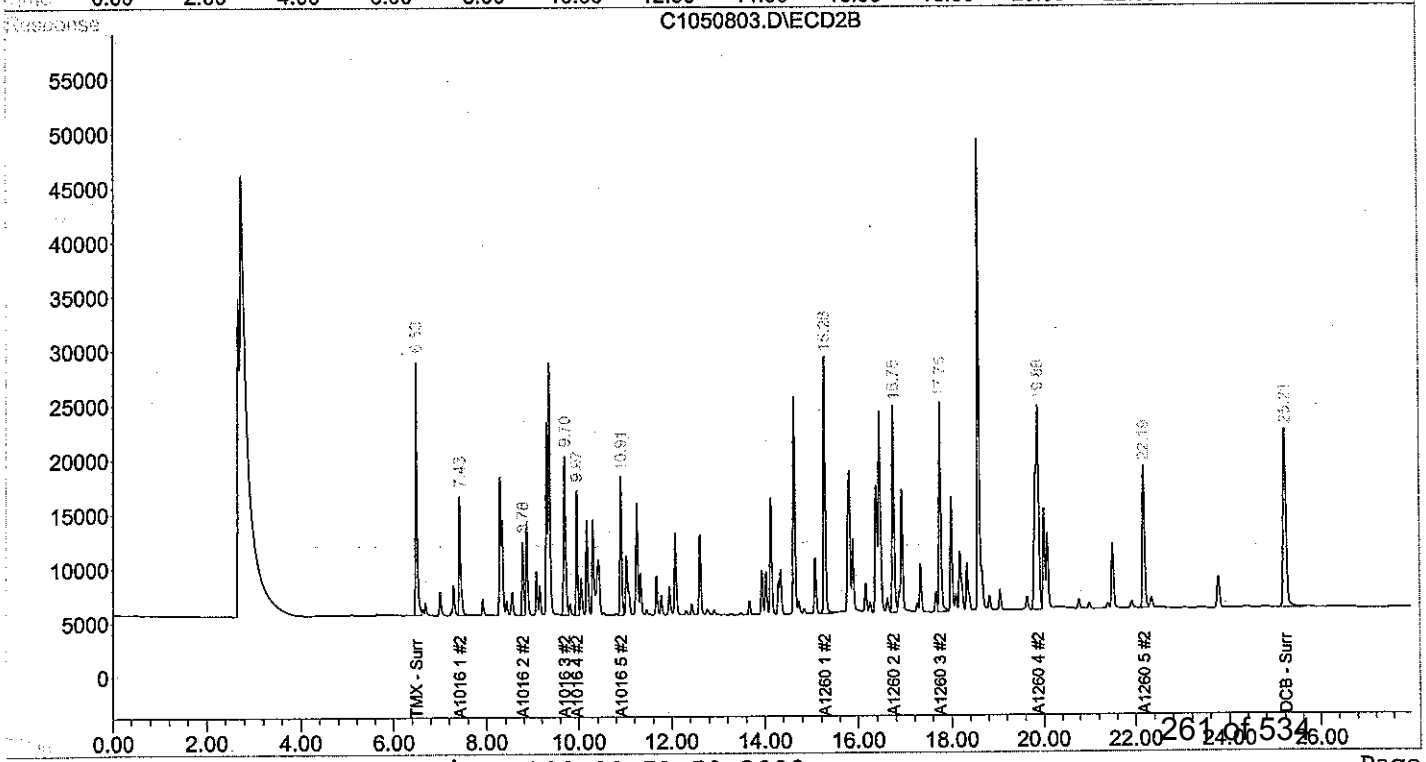
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD2B.CH
Acq On : 8 May 2008 11:18 pm Operator: JBS
Sample : C1050803 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 9 8:51 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Evaluate Continuing Calibration Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD1A.CH Vial: 25
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050803.D\ECD2B.CH
Acq On : 8 May 2008 11:18 pm Operator: JBS
Sample : C1050803 Inst : HP ECD2
Misc : PW0300507A @1000PPB AR1660 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	s	TMX - Surrogate	40.000	41.098	-2.7	101	0.00
2	L1	A1016 1	1000.000	1003.584	-0.4	100	0.00
3	L1	A1016 2	1000.000	1003.242	-0.3	96	0.00
4	L1	A1016 3	1000.000	970.856	2.9	95	0.00
5	L1	A1016 4	1000.000	921.497	7.9	94	0.00
6	L1	A1016 5	1000.000	924.789	7.5	93	0.00
7	L7	A1260 1	1000.000	856.649	14.3	87	0.00
8	L7	A1260 2	1000.000	842.236	15.8#	85	0.00
9	L7	A1260 3	1000.000	882.554	11.7	88	0.00
10	L7	A1260 4	1000.000	888.975	11.1	87	0.00
11	L7	A1260 5	1000.000	932.801	6.7	92	0.00
12	s	DCB - Surrogate	40.000	38.252	4.4	92	0.00

Signal #2

1	s	TMX - Surrogate	40.000	43.098	-7.7	105	0.00
2	L1	A1016 1	1000.000	1069.879	-7.0	105	0.00
3	L1	A1016 2	1000.000	1083.425	-8.3	101	0.00
4	L1	A1016 3	1000.000	1031.642	-3.2	102	0.00
5	L1	A1016 4	1000.000	1041.473	-4.1	102	0.00
6	L1	A1016 5	1000.000	997.089	0.3	98	0.00
7	L7	A1260 1	1000.000	936.838	6.3	94	0.00
8	L7	A1260 2	1000.000	958.774	4.1	95	0.00
9	L7	A1260 3	1000.000	967.868	3.2	96	0.00
10	L7	A1260 4	1000.000	937.302	6.3	93	0.00
11	L7	A1260 5	1000.000	970.817	2.9	96	0.00
12	s	DCB - Surrogate	40.000	41.328	-3.3	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C1050803.D A1042360.M Fri May 09 08:52:06 2008

Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050801.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050801.D\ECD2B.CH
Acq On : 8 May 2008 2:57 pm Operator: JBS
Sample : I1050801 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 14:59 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 11:45:57 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.98	7.44	308308	259601	1264.784 (C)	1375.751
24) L4 A1242 2	8.86	8.30	592248	447648	1240.116m	1301.030m
25) L4 A1242 3	9.94	9.38	1049946	845836	1223.948m	1300.670m
26) L4 A1242 4	10.21	9.72	461624	385171	1219.075	1302.521 (C)
27) L4 A1242 5	11.74	12.10	471453	362674	1237.359	1301.817
Sum A1242 1			2883579	2300930	6185.282	6581.789
Average A1242 1					1237.056	1316.358
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

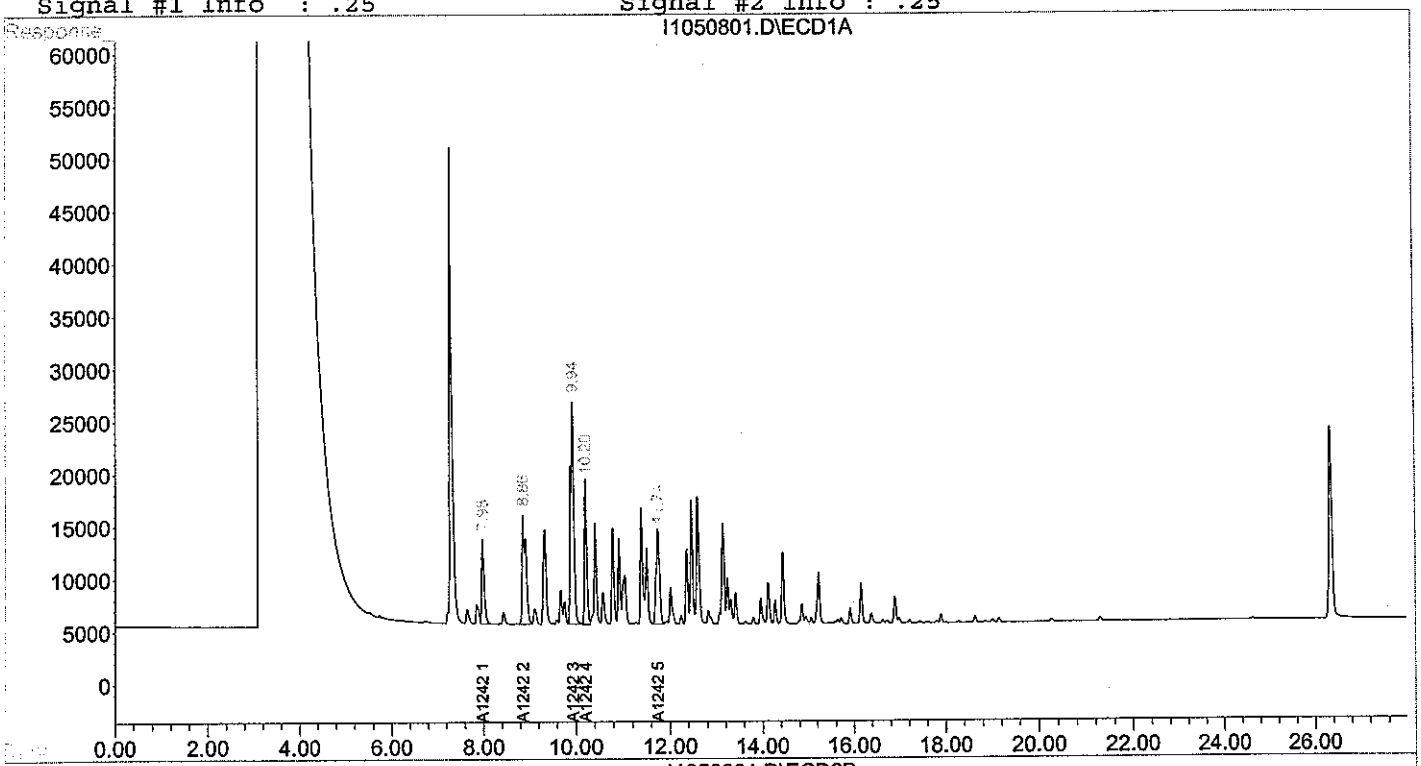
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

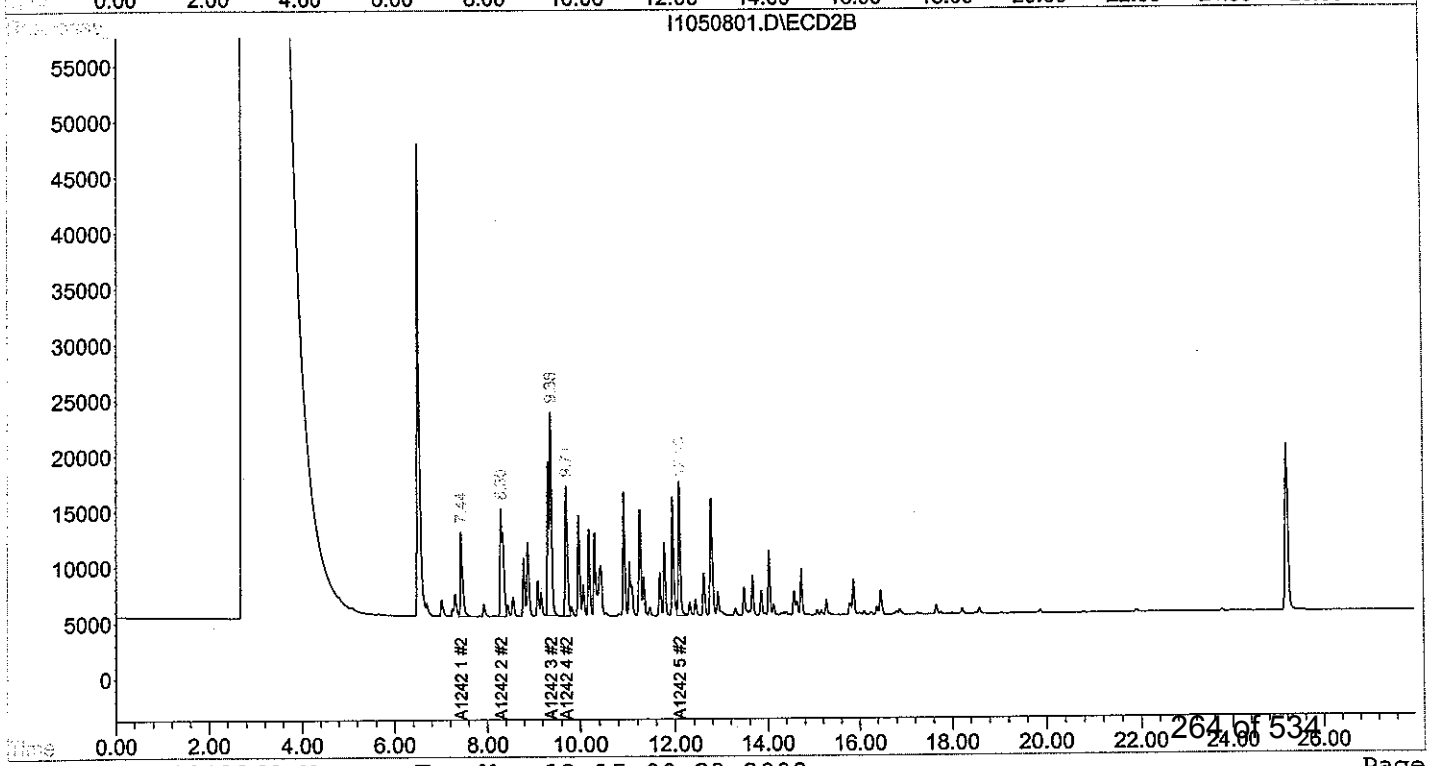
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050801.D\ECD1A.CH Vial: 9
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050801.D\ECD2B.CH
Acq On : 8 May 2008 2:57 pm Operator: JBS
Sample : I1050801 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 14:59 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 11:45:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JJS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050804.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050804.D\ECD2B.CH
Acq On : 8 May 2008 11:49 pm Operator: JBS
Sample : C1050804 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:05 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
23) L4 A1242 1	7.97	7.43	287118	232223	980.901 (C)	966.192
24) L4 A1242 2	8.85	8.29	548886	416562	952.963m	944.127m
25) L4 A1242 3	9.93	9.38	986994	802838	921.606m	939.124m
26) L4 A1242 4	10.20	9.71	429469	361553	937.160 (C)	933.497 (C)
27) L4 A1242 5	11.74	12.10	433444	336355	906.509	903.943
Sum A1242 1			2685911	2149531	4699.139	4686.882
Average A1242 1					939.828	937.376
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

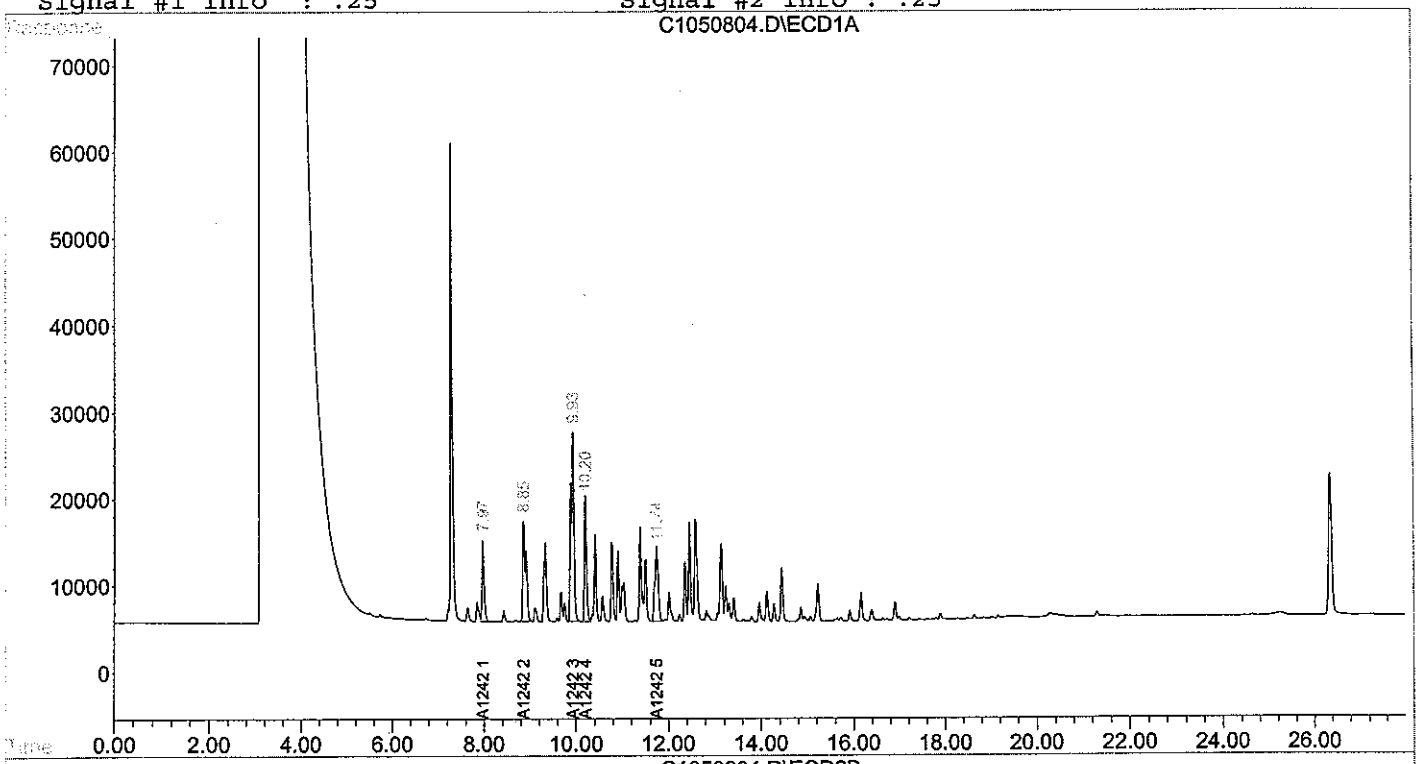
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

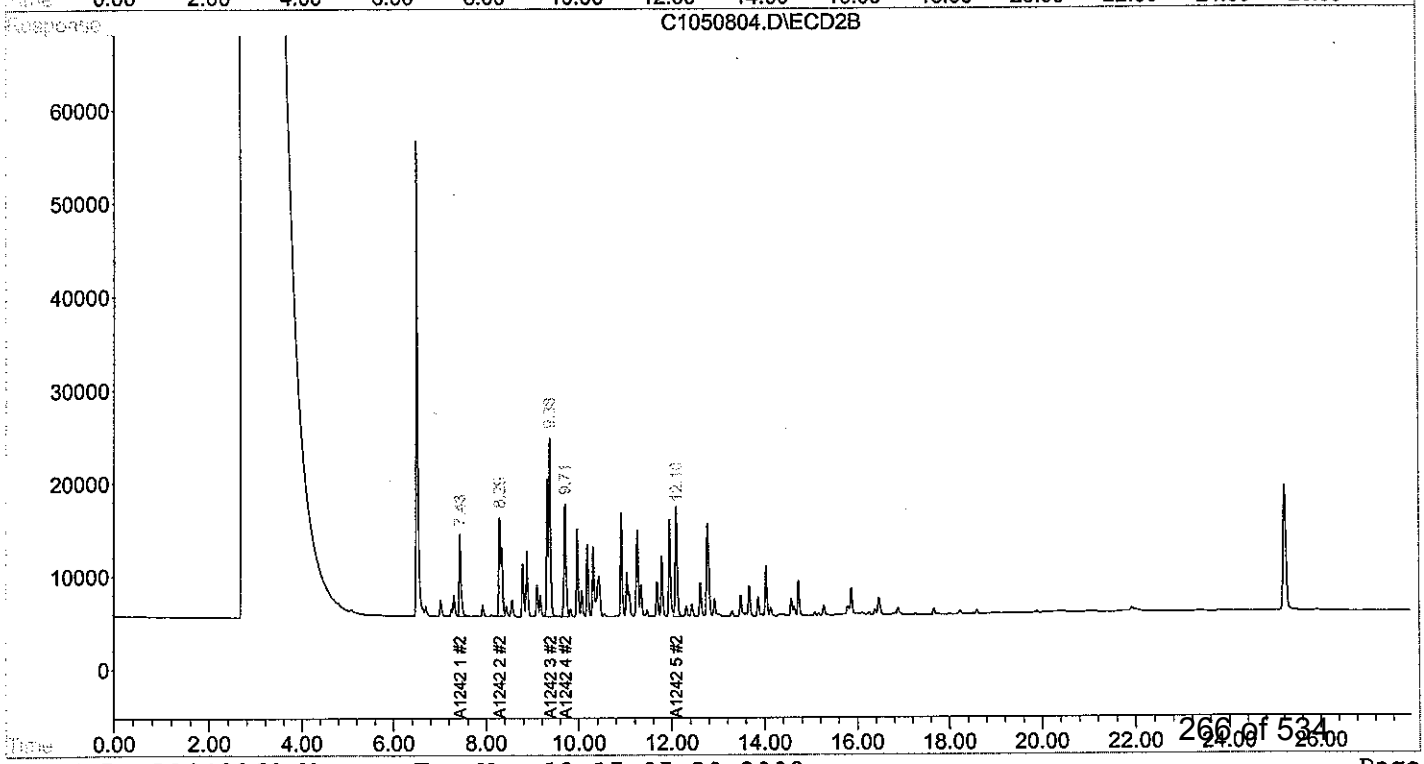
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050804.D\ECD1A.CH Vial: 26
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050804.D\ECD2B.CH
Acq On : 8 May 2008 11:49 pm Operator: JBS
Sample : C1050804 Inst : HP ECD2
Misc : PW050107B 1:10 @1000PPB AR1242 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:05 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Thu May 08 10:49:00 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

JBS 5/19/08

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050802.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050802.D\ECD2B.CH
Acq On : 8 May 2008 3:28 pm Operator: JBS
Sample : I1050802 Inst : HP ECD2
Misc : PW090507B 1:10 @1000PPB AR1248 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:00:13 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
28) L5 A1248 1	10.21	9.71	316449	266482	1099.183 (C)	1150.077
29) L5 A1248 2	10.78	10.19	499479	370302	1086.632	1146.097
30) L5 A1248 3	11.39	10.92	612543	497954	1085.988	1153.931
31) L5 A1248 4	12.46	11.96	685150	553971	1087.670	1145.080
32) L5 A1248 5	14.44	14.03	465658	336835	1097.950 (C)	1157.285 (C)
Sum A1248 1			2579280	2025543	5457.423	5752.470
Average A1248 1					1091.485	1150.494
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

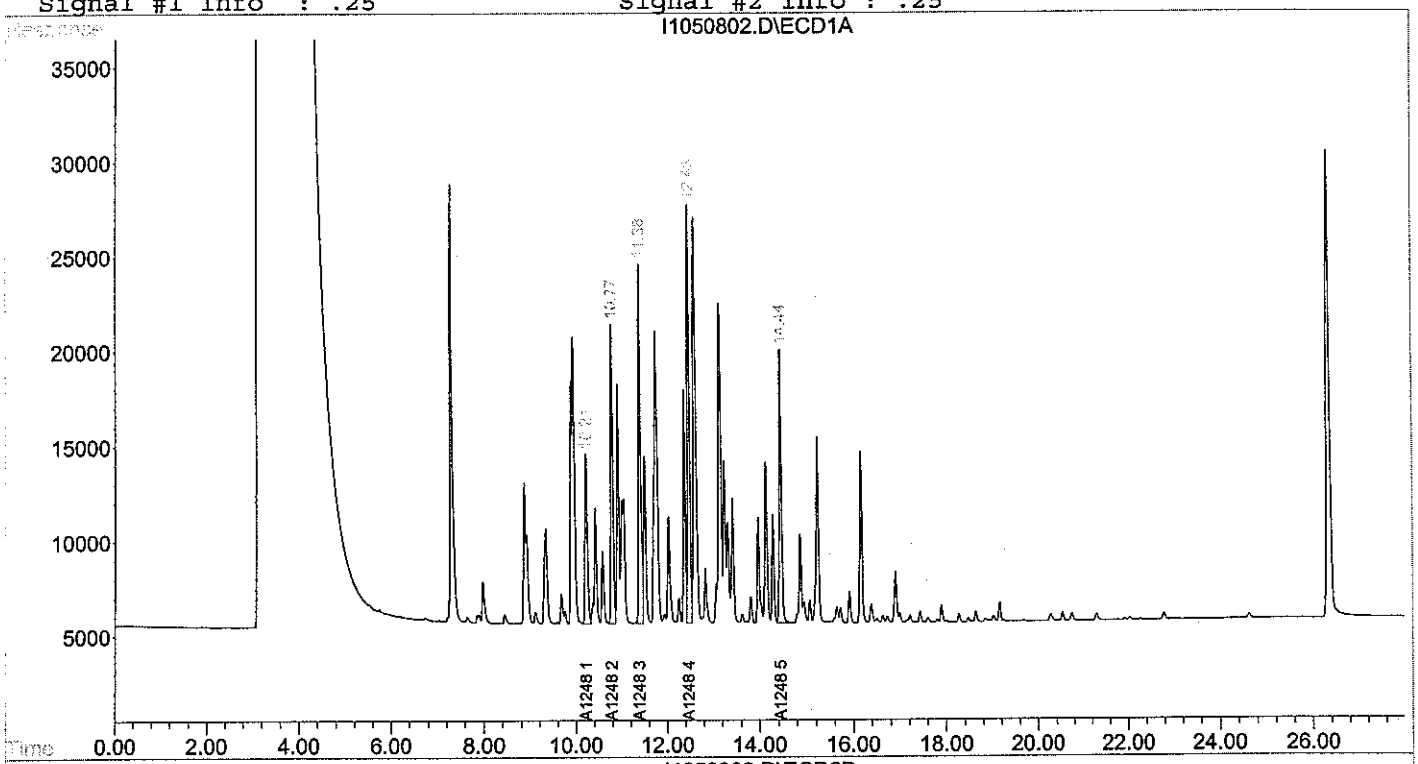
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

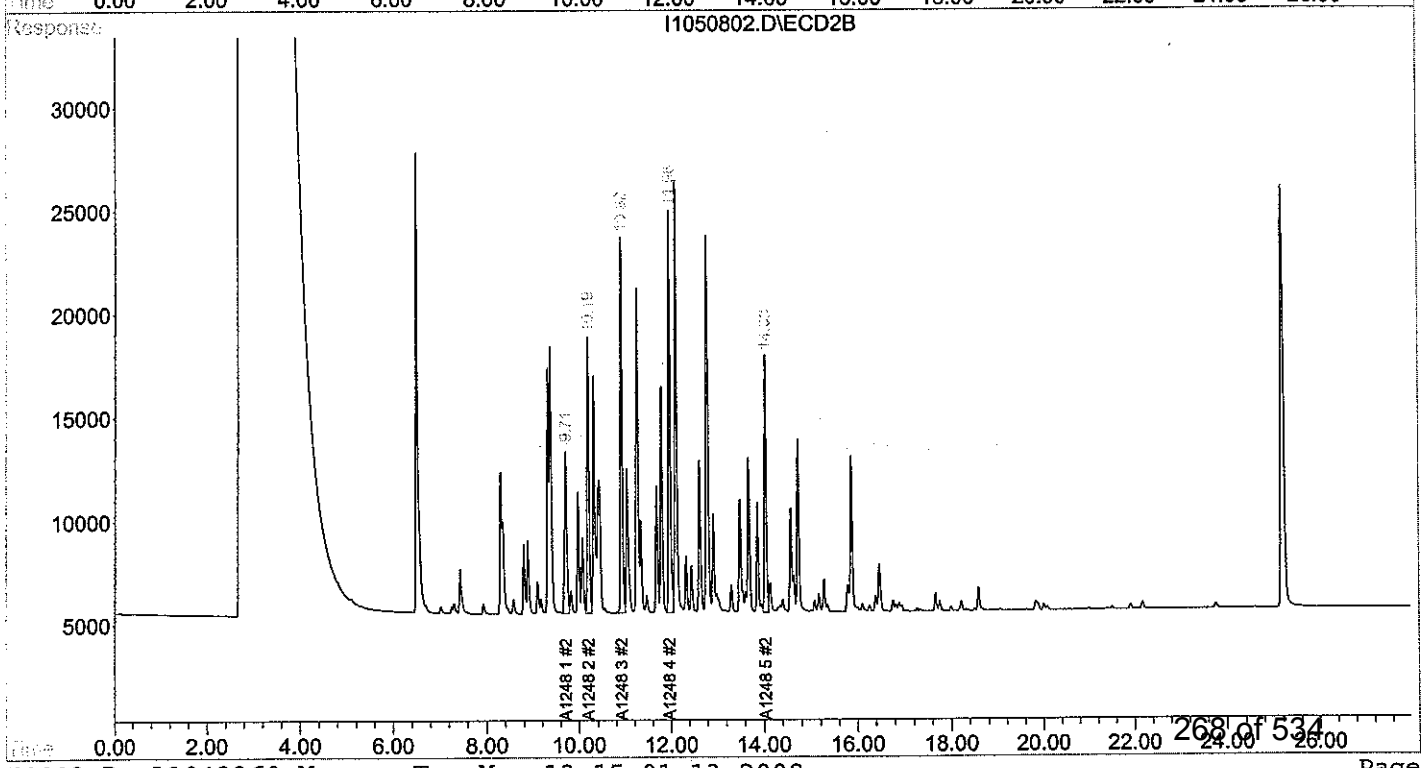
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050802.D\ECD1A.CH Vial: 10
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050802.D\ECD2B.CH
Acq On : 8 May 2008 3:28 pm Operator: JBS
Sample : I1050802 Inst : HP ECD2
Misc : PW090507B 1:10 @1000PPB AR1248 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:00 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:00:13 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





JBS
5/19/08

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050805.D\ECD1A.CH Vial: 27
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050805.D\ECD2B.CH
Acq On : 9 May 2008 12:20 am Operator: JBS
Sample : C1050805 Inst : HP ECD2
Misc : PW090507B 1:10 @1000PPB AR1248 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:05 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
28) L5 A1248 1	10.20	9.71	298328	251280	942.738 (C)	942.952 (C)
29) L5 A1248 2	10.77	10.19	469177	345303	939.333	932.490
30) L5 A1248 3	11.38	10.92	580201	464796	947.200 (C)	933.412 (C)
31) L5 A1248 4	12.46	11.96	640856	518804	935.351	936.518
32) L5 A1248 5	14.44	14.04	418692	305800	899.141	907.865 (C)
Sum A1248 1			2407254	1885983	4663.762	4653.237
Average A1248 1					932.752	930.647
Sum A1254 1			0	0	N.D.	N.D.
Average A1254 1					0.000	0.000
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

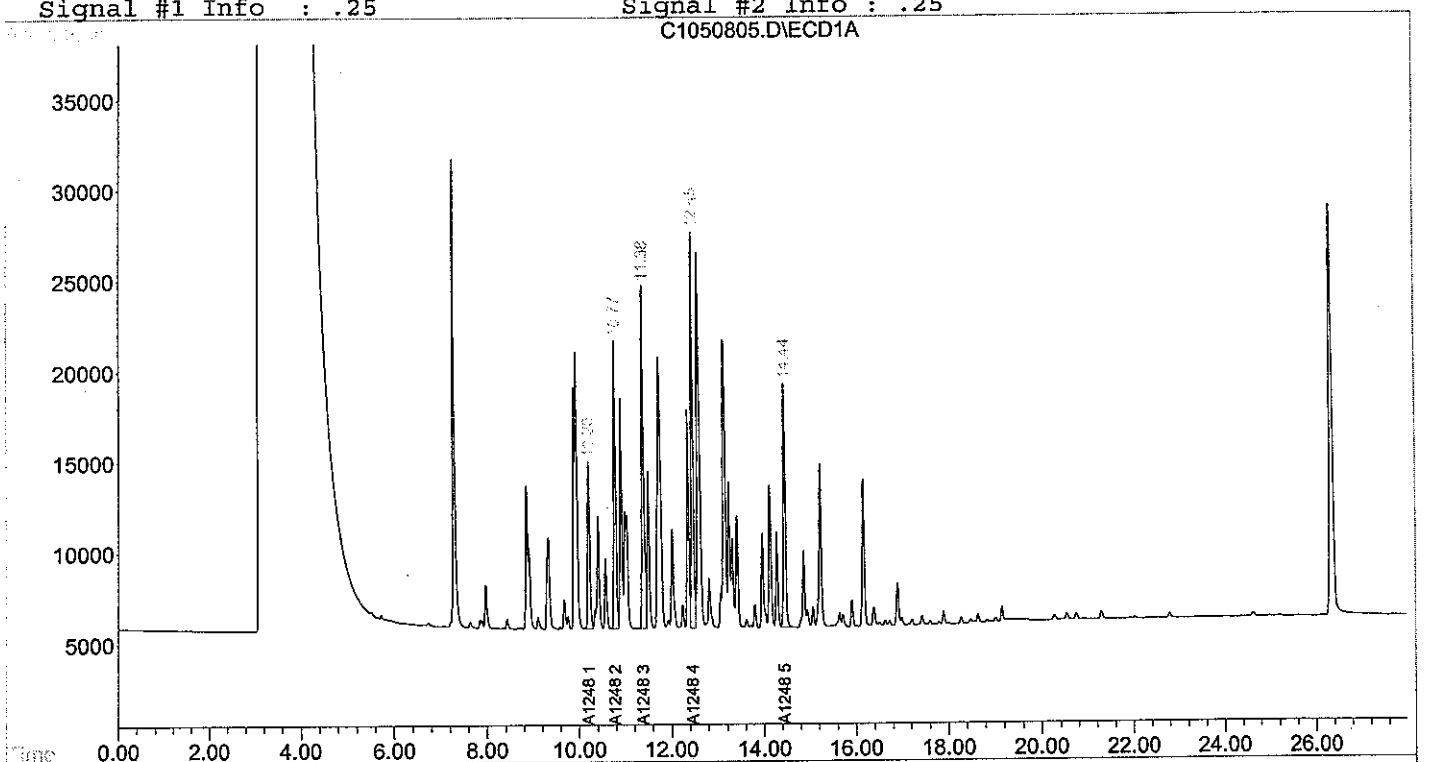
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

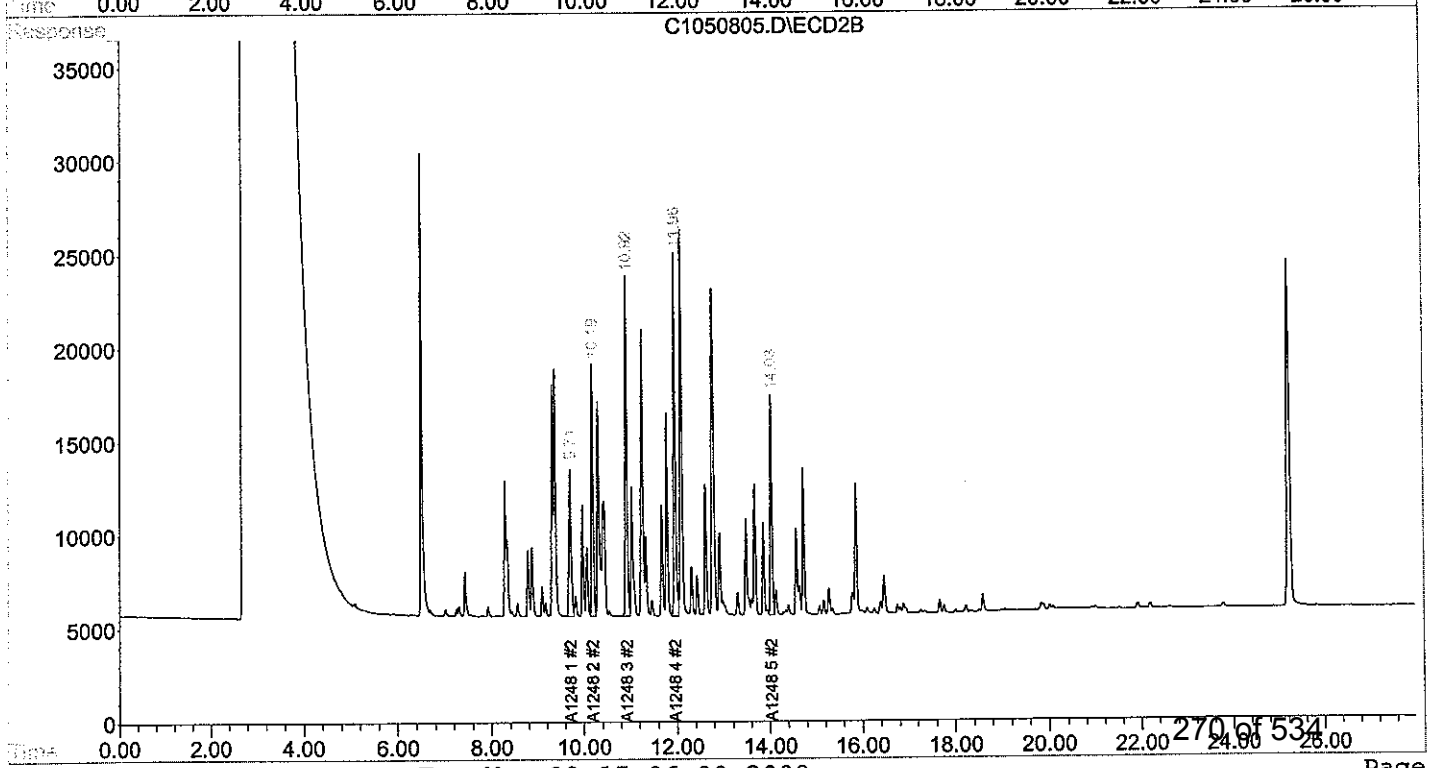
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050805.D\ECD1A.CH Vial: 27
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050805.D\ECD2B.CH
Acq On : 9 May 2008 12:20 am Operator: JBS
Sample : C1050805 Inst : HP ECD2
Misc : PW090507B 1:10 @1000PPB AR1248 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:05 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050803.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050803.D\ECD2B.CH
Acq On : 8 May 2008 3:59 pm Operator: JBS
Sample : I1050803 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:02 2008 Quant Results File: A1042360.RES

JB 5/19/08

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:01:02 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.61	12.09	722568	537738	1098.450m	1139.841m
34) L6 A1254 2	14.43	14.03	1229180	868116	1094.975m	1148.146m(C)
35) L6 A1254 3	15.21	14.72	1325498	647288	1108.543m	1145.596m
36) L6 A1254 4	15.91	15.27	599544	506368	1091.650m	1146.301m
37) L6 A1254 5	16.89	16.46	1177051	876238	1103.856	1163.703m
Sum A1254 1			5053841	3435748	5497.474	5743.586
Average A1254 1					1099.495	1148.717
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

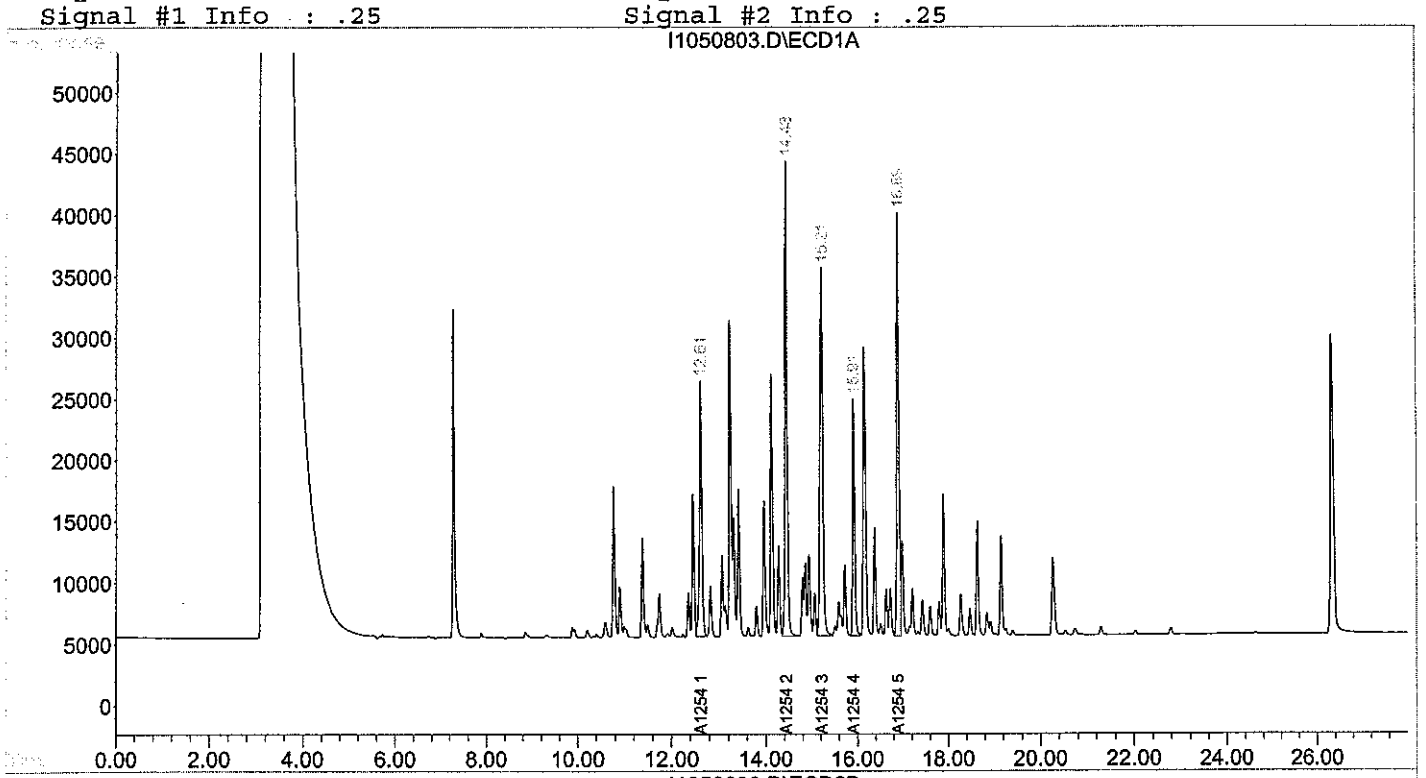
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

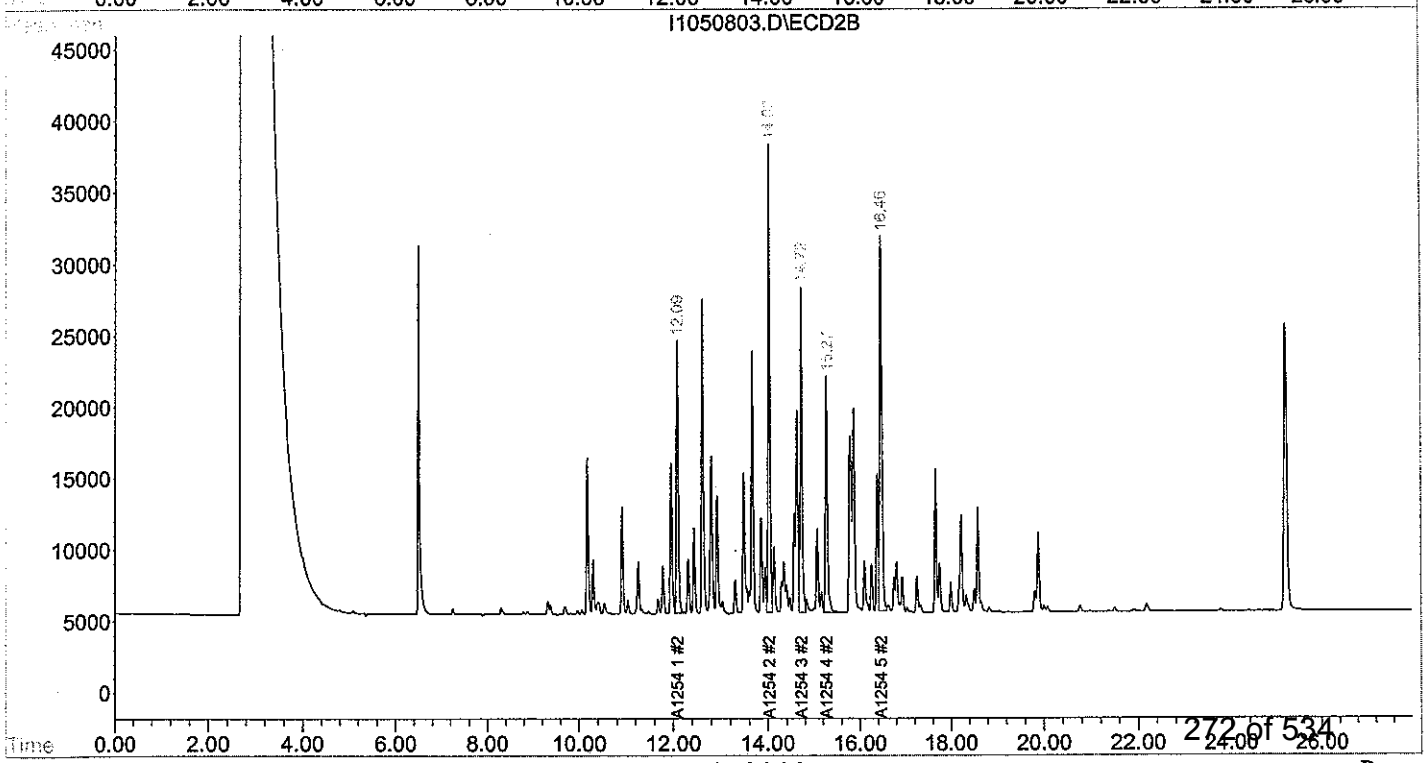
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\I1050803.D\ECD1A.CH Vial: 11
Signal #2 : D:\HPCHEM\2\DATA\MAY08\I1050803.D\ECD2B.CH
Acq On : 8 May 2008 3:59 pm Operator: JBS
Sample : I1050803 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:02 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:01:02 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





JBS 5/19/08

Quantitation Report (QT Reviewed)

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050806.D\ECD1A.CH Vial: 28
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050806.D\ECD2B.CH
Acq On : 9 May 2008 12:52 am Operator: JBS
Sample : C1050806 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:07 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Initial Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
Target Compounds						
Sum A1016 1			0	0	N.D.	N.D.
Average A1016 1					0.000	0.000
Sum A1260 1			0	0	N.D.	N.D.
Average A1260 1					0.000	0.000
Sum A1221 1			0	0	N.D.	N.D.
Average A1221 1					0.000	0.000
Sum A1232 1			0	0	N.D.	N.D.
Average A1232 1					0.000	0.000
Sum A1242 1			0	0	N.D.	N.D.
Average A1242 1					0.000	0.000
Sum A1248 1			0	0	N.D.	N.D.
Average A1248 1					0.000	0.000
33) L6 A1254 1	12.62	12.09	685375	515663	948.527	958.948
34) L6 A1254 2	14.44	14.03	1142172	815368	929.215m	939.239m(C)
35) L6 A1254 3	15.22	14.73	1208616	598878	911.820m	925.211m
36) L6 A1254 4	15.91	15.28	546659	461254	911.791	910.907m
37) L6 A1254 5	16.90	16.47	1075286	796664	913.542m	909.187m
Sum A1254 1			4658108	3187827	4614.895	4643.491
Average A1254 1					922.979	928.698
Sum A1262 1			0	0	N.D.	N.D.
Average A1262 1					0.000	0.000
Sum A1268 1			0	0	N.D.	N.D.
Average A1268 1					0.000	0.000

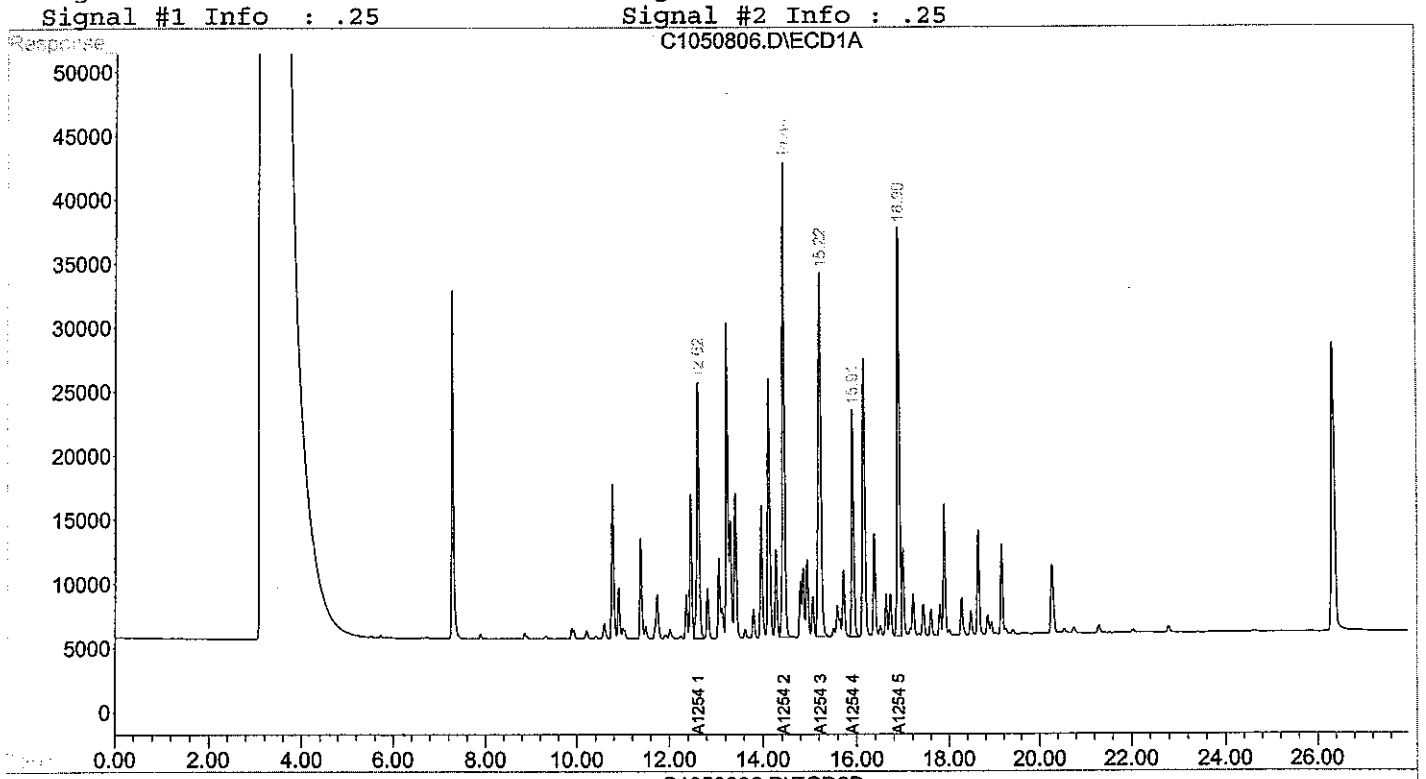
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

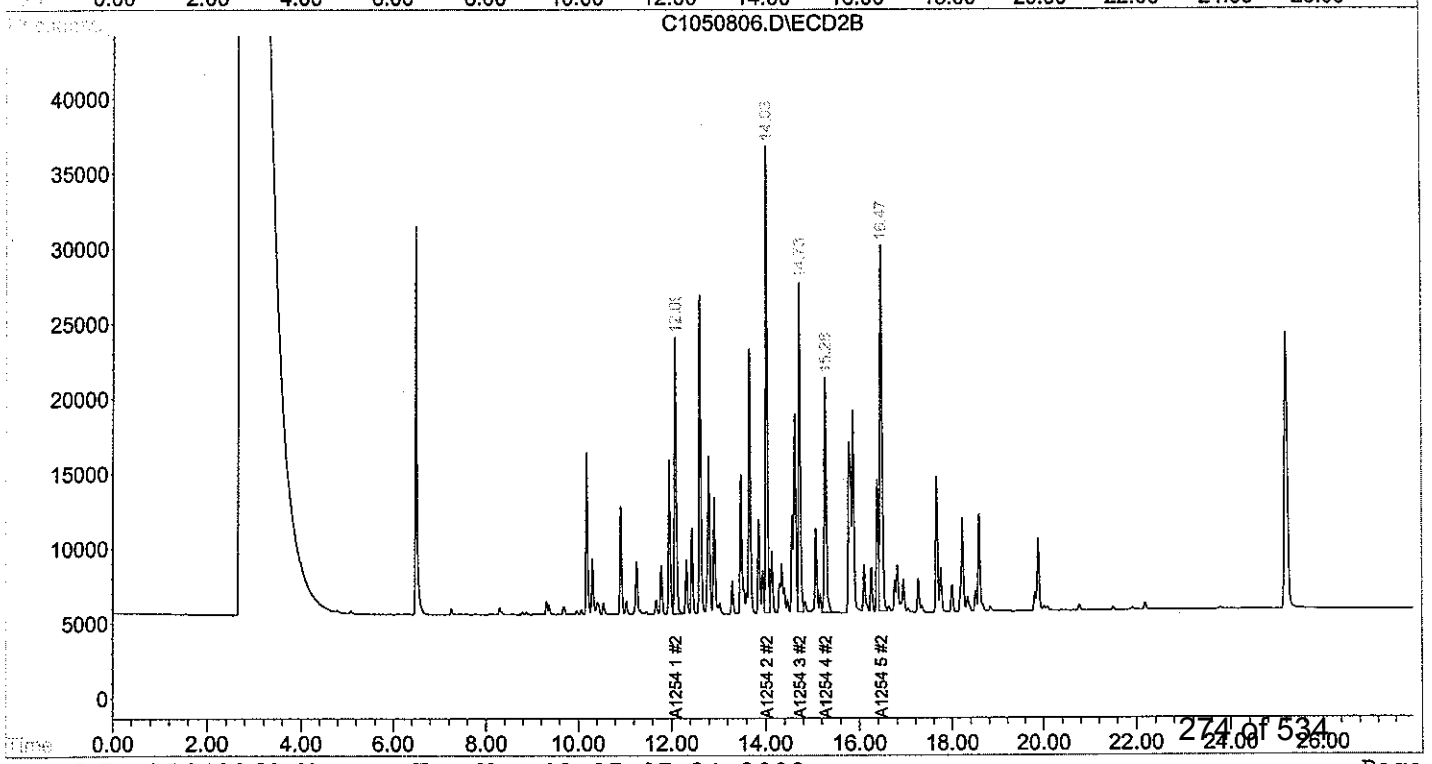
Quantitation Report

Signal #1 : D:\HPCHEM\2\DATA\MAY08\C1050806.D\ECD1A.CH Vial: 28
Signal #2 : D:\HPCHEM\2\DATA\MAY08\C1050806.D\ECD2B.CH
Acq On : 9 May 2008 12:52 am Operator: JBS
Sample : C1050806 Inst : HP ECD2
Misc : PW090507D 1:10 @1000PPB AR1254 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 13 15:07 2008 Quant Results File: A1042360.RES

Quant Method : D:\HPCHEM\2\METHODS\A1042360.M (Chemstation Integrator)
Title : PCB AROCLORS BY 8082
Last Update : Tue May 13 15:02:54 2008
Response via : Multiple Level Calibration
DataAcq Meth : A1042360.M

Volume Inj. : 1
Signal #1 Phase : RTX 5 Signal #2 Phase: RTX CLP II
Signal #1 Info : .25 Signal #2 Info : .25





Form X
Duplicate
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				158				**165**	4

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B3/4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-02**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				333				**398**	18
Aroclor 1254				1250				**1310**	4
Aroclor 1260				254				**277**	9

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B2/3**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-03**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				397				**545**	32
Aroclor 1254				1270				**1320**	4
Aroclor 1260				**364**				345	5

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1/2**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-04**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				**182**				167	9
Aroclor 1254				**408**				380	7

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B1**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-05**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				**501**				427	16
Aroclor 1254				915				**926**	1

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-06**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				**394**				342	14
Aroclor 1254				596				**640**	7

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B5/6**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-07**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				91.3				**108**	17

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B6/7**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-08**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				**193**				186	4

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B7/8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-09**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				108				**120**	11

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B8**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-10**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1242				**177**				151	16
Aroclor 1254				**408**				405	1

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **B4**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1254				141				**156**	11

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Laboratory Control Sample
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108LCS01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1016				1700				**1800**	6
Aroclor 1260				1540				**1720**	11

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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Form X
Polychlorinated Biphenyls by 8082

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Client ID: **Laboratory Control Sample Dup**
Case: **N/A** SDG: **N/A**
Matrix: **Sediment**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **PS050108LCSD01**
Associated Blank: **PS050108B01**
Concentration Units: **µg/Kg**

Column 1: RTX 5 ID: 0.25 mm Column 2: RTX CLP II ID: 0.25 mm

	Column 1				Column 2				
Parameter	Retention Time	RT Window Low	RT Window High	Conc.	Retention Time	RT Window Low	RT Window High	Conc.	RPD
Aroclor 1016				1390				**1480**	6
Aroclor 1260				1290				**1440**	11

N/A - Not Applicable

Result in bold is the reported value.
Concentrations reported as calculated values, which includes rounding for significant figures. Percent Deviation values are reported based on the raw data.

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METALS

Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**6160**	E	40.7	10	05/07/08	05/01/08	6020A	LMR
Antimony	**1.31**	N	0.0407	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**5.34**	¤	0.0407	2	05/02/08	05/01/08	6020A	LMR
Barium	**320**	EN	0.0407	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.224**		0.0163	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**7.74**		0.0163	2	05/02/08	05/01/08	6020A	LMR
Calcium	**4610**	E	204	10	05/07/08	05/01/08	6020A	LMR
Chromium	**47.6**	¤	0.163	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**6.58**	E	0.0163	2	05/02/08	05/01/08	6020A	LMR
Copper	**84.9**	E¤	0.0815	2	05/02/08	05/01/08	6020A	LMR
Iron	**30100**	¤	163	20	05/07/08	05/01/08	6020A	LMR
Lead	**461**	¤N	0.407	20	05/07/08	05/01/08	6020A	LMR
Magnesium	**2640**	EN	40.7	10	05/07/08	05/01/08	6020A	LMR
Manganese	**739**	¤	1.63	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.0212**		0.0149	5	05/07/08	05/05/08	7474	LMR
Nickel	**24.7**	E	0.0815	2	05/02/08	05/01/08	6020A	LMR
Potassium	**784**	N	40.7	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.439**		0.407	2	05/02/08	05/01/08	6020A	LMR
Silver	**0.859**		0.0407	2	05/02/08	05/01/08	6020A	LMR
Sodium	**1160**	N	40.7	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0475**		0.0163	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**34.5**	¤	0.0815	2	05/02/08	05/01/08	6020A	LMR
Zinc	**3430**	¤	4.07	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B3/4**
Matrix: **Sediment**
Percent Solid: **32.6**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-02**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**12400**	E	93.0	10	05/07/08	05/01/08	6020A	LMR
Antimony	**6.02**	N	0.0984	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**19.3**	¤	0.0930	2	05/02/08	05/01/08	6020A	LMR
Barium	**2130**	EN	0.930	20	05/07/08	05/01/08	6020A	LMR
Beryllium	**0.443**		0.0372	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**12.0**		0.0372	2	05/02/08	05/01/08	6020A	LMR
Calcium	**7780**	E	465	10	05/07/08	05/01/08	6020A	LMR
Chromium	**342**	¤	0.372	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**18.0**	E	0.0372	2	05/02/08	05/01/08	6020A	LMR
Copper	**303**	E¤	0.186	2	05/02/08	05/01/08	6020A	LMR
Iron	**67800**	¤	372	20	05/07/08	05/01/08	6020A	LMR
Lead	**750**	¤N	0.0930	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**5030**	EN	93.0	10	05/07/08	05/01/08	6020A	LMR
Manganese	**2050**	¤	3.72	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.282**		0.0380	5	05/07/08	05/05/08	7474	LMR
Nickel	**85.6**	E	0.186	2	05/02/08	05/01/08	6020A	LMR
Potassium	**955**	N	93.0	10	05/07/08	05/01/08	6020A	LMR
Selenium	**1.21**		0.930	2	05/02/08	05/01/08	6020A	LMR
Silver	**2.10**		0.0984	2	05/02/08	05/01/08	6020A	LMR
Sodium	**1320**	N	93.0	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.105**		0.0372	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**97.7**	¤	0.186	2	05/02/08	05/01/08	6020A	LMR
Zinc	**4640**	¤	9.30	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B2/3**
Matrix: **Sediment**
Percent Solid: **30.8**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-03**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**8820**	E	105	10	05/07/08	05/01/08	6020A	LMR
Antimony	**3.72**	N	0.0989	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**8.58**	¤	0.105	2	05/02/08	05/01/08	6020A	LMR
Barium	**417**	EN	0.105	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.300**		0.0419	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**7.63**		0.0419	2	05/02/08	05/01/08	6020A	LMR
Calcium	**5360**	E	523	10	05/07/08	05/01/08	6020A	LMR
Chromium	**265**	¤	0.419	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**12.9**	E	0.0419	2	05/02/08	05/01/08	6020A	LMR
Copper	**290**	E¤	0.209	2	05/02/08	05/01/08	6020A	LMR
Iron	**43100**	¤	419	20	05/07/08	05/01/08	6020A	LMR
Lead	**894**	¤N	0.105	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**3460**	EN	105	10	05/07/08	05/01/08	6020A	LMR
Manganese	**1760**	¤	4.19	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.283**		0.0386	5	05/07/08	05/05/08	7474	LMR
Nickel	**63.7**	E	0.209	2	05/02/08	05/01/08	6020A	LMR
Potassium	**552**	N	105	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.984**	J	1.05	2	05/02/08	05/01/08	6020A	LMR
Silver	**1.58**		0.0989	2	05/02/08	05/01/08	6020A	LMR
Sodium	**645**	N	105	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0900**		0.0419	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**73.8**	¤	0.209	2	05/02/08	05/01/08	6020A	LMR
Zinc	**2720**	¤	10.5	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B1/2**
Matrix: **Sediment**
Percent Solid: **66.4**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-04**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**6760**	E	48.3	10	05/07/08	05/01/08	6020A	LMR
Antimony	**2.21**	N	0.0480	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**6.02**	¤	0.0483	2	05/02/08	05/01/08	6020A	LMR
Barium	**318**	EN	0.0483	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.226**		0.0193	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**8.77**		0.0193	2	05/02/08	05/01/08	6020A	LMR
Calcium	**5250**	E	241	10	05/07/08	05/01/08	6020A	LMR
Chromium	**109**	¤	0.193	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**9.64**	E	0.0193	2	05/02/08	05/01/08	6020A	LMR
Copper	**128**	E¤	0.0965	2	05/02/08	05/01/08	6020A	LMR
Iron	**45400**	¤	193	20	05/07/08	05/01/08	6020A	LMR
Lead	**445**	¤N	0.0483	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**3250**	EN	48.3	10	05/07/08	05/01/08	6020A	LMR
Manganese	**1240**	¤	1.93	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.0476**		0.0176	5	05/07/08	05/05/08	7474	LMR
Nickel	**36.6**	E	0.0965	2	05/02/08	05/01/08	6020A	LMR
Potassium	**747**	N	48.3	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.317**	J	0.483	2	05/02/08	05/01/08	6020A	LMR
Silver	**1.42**		0.0480	2	05/02/08	05/01/08	6020A	LMR
Sodium	**1130**	N	48.3	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0445**		0.0193	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**35.3**	¤	0.0965	2	05/02/08	05/01/08	6020A	LMR
Zinc	**3720**	¤	4.83	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B1**
Matrix: **Sediment**
Percent Solid: **25.6**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-05**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**9100**	E	119	10	05/07/08	05/01/08	6020A	LMR
Antimony	**4.66**	N	0.127	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**7.27**	¤	0.119	2	05/02/08	05/01/08	6020A	LMR
Barium	**339**	EN	0.119	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.277**		0.0476	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**8.22**		0.0476	2	05/02/08	05/01/08	6020A	LMR
Calcium	**5730**	E	595	10	05/07/08	05/01/08	6020A	LMR
Chromium	**206**	¤	0.476	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**12.5**	E	0.0476	2	05/02/08	05/01/08	6020A	LMR
Copper	**241**	E¤	0.238	2	05/02/08	05/01/08	6020A	LMR
Iron	**40600**	¤	476	20	05/07/08	05/01/08	6020A	LMR
Lead	**631**	¤N	0.119	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**3310**	EN	119	10	05/07/08	05/01/08	6020A	LMR
Manganese	**2410**	¤	4.76	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.250**		0.0474	5	05/07/08	05/05/08	7474	LMR
Nickel	**58.6**	E	0.238	2	05/02/08	05/01/08	6020A	LMR
Potassium	**556**	N	119	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.887**	J	1.19	2	05/02/08	05/01/08	6020A	LMR
Silver	**1.20**		0.127	2	05/02/08	05/01/08	6020A	LMR
Sodium	**491**	N	119	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0765**		0.0476	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**60.2**	¤	0.238	2	05/02/08	05/01/08	6020A	LMR
Zinc	**2670**	¤	11.9	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B5**
Matrix: **Sediment**
Percent Solid: **33.9**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-06**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**11400**	E	93.5	10	05/07/08	05/01/08	6020A	LMR
Antimony	**3.99**	N	0.0884	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**8.42**	¤	0.0935	2	05/02/08	05/01/08	6020A	LMR
Barium	**543**	EN	0.0935	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.322**		0.0374	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**7.78**		0.0374	2	05/02/08	05/01/08	6020A	LMR
Calcium	**6680**	E	467	10	05/07/08	05/01/08	6020A	LMR
Chromium	**200**	¤	0.374	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**16.2**	E	0.0374	2	05/02/08	05/01/08	6020A	LMR
Copper	**222**	E¤	0.187	2	05/02/08	05/01/08	6020A	LMR
Iron	**47600**	¤	374	20	05/07/08	05/01/08	6020A	LMR
Lead	**576**	¤N	0.0935	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**4320**	EN	93.5	10	05/07/08	05/01/08	6020A	LMR
Manganese	**1920**	¤	3.74	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.392**		0.0369	5	05/07/08	05/05/08	7474	LMR
Nickel	**63.9**	E	0.187	2	05/02/08	05/01/08	6020A	LMR
Potassium	**644**	N	93.5	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.484**	J	0.935	2	05/02/08	05/01/08	6020A	LMR
Silver	**1.02**		0.0884	2	05/02/08	05/01/08	6020A	LMR
Sodium	**607**	N	93.5	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0846**		0.0374	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**72.4**	¤	0.187	2	05/02/08	05/01/08	6020A	LMR
Zinc	**3940**	¤	9.35	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B5/6**
Matrix: **Sediment**
Percent Solid: **82.2**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-07**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**4690**	E	39.0	10	05/07/08	05/01/08	6020A	LMR
Antimony	**0.271**	N	0.0385	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**2.10**	¤	0.0390	2	05/02/08	05/01/08	6020A	LMR
Barium	**133**	EN	0.0390	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.234**		0.0156	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**1.03**		0.0156	2	05/02/08	05/01/08	6020A	LMR
Calcium	**3420**	E	195	10	05/07/08	05/01/08	6020A	LMR
Chromium	**17.3**	¤	0.156	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**6.00**	E	0.0156	2	05/02/08	05/01/08	6020A	LMR
Copper	**27.3**	E¤	0.0780	2	05/02/08	05/01/08	6020A	LMR
Iron	**14900**	¤	156	20	05/07/08	05/01/08	6020A	LMR
Lead	**233**	¤N	0.0390	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**2560**	EN	39.0	10	05/07/08	05/01/08	6020A	LMR
Manganese	**270**	¤	0.156	2	05/02/08	05/01/08	6020A	LMR
Mercury	0.00111	U	0.0138	5	05/07/08	05/05/08	7474	LMR
Nickel	**15.6**	E	0.0780	2	05/02/08	05/01/08	6020A	LMR
Potassium	**414**	N	39.0	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.0830**	J	0.390	2	05/02/08	05/01/08	6020A	LMR
Silver	**0.174**		0.0385	2	05/02/08	05/01/08	6020A	LMR
Sodium	**303**	N	39.0	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0392**		0.0156	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**24.6**	¤	0.0780	2	05/02/08	05/01/08	6020A	LMR
Zinc	**412**	¤	3.90	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B6/7**
Matrix: **Sediment**
Percent Solid: **66.9**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-08**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**6480**	E	48.5	10	05/07/08	05/01/08	6020A	LMR
Antimony	**1.72**	N	0.0485	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**4.74**	¤	0.0485	2	05/02/08	05/01/08	6020A	LMR
Barium	**335**	EN	0.0485	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.226**		0.0194	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**4.62**		0.0194	2	05/02/08	05/01/08	6020A	LMR
Calcium	**4340**	E	243	10	05/07/08	05/01/08	6020A	LMR
Chromium	**149**	¤	0.194	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**7.87**	E	0.0194	2	05/02/08	05/01/08	6020A	LMR
Copper	**84.3**	E¤	0.0970	2	05/02/08	05/01/08	6020A	LMR
Iron	**29000**	¤	194	20	05/07/08	05/01/08	6020A	LMR
Lead	**607**	¤N	0.485	20	05/07/08	05/01/08	6020A	LMR
Magnesium	**3040**	EN	48.5	10	05/07/08	05/01/08	6020A	LMR
Manganese	**693**	¤	1.94	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.0635**		0.0173	5	05/07/08	05/05/08	7474	LMR
Nickel	**30.0**	E	0.0970	2	05/02/08	05/01/08	6020A	LMR
Potassium	**553**	N	48.5	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.122**	J	0.485	2	05/02/08	05/01/08	6020A	LMR
Silver	**0.883**		0.0485	2	05/02/08	05/01/08	6020A	LMR
Sodium	**505**	N	48.5	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0515**		0.0194	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**38.5**	¤	0.0970	2	05/02/08	05/01/08	6020A	LMR
Zinc	**2110**	¤	4.85	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
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J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B7/8**
Matrix: **Sediment**
Percent Solid: **76.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-09**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**6420**	E	43.1	10	05/07/08	05/01/08	6020A	LMR
Antimony	**0.894**	N	0.0431	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**3.71**	¤	0.0431	2	05/02/08	05/01/08	6020A	LMR
Barium	**743**	EN	0.431	20	05/07/08	05/01/08	6020A	LMR
Beryllium	**0.228**		0.0172	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**3.66**		0.0172	2	05/02/08	05/01/08	6020A	LMR
Calcium	**4020**	E	216	10	05/07/08	05/01/08	6020A	LMR
Chromium	**25.0**	¤	0.172	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**7.84**	E	0.0172	2	05/02/08	05/01/08	6020A	LMR
Copper	**37.5**	E¤	0.0862	2	05/02/08	05/01/08	6020A	LMR
Iron	**25500**	¤	172	20	05/07/08	05/01/08	6020A	LMR
Lead	**196**	¤N	0.0431	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**2540**	EN	43.1	10	05/07/08	05/01/08	6020A	LMR
Manganese	**595**	¤	1.72	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.00742**	J	0.0150	5	05/07/08	05/05/08	7474	LMR
Nickel	**22.6**	E	0.0862	2	05/02/08	05/01/08	6020A	LMR
Potassium	**513**	N	43.1	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.320**	J	0.431	2	05/02/08	05/01/08	6020A	LMR
Silver	**0.672**		0.0431	2	05/02/08	05/01/08	6020A	LMR
Sodium	**504**	N	43.1	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.0413**		0.0172	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**27.9**	¤	0.0862	2	05/02/08	05/01/08	6020A	LMR
Zinc	**1620**	¤	4.31	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
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E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form I
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B8**
Matrix: **Sediment**
Percent Solid: **40.4**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-10**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Result	Qualifier	Reporting Limit	Dilution	Date Analyzed	Date Prepared	Analytical Method	Analyst
Aluminum	**11200**	E	79.3	10	05/07/08	05/01/08	6020A	LMR
Antimony	**1.42**	N	0.0773	2	05/02/08	05/01/08	6020A	LMR
Arsenic	**9.54**	¤	0.0793	2	05/02/08	05/01/08	6020A	LMR
Barium	**618**	EN	0.0793	2	05/02/08	05/01/08	6020A	LMR
Beryllium	**0.423**		0.0317	2	05/02/08	05/01/08	6020A	LMR
Cadmium	**4.92**		0.0317	2	05/02/08	05/01/08	6020A	LMR
Calcium	**6760**	E	396	10	05/07/08	05/01/08	6020A	LMR
Chromium	**87.2**	¤	0.317	2	05/02/08	05/01/08	6020A	LMR
Cobalt	**10.7**	E	0.0317	2	05/02/08	05/01/08	6020A	LMR
Copper	**87.4**	E¤	0.159	2	05/02/08	05/01/08	6020A	LMR
Iron	**35200**	¤	317	20	05/07/08	05/01/08	6020A	LMR
Lead	**417**	¤N	0.0793	2	05/02/08	05/01/08	6020A	LMR
Magnesium	**4710**	EN	79.3	10	05/07/08	05/01/08	6020A	LMR
Manganese	**1150**	¤	3.17	20	05/07/08	05/01/08	6020A	LMR
Mercury	**0.0785**		0.0289	5	05/07/08	05/05/08	7474	LMR
Nickel	**35.2**	E	0.159	2	05/02/08	05/01/08	6020A	LMR
Potassium	**1100**	N	79.3	10	05/07/08	05/01/08	6020A	LMR
Selenium	**0.396**	J	0.793	2	05/02/08	05/01/08	6020A	LMR
Silver	**0.743**		0.0773	2	05/02/08	05/01/08	6020A	LMR
Sodium	**748**	N	79.3	10	05/07/08	05/01/08	6020A	LMR
Thallium	**0.124**		0.0317	2	05/02/08	05/01/08	6020A	LMR
Vanadium	**60.3**	¤	0.159	2	05/02/08	05/01/08	6020A	LMR
Zinc	**2380**	¤	7.93	20	05/07/08	05/01/08	6020A	LMR

N/A - Not Applicable
¤ - Duplicate outside control limits.
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
N - Spike recovery outside control limits.

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050208B**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0502 13:02			CCV 0502 13:48		CCV 0502 14:27		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Arsenic	50.0	52.73	105.0	50.0	54.71	109.0	53.32	107.0	90-110
Barium	50.0	49.75	100.0	50.0	47.91	96.0	46.98	94.0	90-110
Beryllium	50.0	50.92	102.0	50.0	53.04	106.0	52.04	104.0	90-110
Cadmium	50.0	50.36	101.0	50.0	52.36	105.0	50.14	100.0	90-110
Chromium	50.0	51.77	104.0	50.0	52.71	105.0	48.78	98.0	90-110
Cobalt	50.0	53.14	106.0	50.0	51.86	104.0	49.06	98.0	90-110
Copper	50.0	51.21	102.0	50.0	51.35	103.0	48.74	97.0	90-110
Iron	5050.0	5482.59	109.0	5050.0	5360.63	106.0	5088.03	101.0	90-110
Lead	50.0	52.93	106.0	50.0	51.48	103.0	52.66	105.0	90-110
Manganese	50.0	53.22	106.0	50.0	52.94	106.0	50.40	101.0	90-110
Nickel	50.0	51.31	103.0	50.0	52.08	104.0	48.67	97.0	90-110
Selenium	50.0	52.80	106.0	50.0	55.15	110.0	51.49	103.0	90-110
Thallium	50.0	53.70	107.0	50.0	53.07	106.0	53.91	108.0	90-110
Vanadium	50.0	52.46	105.0	50.0	52.72	105.0	47.65	95.0	90-110
Zinc	50.0	49.98	100.0	50.0	51.76	104.0	48.45	97.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050208C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
	ICV 0502 15:14			CCV 0502 15:44			CCV 0502 16:08		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Antimony	50.0	47.15	94.0	50.0	49.38	99.0	51.35	103.0	90-110
Silver	50.0	47.41	95.0	50.0	48.88	98.0	50.94	102.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0507 11:18			CCV 0507 11:49		CCV 0507 12:14		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Aluminum	5050.0	4883.88	97.0	5050.0	5008.48	99.0	4802.68	95.0	90-110
Calcium	5050.0	4860.03	96.0	5050.0	4991.24	99.0	4841.57	96.0	90-110
Magnesium	5050.0	5085.57	101.0	5050.0	5213.71	103.0	5036.65	100.0	90-110
Potassium	5500.0	5377.50	98.0	5500.0	5543.49	101.0	5253.62	96.0	90-110
Sodium	5050.0	5019.38	99.0	5050.0	5189.89	103.0	5094.07	101.0	90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **m050708b**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration					
		ICV 0507 12:46			CCV 0507 13:21		CCV 0507 13:48		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Barium	50.0	53.07	106.0	50.0	51.75	104.0	50.17	100.0	90-110
Iron	5050.0	4739.54	94.0	5050.0	4751.70	94.0	4507.73	89.0[a]	90-110
Lead	50.0	50.78	102.0	50.0	50.19	100.0	49.55	99.0	90-110
Manganese	50.0	47.43	95.0	50.0	46.15	92.0	43.90	88.0[a]	90-110
Zinc	50.0	47.82	96.0	50.0	48.23	96.0	46.05	92.0	90-110

Reruns
[illegible] 5/12/08

N/A - Not Applicable
[a] - Value outside of QC Limits.

05/12/08 15:43

Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **m050708b**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration			Continuing Calibration CCV 0507 13:57				
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**		**Limit**
Barium				50.0	52.80	106.0		90-110
Iron				5050.0	4686.46	93.0		90-110
Lead				50.0	50.92	102.0		90-110
Manganese				50.0	44.75	89.0[a]		90-110
Zinc				50.0	47.69	95.0		90-110

N/A - Not Applicable
[a] - Value outside of QC Limits.

05/12/08 15:43

Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	Initial Calibration ICV 0507 14:16			Continuing Calibration CCV 0507 14:50				
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**		**Limit**
Manganese	50.0	48.79	98.0	50.0	48.79	98.0		90-110

N/A - Not Applicable

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Form II
Initial and Continuing Calibration Verification
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **HG050708B**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **Mercury AF**

	Initial Calibration			Continuing Calibration					
		ICV 0507 13:02			CCV 0507 13:35		CCV 0507 13:54		
Parameter	**True**	**Found**	**% Rec**	**True**	**Found**	**% Rec**	**Found**	**% Rec**	**Limit**
Mercury	5.0	5.00	100.0	5.0	4.99	100.0	5.33	107.0	90-110

N/A - Not Applicable

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050208B**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0502 13:06		MS042408B12 £		CCB 0502 13:51		CCB 0502 14:31	
Arsenic	0.044	U	0.019	J	0.14	J	-0.054	J
Barium	0.10	U	0.010	U	0.10	U	0.10	U
Beryllium	0.055	U	0.0055	U	0.055	U	0.055	U
Cadmium	0.062	U	0.0062	U	0.062	U	0.062	U
Chromium	0.56	U	0.056	U	0.56	U	0.56	U
Cobalt	0.023	U	0.0023	U	0.023	U	0.023	U
Copper	0.22	U	0.027	J	0.22	U	0.22	U
Iron	57	U	5.7	U	57	U	57	U
Lead	0.080	U	0.0080	U	0.080	U	0.080	U
Manganese	0.66	U	0.066	U	0.66	U	0.66	U
Nickel	0.20	U	0.020	U	0.20	U	0.20	U
Selenium	-0.44	J	0.026	U	1.5	J	2.5	J
Thallium	0.040	U	0.0049	J	0.040	U	0.040	U
Vanadium	0.10	U	0.086	J	0.10	U	-0.59	J
Zinc	0.82	U	0.15	J	0.82	U	0.82	U

N/A - Not Applicable
£ - Concentration Units: mg/Kg
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050208C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0502 15:17		MS042408B11 £		CCB 0502 15:46		CCB 0502 16:10	
Antimony	0.15	U	0.015	U	0.15	U	0.15	U
Silver	0.081	U	0.0081	U	0.081	U	0.081	U

N/A - Not Applicable
£ - Concentration Units: mg/Kg
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0507 11:21		MS042408B12 £		CCB 0507 11:52		CCB 0507 12:16	
Aluminum	10	U	1.0	U	10	U	10	U
Calcium	70	U	7.0	U	70	U	70	U
Magnesium	6.9	U	0.69	U	6.9	U	6.9	U
Potassium	21	U	2.1	U	21	U	21	U
Sodium	16	U	1.7	J	16	U	16	U

N/A - Not Applicable
£ - Concentration Units: mg/Kg
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **m050708b**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0507 12:48		CCB 0507 13:24		CCB 0507 13:51	
Barium	0.10	U	0.10	U	0.10	U
Iron	57	U	57	U	57	U
Lead	0.080	U	0.080	U	0.080	U
Manganese	0.66	U	0.66	U	0.66	U
Zinc	0.82	U	0.82	U	0.82	U

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

Parameter	ICB 0507 14:18		CCB 0507 14:52	
Manganese	0.66	U	0.66	U

N/A - Not Applicable
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form III
Blanks
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **HG050708B**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **Mercury AF**

Parameter	ICB 0507 13:05		MS042408B13 £		CCB 0507 13:39		CCB 0507 13:58	
Mercury	-0.020	J	0.0020	U	-0.027	J	-0.028	J

N/A - Not Applicable
£ - Concentration Units: mg/Kg
J - Below CRDL, Project DL, or RL but greater than or = MDL.
U - The analyte was analyzed for but not detected at the sample specific level reported.

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Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050208B**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0502 13:09				ICSAB 0502 13:13			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Aluminum	50000	49576.85	99	80-120	50000	49384.22	99	80-120
Arsenic		4.25			100	105.56	106	80-120
Barium		0.70			50	44.32	89	80-120
Beryllium		0.03			100	101.24	101	80-120
Cadmium		1.63			100	95.96	96	80-120
Calcium	150000	141044.86	94	80-120	150000	138004.72	92	80-120
Chromium		1.53			100	94.37	94	80-120
Cobalt		0.12			100	96.09	96	80-120
Copper		1.87			100	97.35	97	80-120
Iron	125000	125758.38	101	80-120	125000	127281.63	102	80-120
Lead		0.10			100	94.26	94	80-120
Magnesium	50000	50069.75	100	80-120	50000	48341.14	97	80-120
Manganese		1.44			100	98.03	98	80-120
Nickel		3.10			100	98.64	99	80-120
Potassium	50000	51165.22	102	80-120	50000	51573.07	103	80-120
Selenium		0.55			100	101.43	101	80-120
Sodium	125000	126458.76	101	80-120	125000	122917.22	98	80-120
Thallium		0.01			100	94.83	95	80-120
Vanadium		4.37			100	101.89	102	80-120
Zinc		3.56			100	100.93	101	80-120

N/A - Not Applicable

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Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A
Sequence: **M050208C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0502 15:19				ICSAB 0502 15:21			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Antimony		0.01			100	101.75	102	80-120
Silver		0.01			50	49.05	98	80-120

N/A - Not Applicable

05/12/08 15:55

Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708A**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0507 11:23				ICSAB 0507 11:26			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Aluminum	50000	49393.70	99	80-120	50000	46928.82	94	80-120
Calcium	150000	139211.16	93	80-120	150000	132007.00	88	80-120
Magnesium	50000	50477.15	101	80-120	50000	48109.69	96	80-120
Potassium	50000	50508.24	101	80-120	50000	49045.19	98	80-120
Sodium	125000	124797.88	100	80-120	125000	120363.12	96	80-120

N/A - Not Applicable

05/12/08 16:01

Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **m050708b**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0507 12:51				ICSAB 0507 12:54			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Barium		0.77			50	51.57	103	80-120
Iron	125000	115240.02	92	80-120	125000	110285.88	88	80-120
Lead		0.04			100	96.70	97	80-120
Manganese		1.20			100	92.17	92	80-120
Zinc		5.14			100	100.11	100	80-120

N/A - Not Applicable

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Form IV
Interference Check Sample
Initial

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Sequence: **M050708C**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **µg/L**
Instrument: **ICP MS**

	ICSA 0507 14:21				ICSAB 0507 14:23			
Parameter	**True**	**Found**	**Percent Recovery**	**Recovery Limits**	**True**	**Found**	**Percent Recovery**	**Recovery Limits**
Manganese		1.42			100	96.62	97	80-120

N/A - Not Applicable

05/12/08 16:11

Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Lab ID:	0804116-01		0804116-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Aluminum	784	6160	6000	0C	75-125
Arsenic	157	5.34	166	103	75-125
Barium	157	320	532	136N	75-125
Beryllium	78.3	0.224	83.9	107	75-125
Cadmium	78.3	7.74	83.7	97	75-125
Calcium	784	4610	4400	0C	75-125
Chromium	157	47.6	217	108	75-125
Cobalt	157	6.58	160	98	75-125
Copper	157	84.9	211	81	75-125
Iron	784	30100	26800	0C	75-125
Lead	157	461	435	0N	75-125
Magnesium	784	2640	2830	23N	75-125
Manganese	157	739	733	0C	75-125
Nickel	157	24.7	181	100	75-125
Potassium	784	784	1310	68N	75-125
Selenium	157	0.439	168	107	75-125
Sodium	784	1160	1470	39N	75-125
Thallium	157	0.0475	153	97	75-125
Vanadium	157	34.5	191	100	75-125
Zinc	157	3430	2210	0C	75-125

N/A - Not Applicable
C - Sample concentration is > 4 times the spike level, recovery limits do not apply.
N - Spike recovery outside control limits.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/12/08 14:03

Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Lab ID:	0804116-01		0804116-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Antimony	1.61	1.31	2.37	65N	75-125
Silver	1.61	0.859	2.55	104	75-125

N/A - Not Applicable
N - Spike recovery outside control limits.

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/12/08 14:04

Form VA
Matrix Spike Sample Recovery
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **See Below**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Lab ID:	0804116-01		0804116-01		
Parameter	**Spiked Conc.**	**Sample Conc.**	**Matrix Spike Conc.**	**Matrix Spike % Recovery**	**% Recovery Limits**
Mercury	1.50	0.0212	1.74	114	75-125

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/12/08 14:04

Form VI
Duplicates
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01D**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Sample Result	Duplicate Result	Percent RPD	Percent Limit
Aluminum	**6160**	**5520**	11	20
Antimony	**1.31**	**1.53**	15	20
Arsenic	**5.34**	**4.28**	22¤	20
Barium	**320**	**303**	5	20
Beryllium	**0.224**	**0.206**	9	20
Cadmium	**7.74**	**6.44**	18	20
Calcium	**4610**	**4260**	8	20
Chromium	**47.6**	**34.1**	33¤	20
Cobalt	**6.58**	**6.42**	2	20
Copper	**84.9**	**66.1**	25¤	20
Iron	**30100**	**22100**	31¤	20
Lead	**461**	**361**	24¤	20
Magnesium	**2640**	**2750**	4	20
Manganese	**739**	**593**	22¤	20
Mercury	**0.0212**	**0.0372**	55§	20
Nickel	**24.7**	**21.2**	15	20
Potassium	**784**	**764**	3	20
Selenium	**0.439**	**0.288** J	41§	20
Silver	**0.859**	**0.935**	9	20
Sodium	**1160**	**979**	17	20
Thallium	**0.0475**	**0.0490**	3	20
Vanadium	**34.5**	**27.6**	22¤	20
Zinc	**3430**	**2670**	25¤	20

N/A - Not Applicable
¤ - Duplicate outside control limits.
§ - RPD criteria not applicable to results less than 5 times the reporting limit.
J - Below CRDL, Project DL, or RL but greater than or = MDL.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

05/12/08 14:03

Form VII
Laboratory Control Sample - High
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Sediment**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **MS042408LH02LH**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Aluminum	1020	102	80-120
Arsenic	211	105	80-120
Barium	182	91	80-120
Beryllium	104	104	80-120
Cadmium	103	103	80-120
Calcium	996	100	80-120
Chromium	199	99	80-120
Cobalt	197	98	80-120
Copper	187	94	80-120
Iron	1020	102	80-120
Lead	200	100	80-120
Magnesium	1050	105	80-120
Manganese	208	104	80-120
Nickel	209	104	80-120
Potassium	1040	104	80-120
Selenium	215	107	80-120
Sodium	1050	105	80-120
Thallium	205	102	80-120
Vanadium	203	102	80-120
Zinc	198	99	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

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Form VII
Laboratory Control Sample - Low
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Sediment**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **MS042408LL02LL**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Antimony	1.97	98	80-120
Silver	2.10	105	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/12/08 15:33

Form VII
Laboratory Control Sample
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **Laboratory Control Sample**
Matrix: **Sediment**
Percent Solid: **100.0**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **MS042408L03L**
Concentration Units: **mg/Kg**
Date Collected: **N/A**
Date Received: **N/A**

Parameter	Conc.	% Recovery	% Recovery Limits
Mercury	2.73	109	80-120

N/A - Not Applicable

Concentrations reported as calculated values, which includes rounding for significant figures. Percent recoveries and RPD values are calculated from the unrounded results.

05/12/08 15:34

Form VIII
ICP-AES and ICP-MS Serial Dilutions
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**
Client ID: **B4**
Matrix: **Sediment**
Percent Solid: **81.3**

Lab Code: **MA00030**
ETR: **0804116**
Lab ID: **0804116-01SD**
Concentration Units: **mg/Kg**
Date Collected: **03/26/08**
Date Received: **03/28/08**

Parameter	Sample Result	Duplicate Result	Percent Difference	Limit
Aluminum	**6160**	**6890**	12E	10
Antimony	**1.31**	**1.32**	0	10
Arsenic	**5.34**	**5.62**	5	10
Barium	**320**	**355**	11E	10
Beryllium	**0.224**	**0.226**	1	10
Cadmium	**7.74**	**8.51**	10	10
Calcium	**4610**	**5740**	25E	10
Chromium	**47.6**	**49.6**	4	10
Cobalt	**6.58**	**7.36**	12E	10
Copper	**84.9**	**93.8**	11E	10
Iron	**30100**	**31700**	5	10
Lead	**461**	**484**	5	10
Magnesium	**2640**	**2970**	12E	10
Manganese	**739**	**780**	6	10
Mercury	**0.0212**	0.00597 U	X	10
Nickel	**24.7**	**27.4**	11E	10
Potassium	**784**	**866**	10	10
Selenium	**0.439**	**1.05** J	139	10
Silver	**0.859**	**0.882**	3	10
Sodium	**1160**	**1280**	10	10
Thallium	**0.0475**	**0.0564** J	19	10
Vanadium	**34.5**	**36.2**	5	10
Zinc	**3430**	**3620**	6	10

N/A - Not Applicable
J - Below CRDL, Project DL, or RL but greater than or = MDL.
E - Estimated due to Interference.
U - The analyte was analyzed for but not detected at the sample specific level reported.
X - It is not possible to calculate RPD, one result is below the detection limit, the other is above reporting limit.

Concentrations reported as calculated values, which includes rounding for significant figures. RPD values are reported based on the unrounded calculated result.

05/12/08 14:02

Form IX
Method Detection Limits (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Instrument: **ICP MS**
Date: 12/2007

Parameter	Mass (amμ)	WBackground	RL (μg/L)	MDL (μg/L)
Calcium	44.00		500	70
Beryllium	9.00		0.20	0.055
Chromium	52.00		2.0	0.56
Selenium	82.00		5.0	0.26
Aluminum	27.00		100	10
Cobalt	59.00		0.20	0.023
Zinc	66.00		5.0	0.82
Lead	208.00		0.50	0.080
Magnesium	24.00		100	6.9
Copper	63.00		1.0	0.22
Thallium	205.00		0.20	0.040
Antimony	121.00		0.50	0.15
Potassium	39.00		100	21
Nickel	60.00		1.0	0.20
Barium	138.00		0.50	0.10
Silver	107.00		0.50	0.081
Sodium	23.00		100	16
Arsenic	75.00		0.50	0.044
Cadmium	114.00		0.20	0.062
Iron	57.00		200	57
Manganese	55.00		2.0	0.66
Vanadium	51.00		1.0	0.10

N/A - Not Applicable
RL - Reporting Limit

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Form IX
Method Detection Limits (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Instrument: **Mercury AF**
Date: 12/2007

Parameter	Wavelength (nm)	WBackground	RL (µg/L)	MDL (µg/L)
Mercury			0.050	0.0040

N/A - Not Applicable
RL - Reporting Limit

05/12/08 15:37

Form XI
ICP-AES and ICP-MS Linear Ranges (Annually)
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Instrument: **ICP MS**
Date: 01/2008

Parameter	Integration Time (seconds)	Concentration (µg/L)
Vanadium	N/A	5000
Potassium	N/A	55000
Zinc	N/A	5000
Arsenic	N/A	5000
Copper	N/A	5000
Cadmium	N/A	5000
Nickel	N/A	5000
Magnesium	N/A	55000
Sodium	N/A	55000
Antimony	N/A	5000
Iron	N/A	55000
Manganese	N/A	5000
Thallium	N/A	5000
Selenium	N/A	5000
Cobalt	N/A	5000
Chromium	N/A	5000
Calcium	N/A	55000
Aluminum	N/A	55000
Lead	N/A	5000
Silver	N/A	5000
Barium	N/A	5000
Beryllium	N/A	5000

N/A - Not Applicable

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Method: 3050:2T

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
B1	0804116-05	5/1/2008	1.64	50
B1/2	0804116-04	5/1/2008	1.56	50
B2/3	0804116-03	5/1/2008	1.55	50
B3/4	0804116-02	5/1/2008	1.65	50
B4	0804116-01	5/1/2008	1.51	50
B4	0804116-01 MH	5/1/2008	1.57	50
B4	0804116-01 D	5/1/2008	1.52	50
B5	0804116-06	5/1/2008	1.58	50
B5/6	0804116-07	5/1/2008	1.56	50
B6/7	0804116-08	5/1/2008	1.54	50
B7/8	0804116-09	5/1/2008	1.52	50
B8	0804116-10	5/1/2008	1.56	50
Blank	MS042408B12	5/1/2008	1	50
Laboratory Control Sample	MS042408LH02	5/1/2008	1	50

N/A - Not Applicable

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**

Lab Code: **MA00030**
ETR: **0804116**
Method: 3050:1T

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
B1	0804116-05	5/1/2008	1.54	50
B1/2	0804116-04	5/1/2008	1.57	50
B2/3	0804116-03	5/1/2008	1.64	50
B3/4	0804116-02	5/1/2008	1.56	50
B4	0804116-01 ML	5/1/2008	1.52	50
B4	0804116-01 D	5/1/2008	1.53	50
B4	0804116-01	5/1/2008	1.51	50
B5	0804116-06	5/1/2008	1.67	50
B5/6	0804116-07	5/1/2008	1.58	50
B6/7	0804116-08	5/1/2008	1.54	50
B7/8	0804116-09	5/1/2008	1.52	50
B8	0804116-10	5/1/2008	1.6	50
Blank	MS042408B11	5/1/2008	1	50
Laboratory Control Sample	MS042408LL02	5/1/2008	1	50

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Form XII
Preparation Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Method: 7474 Soil/Sed Prep

Client ID	Lab ID	Preparation Date	Weight (g)	Final Volume (ml)
B1	0804116-05	5/5/2008	1.03	50
B1/2	0804116-04	5/5/2008	1.07	50
B2/3	0804116-03	5/5/2008	1.05	50
B3/4	0804116-02	5/5/2008	1.01	50
B4	0804116-01	5/5/2008	1.03	50
B4	0804116-01 M	5/5/2008	1.02	50
B4	0804116-01 D	5/5/2008	1.05	50
B5	0804116-06	5/5/2008	1	50
B5/6	0804116-07	5/5/2008	1.1	50
B6/7	0804116-08	5/5/2008	1.08	50
B7/8	0804116-09	5/5/2008	1.09	50
B8	0804116-10	5/5/2008	1.07	50
Blank	MS042408B13	5/5/2008	0.5	50
Laboratory Control Sample	MS042408L03	5/5/2008	0.5	50

N/A - Not Applicable

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050208B**
Instrument: **ICP MS**

Start Date: **05/02/2008 12:41**
End Date: **05/02/2008 14:31**

Client ID	Lab ID	Dil	Analysis Time	As	Ba	Be	Cd	Cr	Co	Cu	Fe	Pb	Mn	Ni	Se	Tl	V	Zn
Cal Blank	BLANK 0502 12:41	1	12:41 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 1 0502 12:44	1	12:44 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 2 0502 12:48	1	12:48 PM	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 3 0502 12:52	1	12:52 PM	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 4 0502 12:55	1	12:55 PM	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Initial Calibration	STD 5 0502 12:59	1	12:59 PM		X													
ICV	ICV 0502 13:02	1	01:02 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB	ICB 0502 13:06	1	01:06 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA2	ICSA 0502 13:09	1	01:09 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB2	ICSAB 0502 13:13	1	01:13 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LRV	LRV 0502 13:17	1	01:17 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Blank	MS042408B12	2	01:27 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS High	MS042408LH02	2	01:30 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B4	0804116-01	2	01:34 PM	X	X	X	X	X	X	X				X	X	X	X	
B4	0804116-01SD	2	01:37 PM	X	X	X	X	X	X	X				X	X	X	X	
B4	0804116-01D	2	01:41 PM	X	X	X	X	X	X	X				X	X	X	X	
B4	0804116-01MH	2	01:44 PM	X	X	X	X	X	X	X				X	X	X	X	
CCV	CCV 0502 13:48	1	01:48 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	CCB 0502 13:51	1	01:51 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B3/4	0804116-02	2	01:55 PM	X		X	X	X	X	X		X		X	X	X	X	
B2/3	0804116-03	2	01:59 PM	X	X	X	X	X	X	X		X		X	X	X	X	
B1/2	0804116-04	2	02:02 PM	X	X	X	X	X	X	X		X		X	X	X	X	
B1	0804116-05	2	02:06 PM	X	X	X	X	X	X	X		X		X	X	X	X	
B5	0804116-06	2	02:09 PM	X	X	X	X	X	X	X		X		X	X	X	X	
B5/6	0804116-07	2	02:13 PM	X	X	X	X	X	X	X		X	X	X	X	X	X	
B6/7	0804116-08	2	02:17 PM	X	X	X	X	X	X	X				X	X	X	X	
B7/8	0804116-09	2	02:20 PM	X		X	X	X	X	X		X		X	X	X	X	
B8	0804116-10	2	02:24 PM	X	X	X	X	X	X	X		X		X	X	X	X	
CCV	CCV 0502 14:27	1	02:27 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB	CCB 0502 14:31	1	02:31 PM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050208C**
Instrument: **ICP MS**
End Date: 05/02/2008 16:10

Start Date: 05/02/2008 15:00

Client ID	Lab ID	Dil	Analysis Time	Sb	Ag
Cal Blank	BLANK 0502 15:00	1	03:00 PM	X	X
Initial Calibration	STD 1 0502 15:02	1	03:02 PM	X	X
Initial Calibration	STD 2 0502 15:05	1	03:05 PM	X	
Initial Calibration	STD 3 0502 15:07	1	03:07 PM	X	
Initial Calibration	STD 4 0502 15:09	1	03:09 PM	X	
Initial Calibration	STD 5 0502 15:12	1	03:12 PM		X
ICV	ICV 0502 15:14	1	03:14 PM	X	X
ICB	ICB 0502 15:17	1	03:17 PM	X	X
ICSA2	ICSA 0502 15:19	1	03:19 PM	X	X
ICSAB2	ICSAB 0502 15:21	1	03:21 PM	X	X
Blank	MS042408B11	2	03:28 PM	X	X
LCS Low	MS042408LL02	2	03:30 PM	X	X
B4	0804116-01	2	03:32 PM	X	X
B4	0804116-01SD	2	03:35 PM	X	X
B4	0804116-01D	2	03:37 PM	X	X
B4	0804116-01ML	2	03:39 PM	X	X
B3/4	0804116-02	2	03:42 PM	X	X
CCV	CCV 0502 15:44	1	03:44 PM	X	X
CCB	CCB 0502 15:46	1	03:46 PM	X	X
B2/3	0804116-03	2	03:49 PM	X	X
B1/2	0804116-04	2	03:51 PM	X	X
B1	0804116-05	2	03:54 PM	X	X
B5	0804116-06	2	03:56 PM	X	X
B5/6	0804116-07	2	03:58 PM	X	X
B6/7	0804116-08	2	04:01 PM	X	X
B7/8	0804116-09	2	04:03 PM	X	X
B8	0804116-10	2	04:06 PM	X	X
CCV	CCV 0502 16:08	1	04:08 PM	X	X
CCB	CCB 0502 16:10	1	04:10 PM	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050708A**
Instrument: **ICP MS**
End Date: 05/07/2008 12:16

Start Date: 05/07/2008 11:06

Client ID	Lab ID	Dil	Analysis Time	Al	Ca	Mg	K	Na
Cal Blank	BLANK 0507 11:06	1	11:06 AM	X	X	X	X	X
Initial Calibration	STD 1 0507 11:08	1	11:08 AM	X	X	X	X	X
Initial Calibration	STD 2 0507 11:11	1	11:11 AM	X	X	X	X	X
Initial Calibration	STD 3 0507 11:13	1	11:13 AM	X	X	X	X	X
Initial Calibration	STD 4 0507 11:16	1	11:16 AM	X	X	X	X	X
ICV	ICV 0507 11:18	1	11:18 AM	X	X	X	X	X
ICB	ICB 0507 11:21	1	11:21 AM	X	X	X	X	X
ICSA2	ICSA 0507 11:23	1	11:23 AM	X	X	X	X	X
ICSAB2	ICSAB 0507 11:26	1	11:26 AM	X	X	X	X	X
Blank	MS042408B12	2	11:32 AM	X	X	X	X	X
LCS High	MS042408LH02	2	11:34 AM	X	X	X	X	X
B4	0804116-01	10	11:37 AM	X	X	X	X	X
B4	0804116-01SD	10	11:39 AM	X	X	X	X	X
B4	0804116-01D	10	11:42 AM	X	X	X	X	X
B4	0804116-01MH	10	11:44 AM	X	X	X	X	X
B3/4	0804116-02	10	11:47 AM	X	X	X	X	X
CCV	CCV 0507 11:49	1	11:49 AM	X	X	X	X	X
CCB	CCB 0507 11:52	1	11:52 AM	X	X	X	X	X
B2/3	0804116-03	10	11:54 AM	X	X	X	X	X
B1/2	0804116-04	10	11:57 AM	X	X	X	X	X
B1	0804116-05	10	11:59 AM	X	X	X	X	X
B5	0804116-06	10	12:01 PM	X	X	X	X	X
B5/6	0804116-07	10	12:04 PM	X	X	X	X	X
B6/7	0804116-08	10	12:06 PM	X	X	X	X	X
B7/8	0804116-09	10	12:09 PM	X	X	X	X	X
B8	0804116-10	10	12:11 PM	X	X	X	X	X
CCV	CCV 0507 12:14	1	12:14 PM	X	X	X	X	X
CCB	CCB 0507 12:16	1	12:16 PM	X	X	X	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**

Sequence: **m050708b**
Instrument: **ICP MS**
End Date: 05/07/2008 13:57

Start Date: 05/07/2008 12:30

Client ID	Lab ID	Dil	Analysis Time	Ba	Fe	Pb	Mn	Zn
Cal Blank	BLANK 0507 12:30	1	12:30 PM	X	X	X	X	X
Initial Calibration	STD 1 0507 12:32	1	12:32 PM	X	X	X	X	X
Initial Calibration	STD 2 0507 12:35	1	12:35 PM		X	X	X	X
Initial Calibration	STD 3 0507 12:38	1	12:38 PM		X	X	X	X
Initial Calibration	STD 4 0507 12:40	1	12:40 PM		X	X	X	X
Initial Calibration	STD 5 0507 12:43	1	12:43 PM	X				
ICV	ICV 0507 12:46	1	12:46 PM	X	X	X	X	X
ICB	ICB 0507 12:48	1	12:48 PM	X	X	X	X	X
ICSA2	ICSA 0507 12:51	1	12:51 PM	X	X	X	X	X
ICSAB2	ICSAB 0507 12:54	1	12:54 PM	X	X	X	X	X
LRV	LRV 0507 12:56	1	12:56 PM	X	X	X	X	X
B4	0804116-01	20	01:05 PM		X	X	X	X
B4	0804116-01SD	20	01:07 PM		X	X	X	X
B4	0804116-01D	20	01:10 PM		X	X	X	X
B4	0804116-01MH	20	01:13 PM		X	X	X	X
B3/4	0804116-02	20	01:16 PM	X	X		X	X
B2/3	0804116-03	20	01:18 PM		X		X	X
CCV	CCV 0507 13:21	1	01:21 PM	X	X	X	X	X
CCB	CCB 0507 13:24	1	01:24 PM	X	X	X	X	X
B1/2	0804116-04	20	01:26 PM		X			X
B1/2	0804116-04	50	01:29 PM					
B1	0804116-05	20	01:32 PM		X			X
B5	0804116-06	20	01:34 PM		X			X
B5/6	0804116-07	20	01:37 PM		X			X
B6/7	0804116-08	20	01:40 PM		X	X		X
B7/8	0804116-09	20	01:43 PM	X	X			X
B8	0804116-10	20	01:45 PM		X			X
CCV	CCV 0507 13:48	1	01:48 PM	X	X	X	X	X
CCB	CCB 0507 13:51	1	01:51 PM	X	X	X	X	X
CCV	CCV 0507 13:57	1	01:57 PM	X	X	X	X	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050708C**
Instrument: **ICP MS**
End Date: 05/07/2008 14:52

Start Date: 05/07/2008 14:04

Client ID	Lab ID	Dil	Analysis Time	Mn
Cal Blank	BLANK 0507 14:04	1	02:04 PM	X
Initial Calibration	STD 1 0507 14:07	1	02:07 PM	X
Initial Calibration	STD 2 0507 14:09	1	02:09 PM	X
Initial Calibration	STD 3 0507 14:11	1	02:11 PM	X
Initial Calibration	STD 4 0507 14:14	1	02:14 PM	X
ICV	ICV 0507 14:16	1	02:16 PM	X
ICB	ICB 0507 14:18	1	02:18 PM	X
ICSA2	ICSA 0507 14:21	1	02:21 PM	X
ICSAB2	ICSAB 0507 14:23	1	02:23 PM	X
LRV	LRV 0507 14:25	1	02:25 PM	X
B1/2	0804116-04	20	02:33 PM	X
B1	0804116-05	20	02:35 PM	X
B5	0804116-06	20	02:38 PM	X
B5/6	0804116-07	20	02:40 PM	
B6/7	0804116-08	20	02:42 PM	X
B7/8	0804116-09	20	02:44 PM	X
B8	0804116-10	20	02:47 PM	X
CCV	CCV 0507 14:50	1	02:50 PM	X
CCB	CCB 0507 14:52	1	02:52 PM	X

N/A - Not Applicable
Dil - Dilution

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Form XIII
Analysis Run Log
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **HG050708B**
Instrument: **Mercury AF**
End Date: 05/07/2008 13:58

Start Date: 05/07/2008 12:41

Client ID	Lab ID	Dil	Analysis Time	Hg
Cal Blank	STD0 0507 12:41	1	12:41 PM	X
Initial Calibration	STDD1 0507 12:44	1	12:44 PM	X
Initial Calibration	STDD2 0507 12:46	1	12:46 PM	X
Initial Calibration	STDD3 0507 12:49	1	12:49 PM	X
Initial Calibration	STDD4 0507 12:51	1	12:51 PM	X
Initial Calibration	STDD5 0507 12:55	1	12:55 PM	X
Initial Calibration	STDD6 0507 12:58	1	12:58 PM	X
ICV	ICV 0507 13:02	1	01:02 PM	X
ICB	ICB 0507 13:05	1	01:05 PM	X
Blank	MS042408B13	5	01:08 PM	X
LCS	MS042408L03	5	01:10 PM	X
B4	0804116-01	5	01:14 PM	X
B4	0804116-01SD	5	01:17 PM	X
B4	0804116-01D	5	01:19 PM	X
B4	0804116-01M	5	01:22 PM	X
B3/4	0804116-02	5	01:25 PM	X
B2/3	0804116-03	5	01:28 PM	X
B1/2	0804116-04	5	01:30 PM	X
B1	0804116-05	5	01:33 PM	X
CCV	CCV 0507 13:35	1	01:35 PM	X
CCB	CCB 0507 13:39	1	01:39 PM	X
B5	0804116-06	5	01:42 PM	X
B5/6	0804116-07	5	01:44 PM	X
B6/7	0804116-08	5	01:47 PM	X
B7/8	0804116-09	5	01:49 PM	X
B8	0804116-10	5	01:52 PM	X
CCV	CCV 0507 13:54	1	01:54 PM	X
CCB	CCB 0507 13:58	1	01:58 PM	X

N/A - Not Applicable
Dil - Dilution

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Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050208B**

Start Date: **Start Date: 05/02/2008 12:41** **End Date: 05/02/2008 14:31**

Client ID	Lab ID	Analysis Time	Li	Ge	In	Tb
Calibration Blank	BLANK 0502 12:41	12:41 PM	100.00	100.00	100.00	100.00
Initial Calibration	STD 1 0502 12:44	12:44 PM	97.45	100.63	101.68	97.93
Initial Calibration	STD 2 0502 12:48	12:48 PM	91.27	97.18	97.41	95.50
Initial Calibration	STD 3 0502 12:52	12:52 PM	89.72	98.06	98.01	95.79
Initial Calibration	STD 4 0502 12:55	12:55 PM	89.61	97.80	96.17	95.95
Initial Calibration	STD 5 0502 12:59	12:59 PM	91.33	92.60	93.02	91.66
ICV	ICV 0502 13:02	01:02 PM	93.73	99.28	98.92	95.97
ICB	ICB 0502 13:06	01:06 PM	95.50	102.44	101.76	99.93
ICSA	ICSA 0502 13:09	01:09 PM	80.64	95.89	92.11	94.05
ICSAB	ICSAB 0502 13:13	01:13 PM	82.80	95.03	94.92	96.19
Linear Range Verification	LRV 0502 13:17	01:17 PM	88.70	99.74	101.42	98.71
Blank	MS042408B12	01:27 PM	90.80	100.96	99.69	98.64
Laboratory Control Sample	MS042408LH02	01:30 PM	87.94	95.05	93.99	96.65
B4	0804116-01	01:34 PM	84.24	97.40	99.79	107.43
B4	0804116-01 SD	01:37 PM	89.58	98.90	96.82	101.16
B4	0804116-01 D	01:41 PM	79.97	92.18	95.76	102.98
B4	0804116-01 MH	01:44 PM	79.83	92.13	92.80	101.92
CCV	CCV 0502 13:48	01:48 PM	84.39	97.16	95.16	99.16
CCB	CCB 0502 13:51	01:51 PM	90.58	99.95	100.47	95.89
B3/4	0804116-02	01:55 PM	80.58	91.00	96.21	99.48
B2/3	0804116-03	01:59 PM	84.78	93.17	94.50	96.34
B1/2	0804116-04	02:02 PM	80.50	87.48	93.04	102.33
B1	0804116-05	02:06 PM	80.98	91.29	92.49	95.02
B5	0804116-06	02:09 PM	79.59	90.97	90.89	95.33
B5/6	0804116-07	02:13 PM	78.92	86.03	87.28	101.64
B6/7	0804116-08	02:17 PM	79.85	86.28	90.39	100.93
B7/8	0804116-09	02:20 PM	77.75	89.10	89.72	101.78
B8	0804116-10	02:24 PM	79.83	91.06	89.03	100.49
CCV	CCV 0502 14:27	02:27 PM	83.80	95.01	93.98	93.81
CCB	CCB 0502 14:31	02:31 PM	85.42	94.38	95.90	95.45

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050208C**

Start Date: **Start Date: 05/02/2008 15:00**

End Date: 05/02/2008 16:10

Client ID	Lab ID	Analysis Time	In
Calibration Blank	BLANK 0502 15:00	03:00 PM	100.00
Initial Calibration	STD 1 0502 15:02	03:02 PM	101.26
Initial Calibration	STD 2 0502 15:05	03:05 PM	99.86
Initial Calibration	STD 3 0502 15:07	03:07 PM	98.01
Initial Calibration	STD 4 0502 15:09	03:09 PM	96.80
Initial Calibration	STD 5 0502 15:12	03:12 PM	99.04
ICV	ICV 0502 15:14	03:14 PM	102.75
ICB	ICB 0502 15:17	03:17 PM	103.31
ICSA	ICSA 0502 15:19	03:19 PM	93.70
ICSAB	ICSAB 0502 15:21	03:21 PM	96.98
Blank	MS042408B11	03:28 PM	94.14
Laboratory Control Sample	MS042408LL02	03:30 PM	92.79
B4	0804116-01	03:32 PM	88.32
B4	0804116-01 SD	03:35 PM	90.84
B4	0804116-01 D	03:37 PM	87.85
B4	0804116-01 ML	03:39 PM	87.96
B3/4	0804116-02	03:42 PM	89.95
CCV	CCV 0502 15:44	03:44 PM	91.96
CCB	CCB 0502 15:46	03:46 PM	92.44
B2/3	0804116-03	03:49 PM	87.18
B1/2	0804116-04	03:51 PM	85.20
B1	0804116-05	03:54 PM	87.40
B5	0804116-06	03:56 PM	86.59
B5/6	0804116-07	03:58 PM	86.39
B6/7	0804116-08	04:01 PM	87.15
B7/8	0804116-09	04:03 PM	82.66
B8	0804116-10	04:06 PM	85.23
CCV	CCV 0502 16:08	04:08 PM	88.58
CCB	CCB 0502 16:10	04:10 PM	88.95

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050708A**

Start Date: **Start Date: 05/07/2008 11:06**

End Date: 05/07/2008 12:16

Client ID	Lab ID	Analysis Time	Sc
Calibration Blank	BLANK 0507 11:06	11:06 AM	100.00
Initial Calibration	STD 1 0507 11:08	11:08 AM	102.42
Initial Calibration	STD 2 0507 11:11	11:11 AM	104.65
Initial Calibration	STD 3 0507 11:13	11:13 AM	103.13
Initial Calibration	STD 4 0507 11:16	11:16 AM	103.23
ICV	ICV 0507 11:18	11:18 AM	101.58
ICB	ICB 0507 11:21	11:21 AM	103.50
ICSA	ICSA 0507 11:23	11:23 AM	91.60
ICSAB	ICSAB 0507 11:26	11:26 AM	91.23
Blank	MS042408B12	11:32 AM	98.73
Laboratory Control Sample	MS042408LH02	11:34 AM	95.84
B4	0804116-01	11:37 AM	103.62
B4	0804116-01 SD	11:39 AM	96.36
B4	0804116-01 D	11:42 AM	107.37
B4	0804116-01 MH	11:44 AM	103.53
B3/4	0804116-02	11:47 AM	102.90
CCV	CCV 0507 11:49	11:49 AM	95.92
CCB	CCB 0507 11:52	11:52 AM	95.73
B2/3	0804116-03	11:54 AM	100.60
B1/2	0804116-04	11:57 AM	103.85
B1	0804116-05	11:59 AM	99.30
B5	0804116-06	12:01 PM	102.28
B5/6	0804116-07	12:04 PM	104.42
B6/7	0804116-08	12:06 PM	102.44
B7/8	0804116-09	12:09 PM	102.47
B8	0804116-10	12:11 PM	102.94
CCV	CCV 0507 12:14	12:14 PM	97.51
CCB	CCB 0507 12:16	12:16 PM	96.78

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: N/A SDG: N/A

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **m050708b**

Start Date: **Start Date: 05/07/2008 12:30**

End Date: 05/07/2008 13:57

Client ID	Lab ID	Analysis Time	Ge	Tb
Calibration Blank	BLANK 0507 12:30	12:30 PM	100.00	100.00
Initial Calibration	STD 1 0507 12:32	12:32 PM	99.98	101.94
Initial Calibration	STD 2 0507 12:35	12:35 PM	105.70	103.38
Initial Calibration	STD 3 0507 12:38	12:38 PM	102.54	102.08
Initial Calibration	STD 4 0507 12:40	12:40 PM	100.72	102.25
Initial Calibration	STD 5 0507 12:43	12:43 PM	103.76	106.58
ICV	ICV 0507 12:46	12:46 PM	99.20	100.68
ICB	ICB 0507 12:48	12:48 PM	102.37	100.79
ICSA	ICSA 0507 12:51	12:51 PM	95.36	95.63
ICSAB	ICSAB 0507 12:54	12:54 PM	92.87	94.79
Linear Range Verification	LRV 0507 12:56	12:56 PM	94.67	97.75
B4	0804116-01	01:05 PM	100.31	98.42
B4	0804116-01 SD	01:07 PM	99.07	99.27
B4	0804116-01 D	01:10 PM	100.93	99.55
B4	0804116-01 MH	01:13 PM	98.79	100.19
B3/4	0804116-02	01:16 PM	101.12	98.17
B2/3	0804116-03	01:18 PM	101.41	96.74
CCV	CCV 0507 13:21	01:21 PM	98.08	98.51
CCB	CCB 0507 13:24	01:24 PM	97.89	98.91
B1/2	0804116-04	01:26 PM	96.84	97.77
B1/2	0804116-04	01:29 PM	100.75	95.80
B1	0804116-05	01:32 PM	101.99	96.63
B5	0804116-06	01:34 PM	99.91	95.80
B5/6	0804116-07	01:37 PM	95.36	97.74
B6/7	0804116-08	01:40 PM	97.73	98.48
B7/8	0804116-09	01:43 PM	99.24	99.50
B8	0804116-10	01:45 PM	98.17	95.16
CCV	CCV 0507 13:48	01:48 PM	101.74	98.40
CCB	CCB 0507 13:51	01:51 PM	98.04	93.44
CCV	CCV 0507 13:57	01:57 PM	100.60	95.57

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Form XV
Internal Standards Relative Intensity Summary
Total Metals

Client: **NewFields**
Project: **Ash Creek Associates-Port of Portland**
Case: **N/A** SDG: **N/A**

Lab Code: **MA00030**
ETR: **0804116**
Sequence: **M050708C**

Start Date: **Start Date: 05/07/2008 14:04**

End Date: 05/07/2008 14:52

Client ID	Lab ID	Analysis Time	Ge
Calibration Blank	BLANK 0507 14:04	02:04 PM	100.00
Initial Calibration	STD 1 0507 14:07	02:07 PM	104.24
Initial Calibration	STD 2 0507 14:09	02:09 PM	103.35
Initial Calibration	STD 3 0507 14:11	02:11 PM	104.45
Initial Calibration	STD 4 0507 14:14	02:14 PM	104.05
ICV	ICV 0507 14:16	02:16 PM	98.45
ICB	ICB 0507 14:18	02:18 PM	101.11
ICSA	ICSA 0507 14:21	02:21 PM	95.20
ICSAB	ICSAB 0507 14:23	02:23 PM	91.73
Linear Range Verification	LRV 0507 14:25	02:25 PM	91.24
B1/2	0804116-04	02:33 PM	96.57
B1	0804116-05	02:35 PM	98.60
B5	0804116-06	02:38 PM	97.62
B5/6	0804116-07	02:40 PM	97.11
B6/7	0804116-08	02:42 PM	96.32
B7/8	0804116-09	02:44 PM	95.84
B8	0804116-10	02:47 PM	94.52
CCV	CCV 0507 14:50	02:50 PM	99.11
CCB	CCB 0507 14:52	02:52 PM	97.50

N/A - Not Applicable

320 Forbes Blvd, Mansfield, MA 02048, (508) 822-9300, Fax (508) 822-3288

Sample/Batch Report

Sample File: C:\elandata\Sample\0804116.sam
Method File: c:\elandata\Method\6020a5pb.mth
Dataset File: C:\elandata\Dataset\M050208B\
Report Date/Time: Friday, May 02, 2008 12:39:59

A/S Loc.	Sample ID	Standards/Reagents
11	MS042408B12-D2	CAL STD=C042908M1
12	MS042408LH02-D2	ICV=I050208M2
13	0804116-01-D2	ICSA=042908ICSA2
14	0804116-01SD-D2	ICSAB=050208ICSAB2
15	0804116-01D-D2	IS=IS042408
16	0804116-01MH-D2	ACID=10%MW042908A
17	0804116-02-D2	
18	0804116-03-D2	
19	0804116-04-D2	
20	0804116-05-D2	
21	0804116-06-D2	
22	0804116-07-D2	
23	0804116-08-D2	
24	0804116-09-D2	
25	0804116-10-D2	

Lmn
5/2/08

YCD
5/13/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Blank.001
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:41:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	259624.730		4.511			ug/L
	Be	9	15.834		9.116			ug/L
	Na	23	26599.591		0.938			ug/L
	Mg	24	3781.789		4.329			ug/L
	Al	27	13466.897		1.706			ug/L
	K	39	519529.006		0.746			ug/L
	Ca	44	56526.771		1.116			ug/L
>	Sc	45	327412.666		2.247			ug/L
	V	51	17864.172		1.252			ug/L
	Cr	52	3303.332		1.080			ug/L
	Mn	55	1320.074		2.977			ug/L
	Fe	57	9676.706		0.161			ug/L
	Co	59	295.006		4.464			ug/L
	Ni	60	68.334		11.617			ug/L
	Cu	63	471.262		4.602			ug/L
	Zn	66	945.041		2.606			ug/L
>	Ge	74	824440.889		2.418			ug/L
	As	75	609.757		2.798			ug/L
	Se	82	-693.535		43.234			ug/L
	Cd	114	73.070		3.759			ug/L
>	In	115	629613.788		2.629			ug/L
	Ba	138	455.797		1.968			ug/L
>	Tb	159	528763.631		0.957			ug/L
	Tl	205	343.758		11.096			ug/L
	Pb	208	582.094		2.517			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Standard 1.002
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:44:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	253003.325	253003.325	1.610			ug/L
	Be	9	42.084	0.000	3.430	0.10000	7.98	ug/L
	Na	23	41170.071	0.047	1.112	10.00000	4.73	ug/L
	Mg	24	15294.587	0.036	1.134	10.10000	4.42	ug/L
	Al	27	25472.113	0.038	1.476	10.00000	8.77	ug/L
	K	39	553657.257	0.143	1.056	11.00000	39.15	ug/L
	Ca	44	55910.170	0.002	0.333	10.10000	236.77	ug/L
>	Sc	45	320176.611	320176.611	2.878			ug/L
	V	51	18169.979	0.000	0.446	0.10000	146.72	ug/L
	Cr	52	3654.671	0.000	4.307	0.10000	45.50	ug/L
	Mn	55	1895.561	0.001	1.058	0.10000	5.95	ug/L
	Fe	57	10728.301	0.001	1.471	10.10000	20.56	ug/L
	Co	59	918.789	0.001	3.112	0.10000	4.06	ug/L
	Ni	60	190.003	0.000	1.140	0.10000	2.95	ug/L
	Cu	63	670.439	0.000	2.749	0.10000	12.82	ug/L
	Zn	66	372.509	-0.001	4.943	0.10000	2.79	ug/L
>	Ge	74	829608.403	829608.403	1.182			ug/L
	As	75	696.845	0.000	6.347	0.10000	53.84	ug/L
	Se	82	-794.894	-0.000	23.398	0.10000	184.41	ug/L
	Cd	114	492.183	0.001	5.753	0.10000	4.08	ug/L
>	In	115	640187.143	640187.143	2.811			ug/L
	Ba	138	1904.765	0.003	4.465	0.10000	8.55	ug/L
>	Tb	159	517798.856	517798.856	2.682			ug/L
	Tl	205	2209.776	0.004	1.591	0.10000	4.70	ug/L
	Pb	208	3015.988	0.005	1.280	0.10000	3.25	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Standard 2.003
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:48:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	236967.200	236967.200	1.321			ug/L
	Be	9	2972.006	0.012	0.864	10.00016	1.32	ug/L
	Na	23	220623.602	0.638	1.975	100.25500	1.80	ug/L
	Mg	24	159928.231	0.510	1.737	110.20759	1.40	ug/L
	Al	27	210923.287	0.646	0.913	100.40198	0.55	ug/L
	K	39	888597.443	1.309	1.213	100.00431	3.52	ug/L
	Ca	44	64912.804	0.039	1.133	110.38808	8.05	ug/L
>	Sc	45	306868.521	306868.521	0.403			ug/L
	V	51	69681.922	0.065	0.270	10.00064	1.69	ug/L
	Cr	52	49608.163	0.058	1.684	10.00031	2.78	ug/L
	Mn	55	70882.396	0.087	1.401	10.00021	2.01	ug/L
	Fe	57	26182.569	0.021	1.259	110.34902	3.48	ug/L
	Co	59	61622.578	0.077	4.468	10.00002	5.55	ug/L
	Ni	60	13571.579	0.017	0.826	10.00013	1.86	ug/L
	Cu	63	35508.597	0.044	0.531	10.00046	0.56	ug/L
	Zn	66	11036.876	0.013	3.772	10.00653	3.73	ug/L
>	Ge	74	801187.062	801187.062	1.083			ug/L
	As	75	14804.661	0.018	3.840	10.00043	5.04	ug/L
	Se	82	537.405	0.002	38.215	10.00865	16.70	ug/L
	Cd	114	41735.474	0.068	3.169	10.00004	1.68	ug/L
>	In	115	613305.769	613305.769	1.578			ug/L
	Ba	138	414.559	-0.000	7.105	-0.00145	126.85	ug/L
>	Tb	159	504988.449	504988.449	3.466			ug/L
	Tl	205	187257.142	0.370	1.397	10.00002	2.37	ug/L
	Pb	208	257303.424	0.509	1.620	10.00007	1.92	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Standard 3.004
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:52:04

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	232944.556	232944.556	1.724			ug/L
	Be	9	5924.621	0.025	2.808	20.06451	1.87	ug/L
	Na	23	1932724.227	6.219	1.201	999.77290	4.56	ug/L
	Mg	24	1391864.450	4.526	0.465	1019.50178	4.21	ug/L
	Al	27	1914879.799	6.201	2.250	999.62153	4.90	ug/L
	K	39	3776236.038	10.725	1.159	997.79539	5.54	ug/L
	Ca	44	173046.450	0.391	0.816	1020.96646	4.99	ug/L
>	Sc	45	307086.015	307086.015	3.706			ug/L
	V	51	126127.104	0.134	1.438	20.11144	0.89	ug/L
	Cr	52	95215.056	0.114	4.112	19.92751	4.26	ug/L
	Mn	55	142518.003	0.175	1.014	20.02183	2.10	ug/L
	Fe	57	163826.989	0.191	4.667	1019.83545	5.84	ug/L
	Co	59	119412.518	0.147	2.220	19.84389	3.11	ug/L
	Ni	60	26747.807	0.033	3.679	19.91491	4.63	ug/L
	Cu	63	65533.967	0.080	0.984	19.65823	1.95	ug/L
	Zn	66	21036.939	0.025	0.624	19.94148	0.94	ug/L
>	Ge	74	808462.453	808462.453	1.117			ug/L
	As	75	29113.033	0.035	1.082	19.97544	0.41	ug/L
	Se	82	1792.340	0.003	18.961	20.04878	13.09	ug/L
	Cd	114	83898.257	0.136	1.383	20.00009	1.08	ug/L
>	In	115	617074.903	617074.903	1.293			ug/L
	Ba	138	449.067	0.000	5.383	0.00092	278.18	ug/L
>	Tb	159	506515.681	506515.681	2.599			ug/L
	Tl	205	366127.887	0.722	2.510	19.89806	0.90	ug/L
	Pb	208	507509.061	1.001	0.914	19.93703	3.52	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Standard 4.005
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:55:38

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	232638.787	232638.787	1.584			ug/L
	Be	9	29036.443	0.125	1.875	99.93623	2.63	ug/L
	Na	23	19140634.088	60.935	1.951	9997.91322	0.88	ug/L
	Mg	24	13646477.068	43.497	1.854	10096.82869	2.19	ug/L
	Al	27	18810063.119	59.936	0.537	9996.49680	2.15	ug/L
	K	39	32460739.151	101.890	1.928	9994.51144	0.50	ug/L
	Ca	44	1209114.231	3.683	1.528	10094.74204	3.73	ug/L
>	Sc	45	313717.308	313717.308	2.259			ug/L
	V	51	558894.885	0.672	1.269	100.02526	1.20	ug/L
	Cr	52	466417.633	0.574	1.317	100.02939	0.44	ug/L
	Mn	55	683839.726	0.847	1.114	99.85446	2.13	ug/L
	Fe	57	1458127.299	1.797	3.009	10094.57888	2.93	ug/L
	Co	59	599454.910	0.743	2.510	100.00325	2.64	ug/L
	Ni	60	134841.891	0.167	1.321	100.04079	2.69	ug/L
	Cu	63	320221.631	0.397	0.690	99.84602	1.91	ug/L
	Zn	66	101388.407	0.125	2.368	99.99464	2.24	ug/L
>	Ge	74	806294.815	806294.815	1.396			ug/L
	As	75	143123.917	0.177	0.900	100.00553	0.62	ug/L
	Se	82	10471.434	0.014	2.329	99.51626	2.95	ug/L
	Cd	114	415688.201	0.687	2.307	100.05114	3.12	ug/L
>	In	115	605515.826	605515.826	2.307			ug/L
	Ba	138	773.913	0.001	3.610	0.02355	11.50	ug/L
>	Tb	159	507332.388	507332.388	1.609			ug/L
	Tl	205	1708160.045	3.367	0.373	99.62961	1.25	ug/L
	Pb	208	2408000.585	4.746	1.595	99.72215	1.14	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 5

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\Standard 5.006
Calibration File:
Sample Date/Time: Friday, May 02, 2008 12:59:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	237118.745	237118.745	3.257			ug/L
	Be	9	17.917	0.000	28.196	0.01200	156.17	ug/L
	Na	23	234849.172	0.682	0.906	111.84676	0.26	ug/L
	Mg	24	2334.801	-0.004	17.443	-0.91846	35.11	ug/L
	Al	27	217115.295	0.664	2.581	110.79397	3.41	ug/L
	K	39	3964556.840	11.292	1.316	1107.65994	0.72	ug/L
	Ca	44	50733.769	-0.008	0.484	-21.45475	14.81	ug/L
>	Sc	45	307832.082	307832.082	1.120			ug/L
	V	51	15990.668	-0.001	2.385	-0.10658	102.43	ug/L
	Cr	52	3001.596	-0.000	3.103	-0.01270	253.54	ug/L
	Mn	55	985.461	-0.000	4.329	-0.03650	24.78	ug/L
	Fe	57	8862.003	-0.000	0.414	-0.71492	119.78	ug/L
	Co	59	165.836	-0.000	4.417	-0.01892	6.29	ug/L
	Ni	60	65.417	0.000	11.518	0.00163	313.82	ug/L
	Cu	63	541.266	0.000	4.388	0.03453	13.86	ug/L
	Zn	66	1893.061	0.001	0.887	1.07029	2.02	ug/L
>	Ge	74	763416.908	763416.908	1.691			ug/L
	As	75	533.920	-0.000	2.098	-0.02261	60.95	ug/L
	Se	82	-861.104	-0.000	16.615	-2.06761	66.97	ug/L
	Cd	114	117.713	0.000	13.920	0.01242	36.28	ug/L
>	In	115	585659.166	585659.166	1.606			ug/L
	Ba	138	1477532.823	3.048	1.841	100.00001	1.54	ug/L
>	Tb	159	484660.375	484660.375	2.067			ug/L
	Tl	205	409.177	0.000	15.763	0.00580	77.05	ug/L
	Pb	208	738.348	0.000	9.475	0.00893	41.22	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74					
	As	75					
	Se	82					
	Cd	114					
>	In	115					
	Ba	138					
>	Tb	159					
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 1.007
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:02:49

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	243354.746	243354.746	0.441			ug/L
	Be	9	15485.629	0.064	1.939	50.91975	2.32	ug/L
	Na	23	10264254.206	31.492	1.742	5167.09423	2.41	ug/L
	Mg	24	7152759.964	21.982	3.957	5102.60929	2.47	ug/L
	Al	27	9897134.648	30.409	0.779	5071.75767	3.01	ug/L
	K	39	19002854.525	56.860	2.204	5577.50677	2.05	ug/L
	Ca	44	669035.070	1.884	4.119	5163.57227	1.65	ug/L
>	Sc	45	325217.603	325217.603	2.994			ug/L
	V	51	305505.164	0.352	1.593	52.45696	5.90	ug/L
	Cr	52	246336.058	0.297	0.136	51.77339	4.36	ug/L
	Mn	55	370032.368	0.451	1.788	53.22324	6.11	ug/L
	Fe	57	807353.844	0.976	1.557	5482.58629	4.50	ug/L
	Co	59	323073.289	0.395	1.068	53.13987	4.86	ug/L
	Ni	60	70111.145	0.086	2.506	51.30710	6.93	ug/L
	Cu	63	166677.713	0.203	1.671	51.20547	5.98	ug/L
	Zn	66	51892.579	0.062	3.257	49.98093	2.12	ug/L
>	Ge	74	818464.314	818464.314	4.271			ug/L
	As	75	76818.676	0.093	0.985	52.73319	3.75	ug/L
	Se	82	5313.113	0.007	3.775	52.79592	3.78	ug/L
	Cd	114	215164.039	0.346	1.492	50.36358	3.80	ug/L
>	In	115	622810.535	622810.535	3.323			ug/L
	Ba	138	769507.401	1.516	2.790	49.75149	4.59	ug/L
>	Tb	159	507437.059	507437.059	1.923			ug/L
	Tl	205	920839.207	1.815	2.370	53.70183	3.66	ug/L
	Pb	208	1277858.687	2.519	2.985	52.92773	4.84	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.733			
	Be	9	101.840				
	Na	23	102.319				
	Mg	24	101.042				
	Al	27	100.431				
	K	39	101.409				
	Ca	44	102.249				
>	Sc	45		99.330			
	V	51	104.914				
	Cr	52	103.547				
	Mn	55	106.446				
	Fe	57	108.566				
	Co	59	106.280				
	Ni	60	102.614				
	Cu	63	102.411				
	Zn	66	99.962				
>	Ge	74		99.275			
	As	75	105.466				
	Se	82	105.592				
	Cd	114	100.727				
>	In	115		98.919			
	Ba	138	99.503				
>	Tb	159		95.967			
	Tl	205	107.404				
	Pb	208	105.855				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 2.008
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:06:23

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	247934.510	247934.510	1.763			ug/L
	Be	9	12.500	-0.000	10.000	-0.00847	45.50	ug/L
	Na	23	27441.193	0.004	1.727	0.67546	109.59	ug/L
	Mg	24	4131.889	0.001	2.043	0.30272	57.10	ug/L
	Al	27	13809.731	0.002	3.127	0.30223	121.38	ug/L
	K	39	531490.351	0.066	0.339	6.45729	91.81	ug/L
	Ca	44	55220.825	-0.001	0.584	-2.50407	817.04	ug/L
>	Sc	45	321921.156	321921.156	3.990			ug/L
	V	51	18221.297	-0.000	1.617	-0.01249	675.73	ug/L
	Cr	52	3254.570	-0.000	3.153	-0.02662	47.26	ug/L
	Mn	55	1242.983	-0.000	2.364	-0.01510	58.47	ug/L
	Fe	57	9377.754	-0.001	1.047	-3.53345	38.83	ug/L
	Co	59	239.171	-0.000	2.176	-0.01002	14.15	ug/L
	Ni	60	74.584	0.000	4.218	0.00325	52.36	ug/L
	Cu	63	430.011	-0.000	7.913	-0.01582	44.38	ug/L
	Zn	66	870.035	-0.000	1.554	-0.09265	32.09	ug/L
>	Ge	74	844517.622	844517.622	2.708			ug/L
	As	75	592.673	-0.000	8.248	-0.02107	171.51	ug/L
	Se	82	-766.833	-0.000	53.132	-0.44467	744.58	ug/L
	Cd	114	91.329	0.000	12.788	0.00386	67.43	ug/L
>	In	115	640705.242	640705.242	1.443			ug/L
	Ba	138	472.017	0.000	5.890	0.00103	179.10	ug/L
>	Tb	159	528393.830	528393.830	0.732			ug/L
	Tl	205	386.259	0.000	14.897	0.00238	129.72	ug/L
	Pb	208	642.512	0.000	3.603	0.00242	30.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		95.497			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		98.323			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		102.435			
	As	75					
	Se	82					
	Cd	114					
>	In	115		101.762			
	Ba	138					
>	Tb	159		99.930			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 7.009
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:09:57

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	209359.253	209359.253	1.493			ug/L
	Be	9	20.000	0.000	34.799	0.02780	96.94	ug/L
	Na	23	228567713.520	770.741	2.068	126458.75752	0.78	ug/L
	Mg	24	63957802.121	215.700	1.735	50069.75224	1.44	ug/L
	Al	27	88149019.092	297.249	1.544	49576.85160	0.63	ug/L
	K	39	155146498.995	521.609	2.328	51165.22371	0.80	ug/L
	Ca	44	15312316.658	51.466	2.231	141044.86559	1.04	ug/L
>	Sc	45	296517.971	296517.971	1.727			ug/L
	V	51	40332.771	0.029	9.886	4.37335	17.70	ug/L
	Cr	52	10097.836	0.009	1.196	1.52666	1.87	ug/L
	Mn	55	10930.957	0.012	1.196	1.44240	3.23	ug/L
	Fe	57	17707246.209	22.384	3.792	125758.38546	2.86	ug/L
	Co	59	999.628	0.001	6.896	0.12198	8.99	ug/L
	Ni	60	4166.899	0.005	0.494	3.10473	1.58	ug/L
	Cu	63	6318.127	0.007	2.446	1.86877	4.33	ug/L
	Zn	66	4417.811	0.004	3.081	3.56383	1.38	ug/L
>	Ge	74	790591.310	790591.310	2.059			ug/L
	As	75	6518.381	0.008	3.463	4.24749	4.72	ug/L
	Se	82	-602.550	0.000	29.163	0.54597	309.75	ug/L
	Cd	114	6560.935	0.011	7.142	1.63033	4.40	ug/L
>	In	115	579908.151	579908.151	2.873			ug/L
	Ba	138	10990.124	0.021	2.891	0.69688	3.68	ug/L
>	Tb	159	497305.202	497305.202	1.205			ug/L
	Tl	205	504.597	0.000	5.151	0.01080	17.56	ug/L
	Pb	208	2973.898	0.005	0.527	0.10254	1.52	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		80.639			
	Be	9					
	Na	23	101.167				
	Mg	24	100.140				
	Al	27	99.154				
	K	39	102.330				
	Ca	44	94.030				
>	Sc	45		90.564			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57	100.607				
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.894			
	As	75					
	Se	82					
	Cd	114					
>	In	115		92.105			
	Ba	138					
>	Tb	159		94.051			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 8.010
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:13:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	214978.483	214978.483	1.515			ug/L
	Be	9	27187.796	0.126	2.542	101.24412	2.26	ug/L
	Na	23	229014606.316	749.156	1.903	122917.21485	0.74	ug/L
	Mg	24	63646686.215	208.253	1.956	48341.13981	2.56	ug/L
	Al	27	90486641.301	296.094	1.832	49384.22060	3.26	ug/L
	K	39	161153332.847	525.767	0.200	51573.06799	2.08	ug/L
	Ca	44	15444089.493	50.357	1.681	138004.71758	1.26	ug/L
>	Sc	45	305678.495	305678.495	2.134			ug/L
	V	51	552564.853	0.684	0.809	101.88923	3.44	ug/L
	Cr	52	427313.837	0.542	3.349	94.36776	5.86	ug/L
	Mn	55	652082.726	0.831	1.047	98.03402	3.50	ug/L
	Fe	57	17747467.045	22.655	0.882	127281.62927	3.47	ug/L
	Co	59	559152.386	0.714	4.730	96.08775	6.82	ug/L
	Ni	60	129103.906	0.165	2.309	98.63636	4.89	ug/L
	Cu	63	303311.690	0.387	2.901	97.34585	3.41	ug/L
	Zn	66	99381.308	0.126	0.093	100.92643	2.68	ug/L
>	Ge	74	783427.815	783427.815	2.580			ug/L
	As	75	146634.118	0.187	2.413	105.55773	5.04	ug/L
	Se	82	10374.321	0.014	3.907	101.43436	6.01	ug/L
	Cd	114	393458.177	0.659	2.464	95.95904	3.94	ug/L
>	In	115	597653.890	597653.890	2.099			ug/L
	Ba	138	687454.356	1.351	0.527	44.32140	1.90	ug/L
>	Tb	159	508634.192	508634.192	1.385			ug/L
	Tl	205	1629898.804	3.204	0.945	94.82653	2.20	ug/L
	Pb	208	2281411.558	4.485	2.320	94.25692	3.33	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		82.804			
	Be	9	101.244				
	Na	23	98.334				
	Mg	24	96.682				
	Al	27	98.768				
	K	39	103.146				
	Ca	44	92.003				
>	Sc	45		93.362			
	V	51	101.889				
	Cr	52	94.368				
	Mn	55	98.034				
	Fe	57	101.825				
	Co	59	96.088				
	Ni	60	98.636				
	Cu	63	97.346				
	Zn	66	100.926				
>	Ge	74		95.025			
	As	75	105.558				
	Se	82	101.434				
	Cd	114	95.959				
>	In	115		94.924			
	Ba	138	88.643				
>	Tb	159		96.193			
	Tl	205	94.827				
	Pb	208	94.257				

Method 6020 - Summary Report

Sample ID: QC Std 11

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 11.011
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:17:02

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	230288.309	230288.309	3.401			ug/L
	Be	9	1410312.348	6.125	3.091	4905.22773	0.54	ug/L
	Na	23	10560150.107	32.319	2.655	5302.69324	4.25	ug/L
	Mg	24	7230440.436	22.176	3.558	5147.73438	5.36	ug/L
	Al	27	9925161.680	30.406	0.995	5071.35425	2.73	ug/L
	K	39	167879328.581	513.418	3.767	50361.75334	4.57	ug/L
	Ca	44	654928.339	1.836	0.608	5032.46243	2.22	ug/L
>	Sc	45	326081.460	326081.460	1.819			ug/L
	V	51	26936236.548	32.745	2.265	4877.34883	2.39	ug/L
	Cr	52	22984638.411	27.965	1.477	4869.46565	3.63	ug/L
	Mn	55	35141079.124	42.753	0.617	5042.12040	2.41	ug/L
	Fe	57	752672.668	0.904	2.013	5079.62741	3.85	ug/L
	Co	59	30216186.475	36.752	2.262	4945.40633	1.51	ug/L
	Ni	60	6808253.431	8.285	0.909	4957.25465	3.57	ug/L
	Cu	63	16179089.595	19.694	2.440	4957.50733	5.22	ug/L
	Zn	66	4919840.429	5.984	1.044	4802.19161	2.06	ug/L
>	Ge	74	822316.536	822316.536	2.924			ug/L
	As	75	7248965.940	8.815	3.560	4986.65645	2.19	ug/L
	Se	82	582354.890	0.709	3.103	5101.41327	0.56	ug/L
	Cd	114	21194168.310	33.197	2.185	4837.31147	3.08	ug/L
>	In	115	638565.559	638565.559	1.097			ug/L
	Ba	138	70684000.922	135.506	1.172	4445.63263	3.42	ug/L
>	Tb	159	521916.779	521916.779	2.508			ug/L
	Tl	205	89170946.169	170.857	2.346	5056.05637	0.36	ug/L
	Pb	208	122505572.162	234.776	3.617	4933.58466	3.76	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		88.700			
	Be	9	98.105				
	Na	23	9.641				
	Mg	24	9.360				
	Al	27	9.221				
	K	39	100.724				
	Ca	44	9.150				
>	Sc	45		99.593			
	V	51	97.547				
	Cr	52	97.389				
	Mn	55	100.842				
	Fe	57	9.236				
	Co	59	98.908				
	Ni	60	99.145				
	Cu	63	99.150				
	Zn	66	96.044				
>	Ge	74		99.742			
	As	75	99.733				
	Se	82	102.028				
	Cd	114	96.746				
>	In	115		101.422			
	Ba	138	88.913				
>	Tb	159		98.705			
	Tl	205	101.121				
	Pb	208	98.672				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 13.012
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:22:03

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	240127.299	240127.299	1.858			ug/L
	Be	9	40.834	0.000	12.372	0.08719	16.60	ug/L
	Na	23	47002.366	0.055	4.791	9.03906	15.30	ug/L
	Mg	24	4861.293	0.003	2.533	0.59131	22.47	ug/L
	Al	27	15278.744	0.003	3.940	0.53113	76.36	ug/L
	K	39	574226.048	0.078	1.845	7.67538	64.16	ug/L
	Ca	44	52296.498	-0.021	1.394	-57.58091	19.35	ug/L
>	Sc	45	344972.111	344972.111	1.607			ug/L
	V	51	28130.064	0.010	2.683	1.55409	10.92	ug/L
	Cr	52	3688.013	0.000	2.921	0.03530	91.79	ug/L
	Mn	55	1913.481	0.001	7.629	0.06874	30.76	ug/L
	Fe	57	8411.727	-0.002	0.970	-12.01643	8.34	ug/L
	Co	59	773.779	0.001	11.477	0.07063	18.59	ug/L
	Ni	60	158.336	0.000	11.504	0.05846	20.01	ug/L
	Cu	63	1429.253	0.001	4.029	0.26669	7.18	ug/L
	Zn	66	1047.132	0.000	0.795	0.03897	39.87	ug/L
>	Ge	74	876604.185	876604.185	2.385			ug/L
	As	75	1783.620	0.001	11.687	0.73288	18.13	ug/L
	Se	82	-967.909	-0.000	13.267	-1.87792	46.69	ug/L
	Cd	114	440.056	0.001	16.808	0.07940	19.44	ug/L
>	In	115	665247.644	665247.644	0.924			ug/L
	Ba	138	1559.601	0.002	16.955	0.06568	23.04	ug/L
>	Tb	159	544312.604	544312.604	2.822			ug/L
	Tl	205	2604.436	0.004	19.783	0.12229	21.92	ug/L
	Pb	208	2855.141	0.004	16.317	0.08704	19.50	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		92.490			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		105.363			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		106.327			
	As	75					
	Se	82					
	Cd	114					
>	In	115		105.660			
	Ba	138					
>	Tb	159		102.941			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408B12-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\MS042408B12-D2.013
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:27:04

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	235745.936	235745.936	1.212			ug/L
	Be	9	24.167	0.000	16.627	0.03338	44.11	ug/L
	Na	23	52760.742	0.084	2.741	13.77006	6.44	ug/L
	Mg	24	3208.309	-0.002	0.738	-0.35008	2.04	ug/L
	Al	27	12679.919	-0.001	1.679	-0.23989	60.89	ug/L
	K	39	653327.558	0.458	0.139	44.95280	2.86	ug/L
	Ca	44	50459.046	-0.015	0.610	-40.27742	12.39	ug/L
>	Sc	45	319476.879	319476.879	0.649			ug/L
	V	51	22881.015	0.006	3.235	0.86653	4.47	ug/L
	Cr	52	4221.500	0.001	3.207	0.18622	26.34	ug/L
	Mn	55	1653.446	0.000	1.270	0.04549	8.12	ug/L
	Fe	57	8710.242	-0.001	0.597	-7.13203	17.08	ug/L
	Co	59	275.005	-0.000	4.917	-0.00366	79.66	ug/L
	Ni	60	233.338	0.000	4.297	0.11828	8.54	ug/L
	Cu	63	1399.249	0.001	6.074	0.27910	6.51	ug/L
	Zn	66	2575.258	0.002	1.850	1.56375	4.30	ug/L
>	Ge	74	832364.316	832364.316	2.405			ug/L
	As	75	903.526	0.000	8.999	0.19505	20.68	ug/L
	Se	82	-736.564	-0.000	22.371	-0.30648	443.44	ug/L
	Cd	114	15.858	-0.000	248.569	-0.01314	70.78	ug/L
>	In	115	627648.759	627648.759	1.904			ug/L
	Ba	138	1919.205	0.003	2.886	0.09243	3.13	ug/L
>	Tb	159	521566.803	521566.803	0.836			ug/L
	Tl	205	1216.314	0.002	9.192	0.04980	13.63	ug/L
	Pb	208	2555.947	0.004	1.892	0.07986	3.42	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		90.803			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.576			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		100.961			
	As	75					
	Se	82					
	Cd	114					
>	In	115		99.688			
	Ba	138					
>	Tb	159		98.639			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: MS042408LH02-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\MS042408LH02-D2.014
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:30:36

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	228314.680	228314.680	2.492			ug/L
	Be	9	297095.740	1.301	2.775	1042.29062	2.34	ug/L
	Na	23	20799424.400	66.556	0.534	10920.13823	0.30	ug/L
	Mg	24	14439525.145	46.252	1.321	10736.26267	1.63	ug/L
	Al	27	20165430.967	64.565	0.158	10768.57942	0.21	ug/L
	K	39	35211172.471	111.224	2.198	10910.06845	2.23	ug/L
	Ca	44	1279629.735	3.927	0.877	10762.39103	1.09	ug/L
>	Sc	45	312127.759	312127.759	0.319			ug/L
	V	51	10704297.062	13.640	1.520	2031.69690	2.40	ug/L
	Cr	52	8955178.601	11.424	0.998	1989.27507	1.43	ug/L
	Mn	55	13817148.368	17.631	0.673	2079.40995	1.09	ug/L
	Fe	57	1436148.046	1.821	1.629	10231.87682	2.51	ug/L
	Co	59	11446639.564	14.609	1.723	1965.80751	2.55	ug/L
	Ni	60	2735193.166	3.491	0.856	2088.63754	1.73	ug/L
	Cu	63	5825498.620	7.433	2.347	1871.05990	1.72	ug/L
	Zn	66	1936604.647	2.470	0.759	1982.31157	0.25	ug/L
>	Ge	74	783632.509	783632.509	0.892			ug/L
	As	75	2916867.747	3.722	1.228	2105.49877	1.87	ug/L
	Se	82	233432.380	0.299	2.918	2149.24713	2.48	ug/L
	Cd	114	4174885.787	7.055	1.096	1027.97580	1.23	ug/L
>	In	115	591803.751	591803.751	0.766			ug/L
	Ba	138	28393778.567	55.584	2.783	1823.59260	4.28	ug/L
>	Tb	159	511057.155	511057.155	1.817			ug/L
	Tl	205	35319656.355	69.123	1.122	2045.49522	1.81	ug/L
	Pb	208	48638249.419	95.190	1.850	2000.33542	2.51	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		87.940			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.332			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		95.050			
	As	75					
	Se	82					
	Cd	114					
>	In	115		93.995			
	Ba	138					
>	Tb	159		96.651			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-01-D2.015
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:34:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	218708.019	218708.019	1.057			ug/L
	Be	9	765.445	0.003	1.482	2.75468	2.45	ug/L
	Na	23	27144577.835	65.130	1.190	10686.12176	0.90	ug/L
	Mg	24	44332913.370	106.489	1.425	24719.02980	0.77	ug/L
	Al	27	146213812.680	351.186	1.854	58572.63275	0.37	ug/L
	K	39	31550960.507	74.233	1.425	7281.64378	3.36	ug/L
	Ca	44	6799243.368	16.159	2.596	44285.14835	1.42	ug/L
>	Sc	45	416309.213	416309.213	2.080			ug/L
	V	51	2297696.849	2.841	0.584	423.10212	2.27	ug/L
	Cr	52	2696587.748	3.354	1.748	584.06974	0.87	ug/L
	Mn	55	66286058.156	82.549	2.669	9735.60404	2.02	ug/L
	Fe	57	55486112.705	69.094	1.406	388184.40053	1.12	ug/L
	Co	59	482242.556	0.600	0.958	80.79437	2.89	ug/L
	Ni	60	406347.025	0.506	2.566	302.87011	3.95	ug/L
	Cu	63	3322738.954	4.139	0.983	1041.85049	2.82	ug/L
	Zn	66	45057844.397	56.116	2.906	45032.41732	2.66	ug/L
>	Ge	74	802993.830	802993.830	1.959			ug/L
	As	75	93528.463	0.116	0.907	65.48376	1.40	ug/L
	Se	82	-72.382	0.001	294.255	5.38537	35.96	ug/L
	Cd	114	409297.511	0.652	2.454	94.94029	2.97	ug/L
>	In	115	628283.657	628283.657	2.585			ug/L
	Ba	138	67922283.507	119.653	1.347	3925.53941	3.52	ug/L
>	Tb	159	568043.051	568043.051	3.142			ug/L
	Tl	205	11567.716	0.020	2.607	0.58354	2.34	ug/L
	Pb	208	138713803.688	244.286	1.753	5133.42624	2.12	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.240			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		127.151			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		97.399			
	As	75					
	Se	82					
	Cd	114					
>	In	115		99.789			
	Ba	138					
>	Tb	159		107.429			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01SD-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-01SD-D2.016
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:37:40

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	232567.240	232567.240	3.670			ug/L
	Be	9	174.586	0.001	8.391	0.55395	12.77	ug/L
	Na	23	6058069.146	17.602	2.649	2887.96830	0.98	ug/L
	Mg	24	9777884.150	28.541	2.011	6625.06425	3.19	ug/L
	Al	27	32289841.606	94.247	1.725	15718.98339	2.96	ug/L
	K	39	7622328.262	20.661	2.899	2026.65903	1.10	ug/L
	Ca	44	1614705.243	4.541	2.609	12443.79802	1.33	ug/L
>	Sc	45	342568.449	342568.449	1.897			ug/L
	V	51	503499.432	0.596	1.237	88.81058	2.93	ug/L
	Cr	52	572984.267	0.699	1.670	121.75166	3.35	ug/L
	Mn	55	14334083.150	17.588	2.505	2074.23629	3.01	ug/L
	Fe	57	12435604.071	15.253	0.348	85694.76916	3.68	ug/L
	Co	59	109672.542	0.134	3.845	18.06016	4.00	ug/L
	Ni	60	91747.089	0.113	0.456	67.34678	4.26	ug/L
	Cu	63	746080.048	0.915	3.235	230.31161	3.62	ug/L
	Zn	66	9587414.617	11.764	1.903	9440.75043	2.93	ug/L
>	Ge	74	815401.863	815401.863	3.752			ug/L
	As	75	20483.391	0.024	0.399	13.80689	4.13	ug/L
	Se	82	-396.778	0.000	32.975	2.57763	40.54	ug/L
	Cd	114	87486.276	0.143	2.892	20.89546	2.12	ug/L
>	In	115	609573.776	609573.776	1.598			ug/L
	Ba	138	14201263.832	26.551	1.324	871.09227	2.11	ug/L
>	Tb	159	534906.183	534906.183	0.984			ug/L
	Tl	205	2851.563	0.005	1.436	0.13851	0.64	ug/L
	Pb	208	30186950.674	56.438	1.579	1185.99215	2.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		89.578			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		104.629			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		98.904			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.817			
	Ba	138					
>	Tb	159		101.162			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01D-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-01D-D2.017
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:41:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	207617.239	207617.239	2.375			ug/L
	Be	9	671.689	0.003	1.836	2.54363	3.69	ug/L
	Na	23	23060952.613	58.630	1.455	9619.58984	2.71	ug/L
	Mg	24	44297924.651	112.733	2.639	26168.34641	1.83	ug/L
	Al	27	128194472.683	326.273	2.814	54417.56161	2.87	ug/L
	K	39	30479065.083	76.004	2.419	7455.35541	3.09	ug/L
	Ca	44	6168014.945	15.522	4.481	42539.46505	3.20	ug/L
>	Sc	45	392963.932	392963.932	2.859			ug/L
	V	51	1751489.010	2.285	4.118	340.35315	2.98	ug/L
	Cr	52	1838909.020	2.420	1.568	421.40782	4.83	ug/L
	Mn	55	51789473.926	68.229	2.844	8046.80647	3.30	ug/L
	Fe	57	41201176.118	54.312	1.695	305132.01297	5.38	ug/L
	Co	59	447396.890	0.590	1.503	79.33099	5.37	ug/L
	Ni	60	332275.905	0.438	2.487	262.00320	4.73	ug/L
	Cu	63	2460476.269	3.242	2.395	816.19518	4.61	ug/L
	Zn	66	34125197.234	44.979	2.066	36095.23994	4.58	ug/L
>	Ge	74	760000.290	760000.290	6.000			ug/L
	As	75	71521.734	0.093	3.027	52.88242	3.04	ug/L
	Se	82	-264.642	0.000	40.385	3.56255	27.38	ug/L
	Cd	114	329398.656	0.546	1.773	79.59911	1.90	ug/L
>	In	115	602925.027	602925.027	1.319			ug/L
	Ba	138	62155238.451	114.191	0.688	3746.34133	2.58	ug/L
>	Tb	159	544495.714	544495.714	2.061			ug/L
	Tl	205	11487.649	0.020	0.984	0.60527	2.32	ug/L
	Pb	208	109024815.419	200.253	1.312	4208.12770	0.99	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.968			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		120.021			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		92.184			
	As	75					
	Se	82					
	Cd	114					
>	In	115		95.761			
	Ba	138					
>	Tb	159		102.975			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01MH-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-01MH-D2.018
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:44:47

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	207262.376	207262.376	1.299			ug/L
	Be	9	277088.914	1.337	0.953	1070.78957	1.35	ug/L
	Na	23	35881901.193	87.811	0.696	14407.49609	1.21	ug/L
	Mg	24	47232879.262	115.686	1.198	26853.93800	1.69	ug/L
	Al	27	142914335.233	350.031	1.559	58380.11147	1.98	ug/L
	K	39	54537861.511	132.003	1.118	12948.34932	1.55	ug/L
	Ca	44	6039896.424	14.622	0.246	40071.08784	0.58	ug/L
>	Sc	45	408266.631	408266.631	0.524			ug/L
	V	51	12422948.093	16.335	2.211	2433.15093	1.46	ug/L
	Cr	52	12111401.219	15.941	2.965	2775.72370	1.68	ug/L
	Mn	55	63328416.909	83.384	1.644	9834.05452	0.83	ug/L
	Fe	57	49496847.604	65.177	2.248	366176.97071	3.24	ug/L
	Co	59	11527056.538	15.170	4.592	2041.34311	2.15	ug/L
	Ni	60	2932808.740	3.861	2.410	2310.36411	1.07	ug/L
	Cu	63	8130950.517	10.709	1.732	2695.63711	3.12	ug/L
	Zn	66	28717273.021	37.798	3.859	30332.49366	1.45	ug/L
>	Ge	74	759563.779	759563.779	2.417			ug/L
	As	75	2853064.519	3.756	1.457	2125.06868	2.06	ug/L
	Se	82	226230.320	0.299	1.129	2149.71262	2.15	ug/L
	Cd	114	4286432.071	7.334	4.690	1068.68389	3.16	ug/L
>	In	115	584270.389	584270.389	1.697			ug/L
	Ba	138	111626405.046	207.137	2.518	6795.68805	0.31	ug/L
>	Tb	159	538928.949	538928.949	2.808			ug/L
	Tl	205	35494960.108	65.901	0.471	1950.16506	3.24	ug/L
	Pb	208	139451981.866	258.864	1.340	5439.78308	2.51	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.832			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		124.695			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		92.131			
	As	75					
	Se	82					
	Cd	114					
>	In	115		92.798			
	Ba	138					
>	Tb	159		101.922			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 5.019
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:48:22

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	219100.945	219100.945	1.055			ug/L
	Be	9	14523.360	0.066	2.263	53.03826	1.59	ug/L
	Na	23	10377464.251	33.491	2.310	5495.04069	1.36	ug/L
	Mg	24	7167353.372	23.179	2.809	5380.54484	2.97	ug/L
	Al	27	10196237.359	32.960	2.662	5497.32400	4.16	ug/L
	K	39	19753483.209	62.345	2.936	6115.50216	4.27	ug/L
	Ca	44	670719.666	1.998	0.492	5475.23901	2.60	ug/L
>	Sc	45	309150.688	309150.688	2.785			ug/L
	V	51	300687.010	0.354	1.710	52.72422	4.06	ug/L
	Cr	52	245548.922	0.303	0.160	52.71166	3.09	ug/L
	Mn	55	360721.157	0.449	1.434	52.93780	1.51	ug/L
	Fe	57	773400.782	0.954	1.069	5360.63086	1.99	ug/L
	Co	59	308840.629	0.385	3.327	51.86181	4.26	ug/L
	Ni	60	69774.888	0.087	1.918	52.08284	1.25	ug/L
	Cu	63	163774.282	0.204	2.803	51.35367	4.12	ug/L
	Zn	66	52563.730	0.065	1.444	51.76167	2.33	ug/L
>	Ge	74	801008.799	801008.799	2.914			ug/L
	As	75	78031.939	0.097	1.840	54.71221	2.46	ug/L
	Se	82	5449.752	0.008	12.151	55.14958	13.48	ug/L
	Cd	114	215354.173	0.359	1.973	52.35677	1.33	ug/L
>	In	115	599136.337	599136.337	0.645			ug/L
	Ba	138	766055.707	1.460	1.197	47.91094	1.01	ug/L
>	Tb	159	524305.906	524305.906	1.777			ug/L
	Tl	205	940366.757	1.793	0.933	53.07262	2.67	ug/L
	Pb	208	1284703.765	2.450	3.068	51.47926	3.65	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.391			
	Be	9	106.077				
	Na	23	108.813				
	Mg	24	106.545				
	Al	27	108.858				
	K	39	111.191				
	Ca	44	108.421				
>	Sc	45		94.422			
	V	51	105.448				
	Cr	52	105.423				
	Mn	55	105.876				
	Fe	57	106.151				
	Co	59	103.724				
	Ni	60	104.166				
	Cu	63	102.707				
	Zn	66	103.523				
>	Ge	74		97.158			
	As	75	109.424				
	Se	82	110.299				
	Cd	114	104.714				
>	In	115		95.159			
	Ba	138	95.822				
>	Tb	159		99.157			
	Tl	205	106.145				
	Pb	208	102.959				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 6.020
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:51:56

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	235170.779	235170.779	2.263			ug/L
	Be	9	24.167	0.000	14.931	0.03348	36.89	ug/L
	Na	23	35760.522	0.032	3.906	5.25043	4.84	ug/L
	Mg	24	4432.817	0.002	5.250	0.57788	25.62	ug/L
	Al	27	14810.743	0.006	3.115	0.96402	14.27	ug/L
	K	39	557890.122	0.181	0.606	17.75010	22.03	ug/L
	Ca	44	48384.783	-0.019	0.259	-52.96505	20.14	ug/L
>	Sc	45	315725.567	315725.567	2.736			ug/L
	V	51	18384.426	0.001	1.675	0.09837	147.51	ug/L
	Cr	52	3462.538	0.000	1.002	0.03427	42.44	ug/L
	Mn	55	1472.174	0.000	0.649	0.02196	21.96	ug/L
	Fe	57	8992.920	-0.001	1.263	-4.59967	36.70	ug/L
	Co	59	335.424	0.000	9.678	0.00674	98.81	ug/L
	Ni	60	102.085	0.000	6.163	0.02465	26.97	ug/L
	Cu	63	627.103	0.000	2.563	0.04780	16.92	ug/L
	Zn	66	1064.217	0.000	2.053	0.11712	32.20	ug/L
>	Ge	74	824009.916	824009.916	2.767			ug/L
	As	75	818.103	0.000	2.307	0.14376	19.41	ug/L
	Se	82	-517.734	0.000	61.284	1.50023 -	189.90	ug/L
	Cd	114	183.550	0.000	12.008	0.02536	19.17	ug/L
>	In	115	632556.607	632556.607	0.700			ug/L
	Ba	138	870.353	0.001	8.887	0.02803	17.13	ug/L
>	Tb	159	507058.496	507058.496	2.411			ug/L
	Tl	205	955.042	0.001	8.705	0.03645	10.16	ug/L
	Pb	208	1648.804	0.002	10.277	0.04512	11.99	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		90.581			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.430			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		99.948			
	As	75					
	Se	82					
	Cd	114					
>	In	115		100.467			
	Ba	138					
>	Tb	159		95.895			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-02-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-02-D2.021
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:55:29

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	209203.853	209203.853	1.024			ug/L
	Be	9	634.187	0.003	4.535	2.37920	4.66	ug/L
	Na	23	12759869.339	33.667	1.191	5523.92606	2.83	ug/L
	Mg	24	34943328.151	92.407	0.834	21450.19298	2.53	ug/L
	Al	27	121303483.818	320.763	0.825	53498.54329	2.11	ug/L
	K	39	16368838.542	41.708	1.766	4091.23326	3.39	ug/L
	Ca	44	4372827.586	11.389	2.141	31212.57628	1.21	ug/L
>	Sc	45	378212.620	378212.620	1.819			ug/L
	V	51	2659855.787	3.525	0.526	525.00632	2.04	ug/L
	Cr	52	7926486.514	10.562	1.576	1839.17575	0.90	ug/L
	Mn	55	79446285.597	105.905	1.651	12490.10863	1.00	ug/L
	Fe	57	54186583.562	72.247	1.329	405893.35329	3.23	ug/L
	Co	59	538557.562	0.718	1.508	96.59031	3.30	ug/L
	Ni	60	576565.992	0.769	1.118	459.98883	3.08	ug/L
	Cu	63	4854477.698	6.473	1.364	1629.37194	3.16	ug/L
	Zn	66	25900638.769	34.539	1.986	27716.88729	3.63	ug/L
>	Ge	74	750222.788	750222.788	2.075			ug/L
	As	75	138227.945	0.183	2.667	103.80691	0.92	ug/L
	Se	82	44.563	0.001	213.683	6.48997	14.34	ug/L
	Cd	114	267079.234	0.441	2.067	64.22583	1.24	ug/L
>	In	115	605755.405	605755.405	0.877			ug/L
	Ba	138	153968076.038	292.813	1.671	9606.53045	1.93	ug/L
>	Tb	159	526023.630	526023.630	3.264			ug/L
	Tl	205	10326.335	0.019	1.483	0.56227	4.81	ug/L
	Pb	208	100819755.654	191.749	1.484	4029.42367	2.27	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		80.579			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		115.516			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		90.998			
	As	75					
	Se	82					
	Cd	114					
>	In	115		96.211			
	Ba	138					
>	Tb	159		99.482			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-03-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-03-D2.022
Calibration File:
Sample Date/Time: Friday, May 02, 2008 13:59:03

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	220100.867	220100.867	1.257			ug/L
	Be	9	407.927	0.002	3.656	1.43524	2.50	ug/L
	Na	23	5528820.626	15.690	1.332	2574.30720	1.28	ug/L
	Mg	24	21069453.962	60.089	0.813	13948.27009	0.31	ug/L
	Al	27	75927144.226	216.552	1.048	36117.79055	1.48	ug/L
	K	39	9271787.849	24.864	2.533	2438.94373	3.26	ug/L
	Ca	44	2735950.345	7.632	1.974	20916.72112	2.53	ug/L
>	Sc	45	350567.834	350567.834	0.557			ug/L
	V	51	1833306.608	2.366	1.159	352.40865	1.85	ug/L
	Cr	52	5583045.142	7.266	1.668	1265.24285	1.25	ug/L
	Mn	55	60469935.511	78.741	1.827	9286.45602	1.03	ug/L
	Fe	57	31700517.952	41.259	2.920	231802.28370	0.31	ug/L
	Co	59	351686.055	0.458	2.169	61.59838	3.72	ug/L
	Ni	60	390538.749	0.509	3.455	304.42641	5.33	ug/L
	Cu	63	4219894.845	5.496	2.727	1383.48737	3.75	ug/L
	Zn	66	13162015.292	17.134	2.997	13750.13165	0.24	ug/L
>	Ge	74	768093.014	768093.014	2.824			ug/L
	As	75	56195.677	0.072	0.456	40.99524	3.19	ug/L
	Se	82	-139.782	0.001	253.439	4.70225	71.65	ug/L
	Cd	114	148826.002	0.250	1.126	36.44624	2.33	ug/L
>	In	115	594992.236	594992.236	2.820			ug/L
	Ba	138	30898754.821	60.662	0.734	1990.18129	1.70	ug/L
>	Tb	159	509414.696	509414.696	1.150			ug/L
	Tl	205	7735.505	0.015	2.046	0.43013	1.98	ug/L
	Pb	208	103481426.793	203.122	2.124	4268.40591	0.97	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.777			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		107.072			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		93.165			
	As	75					
	Se	82					
	Cd	114					
>	In	115		94.501			
	Ba	138					
>	Tb	159		96.341			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-04-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-04-D2.023
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:02:38

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	208995.724	208995.724	4.138			ug/L
	Be	9	622.936	0.003	3.960	2.33859	1.10	ug/L
	Na	23	20371723.767	53.701	1.841	8811.02370	1.37	ug/L
	Mg	24	40287460.950	106.394	0.281	24696.88127	3.31	ug/L
	Al	27	122550958.408	323.634	0.222	53977.36451	3.30	ug/L
	K	39	24857594.014	64.078	1.029	6285.47234	4.29	ug/L
	Ca	44	5815205.034	15.186	0.202	41619.13319	3.43	ug/L
>	Sc	45	378887.338	378887.338	3.173			ug/L
	V	51	1784538.176	2.453	1.660	365.30626	0.14	ug/L
	Cr	52	4682092.514	6.490	1.268	1129.98260	2.81	ug/L
	Mn	55	79989781.986	110.908	3.903	13080.16552	3.77	ug/L
	Fe	57	64785223.527	89.824	0.484	504643.96681	1.29	ug/L
	Co	59	535520.398	0.742	2.673	99.89107	3.66	ug/L
	Ni	60	456825.062	0.633	3.046	378.97126	3.17	ug/L
	Cu	63	3806789.078	5.279	2.523	1328.87733	3.64	ug/L
	Zn	66	38902542.340	53.942	1.721	43288.10006	1.90	ug/L
>	Ge	74	721250.618	721250.618	1.583			ug/L
	As	75	80060.705	0.110	2.738	62.37154	1.52	ug/L
	Se	82	-276.769	0.000	36.212	3.28844	31.03	ug/L
	Cd	114	365242.907	0.623	3.526	90.83876	1.95	ug/L
>	In	115	585792.814	585792.814	2.963			ug/L
	Ba	138	54345806.129	100.421	3.743	3294.57439	2.68	ug/L
>	Tb	159	541098.740	541098.740	1.641			ug/L
	Tl	205	8787.373	0.016	0.788	0.46145	2.40	ug/L
	Pb	208	118672582.522	219.333	0.993	4609.07431	0.75	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		80.499			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		115.722			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		87.484			
	As	75					
	Se	82					
	Cd	114					
>	In	115		93.040			
	Ba	138					
>	Tb	159		102.333			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-05-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-05-D2.024
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:06:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	210249.541	210249.541	2.677			ug/L
	Be	9	318.757	0.001	11.346	1.16359	8.96	ug/L
	Na	23	3590507.956	11.286	0.869	1851.77413	0.79	ug/L
	Mg	24	17600921.387	55.712	1.684	12932.29292	1.58	ug/L
	Al	27	69361612.872	219.584	2.622	36623.38972	3.25	ug/L
	K	39	7732586.410	22.898	2.818	2246.08869	3.73	ug/L
	Ca	44	2496924.472	7.733	0.231	21191.83212	0.80	ug/L
>	Sc	45	315862.382	315862.382	0.688			ug/L
	V	51	1294091.909	1.698	3.683	252.96507	4.69	ug/L
	Cr	52	3745414.378	4.973	2.601	865.99076	3.31	ug/L
	Mn	55	66186061.514	87.956	3.389	10373.28858	4.00	ug/L
	Fe	57	25226521.283	33.512	1.833	188277.19701	2.66	ug/L
	Co	59	293425.738	0.390	0.267	52.41840	1.15	ug/L
	Ni	60	309742.991	0.411	0.672	246.21668	0.95	ug/L
	Cu	63	3027323.082	4.022	0.117	1012.47921	1.18	ug/L
	Zn	66	11343569.105	15.072	0.747	12095.41920	1.39	ug/L
>	Ge	74	752627.213	752627.213	1.275			ug/L
	As	75	41167.764	0.054	0.590	30.52752	0.88	ug/L
	Se	82	-241.665	0.001	88.644	3.72541	55.54	ug/L
	Cd	114	137998.894	0.237	4.530	34.51811	4.80	ug/L
>	In	115	582341.248	582341.248	0.982			ug/L
	Ba	138	21836204.718	43.459	2.415	1425.80120	1.40	ug/L
>	Tb	159	502442.234	502442.234	1.993			ug/L
	Tl	205	5781.228	0.011	2.139	0.32126	0.70	ug/L
	Pb	208	63349749.230	126.129	0.994	2650.47584	2.82	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		80.982			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.472			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		91.289			
	As	75					
	Se	82					
	Cd	114					
>	In	115		92.492			
	Ba	138					
>	Tb	159		95.022			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-06-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-06-D2.025
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:09:50

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	206633.010	206633.010	1.452			ug/L
	Be	9	456.679	0.002	12.811	1.72282	14.13	ug/L
	Na	23	5639800.403	16.110	2.172	2643.19241	2.99	ug/L
	Mg	24	28770183.364	82.570	1.556	19166.73685	1.35	ug/L
	Al	27	107276062.508	307.839	2.465	51343.09933	1.15	ug/L
	K	39	11159917.434	30.449	2.242	2986.73250	2.65	ug/L
	Ca	44	3626531.765	10.238	1.177	28057.28382	1.93	ug/L
>	Sc	45	348399.025	348399.025	1.327			ug/L
	V	51	1966331.890	2.600	0.714	387.32142	1.24	ug/L
	Cr	52	4599470.788	6.130	2.843	1067.31170	3.34	ug/L
	Mn	55	63304568.337	84.417	3.410	9955.96352	3.81	ug/L
	Fe	57	36786043.044	49.046	3.858	275547.90565	4.35	ug/L
	Co	59	482570.975	0.643	2.750	86.54655	3.26	ug/L
	Ni	60	428383.294	0.571	2.130	341.74400	2.36	ug/L
	Cu	63	3544717.570	4.726	1.972	1189.71251	2.36	ug/L
	Zn	66	20368794.297	27.159	1.594	21795.26349	1.82	ug/L
>	Ge	74	749964.569	749964.569	0.522			ug/L
	As	75	60287.786	0.080	1.365	45.05663	0.86	ug/L
	Se	82	-360.503	0.000	41.858	2.58983	56.49	ug/L
	Cd	114	163551.578	0.286	1.007	41.63338	0.52	ug/L
>	In	115	572228.931	572228.931	1.526			ug/L
	Ba	138	44549579.863	88.476	1.542	2902.68079	4.78	ug/L
>	Tb	159	504058.162	504058.162	3.381			ug/L
	Tl	205	8035.259	0.015	4.072	0.45251	2.62	ug/L
	Pb	208	73859663.828	146.586	1.855	3080.36517	1.96	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.589			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		106.410			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		90.966			
	As	75					
	Se	82					
	Cd	114					
>	In	115		90.886			
	Ba	138					
>	Tb	159		95.328			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-07-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-07-D2.026
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:13:26

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	204905.701	204905.701	1.367			ug/L
	Be	9	778.779	0.004	1.002	2.99559	1.82	ug/L
	Na	23	6444612.441	16.598	1.767	2723.35251	0.44	ug/L
	Mg	24	39661446.573	102.648	1.436	23827.50441	1.51	ug/L
	Al	27	109775738.249	284.164	0.690	47394.42412	2.65	ug/L
	K	39	15500554.900	38.535	1.209	3779.98318	1.48	ug/L
	Ca	44	4377596.684	11.160	1.033	30583.44115	2.21	ug/L
>	Sc	45	386400.498	386400.498	2.160			ug/L
	V	51	1515049.834	2.116	2.249	315.14671	3.53	ug/L
	Cr	52	904926.958	1.273	0.583	221.66116	3.88	ug/L
	Mn	55	20816259.522	29.383	2.228	3465.37715	5.41	ug/L
	Fe	57	26476818.512	37.354	0.948	209858.87050	4.12	ug/L
	Co	59	405220.167	0.572	3.629	76.96169	7.14	ug/L
	Ni	60	235984.242	0.333	4.457	199.41240	8.00	ug/L
	Cu	63	986851.688	1.391	2.618	350.26488	2.98	ug/L
	Zn	66	4905446.016	6.917	4.286	5550.88262 -	3.88	ug/L
>	Ge	74	709287.780	709287.780	3.657			ug/L
	As	75	34322.588	0.048	3.611	26.97926	5.03	ug/L
	Se	82	-492.561	0.000	36.774	1.06431	172.10	ug/L
	Cd	114	50110.366	0.091	2.074	13.28043	3.44	ug/L
>	In	115	549503.736	549503.736	3.655			ug/L
	Ba	138	27957364.955	52.092	1.696	1709.03025	5.46	ug/L
>	Tb	159	537429.849	537429.849	3.888			ug/L
	Tl	205	9474.486	0.017	2.002	0.50308	5.20	ug/L
	Pb	208	76222613.007	142.044	2.044	2984.90603	5.93	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		78.924			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		118.016			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		86.033			
	As	75					
	Se	82					
	Cd	114					
>	In	115		87.276			
	Ba	138					
>	Tb	159		101.639			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-08-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-08-D2.027
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:17:03

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	207312.273	207312.273	2.831			ug/L
	Be	9	615.436	0.003	1.352	2.32994	2.93	ug/L
	Na	23	8550003.652	22.844	0.571	3748.12437	1.62	ug/L
	Mg	24	37988607.552	101.841	2.118	23640.09557	2.16	ug/L
	Al	27	116097514.081	311.236	1.824	51909.67401	1.97	ug/L
	K	39	17561812.623	45.499	0.321	4463.07653	0.78	ug/L
	Ca	44	4495453.759	11.880	2.069	32558.67607	2.21	ug/L
>	Sc	45	372992.698	372992.698	1.069			ug/L
	V	51	1910345.568	2.664	0.841	396.86023	1.58	ug/L
	Cr	52	6255936.105	8.792	0.675	1530.94180	1.55	ug/L
	Mn	55	44226966.423	62.182	1.012	7333.62243	1.41	ug/L
	Fe	57	39194727.186	55.072	4.735	309406.73285	3.18	ug/L
	Co	59	428801.860	0.602	2.575	81.07328	2.31	ug/L
	Ni	60	367355.098	0.517	1.909	309.05970	3.20	ug/L
	Cu	63	2453462.226	3.449	1.313	868.21719	1.74	ug/L
	Zn	66	19936161.802	28.025	2.143	22490.22967	1.14	ug/L
>	Ge	74	711339.684	711339.684	1.940			ug/L
	As	75	61882.939	0.086	1.450	48.80034	1.07	ug/L
	Se	82	-473.381	0.000	16.464	1.25612	68.03	ug/L
	Cd	114	186024.696	0.327	0.933	47.61485	0.80	ug/L
>	In	115	569112.952	569112.952	1.109			ug/L
	Ba	138	56204039.540	105.354	0.593	3456.41791	2.63	ug/L
>	Tb	159	533687.976	533687.976	2.324			ug/L
	Tl	205	9922.296	0.018	2.920	0.53099	2.42	ug/L
	Pb	208	156970063.251	294.148	2.438	6181.22988	1.76	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.851			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		113.921			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		86.281			
	As	75					
	Se	82					
	Cd	114					
>	In	115		90.391			
	Ba	138					
>	Tb	159		100.931			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-09-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-09-D2.028
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:20:36

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	201858.797	201858.797	1.430			ug/L
	Be	9	678.773	0.003	1.574	2.64483	2.51	ug/L
	Na	23	9567229.332	24.906	3.225	4086.44118	2.22	ug/L
	Mg	24	35136869.353	91.759	2.506	21299.73875	1.10	ug/L
	Al	27	128468613.242	335.559	0.929	55966.33657	1.32	ug/L
	K	39	18430368.079	46.549	2.823	4566.00754	1.56	ug/L
	Ca	44	4639527.277	11.943	3.583	32730.69116	1.90	ug/L
>	Sc	45	382850.761	382850.761	1.702			ug/L
	V	51	1614042.560	2.176	0.422	324.08903	1.25	ug/L
	Cr	52	1228341.475	1.668	1.735	290.51307	2.37	ug/L
	Mn	55	41158031.843	56.037	2.412	6608.89766	2.97	ug/L
	Fe	57	41806247.888	56.908	1.075	319717.59588	1.74	ug/L
	Co	59	496287.515	0.675	2.511	90.86821	2.43	ug/L
	Ni	60	322506.898	0.439	1.643	262.64774	0.83	ug/L
	Cu	63	1269483.787	1.728	2.784	434.87563	2.31	ug/L
	Zn	66	18930621.557	25.769	3.335	20679.02102	2.77	ug/L
>	Ge	74	734543.134	734543.134	0.820			ug/L
	As	75	56468.451	0.076	2.095	43.06942	1.60	ug/L
	Se	82	-238.761	0.001	126.137	3.71386	79.60	ug/L
	Cd	114	164639.840	0.291	2.303	42.45220	1.20	ug/L
>	In	115	564860.137	564860.137	1.301			ug/L
	Ba	138	94916512.649	176.417	1.512	5787.85486	3.11	ug/L
>	Tb	159	538197.024	538197.024	1.599			ug/L
	Tl	205	9061.715	0.016	2.749	0.47921	4.31	ug/L
	Pb	208	58198262.969	108.144	0.780	2272.55127	0.90	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		77.750			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		116.932			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		89.096			
	As	75					
	Se	82					
	Cd	114					
>	In	115		89.715			
	Ba	138					
>	Tb	159		101.784			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-10-D2

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\0804116-10-D2.029
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:24:06

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	207261.516	207261.516	1.006			ug/L
	Be	9	703.774	0.003	6.031	2.67050	5.84	ug/L
	Na	23	7926244.677	20.383	4.825	3344.33994	2.17	ug/L
	Mg	24	35555157.912	91.834	2.496	21317.18479	1.67	ug/L
	Al	27	121830495.410	314.789	0.649	52502.18247	2.90	ug/L
	K	39	20331874.381	50.923	3.172	4995.08136	0.47	ug/L
	Ca	44	4099613.209	10.417	2.374	28548.92544	1.37	ug/L
>	Sc	45	387216.350	387216.350	3.306			ug/L
	V	51	1932218.123	2.553	0.509	380.28282	2.66	ug/L
	Cr	52	2372552.727	3.157	2.022	549.77387	3.08	ug/L
	Mn	55	43785558.654	58.382	4.849	6885.45027 -	7.08	ug/L
	Fe	57	30482639.119	40.609	1.958	228149.88855	3.45	ug/L
	Co	59	377253.802	0.502	2.814	67.59836	3.92	ug/L
	Ni	60	278362.003	0.371	2.763	221.83866	2.59	ug/L
	Cu	63	1644346.173	2.191	1.795	551.53255	3.99	ug/L
	Zn	66	14828602.939	19.755	2.062	15853.15858 -	2.32	ug/L
>	Ge	74	750734.217	750734.217	2.188			ug/L
	As	75	80387.868	0.106	1.282	60.16680	1.17	ug/L
	Se	82	-371.386	0.000	28.161	2.49813	38.48	ug/L
	Cd	114	119569.512	0.213	2.390	31.06786	1.23	ug/L
>	In	115	560565.285	560565.285	2.689			ug/L
	Ba	138	63137679.309	118.831	1.955	3898.58676	2.50	ug/L
>	Tb	159	531366.878	531366.878	0.613			ug/L
	Tl	205	14396.978	0.026	0.565	0.78256	0.69	ug/L
	Pb	208	66469304.891	125.100	1.444	2628.85589	2.03	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.831			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		118.266			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		91.060			
	As	75					
	Se	82					
	Cd	114					
>	In	115		89.033			
	Ba	138					
>	Tb	159		100.492			
	Tl	205					
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 5.030
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:27:40

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	217572.276	217572.276	0.822			ug/L
	Be	9	14150.064	0.065	1.731	52.04156	1.84	ug/L
	Na	23	9349005.136	32.091	1.337	5265.30531	4.01	ug/L
	Mg	24	6491372.702	22.327	2.660	5182.74707	4.64	ug/L
	Al	27	9238254.103	31.753	1.949	5295.95886	4.59	ug/L
	K	39	18130117.762	60.795	3.112	5963.46936	4.54	ug/L
	Ca	44	599116.237	1.888	3.997	5174.12027	4.11	ug/L
>	Sc	45	290808.722	290808.722	2.855			ug/L
	V	51	267481.427	0.320	0.309	47.64830	2.32	ug/L
	Cr	52	222548.186	0.280	0.804	48.77964	1.26	ug/L
	Mn	55	335954.268	0.427	2.487	50.39790	2.41	ug/L
	Fe	57	718397.023	0.906	0.395	5088.02687	2.30	ug/L
	Co	59	285716.890	0.365	2.312	49.05681	4.02	ug/L
	Ni	60	63758.063	0.081	2.272	48.67474	3.91	ug/L
	Cu	63	152099.890	0.194	0.915	48.74007	1.00	ug/L
	Zn	66	48190.815	0.060	2.006	48.45197	1.26	ug/L
>	Ge	74	783326.508	783326.508	1.904			ug/L
	As	75	74396.807	0.094	2.868	53.31736	2.90	ug/L
	Se	82	4943.630	0.007	7.035	51.49387	7.28	ug/L
	Cd	114	203642.034	0.344	1.887	50.14232	2.07	ug/L
>	In	115	591730.377	591730.377	2.428			ug/L
	Ba	138	709615.582	1.432	1.416	46.97642	5.21	ug/L
>	Tb	159	496041.936	496041.936	4.529			ug/L
	Tl	205	903234.549	1.822	2.773	53.91051	3.62	ug/L
	Pb	208	1241770.457	2.506	0.667	52.66285	5.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		83.803			
	Be	9	104.083				
	Na	23	104.263				
	Mg	24	102.629				
	Al	27	104.870				
	K	39	108.427				
	Ca	44	102.458				
>	Sc	45		88.820			
	V	51	95.297				
	Cr	52	97.559				
	Mn	55	100.796				
	Fe	57	100.753				
	Co	59	98.114				
	Ni	60	97.349				
	Cu	63	97.480				
	Zn	66	96.904				
>	Ge	74		95.013			
	As	75	106.635				
	Se	82	102.988				
	Cd	114	100.285				
>	In	115		93.983			
	Ba	138	93.953				
>	Tb	159		93.812			
	Tl	205	107.821				
	Pb	208	105.326				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208B\QC Std 6.031
Calibration File:
Sample Date/Time: Friday, May 02, 2008 14:31:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	221760.488	221760.488	0.598			ug/L
	Be	9	22.917	0.000	6.298	0.03392	15.19	ug/L
	Na	23	27254.162	0.011	0.568	1.86770	2.72	ug/L
	Mg	24	4265.264	0.003	5.846	0.68302	26.20	ug/L
	Al	27	13772.193	0.006	2.579	0.94582	16.92	ug/L
	K	39	575079.858	0.368	0.146	36.06884	2.91	ug/L
	Ca	44	40398.695	-0.035	0.089	-96.86981	2.07	ug/L
>	Sc	45	294242.760	294242.760	0.560			ug/L
	V	51	13769.558	-0.004	0.904	-0.59127	8.22	ug/L
	Cr	52	3075.779	-0.000	4.131	-0.00899	433.37	ug/L
	Mn	55	5253.102	0.005	2.853	0.60726	1.99	ug/L
	Fe	57	9676.289	0.001	0.322	3.93046	22.19	ug/L
	Co	59	308.340	0.000	0.234	0.00518	18.51	ug/L
	Ni	60	87.501	0.000	4.286	0.01767	11.45	ug/L
	Cu	63	651.271	0.000	1.571	0.06684	7.76	ug/L
	Zn	66	999.212	0.000	0.939	0.11069	7.95	ug/L
>	Ge	74	778133.497	778133.497	1.581			ug/L
	As	75	500.168	-0.000	3.393	-0.05483	13.68	ug/L
	Se	82	-379.413	0.000	56.419	2.52599	79.93	ug/L
	Cd	114	124.346	0.000	13.844	0.01314	34.55	ug/L
>	In	115	603770.937	603770.937	1.204			ug/L
	Ba	138	866.228	0.001	2.958	0.02806	8.06	ug/L
>	Tb	159	504688.416	504688.416	2.578			ug/L
	Tl	205	559.183	0.000	6.678	0.01354	11.89	ug/L
	Pb	208	2047.577	0.003	5.338	0.06222	10.29	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		85.416			
	Be	9					
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		89.869			
	V	51					
	Cr	52					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Zn	66					
>	Ge	74		94.383			
	As	75					
	Se	82					
	Cd	114					
>	In	115		95.895			
	Ba	138					
>	Tb	159		95.447			
	Tl	205					
	Pb	208					

Sample/Batch Report

Sample File: C:\elandata\Sample\0804116.sam
Method File: c:\elandata\Method\6020a2talsoil.mth
Dataset File: C:\elandata\Dataset\M050208C\
Report Date/Time: Friday, May 02, 2008 14:40:47

A/S Loc.	Sample ID	Standards/Reagents
11	MS042408B11-D2	CAL STD=C042908M1
12	MS042408LL02-D2	ICV=I050208M2
13	0804116-01-D2	ICSA=042908ICSA2
14	0804116-01SD-D2	ICSAB=050208ICSAB2
15	0804116-01D-D2	IS=IS050108
16	0804116-01ML-D2	ACID=10%MW042908A
17	0804116-02-D2	
18	0804116-03-D2	
19	0804116-04-D2	
20	0804116-05-D2	
21	0804116-06-D2	
22	0804116-07-D2	
23	0804116-08-D2	
24	0804116-09-D2	
25	0804116-10-D2	

Lmn 5/2/08

5/13/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Blank.003
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:00:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	525.848		8.719			ug/L
|>	In	115	588490.096		0.998			ug/L
⌊	Sb	121	1448.421		1.030			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Standard 1.004
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:02:47

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	757.944	0.000	7.258	0.10000	22.91	ug/L
|>	In	115	595926.961	595926.961	1.718			ug/L
⌊	Sb	121	1688.450	0.000	1.805	0.10000	24.92	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Standard 2.005
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:05:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	289.589	-0.000	4.774	-0.10601	4.47	ug/L
|>	In	115	587668.846	587668.846	1.208			ug/L
⌊	Sb	121	67921.793	0.113	1.674	10.00067	2.92	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Standard 3.006
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:07:30

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	36.667	-0.001	25.129	-0.21945	1.94	ug/L
|>	In	115	576752.322	576752.322	0.242			ug/L
⌊	Sb	121	135153.566	0.232	1.294	20.09710	1.22	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Standard 4.007
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:09:53

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	97.918	-0.001	10.239	-0.19083	2.29	ug/L
|>	In	115	569680.723	569680.723	1.779			ug/L
⌊	Sb	121	683829.379	1.198	1.849	100.17607	1.41	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: Standard 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\Standard 5.008
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:12:17

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	691798.968	1.186	0.771	100.00007	1.31	ug/L
|>	In	115	582813.751	582813.751	2.060			ug/L
⌊	Sb	121	1121.305	-0.001	5.356	-0.04477	26.71	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115					
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 1.009
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:14:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	340619.839	0.562	0.908	47.41436	0.93	ug/L
|>	In	115	604670.436	604670.436	1.826			ug/L
[	Sb	121	342271.980	0.564	1.548	47.14558	3.26	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107	94.829				
|>	In	115		102.749			
[	Sb	121	94.291				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 2.010
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:17:05

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	585.851	0.000	2.282	0.00592	22.75	ug/L
>	In	115	607975.952	607975.952	2.987			ug/L
	Sb	121	1233.399	-0.000	7.357	-0.03602	40.10	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		103.311			
	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 7.011
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:19:28

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	565.434	0.000	5.043	0.01116	44.50	ug/L
>	In	115	551416.261	551416.261	2.397			ug/L
	Sb	121	1428.419	0.000	3.730	0.01099	114.94	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		93.700			
	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 8.012
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:21:51

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	332596.133	0.582	1.664	49.04945	0.67	ug/L
|>	In	115	570710.899	570710.899	1.528			ug/L
⌊	Sb	121	695695.573	1.217	1.795	101.75298	2.89	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	98.099				
|>	In	115		96.979			
⌊	Sb	121	101.753				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 13.013
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:24:10

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	562.517	0.000	4.813	0.00806	53.65	ug/L
|>	In	115	568732.306	568732.306	0.409			ug/L
⌊	Sb	121	1100.053	-0.001	1.119	-0.04407	2.87	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		96.643			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: MS042408B11-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\MS042408B11-D2.014
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:28:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	332.507	-0.000	15.145	-0.02458	36.54	ug/L
|>	In	115	553991.503	553991.503	3.367			ug/L
⌊	Sb	121	634.604	-0.001	3.842	-0.10993	5.14	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		94.138			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: MS042408LL02-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\MS042408LL02-D2.015
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:30:21

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	136757.046	0.250	1.071	21.03821	1.86	ug/L
>	In	115	546087.317	546087.317	1.665			ug/L
	Sb	121	129805.961	0.235	1.609	19.67373	2.00	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107					
>	In	115		92.795			
	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-01-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-01-D2.016
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:32:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	65448.149	0.125	0.243	10.53894	0.44	ug/L
|>	In	115	519775.095	519775.095	0.680			ug/L
⌊	Sb	121	101516.003	0.193	2.587	16.12825	3.27	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		88.324			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-01SD-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-01SD-D2.017
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:35:03

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	14198.030	0.026	2.420	2.16525	5.01	ug/L
|>	In	115	534592.333	534592.333	2.545			ug/L
⌊	Sb	121	21960.844	0.039	2.680	3.23081	3.99	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		90.841			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-01D-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-01D-D2.018
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:37:25

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	71784.373	0.138	0.593	11.63053	1.35	ug/L
|>	In	115	517012.464	517012.464	1.924			ug/L
⌊	Sb	121	119088.905	0.228	1.465	19.05691	0.85	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		87.854	✓		
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-01ML-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-01ML-D2.019
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:39:47

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	193589.853	0.373	0.848	31.46545	2.73	ug/L
|>	In	115	517616.735	517616.735	2.653			ug/L
⌊	Sb	121	182655.047	0.351	0.650	29.31765	3.06	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		87.957			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-02-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-02-D2.020
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:42:10

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	67485.981	0.127	1.704	10.67301	2.10	ug/L
|>	In	115	529323.386	529323.386	1.409			ug/L
⌊	Sb	121	194871.696	0.366	2.335	30.58425	2.90	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		89.946			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 5.021
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:44:34

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Ag	107	314153.539	0.580	2.381	48.88035	2.47	ug/L
>	In	115	541190.617	541190.617	3.751			ug/L
	Sb	121	320743.435	0.591	1.872	49.38051	2.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Ag	107	97.761				
>	In	115		91.963			
	Sb	121	98.761				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 6.022
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:46:57

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	557.100	0.000	2.133	0.01105	23.46	ug/L
|>	In	115	543988.424	543988.424	3.123			ug/L
⌊	Sb	121	783.779	-0.001	1.462	-0.08523	6.07	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		92.438			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-03-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-03-D2.023
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:49:18

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	48950.526	0.095	3.428	7.96671	2.81	ug/L
|>	In	115	513051.778	513051.778	1.430			ug/L
⌊	Sb	121	116716.891	0.225	1.064	18.82178	2.43	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		87.181			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-04-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-04-D2.024
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:51:42

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	88490.210	0.176	3.881	14.79854	2.89	ug/L
|>	In	115	501408.643	501408.643	1.213			ug/L
⌊	Sb	121	139535.940	0.276	1.851	23.06391	0.89	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		85.203			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-05-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-05-D2.025
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:54:06

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	29257.740	0.056	3.031	4.72139	4.35	ug/L
|>	In	115	514348.276	514348.276	1.346			ug/L
⌊	Sb	121	114264.646	0.220	0.826	18.37374	1.88	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		87.401			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-06-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-06-D2.026
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:56:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	35276.778	0.068	1.586	5.76153	1.78	ug/L
|>	In	115	509576.714	509576.714	2.507			ug/L
⌊	Sb	121	138827.077	0.270	2.312	22.57632	0.33	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		86.591			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-07-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-07-D2.027
Calibration File:
Sample Date/Time: Friday, May 02, 2008 15:58:56

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	14052.049	0.027	1.642	2.25452	0.71	ug/L
|>	In	115	508391.083	508391.083	1.124			ug/L
⌊	Sb	121	22622.711	0.042	1.766	3.51503	0.72	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		86.389			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-08-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-08-D2.028
Calibration File:
Sample Date/Time: Friday, May 02, 2008 16:01:21

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	55841.160	0.108	1.206	9.10441	1.30	ug/L
|>	In	115	512881.139	512881.139	2.496			ug/L
⌊	Sb	121	109878.530	0.212	2.931	17.70769	0.52	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		87.152			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-09-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-09-D2.029
Calibration File:
Sample Date/Time: Friday, May 02, 2008 16:03:44

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	45411.278	0.092	1.626	7.79415	0.73	ug/L
|>	In	115	486432.787	486432.787	1.580			ug/L
⌊	Sb	121	61505.236	0.124	0.780	10.36992	2.39	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		82.658			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: 0804116-10-D2

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\0804116-10-D2.030
Calibration File:
Sample Date/Time: Friday, May 02, 2008 16:06:02

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	29034.353	0.057	1.578	4.80514	2.10	ug/L
|>	In	115	501544.254	501544.254	1.519			ug/L
⌊	Sb	121	56527.619	0.110	1.672	9.22025	2.29	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107					
|>	In	115		85.226			
⌊	Sb	121					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 5.031
Calibration File:
Sample Date/Time: Friday, May 02, 2008 16:08:25

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Ag	107	315453.785	0.604	2.337	50.94048	2.28	ug/L
|>	In	115	521274.271	521274.271	1.670			ug/L
⌊	Sb	121	321369.915	0.614	1.501	51.35230	1.59	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Ag	107	101.881				
|>	In	115		88.578			
⌊	Sb	121	102.705				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2agsb.mth
Dataset File: C:\elandata\Dataset\M050208C\QC Std 6.032
Calibration File:
Sample Date/Time: Friday, May 02, 2008 16:10:47

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
[	Ag	107	561.267	0.000	6.573	0.01505	38.40	ug/L
|>	In	115	523475.973	523475.973	0.416			ug/L
[	Sb	121	724.192	-0.001	5.710	-0.09014	7.08	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
[	Ag	107					
|>	In	115		88.952			
[	Sb	121					

Sample/Batch Report

Sample File: C:\elandata\Sample\0804116.sam
Method File: c:\elandata\Method\6020a2se.mth
Dataset File: C:\elandata\Dataset\M050708A\
Report Date/Time: Wednesday, May 07, 2008 11:05:24

A/S Loc.	Sample ID	Standards/Reagents
11	MS042408B12-D2	CAL STD=C050508M1
12	MS042408LH02-D2	ICV=I050708M1
13	0804116-01-D10	ICSA=042908ICSA2
14	0804116-01SD-D10	ICSAB=050708ICSAB1
15	0804116-01D-D10	IS=IS050708
16	0804116-01MH-D10	ACID=10%MW042908A
17	0804116-02-D10	
18	0804116-03-D10	
19	0804116-04-D10	
20	0804116-05-D10	
21	0804116-06-D10	
22	0804116-07-D10	
23	0804116-08-D10	
24	0804116-09-D10	
25	0804116-10-D10	

LMR
5/7/08

TC 5/13/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\Blank.001
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:06:32

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	16974.835		2.054			ug/L
Mg	24	1993.076		3.152			ug/L
Al	27	8309.170		5.283			ug/L
K	39	637078.374		1.142			ug/L
Ca	44	47623.478		0.906			ug/L
Sc	45	382557.772		1.418			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\Standard 1.002
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:08:57

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	47834.189	0.078	1.485	10.00000	3.47	ug/L
Mg	24	22046.388	0.051	1.666	10.10000	1.99	ug/L
Al	27	34349.097	0.066	1.735	10.00000	1.76	ug/L
K	39	689096.277	0.094	0.483	11.00000	14.52	ug/L
Ca	44	49507.801	0.002	0.739	10.10000	22.71	ug/L
Sc	45	391806.908	391806.908	0.909			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\Standard 2.003
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:11:24

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	329328.279	0.778	2.761	100.00150	1.76	ug/L
Mg	24	239372.508	0.593	1.941	110.05735	3.08	ug/L
Al	27	311212.411	0.756	2.893	100.12689	4.55	ug/L
K	39	1106315.736	1.100	1.010	100.27262	9.20	ug/L
Ca	44	68911.080	0.048	0.523	110.52968	11.93	ug/L
> Sc	45	400330.000	400330.000	3.470			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\Standard 3.004
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:13:51

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	2900274.145	7.306	2.298	999.34621	1.40	ug/L
Mg	24	2052463.728	5.197	2.781	1019.31975	2.76	ug/L
Al	27	2753518.550	6.957	3.564	999.14364	2.82	ug/L
K	39	5036846.438	11.103	1.076	1000.11563	1.81	ug/L
Ca	44	225263.619	0.446	2.074	1020.14698	1.79	ug/L
Sc	45	394519.733	394519.733	1.004			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\Standard 4.005
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:16:19

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	28957289.616	73.328	1.872	10000.29377	4.16	ug/L
Mg	24	20393130.171	51.664	1.697	10100.33103	3.87	ug/L
Al	27	28837590.205	73.034	1.521	10004.66656	3.25	ug/L
K	39	46061147.385	115.069	3.992	10003.52477	6.07	ug/L
Ca	44	1770905.836	4.363	2.873	10098.65241	5.27	ug/L
> Sc	45	394909.642	394909.642	2.261			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 1.006
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:18:48

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	14314547.293	36.805	2.242	5019.38460	1.48	ug/L
Mg	24	10103080.280	26.013	2.800	5085.57354	4.16	ug/L
Al	27	13852254.502	35.652	2.980	4883.87845	4.33	ug/L
K	39	24665996.211	61.856	2.167	5377.50092	3.77	ug/L
Ca	44	863923.451	2.100	1.821	4860.03158	2.49	ug/L
> Sc	45	388584.489	388584.489	3.498			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23	99.394				
Mg	24	100.704				
Al	27	96.710				
K	39	97.773				
Ca	44	96.238				
> Sc	45		101.575			

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 2.007
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:21:16

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	18070.352	0.001	0.222	0.17293	24.23	ug/L
Mg	24	1679.699	-0.001	1.604	-0.18911	8.88	ug/L
Al	27	6173.062	-0.006	1.261	-0.83965	2.24	ug/L
K	39	654325.598	-0.013	0.390	-1.10398	90.99	ug/L
Ca	44	47282.766	-0.005	1.295	-11.71793	39.53	ug/L
> Sc	45	395940.901	395940.901	0.453			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		103.498			

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 7.008
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:23:43

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	320833791.044	915.088	5.480	124797.88523	2.93	ug/L
Mg	24	90445887.181	258.196	3.083	50477.15110	3.70	ug/L
Al	27	126330111.995	360.574	3.252	49393.69435	3.31	ug/L
K	39	204120012.215	580.987	4.447	50508.24103	4.61	ug/L
Ca	44	21111350.380	60.148	3.294	139211.15679	4.19	ug/L
Sc	45	350431.252	350431.252	2.830			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23	99.838				
Mg	24	100.954				
Al	27	98.787				
K	39	101.016				
Ca	44	92.807				
Sc	45		91.602			

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 8.009
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:26:11

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Na	23	307937931.285	882.570	0.735	120363.11766	2.20	ug/L
|	Mg	24	85856883.964	246.086	0.129	48109.69198	2.30	ug/L
|	Al	27	119587836.446	342.581	3.786	46928.81873	2.18	ug/L
|	K	39	197503809.595	564.158	3.527	49045.18622	1.72	ug/L
|	Ca	44	19946403.654	57.036	3.384	132006.99958	3.19	ug/L
⌊>	Sc	45	349011.058	349011.058	2.407			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Na	23	96.290				
|	Mg	24	96.219				
|	Al	27	93.858				
|	K	39	98.090				
|	Ca	44	88.005				
⌊>	Sc	45		91.231			

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 13.010
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:28:35

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	43470.228	0.074	1.162	10.02895	0.23	ug/L
Mg	24	3325.837	0.004	2.698	0.74521	6.68	ug/L
Al	27	8527.630	0.001	0.257	0.19354	21.27	ug/L
K	39	606235.565	-0.021	0.616	-1.80684	110.89	ug/L
Ca	44	46423.272	0.001	0.627	3.35097	142.09	ug/L
Sc	45	368670.498	368670.498	1.043			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		96.370			

Method 6020 - Summary Report

Sample ID: MS042408B12-D2

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\MS042408B12-D2.011
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:32:30

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Na	23	65164.389	0.128	1.934	17.47726	1.08	ug/L
	Mg	24	5022.183	0.008	2.392	1.58141	4.73	ug/L
	Al	27	15512.740	0.019	0.452	2.65180	3.49	ug/L
	K	39	684377.034	0.147	0.624	12.77109	18.81	ug/L
	Ca	44	50841.233	0.010	0.329	23.47450	21.86	ug/L
>	Sc	45	377692.356	377692.356	1.310			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		98.728			

Method 6020 - Summary Report

Sample ID: MS042408LH02-D2

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\MS042408LH02-D2.012
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:34:56

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	28148307.425	76.742	3.081	10465.87778	1.77	ug/L
Mg	24	19667069.414	53.677	0.676	10493.86413	3.47	ug/L
Al	27	27195675.275	74.200	0.731	10164.37646	2.82	ug/L
K	39	44606443.706	120.167	3.374	10446.70435	6.51	ug/L
Ca	44	1621255.193	4.302	3.206	9956.56928	5.58	ug/L
Sc	45	366628.415	366628.415	3.235			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		95.836			

Method 6020 - Summary Report

Sample ID: 0804116-01-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-01-D10.013
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:37:21

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	8324113.399	20.956	1.141	2857.88463	1.87	ug/L
Mg	24	13168225.154	33.214	0.208	6493.29207	0.88	ug/L
Al	27	43770367.490	110.398	0.277	15123.01682	1.13	ug/L
K	39	9441245.854	22.151	0.718	1925.72868	0.81	ug/L
Ca	44	1986843.459	4.887	1.325	11311.48764	0.54	ug/L
> Sc	45	396425.090	396425.090	0.875			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		103.625			

Method 6020 - Summary Report

Sample ID: 0804116-01SD-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-01SD-D10.014
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:39:47

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	1720119.739	4.625	1.462	630.68843	3.58	ug/L
Mg	24	2748096.068	7.456	2.305	1457.62866	4.85	ug/L
Al	27	9104547.565	24.695	5.176	3382.86853	6.59	ug/L
K	39	2414094.076	4.889	2.397	425.00593	6.40	ug/L
Ca	44	494548.049	1.217	2.429	2817.25195	1.72	ug/L
> Sc	45	368632.556	368632.556	2.624			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		96.360			

Method 6020 - Summary Report

Sample ID: 0804116-01D-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-01D-D10.015
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:42:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Na	23	7306658.955	17.744	1.232	2419.93081	0.70	ug/L
	Mg	24	14298067.000	34.804	1.652	6804.12447	1.00	ug/L
	Al	27	40945274.127	99.667	2.195	13653.04341	2.27	ug/L
	K	39	9606015.831	21.725	2.953	1888.69866	3.85	ug/L
	Ca	44	1919735.744	4.549	2.291	10528.62096	1.71	ug/L
>	Sc	45	410739.865	410739.865	0.656			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Na	23					
	Mg	24					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		107.367			

Method 6020 - Summary Report

Sample ID: 0804116-01MH-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-01MH-D10.016
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:44:40

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	10890237.308	27.456	2.298	3744.43942	1.94	ug/L
Mg	24	14620654.364	36.920	1.569	7217.74450	2.00	ug/L
Al	27	44259686.420	111.780	1.936	15312.25252	3.39	ug/L
K	39	15930568.754	38.566	4.563	3352.71074	4.77	ug/L
Ca	44	1972185.087	4.857	1.180	11240.69552	2.38	ug/L
> Sc	45	396063.512	396063.512	2.542			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		103.530			

Method 6020 - Summary Report

Sample ID: 0804116-02-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-02-D10.017
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:47:08

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	4118545.421	10.419	1.040	1420.90969	1.08	ug/L
Mg	24	10888569.959	27.662	2.045	5407.97067	3.07	ug/L
Al	27	38360236.420	97.476	4.314	13352.78974	5.59	ug/L
K	39	5303191.859	11.809	1.690	1026.65510	3.02	ug/L
Ca	44	1471667.529	3.615	1.261	8366.68229	2.66	ug/L
Sc	45	393642.958	393642.958	1.329			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		102.898			

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 5.018
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:49:37

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	13975082.770	38.055	3.779	5189.88753	4.73	ug/L
Mg	24	9788473.824	26.669	2.908	5213.70938	1.68	ug/L
Al	27	13421197.368	36.562	3.013	5008.48174	3.51	ug/L
K	39	23999258.862	63.766	1.588	5543.49426	3.50	ug/L
Ca	44	836958.815	2.157	1.422	4991.24434	0.49	ug/L
Sc	45	366943.008	366943.008	1.886			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23	102.770				
Mg	24	103.242				
Al	27	99.178				
K	39	100.791				
Ca	44	98.837				
Sc	45		95.918			

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 6.019
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:52:05

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	21527.674	0.014	0.655	1.96899	10.05	ug/L
Mg	24	2521.498	0.002	0.650	0.32819	11.27	ug/L
Al	27	7840.564	-0.000	2.782	-0.04164	217.68	ug/L
K	39	620700.016	0.030	0.086	2.64516	151.70	ug/L
Ca	44	43569.693	-0.005	0.535	-12.64051	54.28	ug/L
Sc	45	366220.240	366220.240	2.789			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		95.729			

Method 6020 - Summary Report

Sample ID: 0804116-03-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-03-D10.020
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:54:32

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	1755967.935	4.519	0.486	616.30425	1.69	ug/L
Mg	24	6509305.982	16.907	3.176	3305.27237	2.15	ug/L
Al	27	23700070.286	61.552	4.245	8431.71312	3.34	ug/L
K	39	2977034.277	6.071	1.897	527.78123	2.61	ug/L
Ca	44	898372.866	2.210	2.059	5116.02638	3.29	ug/L
> Sc	45	384840.647	384840.647	1.219			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		100.597			

Method 6020 - Summary Report

Sample ID: 0804116-04-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-04-D10.021
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:57:00

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	6837185.796	17.180	2.041	2343.02597	4.18	ug/L
Mg	24	13682936.065	34.478	2.265	6740.43122	5.42	ug/L
Al	27	40539481.412	102.204	4.423	14000.50227	7.88	ug/L
K	39	7722561.793	17.798	2.119	1547.25622	6.01	ug/L
Ca	44	1914792.284	4.698	1.334	10873.55211	2.67	ug/L
> Sc	45	397272.917	397272.917	3.441			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		103.847			

Method 6020 - Summary Report

Sample ID: 0804116-05-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-05-D10.022
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 11:59:29

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	1165901.159	3.026	1.817	412.74031	2.23	ug/L
Mg	24	5400416.425	14.222	1.164	2780.31906	3.02	ug/L
Al	27	21198569.072	55.843	0.509	7649.71566	4.28	ug/L
K	39	2673311.298	5.375	2.292	467.26145	2.11	ug/L
Ca	44	837917.323	2.082	3.226	4817.83541	0.64	ug/L
Sc	45	379875.391	379875.391	3.822			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		99.299			

Method 6020 - Summary Report

Sample ID: 0804116-06-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-06-D10.023
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:01:58

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	1880546.893	4.761	3.556	649.27755	1.75	ug/L
Mg	24	9250959.630	23.645	0.055	4622.54275	2.27	ug/L
Al	27	34925796.298	89.272	1.254	12229.01184	2.95	ug/L
K	39	3753015.532	7.931	1.575	689.52554	4.65	ug/L
Ca	44	1256086.025	3.086	2.993	7142.09925	2.56	ug/L
> Sc	45	391295.935	391295.935	2.283			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		102.284			

Method 6020 - Summary Report

Sample ID: 0804116-07-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-07-D10.024
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:04:28

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	2294476.627	5.704	0.869	777.89660	3.76	ug/L
Mg	24	13405335.064	33.581	1.599	6565.05980	4.12	ug/L
Al	27	35076406.560	87.787	3.813	12025.61627	2.16	ug/L
K	39	5539988.060	12.205	3.232	1061.04511	2.34	ug/L
Ca	44	1566031.475	3.796	3.375	8786.06423	1.98	ug/L
Sc	45	399466.560	399466.560	3.229			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		104.420			

Method 6020 - Summary Report

Sample ID: 0804116-08-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-08-D10.025
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:06:58

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	3004454.637	7.635	1.015	1041.30151	5.32	ug/L
Mg	24	12535367.948	32.030	0.263	6261.86117	4.58	ug/L
Al	27	38151420.882	97.511	0.860	13357.59671	5.62	ug/L
K	39	5781663.190	13.112	0.964	1139.86294	5.61	ug/L
Ca	44	1563790.276	3.870	1.958	8956.35775	3.01	ug/L
> Sc	45	391888.860	391888.860	4.932			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		102.439			

Method 6020 - Summary Report

Sample ID: 0804116-09-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-09-D10.026
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:09:26

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	3380358.075	8.581	0.689	1170.27726	1.65	ug/L
Mg	24	11831831.623	30.190	1.622	5902.11188	3.04	ug/L
Al	27	42580941.033	108.620	1.303	14879.46688	1.10	ug/L
K	39	6019076.837	13.692	1.854	1190.30615	1.93	ug/L
Ca	44	1629555.936	4.033	2.085	9334.53123	1.89	ug/L
> Sc	45	392003.390	392003.390	2.349			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		102.469			

Method 6020 - Summary Report

Sample ID: 0804116-10-D10

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\0804116-10-D10.027
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:11:49

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	2741339.589	6.918	1.038	943.51775	2.05	ug/L
Mg	24	11977242.817	30.421	0.988	5947.24032	2.98	ug/L
Al	27	40596700.158	103.135	3.107	14128.02934	5.09	ug/L
K	39	6916005.916	15.898	5.246	1382.06839	5.51	ug/L
Ca	44	1500604.269	3.685	5.391	8528.25437	4.06	ug/L
> Sc	45	393806.465	393806.465	1.986			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
> Sc	45		102.940			

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 5.028
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:14:17

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	13947825.910	37.353	0.581	5094.07078	1.80	ug/L
Mg	24	9609985.130	25.763	1.609	5036.65341	2.76	ug/L
Al	27	13082694.227	35.060	1.969	4802.68261	3.19	ug/L
K	39	23159801.913	60.431	1.227	5253.61932	2.23	ug/L
Ca	44	826862.685	2.092	3.179	4841.57394	2.23	ug/L
Sc	45	373021.033	373021.033	1.222			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23	100.873				
Mg	24	99.736				
Al	27	95.103				
K	39	95.520				
Ca	44	95.873				
Sc	45		97.507			

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2alcakmgna.mth
Dataset File: C:\elandata\Dataset\M050708A\QC Std 6.029
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:16:44

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Na	23	21612.804	0.014	0.943	1.91102	5.91	ug/L
Mg	24	3375.850	0.004	3.095	0.76431	7.50	ug/L
Al	27	9583.728	0.004	3.148	0.57062	15.77	ug/L
K	39	622468.372	0.016	0.330	1.42313	204.16	ug/L
Ca	44	41433.755	-0.013	1.486	-29.04231	21.98	ug/L
Sc	45	370230.253	370230.253	1.729			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Na	23					
Mg	24					
Al	27					
K	39					
Ca	44					
Sc	45		96.778			

Sample/Batch Report

Sample File: C:\elandata\Sample\0804116.sam
Method File:
Dataset File: c:\elandata\dataset\m050708b\
Report Date/Time: Wednesday, May 07, 2008 12:28:22

A/S Loc.	Sample ID
11	0804116-01-D20
12	0804116-01SD-D20
13	0804116-01D-D20
14	0804116-01MH-D20
15	0804116-02-D20
16	0804116-03-D20
17	0804116-04-D20
18	0804116-04-D50
19	0804116-05-D20
20	0804116-06-D20
21	0804116-07-D20
22	0804116-08-D20
23	0804116-09-D20
24	0804116-10-D20

Standards/Reagents
CAL STD=C050508M1
ICV=I050708M1
ICSA=042908ICSA2
ICSAB=050708ICSAB1
IS=IS050708
ACID=10%MW042908A

Lmm /HCP
5/7/08

HD
5/13/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Blank.001
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:30:01

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	2714.452		0.625			ug/L
	Fe	57	8643.117		1.850			ug/L
	Zn	66	594.185		2.393			ug/L
>	Ge	74	806092.686		2.524			ug/L
	Ba	138	883.143		3.077			ug/L
>	Tb	159	607021.912		0.387			ug/L
	Pb	208	3887.334		1.625			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74					
	Ba	138					
>	Tb	159					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Standard 1.002
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:32:40

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	3394.604	0.001	2.042	0.10000	23.55	ug/L
|	Fe	57	9871.842	0.002	1.580	10.10000	28.58	ug/L
|	Zn	66	547.933	-0.000	2.168	0.10000	39.30	ug/L
⌊>	Ge	74	805955.408	805955.408	2.965			ug/L
⌈	Ba	138	2249.193	0.002	1.704	0.10000	6.79	ug/L
|>	Tb	159	618825.405	618825.405	3.308			ug/L
⌊	Pb	208	5932.624	0.003	2.192	0.10000	11.15	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈	Ba	138					
|>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Standard 2.003
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:35:21

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	92678.252	0.105	2.982	10.00020	4.27	ug/L
	Fe	57	28676.552	0.023	2.540	110.25070	3.06	ug/L
	Zn	66	12386.747	0.014	3.857	10.00141	2.69	ug/L
>	Ge	74	852075.511	852075.511	4.381			ug/L
	Ba	138	558.502	-0.001	6.492	-0.02582	14.41	ug/L
>	Tb	159	627543.933	627543.933	2.650			ug/L
	Pb	208	337727.170	0.532	0.414	10.00040	2.93	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74					
	Ba	138					
>	Tb	159					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Standard 3.004
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:38:02

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	174008.891	0.207	2.616	19.92675	1.12	ug/L
|	Fe	57	186241.185	0.215	1.872	1020.12799	1.59	ug/L
|	Zn	66	23599.718	0.028	2.061	20.03112	1.60	ug/L
⌊>	Ge	74	826582.049	826582.049	3.337			ug/L
⌈	Ba	138	618.433	-0.000	5.925	-0.02095	7.40	ug/L
|>	Tb	159	619647.857	619647.857	3.379			ug/L
⌊	Pb	208	658820.648	1.057	2.271	19.97473	3.04	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈	Ba	138					
|>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Standard 4.005
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:40:45

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	870878.604	1.070	2.812	100.13599	5.38	ug/L
	Fe	57	1812892.922	2.224	4.482	10104.58394	6.29	ug/L
	Zn	66	116477.209	0.143	2.633	100.13187	5.09	ug/L
>	Ge	74	811929.515	811929.515	2.759			ug/L
	Ba	138	1007.226	0.000	2.348	0.00780	54.37	ug/L
>	Tb	159	620650.444	620650.444	3.981			ug/L
	Pb	208	3156075.510	5.085	1.388	99.80516	4.79	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74					
	Ba	138					
>	Tb	159					
	Pb	208					

Method 6020 - Summary Report

Sample ID: Standard 5

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\Standard 5.006
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:43:29

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	2501.077	-0.000	2.250	-0.03504	37.46	ug/L
|	Fe	57	7853.487	-0.001	0.236	-6.02662	22.87	ug/L
|	Zn	66	739.610	0.000	5.462	0.10359	38.47	ug/L
⌊>	Ge	74	836389.126	836389.126	2.942			ug/L
⌈	Ba	138	1760611.601	2.720	0.784	100.00002	1.39	ug/L
|>	Tb	159	646951.951	646951.951	1.515			ug/L
⌊	Pb	208	3313.101	-0.001	4.684	-0.02521	12.78	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74					
⌈	Ba	138					
|>	Tb	159					
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 1.007
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:46:13

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	408081.561	0.507	2.898	47.42751	1.46	ug/L
	Fe	57	842706.870	1.043	1.031	4739.53532	0.74	ug/L
	Zn	66	55136.772	0.068	1.865	47.81938	1.45	ug/L
>	Ge	74	799627.808	799627.808	1.688			ug/L
	Ba	138	882957.489	1.444	2.310	53.06627	3.11	ug/L
>	Tb	159	611164.308	611164.308	1.285			ug/L
	Pb	208	1584878.581	2.587	1.428	50.78391	2.70	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55	94.855				
	Fe	57	93.852				
	Zn	66	95.639				
>	Ge	74		99.198			
	Ba	138	106.133				
>	Tb	159		100.682			
	Pb	208	101.568				

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 2.008
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:48:55

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	1923.482	-0.001	4.644	-0.09692	10.00	ug/L
	Fe	57	8532.216	-0.000	0.789	-1.69990	109.35	ug/L
	Zn	66	612.936	0.000	6.207	0.00369	496.01	ug/L
>	Ge	74	825233.372	825233.372	3.274			ug/L
	Ba	138	851.069	-0.000	5.444	-0.00236	100.20	ug/L
>	Tb	159	611840.410	611840.410	1.685			ug/L
	Pb	208	3814.400	-0.000	2.298	-0.00333	61.44	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		102.375			
	Ba	138					
>	Tb	159		100.794			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 7.009
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:51:38

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	12431.365	0.013	1.309	1.19896	3.96	ug/L
	Fe	57	19498399.343	25.366	3.823	115240.02075	4.11	ug/L
	Zn	66	6198.491	0.007	3.391	5.13852	4.41	ug/L
>	Ge	74	768717.132	768717.132	3.385			ug/L
	Ba	138	13064.770	0.021	2.667	0.77488	5.88	ug/L
>	Tb	159	580487.042	580487.042	3.503			ug/L
	Pb	208	4866.201	0.002	1.034	0.03897	14.95	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57	92.192				
	Zn	66					
>	Ge	74		95.363			
	Ba	138					
>	Tb	159		95.629			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 8.010
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:54:19

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	739953.504	0.985	3.115	92.17069	1.27	ug/L
	Fe	57	18173228.094	24.275	1.385	110285.88357	2.10	ug/L
	Zn	66	107436.592	0.143	2.180	100.10742	1.50	ug/L
>	Ge	74	748627.868	748627.868	3.279			ug/L
	Ba	138	807097.139	1.403	1.880	51.56526	5.08	ug/L
>	Tb	159	575404.888	575404.888	3.176			ug/L
	Pb	208	2836452.559	4.927	0.464	96.70188	3.65	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55	92.171				
	Fe	57	88.229				
	Zn	66	100.107				
>	Ge	74		92.871			
	Ba	138	103.131				
>	Tb	159		94.791			
	Pb	208	96.702				

Method 6020 - Summary Report

Sample ID: QC Std 11

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 11.011
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 12:56:59

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	35987073.158	47.161	3.108	4412.43300	3.66	ug/L
	Fe	57	807839.172	1.048	0.723	4760.64899	0.63	ug/L
	Zn	66	4847604.267	6.352	0.780	4452.35644	1.00	ug/L
>	Ge	74	763136.253	763136.253	0.915			ug/L
	Ba	138	78732886.398	132.750	0.495	4880.02520	2.49	ug/L
>	Tb	159	593367.364	593367.364	2.874			ug/L
	Pb	208	142282738.939	239.928	0.490	4709.14566	3.19	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55	88.249				
	Fe	57	8.656				
	Zn	66	89.047				
>	Ge	74		94.671			
	Ba	138	97.601				
>	Tb	159		97.751			
	Pb	208	94.183				

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 13.012
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:01:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	2878.235	0.000	2.085	0.00995	52.86	ug/L
|	Fe	57	7707.156	-0.001	1.357	-6.44754	13.69	ug/L
|	Zn	66	712.108	0.000	2.897	0.08612	35.46	ug/L
⌊>	Ge	74	828651.386	828651.386	2.130			ug/L
⌈	Ba	138	1961.157	0.002	3.486	0.06685	10.94	ug/L
|>	Tb	159	599732.668	599732.668	2.560			ug/L
⌊	Pb	208	5840.102	0.003	2.478	0.06556	12.85	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66			✓		
⌊>	Ge	74		102.799			
⌈	Ba	138			✓		
|>	Tb	159		98.799			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-01-D20.013
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:05:18

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	7839668.639	9.694	3.152	906.96354	3.94	ug/L
|	Fe	57	6593714.553	8.144	2.127	36997.18595	1.94	ug/L
|	Zn	66	4853967.301	6.002	2.239	4206.87904	1.34	ug/L
|>	Ge	74	808625.464	808625.464	0.959			ug/L
⌈	Ba	138	7942964.290	13.301	2.337	488.97501	2.50	ug/L
|>	Tb	159	597404.224	597404.224	3.872			ug/L
⌊	Pb	208	17220309.714	28.851	0.421	566.26251	4.28	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
|>	Ge	74		100.314			
⌈	Ba	138					
|>	Tb	159		98.416			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01SD-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-01SD-D20.014
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:07:58

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	1635172.243	2.048	1.544	191.62104	5.61	ug/L
	Fe	57	1375116.461	1.713	2.541	7782.73972	3.39	ug/L
	Zn	66	1012284.564	1.269	1.481	889.29925	4.15	ug/L
>	Ge	74	798583.692	798583.692	5.279			ug/L
	Ba	138	1663690.369	2.760	2.401	101.44269	2.21	ug/L
>	Tb	159	602563.673	602563.673	0.566			ug/L
	Pb	208	3649102.097	6.050	1.395	118.73676	1.28	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		99.068			
	Ba	138					
>	Tb	159		99.266			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01D-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-01D-D20.015
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:10:38

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	6367496.579	7.828	1.112	732.38828	3.59	ug/L
|	Fe	57	4894995.950	6.008	0.344	27296.16030	2.35	ug/L
|	Zn	66	3831475.758	4.711	2.447	3302.54524	4.18	ug/L
⌊>	Ge	74	813592.149	813592.149	2.605			ug/L
⌈	Ba	138	7624757.448	12.621	2.845	463.95931	3.87	ug/L
|>	Tb	159	604305.226	604305.226	2.303			ug/L
⌊	Pb	208	13721360.790	22.709	0.841	445.72144	2.84	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		100.930			
⌈	Ba	138					
|>	Tb	159		99.552			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-01MH-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-01MH-D20.016
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:13:19

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	7966824.596	10.000	2.302	935.63650	1.57	ug/L
	Fe	57	6000842.836	7.525	0.638	34187.89139	1.09	ug/L
	Zn	66	3202319.582	4.021	1.390	2818.28531	1.10	ug/L
>	Ge	74	796367.438	796367.438	1.342			ug/L
	Ba	138	13598114.167	22.361	0.681	822.00172	1.72	ug/L
>	Tb	159	608166.824	608166.824	1.202			ug/L
	Pb	208	17215746.071	28.302	1.477	555.49469	1.28	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		98.794			
	Ba	138					
>	Tb	159		100.189			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-02-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-02-D20.017
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:16:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	9608960.713	11.784	3.255	1102.56186	1.69	ug/L
	Fe	57	6543992.634	8.018	2.539	36426.52211	1.41	ug/L
	Zn	66	2897511.561	3.556	0.912	2492.33310	2.89	ug/L
>	Ge	74	815089.378	815089.378	2.187			ug/L
	Ba	138	18559291.104	31.155	2.110	1145.30871	2.63	ug/L
>	Tb	159	595888.461	595888.461	2.897			ug/L
	Pb	208	12312108.948	20.662	1.785	405.53674	2.02	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		101.116			
	Ba	138					
>	Tb	159		98.166			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-03-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-03-D20.018
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:18:41

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	7331417.108	8.962	4.997	838.52696	3.55	ug/L
|	Fe	57	3713426.847	4.531	3.735	20585.34800	2.44	ug/L
|	Zn	66	1517219.089	1.855	1.064	1300.61691	1.26	ug/L
⌊>	Ge	74	817453.184	817453.184	1.498			ug/L
⌈	Ba	138	3779193.954	6.440	3.123	236.73238	5.33	ug/L
|>	Tb	159	587217.836	587217.836	2.574			ug/L
⌊	Pb	208	12584983.309	21.433	1.785	420.67032	2.71	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		101.409			
⌈	Ba	138					
|>	Tb	159		96.738			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 5.019
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:21:25

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	392503.409	0.493	0.610	46.14998	2.71	ug/L
	Fe	57	835654.654	1.046	5.806	4751.70158	4.53	ug/L
	Zn	66	54953.188	0.069	3.016	48.23016	4.65	ug/L
>	Ge	74	790649.248	790649.248	2.196			ug/L
	Ba	138	842239.425	1.408	0.663	51.75061	2.69	ug/L
>	Tb	159	597993.079	597993.079	3.101			ug/L
	Pb	208	1532118.091	2.557	0.872	50.19269	3.13	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55	92.300				
	Fe	57	94.093				
	Zn	66	96.460				
>	Ge	74		98.084			
	Ba	138	103.501				
>	Tb	159		98.513			
	Pb	208	100.385				

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 6.020
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:24:08

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	2244.782	-0.001	1.335	-0.04869	17.50	ug/L
	Fe	57	7992.316	-0.001	2.146	-2.62808	101.35	ug/L
	Zn	66	547.933	-0.000	8.537	-0.03031	97.86	ug/L
>	Ge	74	789085.020	789085.020	3.941			ug/L
	Ba	138	1200.674	0.001	1.594	0.02011	17.15	ug/L
>	Tb	159	600376.429	600376.429	3.666			ug/L
	Pb	208	3816.486	-0.000	1.072	-0.00082	564.21	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		97.890			
	Ba	138					
>	Tb	159		98.905			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-04-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-04-D20.021
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:26:49

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	10328110.283	13.233	2.098	1238.10485	1.81	ug/L
|	Fe	57	8080827.733	10.350	1.169	47022.74981	3.71	ug/L
|	Zn	66	4293166.893	5.504	0.502	3857.85923	3.38	ug/L
⌊>	Ge	74	780632.426	780632.426	3.849			ug/L
⌈	Ba	138	6681348.821	11.266	0.925	414.13283	3.82	ug/L
|>	Tb	159	593490.969	593490.969	3.285			ug/L
⌊	Pb	208	14506057.466	24.448	1.049	479.84423	2.31	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
|	Fe	57					
|	Zn	66					
⌊>	Ge	74		96.842			
⌈	Ba	138					
|>	Tb	159		97.771			
⌊	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-04-D50

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-04-D50.022
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:29:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	4046595.892	4.987	3.325	466.63188	6.86	ug/L
	Fe	57	3249758.110	3.994	0.122	18145.99235	3.64	ug/L
	Zn	66	1774665.252	2.185	3.592	1531.91822	3.83	ug/L
>	Ge	74	812172.865	812172.865	3.696			ug/L
	Ba	138	2688700.367	4.622	2.290	169.91717	1.66	ug/L
>	Tb	159	581519.291	581519.291	1.741			ug/L
	Pb	208	5810335.535	9.987	0.559	196.02113	1.73	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		100.754			
	Ba	138					
>	Tb	159		95.799			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-05-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-05-D20.023
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:32:14

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	8159789.172	9.928	0.319	928.84609	3.12	ug/L
	Fe	57	3098625.291	3.758	4.561	17070.86046	2.50	ug/L
	Zn	66	1316173.718	1.601	2.047	1121.91554	1.52	ug/L
>	Ge	74	822121.680	822121.680	2.780			ug/L
	Ba	138	2578737.128	4.395	2.299	161.55729	1.86	ug/L
>	Tb	159	586547.168	586547.168	0.572			ug/L
	Pb	208	7723877.740	13.162	2.397	258.33352	2.29	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		101.988			
	Ba	138					
>	Tb	159		96.627			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-06-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-06-D20.024
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:34:57

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	8042868.288	9.989	2.719	934.55570	4.52	ug/L
	Fe	57	4521701.782	5.604	1.772	25460.91393	1.69	ug/L
	Zn	66	2420839.195	3.006	2.044	2107.21203	3.30	ug/L
>	Ge	74	805375.908	805375.908	1.873			ug/L
	Ba	138	5435226.884	9.345	1.641	343.52258	1.11	ug/L
>	Tb	159	581522.394	581522.394	0.559			ug/L
	Pb	208	9032485.946	15.526	0.279	304.74333	0.72	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		99.911			
	Ba	138					
>	Tb	159		95.799			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-07-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-07-D20.025
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:37:41

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	2615023.377	3.398	4.082	317.95921	3.26	ug/L
	Fe	57	3246641.969	4.215	1.228	19147.72549	3.04	ug/L
	Zn	66	580690.063	0.755	1.013	529.20544	2.62	ug/L
>	Ge	74	768685.342	768685.342	2.199			ug/L
	Ba	138	3515202.700	5.926	0.685	217.83902	2.71	ug/L
>	Tb	159	593284.120	593284.120	2.151			ug/L
	Pb	208	9429112.853	15.891	0.353	311.89908	1.94	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		95.359			
	Ba	138					
>	Tb	159		97.737			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-08-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-08-D20.026
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:40:27

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	5728277.757	7.267	3.291	679.87114	1.57	ug/L
	Fe	57	5180862.898	6.568	2.185	29839.90428	3.62	ug/L
	Zn	66	2440719.336	3.099	3.008	2171.99947	4.14	ug/L
>	Ge	74	787831.038	787831.038	2.024			ug/L
	Ba	138	7254802.085	12.135	3.520	446.10925	3.76	ug/L
>	Tb	159	597793.998	597793.998	0.605			ug/L
	Pb	208	19060990.269	31.879	0.978	625.69477	0.45	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		97.735			
	Ba	138					
>	Tb	159		98.480			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-09-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-09-D20.027
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:43:11

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	5213261.739	6.515	1.343	609.50663	2.40	ug/L
	Fe	57	5212615.072	6.505	2.966	29554.48754	2.83	ug/L
	Zn	66	2140740.836	2.676	2.165	1875.78258	3.41	ug/L
>	Ge	74	799994.758	799994.758	1.364			ug/L
	Ba	138	14163339.874	23.448	3.447	861.98542	3.52	ug/L
>	Tb	159	604001.242	604001.242	0.527			ug/L
	Pb	208	7313160.279	12.101	0.527	237.51943	0.07	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		99.244			
	Ba	138					
>	Tb	159		99.502			
	Pb	208					

Method 6020 - Summary Report

Sample ID: 0804116-10-D20

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\0804116-10-D20.028
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:45:53

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	5520244.528	6.981	3.808	653.13258	6.38	ug/L
	Fe	57	3867292.781	4.882	4.969	22178.75504	6.97	ug/L
	Zn	66	1691280.077	2.137	1.221	1498.23712	2.16	ug/L
>	Ge	74	791313.772	791313.772	2.865			ug/L
	Ba	138	8054579.832	13.949	1.726	512.78957	3.53	ug/L
>	Tb	159	577620.118	577620.118	1.978			ug/L
	Pb	208	8135358.673	14.080	1.054	276.34702	1.05	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		98.167			
	Ba	138					
>	Tb	159		95.156			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 5.029
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:48:35

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	387390.737	0.469	2.775	43.89716	3.09	ug/L
Fe	57	821820.512	0.992	0.865	4507.72716	4.03	ug/L
Zn	66	54453.732	0.066	1.724	46.04538	2.33	ug/L
> Ge	74	820134.541	820134.541	3.327			ug/L
Ba	138	815421.300	1.365	0.702	50.16696	2.99	ug/L
> Tb	159	597306.048	597306.048	3.584			ug/L
Pb	208	1511191.331	2.525	1.813	49.55269	1.80	ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55	87.794				
Fe	57	89.262				
Zn	66	92.091				
> Ge	74		101.742			
Ba	138	100.334				
> Tb	159		98.399			
Pb	208	99.105				

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Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 6.030
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 13:51:16

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
	Mn	55	2337.715	-0.000	1.901	-0.03818	24.26	ug/L
	Fe	57	8189.095	-0.000	0.181	-1.61626	75.54	ug/L
	Zn	66	592.518	0.000	2.378	0.00931	287.54	ug/L
>	Ge	74	790325.571	790325.571	2.687			ug/L
	Ba	138	1115.257	0.001	4.810	0.01878	14.16	ug/L
>	Tb	159	567229.112	567229.112	1.670			ug/L
	Pb	208	3615.214	-0.000	3.143	-0.00054	1079.20	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Mn	55					
	Fe	57					
	Zn	66					
>	Ge	74		98.044			
	Ba	138					
>	Tb	159		93.445			
	Pb	208					

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: c:\elandata\dataset\m050708b\QC Std 5.031
Calibration File: C:\elandata\System\C050708B.cal
Sample Date/Time: Wednesday, May 07, 2008 13:57:12

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	390393.486	0.478	1.745	44.74694	3.04	ug/L
|	Fe	57	844894.687	1.032	0.674	4686.45841	2.08	ug/L
|	Zn	66	55747.058	0.068	1.897	47.69253	3.13	ug/L
⌊>	Ge	74	810897.038	810897.038	2.496			ug/L
⌈	Ba	138	834050.190	1.436	1.174	52.80104	1.51	ug/L
|>	Tb	159	580141.785	580141.785	1.267			ug/L
⌊	Pb	208	1508823.249	2.594	1.703	50.92087	1.17	ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55	89.494				
|	Fe	57	92.801				
|	Zn	66	95.385				
⌊>	Ge	74		100.596			
⌈	Ba	138	105.602				
|>	Tb	159		95.572			
⌊	Pb	208	101.842				

Sample/Batch Report

Sample File: C:\elandata\Sample\0804116.sam
Method File: c:\elandata\Method\6020a2bafemnpbzn.mth
Dataset File: C:\elandata\Dataset\M050708C\
Report Date/Time: Wednesday, May 07, 2008 14:03:37

A/S Loc.	Sample ID	Standards/Reagents
11	0804116-04-D20	CAL STD=C050508M1
12	0804116-05-D20	ICV=I050708M1
13	0804116-06-D20	ICSA=042908ICSA2
14	0804116-07-D20	ICSAB=050708ICSAB1
15	0804116-08-D20	IS=IS050708
16	0804116-09-D20	ACID=10%MW042908A
17	0804116-10-D20	

Lmn / KDR
5/7/08

KDR 5/13/08

Method 6020 - Summary Report

Sample ID: Blank

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\Blank.001
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:04:53

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	1897.228		2.017			ug/L
Ge	74	791968.527		2.134			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74					

Method 6020 - Summary Report

Sample ID: Standard 1

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\Standard 1.002
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:07:10

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	2664.442	0.001	2.791	0.10000	21.45	ug/L
Ge	74	825550.029	825550.029	5.138			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74					

Method 6020 - Summary Report

Sample ID: Standard 2

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\Standard 2.003
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:09:29

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	87766.786	0.105	1.643	10.00020	2.01	ug/L
Ge	74	818503.908	818503.908	0.911			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74					

Method 6020 - Summary Report

Sample ID: Standard 3

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\Standard 3.004
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:11:49

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	169243.041	0.202	1.591	19.85588	3.67	ug/L
Ge	74	827239.231	827239.231	3.182			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74					

Method 6020 - Summary Report

Sample ID: Standard 4

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\Standard 4.005
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:14:09

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	817819.203	0.991	2.399	99.86531	2.67	ug/L
Ge	74	824024.922	824024.922	4.997			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74					

Method 6020 - Summary Report

Sample ID: QC Std 1

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 1.006
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:16:31

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	379378.337	0.484	0.810	48.79494	0.98	ug/L
⌊>	Ge	74	779714.851	779714.851	0.884			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55	97.590				
⌊>	Ge	74		98.453			

Method 6020 - Summary Report

Sample ID: QC Std 2

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 2.007
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:18:51

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	1634.277	-0.000	3.694	-0.03567	8.55	ug/L
Ge	74	800795.780	800795.780	4.779			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		101.115			

Method 6020 - Summary Report

Sample ID: QC Std 7

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 7.008
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:21:12

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	12406.342	0.014	0.920	1.41690	0.93	ug/L
Ge	74	753939.455	753939.455	0.129			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		95.198			

Method 6020 - Summary Report

Sample ID: QC Std 8

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 8.009
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:23:32

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	698160.470	0.959	0.754	96.62445	1.42	ug/L
Ge	74	726473.158	726473.158	1.830			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55	96.624				
Ge	74		91.730			

Method 6020 - Summary Report

Sample ID: QC Std 11

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 11.010
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:25:49

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	33620512.180	46.533	1.137	4689.46468	1.89	ug/L
Ge	74	722590.995	722590.995	1.549			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55	93.789				
Ge	74		91.240			

Method 6020 - Summary Report

Sample ID: QC Std 13

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 13.011
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:29:36

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	2428.564	0.001	2.766	0.06268	34.22	ug/L
Ge	74	806531.716	806531.716	4.677			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		101.839			

Method 6020 - Summary Report

Sample ID: 0804116-04-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-04-D20.012
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:33:24

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	9760013.231	12.759	2.917	1285.81064	0.46	ug/L
⌊>	Ge	74	764784.399	764784.399	2.642			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
⌊>	Ge	74		96.568			

Method 6020 - Summary Report

Sample ID: 0804116-05-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-05-D20.013
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:35:42

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	7848692.162	10.049	1.242	1012.71478	1.43	ug/L
Ge	74	780874.254	780874.254	0.341			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		98.599			

Method 6020 - Summary Report

Sample ID: 0804116-06-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-06-D20.014
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:38:00

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	7861993.971	10.165	3.358	1024.45513	0.57	ug/L
⌊>	Ge	74	773139.154	773139.154	2.785			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
⌊>	Ge	74		97.622			

Method 6020 - Summary Report

Sample ID: 0804116-07-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-07-D20.015
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:40:19

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	2567911.751	3.336	3.479	336.21752	0.77	ug/L
Ge	74	769078.696	769078.696	2.933			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		97.110			

Method 6020 - Summary Report

Sample ID: 0804116-08-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-08-D20.016
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:42:39

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
⌈	Mn	55	5403134.339	7.083	1.145	713.79076	2.54	ug/L
⌊>	Ge	74	762789.808	762789.808	1.571			ug/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Mn	55					
⌊>	Ge	74		96.316			

Method 6020 - Summary Report

Sample ID: 0804116-09-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-09-D20.017
Calibration File:
Sample Date/Time: Wednesday, May 07, 2008 14:44:59

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	5196754.371	6.846	1.213	689.88483	1.28	ug/L
Ge	74	758993.355	758993.355	2.130			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		95.836			

Method 6020 - Summary Report

Sample ID: 0804116-10-D20

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\0804116-10-D20.018
Calibration File: C:\elandata\System\C050708C.cal
Sample Date/Time: Wednesday, May 07, 2008 14:47:58

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	5369450.726	7.175	1.477	723.12694	3.75	ug/L
Ge	74	748532.205	748532.205	2.691			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		94.515			

Method 6020 - Summary Report

Sample ID: QC Std 5

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 5.019
Calibration File: C:\elandata\System\C050708C.cal
Sample Date/Time: Wednesday, May 07, 2008 14:50:20

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	381898.446	0.484	1.480	48.79500	1.07	ug/L
Ge	74	784927.616	784927.616	1.853			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55	97.590				
Ge	74		99.111			

Method 6020 - Summary Report

Sample ID: QC Std 6

Method File: c:\elandata\Method\6020a2mn.mth
Dataset File: C:\elandata\Dataset\M050708C\QC Std 6.020
Calibration File: C:\elandata\System\C050708C.cal
Sample Date/Time: Wednesday, May 07, 2008 14:52:40

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Meas. Intens. RSD	Conc. Mean	Conc. RSD	Sample Unit
Mn	55	1807.632	-0.000	2.009	-0.00549	81.69	ug/L
Ge	74	772134.007	772134.007	0.580			ug/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Mn	55					
Ge	74		97.496			

Analysis Report - Filename: C:\Program Files\P S Analytical\Millennium\Results\HG050708B.rsf

Pos	Runs	Type	Name	ID / Action	Conc	Pk Ht	Pk Area	Baseline	Message	Flag	Slope/ CFm	Intercept	Dilutio Factor	SD	RSD	Cal	Method	Date/Time
1	1	Cal	0.00	STD0	0.00	0.096781	1.332907	-0.003035	----		0.000000	0.000000	----	----	----	D	7474	07 May 08 12:41
2	1	Cal	0.020	STD1	0.020	0.844975	56.394321	0.010176	----		37.409698	0.096781	----	----	----	D	7474	07 May 08 12:44
3	1	Cal	0.100	STD2	0.100	3.786608	255.990845	0.000893	----		36.861740	0.101652	----	----	----	D	7474	07 May 08 12:46
4	1	Cal	0.500	STD3	0.500	18.316572	1236.055542	-0.077188	----		36.408283	0.117950	----	----	----	D	7474	07 May 08 12:49
5	1	Cal	2.000	STD4	2.000	72.303062	4938.075195	-0.254301	----		36.085503	0.160796	----	----	----	D	7474	07 May 08 12:51
6	1	Cal	5.000	STD5	5.000	176.264084	12113.877930	-0.322167	----		35.261860	0.486119	----	----	----	D	7474	07 May 08 12:55
7	1	Cal	10.000	STD6	10.000	345.022583	23959.392578	-0.297910	----		34.549591	1.124409	----	----	----	D	7474	07 May 08 12:58
8	1	QC	ICV7474	Ignore	5.000742	173.897995	11959.346680	-0.251139	Pass		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:02
1	1	QC	ICB7474	Ignore	-0.020321	0.422321	-146.281723	-0.422321	Fail		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:05
9	1	Sample	MS042408B13-D5		-0.027995	0.157206	3.014885	-0.032938	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:08
10	1	Sample	MS042408L03-D5		5.455459	189.608292	12920.246094	0.052848	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:10
11	1	Sample	0804116-01-D5		0.070880	3.573285	222.203888	-0.109047	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:14
12	1	Sample	0804116-01SD-D5		-0.021906	0.367570	7.296248	-0.062609	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:17
13	1	Sample	0804116-01D-D5		0.127140	5.517057	368.730957	0.032944	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:19
14	1	Sample	0804116-01M-D5		5.777449	200.732895	13538.139648	-0.087169	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:22
15	1	Sample	0804116-02-D5		0.371295	13.952492	905.530884	-0.162909	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:25
16	1	Sample	0804116-03-D5		0.366107	13.773273	876.100037	-0.268407	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:28
17	1	Sample	0804116-04-D5		0.135274	5.798053	346.285858	-0.276180	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:30
18	1	Sample	0804116-05-D5		0.264362	10.257995	662.185364	-0.129688	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:33
8	1	QC	CCV7474	Ignore	4.988303	173.468231	11945.868164	-0.177082	Pass		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:35
1	1	QC	CCB7474	Ignore	-0.027761	0.165263	-74.039322	-0.165263	Fail		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:39
19	1	Sample	0804116-06-D5		0.530616	19.456989	1312.245728	0.002199	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:42
20	1	Sample	0804116-07-D5		-0.003868	0.990773	35.126118	-0.243895	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:44
21	1	Sample	0804116-08-D5		0.183482	7.463634	486.693115	-0.027173	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:47
22	1	Sample	0804116-09-D5		0.024687	1.977345	115.412292	-0.108926	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:49
23	1	Sample	0804116-10-D5		0.135945	5.821243	367.613159	-0.012914	----		34.549591	1.124409	1	----	----	D	7474	07 May 08 13:52
8	1	QC	CCV7474	Ignore	5.330844	185.302887	12527.250000	-0.087245	Pass		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:54
1	1	QC	CCB7474	Ignore	-0.028756	0.130900	-57.582939	-0.130900	Fail		34.549591	1.124409	----	----	----	D	7474	07 May 08 13:56

Printed: 5/7/2008 2:00:53 PM Generated by: [illegible] 5/7/08 Signature: [illegible] 5/8/08

Calibration Report -

General Details

Measured By :

Calibration #: Default

Fit Type : Least Squares

Unit : ppb

Slope : 34.549591

Y Intercept : 1.124409

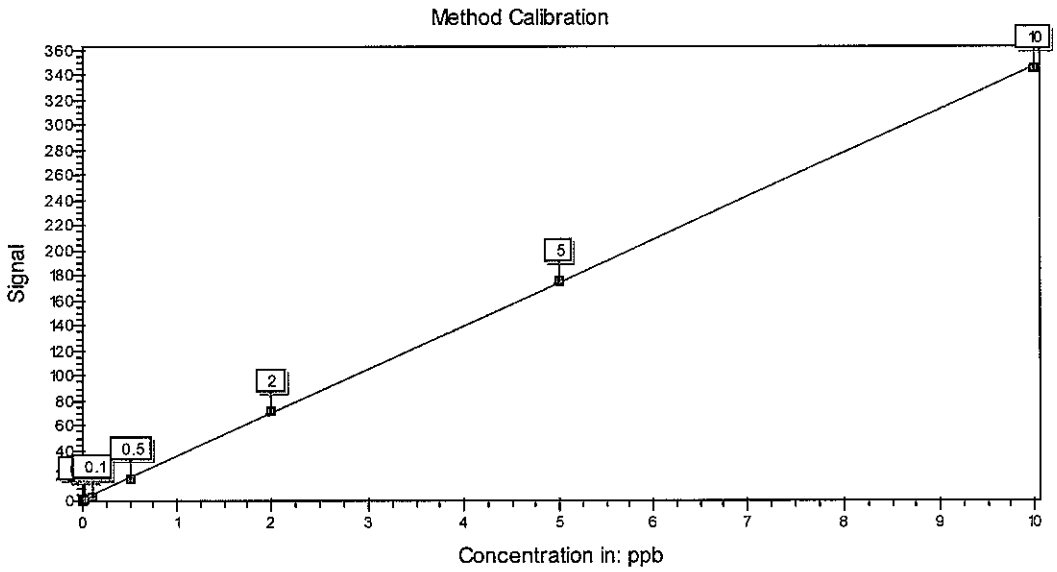
Correlation Coefficient : 0.999925

Reslope %:

Method Name: 7474

Definition of Standards

Include	*Pos*	*Runs*	*Conc*	*Pk Ht*	*Pk Area*	*Res %*	*Res Conc*	*Date/Time*
Yes	1	1	0.00	0.096781	1.332907	0.000000	-0.029744	07 May 2008 12:41
Yes	2	1	0.020	0.844975	56.394321	-140.439529	-0.028088	07 May 2008 12:44
Yes	3	1	0.100	3.786608	255.990845	-22.945568	-0.022946	07 May 2008 12:46
Yes	4	1	0.500	18.316572	1236.055542	-0.478340	-0.002392	07 May 2008 12:49
Yes	5	1	2.000	72.303062	4938.075195	3.009401	0.060188	07 May 2008 12:51
Yes	6	1	5.000	176.264084	12113.877930	1.384514	0.069226	07 May 2008 12:55
Yes	7	1	10.000	345.022583	23959.392578	-0.462447	-0.046245	07 May 2008 12:58



Method Set-up Report: C:\Program Files\P S Analytical\Millennium\Methods\7474.mef

Name, Time, Originator/Modifier

Method Title :	Method 7474
Method History :	33
Method Type :	Millennium Merlin
Method Name :	7474
Last Modified :	06 May 2008
Modified by :	

Method Parameters

Unit :	ppb	Idle Actions Active:	Yes
Allow Auto-Range :	No	- Idle After :	6 mins
Gain :	10	- Switch off Pump 1:	Yes
Mode :	Ratio	- Switch off Pump 2 :	Yes
Measurement Mode :	Height	- Switch off Analysis Gas :	Yes
Baseline Check Type :	Units	- Switch off Dryer Gas:	Yes
Baseline Check Value:	1		
Filter Factor :	32	Over Range Action:	Run Blank Wash
Auto Zero:	Yes	- Blank/Wash Sampler Pos:	1
Allow Negative Results:	Yes	- # Repeats:	1
Blank Subtraction:	Yes	- Blank Pk Height:	1.00

Instrument Parameters

Delay Period (s) :	15
Analysis Period (s) :	60
Memory Period (s) :	60
Pump 1 Speed (%) :	100%
Pump 2 Speed (%) :	100%
Valve Flush :	On

Notes

C050608VH1
I050608VH1
10% HCl =MW050608A
SnCl2 = MW050708A

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804116_30502T - 3050:2T

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804116-01	D	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.52	50
0804116-01	MH	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.57	50
0804116-01	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.51	50
0804116-01	SD	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.51	50
0804116-02	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.65	50
0804116-03	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.55	50
0804116-04	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.56	50
0804116-05	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.64	50
0804116-06	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.58	50
0804116-07	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.56	50
0804116-08	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.54	50
0804116-09	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.52	50
0804116-10	SAM	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.56	50
MS042408B12	B	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1	50
MS042408LH02	LH	3050:2T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW032207A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804116_30502T - 3050:2T

Lab ID	Notes
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-02	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-03	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-04	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-05	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-06	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-07	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-08	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-09	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-10	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
MS042408B12	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
MS042408LH02	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804116_30502T - 3050:2T Analyst: EYC Witness: LMR

Lab ID	QC Type	3050:2T - spk 1	Vol 3050:2T - spk 1	Units 3050:2T - spk 1	3050:2T - spk 2	Vol 3050:2T - spk 2	Units 3050:2T - spk 2	3050:2T - spk 3	Vol 3050:2T - spk 3	Units 3050:2T - spk 3
0804116-01	D									
0804116-01	MH	MW030608S1	2	ml						
0804116-01	SAM									
0804116-01	SD									
0804116-02	SAM									
0804116-03	SAM									
0804116-04	SAM									
0804116-05	SAM									
0804116-06	SAM									
0804116-07	SAM									
0804116-08	SAM									
0804116-09	SAM									
0804116-10	SAM									
MS042408B12	B									
MS042408LH02	LH	MW030608S1	2	ml						

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804116_30501T - 3050:1T

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804116-01	D	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.53	50
0804116-01	ML	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.52	50
0804116-01	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.51	50
0804116-01	SD	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.51	50
0804116-02	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.56	50
0804116-03	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.64	50
0804116-04	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.57	50
0804116-05	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.54	50
0804116-06	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.67	50
0804116-07	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.58	50
0804116-08	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.54	50
0804116-09	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.52	50
0804116-10	SAM	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1.6	50
MS042408B11	B	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1	50
MS042408LL02	LL	3050:1T	EYC	2008-05-01 00:00:00	2008-05-01 00:00:00		1	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW032207A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804116_30501T - 3050:1T

Lab ID	Notes
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-01	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-02	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-03	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-04	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-05	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-06	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-07	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-08	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-09	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
0804116-10	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
MS042408B11	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.
MS042408LL02	1st Prep: Start time 9:50. Block/Them. #2. Avg. temp. 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804116_30501T - 3050:1T Analyst: EYC Witness: LMR

Lab ID	QC Type	3050:1T - spk 1	Vol 3050:1T - spk 1	Units 3050:1T - spk 1	3050:1T - spk 2	Vol 3050:1T - spk 2	Units 3050:1T - spk 2	3050:1T - spk 3	Vol 3050:1T - spk 3	Units 3050:1T - spk 3
0804116-01	D									
0804116-01	ML	MW042508S3	0.8	ml						
0804116-01	SAM									
0804116-01	SD									
0804116-02	SAM									
0804116-03	SAM									
0804116-04	SAM									
0804116-05	SAM									
0804116-06	SAM									
0804116-07	SAM									
0804116-08	SAM									
0804116-09	SAM									
0804116-10	SAM									
MS042408B11	B									
MS042408LL02	LL	MW042508S3	0.8	ml						

Alpha Woods Hole Lab
Batch Prep Report
04/24/2008 0804116_7471 - 7471 Hg Prep

Lab ID	QC Type	Prep Method	Analyst	Prep Start Date	Prep Completed	TCLP Date	Initial Amount (g or ml)	Final Volume (ml)
0804116-01	D	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.05	50
0804116-01	M	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.02	50
0804116-01	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.03	50
0804116-01	SD	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.03	50
0804116-02	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.01	50
0804116-03	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.05	50
0804116-04	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.07	50
0804116-05	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.03	50
0804116-06	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1	50
0804116-07	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.1	50
0804116-08	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.08	50
0804116-09	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.09	50
0804116-10	SAM	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		1.07	50
MS042408B13	B	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.5	50
MS042408L03	L	7471	EYC	2008-05-05 00:00:00	2008-05-06 00:00:00		0.5	50

H2SO4: MS090707A Conc. HCL: MS031108A
30% H2O2.: MS032808A 1:1 HNO3: MW040208A
Conc. HNO3: MS031108B K2S2O8: MW032207A
KMnO4 MW091407C NaCl: MA113005A NH2OH MS030207A
CH3CO2H: MS112105B KBrO3 MS030608A KBr MS022608A
SnCl2 MS020108A NH4OH MS101305A

Alpha Woods Hole Lab
Batch Prep Report

04/24/2008 0804116_7471 - 7471 Hg Prep

Lab ID	Notes
0804116-01	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-01	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-01	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-01	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-02	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-03	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-04	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-05	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-06	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-07	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-08	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-09	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
0804116-10	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
MS042408B13	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.
MS042408L03	1st Prep: Start time 12:00. Block/Them. #1. Avg. temp. 95C.

Alpha Woods Hole Lab
Batch Prep Spike Report

04/24/2008 0804116_7471 - 7471 Hg Prep Analyst: EYC Witness: LMR

Lab ID	QC Type	7471 Hg Prep - spk 1	Vol 7471 Hg Prep - spk 1	Units 7471 Hg Prep - spk 1	7471 Hg Prep - spk 2	Vol 7471 Hg Prep - spk 2	Units 7471 Hg Prep - spk 2	7471 Hg Prep - spk 3	Vol 7471 Hg Prep - spk 3	Units 7471 Hg Prep - spk 3
0804116-01	D									
0804116-01	M	I050508VH	1.25	ml						
0804116-01	SAM									
0804116-01	SD									
0804116-02	SAM									
0804116-03	SAM									
0804116-04	SAM									
0804116-05	SAM									
0804116-06	SAM									
0804116-07	SAM									
0804116-08	SAM									
0804116-09	SAM									
0804116-10	SAM									
MS042408B13	B									
MS042408L03	L	I050508VH	1.25	ml						

Chain of Custody Records

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

CHAIN OF CUSTODY RECORD

Client Name: Ash Creek Associates
Address: 9615 SW Allen Blvd #106
City/State/Zip: Beaverton, OR 97005

Telephone Number: 503.924.4704
Fax No.: 503.924.4707

0804116

Project Manager: Amanda Spencer
Project Name: ESC - T4 Grain Tank Demo
Project Number: 1471-00
Sampler Name: D. Urquhart

Analytical Lab: Alpha Laboratories
Report To: Amanda Spencer
Page: 1 of 1

	Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass(Yellow Label)	Preservative: None	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Analyze: Catch Basin Sediment		Analyze For: Aroclor PCB Analysis											RUSH TAT (Pre-Schedule	Standard TAT	Fax Results	Send QC with report
1	B4	3/26/08	1235	4	X																X		X												X		
2	B3/4	3/26/08	1225	2	X																X		X												X		
3	B2/3	3/26/08	1214	2	X																X		X												X		
4	B1/2	3/26/08	1340	2	X																X		X												X		
5	B1	3/26/08	1146	2	X																X		X												X		
6	B5	3/26/08	1120	4	X																X		X												X		
7	B5/6	3/26/08	1108	2	X																X		X												X		
8	B6/7	3/26/08	1100	2	X																X		X												X		
9	B7/8	3/26/08	1035	2	X																X		X												X		
10	B8	3/26/08	1045	2	X																X		X												X		

Special Instructions: *** See Steve Mattingly for questions

Method of Shipment:

Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Ashleigh Fines, Ash Creek Assoc.	3/27/2008	1302	Fed Ex		
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Fed Ex	3/28/08	1000	ALPHA	3/28/08	1000
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time
Relinquished by: Name/Company	Date	Time	Received by: Name/Company	Date	Time

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

Sample Receipt Checklist

Client:	NEWFE	**Receipt Date:**	3/28/08
Project:	Ash Creek – POP	**Log-in Date:**	4/23/08
ETR #:	0804116	**Inspection by:** kr	**Login by:** DMT

ALL SECTIONS BELOW MUST BE COMPLETED

Were samples shipped? (Yes, FedEx) / UPS / Other:_____
No, Alpha Analytical Courier pick-up / Hand delivered

Is bill of lading retained? (Yes) Tracking #: attached
No, Unavailable / NA

Number of coolers received for this project delivery: 1

Indicate cooler temperature upon opening (if multiple coolers, record all temps):

Note: If all coolers are 2-6°C, use one checklist, if NOT, use separate checklists and note all samples received *above* 6°C.

Cooler 1:
Temperature(s) taken from: 5° IR Gun, _____ Temp. Blank, / NA

Were samples received on ice? (Yes) / No

Chain-of-Custody present? (Yes) / No
Complete? (Yes) / No

Custody seals present on Cooler? Yes / (No)
on Bottles? Yes / (No)
Intact? Yes / No / (NA)

Note: Affix custody seals to back of this page.

Were sample containers intact? (Yes) / No If No, list samples: →

Did VOA/VPH waters contain headspace (>5mm)? Yes / No (NA) If Yes, list samples: →

Were 5035 VOA soils, or VPH soils, *covered* with MeOH? Yes / No / (NA)
If No, list samples: →

Was a sufficient amount of sample received for each test indicated on the COC?
(Yes) / No If No, list samples: →

If chemical preservation is appropriate -
Were samples field preserved? Yes / No / (NA)

☐ C=HCl ☐ M=MeOH ☐ S=H_2SO4
☐ H=NaOH ☐ N=HNO_3 ☐ Other:_____ ☐ U= Unknown

Preservation (pH) verified at lab for *EVERY* bottle? (Not: VOA / VPH / Sulfide)
YES: <2 or >12 (CN) or NO (NA)
If No, why?:

Were samples received within hold time? (Yes) / No If No, list samples: →

Discrepancy between samples rec'd & COC ? Yes / (No) If Yes, list samples: →

Was the Project Manager notified of any other problems? Yes / No / (NA)

Project Manager Acknowledgement: KMP Date: 4/23/08

Comments / Notes

Sample storage refrigerator #:_____

Sample storage freezer #: 1

3/28/08 into FRZ.

Cooler 2:_____ Cooler 3:_____

Cooler 4:_____ Cooler 5:_____

Cooler 6:_____ Cooler 7:_____

More:_____

Chemical preservation OK for ALL samples?

Yes / No / (N/A)

If No, list samples below:

Please use back for any additional notes!

From: Origin ID: BNOA (503)924-4704
Stephen Teafer
Ash Creek Associates
9615 SW Allen Blvd., Ste. 106

Beaverton, OR 97005

FedEx Express

CLS128767/21/24

Ship Date: 27MAR08
ActWgt: 36 LB
System#: 2904184/INET8011
Account#: S *********

Delivery Address Bar Code

Ref # 1471-00
Invoice #
PO #
Dept #

SHIP TO: 508-822-9300 BILL SENDER

Liz Porta
Alpha Laboratories
320 FORBES BLVD

MANSFIELD, MA 020481806

FRI - 28MAR A4

TRK# 0201 7904 7944 5410 PRIORITY OVERNIGHT

02048
MA-US
BOS

XH WBNA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.
FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Appendix E

Field and Oversight Inspection Notes

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

9615 SW Allen Boulevard, Suite 106
Portland, Oregon 97005-4814
www.ashcreekassociates.com
Portland (503) 924-4704
Vancouver (360) 567-3977
Fax (503) 924-4707

PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 1
DATE 3/12/2008

PROJECT T4 Grain Tanks
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Photo-document
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR
CONTRACTOR REP.

ARRIVAL TIME 906
DEPARTURE TIME
WEATHER Clear 58°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve any contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, snd sequence of construction. Unless signed by the Ash CReek Associates Project Manager, this report is preliminary. A preliminary report is provided solely as evidence that field observation was performed. Observations and/or conclusions and/or recommendationsconveyed in the final reportmay vary from and shall take precedence over those included in apreliminary report.

906 Arrive on-site;
930 Pre-construction meeting;
1015 Report meeting;
1030 Start collecting photos;
1235 Leave site;
1245 Leave Terminal 4;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

REVIEWED BY

ASH CREEK ASSOCIATES PROJECT MANAGER

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

9615 SW Allen Boulevard, Suite 106
Portland, Oregon 97005-4814
www.ashcreekassociates.com
Portland (503) 924-4704
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Fax (503) 924-4707

PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 1
DATE 3/24/08

PROJECT T4 Grain Tanks
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Meet Port & Elder for first site walk;
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demolition
CONTRACTOR REP. Jason Samek

ARRIVAL TIME 1310
DEPARTURE TIME
WEATHER Clear 60°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve any contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, snd sequence of construction. Unless signed by the Ash CReek Associates Project Manager, this report is preliminary. A preliminary report is provided solely as evidence that field observation was performed. Observations and/or conclusions and/or recommendationsconveyed in the final reportmay vary from and shall take precedence over those included in apreliminary report.

1240 Depart office;
1304 Arrive offsite;
1315 Meet Phillip Bales (Port of Portland) and wait for arrival of David Breen (Port of Portland);
1330 D. Breen arrives and meet w/ Elder site foreman Jason Samek; Walk to location of stockpile and assess access and volume;
1355 Site walk w/ Jason Samek to review environmental controls in place; Advise him to incline AKF rail jacket to prevent paint chip runoff when raining; Discuss time frame for catch basin inserts at tanks 1-4;
1437 Discuss w/ P. Bales the additional controls to be implemented by Elder and additional sections to be added to the daily inspection sheet;
1445 Demolition has begun on Tank 8. The very southern portion of the wall has been removed and work is currently taking place to remove the roof;
1452 leave site;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

REVIEWED BY

ASH CREEK ASSOCIATES PROJECT MANAGER

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

9615 SW Allen Boulevard, Suite 106
Portland, Oregon 97005-4814
www.ashcreekassociates.com
Portland (503) 924-4704
Vancouver (360) 567-3977
Fax (503) 924-4707

PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 4/2/08

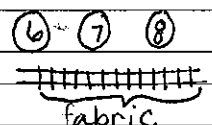
PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Photodocument progress & verify environmental controls
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1446
DEPARTURE TIME
WEATHER
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

Our firm's professionals are represented on site solely to observe operations of the contractor identified, to form opinions about the adequacy of those operations, and to report those opinions to our client. The presence and activities of our field representative do not relieve any contractor from its obligation to meet contractual requirements. The contractor retains sole responsibility for site safety and the methods, operations, snd sequence of construction. Unless signed by the Ash CReek Associates Project Manager, this report is preliminary. A preliminary report is provided solely as evidence that field observation was performed. Observations and/or conclusions and/or recommendationsconveyed in the final reportmay vary from and shall take precedence over those included in apreliminary report.

1446 Arrive on-site;
Drop-off two empty drums and verify the contents of the one drum on-site; Drum contains predominantly paint chips w/small gravels & debris from demolition; The first drum is completely full; ACA put a non-haz label on the drum w/ the following: Contents; Start/finish date; contact & results pending analysis;

Rail fabric: Rail fabric is in place from the start of the construction zone near Tank 8 until ~20 feet west of the start of Tank 6. (paced distance)



Rail fabric is in place on the center track North of tank 8; Jason (Elder) indicated the fabric was put there when demo on the roof was taken place; Currently, no roof demo was taking place on either Tank 7 or 8.

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

REVIEWED BY

ASH CREEK ASSOCIATES PROJECT MANAGER

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

9615 SW Allen Boulevard, Suite 106
Portland, Oregon 97005-4814
www.ashcreekassociates.com
Portland (503) 924-4704
Vancouver (360) 567-3977
Fax (503) 924-4707

PROJECT NUMBER 1484-00
FIELD REPORT NUMBER 1
PAGE 2 OF 2
DATE 4/2/08

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Progress of demo & verify environmental controls in place.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR ~~Ba~~ Eldir Demo.
CONTRACTOR REP. Jason

ARRIVAL TIME 1446
DEPARTURE TIME 1555
WEATHER Clear 60°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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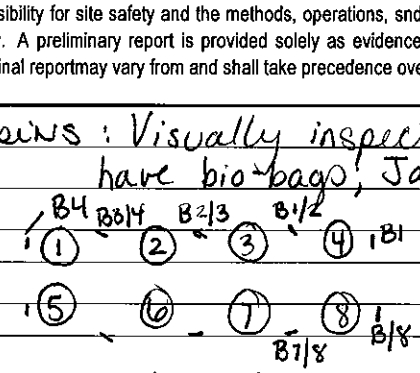
Catch Basins: Visually inspected for bio-bags; B4 did not have bio-bags; Jason (Elder) was putting them in place when I walked up; All other catch basins had 2 to 3 bio-bags surrounding the drain;



Catch Basin Filters: Visually inspected for all but 2 catch basins (B7/8 & B8); Demo was unsafe to approach;

Fabric over ~~im~~ AKF pervious surface; Dumpsters & heavy machinery were being operated on impervious surfaces; Two dumpsters at the last side of Tank 8 and one at the west side of Tank 6;

Paint Chips: Paint Chips were noticed only on asphalt directly next the tanks under demolition; A few chips were noticed on fabric covering pervious surface & none observed on real fabric.

BY

REVIEWED BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 4/11/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Inspect progress & environmental controls
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (Not on-site)

ARRIVAL TIME 1258
DEPARTURE TIME 1405
WEATHER Clear 68°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1300 Drop-off 2 new drums.
1306 Inspect drums for contents & labels;
Contents from 3rd drum mainly organic debris, paint chips, trash & gravel;
No label on drum; 2/3 full;
Contents of drum #2 mainly organic debris (moss); scattered paint chips; Not labelled ½ full;
1318 Inspect environmental controls.
1328 Talked w/Ryan from Elder about foreman; Jason was off-site, but gave me clearance to walk around w/caution;
1347 Observations of environmental controls;
All catch basin inserts were in place; Biobags in place except for catch basins between Tanks 2 & 3 and Tanks 3 & 4; Placed bags back around basins, both sites, the bags were >5 feet away from the catch basin;
The pervious surface covered w/fabric;
All machinery & dumpsters on impervious surface;
Fabric laid along the entire length of the southern rail in the work area;
Rail fabric laid to the western side of Tank 7

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 4/11/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Inspect progress & environmental controls
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (not on-site)

ARRIVAL TIME 1258
DEPARTURE TIME 1405
WEATHER Clear 68°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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On the center tracks; Need to make sure these are covered before work on Tank 5 & 6 ~~rooves~~ AKT roofs begins; Besides direct work areas, the paint chips and debris have been placed in the drums;

1355 Tank Demo progress:

Tank 5 & 6: have started taking down the southern walls; Shredding was in progress when I arrived;
Tank 7: Majority of southern wall & entire roof are gone; Work was taking place inside the tank (sifting through debris);
Tank 8: small portion of NE wall remains; inside tank debris is minimal;

1357 Labeled two drums w/debris content; leave site;

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PROJECT NUMBER 1184-00
FIELD REPORT NUMBER
PAGE 1 OF 3
DATE 4/18/08

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Check environmental controls
ASH CREEK REPRESENTATIVE A. Finds
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (Elder)

ARRIVAL TIME 1532
DEPARTURE TIME
WEATHER Overcast, 55°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1532 Arrive on-site; Drop-off 5 empty drums;
1540 Talk w/ Jason Elder about marking drum labels; Currently there are six drums that are full; Jennifer (POP) has placed Caution labels on five of the six drums on (4/15/08); One "Waste Pending Analysis" on Drum #1; ~~All but~~ AKF 1 of 5 drums is not labeled; This drum was indicated to me by Jason, that it was almost full, but would be topped of today; Placed a label on the drum;
1550 Progress of tanks;

Tank 7&8: all side walls are demolished; metal debris covers ~ 1/2 of the tank floors; Schnitzer truck was on-site when I arrived collecting metal scrap from tank 7;

1601 Took a walk around Tanks 5&6; The entire roof & catwalk structures have been demolished on Tank 6; Tank 5 has a portion of the SE wall demolished and both Tanks 5&6 have been demolished on the inside; Backhoes w/ grip buckets attached

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 3
DATE 4/18/08

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Check
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason

ARRIVAL TIME ~~13~~ 1532
DEPARTURE TIME
WEATHER Overcast 55°
ASH CREEK PROJECT MANAGER H. Clough
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were working on Tank 6 & 7 during the site visit;

1607 Environmental Controls;

Catch Basins in good condition, except the one in between tanks 5 & 6; Biobags were over top of catch basin; One biobag was ripped & pouring bark chips into catch basin; Moved biobags to encompass catch basin cover;

Rail Fabric laid over entire length of south track in the working area; Center rail fabric extends to the east side of tank 6 (as in previous visits;

Heavy Equipment, during the site visit remained on impervious surface; large catwalk debris was now located to the west of Tank 5;

Dumpsters: 2 dumpsters are located on impervious surface w/in 30' of the ~~W~~ AKF east wall of Tank 8; 3 new dumpsters are located on pervious

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 3 OF 3
DATE 4/18/08

PROJECT T4 Grain Tank Demo
LOCATION T4 S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Check
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder
CONTRACTOR REP. Jason

ARRIVAL TIME 1325
DEPARTURE TIME
WEATHER
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
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surface at east entrance of work zone; These three dumpsters had lids covering the contents; No debris was observed falling out of the dumpsters

Impervious surface near work area was covered w/ fabric; Asphalt in work area contained dirt w/ minor traces of debris

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 3
DATE 4/25/08

PROJECT	T4 Grain Tank Demo	ARRIVAL TIME	1635
LOCATION	T4S1	DEPARTURE TIME	1830
CLIENT	~~Demo progress~~ PoP	WEATHER	sunny 55°
PURPOSE OF OBSERVATIONS	Demo progress; Env. control check; paint chip collection		
ASH CREEK REPRESENTATIVE	DIU	ASH CREEK PROJECT MANAGER	H. Clough
CONTRACTOR	—	PERMIT NO.	—
CONTRACTOR REP.	—	JOB PHONE	—

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1635 Arrive on site
1640 10 full drums, one has haz. waste label on it (04/02/08), one drum is damaged (took picture), one drum label is illegible - add new label
3 tote bags (each ≈ 3/4 full) no labels, added new labels. 1 full tote bag in Tank 8 area (full, no ~~[illegible]~~ DU label add new label

1655 Progress of tanks:
~~Tank 8 is fully demolished, 2 piles of debris on W side between Tank 7 & 8~~
DU → Tank 8 - fully demolished, no debris, took picture
Tank 7 - fully demolished, some debris remains in tank area, take picture
Tank 6 - nearly fully demolished, debris in centre, N wall (~50' wide) remains to be demolished, take picture
1700 Take sample (debris) in plastic bag from ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ T4-Tank6-G

Tank 5 - 75% of roof is demolished, 30% of walls, take picture
T4-Tank5-G
1720 Take sample (debris) in plastic bag from N (5) ~~T4-Tank6-G~~ DU
↑ sample location

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 3
DATE 04/25/08

PROJECT	T4 Grain Tank Demo	ARRIVAL TIME	1635
LOCATION	T4S1	DEPARTURE TIME	1830
CLIENT	PoP	WEATHER	clear 55°
PURPOSE OF OBSERVATIONS	Demo progress; Env. control check; paint chip collection		
ASH CREEK REPRESENTATIVE	DIU	ASH CREEK PROJECT MANAGER	H. Clough
CONTRACTOR	–	PERMIT NO.	–
CONTRACTOR REP.	–	JOB PHONE	–

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1716 Env. controls
Catch basins in okay condition; catch basin between tanks 5 & 6 has ripped biobag and not encompassing basin, move to contain basin. All catch basins appear to be collecting sediment & small debris
- Roll fabric extends from Elder office (W of Tank 5 to Tank 8 on rail track.

- Roll fabric covers DU pervious area around drums
- all heavy equipment on impervious areas during DU visit
- two dumpsters are located 30' E of tank 8 on impervious surface, 2 new (orange dumpsters on pervious surface near parking

1735 Take sample (debris) at T4 - ~~Tank 6 - G~~ Tank 7 - G DU in plastic bag

Environmental controls cont'd

- all asphalt in work area had some dirt w/ trace debris
- no debris falling out of dumpsters

BY
ASH CREEK ASSOCIATES REPRESENTATIVE

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 3 OF 3
DATE 04/25/08

PROJECT T4 Grain tank demo
LOCATION T4S1
CLIENT ~~PP~~ DU PoP
PURPOSE OF OBSERVATIONS Demo progress; Env. control check; paint chip collection
ASH CREEK REPRESENTATIVE DIU
CONTRACTOR -
CONTRACTOR REP. -

ARRIVAL TIME 1635
DEPARTURE TIME 1830
WEATHER clear 55°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO. -
JOB PHONE -

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1755 Take sample (chip) of ~~T4~~ T4 - Tank 1 - G - A (1) (2) (3)
Tank 1 - G - B
1805 Attempt to sample T4-Tank 2- G, no large chips
1810 Take sample (chip) of T4 - Tank 3 - G - A (2) (3) (4) N
T4 - Tank 3 - G - B
1818 Take sample (chip) T4 - Tank ~~4~~ DU G - A (4) N
T4 - Tank 4 - G - B
1830 Leave site

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 3
DATE 4/30/08

PROJECT T4 Grain Tank Demo
LOCATION T4 S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Tank Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo.
CONTRACTOR REP. Jason (Site Foreman)

ARRIVAL TIME 1550
DEPARTURE TIME 1709
WEATHER Cloudy; Showers
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO. —
JOB PHONE —

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1550 Arrive on-site;
Verify that the roll-off box is being used properly; Non. haz labels are on all drums and totes;

1601 Progress of Tanks:
Tank 8: metal floor remains; standing water sits towards the center of the floor;
Tank 7: metal floor remains; standing water sits towards the center of the floor;
Tank 6: metal floor remains; no visible standing water; large pile of metal debris sits in the center;
Tank 5: West half of wall remains w/ one large pile of metal scrap in the center of the tank
Tanks 1-4: No demo has begun;
Conveyor belt that attaches to the top of Tank 1 and the building directly to the west was in the process of being taken down during my site visit;

1634 Meet w/ Phillip Bales (POP) and Jason (Elder) about the standing water in Tanks 7 & 8;

BY
ASH CREEK ASSOCIATES REPRESENTATIVE

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 3
DATE 4/30/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Tank Demo Progress & Environmental Control Ins.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason S.

ARRIVAL TIME 1550
DEPARTURE TIME 1709
WEATHER Cloudy; Showers
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
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Consensus about the water is to let it vaporate over the next week and then readdress the issue if it starts to impede the progress of work;

Environmental Controls:

1651 Catch basin between tank 5 & 6 has significant standing water; Both Phillip & Jason were told of the finding; Other catch basins had filter bags & bio bags in place;

Rail Fabric: fabric covered the tracks south between Tanks 5 & 6; Center track was covered the entire length w/ rail fabric.

Impervious/Pervious Surfaces: impervious surfaces had minimal debris; pervious surface near IDW storage had fabric overlaid on it;

Heavy equipment was stored on impervious

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 3 OF 3
DATE 4/30/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS T4 Tank Demo Progress & Env. Control Insp.
ASH CREEK REPRESENTATIVE A. Fries
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason S.

ARRIVAL TIME 1550
DEPARTURE TIME 1709
WEATHER Cloudy w/ showers
ASH CREEK PROJECT MANAGER H. Clough
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surfaces;

No debris was on the ground or overflowing from the dumpsters or roll off bins.

1707 leave site;

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 3
DATE 5/7/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason

ARRIVAL TIME 1626
DEPARTURE TIME
WEATHER 60° Cloudy
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1626 Arrive on-site;
1649 Placed hazardous labels on all eleven drums and five totes; accumulation dates need to be verified w/ Jenifer's (POP) records; accumulation dates on 4 drums and 5 totes was not legible;

1651 Progress of Tank Demo:

Tank 8: only the metal floor remains; no debris or water are on the floor;
Tank 7: only the metal floor remains; no debris or water on the floor;
Tank 6: only the metal floor remains; no water, minor debris & a small pile of dirt are on the floor;
Tank 5: only metal floor remains; large pile of metal scrap sits on the floor; no standing water;
Tank 1: 1/4 of the wall has been removed; the roof has been completely removed; metal debris is piled in the middle of the floor; no standing water; Conveyor to the bldg. & Tank 1 completely removed;
Tanks 2-4: ~~ye~~ no demolisin started;

BY
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PROJECT NUMBER 1484-06
FIELD REPORT NUMBER
PAGE 2 OF 3
DATE 5/7/2008

PROJECT T4 Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Grain Tank Demo & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo.
CONTRACTOR REP. Jason

ARRIVAL TIME 1426
DEPARTURE TIME
WEATHER 60° Cloudy
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1726 Check environmental controls:

Catch Basins: Could not inspect CB on West side of Tank 1 (demo taking place); CB between 1 & 2 has metal debris laying overtop; CB between 2 & 3 has significant debdis in filter, functionality needs to be verified; CB to the east of 8, between 7 & 8, and between 6 & 7 have significant standing water; These catch basins need to be checked for functionality;

Dumpsters on-site were located on impervious surfaces w/no debris hanging over the sides or falling out;

Rail fabric is laid on the south track between Tanks 7 & 8; Fabric was also laid the entire length of the center track, but was being taken off & moved to the side during my visit; Rail fabric was laid next to the north track, but not on top off;

Pervious surface near IDW storage was covered w/fabric

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 3 OF 3
DATE 5/7/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
ARRIVAL TIME 1626
DEPARTURE TIME 1752
WEATHER 60° Cloudy
PURPOSE OF OBSERVATIONS Grain Tank Demo Progress & Environmental Control Ins.
ASH CREEK REPRESENTATIVE A. Fines
ASH CREEK PROJECT MANAGER H. Clough
CONTRACTOR Elder Demo
PERMIT NO.
CONTRACTOR REP. Jason
JOB PHONE

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Pervious surface to the North of tanks 1-4 not covered w/ fabric; Verification needs to be made if the extent between the tanks & rr tracks is all asphalt or asphalt & part gravel;

Ground Debris: dirt, asphalt are on impervious surface near tanks 5-7; a significant pile of metal debris sits on impervious surface near tank 1;

Equipment: equipment was over impervious surface during visit;

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 3
DATE 5/14/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo.
CONTRACTOR REP. Jason (Elder)

ARRIVAL TIME 1224
DEPARTURE TIME 1336
WEATHER Cloudy 70°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1224 Arrive on-site; inspect all IDW containers: new drop box not labeled; attached haz. waste label to end of box;

1232 Inspect progress of tanks.

Tank 8: Metal floor has been removed; the concrete outline of the tank and several vault type structures still exist;
Tank 7: Metal floor has been removed; the concrete outline of the tank & several vault type structures remain.
Tank 6: metal floor remains; no scrap metal or debris is on tank floor; a few puddles of water have formed.
Tank 5: metal floor remains; large pile of scrap metal sits in the center of the floor.
Tank 1: side walls are down but laying in the center of tank; large pile of scrap metal also sits on the tank floor.
Tank 2: roof of tank has been completely removed; Skeaker was in the process of taking

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 3
DATE 5/14/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (Elder)

ARRIVAL TIME 1224
DEPARTURE TIME 1336
WEATHER Cloudy 70°
ASH CREEK PROJECT MANAGER ~~C.~~ H. Clough
PERMIT NO.
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the sidewalls down;
Tanks 3&4: no demolition has been started;

Environmental Control Inspection:

Catch Basins: catch basins were surrounded by biobags & had filter fabric inserts; The catch basins between Tank 1&2 and 2&3 were not able to be observed due to work in progress.

Rail Fabric: fabric covered up the southern track between Tank 5; The center rail was covered w/fabric directly south of Tank 2; fabric covered the northern track ~~between~~ AKF directly north of Tank 2;

Pervious Surfaces Covered: Area at southeast end of demo site covered w/fabric.

Dumpsters & Drop-off boxes: no debris was observed spilling over the sides of the

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 3 OF 3
DATE 5/14/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (Elder)

ARRIVAL TIME 1224
DEPARTURE TIME 1336
WEATHER Cloudy 70°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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boxes;

Heavey Equipment: equipment in use was observed only on impervious surfacis;

1310 Talked w/Jason (Elder) informed me that we would be needing another box on-site by Monday. Also discussed the small amount of pending; agreed to wait and address if still there by next Wednesday;

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 5/21/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
ARRIVAL TIME 1541
DEPARTURE TIME 1637
WEATHER Cloudy 60°
PURPOSE OF OBSERVATIONS Inspection of Demo & Environmental Controls
ASH CREEK REPRESENTATIVE A. Fines
ASH CREEK PROJECT MANAGER H. Clough
CONTRACTOR Elder Demo
PERMIT NO.
CONTRACTOR REP. Jason (Site Foreman)
JOB PHONE

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1543 Drums, galaxy bags & roll-off boxes had hazardous labels on them; Placed a haz. label on the new (third) roll-off box;

1551 Progress of tank demolition;
Tank 8: cement vault type structures & cement pad around tank remain;
Tank 7: cement vault type structures & cement pad around tank remain;
Tank 6: cement vault type structures & cement pad around tank remain;
Tank 5: the metal floor remains w/a large pile of metal debris sitting in the center of the tank;
Tank 4: 1/32 of the wall has been taken down;
Tank 3: 1/4 of the wall has been removed; the shearer was in the tank, but not operating during the site visit;
Tank 2: the remaining wall was removed during the site visit; a very large pile of metal scrap sits in the center of the tank;
Tank 1: the metal floor remains; a large pile of metal debris sits in the center of the tank;

1612 Inspection of environmental controls:
Rail fabric was located on the center track between tanks 1 & 2; Rail fabric sits on the south

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 5/21/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason (Foreman)

ARRIVAL TIME 1541
DEPARTURE TIME
WEATHER Cloudy 60°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
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tracks between Tanks 7&8; Raul fabric sits across the north rails between Tanks 1-3;

Catch basins: biobags & filter bags were observed in catch basins except between tanks 1&2 & 2&3 due to working conditions; Catch basins had some standing water;

Heavy equipment: vehicles & heavy equipment were observed on impervious surfaces

Dumpsters: Roll-off boxes are lined and lid shut except for the box being loaded; Gray dumpster directly east of TANK 8 is almost full; no debris was observed hanging over of spilled from the dumpsters;

1637 leave site;

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 5/28/08

PROJECT T4 Grain Tank Demo
LOCATION Terminal 4 Slip 1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demolition Progress & Environmental Control Check
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason Semak

ARRIVAL TIME 1457
DEPARTURE TIME
WEATHER Cloudy 60°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
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1457 Arrive on-site;
1500 Take a site walk;
1520 Demolition progress:
Tank 8+: metal floor removed; concrete vault-type structures remain;
Tank 7: metal floor removed; concrete vault-type structures remain;
Tank 6: metal floor removed; concrete vault-type structures remain;
Tank 5+: metal floor remains; no debris is located on the floor; two small puddles remain;
Tank 1: metal floor remains w/a large pile of metal scrap;
Tank 2: metal floor remains w/a large pile of metal scrap;
Tank 3: 80% of the wall remains; roof is completely removed; Backhoe operating inside tank was piling metal scrap;
Tank 4: 80% of wall remains; shearer was operating inside of tank to remove catwalk and remaining roof;
1532 environmental control check:
Heavy equipment is stationary or working on impervious surface;

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 5/28/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demolition Progress & Environmental Control Check
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason Samek

ARRIVAL TIME 1457
DEPARTURE TIME
WEATHER Cloudy 60°
ASH CREEK PROJECT MANAGER H. Clough
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Dumpsters are on impervious surfaces w/no observable debris spilling or falling out;

Fabric covers pervious surface directly east of Tank 4;

Rail fabric covers north tracks between Tanks 2+3;
Rail fabric covers south tracks between Tank 5 & 6;
Rail fabric covers center track between all tanks;

Observed catch basins had biobags & filter fabrics in them; Catch basins between Tanks 2 & 3 & 4 & east side of 4 were not able to be observed due to demolition activities;

1541 label new drop-box (4th) is labeled w/a haz. waste label;

1547 leave site;

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 6/5/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR
CONTRACTOR REP.

ARRIVAL TIME 1540
DEPARTURE TIME 1627
WEATHER Cloudy 58°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1540 Arrive on-site;
1542 Site walk;
1558 Place a haz. label on drop box that was brought to the site this morning; On-site there are 3 drop boxes, 5 totes, 10 drums & 1 very badly damaged drum;
1602 Demolition Progress:
TANK 8: Concrete vault structures remain inside the tank outline; The concrete ring outlining the tank was in the progress of being removed; ~2/3 had been removed at the end of the site visit;
TANK 7: concrete vault structures remain inside tank outline; concrete ring was completely removed;
TANK 6: metal floor remains;
TANK 5: metal floor remains;
TANK 1: metal floor remains;
TANK 2: metal floor remains;
TANK 3: ~2/3 of wall remains w/a large pile of metal scrap in the center of the tank;
TANK 4: ~2/3 of wall remains w/a large pile of metal scrap in the center of the tank;
1608 Environmental Control inspection:
Heavy equipment was stored on impervious surfaces, except for the machine working on removing the

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 6/5/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR
CONTRACTOR REP.

ARRIVAL TIME 1540
DEPARTURE TIME
WEATHER Cloudy 58°
ASH CREEK PROJECT MANAGER H. Clough
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Concrete ring from tank 8;

Dumpsters & drop boxes were kept on impervious surfaces; No material was observed to be overflowing or spilling out of the dumpsters & drop boxes;

Rail fabric was over top of center rail between Tank 3 & 4; rail fabric was observed on the north rail between Tank 3 & 4; Fabric covering pervious ground was observed directly east of tank 4;

Catch basins were observed to have biobags & filter bags, w/the exception of the catch basins between Tank 3 & 4, east of Tank 4 & east of Tank 8; these could not be observed due to current demolition activities occurring;

1627 leave site;

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 6/11/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Grain Tank Demo Progress & Environmental Control Ins.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR ~~Elder~~ Demo
CONTRACTOR REP. Jason Samek

ARRIVAL TIME 733
DEPARTURE TIME 902
WEATHER
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
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733 Arrive on-site;
740 Meet Jenifer (POP) and Waste Management on-site for pick-up of 10 drums & 2 drop boxes; Wait as boxes are taken to Schnitzer to be weighed; Instruct Jason that tote bags are to dumped in one of the drop boxes when it returns from Arlington;
815 All boxes are weighed & okay'd by Waste Express for shipment to Arlington;
817 Progress of Tank demo:
Tanks 7 & 8: metal floor removed & concrete outline & vault structures removed;
Tank 6: metal floor removed;
Tank 5: metal floor remains w/ puddles of water;
Tank 1 & 2: metal floor remains w/ minor scrap metal;
Tank 3: metal floor remains w/ piles of scrap metal;
Tank 4: metal floor & walls remain w/ large piles of scrap metal in center of tank;

831 Environmental Control Inspection:
① Catch Basins: Catch basins were observed to have filter bags & biobags in place; Catch basins between Tanks 3 & 4 & on the last end of 4 were not observed due to demolition activities;

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 6/11/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason Samek

ARRIVAL TIME 733
DEPARTURE TIME 902
WEATHER Cloudy 55°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO. —
JOB PHONE —

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② Fabric was observed on pervious surface at the east end of tank 4; fabric was laid over the center & northern rail tracks between Tanks 3 & 4;

③ Dumpsters were observed not to have any material overflowing or spilling over the sides;

④ Heavy equipment was observed on impervious surfaces only;

902 leave site,

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 6/19/08

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR
CONTRACTOR REP.

ARRIVAL TIME 1431
DEPARTURE TIME 1530
WEATHER
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1432 Arrive on-site & Complete Inspection;
1458 Replace old haz. wastes labels on drop boxes to Reflect the new contents;
Four drop boxes on-site: 4/19/08 - Full
6/13/08 - Full
6/12/08 - Partially Full
6/11/08 - Partially Full
all drums have been removed from site and galaxy bags dumped in box labeled 4/19/08;
1501 Progress of Tanks:
Tanks 7&8: metal floor removed & concrete outline & vault structures removed;
Tanks 5,6&1: metal floor removed & concrete outline & vault structures remain;
Tanks 2&3: metal floor remains & all debris cleaned off of surface;
Tank 4: metal floor remains, no debris has been removed from surface;
1513 Environmental Controls:
Catch Basins: filter bags & biobags were observed in catch basins

Heavy Equipment was observed only on impervious

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 6/19/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP. Jason Samek

ARRIVAL TIME 1431
DEPARTURE TIME 1530
WEATHER Clear & Sunny 75°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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surfaces;

Fabric was observed on pervious surfaces at the last end of Tank 4;

No rail fabric was observed;

Dumpsters were observed: No material was spilling or overflowing from these dumpsters;

1530 leave site

BY

REVIEWED BY

ASH CREEK ASSOCIATES REPRESENTATIVE

ASH CREEK ASSOCIATES PROJECT MANAGER

Ash Creek Associates, Inc.
Environmental and Geotechnical Consultants

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Fax (503) 924-4707

PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 6/25/08

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Grain Tank Demo & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1433
DEPARTURE TIME 1515
WEATHER Clear & Sunny 80°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1433 Arrive on-site;
1439 Progress of tanks:
Tank 4: Metal floor removed; concrete vault structure still in place;

Tanks 5-8: Concrete is being crushed to less than 2' and rebar is being removed;

Tanks 1-3: Concrete vault structures & tank foundation ring removed,

1445 Environmental Controls:
No fabric is laid on tracks;
Heavy equipment is on impervious surfaces except machines crushing concrete inside former tanks;
No material is spilling or overflowing of dumpsters or drop boxes;
Catch basins were observed to have ~~Bion~~ AKF biobags around them & filter bags inside;
1449 Talked w/ Elder foreman about remainder of boxes necessary for the project; Three boxes are on-site & one is arriving w/in

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 6/25/08

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Grain Tank Demo & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1433
DEPARTURE TIME 1515
WEATHER Clear & Sunny 80°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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24 hrs. Elder foreman beleiving these four should be sufficient for the remainder of the project.

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 1
DATE 7/3/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Grain Tank Demo & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1445
DEPARTURE TIME 1525
WEATHER Sunny 85°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1445 Arrive on-site;
1449 Site walk;
1507 Grain Tank Progress:

Tanks 5-8: Concrete is being crushed and rebar removed;
Tanks 1-4: all concrete vault type structures & ferundations have been removed and are ready to be crushed;

1511 Environmental Controls:

No fabric is in place;
Catch basins have filter bags & are surrounded by biobags;
No material is spilling from dumpsters or drop boxes;

1515 Four drop boxes remain on-site;

1525 leave site;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

REVIEWED BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 7/10/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1246
DEPARTURE TIME 1330
WEATHER Clear 90°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1246 Arrive on-site;
1252 Tank progress

Tanks 1-2 and 5-8 have all concrete crushed to <2' and are ready for concrete crusher.

Tank 3 has ~70% of concrete crushed to <2'

Tank 4 has concrete removed from ring and vault type structures, but none has been crushed;

1259 Site Walk;

1315 Catch basin filters and biobags are in place at all catch basins; heavy equipment was maintained on impervious surfaces during site visit; no soil fabric was laid out over tracks or impervious surfaces; No material was observed to be spilling from dumpsters on site

1323 One drop box was delivered on-site on 7/9/08

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 7/10/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
ARRIVAL TIME 1246
DEPARTURE TIME 1330
WEATHER Clear 90°
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
ASH CREEK PROJECT MANAGER H. Clough
CONTRACTOR Elder Demo
PERMIT NO.
CONTRACTOR REP.
JOB PHONE

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1325 Drop box was labeled w/a haz. waste label; the drop box will likely remain on-site for the remainder of the demo or 90-days

1330 leave site.

BY

REVIEWED BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 7/18/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1224
DEPARTURE TIME 1305
WEATHER Cloudy 75°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1155 Mob to site;
1224 Arrive on-site;
1227 TANK Demo Progress:
TANKS 5 through 8:
Concrete from tank outline & vault structures have been crushed to less than 2" and used to partially fill the tanks; equipment has been used to slightly grade these areas;
TANK 1:
Concrete is in the process of being crushed to less than 2";
TANK 2:
Concrete has been crushed to less than 2' and all metal & rebar removed;
TANKS 3 & 4:
Concrete is still being crushed to less than 2' and metal & rebar remains;
1233 One elder dumpster is on site w/no observable material spilling from it; One drop box is on-site to contain the remainder of waste generated on the project;
1245 Site walk;
1255 Catch basins have filter bags and bio bags; no rail fabric is currently in use; Heavy

BY
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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 7/18/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1224
DEPARTURE TIME 1307
WEATHER
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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equipment is on impervious surfaces, except those that are working w/in the tank outline & rigs collecting from the fill pile to the south;
1302 Talked w/ Tom (Elder) progress is currently delayed to due to a stuck rig in the fill area;
1305 leave site;

BY

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 2
DATE 7/24/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR
CONTRACTOR REP.

ARRIVAL TIME 834
DEPARTURE TIME 909
WEATHER Partly Cloudy, 57°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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741 leave
834 Arrive on-site;
843 Progress of tank demolition
Tanks 6 & 8: Concrete has been crushed and graded w/ fill;

Tank 5: Concrete has been crushed and spread across former tank floor w/ several piles of fill awaiting to be spread and graded across former floor;

Tank 1 & 2: Concrete has been crushed and is in the process of being graded

Tank 3: large piles of crushed concrete are awaiting to be graded across the former floor;

Tank 4: Concrete needs to be crushed to below 2"; Concrete crusher sits at the tank;

856 Environmental Controls: no rail fabric is currently being used; Catch basins have filter bags and birbags; 1 Dumpster remains

BY
ASH CREEK ASSOCIATES REPRESENTATIVE

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 2 OF 2
DATE 7/24/2008

PROJECT T4 Grain Tank Demo
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo Progress & Environmental Control Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 834
DEPARTURE TIME 909
WEATHER Partly Cloudy ~70
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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on-site; no material was observed spilling over the dumpster; 1 Crop-box remains on-site for disposal of any waste; Heavy equipment sits on impervious surfaces and the former floors of the grain tanks;

909 leave site;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF 1
DATE 8/01/2008

PROJECT T4 Grain Tank Demo
LOCATION T4S1
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Demo progress & environmental control inspection
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1136
DEPARTURE TIME 1201
WEATHER Rainy 60°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1105 Leave for site;
1136 Arrive on-site;
Tank progress:

All concrete has been removed and grading is being currently conducted on Tanks 1-4;

Environmental Controls:
- No rail fabric
- 1 drop box on-site
- 2 dumpsters w/No material overflowing or spilling over the sides
- catch basins have fabric inserts & bio bags;
- heavy equipment is on impervious surfaces except machinis grading the former tank floors, the large excavator & concrete crusher (to east of tanks)

1154 Talked w/ Tom (Elder foreman) about IDW box; he indicated there are a few more pieces to be removed from site & that the expected date for removal of box should be sometime early next week;
1201 leave site;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

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PROJECT NUMBER 1484-00
FIELD REPORT NUMBER
PAGE 1 OF
DATE 8/5/2008

PROJECT T4 Grain Tank Removal
LOCATION T451
CLIENT Port of Portland
PURPOSE OF OBSERVATIONS Environmental Control Inspection & Demo Insp.
ASH CREEK REPRESENTATIVE A. Fines
CONTRACTOR Elder Demo
CONTRACTOR REP.

ARRIVAL TIME 1315
DEPARTURE TIME 1410
WEATHER Clear 95°
ASH CREEK PROJECT MANAGER H. Clough
PERMIT NO.
JOB PHONE

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1315 Arrive on-site;
1318 Find Elder Contractor (Tom) to discuss dropping off drums to contain soil stained w/ materials released during disconnection piping;
1325 Took pictures of stained soil;
1330 Took site walk to observe and document site after construction;
1350 Discuss w/ Tom (Elder) the remaining work that needs to be completed; He indicated that the asphalt needed to be cleaned up around the tanks; A site walk was completed by the contractors & the Port;
1400 No drop boxes remain on-site; two elder dumpsters and two drums;
1401 Photos were taken of heavy equipment w/ absorbent pads containing petroleum leaks near the Elder office;
1410 leave site;

BY

ASH CREEK ASSOCIATES REPRESENTATIVE

REVIEWED BY

ASH CREEK ASSOCIATES PROJECT MANAGER

Appendix F

Demolition-Derived Waste Analytical Data

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

April 25, 2008

Jenifer Fonseca-Litrell
Port of Portland-Marine Terminal 6
7201 N Marine Dr.
Portland, OR 97203

RE: T4 Grain

Enclosed are the results of analyses for samples received by the laboratory on 04/15/08 16:43.
The following list is a summary of the Work Orders contained in this report, generated on 04/25/08 08:39.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PRD0519	T4 Grain	T4 Grain

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T4GT041508	PRD0519-01	Soil	04/15/08 15:10	04/15/08 16:43

The results provided in this report have not been approved for final release by the Laboratory, and are provided in DRAFT format at the request of the client. Reported results may not have been fully reviewed, and are subject to change.

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Arsenic	EPA 6020	**9.74**	-----	0.521	mg/kg	1x	8040880	04/23/08 16:45	04/24/08 17:28	
Barium	"	**4950**	-----	52.1	"	100x	"	"	04/24/08 20:04	
Cadmium	"	**7.25**	-----	0.521	"	1x	"	"	04/24/08 07:00	
Chromium	"	**3040**	-----	52.1	"	100x	"	"	04/24/08 20:04	
Lead	"	**507**	-----	52.1	"	"	"	"	"	
Selenium	"	ND	-----	0.521	"	1x	"	"	04/24/08 07:00	
Silver	"	**0.671**	-----	0.521	"	"	"	"	"	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Metals per EPA 1311/6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Arsenic	1311/6020	ND	-----	0.0500	mg/l	1x	8040873	04/23/08 14:30	04/23/08 22:39	
Barium	"	**6.96**	-----	0.500	"	"	"	"	"	
Cadmium	"	**0.0536**	-----	0.0200	"	"	"	"	"	
Chromium	"	**25.3**	-----	0.500	"	10x	"	"	04/24/08 00:37	
Lead	"	**0.0932**	-----	0.0500	"	1x	"	"	04/23/08 22:39	
Selenium	"	ND	-----	0.0200	"	"	"	"	"	
Silver	"	ND	-----	0.0500	"	"	"	"	"	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Total Mercury per EPA Method 7471A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Mercury	EPA 7471A	**0.102**	-----	0.0848	mg/kg dry	1x	8040605	04/16/08 09:36	04/17/08 09:48	

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Mercury per EPA Methods 1311/7470A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Mercury	1311/7470A	ND	-----	0.000200	mg/l	1x	8040919	04/24/08 11:01	04/24/08 17:11	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Aroclor 1016	EPA 8082	ND	-----	0.0344	mg/kg dry	1x	8040758	04/21/08 19:20	04/23/08 15:19	
Aroclor 1221	"	ND	-----	0.0692	"	"	"	"	"	
Aroclor 1232	"	ND	-----	0.0344	"	"	"	"	"	
Aroclor 1242	"	ND	-----	0.0344	"	"	"	"	"	
Aroclor 1248	"	ND	-----	0.0344	"	"	"	"	"	
Aroclor 1254	"	**0.192**	-----	0.0344	"	"	"	"	04/23/08 18:36	
Aroclor 1260	"	ND	-----	0.0344	"	"	"	"	04/23/08 15:19	
Surrogate(s): Decachlorobiphenyl			*70.5%*		*16 - 149 %*	"			"	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Extraction Only

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
Extraction	EPA 1311	ND	-----	1.00	N/A	1x	8040830	04/22/08 18:22	04/23/08 14:20	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Percent Dry Weight (Solids) per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRD0519-01 (T4GT041508)		**Soil**			**Sampled: 04/15/08 15:10**					
% Solids	NCA SOP	**95.7**	-----	0.0100	% by Weight	1x	8040746	04/21/08 07:56	04/21/08 07:56	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040880 **Other wet Preparation Method: EPA 3050**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040880-BLK1)								Extracted: 04/23/08 16:45						
Arsenic	EPA 6020	ND	---	0.490	mg/kg	1x	--	--	--	--	--	--	04/24/08 17:12	
Barium	"	ND	---	0.490	"	"	--	--	--	--	--	--	04/24/08 06:43	
Cadmium	"	ND	---	0.490	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.490	"	"	--	--	--	--	--	--	04/24/08 17:12	
Lead	"	ND	---	0.490	"	"	--	--	--	--	--	--	04/24/08 06:43	
Selenium	"	ND	---	0.490	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.490	"	"	--	--	--	--	--	--	"	
LCS (8040880-BS1)								Extracted: 04/23/08 16:45						
Arsenic	EPA 6020	10.5	---	0.521	mg/kg	1x	--	10.4	101%	(80-120)	--	--	04/24/08 17:20	
Barium	"	11.4	---	0.521	"	"	--	"	110%	"	--	--	04/24/08 06:51	
Cadmium	"	10.8	---	0.521	"	"	--	"	103%	"	--	--	"	
Chromium	"	10.9	---	0.521	"	"	--	"	105%	"	--	--	04/24/08 17:20	
Lead	"	11.5	---	0.521	"	"	--	"	111%	"	--	--	04/24/08 06:51	
Selenium	"	12.1	---	0.521	"	"	--	"	116%	"	--	--	"	
Silver	"	5.53	---	0.521	"	"	--	5.21	106%	"	--	--	"	
Duplicate (8040880-DUP1)					QC Source: PRD0693-23			Extracted: 04/23/08 16:45						
Arsenic	EPA 6020	2.78	---	0.476	mg/kg	1x	2.27	--	--	--	20.3%	(40)	04/24/08 19:22	
Barium	"	151	---	0.476	"	"	147	--	--	--	2.48%	"	04/24/08 09:32	
Cadmium	"	ND	---	0.476	"	"	ND	--	--	--	16.1%	"	"	
Chromium	"	14.8	---	0.476	"	"	13.4	--	--	--	9.88%	"	04/24/08 19:22	
Lead	"	5.09	---	0.476	"	"	5.58	--	--	--	9.18%	"	04/24/08 09:32	
Selenium	"	ND	---	0.476	"	"	0.498	--	--	--	5.08%	"	"	
Silver	"	ND	---	0.476	"	"	ND	--	--	--	31.2%	"	"	
Matrix Spike (8040880-MS1)					QC Source: PRD0693-23			Extracted: 04/23/08 16:45						
Arsenic	EPA 6020	10.9	---	0.495	mg/kg	1x	2.27	9.90	86.9%	(75-125)	--	--	04/24/08 19:39	
Barium	"	157	---	0.495	"	"	147	"	100%	"	--	--	04/24/08 10:05	
Cadmium	"	9.68	---	0.495	"	"	0.302	"	94.7%	"	--	--	"	
Chromium	"	23.0	---	0.495	"	"	13.4	"	96.7%	"	--	--	04/24/08 19:39	
Lead	"	14.5	---	0.495	"	"	5.58	"	89.7%	"	--	--	04/24/08 10:05	
Selenium	"	10.8	---	0.495	"	"	0.498	"	104%	"	--	--	"	
Silver	"	4.74	---	0.495	"	"	0.0965	4.95	93.8%	"	--	--	"	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040880 **Other wet Preparation Method: EPA 3050**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8040880-MS2)				**QC Source: PRD0693-04**				**Extracted: 04/23/08 16:45**						
Arsenic	EPA 6020	10.4	---	0.500	mg/kg	1x	1.47	10.0	89.7%	(75-125)	--	--	04/24/08 17:53	
Barium	"	88.8	---	0.500	"	"	65.4	"	235%	"	--	--	04/24/08 07:24	M7
Cadmium	"	11.8	---	0.500	"	"	ND	"	118%	"	--	--	"	
Chromium	"	16.1	---	0.500	"	"	8.36	"	77.0%	"	--	--	04/24/08 17:53	
Lead	"	16.1	---	0.500	"	"	4.35	"	117%	"	--	--	04/24/08 07:24	
Selenium	"	13.2	---	0.500	"	"	ND	"	132%	"	--	--	"	M7
Silver	"	5.76	---	0.500	"	"	0.0613	5.00	114%	"	--	--	"	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Metals per EPA 1311/6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040873 **Soil Preparation Method: EPA 1311/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040873-BLK1)									Extracted: 04/23/08 14:30					
Arsenic	1311/6020	ND	---	0.0500	mg/l	1x	--	--	--	--	--	--	04/23/08 22:07	
Barium	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.0500	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.0500	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.0200	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.0500	"	"	--	--	--	--	--	--	"	
LCS (8040873-BS1)									Extracted: 04/23/08 14:30					
Arsenic	1311/6020	0.201	---	0.0500	mg/l	1x	--	0.200	100%	(75-125)	--	--	04/23/08 22:15	
Barium	"	0.180	---	0.500	"	"	--	"	90.2%	"	--	--	"	
Cadmium	"	0.172	---	0.0200	"	"	--	"	86.2%	"	--	--	"	
Chromium	"	0.195	---	0.0500	"	"	--	"	97.6%	"	--	--	"	
Lead	"	0.171	---	0.0500	"	"	--	"	85.4%	"	--	--	"	
Selenium	"	0.197	---	0.0200	"	"	--	"	98.6%	"	--	--	"	
Silver	"	0.0821	---	0.0500	"	"	--	0.100	82.1%	"	--	--	"	
Duplicate (8040873-DUP1)							QC Source: PRD0164-01		Extracted: 04/23/08 14:30					
Arsenic	1311/6020	ND	---	0.0500	mg/l	1x	ND	--	--	--	NR	(20)	04/23/08 22:31	
Barium	"	0.907	---	0.500	"	"	0.925	--	--	--	1.98%	"	"	
Cadmium	"	ND	---	0.0200	"	"	ND	--	--	--	2.45%	"	"	
Chromium	"	ND	---	0.0500	"	"	ND	--	--	--	NR	"	"	
Lead	"	0.282	---	0.0500	"	"	0.282	--	--	--	0.319%	"	"	
Selenium	"	ND	---	0.0200	"	"	ND	--	--	--	NR	"	"	
Silver	"	ND	---	0.0500	"	"	ND	--	--	--	NR	"	"	
Matrix Spike (8040873-MS1)							QC Source: PRD0538-01		Extracted: 04/23/08 14:30					
Arsenic	1311/6020	0.197	---	0.0500	mg/l	1x	ND	0.200	98.7%	(50-150)	--	--	04/23/08 23:33	
Barium	"	0.305	---	0.500	"	"	0.128	"	88.8%	"	--	--	"	
Cadmium	"	0.178	---	0.0200	"	"	0.00612	"	86.2%	"	--	--	"	
Chromium	"	0.240	---	0.0500	"	"	0.0530	"	93.6%	"	--	--	"	
Lead	"	0.187	---	0.0500	"	"	0.0158	"	85.6%	"	--	--	"	
Selenium	"	0.200	---	0.0200	"	"	ND	"	100%	"	--	--	"	
Silver	"	0.0837	---	0.0500	"	"	ND	0.100	83.7%	"	--	--	"	

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Draft Report

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Metals per EPA 1311/6000/7000 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040873 **Soil Preparation Method: EPA 1311/3005**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8040873-MS2)				**QC Source: PRD0681-01**				**Extracted: 04/23/08 14:30**						
Arsenic	1311/6020	0.233	---	0.0500	mg/l	1x	0.0144	0.200	109%	(50-150)	--	--	04/24/08 00:05	
Barium	"	0.265	---	0.500	"	"	0.0832	"	91.1%	"	--	--	"	
Cadmium	"	0.196	---	0.0200	"	"	0.0195	"	88.4%	"	--	--	"	
Chromium	"	1.05	---	0.0500	"	"	0.866	"	90.0%	"	--	--	"	
Lead	"	0.190	---	0.0500	"	"	0.0163	"	86.8%	"	--	--	"	
Selenium	"	0.240	---	0.0200	"	"	0.00870	"	116%	"	--	--	"	
Silver	"	0.0847	---	0.0500	"	"	ND	0.100	84.7%	"	--	--	"	
Matrix Spike (8040873-MS3)				**QC Source: PRD0692-01**				**Extracted: 04/23/08 14:30**						
Arsenic	1311/6020	0.204	---	0.0500	mg/l	1x	0.00778	0.200	98.2%	(50-150)	--	--	04/24/08 00:29	
Barium	"	1.43	---	0.500	"	"	1.12	"	154%	"	--	--	"	M7
Cadmium	"	0.175	---	0.0200	"	"	ND	"	87.6%	"	--	--	"	
Chromium	"	0.191	---	0.0500	"	"	ND	"	95.6%	"	--	--	"	
Lead	"	0.230	---	0.0500	"	"	0.0588	"	85.7%	"	--	--	"	
Selenium	"	0.200	---	0.0200	"	"	ND	"	99.9%	"	--	--	"	
Silver	"	0.0840	---	0.0500	"	"	ND	0.100	84.0%	"	--	--	"	
Matrix Spike Dup (8040873-MSD1)				**QC Source: PRD0538-01**				**Extracted: 04/23/08 14:30**						
Arsenic	1311/6020	0.199	---	0.0500	mg/l	1x	ND	0.200	99.4%	(50-150)	0.707%	(20)	04/23/08 23:41	
Barium	"	0.312	---	0.500	"	"	0.128	"	92.0%	"	2.01%	"	"	
Cadmium	"	0.182	---	0.0200	"	"	0.00612	"	87.8%	"	1.78%	"	"	
Chromium	"	0.245	---	0.0500	"	"	0.0530	"	96.0%	"	1.94%	"	"	
Lead	"	0.191	---	0.0500	"	"	0.0158	"	87.4%	"	1.96%	"	"	
Selenium	"	0.199	---	0.0200	"	"	ND	"	99.7%	"	0.300%	"	"	
Silver	"	0.0855	---	0.0500	"	"	ND	0.100	85.5%	"	2.10%	"	"	
Matrix Spike Dup (8040873-MSD2)				**QC Source: PRD0681-01**				**Extracted: 04/23/08 14:30**						
Arsenic	1311/6020	0.228	---	0.0500	mg/l	1x	0.0144	0.200	107%	(50-150)	2.04%	(20)	04/24/08 00:13	
Barium	"	0.266	---	0.500	"	"	0.0832	"	91.5%	"	0.301%	"	"	
Cadmium	"	0.197	---	0.0200	"	"	0.0195	"	88.6%	"	0.153%	"	"	
Chromium	"	1.04	---	0.0500	"	"	0.866	"	89.0%	"	0.191%	"	"	
Lead	"	0.191	---	0.0500	"	"	0.0163	"	87.3%	"	0.525%	"	"	
Selenium	"	0.242	---	0.0200	"	"	0.00870	"	117%	"	0.996%	"	"	
Silver	"	0.0845	---	0.0500	"	"	ND	0.100	84.5%	"	0.272%	"	"	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Total Mercury per EPA Method 7471A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040605 **Soil Preparation Method: EPA 7471A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040605-BLK1)									**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	ND	---	0.100	mg/kg wet	1x	--	--	--	--	--	--	04/17/08 09:06	
LCS (8040605-BS1)									**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	1.04	---	0.100	mg/kg wet	1x	--	1.00	104%	(80-120)	--	--	04/17/08 09:08	
LCS Dup (8040605-BSD1)									**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	1.03	---	0.100	mg/kg wet	1x	--	1.00	103%	(80-120)	0.828%	(20)	04/17/08 09:12	
Duplicate (8040605-DUP1)				**QC Source: PRD0481-01**					**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	ND	---	0.388	mg/kg dry	1x	ND	--	--	--	NR	(40)	04/17/08 09:16	
Matrix Spike (8040605-MS1)				**QC Source: PRD0481-01**					**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	3.25	---	0.387	mg/kg dry	1x	ND	3.87	84.0%	(75-125)	--	--	04/17/08 09:18	
Matrix Spike Dup (8040605-MSD1)				**QC Source: PRD0481-01**					**Extracted: 04/16/08 09:36**					
Mercury	EPA 7471A	3.33	---	0.400	mg/kg dry	1x	ND	4.00	83.4%	(75-125)	2.55%	(40)	04/17/08 09:22	

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Draft Report

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Mercury per EPA Methods 1311/7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040919 **Other wet Preparation Method: EPA 1311/7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040919-BLK1)									**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	04/24/08 15:50	
LCS (8040919-BS1)									**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	0.00482	---	0.000200	mg/l	1x	--	0.00500	96.4%	(85-115)	--	--	04/24/08 15:52	
LCS Dup (8040919-BSD1)									**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	0.00516	---	0.000200	mg/l	1x	--	0.00500	103%	(85-115)	6.81%	(20)	04/24/08 15:57	
Duplicate (8040919-DUP1)				**QC Source: PRD0519-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:44	
Duplicate (8040919-DUP2)				**QC Source: PRD0532-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:46	
Duplicate (8040919-DUP3)				**QC Source: PRD0538-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:48	
Duplicate (8040919-DUP4)				**QC Source: PRD0681-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.0800	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:51	
Duplicate (8040919-DUP5)				**QC Source: PRD0686-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.0800	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:53	
Duplicate (8040919-DUP6)				**QC Source: PRD0699-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 16:55	
Duplicate (8040919-DUP7)				**QC Source: PRD0750-02**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 17:04	
Duplicate (8040919-DUP8)				**QC Source: PRD0750-03**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.00200	mg/l	1x	ND	--	--	--	55.0%	(20)	04/24/08 17:06	R4
Duplicate (8040919-DUP9)				**QC Source: PRD0750-04**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	ND	---	0.000200	mg/l	1x	ND	--	--	--	NR	(20)	04/24/08 17:08	
Matrix Spike (8040919-MS1)				**QC Source: PRD0519-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	0.00547	---	0.000200	mg/l	1x	ND	0.00500	109%	(75-125)	--	--	04/24/08 16:01	
Matrix Spike (8040919-MS2)				**QC Source: PRD0532-01**					**Extracted: 04/24/08 11:01**					
Mercury	1311/7470A	0.00515	---	0.000200	mg/l	1x	ND	0.00500	103%	(75-125)	--	--	04/24/08 16:04	

DRAFT REPORT

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Mercury per EPA Methods 1311/7470A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040919 **Other wet Preparation Method: EPA 1311/7470A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8040919-MS3)				**QC Source: PRD0538-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	0.00531	---	0.000200	mg/l	1x	ND	0.00500	106%	(75-125)	--	--	04/24/08 16:08	
Matrix Spike (8040919-MS4)				**QC Source: PRD0681-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	1.96	---	0.0800	mg/l	1x	ND	2.00	97.8%	(75-125)	--	--	04/24/08 16:11	
Matrix Spike (8040919-MS5)				**QC Source: PRD0686-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	1.96	---	0.0800	mg/l	1x	ND	2.00	97.8%	(75-125)	--	--	04/24/08 16:18	
Matrix Spike (8040919-MS6)				**QC Source: PRD0699-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	0.00473	---	0.000200	mg/l	1x	ND	0.00500	94.6%	(75-125)	--	--	04/24/08 16:30	
Matrix Spike (8040919-MS7)				**QC Source: PRD0750-02**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	0.00441	---	0.000200	mg/l	1x	ND	0.00500	88.3%	(75-125)	--	--	04/24/08 16:34	
Matrix Spike (8040919-MS8)				**QC Source: PRD0750-03**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	0.0444	---	0.00200	mg/l	1x	0.00138	0.0500	85.9%	(75-125)	--	--	04/24/08 16:37	
Matrix Spike (8040919-MS9)				**QC Source: PRD0750-04**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	0.00481	---	0.000200	mg/l	1x	ND	0.00500	96.1%	(75-125)	--	--	04/24/08 16:41	
Matrix Spike Dup (8040919-MSD4)				**QC Source: PRD0681-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	1.92	---	0.0800	mg/l	1x	ND	2.00	95.8%	(75-125)	2.11%	(20)	04/24/08 16:14	
Matrix Spike Dup (8040919-MSD5)				**QC Source: PRD0686-01**				**Extracted: 04/24/08 11:01**						
Mercury	1311/7470A	1.60	---	0.0800	mg/l	1x	ND	2.00	80.0%	(75-125)	20.0%	(20)	04/24/08 16:21	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040758 **Soil Preparation Method: EPA 3550**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040758-BLK1)								Extracted: 04/21/08 19:20						
Aroclor 1016	EPA 8082	ND	---	0.0330	mg/kg wet	1x	--	--	--	--	--	--	04/22/08 13:34	
Aroclor 1221	"	ND	---	0.0664	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	0.0330	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	0.0330	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	0.0330	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	0.0330	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	0.0330	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 102%*			*Limits: 16-149%*	*"*							*04/22/08 13:34*	
LCS (8040758-BS1)								Extracted: 04/21/08 19:20						
Aroclor 1016	EPA 8082	0.282	---	0.0329	mg/kg wet	1x	--	0.329	85.5%	(57-135)	--	--	04/22/08 13:56	
Aroclor 1260	"	0.355	---	0.0329	"	"	--	"	108%	(60-135)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 111%*			*Limits: 16-149%*	*"*							*04/22/08 13:56*	
Matrix Spike (8040758-MS1)					QC Source: PRD0519-01			Extracted: 04/21/08 19:20						
Aroclor 1016	EPA 8082	0.264	---	0.174	mg/kg dry	5x	ND	0.348	76.0%	(37-145)	--	--	04/23/08 15:42	
Aroclor 1260	"	0.430	---	0.174	"	"	ND	"	124%	(25-144)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 68.7%*			*Limits: 16-149%*	*"*							*04/23/08 15:42*	
Matrix Spike Dup (8040758-MSD1)					QC Source: PRD0519-01			Extracted: 04/21/08 19:20						
Aroclor 1016	EPA 8082	0.253	---	0.173	mg/kg dry	5x	ND	0.346	73.1%	(37-145)	4.44%	(26)	04/23/08 16:04	
Aroclor 1260	"	0.369	---	0.173	"	"	ND	"	107%	(25-144)	15.4%	(30)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 68.6%*			*Limits: 16-149%*	*"*							*04/23/08 16:04*	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: TCLP Extraction Only - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040830 **Soil Preparation Method: EPA 1311**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8040830-BLK1)								**Extracted: 04/22/08 18:22**						
Extraction	EPA 1311	ND	---	1.00	N/A	1x	--	--	--	--	--	--	04/23/08 14:20	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

DRAFT: Percent Dry Weight (Solids) per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8040746 **Other dry Preparation Method: Dry Weight**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8040746-DUP1)					**QC Source: PRD0506-21**				**Extracted: 04/21/08 07:56**					
% Solids	NCA SOP	92.6	---	0.0100	% by Weight	1x	91.8	--	--	--	0.868%	(20)	04/21/08 07:56	

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Port of Portland-Marine Terminal 6	Project Name:	**T4 Grain**	
7201 N Marine Dr.	Project Number:	T4 Grain	Report Created:
Portland, OR 97203	Project Manager:	Jenifer Fonseca-Litrell	04/25/08 08:39

Notes and Definitions

Report Specific Notes:

M7	-	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

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TestAmerica
ANALYTICAL TESTING CORPORATION

[illegible] North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210
[illegible] E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
[illegible] Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PRD0519

CLIENT: Port of Portland

REPORT TO: Jenifer Fonszca-Littrell
ADDRESS: 7201 North Marine Dr, PTLD OR
PHONE: 503 240 2013 FAX: 503 548 5949

INVOICE TO: Port of Portland

P.O. NUMBER:

PROJECT NAME: T4 Grain Tank HWD
PROJECT NUMBER:
SAMPLED BY: J. Fonszca-Littrell

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 (STD) | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD) | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges

PRESERVATIVE: NA | NA | NA

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	Total Metals	RCRA & TCLP	PCB	MATRIX (W, S, O)	# OF CONT.	LOCATION COMMENTS	TA WO ID
1	T4GT041508	4-15-08/1510	✓	✓	✓	S	1		
2									
3									
4									
5									
6									
7									
8									
9									
10									

RELEASED BY: Jenifer Fonszca-Littrell DATE: 4-15-08
PRINT NAME: JENIFER FONSZCA-LITTRELL POP TIME: 1643

RECEIVED BY: [signature] DATE: 4/15/08
PRINT NAME: J. Ireland FIRM: TAP TIME: 16:43

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS:

TEMP: 23.8

PAGE OF

TAL-1000 0907

TestAmerica Sample Receipt Checklist

Cooler ID(s):

Received by: *(section A)*
Date: 4/15/08
Time: 16:42
Initials: JL

Unpacked by: *(section B)*
Date: 4/15/08
Initials: JT

Logged-in by:
Date: 4/15/08
Initials: JT

Work Order No. PRD0519
Client: Port of Portland
Project: T4 Grain Tank HWD

Temperature out of range:
___Not enough Ice
X No Ice
___Ice Melted
___W/in 4 Hours
___Other:_____

***ESI Clients *(see Section C)*

Cooler Temperature (IR): 23.4 °C plastic glass NA *(oil/air samples, ESI client)* Temperature Blank: _____ °C

A

Custody Seals: (#____)

Signature: Y N Dated:_____
X None

Container Type:
____#Cooler(s)
____#Box(s)
X None (___#Other:_____)

Coolant Type:
____Gel Ice
____Loose Ice
X None

Packing Material:
____Bubble Bags
____Styrofoam Cubbies
X None (____Other:_____)

Received from:
____TA Courier
____Senvoy
____UPS
____Fed Ex
X Client
____TDP
____DHL
____SDS
____Mid-Valley
____GS/TA
____GS/Senvoy
____Other:
_____

B

Sample Status:
(If N circled, see NOD)

General:
Intact? Y N
Containers Match COC? Y N none given
IDs Match COC? Y N

For Analyses Requested:
Correct Type & Preservation? Y N
Adequate Volume? Y N
Within Hold Time? Y N

Volatiles/ Oil Quality:
VOAs/ Syringes free of Headspace? Y N NA
TB on COC? not provided Y N NA

Metals:
HNO3 Preserved? Y N NA
Dissolved Metals Filtered? Y N NA

C

***ESI Clients Only:

Temperature Blank: _____ °C not provided

All preserved bottles checked Y N NA *(voas/soils/all unp.)*
All preserved accordingly? Y N *(see NOD)* NA *(voas/soils/all unp.)*

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other: _____

Project Managers:

Comments: _____

PM Reviewed: _____ *(Initial/Date)*

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
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ORELAP#: OR100021

August 20, 2008

Ashleigh Fines
Ash Creek Associates, Inc.
9615 SW Allen Blvd. Suite 106
Beaverton, OR 97005

RE: T4 Grain Tank Demo

Enclosed are the results of analyses for samples received by the laboratory on 08/06/08 17:00. The following list is a summary of the Work Orders contained in this report, generated on 08/20/08 11:56.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PRH0178	T4 Grain Tank Demo	1484-00 Task 1

TestAmerica Portland

Darrell Auvil, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
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Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
IDW	PRH0178-01	Soil	08/06/08 12:05	08/06/08 17:00

TestAmerica Portland

Darrell Auvil, Project Manager

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BEAVERTON, OR 97008-7132
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Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Hydrocarbon Identification per NW-TPH Methodology

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRH0178-01 (IDW)			**Soil**			**Sampled: 08/06/08 12:05**				
Gasoline Range Hydrocarbons	NWTPH HCID	**DET**	-----	20.0	mg/kg dry	1x	8080237	08/08/08 08:50	08/08/08 13:56	
Diesel Range Hydrocarbons	"	**DET**	-----	50.1	"	"	"	"	"	**Q6**
Heavy Oil Range Hydrocarbons	"	**DET**	-----	100	"	"	"	"	"	
Surrogate(s): 1-Chlorooctadecane				*151%*		*50 - 150 %*	*"*		*"*	***ZX***

TestAmerica Portland

Darrell Auvil, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Total Metals per EPA 6000/7000 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRH0178-01 (IDW)			**Soil**			**Sampled: 08/06/08 12:05**				
Arsenic	EPA 6020	**4.62**	-----	0.531	mg/kg dry	1x	8080301	08/11/08 11:49	08/12/08 00:19	
Barium	"	**306**	-----	0.531	"	"	"	"	"	
Cadmium	"	**2.84**	-----	0.531	"	"	"	"	"	
Chromium	"	**626**	-----	1.06	"	2x	"	"	08/12/08 14:19	
Lead	"	**228**	-----	0.531	"	1x	"	"	08/12/08 00:19	
Selenium	"	**0.774**	-----	0.531	"	"	"	"	08/12/08 14:41	
Silver	"	ND	-----	0.531	"	"	"	"	08/12/08 00:19	

TestAmerica Portland

Darrell Auvil, Project Manager

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ph: (503) 906.9200 fax: (503) 906.9210

Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Total Mercury per EPA Method 7471A

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRH0178-01 (IDW)			**Soil**			**Sampled: 08/06/08 12:05**				
Mercury	EPA 7471A	**0.124**	-----	0.0977	mg/kg dry	1x	8080316	08/11/08 14:52	08/12/08 10:40	

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Darrell Auvil, Project Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Polychlorinated Biphenyls per EPA Method 8082

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRH0178-01 (IDW)			**Soil**			**Sampled: 08/06/08 12:05**				
Aroclor 1016	EPA 8082	ND	-----	34.9	ug/kg dry	1x	8080179	08/07/08 09:30	08/07/08 16:26	
Aroclor 1221	"	ND	-----	70.1	"	"	"	"	"	
Aroclor 1232	"	ND	-----	34.9	"	"	"	"	"	
Aroclor 1242	"	ND	-----	34.9	"	"	"	"	"	
Aroclor 1248	"	ND	-----	34.9	"	"	"	"	"	
Aroclor 1254	"	**546**	-----	34.9	"	"	"	"	"	
Aroclor 1260	"	ND	-----	34.9	"	"	"	"	"	
Surrogate(s): Decachlorobiphenyl				*76.6%*		*16 - 149 %*	"			"

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Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Percent Dry Weight (Solids) per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRH0178-01 (IDW)				**Soil**			**Sampled: 08/06/08 12:05**			
% Solids	NCA SOP	**95.1**	-----	0.0100	% by Weight	1x	8080342	08/12/08 09:45	08/12/08 09:45	

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9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Hydrocarbon Identification per NW-TPH Methodology - Laboratory Quality Control Results

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QC Batch: 8080237 **Soil Preparation Method: EPA 3550 Fuels**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8080237-BLK1)								**Extracted: 08/08/08 08:50**						
Gasoline Range Hydrocarbons	NWTPH HCID	ND	---	20.0	mg/kg wet	1x	--	--	--	--	--	--	08/08/08 13:56	
Diesel Range Hydrocarbons	"	ND	---	50.0	"	"	--	--	--	--	--	--	"	
Heavy Oil Range Hydrocarbons	"	ND	---	100	"	"	--	--	--	--	--	--	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 108%*			*Limits: 50-150%*	*"*							*08/08/08 13:56*	
Duplicate (8080237-DUP1)					**QC Source: PRH0155-01**			**Extracted: 08/08/08 08:50**						
Gasoline Range Hydrocarbons	NWTPH HCID	DET	---	21.9	mg/kg dry	1x	110	--	--	--	12.6%	(50)	08/08/08 14:33	
Diesel Range Hydrocarbons	"	DET	---	54.8	"	"	114	--	--	--	25.0%	"	"	Q10
Heavy Oil Range Hydrocarbons	"	DET	---	110	"	"	235	--	--	--	18.2%	"	"	
Surrogate(s): 1-Chlorooctadecane		*Recovery: 102%*			*Limits: 50-150%*	*"*							*08/08/08 14:33*	

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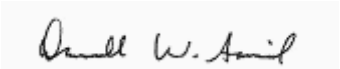

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9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 8080301 **Soil Preparation Method: EPA 3050**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8080301-BLK1)								Extracted: 08/11/08 11:49						
Arsenic	EPA 6020	ND	---	0.485	mg/kg wet	1x	--	--	--	--	--	--	08/12/08 00:04	
Barium	"	ND	---	0.485	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.485	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.485	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.485	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.485	"	"	--	--	--	--	--	--	08/12/08 14:04	
Silver	"	ND	---	0.485	"	"	--	--	--	--	--	--	08/12/08 00:04	
LCS (8080301-BS1)								Extracted: 08/11/08 11:49						
Arsenic	EPA 6020	8.82	---	0.481	mg/kg wet	1x	--	9.62	91.7%	(80-120)	--	--	08/12/08 00:11	
Barium	"	9.06	---	0.481	"	"	--	"	94.2%	"	--	--	"	
Cadmium	"	8.43	---	0.481	"	"	--	"	87.6%	"	--	--	"	
Chromium	"	9.23	---	0.481	"	"	--	"	96.0%	"	--	--	"	
Lead	"	9.17	---	0.481	"	"	--	"	95.3%	"	--	--	"	
Selenium	"	8.26	---	0.481	"	"	--	"	85.9%	"	--	--	08/12/08 14:12	
Silver	"	4.39	---	0.481	"	"	--	4.81	91.3%	"	--	--	08/12/08 00:11	
Duplicate (8080301-DUP1)							QC Source: PRH0178-01		Extracted: 08/11/08 11:49					
Arsenic	EPA 6020	4.70	---	0.542	mg/kg dry	1x	4.62	--	--	--	1.62%	(40)	08/12/08 00:26	
Barium	"	273	---	0.542	"	"	306	--	--	--	11.5%	"	"	
Cadmium	"	2.45	---	0.542	"	"	2.84	--	--	--	14.8%	"	"	
Chromium	"	802	---	1.08	"	2x	626	--	--	--	24.7%	"	08/12/08 14:26	
Lead	"	203	---	0.542	"	1x	228	--	--	--	11.4%	"	08/12/08 00:26	
Selenium	"	ND	---	0.542	"	"	0.774	--	--	--	43.2%	"	08/12/08 14:48	R4
Silver	"	ND	---	0.542	"	"	ND	--	--	--	2.25%	"	08/12/08 00:26	
Matrix Spike (8080301-MS1)							QC Source: PRH0178-01		Extracted: 08/11/08 11:49					
Arsenic	EPA 6020	10.9	---	0.506	mg/kg dry	1x	4.62	10.1	62.2%	(75-125)	--	--	08/12/08 00:40	M2
Barium	"	342	---	0.506	"	"	306	"	354%	"	--	--	"	M1
Cadmium	"	11.4	---	0.506	"	"	2.84	"	84.7%	"	--	--	"	
Chromium	"	811	---	1.01	"	2x	626	"	1830%	"	--	--	08/12/08 14:34	MHA
Lead	"	193	---	0.506	"	1x	228	"	-349%	"	--	--	08/12/08 00:40	M2
Selenium	"	7.27	---	0.506	"	"	0.774	"	64.3%	"	--	--	08/12/08 15:03	M2
Silver	"	4.89	---	0.506	"	"	0.405	5.06	88.8%	"	--	--	08/12/08 00:40	

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Ash Creek Associates, Inc.	Project Name:	**T4 Grain Tank Demo**	
9615 SW Allen Blvd. Suite 106	Project Number:	1484-00 Task 1	Report Created:
Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Total Metals per EPA 6000/7000 Series Methods - Laboratory Quality Control Results

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QC Batch: 8080301 **Soil Preparation Method: EPA 3050**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8080301-MS2)					QC Source: PRH0321-02			Extracted: 08/11/08 11:49						
Arsenic	EPA 6020	17.5	---	0.592	mg/kg dry	1x	9.85	11.8	64.9%	(75-125)	--	--	08/12/08 02:14	M1
Barium	"	88.8	---	0.592	"	"	79.3	"	80.0%	"	--	--	"	MHA
Cadmium	"	11.4	---	0.592	"	"	1.36	"	84.9%	"	--	--	"	
Chromium	"	76.7	---	0.592	"	"	66.6	"	85.5%	"	--	--	"	
Lead	"	77.2	---	0.592	"	"	72.0	"	44.0%	"	--	--	"	MHA
Selenium	"	10.4	---	0.592	"	"	0.454	"	83.8%	"	--	--	08/12/08 17:18	
Silver	"	5.53	---	0.592	"	"	0.204	5.92	90.1%	"	--	--	08/12/08 02:14	

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Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Total Mercury per EPA Method 7471A - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8080316 **Soil Preparation Method: EPA 7471A**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8080316-BLK1)								**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	ND	---	0.100	mg/kg wet	1x	--	--	--	--	--	--	08/12/08 10:19	
LCS (8080316-BS1)								**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	1.03	---	0.100	mg/kg wet	1x	--	1.00	103%	(80-120)	--	--	08/12/08 10:21	
LCS Dup (8080316-BSD1)								**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	1.03	---	0.100	mg/kg wet	1x	--	1.00	103%	(80-120)	0.160%	(20)	08/12/08 10:26	
Duplicate (8080316-DUP1)				**QC Source: PRH0178-01**				**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	0.302	---	0.0996	mg/kg dry	1x	0.124	--	--	--	83.5%	(40)	08/12/08 10:30	R4
Matrix Spike (8080316-MS1)				**QC Source: PRH0178-01**				**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	1.10	---	0.100	mg/kg dry	1x	0.124	1.00	97.2%	(75-125)	--	--	08/12/08 10:33	
Matrix Spike Dup (8080316-MSD1)				**QC Source: PRH0178-01**				**Extracted: 08/11/08 14:52**						
Mercury	EPA 7471A	1.10	---	0.0992	mg/kg dry	1x	0.124	0.992	98.0%	(75-125)	0.0584%	(40)	08/12/08 10:37	

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Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Polychlorinated Biphenyls per EPA Method 8082 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8080179 **Soil Preparation Method: EPA 3550**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8080179-BLK1)								**Extracted: 08/07/08 09:30**						
Aroclor 1016	EPA 8082	ND	---	33.3	ug/kg wet	1x	--	--	--	--	--	--	08/07/08 17:58	
Aroclor 1221	"	ND	---	66.9	"	"	--	--	--	--	--	--	"	
Aroclor 1232	"	ND	---	33.3	"	"	--	--	--	--	--	--	"	
Aroclor 1242	"	ND	---	33.3	"	"	--	--	--	--	--	--	"	
Aroclor 1248	"	ND	---	33.3	"	"	--	--	--	--	--	--	"	
Aroclor 1254	"	ND	---	33.3	"	"	--	--	--	--	--	--	"	
Aroclor 1260	"	ND	---	33.3	"	"	--	--	--	--	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 80.4%*			*Limits: 16-149%*	*"*							*08/07/08 17:58*	
LCS (8080179-BS1)								**Extracted: 08/07/08 09:30**						
Aroclor 1016	EPA 8082	341	---	33.2	ug/kg wet	1x	--	332	103%	(57-135)	--	--	08/07/08 18:21	
Aroclor 1260	"	287	---	33.2	"	"	--	"	86.3%	(60-135)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 85.6%*			*Limits: 16-149%*	*"*							*08/07/08 18:21*	
Matrix Spike (8080179-MS1)					**QC Source: PRH0178-01**			**Extracted: 08/07/08 09:30**						
Aroclor 1016	EPA 8082	379	---	34.9	ug/kg dry	1x	ND	350	108%	(37-145)	--	--	08/07/08 16:49	
Aroclor 1260	"	371	---	34.9	"	"	ND	"	106%	(25-144)	--	--	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 76.5%*			*Limits: 16-149%*	*"*							*08/07/08 16:49*	
Matrix Spike Dup (8080179-MSD1)					**QC Source: PRH0178-01**			**Extracted: 08/07/08 09:30**						
Aroclor 1016	EPA 8082	445	---	35.0	ug/kg dry	1x	ND	350	127%	(37-145)	16.0%	(26)	08/07/08 17:12	
Aroclor 1260	"	474	---	35.0	"	"	ND	"	135%	(25-144)	24.3%	(30)	"	
Surrogate(s): Decachlorobiphenyl		*Recovery: 78.3%*			*Limits: 16-149%*	*"*							*08/07/08 17:12*	

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Percent Dry Weight (Solids) per Standard Methods - Laboratory Quality Control Results

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QC Batch: 8080342 **Other dry Preparation Method: Dry Weight**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8080342-DUP1)				**QC Source: PRH0166-05**					**Extracted: 08/12/08 09:45**					
% Solids	NCA SOP	87.8	---	0.0100	% by Weight	1x	87.4	--	--	--	0.457%	(20)	08/12/08 09:45	

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Beaverton, OR 97005	Project Manager:	Ashleigh Fines	08/20/08 11:56

Notes and Definitions

Report Specific Notes:

M1	-	The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
M2	-	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
Q10	-	Hydrocarbon pattern most closely resembles a blend of gasoline overlap as well as oil overlap.
Q6	-	Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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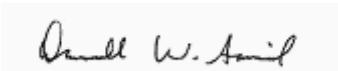

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11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: PRH0178

CLIENT: Ash Creek Associates

REPORT TO: Ashleigh Fines

ADDRESS: 9615 SW Allen, Suite 106
Beaverton OR 97005

PHONE: 503.924.4704 FAX: 503 924.4708 7

INVOICE TO: Same

P.O. NUMBER:

PROJECT NAME: T4 Grain Tank

PROJECT NUMBER: 1484-00 Task 1

SAMPLED BY: D. Urquhart

TURNAROUND REQUEST
in Business Days *

Organic & Inorganic Analyses: 10 (STD.) | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 (STD.) | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

PRESERVATIVE

REQUESTED ANALYSES

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	NWTPH-HCID	PCBs by EPA Method 8082	RCRA 8 Metals	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	IDW	8/6/08 1205	X	X	X	S	1		
2									
3									
4									
5									
6									
7									
8									
9									
10									

RELEASED BY: Douglas Urquhart		DATE: 8/6/08	RECEIVED BY: Bob F		DATE: 8/6/8
PRINT NAME: Douglas Urquhart	FIRM: ACA	TIME: 1527	PRINT NAME: Bob F	FIRM: TAP	TIME: 15:27
RELEASED BY: Bob F		DATE: 8/6/8	RECEIVED BY: James Ireland		DATE: 8/6/08
PRINT NAME: Bob F	FIRM: TAP	TIME: 17:00	PRINT NAME: J. Ireland	FIRM: TAP	TIME: 17:00

ADDITIONAL REMARKS:

TEMP: 2.3

PAGE OF

TAL-1000(0108)

TestAmerica Sample Receipt Checklist

Received by: (section A) Date: 8/6/08 Time: 17:00 Initials: JI

Unpacked by: (section B) Date: 8/6/08 Initials: JI

Logged-in by: Date: 8/10/08 Initials: JI

Cooler ID(s)

Work Order No. PRH0178

Client: Ash Creek Assoc.

Project: T4 Grain Tank

Temperature out of range

___Not enough Ice
___No Ice
___Ice Melted
___Win 4 Hours
___Other

***ESI Clients (see Section C)

Cooler Temperature (IR): 2.3 °C (plastic) glass NA (oil/air OR ESI client) Temperature Blank: _____ °C DIGI #1 #2

A

Custody Seals: (#____)

Signature: Y N Dated:_____

X None

Container Type:

1 #Cooler(s)

____#Box(s)

____None (___#Other:_____)

Coolant Type:

____Gel/ Blue Ice

X Loose Ice

____None

Packing Material:

____Bubble Bags

____Styrofoam Cubbies

____Peanuts

X None (____Other:_____)

Received from:

X TA Courier

____Senvoy

____UPS

____Fed Ex

____Client

____TDP

____USPS

____SDS

____Mid-Valley

____GS/TA

____GS/Senvoy

____Other:

_____

B

Sample Status:

(If N circled, see NOD)

General:

Intact? (Y) N

Containers Match COC? (Y) N none given

IDs Match COC? (Y) N

For Analyses Requested:

Cyanide checked? Y N (NA)

Correct Type & Preservation? (Y) N

Adequate Volume? (Y) N

Within Hold Time? (Y) N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace? Y N (NA)

TB on COC? not provided Y N (NA)

Metals:

HNO3 Preserved? Y N (NA)

Dissolved Metals Filtered? Y N (NA)

C

***ESI Clients Only:

Temperature Blank: _____ °C not provided DIGI #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other: _____

Comments: _____

Project Managers:

PM Reviewed: _____ (Initial/Date)

Appendix G

Waste Manifests

108

397726

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD 981771546
2. Page 1 of: 1
3. Emergency Response Phone: 503 224 3206
4. Manifest Tracking Number: 001388842 FLE

5. Generator's Name and Mailing Address: Port of Portland - Jennifer Fonseca Littrell, P.O. Box 3529 Portland OR 97208
Generator's Site Address (if different than mailing address): Port of Portland T-4, 11040 N. Lombard St. Portland OR 97203
Generator's Phone: 503-224-3206

6. Transporter 1 Company Name: AGG
U.S. EPA ID Number: ORQ000019968

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Chemical Waste Management of Northwest, 17629 Cedar Springs Lane, Arlington OR 97812
U.S. EPA ID Number: ORD089452353
Facility's Phone: 541-454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. Hazardous Waste Solid, N.O.S. (Chromium), 9, NA3077, PG III	1	CM	~~10~~ 7.55	T	D007
	2.					
	3.					
	4.					

RECEIVED AUG 18 2008 By JF.L.

14. Special Handling Instructions and Additional Information: (1) OR297567 SU3B, 15100P, ERG#171 Job#8749 7.55T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JENIFER FONSECA - LITTRELL
Signature: Jennifer Fonseca Littrell
Month 8 Day 11 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Donald J Good
Signature: [signature]
Month 8 Day 11 Year 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Unverchanged Total Quantity - Q 8/11/08
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. Hill 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand
Signature: [signature]
Month 8 Day 11 Year 08

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

3968602

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD981771546
2. Page 1 of 1
3. Emergency Response Phone: 503-224-3206
4. Manifest Tracking Number: 001388819 FLE

5. Generator's Name and Mailing Address: Portland + Jennifer Fonseca Littrell, PO Box 3529 Portland OR 97208
Generator's Phone: 503 224 3206

Generator's Site Address (if different than mailing address): Port Portland T-4, 11040 N. Lombard St, Portland OR 97203

6. Transporter 1 Company Name: AGG
U.S. EPA ID Number: ORQ000019968

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Chemical Waste Management of Northwest, 17629 Cedar Springs Lane, Arlington, OR 97804
U.S. EPA ID Number: ORD089452353
Facility's Phone: 541-454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. Hazardous Waste Solid N.O.S. (Chromium) 9, NA3077, PG III	1	CM	11600 11	P T	D007
	2.					
	3.					
	4.					

RECEIVED JUL 21 2008 By KF-2

14. Special Handling Instructions and Additional Information
(1) OR297567
ERG#171
Job #5U2B, 11600P, 5.80T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jennifer Fonseca Littrell
Signature: [signature]
Month 6 Day 30 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Donald Good
Signature: [signature]
Month 6 Day 30 Year 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Never added pounds - [signature] 6/30/08
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H111 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand
Signature: [signature]
Month 6 Day 30 Year 08

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

396805

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD981771546
2. Page 1 of 1
3. Emergency Response Phone: 503-224-3206
4. Manifest Tracking Number: 001388816 FLE

5. Generator's Name and Mailing Address: Port of Portland - Jennifer Fonseca-Littrell, P.O. Box 3529, Portland OR 97208
Generator's Phone: 503-224-3206
Generator's Site Address (if different than mailing address): Terminal 4, 11040 N. Lombard St, Portland OR 97203

6. Transporter 1 Company Name: AGG
U.S. EPA ID Number: ORQ000019968

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Chemical Waste Management of Northwest, 17629 Cedar Springs Lane, Arlington OR 97812
Facility's Phone: 541-454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. Hazardous Waste Solid, NOS (Chromium), 9, NA3077, PG III	2	CM	17 ~~22~~	T T	D007
	2.					
	3.					
	4.					

RECEIVED JUL 21 2008 By JF-Z

14. Special Handling Instructions and Additional Information
1) OR297567
ERG # 171
SU2B, 33500P, 16175T
Job #

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jennifer Fonseca-Littrell
Signature: [signature]
Month Day Year: 06 26 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible]
Signature: [signature]
Month Day Year: 6 26 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year:

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Driver adjusted Total Quantity - [illegible]
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. Hill 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand
Signature: [signature]
Month Day Year: 6 26 08

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

RMS

108 396719 V 15

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	ORD981771546	1	503-224-3206	001388786 FLE

5. Generator's Name and Mailing Address
PORT OF PORTLAND - JENNIFER FONSECA LITTRELL
PO BOX 3529
PORTLAND OR 97208
Generator's Phone: 503-224-3206

Generator's Site Address (if different than mailing address)
PORT OF PORTLAND T-4
11040 N LOMBARD
PORTLAND OR 97203

6. Transporter 1 Company Name: AGG — U.S. EPA ID Number: ORQ000019968

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT OF NORTH WEST
17629 CEDAR SPRING LANE ARLINGTON OR 97812
Facility's Phone: 541-454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. HAZARDOUS WASTE, SOLID, NOS (CHROMIUM), 9, NA 3077, PG III	2	CM	~~24~~ 19	~~[illegible]~~ T	D007
	2.			KS 6/23/08		
	3.					
	4.					

RECEIVED JUN 30 2008 By

14. Special Handling Instructions and Additional Information
(1) OR297567
ERG 171
SUBA, 37850P, 10.93T

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JENIFER FONSECA-LITTRELL — Signature: Jenifer Fonseca-Littrell — Month 6 Day 23 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [signature] Ray Sutton — Signature: [signature] — Month 6 Day 23 Year 8
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity changed by driver JM 6-23-08
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 9/11 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Sue McAhren — Signature: Sue McAhren — Month 06 Day 23 Year 08

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

AMS

346650

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD981771546
2. Page 1 of 1
3. Emergency Response Phone: 503 224 3206
4. Manifest Tracking Number: 001388808 FLE

5. Generator's Name and Mailing Address: Port of Portland - Jenifer Fonseca-Littell, P.O. Box 3529 Portland, OR 97208
Generator's Site Address (if different than mailing address): Port of Portland T-4, 11040 N. Lombard St. Portland OR 97203
Generator's Phone: 503-224-3206

6. Transporter 1 Company Name: Waste Xpress
U.S. EPA ID Number: ORQ0000 23150

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Chemical Waste Management of Northwest, 17629 Cedar Springs Lane Arlington, OR 97812
U.S. EPA ID Number: ORD089452353
Facility's Phone: 541-454-2641

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
RQ	1. Hazardous Waste, Solid, Nos (Ni Vanadium) 9, NA3077, PG III	10	DM	550	G	D007
	2.					
	3.					
	4.					

RECEIVED JUN 30 2008 By

14. Special Handling Instructions and Additional Information
1) OR297567
ERG# 171
SUBB, 4400P, 5520P
Job# 8533

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jenifer Fonseca-Littell
Signature: Jenifer Fonseca-Littell
Month 6 Day 11 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Steve DeLaur
Signature: Steve DeLaur
Month 6 Day 11 Year 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H111 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand
Signature: Janice Strand
Month 6 Day 19 Year 08

GENERATOR — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

102 396503 KP

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD981971546
2. Page 1 of 1
3. Emergency Response Phone: 503-224-3206
4. Manifest Tracking Number: 001388807 FLE

5. Generator's Name and Mailing Address: Port of Portland - Jennifer Fonseca-Littrell, P.O. Box 3529, Portland, OR 97208
Generator's Site Address (if different than mailing address): Portland T4, 11040 N. Lombard St, Portland, OR 97203
Generator's Phone: 503-224-3206

6. Transporter 1 Company Name: AGG — U.S. EPA ID Number: ORQ0000199168
7. Transporter 2 Company Name — U.S. EPA ID Number:
8. Designated Facility Name and Site Address: Chemical Waste Management of Northwest, 17629 Cedar Springs Lane, Arlington OR 97812 — U.S. EPA ID Number: ORD089452353
Facility's Phone: 541-454-2643

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RQ Hazardous Waste, Solid, N.O.S (Chromium), 9, NA3077, PG III	2	CM	~~23.5~~ 29	T	D007
	2.					
	3.					
	4.					

RECEIVED JUN 30 2008 By

14. Special Handling Instructions and Additional information
1) OR297567
Job # 8533 — SUZA 400.00P, 24.40T, ERG171

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: JENNIFER FONSECA-LITTRELL — Signature: [signature] — Month 6 Day 11 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name — Signature — Month Day Year
Transporter 2 Printed/Typed Name: [illegible] — Signature: [illegible] — Month 6 Day 11 Year 8

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Quantity changed per Jeremy/Kemp/Waterpress 6-17-08
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H111 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand — Signature: [signature] — Month 6 Day 12 Year 08

GENERATOR — INT'L — TRANSPORTER — DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO GENERATOR

346247

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD 981771546
2. Page 1 of 1
3. Emergency Response Phone: 503-224-3206
4. Manifest Tracking Number: 000726518 FLE

5. Generator's Name and Mailing Address: Port of Portland, P.O. Box 3529, Portland OR 97208 — Attn Jenifer Fonseca
Generator's Site Address (if different than mailing address): 11040 N. Lombard, Portland, OR 97203 — T-4
Generator's Phone: 503-224-3206

6. Transporter 1 Company Name: ~~Waste Xpress~~ AGG — ORQ000019968 — 6-4-08
U.S. EPA ID Number: ~~ORQ 0000~~ 09968

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Chemical Waste Management of North West, 17629 Cedar Springs Lane, Arlington OR 97812
Facility's Phone: 541-454-2643
U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
RQ	1. Hazardous Waste, Solid, N.O.S. (Chromium) 9, NA3077, PG III	2	~~SM~~	00024 21.20	T	D007		
	2.							
	3.							
	4.							

RECEIVED JUN 23 2008 By [signature]

14. Special Handling Instructions and Additional Information
(1) OR297567
#ERG #171
SU3A, 42400P, 21.20T
Job # 8494

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jenifer Fonseca-Littrell — Signature: [signature] — Month 6 Day 2 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ronald L Russell — Signature: [signature] — Month 6 Day 2 Year 08
Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Transporter 1 EPA ID corrected per gate log [initials] 6-4-08
Driver changed Total Qty [initials] 6/2/08
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. Hill 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Janice Strand — Signature: [signature] — Month 6 Day 2 Year 08

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

T-4 DRUM

WASTE MANAGEMENT

Hillsboro Landfill, Inc
3205 SE Minter Bridge
Hillsboro, OR, 97123
Ph: (503)-640-9427

Original
Ticket# 1181820

Customer Name WASTEXPRESS WASTE XPRESS
Ticket Date 10/30/2008
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest NA
Destination
PO 1030100R
Profile 1030100R (PCS)
Generator OR-PORTOFPORTLANDT4 PORT OF PORTLAND T-4

Carrier SELFHLD SELF HAULED
Vehicle# WASTE EXPRESS Volume
Container
Driver STEVE
Check#
Billing # 0001576
Gen EPA ID

Grid

	Time	Scale	Operator	Inbound		
In	10/30/2008 11:29:01	Inbound 1	trc		Gross	12200 lb
Out	10/30/2008 11:53:25	Outbound	trc		Tare	11800 lb
					Net	400 lb
					Tons	0.20

Comments