SITE CHARACTERIZATION REPORT FOR THE FORMER LUDLOW STREET WORKS SITE

Yonkers, New York

Site Number V00562

Prepared For:

Consolidated Edison Company of New York, Inc.

31-01 20th Avenue
Long Island City, NY 11105

Prepared By:

PARSONS

Somerset, New Jersey

MARCH 2011

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MARCH 2011

"*I Eric Gaulin, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.*"

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SECTION 1

INTRODUCTION

1.1 SITE CHARACTERIZATION STUDY OBJECTIVES

The specific objectives of this Site Characterization for the former Ludlow Street Works (a former manufactured gas plant (MGP) and holder station in Yonkers, New York) are to assess whether hazardous substances have been released to the environment and may be present onsite, if they may have migrated offsite, and whether they may have impacted human health or the environment. If no potential impacts are identified, a "no further action" conclusion may be warranted. If potential impacts are verified, additional sampling may be needed to determine the nature and extent of those impacts, or the need for remediation and interim measures to address the impacts. . These objectives are consistent with those of the New York State Department of Environmental Conservation's (NYSDEC) comprehensive remedial investigation process, specifically Chapter 3 of the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation.

1.2 REPORT ORGANIZATION

The Site Characterization was conducted by Parsons in June and July 2010. The field investigation activities and results are documented in this report in the following sections and appendices:

- Section 1: Introduction
- Section 2: Site Background
- Section 3: Site Characterization Activities
- Section 4: Site Characterization Results
- Section 5: Exposure Assessment
- Section 6: Conclusions and Recommendations
- Section 7: References

- Appendix A: Test Pit Logs
- Appendix B: Soil Boring and Monitoring Well Logs
- Appendix C: Groundwater Sampling Logs
- Appendix D: Data Usability Summary Report
- Appendix E: Hydrocarbon Fingerprint Results

SECTION 2

SITE BACKGROUND

2.1 SITE OVERVIEW

The Consolidated Edison Company of New York, Inc. (Con Edison) has entered into a Voluntary Cleanup Agreement with the NYSDEC to investigate, and if necessary, remediate potential impacts at former MGP properties. One of these facilities, the former Ludlow Street Works (Voluntary Cleanup Agreement Index No. D2-0003-02-08; Site ID No. V00562) a former MGP and holder station, was operated between 1879 and 1936 on a property formerly owned by predecessor companies of Con Edison. Currently, the former Ludlow Street Works Site (Site) is owned by the City of Yonkers and is part of the Yonkers Department of Public Works (DPW) storage yard in the neighborhood of Ludlow in Yonkers, NY (Figure 1).

The Site is located in a residential and commercial neighborhood at 162 Downing Street, Yonkers, New York. The Site consists of approximately 1.35 acres and is identified as Section 1, Block 171, Lot 1 (Figure 2). Currently there is only one small single-story concrete block structure located on the southeastern corner of the Site. The northern and southern portions of the Site are divided by a concrete block retaining wall. The southern portion of the Site, where the former MGP and holder station structures were located, is a parking lot consisting of gravel, dirt and bituminous asphalt which is in poor condition. The south-central portion of the Site is used for road salt storage. The northern portion of the Site is approximately 10 to 15 feet higher than the southern portion (GEI, 2003) and is overgrown with trees and covered by piles of asphalt, concrete, trash, soil, and other unidentifiable materials.

2.2 ADJOINING PROPERTY DESCRIPTION

The Site is located within an industrial district, bordered to the north by Downing Street; to the east by a commercial automobile repair garage, and a metal fabrication shop; and to the south by Knowles Street (formerly Fernbrook Street) and a Dunkin Donuts bakery. The New York Central Railroad is located west of the Site. The Site is located approximately 700 feet east of the Hudson River (GEI, 2003).

2.3 SITE HISTORY

Historical research was previously conducted and is documented in the *Manufactured Gas Plant History, Ludlow Street Work, Yonkers, New York* (GEI, 2003) which indicates that the Site was operated as an MGP and gas holder station by several predecessor companies of Con Edison on the southern portion of the Site between 1879 and 1936 and on the northern portion between 1923 and 1936. The Municipal Gas Company of Yonkers (i.e., Yonkers Municipal Gas Company) acquired the southern portion of the Site in 1879 from a private owner. The Westchester Lighting Company acquired the northern portion of the Site in 1923. The Municipal Gas Company constructed an MGP at the Site and began manufacturing gas around 1880.

In 1886, there were three buildings, two gas holders, and three underground naphtha storage tanks located on the Site (Figure 2). One holder was located on the southern portion of the Site

and had a 22,800 cubic feet (cu. ft.) capacity. The other holder was located on the northern portion of the Site and had a 50,000 cubic cu. ft. capacity. One building, which contained the lime house, purifying house, and meter room, was located at the southwest corner side of the Site. To the north of this building was the engine room and retorts building. A boiler house was located at the southeastern corner of the Site. The underground naphtha storage tanks were located approximately at the middle of the west side of the Site. An underground pipe was used to pump naphtha from boats on the Hudson River to the tanks. By 1898, the plant was no longer manufacturing gas.

A third larger gas holder (250,000 cu. ft.) was constructed before 1907, replacing the building that contained the lime house, purifying house, and meter room and a portion of the retorts and engine room building. The two smaller holders were removed from the Site between 1917 and 1931. By 1936, the Site was no longer used as a holder station. It is not known what the Site was utilized for between 1936 and 1946 (GEI, 2003). The Site was sold in 1946 and was owned by various bus companies for bus storage and parking until 1973 when the City of Yonkers acquired the Site. The City of Yonkers has used the Site as a DPW storage yard for vehicles and trucks, road salt, materials, street sweeping dumping, debris, fuel tanks, asbestos-containing materials, 55-gallon drums, and other unidentified waste materials since 1973.

2.4 TOPOGRAPHY, REGIONAL GEOLOGY, AND HYDROGEOLOGY

The Site is located in the southwestern corner of Yonkers, approximately 700 feet east of the Hudson River. Based on the Site survey performed in June 2010, the ground surface elevation of the southern portion of the Site is approximately 16 feet above mean sea level (MSL) and it is estimated that the northern portion of the Site is approximately 30 feet above MSL. The Site is located in the Manhattan Prong section of the New England Uplands physiographic region of New York and is near a northeast-trending geologic contact between the Fordham Gneiss and the Inwood Marble. It is estimated that the depth to the bedrock at the Site is greater than 30 feet below ground surface (ft bgs). The bedrock is most likely overlain by glacial till deposits, alluvium, and fill material (GEI, 2003). During the Site Characterization, in July 2010, the depth to groundwater at the Site was approximately 11 ft bgs. Groundwater flows to the northwest, toward the Hudson River. As indicated in earlier reports, it is believed that groundwater levels are most likely affected by tidal fluctuation (GEI, 2003).

2.5 PREVIOUS INVESTIGATIONS/REMEDIAL MEASURES

In 1993, Vollmuth & Brush of Blue Point, New York performed a two-phase sampling and analysis program on the Site and the adjacent lots (Vollmuth and Brush, 1997). A report entitled "Phase I and II Sampling and Analysis Program 151-154 Downing Street, DPW Garage, City of Yonkers, Yonkers, NY" was prepared for the Department of Planning and Development of City of Yonkers by Vollmuth & Brush in 1997 (Vollmuth and Brush, 1997). The first phase of the investigation was a soil gas survey and the second phase was a soil sampling, collection, and laboratory analysis program. Eleven soil samples were collected from inside the former DPW garage building on the eastern abutting property and on the Site. Soil samples were analyzed for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) from depths of 0 to 2 or 2 to 4 feet below grade. Soils samples were analyzed for metals from depths of 0 to 2, 2 to 4, 6 to 8, or 10 to 12 feet below grade. Vollmuth & Brush compared the detectable levels of VOCs and SVOCs to NYSDEC Soil Cleanup Objectives, and indicated that concentrations of

VOCs and SVOCs were below the recommended standards. Five total metals (copper, iron, lead, selenium, and zinc) were detected in various soil samples above NYSDEC soil cleanup objectives.

SECTION 3

SITE CHARACTERIZATION ACTIVITIES

The following sections describe the field investigation activities conducted as part of the Site Characterization. Parsons personnel mobilized to the Site on June 2, 2010, and the field investigation activities were conducted between June and July 2010 in accordance with the NYSDEC approved *Site Characterization Work Plan* (work plan) (Parsons, 2009, revised 2010). The scope of field investigation activities included the installation of test pits, soil borings, and monitoring wells. Soil, groundwater, and non-aqueous phase liquid (NAPL) samples were collected for laboratory analysis. Since historical information indicated that the former MGP structures were located at the southern portion of the Site, field investigation activities were conducted primarily on the southern portion of the property and adjacent sidewalk. Additionally, due to drastic topographic changes at the central portion of the Site, there is very limited access to the northern portion of the Site. During all intrusive activities, a Community Air Monitoring Plan (CAMP) was implemented in accordance with the approved work plan. Sampling locations are shown on Figure 3. Table 1 provides a summary of the samples and analyses.

3.1 SITE INSPECTION AND PRELIMINARY INVESTIGATION ACTIVITIES

On June 2, 2010, a Site inspection was conducted to refine the locations of the proposed investigation points. The proposed scope of work was reviewed with Con Edison and representatives of the Yonkers DPW. Proposed locations and proposed methods were altered in the field, as necessary, based on Site conditions, access, utilities, and safety. The modifications to the sampling locations are further discussed below. Sampling location changes were made in consultation with Con Edison and the NYSDEC.

3.2 UTILITY CLEARANCE

The geophysical surveys were conducted to identify potential/possible underground conduits/utilities in the area of the proposed boring, monitoring well, and test pit locations. A geophysical survey was completed at the Site by Diversified Geophysics, Inc. (DGI), of New Hyde Park, New York prior to start of Site work. A second geophysical survey was performed by NAEVA Geophysics of Congers, New York prior to installing several boring and well locations that were relocated due to Site conditions, after work had been started.

Once the initial geophysical survey was completed, utility clearance key hole test pits were hand or vacuum excavated at each proposed soil boring and monitoring well location for subsurface utilities. Utility clearance test pits were completed by Aquifer Drilling & Testing, Inc. (ADT) of New Hyde Park, New York in June and July 2010. The typical utility clearance test pit excavation consisted of saw-cutting and jack-hammering the surface pavement (as necessary), and excavating using a Vactron, an air knife, and hand tools (as necessary) to a minimum depth of 5 ft bgs. During these excavation activities, soils were screened for VOCs using a photoionization detector (PID), their physical characteristics (e.g., soil type, grain size, color, etc.) were described, and notes of any evidence of physical impacts observed (staining, odor, sheen, non-aqueous phase liquid (NAPL), etc.) were recorded. When a utility clearance test pit could not be completed to a depth of 5 ft bgs due to the presence of underground utilities

or subsurface obstructions, the location was moved approximately 5 to 10 feet away from the original location and re-excavated. Following completion of the utility clearance test pits, each test pit was backfilled prior to drilling or excavation.

After commencing Site work, a 54-inch New York State sewer drain/easement that intersects the southwest portion of the Site was discovered. Yonkers Engineering provided detailed drawings of the subsurface utility, and after review of the drawings and completion of additional geophysical work in the vicinity of the sewer drain, Con Edison, Yonkers Engineering, and Parsons met to identify acceptable boring locations in the vicinity of the sewer drain. The proposed locations near the drain were relocated to allow for a 15-foot clearance (tolerance zone), as agreed upon between Yonkers Engineering, Con Edison, and Parsons.

3.3 TEST PIT EXCAVATION

A total of five (5) investigation test pits were advanced including TP-1, TP-2, TP-3, TP-4A/B, and TP-5, to determine the presence of MGP structure remnants and/or impacted subsurface material from the MGP operations or other historic Site uses. Test pit excavations were completed from June 14, 2010 through June 18, 2010. Test pit excavation services were provided by Environmental Closures, Inc. (ECI) under the supervision of a Parsons geologist. The test pit locations are shown on Figure 3. Test pits were advanced with a rubber-tired backhoe to the depth of the underground structures or until groundwater was encountered. Based on Site conditions and observations made during implementation of the Site characterization activities, the following additions and modifications were made to the work plan:

- TP-1 was proposed to be in the vicinity of the northern wall of the former lime house and intersection of the western portion of the former 250,000 cu. ft. holder. As per the agreement between Con Edison, Yonkers Engineering, NYSDEC, and Parsons concerning the 15-foot tolerance zone associated with the 54-inch New York State sewer/easement, TP-1 was moved north in an attempt to intersect the northwest curvature of the 250,000 cu. ft. holder.
- TP-3 was proposed to intersect the southeastern curvature of the 250,000 cu. ft. holder. As per the agreement between Con Edison, Yonkers Engineering, NYSDEC, and Parsons concerning the 15-foot tolerance zone associated with the 54-inch New York State sewer/easement, TP-3 was moved north in an attempt to intersect the northeast curvature of the 250,000 cu. ft. holder.
- TP-4 was split into TP-4A and TP-4B due to the presence of a large square brick subgrade structure abutting TP-4A to the north and TP-4B to the west was encountered.
- TP-4A was not extended deeper than 3 ft bgs due to the presence of the two 12-inch cast iron pipes extending out of the large square brick structure to the north.
- TP-4B was not extended deeper than 4.5 ft bgs due to health and safety concerns associated with heavy naphthalene and/or acetone odors and high PID readings in the vicinity; additionally, continuing further northward or deeper with the test-pit excavation could have compromised the integrity of the concrete block retaining wall to the north.

- The northern half of the 22,800 cu. ft. holder was exposed at surface grade, approximately 20 feet. TP-5 was therefore shifted north to intersect the southern curvature of this holder foundation wall.

During test pit excavation, the excavated soil and fill were temporarily placed on impervious plastic sheeting adjacent to the test pit and were put back into the excavation in reverse order from which they were removed. The test pit excavations were conducted in 6-inch lifts to their final depths. While backfilling, the lower portions of the test pits were backfilled in 12-inch lifts. The upper portions of the test pits (up to a depth of 4 ft bgs) were backfilled in 6-inch lifts using suitable excavated materials (e.g. material that did not contain deleterious materials, saturated/near saturated fill, or rocks/soils clumps bigger than 6 inches in size).

While the test pits remained open, subsurface conditions were logged and photographed, the test pit walls and floors were inspected for evidence of MGP-related impacts (e.g., odors, staining, sheens, NAPL, PID readings above background levels), soil samples were collected, and the dimensions of any subsurface features were measured. The soil characteristics, PID, and visual/odor inspection results (including photographs taken during the excavation) are summarized in the test pit logs provided in Appendix A.

Soil samples were collected from the bottom and sidewalls of the test pits to confirm whether soil had been impacted by the MGP operations. The samples were submitted to Chemtech of Mountainside, NJ (NYS DOH, ELAP Certified) for laboratory analysis for Target Compound List (TCL) VOCs by EPA Method 8260, TCL SVOCs by EPA Method 8270, TAL metals by EPA Method 6000/7000 Series, and cyanide by EPA Method 9012. A summary of samples collected and analyzed can be found in Table 1. A total of 11 soil samples were collected from the test pits and submitted for laboratory analysis. NAPL was not observed in any of the test pit excavations.

3.4 SOIL BORING INSTALLATION

A total of eight (8) soil borings (SB-1 through SB-8) were advanced during the Site characterization activities to characterize subsurface conditions. The soil borings were completed from June 14, 2010 through July 6, 2010. Soil borings were advanced by ADT under the supervision of a Parsons geologist. Soil borings were completed to depths ranging from approximately 13 to 35 ft bgs, depending on observed impacts and refusals. Soil boring locations are shown on Figure 3 and the corresponding boring logs are presented in Appendix B. Based on Site conditions and observations made during implementation of the Site characterization activities, the following additions/modifications were made to the work plan:

- SB-1 was moved north along the western property line due to the agreed upon 15-foot tolerance zone associated with the 54-inch New York State sewer/easement. This boring was advanced more easterly than planned, since the fence line was further east than anticipated.
- SB-2 was moved south due to the agreed upon 15-foot tolerance zone associated with the 54-inch New York State sewer/easement.
- No samples were collected from SB-3 due to poor recovery.
- SB-5 was shifted north approximately 20 feet in order to be positioned in the approximate center of the former 22,800 cu. ft. holder.

- SB-6 was proposed to be advanced within the former 50,000 cu. ft. holder; however, as indicated in Section 3.3, the southern edge of this holder foundation wall was encountered just under the concrete block retaining wall. Therefore, SB-6 was re-positioned between the 50,000 cu. ft. and the 22,800 cu. ft. holder foundations to determine the presence and the nature and extent of MGP residues, NAPL, or other constituents in the area.
- SB-8 was added to the scope in order to determine the presence and the nature and extent of MGP residues, NAPL, or other constituents in the northern portion of the former 250,000 cu. ft. footprint. No samples were collected due to poor recovery at this location.

Soil borings were advanced using a track-mounted or truck-mounted drill rig, and 4.25-inch inner diameter hollow stem augers (HSAs). Soil samples were collected continuously to the bottom of the boring using a 2-foot long, 2-inch diameter stainless steel split spoon sampler. Each sample was screened for the presence of VOCs using a PID and was logged. Physical characteristics of each sample were recorded (e.g., soil type, color, texture, moisture content, etc.), along with physical evidence of any impacted material (e.g., oil-like or tar-like NAPL, staining, sheens, odors, etc).

Soil samples were submitted to Chemtech and analyzed for TCL VOCs, TCL SVOCs, cyanide, and TAL metals. A summary of the soil samples collected and analyses performed is provided in Table 1. Soil samples were collected from selected zones within the borings (as described below) and were submitted for laboratory analysis:

- One sample was collected from the zone with the highest PID readings or visual impacts. If visual impacts or elevated PID readings were not observed, a sample was collected from the upper portion of the boring or directly above the water table (if present).
- One sample was collected below the impacted zone (if present) or near the base of the boring to identify the vertical extent of any impacts at the location.
- Where applicable, NAPL samples were collected and submitted to META Environmental, Inc. of Watertown, MA for hydrocarbon fingerprint analysis.

Upon completion, the boring locations were grouted with Portland cement and bentonite grout using a tremie pipe. Drilling equipment was decontaminated between each boring. Drill cuttings and decontamination water were containerized in 55-gallon steel drums and handled as described in Section 3.8.

3.5 MONITORING WELL INSTALLATION/DEVELOPMENT

A total of five (5) monitoring wells (MW-1 through MW-5) were installed during the Site characterization activities. Monitoring wells were installed between June 18, 2010 and June 28, 2010.

The monitoring well borings were advanced to a depth of 25 ft bgs with the exception of MW-3 which was completed to 33 ft bgs. Monitoring well borings were completed with 4.25-inch outside diameter hollow stem augers and a track-mounted and truck-mounted drill rig. The monitoring well screens were set at depths ranging from 5 to 27 ft bgs with the top of the screen approximately 2 feet above the observed groundwater table. Soil samples were collected from

monitoring well borings on a continuous basis and were screened for the presence of VOCs using a PID. Soil samples were selected for analysis as described above (Section 3.4).

The monitoring wells were constructed with 2-inch inner diameter, threaded, flush-joint, PVC casing and 10 to 20 feet lengths of 0.02-inch slot screen. The annular space around each well screen was backfilled with a No. 2 sand filter pack extending from the bottom of the well to at least 2 feet above the top of the screen. The annular space around the well riser was sealed with at least 2 feet of hydrated bentonite pellets on top of the sand pack. The remainder of the boring was backfilled with cement-bentonite grout to approximately 1 foot below grade. Monitoring wells MW-1 and MW-2 were finished with a locking, flush-mount box set in concrete. Monitoring wells MW-3, MW-4, and MW-5 were finished with a protective stick-up casing and bollards set in concrete.

Monitoring well development was conducted on June 28, 2010 and June 29, 2010 a minimum of 24 hours after installation. Monitoring wells were developed until reasonably free of sediment (less than 50 NTU if possible) or until the pH, temperature, Oxygen Reduction Potential (ORP), and conductivity stabilized. Monitoring well development was monitored approximately every 5 minutes by reviewing water quality indicator measurements. Well development continued until turbidity was less than 50 nephelometric turbidity units (NTUs) for three successive readings or until water quality indicators stabilized, whichever occurred first in each monitoring well with the exception of monitoring wells MW-1 and MW-4, which ran dry numerous times. The criteria for stabilization based on water quality indicators were three successive readings within 10%.

Non-disposable drilling equipment was decontaminated between monitoring well locations. Monitoring well drill cuttings, well development water, and decontamination water were containerized in 55-gallon steel drums and handled as described in Section 3.8.

3.6 SURVEYING

At the conclusion of drilling activities, Chazen, a licensed New York state land surveyor mobilized to the Site and identified the horizontal and vertical location of each new soil boring, monitoring well, and test pit location. Additionally, the survey included locating Site features such as manholes, the 54-inch sewer main, holder walls and the concrete block wall located at the north end of the Site. Two elevation measurements were taken at each well location to identify the top of the PVC casing and the grade elevation. The survey elevations were measured to an accuracy of 0.01 feet above the National Geodetic Vertical Datum of 1988 (NGVD 1988).

3.7 GROUNDWATER SAMPLING

On July 12 and 13, 2010, groundwater samples were collected from the five (5) monitoring wells (MW-1 through MW-5). Prior to collecting samples, the depth to groundwater and thickness of any free product (if present) was measured in the monitoring wells using an electronic oil/water interface probe attached to a measuring tape accurate to 0.01 foot. Table 2 provides a summary of the groundwater level measurements and elevations.

Prior to purging, the headspace within each well was measured with a PID. Each well was purged using a submersible pump and low-flow purging techniques to remove a minimum of three times the volume of standing water in the well (to allow for collection of a representative

sample). As discussed in Section 4.5, monitoring well MW-4 ran dry numerous times before three well volumes had been removed. During the purging process, water quality parameters including temperature, conductivity, pH, dissolved oxygen, conductivity, oxidation reduction potential (ORP), and turbidity were measured approximately every 5 minutes.

Once three well volumes had been removed from a well, groundwater samples were collected using a low-flow submersible pump with dedicated tubing. Water quality parameter measurements and observations recorded during sampling activities are documented on the groundwater sampling records provided in Appendix C. Groundwater samples were submitted to Chemtech laboratories for the following analysis: TCL VOCs, TCL SVOCs, TAL Metals and total cyanide. Non-dedicated sampling equipment (e.g., oil/water interface probe, submersible pump) was decontaminated between sampling locations. Decontamination water was placed in 55-gallon drums and handled as described in Section 3.8.

During purging and sampling of MW-2 and MW-4, the measured turbidity was greater than 50 NTU. As per the Ludlow Street SCWP and associated Field Sampling Plan (FSP), since the turbidity was greater than 50 NTU, samples were sent for analysis of both total and dissolved metals from this well.

3.8 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

Investigation-derived waste (IDW), which included decontamination wash and rinse water, soil cuttings, purge water, debris, and used personal protective equipment (PPE), was containerized in Department of Transportation (DOT)-approved 55-gallon drums. The drums were sealed at the end of each work day and labeled with the date, the well or boring number(s), and the type of waste (e.g., drill cuttings, purge water). Parsons collected representative waste characterization samples of the IDW and coordinated transportation and disposal. Clean Earth of North Jersey, Inc. of Kearny, New Jersey disposed of the Site IDW at an offsite Con Edison-approved location in accordance with applicable local, state, and federal regulations.

3.9 DATA VALIDATION AND REPORTING

Data validation was performed in accordance with the USEPA Region II standard operating procedures (SOPs) for organic and inorganic data review. These validation guidelines are regional modifications to the National Functional Guidelines for organic and inorganic data review (USEPA, 1999 and 2004). Validation included the following:

- Verification of 100% of all quality control (QC) sample results (both qualitative and quantitative);
- Verification of the identification of 100% of all sample results (both positive hits and non-detects);
- Recalculation of 10% of all investigative sample results; and
- Preparation of a Data Usability Summary Report (DUSR).

The quality of the data has been assessed and is documented in the DUSR provided in Appendix D. In summary, the results of the data usability assessment show that the collected analytical data for soil and groundwater are valid for the intended purposes of the Site Characterization.

SECTION 4

SITE CHARACTERIZATION RESULTS

This section presents the results of the Site Characterization. Analytical results for the soil and groundwater samples collected during the Site Characterization have been summarized in Tables 3 and 4 and on Figures 4, 5, 6 and 7.

4.1 SITE GEOLOGY

The geology encountered in the soil borings and test pits during the Site Characterization is summarized in the logs provided in Appendices A and B. The logs show that the upper 20 to 22 feet in the south and west portions and 13-15 feet in the central and north portions of the Site contained fill materials (generally sand, gravel and silt with cobbles, cement, brick, and wood fragments). Deposits of fine to course-grained sand with some silt were encountered beneath the fill. These deposits were approximately 3 to 20 feet in thickness. Clay was encountered from approximately 4 inches to 8 feet in thickness. During the Site Characterization activities, bedrock was not encountered. Soil boring logs generated during the Site Characterization were used to develop three representative cross sections. A west to east cross-section of the Site is shown on Figure 8 (cross section A-A') and two north to south cross-sections are shown on Figure 9 (cross sections B-B'and C-C').

4.2 FORMER GAS WORKS STRUCTURES

The test pitting and soil boring activities conducted during the Site Characterization confirmed that below-grade MGP structure remnants are present at the Site. Former MGP structures identified in the *Manufactured Gas Plant History Report* (GEI, 2003) are depicted on Figure 2. A summary of below-grade structures encountered during the Site Characterization is provided below.

250,000 Cubic Foot Holder

- During the excavation of test pit TP-1, the holder foundation floor of the 250,000 cu. ft. holder was encountered at approximately 8.5 ft bgs. The former holder foundation wall was not encountered, at this location. Neither groundwater nor NAPL was encountered within the excavation of TP-1.
- During the excavation of test pit TP-2, the former 250,000 cu. ft. holder foundation wall was encountered from 3.5 to 8.5 ft bgs. The holder bottom was encountered at 8.5 ft bgs. Neither groundwater nor NAPL were encountered within the excavation of TP-2.
- During the excavation of test pit TP-3, the former 250,000 cu. ft. holder foundation wall was encountered from approximately 0.5 to 9.5 ft bgs. The former 250,000 cu. ft. holder foundation bottom was encountered at approximately 9.5 ft bgs. Neither groundwater nor NAPL were encountered within the excavation of TP-3.
- During the installation of soil boring SB-01, the former 250,000 cu. ft. holder foundation bottom was encountered at an approximate depth of 10' below ground surface. Stained wood was observed within this boring.

- During the installation of soil boring SB-04, the holder bottom was encountered at an approximate depth of 9 feet bgs. NAPL was observed in this boring at an approximate depth of 20 feet bgs.

Retort House

- During the excavation of test pit TP-2, the former Retort House concrete footings and the former 250,000 cu. ft. holder walls and foundation floor were encountered. This test pit initially extended eastward for 18 feet from the western property fence line; upon encountering the holder wall, the test pit was forked in a southeast trajectory to straddle the adjacent holder wall and extend to the holder bottom. Footings were encountered at approximately 4.5 ft bgs; Along the eastward test pit trajectory, the concrete Retort House footing continued to be exposed for 40 feet at which point, the northern edge of the a portion of the former 250,000 cu. ft. holder wall was exposed at approximately 1 ft bgs. Neither groundwater nor NAPL were encountered within the excavation of TP-2.

Former Suspected MGP Facility Piping

- During the excavation of test pit TP-4, two 12-inch cast iron pipes believed to be associated with former MGP operations were observed extending in a southwestern trajectory under a subsurface square brick structure encountered from approximately 0.5 to 2 ft bgs. The two pipes were exposed from 2 to 3 ft bgs. However, TP-4A was not advanced deeper to maintain the integrity of the piping. No staining or sheen was observed in the vicinity of the piping. Test pit TP-4 was then split into TP-4A and TP-4B as the excavation continued north and along the east side of the remnant square brick structure. Neither a holder wall or holder floor was encountered at TP-4B. Excavation at this test pit did not extend deeper than 4.5 ft bgs due to health and safety concerns associated with heavy naphthalene and/or acetone odors and high PID readings. Additionally, TP-4B was encroaching northward towards the concrete block retaining wall; therefore in order to maintain the integrity of the concrete wall, TP-4B did not extend further north. Neither groundwater nor NAPL were encountered within the excavation of TP-4.
- During Site clearing activities, two 12-inch cast iron pipe openings were uncovered north of TP-4A, adjacent to the concrete block retaining wall, south of the 50,000 cubic foot holder. These pipe openings were observed to be open-ended couplings to the two 12-inch cast iron pipes and are likely to be associated with the onsite former MGP structures, and likely the same piping observed in TP-4. Standing water was observed within these open ended pipes and black NAPL globules were observed floating on the water. A sample of this NAPL was collected and submitted to META Environmental for fingerprint analyses as per Con Edison. The laboratory report for this fingerprint analyses is provided in Appendix E

22,800 Cubic Foot Holder

- During the excavation of test-pit TP-5, the former 22,800 cu. ft. holder foundation wall was encountered from 1.5 to 9 ft bgs. Groundwater was encountered at 9 ft bgs; a

holder floor was not encountered during the installation of TP-5. NAPL was not encountered during the excavation of TP-5.

- During the installation of SB-05, NAPL was detected at a depth of 22 feet bgs. A holder floor was not encountered at SB-05.

50,000 Cubic Foot Holder

- During the removal of a salt pile adjacent to the concrete block retaining wall in the northern portion of the Site, the southern edge of the former 50,000 cu. ft. holder wall was uncovered. Approximately 1 foot of this holder wall was exposed and was observed to be extending underneath the concrete block retaining wall. Further excavation was not attempted in this location due to access issues and the integrity of the concrete block wall.

4.3 SITE HYDROGEOLOGY

Groundwater was encountered beneath the Site at elevations ranging from 2.99 to 7.10 feet above MSL (10.32 to 16.06 feet below ground surface). The depth to groundwater was gauged in the five new monitoring wells (MW-1 through MW-5) on July 12, 2010. The groundwater levels and corresponding elevations are summarized in Table 2 and were used to produce a Site groundwater contour map (Figure 9). The groundwater contours based on the July 2010 gauging event indicate that the groundwater flow direction is predominantly to the northwest towards the Hudson River.

4.4 SOIL SAMPLE RESULTS

A total of 34 soil samples and 1 duplicate sample were collected from the test pits, soil borings, and monitoring well borings as part of the Site Characterization. Due to the poor recovery during the soil boring phase of the Site Characterization, only on duplicate sample was collected. Soil samples were submitted to Chemtech Laboratories and analyzed for TCL VOCs, TCL SVOCs, TAL metals, and cyanide as described in Section 3. The analytical results of the soil samples are summarized in Table 3 and presented on Figures 4, 5, and 6. The soil sample results have been compared to the Unrestricted Soil Cleanup Objectives (USCOs) provided by NYSDEC in 6 NYCRR Part 375 (NYSDEC, 2006). The USCOs assume there are no imposed restrictions on the use of the Site; however, the Site is used for commercial/industrial purposes, and Site access is restricted via a fence and gate at the entrance. Therefore, a comparison of soil sample results to the USCOs is conservative. PID readings, visual observation, and analytical results from the subsurface soil investigation are summarized below.

PID Readings/NAPL/Hydrocarbon Fingerprinting Results

PID readings for soil samples collected during soil boring/monitoring well installations ranged from 0.0 to 1,250 ppm above background. The highest PID reading from subsurface soil was 851 ppm in soil boring MW-3 at a depth interval of 9 to 11 ft bgs. The 1,250 ppm reading was detected from a black stained sample of wood that was extracted from the 18-20 ft bgs interval of SB-1. Non-aqueous-phase-liquid (NAPL) was observed in samples collected from MW-3 (9-13 ft bgs and 17-19 ft bgs) from SB-6 (7-9 ft bgs and 13-15 ft bgs), and from SB-7 (13-23 ft bgs). The presence of NAPL was also noted in SB-4 (20 to 23 ft bgs) and SB-5 (17-19 ft bgs and 22-25 ft bgs).

Samples of soil containing NAPL from soil borings MW-3 and SB-7 were collected and submitted to META Environmental, Inc. of Watertown, MA for forensic hydrocarbon fingerprint analysis. Additionally, LNAPL, which was observed floating on top of water within an abandoned pipe suspected to be associated with MGP operations to the north of test pit TP-4 (Exposed Pipe 1), and the stained wood sample from SB-1(18-20 ft bgs) were submitted to META for fingerprint analysis. The fingerprinting samples were analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

The laboratory reports for these fingerprint analyses are provided in Appendix E. The reports indicate that the samples MW-3(9-11) and SB-7(17-19) contained pyrogenic material and exhibited fluoranthene to pyrene ratios indicative of tars formed from MGPs utilizing carbureted waste gas (CWG) processes. Sample Exposed Pipe 1 also contained pyrogenic material; however, it had substantially different characteristics than the samples from MW-3(9-11) and SB-7(17-19). Fingerprint analysis of the sample from Exposed Pipe 1 concluded that the NAPL is likely indicative of a coal tar distillate and/or the dissolved phase of the tarry material detected in MW-3(9-11) and SB-7(17-19). The results from the stained wood in sample SB-1(18-20) indicated the presence of a wide range distribution of pyrogenic PAHs consistent with CWG MGP tar residues and similar to the material found in the other samples at a lower relative concentration.

VOCs

A total of 16 VOCs were detected at least once in the soil samples collected during the Site Characterization. Of these, only six (acetone, benzene, ethyl benzene, toluene, o-xylene, and m/p-xylene) were detected at concentrations exceeding the USCOs in any soil sample. Acetone was detected above the USCO in four soil samples [SB-1(18-20), SB-1 (24-26), SB-2(20-22), and SB-7(15-17)]. Benzene was detected above the USCO in four soil samples [MW-3(9-11), SB-4(20-22), SB-6(13-15), and SB-7(15-17)]. Ethyl benzene, toluene, o-xylene, and m/p-xylene were detected at concentrations exceeding the USCOs in samples MW-3(9-11), SB-6(13-15), and SB-7(15-17). Toluene also exceeded the USCO in sample TP-4AFLOOR(3). Total VOC concentrations in all soil samples ranged from non-detect to 368.3 milligrams/kilogram (mg/kg), which was detected in soil sample SB-7(15-17) collected at a depth of 15 to 17 ft bgs.

The vertical extent of VOC impacts was delineated at each soil boring, monitoring well boring, and test pit sample location (i.e. no USCOs were exceeded in the deepest sample collected), with the exception of locations SB-2 and TP-4. At location SB-2 acetone, a common lab contaminant was detected above the USCO in the deepest soil sample (collected from depth of 20 to 22 ft bgs. At location TP-4A, toluene was detected above the USCO at a depth of 3 feet bgs. A deeper sample could not be collected from TP-4A; however, the results for the deepest sample (collected at a depth of 29 to 31 ft bgs) from location SB-6, which is adjacent to TP-4A, showed no concentrations above the USCOs.

SVOCs

A total of 26 SVOCs were detected in soil samples collected during the Site Characterization. Twelve PAHs [acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, flourene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene] were detected at concentrations

exceeding the USCOs in at least one soil sample. Total SVOC concentrations ranged from non-detect to 2,277.2 mg/kg, which was detected at location MW-3 in a sample collected from 9 to 11 ft bgs.

The vertical extent of SVOC impacts was delineated at each soil boring, monitoring well boring, and test pit sample location, with the exception of location SB-4 where seven PAHs were detected at concentrations exceeding the USCOs in the deepest soil sample (collected from depth of 30 to 32 ft bgs).

Inorganics

A total of 24 inorganic constituents were detected in soil samples collected during the Site Characterization. Nine of these exceeded the USCOs (arsenic, barium, cadmium, copper, lead, mercury, selenium, zinc, and cyanide). The vertical extent of impacts from inorganics was delineated at each soil boring and monitoring well boring, with the exception of location SB-2 where lead was detected above the USCO in the deepest soil sample (collected from depth of 20 to 22 ft bgs). Inorganic constituents were detected at concentrations above USCOs in the bottom of the test pits. However, the test pits were typically terminated in the fill layer and metals are typically detected in soil used as fill in urban areas.

4.5 GROUNDWATER SAMPLE RESULTS

A total of five (5) groundwater samples and one duplicate were collected during the Site Characterization and analyzed for TCL VOCs, TCL SVOCs, TAL Metals, and total cyanide. Laboratory analytical results for constituents detected in the groundwater samples are summarized in Table 4. For evaluation purposes, analytical results were compared with Class GA groundwater quality standards (GWQS) and guidance values contained in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC, 1998). These standards and guidance values are protective of groundwater quality assuming that groundwater is used as a source of drinking water. That assumption is not applicable to the Site because groundwater is not used as a source of drinking water. Thus, the use of Class GA standards and guidance values for comparison to Site groundwater is conservative. The analytical results of the groundwater samples collected from each well are presented on Figure 7. Field measurements and observations as well as analytical results from the groundwater investigation are summarized below.

Field Measurements

Each monitoring well was sampled upon reaching parameter stability and turbidity levels below 50 NTU with the exception of MW-4 and MW-2; MW-4 had very slow recharge and ran dry numerous times before three well volumes were able to be purged and MW-2 was very turbid and did not clear up after 2 hours of purging. During groundwater sampling activities, each monitoring well was monitored for the presence of NAPL. No NAPL or sheens were noted in any of the wells with the exception of MW-3 where NAPL globules and sheens were observed. Visual descriptions and observations made during the groundwater sampling activities are presented on the groundwater sampling records provided in Appendix C.

VOCs

A total of fourteen VOCs were detected at least once in the groundwater samples collected during the Site Characterization. Of these, eight VOCs (acetone, benzene, chloromethane, ethyl

benzene, styrene, toluene, o-xylene, and m/p-xylene) were detected at concentrations exceeding the Class GA GWQS. No VOCs were detected above the Class GA GWQS in MW-1. Groundwater analytical results are summarized in Table 4 and on Figure 7.

SVOCs

Nine PAHs and four other SVOCs were detected at least once in the groundwater samples collected during the Site Characterization. Of these, four were detected at concentrations exceeding the Class GA GWQS (1,1-Biphenyl in MW-3; phenol in MW-3 and MW-5; acenaphthene in MW-3; and naphthalene in MW-3 and MW-5). No other SVOCs were detected above the Class GA GWQS in any of the monitoring wells.

Inorganics

Analytical results indicate the presence of eight metals (arsenic, cadmium, iron, lead, magnesium, manganese, mercury, and sodium) and cyanide in groundwater samples that exceeded their respective Class GA GWQS.

SECTION 5

EXPOSURE ASSESSMENT

Information collected during the Site Characterization at the former Ludlow Street Works Site has been used to qualitatively assess potential exposure pathways for the various detected compounds in Site soils and groundwater. The Site is located within an industrial district of a residential and commercial neighborhood and is currently used as a public works storage yard.

Analytical results from the soil samples collected during the Site characterization activities indicate the presence of possible MGP-related contaminants in the soil. VOCs, PAHs, and inorganic constituents were detected at concentrations above the USCOs at the Site in soil ranging from 3 to 32 ft bgs. The highest total VOC and SVOC concentrations were detected in the soil samples collected downgradient of the former gas holders; from 9 to 11 ft bgs at location MW-3 (on the north edge of the former 22,800 cu. ft. holder near the concrete block retaining wall) and from 15 to 17 ft bgs at location SB-7 (just north of the edge of the former 250,000 cu. ft. holder).

Shallow impacted soils on the Site may be encountered during intrusive maintenance activities (e.g., repair of underground utilities); however, it is unlikely that these materials would be encountered during day-to-day Site operations (i.e., use as a DPW storage yard). It should be noted that the Site soils are covered with gravel and bituminous pavement, and for most of the year, the southern portion of the Site is covered by a pile of road salt.

Groundwater analytical results indicated the presence of VOCs, PAHs, and inorganic concentrations in the monitoring wells at the Site above the Class GA GWQS and guidance values. Four monitoring wells (MW-2, MW-3, MW-4, and MW-5) exceeded GWQS for possible MGP-related VOCs or SVOCs. Analytical results indicate that no VOCs or SVOCs were detected in Monitoring well MW-1 (offsite area).

Groundwater at the Site is currently not used for a potable water source and there are no plans for future use of potable or commercial/industrial groundwater at the Site. Groundwater flow direction is predominantly to the northwest towards the Hudson River. The depth to groundwater at the Site is approximately 10 to 16 feet bgs. Therefore, there is limited potential for exposure to groundwater during intrusive subsurface activities (e.g., repair of underground utilities) at the Site. Surface water and sediment are not present at the Site.

It should be noted that several inorganic analytes were detected at the Site (sodium, magnesium, and manganese) at concentrations exceeding Class GA Groundwater Standards. These analytes are not typically associated with MGP related operations. Their presence at high concentrations in both Site soils and in Site ground water is believed to be due to use of the Site for road salt storage.

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The following conclusions have been made based on the results of the Site Characterization presented herein:

- Remnants of the former MGP structures are present on the property.
- NAPL encountered onsite was sampled and submitted for forensic hydrocarbon fingerprint analysis. The results indicate that the samples contained materials indicative of tars formed from MGP processes. NAPL, when encountered, was in close proximity to former MGP structures.
- Contaminants potentially related to former MGP activities were encountered in Site soil at concentrations exceeding the USCOs during the Site Characterization. These contaminants were generally encountered at or below the ground water table (10.32 ft to 16.06 ft bgs) and extended to depths of 30 ft to 32 ft bgs. Vertical extent of these contaminants was delineated at all sampling locations, with the exception of SB-02. Contaminants potentially related to former MGP activities were encountered in groundwater at concentrations exceeding the Class GA GWQS and guidance values at the Site.
- Elevated concentrations of sodium, manganese, and magnesium detected in Site soil and ground water are believed to be associated with use of the Site for a road salt storage facility.

6.2 RECOMMENDATIONS

Based on the Site Characterization activities, further investigation is recommended to delineate the impacts identified within the Site. To accomplish this objective, a Remedial Investigation Work Plan will be developed and submitted to the NYSDEC under separate cover.

SECTION 7

REFERENCES

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TABLES

Table 1
Sample Summary
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Location	Sample ID	Depth (bgs)	TCL VOCs	TCL SVOCs	TAL Metals	Cyanide	Hydrocarbon Fingerprint	Dissolved Metals
SOIL SAMPLES								
MW-1	MW-1(11-13)	11-13'	X	X	X	X		
	MW-1(23-25)	23-25'	X	X	X	X		
MW-2	MW-2(13-15)	13-15'	X	X	X	X		
	MW-2(23-25)	23-25'	X	X	X	X		
MW-3	MW-3 (9-11)	9-11'	X	X	X	X	X	
	MW-3(31-33)	31-33'	X	X	X	X		
MW-4	MW-4 (5-7)	5-7'	X	X	X	X		
	MW-4(23-25)	23-25'	X	X	X	X		
MW-5	MW-5 (4-6)	4-6'	X	X	X	X		
	MW-5 (7-9)	7-9'	X	X	X	X		
	MW-5(23-25)	23-25'	X	X	X	X		
SB-1	SB-1(18-20)	18-20'	X	X	X	X	X	
	SB-1(24-26)	24-26'	X	X	X	X		
	SB-1(32-34)	32-34'	X	X	X	X		
SB-2	SB-2(20-22)	20-22'	X	X	X	X		
SB-4	SB-4(20-22)	20-22'	X	X	X	X		
	SB-4(30-32)	30-32'	X	X	X	X		
SB-5	SB-5(21-23)	21-23'	X	X	X	X		
	SB-5(29-31)	29-31'	X	X	X	X		
SB-6	SB-6(13-15)	13-15'	X	X	X	X		
	SB-16(13-15)*	13-15'	X	X	X	X		
	SB-6(29-31)	29-31'	X	X	X	X		
SB-7	SB-7(15-17)	15-17'	X	X	X	X		
	SB-7(17-19)	17-19'					X	
	SB-7(33-35)	33-35'	X	X	X	X		
TP-1	TP-1FLOOR(8.5)	8.5'	X	X	X	X		
	TP-1WALL(7.5)	7.5'	X	X	X	X		
TP-2	TP-2FLOOR(8.5)	8.5'	X	X	X	X		
	TP-2FOOTING(4.5)	4.5'	X	X	X	X		
	TP-2WELL(7.5)	7.5'	X	X	X	X		
TP-3	TP-3FLOOR(9.5)	9.5'	X	X	X	X		
	TP-3WALL(8.5)	8.5'	X	X	X	X		
TP-4A	TP-4AFLOOR(3)	3'	X	X	X	X		
	TP-4AWALL(2.5)	2.5'	X	X	X	X		
	Exposed Pipe	n/a					X	
TP-5	TP-5FLOOR(9)	9'	X	X	X	X		
	TP-5WALL(8)	8'	X	X	X	X		

Table 1
Sample Summary
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Location	Sample ID	Depth (bgs)	TCL VOCs	TCL SVOCs	TAL Metals	Cyanide	Hydrocarbon Fingerprint	Dissolved Metals
GROUNDWATER SAMPLES								
MW-1	MW-1	NA	X	X	X	X		
MW-2	MW-2	NA	X	X	X	X		X
MW-3	MW-3	NA	X	X	X	X		
MW-4	MW-4	NA	X	X	X	X		X
MW-5	MW-5	NA	X	X	X	X		
MW-5	MW-15*	NA	X	X	X	X		

X - Indicates sample was analyzed
* - Indicates a duplicate sample.

Table 2
Summary of Groundwater Elevations
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Monitoring Well Number	Total Well Depth (feet)	Top of Casing Elevation (feet AMSL)	Depth to Water (feet)[(1)]	Groundwater Elevation (feet AMSL)
MW-1	21.90	20.35	13.25	7.10
MW-2	25.04	16.28	10.32	5.96
MW-3	23.25	19.35	16.06	3.29
MW-4	24.18	18.82	13.40	5.42
MW-5	22.98	17.37	14.38	2.99

Notes:
(1) Measured from top of PVC on July 12, 2010
AMSL = Above Mean Sea Level
Elevations are based on the North American Vertical Datum of 1988 (NAVD88).

Table 3
Summary of Soil Analytical Data
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Consolidated Edisor Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010
CAS NO.	COMPOUND												
	VOLATILES												
67-64-1	Acetone	0.05	mg/Kg	ND	ND	ND	0.01 J	ND	ND	ND	0.0067 J	ND	ND
71-43-2	Benzene	0.06	mg/Kg	ND	ND	ND	ND	16	ND	ND	0.0011 J	ND	ND
78-93-3	2-Butanone	0.12	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
74-87-3	Chloromethane	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	ND	ND	ND	ND	62	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	ND	0.016 J	ND	3.5	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-Pentanone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	0.0018 J	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	0.064	ND	0.28 J	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	0.0019 J	0.0026 J
100-42-5	Styrene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	1.3	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	ND	ND	ND	ND	66	ND	ND	ND	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	ND	ND	0.034	ND	54	ND	ND	ND	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	ND	ND	ND	ND	110	ND	ND	ND	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**ND**	**ND**	**0.114**	**0.01**	**311.78**	**ND**	**ND**	**0.0096**	**0.0019**	**0.0026**
	SEMIVOLATILES												
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
100-52-7	Benzaldehyde	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
92-52-4	1,1-Biphenyl	NS	mg/Kg	ND	ND	0.13 J	ND	37	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	2.9 J	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	2.7 J	ND	1.9 J	ND	ND	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	11	ND	1 J	ND	ND	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	0.24 J	0.29 J	0.36 J	0.33 J	ND	0.39	0.5 J	0.33 J	ND	ND
87-86-5	Pentachlorophenol	0.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	PAHs												
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	51	ND	1.3 J	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	ND	76	ND	ND	ND	1.3 J	ND
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	ND	81	ND	3.2	ND	ND	0.75 J
120-12-7	Benzo(a)anthracene	1	mg/Kg	ND	ND	ND	ND	48	ND	7.3	ND	ND	1.5 J
50-32-8	Benzo(a)pyrene	1	mg/Kg	ND	ND	ND	ND	35	ND	6.3	ND	ND	1.1 J
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	ND	ND	ND	ND	28	ND	8.9	ND	ND	1.5 J
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	ND	ND	ND	ND	12	ND	4.2	ND	ND	0.69 J
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	ND	8.8	ND	2.1	ND	ND	0.56 J
218-01-9	Chrysene	1	mg/Kg	ND	ND	ND	ND	41	ND	7	ND	ND	1.3 J
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	ND	3.8 J	ND	0.6 J	ND	ND	ND
206-44-0	Fluoranthene	100	mg/Kg	ND	ND	ND	ND	78	ND	18	ND	ND	3.2 J
86-73-7	Fluorene	30	mg/Kg	ND	ND	0.081 J	ND	100	ND	1.3 J	ND	ND	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	ND	ND	ND	ND	11	ND	3.7	ND	ND	0.64 J
91-57-6	2-Methylnaphthalene	NS	mg/Kg	ND	ND	0.66	ND	450	ND	0.68 J	ND	ND	ND
91-20-3	Naphthalene	12	mg/Kg	ND	ND	0.066 J	ND	820	ND	1.5 J	ND	ND	ND
85-01-8	Phenanthrene	100	mg/Kg	ND	ND	0.19 J	ND	270	0.094 J	15	ND	ND	3.2 J
129-00-0	Pyrene	100	mg/Kg	ND	ND	ND	ND	110	ND	15	ND	ND	2.6 J
	Total PAHs	**NS**	**mg/Kg**	**ND**	**ND**	**0.997**	**ND**	**2223.6**	**0.094**	**96.08**	**ND**	**1.3**	**17.04**
	Total SVOCs	**NS**	**mg/Kg**	**0.24**	**0.29**	**1.487**	**0.33**	**2277.2**	**0.484**	**99.48**	**0.33**	**1.3**	**17.04**

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006
(2) NS indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected
(4) J indicates an estimated concentration
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Table 3
Summary of Soil Analytical Data
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Consolidated Edisor Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010
CAS NO.	COMPOUND												
	INORGANICS												
7429-90-5	Aluminum	NS	mg/Kg	5080	2760	4770	9550	3010	1090	2760	5360	3290	6560
7440-36-0	Antimony	NS	mg/Kg	ND	ND	ND	ND	ND	ND	0.61 J	ND	ND	1.14 J
7440-38-2	Arsenic	13	mg/Kg	ND	ND	ND	0.33 J	ND	ND	4.57	ND	2.33	4.19
7440-39-3	Barium	350	mg/Kg	31.1	15.4	21.5	57.1	28.1	12.8	77.9	39.5	68.7	128
7440-41-7	Beryllium	7.2	mg/Kg	0.31 J	0.19 J	0.39	0.66	0.24	0.12 J	0.26 J	0.49	0.29	0.37
7440-43-9	Cadmium	2.5	mg/Kg	0.56	0.26 J	1.21	1.44	0.75	0.13 J	0.72	0.8	0.73	1.66
7440-70-2	Calcium	NS	mg/Kg	3800	367	722	672	299	445	12000	1240	12900	16700
7440-47-3	Chromium	NS	mg/Kg	10.8	7.14	9.69	20.2	8.04	4.11	7.83	10.9	22.2	17.4
7440-48-4	Cobalt	NS	mg/Kg	4.38	2.32	6.65	8.38	1.58	1.37	2.63	6.13	3.73	5.67
7440-50-8	Copper	50	mg/Kg	7.25	2.86	27.4	14.1	10.6	3.46	34.6	9	21.9	44.9
7439-89-6	Iron	NS	mg/Kg	11000	5930	11000	20200	6650	3620	7820	14900	10200	17600
7439-92-1	Lead	63	mg/Kg	11.7	3.67	255	10.1	183	2.09	310	7.99	70.8	144
7439-95-4	Magnesium	NS	mg/Kg	3730	1220	2120	3810	1110	770	4230	2380	6020	8270
7439-96-5	Manganese	1600	mg/Kg	244	67.2	199	561	46.2	117	133	343	95.2	249
7439-97-6	Mercury	0.18	mg/Kg	0.024	0.008 J	0.222	0.006 J	0.014	0.002 J	0.44	0.003 J	0.467	0.194
7440-02-0	Nickel	30	mg/Kg	9.53	5.23	14.1	19.7	4.79	3.82	8.43	13.7	9.72	17.3
7440-09-7	Potassium	NS	mg/Kg	665	471	956	2000	680	271	447	1420	403	933
7782-49-2	Selenium	3.9	mg/Kg	2.15	1.02	1.87	2.88	1.23	0.54 J	1.63	2.29	1.65	2.7
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	279	133	7430	7090	10200	186	593	5260	2410	4850
7440-28-0	Thallium	NS	mg/Kg	0.37 J	ND	0.51 J	0.42 J	0.62 J	ND	ND	0.42 J	0.54 J	0.61 J
7440-62-2	Vanadium	NS	mg/Kg	13.8	8.01	14.2	23.2	9.21	4.01	18	16.1	18.6	25.5
7440-66-6	Zinc	109	mg/Kg	26	12.6	47.6	46.4	15.5	9.84	178	32.6	81.9	196 J
57-12-5	Cyanide	27	mg/Kg	ND	ND	ND	ND	12	ND	1.86	ND	70	15

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006
(2) NS indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected
(4) J indicates an estimated concentration
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

Table 3
Summary of Soil Analytical Data
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Consolidated Edisor Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010
CAS NO.	COMPOUND													
	VOLATILES													
67-64-1	Acetone	0.05	mg/Kg	0.029 J	4.2	0.11	0.0085 J	0.077	ND	ND	ND	ND	ND	
71-43-2	Benzene	0.06	mg/Kg	0.0022 J	0.0027 J	ND	ND	0.0014 J	0.12 J	ND	ND	ND	7 J	
78-93-3	2-Butanone	0.12	mg/Kg	ND	0.041	0.0038 J	ND	ND	ND	ND	ND	ND	ND	
75-15-0	Carbon Disulfide	NS	mg/Kg	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	
74-87-3	Chloromethane	NS	mg/Kg	0.0058 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	
100-41-4	Ethyl Benzene	1	mg/Kg	0.014	0.062	ND	ND	ND	ND	ND	ND	ND	16	
98-82-8	Isopropylbenzene	NS	mg/Kg	0.0021 J	0.0094	ND	ND	ND	0.17 J	ND	ND	ND	2.8 J	
108-10-1	4-Methyl-2-Pentanone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
108-87-2	Methylcyclohexane	NS	mg/Kg	0.011	ND	ND	ND	ND	ND	ND	ND	ND	ND	
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	0.0017 J	ND	ND	ND	ND	0.0017 J	0.0017 J	0.0017 J	ND	
100-42-5	Styrene	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.38 J	
127-18-4	Tetrachloroethene	1.3	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
108-88-3	Toluene	0.7	mg/Kg	0.0032 J	0.008	ND	ND	ND	ND	ND	ND	ND	2.7 J	
1330-20-7	o-Xylene	0.26	mg/Kg	0.0061	0.038	ND	ND	ND	ND	ND	ND	ND	10	
136777-61-2	m/p-Xylenes	0.26	mg/Kg	0.0088 J	0.032	ND	ND	ND	ND	ND	ND	ND	22 J	
	Total VOCs	**NS**	**mg/Kg**	**0.0822**	**4.7248**	**0.1138**	**0.0085**	**0.0784**	**0.29**	**0.0017**	**0.0017**	**0.0017**	**60.88**	
	SEMIVOLATILES													
98-86-2	Acetophenone	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
100-52-7	Benzaldehyde	NS	mg/Kg	ND	0.57	ND	ND	0.11 J	ND	ND	ND	ND	ND	
92-52-4	1,1-Biphenyl	NS	mg/Kg	0.1 J	ND	ND	ND	ND	0.41	ND	0.3 J	0.052 J	2	
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	0.35 J	0.17 J	ND	ND	ND	ND	ND	ND	ND	
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	ND	ND	0.22 J	ND	0.098 J	ND	0.54	
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
87-86-5	Pentachlorophenol	0.8	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	PAHs													
83-32-9	Acenaphthene	20	mg/Kg	0.21 J	ND	ND	ND	ND	1.2	1.3 J	1.2	0.21 J	7.1	
208-96-8	Acenaphthylene	100	mg/Kg	0.64	ND	ND	ND	ND	1.1	12	0.73	0.1 J	4	
120-12-7	Anthracene	100	mg/Kg	0.28 J	ND	ND	ND	ND	2.4	3.6	1.1	0.18 J	4.7	
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.95	ND	ND	ND	0.051 J	1.3	21	0.95	0.13 J	2.3	
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.7	ND	ND	ND	ND	0.85	14	0.63	0.076 J	1.5	
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	0.57	ND	ND	ND	0.059 J	0.65	11	0.48	0.058 J	1.2	
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	0.29 J	ND	ND	ND	ND	0.29 J	4.8	0.21 J	ND	0.51	
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	0.18 J	ND	ND	ND	ND	0.24 J	3.6	0.19 J	ND	0.33 J	
218-01-9	Chrysene	1	mg/Kg	0.78	ND	ND	ND	0.061 J	1.2	20	0.85	0.1 J	2	
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	0.068 J	ND	ND	ND	ND	0.099 J	1.6 J	0.075 J	ND	0.17 J	
206-44-0	Fluoranthene	100	mg/Kg	1.4	0.06 J	ND	ND	0.12 J	2.3	39	1.4	0.2 J	5	
86-73-7	Fluorene	30	mg/Kg	0.2 J	ND	ND	ND	ND	2.8	1.1 J	1	0.17 J	6.8	
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	0.24 J	ND	ND	ND	ND	0.26 J	4.2	0.19 J	ND	0.44	
91-57-6	2-Methylnaphthalene	NS	mg/Kg	0.33 J	0.074 J	ND	ND	0.06 J	ND	ND	1.7	0.29 J	27	
91-20-3	Naphthalene	12	mg/Kg	0.9	0.36 J	ND	ND	0.21 J	1.9	ND	1.9	0.31 J	63	
85-01-8	Phenanthrene	100	mg/Kg	0.48	0.12 J	0.077 J	ND	0.095 J	10	0.38 J	3.6	0.62	18	
129-00-0	Pyrene	100	mg/Kg	2	0.075 J	ND	ND	0.11 J	3.6	52	2	0.3 J	6.6	
	Total PAHs	**NS**	**mg/Kg**	**10.218**	**0.689**	**0.077**	**ND**	**0.766**	**30.189**	**189.58**	**18.205**	**2.744**	**150.65**	
	Total SVOCs	**NS**	**mg/Kg**	**10.318**	**1.609**	**0.247**	**ND**	**0.876**	**30.819**	**189.58**	**18.603**	**2.796**	**153.34**	

Notes:
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CAS NO.	COMPOUND													
	INORGANICS													
7429-90-5	Aluminum	NS	mg/Kg	2170	5580	1540	2850	10900	3050	1590	4140	1540	6070
7440-36-0	Antimony	NS	mg/Kg	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	13	mg/Kg	ND	ND	0.51 J	0.49 J	0.98 J	0.45 J	ND	ND	ND	ND
7440-39-3	Barium	350	mg/Kg	10.2	42.8	7.53	15.3	67.7	20.5	19.7	38.9	23.4	29.2
7440-41-7	Beryllium	7.2	mg/Kg	0.19 J	0.29	0.14 J	0.2 J	0.41	0.25 J	0.16 J	0.28	0.11 J	0.45
7440-43-9	Cadmium	2.5	mg/Kg	0.2 J	1.46	0.19 J	0.34 J	1.03	0.57	0.22 J	0.56	0.2 J	0.78
7440-70-2	Calcium	NS	mg/Kg	540	46100	1990 J	1610 J	37300	12200	631	7260	627	547
7440-47-3	Chromium	NS	mg/Kg	5.72	16.6 J	6.85	6.73	11.3 J	8.32	4.3	9.02	7.36	11.2
7440-48-4	Cobalt	NS	mg/Kg	2.02	8.8	2.27	4.26	3.37	3.69	1.52	4.92	2.34	5.67
7440-50-8	Copper	50	mg/Kg	4.48	19.1	3.76	10.9	11.7	10	3.41	6.36	7.23	9.28
7439-89-6	Iron	NS	mg/Kg	4940	17500	5570 J	7180 J	10300	8140	3940	8770	4520	11600
7439-92-1	Lead	63	mg/Kg	9.81	42	5.35	4	125	15	4.21	9.66	2.99	6.85
7439-95-4	Magnesium	NS	mg/Kg	1190	14000	1110 J	2030 J	4020	6860	923	3960	1360	2730
7439-96-5	Manganese	1600	mg/Kg	51.1	197	44.4 J	80.9 J	190	602	45.8	524	229	133
7439-97-6	Mercury	0.18	mg/Kg	0.011 J	0.058	0.055	0.021	0.105	0.004 J	ND	0.005 J	ND	ND
7440-02-0	Nickel	30	mg/Kg	5.98	24.6	6.32	9.63	9.12	7.9	4.27	11.5	6.27	13
7440-09-7	Potassium	NS	mg/Kg	594	890	443	740	1640	834	546	981	399	1440
7782-49-2	Selenium	3.9	mg/Kg	0.89 J	0.7 J	0.56 J	0.75 J	ND	0.45 J	0.65 J	0.63 J	0.58 J	0.74 J
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	1440	8340	3220 J	1620 J	4160	7330	1690	7320	708	7650
7440-28-0	Thallium	NS	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-62-2	Vanadium	NS	mg/Kg	6.82	14	7.84	7.83	19.9	10.1	5.02	10.4	5.79	16.6
7440-66-6	Zinc	109	mg/Kg	13.7 J	38.9	13.1	17.9	63.2	18.3	10.2	22.1	10.8	25.3
57-12-5	Cyanide	27	mg/Kg	ND	7.18 J	2.16	ND	6.22 J	ND	13	1.05	ND	0.717 J

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006
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CAS NO.	COMPOUND		UNITS:											
	VOLATILES													
67-64-1	Acetone	0.05	mg/Kg		ND	ND	11 J	ND	ND	ND	ND	ND	ND	
71-43-2	Benzene	0.06	mg/Kg		11	ND	2.2	ND	ND	ND	ND	ND	0.0027 J	
78-93-3	2-Butanone	0.12	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
75-15-0	Carbon Disulfide	NS	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
74-87-3	Chloromethane	NS	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
100-41-4	Ethyl Benzene	1	mg/Kg		27	0.0017 J	99 J	ND	ND	ND	ND	ND	ND	
98-82-8	Isopropylbenzene	NS	mg/Kg		3.8	ND	19 J	ND	ND	ND	ND	ND	ND	
108-10-1	4-Methyl-2-Pentanone	NS	mg/Kg		ND	ND	16	ND	ND	ND	ND	ND	ND	
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
108-87-2	Methylcyclohexane	NS	mg/Kg		0.5 J	ND	11	ND	ND	ND	ND	ND	ND	
75-09-2	Methylene Chloride	0.05	mg/Kg		ND	0.0018 J	ND	0.0018 J	ND	ND	0.0019 J	ND	0.0032 J	
100-42-5	Styrene	NS	mg/Kg		0.67	ND	2.7	ND	ND	ND	ND	ND	ND	
127-18-4	Tetrachloroethene	1.3	mg/Kg		ND	ND	ND	ND	ND	0.0014 J	ND	ND	0.0012 J	
108-88-3	Toluene	0.7	mg/Kg		10 J	0.0013 J	8.4	ND	ND	ND	ND	0.0033 J	0.0016 J	
1330-20-7	o-Xylene	0.26	mg/Kg		15	0.0012 J	69 J	ND	ND	ND	ND	ND	ND	
136777-61-2	m/p-Xylenes	0.26	mg/Kg		30	ND	130 J	ND	ND	ND	ND	0.011 J	ND	
	Total VOCs	**NS**	**mg/Kg**		**97.97**	**0.006**	**368.3**	**0.0018**	**ND**	**0.0014**	**0.0019**	**0.0143**	**0.0087**	
	SEMIVOLATILES													
98-86-2	Acetophenone	NS	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
100-52-7	Benzaldehyde	NS	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
92-52-4	1,1-Biphenyl	NS	mg/Kg		3	ND	30	ND	ND	ND	ND	ND	ND	
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg		ND	ND	ND	ND	0.2 J	ND	ND	ND	ND	
85-68-7	Butylbenzylphthalate	NS	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	ND	
86-74-8	Carbazole	NS	mg/Kg		0.22 J	ND	0.85 J	ND	ND	ND	ND	ND	ND	
132-64-9	Dibenzofuran	NS	mg/Kg		0.83	ND	8.9	ND	ND	ND	ND	ND	ND	
131-11-3	Dimethylphthalate	NS	mg/Kg		ND	ND	ND	ND	ND	ND	0.5 J	ND	0.42	
87-86-5	Pentachlorophenol	0.8	mg/Kg		ND	ND	ND	ND	ND	ND	ND	ND	0.44 J	
	PAHs													
83-32-9	Acenaphthene	20	mg/Kg		9.3	0.065 J	46	ND	ND	ND	ND	ND	ND	
208-96-8	Acenaphthylene	100	mg/Kg		6.7	0.061 J	90	ND	ND	ND	ND	ND	ND	
120-12-7	Anthracene	100	mg/Kg		7.4	ND	58	ND	ND	ND	ND	ND	ND	
120-12-7	Benzo(a)anthracene	1	mg/Kg		4	ND	35	ND	ND	ND	ND	ND	0.091 J	
50-32-8	Benzo(a)pyrene	1	mg/Kg		2.5	ND	22	ND	ND	ND	ND	ND	0.075 J	
205-99-2	Benzo(b)fluoranthene	1	mg/Kg		2	ND	18	ND	ND	ND	ND	ND	0.11 J	
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg		0.85	ND	7.5	ND	ND	ND	ND	ND	ND	
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg		0.62	ND	5.9	ND	ND	ND	ND	ND	ND	
218-01-9	Chrysene	1	mg/Kg		3.9	ND	29	ND	ND	ND	ND	ND	0.11 J	
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg		0.29 J	ND	2.6 J	ND	ND	ND	ND	ND	ND	
206-44-0	Fluoranthene	100	mg/Kg		8.2	0.054 J	60	ND	ND	0.065 J	ND	ND	0.19 J	
86-73-7	Fluorene	30	mg/Kg		11	0.081 J	92	ND	ND	ND	ND	ND	ND	
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg		0.75	ND	6.8	ND	ND	ND	ND	ND	ND	
91-57-6	2-Methylnaphthalene	NS	mg/Kg		25	0.26 J	130	ND	ND	ND	ND	ND	ND	
91-20-3	Naphthalene	12	mg/Kg		75	0.48	250	ND	ND	ND	1 J	ND	0.33 J	
85-01-8	Phenanthrene	100	mg/Kg		28	0.21 J	220	ND	ND	ND	ND	ND	0.11 J	
129-00-0	Pyrene	100	mg/Kg		10	0.083 J	80	0.057 J	ND	ND	ND	ND	0.2 J	
	Total PAHs	**NS**	**mg/Kg**		**195.51**	**1.294**	**1152.8**	**0.057**	**ND**	**0.065**	**1**	**ND**	**1.216**	
	Total SVOCs	**NS**	**mg/Kg**		**199.56**	**1.294**	**1192.55**	**0.057**	**0.2**	**0.065**	**1.5**	**ND**	**2.076**	

Notes:
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Consolidated Edison Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	Dup of SB-6(13-15) SB-16 (13-15) B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND											
	INORGANICS											
7429-90-5	Aluminum	NS	mg/Kg	3220	1380	5480	2510	1580	1930	2840	6170	2480
7440-36-0	Antimony	NS	mg/Kg	ND	ND	ND	ND	ND	ND	0.51 J	ND	ND
7440-38-2	Arsenic	13	mg/Kg	ND	ND	0.67 J	0.37 J	2.13	3.58	4.53	ND	3.46
7440-39-3	Barium	350	mg/Kg	13.7	15.5	23.4	19.6	52.3	67.5	436	63.5	387
7440-41-7	Beryllium	7.2	mg/Kg	0.27	0.14 J	0.42	0.2 J	0.18 J	0.2 J	0.25	0.42	0.24 J
7440-43-9	Cadmium	2.5	mg/Kg	0.38	0.16 J	0.95	0.3	0.32 J	0.75	1.63	0.78	1.56
7440-70-2	Calcium	NS	mg/Kg	549	515	634	2640	19300	5700	31600	3000	31900
7440-47-3	Chromium	NS	mg/Kg	7.65	5.51	11.4	7.01	4.2	6.78	8.31	11	6.72
7440-48-4	Cobalt	NS	mg/Kg	3.43	1.46	5.93	2.65	2.87	3.39	2.71	5.6	2.32
7440-50-8	Copper	50	mg/Kg	5.75	4.96	8.5	6.84	16.7	17.8	8.58	10.3	8.98
7439-89-6	Iron	NS	mg/Kg	6580	4450	11500	6610	3450	5500	10900	11800	9260
7439-92-1	Lead	63	mg/Kg	4.04	2.51	185	3.25	77.8	203	303	62.3	339
7439-95-4	Magnesium	NS	mg/Kg	1340	1040	2190	2830	7490	1720	3870	2150	3570
7439-96-5	Manganese	1600	mg/Kg	63.2	148	94.2	249	62	98.3	203	296	216
7439-97-6	Mercury	0.18	mg/Kg	ND	ND	0.276	ND	0.231 J	0.227 J	0.214	0.07	0.258
7440-02-0	Nickel	30	mg/Kg	8.34	4.92	12.2	7.78	6.57	9.55	9.24	12.4	6.27
7440-09-7	Potassium	NS	mg/Kg	752	412	1260	753	227	377	448	1030	487
7782-49-2	Selenium	3.9	mg/Kg	0.58 J	0.57 J	1.84	0.56 J	0.88 J	0.95 J	1.52	1.75	1.54
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-23-5	Sodium	NS	mg/Kg	4410	175	12200	786	5960	6240	6960	7550	7350
7440-28-0	Thallium	NS	mg/Kg	ND	ND	ND	ND	ND	ND	0.42 J	0.29 J	0.29 J
7440-62-2	Vanadium	NS	mg/Kg	10.3	4.83	13.9	7.66	9.74	20.2	19.7	20.7	17.1
7440-66-6	Zinc	109	mg/Kg	16.7	9.93	27.7 J	15.6	81.1	243	784	134	634
57-12-5	Cyanide	27	mg/Kg	ND	ND	6.3	ND	8.97	7.14	38	21	40

Notes:
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Consolidated Edisor Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010
CAS NO.	COMPOUND			
	VOLATILES			
67-64-1	Acetone	0.05	mg/Kg	0.043
71-43-2	Benzene	0.06	mg/Kg	0.034
78-93-3	2-Butanone	0.12	mg/Kg	0.0084 J
75-15-0	Carbon Disulfide	NS	mg/Kg	ND
74-87-3	Chloromethane	NS	mg/Kg	ND
100-41-4	Ethyl Benzene	1	mg/Kg	0.03
98-82-8	Isopropylbenzene	NS	mg/Kg	0.0018 J
108-10-1	4-Methyl-2-Pentanone	NS	mg/Kg	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND
100-42-5	Styrene	NS	mg/Kg	0.011
127-18-4	Tetrachloroethene	1.3	mg/Kg	ND
108-88-3	Toluene	0.7	mg/Kg	0.047
1330-20-7	o-Xylene	0.26	mg/Kg	0.017
136777-61-2	m/p-Xylenes	0.26	mg/Kg	0.041
	Total VOCs	**NS**	**mg/Kg**	**0.2332**
	SEMIVOLATILES			
98-86-2	Acetophenone	NS	mg/Kg	ND
100-52-7	Benzaldehyde	NS	mg/Kg	0.06 J
92-52-4	1,1-Biphenyl	NS	mg/Kg	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND
86-74-8	Carbazole	NS	mg/Kg	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND
87-86-5	Pentachlorophenol	0.8	mg/Kg	ND
	PAHs			
83-32-9	Acenaphthene	20	mg/Kg	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND
120-12-7	Anthracene	100	mg/Kg	ND
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.088 J
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.084 J
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	0.11 J
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	0.059 J
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND
218-01-9	Chrysene	1	mg/Kg	0.11 J
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND
206-44-0	Fluoranthene	100	mg/Kg	0.16 J
86-73-7	Fluorene	30	mg/Kg	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	0.054 J
91-57-6	2-Methylnaphthalene	NS	mg/Kg	0.1 J
91-20-3	Naphthalene	12	mg/Kg	0.53
85-01-8	Phenanthrene	100	mg/Kg	0.073 J
129-00-0	Pyrene	100	mg/Kg	0.16 J
	Total PAHs	**NS**	**mg/Kg**	**1.528**
	Total SVOCs	**NS**	**mg/Kg**	**1.588**

Notes:
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CAS NO.	COMPOUND			
	INORGANICS			
7429-90-5	Aluminum	NS	mg/Kg	6160
7440-36-0	Antimony	NS	mg/Kg	7.11
7440-38-2	Arsenic	13	mg/Kg	35.2
7440-39-3	Barium	350	mg/Kg	1340
7440-41-7	Beryllium	7.2	mg/Kg	0.62
7440-43-9	Cadmium	2.5	mg/Kg	57.3
7440-70-2	Calcium	NS	mg/Kg	7610
7440-47-3	Chromium	NS	mg/Kg	66.7
7440-48-4	Cobalt	NS	mg/Kg	6.44
7440-50-8	Copper	50	mg/Kg	32.7
7439-89-6	Iron	NS	mg/Kg	70900
7439-92-1	Lead	63	mg/Kg	19900
7439-95-4	Magnesium	NS	mg/Kg	4640
7439-96-5	Manganese	1600	mg/Kg	426
7439-97-6	Mercury	0.18	mg/Kg	0.17 J
7440-02-0	Nickel	30	mg/Kg	15.1
7440-09-7	Potassium	NS	mg/Kg	755
7782-49-2	Selenium	3.9	mg/Kg	12.7 J
7440-22-4	Silver	2	mg/Kg	ND
7440-23-5	Sodium	NS	mg/Kg	26000
7440-28-0	Thallium	NS	mg/Kg	ND
7440-62-2	Vanadium	NS	mg/Kg	25.5
7440-66-6	Zinc	109	mg/Kg	8230
57-12-5	Cyanide	27	mg/Kg	26

Notes:
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Consolidated Edisor Ludlow Street Site Validated Soil Analytical Data Detected Compound Summary		Unrestricted Use Soil Cleanup Objectives	Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated: UNITS:	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010
CAS NO.	COMPOUND							
	VOLATILES							
67-64-1	Acetone	0.05	mg/Kg	0.022 J	ND	ND	0.0098 J	ND
71-43-2	Benzene	0.06	mg/Kg	0.0047 J	ND	ND	ND	ND
78-93-3	2-Butanone	0.12	mg/Kg	ND	ND	ND	ND	ND
75-15-0	Carbon Disulfide	NS	mg/Kg	ND	ND	ND	ND	ND
74-87-3	Chloromethane	NS	mg/Kg	ND	ND	ND	ND	ND
100-41-4	Ethyl Benzene	1	mg/Kg	0.0017 J	0.015	0.0042 J	ND	ND
98-82-8	Isopropylbenzene	NS	mg/Kg	ND	0.00066 J	ND	ND	ND
108-10-1	4-Methyl-2-Pentanone	NS	mg/Kg	ND	0.03	ND	ND	ND
1634-04-4	Methyl tert-butyl Ether	0.93	mg/Kg	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	NS	mg/Kg	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	0.05	mg/Kg	ND	0.0022 J	ND	ND	ND
100-42-5	Styrene	NS	mg/Kg	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethene	1.3	mg/Kg	ND	ND	ND	ND	ND
108-88-3	Toluene	0.7	mg/Kg	0.004 J	1.8	0.078	ND	ND
1330-20-7	o-Xylene	0.26	mg/Kg	0.00099 J	0.021	0.0058	ND	ND
136777-61-2	m/p-Xylenes	0.26	mg/Kg	0.0023 J	0.073 J	0.021	ND	ND
	Total VOCs	**NS**	**mg/Kg**	**0.03569**	**1.94186**	**0.109**	**0.0098**	**ND**
	SEMIVOLATILES							
98-86-2	Acetophenone	NS	mg/Kg	0.09 J	ND	ND	ND	ND
100-52-7	Benzaldehyde	NS	mg/Kg	0.14 J	ND	ND	ND	ND
92-52-4	1,1-Biphenyl	NS	mg/Kg	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl)phthalate	NS	mg/Kg	ND	ND	ND	ND	ND
85-68-7	Butylbenzylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND
86-74-8	Carbazole	NS	mg/Kg	ND	ND	ND	0.059 J	ND
132-64-9	Dibenzofuran	NS	mg/Kg	ND	ND	ND	0.11 J	ND
131-11-3	Dimethylphthalate	NS	mg/Kg	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	0.8	mg/Kg	ND	ND	ND	ND	ND
	PAHs							
83-32-9	Acenaphthene	20	mg/Kg	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	100	mg/Kg	ND	ND	ND	0.57	0.21 J
120-12-7	Anthracene	100	mg/Kg	ND	ND	ND	0.29 J	0.1 J
120-12-7	Benzo(a)anthracene	1	mg/Kg	0.1 J	0.11 J	0.054 J	0.95	0.43
50-32-8	Benzo(a)pyrene	1	mg/Kg	0.08 J	0.11 J	0.055 J	0.68	0.34 J
205-99-2	Benzo(b)fluoranthene	1	mg/Kg	0.12 J	0.14 J	0.078 J	0.83	0.47
191-24-2	Benzo(g,h,i)perylene	100	mg/Kg	0.061 J	0.081 J	0.047 J	0.43	0.26 J
207-08-9	Benzo(k)fluoranthene	0.8	mg/Kg	ND	ND	ND	0.3 J	0.14 J
218-01-9	Chrysene	1	mg/Kg	0.15 J	0.1 J	0.054 J	0.99	0.46
53-70-3	Dibenz(a,h)anthracene	0.33	mg/Kg	ND	ND	ND	0.14 J	0.073 J
206-44-0	Fluoranthene	100	mg/Kg	0.21 J	0.15 J	0.091 J	1.2	0.56
86-73-7	Fluorene	30	mg/Kg	ND	ND	ND	0.12 J	ND
193-39-5	Indeno(1,2,3-cd)pyrene	0.5	mg/Kg	0.061 J	0.078 J	ND	0.44	0.27 J
91-57-6	2-Methylnaphthalene	NS	mg/Kg	0.2 J	ND	ND	0.14 J	ND
91-20-3	Naphthalene	12	mg/Kg	0.97	ND	ND	0.19 J	0.093 J
85-01-8	Phenanthrene	100	mg/Kg	0.1 J	ND	ND	0.91	0.34 J
129-00-0	Pyrene	100	mg/Kg	0.23 J	0.13 J	0.089 J	1.2	0.6
	Total PAHs	**NS**	**mg/Kg**	**2.282**	**0.899**	**0.468**	**9.38**	**4.346**
	Total SVOCs	**NS**	**mg/Kg**	**2.512**	**0.899**	**0.468**	**9.549**	**4.346**

Notes:
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CAS NO.	COMPOUND							
	INORGANICS							
7429-90-5	Aluminum	NS	mg/Kg	4970	6020	6260	2880	2610
7440-36-0	Antimony	NS	mg/Kg	2.56	ND	ND	5.39	3.33
7440-38-2	Arsenic	13	mg/Kg	9.95	1.36	0.61 J	51.1	98.4
7440-39-3	Barium	350	mg/Kg	680	46.2	55.9	57.4	92.9
7440-41-7	Beryllium	7.2	mg/Kg	0.31	0.33	0.37	0.38	0.36
7440-43-9	Cadmium	2.5	mg/Kg	15.5	0.62	0.69	2.26	1.52
7440-70-2	Calcium	NS	mg/Kg	6990	4380	2340	10400	283
7440-47-3	Chromium	NS	mg/Kg	27.1	12.3	14.5	7.95	8.28
7440-48-4	Cobalt	NS	mg/Kg	5.26	6.05	6.51	7.34	7.77
7440-50-8	Copper	50	mg/Kg	17.7	18.3	21.5	809	50.4
7439-89-6	Iron	NS	mg/Kg	26900	10100	11500	25900	29700
7439-92-1	Lead	63	mg/Kg	7250	28	38	692	317
7439-95-4	Magnesium	NS	mg/Kg	4850	4920	3880	726	611
7439-96-5	Manganese	1600	mg/Kg	351	264	296	95.2	76.5
7439-97-6	Mercury	0.18	mg/Kg	0.438 J	0.208 J	0.439 J	0.33 J	0.256 J
7440-02-0	Nickel	30	mg/Kg	12.1	16.7	18.1	21.7	27
7440-09-7	Potassium	NS	mg/Kg	723	891	968	496	573
7782-49-2	Selenium	3.9	mg/Kg	4.96 J	1.32 J	1.78 J	10.9 J	9.99 J
7440-22-4	Silver	2	mg/Kg	ND	ND	ND	0.92 J	ND
7440-23-5	Sodium	NS	mg/Kg	12500	32500	12500	8300	18400
7440-28-0	Thallium	NS	mg/Kg	ND	0.39 J	ND	0.4 J	0.67 J
7440-62-2	Vanadium	NS	mg/Kg	15	17.2	21.8	12.7	12.1
7440-66-6	Zinc	109	mg/Kg	2150	94.4	88.1	107	75.9
57-12-5	Cyanide	27	mg/Kg	7.33	25	64	11	6.09

Notes:
(1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006
(2) NS indicates no cleanup objective or background level is available
(3) ND indicates compound was not detected
(4) J indicates an estimated concentration
(5) Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objecti

Table 4
Summary of Groundwater Analytical Data
Former Ludlow Street Works
Consolidated Edison Company of New York
Site Characterization - June and July 2010

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data Detected Compound Summary		NYSDEC Class GA Groundwater Standards/Guidance Values [1]	Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010
CAS NO.	COMPOUND		UNITS:						
	VOLATILES								
67-64-1	Acetone	5	ug/L	ND	13 J	ND	ND	88 J	140 J
71-43-2	Benzene	1	ug/L	ND	1.7 J	95	1.3 J	7.8	9.6
74-83-9	Bromomethane	5	ug/L	ND	ND	ND	ND	ND	9.8 J
78-93-3	2-Butanone	50 (G)	ug/L	ND	ND	ND	ND	ND	9.2 J
74-87-3	Chloromethane	5	ug/L	ND	ND	ND	ND	69	64
100-41-4	Ethyl Benzene	5	ug/L	ND	1.4 J	64	ND	6	7.1
98-82-8	Isopropylbenzene	5	ug/L	ND	ND	2.4 J	ND	0.52 J	ND
108-10-1	4-Methyl-2-Pentanone	--	ug/L	ND	ND	ND	ND	15 J	18 J
1634-04-4	Methyl tert-butyl Ether	10 (G)	ug/L	ND	ND	1.6 J	ND	1.9 J	2.1 J
108-87-2	Methylcyclohexane	--	ug/L	ND	ND	2.4 J	ND	2.2 J	1.6 J
100-42-5	Styrene	5	ug/L	ND	ND	7	ND	ND	ND
108-88-3	Toluene	5	ug/L	ND	ND	120	ND	5.2	5.9
136777-61-2	m/p-Xylenes	5	ug/L	ND	ND	160	ND	3.2 J	3.5 J
1330-20-7	o-Xylene	5	ug/L	ND	3.7 J	77	ND	2.4 J	2.8 J
	Total VOCs	**--**	**ug/L**	**ND**	**19.8**	**529.4**	**1.3**	**201.22**	**273.6**
	SEMIVOLATILES								
92-52-4	1,1-Biphenyl	5	ug/L	ND	1.9 J	25	ND	2.8 J	3.6 J
86-74-8	Carbazole	--	ug/L	ND	ND	3.5 J	ND	ND	ND
132-64-9	Dibenzofuran	--	ug/L	ND	ND	5.5 J	ND	ND	ND
108-95-2	Phenol	1	ug/L	ND	ND	3.2 J	ND	1.4 J	ND
	PAHs								
83-32-9	Acenaphthene	20 (G)	ug/L	ND	ND	31	ND	11	14
208-96-8	Acenaphthylene	--	ug/L	ND	ND	48	ND	3.6 J	4.8 J
120-12-7	Anthracene	50 (G)	ug/L	ND	ND	9.9 J	ND	3.1 J	4.3 J
206-44-0	Fluoranthene	50 (G)	ug/L	ND	ND	4.2 J	1.5 J	3.7 J	5.1 J
86-73-7	Fluorene	50 (G)	ug/L	ND	ND	43	ND	5.8 J	7.6 J
91-57-6	2-Methylnaphthalene	--	ug/L	ND	11	380	ND	12	15
91-20-3	Naphthalene	10	ug/L	ND	4.7 J	1300	ND	53	66
85-01-8	Phenanthrene	50 (G)	ug/L	ND	ND	48	ND	14	19
129-00-0	Pyrene	50 (G)	ug/L	ND	ND	5.2 J	1.4 J	4.5 J	5.9 J
	Total PAHs	**--**	**ug/L**	**ND**	**15.7**	**1869.3**	**2.9**	**110.7**	**141.7**
	Total SVOCs	**--**	**ug/L**	**ND**	**17.6**	**1906.5**	**2.9**	**114.9**	**145.3**

Notes:

(1)	NYSDEC TOGS 1:1:1 Class GA Ambient Water Quality Standards and Guidance Values (October 1998
	Indicates concentration exceeds standard or guidance value
(G)	Indicates guidance value.
NS	No standard or guidance value available
ND	Indicates compound was not detected.
J	Indicates an estimated concentration.
NA	Not Analyzed
ug/L	Micrograms per liter

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CAS NO.	COMPOUND		UNITS:						
	INORGANICS								
7429-90-5	Aluminum	--	ug/L	814	4840	284	13400	137	105
7440-38-2	Arsenic	25	ug/L	5.98 J	16.2	ND	30.1	ND	ND
7440-39-3	Barium	1000	ug/L	139	630	228	221	157	149
7440-41-7	Beryllium	3 (G)	ug/L	ND	ND	ND	0.98 J	ND	ND
7440-43-9	Cadmium	5	ug/L	ND	1.63 J	ND	8.57	ND	ND
7440-70-2	Calcium	--	ug/L	79300	62200	82900	23700	122000	117000
7440-47-3	Chromium	50	ug/L	ND	4.96 J	ND	19.3	ND	ND
7440-48-4	Cobalt	--	ug/L	ND	ND	ND	12.5 J	ND	ND
7440-50-8	Copper	200	ug/L	ND	12.3	ND	61.5	ND	ND
7439-89-6	Iron	300	ug/L	2040	11700	453	20400	2390	2230
7439-92-1	Lead	25	ug/L	10.4	97	13.4	559	9.5	12.2
7439-95-4	Magnesium	35000 (G)	ug/L	16400	10300	29900	6360	36900	35800
7439-96-5	Manganese	300	ug/L	2960	2010	3150	927	4100	3890
7439-97-6	Mercury	0.7	ug/L	ND	9.7	ND	43.1	ND	ND
7440-02-0	Nickel	100	ug/L	ND	8.77 J	13.3 J	36.8	5.53 J	6.42 J
7440-09-7	Potassium	--	ug/L	8360	22700	8830	7840	19500	18700
7782-49-2	Selenium	10	ug/L	ND	ND	ND	5.7 J	ND	ND
7440-23-5	Sodium	20000	ug/L	240000	10800000	2450000	1500000	5250000	5170000
7440-62-2	Vanadium	--	ug/L	ND	10.6 J	ND	48.2	ND	ND
7440-66-6	Zinc	2000 (G)	ug/L	ND	ND	ND	327	ND	ND
57-12-5	Cyanide	200	ug/L	13	126	127	299	24	27
	METALS, DISSOLVED								
7429-90-5	Aluminum	--	ug/L	NA	409	NA	16900	NA	NA
7440-38-2	Arsenic	25	ug/L	NA	5.81 J	NA	34.4	NA	NA
7440-39-3	Barium	1000	ug/L	NA	442	NA	211	NA	NA
7440-41-7	Beryllium	3 (G)	ug/L	NA	ND	NA	0.89 J	NA	NA
7440-43-9	Cadmium	5	ug/L	NA	ND	NA	7.5	NA	NA
7440-70-2	Calcium	--	ug/L	NA	60800	NA	22400	NA	NA
7440-47-3	Chromium	50	ug/L	NA	ND	NA	25.3	NA	NA
7440-48-4	Cobalt	--	ug/L	NA	ND	NA	12.9 J	NA	NA
7440-50-8	Copper	200	ug/L	NA	ND	NA	83.9	NA	NA
7439-89-6	Iron	300	ug/L	NA	1410	NA	25000	NA	NA
7439-92-1	Lead	25	ug/L	NA	15	NA	480	NA	NA
7439-95-4	Magnesium	35000 (G)	ug/L	NA	9180	NA	6320	NA	NA
7439-96-5	Manganese	300	ug/L	NA	1770	NA	908	NA	NA
7439-97-6	Mercury	0.7	ug/L	NA	0.93	NA	13.8	NA	NA
7440-02-0	Nickel	100	ug/L	NA	4.39 J	NA	39.9	NA	NA
7440-09-7	Potassium	--	ug/L	NA	23200	NA	8650	NA	NA
7782-49-2	Selenium	10	ug/L	NA	ND	NA	4.97 J	NA	NA
7440-23-5	Sodium	20000	ug/L	NA	10900000	NA	1490000	NA	NA
7440-62-2	Vanadium	--	ug/L	NA	ND	NA	52.4	NA	NA
7440-66-6	Zinc	2000 (G)	ug/L	NA	ND	NA	322	NA	NA

Notes:
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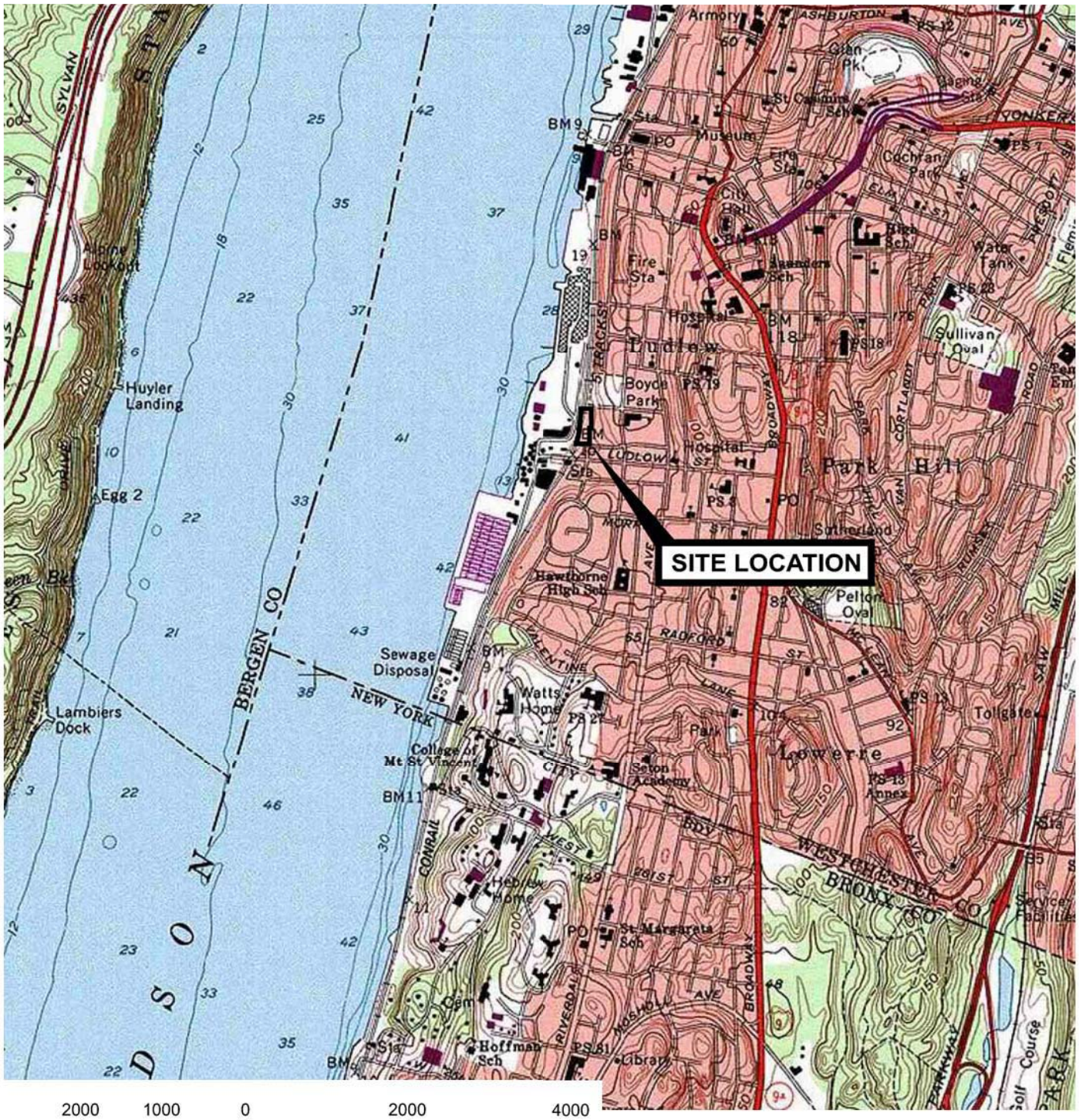
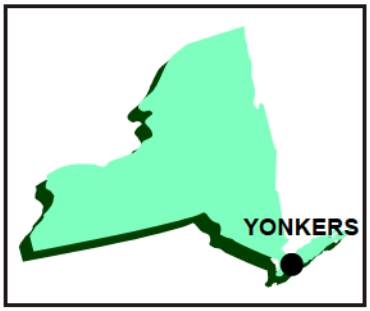
FIGURES





New York

N

SOURCE:

MAP CREATED WITH TOPO!™
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PRODUCTIONS
(www.topo.com)

FIGURE 1

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SITE LOCATION MAP

PARSONS
301 Liverpool Road, Syracuse, NY 13212

LEGEND:

- FORMER MGP STRUCTURES
- FENCELINE
- RAILROAD TRACKS
- PROPERTY LINE
- SITE BOUNDARY
- OHW — OVERHEAD WIRE
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE

NOTES:

1. BASE SURVEY DRAWING PROVIDED BY THE CHAZEN COMPANIES, FROM A SURVEY PERFORMED ON THE SITE IN JULY, 2010.

2. HISTORIC FEATURES IN BASE DRAWING BASED ON SANBORN FIRE INSURANCE MAPS DATED 1888, 1898, 1917, 1951, & 1991. WESTCHESTER COUNTY ATLAS, 1931., YONKERS TAX ASSESSORS MAP, REVISED 1947 AND FIGURE 3 FROM GEI CONSULTANTS, INC.

50 25 0 50 100

SCALE: 1"=50'

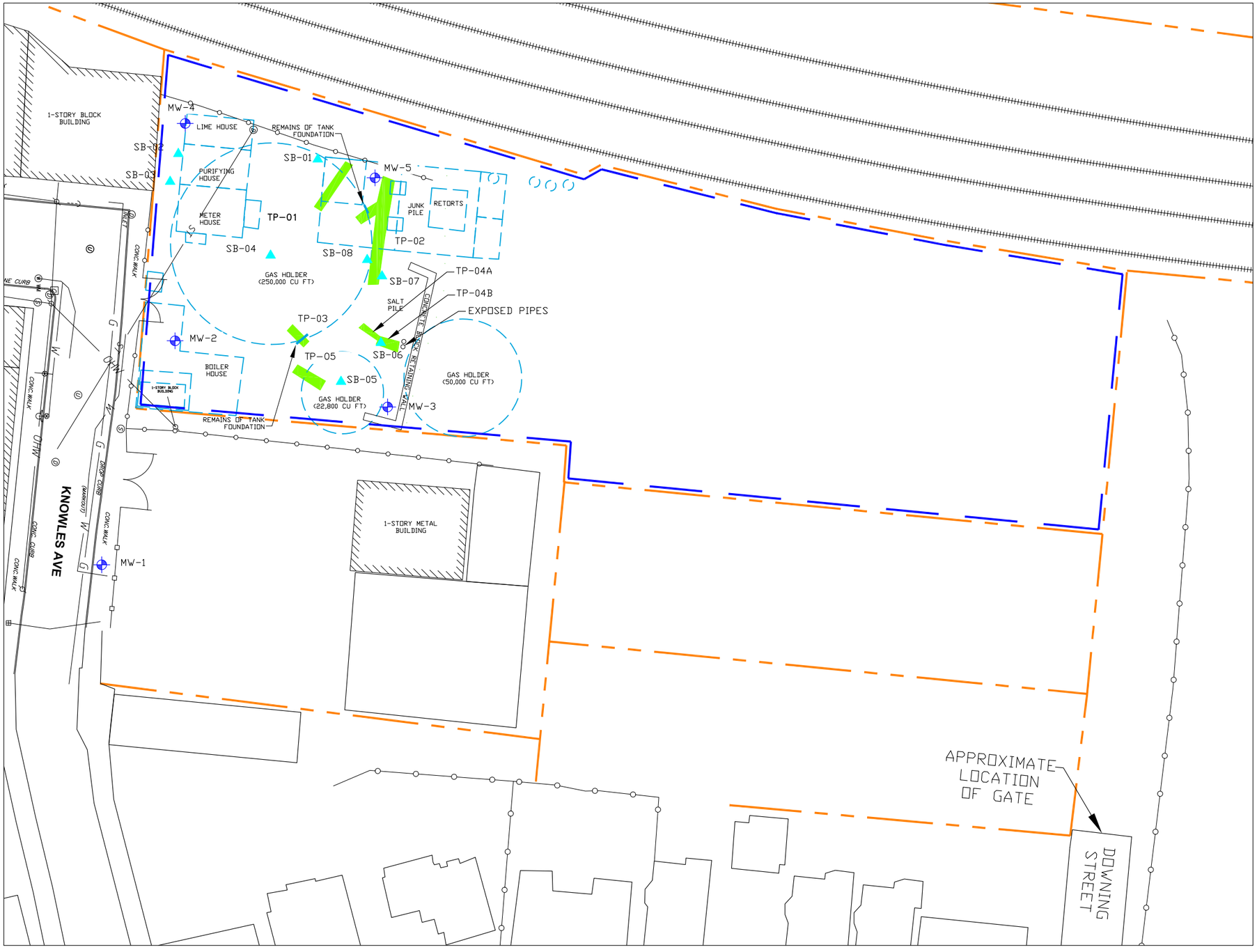
FIGURE 2

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

FORMER MGP STRUCTURES

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 - LUDLOW ST\CAD\446110-SK004.DWG
PLOT DATE: 2/8/2011 10:43 AM PLOTTED BY: MCFARLANE, TANESHA



LEGEND:

- MONITORING WELL LOCATION (MW)
- SOIL BORING LOCATION (SB)
- TEST PIT LOCATION (TP)
- FORMER MGP STRUCTURES
- FENCELINE
- RAILROAD TRACKS
- PROPERTY LINE
- SITE BOUNDARY
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- BUILDING

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FIGURE 3

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SAMPLE LOCATION MAP

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 - LUDLOW ST\CAD\446110-SK002.DWG
PLOT DATE: 2/8/2011 10:39 AM PLOTTED BY: MCFARLANE, TANESHA

SB-2	20-22'
Acetone	0.077
Benzene	0.0014
Ethyl Benzene	ND
Toluene	ND
o-Xylene	ND
m/p- Xylene	ND

MW-4	5-7'	23-25'
Acetone	ND	0.00067
Benzene	ND	0.0011
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND

SB-1	18-20'	24-26'	32-34'
Acetone	4.2	0.11	0.0085
Benzene	0.0027	ND	ND
Ethyl Benzene	0.062	ND	ND
Toluene	0.008	ND	ND
o-Xylene	0.038	ND	ND
m/p- Xylene	0.032	ND	ND

TP-1	7.5'	8.5'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND

MW-5	4-6'	7-9'	23-25'
Acetone	ND	ND	0.029
Benzene	ND	ND	0.0022
Ethyl Benzene	ND	ND	0.014
Toluene	ND	ND	0.0032
o-Xylene	ND	ND	0.0061
m/p- Xylene	ND	ND	0.0088

TP-2	4.5'	7.5'	8.5'
Acetone	ND	ND	ND
Benzene	ND	0.0027	ND
Ethyl Benzene	ND	ND	ND
Toluene	0.0033	0.0016	ND
o-Xylene	ND	ND	ND
m/p- Xylene	0.011	ND	ND

SB-7	15-17'	33-35'
Acetone	11	ND
Benzene	2.2	ND
Ethyl Benzene	99	ND
Toluene	8.4	ND
o-Xylene	69	ND
m/p- Xylene	130	ND

TP-4	2.5'	3'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	0.0042	0.015
Toluene	0.078	1.8
o-Xylene	0.0058	0.021
m/p- Xylene	0.021	0.073

SB-6	13-15'	13-15' DUP	29-31'
Acetone	ND	ND	ND
Benzene	7	11	ND
Ethyl Benzene	16	27	0.0017
Toluene	2.7	10	0.0013
o-Xylene	10	15	0.0012
m/p- Xylene	22	30	ND

MW-3	9-11'	31-33'
Acetone	ND	ND
Benzene	16	ND
Ethyl Benzene	62	ND
Toluene	66	ND
o-Xylene	54	ND
m/p- Xylene	110	ND

SB-4	20-22'	30-32'
Acetone	ND	ND
Benzene	0.12	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND

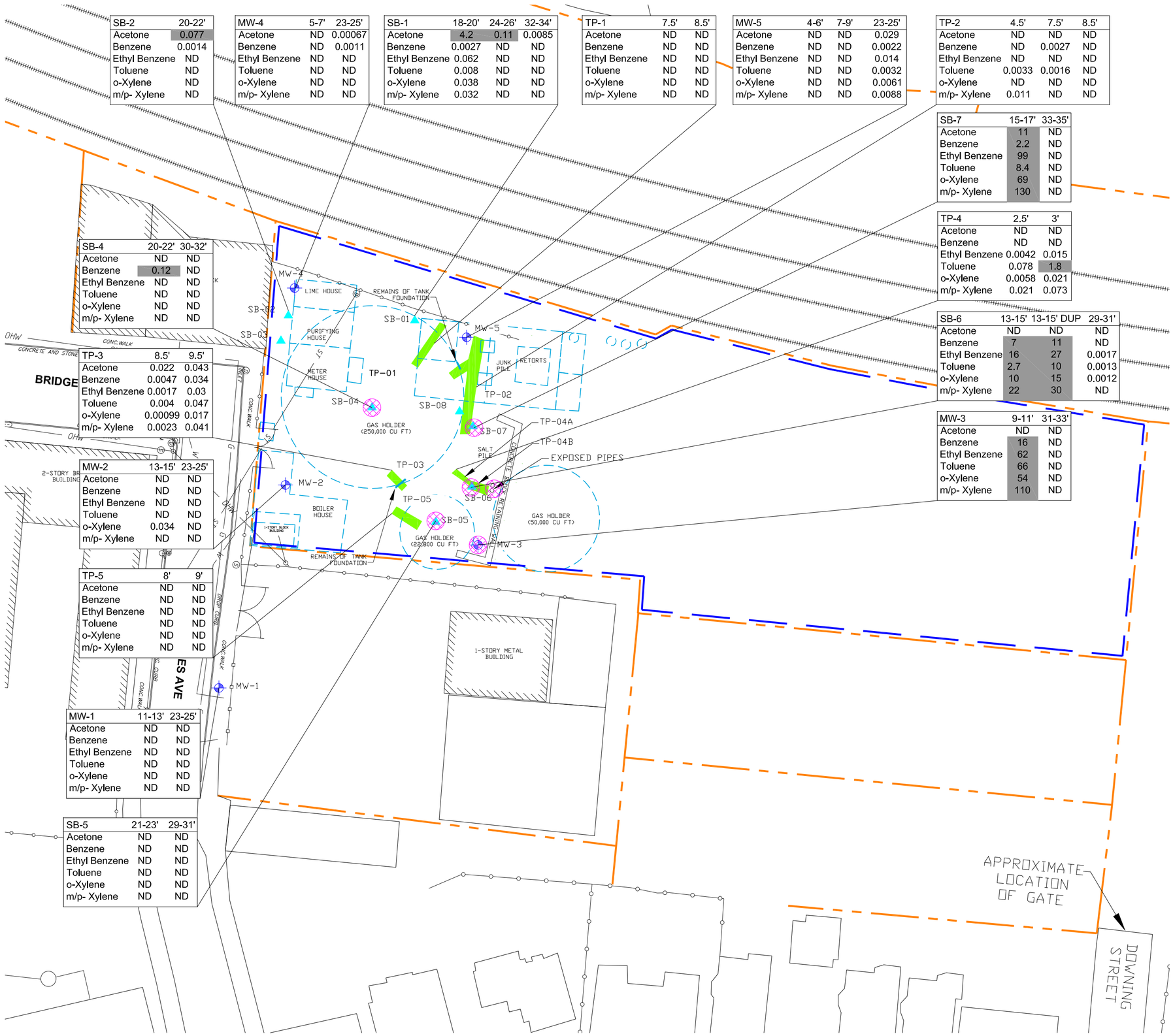
TP-3	8.5'	9.5'
Acetone	0.022	0.043
Benzene	0.0047	0.034
Ethyl Benzene	0.0017	0.03
Toluene	0.004	0.047
o-Xylene	0.00099	0.017
m/p- Xylene	0.0023	0.041

MW-2	13-15'	23-25'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	0.034	ND
m/p- Xylene	ND	ND

TP-5	8'	9'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND

MW-1	11-13'	23-25'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND

SB-5	21-23'	29-31'
Acetone	ND	ND
Benzene	ND	ND
Ethyl Benzene	ND	ND
Toluene	ND	ND
o-Xylene	ND	ND
m/p- Xylene	ND	ND



LEGEND:

- MONITORING WELL LOCATION (MW)
- SOIL BORING LOCATION (SB)
- TEST PIT LOCATION (TP)
- NAPL OBSERVED
- FORMER MGP STRUCTURES
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3. ALL CONCENTRATIONS IN PARTS PER MILLION (ppm)
4. SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
5. ND – NOT DETECTED
6. COMPOUNDS DETECTED ABOVE USCOs, AT ANY LOCATION, ARE SHOWN.

40 20 0 40 80

SCALE: 1"=40'

FIGURE 4

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SUMMARY OF VOC EXCEEDANCES IN SOIL

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 – LUDLOW ST\CAD\446110-SK006-VOC.DWG
PLOT DATE: 2/8/2011 11:17 AM PLOTTED BY: MCFARLANE, TANESHA

SB-2	20-22'
Acenaphthene	ND
Benzo(a)anthracene	0.051
Benzo(a)pyrene	ND
Benzo(b)fluoranthene	0.059
Benzo(k)fluoranthene	ND
Chrysene	0.061
Dibenz(a,h)anthracene	ND
Fluorene	ND
Indeno(1,2,3-cd)pyrene	ND
Naphthalene	0.21
Phenanthrene	0.095
Pyrene	0.11

MW-4	5-7'	23-25'
Acenaphthene	1.3	ND
Benzo(a)anthracene	7.3	ND
Benzo(a)pyrene	6.3	ND
Benzo(b)fluoranthene	8.9	ND
Benzo(k)fluoranthene	2.1	ND
Chrysene	7	ND
Dibenz(a,h)anthracene	0.6	ND
Fluorene	1.3	ND
Indeno(1,2,3-cd)pyrene	3.7	ND
Naphthalene	1.5	ND
Phenanthrene	15	ND
Pyrene	15	ND

SB-1	18-20'	24-26'	32-34'
Acenaphthene	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND
Chrysene	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND
Fluorene	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND
Naphthalene	0.36	ND	ND
Phenanthrene	0.12	0.077	ND
Pyrene	0.075	ND	ND

TP-1	7.5'	8.5'
Acenaphthene	ND	ND
Benzo(a)anthracene	ND	ND
Benzo(a)pyrene	ND	ND
Benzo(b)fluoranthene	ND	ND
Benzo(k)fluoranthene	ND	ND
Chrysene	ND	ND
Dibenz(a,h)anthracene	ND	ND
Fluorene	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Naphthalene	ND	ND
Phenanthrene	ND	ND
Pyrene	ND	ND

MW-5	4-6'	7-9'	23-25'
Acenaphthene	ND	ND	0.21
Benzo(a)anthracene	ND	1.5	0.95
Benzo(a)pyrene	ND	1.1	0.7
Benzo(b)fluoranthene	ND	1.5	0.57
Benzo(k)fluoranthene	ND	0.56	0.18
Chrysene	ND	1.3	0.78
Dibenz(a,h)anthracene	ND	ND	0.068
Fluorene	ND	ND	0.2
Indeno(1,2,3-cd)pyrene	ND	0.64	0.24
Naphthalene	ND	ND	0.9
Phenanthrene	ND	3.2	0.48
Pyrene	ND	2.6	2

MW-2	13-15'	23-25'
Acenaphthene	ND	ND
Benzo(a)anthracene	ND	ND
Benzo(a)pyrene	ND	ND
Benzo(b)fluoranthene	ND	ND
Benzo(k)fluoranthene	ND	ND
Chrysene	ND	ND
Dibenz(a,h)anthracene	ND	ND
Fluorene	0.081	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Naphthalene	0.066	ND
Phenanthrene	0.19	ND
Pyrene	ND	ND

TP-2	4.5'	7.5'	8.5'
Acenaphthene	ND	ND	ND
Benzo(a)anthracene	ND	0.091	ND
Benzo(a)pyrene	ND	0.075	ND
Benzo(b)fluoranthene	ND	0.11	ND
Benzo(k)fluoranthene	ND	ND	ND
Chrysene	ND	0.11	ND
Dibenz(a,h)anthracene	ND	ND	ND
Fluorene	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND
Naphthalene	ND	0.33	1
Phenanthrene	ND	0.11	ND
Pyrene	ND	0.2	ND

SB-7	15-17'	33-35'
Acenaphthene	46	ND
Benzo(a)anthracene	35	ND
Benzo(a)pyrene	22	ND
Benzo(b)fluoranthene	18	ND
Benzo(k)fluoranthene	5.9	ND
Chrysene	29	ND
Dibenz(a,h)anthracene	2.6	ND
Fluorene	92	ND
Indeno(1,2,3-cd)pyrene	6.8	ND
Naphthalene	250	ND
Phenanthrene	220	ND
Pyrene	80	0.057

TP-4	2.5'	3'
Acenaphthene	ND	ND
Benzo(a)anthracene	0.054	0.11
Benzo(a)pyrene	0.055	0.11
Benzo(b)fluoranthene	0.078	0.14
Benzo(k)fluoranthene	ND	ND
Chrysene	0.054	0.1
Dibenz(a,h)anthracene	ND	ND
Fluorene	ND	ND
Indeno(1,2,3-cd)pyrene	ND	0.078
Naphthalene	ND	ND
Phenanthrene	ND	ND
Pyrene	0.089	0.13

SB-4	20-22'	30-32'
Acenaphthene	1.2	1.3
Benzo(a)anthracene	1.3	21
Benzo(a)pyrene	0.85	14
Benzo(b)fluoranthene	0.65	11
Benzo(k)fluoranthene	0.24	3.6
Chrysene	1.2	20
Dibenz(a,h)anthracene	0.099	1.6
Fluorene	2.8	1.1
Indeno(1,2,3-cd)pyrene	0.26	4.2
Naphthalene	1.9	ND
Phenanthrene	10	0.38
Pyrene	3.6	52

SB-6	13-15'	13-15' DUP	29-31'
Acenaphthene	7.1	9.3	0.065
Benzo(a)anthracene	2.3	4	ND
Benzo(a)pyrene	1.5	2.5	ND
Benzo(b)fluoranthene	1.2	2	ND
Benzo(k)fluoranthene	0.33	0.62	ND
Chrysene	2	3.9	ND
Dibenz(a,h)anthracene	0.17	0.29	ND
Fluorene	6.8	11	0.81
Indeno(1,2,3-cd)pyrene	0.44	0.75	ND
Naphthalene	63	75	0.48
Phenanthrene	18	28	0.21
Pyrene	6.6	10	0.083

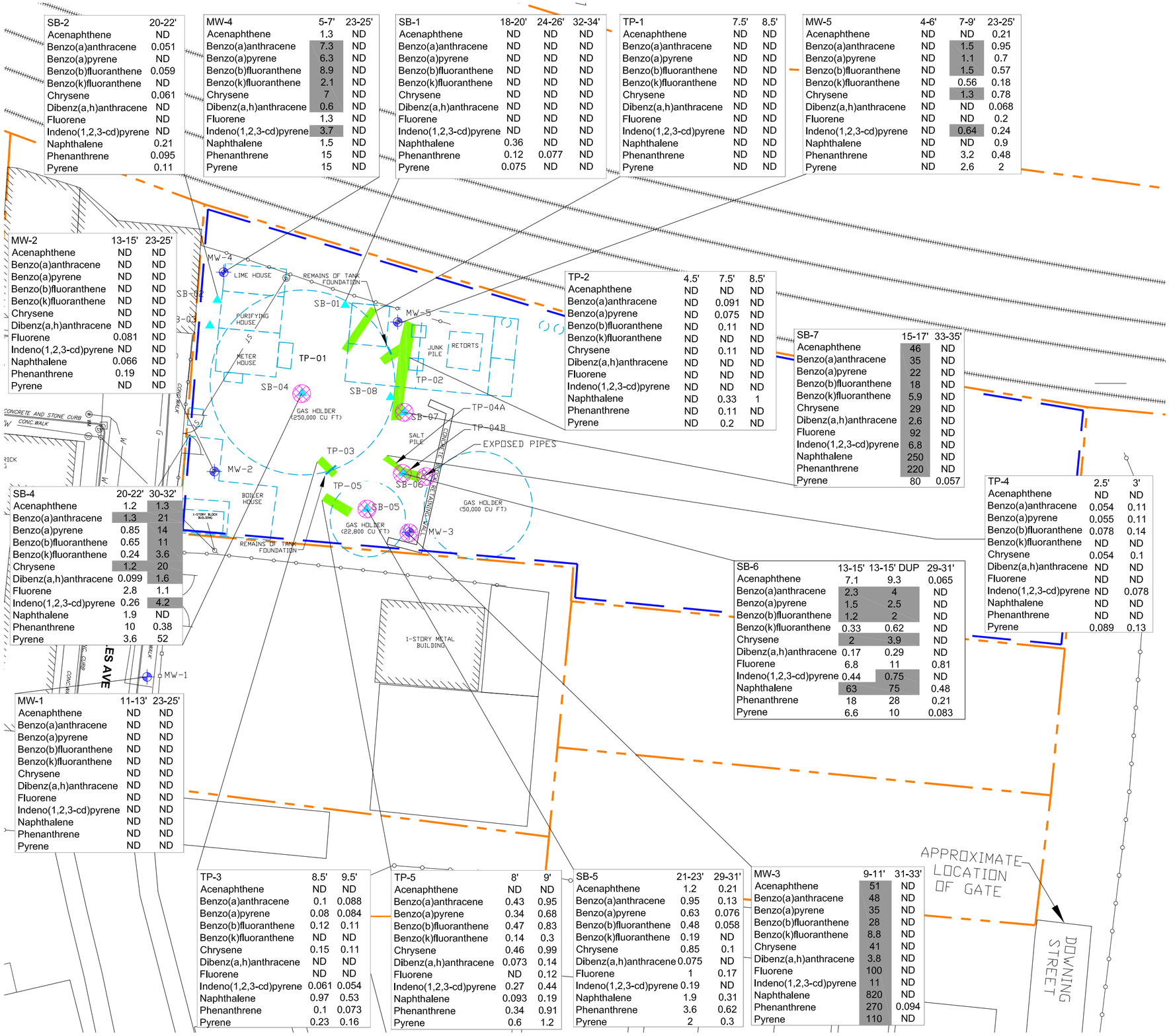
MW-1	11-13'	23-25'
Acenaphthene	ND	ND
Benzo(a)anthracene	ND	ND
Benzo(a)pyrene	ND	ND
Benzo(b)fluoranthene	ND	ND
Benzo(k)fluoranthene	ND	ND
Chrysene	ND	ND
Dibenz(a,h)anthracene	ND	ND
Fluorene	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Naphthalene	ND	ND
Phenanthrene	ND	ND
Pyrene	ND	ND

TP-3	8.5'	9.5'
Acenaphthene	ND	ND
Benzo(a)anthracene	0.1	0.088
Benzo(a)pyrene	0.08	0.084
Benzo(b)fluoranthene	0.12	0.11
Benzo(k)fluoranthene	ND	ND
Chrysene	0.15	0.11
Dibenz(a,h)anthracene	ND	ND
Fluorene	ND	ND
Indeno(1,2,3-cd)pyrene	0.061	0.054
Naphthalene	0.97	0.53
Phenanthrene	0.1	0.073
Pyrene	0.23	0.16

TP-5	8'	9'
Acenaphthene	ND	ND
Benzo(a)anthracene	0.43	0.95
Benzo(a)pyrene	0.34	0.68
Benzo(b)fluoranthene	0.47	0.83
Benzo(k)fluoranthene	0.14	0.3
Chrysene	0.46	0.99
Dibenz(a,h)anthracene	0.073	0.14
Fluorene	ND	0.12
Indeno(1,2,3-cd)pyrene	0.27	0.44
Naphthalene	0.093	0.19
Phenanthrene	0.34	0.91
Pyrene	0.6	1.2

SB-5	21-23'	29-31'
Acenaphthene	1.2	0.21
Benzo(a)anthracene	0.95	0.13
Benzo(a)pyrene	0.63	0.076
Benzo(b)fluoranthene	0.48	0.058
Benzo(k)fluoranthene	0.19	ND
Chrysene	0.85	0.1
Dibenz(a,h)anthracene	0.075	ND
Fluorene	1	0.17
Indeno(1,2,3-cd)pyrene	0.19	ND
Naphthalene	1.9	0.31
Phenanthrene	3.6	0.62
Pyrene	2	0.3

MW-3	9-11'	31-33'
Acenaphthene	51	ND
Benzo(a)anthracene	48	ND
Benzo(a)pyrene	35	ND
Benzo(b)fluoranthene	28	ND
Benzo(k)fluoranthene	8.8	ND
Chrysene	41	ND
Dibenz(a,h)anthracene	3.8	ND
Fluorene	100	ND
Indeno(1,2,3-cd)pyrene	11	ND
Naphthalene	820	ND
Phenanthrene	270	0.094
Pyrene	110	ND



LEGEND:

- MONITORING WELL LOCATION (MW)
- SOIL BORING LOCATION (SB)
- TEST PIT LOCATION (TP)
- NAPL OBSERVED
- FORMER MGP STRUCTURES
- FENCELINE
- RAILROAD TRACKS
- PROPERTY LINE
- SITE BOUNDARY
- OHW — OVERHEAD WIRE
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE

NOTES:

1. BASE SURVEY DRAWING PROVIDED BY THE CHAZEN COMPANIES, FROM A SURVEY PERFORMED ON THE SITE IN JULY, 2010.
2. HISTORIC FEATURES IN BASE DRAWING BASED ON SANBORN FIRE INSURANCE MAPS DATED 1888, 1898, 1917, 1951, & 1991. WESTCHESTER COUNTY ATLAS, 1931., YONKERS TAX ASSESSORS MAP, REVISED 1947 AND FIGURE 3 FROM GEI CONSULTANTS, INC.
3. ALL CONCENTRATIONS IN PARTS PER MILLION (ppm)
4. SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
5. ND – NOT DETECTED
6. COMPOUNDS DETECTED ABOVE USCOs, AT ANY LOCATION, ARE SHOWN.

40 20 0 40 80

SCALE: 1"=40'

FIGURE 5

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SUMMARY OF SVOC EXCEEDANCES IN SOIL

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 – LUDLOW ST\CAD\446110-SK008-SVOC.DWG
PLOT DATE: 2/8/2011 2:36 PM PLOTTED BY: MCFARLANE, TANESHA

SB-2	20-22'
Arsenic	0.98
Barium	67.7
Cadmium	1.03
Copper	11.7
Lead	125
Mercury	0.105
Selenium	ND
Zinc	63.2
Cyanide	6.22

MW-4	5-7'	23-25'
Arsenic	4.57	ND
Barium	77.9	39.5
Cadmium	0.72	0.8
Copper	34.6	9
Lead	310	7.99
Mercury	0.44	0.003
Selenium	1.63	2.29
Zinc	178	32.6
Cyanide	1.86	ND

SB-1	18-20'	24-26'	32-34'
Arsenic	ND	0.51	0.49
Barium	42.8	7.53	15.3
Cadmium	1.46	0.19	0.34
Copper	19.1	3.76	10.9
Lead	42.8	5.35	4
Mercury	0.058	0.055	0.021
Selenium	0.7	0.56	0.75
Zinc	38.9	13.1	17.9
Cyanide	7.18	2.16	ND

TP-1	7.5'	8.5'
Arsenic	3.58	2.13
Barium	67.5	52.3
Cadmium	0.75	0.32
Copper	17.8	16.7
Lead	203	77.8
Mercury	0.227	0.231
Selenium	0.95	0.88
Zinc	243	81.1
Cyanide	7.14	8.97

MW-5	4-6'	7-9'	23-25'
Arsenic	2.33	4.19	ND
Barium	68.7	128	10.2
Cadmium	0.73	1.66	0.2
Copper	21.9	44.9	4.48
Lead	70.8	144	9.81
Mercury	0.467	0.194	0.011
Selenium	1.65	2.7	0.89
Zinc	81.9	196	13.7
Cyanide	70	15	ND

TP-2	4.5'	7.5'	8.5'
Arsenic	ND	3.46	4.53
Barium	63.5	387	436
Cadmium	0.78	1.56	1.63
Copper	10.3	8.98	8.58
Lead	62.3	339	303
Mercury	0.07	0.258	0.215
Selenium	1.75	1.54	1.52
Zinc	134	634	784
Cyanide	21	40	38

SB-7	15-17'	33-35'
Arsenic	0.67	0.37
Barium	23.4	19.6
Cadmium	0.95	0.3
Copper	8.5	6.84
Lead	185	3.25
Mercury	0.276	ND
Selenium	1.84	0.56
Zinc	27.7	15.6
Cyanide	6.3	ND

SB-4	20-22'	30-32'
Arsenic	0.45	ND
Barium	20.5	19.7
Cadmium	0.57	0.22
Copper	10	3.41
Lead	15	4.21
Mercury	0.004	ND
Selenium	0.45	0.65
Zinc	18.3	10.2
Cyanide	ND	13

TP-4	2.5'	3'
Arsenic	0.61	1.36
Barium	55.9	46.2
Cadmium	0.69	0.62
Copper	21.5	18.3
Lead	38	28
Mercury	0.439	0.208
Selenium	1.78	1.32
Zinc	88.1	94.4
Cyanide	64	25

MW-2	13-15'	23-25'
Arsenic	ND	0.33
Barium	21.5	57.1
Cadmium	1.21	1.44
Copper	27.4	14.1
Lead	255	10.1
Mercury	0.222	0.006
Selenium	1.87	2.88
Zinc	47.6	46.4
Cyanide	ND	ND

SB-6	13-15'	13-15' DUP	29-31'
Arsenic	ND	ND	ND
Barium	13.7	29.2	15.5
Cadmium	0.38	0.78	0.16
Copper	5.75	9.28	4.96
Lead	4.04	6.85	2.51
Mercury	ND	ND	ND
Selenium	0.58	0.74	0.57
Zinc	16.7	25.3	9.93
Cyanide	ND	0.717	ND

MW-1	11-13'	23-25'
Arsenic	ND	ND
Barium	31.1	15.4
Cadmium	0.56	0.26
Copper	7.25	2.86
Lead	11.7	3.67
Mercury	0.024	0.008
Selenium	2.15	1.02
Zinc	26	12.6
Cyanide	ND	ND

TP-3	8.5'	9.5'
Arsenic	9.95	35.2
Barium	680	1340
Cadmium	15.5	57.3
Copper	17.7	32.7
Lead	7250	19900
Mercury	0.438	0.17
Selenium	4.96	12.7
Zinc	2150	8230
Cyanide	7.33	26

TP-5	8'	9'
Arsenic	98.4	51.1
Barium	92.9	57.4
Cadmium	1.52	2.26
Copper	50.4	809
Lead	317	692
Mercury	0.256	0.33
Selenium	9.99	10.9
Zinc	75.9	107
Cyanide	6.09	11

SB-5	21-23'	29-31'
Arsenic	ND	ND
Barium	38.9	23.4
Cadmium	0.56	0.2
Copper	6.36	7.23
Lead	9.66	2.99
Mercury	0.005	ND
Selenium	0.63	0.58
Zinc	22.1	10.8
Cyanide	1.05	ND

MW-3	9-11'	31-33'
Arsenic	ND	ND
Barium	28.1	12.8
Cadmium	0.75	0.13
Copper	10.6	3.46
Lead	183	2.09
Mercury	0.014	0.002
Selenium	1.23	0.54
Zinc	15.5	9.84
Cyanide	12	ND

LEGEND:

- MONITORING WELL LOCATION (MW)
- SOIL BORING LOCATION (SB)
- TEST PIT LOCATION (TP)
- NAPL OBSERVED
- FORMER MGP STRUCTURES
- FENCELINE
- RAILROAD TRACKS
- PROPERTY LINE
- SITE BOUNDARY
- OHW — OVERHEAD WIRE
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE

NOTES:

1. BASE SURVEY DRAWING PROVIDED BY THE CHAZEN COMPANIES, FROM A SURVEY PERFORMED ON THE SITE IN JULY, 2010.
2. HISTORIC FEATURES IN BASE DRAWING BASED ON SANBORN FIRE INSURANCE MAPS DATED 1888, 1898, 1917, 1951, & 1991. WESTCHESTER COUNTY ATLAS, 1931., YONKERS TAX ASSESSORS MAP, REVISED 1947 AND FIGURE 3 FROM GEI CONSULTANTS, INC.
3. ALL CONCENTRATIONS IN PARTS PER MILLION (ppm)
4. SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
5. ND – NOT DETECTED
6. COMPOUNDS DETECTED ABOVE USCOs, AT ANY LOCATION, ARE SHOWN.

40 20 0 40 80

SCALE: 1"=40'

FILE NAME: S:\446110 – LUDLOW ST\CAD\446110-SK007-INORG.DWG
PLOT DATE: 2/8/2011 2:40 PM PLOTTED BY: MCFARLANE, TANESHA

FIGURE 6

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SUMMARY OF INORGANIC EXCEEDANCES IN SOIL

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

NOTES:

1. BASE SURVEY DRAWING PROVIDED BY THE CHAZEN COMPANIES, FROM A SURVEY PERFORMED ON THE SITE IN JULY, 2010.

2. HISTORIC FEATURES IN BASE DRAWING BASED ON SANBORN FIRE INSURANCE MAPS DATED 1888, 1898, 1917, 1951, & 1991. WESTCHESTER COUNTY ATLAS, 1931., YONKERS TAX ASSESSORS MAP, REVISED 1947 AND FIGURE 3 FROM GEI CONSULTANTS, INC.

3. CONCENTRATIONS IN PARTS PER BILLION (ppb); METALS SHOWN IN PARTS PER MILLION (ppm)

4. SHADED VALUES EXCEED NYSDEC GROUNDWATER QUALITY STANDARDS OR GUIDANCE VALUES (TOGS 1.1.1)

5. ND – NOT DETECTED

6. COMPOUNDS DETECTED ABOVE NYSDEC GROUNDWATER QUALITY STANDARDS OR GUIDANCE VALUES (TOGS 1.1.1), AT ANY LOCATION, ARE SHOWN.

FIGURE 7

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

SUMMARY OF VOC, SVOC AND INORGANIC EXCEEDANCES IN GROUNDWATER

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 – LUDLOW ST\CAD\446110-SK009-GW.DWG
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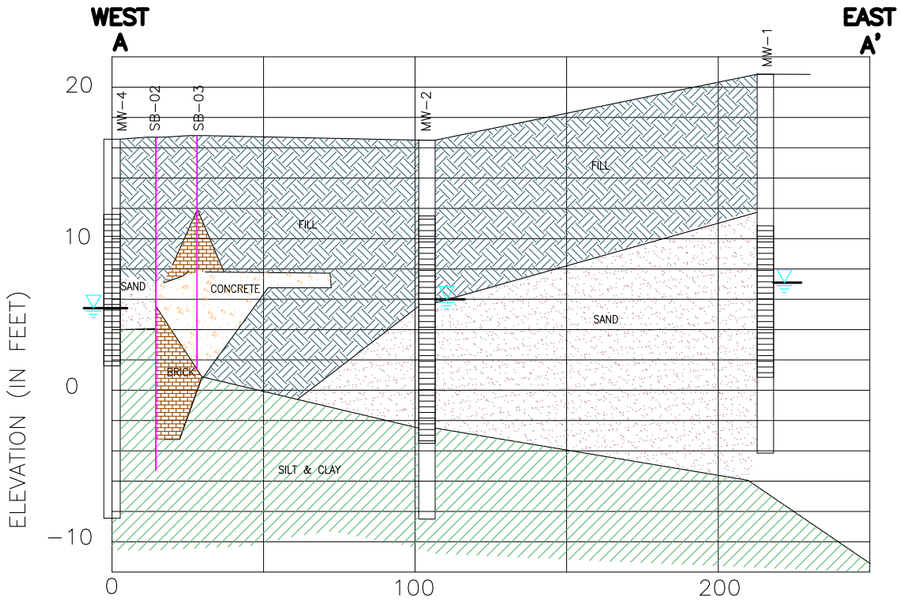
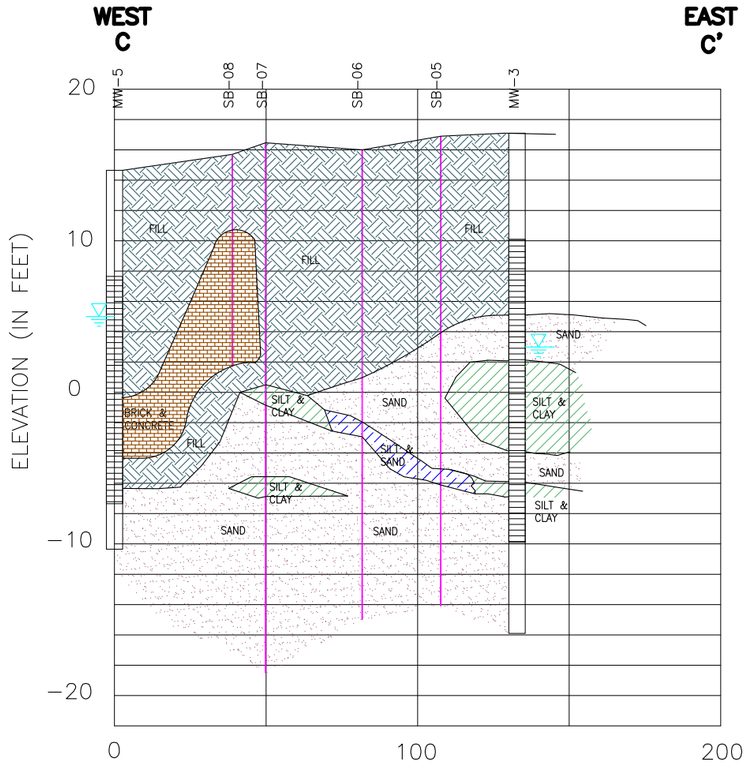
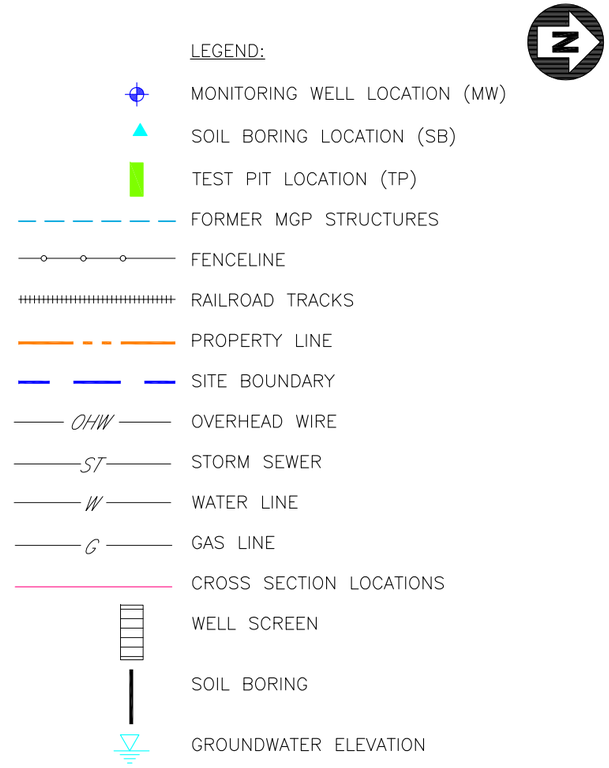
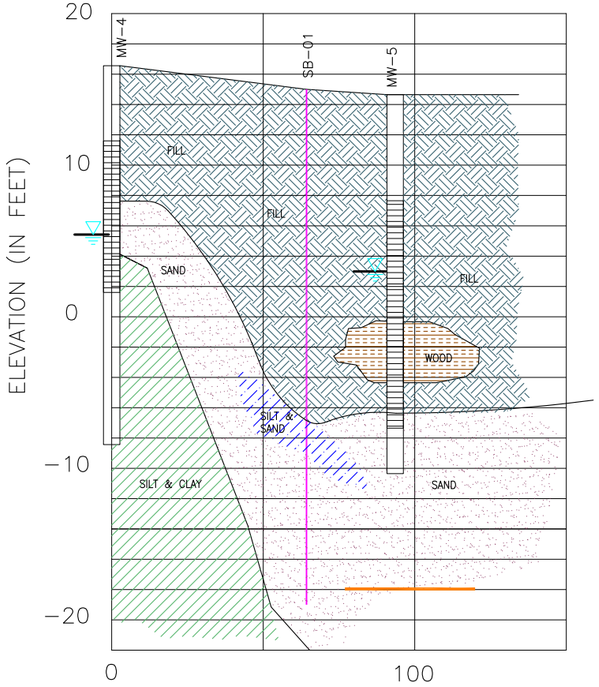
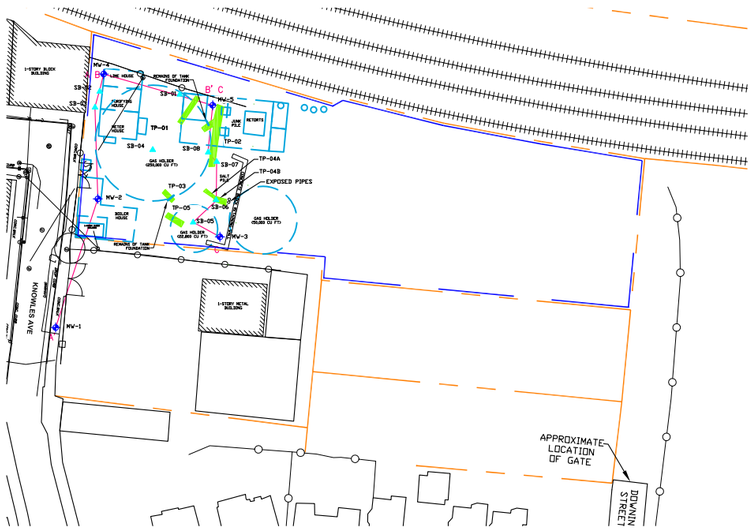










SITE PLAN

125 62.5 0 125 250

SCALE: 1"=125'

10 5 0 10 20

SCALE: 1"=10'
VERTICAL

50 25 0 50 100

SCALE: 1"=50'
HORIZONTAL

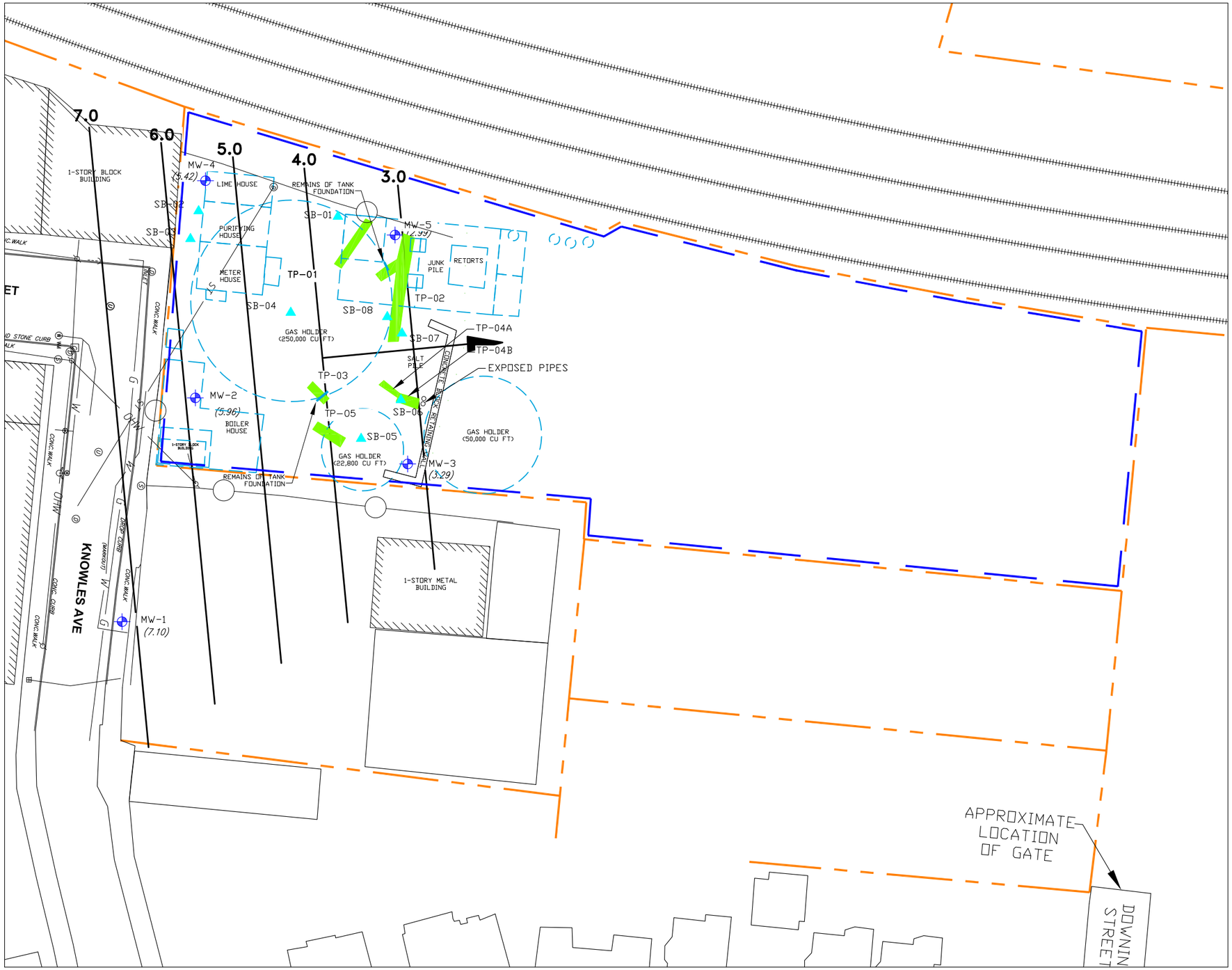
FIGURE 8

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

CROSS SECTIONS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 - LUDLOW ST\CAD\446110-SK010.DWG
PLOT DATE: 2/8/2011 12:50 PM PLOTTED BY: MCFARLANE, TANESHA



LEGEND:

- MONITORING WELL LOCATION (MW)
- SOIL BORING LOCATION (SB)
- TEST PIT LOCATION (TP)
- FORMER MGP STRUCTURES
- FENCELINE
- RAILROAD TRACKS
- PROPERTY LINE
- SITE BOUNDARY
- OHW — OVERHEAD WIRE
- ST — STORM SEWER
- W — WATER LINE
- G — GAS LINE
- GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL)
- (3.29) GROUNDWATER ELEVATION (IN FEET ABOVE MEAN SEA LEVEL (NAVD88) BASED ON 7/12/2010 WATER LEVEL MEASUREMENTS)

NOTES:

1. BASE SURVEY DRAWING PROVIDED BY THE CHAZEN COMPANIES, FROM A SURVEY PERFORMED ON THE SITE IN JULY, 2010.

2. HISTORIC FEATURES IN BASE DRAWING BASED ON SANBORN FIRE INSURANCE MAPS DATED 1888, 1898, 1917, 1951, & 1991. WESTCHESTER COUNTY ATLAS, 1931., YONKERS TAX ASSESSORS MAP, REVISED 1947 AND FIGURE 3 FROM GEI CONSULTANTS, INC.

50 25 0 50 100

SCALE: 1"=50'

FIGURE 9

Consolidated Edison
Former Ludlow Street Works
Yonkers, New York

GROUNDWATER CONTOUR MAP

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, N.Y. 13212, PHONE: 315-451-9560

FILE NAME: S:\446110 - LUDLOW ST\CAD\446110-SK005.DWG
PLOT DATE: 2/8/2011 11:06 AM PLOTTED BY: MCFARLANE, TANESHA

APPENDIX A

TEST PIT LOGS

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 5-10 mph E
DATE/TIME START:	June 17, 2010/1230
DATE/TIME FINISH:	June 17, 2010/1400
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-1

LOCATION:

Approximate L X W X D
= 29' X 4' X 8.5'

Northwest portion of the site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' ASPHALT	Holder foundation wall not encountered. Holder bottom/floor encountered at ~ 8.5 ft bgs.
1	0.5-3' Dark brown fine to coarse SAND, some Gravel and Cobble, little Brick, trace Boulder and Wood	
2		
3		
4	3-6' Dark brown medium to coarse SAND, some Gravel and Brick, trace Cobble	
5		
6	6-8.5' ASH and SLAG, little fine to coarse Sand, Cobble and Brick	
7		
8		
9	Bottom of Test Pit at 8.5 ft bgs	
10		
11		
12		

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 5-10 mph E
DATE/TIME START:	June 17, 2010/1230
DATE/TIME FINISH:	June 17, 2010/1400
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-1

LOCATION:

Approximate L X W X D
= 29' X 4' X 8.5'

Northwest portion of the site

PHOTOGRAPH

TP-1looking west

TP-1 at 8.5 ft bgs

TP-1 Close up looking east

TP-1 Scraped holder bottom at 8.5 ft bgs

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Clear, 70s, 0-5 mph East
DATE/TIME START:	June 18, 2010/0800
DATE/TIME FINISH:	June 18, 2010/1215
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-2

LOCATION:

Approximate L X W X D
= 50' X 4' X 4.5'
Angled test-pit = 8' X 4' X 8.5'

Northwest portion of the site, just south of junk pile

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	
0	0-4.5' CONSTRUCTION DEBRIS and brown fine to coarse SAND, some Brick; 0-4.5' (in Angled Test Pit) BRICK and brown fine to coarse SAND	Holder foundation wall not encountered in originalTP-2. Footings encountered at ~4.5 ft bgs in original TP-2. Holder wall encountered from ~3.5 to 8.5 ft bgs in angled TP-2 (~18 ft east of TP-2 western starting point). Holder foundation wall encountered again at ~ 40 ft east from TP-2 western starting point.
1		
2		
3		
4		
5	4.5-7.5' (in Angled Test Pit) BRICK and brown fine to coarse SAND	
6		
7		
8	7.5-8.5' (in Angled Test Pit) ASH and SLAG, little fine to coarse Sand	Holder bottom/floor encountered at ~8.5 ft bgs
	Bottom of Test Pit at 8.5 ft bgs	

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Clear, 70s, 0-5 mph East
DATE/TIME START:	June 18, 2010/0800
DATE/TIME FINISH:	June 18, 2010/1215
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-2

LOCATION:

Approximate L X W X D
= 50' X 4' X 4.5'

Angled test-pit = 8' X 4' X 8.5'

Northwest portion of the site, just south of junk pile

PHOTOGRAPH

TP-2 looking northwest

TP-2 looking west

TP-2 (angled) at ~ 8.5 ft bgs with holder foundation wall in foreground and footings in back ground

TP-2 eastward extension with exposed holder foundation wall and larger excavation in back ground

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 5-10 mph east
DATE/TIME START:	June 17, 2010/0800
DATE/TIME FINISH:	June 17, 2010/1130
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-3

LOCATION:

Approximate L X W X D

= 11' X 4' X 9.5'

Central-Eastern portion of the site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' ASPHALT	Holder wall encountered at ~ 0.5 ft bgs and intact to 9.5 ft bgs
1	0.5-3' Brown fine to medium SAND, some Gravel, little sub-round Cobble, trace Urban fill, dry	
2		
3	3-6' Brown/red medium to coarse SAND, some angular and sub-angular Gravel, trace Cobble, dry	
4		
5		
6	6-9' Dark brown/red fine to coarse SAND, little sub-angular Gravel, little Concrete and Brick, trace Boulder, slightly moist	
7		
8		
9	9-9.5' Dark brown/black fine to coarse SAND, little sub-angular Gravel, moist	Holder bottom encountered at ~ 9.5 ft bgs
10	Bottom of Test Pit at 9.5 ft bgs	
11		
12		

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 5-10 mph east
DATE/TIME START:	June 17, 2010/0800
DATE/TIME FINISH:	June 17, 2010/1130
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-3

LOCATION:

Approximate L X W X D
= 11' X 4' X 9.5'
Central-eastern portion of the site

PHOTOGRAPH

TP-3 looking north

TP-3 looking north into excavation

TP-3 and holder wall exposed at ~0.5 ft bgs

TP-3 and holder wall exposed to 9.5 ft bgs

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 0-5 mph east
DATE/TIME START:	June 14, 2010/1100
DATE/TIME FINISH:	June 14, 2010/1425
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-4A/B

LOCATION:

Approximate L X W X D

TP-4A = 12' X 4' X 3'

TP-4B = 10' X 4' X4.5'

Northern portion of the site

DEPTH (feet bgs)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-0.5' SALT	Gasholder wall not encountered. A brick structure with two ~12" diameter pipes running northeast/southwest was exposed. The holder wall was later uncovered at the surface ~8 ft northeast of TP-4B during salt moving operations. Additionally, two open ~12" pipes were encountered ~ 2 ft north of TP-4B.
1	0.5-4.5' Brown fine to coarse SAND, some Gravel, some Brick, little Cobble, little Urban fill and Debris	
2		
3		
4		
5	Bottom of Test Pit at 4.5 ft bgs	
6		
7		
8		
9		
10		
11		
12		

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Partly cloudy, 60s, 0-5 mph east
DATE/TIME START:	June 14, 2010/1100
DATE/TIME FINISH:	June 14, 2010/1425
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-4A/B

LOCATION:

Approximate L X W X D

TP-4A = 12' X 4' X 3'

TP-4B = 10' X 4' X4.5'

Northern portion of the site

PHOTOGRAPH

TP-4A looking north

TP-4A and 4B looking southwest

TP-4A and brick structure to the north with 2 ~12" pipes running southwest from under brick structure

TP-4B in foreground and TP-4A in background with the square brick structure adjacent to both

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Clear, 60s, 0-5 mph east
DATE/TIME START:	June 15, 2010/0720
DATE/TIME FINISH:	June 15, 2010/1145
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-5

LOCATION:

Approximate L X W X D

12' X 4' X 9'

Northern portion of the site

DEPTH (feet bags)	FIELD IDENTIFICATION OF MATERIAL	COMMENTS
0	0-5' Brown fine to coarse SAND, some Cobble, some Gravel, little Boulder, trace Brick, trace Urban debris, dry	Holder wall encountered at ~ 1.5 ft bgs. The bottom/floor of the holder was not encountered.
1		
2		
3		
4		
5	Brown fine to coarse SAND and COAL, little Gravel, some Cobble, dry	
6		
7	Brown/grey fine to coarse SAND and fine GRAVEL, little Gravel, trace Rubber, trace Metal	Water encountered at ~ 9 ft bgs
8		
9	Bottom of Test Pit at ~ 9 ft bgs	
10		
11		
12		

PARSONS
TEST PIT RECORD

PROJECT NAME:	Con Edison: Ludlow Street Works
PROJECT NUMBER:	446110
WEATHER	Clear, 60s, 0-5 mph east
DATE/TIME START:	June 15, 2010/0720
DATE/TIME FINISH:	June 15, 2010/1145
CONTRACTOR:	ECI
INSPECTOR:	Zohar Lavy

TEST PIT ID: TP-5

LOCATION:

Approximate L X W X D

12' X 4' X 9'

Northern portion of the site

PHOTOGRAPH

TP-5 looking northeast

TP-5 to 9 ft bgs with holder wall in the foreground

TP-5 looking southwest

TP-5 to 9 ft bgs with holder wall reaching down to and passed water at 9 ft bgs

APPENDIX B

SOIL BORING AND MONITORING WELL LOGS

PARSONS
DRILLING RECORD

BORING/ WELL NO. MW-1 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Zohar Lavy
Rig Type: Track Mounted Hollow Stem Auger LC 50

PROJECT NAME: Consolidated Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: North side of Knowles Street and southeast of the site

GROUNDWATER OBSERVATIONS				
Water Level	DTW ~13.00	DTW 13.25		
Date	06/22/10	07/12/10		
Time	0958	0800		
Meas. From	ft bgs - Split Spoon	Top of Casing		

Weather: Partly cloudy, 60s, 0-5 mph East
Date/Time Start: 06/22/10 0930
Date/Time Finish: 06/22/10 1235

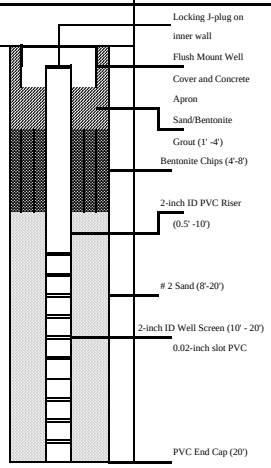
Location Plan

N

See Site Plan

Sample Depth	Location/ Sample I.D.	SPT	% Rec.	PID* (ppm)	FIELD IDENTIFICATION OF MATERIAL
+2					
+1					
0		Vac-tron		NA	0-0.5' CONCRETE
1		Vac-tron		0.0	0.5-5' Brown fine to coarse SAND, some Silt, some Cobble
2		Vac-tron			
3		Vac-tron			
4		Vac-tron			
5		2-2-4-2	33	0.0	Brown fine to coarse SAND, little sub-round Gravel, trace Silt, trace Mica, dry
6					
7		3-3-4-2	83	0.1	Brown/orange fine to medium SAND, little fine sub-angular Gravel, trace Silt, dry
8					
9		5-4-4-4	58	0	Brown/orange fine to medium SAND, little fine sub-angular Gravel, trace Silt, dry
10					
11	MW-1 (11-13)	4-5-4-4	50	0	Brown/orange fine to medium SAND, little fine sub-angular Gravel, trace Silt, trace Mica, slightly moist
12					
13		4-3-7-3	67	0.3	Brown/red fine to medium SAND, trace sub-round Gravel, wet
14					
15		4-3-2-9	0	NA	No Recovery
16					
17		3-3-3-4	83	0.2	Brown/dark grey fine to medium SAND, trace fine sub-round Gravel, wet
18					
19		4-3-3-9	33	0.1	Dark brown fine to medium SAND, trace Mica, wet
20					
21		4-3-4-5	100	0.3	Brown fine to coarse SAND, little fine sub-round and sub-angular Gravel, trace Mica, trace Silt, wet
22					
23	MW-1 (23-25)	4-7-7-9	92	0.3	Brown/orange medium to coarse SAND, little fine sub-round Gravel, trace angular Gravel
24					
25					**End of Boring at 25 ft bgs**
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

SCHEMATIC



COMMENTS

Boring was hand cleared to 5' bgs; Auger and split spoon to 25 ft bgs
HCN not detected in any interval.

SAMPLING METHOD
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

PARSONS
DRILLING RECORD

BORING/ WELL NO. MW-2 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Samuel Monte
Rig Type: Track Mounted Hollow Stem Auger LC 50

PROJECT NAME: Consolidated Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Southeastern portion of site

Location Plan N

See Site Plan

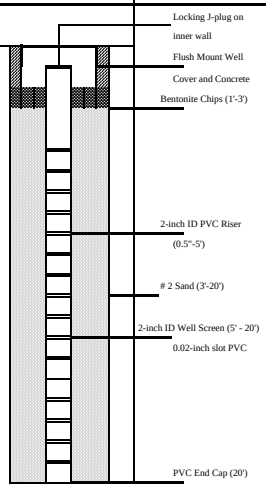
Weather: Clear, 70s, Wind: 5-10 mph East
Date/Time Start: 06/21/10 1250
Date/Time Finish: 06/21/10 1500

GROUNDWATER OBSERVATIONS

Water Level	DTW ~ 9.5	DTW 10.32		
Date	6/22/10	7/12/10		
Time	700	1320		
Meas. From	ft bgs - Split Spoon	Top of Casing		

Sample Depth	Location/ Sample I.D.	SPT	% Rec.	PID* (ppm)	FIELD IDENTIFICATION OF MATERIAL
+2					
+1					
0		Vac-tron		0.0	0-2' Dark brown medium to coarse SAND, some Brick and Concrete
1		Vac-tron		0.0	2-5' Dark brown fine to medium SAND, some Silt, trace Brick and coarse Gravel, dry
2		Vac-tron			
3		Vac-tron			
4		Vac-tron			
5		1-3-3-6	50	2.8	Dark brown fine SAND, some Silt, some Brick, some Gravel, dry
6					
7		4-2-2-2	8	1.5	Brown fine to medium SAND, some Silt, wet
8					
9		3-2-2-3	50	8.3	Brown fine SAND, some Silt, some Gravel, slight Hydrocarbon odor, wet
10					
11		2-8-3-2	50	3.6	Brown fine SAND, some Silt, some Gravel, wet
12					
13	MW-2 (13-15)	2-2-3-2	50	34.7	Dark brown fine SAND, some Silt, slight hydrocarbon odor, wet
14					
15		1-1-2-2	25	4.6	Brown fine SAND, some Silt, some coarse Gravel, wet
16					
17		1-1-1-1	100	0.8	Brown fine SAND, some Silt, some coarse Gravel, wet
18					
19		1-3-4-7	100	0.5	0-12" Brown SILT, some Sand, wet
20					12-24" Brown fine to medium SAND, wet
21		3-5-5-5	100	0.8	Brown fine to coarse SAND, some Silt, wet
22					
23	MW-2 (23-25)	5-5-5-7	100	0.5	Brown CLAY, some Silt, some sand, wet
24					
25					**End Boring at 25 ft bgs**
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

SCHEMATIC



COMMENTS

SAMPLING METHOD
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

Boring was hand cleared to 5' bgs; Auger and split spoon to 25 ft bgs
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING/ WELL NO. MW-3 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Samuel Monte
Rig Type: Track Mounted Hollow Stem Auger LC 50 and Truck Mounted Hollow Stem Auger CME 75

PROJECT NAME: Consolidated Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Northeast corner of the site

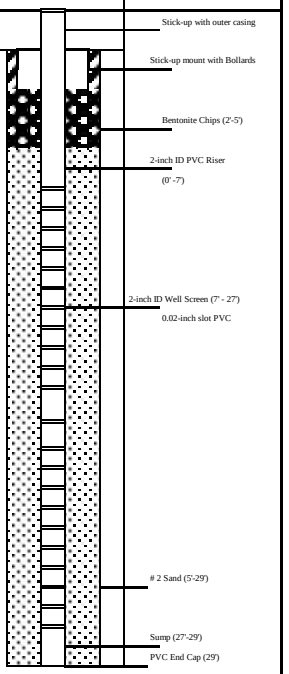
Location Plan N — See Site Plan

GROUNDWATER OBSERVATIONS				
Water Level	DTW ~ 9.5	DTW 16.06		
Date	6/22/10	7/13/10		
Time	705	1055		
Meas. From	ft bgs - Split Spoon	Top of Casing		

Weather: Clear, 80s, Wind: 0-5 mph East
Date/Time Start: 06/18/10 0945
Date/Time Finish: 06/23/10 1445

Sample Depth	Location/ Sample I.D.	SPT	% Rec.	PID* (ppm)	FIELD IDENTIFICATION OF MATERIAL
+2					
+1					
0		Vac-tron		0.0	0-5' Brown SAND, some Silt, some Cobble and some Brick, dry
1		Vac-tron			
2		Vac-tron			
3		Vac-tron			
4		Vac-tron			
5		2-2-2-2	50	0.5	Brown fine to medium SAND, some Silt, trace Gravel, dry
6					
7		1-3-4-5	0	NA	No recovery
8					
9	MW-3 (9-11)	5-5-6-6	50	851	Dark brown/black fine to medium SAND, some Silt, staining, Hydrocarbon odor, NAPL, moist
10					
11		7-8-25-13	50	263	Dark brown/black fine to medium SAND, some Silt, Hydrocarbon odor, NAPL, moist
12					
13		28-18-13-14	50	4.5	Brown fine to medium SAND, some Silt, Hydrocarbon odor, moist
14					
15		4-3-3-7	75	25.1	Brown CLAY, some Silt, moist
16					
17		5-8-5-7	75	472	0-3" Red/brown CLAY, slight Hydrocarbon odor, moist; 3-5" Dark brown/black SAND, staining, NAPL, heavy Hydrocarbon odor; 5-14" Red/brown CLAY, slight Hydrocarbon odor, moist; 14-16" Black/dark brown SAND, NAPL, heavy Hydrocarbon odor, moist; 16"-18" Red/brown CLAY, slight Hydrocarbon odor, moist
18					
19		5-5-6-4	100	9.5	Brown CLAY, slight Hydrocarbon odor, moist
20					
21		5-5-9-10	100	3.5	0-18" Brown fine to coarse SAND, wet; 18-22" Dark brown fine to coarse SAND, wet; 22-24" Brown fine to coarse SAND, wet
22					
23		6-7-9-9	75	7	0-12" Brown CLAY, wet; 12-18" Dark brown fine to coarse SAND, slight Hydrocarbon odor, wet
24					
25		3-3-5-3	75	2.5	Brown medium to coarse SAND, some silt, wet
26					
27		4-6-10-12	75	2.1	Brown medium to coarse SAND, trace silt, wet
28					
29		6-6-7-7	75	1.7	Brown medium to coarse SAND, trace silt, wet
30					
31	MW-3 (31-33)	7-8-8-8	100	0.2	Brown medium to coarse SAND, wet
32					
33					**End of Boring at 33 ft bgs**
34					
35					
36					

SCHEMATIC



COMMENTS

SAMPLING METHOD
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

Boring was hand cleared to 5' bgs; Auger and split spoon to 33 ft bgs
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING/ WELL NO. MW-4 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 75

PROJECT NAME: Consolidated Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Southwest corner of site

Location Plan N

See Site Plan

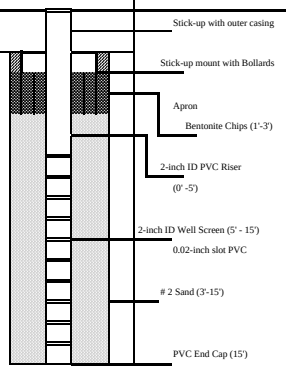
Weather: Clear, 70s-90s, 0-5 mph East
Date/Time Start: 06/23/10 0920
Date/Time Finish: 06/23/10 1145

GROUNDWATER OBSERVATIONS

Water Level	DTW ~9	DTW 13.4		
Date	06/23/10	07/12/10		
Time	0936	1145		
Meas. From	ft bgs - Split Spoon	Top of Casing		

Sample Depth	Location/ Sample I.D.	SPT	% Rec.	PID* (ppm)	FIELD IDENTIFICATION OF MATERIAL
+2					
+1					
0		Vac-tron		0.0	0-5' ASPHALT, COBBLE, BRICK, and black coarse SAND
1		Vac-tron			
2		Vac-tron			
3		Vac-tron			
4		Vac-tron			
5	MW-4 (5-7)	2-2-2-2	25	0.1	Dark brown fine to coarse SAND, little Silt, trace angular Gravel, moist
6					
7		2-3-3-4	0	NA	No Recovery
8					
9		1-1-1-1	67	0.3	Brown fine to medium SAND, some fine sub-angular Gravel, little Silt, wet
10					
11		1-2-2-1	25	0.1	Dark brown medium to coarse SAND, some fine sub-angular Gravel, trace Silt, trace angular
12					Gravel, wet
13		3-4-4-7	92	0.3	0-3" Dark brown medium to coarse SAND, some fine sub-angular Gravel, trace Silt, trace angular
14					Gravel, wet; 3-22" Brown/grey SILT and Clay, trace sub-round Gravel, moist
15		4-5-6-8	100	0.5	Light brown/green SILT and CLAY, trace fine Sand, moist
16					
17		4-5-6-5	83	0.2	Light green/gret SILT and fine SAND, little Clay, trace fine sub-angular Gravel
18					
19		7-3-3-3	100	0	0-18" Light brown/green CLAY, little Silt
20					18-24" Brown/red SILT and fine SAND
21		4-5-5-4	58	0	0-8" Brown/red SILT and fine SAND; 8-10" Dark brown/red medium to coarse SAND
22					10-14" Red/brown SILT
23	MW-4 (23-25)	3-3-5-6	58	0	0-11" Red/brown SILT
24					11-14" Red/brown SILT, trace fine Sand
25					**End of Boring at 25 ft bgs**
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

SCHEMATIC



COMMENTS

SAMPLING METHOD
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

Boring was hand cleared to 5' bgs; Auger and split spoon to 25 ft bgs
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING/ WELL NO. MW-5 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 75

PROJECT NAME: Consolidated Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Northwest corner of site

Location Plan

N

See Site Plan

Weather: Clear, 70s-90s, 0-5 mph East

Date/Time Start: 06/25/10 0830

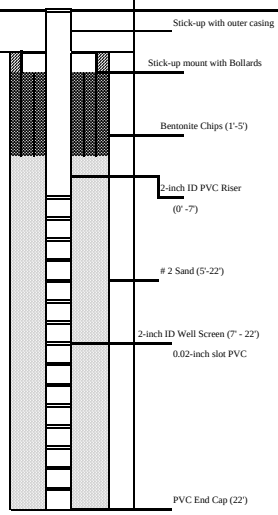
Date/Time Finish: 06/28/10 1045

GROUNDWATER OBSERVATIONS

Water Level	DTW ~9'	DTW 14.38		
Date	6/25/10	7/13/10		
Time	0840	0740		
Meas. From	ft bgs - Split Spoon	Top of Casing - Stick-up		

Sample Depth	Location/ Sample I.D.	SPT	% Rec.	PID* (ppm)	FIELD IDENTIFICATION OF MATERIAL
+2					
+1					
0		Vac-tron		NA	0-0.5' WOOD, METAL, and ASPHALT
1		Vac-tron		0.0	0.5-5' Dark brown fine to coarse SAND and sub-round and sub-angular GRAVEL and COBBLE, some Concrete
2		Vac-tron			
3		Vac-tron			
4	MW-5 (4-6)	Vac-tron			
5		1-1-1-1	0	NA	No Recovery
6					
7	MW-5 (7-9)	5-4-4-6	58	1.1	Dark brown fine to coarse SAND and BRICK, trace sub-angular Gravel, dry
8					
9		1-WH-1-WH	8	1	Dark brown fine to coarse SAND, trace Silt, trace Brick and fine sub-angular Gravel, wet
10					
11		2-4-4-2	25	0	Dark brown/orange fine to medium SAND, some fine sub-angular Gravel, trace Organics (Wood), trace Silt, wet
12					
13		13-50/2"	42	2.7	0-2" Dark brown/orange fine to medium SAND, some fine sub-angular Gravel, trace Organics (Wood) trace Silt, wet; 2-10" WOOD (heavy Creosote odor)
14					
15					WOOD
16					
17					
18					
19		10-9-9-7	100	1.8	Dark brown fine to coarse SAND, little sub-angular Gravel, little Wood, trace Silt, wet
20					
21		4-6-6-8	75	1.5	Red/brown medium to coarse SAND, wet
22					
23	MW-5 (23-25)	7-5-6-5	58	1.2	Red/brown medium to coarse SAND, trace fine sub-round Gravel, wet
24					
25					**End of Boring at 25 ft bgs**
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

SCHEMATIC



COMMENTS

SAMPLING METHOD
SS = SPLIT SPOON
A = AUGER CUTTINGS
C = CORED

Boring was hand cleared to 5' bgs; Auger and split spoon to refusal at 15 ft bgs; solid auger through wood from 15 to 19 ft bgs; auger and split spoon from 19 to 25 ft bgs

HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-1 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: West portion of site (within holder)

GROUNDWATER OBSERVATIONS

Water Level	~10'			
Date	7/2/10			
Time	0820			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-80s, Wind: 0-5 mph East

Date/Time Start: 07/2/10 0805

Date/Time Finish: 07/2/10 1028

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		NA	0-0.5' CONCRETE and ASHPHALT		
1		Vac-tron		0.0	0.5-5' Brown fine to coarse SAND and sub-angular GRAVEL, some Brick, little		
2		Vac-tron			Boulder and Concrete		
3		Vac-tron					
4		Vac-tron					
5		15-13-9-8	25	1.8	Dark brown fine to coarse SAND and sub-angular GRAVEL, little Brick, dry		
6							
7		12-5-50/1"	25	1.0	COAL and ASH, moist		
8							
9							
10		100/3"	12.5	1.1	CONCRETE and AGREGATE, wet		
11							
12		25-15-15-8	17	NA	CONCRETE		
13							
14		10-10-100/2"	33	10.5	0-2" Dark brown fine to coarse SAND and angular GRAVEL		
15				365.0	WOOD		
16		15-20-40-31	12.5	279.0	WOOD		
17							
18	SB-1 (18-20)	42-47-16-24	33	1250.0	Black stained WOOD, some fine to coarse Sand and Gravel		
19							
20		14-8-7-9	58	39.4	0-12" Brown fine to coarse SAND and round and subround GRAVEL, trace Wood, wet		
21					12-14" Brown/orange SILT, little fine Sand, wet		
22		7-4-6-5	33	7.8	0-4" Brown/orange SILT, trace Clay, wet		
23					4-8" Brown/orange SILT, some fine Sand, wet		
24	SB-1 (24-26)	33-25-18-17	75	69.3	Brown medium to coarse SAND, little fine sub-round Gravel, wet		
25							
26		7-13-8-9	83	46.0	0-12" Brown medium to coarse SAND, little fine sub-round Gravel		
27					12-20" Brown/red medium SAND, trace round fine Gravel		Primarily Heaving Sands
28		16-30-23-14	67	54.3	Brown medium to coarse SAND, trace sub-round Gravel, wet, slight chlorinated odor		
29							
30		12-9-10-14	12.5	0.5	Brown sub-round and sub-angular GRAVEL, wet		
31							
32	SB-1 (32-34)	20-11-10-15	50	0.7	Brown/red fine to coarse SAND, little sub-round GRAVEL, wet		
33							
34					**End of Boring at 34 ft bgs**		
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Hollow stem auger from 5' to 34' bgs
HCN detected from 18-20 ft bgs

PARSONS
DRILLING RECORD

BORING NO. SB-2 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Southwest portion of site

Location Plan
See Site Plan

GROUNDWATER OBSERVATIONS				
Water Level	~9'			
Date	7/1/10			
Time	0843			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-80s, Wind: 0-5 mph East
Date/Time Start: 07/1/10 0835
Date/Time Finish: 07/2/10 1420

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		0.0	0-1.5' ASPHALT, CONCRETE, and WOOD		
1		Vac-tron		0.4	1.5-2' Brown SAND, some Gravel and Cobbles		
2		Vac-tron			2-4' Brown SAND, some Cobble		
3		Vac-tron			4-5' Grey SAND and GRAVEL, some ASH		
4		Vac-tron					
5		10-4-1-1	17	0.5	Dark brown fine to coarse SAND and fine sub-angular GRAVEL, trace Silt, slightly moist		
6							
7		1-WH-1-WH	25	0.7	Black medium to coarse SAND and ASH, little angular Gravel, moist		
8							
9		5-50/0"	12.5	0.3	Dark brown/red medium to coarse SAND, trace sub-angular and sub-round Gravel, wet		
10					(Concrete in tip of spoon)		
11							
12							
13							Advanced solid augers through the following impedances and intervals 9.5-11 Concrete; 11-14 ft bgs Wood and Brick; 14-20 ft bgs Brick
14		50/4"	17	0.0	BRICK		
15							
16							
17							
18							
19							
20	SB-2 (20-22)	17-20-38-45	58	5.6	0-10" Red/brown fine to coarse SAND and BRICK, trace Silt, wet		Advanced split spoon through open bore-hole from 20-22 ft bgs
21					10-14" WOOD		
22					**End of Boring at 22 ft bgs**		
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; augered to 20 ft bgs, split spoon to 22 ft bgs refusal; pulled auger to install solid cutting head and upon re-insert of auger, refusal was encountered at 15 ft bgs; utilized mud-rotary methods to advance to refusal at 18 ft bgs
HCN detected at ~ 15 ft bgs

PARSONS
DRILLING RECORD

BORING NO. SB-3 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Shawn Miller
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 75 and 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: South-central part of site

GROUNDWATER OBSERVATIONS

Water Level	~9'			
Date	6/24/10			
Time	0935			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-90s, Wind: 0-5 mph East

Date/Time Start: 06/24/10 0925

Date/Time Finish: 06/29/10 1210

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		Vac-tron		NA	0-0.5' Weathered ASPHALT and GRAVEL
1		Vac-tron		0.0	0.5-1' Weathered ASPHALT, GRAVEL, and WOOD
2		Vac-tron		0.0	1-5' Brown fine to medium SAND
3		Vac-tron			
4		Vac-tron			
5		1-2-WH-WH	0	NA	No Recovery
6					
7		1-1-WH-WH	0	NA	No Recovery
8					
9		50/2"	2"	0.8	Dark brown medium to coarse SAND, trace angular Gravel/boulder, wet
10					
11					
12					
13					**End of Boring at 13 ft bgs**
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					

SCHEMATIC (drawing not to scale)

COMMENTS

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; auger refusal at 9.5 ft bgs (concrete); utilize solid auger to advance to refusal at 13 ft bgs
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-3 (alt.) Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Shawn Miller
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 75 and 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: South-central part of site

Location Plan

See Site Plan

Weather: Clear, 70s-90s, Wind: 5-15 mph East

Date/Time Start: 06/29/10 1130

Date/Time Finish: 07/6/10 1010

GROUNDWATER OBSERVATIONS				
Water Level	~9'			
Date	6/24/10			
Time	0935			
Meas. From	ft bgs - Split Spoon			

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vactron		NA	0-0.5' ASPHALT		
1		Vactron		0.4	0.5-3' Dark brown fine to coarse SAND, some sub-angular and sub-round GRAVEL,		
2		Vactron		1.2	trace Silt, trace Brick, trace Concrete		
3		Vactron			3-5' Dark brown fine to coarse SAND and ASH, trace Brick		
4		Vactron					
5		NA			BRICK and BOULDER		Hard drilling from 5 to 9 ft bgs - unable to advance split spoons
6							
7							
8							
9					CONCRETE		
10							
11							
12							
13							
14							
15							
16					WOOD		
17					**End of Boring at 16 ft bgs**		
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Auger refusal encountered at 9 ft bgs; solid auger refusal at 14 ft bgs; mud rotary refusal at 16 ft bgs on wood

HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-4 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Center of the site (within holder)

Location Plan

See Site Plan

GROUNDWATER OBSERVATIONS				
Water Level	~12'			
Date	6/30/10			
Time	0915			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-80s, Wind: 0-5 mph East
Date/Time Start: 06/30/10 0855
Date/Time Finish: 06/30/10 1220

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		NA	0-1' ASPHALT		
1		Vac-tron		0.0	1-5' ASPHALT, grey SAND, urban DEBRIS, and ASH		
2		Vac-tron					
3		Vac-tron					
4		Vac-tron					
5		10-6-2-1	17	0.2	Dark brown fine to coarse SAND and sub-angular and sub-round GRAVEL, dry		
6							
7		2-1-1-1	17	0.5	Dark brown fine to coarse SAND and sub-angular and sub-round GRAVEL and COAL, dry		
8							
9							Auger through impedance 9-10 ft bgs
10		4-15-22-7	18	1.1	BRICK, sub-angular GRAVEL and ASH, slightly moist		
11							
12		18-16-18-20	58	1.5	Tan fine-coarse SAND and sub-angular GRAVEL, some Brick, some fine Gravel, wet		
13							
14		70-30-15-20	75	1.8	0-14" Dark grey sub-angular and sub-round GRAVEL, some fine to coarse Sand, little		
15					Brick, wet; 14-18"		
16		30-24-11-12	50	3.6	WOOD, some fine to coarse SAND, wet		
17							
18		30-20-4-3	50	1.8	Dark grey fine to coarse SAND and sub-angular GRAVEL, wet		
19							
20	SB-4 (20-22)	6-6-12-14	75	37.5	Dark brown/grey-red fine to coarse SAND, little sub-angular and sub-round Gravel,		
21					trace Wood, trace Silt, NAPL Globules, staining, Hydrocarbon odor, wet		
22		6-13-12-12	67	12.9	0-4" Dark brown/grey-red fine to coarse SAND, little sub-angular and sub-round Gravel,		
23					trace Wood, trace Silt, NAPL Globules, staining, Hydrocarbon odor, wet; 4-10" Dark		
					grey/red fine to medium SAND, little sub-round/round Gravel, trace Wood and Silt,		
					NAPL Globules, staining, Hydrocarbon odor; 10-16" Dark grey/black fine to medium		
					SAND, trace sub-round GRAVEL, staining, Hydrocarbon odor		
24		8-4-5-5	0	NA	No Recovery (Wood in tip of spoon)		
25							
26		10-4-9-11	58	1.2	0-10" Brown SILT and CLAY		
27					10-14" Brown/red medium SAND, trace sub-round Gravel		
28		4-6-8-10	0	NA	No Recovery		
29							
30	SB-4 (30-32)	5-6-6-8	50	0.7	Red/brown fine to coarse SAND, little sub-round Gravel, wet		
31							
32					**End of Boring at 32 ft bgs**		
33							
34							
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Auger and split spoon to 32 ft bgs

HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-5 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Northeastern portion of site (within holder)

GROUNDWATER OBSERVATIONS

Water Level	~13'			
Date	7/1/10			
Time	1322			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s, Wind: 0-5 mph East

Date/Time Start: 07/1/10 1245

Date/Time Finish: 07/1/10 1358

Location Plan

See Site Plan

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL
+3					
+2					
+1					
0		Vac-tron		0.0	0-4' Brown/red fine to medium SAND
1		Vac-tron		0.0	4-5' COAL
2		Vac-tron			
3		Vac-tron			
4		Vac-tron			
5		8-9-11-9	42	1.2	COAL
6					
7		8-50/1"	0	NA	No Recovery
8					
9		9-9-14-7	17	2.5	Brown fine to coarse SAND and Coal
10					
11		11-4-3-3	0	NA	No Recovery
12					
13		13-5-5-5	50	3.6	Brown/orange medium to coarse SAND, trace fine sub-round Gravel, wet
14					
15		4-5-6-16	75	2.5	Brown/orange medium to coarse SAND, trace fine sub-round Gravel, wet
16					
17		50/4"	17	13.7	Brown fine to coarse SAND, little fine sub-angular Gravel, sheen, NAPL Globules,
18					Hydrocarbon odor
19		7-8-7-6	25	4.1	Brown fine to coarse SAND and fine sub-round/sub-angular GRAVEL, little Silt, sheen,
20					Hydrocarbon odor
21	SB-5 (21-23)	5-5-5-13	100	28.2	0-10" Brown fine to coarse SAND and fine sub-round/sub-angular GRAVEL, little Silt,
22					sheen, Hydrocarbon odor; 10-24" Brown/orange fine SAND and SILT, little fine
					sub-angular Gravel, NAPL Globules
23		3-3-3-5	67	22.5	Brown fine to coarse SAND, some fine sub-angular Gravel, little Silt, NAPL Globules,
24					wet
25		3-2-2-3	42	8.2	Brown fine to coarse SAND, some fine sub-angular Gravel, little Silt, wet
26					
27		1-3-3-2	67	9.4	Brown fine to coarse SAND, some fine sub-angular Gravel, little Silt, slight Sheen, wet
28					
29	SB-5 (29-31)	12-8-6-6	67	1.9	Brown medium to coarse SAND, little sub-round and sub-angular Gravel, wet
30					
31					**End of Boring at 31 ft bgs**
32					
33					
34					
35					
36					
37					

SCHEMATIC (drawing not to scale)

COMMENTS

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs
Auger and split spoon from 5 to 31 ft bgs.
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-6 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: Northeastern portion of site (outside of holder)

Location Plan
See Site Plan

GROUNDWATER OBSERVATIONS

Water Level	~9'			
Date	6/30/10			
Time	1352			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-80s, Wind: 0-5 mph East
Date/Time Start: 06/30/10 1330
Date/Time Finish: 06/30/10 1445

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		5.8	0-5' Red/brown fine to coarse SAND, some SILT, some Cobble, slight acetone Odor		
1		Vac-tron					
2		Vac-tron					
3		Vac-tron					
4		Vac-tron					
5		5-4-4-6	12.5	2.0	Dark brown fine to coarse SAND, some fine sub-angular Gravel, slightly moist		
6							
7		6-5-6-7	50	2.7	Dark brown/black fine to medium SAND, some fine sub-angular Gravel and Brick,		
8					staining, NAPL Globules, sheen, Hydrocarbon odor, moist		
9		2-2-4-2	17	6.7	Dark brown fine to coarse SAND, little Brick, trace Silt, trace fine sub-angular Gravel,		
10					Staining, Hydrocarbon odor, wet		
11		4-6-4-5	25	85.7	Dark brown fine to coarse SAND, little Brick, trace Silt, trace fine sub-angular Gravel,		
12					Staining, Hydrocarbon odor, wet		
13	SB-6 (13-15)	6-6-4-6	75	235.0	Black fine to medium SAND, trace Silt, trace Gravel, NAPL, sheen, staining,		
14					Hydrocarbon odor, wet		
15		10-14-9-11	50	171.0	Brown/grey fine to medium SAND, little sub-angular and sub-round fine Gravel, trace		
16					Silt, slight Hydrocarbon odor, wet		
17		5-5-4-3	75	13.4	0-8" Brown/grey fine to medium SAND, little sub-angular and sub-round fine Gravel,		
18					trace Silt, slight Hydrocarbon odor, wet; 8-18" Brown/orange SILT and fine SAND,		
					trace Clay, moist		
19		5-5-5-5	50	34.9	Brown/red medium to coarse SAND, trace Gravel, trace Silt, wet		
20							
21		2-5-5-3	83	5.8	Brown/tan medium to coarse SAND, some fine sub-round and sub-angular Gravel, slight		
22					Hydrocarbon odor, wet		
23		5-4-4-7	42	5.9	Brown/tan medium to coarse SAND, trace fine round and sub-angular Gravel, wet		
24							
25		5-3-3-9	50	6.3	Brown/tan medium to coarse SAND, trace fine round and sub-angular Gravel, wet		
26							
27		5-4-4-8	42	10.4	Brown/tan medium to coarse SAND, trace fine round and sub-angular Gravel, trace Silt,		
28					wet		
29	SB-6 (29-31)	6-5-5-9	50	1.8	Brown/red fine to coarse SAND, trace sub-round Gravel, wet		
30							
31					**End of Boring at 31 ft bgs**		
32							
33							
34							
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Auger and split spoon from 5 to 31 ft bgs.

HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-7 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Tony Polomeque/Jeremey Meyers
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 75

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: North/central portion of site (outside of holder)

Location Plan
See Site Plan

GROUNDWATER OBSERVATIONS				
Water Level	~9'			
Date	6/28/10			
Time	1110			
Meas. From	ft bgs - Split Spoon			

Weather: Clear, 70s-90s, Wind: 5-15 mph East
Date/Time Start: 06/28/10 1055
Date/Time Finish: 06/29/10 0840

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		NA	0-1' ASPHALT and SALT		
1		Vac-tron		13.5	1-5' Dark brown fine to coarse SAND, some sub-angular and sub-round Gravel, little		
2		Vac-tron			Brick, Cobble, and Concrete		
3		Vac-tron					
4		Vac-tron					
5		3-3-2-2	12.5	16.2	Dark brown fine to coarse SAND, trace Brick and sub-angular Gravel, dry		
6							
7		4-3-4-2	33	56.8	Brown fine to medium SAND, little sub-angular Gravel, trace Silt, moist		
8							
9		5-5-6-4	17	25.7	Brown fine to medium SAND, little sub-angular Gravel, trace Silt, wet		
10							
11		3-3-2-4	50	83.5	Brown fine to coarse SAND, little Silt, trace sub-round and sub-angular Gravel, very		
12					slight Sheen, wet		
13		15-5-4-6	75	168.0	0-12" Dark brown fine to medium SAND, little fine sub-round Gravel and Wood, trace		
14					Silt; 12-16" Black fine to medium SANDm little fine sub-angular Gravel, NAPL, staining		
15	SB-7 (15-17)	5-6-7-7	67	224.0	0-10" Black fine to medium SANDm little fine sub-angular Gravel, NAPL, staining, heavy		
16					Hydrocarbon odor; 10-15" Brown SILT and CLAY, some fine to medium Sand; 15-16"		
					Brown SILT and CLAY, some fine to medium Sand, NAPL, staining, Hydrocarbon odor		
17	SB-7 (17-19)	6-6-10-12	50	106.0	0-5" Brown SILT and CLAY, some fine to medium Sand, NAPL, staining, Hydrocarbon		
18					odor; 5-12" Dark grey/black medium SAND, little Silt, trace Wood and Clay, NAPL		
					Globules, staining, Hydrocarbon odor		
19		4-4-5-3	42	197.0	Dark grey/black medium SAND, little Silt, trace Wood and Clay, NAPL Globules,		
20					staining, Hydrocarbon odor		
21		4-4-3-5	50	188.0	0-7" Dark grey/black medium SAND, little Silt, trace Wood and Clay, NAPL Globules,		
22					staining, Hydrocarbon odor; 7-12" Brown/red SILT, trace fine Sand, slight Hydrocarbon		
					odor		
23		4-4-4-4	75	92.7	0-4" Brown/red SILT, trace fine Sand, slight Hydrocarbon odor; 4-18" Brown/red medium		
24					to coarse SAND, some fine sub-round Gravel, sheen, Hydrocarbon odor		
25		2-3-4-4	67	75.6	Brown/tan coarse SAND, some fine sub-round Gravel, slight Sheen, slight Hydrocarbon		
26					odor		
27		2-1-2-2	67	85.2	0-14" Brown/red medium to coarse SAND, slight Hydrocarbon odor		
28					14-16" Brown/red fine SAND, slight Hydrocarbon odor		
29		3-3-3-3	42	15.7	Brown/red fine SAND, slight Hydrocarbon odor		
30							
31		3-6-5-7	50	3.1	Brown/red fine SAND		
32							
33	SB-7 (33-35)	7-8-9-7	58	1	Brown/red fine SAND		
34							
35					**End of Boring at 35 ft bgs**		
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Auger and split spoon from 5 to 35 ft bgs
HCN not detected in any interval.

PARSONS
DRILLING RECORD

BORING NO. SB-8 Sheet 1 of 1

Contractor: Advanced Drilling Technology
Driller: Shawn Miller/German Torres
Inspector: Zohar Lavy
Rig Type: Truck Mounted Hollow Stem Auger CME 85

PROJECT NAME: Con Edison /Ludlow Street Works
PROJECT NUMBER: 446110-02000

Location Description: North-central part of site (within holder)

Location Plan

See Site Plan

Weather: Clear, 70s-80s, Wind: 0-5 mph East

Date/Time Start: 06/30/10 1240

Date/Time Finish: 07/1/10 1145

GROUNDWATER OBSERVATIONS				
Water Level				
Date				
Time				
Meas. From				

Sample Depth	Sample I.D.	SPT	% Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC (drawing not to scale)	COMMENTS
+3							
+2							
+1							
0		Vac-tron		NA	0-1' ASPHALT and COBBLE		
1		Vac-tron		5.4	1-5' Brown fine to coarse SAND and sub-round and sub-angular GRAVEL, some Brick trace Concrete		
2		Vac-tron					
3		Vac-tron					
4		Vac-tron					
5		8-8-4-4	50	10.1	BRICK, trace fine to coarse SAND		
6							
7		50/2"	8	0.5	BRICK, trace fine to coarse SAND		
8							
9					9-14' CONCRETE		
10							Utilized solid auger cutting head to advance to refusal at 14 ft bgs
11							
12							
13							
14					**End of Boring at 14 ft bgs**		
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
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34							
35							
36							
37							

SAMPLING METHOD
WH = WEIGHT OF RODS
HC = HAND CLEARED
VC = VACUUM CLEARED
GP = GEOPROBE/DIRECT PUSH

COMMENTS:
Boring was hand cleared to 5' bgs; Auger and split spoon refusal at ~ 9 ft bgs; Solid auger refusal at 14 ft bgs.

HCN not detected in any interval.

APPENDIX C

GROUNDWATER SAMPLING LOGS

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-1
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 13.25
Depth to Well Bottom (TOC): 20.25

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons	
2-inch Casing:	Ft. of Water in Wel	7.00	x 0.16 =	1.12	Gallons	x 3 = 3.36 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons	
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons	

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Clear

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	0810	0815	0820	0825	0830	0835	0840	0845
Depth To Water (TOC) (ft)	14.84	14.95	15.00	15.25	15.33	15.23	15.36	15.34
Depth To Pump (TOC) (ft)	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Flow Rate (ml/min)	~200	~150	~150	~200	~150	~150	~150	~150
Volume of Water Purged	~0.25	~0.35	~0.5	~0.75	~0.85	~1.0	~1.15	~1.25
pH (s.u.)	6.46	6.78	6.97	7.02	7.07	7.09	7.11	7.12
Conductivity (mS/cm)	1.52	1.50	1.50	1.50	1.53	1.52	1.51	1.52
Turbidity (NTUs)	170	138	122	118	196	180	175	161
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	18.43	18.99	19.90	20.31	19.74	20.26	20.73	20.98
ORP (mV)	-105	-135	-145	-145	-147	-148	-148	-148
Salinity (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TDS (g/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-1
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 13.25
Depth to Well Bottom (TOC): 20.25

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons	
2-inch Casing:	Ft. of Water in Wel	7.00	x 0.16 =	1.12	Gallons	x 3 = 3.36 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons	
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons	

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Clear

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	0850	0855	0900	0905	0910	0915	0920	0925
Depth To Water (TOC) (ft)	15.27	15.47	15.42	15.40	15.37	15.35	15.25	15.32
Depth To Pump (TOC) (ft)	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Flow Rate (ml/min)	~150	~200	~150	~100	~75	~100	~75	~100
Volume of Water Purged	~1.40	~1.65	~1.75	~1.85	~1.90	~1.95	~2.0	~2.05
pH (s.u.)	7.13	7.15	7.14	7.14	7.15	7.15	7.15	7.15
Conductivity (mS/cm)	1.53	1.60	1.60	1.60	1.64	1.63	1.64	1.64
Turbidity (NTUs)	148	193	146	152	126	117	117	105
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	21.32	20.50	20.61	21.13	21.12	21.44	21.91	22.40
ORP (mV)	-147	-147	-148	-147	-143	-143	-140	-140
Salinity (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TDS (g/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-1
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 13.25
Depth to Well Bottom (TOC): 20.25

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	7.00	x 0.16 =	1.12	Gallons	x 3 =	3.36 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Clear

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	SAMPLE
Time	0930	0935	0940	0945	0950	0955	1000	1005
Depth To Water (TOC) (ft)	15.33	15.31	15.35	15.57	15.64	15.88	16.07	16.15
Depth To Pump (TOC) (ft)	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Flow Rate (ml/min)	~100	~100	~75	~100	~100	~100	~150	~100
Volume of Water Purged	~2.1	~2.15	~2.25	~2.45	~2.65	~2.85	~3.15	~3.4
pH (s.u.)	7.15	7.15	7.15	7.14	7.14	7.14	7.13	7.14
Conductivity (mS/cm)	1.69	1.69	1.71	1.75	1.75	1.78	1.77	1.78
Turbidity (NTUs)	88	86	73.6	64.8	59.5	57.5	51.7	48.7
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	21.89	22.41	21.76	20.85	20.82	20.48	21.06	21.25
ORP (mV)	-137	-136	-136	-134	-133	-133	-131	-130
Salinity (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TDS (g/L)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-2
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 10.32
Depth to Well Bottom (TOC): 20.22

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	9.90	x 0.16 =	1.58	Gallons	x 3 =	4.75 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Slight hydrocarbon odor
Other : Turbid

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1320	1325	1330	1335	1340	1345	1350	1355
Depth To Water (TOC) (ft)	10.64	11.1	11.18	11.23	11.27	11.07	11.15	11.35
Depth To Pump (TOC) (ft)	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22
Flow Rate (ml/min)	~200	~250	~200	~250	~250	~150	~200	~250
Volume of Water Purged	~0.25	~0.5	~0.75	~1.0	~1.25	~1.5	~2.0	~2.25
pH (s.u.)	7.24	7.22	7.23	7.25	7.25	7.21	7.25	7.25
Conductivity (mS/cm)	66.2	65.7	66.1	66.4	66.4	67.1	67.2	66.3
Turbidity (NTUs)	Error*	Error*	Error*	Error*	Error*	Error*	Error*	Error*
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	19.78	18.60	18.80	18.69	18.68	18.47	17.84	17.70
ORP (mV)	-225	-229	-230	-231	-231	-210	-219	-210
Salinity (%)	Error*	Error*	Error*	Error*	Error*	Error*	Error*	Error*
TDS (g/L)	40	39	40	40	40	40	40	40

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metal dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes: * - Readings were above meter limits

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-2
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 10.32
Depth to Well Bottom (TOC): 20.22

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	9.90	x 0.16 =	1.58	Gallons	x 3 =	4.75 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Slight hydrocarbon odor
Other : Turbid

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1400	1405	1410	1415	1420	1425	1430	1435
Depth To Water (TOC) (ft)	11.35	11.43	11.50	11.52	12.32	11.85	11.89	11.77
Depth To Pump (TOC) (ft)	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22
Flow Rate (ml/min)	~250	~250	~300	~250	~300	~300	~300	~250
Volume of Water Purged	~2.5	~2.75	~3.25	~3.75	~4.25	~4.75	~5.25	~5.75
pH (s.u.)	7.27	7.27	7.29	7.30	7.27	7.28	7.31	7.31
Conductivity (mS/cm)	66.5	66.4	65.9	65.8	65.2	65.3	65.6	64.8
Turbidity (NTUs)	Error*	872	407	474	Error*	Error*	Error*	626
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	17.17	16.79	16.63	16.64	16.36	16.41	16.84	17.00
ORP (mV)	-218	-218	-219	-219	-205	-208	-213	-214
Salinity (%)	Error*	Error*	Error*	Error*	Error*	Error*	Error*	Error*
TDS (g/L)	40	40	39	39	39	39	39	39

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metal dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes: * - Readings were above meter limits

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-2
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 10.32
Depth to Well Bottom (TOC): 20.22

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	9.90	x 0.16 =	1.58	Gallons	x 3 =	4.75 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Slight hydrocarbon odor
Other : Turbid

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1440	1445	1450	1455	1500	1505	1510	1515
Depth To Water (TOC) (ft)	11.79	11.68	11.61	11.56	11.70	11.65	11.47	11.42
Depth To Pump (TOC) (ft)	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22
Flow Rate (ml/min)	~250	~250	~250	~300	~250	~250	~200	~200
Volume of Water Purged	~6.25	~6.75	~7.25	~7.50	~7.75	~8.25	~8.75	~9.0
pH (s.u.)	7.23	7.32	7.32	7.32	7.29	7.30	7.33	7.34
Conductivity (mS/cm)	62.7	63.3	64.0	63.6	63.9	65.2	65.1	64.2
Turbidity (NTUs)	692	505	393	310	329	201	227	229
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	16.95	16.91	16.88	17.18	17.61	17.51	17.47	17.44
ORP (mV)	-209	-209	-208	-211	-199	-201	-207	-209
Salinity (%)	Error*	Error*	Error*	Error*	Error*	Error*	Error*	Error*
TDS (g/L)	38	38	38	38	38	39	39	39

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metal dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes: * - Readings were above meter limits

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: July 12, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-2
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 10.32
Depth to Well Bottom (TOC): 20.22

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	9.90	x 0.16 =	1.58	Gallons	x 3 =	4.75 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Slight hydrocarbon odor
Other : Turbid

FIELD TESTS

	PURGE	SAMPLE
Time	1520	1525
Depth To Water (TOC) (ft)	11.35	11.33
Depth To Pump (TOC) (ft)	19.22	19.22
Flow Rate (ml/min)	~250	~250
Volume of Water Purged	~9.5	~10
pH (s.u.)	7.34	7.34
Conductivity (mS/cm)	64.0	63.8
Turbidity (NTUs)	213	205
Dissolved Oxygen (mg/L)	0.0	0.0
Temperature (Degrees C)	17.35	17.05
ORP (mV)	-209	-210
Salinity (%)	Error*	Error*
TDS (g/L)	39	38

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metal dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes: * - Readings were above meter limits

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 13, 2010
Sampling Date: July 13, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-3
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 16.04
Depth to Well Bottom (TOC): 30.02

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	13.98	x 0.16 =	2.24	Gallons	x 3 =	6.71 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Hydrocarbon odor
Other : Clear with sheen; NAPL globules observed within Horiba flow-through cell

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1055	1100	1105	1110	1115	1120	1125	1130
Depth To Water (TOC) (ft)	16.10	16.12	16.08	16.06	16.07	16.08	16.12	16.10
Depth To Pump (TOC) (ft)	29.02	29.02	29.02	29.02	29.02	29.02	29.02	29.02
Flow Rate (ml/min)	~250	~300	~200	~250	~200	~250	~300	~250
Volume of Water Purged	~0.5	~1.0	~1.25	~1.75	~2.0	~2.25	~2.5	~3.0
pH (s.u.)	6.83	6.84	6.84	6.84	6.85	6.85	6.84	6.86
Conductivity (mS/cm)	38.2	34.7	30.1	29	27.5	27.4	27.1	26.4
Turbidity (NTUs)	145	84.3	53.6	50.4	46.7	47.6	50.3	52.9
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	19.32	19.39	19.44	20.14	20.85	20.19	20.7	19.47
ORP (mV)	142	151	154	154	152	150	152	151
Salinity (%)	2.4	2.2	1.9	1.8	1.7	1.7	1.7	1.6
TDS (g/L)	23	21	19	18	17	17	17	16

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 13, 2010
Sampling Date: July 13, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-3
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 16.04
Depth to Well Bottom (TOC): 30.02

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =	Gallons		
2-inch Casing:	Ft. of Water in Wel	13.98	x 0.16 =	2.24 Gallons	x 3 =	6.71 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =	Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =	Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Hydrocarbon odor
Other : Clear with sheen; NAPL globules observed within Horiba flow-through cell

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1135	1140	1145	1150	1155	1200	1205	1210
Depth To Water (TOC) (ft)	16.07	16.09	16.05	16.06	16.10	16.05	16.08	16.05
Depth To Pump (TOC) (ft)	29.02	29.02	29.02	29.02	29.02	29.02	29.02	29.02
Flow Rate (ml/min)	~250	~250	~200	~200	~250	~200	~250	~250
Volume of Water Purged	~3.25	~3.75	~4.0	~4.25	~4.75	~5.25	~5.5	~5.75
pH (s.u.)	6.87	6.87	6.88	6.88	6.89	6.90	6.90	6.92
Conductivity (mS/cm)	25.7	24.1	22.6	21.8	19.9	19.9	19.9	19.9
Turbidity (NTUs)	51.2	50.5	48.1	51.7	57.4	54.2	51.2	48.7
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	19.56	18.72	18.97	19.13	18.98	19.5	19.72	20.69
ORP (mV)	150	148	143	143	147	144	139	136
Salinity (%)	1.5	1.5	1.4	1.3	1.2	1.2	1.2	1.2
TDS (g/L)	15	15	14	13	12	12	12	12

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 13, 2010
Sampling Date: July 13, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-3
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 16.04
Depth to Well Bottom (TOC): 30.02

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	13.98	x 0.16 =	2.24	Gallons	x 3 =	6.71 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : Hydrocarbon odor
Other : Clear with sheen; NAPL globules observed within Horiba flow-through cell

FIELD TESTS

	PURGE	PURGE	SAMPLE
Time	1215	1220	1225
Depth To Water (TOC) (ft)	16.06	16.09	16.08
Depth To Pump (TOC) (ft)	29.02	29.02	29.02
Flow Rate (ml/min)	~250	~250	~250
Volume of Water Purged	~6.25	~6.5	~6.75
pH (s.u.)	6.92	6.88	6.91
Conductivity (mS/cm)	19.9	20.3	19.2
Turbidity (NTUs)	48.5	45.2	47.8
Dissolved Oxygen (mg/L)	0.0	0.0	0.0
Temperature (Degrees C)	21.08	19.80	18.60
ORP (mV)	137	133	135
Salinity (%)	1.2	1.2	1.0
TDS (g/L)	12	12	

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: 7/12/2010 (TCL VOCs, 7/13/10 (TCL SVOCs, TAL Metals, CN)
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-4
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 13.40
Depth to Well Bottom (TOC): 17.70

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons	
2-inch Casing:	Ft. of Water in Wel	4.30	x 0.16 =	0.69	Gallons	x 3 = 2.06 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons	
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons	

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Turbid

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	1145	1150	1155	1200	1205	1210	1215	1220
Depth To Water (TOC) (ft)	14.63	15.55	15.80	Dry	Dry	16.4	Dry	Dry
Depth To Pump (TOC) (ft)	16.7	16.7	16.7	16.7	16.7	17.2	17.2	17.2
Flow Rate (ml/min)	~150	~100	~75	Dry	Dry	~50	Dry	Dry
Volume of Water Purged	~0.25	~0.35	~0.4	~0.4	~0.4	~0.45	~0.45	~0.45
pH (s.u.)	8.06	8.07	8.07	Dry	Dry	8.03	Dry	Dry
Conductivity (mS/cm)	6.76	6.80	6.90	Dry	Dry	8.05	Dry	Dry
Turbidity (NTUs)	546	306	228	Dry	Dry	Error*	Dry	Dry
Dissolved Oxygen (mg/L)	0.72	0.85	1.14	Dry	Dry	4.55	Dry	Dry
Temperature (Degrees C)	23.37	24.94	26.57	Dry	Dry	24.33	Dry	Dry
ORP (mV)	91	109	107	Dry	Dry	52	Dry	Dry
Salinity (%)	0.4	0.4	0.4	Dry	Dry	0.4	Dry	Dry
TDS (g/L)	4.3	4.3	4.3	Dry	Dry	5.0	Dry	Dry

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metals dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes: * - Readings were above meter limits

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 12, 2010
Sampling Date: 7/12/2010 (TCL VOCs, 7/13/10 (TCL SVOCs, TAL Metals, CN)
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-4
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 13.40
Depth to Well Bottom (TOC): 17.70

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons	
2-inch Casing:	Ft. of Water in Wel	4.30	x 0.16 =	0.69	Gallons	x 3 = 2.06 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons	
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons	

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Turbid

FIELD TESTS

	PURGE	PURGE	SAMPLE
Time	1225	1230	1235
Depth To Water (TOC) (ft)	Dry	Dry	Dry
Depth To Pump (TOC) (ft)	17.7	17.7	17.7
Flow Rate (ml/min)	Dry	Dry	Dry
Volume of Water Purged	~0.45	~0.45	~0.45
pH (s.u.)	Dry	Dry	Dry
Conductivity (mS/cm)	Dry	Dry	Dry
Turbidity (NTUs)	Dry	Dry	Dry
Dissolved Oxygen (mg/L)	Dry	Dry	Dry
Temperature (Degrees C)	Dry	Dry	Dry
ORP (mV)	Dry	Dry	Dry
Salinity (%)	Dry	Dry	Dry
TDS (g/L)	Dry	Dry	Dry

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, TAL Metals dissolved, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 13, 2010
Sampling Date: July 13, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-5
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 14.35
Depth to Well Bottom (TOC): 24.12

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons		
2-inch Casing:	Ft. of Water in Wel	9.77	x 0.16 =	1.56	Gallons	x 3 =	4.69 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons		
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons		

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Clear

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE	PURGE
Time	0740	0745	0750	0755	0800	0805	0810	0815
Depth To Water (TOC) (ft)	14.37	14.40	14.40	14.37	14.37	14.38	14.40	14.37
Depth To Pump (TOC) (ft)	23.12	23.12	23.12	23.12	23.12	23.12	23.12	23.12
Flow Rate (ml/min)	~300	~250	~250	~250	~250	~200	~200	~250
Volume of Water Purged	~0.5	~1.0	~1.5	~2.0	~2.25	~2.5	~2.75	~3.25
pH (s.u.)	6.54	6.54	6.54	6.55	6.55	6.55	6.56	6.56
Conductivity (mS/cm)	38.2	38.7	38.1	38.2	38.3	38.1	38.0	36.3
Turbidity (NTUs)	331	144	133	74.1	71.3	64.3	63.6	63.1
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Temperature (Degrees C)	17.75	17.33	17.48	18.66	18.61	18.60	18.39	19.09
ORP (mV)	-74	-79	-79	-75	-75	-74	-72	-72
Salinity (%)	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.3
TDS (g/L)	23	24	23	23	23	23	23	22

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

PARSONS

GROUNDWATER SAMPLING RECORD

SITE NAME: Con Edison - Ludlow Street Works
PROJECT NUMBER: 446110-02000
Purge Date: July 13, 2010
Sampling Date: July 13, 2010
Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-5
Sampling Method: Low flow purge - Whale Pump

WELL PURGING

Static Water Level (TOC): 14.35
Depth to Well Bottom (TOC): 24.12

CALCULATIONS:	Ft. of Water in Well		X (GAL / FT) =		Gallons	
2-inch Casing:	Ft. of Water in Wel	9.77	x 0.16 =	1.56	Gallons	x 3 = 4.69 Gallons
3-inch Casing:	Ft. of Water in Well		x 0.32 =		Gallons	
4-inch Casing:	Ft. of Water in Well		x 0.64 =		Gallons	

Method: Low flow purge - Whale Pump

SAMPLE DESCRIPTION

Odor : No odor
Other : Clear

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	PURGE	SAMPLE
Time	0820	0825	0830	0835	0840	0845
Depth To Water (TOC) (ft)	14.38	14.37	14.39	14.38	14.38	
Depth To Pump (TOC) (ft)	23.12	23.12	23.12	23.12	23.12	
Flow Rate (ml/min)	~250	~200	~200	~250	~200	
Volume of Water Purged	~3.5	~3.75	~4.0	~4.5	~4.75	
pH (s.u.)	6.57	6.57	6.6	6.57	6.57	
Conductivity (mS/cm)	36.4	36.7	36.5	35.4	34.7	
Turbidity (NTUs)	65.5	55.5	26.8	22.1	22.4	
Dissolved Oxygen (mg/L)	0.0	0.0	0.0	0.0	0.0	
Temperature (Degrees C)	19.13	18.73	17.95	18.44	18.48	
ORP (mV)	-71	-71	-67	-66	-68	
Salinity (%)	2.3	2.3	2.3	2.2	2.2	
TDS (g/L)	22	22	22	22	21	

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOC's, TCL SVOC's, TAL Metals, CN

Shipped Via: Chemtech
Laboratory

Other Notes:

APPENDIX D

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

FORMER LUDLOW STREET WORKS

Prepared For:

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

31-01 20th Avenue
Long Island City, NY 11105

Prepared By:

PARSONS

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SEPTEMBER 2010

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LIST OF ATTACHMENTS

SECTION 1

DATA USABILITY SUMMARY

Soil and groundwater samples were collected from the Consolidated Edison Former Ludlow Street Works site in Yonkers, New York from June 14, 2010 through July 13, 2010. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan,
- NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratory for this project was Chemtech. This laboratory is certified to perform project analyses through the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 16-24 days for the project samples.

The data packages received from Chemtech were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation reports which are summarized by sample media in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received at Chemtech within one to five days of sampling. All samples were received intact and in good condition at the laboratory.

1.3 LABORATORY ANALYTICAL METHODS

The soil and groundwater samples that were collected from the site were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, and cyanide. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.3. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method by media in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

"U" - not detected at the value given,

"UJ" - estimated and not detected at the value given,

"J" - estimated at the value given,

"N" - presumptive evidence at the value given, and

"R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

Soil and groundwater samples were analyzed for VOCs using the USEPA SW-846 8260B analytical method. Certain reported results for the VOC samples were qualified as estimated based upon matrix spike/matrix spike duplicate (MS/MSD) recoveries, instrument calibrations, internal standard responses, and field duplicate precision. Certain reported results for the VOC samples were considered unusable and qualified "R" based upon poor instrument calibrations. The reported VOC analytical results were 99.9% to 100% complete (i.e., usable) for the soil and groundwater data, respectively. PARCC requirements were met overall.

1.3.2 Semivolatile Organic Analysis

Soil and groundwater samples were analyzed for SVOCs using the USEPA SW-846 8270C analytical method. Certain reported results for the SVOC samples were qualified as estimated based upon laboratory control sample recoveries and instrument calibrations. Certain reported SVOC analytical results were considered unusable and qualified "R" based upon poor MS/MSD recoveries and instrument calibrations. The reported SVOC analytical results were 99.5% to 100% complete (i.e., usable) for the soil and groundwater data, respectively. PARCC requirements were met overall.

1.3.3 Inorganics Analysis

Soil samples were analyzed for metals and cyanide using the USEPA SW-846 6010B/7471A/9012 analytical methods. Groundwater samples were analyzed for total and dissolved metals and cyanide using the USEPA SW-846 6010B/7470A/9012 analytical methods. Certain reported results for the inorganics samples were qualified as estimated based upon matrix spike recoveries, calibration standard recoveries, serial dilutions, and field duplicate precision. The reported inorganic analytical results were considered 100% complete (i.e., usable) for the soil and groundwater data. PARCC requirements were met.

SECTION 2

DATA VALIDATION REPORTS

2.1 SOIL

Data review has been completed for data packages generated by Chemtech containing analytical results for soil samples collected from the site. The analytical results for the specific soil samples were contained within sample delivery groups (SDGs) B2731, B2787, B2845, B2886, and B2899. All of the samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data are presented in Attachment A-1.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.1.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and field equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, LCS recoveries, initial and continuing calibrations, internal standard responses, and field duplicate precision as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were within QC limits, considered acceptable, and did not warrant data qualifications during the spiked analyses of designated project samples with the exception of the low MS/MSD accuracy results for m,p-xylenes (52%R/43%R; QC limit 65-131%R) during the spiked analyses of TP-4A FLOOR; and the low MS/MSD accuracy results for bromomethane (26%R/24%R; QC limit 40-154%R), chloroethane (34%R/29%R; QC limit 39-165%R), and trichlorofluoromethane (44%R/39%R; QC limit 46-159%R) during the spiked analyses of sample MW-2 (13-15). Therefore, the results for these compounds were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the parent samples.

LCS Recoveries

All LCS recoveries associated with project samples were considered acceptable and within QC limits with the exception of the high LCS recoveries for acetone (160%R, 150%R; QC limit 50-149%R) associated with samples TRIP BLANK (7/1/10), FB062810, and FB070110; and methylcyclohexane (125%R; QC limit 71-124%R) and trichloroethene (125%R; QC limit 77-120%R) associated with samples SB-5 (29-31), SB-5 (21-23), SB-6 (29-31), SB-4 (30-32), SB-7 (33-35), SB-1 (24-26), SB-1 (18-20), and SB-2 (20-22). Validation qualification of these samples was not required since these compounds were not detected.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum relative response factor (RRF) of 0.05 and a maximum percent relative standard deviation (%RSD) of 20% with the exception of acetone (64.86%RSD) and bromoform (23.09%RSD) in the initial calibration associated with sample TRIP BLANK (6/17/10); dichlorodifluoromethane (20.74%RSD), bromomethane (31.02%RSD), and chloroethane (25.11%RSD) in the initial calibration associated with sample TP-4A FLOOR; dichlorodifluoromethane (32.06%RSD) and chloroethane (20.78%RSD) in the initial calibration associated with samples in SDG B2731 except TRIP BLANK (6/17/10) and TP-4A FLOOR; dichlorodifluoromethane (27.25%RSD), chloroethane (26.30%RSD), and acetone (RRF=0.034) in the initial calibration associated with sample TRIP BLANK (6/23/10); dichlorodifluoromethane (25.06%RSD) and chloroethane (21.28%RSD) in the initial calibration associated with samples in SDG B2787 except TRIP BLANK (6/23/10) and MW-3 (9-11); bromomethane (44.73%RSD), acetone (RRF=0.034), and bromoform (28.41%RSD) in the initial calibration associated with TRIP BLANK (6/28/10); dichlorodifluoromethane (29.45%RSD) and acetone (22.22%RSD) in the initial calibration associated with SB-7 (15-17), TRIP BLANK (7/1/10), FB062810, and FB070110; dichlorodifluoromethane (38.03%RSD) in the initial calibration associated with MW-5 (7-9) and MW-5 (23-25); dichlorodifluoromethane (30.04%RSD) in the initial calibration associated with sample SB-5 (29-31), SB-5 (21-23), SB-6 (29-31), SB-4 (30-32), SB-7 (33-35), and SB-1 (32-34); dichlorodifluoromethane (30.90%RSD) in the initial calibration associated with samples SB-16, SB-4 (20-22), and SB-6 (13-15); and dichlorodifluoromethane (21.3%RSD), bromomethane (26.26%RSD), chloroethane (36.62%RSD), and trichlorofluoromethane (36.54%RSD) in the initial calibration associated with sample SB-1 (32-34). Therefore, results

for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples. However, nondetected acetone results for those samples where the RRF was outside the criteria were considered unusable and qualified "R".

All continuing calibration compounds were compliant with a minimum RRF of 0.05 and a maximum percent difference (%D) within ±20% with the exception of chloroethane (-23.6%D), carbon disulfide (-27.8%D), 1,2-dichloropropane (-39.3%D), and bromodichloromethane (-22.5%D) in the continuing calibration associated with all samples in SDG B2731 except TP-4A FLOOR and TRIP BLANK (6/17/10); dichlorodifluoromethane (-23%D), chloromethane (-34.6%D), vinyl chloride (-23.1%D), methylene chloride (-31.8%D), and 1,2-dichloropropane (-21.3%D) in the continuing calibration associated with sample MW-3 (9-11); dichlorodifluoromethane (-26.4%D) in the continuing calibration associated with all samples in SDG B2787 except MW-3 (9-11) and TRIP BLANK (6/23/10); dichlorodifluoromethane (-31.6%D), chloromethane (-33.3%D), chloroethane (-43.5%D), trichlorofluoromethane (-24.3%D), and acetone (-29.8%D) in the continuing calibration associated with sample SB-7 (15-17); dichlorodifluoromethane (-61.6%D), chloroethane (-21.6%D), trichlorofluoromethane (-29.3%D), 1,1,2-trichlorotrifluoroethane (-25.1%D), carbon disulfide (-25.2%D), and acetone (RRF=0.032) in the continuing calibration associated with TRIP BLANK (6/28/10); chloroethane (-41.2%D) in the continuing calibration associated with samples in SDG B2899 except SB-1 (32-34), and SB-5 (29-31), SB-5 (21-23), SB-6 (29-31), SB-4 (30-32), and SB-7 (33-35); dichlorodifluoromethane (22.29%D), acetone (54.35%D), and 1,2-dichloroethane (22.74%D) in the continuing calibration associated with samples SB-16, SB-6 (13-15), and SB-4 (20-22); and dichlorodifluoromethane (-47.8%D), chloromethane (-37%D), chloroethane (-28.5%D), acetone (-44.4%D), and 2-hexanone (-22.6%D) in the continuing calibration associated with samples TRIP BLANK (7/1/10), FB062810, and FB070110. Therefore, the sample results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples. However, nondetected acetone results for those samples where the RRF was outside criteria were considered unusable and qualified "R".

It was noted that ethylbenzene, m,p-xylenes, o-xylene, and isopropylbenzene exceeded the instrument calibration ranges for sample SB-7 (15-17). Although this sample was diluted and reanalyzed, original sample results were reported in the validated laboratory data presented in Attachment A-1 and qualified "J".

Internal Standard (IS) Responses

All internal standard (IS) responses and retention times were within specified QC ranges based on associated calibration standards (i.e., sample's area count within -50% to +100% and retention times within ±0.5 minutes of the standard) with the exception of the low responses for all ISs in sample SB-6 (13-15); the low response for the IS pentafluorobenzene in sample SB-6 (13-15) DL; and the low response for the IS 1,4-dichlorobenzene-d4 in samples TP-5 WALL and TP-5 WALL RE. Therefore, results associated with these ISs for these samples were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ".

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the precision for toluene (115%RPD) associated with the field duplicate pair SB-6 (13-15) and SB-16. The toluene results for these samples were considered estimated and qualified "J".

Usability

All volatile soil sample results were considered usable following data validation with the exception of certain nondetected results based upon poor instrument calibration linearity.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile soil data presented by Chemtech were 99.9% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A-1.

2.1.2 Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank and field equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, LCS recoveries, blank contamination, and initial and continuing calibrations as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were within QC limits, considered acceptable, and did not warrant data qualification during the spiked analyses of designated project samples with the exception of the less than 10% MS/MSD accuracy results for 2,4-dinitrophenol (6%R/6%R; QC limit 10-177%R) during the spiked analyses of sample SB-1(18-20). Therefore, the nondetected result for this compound was considered unusable and qualified "R" for the parent samples.

LCS Recoveries

All LCS recoveries associated with project samples were considered acceptable and within QC limits with the exception of the low LCS recoveries for 4-chloroaniline (19%R, 24%R; QC limit 25-115%R) associated with the soil samples in SDGs B2787 and B2886. Therefore, sample results for this compound which were nondetects, were considered estimated, possibly biased low, and qualified "UJ" for the affected samples.

Blank Contamination

The laboratory method blank PB49946B associated with soil samples in SDG B2731 contained dimethylphthalate at a concentration of 51 µg/kg; the laboratory method blank PB50130B associated with soil samples in SDG B2845 contained dimethylphthalate at a concentration of 220 µg/kg; the laboratory method blank PB50236B associated with soil samples in SDG B2886 contained dimethylphthalate at a concentration of 84 µg/kg; the laboratory method blank PB50256B associated with soil samples in SDG B2899 except SB-2(20-22) contained dimethylphthalate at a concentration of 290 µg/kg; and the laboratory method blank PB50293B associated with sample SB-2(20-22) contained dimethylphthalate at a concentration of 43 µg/kg. Therefore, the dimethylphthalate results less than associated validation action concentrations were considered not detected and qualified "U" for the affected samples.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %RSD of 20% with the exception of 2,4-dinitrophenol (57.19%RSD) and 4,6-dinitro-2-methylphenol (41.44%RSD) in the initial calibration associated with all samples in SDG B2731; 2,4-dinitrophenol (73.12%RSD), 4,6-dinitro-2-methylphenol (34.66%RSD), and pentachlorophenol (34.76%RSD) in the initial calibration associated with samples MW-1(11-13), MW-1(23-25), MW-2(13-15), MW-2(23-25), MW-3(31-33), MW-4(23-25), and TP-2 WELL (7.5); 2,4-dinitrophenol (52.4%RSD) and 4,6-dinitro-2-methylphenol (34.66%RSD) in the initial calibration associated with samples in SDG B2845, MW-3(9-11), MW-4(5-7), MW-5(4-6), TP-2 FLOOR (8.5), and TP-2 FOOTING (4.5); 2,4-dinitrophenol (53.78%RSD) and 4,6-dinitro-2-methylphenol (36.73%RSD) in the initial calibration associated with samples in SDG B2886; and 2,4-dinitrophenol (40.26%RSD) and 4,6-dinitro-2-methylphenol (28.92%RSD) in the initial calibration associated with samples in SDG B2899 except SB-2(20-22). Therefore, the sample results for these compounds which were nondetects, were considered estimated and qualified "UJ" for the affected samples.

All continuing calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %D within ±20% with the exception of 2,4-dinitrophenol (-126.4%D) and 4,6-dinitro-2-methylphenol (-54.4%D) in the continuing calibration associated with samples SB-7 (33-35), FB062810, and FB070110; 2,4-dinitrophenol (-130.6%D) and 4,6-dinitro-2-methylphenol (-61.1%D) in the continuing calibration associated with samples in SDG B2886 except SB-7 (33-35), FB062810, and FB070110; and 2,4-dinitrophenol (-78.3%D) and 4,6-dinitro-2-methylphenol (-39.7%D) in the continuing calibration associated with samples in SDG B2899 except SB-2 (20-22). The sample results for these noncompliant compounds which were nondetects, were considered estimated and qualified "UJ" for the affected samples. However, the nondetected 2,4-dinitrophenol results for those samples where the %D exceeded ±90% were considered unusable and qualified "R".

Usability

All semivolatile soil sample results were considered usable following data validation with the exception of certain nondetected results based upon MS/MSD recoveries and poor instrument calibration linearity.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The semivolatile soil data presented by Chemtech were 99.5% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A-1.

2.1.3 Inorganics

The following items were reviewed for compliancy in the inorganics analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Inductively coupled plasma (ICP) interference check sample (ICS)
- Matrix spike (MS) recoveries
- Laboratory duplicate precision
- Field duplicate precision
- Laboratory control sample (LCS) recoveries
- ICP serial dilutions
- Sample result verification and identification
- Quantitation limits

- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of calibration standard recoveries, matrix spike recoveries, ICP serial dilutions, and field duplicate precision as discussed below.

Calibrations

All initial and continuing calibration verifications were analyzed at the appropriate frequency with recoveries within QC acceptance limits. All calibration standards were analyzed at the appropriate frequency with recoveries within the 70-130%R QC limit with the exception of the high recoveries for zinc (139.8%R) associated with samples in SDG B2845 and the high recoveries for arsenic (147%R) and chromium (131.6%R) associated with samples SB-1 (18-20) and SB-2 (20-22). Therefore, positive results for these analytes were considered estimated, possibly biased high, and qualified "J" for the affected samples.

Matrix Spike Recoveries

All the MS recoveries for designated spiked project samples were within the 75-125%R QC limit with sample concentrations less than four times the spiking concentration with the exception of the high MS recovery for cyanide (156.6%R) associated with samples SB-1 (18-20) and SB-2 (20-22); and the high MS recoveries for mercury (394.9%, 316%R) and the low MS recoveries for silver (65.7%R, 68.6%R) and selenium (71.4%R) associated with samples in SDG B2731. Therefore, positive cyanide and mercury results were considered estimated, possibly biased high, and qualified "J" for the affected samples since MS recoveries exceeded the QC limit. The silver and selenium results were considered estimated, possibly biased low, with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples since MS recoveries fell below the QC limit.

ICP Serial Dilution

QC serial dilution results were compliant for all analytes with the exception of the serial dilution results for calcium, iron, magnesium, manganese, and sodium associated with samples SB-1 (24-26) and SB-1 (32-34). Therefore, positive results for these analytes were considered estimated and qualified "J" for the affected samples.

Field Duplicate Precision

All field duplicate results were considered acceptable with the exception of the cyanide results for the field duplicate pair SB-6 (13-15) (0.717 mg/kg) and SB-16 (nondetect). The cyanide results for these samples were considered estimated with the positive result qualified "J" and the nondetected result qualified "UJ".

Usability

All inorganics soil sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganics soil data presented by Chemtech were 100% complete (i.e., usable). The validated soil inorganics laboratory data are tabulated and presented in Attachment A-1.

2.2 GROUNDWATER

Data review has been completed for data packages generated by Chemtech containing analytical results for groundwater samples collected from the site. The analytical results for the specific groundwater samples were contained within SDG B2963. All of the samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data are presented in Attachment A-2.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.2.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank and trip/field equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, initial calibrations, and field duplicate precision as discussed below.

MS/MSD Precision and Accuracy

All of the MS/MSD precision (relative percent difference; RPD) and accuracy percent recovery; %R) measurements for designated spiked project samples were within QC limits or considered acceptable with validation protocols with the exception of the low MS/MSD accuracy results for 1,2-dibromoethane (34%R/60%R; QC limit 63-142%R) during the spiked analyses of MW-5. Therefore, the nondetected result for this compound was considered estimated, possibly biased low, and qualified "UJ" for the parent sample.

Initial Calibrations

All initial calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %RSD of 20% with the exception of bromomethane (35.09%RSD), trans-1,3-dichloropropene (21.98%RSD), cis-1,3-dichloropropene (21.08%RSD), and bromoform (25.14%RSD) in the initial calibration associated with MW-15. The results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected sample.

Field Duplicate Precision

All field duplicate results for the field duplicate samples MW-5 and MW-15 were considered acceptable with the exception of the bromomethane results (9.8 µg/L and nondetect, respectively) and the acetone precision (46%RPD). Therefore, the bromomethane and acetone results for this field duplicate pair were considered estimated with the positive results qualified "J" and the nondetected results qualified "UJ".

Usability

All groundwater volatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile groundwater data presented by Chemtech were 100% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A-2.

2.2.2 Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries

- Laboratory method blank and field equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of initial and continuing calibrations as discussed below.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %RSD of 20% with the exception of 2,4-dinitrophenol (40.26%RSD) and 4,6-dinitro-2-methylphenol (28.92%RSD) in the initial calibration associated with all samples. The sample results for these compounds which were nondetects, were considered estimated and qualified "UJ" for the affected samples.

All continuing calibration compounds were compliant with a minimum RRF of 0.05 and a maximum %D within ±20% with the exception of 2,4-dinitrophenol (-75.4%D, -76.8%D) and 4,6-dinitro-2-methylphenol (-44.9%D, -37.2%D) in the continuing calibrations associated with all samples. The sample results for these compounds which were nondetects, were considered estimated and qualified "UJ" for the affected samples.

Usability

All groundwater semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The groundwater semivolatile data presented by Chemtech were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A-2.

2.2.3 Inorganics

The following items were reviewed for compliancy in the inorganics analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications

- Initial and continuing calibration blank, laboratory preparation blank, and field equipment blank contamination
- Interference check sample (ICS)
- Matrix spike (MS) recoveries
- Laboratory duplicate precision
- LCS recoveries
- ICP serial dilution
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination as discussed below.

Blank Contamination

The field equipment blank FB071310 associated with all samples contained total sodium, dissolved sodium, total zinc, and dissolved zinc at concentrations of 1350, 1290, 38.7, and 45 µ/L, respectively. Therefore, associated sample results less than validation action concentrations for these analytes were considered not detected and qualified "U" for the affected samples.

Usability

All groundwater inorganic sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The groundwater inorganic data presented by Chemtech were 100% complete (i.e., usable). The validated inorganic laboratory data are tabulated and presented in Attachment A-2.

ATTACHMENT A

VALIDATED LABORATORY DATA

ATTACHMENT A-1

VALIDATED LABORATORY DATA FOR SOIL

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2731		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TRIPBLANK B2731-09 Chemtech B2731 WATER 6/9/2010 8/26/2010 ug/L
CAS NO.	COMPOUND	UNITS:									
	VOLATILES										
75-71-8	Dichlorodifluoromethane	ug/Kg	0.78 U	0.8 U	0.82 U	0.71 U	0.71 UJ	0.71 U	0.81 U	0.82 U	0.55 U
74-87-3	Chloromethane	ug/Kg	1 U	1.1 U	1.1 U	0.94 U	0.93 U	0.93 U	1.1 U	1.1 U	0.54 U
75-01-4	Vinyl chloride	ug/Kg	1.5 U	1.5 U	1.6 U	1.3 U	1.3 U	1.3 U	1.5 U	1.6 U	0.34 U
74-83-9	Bromomethane	ug/Kg	3 U	3 U	3.1 U	2.7 U	2.7 UJ	2.7 U	3 U	3.1 U	0.62 U
75-00-3	Chloroethane	ug/Kg	1.7 UJ	1.7 UJ	1.8 UJ	1.5 UJ	1.5 UJ	1.5 UJ	1.7 UJ	1.8 UJ	0.66 U
75-69-4	Trichlorofluoromethane	ug/Kg	1.6 U	1.6 U	1.7 U	1.4 U	1.4 U	1.4 U	1.6 U	1.7 U	0.35 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	1.6 U	1.6 U	1.7 U	1.5 U	1.4 U	1.4 U	1.6 U	1.7 U	0.45 U
75-35-4	1,1-Dichloroethene	ug/Kg	1.8 U	1.8 U	1.9 U	1.6 U	1.6 U	1.6 U	1.8 U	1.9 U	0.47 U
67-64-1	Acetone	ug/Kg	3.6 U	3.7 U	43	22 J	3.3 U	3.3 U	9.8 J	3.8 U	2.8 UJ
75-15-0	Carbon Disulfide	ug/Kg	1.3 UJ	1.3 UJ	1.3 UJ	1.2 UJ	1.2 U	1.2 UJ	1.3 UJ	1.3 UJ	0.54 U
1634-04-4	Methyl tert-butyl Ether	ug/Kg	1.2 U	1.2 U	1.2 U	1.1 U	1 U	1 U	1.2 U	1.2 U	0.35 U
79-20-9	Methyl Acetate	ug/Kg	1.8 U	1.9 U	1.9 U	1.7 U	1.6 U	1.6 U	1.9 U	1.9 U	0.83 U
75-09-2	Methylene Chloride	ug/Kg	1.7 U	1.7 U	1.8 U	1.6 U	2.2 J	1.5 U	1.8 U	1.8 U	0.41 U
156-60-5	trans-1,2-Dichloroethene	ug/Kg	0.83 U	0.85 U	0.87 U	0.76 U	0.75 U	0.75 U	0.86 U	0.87 U	0.41 U
75-34-3	1,1-Dichloroethane	ug/Kg	1.1 U	1.2 U	1.2 U	1 U	1 U	1 U	1.2 U	1.2 U	0.36 U
110-82-7	Cyclohexane	ug/Kg	1.2 U	1.2 U	1.3 U	1.1 U	1.1 U	1.1 U	1.3 U	1.3 U	0.55 U
78-93-3	2-Butanone	ug/Kg	3.7 U	3.8 U	8.4 J	3.4 U	3.4 U	3.4 U	3.9 U	3.9 U	1.3 U
56-23-5	Carbon Tetrachloride	ug/Kg	1.2 U	1.2 U	1.3 U	1.1 U	1.1 U	1.1 U	1.2 U	1.3 U	0.62 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	1.1 U	1.1 U	1.1 U	0.97 U	0.97 U	0.97 U	1.1 U	1.1 U	0.35 U
67-66-3	Chloroform	ug/Kg	0.89 U	0.91 U	0.94 U	0.81 U	0.8 U	0.8 U	0.92 U	0.93 U	0.34 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	1.1 U	1.1 U	1.1 U	0.96 U	0.96 U	0.96 U	1.1 U	1.1 U	0.4 U
108-87-2	Methylcyclohexane	ug/Kg	1.3 U	1.3 U	1.3 U	1.2 U	1.2 U	1.2 U	1.3 U	1.3 U	0.68 U
71-43-2	Benzene	ug/Kg	0.46 U	0.47 U	34	4.7 J	0.41 U	0.41 U	0.47 U	0.48 U	0.32 U
107-06-2	1,2-Dichloroethane	ug/Kg	0.77 U	0.79 U	0.81 U	0.7 U	0.7 U	0.7 U	0.79 U	0.81 U	0.48 U
79-01-6	Trichloroethene	ug/Kg	1 U	1.1 U	1.1 U	0.94 U	0.93 U	0.93 U	1.1 U	1.1 U	0.28 U
78-87-5	1,2-Dichloropropane	ug/Kg	0.31 UJ	0.32 UJ	0.33 UJ	0.28 UJ	0.28 U	0.28 UJ	0.32 UJ	0.33 UJ	0.46 U
75-27-4	Bromodichloromethane	ug/Kg	0.75 UJ	0.76 UJ	0.78 UJ	0.68 UJ	0.67 U	0.67 UJ	0.77 UJ	0.78 UJ	0.36 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	3.5 U	3.6 U	3.7 U	3.2 U	30	3.2 U	3.6 U	3.7 U	2.1 U
108-88-3	Toluene	ug/Kg	0.77 U	0.79 U	47	4 J	1800	78	0.79 U	0.81 U	0.37 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	0.95 U	0.97 U	1 U	0.86 U	0.86 U	0.86 U	0.98 U	1 U	0.29 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	0.87 U	0.88 U	0.91 U	0.79 U	0.78 U	0.78 U	0.89 U	0.91 U	0.31 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	1.1 U	1.1 U	1.1 U	0.99 U	0.98 U	0.98 U	1.1 U	1.1 U	0.38 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2731		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TRIPBLANK B2731-09 Chemtech B2731 WATER 6/9/2010 8/26/2010
CAS NO.	COMPOUND	UNITS:									ug/L
	VOLATILES										
591-78-6	2-Hexanone	ug/Kg	4.7 U	4.8 U	5 U	4.3 U	4.3 U	4.3 U	4.9 U	5 U	1.9 U
124-48-1	Dibromochloromethane	ug/Kg	0.65 U	0.66 U	0.68 U	0.59 U	0.59 U	0.59 U	0.67 U	0.68 U	0.52 U
106-93-4	1,2-Dibromoethane	ug/Kg	0.77 U	0.79 U	0.81 U	0.7 U	0.7 U	0.7 U	0.79 U	0.81 U	0.41 U
127-18-4	Tetrachloroethene	ug/Kg	1.2 U	1.4 J	1.3 U	1.1 U	1.1 U	1.1 U	1.3 U	1.3 U	0.27 U
108-90-7	Chlorobenzene	ug/Kg	0.6 U	0.61 U	0.63 U	0.55 U	0.54 U	0.54 U	0.62 U	0.63 U	0.49 U
100-41-4	Ethyl Benzene	ug/Kg	0.75 U	0.76 U	30	1.7 J	15	4.2 J	0.77 U	0.78 U	0.53 U
136777-61-2	m/p-Xylenes	ug/Kg	0.87 U	0.88 U	41	2.3 J	73 J	21	0.89 U	0.91 U	0.95 U
1330-20-7	o-Xylene	ug/Kg	0.82 U	0.83 U	17	0.99 J	21	5.8	0.84 U	0.86 U	0.43 U
100-42-5	Styrene	ug/Kg	0.54 U	0.55 U	11	0.49 U	0.49 U	0.49 U	0.56 U	0.57 U	0.36 U
75-25-2	Bromoform	ug/Kg	0.89 U	0.91 U	0.94 U	0.81 U	0.8 U	0.8 U	0.92 U	0.93 U	0.47 UJ
98-82-8	Isopropylbenzene	ug/Kg	0.58 U	0.59 U	1.8 J	0.53 U	0.66 J	0.52 U	0.6 U	0.61 UJ	0.45 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	0.55 U	0.56 U	0.58 U	0.5 U	0.5 U	0.5 U	0.57 U	0.58 UJ	0.31 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	0.45 U	0.45 U	0.47 U	0.4 U	0.4 U	0.4 U	0.46 U	0.47 UJ	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	0.49 U	0.5 U	0.52 U	0.45 U	0.45 U	0.45 U	0.51 U	0.52 UJ	0.32 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	0.75 U	0.76 U	0.78 U	0.68 U	0.67 U	0.67 U	0.77 U	0.78 UJ	0.45 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	1 U	1.1 U	1.1 U	0.95 U	0.95 U	0.95 U	1.1 U	1.1 UJ	0.46 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	0.84 U	0.86 U	0.89 U	0.77 U	0.76 U	0.76 U	0.87 U	0.88 UJ	0.62 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2731		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TRIPBLANK B2731-09 Chemtech B2731 WATER 6/9/2010 8/26/2010 ug/L
CAS NO.	COMPOUND	UNITS:									
	SEMIVOLATILES										
100-52-7	Benzaldehyde	ug/Kg	21 U	21 U	60 J	140 J	19 U	19 U	22 U	22 U	
108-95-2	Phenol	ug/Kg	9.3 U	9.5 U	9.7 U	8.4 U	8.4 U	8.4 U	9.6 U	9.7 U	
95-57-8	2-Chlorophenol	ug/Kg	21 U	22 U	22 U	19 U	19 U	19 U	22 U	22 U	
50-32-8	2-Methylphenol	ug/Kg	22 U	22 U	23 U	20 U	20 U	20 U	23 U	23 U	
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	17 U	17 U	17 U	15 U	15 U	15 U	17 U	17 U	
98-86-2	Acetophenone	ug/Kg	12 U	13 U	13 U	90 J	11 U	11 U	13 U	13 U	
87-86-5	3+4-Methylphenols	ug/Kg	21 U	21 U	22 U	19 U	19 U	19 U	22 U	22 U	
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	20 U	21 U	21 U	18 U	18 U	18 U	21 U	21 U	
67-72-1	Hexachloroethane	ug/Kg	18 U	18 U	19 U	16 U	16 U	16 U	19 U	19 U	
98-95-3	Nitrobenzene	ug/Kg	15 U	16 U	16 U	14 U	14 U	14 U	16 U	16 U	
78-59-1	Isophorone	ug/Kg	13 U	14 U	14 U	12 U	12 U	12 U	14 U	14 U	
88-75-5	2-Nitrophenol	ug/Kg	19 U	20 U	20 U	18 U	17 U	17 U	20 U	20 U	
105-67-9	2,4-Dimethylphenol	ug/Kg	23 U	23 U	24 U	21 U	21 U	21 U	24 U	24 U	
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	23 U	24 U	24 U	21 U	21 U	21 U	24 U	24 U	
120-83-2	2,4-Dichlorophenol	ug/Kg	15 U	16 U	16 U	14 U	14 U	14 U	16 U	16 U	
91-20-3	Naphthalene	ug/Kg	14 U	14 U	530	970	12 U	12 U	190 J	93 J	
106-47-8	4-Chloroaniline	ug/Kg	28 U	29 U	30 U	26 U	26 U	25 U	29 U	30 U	
87-68-3	Hexachlorobutadiene	ug/Kg	15 U	15 U	15 U	13 U	13 U	13 U	15 U	15 U	
105-60-2	Caprolactam	ug/Kg	19 U	19 U	20 U	17 U	17 U	17 U	19 U	20 U	
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	19 U	20 U	20 U	18 U	17 U	17 U	20 U	20 U	
59-50-7	4-Chloro-3-methylphenol	ug/Kg	18 U	18 U	19 U	16 U	16 U	16 U	18 U	19 U	
91-57-6	2-Methylnaphthalene	ug/Kg	10 U	10 U	100 J	200 J	9.1 U	9.1 U	140 J	11 U	
77-47-4	Hexachlorocyclopentadiene	ug/Kg	9.7 U	10 U	10 U	8.9 U	8.8 U	8.8 U	10 U	10 U	
88-06-2	2,4,6-Trichlorophenol	ug/Kg	12 U	13 U	13 U	11 U	11 U	11 U	13 U	13 U	
95-95-4	2,4,5-Trichlorophenol	ug/Kg	28 U	29 U	30 U	26 U	25 U	25 U	29 U	30 U	
92-52-4	1,1-Biphenyl	ug/Kg	15 U	16 U	16 U	14 U	14 U	14 U	16 U	16 U	
91-58-7	2-Chloronaphthalene	ug/Kg	9.1 U	9.4 U	9.6 U	8.3 U	8.2 U	8.2 U	9.5 U	9.6 U	
621-64-7	2-Nitroaniline	ug/Kg	18 U	18 U	19 U	16 U	16 U	16 U	18 U	19 U	
131-11-3	Dimethylphthalate	ug/Kg	490 U	470 U	420 U	410 U	360 U	390 U	480 U	480 U	
208-96-8	Acenaphthylene	ug/Kg	10 U	10 U	11 U	9.2 U	9.1 U	9.1 U	570	210 J	
606-20-2	2,6-Dinitrotoluene	ug/Kg	16 U	17 U	17 U	15 U	15 U	15 U	17 U	17 U	
621-64-7	3-Nitroaniline	ug/Kg	26 U	26 U	27 U	23 U	23 U	23 U	27 U	27 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2731		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TRIPBLANK B2731-09 Chemtech B2731 WATER 6/9/2010 8/26/2010 ug/L
CAS NO.	COMPOUND	UNITS:									
	SEMIVOLATILES										
83-32-9	Acenaphthene	ug/Kg	11 U	12 U	12 U	10 U	10 U	10 U	12 U	12 U	
51-28-5	2,4-Dinitrophenol	ug/Kg	41 UJ	42 UJ	43 UJ	37 UJ	37 UJ	37 UJ	42 UJ	43 UJ	
100-02-7	4-Nitrophenol	ug/Kg	74 U	76 U	78 U	68 U	67 U	67 U	77 U	78 U	
132-64-9	Dibenzofuran	ug/Kg	16 U	16 U	16 U	14 U	14 U	14 U	110 J	16 U	
121-14-2	2,4-Dinitrotoluene	ug/Kg	12 U	12 U	13 U	11 U	11 U	11 U	13 U	13 U	
84-66-2	Diethylphthalate	ug/Kg	6.2 U	6.4 U	6.6 U	5.7 U	5.6 U	5.6 U	6.5 U	6.6 U	
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	22 U	22 U	23 U	20 U	20 U	20 U	23 U	23 U	
86-73-7	Fluorene	ug/Kg	15 U	16 U	16 U	14 U	14 U	14 U	120 J	16 U	
621-64-7	4-Nitroaniline	ug/Kg	52 U	53 U	55 U	48 U	47 U	47 U	54 U	55 U	
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	23 UJ	24 UJ	24 UJ	21 UJ	21 UJ	21 UJ	24 UJ	24 UJ	
86-30-6	N-Nitrosodiphenylamine	ug/Kg	9.6 U	9.9 U	10 U	8.8 U	8.7 U	8.7 U	10 U	10 U	
101-55-3	4-Bromophenyl-phenylether	ug/Kg	7.8 U	8 U	8.2 U	7.1 U	7.1 U	7.1 U	8.1 U	8.2 U	
118-74-1	Hexachlorobenzene	ug/Kg	16 U	17 U	17 U	15 U	15 U	15 U	17 U	17 U	
1912-24-9	Atrazine	ug/Kg	21 U	22 U	22 U	19 U	19 U	19 U	22 U	22 U	
87-86-5	Pentachlorophenol	ug/Kg	27 U	28 U	29 U	25 U	25 U	25 U	28 U	29 U	
85-01-8	Phenanthrene	ug/Kg	11 U	11 U	73 J	100 J	9.8 U	9.8 U	910	340 J	
120-12-7	Anthracene	ug/Kg	8.2 U	8.4 U	8.6 U	7.5 U	7.4 U	7.4 U	290 J	100 J	
86-74-8	Carbazole	ug/Kg	8.8 U	9 U	9.2 U	8 U	7.9 U	7.9 U	59 J	9.2 U	
84-74-2	Di-n-butylphthalate	ug/Kg	31 U	32 U	33 U	29 U	28 U	28 U	33 U	33 U	
206-44-0	Fluoranthene	ug/Kg	8.1 U	65 J	160 J	210 J	150 J	91 J	1200	560	
129-00-0	Pyrene	ug/Kg	9.6 U	9.9 U	160 J	230 J	130 J	89 J	1200	600	
85-68-7	Butylbenzylphthalate	ug/Kg	19 U	20 U	20 U	18 U	17 U	17 U	20 U	20 U	
91-94-1	3,3-Dichlorobenzidine	ug/Kg	26 U	26 U	27 U	23 U	23 U	23 U	27 U	27 U	
120-12-7	Benzo(a)anthracene	ug/Kg	19 U	20 U	88 J	100 J	110 J	54 J	950	430	
218-01-9	Chrysene	ug/Kg	18 U	19 U	110 J	150 J	100 J	54 J	990	460	
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	200 J	15 U	15 U	13 U	13 U	13 U	15 U	15 U	
117-84-0	Di-n-octyl phthalate	ug/Kg	4.6 U	4.7 U	4.8 U	4.2 U	4.1 U	4.1 U	4.7 U	4.8 U	
205-99-2	Benzo(b)fluoranthene	ug/Kg	13 U	13 U	110 J	120 J	140 J	78 J	830	470	
207-08-9	Benzo(k)fluoranthene	ug/Kg	19 U	19 U	20 U	17 U	17 U	17 U	300 J	140 J	
50-32-8	Benzo(a)pyrene	ug/Kg	8.7 U	8.9 U	84 J	80 J	110 J	55 J	680	340 J	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	13 U	14 U	54 J	61 J	78 J	12 U	440	270 J	
53-70-3	Dibenz(a,h)anthracene	ug/Kg	12 U	12 U	12 U	11 U	10 U	10 U	140 J	73 J	
191-24-2	Benzo(g,h,i)perylene	ug/Kg	16 U	17 U	59 J	61 J	81 J	47 J	430	260 J	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2731		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	TP-1FLOOR(8.5) B2731-07 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-1WALL(7.5) B2731-08 7.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3FLOOR(9.5) B2731-05 9.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-3WALL(8.5) B2731-06 8.5' Chemtech B2731 SOIL 6/17/2010 8/26/2010	TP-4AFLOOR(3) B2731-01 3' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-4AWALL(2.5) B2731-02 2.5' Chemtech B2731 SOIL 6/14/2010 8/26/2010	TP-5FLOOR(9) B2731-03 9' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TP-5WALL(8) B2731-04 8' Chemtech B2731 SOIL 6/15/2010 8/26/2010	TRIPBLANK B2731-09 Chemtech B2731 WATER 6/9/2010 8/26/2010 ug/L
CAS NO.	COMPOUND	UNITS:									
	INORGANICS										
7429-90-5	Aluminum	mg/Kg	1580	1930	6160	4970	6020	6260	2880	2610	
7440-36-0	Antimony	mg/Kg	0.63 U	0.6 U	7.11	2.56	0.61 U	0.47 U	5.39	3.33	
7440-38-2	Arsenic	mg/Kg	2.13	3.58	35.2	9.95	1.36	0.61 J	51.1	98.4	
7440-39-3	Barium	mg/Kg	52.3	67.5	1340	680	46.2	55.9	57.4	92.9	
7440-41-7	Beryllium	mg/Kg	0.18 J	0.2 J	0.62	0.31	0.33	0.37	0.38	0.36	
7440-43-9	Cadmium	mg/Kg	0.32 J	0.75	57.3	15.5	0.62	0.69	2.26	1.52	
7440-70-2	Calcium	mg/Kg	19300	5700	7610	6990	4380	2340	10400	283	
7440-47-3	Chromium	mg/Kg	4.2	6.78	66.7	27.1	12.3	14.5	7.95	8.28	
7440-48-4	Cobalt	mg/Kg	2.87	3.39	6.44	5.26	6.05	6.51	7.34	7.77	
7440-50-8	Copper	mg/Kg	16.7	17.8	32.7	17.7	18.3	21.5	809	50.4	
7439-89-6	Iron	mg/Kg	3450	5500	70900	26900	10100	11500	25900	29700	
7439-92-1	Lead	mg/Kg	77.8	203	19900	7250	28	38	692	317	
7439-95-4	Magnesium	mg/Kg	7490	1720	4640	4850	4920	3880	726	611	
7439-96-5	Manganese	mg/Kg	62	98.3	426	351	264	296	95.2	76.5	
7439-97-6	Mercury	mg/Kg	0.231 J	0.227 J	0.17 J	0.438 J	0.208 J	0.439 J	0.33 J	0.256 J	
7440-02-0	Nickel	mg/Kg	6.57	9.55	15.1	12.1	16.7	18.1	21.7	27	
7440-09-7	Potassium	mg/Kg	227	377	755	723	891	968	496	573	
7782-49-2	Selenium	mg/Kg	0.88 J	0.95 J	12.7 J	4.96 J	1.32 J	1.78 J	10.9 J	9.99 J	
7440-22-4	Silver	mg/Kg	0.17 UJ	0.16 UJ	0.15 UJ	0.15 UJ	0.16 UJ	0.13 UJ	0.92 J	0.18 UJ	
7440-23-5	Sodium	mg/Kg	5960	6240	26000	12500	32500	12500	8300	18400	
7440-28-0	Thallium	mg/Kg	0.31 U	0.29 U	0.27 U	0.27 U	0.39 J	0.23 U	0.4 J	0.67 J	
7440-62-2	Vanadium	mg/Kg	9.74	20.2	25.5	15	17.2	21.8	12.7	12.1	
7440-66-6	Zinc	mg/Kg	81.1	243	8230	2150	94.4	88.1	107	75.9	
57-12-5	Cyanide	mg/Kg	8.97	7.14	26	7.33	25	64	11	6.09	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:										
	VOLATILES											
75-71-8	Dichlorodifluoromethane	ug/Kg	0.71 UJ	0.75 UJ	3.8 UJ	0.8 UJ	63 UJ	0.75 UJ	0.77 UJ	0.79 UJ	0.75 UJ	0.75 UJ
74-87-3	Chloromethane	ug/Kg	0.95 U	0.99 U	5.1 U	1.1 U	61 UJ	0.99 U	1 U	1 U	1 U	0.99 U
75-01-4	Vinyl chloride	ug/Kg	1.4 U	1.4 U	7.2 U	1.5 U	39 UJ	1.4 U	1.5 U	1.5 U	1.4 U	1.4 U
74-83-9	Bromomethane	ug/Kg	2.7 U	2.8 U	14 UJ	3 U	70 U	2.8 U	2.9 U	3 U	2.8 U	2.8 U
75-00-3	Chloroethane	ug/Kg	1.5 UJ	1.6 UJ	8.2 UJ	1.7 UJ	75 U	1.6 UJ	1.7 UJ	1.7 UJ	1.6 UJ	1.6 UJ
75-69-4	Trichlorofluoromethane	ug/Kg	1.5 U	1.5 U	7.8 UJ	1.6 U	40 U	1.5 U	1.6 U	1.6 U	1.5 U	1.5 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	1.5 U	1.5 U	7.8 U	1.6 U	51 U	1.5 U	1.6 U	1.6 U	1.5 U	1.5 U
75-35-4	1,1-Dichloroethene	ug/Kg	1.6 U	1.7 U	8.6 U	1.8 U	53 U	1.7 U	1.8 U	1.8 U	1.7 U	1.7 U
67-64-1	Acetone	ug/Kg	3.3 U	3.5 U	18 U	10 J	310 U	3.5 U	3.6 U	6.7 J	3.5 U	3.5 U
75-15-0	Carbon Disulfide	ug/Kg	1.2 U	1.2 U	6.2 U	1.3 U	61 U	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U
1634-04-4	Methyl tert-butyl Ether	ug/Kg	1.1 U	1.1 U	5.6 U	1.2 U	40 U	1.1 U	1.1 U	1.8 J	1.1 U	1.1 U
79-20-9	Methyl Acetate	ug/Kg	1.7 U	1.7 U	8.9 U	1.9 U	94 U	1.7 U	1.8 U	1.8 U	1.8 U	1.7 U
75-09-2	Methylene Chloride	ug/Kg	1.6 U	1.6 U	8.4 U	1.7 U	47 UJ	1.6 U	1.7 U	1.7 U	1.9 J	1.9 J
156-60-5	trans-1,2-Dichloroethene	ug/Kg	0.76 U	0.79 U	4.1 U	0.85 U	47 U	0.79 U	0.82 U	0.83 U	0.8 U	0.79 U
75-34-3	1,1-Dichloroethane	ug/Kg	1 U	1.1 U	5.5 U	1.2 U	41 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
110-82-7	Cyclohexane	ug/Kg	1.1 U	1.2 U	5.9 U	1.2 U	63 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
78-93-3	2-Butanone	ug/Kg	3.4 U	3.6 U	18 U	3.8 U	150 U	3.6 U	3.7 U	3.8 U	3.6 U	3.6 U
56-23-5	Carbon Tetrachloride	ug/Kg	1.1 U	1.1 U	5.8 U	1.2 U	70 U	1.1 U	1.2 U	1.2 U	1.1 U	1.1 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	0.98 U	1 U	5.2 U	1.1 U	40 U	1 U	1.1 U	1.1 U	1 U	1 U
67-66-3	Chloroform	ug/Kg	0.81 U	0.85 U	4.4 U	0.91 U	39 U	0.85 U	0.88 U	0.9 U	0.86 U	0.85 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	0.97 U	1 U	5.2 U	1.1 U	45 U	1 U	1 U	1.1 U	1 U	1 U
108-87-2	Methylcyclohexane	ug/Kg	1.2 U	1.2 U	64	1.3 U	280 J	1.2 U	1.3 U	1.3 U	1.2 U	1.2 U
71-43-2	Benzene	ug/Kg	0.42 U	0.44 U	2.2 U	0.47 U	16000	0.44 U	0.45 U	1.1 J	0.44 U	0.44 U
107-06-2	1,2-Dichloroethane	ug/Kg	0.7 U	0.73 U	3.8 U	0.79 U	55 U	0.73 U	0.76 U	0.77 U	0.74 U	0.74 U
79-01-6	Trichloroethene	ug/Kg	0.95 U	0.99 U	5.1 U	1.1 U	32 U	0.99 U	1 U	1 U	1 U	0.99 U
78-87-5	1,2-Dichloropropane	ug/Kg	0.29 U	0.3 U	1.5 U	0.32 U	52 UJ	0.3 U	0.31 U	0.31 U	0.3 U	0.3 U
75-27-4	Bromodichloromethane	ug/Kg	0.68 U	0.71 U	3.6 U	0.76 U	41 U	0.71 U	0.74 U	0.75 U	0.72 U	0.71 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	3.2 U	3.3 U	17 U	3.6 U	240 U	3.3 U	3.5 U	3.5 U	3.4 U	3.4 U
108-88-3	Toluene	ug/Kg	0.7 U	0.73 U	3.8 U	0.79 U	66000	0.73 U	0.76 U	0.77 U	0.74 U	0.74 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	0.87 U	0.91 U	4.6 U	0.97 U	33 U	0.91 U	0.94 U	0.96 U	0.92 U	0.91 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	0.79 U	0.83 U	4.2 U	0.89 U	35 U	0.83 U	0.86 U	0.87 U	0.84 U	0.83 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	0.99 U	1 U	5.3 U	1.1 U	43 U	1 U	1.1 U	1.1 U	1 U	1 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:										
	VOLATILES											
591-78-6	2-Hexanone	ug/Kg	4.3 U	4.5 U	23 U	4.8 U	220 U	4.5 U	4.7 U	4.7 U	4.5 U	4.5 U
124-48-1	Dibromochloromethane	ug/Kg	0.59 U	0.62 U	3.2 U	0.66 U	59 U	0.62 U	0.64 U	0.65 U	0.63 U	0.62 U
106-93-4	1,2-Dibromoethane	ug/Kg	0.7 U	0.73 U	3.8 U	0.79 U	47 U	0.73 U	0.76 U	0.77 U	0.74 U	0.74 U
127-18-4	Tetrachloroethene	ug/Kg	1.1 U	1.2 U	5.9 U	1.2 U	31 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
108-90-7	Chlorobenzene	ug/Kg	0.55 U	0.57 U	2.9 U	0.61 U	56 U	0.57 U	0.6 U	0.6 U	0.58 U	0.57 U
100-41-4	Ethyl Benzene	ug/Kg	0.68 U	0.71 U	3.6 U	0.76 U	62000	0.71 U	0.74 U	0.75 U	0.72 U	0.71 U
136777-61-2	m/p-Xylenes	ug/Kg	0.79 U	0.83 U	4.2 U	0.89 U	110000	0.83 U	0.86 U	0.87 U	0.84 U	0.83 U
1330-20-7	o-Xylene	ug/Kg	0.75 U	0.78 U	34	0.84 U	54000	0.78 U	0.81 U	0.82 U	0.79 U	0.78 U
100-42-5	Styrene	ug/Kg	0.49 U	0.52 U	2.6 U	0.55 U	41 U	0.52 U	0.54 U	0.54 U	0.52 U	0.52 U
75-25-2	Bromoform	ug/Kg	0.81 U	0.85 U	4.4 U	0.91 U	53 U	0.85 U	0.88 U	0.9 U	0.86 U	0.85 U
98-82-8	Isopropylbenzene	ug/Kg	0.53 U	0.55 U	16 J	0.59 U	3500	0.55 U	0.57 U	0.58 U	0.56 U	0.55 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	0.51 U	0.53 U	2.7 U	0.57 U	35 U	0.53 U	0.55 U	0.56 U	0.53 U	0.53 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	0.41 U	0.42 U	2.2 U	0.45 U	49 U	0.42 U	0.44 U	0.45 U	0.43 U	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	0.45 U	0.47 U	2.4 U	0.5 U	36 U	0.47 U	0.49 U	0.5 U	0.48 U	0.47 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	0.68 U	0.71 U	3.6 U	0.76 U	51 U	0.71 U	0.74 U	0.75 U	0.72 U	0.71 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	0.96 U	1 U	5.1 U	1.1 U	52 U	1 U	1 U	1.1 U	1 U	1 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	0.77 U	0.8 U	4.1 U	0.86 U	70 U	0.8 U	0.83 U	0.85 U	0.81 U	0.8 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:										
	SEMIVOLATILES											
100-52-7	Benzaldehyde	ug/Kg	19 U	20 U	20 U	21 U	390 U	20 U	100 U	21 U	400 U	100 U
108-95-2	Phenol	ug/Kg	8.4 U	8.8 U	9 U	9.5 U	170 U	8.8 U	46 U	9.4 U	180 U	44 U
95-57-8	2-Chlorophenol	ug/Kg	19 U	20 U	21 U	22 U	400 U	20 U	100 U	21 U	410 U	100 U
50-32-8	2-Methylphenol	ug/Kg	20 U	21 U	21 U	22 U	410 U	21 U	110 U	22 U	420 U	100 U
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	15 U	16 U	16 U	17 U	310 U	16 U	82 U	17 U	320 U	79 U
98-86-2	Acetophenone	ug/Kg	11 U	12 U	12 U	13 U	230 U	12 U	61 U	12 U	240 U	58 U
87-86-5	3+4-Methylphenols	ug/Kg	19 U	20 U	20 U	21 U	390 U	20 U	100 U	21 U	400 U	99 U
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	18 U	19 U	20 U	21 U	380 U	19 U	100 U	20 U	390 U	96 U
67-72-1	Hexachloroethane	ug/Kg	16 U	17 U	18 U	18 U	340 U	17 U	88 U	18 U	350 U	85 U
98-95-3	Nitrobenzene	ug/Kg	14 U	14 U	15 U	15 U	290 U	14 U	75 U	15 U	290 U	72 U
78-59-1	Isophorone	ug/Kg	12 U	13 U	13 U	14 U	250 U	13 U	65 U	13 U	260 U	63 U
88-75-5	2-Nitrophenol	ug/Kg	18 U	18 U	19 U	20 U	370 U	18 U	96 U	20 U	370 U	92 U
105-67-9	2,4-Dimethylphenol	ug/Kg	21 U	22 U	22 U	23 U	430 U	22 U	110 U	23 U	440 U	110 U
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	21 U	22 U	23 U	24 U	440 U	22 U	110 U	23 U	450 U	110 U
120-83-2	2,4-Dichlorophenol	ug/Kg	14 U	15 U	15 U	16 U	290 U	15 U	75 U	15 U	290 U	73 U
91-20-3	Naphthalene	ug/Kg	13 U	13 U	66 J	14 U	820000	13 U	1500 J	14 U	270 U	1000 J
106-47-8	4-Chloroaniline	ug/Kg	26 UJ	27 UJ	28 UJ	29 UJ	530 UJ	27 UJ	140 UJ	29 UJ	550 UJ	130 UJ
87-68-3	Hexachlorobutadiene	ug/Kg	13 U	14 U	14 U	15 U	270 U	14 U	72 U	15 U	280 U	69 U
105-60-2	Caprolactam	ug/Kg	17 U	18 U	18 U	19 U	350 U	18 U	92 U	19 U	360 U	89 U
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	18 U	18 U	19 U	20 U	360 U	18 U	95 U	19 U	370 U	92 U
59-50-7	4-Chloro-3-methylphenol	ug/Kg	16 U	17 U	17 U	18 U	340 U	17 U	88 U	18 U	340 U	85 U
91-57-6	2-Methylnaphthalene	ug/Kg	9.2 U	9.6 U	660	10 U	450000	9.6 U	680 J	10 U	190 U	48 U
77-47-4	Hexachlorocyclopentadiene	ug/Kg	8.9 U	9.3 U	9.5 U	10 U	180 U	9.3 U	48 U	9.9 U	190 U	46 U
88-06-2	2,4,6-Trichlorophenol	ug/Kg	11 U	12 U	12 U	13 U	230 U	12 U	61 U	12 U	240 U	58 U
95-95-4	2,4,5-Trichlorophenol	ug/Kg	26 U	27 U	27 U	29 U	530 U	27 U	140 U	28 U	540 U	130 U
92-52-4	1,1-Biphenyl	ug/Kg	14 U	14 U	130 J	15 U	37000	14 U	75 U	15 U	290 U	72 U
91-58-7	2-Chloronaphthalene	ug/Kg	8.3 U	8.7 U	8.9 U	9.3 U	170 U	8.7 U	45 U	9.3 U	180 U	44 U
621-64-7	2-Nitroaniline	ug/Kg	16 U	17 U	17 U	18 U	340 U	17 U	88 U	18 U	340 U	85 U
131-11-3	Dimethylphthalate	ug/Kg	240 J	290 J	360 J	330 J	200 U	390	500 J	330 J	210 U	500 J
208-96-8	Acenaphthylene	ug/Kg	9.2 U	9.6 U	9.9 U	10 U	76000	9.6 U	50 U	10 U	1300 J	48 U
606-20-2	2,6-Dinitrotoluene	ug/Kg	15 U	16 U	16 U	17 U	310 U	16 U	81 U	17 U	320 U	78 U
621-64-7	3-Nitroaniline	ug/Kg	23 U	25 U	25 U	26 U	490 U	25 U	130 U	26 U	500 U	120 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:										
	SEMIVOLATILES											
83-32-9	Acenaphthene	ug/Kg	10 U	11 U	11 U	12 U	51000	11 U	1300 J	11 U	220 U	54 U
51-28-5	2,4-Dinitrophenol	ug/Kg	37 UJ	39 UJ	40 UJ	42 UJ	770 UJ	39 UJ	200 UJ	41 UJ	790 UJ	190 UJ
100-02-7	4-Nitrophenol	ug/Kg	68 U	71 U	73 U	76 U	1400 U	71 U	370 U	75 U	1400 U	350 U
132-64-9	Dibenzofuran	ug/Kg	14 U	15 U	15 U	16 U	11000	15 U	1000 J	16 U	300 U	75 U
121-14-2	2,4-Dinitrotoluene	ug/Kg	11 U	12 U	12 U	12 U	230 U	12 U	60 U	12 U	230 U	58 U
84-66-2	Diethylphthalate	ug/Kg	5.7 U	6 U	6.1 U	6.4 U	120 U	6 U	31 U	6.3 U	120 U	30 U
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	20 U	21 U	21 U	22 U	410 U	21 U	110 U	22 U	420 U	100 U
86-73-7	Fluorene	ug/Kg	14 U	14 U	81 J	15 U	100000	14 U	1300 J	15 U	290 U	72 U
621-64-7	4-Nitroaniline	ug/Kg	48 U	50 U	51 U	53 U	980 U	50 U	260 U	53 U	1000 U	250 U
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	21 UJ	22 UJ	22 UJ	23 UJ	430 UJ	22 UJ	110 UJ	23 UJ	440 UJ	110 UJ
86-30-6	N-Nitrosodiphenylamine	ug/Kg	8.8 U	9.2 U	9.4 U	9.8 U	180 U	9.2 U	47 U	9.7 U	190 U	46 U
101-55-3	4-Bromophenyl-phenylether	ug/Kg	7.1 U	7.4 U	7.6 U	8 U	150 U	7.5 U	39 U	7.9 U	150 U	37 U
118-74-1	Hexachlorobenzene	ug/Kg	15 U	16 U	16 U	17 U	310 U	16 U	81 U	17 U	320 U	78 U
1912-24-9	Atrazine	ug/Kg	19 U	20 U	21 U	22 U	400 U	20 U	100 U	21 U	410 U	100 U
87-86-5	Pentachlorophenol	ug/Kg	25 UJ	26 UJ	27 UJ	28 UJ	520 U	26 UJ	140 U	28 UJ	530 U	130 U
85-01-8	Phenanthrene	ug/Kg	9.9 U	10 U	190 J	11 U	270000	94 J	15000	11 U	210 U	52 U
120-12-7	Anthracene	ug/Kg	7.5 U	7.8 U	8 U	8.4 U	81000	7.8 U	3200	8.3 U	160 U	39 U
86-74-8	Carbazole	ug/Kg	8 U	8.4 U	8.6 U	9 U	2700 J	8.4 U	1900 J	8.9 U	170 U	42 U
84-74-2	Di-n-butylphthalate	ug/Kg	29 U	30 U	31 U	32 U	590 U	30 U	160 U	32 U	610 U	150 U
206-44-0	Fluoranthene	ug/Kg	7.3 U	7.7 U	7.9 U	8.2 U	78000	7.7 U	18000	8.2 U	160 U	38 U
129-00-0	Pyrene	ug/Kg	8.8 U	9.2 U	9.4 U	9.8 U	110000	9.2 U	15000	9.7 U	190 U	46 U
85-68-7	Butylbenzylphthalate	ug/Kg	18 U	18 U	19 U	20 U	2900 J	18 U	95 U	19 U	370 U	92 U
91-94-1	3,3-Dichlorobenzidine	ug/Kg	23 U	25 U	25 U	26 U	490 U	25 U	130 U	26 U	500 U	120 U
120-12-7	Benzo(a)anthracene	ug/Kg	17 U	18 U	19 U	20 U	48000	18 U	7300	19 U	370 U	91 U
218-01-9	Chrysene	ug/Kg	17 U	17 U	18 U	19 U	41000	17 U	7000	18 U	350 U	87 U
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	13 U	14 U	14 U	15 U	270 U	14 U	70 U	14 U	270 U	68 U
117-84-0	Di-n-octyl phthalate	ug/Kg	4.2 U	4.4 U	4.5 U	4.7 U	86 U	4.4 U	23 U	4.6 U	88 U	22 U
205-99-2	Benzo(b)fluoranthene	ug/Kg	12 U	12 U	13 U	13 U	28000	12 U	8900	13 U	250 U	62 U
207-08-9	Benzo(k)fluoranthene	ug/Kg	17 U	18 U	18 U	19 U	8800	18 U	2100	19 U	360 U	90 U
50-32-8	Benzo(a)pyrene	ug/Kg	7.9 U	8.2 U	8.5 U	8.9 U	35000	8.3 U	6300	8.8 U	170 U	41 U
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	12 U	13 U	13 U	14 U	11000	13 U	3700	14 U	260 U	64 U
53-70-3	Dibenz(a,h)anthracene	ug/Kg	11 U	11 U	11 U	12 U	3800 J	11 U	600 J	12 U	220 U	55 U
191-24-2	Benzo(g,h,i)perylene	ug/Kg	15 U	15 U	16 U	17 U	12000	15 U	4200	16 U	310 U	77 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	MW-1(11-13) B2787-11 11-13' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-1(23-25) B2787-12 23-25' Chemtech B2787 SOIL 6/22/2010 8/27/2010	MW-2(13-15) B2787-06 13-15' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-2(23-25) B2787-07 23-25' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-3 (9-11) B2787-01 9-11' Chemtech B2787 SOIL 6/18/2010 8/27/2010	MW-3(31-33) B2787-05 31-33' Chemtech B2787 SOIL 6/21/2010 8/27/2010	MW-4 (5-7) B2787-09 5-7' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-4(23-25) B2787-10 23-25' Chemtech B2787 SOIL 6/23/2010 8/27/2010	MW-5 (4-6) B2787-08 4-6' Chemtech B2787 SOIL 6/23/2010 8/27/2010	TP-2FLOOR(8.5) B2787-02 8.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:										
	INORGANICS											
7429-90-5	Aluminum	mg/Kg	5080	2760	4770	9550	3010	1090	2760	5360	3290	2840
7440-36-0	Antimony	mg/Kg	0.62 U	0.49 U	0.61 U	0.52 U	0.42 U	0.5 U	0.61 J	0.63 U	0.51 U	0.51 J
7440-38-2	Arsenic	mg/Kg	0.36 U	0.29 U	0.36 U	0.33 J	0.25 U	0.3 U	4.57	0.37 U	2.33	4.53
7440-39-3	Barium	mg/Kg	31.1	15.4	21.5	57.1	28.1	12.8	77.9	39.5	68.7	436
7440-41-7	Beryllium	mg/Kg	0.31 J	0.19 J	0.39	0.66	0.24	0.12 J	0.26 J	0.49	0.29	0.25
7440-43-9	Cadmium	mg/Kg	0.56	0.26 J	1.21	1.44	0.75	0.13 J	0.72	0.8	0.73	1.63
7440-70-2	Calcium	mg/Kg	3800	367	722	672	299	445	12000	1240	12900	31600
7440-47-3	Chromium	mg/Kg	10.8	7.14	9.69	20.2	8.04	4.11	7.83	10.9	22.2	8.31
7440-48-4	Cobalt	mg/Kg	4.38	2.32	6.65	8.38	1.58	1.37	2.63	6.13	3.73	2.71
7440-50-8	Copper	mg/Kg	7.25	2.86	27.4	14.1	10.6	3.46	34.6	9	21.9	8.58
7439-89-6	Iron	mg/Kg	11000	5930	11000	20200	6650	3620	7820	14900	10200	10900
7439-92-1	Lead	mg/Kg	11.7	3.67	255	10.1	183	2.09	310	7.99	70.8	303
7439-95-4	Magnesium	mg/Kg	3730	1220	2120	3810	1110	770	4230	2380	6020	3870
7439-96-5	Manganese	mg/Kg	244	67.2	199	561	46.2	117	133	343	95.2	203
7439-97-6	Mercury	mg/Kg	0.024	0.008 J	0.222	0.006 J	0.014	0.002 J	0.44	0.003 J	0.467	0.214
7440-02-0	Nickel	mg/Kg	9.53	5.23	14.1	19.7	4.79	3.82	8.43	13.7	9.72	9.24
7440-09-7	Potassium	mg/Kg	665	471	956	2000	680	271	447	1420	403	448
7782-49-2	Selenium	mg/Kg	2.15	1.02	1.87	2.88	1.23	0.54 J	1.63	2.29	1.65	1.52
7440-22-4	Silver	mg/Kg	0.17 U	0.13 U	0.16 U	0.14 U	0.11 U	0.13 U	0.16 U	0.17 U	0.14 U	0.12 U
7440-23-5	Sodium	mg/Kg	279	133	7430	7090	10200	186	593	5260	2410	6960
7440-28-0	Thallium	mg/Kg	0.37 J	0.24 U	0.51 J	0.42 J	0.62 J	0.24 U	0.29 U	0.42 J	0.54 J	0.42 J
7440-62-2	Vanadium	mg/Kg	13.8	8.01	14.2	23.2	9.21	4.01	18	16.1	18.6	19.7
7440-66-6	Zinc	mg/Kg	26	12.6	47.6	46.4	15.5	9.84	178	32.6	81.9	784
57-12-5	Cyanide	mg/Kg	0.55 U	0.572 U	0.591 U	0.616 U	12	0.576 U	1.86	0.61 U	70	38

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TRIPBLANK B2787-13 Chemtech B2787 WATER 6/9/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:			ug/L
	VOLATILES				
75-71-8	Dichlorodifluoromethane	ug/Kg	0.75 UJ	0.76 UJ	0.55 UJ
74-87-3	Chloromethane	ug/Kg	0.99 U	1 U	0.54 U
75-01-4	Vinyl chloride	ug/Kg	1.4 U	1.4 U	0.34 U
74-83-9	Bromomethane	ug/Kg	2.8 U	2.9 U	0.62 U
75-00-3	Chloroethane	ug/Kg	1.6 UJ	1.6 UJ	0.66 UJ
75-69-4	Trichlorofluoromethane	ug/Kg	1.5 U	1.5 U	0.35 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	1.5 U	1.5 U	0.45 U
75-35-4	1,1-Dichloroethene	ug/Kg	1.7 U	1.7 U	0.47 U
67-64-1	Acetone	ug/Kg	3.5 U	3.5 U	R
75-15-0	Carbon Disulfide	ug/Kg	1.2 U	1.2 U	0.54 U
1634-04-4	Methyl tert-butyl Ether	ug/Kg	1.1 U	1.1 U	0.35 U
79-20-9	Methyl Acetate	ug/Kg	1.7 U	1.8 U	0.83 U
75-09-2	Methylene Chloride	ug/Kg	1.6 U	3.2 J	0.41 U
156-60-5	trans-1,2-Dichloroethene	ug/Kg	0.8 U	0.8 U	0.41 U
75-34-3	1,1-Dichloroethane	ug/Kg	1.1 U	1.1 U	0.36 U
110-82-7	Cyclohexane	ug/Kg	1.2 U	1.2 U	0.55 U
78-93-3	2-Butanone	ug/Kg	3.6 U	3.6 U	1.3 U
56-23-5	Carbon Tetrachloride	ug/Kg	1.1 U	1.2 U	0.62 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	1 U	1 U	0.35 U
67-66-3	Chloroform	ug/Kg	0.86 U	0.86 U	0.34 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	1 U	1 U	0.4 U
108-87-2	Methylcyclohexane	ug/Kg	1.2 U	1.2 U	0.68 U
71-43-2	Benzene	ug/Kg	0.44 U	2.7 J	0.32 U
107-06-2	1,2-Dichloroethane	ug/Kg	0.74 U	0.75 U	0.48 U
79-01-6	Trichloroethene	ug/Kg	0.99 U	1 U	0.28 U
78-87-5	1,2-Dichloropropane	ug/Kg	0.3 U	0.3 U	0.46 U
75-27-4	Bromodichloromethane	ug/Kg	0.72 U	0.72 U	0.36 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	3.4 U	3.4 U	2.1 U
108-88-3	Toluene	ug/Kg	3.3 J	1.6 J	0.37 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	0.91 U	0.92 U	0.29 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	0.83 U	0.84 U	0.31 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	1 U	1 U	0.38 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TRIPBLANK B2787-13 Chemtech B2787 WATER 6/9/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:			ug/L
	VOLATILES				
591-78-6	2-Hexanone	ug/Kg	4.5 U	4.6 U	1.9 U
124-48-1	Dibromochloromethane	ug/Kg	0.62 U	0.63 U	0.52 U
106-93-4	1,2-Dibromoethane	ug/Kg	0.74 U	0.75 U	0.41 U
127-18-4	Tetrachloroethene	ug/Kg	1.2 U	1.2 J	0.27 U
108-90-7	Chlorobenzene	ug/Kg	0.58 U	0.58 U	0.49 U
100-41-4	Ethyl Benzene	ug/Kg	0.72 U	0.72 U	0.53 U
136777-61-2	m/p-Xylenes	ug/Kg	11 J	0.84 U	0.95 U
1330-20-7	o-Xylene	ug/Kg	0.79 U	0.79 U	0.43 U
100-42-5	Styrene	ug/Kg	0.52 U	0.52 U	0.36 U
75-25-2	Bromoform	ug/Kg	0.86 U	0.86 U	0.47 U
98-82-8	Isopropylbenzene	ug/Kg	0.55 U	0.56 U	0.45 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	0.53 U	0.54 U	0.31 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	0.43 U	0.43 U	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	0.47 U	0.48 U	0.32 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	0.72 U	0.72 U	0.45 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	1 U	1 U	0.46 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	0.81 U	0.82 U	0.62 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TRIPBLANK B2787-13 Chemtech B2787 WATER 6/9/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:			ug/L
	SEMIVOLATILES				
100-52-7	Benzaldehyde	ug/Kg	400 U	20 U	
108-95-2	Phenol	ug/Kg	180 U	8.9 U	
95-57-8	2-Chlorophenol	ug/Kg	410 U	20 U	
50-32-8	2-Methylphenol	ug/Kg	420 U	21 U	
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	320 U	16 U	
98-86-2	Acetophenone	ug/Kg	240 U	12 U	
87-86-5	3+4-Methylphenols	ug/Kg	400 U	20 U	
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	390 U	19 U	
67-72-1	Hexachloroethane	ug/Kg	350 U	17 U	
98-95-3	Nitrobenzene	ug/Kg	290 U	15 U	
78-59-1	Isophorone	ug/Kg	250 U	13 U	
88-75-5	2-Nitrophenol	ug/Kg	370 U	19 U	
105-67-9	2,4-Dimethylphenol	ug/Kg	440 U	22 U	
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	440 U	22 U	
120-83-2	2,4-Dichlorophenol	ug/Kg	290 U	15 U	
91-20-3	Naphthalene	ug/Kg	270 U	330 J	
106-47-8	4-Chloroaniline	ug/Kg	540 UJ	27 UJ	
87-68-3	Hexachlorobutadiene	ug/Kg	280 U	14 U	
105-60-2	Caprolactam	ug/Kg	360 U	18 U	
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	370 U	19 U	
59-50-7	4-Chloro-3-methylphenol	ug/Kg	340 U	17 U	
91-57-6	2-Methylnaphthalene	ug/Kg	190 U	9.7 U	
77-47-4	Hexachlorocyclopentadiene	ug/Kg	190 U	9.4 U	
88-06-2	2,4,6-Trichlorophenol	ug/Kg	240 U	12 U	
95-95-4	2,4,5-Trichlorophenol	ug/Kg	540 U	27 U	
92-52-4	1,1-Biphenyl	ug/Kg	290 U	15 U	
91-58-7	2-Chloronaphthalene	ug/Kg	180 U	8.8 U	
621-64-7	2-Nitroaniline	ug/Kg	340 U	17 U	
131-11-3	Dimethylphthalate	ug/Kg	210 U	420	
208-96-8	Acenaphthylene	ug/Kg	190 U	9.7 U	
606-20-2	2,6-Dinitrotoluene	ug/Kg	320 U	16 U	
621-64-7	3-Nitroaniline	ug/Kg	500 U	25 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TRIPBLANK B2787-13 Chemtech B2787 WATER 6/9/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:			ug/L
	SEMIVOLATILES				
83-32-9	Acenaphthene	ug/Kg	220 U	11 U	
51-28-5	2,4-Dinitrophenol	ug/Kg	790 UJ	39 UJ	
100-02-7	4-Nitrophenol	ug/Kg	1400 U	72 U	
132-64-9	Dibenzofuran	ug/Kg	300 U	15 U	
121-14-2	2,4-Dinitrotoluene	ug/Kg	230 U	12 U	
84-66-2	Diethylphthalate	ug/Kg	120 U	6 U	
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	420 U	21 U	
86-73-7	Fluorene	ug/Kg	290 U	15 U	
621-64-7	4-Nitroaniline	ug/Kg	1000 U	50 U	
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	440 UJ	22 UJ	
86-30-6	N-Nitrosodiphenylamine	ug/Kg	190 U	9.3 U	
101-55-3	4-Bromophenyl-phenylether	ug/Kg	150 U	7.5 U	
118-74-1	Hexachlorobenzene	ug/Kg	320 U	16 U	
1912-24-9	Atrazine	ug/Kg	410 U	20 U	
87-86-5	Pentachlorophenol	ug/Kg	530 U	440 J	
85-01-8	Phenanthrene	ug/Kg	210 U	110 J	
120-12-7	Anthracene	ug/Kg	160 U	7.9 U	
86-74-8	Carbazole	ug/Kg	170 U	8.5 U	
84-74-2	Di-n-butylphthalate	ug/Kg	610 U	30 U	
206-44-0	Fluoranthene	ug/Kg	160 U	190 J	
129-00-0	Pyrene	ug/Kg	190 U	200 J	
85-68-7	Butylbenzylphthalate	ug/Kg	370 U	19 U	
91-94-1	3,3-Dichlorobenzidine	ug/Kg	500 U	25 U	
120-12-7	Benzo(a)anthracene	ug/Kg	370 U	91 J	
218-01-9	Chrysene	ug/Kg	350 U	110 J	
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	270 U	14 U	
117-84-0	Di-n-octyl phthalate	ug/Kg	88 U	4.4 U	
205-99-2	Benzo(b)fluoranthene	ug/Kg	250 U	110 J	
207-08-9	Benzo(k)fluoranthene	ug/Kg	360 U	18 U	
50-32-8	Benzo(a)pyrene	ug/Kg	170 U	75 J	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	260 U	13 U	
53-70-3	Dibenz(a,h)anthracene	ug/Kg	220 U	11 U	
191-24-2	Benzo(g,h,i)perylene	ug/Kg	310 U	16 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2787		Sample ID: Lab Sample Id: Depth: Source: SDG: Matrix: Sampled: Validated:	TP-2FOOTING(4.5) B2787-04 4.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TP-2WELL(7.5) B2787-03 7.5' Chemtech B2787 SOIL 6/18/2010 8/27/2010	TRIPBLANK B2787-13 Chemtech B2787 WATER 6/9/2010 8/27/2010
CAS NO.	COMPOUND	UNITS:			ug/L
	INORGANICS				
7429-90-5	Aluminum	mg/Kg	6170	2480	
7440-36-0	Antimony	mg/Kg	0.43 U	0.5 U	
7440-38-2	Arsenic	mg/Kg	0.26 U	3.46	
7440-39-3	Barium	mg/Kg	63.5	387	
7440-41-7	Beryllium	mg/Kg	0.42	0.24 J	
7440-43-9	Cadmium	mg/Kg	0.78	1.56	
7440-70-2	Calcium	mg/Kg	3000	31900	
7440-47-3	Chromium	mg/Kg	11	6.72	
7440-48-4	Cobalt	mg/Kg	5.6	2.32	
7440-50-8	Copper	mg/Kg	10.3	8.98	
7439-89-6	Iron	mg/Kg	11800	9260	
7439-92-1	Lead	mg/Kg	62.3	339	
7439-95-4	Magnesium	mg/Kg	2150	3570	
7439-96-5	Manganese	mg/Kg	296	216	
7439-97-6	Mercury	mg/Kg	0.07	0.258	
7440-02-0	Nickel	mg/Kg	12.4	6.27	
7440-09-7	Potassium	mg/Kg	1030	487	
7782-49-2	Selenium	mg/Kg	1.75	1.54	
7440-22-4	Silver	mg/Kg	0.12 U	0.13 U	
7440-23-5	Sodium	mg/Kg	7550	7350	
7440-28-0	Thallium	mg/Kg	0.29 J	0.29 J	
7440-62-2	Vanadium	mg/Kg	20.7	17.1	
7440-66-6	Zinc	mg/Kg	134	634	
57-12-5	Cyanide	mg/Kg	21	40	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2845		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	TRIPBLANK B2845-05 Chemtech B2845 WATER 6/22/2010 8/29/2010
CAS NO.	COMPOUND	UNITS:				ug/L
	VOLATILES					
75-71-8	Dichlorodifluoromethane	ug/Kg	0.74 UJ	0.77 UJ	64 UJ	0.55 UJ
74-87-3	Chloromethane	ug/Kg	0.98 U	5.8 J	63 UJ	0.54 U
75-01-4	Vinyl chloride	ug/Kg	1.4 U	1.5 U	40 U	0.34 U
74-83-9	Bromomethane	ug/Kg	2.8 U	2.9 U	72 U	0.62 UJ
75-00-3	Chloroethane	ug/Kg	1.6 U	1.7 U	77 UJ	0.66 UJ
75-69-4	Trichlorofluoromethane	ug/Kg	1.5 U	1.6 U	41 UJ	0.35 UJ
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	1.5 U	1.6 U	52 U	0.45 UJ
75-35-4	1,1-Dichloroethene	ug/Kg	1.7 U	1.8 U	55 U	0.47 U
67-64-1	Acetone	ug/Kg	3.4 U	29 J	11000 J	R
75-15-0	Carbon Disulfide	ug/Kg	1.2 U	1.3 U	63 U	0.54 UJ
1634-04-4	Methyl tert-butyl Ether	ug/Kg	1.1 U	1.1 U	41 U	0.35 U
79-20-9	Methyl Acetate	ug/Kg	1.7 U	1.8 U	97 U	0.83 U
75-09-2	Methylene Chloride	ug/Kg	2.6 J	1.7 U	48 U	0.41 U
156-60-5	trans-1,2-Dichloroethene	ug/Kg	0.78 U	0.82 U	48 U	0.41 U
75-34-3	1,1-Dichloroethane	ug/Kg	1.1 U	1.1 U	42 U	0.36 U
110-82-7	Cyclohexane	ug/Kg	1.1 U	1.2 U	64 U	0.55 U
78-93-3	2-Butanone	ug/Kg	3.5 U	3.7 U	150 U	1.3 U
56-23-5	Carbon Tetrachloride	ug/Kg	1.1 U	1.2 U	72 U	0.62 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	1 U	1.1 U	41 U	0.35 U
67-66-3	Chloroform	ug/Kg	0.84 U	0.88 U	40 U	0.34 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	1 U	1 U	47 U	0.4 U
108-87-2	Methylcyclohexane	ug/Kg	1.2 U	11	11000	0.68 U
71-43-2	Benzene	ug/Kg	0.43 U	2.2 J	2200	0.32 U
107-06-2	1,2-Dichloroethane	ug/Kg	0.73 U	0.76 U	56 U	0.48 U
79-01-6	Trichloroethene	ug/Kg	0.98 U	1 U	33 U	0.28 U
78-87-5	1,2-Dichloropropane	ug/Kg	0.29 U	0.31 U	53 U	0.46 U
75-27-4	Bromodichloromethane	ug/Kg	0.7 U	0.74 U	42 U	0.36 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	3.3 U	3.5 U	16000	2.1 U
108-88-3	Toluene	ug/Kg	0.73 U	3.2 J	8400	0.37 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	0.9 U	0.94 U	34 U	0.29 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	0.82 U	0.86 U	36 U	0.31 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	1 U	1.1 U	44 U	0.38 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2845		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	TRIPBLANK B2845-05 Chemtech B2845 WATER 6/22/2010 8/29/2010
CAS NO.	COMPOUND	UNITS:				ug/L
	VOLATILES					
591-78-6	2-Hexanone	ug/Kg	4.4 U	4.7 U	230 U	1.9 U
124-48-1	Dibromochloromethane	ug/Kg	0.61 U	0.64 U	60 U	0.52 U
106-93-4	1,2-Dibromoethane	ug/Kg	0.73 U	0.76 U	48 U	0.41 U
127-18-4	Tetrachloroethene	ug/Kg	1.1 U	1.2 U	31 U	0.27 U
108-90-7	Chlorobenzene	ug/Kg	0.57 U	0.6 U	57 U	0.49 U
100-41-4	Ethyl Benzene	ug/Kg	0.7 U	14	99000 J	0.53 U
136777-61-2	m/p-Xylenes	ug/Kg	0.82 U	8.8 J	130000 J	0.95 U
1330-20-7	o-Xylene	ug/Kg	0.77 U	6.1	69000 J	0.43 U
100-42-5	Styrene	ug/Kg	0.51 U	0.54 U	2700	0.36 U
75-25-2	Bromoform	ug/Kg	0.84 U	0.88 U	55 U	0.47 UJ
98-82-8	Isopropylbenzene	ug/Kg	0.54 U	2.1 J	19000 J	0.45 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	0.52 U	0.55 U	36 U	0.31 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	0.42 U	0.44 U	50 U	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	0.46 U	0.49 U	37 U	0.32 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	0.7 U	0.74 U	52 U	0.45 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	0.99 U	1 U	53 U	0.46 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	0.79 U	0.83 U	72 U	0.62 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2845		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	TRIPBLANK B2845-05 Chemtech B2845 WATER 6/22/2010 8/29/2010
CAS NO.	COMPOUND	UNITS:				ug/L
	SEMIVOLATILES					
100-52-7	Benzaldehyde	ug/Kg	200 U	21 U	200 U	
108-95-2	Phenol	ug/Kg	87 U	9.1 U	89 U	
95-57-8	2-Chlorophenol	ug/Kg	200 U	21 U	200 U	
50-32-8	2-Methylphenol	ug/Kg	210 U	21 U	210 U	
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	160 U	16 U	160 U	
98-86-2	Acetophenone	ug/Kg	120 U	12 U	120 U	
87-86-5	3+4-Methylphenols	ug/Kg	200 U	21 U	200 U	
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	190 U	20 U	200 U	
67-72-1	Hexachloroethane	ug/Kg	170 U	18 U	170 U	
98-95-3	Nitrobenzene	ug/Kg	140 U	15 U	150 U	
78-59-1	Isophorone	ug/Kg	120 U	13 U	130 U	
88-75-5	2-Nitrophenol	ug/Kg	180 U	19 U	190 U	
105-67-9	2,4-Dimethylphenol	ug/Kg	210 U	22 U	220 U	
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	220 U	23 U	220 U	
120-83-2	2,4-Dichlorophenol	ug/Kg	140 U	15 U	150 U	
91-20-3	Naphthalene	ug/Kg	130 U	900	250000	
106-47-8	4-Chloroaniline	ug/Kg	270 U	28 U	270 U	
87-68-3	Hexachlorobutadiene	ug/Kg	140 U	14 U	140 U	
105-60-2	Caprolactam	ug/Kg	180 U	18 U	180 U	
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	180 U	19 U	190 U	
59-50-7	4-Chloro-3-methylphenol	ug/Kg	170 U	18 U	170 U	
91-57-6	2-Methylnaphthalene	ug/Kg	95 U	330 J	130000	
77-47-4	Hexachlorocyclopentadiene	ug/Kg	92 U	9.6 U	94 U	
88-06-2	2,4,6-Trichlorophenol	ug/Kg	120 U	12 U	120 U	
95-95-4	2,4,5-Trichlorophenol	ug/Kg	270 U	28 U	270 U	
92-52-4	1,1-Biphenyl	ug/Kg	140 U	100 J	30000	
91-58-7	2-Chloronaphthalene	ug/Kg	86 U	9 U	88 U	
621-64-7	2-Nitroaniline	ug/Kg	170 U	18 U	170 U	
131-11-3	Dimethylphthalate	ug/Kg	100 U	530 U	100 U	
208-96-8	Acenaphthylene	ug/Kg	95 U	640	90000	
606-20-2	2,6-Dinitrotoluene	ug/Kg	150 U	16 U	160 U	
621-64-7	3-Nitroaniline	ug/Kg	240 U	25 U	250 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2845		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	TRIPBLANK B2845-05 Chemtech B2845 WATER 6/22/2010 8/29/2010
CAS NO.	COMPOUND	UNITS:				ug/L
	SEMIVOLATILES					
83-32-9	Acenaphthene	ug/Kg	110 U	210 J	46000	
51-28-5	2,4-Dinitrophenol	ug/Kg	380 UJ	40 UJ	390 UJ	
100-02-7	4-Nitrophenol	ug/Kg	700 U	73 U	720 U	
132-64-9	Dibenzofuran	ug/Kg	150 U	15 U	8900	
121-14-2	2,4-Dinitrotoluene	ug/Kg	110 U	12 U	120 U	
84-66-2	Diethylphthalate	ug/Kg	59 U	6.2 U	60 U	
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	210 U	21 U	210 U	
86-73-7	Fluorene	ug/Kg	140 U	200 J	92000	
621-64-7	4-Nitroaniline	ug/Kg	490 U	52 U	500 U	
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	220 UJ	23 UJ	220 UJ	
86-30-6	N-Nitrosodiphenylamine	ug/Kg	91 U	9.5 U	93 U	
101-55-3	4-Bromophenyl-phenylether	ug/Kg	74 U	7.7 U	75 U	
118-74-1	Hexachlorobenzene	ug/Kg	150 U	16 U	160 U	
1912-24-9	Atrazine	ug/Kg	200 U	21 U	200 U	
87-86-5	Pentachlorophenol	ug/Kg	260 U	27 U	260 U	
85-01-8	Phenanthrene	ug/Kg	3200 J	480	220000	
120-12-7	Anthracene	ug/Kg	750 J	280 J	58000	
86-74-8	Carbazole	ug/Kg	83 U	8.7 U	850 J	
84-74-2	Di-n-butylphthalate	ug/Kg	300 U	31 U	300 U	
206-44-0	Fluoranthene	ug/Kg	3200 J	1400	60000	
129-00-0	Pyrene	ug/Kg	2600 J	2000	80000	
85-68-7	Butylbenzylphthalate	ug/Kg	180 U	19 U	190 U	
91-94-1	3,3-Dichlorobenzidine	ug/Kg	240 U	25 U	250 U	
120-12-7	Benzo(a)anthracene	ug/Kg	1500 J	950	35000	
218-01-9	Chrysene	ug/Kg	1300 J	780	29000	
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	130 U	14 U	140 U	
117-84-0	Di-n-octyl phthalate	ug/Kg	43 U	4.5 U	44 U	
205-99-2	Benzo(b)fluoranthene	ug/Kg	1500 J	570	18000	
207-08-9	Benzo(k)fluoranthene	ug/Kg	560 J	180 J	5900	
50-32-8	Benzo(a)pyrene	ug/Kg	1100 J	700	22000	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	640 J	240 J	6800	
53-70-3	Dibenz(a,h)anthracene	ug/Kg	110 U	68 J	2600 J	
191-24-2	Benzo(g,h,i)perylene	ug/Kg	690 J	290 J	7500	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2845		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	MW-5 (7-9) B2845-01 7-9' Chemtech B2845 SOIL 6/25/2010 8/29/2010	MW-5(23-25) B2845-02 23-25' Chemtech B2845 SOIL 6/28/2010 8/29/2010	SB-7(15-17) B2845-04 15-17' Chemtech B2845 SOIL 6/28/2010 8/29/2010	TRIPBLANK B2845-05 Chemtech B2845 WATER 6/22/2010 8/29/2010
CAS NO.	COMPOUND	UNITS:				ug/L
	INORGANICS					
7429-90-5	Aluminum	mg/Kg	6560	2170	5480	
7440-36-0	Antimony	mg/Kg	1.14 J	0.52 U	0.44 U	
7440-38-2	Arsenic	mg/Kg	4.19	0.31 U	0.67 J	
7440-39-3	Barium	mg/Kg	128	10.2	23.4	
7440-41-7	Beryllium	mg/Kg	0.37	0.19 J	0.42	
7440-43-9	Cadmium	mg/Kg	1.66	0.2 J	0.95	
7440-70-2	Calcium	mg/Kg	16700	540	634	
7440-47-3	Chromium	mg/Kg	17.4	5.72	11.4	
7440-48-4	Cobalt	mg/Kg	5.67	2.02	5.93	
7440-50-8	Copper	mg/Kg	44.9	4.48	8.5	
7439-89-6	Iron	mg/Kg	17600	4940	11500	
7439-92-1	Lead	mg/Kg	144	9.81	185	
7439-95-4	Magnesium	mg/Kg	8270	1190	2190	
7439-96-5	Manganese	mg/Kg	249	51.1	94.2	
7439-97-6	Mercury	mg/Kg	0.194	0.011 J	0.276	
7440-02-0	Nickel	mg/Kg	17.3	5.98	12.2	
7440-09-7	Potassium	mg/Kg	933	594	1260	
7782-49-2	Selenium	mg/Kg	2.7	0.89 J	1.84	
7440-22-4	Silver	mg/Kg	0.13 U	0.14 U	0.12 U	
7440-23-5	Sodium	mg/Kg	4850	1440	12200	
7440-28-0	Thallium	mg/Kg	0.61 J	0.25 U	0.21 U	
7440-62-2	Vanadium	mg/Kg	25.5	6.82	13.9	
7440-66-6	Zinc	mg/Kg	196 J	13.7 J	27.7 J	
57-12-5	Cyanide	mg/Kg	15	0.598 U	6.3	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2886		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	Dup of SB-6(13-15) SB-16 B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	FB062810 B2886-07 Chemtech B2886 WATER 6/28/2010 8/30/2010	FB070110 B2886-08 Chemtech B2886 WATER 7/1/2010 8/30/2010	TRIPBLANK B2886-09 Chemtech B2886 WATER 6/22/2010 8/30/2010
CAS NO.	COMPOUND	UNITS:									ug/L	ug/L	ug/L
	VOLATILES												
75-71-8	Dichlorodifluoromethane	ug/Kg	64 UJ	0.76 UJ	0.76 UJ	0.74 UJ	65 UJ	65 UJ	0.77 UJ	0.74 UJ	0.55 UJ	0.55 UJ	0.55 UJ
74-87-3	Chloromethane	ug/Kg	63 U	1 U	1 U	0.98 U	64 UJ	64 U	1 U	0.98 U	0.54 UJ	0.54 UJ	0.54 UJ
75-01-4	Vinyl chloride	ug/Kg	40 U	1.4 U	1.4 U	1.4 U	40 UJ	40 U	1.5 U	1.4 U	0.34 U	0.34 U	0.34 U
74-83-9	Bromomethane	ug/Kg	72 U	2.9 U	2.9 U	2.8 U	73 UJ	73 U	2.9 U	2.8 U	0.62 U	0.62 U	0.62 U
75-00-3	Chloroethane	ug/Kg	77 U	1.6 UJ	1.6 UJ	1.6 UJ	78 UJ	78 U	1.7 UJ	1.6 UJ	0.66 UJ	0.66 UJ	0.66 UJ
75-69-4	Trichlorofluoromethane	ug/Kg	41 U	1.5 U	1.6 U	1.5 U	41 UJ	41 U	1.6 U	1.5 U	0.35 U	0.35 U	0.35 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	52 U	1.6 U	1.6 U	1.5 U	53 UJ	53 U	1.6 U	1.5 U	0.45 U	0.45 U	0.45 U
75-35-4	1,1-Dichloroethene	ug/Kg	55 U	1.7 U	1.7 U	1.7 U	55 UJ	55 U	1.8 U	1.7 U	0.47 U	0.47 U	0.47 U
67-64-1	Acetone	ug/Kg	320 UJ	3.5 U	3.6 U	3.5 U	320 UJ	320 UJ	3.6 U	3.4 U	2.8 UJ	2.8 UJ	2.8 UJ
75-15-0	Carbon Disulfide	ug/Kg	63 U	1.2 U	1.2 U	1.2 U	64 UJ	64 U	1.3 U	1.2 U	0.54 U	0.54 U	0.54 U
1634-04-4	Methyl tert-butyl Ether	ug/Kg	41 U	1.1 U	1.1 U	1.1 U	41 UJ	41 U	1.1 U	1.1 U	0.35 U	0.35 U	0.35 U
79-20-9	Methyl Acetate	ug/Kg	97 U	1.8 U	1.8 U	1.7 U	98 UJ	98 U	1.8 U	1.7 U	0.83 U	0.83 U	0.83 U
75-09-2	Methylene Chloride	ug/Kg	48 U	1.7 J	1.7 J	1.7 J	48 UJ	48 U	1.8 J	1.8 J	0.41 U	0.41 U	0.41 U
156-60-5	trans-1,2-Dichloroethene	ug/Kg	48 U	0.81 U	0.81 U	0.79 U	48 UJ	48 U	0.82 U	0.78 U	0.41 U	0.41 U	0.41 U
75-34-3	1,1-Dichloroethane	ug/Kg	42 U	1.1 U	1.1 U	1.1 U	42 UJ	42 U	1.1 U	1.1 U	0.36 U	0.36 U	0.36 U
110-82-7	Cyclohexane	ug/Kg	64 U	1.2 U	1.2 U	1.2 U	65 UJ	65 U	1.2 U	1.1 U	0.55 U	0.55 U	0.55 U
78-93-3	2-Butanone	ug/Kg	150 U	3.6 U	3.7 U	3.6 U	160 UJ	160 U	3.7 U	3.5 U	1.3 U	1.3 U	1.3 U
56-23-5	Carbon Tetrachloride	ug/Kg	72 U	1.2 U	1.2 U	1.1 U	73 UJ	73 U	1.2 U	1.1 U	0.62 U	0.62 U	0.62 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	41 U	1 U	1 U	1 U	41 UJ	41 U	1.1 U	1 U	0.35 U	0.35 U	0.35 U
67-66-3	Chloroform	ug/Kg	40 U	0.86 U	0.87 U	0.85 U	40 UJ	40 U	0.88 U	0.84 U	0.34 U	0.34 U	0.34 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	47 U	1 U	1 U	1 U	47 UJ	47 U	1 U	1 U	0.4 U	0.4 U	0.4 U
108-87-2	Methylcyclohexane	ug/Kg	79 U	1.2 U	1.2 U	1.2 U	80 UJ	500 J	1.3 U	1.2 U	0.68 U	0.68 U	0.68 U
71-43-2	Benzene	ug/Kg	120 J	0.44 U	0.45 U	0.44 U	7000 J	11000	0.45 U	0.43 U	0.32 U	0.32 U	0.32 U
107-06-2	1,2-Dichloroethane	ug/Kg	56 UJ	0.75 U	0.75 U	0.73 U	56 UJ	56 UJ	0.76 U	0.73 U	0.48 U	0.48 U	0.48 U
79-01-6	Trichloroethene	ug/Kg	33 U	1 U	1 U	0.98 U	33 UJ	33 U	1 U	0.98 U	0.28 U	0.28 U	0.28 U
78-87-5	1,2-Dichloropropane	ug/Kg	53 U	0.3 U	0.31 U	0.3 U	54 UJ	54 U	0.31 U	0.29 U	0.46 U	0.46 U	0.46 U
75-27-4	Bromodichloromethane	ug/Kg	42 U	0.72 U	0.73 U	0.71 U	42 UJ	42 U	0.74 U	0.7 U	0.36 U	0.36 U	0.36 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	240 U	3.4 U	3.4 U	3.3 U	250 UJ	250 U	3.5 U	3.3 U	2.1 U	2.1 U	2.1 U
108-88-3	Toluene	ug/Kg	43 U	0.75 U	0.75 U	0.73 U	2700 J	10000 J	1.3 J	0.73 U	0.37 U	0.37 U	0.37 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	34 U	0.92 U	0.93 U	0.9 U	34 UJ	34 U	0.94 U	0.9 U	0.29 U	0.29 U	0.29 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	36 U	0.84 U	0.85 U	0.82 U	36 UJ	36 U	0.86 U	0.82 U	0.31 U	0.31 U	0.31 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	44 U	1.1 U	1.1 U	1 U	45 UJ	45 U	1.1 U	1 U	0.38 U	0.38 U	0.38 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2886		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	Dup of SB-6(13-15) SB-16 B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	FB062810 B2886-07 Chemtech B2886 WATER 6/28/2010 8/30/2010	FB070110 B2886-08 Chemtech B2886 WATER 7/1/2010 8/30/2010	TRIPBLANK B2886-09 Chemtech B2886 WATER 6/22/2010 8/30/2010
CAS NO.	COMPOUND	UNITS:									ug/L	ug/L	ug/L
	VOLATILES												
591-78-6	2-Hexanone	ug/Kg	230 U	4.6 U	4.6 U	4.5 U	230 UJ	230 U	4.7 U	4.4 U	1.9 UJ	1.9 UJ	1.9 UJ
124-48-1	Dibromochloromethane	ug/Kg	60 U	0.63 U	0.64 U	0.62 U	61 UJ	61 U	0.64 U	0.61 U	0.52 U	0.52 U	0.52 U
106-93-4	1,2-Dibromoethane	ug/Kg	48 U	0.75 U	0.75 U	0.73 U	48 UJ	48 U	0.76 U	0.73 U	0.41 U	0.41 U	0.41 U
127-18-4	Tetrachloroethene	ug/Kg	31 U	1.2 U	1.2 U	1.2 U	32 UJ	32 U	1.2 U	1.1 U	0.27 U	0.27 U	0.27 U
108-90-7	Chlorobenzene	ug/Kg	57 U	0.58 U	0.59 U	0.57 U	58 UJ	58 U	0.6 U	0.57 U	0.49 U	0.49 U	0.49 U
100-41-4	Ethyl Benzene	ug/Kg	62 U	0.72 U	0.73 U	0.71 U	16000	27000	1.7 J	0.7 U	0.53 U	0.53 U	0.53 U
136777-61-2	m/p-Xylenes	ug/Kg	110 U	0.84 U	0.85 U	0.82 U	22000 J	30000	0.86 U	0.82 U	0.95 U	0.95 U	0.95 U
1330-20-7	o-Xylene	ug/Kg	50 U	0.79 U	0.8 U	0.78 U	10000	15000	1.2 J	0.77 U	0.43 U	0.43 U	0.43 U
100-42-5	Styrene	ug/Kg	42 U	0.53 U	0.53 U	0.52 U	380 J	670	0.54 U	0.51 U	0.36 U	0.36 U	0.36 U
75-25-2	Bromoform	ug/Kg	55 U	0.86 U	0.87 U	0.85 U	55 UJ	55 U	0.88 U	0.84 U	0.47 U	0.47 U	0.47 U
98-82-8	Isopropylbenzene	ug/Kg	170 J	0.56 U	0.56 U	0.55 U	2800 J	3800	0.57 U	0.54 U	0.45 U	0.45 U	0.45 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	36 U	0.54 U	0.54 U	0.53 U	36 UJ	36 U	0.55 U	0.52 U	0.31 U	0.31 U	0.31 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	50 U	0.43 U	0.44 U	0.42 U	51 UJ	51 U	0.44 U	0.42 U	0.43 U	0.43 U	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	37 U	0.48 U	0.48 U	0.47 U	38 UJ	38 U	0.49 U	0.46 U	0.32 U	0.32 U	0.32 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	52 U	0.72 U	0.73 U	0.71 U	53 UJ	53 U	0.74 U	0.7 U	0.45 U	0.45 U	0.45 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	53 U	1 U	1 U	1 U	54 UJ	54 U	1 U	0.99 U	0.46 U	0.46 U	0.46 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	72 U	0.82 U	0.82 U	0.8 U	73 UJ	73 U	0.83 U	0.79 U	0.62 U	0.62 U	0.62 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2886		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	Dup of SB-6(13-15) SB-16 B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	FB062810 B2886-07 Chemtech B2886 WATER 6/28/2010 8/30/2010	FB070110 B2886-08 Chemtech B2886 WATER 7/1/2010 8/30/2010	TRIPBLANK B2886-09 Chemtech B2886 WATER 6/22/2010 8/30/2010
CAS NO.	COMPOUND	UNITS:									ug/L	ug/L	ug/L
	SEMIVOLATILES												
100-52-7	Benzaldehyde	ug/Kg	20 U	100 U	20 U	20 U	20 U	20 U	21 U	20 U	0.79 U	0.79 U	
108-95-2	Phenol	ug/Kg	8.9 U	45 U	9 U	8.8 U	9 U	9 U	9.1 U	8.7 U	0.22 U	0.22 U	
95-57-8	2-Chlorophenol	ug/Kg	20 U	100 U	21 U	20 U	21 U	21 U	21 U	20 U	0.56 U	0.56 U	
50-32-8	2-Methylphenol	ug/Kg	21 U	110 U	21 U	21 U	21 U	21 U	21 U	20 U	0.25 U	0.25 U	
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	16 U	81 U	16 U	16 U	16 U	16 U	16 U	16 U	0.18 U	0.18 U	
98-86-2	Acetophenone	ug/Kg	12 U	60 U	12 U	12 U	12 U	12 U	12 U	12 U	0.14 U	0.14 U	
87-86-5	3+4-Methylphenols	ug/Kg	20 U	100 U	20 U	20 U	20 U	20 U	21 U	20 U	0.39 U	0.39 U	
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	19 U	98 U	20 U	19 U	20 U	20 U	20 U	19 U	0.21 U	0.21 U	
67-72-1	Hexachloroethane	ug/Kg	17 U	87 U	18 U	17 U	18 U	17 U	18 U	17 U	0.26 U	0.26 U	
98-95-3	Nitrobenzene	ug/Kg	15 U	74 U	15 U	14 U	15 U	15 U	15 U	14 U	0.7 U	0.7 U	
78-59-1	Isophorone	ug/Kg	13 U	64 U	13 U	13 U	13 U	13 U	13 U	12 U	0.31 U	0.31 U	
88-75-5	2-Nitrophenol	ug/Kg	19 U	94 U	19 U	18 U	19 U	19 U	19 U	18 U	0.54 U	0.54 U	
105-67-9	2,4-Dimethylphenol	ug/Kg	22 U	110 U	22 U	22 U	22 U	22 U	22 U	21 U	0.73 U	0.73 U	
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	22 U	110 U	23 U	22 U	23 U	23 U	23 U	22 U	0.57 U	0.57 U	
120-83-2	2,4-Dichlorophenol	ug/Kg	15 U	74 U	15 U	15 U	15 U	15 U	15 U	14 U	0.68 U	0.68 U	
91-20-3	Naphthalene	ug/Kg	1900	67 U	1900	310 J	63000	75000	480	13 U	0.12 U	0.12 U	
106-47-8	4-Chloroaniline	ug/Kg	27 UJ	140 UJ	28 UJ	27 UJ	28 UJ	28 UJ	28 UJ	27 UJ	2.9 U	2.9 U	
87-68-3	Hexachlorobutadiene	ug/Kg	14 U	71 U	14 U	14 U	14 U	14 U	14 U	14 U	0.26 U	0.26 U	
105-60-2	Caprolactam	ug/Kg	18 U	91 U	18 U	18 U	18 U	18 U	18 U	18 U	4.6 U	4.6 U	
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	19 U	94 U	19 U	18 U	19 U	19 U	19 U	18 U	0.57 U	0.57 U	
59-50-7	4-Chloro-3-methylphenol	ug/Kg	17 U	87 U	17 U	17 U	17 U	17 U	18 U	17 U	0.41 U	0.41 U	
91-57-6	2-Methylnaphthalene	ug/Kg	9.7 U	49 U	1700	290 J	27000	25000	260 J	9.5 U	0.33 U	0.33 U	
77-47-4	Hexachlorocyclopentadiene	ug/Kg	9.4 U	47 U	9.5 U	9.3 U	9.5 U	9.5 U	9.6 U	9.2 U	0.25 U	0.25 U	
88-06-2	2,4,6-Trichlorophenol	ug/Kg	12 U	60 U	12 U	12 U	12 U	12 U	12 U	12 U	0.58 U	0.58 U	
95-95-4	2,4,5-Trichlorophenol	ug/Kg	27 U	140 U	27 U	27 U	27 U	27 U	28 U	26 U	0.41 U	0.41 U	
92-52-4	1,1-Biphenyl	ug/Kg	410	74 U	300 J	52 J	2000	3000	15 U	14 U	0.15 U	0.15 U	
91-58-7	2-Chloronaphthalene	ug/Kg	8.8 U	45 U	8.9 U	8.7 U	8.9 U	8.9 U	9 U	8.6 U	0.16 U	0.16 U	
621-64-7	2-Nitroaniline	ug/Kg	17 U	87 U	17 U	17 U	17 U	17 U	18 U	17 U	0.51 U	0.51 U	
131-11-3	Dimethylphthalate	ug/Kg	600 U	1900 U	410 U	440 U	390 U	490 U	440 U	500 U	0.23 U	0.23 U	
208-96-8	Acenaphthylene	ug/Kg	1100	12000	730	100 J	4000	6700	61 J	9.5 U	0.72 U	0.72 U	
606-20-2	2,6-Dinitrotoluene	ug/Kg	16 U	80 U	16 U	16 U	16 U	16 U	16 U	15 U	0.33 U	0.33 U	
621-64-7	3-Nitroaniline	ug/Kg	25 U	130 U	25 U	25 U	25 U	25 U	25 U	24 U	1.1 U	1.1 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2886		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	Dup of SB-6(13-15) SB-16 B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	FB062810 B2886-07 Chemtech B2886 WATER 6/28/2010 8/30/2010	FB070110 B2886-08 Chemtech B2886 WATER 7/1/2010 8/30/2010	TRIPBLANK B2886-09 Chemtech B2886 WATER 6/22/2010 8/30/2010
CAS NO.	COMPOUND	UNITS:									ug/L	ug/L	ug/L
	SEMIVOLATILES												
83-32-9	Acenaphthene	ug/Kg	1200	1300 J	1200	210 J	7100	9300	65 J	11 U	0.22 U	0.22 U	
51-28-5	2,4-Dinitrophenol	ug/Kg	R	R	R	R	R	R	R	R	R	R	
100-02-7	4-Nitrophenol	ug/Kg	72 U	360 U	73 U	71 U	73 U	73 U	74 U	70 U	12 U	2 U	
132-64-9	Dibenzofuran	ug/Kg	220 J	76 U	98 J	15 U	540	830	15 U	15 U	0.25 U	0.25 U	
121-14-2	2,4-Dinitrotoluene	ug/Kg	12 U	59 U	12 U	12 U	12 U	12 U	12 U	11 U	1.1 U	1.1 U	
84-66-2	Diethylphthalate	ug/Kg	6 U	30 U	6.1 U	6 U	6.1 U	6.1 U	6.2 U	5.9 U	0.39 U	0.39 U	
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	21 U	110 U	21 U	21 U	21 U	21 U	21 U	20 U	0.22 U	0.22 U	
86-73-7	Fluorene	ug/Kg	2800	1100 J	1000	170 J	6800	11000	81 J	14 U	0.32 U	0.32 U	
621-64-7	4-Nitroaniline	ug/Kg	50 U	250 U	51 U	50 U	51 U	51 U	52 U	49 U	1.4 U	1.4 U	
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	22 UJ	110 UJ	22 UJ	22 UJ	22 UJ	22 UJ	23 UJ	22 UJ	0.76 UJ	0.76 UJ	
86-30-6	N-Nitrosodiphenylamine	ug/Kg	9.3 U	47 U	9.4 U	9.2 U	9.4 U	9.4 U	9.5 U	9.1 U	0.62 U	0.62 U	
101-55-3	4-Bromophenyl-phenylether	ug/Kg	7.5 U	38 U	7.6 U	7.5 U	7.6 U	7.6 U	7.7 U	7.4 U	0.24 U	0.24 U	
118-74-1	Hexachlorobenzene	ug/Kg	16 U	80 U	16 U	16 U	16 U	16 U	16 U	15 U	0.19 U	0.19 U	
1912-24-9	Atrazine	ug/Kg	20 U	100 U	21 U	20 U	21 U	21 U	21 U	20 U	0.41 U	0.41 U	
87-86-5	Pentachlorophenol	ug/Kg	26 U	130 U	27 U	26 U	27 U	27 U	27 U	26 U	1.8 U	1.8 U	
85-01-8	Phenanthrene	ug/Kg	10000	380 J	3600	620	18000	28000	210 J	10 U	0.27 U	0.27 U	
120-12-7	Anthracene	ug/Kg	2400	3600	1100	180 J	4700	7400	8.1 U	7.7 U	0.16 U	0.16 U	
86-74-8	Carbazole	ug/Kg	8.5 U	43 U	8.6 U	8.4 U	150 J	220 J	8.7 U	8.3 U	0.23 U	0.23 U	
84-74-2	Di-n-butylphthalate	ug/Kg	30 U	150 U	31 U	30 U	31 U	31 U	31 U	30 U	2.5 U	2.5 U	
206-44-0	Fluoranthene	ug/Kg	2300	39000	1400	200 J	5000	8200	54 J	7.6 U	0.41 U	0.41 U	
129-00-0	Pyrene	ug/Kg	3600	52000	2000	300 J	6600	10000	83 J	57 J	0.21 U	0.21 U	
85-68-7	Butylbenzylphthalate	ug/Kg	19 U	94 U	19 U	18 U	19 U	19 U	19 U	18 U	0.2 U	0.2 U	
91-94-1	3,3-Dichlorobenzidine	ug/Kg	25 U	130 U	25 U	25 U	25 U	25 U	25 U	24 U	7.1 U	2 U	
120-12-7	Benzo(a)anthracene	ug/Kg	1300	21000	950	130 J	2300	4000	19 U	18 U	0.16 U	0.16 U	
218-01-9	Chrysene	ug/Kg	1200	20000	850	100 J	2000	3900	18 U	17 U	0.19 U	0.19 U	
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	14 U	69 U	14 U	14 U	14 U	14 U	14 U	13 U	0.16 U	0.16 U	
117-84-0	Di-n-octyl phthalate	ug/Kg	4.4 U	22 U	4.5 U	4.4 U	4.5 U	4.5 U	4.5 U	4.3 U	0.53 U	0.53 U	
205-99-2	Benzo(b)fluoranthene	ug/Kg	650	11000	480	58 J	1200	2000	13 U	12 U	0.3 U	0.3 U	
207-08-9	Benzo(k)fluoranthene	ug/Kg	240 J	3600	190 J	18 U	330 J	620	19 U	18 U	0.19 U	0.19 U	
50-32-8	Benzo(a)pyrene	ug/Kg	850	14000	630	76 J	1500	2500	8.6 U	8.2 U	0.14 U	0.14 U	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	260 J	4200	190 J	13 U	440	750	13 U	13 U	0.15 U	0.15 U	
53-70-3	Dibenz(a,h)anthracene	ug/Kg	99 J	1600 J	75 J	11 U	170 J	290 J	11 U	11 U	0.43 U	0.43 U	
191-24-2	Benzo(g,h,i)perylene	ug/Kg	290 J	4800	210 J	15 U	510	850	16 U	15 U	0.3 U	0.3 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2886		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-4(20-22) B2886-02 20-22' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-4(30-32) B2886-03 30-32' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-5(21-23) B2886-11 21-23' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-5(29-31) B2886-10 29-31' Chemtech B2886 SOIL 7/1/2010 8/30/2010	SB-6(13-15) B2886-04 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	Dup of SB-6(13-15) SB-16 B2886-06 13-15' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-6(29-31) B2886-05 29-31' Chemtech B2886 SOIL 6/30/2010 8/30/2010	SB-7(33-35) B2886-01 33-35' Chemtech B2886 SOIL 6/29/2010 8/30/2010	FB062810 B2886-07 Chemtech B2886 WATER 6/28/2010 8/30/2010	FB070110 B2886-08 Chemtech B2886 WATER 7/1/2010 8/30/2010	TRIPBLANK B2886-09 Chemtech B2886 WATER 6/22/2010 8/30/2010
CAS NO.	COMPOUND	UNITS:									ug/L	ug/L	ug/L
	INORGANICS												
7429-90-5	Aluminum	mg/Kg	3050	1590	4140	1540	6070	3220	1380	2510	6.5 U	6.5 U	
7440-36-0	Antimony	mg/Kg	0.48 U	0.46 U	0.48 U	0.49 U	0.5 U	0.45 U	0.46 U	0.47 U	8 U	8 U	
7440-38-2	Arsenic	mg/Kg	0.45 J	0.27 U	0.28 U	0.29 U	0.3 U	0.26 U	0.27 U	0.37 J	4.2 U	4.2 U	
7440-39-3	Barium	mg/Kg	20.5	19.7	38.9	23.4	29.2	13.7	15.5	19.6	4 U	4 U	
7440-41-7	Beryllium	mg/Kg	0.25 J	0.16 J	0.28	0.11 J	0.45	0.27	0.14 J	0.2 J	0.7 U	0.7 U	
7440-43-9	Cadmium	mg/Kg	0.57	0.22 J	0.56	0.2 J	0.78	0.38	0.16 J	0.3	0.5 U	0.5 U	
7440-70-2	Calcium	mg/Kg	12200	631	7260	627	547	549	515	2640	31.8 U	31.8 U	
7440-47-3	Chromium	mg/Kg	8.32	4.3	9.02	7.36	11.2	7.65	5.51	7.01	1.1 U	1.1 U	
7440-48-4	Cobalt	mg/Kg	3.69	1.52	4.92	2.34	5.67	3.43	1.46	2.65	5.8 U	5.8 U	
7440-50-8	Copper	mg/Kg	10	3.41	6.36	7.23	9.28	5.75	4.96	6.84	6.6 U	6.6 U	
7439-89-6	Iron	mg/Kg	8140	3940	8770	4520	11600	6580	4450	6610	20.4 U	20.4 U	
7439-92-1	Lead	mg/Kg	15	4.21	9.66	2.99	6.85	4.04	2.51	3.25	2.6 U	2.6 U	
7439-95-4	Magnesium	mg/Kg	6860	923	3960	1360	2730	1340	1040	2830	32.5 U	32.5 U	
7439-96-5	Manganese	mg/Kg	602	45.8	524	229	133	63.2	148	249	1.7 U	1.7 U	
7439-97-6	Mercury	mg/Kg	0.004 J	0.002 U	0.005 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.09 U	0.09 U	
7440-02-0	Nickel	mg/Kg	7.9	4.27	11.5	6.27	13	8.34	4.92	7.78	4.2 U	4.2 U	
7440-09-7	Potassium	mg/Kg	834	546	981	399	1440	752	412	753	38.8 U	38.8 U	
7782-49-2	Selenium	mg/Kg	0.45 J	0.65 J	0.63 J	0.58 J	0.74 J	0.58 J	0.57 J	0.56 J	4.8 U	4.8 U	
7440-22-4	Silver	mg/Kg	0.13 U	0.12 U	0.13 U	0.13 U	0.14 U	0.12 U	0.12 U	0.13 U	1.5 U	1.5 U	
7440-23-5	Sodium	mg/Kg	7330	1690	7320	708	7650	4410	175	786	13.9 U	13.9 U	
7440-28-0	Thallium	mg/Kg	0.23 U	0.22 U	0.23 U	0.23 U	0.24 U	0.22 U	0.22 U	0.23 U	2.4 U	2.4 U	
7440-62-2	Vanadium	mg/Kg	10.1	5.02	10.4	5.79	16.6	10.3	4.83	7.66	6.1 U	6.1 U	
7440-66-6	Zinc	mg/Kg	18.3	10.2	22.1	10.8	25.3	16.7	9.93	15.6	6.5 U	6.5 U	
57-12-5	Cyanide	mg/Kg	0.581 U	13	1.05	0.573 U	0.717 J	0.584 UJ	0.596 U	0.571 U	10 U	10 U	

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2899		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010
CAS NO.	COMPOUND	UNITS:				
	VOLATILES					
75-71-8	Dichlorodifluoromethane	ug/Kg	0.75 UJ	0.79 UJ	0.76 UJ	0.78 UJ
74-87-3	Chloromethane	ug/Kg	0.99 U	1 U	1 U	1 U
75-01-4	Vinyl chloride	ug/Kg	1.4 U	1.5 U	1.4 U	1.5 U
74-83-9	Bromomethane	ug/Kg	2.8 U	3 U	2.9 UJ	2.9 U
75-00-3	Chloroethane	ug/Kg	1.6 UJ	1.7 UJ	1.6 UJ	1.7 UJ
75-69-4	Trichlorofluoromethane	ug/Kg	1.5 U	1.6 U	1.5 UJ	1.6 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/Kg	1.5 U	1.6 U	1.6 U	1.6 U
75-35-4	1,1-Dichloroethene	ug/Kg	1.7 U	1.8 U	1.7 U	1.8 U
67-64-1	Acetone	ug/Kg	4200	110	8.5 J	77
75-15-0	Carbon Disulfide	ug/Kg	330 J	1.3 U	1.2 U	1.3 U
1634-04-4	Methyl tert-butyl Ether	ug/Kg	1.1 U	1.2 U	1.1 U	1.2 U
79-20-9	Methyl Acetate	ug/Kg	1.7 U	1.8 U	1.8 U	1.8 U
75-09-2	Methylene Chloride	ug/Kg	1.7 J	1.7 U	1.7 U	1.7 U
156-60-5	trans-1,2-Dichloroethene	ug/Kg	0.79 U	0.84 U	0.81 U	0.83 U
75-34-3	1,1-Dichloroethane	ug/Kg	1.1 U	1.1 U	1.1 U	1.1 U
110-82-7	Cyclohexane	ug/Kg	1.2 U	1.2 U	1.2 U	1.2 U
78-93-3	2-Butanone	ug/Kg	41	3.8 J	3.6 U	3.7 U
56-23-5	Carbon Tetrachloride	ug/Kg	1.1 U	1.2 U	1.2 U	1.2 U
156-59-2	cis-1,2-Dichloroethene	ug/Kg	1 U	1.1 U	1 U	1.1 U
67-66-3	Chloroform	ug/Kg	0.85 U	0.9 U	0.87 U	0.89 U
71-55-6	1,1,1-Trichloroethane	ug/Kg	1 U	1.1 U	1 U	1.1 U
108-87-2	Methylcyclohexane	ug/Kg	1.2 U	1.3 U	1.2 U	1.3 U
71-43-2	Benzene	ug/Kg	2.7 J	0.46 U	0.45 U	1.4 J
107-06-2	1,2-Dichloroethane	ug/Kg	0.74 U	0.78 U	0.75 U	0.77 U
79-01-6	Trichloroethene	ug/Kg	0.99 U	1 U	1 U	1 U
78-87-5	1,2-Dichloropropane	ug/Kg	0.3 U	0.32 U	0.3 U	0.31 U
75-27-4	Bromodichloromethane	ug/Kg	0.71 U	0.75 U	0.73 U	0.75 U
108-10-1	4-Methyl-2-Pentanone	ug/Kg	3.4 U	3.5 U	3.4 U	3.5 U
108-88-3	Toluene	ug/Kg	8	0.78 U	0.75 U	0.77 U
10061-02-6	t-1,3-Dichloropropene	ug/Kg	0.91 U	0.96 U	0.93 U	0.95 U
10061-01-5	cis-1,3-Dichloropropene	ug/Kg	0.83 U	0.87 U	0.84 U	0.87 U
79-00-5	1,1,2-Trichloroethane	ug/Kg	1 U	1.1 U	1.1 U	1.1 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2899		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010
CAS NO.	COMPOUND	UNITS:				
	VOLATILES					
591-78-6	2-Hexanone	ug/Kg	4.5 U	4.8 U	4.6 U	4.7 U
124-48-1	Dibromochloromethane	ug/Kg	0.62 U	0.66 U	0.63 U	0.65 U
106-93-4	1,2-Dibromoethane	ug/Kg	0.74 U	0.78 U	0.75 U	0.77 U
127-18-4	Tetrachloroethene	ug/Kg	1.2 U	1.2 U	1.2 U	1.2 U
108-90-7	Chlorobenzene	ug/Kg	0.57 U	0.61 U	0.59 U	0.6 U
100-41-4	Ethyl Benzene	ug/Kg	62	0.75 U	0.73 U	0.75 U
136777-61-2	m/p-Xylenes	ug/Kg	32	0.87 U	0.84 U	0.87 U
1330-20-7	o-Xylene	ug/Kg	38	0.83 U	0.8 U	0.82 U
100-42-5	Styrene	ug/Kg	0.52 U	0.55 U	0.53 U	0.54 U
75-25-2	Bromoform	ug/Kg	0.85 U	0.9 U	0.87 U	0.89 U
98-82-8	Isopropylbenzene	ug/Kg	9.4	0.58 U	0.56 U	0.58 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/Kg	0.53 U	0.56 U	0.54 U	0.55 U
541-73-1	1,3-Dichlorobenzene	ug/Kg	0.43 U	0.45 U	0.43 U	0.44 U
106-46-7	1,4-Dichlorobenzene	ug/Kg	0.47 U	0.5 U	0.48 U	0.49 U
95-50-1	1,2-Dichlorobenzene	ug/Kg	0.71 U	0.75 U	0.73 U	0.75 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/Kg	1 U	1.1 U	1 U	1 U
120-82-1	1,2,4-Trichlorobenzene	ug/Kg	0.8 U	0.85 U	0.82 U	0.84 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2899		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010
CAS NO.	COMPOUND	UNITS:				
	SEMIVOLATILES					
100-52-7	Benzaldehyde	ug/Kg	570	21 U	20 U	110 J
108-95-2	Phenol	ug/Kg	8.8 U	9.4 U	9 U	9.3 U
95-57-8	2-Chlorophenol	ug/Kg	20 U	21 U	21 U	21 U
50-32-8	2-Methylphenol	ug/Kg	21 U	22 U	21 U	22 U
108-60-1	2,2-oxybis(1-Chloropropane)	ug/Kg	16 U	17 U	16 U	17 U
98-86-2	Acetophenone	ug/Kg	12 U	12 U	12 U	12 U
87-86-5	3+4-Methylphenols	ug/Kg	20 U	21 U	20 U	21 U
621-64-7	N-Nitroso-di-n-propylamine	ug/Kg	19 U	20 U	20 U	20 U
67-72-1	Hexachloroethane	ug/Kg	17 U	18 U	18 U	18 U
98-95-3	Nitrobenzene	ug/Kg	14 U	15 U	15 U	15 U
78-59-1	Isophorone	ug/Kg	13 U	13 U	13 U	13 U
88-75-5	2-Nitrophenol	ug/Kg	18 U	20 U	19 U	19 U
105-67-9	2,4-Dimethylphenol	ug/Kg	22 U	23 U	22 U	23 U
111-91-1	bis(2-Chloroethoxy)methane	ug/Kg	22 U	23 U	23 U	23 U
120-83-2	2,4-Dichlorophenol	ug/Kg	15 U	15 U	15 U	15 U
91-20-3	Naphthalene	ug/Kg	360 J	14 U	14 U	210 J
106-47-8	4-Chloroaniline	ug/Kg	27 U	29 U	28 U	28 U
87-68-3	Hexachlorobutadiene	ug/Kg	14 U	15 U	14 U	15 U
105-60-2	Caprolactam	ug/Kg	18 U	19 U	18 U	19 U
111-44-4	bis(2-Chloroethyl)ether	ug/Kg	18 U	19 U	19 U	19 U
59-50-7	4-Chloro-3-methylphenol	ug/Kg	17 U	18 U	17 U	18 U
91-57-6	2-Methylnaphthalene	ug/Kg	74 J	10 U	9.9 U	60 J
77-47-4	Hexachlorocyclopentadiene	ug/Kg	9.3 U	9.9 U	9.5 U	9.7 U
88-06-2	2,4,6-Trichlorophenol	ug/Kg	12 U	12 U	12 U	12 U
95-95-4	2,4,5-Trichlorophenol	ug/Kg	27 U	28 U	27 U	28 U
92-52-4	1,1-Biphenyl	ug/Kg	14 U	15 U	15 U	15 U
91-58-7	2-Chloronaphthalene	ug/Kg	8.7 U	9.2 U	8.9 U	9.1 U
621-64-7	2-Nitroaniline	ug/Kg	17 U	18 U	17 U	18 U
131-11-3	Dimethylphthalate	ug/Kg	490 U	390 U	390 U	480 U
208-96-8	Acenaphthylene	ug/Kg	9.6 U	10 U	9.9 U	10 U
606-20-2	2,6-Dinitrotoluene	ug/Kg	16 U	17 U	16 U	16 U
621-64-7	3-Nitroaniline	ug/Kg	25 U	26 U	25 U	26 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2899		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010
CAS NO.	COMPOUND	UNITS:				
	SEMIVOLATILES					
83-32-9	Acenaphthene	ug/Kg	11 U	11 U	11 U	11 U
51-28-5	2,4-Dinitrophenol	ug/Kg	R	41 UJ	40 UJ	41 UJ
100-02-7	4-Nitrophenol	ug/Kg	71 U	75 U	73 U	74 U
132-64-9	Dibenzofuran	ug/Kg	15 U	16 U	15 U	16 U
121-14-2	2,4-Dinitrotoluene	ug/Kg	12 U	12 U	12 U	12 U
84-66-2	Diethylphthalate	ug/Kg	6 U	6.3 U	6.1 U	6.2 U
7005-72-3	4-Chlorophenyl-phenylether	ug/Kg	21 U	22 U	21 U	22 U
86-73-7	Fluorene	ug/Kg	14 U	15 U	15 U	15 U
621-64-7	4-Nitroaniline	ug/Kg	50 U	53 U	51 U	52 U
534-52-1	4,6-Dinitro-2-methylphenol	ug/Kg	22 UJ	23 UJ	22 UJ	23 UJ
86-30-6	N-Nitrosodiphenylamine	ug/Kg	9.2 U	9.7 U	9.4 U	9.6 U
101-55-3	4-Bromophenyl-phenylether	ug/Kg	7.5 U	7.9 U	7.6 U	7.8 U
118-74-1	Hexachlorobenzene	ug/Kg	16 U	17 U	16 U	16 U
1912-24-9	Atrazine	ug/Kg	20 U	21 U	21 U	21 U
87-86-5	Pentachlorophenol	ug/Kg	26 U	28 U	27 U	27 U
85-01-8	Phenanthrene	ug/Kg	120 J	77 J	11 U	95 J
120-12-7	Anthracene	ug/Kg	7.8 U	8.3 U	8 U	8.2 U
86-74-8	Carbazole	ug/Kg	8.4 U	8.9 U	8.6 U	8.8 U
84-74-2	Di-n-butylphthalate	ug/Kg	30 U	32 U	31 U	31 U
206-44-0	Fluoranthene	ug/Kg	60 J	8.1 U	7.9 U	120 J
129-00-0	Pyrene	ug/Kg	75 J	9.7 U	9.4 U	110 J
85-68-7	Butylbenzylphthalate	ug/Kg	18 U	19 U	19 U	19 U
91-94-1	3,3-Dichlorobenzidine	ug/Kg	25 U	26 U	25 U	26 U
120-12-7	Benzo(a)anthracene	ug/Kg	18 U	19 U	19 U	51 J
218-01-9	Chrysene	ug/Kg	17 U	18 U	18 U	61 J
117-81-7	Bis(2-ethylhexyl)phthalate	ug/Kg	350 J	170 J	14 U	14 U
117-84-0	Di-n-octyl phthalate	ug/Kg	4.4 U	4.6 U	4.5 U	4.6 U
205-99-2	Benzo(b)fluoranthene	ug/Kg	13 U	13 U	13 U	59 J
207-08-9	Benzo(k)fluoranthene	ug/Kg	18 U	19 U	18 U	19 U
50-32-8	Benzo(a)pyrene	ug/Kg	8.3 U	8.8 U	8.5 U	8.7 U
193-39-5	Indeno(1,2,3-cd)pyrene	ug/Kg	13 U	14 U	13 U	13 U
53-70-3	Dibenz(a,h)anthracene	ug/Kg	11 U	12 U	11 U	12 U
191-24-2	Benzo(g,h,i)perylene	ug/Kg	15 U	16 U	16 U	16 U

Consolidated Edison Ludlow Street Site Validated Soil Analytical Data SDG: B2899		Sample ID: Lab Sample Id Depth: Source: SDG: Matrix: Sampled: Validated:	SB-1(18-20) B2899-07 18-20' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(24-26) B2899-01 24-26' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-1(32-34) B2899-04 32-34' Chemtech B2899 SOIL 7/2/2010 8/31/2010	SB-2(20-22) B2899-08 20-22' Chemtech B2899 SOIL 7/1/2010 8/31/2010
CAS NO.	COMPOUND	UNITS:				
	INORGANICS					
7429-90-5	Aluminum	mg/Kg	5580	1540	2850	10900
7440-36-0	Antimony	mg/Kg	0.55 J	0.68 U	0.66 U	0.56 U
7440-38-2	Arsenic	mg/Kg	0.31 U	0.51 J	0.49 J	0.98 J
7440-39-3	Barium	mg/Kg	42.8	7.53	15.3	67.7
7440-41-7	Beryllium	mg/Kg	0.29	0.14 J	0.2 J	0.41
7440-43-9	Cadmium	mg/Kg	1.46	0.19 J	0.34 J	1.03
7440-70-2	Calcium	mg/Kg	46100	1990 J	1610 J	37300
7440-47-3	Chromium	mg/Kg	16.6 J	6.85	6.73	11.3 J
7440-48-4	Cobalt	mg/Kg	8.8	2.27	4.26	3.37
7440-50-8	Copper	mg/Kg	19.1	3.76	10.9	11.7
7439-89-6	Iron	mg/Kg	17500	5570 J	7180 J	10300
7439-92-1	Lead	mg/Kg	42	5.35	4	125
7439-95-4	Magnesium	mg/Kg	14000	1110 J	2030 J	4020
7439-96-5	Manganese	mg/Kg	197	44.4 J	80.9 J	190
7439-97-6	Mercury	mg/Kg	0.058	0.055	0.021	0.105
7440-02-0	Nickel	mg/Kg	24.6	6.32	9.63	9.12
7440-09-7	Potassium	mg/Kg	890	443	740	1640
7782-49-2	Selenium	mg/Kg	0.7 J	0.56 J	0.75 J	0.41 U
7440-22-4	Silver	mg/Kg	0.14 U	0.18 U	0.18 U	0.15 U
7440-23-5	Sodium	mg/Kg	8340	3220 J	1620 J	4160
7440-28-0	Thallium	mg/Kg	0.25 U	0.33 U	0.32 U	0.27 U
7440-62-2	Vanadium	mg/Kg	14	7.84	7.83	19.9
7440-66-6	Zinc	mg/Kg	38.9	13.1	17.9	63.2
57-12-5	Cyanide	mg/Kg	7.18 J	2.16	0.586 U	6.22 J

ATTACHMENT A-2

VALIDATED LABORATORY DATA FOR GROUNDWATER

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data SDG: B2963		Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010	FB071310 B2963-09/14 Chemtech B2963 WATER 7/13/2010 9/1/2010	TB(TRIPBLANK) B2963-12 Chemtech B2963 WATER 7/8/2010 9/1/2010
CAS NO.	COMPOUND	UNITS:								
	VOLATILES									
75-71-8	Dichlorodifluoromethane	ug/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
74-87-3	Chloromethane	ug/L	0.54 U	0.54 U	0.54 U	0.54 U	69	64	0.54 U	0.54 U
75-01-4	Vinyl chloride	ug/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
74-83-9	Bromomethane	ug/L	0.62 U	0.62 U	0.62 U	0.62 U	0.62 UJ	9.8 J	0.62 U	0.62 U
75-00-3	Chloroethane	ug/L	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U	0.66 U
75-69-4	Trichlorofluoromethane	ug/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
75-35-4	1,1-Dichloroethene	ug/L	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U
67-64-1	Acetone	ug/L	2.8 U	13 J	2.8 U	2.8 U	88 J	140 J	2.8 U	2.8 U
75-15-0	Carbon Disulfide	ug/L	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
1634-04-4	Methyl tert-butyl Ether	ug/L	0.35 U	0.35 U	1.6 J	0.35 U	1.9 J	2.1 J	0.35 U	0.35 U
79-20-9	Methyl Acetate	ug/L	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
75-09-2	Methylene Chloride	ug/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
156-60-5	trans-1,2-Dichloroethene	ug/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U
75-34-3	1,1-Dichloroethane	ug/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
110-82-7	Cyclohexane	ug/L	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
78-93-3	2-Butanone	ug/L	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	9.2 J	1.3 U	1.3 U
56-23-5	Carbon Tetrachloride	ug/L	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
156-59-2	cis-1,2-Dichloroethene	ug/L	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
67-66-3	Chloroform	ug/L	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
71-55-6	1,1,1-Trichloroethane	ug/L	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
108-87-2	Methylcyclohexane	ug/L	0.68 U	0.68 U	2.4 J	0.68 U	2.2 J	1.6 J	0.68 U	0.68 U
71-43-2	Benzene	ug/L	0.32 U	1.7 J	95	1.3 J	7.8	9.6	0.32 U	0.32 U
107-06-2	1,2-Dichloroethane	ug/L	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
79-01-6	Trichloroethene	ug/L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
78-87-5	1,2-Dichloropropane	ug/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
75-27-4	Bromodichloromethane	ug/L	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
108-10-1	4-Methyl-2-Pentanone	ug/L	2.1 U	2.1 U	2.1 U	2.1 U	15 J	18 J	2.1 U	2.1 U
108-88-3	Toluene	ug/L	0.37 U	0.37 U	120	0.37 U	5.2	5.9	0.37 U	0.37 U
10061-02-6	t-1,3-Dichloropropene	ug/L	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 UJ	0.29 U	0.29 U
10061-01-5	cis-1,3-Dichloropropene	ug/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 UJ	0.31 U	0.31 U
79-00-5	1,1,2-Trichloroethane	ug/L	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data SDG: B2963		Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010	FB071310 B2963-09/14 Chemtech B2963 WATER 7/13/2010 9/1/2010	TB(TRIPBLANK) B2963-12 Chemtech B2963 WATER 7/8/2010 9/1/2010
CAS NO.	COMPOUND	UNITS:								
	VOLATILES									
591-78-6	2-Hexanone	ug/L	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
124-48-1	Dibromochloromethane	ug/L	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
106-93-4	1,2-Dibromoethane	ug/L	0.41 U	0.41 U	0.41 U	0.41 U	0.41 UJ	0.41 U	0.41 U	0.41 U
127-18-4	Tetrachloroethene	ug/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
108-90-7	Chlorobenzene	ug/L	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
100-41-4	Ethyl Benzene	ug/L	0.53 U	1.4 J	64	0.53 U	6	7.1	0.53 U	0.53 U
136777-61-2	m/p-Xylenes	ug/L	0.95 U	0.95 U	160	0.95 U	3.2 J	3.5 J	0.95 U	0.95 U
1330-20-7	o-Xylene	ug/L	0.43 U	3.7 J	77	0.43 U	2.4 J	2.8 J	0.43 U	0.43 U
100-42-5	Styrene	ug/L	0.36 U	0.36 U	7	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
75-25-2	Bromoform	ug/L	0.47 U	0.47 U	0.47 U	0.47 U	0.47 U	0.47 UJ	0.47 U	0.47 U
98-82-8	Isopropylbenzene	ug/L	0.45 U	0.45 U	2.4 J	0.45 U	0.52 J	0.45 U	0.45 U	0.45 U
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U
541-73-1	1,3-Dichlorobenzene	ug/L	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
106-46-7	1,4-Dichlorobenzene	ug/L	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
95-50-1	1,2-Dichlorobenzene	ug/L	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
120-82-1	1,2,4-Trichlorobenzene	ug/L	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data SDG: B2963		Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010	FB071310 B2963-09/14 Chemtech B2963 WATER 7/13/2010 9/1/2010	TB(TRIPBLANK) B2963-12 Chemtech B2963 WATER 7/8/2010 9/1/2010
CAS NO.	COMPOUND	UNITS:								
	SEMIVOLATILES									
100-52-7	Benzaldehyde	ug/L	0.8 U	0.81 U	0.86 U	0.8 U	0.83 U	0.81 U	0.85 U	
108-95-2	Phenol	ug/L	0.22 U	0.22 U	3.2 J	0.22 U	1.4 J	0.22 U	0.23 U	
95-57-8	2-Chlorophenol	ug/L	0.56 U	0.57 U	0.6 U	0.56 U	0.58 U	0.57 U	0.59 U	
50-32-8	2-Methylphenol	ug/L	0.25 U	0.25 U	0.27 U	0.25 U	0.26 U	0.25 U	0.26 U	
108-60-1	2,2-oxybis(1-Chloropropane)	ug/L	0.18 U	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.19 U	
98-86-2	Acetophenone	ug/L	0.15 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.15 U	
87-86-5	3+4-Methylphenols	ug/L	0.4 U	0.4 U	0.42 U	0.4 U	0.41 U	0.4 U	0.42 U	
621-64-7	N-Nitroso-di-n-propylamine	ug/L	0.21 U	0.21 U	0.22 U	0.21 U	0.22 U	0.21 U	0.22 U	
67-72-1	Hexachloroethane	ug/L	0.26 U	0.26 U	0.28 U	0.26 U	0.27 U	0.26 U	0.27 U	
98-95-3	Nitrobenzene	ug/L	0.71 U	0.72 U	0.76 U	0.71 U	0.73 U	0.72 U	0.75 U	
78-59-1	Isophorone	ug/L	0.31 U	0.32 U	0.33 U	0.31 U	0.32 U	0.32 U	0.33 U	
88-75-5	2-Nitrophenol	ug/L	0.54 U	0.55 U	0.58 U	0.54 U	0.56 U	0.55 U	0.57 U	
105-67-9	2,4-Dimethylphenol	ug/L	0.74 U	0.75 U	0.79 U	0.74 U	0.76 U	0.75 U	0.78 U	
111-91-1	bis(2-Chloroethoxy)methane	ug/L	0.57 U	0.58 U	0.61 U	0.57 U	0.59 U	0.58 U	0.6 U	
120-83-2	2,4-Dichlorophenol	ug/L	0.69 U	0.69 U	0.73 U	0.69 U	0.71 U	0.69 U	0.73 U	
91-20-3	Naphthalene	ug/L	0.12 U	4.7 J	1300	0.12 U	53	66	0.13 U	
106-47-8	4-Chloroaniline	ug/L	3 U	3 U	3.2 U	3 U	3.1 U	3 U	3.1 U	
87-68-3	Hexachlorobutadiene	ug/L	0.26 U	0.26 U	0.28 U	0.26 U	0.27 U	0.26 U	0.27 U	
105-60-2	Caprolactam	ug/L	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2.2 U	
111-44-4	bis(2-Chloroethyl)ether	ug/L	0.57 U	0.58 U	0.61 U	0.57 U	0.59 U	0.58 U	0.6 U	
59-50-7	4-Chloro-3-methylphenol	ug/L	0.42 U	0.42 U	0.44 U	0.42 U	0.43 U	0.42 U	0.44 U	
91-57-6	2-Methylnaphthalene	ug/L	0.33 U	11	380	0.33 U	12	15	0.35 U	
77-47-4	Hexachlorocyclopentadiene	ug/L	0.25 U	0.25 U	0.27 U	0.25 U	0.26 U	0.25 U	0.26 U	
88-06-2	2,4,6-Trichlorophenol	ug/L	0.58 U	0.59 U	0.62 U	0.58 U	0.6 U	0.59 U	0.62 U	
95-95-4	2,4,5-Trichlorophenol	ug/L	0.42 U	0.42 U	0.44 U	0.42 U	0.43 U	0.42 U	0.44 U	
92-52-4	1,1-Biphenyl	ug/L	0.16 U	1.9 J	25	0.16 U	2.8 J	3.6 J	0.16 U	
91-58-7	2-Chloronaphthalene	ug/L	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.17 U	0.18 U	
621-64-7	2-Nitroaniline	ug/L	0.51 U	0.52 U	0.54 U	0.51 U	0.53 U	0.52 U	0.54 U	
131-11-3	Dimethylphthalate	ug/L	0.23 U	0.23 U	0.24 U	0.23 U	0.24 U	0.23 U	0.24 U	
208-96-8	Acenaphthylene	ug/L	0.73 U	0.74 U	48	0.73 U	3.6 J	4.8 J	0.77 U	
606-20-2	2,6-Dinitrotoluene	ug/L	0.33 U	0.34 U	0.36 U	0.33 U	0.34 U	0.34 U	0.35 U	
621-64-7	3-Nitroaniline	ug/L	1.1 U	1.1 U	1.2 U	1.1 U	1.2 U	1.1 U	1.2 U	

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data SDG: B2963		Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010	FB071310 B2963-09/14 Chemtech B2963 WATER 7/13/2010 9/1/2010	TB(TRIPBLANK) B2963-12 Chemtech B2963 WATER 7/8/2010 9/1/2010
CAS NO.	COMPOUND	UNITS:								
	SEMIVOLATILES									
83-32-9	Acenaphthene	ug/L	0.22 U	0.22 U	31	0.22 U	11	14	0.23 U	
51-28-5	2,4-Dinitrophenol	ug/L	2.2 UJ	2.2 UJ	2.3 UJ	2.2 UJ	2.3 UJ	2.2 UJ	2.3 UJ	
100-02-7	4-Nitrophenol	ug/L	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2.2 U	
132-64-9	Dibenzofuran	ug/L	0.25 U	0.25 U	5.5 J	0.25 U	0.26 U	0.25 U	0.26 U	
121-14-2	2,4-Dinitrotoluene	ug/L	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	
84-66-2	Diethylphthalate	ug/L	0.4 U	0.4 U	0.42 U	0.4 U	0.41 U	0.4 U	0.42 U	
7005-72-3	4-Chlorophenyl-phenylether	ug/L	0.22 U	0.22 U	0.23 U	0.22 U	0.23 U	0.22 U	0.23 U	
86-73-7	Fluorene	ug/L	0.32 U	0.33 U	43	0.32 U	5.8 J	7.6 J	0.34 U	
621-64-7	4-Nitroaniline	ug/L	1.4 U	1.4 U	1.5 U	1.4 U	1.5 U	1.4 U	1.5 U	
534-52-1	4,6-Dinitro-2-methylphenol	ug/L	0.77 UJ	0.78 UJ	0.82 UJ	0.77 UJ	0.8 UJ	0.78 UJ	0.81 UJ	
86-30-6	N-Nitrosodiphenylamine	ug/L	0.62 U	0.63 U	0.67 U	0.62 U	0.65 U	0.63 U	0.66 U	
101-55-3	4-Bromophenyl-phenylether	ug/L	0.24 U	0.24 U	0.26 U	0.24 U	0.25 U	0.24 U	0.25 U	
118-74-1	Hexachlorobenzene	ug/L	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	
1912-24-9	Atrazine	ug/L	0.42 U	0.42 U	0.44 U	0.42 U	0.43 U	0.42 U	0.44 U	
87-86-5	Pentachlorophenol	ug/L	1.8 U	1.8 U	1.9 U	1.8 U	1.8 U	1.8 U	1.9 U	
85-01-8	Phenanthrene	ug/L	0.27 U	0.27 U	48	0.27 U	14	19	0.29 U	
120-12-7	Anthracene	ug/L	0.17 U	0.17 U	9.9 J	0.17 U	3.1 J	4.3 J	0.18 U	
86-74-8	Carbazole	ug/L	0.23 U	0.23 U	3.5 J	0.23 U	0.24 U	0.23 U	0.24 U	
84-74-2	Di-n-butylphthalate	ug/L	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2.2 U	
206-44-0	Fluoranthene	ug/L	0.42 U	0.42 U	4.2 J	1.5 J	3.7 J	5.1 J	0.44 U	
129-00-0	Pyrene	ug/L	0.21 U	0.21 U	5.2 J	1.4 J	4.5 J	5.9 J	0.22 U	
85-68-7	Butylbenzylphthalate	ug/L	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.21 U	
91-94-1	3,3-Dichlorobenzidine	ug/L	2.1 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2.2 U	
120-12-7	Benzo(a)anthracene	ug/L	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.17 U	0.18 U	
218-01-9	Chrysene	ug/L	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	
117-81-7	Bis(2-ethylhexyl)phthalate	ug/L	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.17 U	0.18 U	
117-84-0	Di-n-octyl phthalate	ug/L	0.53 U	0.54 U	0.57 U	0.53 U	0.55 U	0.54 U	0.56 U	
205-99-2	Benzo(b)fluoranthene	ug/L	0.3 U	0.31 U	0.32 U	0.3 U	0.31 U	0.31 U	0.32 U	
207-08-9	Benzo(k)fluoranthene	ug/L	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.2 U	
50-32-8	Benzo(a)pyrene	ug/L	0.15 U	0.15 U	0.16 U	0.15 U	0.15 U	0.15 U	0.15 U	
193-39-5	Indeno(1,2,3-cd)pyrene	ug/L	0.16 U	0.16 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	
53-70-3	Dibenz(a,h)anthracene	ug/L	0.44 U	0.44 U	0.47 U	0.44 U	0.45 U	0.44 U	0.46 U	
191-24-2	Benzo(g,h,i)perylene	ug/L	0.3 U	0.31 U	0.32 U	0.3 U	0.31 U	0.31 U	0.32 U	

Consolidated Edison Ludlow Street Site Validated Groundwater Analytical Data SDG: B2963		Sample ID: Lab Sample Id Source: SDG: Matrix: Sampled: Validated:	MW-1 B2963-01 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-2 B2963-03/13 Chemtech B2963 WATER 7/12/2010 9/1/2010	MW-3 B2963-08 Chemtech B2963 WATER 7/13/2010 9/1/2010	MW-4 B2963-02/11/15 Chemtech B2963 WATER 7/12-13/2010 9/1/2010	MW-5 B2963-04 Chemtech B2963 WATER 7/13/2010 9/1/2010	Dup of MW-5 MW-15 B2963-07 Chemtech B2963 WATER 7/13/2010 9/1/2010	FB071310 B2963-09/14 Chemtech B2963 WATER 7/13/2010 9/1/2010	TB(TRIPBLANK) B2963-12 Chemtech B2963 WATER 7/8/2010 9/1/2010
CAS NO.	COMPOUND	UNITS:								
	INORGANICS									
7429-90-5	Aluminum	ug/L	814	4840	284	13400	137	105	6.5 U	
7440-36-0	Antimony	ug/L	8 U	8 U	8 U	8 U	8 U	8 U	8 U	
7440-38-2	Arsenic	ug/L	5.98 J	16.2	4.2 U	30.1	4.2 U	4.2 U	4.2 U	
7440-39-3	Barium	ug/L	139	630	228	221	157	149	4 U	
7440-41-7	Beryllium	ug/L	0.7 U	0.7 U	0.7 U	0.98 J	0.7 U	0.7 U	0.7 U	
7440-43-9	Cadmium	ug/L	0.5 U	1.63 J	0.5 U	8.57	0.5 U	0.5 U	0.5 U	
7440-70-2	Calcium	ug/L	79300	62200	82900	23700	122000	117000	117 J	
7440-47-3	Chromium	ug/L	1.1 U	4.96 J	1.1 U	19.3	1.1 U	1.1 U	1.1 U	
7440-48-4	Cobalt	ug/L	5.8 U	5.8 U	5.8 U	12.5 J	5.8 U	5.8 U	5.8 U	
7440-50-8	Copper	ug/L	6.6 U	12.3	6.6 U	61.5	6.6 U	6.6 U	6.6 U	
7439-89-6	Iron	ug/L	2040	11700	453	20400	2390	2230	20.4 U	
7439-92-1	Lead	ug/L	10.4	97	13.4	559	9.5	12.2	2.6 U	
7439-95-4	Magnesium	ug/L	16400	10300	29900	6360	36900	35800	32.5 U	
7439-96-5	Manganese	ug/L	2960	2010	3150	927	4100	3890	1.7 U	
7439-97-6	Mercury	ug/L	0.09 U	9.7	0.09 U	43.1	0.09 U	0.09 U	0.09 U	
7440-02-0	Nickel	ug/L	4.2 U	8.77 J	13.3 J	36.8	5.53 J	6.42 J	4.2 U	
7440-09-7	Potassium	ug/L	8360	22700	8830	7840	19500	18700	38.8 U	
7782-49-2	Selenium	ug/L	4.8 U	4.8 U	4.8 U	5.7 J	4.8 U	4.8 U	4.8 U	
7440-22-4	Silver	ug/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	
7440-23-5	Sodium	ug/L	240000	10800000	2450000	1500000	5250000	5170000	1350	
7440-28-0	Thallium	ug/L	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	
7440-62-2	Vanadium	ug/L	6.1 U	10.6 J	6.1 U	48.2	6.1 U	6.1 U	6.1 U	
7440-66-6	Zinc	ug/L	49.9 U	81 U	40.8 U	327	42 U	37.8 U	38.7	
57-12-5	Cyanide	ug/L	13	126	127	299	24	27	10 U	
	METALS, DISSOLVED									
7429-90-5	Aluminum	ug/L		409		16900			7.49 J	
7440-36-0	Antimony	ug/L		8 U		8 U			8 U	
7440-38-2	Arsenic	ug/L		5.81 J		34.4			4.2 U	
7440-39-3	Barium	ug/L		442		211			4 U	
7440-41-7	Beryllium	ug/L		0.7 U		0.89 J			0.7 U	
7440-43-9	Cadmium	ug/L		0.5 U		7.5			0.5 U	
7440-70-2	Calcium	ug/L		60800		22400			117 J	
7440-47-3	Chromium	ug/L		1.1 U		25.3			1.1 U	
7440-48-4	Cobalt	ug/L		5.8 U		12.9 J			5.8 U	
7440-50-8	Copper	ug/L		6.6 U		83.9			6.6 U	
7439-89-6	Iron	ug/L		1410		25000			21.4 J	
7439-92-1	Lead	ug/L		15		480			2.6 U	
7439-95-4	Magnesium	ug/L		9180		6320			32.5 U	
7439-96-5	Manganese	ug/L		1770		908			1.7 U	
7439-97-6	Mercury	ug/L		0.93		13.8			0.09 U	
7440-02-0	Nickel	ug/L		4.39 J		39.9			4.2 U	
7440-09-7	Potassium	ug/L		23200		8650			74.2 J	
7782-49-2	Selenium	ug/L		4.8 U		4.97 J			4.8 U	
7440-22-4	Silver	ug/L		1.5 U		1.5 U			1.5 U	
7440-23-5	Sodium	ug/L		10900000		1490000			1290	
7440-28-0	Thallium	ug/L		2.4 U		2.4 U			2.4 U	
7440-62-2	Vanadium	ug/L		6.1 U		52.4			6.1 U	
7440-66-6	Zinc	ug/L		42.3 U		322			45	

APPENDIX E

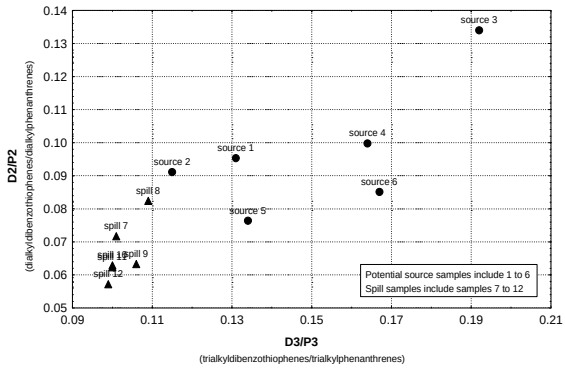
HYDROCARBON FINGERPRINT RESULTS

Environmental Forensic Report

Ludlow Street Works

SDG: PA100709

Figure 1. Double Ratio Plot



Report To:

Parsons
200 Cottontail Ln.
Somerset, NJ 08873

Report By:

META Environmental, Inc.
49 Clarendon Street
Watertown, MA 02472

August 17, 2010

Identifying and allocating sources of pollutants in complex environments.

META Environmental, Inc.
ENGINEERING & CHEMISTRY

Final Laboratory Report

META Environmental, Inc.
49 Clarendon Street
Watertown, MA 02472
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Fax: 617-923-4610
E-Mail meta@metaenv.com

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

New York Certification Number: 11886

Certification

This certifies that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed herein. The results included in this data report relate only to the samples as received and analyzed by the laboratory.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager and Quality Assurance Officer, as verified by the following signatures.

James A. Roush, Environmental Scientist, Laboratory Manager — August 17, 2010 (Date)

David M. Mauro, Senior Scientist, Quality Assurance Officer — August 17, 2010 (Date)

Sample Delivery Group Narrative

Project:	Ludlow Street Works
Client	Parsons 200 Cottontail Ln. Somerset, NJ 08873
Report Contact:	Eric Gaulin
Dates of Receipt:	July 9th of 2010
Sample Summary:	The samples received for this project are summarized in the attached sample login forms in Appendix A.
META Project Number:	P06018
SDG No.:	PA100709
Total Pages in Report:	141

Chain of Custody

The samples were received in good condition. The internal temperature of the shipping containers was above the recommended 0-6°C range and was as follows:

Samples received: 07/09/2010 18.8°C Ice present

Internal chain of custody procedures were followed after sample receipt. Samples were stored in a locked refrigerator. A sample custody logbook contains the record of sample removal from the secure sample storage area to the sample preparation laboratory. The custody record for the sample extracts is present on the sample extraction logbook page.

The disposal of samples and extracts will be authorized one month after the release of this data report. Sample disposal will be documented.

Methods

Four mixed matrix samples were received by the laboratory. Samples MW-3(9-11) and SB-7(17-19) were initially processed as non-aqueous phase liquid (NAPL) samples by using a pipette to sample a small amount of the visible NAPL; however a review of the results suggested substantial water content was present in the NAPL reducing the detectability of the hydrocarbons. These two samples were re-extracted as soil samples by solvent extraction (EPA 3570) using dichloromethane (DCM). Sample SB-1(18-20) was also processed by EPA method

3570. Sample Exposed Pipe 1 was processed as a water sample by liquid extraction (EPA 3511) also using DCM. All extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

Results

Sample results are presented in several appendices which follow this narrative.

Appendix B: GC/FID Fingerprints
Appendix C: MAH/PAH Concentrations
Appendix D: Extended MAH/PAH Profiles - Histograms
Appendix E: Extracted Ion Current Profiles (EICPs)

Quality Control

Analyte Flags

The detection limits were determined as the sample equivalent of the lowest linear initial calibration standard. Analytes measured between 50% and 100% of the lowest standard were reported as "estimated" and flagged with the letter "J." Undetected analytes were reported as null and flagged with the letter, "U." Analytes marked with a "B" were detected in the associated blank and should be reviewed for a possible positive bias. No deviations were thought significant enough to compromise the integrity of the reported values.

Holding Times

All samples were extracted outside the EPA recommended 7 day holding time for volatile organics. Three of four samples were also extracted outside the 14 day holding time for semivolatile organics as follows: Sample MW-3(9-11) was received 21 days after collection, extracted 26 days after collection, and re-extracted 56 days after collection. Sample SB-7(17-19) was received 11 days after collection, extracted 16 days after collection, and re-extracted 46 days after collection. Sample Exposed Pipe 1 was received 23 days after collection and extracted 29 days after collection. The samples and extracts were stored at 4°C ± 2°C prior to extraction and analysis. The extracts were analyzed within 40 days of sample preparation.

Surrogate Spikes

Extraction surrogates were added to all samples prior to extraction. All surrogate compounds were recovered within the 50%-120% acceptable criterion.

Blanks

Various MAHs and PAHs were detected below or just above the reporting limit (RL) in blank QC100813-SB, QC100716-AB, and QC100716-SB. Compounds detected in field samples at a level less than 10 times the associated blank should be reviewed for potential positive bias.

Blank Spikes

A blank spike sample was extracted with each analytical batch. All spiked compounds were recovered within criteria with the following exceptions: many compounds were under-recovered between 55-70% in soil blank spike QC100716-SBS1, and five compounds were under-recovered in aqueous blank spike QC100715-ABS.

Duplicates

Samples MW-3(9-11), Exposed Pipe 1, and SB-1(18-20) were extracted and analyzed in duplicate. Relative percent differences are reported with the sample results in Appendix C.

Internal Standards

Internal standards were recovered within acceptable QC limits (50%-200%) relative to the continuing calibration standards.

Interpretation

Introduction

Two samples of soil/NAPL mixtures, one sample of a water/NAPL mixture, and one sample of a soil/wood mixture were received by META from the Ludlow St. Works site on July 9th, 2010. The samples was analyzed for hydrocarbon fingerprints and an expanded list of MAHs and PAHs.

This report summarizes the findings and compares the samples.

Sources of MAHs and PAHs in the Environment

Aromatic hydrocarbons include MAHs such as benzene, toluene, xylenes, and alkylated benzenes, and PAHs such as naphthalene, phenanthrene, and pyrene. MAHs and PAHs originate from many sources and exist at many sites. This section briefly reviews the sources of MAHs and PAHs in urban soils and sediment.

Crude petroleum, many of its refined products, coal, coal tar, and many coal tar products consist primarily of hydrocarbons. Hydrocarbons are organic molecules that are made up of only carbon and hydrogen atoms. Some simple hydrocarbons include hexane and benzene. There are several types of hydrocarbons that are commonly grouped by similar chemical structures, such as alkanes, cyclic alkanes, and aromatic hydrocarbons.

MAHs and PAHs are one group of hydrocarbons that are present at high relative amounts in crude oil, coal, coal tar, and many of their products. In environmental forensic chemistry and geochemistry, MAHs and PAHs are placed in subgroups according to their origins. These groups include diagenic, or recently produced, petrogenic, produced at relatively low temperatures over long periods of time, and pyrogenic, produced at high temperatures with a shortage of oxygen. Petrogenic PAHs are those found in crude oil and similar materials. Pyrogenic PAHs are those

found in coal tar and related substances, and from the incomplete combustion of organic matter.

Some PAHs can be formed by natural biological and chemical processes at ambient temperatures. When present, these PAHs are found at very low concentrations. Further, these PAHs are rarely the subjects of environmental investigations and few, if any, are regulated.

PAHs also can be formed at relatively low temperatures. In particular, crude oils contain MAHs and PAHs that formed over millions of years at temperatures as low as 100°C to 150°C. MAHs and PAHs formed during crude oil maturation and similar processes are called petrogenic. Similarly, coal was formed at low temperatures over long periods of time and therefore is included in the petrogenic group. Both crude oil and coal contain hundreds of different MAH and PAH compounds, including many that are the subject of environmental investigations and are regulated.

Petrogenic MAHs and PAHs have been released into urban environments from numerous anthropogenic sources over the past two centuries. For example, it has been a common practice to spray roads with oil to manage dust. Asphalt is produced from petroleum and the small particles that are created as roads wear away contain PAHs. Cars and trucks drip fuels and lubricating oils that contain petrogenic MAHs and PAHs. Many industries have stored and ultimately spilled petroleum products that range from gasoline to heavy oils. Further, the potential impacts from coal cannot be ignored. For many years, residential and commercial buildings were heated with coal and small amounts of coal and coal dust accumulated wherever coal was handled. All of these sources of petrogenic PAHs, and many others, contributed to a pervasive background of PAHs in urban settings. Because many releases occurred years ago at unanticipated locations and because soil was moved around as the urban environment expanded and was modified for various uses, it is difficult to predict where and at what levels MAHs and PAHs might be found.

Finally, MAHs and PAHs are formed whenever organic substances are exposed to high temperatures under low oxygen or no oxygen conditions in a process called pyrolysis. Pyrolytic processes occur intentionally, such as in the destructive distillation of coal into coke and coal tar, or the thermal cracking of petroleum residuals into lighter hydrocarbons and oil tar. Similar processes occur unintentionally, such as the incomplete combustion of motor fuels in cars and trucks, the incomplete combustion of wood in forest fires and fireplaces, and the incomplete combustion of fuel oils in heating systems. These processes occur at temperatures that range from about 350°C to more than 1200°C, and their products are called pyrogenic.

Like petrogenic MAHs and PAHs, pyrogenic MAHs and PAHs have been released into urban environments from numerous sources. These include some obvious sources, such as building fires and industrial smoke stacks. They also include less obvious sources, such as debris from coal tar-treated roofing and building materials. The incomplete combustion of gasoline and diesel fuel in cars, trucks, and buses produces substantial amounts of pyrogenic PAHs that attach to small particles and accumulate along roadsides. Any industry that utilized high temperatures in their operation probably produced PAHs. These included such industries as foundries, steel mills, coke plants, smelters, and others. Similar to petrogenic MAHs and PAHs, pyrogenic MAHs and PAHs accumulated in soil and are found throughout all urban areas.

Much modern gasoline is unusual in that it contains both petrogenic substances (the light

distillate of crude oil) and pyrogenic substances (the light hydrocarbons from thermal cracking of oil). For the purposes of this report, all motor gasoline is considered petrogenic.

Composition of Pyrogenic and Petrogenic Materials

Both pyrogenic and petrogenic sources of PAHs have been found to contain hundreds of individual MAHs and PAH compounds in generally predictable patterns. For example, it is known that the temperature of formation of MAHs and PAHs largely determines the distribution of the various parent and alkylated PAHs. Variations in these MAH and PAH distributions are measured using gas chromatography (GC) methods, particularly GC/MS. The visual interpretation of the results from GC/MS testing is a chromatogram. Variations in chromatograms are used to identify the sources of those MAH and PAHs.

Of particular importance to environmental forensic chemistry is the fact that petrogenic and pyrogenic substances from different sources can have measurably different amounts of MAHs and PAHs. For example, crude oils from different reservoirs can exhibit notably different ratios of trialkylated dibenzothiophenes to trialkylated phenanthrenes. Similarly, the ratio of dialkylated chrysene to chrysene varies among certain pyrogenic sources. Consequently, the determination of PAH profiles forms an important component of environmental forensic studies where hydrocarbon releases, either petrogenic or pyrogenic, are known or suspected to be involved.

In addition to MAHs and PAHs, pyrogenic and petrogenic substances can contain paraffinic hydrocarbons, olefinic hydrocarbons, naphthenic hydrocarbons, and other types of compounds. The presence and relative amounts of these compounds also is used to identify the nature and source of hydrocarbon-based materials in environmental samples.

Description of Chemical Fingerprinting Methodology

PAHs commonly form the basis for source attribution and allocation at sites involving petrogenic or pyrogenic materials. Studies have shown that the pattern of PAHs clearly distinguishes petrogenic from pyrogenic substances and can be used to identify and classify petrogenic or pyrogenic substances of different origins. For example, ASTM Method D 5739-95 is the method used extensively by the U.S. Coast Guard to determine the source of oil spilled in public waterways. That method relies on the determination of selected PAHs in oil, soil, or water samples by gas chromatography with mass spectrometric detection (GC/MS) and the use of the qualitative patterns and quantitative ratios of those PAHs to determine which oil samples have a common origin. Similarly, work by META Environmental, Inc. (META) has shown that the same methodology can be used to identify the sources of PAHs at former MGP sites, coke plants, tar refineries and wood treating facilities. Further, META has modified the typical sample preparation and analysis procedures for hydrocarbon fingerprinting to include MAHs as well as PAHs.

An approach based on MAH/PAH profiling has been used to investigate the sources of hydrocarbons at the Ludlow St. Works site, which is the topic of this report. Therefore, a more detailed discussion of the forensic methods used is presented in the next subsection as background.

GC/FID Fingerprinting

All samples in this study were analyzed by gas chromatography with flame ionization detection (GC/FID). With GC/FID, organic compounds in a sample are vaporized and then separated in a long, narrow fused silica capillary column. Separation follows boiling point approximately with the most volatile compounds exiting the column first followed by increasingly less volatile compounds. Therefore, certain refined petroleum products, generated by the distillation of crude oil and which differ in their boiling point ranges, are distinguishable by where they appear on a chromatogram. Once they exit the column, the compounds are detected using the flame ionization technique. As the compounds exit and are detected, their responses are recorded and shown as peaks on a continuous plot. The height and area of a peak are proportional to the concentration of that compound in the sample. When done in a controlled and reproducible manner, the GC/FID method produces a "fingerprint" of a sample where the presence and relative amounts of the compounds are immediately visible as peaks of varying height appearing at different times. GC/FID fingerprints for the samples analyzed are provided in Appendix B.

GC/FID methods are commonly used for fingerprinting in a number of forensic fields. The patterns of individual peaks and the sizes and shapes of any baseline features are examined qualitatively for similarities and differences among samples.

The instrumental conditions for the GC/FID analyses in this study were adjusted so that compounds with boiling points between about hexane (C6) and n-tetracontane (C40) were detectable in one analytical run. This range includes most of the VOCs and all of the SVOCs commonly measured in environmental investigations. In particular, it includes benzene, toluene, ethylbenzene, xylenes, and the 16 priority pollutant PAHs that comprise a major portion of MGP tars and other pyrogenic substances. It also includes the range of compounds that are measurable in pyrogenic substances by gas chromatographic methods. Finally, META's GC/FID conditions detect most of the constituents of gasoline, as well as all of the constituents of higher boiling petroleum products (e.g., kerosene, diesel, refined oils).

Source identification using GC/FID is mostly qualitatively applied. An experienced chemist examines the chromatograms, compares them to those of reference materials, and makes a judgment regarding the nature and source of the contamination in the sample. The chemist might go "peak-by-peak" looking for similarities and differences, comparing peak ratios, and looking for indicator compounds.

For some samples, GC/FID fingerprinting is accurate and sufficient. However, the reliability of GC/FID fingerprinting decreases when multiple sources are present in a sample and when the sample composition becomes extensively altered by environmental weathering processes. Other testing methods, such as GC/MS, are complementary for source identification under these conditions.

Extended PAH Profiles (EPPs) by GC/MS

Samples from the Ludlow St. Works site also were analyzed by GC/MS for an expanded list of MAHs and PAHs (EPPs). Separation was accomplished with gas chromatography using a method similar to the GC/FID method discussed previously. However, in GC/MS, once compounds exit the column, they are detected using a mass spectrometer. In the mass

spectrometer, the molecules of each compound are ionized at high temperature and vacuum. The ionic fragments are unstable and fragment into smaller ions. The ions are then counted and the mass spectrum recorded. Thus, the mass spectrum for a compound is the pattern of ionic fragments that forms when that compound is ionized. Mass spectra vary widely and are characteristic of their source compound. For example, the mass spectrum of hexane is very different from the mass spectrum of benzene even though both compounds contain six carbon atoms plus hydrogen atoms.

In GC/MS, one obtains both a chromatogram of peaks and additional compound-specific information in the mass spectrum. When executed in a controlled and reproducible manner, the GC/MS method produces multiple "fingerprints" of a sample when specific fragment ions are isolated.

GC/MS is utilized in two general ways in environmental forensic chemistry. First, samples are analyzed under the conditions required by various standard methods, particularly EPA Methods 8260 and 8270 (U.S. EPA SW-846). The concentrations of certain target compounds are determined and the mass spectrum of each peak in the chromatogram is generated and stored. These mass spectra can be used to identify non-target compounds or to generate extracted ion current profiles (EICPs). Second, various specialty methods are utilized where the GC/MS operating conditions are setup to measure only certain groups of compounds. For example, the method described in 40 CFR Subchapter J Part 300 Subpart L Appendix C for PAHs, alkylated PAHs, and biomarkers is used extensively in oil spill and UST release analyses. This method is similar to ASTM Method D 5739-95, "Standard Practice for Oil Spill Source Identification by Gas Chromatography and Positive Ion Electron Impact Low Resolution Mass Spectrometry."

GC/MS data are used both qualitatively and quantitatively. An experienced chemist examines the chromatograms, compares them to those of reference materials, and makes judgments regarding the nature and source of the contamination in the sample. The chemist might go "peak-by-peak" looking for similarities and differences, comparing peak ratios, and looking for indicator compounds. This process is described in detail in ASTM Method D 5739-95.

GC/MS data are more commonly used quantitatively by calculating the concentrations of selected compounds, by comparing peak area ratios, or by applying chemometric or pattern recognition techniques to the raw or adjusted data. These data analysis methods are used extensively with extended PAH profiles (MAHs, PAHs and alkylated PAHs) and with biomarker compound data. Various degrees of statistical confidence can be achieved by examining chemical concentrations and compound ratios or patterns from multiple samples and replicate samples. This characteristic of GC/MS quantitative data is particularly valuable when assessing the degree of similarity or difference between samples, particularly when multiple sources of hydrocarbons are present in the sample or when environmental weathering has altered the original distributions of hydrocarbons.

Finally, the mass spectra of selected compounds also can be examined to determine whether any diagnostic or indicator chemicals are present in the sample. For example, the PAH retene (1-methyl-7-isopropylphenanthrene) is present in significant concentrations in coal, but at much lower concentrations in coal tar or petroleum products. Thus, the ratio of retene to chrysene can be used to determine whether coal fines are present in a soil sample and to explain some of the

hydrocarbon patterns observed at sites where coal was used extensively. Further, unknown compounds can be identified and their presence used as clues to the source(s) of the chemicals.

The GC/MS data in this study were reported and utilized both qualitatively and quantitatively. First, the concentrations of MAHs, PAHs and alkylated PAHs were calculated and included in Appendix C. These concentrations were utilized to estimate contaminant levels in samples, to generate bar graphs (Appendix D) and compare compound ratios. The ratios were used to generate plots for identifying samples with similar compositions.

The GC/MS data also were used qualitatively by generating extracted ion current profiles (EICPs) for selected compounds and compound groups of forensic value (Appendix E). For example, the EICPs for selected "biomarker" compounds including normal alkanes, isoprenoid hydrocarbons, alkylcyclohexanes, triterpanes and steranes are shown on the first page of the EICP report for each sample. These compound groups are commonly used in hydrocarbon source identifications and weathering evaluations. For example, the estimated boiling point range of a refined petroleum product, as indicated by the location of the alkanes and unresolved complex mixture (UCM) on the chromatogram, can be used to determine whether the material is kerosene, diesel, No. 6 fuel oil, or some other product. Similarly, triterpanes and steranes are known to be present in crude oils and some refined petroleum products, but not found in coke oven tars and rarely found in MGP tars. Therefore, the presence of triterpanes and steranes is monitored to confirm and refine the petrogenic verses pyrogenic assessment conducted with the PAH profiles.

Sample-Specific Observations

MW-3(9-11)

Sample MW-3(9-11) contained pyrogenic material (see definitions). The pyrogenic material was indicated by the wide range distribution of unsubstituted mono- and polycyclic aromatic hydrocarbons (MAHs & PAHs) with the 2-ring PAH naphthalene most abundant suggesting that this material has not experienced substantial weathering.

The ratio of fluoranthene to pyrene (F/P – Table 1) as well as the double ratio plot of dibenzofuran/fluorene (D/F) to F/P (Figure 1) shows that the material in this sample is very similar to tars in META's reference library that were formed from manufactured gas plants (MGPs) utilizing carbureted water gas (CWG) processes.

SB-7(17-19)

Sample SB-7(17-19) contained a pyrogenic material similar to the material found in sample MW-3(9-11), but at a somewhat lower concentration. Sample SB-7(17-19) also appeared to contain CWG process MGP residues.

Exposed Pipe 1

Sample Exposed Pipe 1 also contained a pyrogenic material, however, the characteristics were substantially different than those seen in samples MW-3(9-11) and SB-7(17-19). The pyrogenic material was characterized by a distribution of relatively high concentration MAHs and

naphthalene with much lower concentrations of the higher molecular weight PAHs. Pyrogenic materials with these characteristics include coal tar distillates including light oil and coal tar condensates including drip oil. Also, MAHs and naphthalene are the most abundant constituents in the water soluble fraction (WSF) of tarry materials, suggesting that the hydrocarbons in the Exposed Pipe 1 sample may be dominated by the dissolved phase of tar.

The Fl/Py ratio of sample Exposed Pipe 1 falls between that observed for CWG process MGP residues and coal carbonization (CC) MGP residues (the ranges overlap), however, the dibenzofuran/fluorene ratio is lower than would be expected from a CC tar residue. In addition, diagnostic ratios may become distorted in dissolved phase materials. Sample Exposed Pipe 1 groups well with the other samples in the set in Figure 1 and 1a and is likely CWG process derived but this could not be confirmed with the available data.

Finally, the pattern of alkylated benzenes in Exposed Pipe 1 was similar to those observed in the other samples, suggesting that the MAHs and PAHs could be the dissolved phase of the tarry material found in the soil samples.

SB-1(18-20)

Sample SB-1(18-20) contained an irregular distribution of several large unidentified peaks. The pattern did not specifically match any reference materials in META's library. However, the high relative concentration of retene detected is indicative of material derived from plant sources, particularly conifers. A visual inspection of the physical field sample showed substantial wood content providing a source for the retene.

Also present in the sample at a lower relative concentration was a wide range distribution of pyrogenic PAHs. Again, the Fl/Py ratio was consistent with CWG tar residues and the material groups well in Figures 1 and 1a with the material found in the previous 3 samples.

Table 1. Selected Source and Weathering Ratios

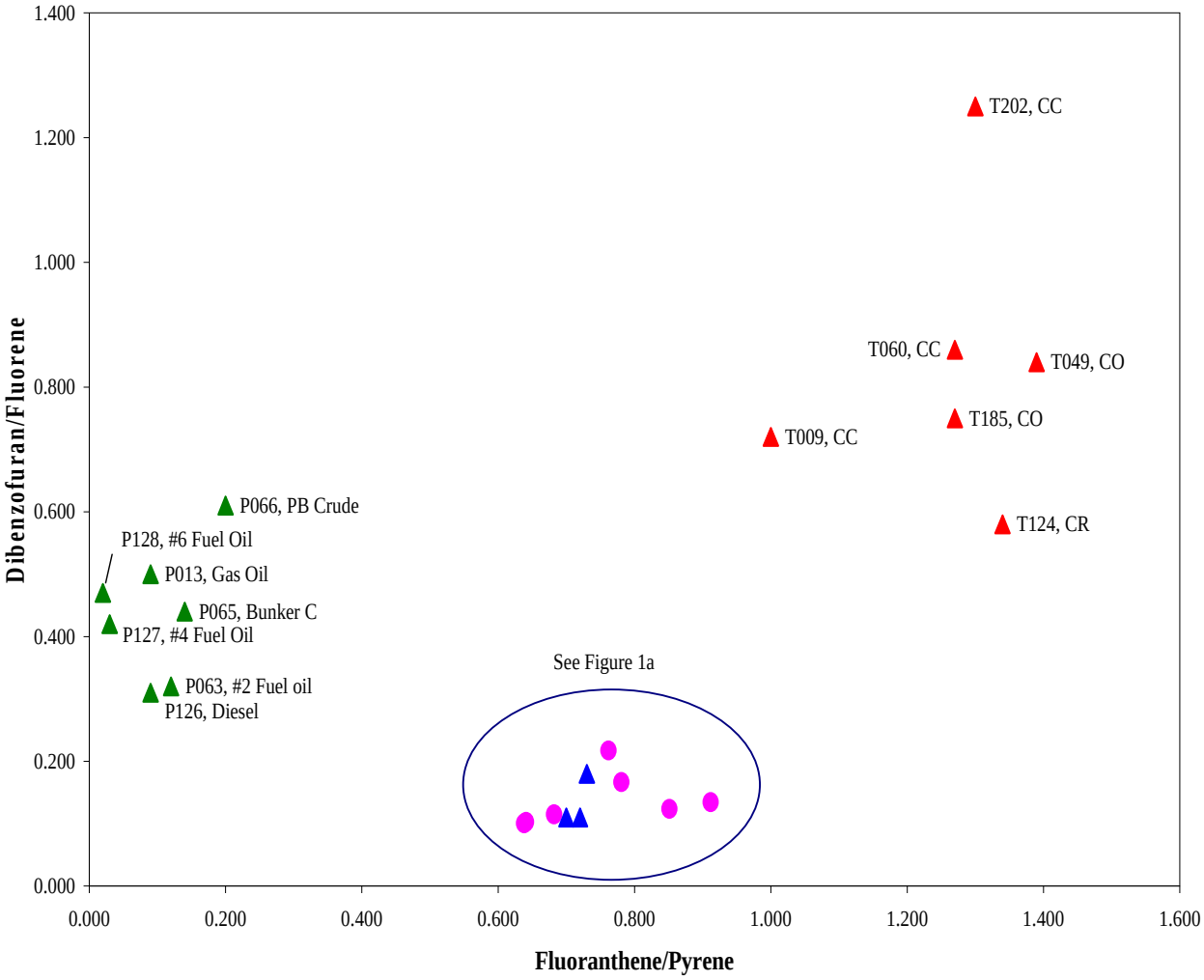
	Fl/Py	D/F	C17/Pris	C18/Phy	Pris/Phy	C3D/C3PA	C2D/C2PA	BF/MP
MW-3(9-11)	0.638	0.101	1.562	1.983	1.563	0.574	0.365	0.407
Dup of MW-3(9-11)	0.641	0.103	1.597	1.908	1.454	0.566	0.384	0.408
SB-7(17-19)	0.682	0.115	2.081	2.324	1.414	0.582	0.379	0.410
Exposed Pipe 1	0.851	0.124	NC	NC	NC	NC	NC	NC
Dup of Exposed Pipe 1	0.912	0.135	NC	NC	NC	NC	0.474	1.340
SB-1(18-20)	0.762	0.217	1.364	2.571	1.571	0.013	0.373	0.256
Dup of SB-1(18-20)	0.781	0.167	1.151	2.143	1.893	0.030	0.288	0.256

Ratios:

Fl/Py	fluoranthene/pyrene
D/F	dibenzofuran/fluorene
C17/Pris	heptadecane/pristane
C18/Phy	octadecane/phytane
Pris/Phy	pristane/phytane
C3D/C3PA	trialkyldibenzothiophenes/trialkylphenanthrenes/anthracenes
C2D/C2PA	dialkyldibenzothiophenes/dialkylphenanthrenes/anthracenes

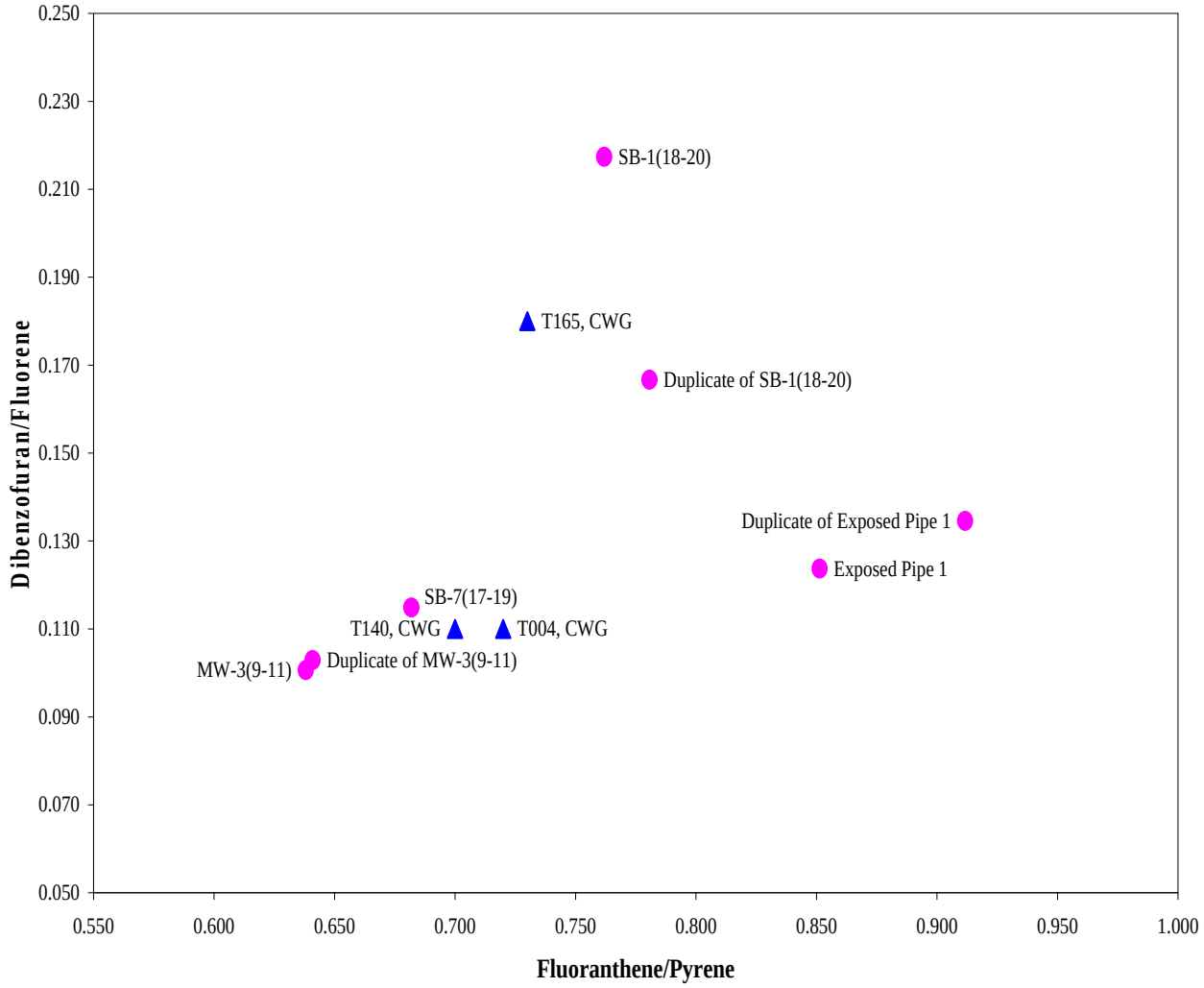
BF/MP benzofluorenes/methylpyrenes
NC Not calculable

Figure 1. Selected Diagnostic Ratios – Fl/Py v. D/F



TXXX Tar Sample from META's in house source library
CC Coal Carbonization Tar
CO Coke Oven Tar
CR Creosote
CWG Carbureted Water Gas Tar
● Field Samples

Figure 2a. Selected Diagnostic Ratios – Fl/Py v. D/F - Inset



TXXX Tar Sample from META's in house source library
CC Coal Carbonization Tar
CO Coke Oven Tar
CR Creosote
CWG Carbureted Water Gas Tar
● Field Samples

Definitions

Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

Pitch is the semi-solid or solid material consisting of high molecular weight hydrocarbons that remain following coal tar distillation.

References

McNicoll, D., Tousignant, L.P., Augustine, P. "Facts and Fallacies: Petroleum Degradation in a Subsurface Environment." Contaminated Soil Sediment and Water, 17-21, June,July 2001

"Chemical Fingerprinting of Hydrocarbons," in: Introduction to Environmental Forensics. B.L. Murphy and R.D. Morrison editors, Academic Press, San Diego, CA 2002.

Mauro, D.M., "Chemical Source Attribution at former MGP Sites," EPRI Report 1000728, December 2000.

Appendix A

Chain of Custody

CHAIN OF CUSTODY RECORD

PROJECT Ludlow St. Works
CONTACT Eric Gaulin
COMPANY Parsons
ADDRESS 200 Cottontail Ln.
Somerset, NJ 08873
EMAIL eric.gaulin@parsons.com
PHONE 732 537 3570 **FAX**
SAMPLED BY
Print Name Zohar Lavy Sign

Turn Around Time
Standard [X]
If Authorized *
1 Week [ ]
Other [ ] ____

META Environmental, Inc.
49 Clarendon St. - Watertown, Massachusetts - 02472
Tel (617) 923-4662 - Fax (617) 923-4610 - www.metaenv.com

Samp #	Date	Time	Field Sample ID	Container Size	Container G/P	Grab	Composite	# of Containers	Matrix	Preserv.	Parameters: Fingerprint	Comments
	6/18/10	1300	MW-3 (9-11)	4oz		✓		1	Soil/NAPL	N	X	PA100709-01
	6/28/10	1133	SB-7 (17-19)	4oz		✓		1	Soil/NAPL	N	X	-02
	6/9/10	1255	Exposed Pipe 1	4oz		✓		1	water/NAPL	N	X	-03
	7/2/10	0914	SB-1 (18-20)	8oz		✓		1	Soil/water/NAPL	N	X	-04

Relinquished by	Date & Time	Relinquished by	Date & Time	Relinquished by	Date & Time
	7/8/10 1500				
Received by	**Date & Time**	**Received by**	**Date & Time**	**Received by**	**Date & Time**
Carrie McGeough	7/9/10 11 AM				

Shipping Info.

Remarks

Temp °C 18.8

* Surcharges may apply

META Environmental, Inc.

Sample Receipt Log

Lab ID	Field ID	Matrix	Date Sampled	Date Received	Project #	Container	Comments	Client Name	Project Name
PA100709-01	MW-3(9-11)	Soil/NAPL	6/18/2010	7/9/2010	P06018-60	1 x 4 oz jar		Parsons	Ludlow St. Works
PA100709-02	SB-7(17-19)	Soil/NAPL	6/28/2010	7/9/2010	P06018-60	1 x 4 oz jar		Parsons	Ludlow St. Works
PA100709-03	Exposed Pipe 1	Soil/NAPL	6/16/2010	7/9/2010	P06018-60	1 x 4 oz jar		Parsons	Ludlow St. Works
PA100709-04	SB-1(18-20)	Soil/NAPL	7/2/2010	7/9/2010	P06018-60	1 x 4 oz jar		Parsons	Ludlow St. Works

Logged By: CAM

Date: 7/9/10

Reviewed By:

Date: 7/9/10

META Environmental, Inc.

Sample Receipt Checklist

Receipt date: 7/9/10

Login date: 7/9/10

Login personnel: CAM

Client Information:.

Company Name: PARSONS

Project Manager: Eric Gaylin

Project Name: Ludlow St. Works

Shipping Information:

How were samples received? (UPS) FedEx DHL Other:

Number of coolers: 1

Internal temperature of coolers: 18.8°C

Was ice present? (Yes) / No

Note: if cooler is outside the 2-6° range, META's project manager should be notified.

Documentation:

Was a Chain of Custody present? (Yes) / No

Was it signed? (Yes) / No

Was all project information present on the COC? (Yes) / No

Was a bill of lading or shipping label retained? Yes / (No)

Sample Information:

Number of sample containers: 4

Does this match the COC? (Yes) / No

Were all sample containers Intact? (Yes) / No

If no, list samples and problems:

Note: if samples are damaged, META's project manager should be notified.

For aqueous 40ml Voas; was headspace present? Yes / No / (NA)

Comments:

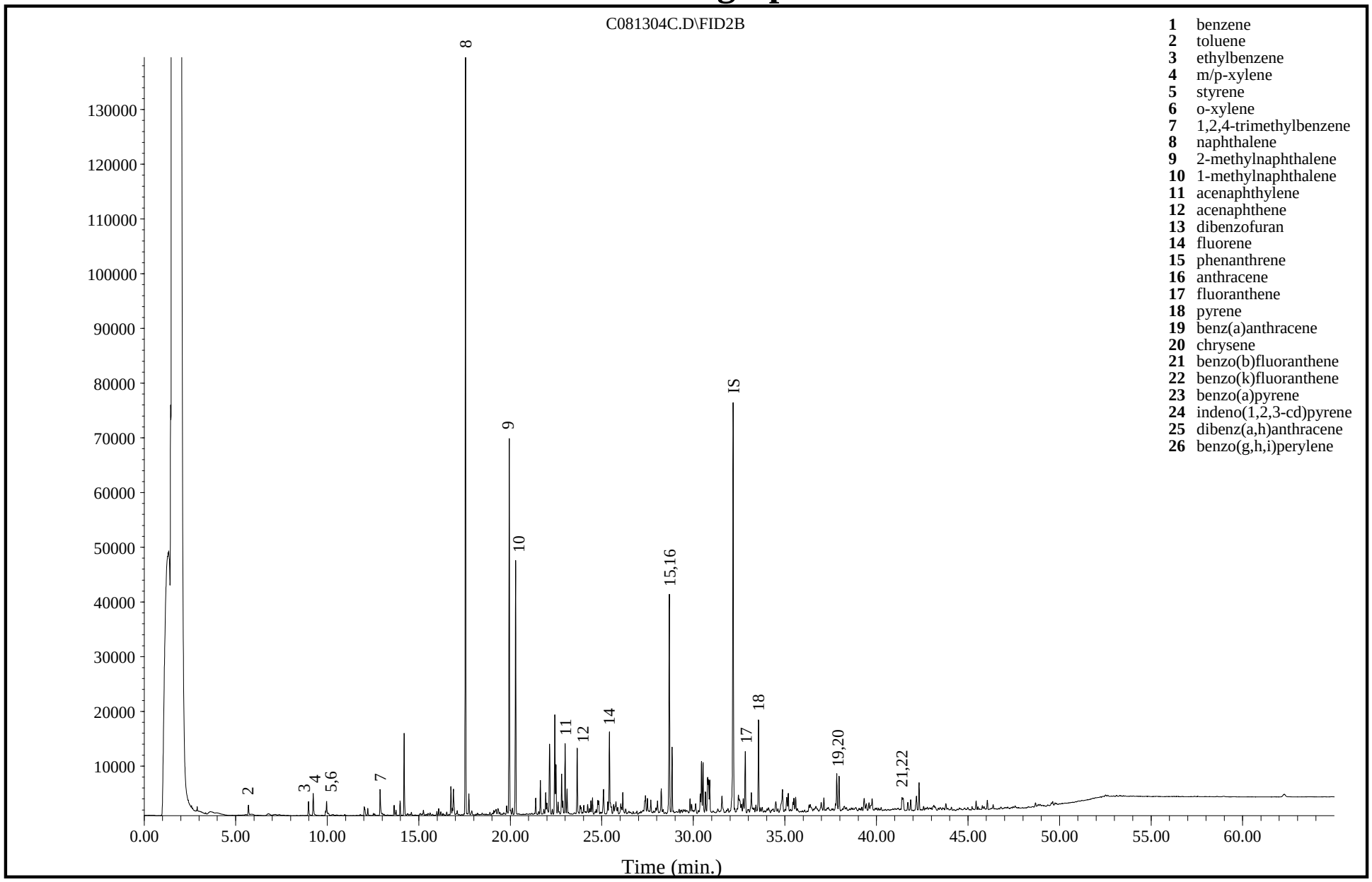
Custodian: Carrie McGinn Jr

Project Manager: James A [illegible]

Appendix B

GC/FID Fingerprints

GC/FID Fingerprint

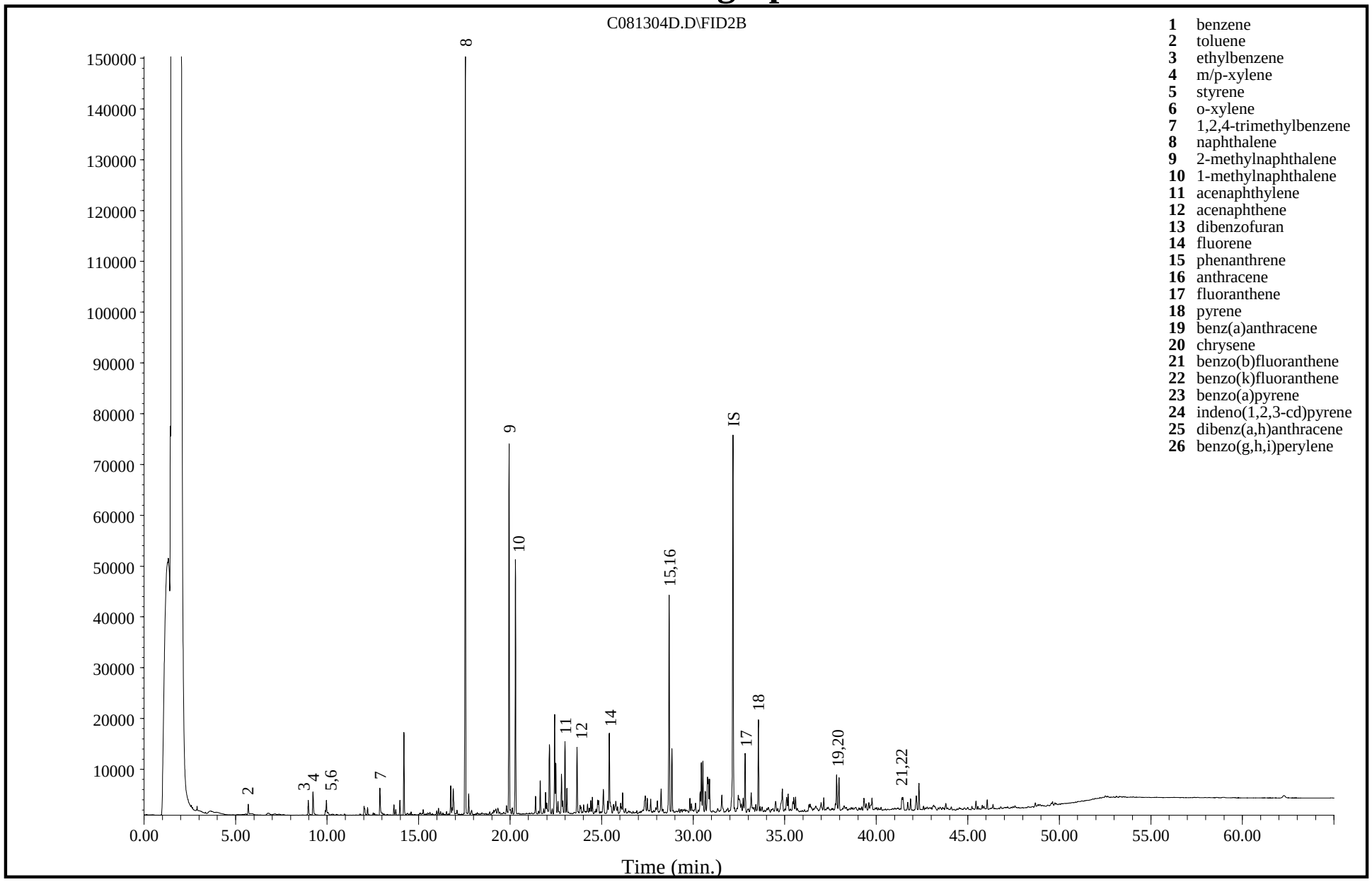


Extraction Date: 08/13/2010
Analysis Date: 08/13/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **MW-3(9-11)**
Laboratory ID: PA100709-01-R-D
Method: EPA 8100M

GC/FID Fingerprint

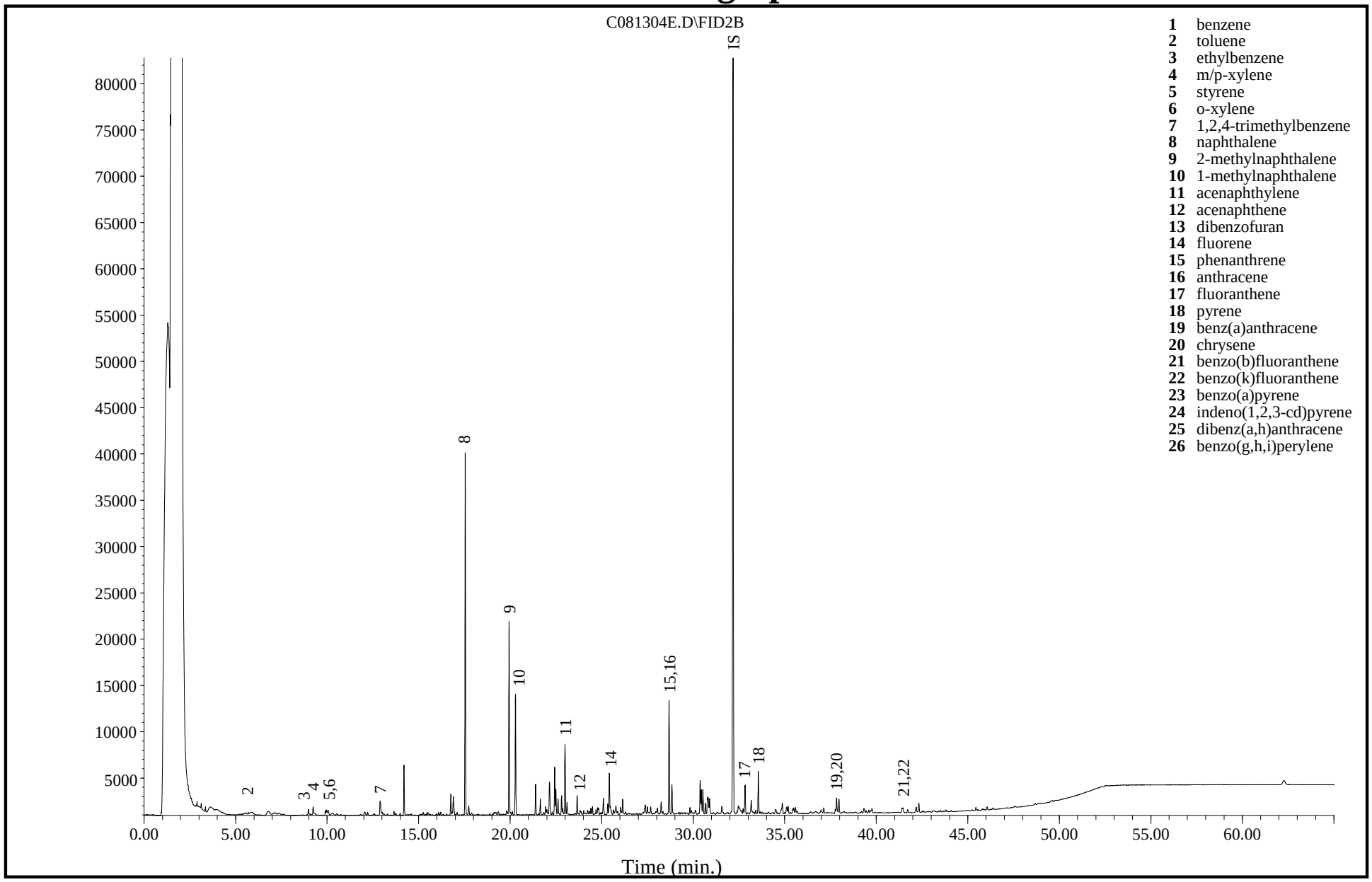


Extraction Date: 08/13/2010
Analysis Date: 08/13/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **MW-3(9-11)**
Laboratory ID: PA100709-01DUP-R-D
Method: EPA 8100M

GC/FID Fingerprint

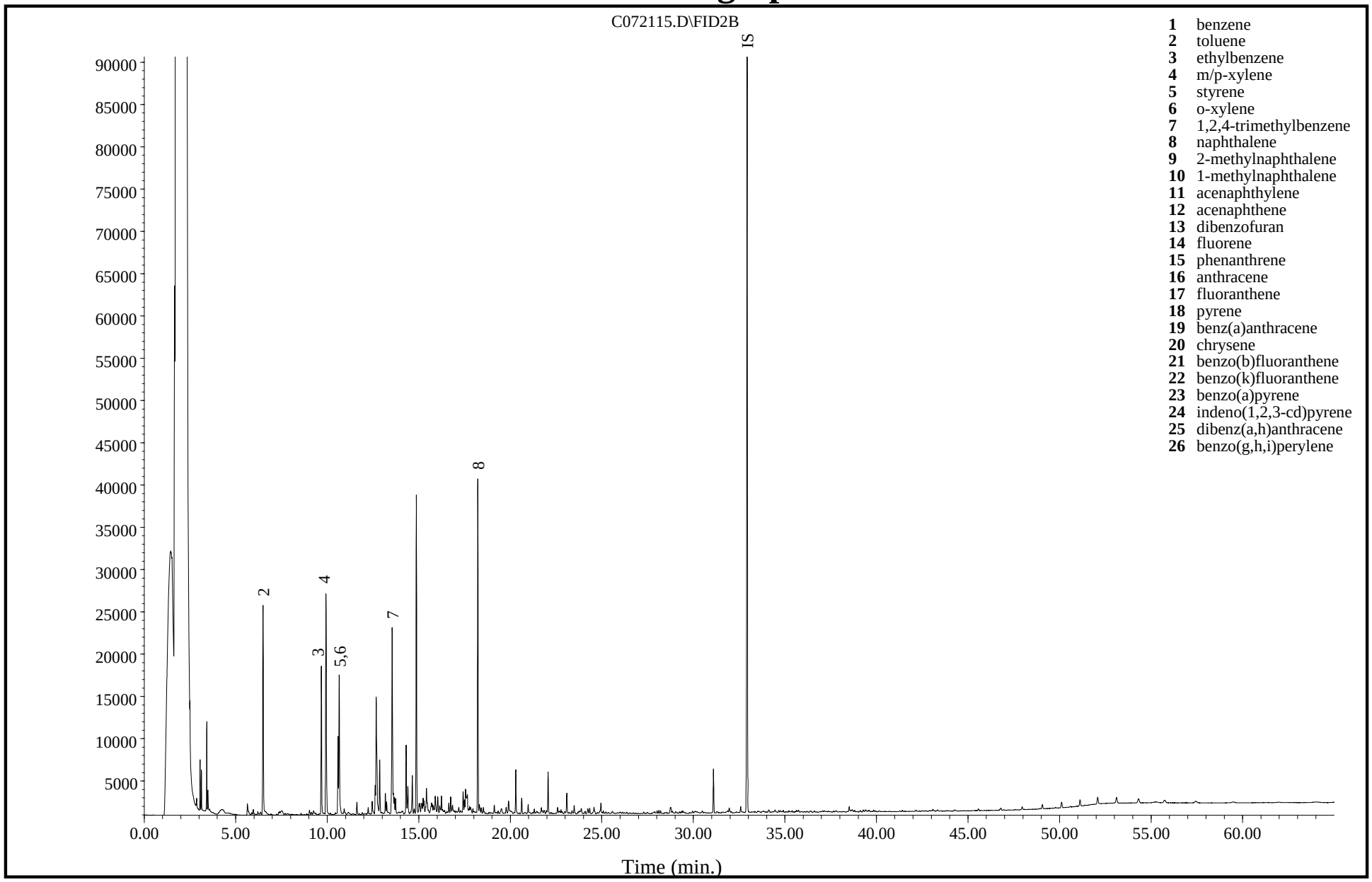


Extraction Date: 08/13/2010
Analysis Date: 08/14/2010

Field ID: **SB-7(17-19)**
Laboratory ID: PA100709-02-R-D
Method: EPA 8100M

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

GC/FID Fingerprint

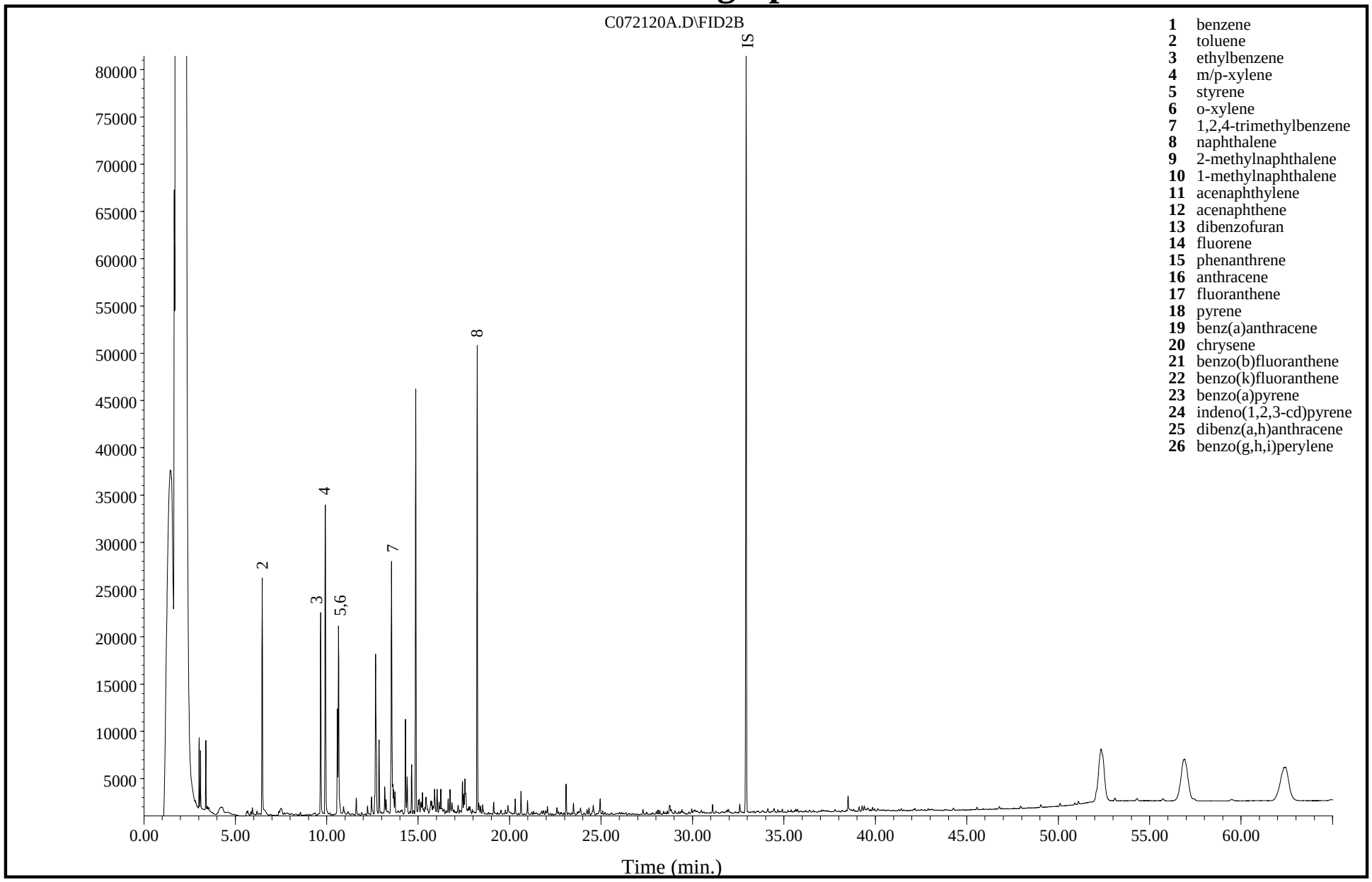


Extraction Date: 07/15/2010
Analysis Date: 07/22/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **Exposed Pipe 1**
Laboratory ID: PA100709-03-R-D
Method: EPA 8100M

GC/FID Fingerprint

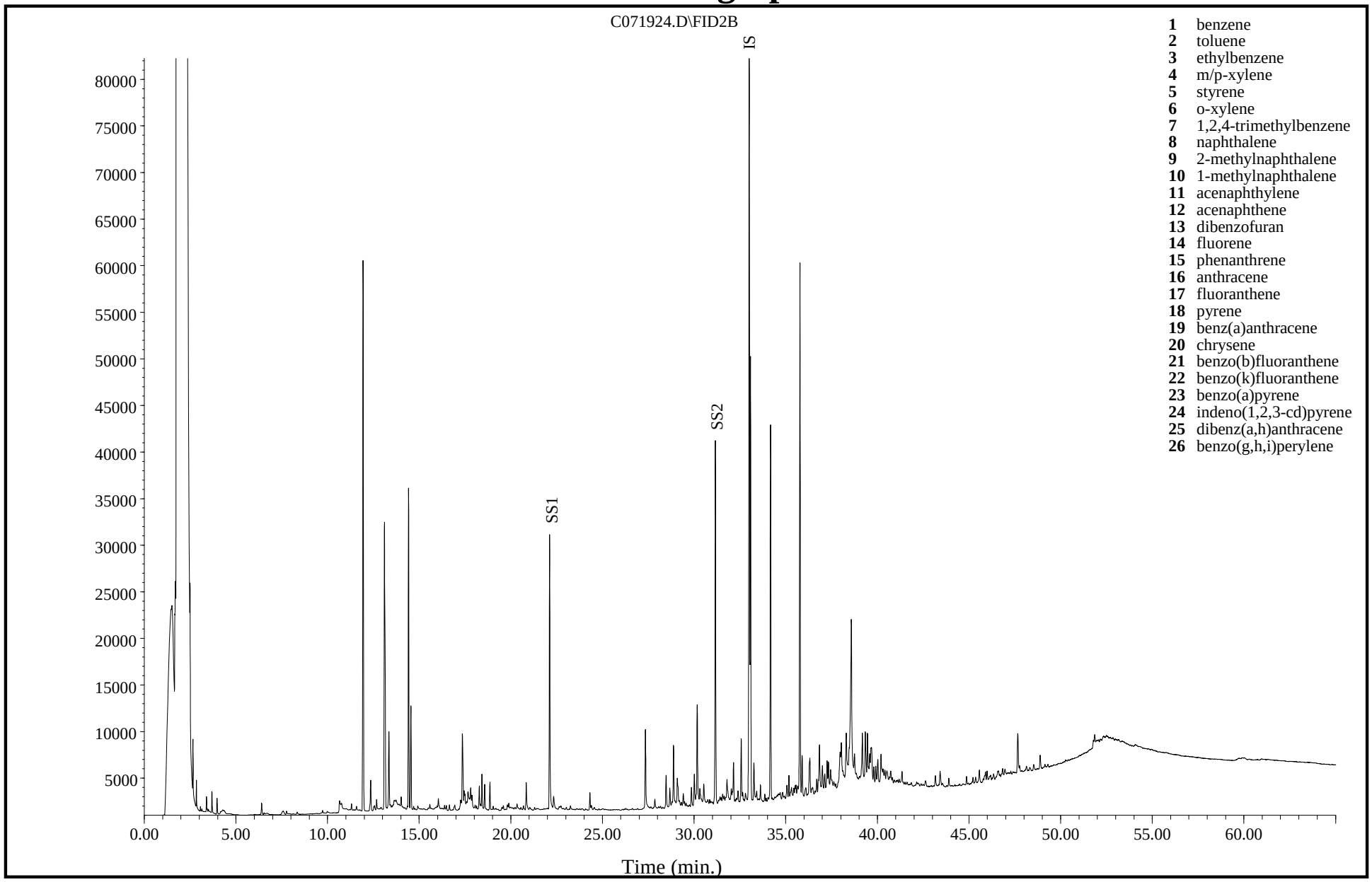


Extraction Date: 07/15/2010
Analysis Date: 07/22/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID:	**Exposed Pipe 1**
Laboratory ID:	PA100709-03DUP-R-D
Method:	EPA 8100M

GC/FID Fingerprint

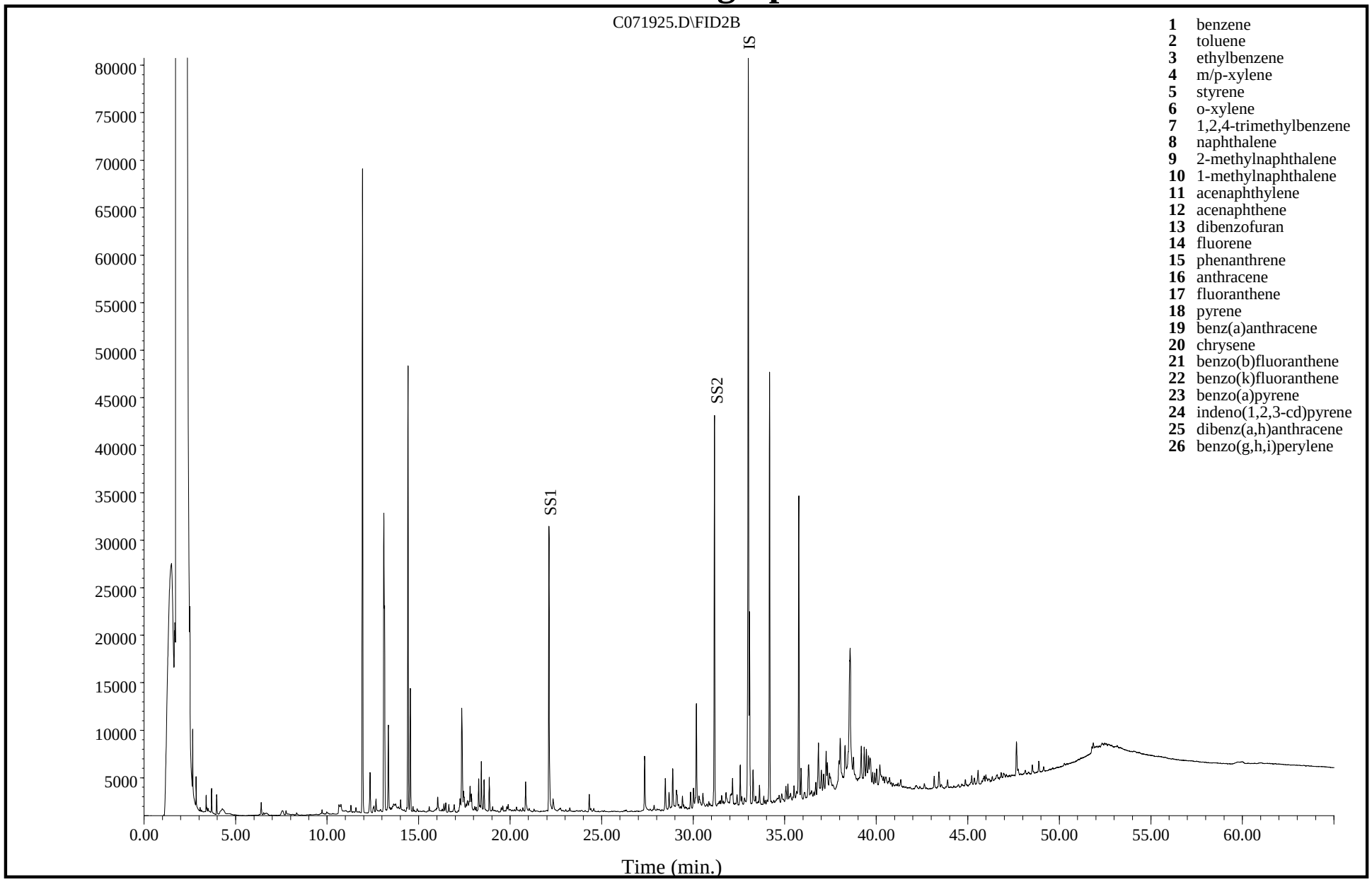


Extraction Date: 07/16/2010
Analysis Date: 07/20/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **SB-1(18-20)**
Laboratory ID: PA100709-04
Method: EPA 8100M

GC/FID Fingerprint

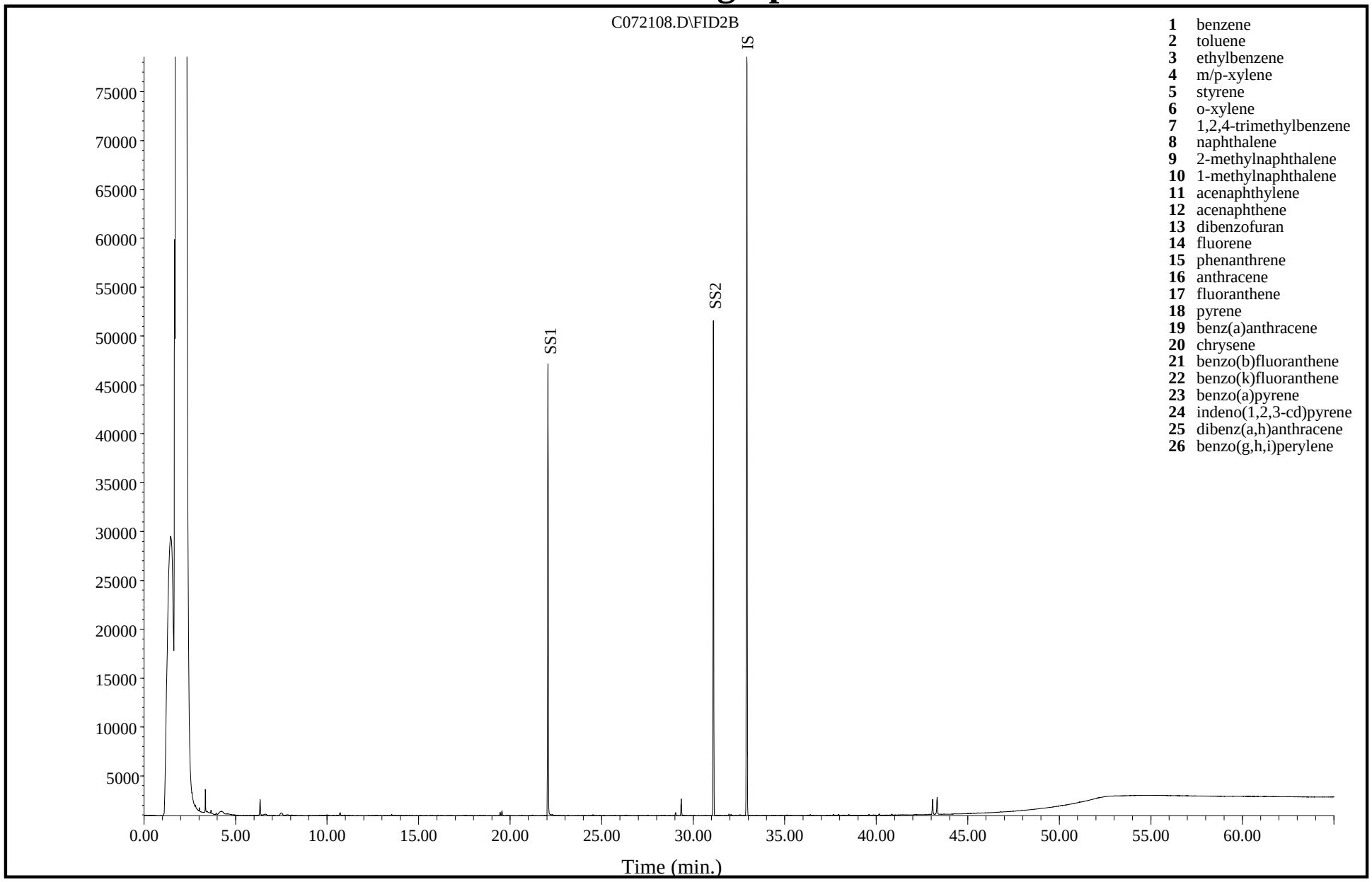


Extraction Date: 07/16/2010
Analysis Date: 07/20/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **SB-1(18-20)**
Laboratory ID: PA100709-04DUP
Method: EPA 8100M

GC/FID Fingerprint

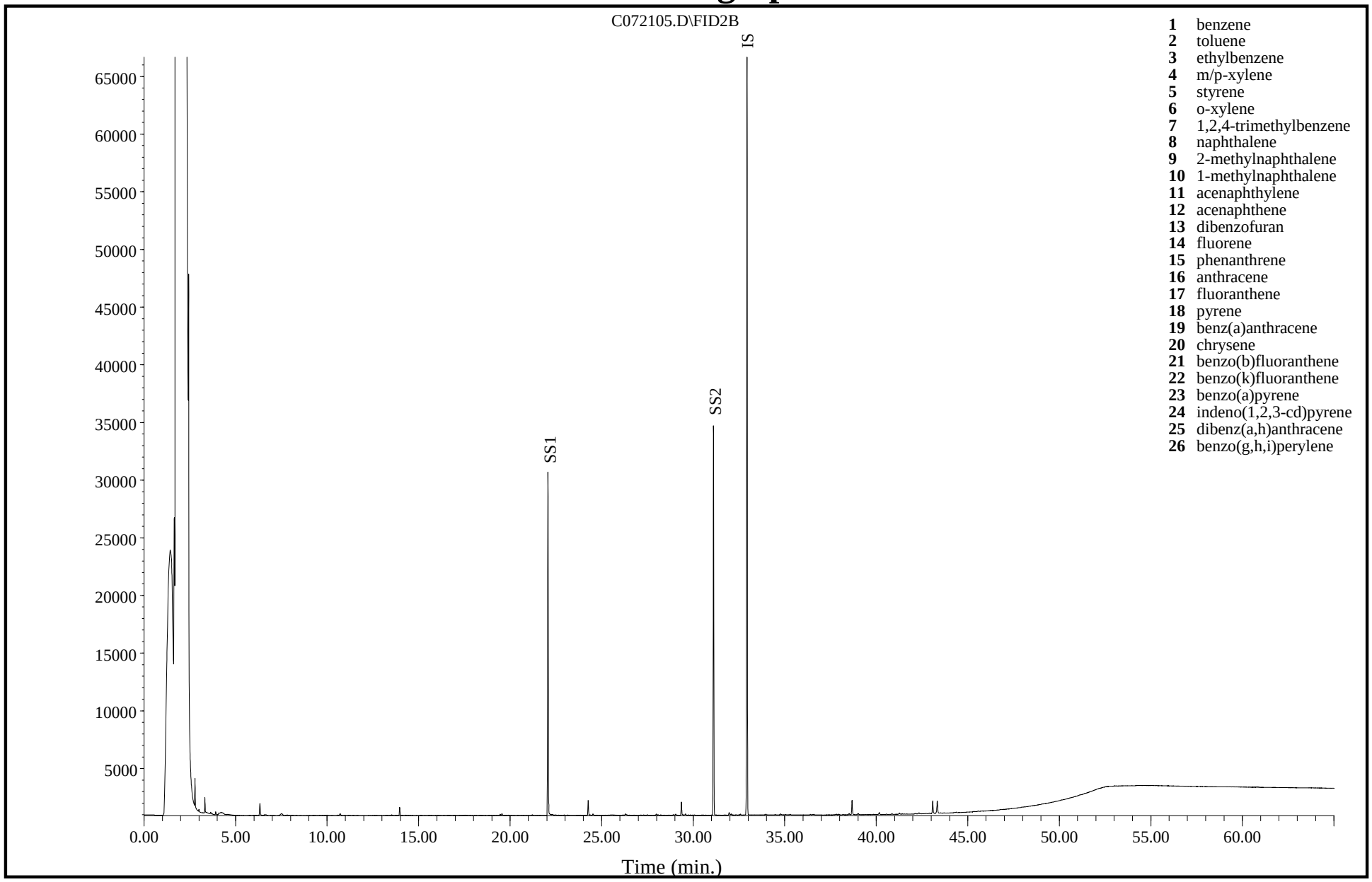


Extraction Date: 07/15/2010
Analysis Date: 07/22/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **Aqueous Blank**
Laboratory ID: QC100715-AB
Method: EPA 8100M

GC/FID Fingerprint

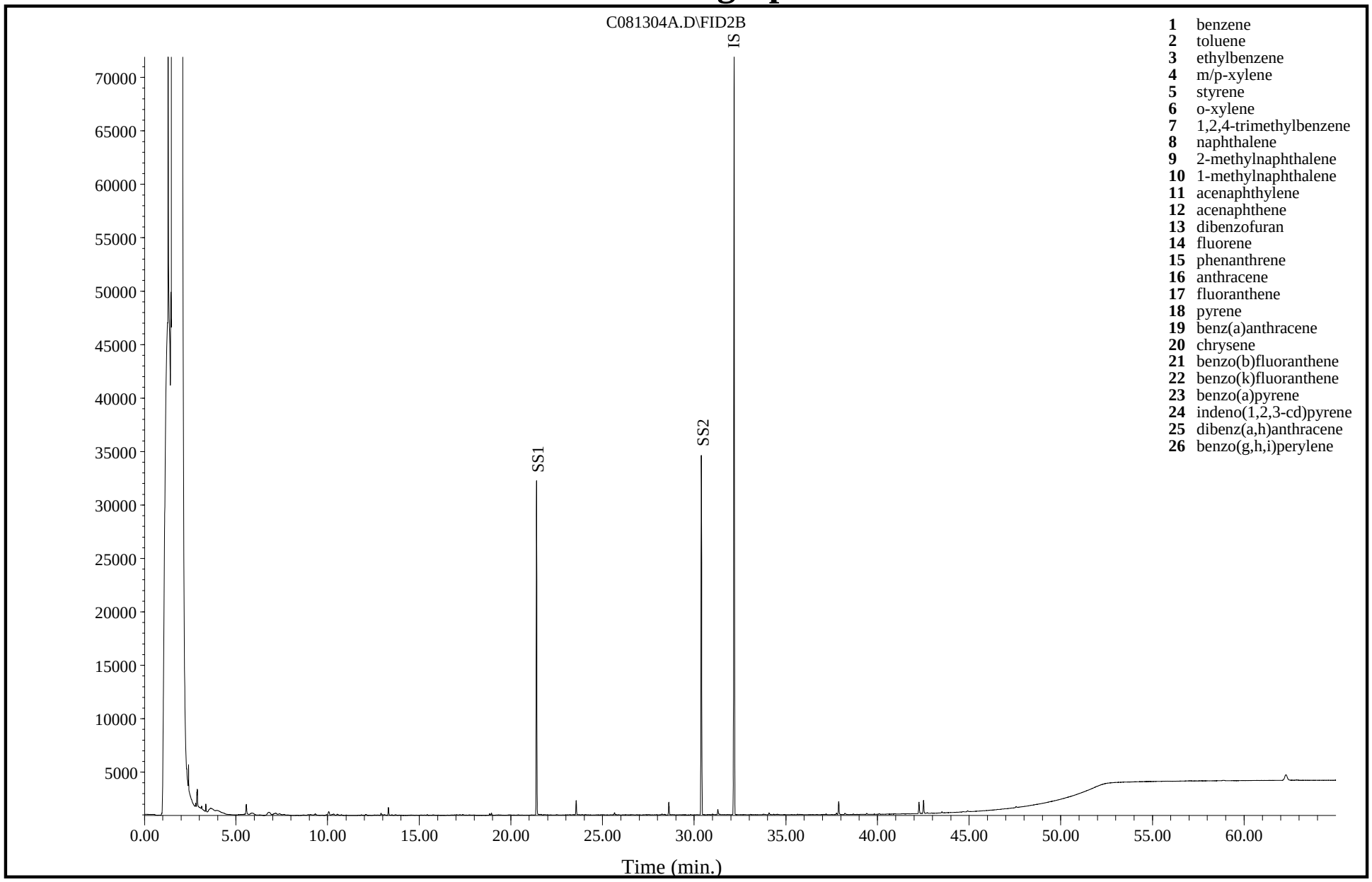


Extraction Date: 07/16/2010
Analysis Date: 07/21/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **Soil Blank**
Laboratory ID: QC100716-SB
Method: EPA 8100M

GC/FID Fingerprint



Extraction Date: 08/13/2010
Analysis Date: 08/13/2010

IS – 5a-androstane
SS1 – 2-fluorobiphenyl
SS2 – o-terphenyl

Field ID: **Soil Blank**
Laboratory ID: QC100813-SB
Method: EPA 8100M

Appendix C

MAH/PAH Concentrations

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01-R-D1		
File ID:	E081319.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.08
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Benzene	2.95	B	0.210	0.105	
Toluene	27.0	B	0.210	0.105	
Ethylbenzene	31.8		0.210	0.105	
m/p-Xylenes	58.3		0.210	0.105	
Styrene	5.26	B	0.210	0.105	
o-Xylene	30.3		0.210	0.105	
Isopropylbenzene	2.9		0.210	0.105	
n-Propylbenzene	2.35		0.210	0.105	
1,3,5-Trimethylbenzene	15.9		0.210	0.105	
1,2,4-Trimethylbenzene	51.1		0.210	0.105	
t-Butylbenzene		U	0.210	0.105	
sec-Butylbenzene	0.187	J	0.210	0.105	
p-Isopropyltoluene	4.01		0.210	0.105	
n-Butylbenzene	2.53		0.210	0.105	
C1 - Benzene	19.2	B	0.210	0.105	
C2 - Benzene	64.3		0.210	0.105	
C3 - Benzene	64.0		0.210	0.105	
C4 - Benzene	34.1		0.210	0.105	
C5 - Benzene	9.24		0.210	0.105	
trans-Decalin	0.291		0.210	0.105	
cis-Decalin		U	0.210	0.105	
Naphthalene	1,390	D	0.210	0.105	
2-Methylnaphthalene	811		0.210	0.105	
1-Methylnaphthalene	543		0.210	0.105	
C1 - Naphthalene	828		0.210	0.105	
C2 - Naphthalene	355		0.210	0.105	
C3 - Naphthalene	93.9		0.210	0.105	
C4 - Naphthalene	22.2		0.210	0.105	
Acenaphthylene	114		0.210	0.105	
Acenaphthene	93.6		0.210	0.105	
Dibenzofuran	18.2		0.210	0.105	
Fluorene	181		0.210	0.105	
C1 - Fluorene	81.2		0.210	0.105	
C2 - Fluorene	38.6		0.210	0.105	
C3 - Fluorene	15.5		0.210	0.105	
Phenanthrene	533		0.210	0.105	
Anthracene	165		0.210	0.105	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01-R-D1		
File ID:	E081319.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.08
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	336	0.210	0.105	
C2 - Phenanthrene/Anthracene	116	0.210	0.105	
C3 - Phenanthrene/Anthracene	29.2	0.210	0.105	
C4 - Phenanthrene/Anthracene	6.38	0.210	0.105	
Dibenzothiophene	69.1	0.210	0.105	
C1 - Dibenzothiophene	69.8	0.210	0.105	
C2 - Dibenzothiophene	42.1	0.210	0.105	
C3 - Dibenzothiophene	16.8	0.210	0.105	
C4 - Dibenzothiophene	4.21	0.210	0.105	
Benzo(b)naphtho(2,1-d)thiophene	15.1	0.210	0.105	
Fluoranthene	152	0.210	0.105	
Pyrene	238	0.210	0.105	
C1 - Fluoranthene/Pyrene	208	0.210	0.105	
C2 - Fluoranthene/Pyrene	59.8	0.210	0.105	
C3 - Fluoranthene/Pyrene	17.1	0.210	0.105	
Benz(a)anthracene	91.8	0.210	0.105	
Chrysene*	87.9	0.210	0.105	
C1 - Benz(a)anthracene/Chrysene	65.2	0.210	0.105	
C2 - Benz(a)anthracene/Chrysene	20.0	0.210	0.105	
C3 - Benz(a)anthracene/Chrysene	5.54	0.210	0.105	
C4 - Benz(a)anthracene/Chrysene	1.9	0.210	0.105	
Benzo(b)fluoranthene	29.9	0.210	0.105	
Benzo(j/k)fluoranthene	39.8	0.210	0.105	
Benzo(e)pyrene	34.0	0.210	0.105	
Benzo(a)pyrene	74.2	0.210	0.105	
Perylene	9.96	0.210	0.105	
Indeno(1,2,3-cd)pyrene	23.3	0.210	0.105	
Dibenz(a,h)anthracene	7.8	0.210	0.105	
Benzo(g,h,i)perylene	22.7	0.210	0.105	
Coronene	4.73	0.210	0.105	
Retene	U	0.210	0.105	
Benzo(b/c)fluorenes	32.9	0.210	0.105	
2-Methylpyrene	28.0	0.210	0.105	
4-Methylpyrene	24.8	0.210	0.105	
1-Methylpyrene	28.0	0.210	0.105	
Heptadecane	6.58	0.210	0.105	
Pristane	4.22	0.210	0.105	
Octadecane	5.36	0.210	0.105	
Phytane	2.69	0.210	0.105	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01-R-D1		
File ID:	E081319.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.08
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	2.03	0.210	0.105	
2,6,10-trimethyltridecane	2.87	0.210	0.105	
Norpristane	2.67	0.210	0.105	
Total PAH (16)	3,240	0.210	0.105	
Total PAH (42)	5,810	0.210	0.105	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	62	50 - 120
Phenanthrene-d10	70	50 - 120
Benzo(a)pyrene-d12	78	50 - 120
Perylene-d12	95	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-7(17-19)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-02-R-D1		
File ID:	E081323.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/28/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.05
Date Cleanup:	NA	Percent Solid:	81.9%
Date Analyzed:	8/15/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Benzene	0.258	B	0.232	0.116	
Toluene	3.55	B	0.232	0.116	
Ethylbenzene	8.5		0.232	0.116	
m/p-Xylenes	14.4		0.232	0.116	
Styrene	5.57	B	0.232	0.116	
o-Xylene	7.08		0.232	0.116	
Isopropylbenzene	0.498		0.232	0.116	
n-Propylbenzene	0.861		0.232	0.116	
1,3,5-Trimethylbenzene	4.95		0.232	0.116	
1,2,4-Trimethylbenzene	14.8		0.232	0.116	
t-Butylbenzene		U	0.232	0.116	
sec-Butylbenzene		U	0.232	0.116	
p-Isopropyltoluene	1.05		0.232	0.116	
n-Butylbenzene	0.667		0.232	0.116	
C1 - Benzene	2.55	B	0.232	0.116	
C2 - Benzene	16.3		0.232	0.116	
C3 - Benzene	18.2		0.232	0.116	
C4 - Benzene	9.51		0.232	0.116	
C5 - Benzene	2.69		0.232	0.116	
trans-Decalin		U	0.232	0.116	
cis-Decalin		U	0.232	0.116	
Naphthalene	468		0.232	0.116	
2-Methylnaphthalene	272		0.232	0.116	
1-Methylnaphthalene	167		0.232	0.116	
C1 - Naphthalene	271		0.232	0.116	
C2 - Naphthalene	108		0.232	0.116	
C3 - Naphthalene	28.2		0.232	0.116	
C4 - Naphthalene	6.49		0.232	0.116	
Acenaphthylene	91.6		0.232	0.116	
Acenaphthene	11.2		0.232	0.116	
Dibenzofuran	6.22		0.232	0.116	
Fluorene	54.2		0.232	0.116	
C1 - Fluorene	6.05		0.232	0.116	
C2 - Fluorene	1.64		0.232	0.116	
C3 - Fluorene	0.315		0.232	0.116	
Phenanthrene	162		0.232	0.116	
Anthracene	45.3		0.232	0.116	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-7(17-19)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-02-R-D1		
File ID:	E081323.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/28/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.05
Date Cleanup:	NA	Percent Solid:	81.9%
Date Analyzed:	8/15/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	98.3	0.232	0.116	
C2 - Phenanthrene/Anthracene	30.6	0.232	0.116	
C3 - Phenanthrene/Anthracene	7.1	0.232	0.116	
C4 - Phenanthrene/Anthracene	1.59	0.232	0.116	
Dibenzothiophene	20.7	0.232	0.116	
C1 - Dibenzothiophene	20.8	0.232	0.116	
C2 - Dibenzothiophene	11.6	0.232	0.116	
C3 - Dibenzothiophene	4.13	0.232	0.116	
C4 - Dibenzothiophene	0.940	0.232	0.116	
Benzo(b)naphtho(2,1-d)thiophene	4.01	0.232	0.116	
Fluoranthene	43.7	0.232	0.116	
Pyrene	64.1	0.232	0.116	
C1 - Fluoranthene/Pyrene	55.5	0.232	0.116	
C2 - Fluoranthene/Pyrene	14.1	0.232	0.116	
C3 - Fluoranthene/Pyrene	3.67	0.232	0.116	
Benz(a)anthracene	22.6	0.232	0.116	
Chrysene*	22.5	0.232	0.116	
C1 - Benz(a)anthracene/Chrysene	14.6	0.232	0.116	
C2 - Benz(a)anthracene/Chrysene	4.36	0.232	0.116	
C3 - Benz(a)anthracene/Chrysene	1.09	0.232	0.116	
C4 - Benz(a)anthracene/Chrysene	U	0.232	0.116	
Benzo(b)fluoranthene	6.22	0.232	0.116	
Benzo(j/k)fluoranthene	9.16	0.232	0.116	
Benzo(e)pyrene	7.02	0.232	0.116	
Benzo(a)pyrene	14.6	0.232	0.116	
Perylene	1.94	0.232	0.116	
Indeno(1,2,3-cd)pyrene	4.73	0.232	0.116	
Dibenz(a,h)anthracene	1.51	0.232	0.116	
Benzo(g,h,i)perylene	4.55	0.232	0.116	
Coronene	0.973	0.232	0.116	
Retene	U	0.232	0.116	
Benzo(b/c)fluorenes	8.63	0.232	0.116	
2-Methylpyrene	7.02	0.232	0.116	
4-Methylpyrene	5.76	0.232	0.116	
1-Methylpyrene	8.3	0.232	0.116	
Heptadecane	1.68	0.232	0.116	
Pristane	0.809	0.232	0.116	
Octadecane	1.33	0.232	0.116	
Phytane	0.573	0.232	0.116	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-7(17-19)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-02-R-D1		
File ID:	E081323.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/28/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.05
Date Cleanup:	NA	Percent Solid:	81.9%
Date Analyzed:	8/15/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.518	0.232	0.116	
2,6,10-trimethyltridecane	0.611	0.232	0.116	
Norpristane	0.604	0.232	0.116	
Total PAH (16)	1,020	0.232	0.116	
Total PAH (42)	1,750	0.232	0.116	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	71	50 - 120
Phenanthrene-d10	78	50 - 120
Benzo(a)pyrene-d12	78	50 - 120
Perylene-d12	81	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03-R-D		
File ID:	E071937.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	38.67
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Benzene	1,900	B	5.17	2.58	
Toluene	6,410	B	5.17	2.58	
Ethylbenzene	3,940		5.17	2.58	
m/p-Xylenes	6,790		5.17	2.58	
Styrene	2,430	B	5.17	2.58	
o-Xylene	3,430		5.17	2.58	
Isopropylbenzene	335		5.17	2.58	
n-Propylbenzene	301		5.17	2.58	
1,3,5-Trimethylbenzene	1,380		5.17	2.58	
1,2,4-Trimethylbenzene	4,290		5.17	2.58	
t-Butylbenzene		U	5.17	2.58	
sec-Butylbenzene	21.8		5.17	2.58	
p-Isopropyltoluene	246		5.17	2.58	
n-Butylbenzene	168		5.17	2.58	
C1 - Benzene	4,620	B	5.17	2.58	
C2 - Benzene	7,850		5.17	2.58	
C3 - Benzene	6,450		5.17	2.58	
C4 - Benzene	1,440		5.17	2.58	
C5 - Benzene	159		5.17	2.58	
trans-Decalin	30.1		5.17	2.58	
cis-Decalin		U	5.17	2.58	
Naphthalene	8,020		5.17	2.58	
2-Methylnaphthalene	388		5.17	2.58	
1-Methylnaphthalene	230		5.17	2.58	
C1 - Naphthalene	383	B	5.17	2.58	
C2 - Naphthalene	74.8		5.17	2.58	
C3 - Naphthalene	17.5		5.17	2.58	
C4 - Naphthalene	10.1		5.17	2.58	
Acenaphthylene	41.1	B	5.17	2.58	
Acenaphthene	13.8		5.17	2.58	
Dibenzofuran	3.34	J	5.17	2.58	
Fluorene	27.0		5.17	2.58	
C1 - Fluorene	12.3		5.17	2.58	
C2 - Fluorene	12.4		5.17	2.58	
C3 - Fluorene		U	5.17	2.58	
Phenanthrene	64.7		5.17	2.58	
Anthracene	9.45		5.17	2.58	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03-R-D		
File ID:	E071937.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	38.67
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene	22.6		5.17	2.58	
C2 - Phenanthrene/Anthracene	12.8		5.17	2.58	
C3 - Phenanthrene/Anthracene	8.11		5.17	2.58	
C4 - Phenanthrene/Anthracene	13.9		5.17	2.58	
Dibenzothiophene	7.88		5.17	2.58	
C1 - Dibenzothiophene	8.69		5.17	2.58	
C2 - Dibenzothiophene		U	5.17	2.58	
C3 - Dibenzothiophene		U	5.17	2.58	
C4 - Dibenzothiophene		U	5.17	2.58	
Benzo(b)naphtho(2,1-d)thiophene		U	5.17	2.58	
Fluoranthene	9.79		5.17	2.58	
Pyrene	11.5		5.17	2.58	
C1 - Fluoranthene/Pyrene	13.0		5.17	2.58	
C2 - Fluoranthene/Pyrene	12.9		5.17	2.58	
C3 - Fluoranthene/Pyrene	7.2		5.17	2.58	
Benz(a)anthracene	2.74	J	5.17	2.58	
Chrysene*	3.45	J	5.17	2.58	
C1 - Benz(a)anthracene/Chrysene		U	5.17	2.58	
C2 - Benz(a)anthracene/Chrysene		U	5.17	2.58	
C3 - Benz(a)anthracene/Chrysene		U	5.17	2.58	
C4 - Benz(a)anthracene/Chrysene		U	5.17	2.58	
Benzo(b)fluoranthene		U	5.17	2.58	
Benzo(j/k)fluoranthene		U	5.17	2.58	
Benzo(e)pyrene		U	5.17	2.58	
Benzo(a)pyrene		U	5.17	2.58	
Perylene		U	5.17	2.58	
Indeno(1,2,3-cd)pyrene		U	5.17	2.58	
Dibenz(a,h)anthracene		U	5.17	2.58	
Benzo(g,h,i)perylene		U	5.17	2.58	
Coronene		U	5.17	2.58	
Retene		U	5.17	2.58	
Benzo(b/c)fluorenes	3.11	J	5.17	2.58	
2-Methylpyrene		U	5.17	2.58	
4-Methylpyrene		U	5.17	2.58	
1-Methylpyrene		U	5.17	2.58	
Heptadecane	5.99	B	5.17	2.58	
Pristane		U	5.17	2.58	
Octadecane	7.29	B	5.17	2.58	
Phytane		U	5.17	2.58	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03-R-D		
File ID:	E071937.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	38.67
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
2,6,10-trimethyldodecane		U	5.17	2.58	
2,6,10-trimethyltridecane		U	5.17	2.58	
Norpristane		U	5.17	2.58	
Total PAH (16)	8,200		5.17	2.58	
Total PAH (42)	8,820		5.17	2.58	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	87	50 - 120
Phenanthrene-d10	89	50 - 120
Benzo(a)pyrene-d12	81	50 - 120
Perylene-d12	83	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04		
File ID:	E071939.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.52
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					
Benzene	0.078	B	0.005	0.002	
Toluene	0.078	B	0.005	0.002	
Ethylbenzene	0.102		0.005	0.002	
m/p-Xylenes	0.075		0.005	0.002	
Styrene	0.108	B	0.005	0.002	
o-Xylene	0.037		0.005	0.002	
Isopropylbenzene	0.023		0.005	0.002	
n-Propylbenzene	0.027		0.005	0.002	
1,3,5-Trimethylbenzene	0.016		0.005	0.002	
1,2,4-Trimethylbenzene	0.042		0.005	0.002	
t-Butylbenzene		U	0.005	0.002	
sec-Butylbenzene		U	0.005	0.002	
p-Isopropyltoluene	12.6		0.005	0.002	
n-Butylbenzene	0.025		0.005	0.002	
C1 - Benzene	0.056	B	0.005	0.002	
C2 - Benzene	0.118		0.005	0.002	
C3 - Benzene	1.93		0.005	0.002	
C4 - Benzene	4.4		0.005	0.002	
C5 - Benzene	0.179		0.005	0.002	
trans-Decalin		U	0.005	0.002	
cis-Decalin	0.010		0.005	0.002	
Naphthalene	0.391		0.005	0.002	
2-Methylnaphthalene	0.062	B	0.005	0.002	
1-Methylnaphthalene	0.071		0.005	0.002	
C1 - Naphthalene	0.082	B	0.005	0.002	
C2 - Naphthalene	0.052		0.005	0.002	
C3 - Naphthalene	0.029		0.005	0.002	
C4 - Naphthalene	0.014	B	0.005	0.002	
Acenaphthylene	0.052	B	0.005	0.002	
Acenaphthene	0.029		0.005	0.002	
Dibenzofuran	0.005	J	0.005	0.002	
Fluorene	0.023		0.005	0.002	
C1 - Fluorene	0.026		0.005	0.002	
C2 - Fluorene	0.038		0.005	0.002	
C3 - Fluorene	0.033		0.005	0.002	
Phenanthrene	0.148	B	0.005	0.002	
Anthracene	0.049		0.005	0.002	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04		
File ID:	E071939.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.52
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.167	B	0.005	0.002	
C2 - Phenanthrene/Anthracene	0.150	B	0.005	0.002	
C3 - Phenanthrene/Anthracene	2.04	B	0.005	0.002	
C4 - Phenanthrene/Anthracene	5.96		0.005	0.002	
Dibenzothiophene	0.020		0.005	0.002	
C1 - Dibenzothiophene	0.026		0.005	0.002	
C2 - Dibenzothiophene	0.056	B	0.005	0.002	
C3 - Dibenzothiophene	0.027		0.005	0.002	
C4 - Dibenzothiophene	0.421		0.005	0.002	
Benzo(b)naphtho(2,1-d)thiophene	0.010		0.005	0.002	
Fluoranthene	0.080		0.005	0.002	
Pyrene	0.105	B	0.005	0.002	
C1 - Fluoranthene/Pyrene	0.338	B	0.005	0.002	
C2 - Fluoranthene/Pyrene	0.054		0.005	0.002	
C3 - Fluoranthene/Pyrene	0.032		0.005	0.002	
Benz(a)anthracene	0.048		0.005	0.002	
Chrysene*	0.054		0.005	0.002	
C1 - Benz(a)anthracene/Chrysene	0.052		0.005	0.002	
C2 - Benz(a)anthracene/Chrysene	0.033		0.005	0.002	
C3 - Benz(a)anthracene/Chrysene	0.023		0.005	0.002	
C4 - Benz(a)anthracene/Chrysene		U	0.005	0.002	
Benzo(b)fluoranthene	0.024		0.005	0.002	
Benzo(j/k)fluoranthene	0.028		0.005	0.002	
Benzo(e)pyrene	0.027		0.005	0.002	
Benzo(a)pyrene	0.035		0.005	0.002	
Perylene	0.008		0.005	0.002	
Indeno(1,2,3-cd)pyrene	0.018		0.005	0.002	
Dibenz(a,h)anthracene	0.005		0.005	0.002	
Benzo(g,h,i)perylene	0.019		0.005	0.002	
Coronene	0.004	J	0.005	0.002	
Retene	37.8	E	0.005	0.002	
Benzo(b/c)fluorenes	0.011		0.005	0.002	
2-Methylpyrene	0.014		0.005	0.002	
4-Methylpyrene	0.015		0.005	0.002	
1-Methylpyrene	0.014		0.005	0.002	
Heptadecane	0.015	B	0.005	0.002	
Pristane	0.011	B	0.005	0.002	
Octadecane	0.018	B	0.005	0.002	
Phytane	0.007	B	0.005	0.002	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04		
File ID:	E071939.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.52
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.009	0.005	0.002	
2,6,10-trimethyltridecane	0.007	0.005	0.002	
Norpristane	0.004 J	0.005	0.002	
Total PAH (16)	1.11	0.005	0.002	
Total PAH (42)	10.8	0.005	0.002	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	54	50 - 120
Phenanthrene-d10	66	50 - 120
Benzo(a)pyrene-d12	62	50 - 120
Perylene-d12	63	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SB		
File ID:	E081317.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.008 J	0.010	0.005	
Toluene	0.018	0.010	0.005	
Ethylbenzene	U	0.010	0.005	
m/p-Xylenes	U	0.010	0.005	
Styrene	0.013	0.010	0.005	
o-Xylene	U	0.010	0.005	
Isopropylbenzene	U	0.010	0.005	
n-Propylbenzene	U	0.010	0.005	
1,3,5-Trimethylbenzene	U	0.010	0.005	
1,2,4-Trimethylbenzene	U	0.010	0.005	
t-Butylbenzene	U	0.010	0.005	
sec-Butylbenzene	U	0.010	0.005	
p-Isopropyltoluene	U	0.010	0.005	
n-Butylbenzene	U	0.010	0.005	
C1 - Benzene	0.011	0.010	0.005	
C2 - Benzene	U	0.010	0.005	
C3 - Benzene	U	0.010	0.005	
C4 - Benzene	U	0.010	0.005	
C5 - Benzene	U	0.010	0.005	
trans-Decalin	U	0.010	0.005	
cis-Decalin	U	0.010	0.005	
Naphthalene	U	0.010	0.005	
2-Methylnaphthalene	U	0.010	0.005	
1-Methylnaphthalene	U	0.010	0.005	
C1 - Naphthalene	U	0.010	0.005	
C2 - Naphthalene	U	0.010	0.005	
C3 - Naphthalene	U	0.010	0.005	
C4 - Naphthalene	U	0.010	0.005	
Acenaphthylene	U	0.010	0.005	
Acenaphthene	U	0.010	0.005	
Dibenzofuran	U	0.010	0.005	
Fluorene	U	0.010	0.005	
C1 - Fluorene	U	0.010	0.005	
C2 - Fluorene	U	0.010	0.005	
C3 - Fluorene	U	0.010	0.005	
Phenanthrene	U	0.010	0.005	
Anthracene	U	0.010	0.005	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SB		
File ID:	E081317.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		U	0.010	0.005	
C2 - Phenanthrene/Anthracene		U	0.010	0.005	
C3 - Phenanthrene/Anthracene		U	0.010	0.005	
C4 - Phenanthrene/Anthracene		U	0.010	0.005	
Dibenzothiophene		U	0.010	0.005	
C1 - Dibenzothiophene		U	0.010	0.005	
C2 - Dibenzothiophene		U	0.010	0.005	
C3 - Dibenzothiophene		U	0.010	0.005	
C4 - Dibenzothiophene		U	0.010	0.005	
Benzo(b)naphtho(2,1-d)thiophene		U	0.010	0.005	
Fluoranthene		U	0.010	0.005	
Pyrene		U	0.010	0.005	
C1 - Fluoranthene/Pyrene		U	0.010	0.005	
C2 - Fluoranthene/Pyrene		U	0.010	0.005	
C3 - Fluoranthene/Pyrene		U	0.010	0.005	
Benz(a)anthracene		U	0.010	0.005	
Chrysene*		U	0.010	0.005	
C1 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
Benzo(b)fluoranthene		U	0.010	0.005	
Benzo(j/k)fluoranthene		U	0.010	0.005	
Benzo(e)pyrene		U	0.010	0.005	
Benzo(a)pyrene		U	0.010	0.005	
Perylene		U	0.010	0.005	
Indeno(1,2,3-cd)pyrene		U	0.010	0.005	
Dibenz(a,h)anthracene		U	0.010	0.005	
Benzo(g,h,i)perylene		U	0.010	0.005	
Coronene		U	0.010	0.005	
Retene		U	0.010	0.005	
Benzo(b/c)fluorenes		U	0.010	0.005	
2-Methylpyrene		U	0.010	0.005	
4-Methylpyrene		U	0.010	0.005	
1-Methylpyrene		U	0.010	0.005	
Heptadecane		U	0.010	0.005	
Pristane		U	0.010	0.005	
Octadecane		U	0.010	0.005	
Phytane		U	0.010	0.005	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SB		
File ID:	E081317.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.010	0.005	
2,6,10-trimethyltridecane	U	0.010	0.005	
Norpristane	U	0.010	0.005	
Total PAH (16)	U	0.010	0.005	
Total PAH (42)	U	0.010	0.005	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	86	50 - 120
Phenanthrene-d10	82	50 - 120
Benzo(a)pyrene-d12	81	50 - 120
Perylene-d12	87	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SBS		
File ID:	E081318.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount				% Recovery
Benzene	10	6.3 B	0.010	0.005	63
Toluene	10	7.81 B	0.010	0.005	78
Ethylbenzene	10	7.67	0.010	0.005	77
m/p-Xylenes	10	7.65	0.010	0.005	77
Styrene	10	7.86 B	0.010	0.005	79
o-Xylene	10	7.8	0.010	0.005	78
Isopropylbenzene	10	8.0	0.010	0.005	80
n-Propylbenzene	10	8.0	0.010	0.005	80
1,3,5-Trimethylbenzene	10	8.15	0.010	0.005	82
1,2,4-Trimethylbenzene	10	7.88	0.010	0.005	79
t-Butylbenzene		U	0.010	0.005	
sec-Butylbenzene	10	7.93	0.010	0.005	79
p-Isopropyltoluene	10	8.06	0.010	0.005	81
n-Butylbenzene	10	8.11	0.010	0.005	81
C1 - Benzene		BU	0.010	0.005	
C2 - Benzene		U	0.010	0.005	
C3 - Benzene		U	0.010	0.005	
C4 - Benzene		U	0.010	0.005	
C5 - Benzene		U	0.010	0.005	
trans-Decalin		U	0.010	0.005	
cis-Decalin		U	0.010	0.005	
Naphthalene	10	7.96	0.010	0.005	80
2-Methylnaphthalene	10	8.12	0.010	0.005	81
1-Methylnaphthalene	10	8.21	0.010	0.005	82
C1 - Naphthalene		U	0.010	0.005	
C2 - Naphthalene		U	0.010	0.005	
C3 - Naphthalene		U	0.010	0.005	
C4 - Naphthalene		U	0.010	0.005	
Acenaphthylene	10	8.48	0.010	0.005	85
Acenaphthene	10	8.33	0.010	0.005	83
Dibenzofuran	10	8.43	0.010	0.005	84
Fluorene	10	8.5	0.010	0.005	85
C1 - Fluorene		U	0.010	0.005	
C2 - Fluorene		U	0.010	0.005	
C3 - Fluorene		U	0.010	0.005	
Phenanthrene	10	8.62	0.010	0.005	86
Anthracene	10	8.66	0.010	0.005	87

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SBS		
File ID:	E081318.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene		U	0.010	0.005	
C2 - Phenanthrene/Anthracene		U	0.010	0.005	
C3 - Phenanthrene/Anthracene		U	0.010	0.005	
C4 - Phenanthrene/Anthracene		U	0.010	0.005	
Dibenzothiophene	10	8.76	0.010	0.005	88
C1 - Dibenzothiophene		U	0.010	0.005	
C2 - Dibenzothiophene		U	0.010	0.005	
C3 - Dibenzothiophene		U	0.010	0.005	
C4 - Dibenzothiophene		U	0.010	0.005	
Benzo(b)naphtho(2,1-d)thiophene		U	0.010	0.005	
Fluoranthene	10	8.94	0.010	0.005	89
Pyrene	10	8.82	0.010	0.005	88
C1 - Fluoranthene/Pyrene		U	0.010	0.005	
C2 - Fluoranthene/Pyrene		U	0.010	0.005	
C3 - Fluoranthene/Pyrene		U	0.010	0.005	
Benz(a)anthracene	10	8.62	0.010	0.005	86
Chrysene*	10	8.98	0.010	0.005	90
C1 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C2 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C3 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
C4 - Benz(a)anthracene/Chrysene		U	0.010	0.005	
Benzo(b)fluoranthene	10	8.79	0.010	0.005	88
Benzo(j/k)fluoranthene	10	9.04	0.010	0.005	90
Benzo(e)pyrene	10	8.44	0.010	0.005	84
Benzo(a)pyrene	10	8.64	0.010	0.005	86
Perylene		U	0.010	0.005	
Indeno(1,2,3-cd)pyrene	10	9.36	0.010	0.005	94
Dibenz(a,h)anthracene	10	9.04	0.010	0.005	90
Benzo(g,h,i)perylene	10	8.37	0.010	0.005	84
Coronene		U	0.010	0.005	
Retene		U	0.010	0.005	
Benzo(b/c)fluorenes		U	0.010	0.005	
2-Methylpyrene		U	0.010	0.005	
4-Methylpyrene		U	0.010	0.005	
1-Methylpyrene		U	0.010	0.005	
Heptadecane		U	0.010	0.005	
Pristane		U	0.010	0.005	
Octadecane		U	0.010	0.005	
Phytane		U	0.010	0.005	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100813-SBS		
File ID:	E081318.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	8/13/2010	Sample Size (g):	1.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
2,6,10-trimethyldodecane		U	0.010	0.005	
2,6,10-trimethyltridecane		U	0.010	0.005	
Norpristane		U	0.010	0.005	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	78	50 - 120
Phenanthrene-d10	84	50 - 120
Benzo(a)pyrene-d12	87	50 - 120
Perylene-d12	89	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01DUP-R-D1		
File ID:	E081321.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.07
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					RPD
Benzene	3.36	B	0.213	0.106	13
Toluene	31.2	B	0.213	0.106	14.4
Ethylbenzene	36.7		0.213	0.106	14.3
m/p-Xylenes	66.4		0.213	0.106	13
Styrene	8.67	B	0.213	0.106	49
o-Xylene	34.4		0.213	0.106	12.7
Isopropylbenzene	3.26		0.213	0.106	11.7
n-Propylbenzene	2.69		0.213	0.106	13.5
1,3,5-Trimethylbenzene	17.8		0.213	0.106	11.3
1,2,4-Trimethylbenzene	56.5		0.213	0.106	10
t-Butylbenzene		U	0.213	0.106	NA
sec-Butylbenzene	0.203	J	0.213	0.106	8.2
p-Isopropyltoluene	4.43		0.213	0.106	10
n-Butylbenzene	2.83		0.213	0.106	11.2
C1 - Benzene	22.2	B	0.213	0.106	14.5
C2 - Benzene	73.2		0.213	0.106	12.9
C3 - Benzene	71.1		0.213	0.106	10.5
C4 - Benzene	37.2		0.213	0.106	8.7
C5 - Benzene	10.1		0.213	0.106	8.9
trans-Decalin	0.300		0.213	0.106	3
cis-Decalin		U	0.213	0.106	NA
Naphthalene	1,520	D	0.213	0.106	8.9
2-Methylnaphthalene	866		0.213	0.106	6.6
1-Methylnaphthalene	581		0.213	0.106	6.8
C1 - Naphthalene	886		0.213	0.106	6.8
C2 - Naphthalene	382		0.213	0.106	7.3
C3 - Naphthalene	101		0.213	0.106	7.3
C4 - Naphthalene	24.0		0.213	0.106	7.8
Acenaphthylene	144		0.213	0.106	23.3
Acenaphthene	103		0.213	0.106	9.6
Dibenzofuran	20.0		0.213	0.106	9.4
Fluorene	195		0.213	0.106	7.4
C1 - Fluorene	88.1		0.213	0.106	8.2
C2 - Fluorene	43.5		0.213	0.106	11.9
C3 - Fluorene	18.0		0.213	0.106	14.9
Phenanthrene	570		0.213	0.106	6.7
Anthracene	180		0.213	0.106	8.7

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01DUP-R-D1		
File ID:	E081321.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.07
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	359	0.213	0.106	6.6
C2 - Phenanthrene/Anthracene	117	0.213	0.106	0.9
C3 - Phenanthrene/Anthracene	31.7	0.213	0.106	8.2
C4 - Phenanthrene/Anthracene	6.71	0.213	0.106	5
Dibenzothiophene	73.8	0.213	0.106	6.6
C1 - Dibenzothiophene	74.7	0.213	0.106	6.8
C2 - Dibenzothiophene	44.9	0.213	0.106	6.4
C3 - Dibenzothiophene	18.0	0.213	0.106	6.9
C4 - Dibenzothiophene	4.59	0.213	0.106	8.6
Benzo(b)naphtho(2,1-d)thiophene	15.8	0.213	0.106	4.5
Fluoranthene	160	0.213	0.106	5.1
Pyrene	250	0.213	0.106	4.9
C1 - Fluoranthene/Pyrene	222	0.213	0.106	6.5
C2 - Fluoranthene/Pyrene	62.5	0.213	0.106	4.4
C3 - Fluoranthene/Pyrene	18.7	0.213	0.106	8.9
Benz(a)anthracene	96.2	0.213	0.106	4.7
Chrysene*	91.5	0.213	0.106	4
C1 - Benz(a)anthracene/Chrysene	69.0	0.213	0.106	5.7
C2 - Benz(a)anthracene/Chrysene	21.7	0.213	0.106	8.2
C3 - Benz(a)anthracene/Chrysene	5.18	0.213	0.106	6.7
C4 - Benz(a)anthracene/Chrysene	1.9	0.213	0.106	0
Benzo(b)fluoranthene	31.0	0.213	0.106	3.6
Benzo(j/k)fluoranthene	42.6	0.213	0.106	6.8
Benzo(e)pyrene	35.4	0.213	0.106	4
Benzo(a)pyrene	77.9	0.213	0.106	4.9
Perylene	10.6	0.213	0.106	6.2
Indeno(1,2,3-cd)pyrene	24.3	0.213	0.106	4.2
Dibenz(a,h)anthracene	8.24	0.213	0.106	5.5
Benzo(g,h,i)perylene	23.7	0.213	0.106	4.3
Coronene	5.05	0.213	0.106	6.5
Retene	U	0.213	0.106	NA
Benzo(b/c)fluorenes	35.2	0.213	0.106	6.8
2-Methylpyrene	29.3	0.213	0.106	4.5
4-Methylpyrene	26.6	0.213	0.106	7
1-Methylpyrene	30.1	0.213	0.106	7.2
Heptadecane	7.18	0.213	0.106	8.7
Pristane	4.5	0.213	0.106	6.4
Octadecane	5.9	0.213	0.106	9.6
Phytane	3.09	0.213	0.106	13.8

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of MW-3(9-11)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-01DUP-R-D1		
File ID:	E081321.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	6/18/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	8/13/2010	Sample Size (g):	1.07
Date Cleanup:	NA	Percent Solid:	88.2%
Date Analyzed:	8/14/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	20
		Injection Volume (µl):	1.00
Batch QC:	QC100813-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	2.23	0.213	0.106	9.4
2,6,10-trimethyltridecane	3.06	0.213	0.106	6.4
Norpristane	2.89	0.213	0.106	7.9
Total PAH (16)	3,520	0.213	0.106	8.3
Total PAH (42)	6,260	0.213	0.106	7.5

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	69	50 - 120
Phenanthrene-d10	82	50 - 120
Benzo(a)pyrene-d12	91	50 - 120
Perylene-d12	108	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-AB		
File ID:	E071935.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.231 J	0.286	0.143	
Toluene	1.33	0.286	0.143	
Ethylbenzene	U	0.286	0.143	
m/p-Xylenes	U	0.286	0.143	
Styrene	0.302	0.286	0.143	
o-Xylene	U	0.286	0.143	
Isopropylbenzene	U	0.286	0.143	
n-Propylbenzene	U	0.286	0.143	
1,3,5-Trimethylbenzene	U	0.286	0.143	
1,2,4-Trimethylbenzene	U	0.286	0.143	
t-Butylbenzene	U	0.286	0.143	
sec-Butylbenzene	U	0.286	0.143	
p-Isopropyltoluene	U	0.286	0.143	
n-Butylbenzene	U	0.286	0.143	
C1 - Benzene	0.973	0.286	0.143	
C2 - Benzene	U	0.286	0.143	
C3 - Benzene	U	0.286	0.143	
C4 - Benzene	U	0.286	0.143	
C5 - Benzene	U	0.286	0.143	
trans-Decalin	U	0.286	0.143	
cis-Decalin	U	0.286	0.143	
Naphthalene	U	0.286	0.143	
2-Methylnaphthalene	U	0.286	0.143	
1-Methylnaphthalene	U	0.286	0.143	
C1 - Naphthalene	0.145 J	0.286	0.143	
C2 - Naphthalene	U	0.286	0.143	
C3 - Naphthalene	U	0.286	0.143	
C4 - Naphthalene	U	0.286	0.143	
Acenaphthylene	0.254 J	0.286	0.143	
Acenaphthene	U	0.286	0.143	
Dibenzofuran	U	0.286	0.143	
Fluorene	U	0.286	0.143	
C1 - Fluorene	U	0.286	0.143	
C2 - Fluorene	U	0.286	0.143	
C3 - Fluorene	U	0.286	0.143	
Phenanthrene	U	0.286	0.143	
Anthracene	U	0.286	0.143	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-AB		
File ID:	E071935.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	U	0.286	0.143	
C2 - Phenanthrene/Anthracene	U	0.286	0.143	
C3 - Phenanthrene/Anthracene	U	0.286	0.143	
C4 - Phenanthrene/Anthracene	U	0.286	0.143	
Dibenzothiophene	U	0.286	0.143	
C1 - Dibenzothiophene	U	0.286	0.143	
C2 - Dibenzothiophene	U	0.286	0.143	
C3 - Dibenzothiophene	U	0.286	0.143	
C4 - Dibenzothiophene	U	0.286	0.143	
Benzo(b)naphtho(2,1-d)thiophene	U	0.286	0.143	
Fluoranthene	U	0.286	0.143	
Pyrene	U	0.286	0.143	
C1 - Fluoranthene/Pyrene	U	0.286	0.143	
C2 - Fluoranthene/Pyrene	U	0.286	0.143	
C3 - Fluoranthene/Pyrene	U	0.286	0.143	
Benz(a)anthracene	U	0.286	0.143	
Chrysene*	U	0.286	0.143	
C1 - Benz(a)anthracene/Chrysene	U	0.286	0.143	
C2 - Benz(a)anthracene/Chrysene	U	0.286	0.143	
C3 - Benz(a)anthracene/Chrysene	U	0.286	0.143	
C4 - Benz(a)anthracene/Chrysene	U	0.286	0.143	
Benzo(b)fluoranthene	U	0.286	0.143	
Benzo(j/k)fluoranthene	U	0.286	0.143	
Benzo(e)pyrene	U	0.286	0.143	
Benzo(a)pyrene	U	0.286	0.143	
Perylene	U	0.286	0.143	
Indeno(1,2,3-cd)pyrene	U	0.286	0.143	
Dibenz(a,h)anthracene	U	0.286	0.143	
Benzo(g,h,i)perylene	U	0.286	0.143	
Coronene	U	0.286	0.143	
Retene	U	0.286	0.143	
Benzo(b/c)fluorenes	U	0.286	0.143	
2-Methylpyrene	U	0.286	0.143	
4-Methylpyrene	U	0.286	0.143	
1-Methylpyrene	U	0.286	0.143	
Heptadecane	0.223 J	0.286	0.143	
Pristane	U	0.286	0.143	
Octadecane	0.257 J	0.286	0.143	
Phytane	U	0.286	0.143	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-AB		
File ID:	E071935.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.286	0.143	
2,6,10-trimethyltridecane	U	0.286	0.143	
Norpristane	U	0.286	0.143	
Total PAH (16)	0.254	0.286	0.143	
Total PAH (42)	0.399	0.286	0.143	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	81	50 - 120
Phenanthrene-d10	84	50 - 120
Benzo(a)pyrene-d12	82	50 - 120
Perylene-d12	84	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank Spike

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-ABS		
File ID:	E071936.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)			RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount					% Recovery
Benzene	286	197	B	0.286	0.143	69
Toluene	286	199	B	0.286	0.143	70
Ethylbenzene	286	189		0.286	0.143	66
m/p-Xylenes	286	187		0.286	0.143	65
Styrene	286	204	B	0.286	0.143	71
o-Xylene	286	192		0.286	0.143	67
Isopropylbenzene	286	200		0.286	0.143	70
n-Propylbenzene	286	199		0.286	0.143	70
1,3,5-Trimethylbenzene	286	203		0.286	0.143	71
1,2,4-Trimethylbenzene	286	199		0.286	0.143	70
t-Butylbenzene			U	0.286	0.143	
sec-Butylbenzene	286	203		0.286	0.143	71
p-Isopropyltoluene	286	209		0.286	0.143	73
n-Butylbenzene	286	207		0.286	0.143	72
C1 - Benzene			BU	0.286	0.143	
C2 - Benzene			U	0.286	0.143	
C3 - Benzene			U	0.286	0.143	
C4 - Benzene			U	0.286	0.143	
C5 - Benzene			U	0.286	0.143	
trans-Decalin			U	0.286	0.143	
cis-Decalin			U	0.286	0.143	
Naphthalene	286	219		0.286	0.143	77
2-Methylnaphthalene	286	223		0.286	0.143	78
1-Methylnaphthalene	286	226		0.286	0.143	79
C1 - Naphthalene			BU	0.286	0.143	
C2 - Naphthalene			U	0.286	0.143	
C3 - Naphthalene			U	0.286	0.143	
C4 - Naphthalene			U	0.286	0.143	
Acenaphthylene	286	240	B	0.286	0.143	84
Acenaphthene	286	233		0.286	0.143	81
Dibenzofuran	286	235		0.286	0.143	82
Fluorene	286	238		0.286	0.143	83
C1 - Fluorene			U	0.286	0.143	
C2 - Fluorene			U	0.286	0.143	
C3 - Fluorene			U	0.286	0.143	
Phenanthrene	286	244		0.286	0.143	85
Anthracene	286	237		0.286	0.143	83

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank Spike

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-ABS		
File ID:	E071936.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte		Concentration (µg/L)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene			U	0.286	0.143	
C2 - Phenanthrene/Anthracene			U	0.286	0.143	
C3 - Phenanthrene/Anthracene			U	0.286	0.143	
C4 - Phenanthrene/Anthracene			U	0.286	0.143	
Dibenzothiophene	286	251		0.286	0.143	88
C1 - Dibenzothiophene			U	0.286	0.143	
C2 - Dibenzothiophene			U	0.286	0.143	
C3 - Dibenzothiophene			U	0.286	0.143	
C4 - Dibenzothiophene			U	0.286	0.143	
Benzo(b)naphtho(2,1-d)thiophene			U	0.286	0.143	
Fluoranthene	286	252		0.286	0.143	88
Pyrene	286	248		0.286	0.143	87
C1 - Fluoranthene/Pyrene			U	0.286	0.143	
C2 - Fluoranthene/Pyrene			U	0.286	0.143	
C3 - Fluoranthene/Pyrene			U	0.286	0.143	
Benz(a)anthracene	286	245		0.286	0.143	86
Chrysene*	286	235		0.286	0.143	82
C1 - Benz(a)anthracene/Chrysene			U	0.286	0.143	
C2 - Benz(a)anthracene/Chrysene			U	0.286	0.143	
C3 - Benz(a)anthracene/Chrysene			U	0.286	0.143	
C4 - Benz(a)anthracene/Chrysene			U	0.286	0.143	
Benzo(b)fluoranthene	286	238		0.286	0.143	83
Benzo(j/k)fluoranthene	286	236		0.286	0.143	83
Benzo(e)pyrene	286	226		0.286	0.143	79
Benzo(a)pyrene	286	226		0.286	0.143	79
Perylene			U	0.286	0.143	
Indeno(1,2,3-cd)pyrene	286	201		0.286	0.143	70
Dibenz(a,h)anthracene	286	210		0.286	0.143	73
Benzo(g,h,i)perylene	286	196		0.286	0.143	69
Coronene			U	0.286	0.143	
Retene			U	0.286	0.143	
Benzo(b/c)fluorenes			U	0.286	0.143	
2-Methylpyrene			U	0.286	0.143	
4-Methylpyrene			U	0.286	0.143	
1-Methylpyrene			U	0.286	0.143	
Heptadecane			BU	0.286	0.143	
Pristane			U	0.286	0.143	
Octadecane			BU	0.286	0.143	
Phytane			U	0.286	0.143	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Aqueous Blank Spike

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100715-ABS		
File ID:	E071936.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/15/2010	Sample Volume (ml)	35.00
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
2,6,10-trimethyldodecane		U	0.286	0.143	
2,6,10-trimethyltridecane		U	0.286	0.143	
Norpristane		U	0.286	0.143	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	83	50 - 120
Phenanthrene-d10	94	50 - 120
Benzo(a)pyrene-d12	94	50 - 120
Perylene-d12	94	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03DUP-R-D		
File ID:	E071938.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	39.23
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	50
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					RPD
Benzene	7,200	B	12.7	6.37	116.5
Toluene	36,500	B	12.7	6.37	140.2
Ethylbenzene	27,300		12.7	6.37	149.6
m/p-Xylenes	47,600		12.7	6.37	150.1
Styrene	16,700	B	12.7	6.37	149.2
o-Xylene	23,900		12.7	6.37	149.8
Isopropylbenzene	2,450		12.7	6.37	151.9
n-Propylbenzene	2,210		12.7	6.37	152.1
1,3,5-Trimethylbenzene	10,100		12.7	6.37	151.9
1,2,4-Trimethylbenzene	31,800		12.7	6.37	152.5
t-Butylbenzene		U	12.7	6.37	NA
sec-Butylbenzene	140		12.7	6.37	146.1
p-Isopropyltoluene	1,830		12.7	6.37	152.6
n-Butylbenzene	1,240		12.7	6.37	152.3
C1 - Benzene	26,300	B	12.7	6.37	140.2
C2 - Benzene	54,600		12.7	6.37	149.7
C3 - Benzene	47,500		12.7	6.37	152.2
C4 - Benzene	10,800		12.7	6.37	152.9
C5 - Benzene	1,200		12.7	6.37	153.2
trans-Decalin	222		12.7	6.37	152.2
cis-Decalin		U	12.7	6.37	NA
Naphthalene	59,700	E	12.7	6.37	152.6
2-Methylnaphthalene	2,980		12.7	6.37	153.9
1-Methylnaphthalene	1,730		12.7	6.37	153.1
C1 - Naphthalene	2,900	B	12.7	6.37	153.3
C2 - Naphthalene	483		12.7	6.37	146.4
C3 - Naphthalene	111		12.7	6.37	145.5
C4 - Naphthalene	59.2		12.7	6.37	141.7
Acenaphthylene	284	B	12.7	6.37	149.4
Acenaphthene	76.4		12.7	6.37	138.8
Dibenzofuran	25.3		12.7	6.37	153.4
Fluorene	188		12.7	6.37	149.8
C1 - Fluorene	101		12.7	6.37	156.6
C2 - Fluorene	74.4		12.7	6.37	142.9
C3 - Fluorene	367		12.7	6.37	NA
Phenanthrene	500		12.7	6.37	154.2
Anthracene	68.2		12.7	6.37	151.3

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03DUP-R-D		
File ID:	E071938.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	39.23
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	50
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
C1 - Phenanthrene/Anthracene	171		12.7	6.37	153.3
C2 - Phenanthrene/Anthracene	61.6		12.7	6.37	131.2
C3 - Phenanthrene/Anthracene	76.9		12.7	6.37	161.8
C4 - Phenanthrene/Anthracene	111		12.7	6.37	155.5
Dibenzothiophene	64.0		12.7	6.37	156.1
C1 - Dibenzothiophene	51.1		12.7	6.37	141.9
C2 - Dibenzothiophene	29.2		12.7	6.37	NA
C3 - Dibenzothiophene		U	12.7	6.37	NA
C4 - Dibenzothiophene		U	12.7	6.37	NA
Benzo(b)naphtho(2,1-d)thiophene		U	12.7	6.37	NA
Fluoranthene	77.4		12.7	6.37	155.1
Pyrene	84.9		12.7	6.37	152.3
C1 - Fluoranthene/Pyrene	87.6		12.7	6.37	148.3
C2 - Fluoranthene/Pyrene	102		12.7	6.37	155.1
C3 - Fluoranthene/Pyrene	49.6		12.7	6.37	149.3
Benz(a)anthracene	18.2		12.7	6.37	147.7
Chrysene*	18.9		12.7	6.37	138.3
C1 - Benz(a)anthracene/Chrysene	13.9		12.7	6.37	NA
C2 - Benz(a)anthracene/Chrysene		U	12.7	6.37	NA
C3 - Benz(a)anthracene/Chrysene		U	12.7	6.37	NA
C4 - Benz(a)anthracene/Chrysene		U	12.7	6.37	NA
Benzo(b)fluoranthene	7.06	J	12.7	6.37	NA
Benzo(j/k)fluoranthene	8.96	J	12.7	6.37	NA
Benzo(e)pyrene	7.52	J	12.7	6.37	NA
Benzo(a)pyrene	8.97	J	12.7	6.37	NA
Perylene		U	12.7	6.37	NA
Indeno(1,2,3-cd)pyrene		U	12.7	6.37	NA
Dibenz(a,h)anthracene		U	12.7	6.37	NA
Benzo(g,h,i)perylene		U	12.7	6.37	NA
Coronene		U	12.7	6.37	NA
Retene		U	12.7	6.37	NA
Benzo(b/c)fluorenes	19.9		12.7	6.37	145.9
2-Methylpyrene	6.76	J	12.7	6.37	NA
4-Methylpyrene		U	12.7	6.37	NA
1-Methylpyrene	8.09	J	12.7	6.37	NA
Heptadecane	21.0	B	12.7	6.37	111.2
Pristane		U	12.7	6.37	NA
Octadecane	23.5	B	12.7	6.37	105.3
Phytane		U	12.7	6.37	NA

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of Exposed Pipe 1

Client:	Parsons	Preparation Method:	EPA 3511
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-03DUP-R-D		
File ID:	E071938.D	Matrix:	Aqueous
		Preservation:	None
Date Sampled:	6/16/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/15/2010	Sample Volume (ml)	39.23
Date Cleanup:	NA	Percent Solid:	NA
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	50
		Injection Volume (µl):	1.00
Batch QC:	QC100715-AB		

Analyte	Concentration (µg/L)		RL	EDL	Comments
2,6,10-trimethyldodecane		U	12.7	6.37	NA
2,6,10-trimethyltridecane		U	12.7	6.37	NA
Norpristane		U	12.7	6.37	NA
Total PAH (16)	61,000		12.7	6.37	152.6
Total PAH (42)	66,000		12.7	6.37	152.8

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	84	50 - 120
Phenanthrene-d10	87	50 - 120
Benzo(a)pyrene-d12	80	50 - 120
Perylene-d12	87	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SB		
File ID:	E071928.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
MAH & PAH COMPOUNDS:				
Benzene	0.002 J	0.003	0.001	
Toluene	0.004	0.003	0.001	
Ethylbenzene	U	0.003	0.001	
m/p-Xylenes	U	0.003	0.001	
Styrene	0.004	0.003	0.001	
o-Xylene	U	0.003	0.001	
Isopropylbenzene	U	0.003	0.001	
n-Propylbenzene	U	0.003	0.001	
1,3,5-Trimethylbenzene	U	0.003	0.001	
1,2,4-Trimethylbenzene	U	0.003	0.001	
t-Butylbenzene	U	0.003	0.001	
sec-Butylbenzene	U	0.003	0.001	
p-Isopropyltoluene	U	0.003	0.001	
n-Butylbenzene	U	0.003	0.001	
C1 - Benzene	0.003 J	0.003	0.001	
C2 - Benzene	U	0.003	0.001	
C3 - Benzene	U	0.003	0.001	
C4 - Benzene	U	0.003	0.001	
C5 - Benzene	U	0.003	0.001	
trans-Decalin	U	0.003	0.001	
cis-Decalin	U	0.003	0.001	
Naphthalene	U	0.003	0.001	
2-Methylnaphthalene	0.001 J	0.003	0.001	
1-Methylnaphthalene	U	0.003	0.001	
C1 - Naphthalene	0.001 J	0.003	0.001	
C2 - Naphthalene	U	0.003	0.001	
C3 - Naphthalene	U	0.003	0.001	
C4 - Naphthalene	0.008	0.003	0.001	
Acenaphthylene	0.008	0.003	0.001	
Acenaphthene	U	0.003	0.001	
Dibenzofuran	U	0.003	0.001	
Fluorene	U	0.003	0.001	
C1 - Fluorene	U	0.003	0.001	
C2 - Fluorene	U	0.003	0.001	
C3 - Fluorene	U	0.003	0.001	
Phenanthrene	0.004	0.003	0.001	
Anthracene	U	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SB		
File ID:	E071928.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.011	0.003	0.001	
C2 - Phenanthrene/Anthracene	0.010	0.003	0.001	
C3 - Phenanthrene/Anthracene	0.006	0.003	0.001	
C4 - Phenanthrene/Anthracene	U	0.003	0.001	
Dibenzothiophene	U	0.003	0.001	
C1 - Dibenzothiophene	U	0.003	0.001	
C2 - Dibenzothiophene	0.004	0.003	0.001	
C3 - Dibenzothiophene	U	0.003	0.001	
C4 - Dibenzothiophene	U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene	U	0.003	0.001	
Fluoranthene	U	0.003	0.001	
Pyrene	0.001 J	0.003	0.001	
C1 - Fluoranthene/Pyrene	0.005	0.003	0.001	
C2 - Fluoranthene/Pyrene	U	0.003	0.001	
C3 - Fluoranthene/Pyrene	U	0.003	0.001	
Benz(a)anthracene	U	0.003	0.001	
Chrysene*	U	0.003	0.001	
C1 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene	U	0.003	0.001	
Benzo(b)fluoranthene	U	0.003	0.001	
Benzo(j/k)fluoranthene	U	0.003	0.001	
Benzo(e)pyrene	U	0.003	0.001	
Benzo(a)pyrene	U	0.003	0.001	
Perylene	U	0.003	0.001	
Indeno(1,2,3-cd)pyrene	U	0.003	0.001	
Dibenz(a,h)anthracene	U	0.003	0.001	
Benzo(g,h,i)perylene	U	0.003	0.001	
Coronene	U	0.003	0.001	
Retene	U	0.003	0.001	
Benzo(b/c)fluorenes	U	0.003	0.001	
2-Methylpyrene	U	0.003	0.001	
4-Methylpyrene	U	0.003	0.001	
1-Methylpyrene	U	0.003	0.001	
Heptadecane	0.026	0.003	0.001	
Pristane	0.016	0.003	0.001	
Octadecane	0.023	0.003	0.001	
Phytane	0.010	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SB		
File ID:	E071928.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	U	0.003	0.001	
2,6,10-trimethyltridecane	U	0.003	0.001	
Norpristane	U	0.003	0.001	
Total PAH (16)	0.013	0.003	0.001	
Total PAH (42)	0.058	0.003	0.001	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	77	50 - 120
Phenanthrene-d10	80	50 - 120
Benzo(a)pyrene-d12	82	50 - 120
Perylene-d12	84	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SBS1		
File ID:	E071929.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)			RL	EDL	Comments
MAH & PAH COMPOUNDS:	Spike Amount					% Recovery
Benzene	2.5	1.36	B	0.003	0.001	54
Toluene	2.5	1.64	B	0.003	0.001	66
Ethylbenzene	2.5	1.56		0.003	0.001	62
m/p-Xylenes	2.5	1.54		0.003	0.001	62
Styrene	2.5	1.74	B	0.003	0.001	70
o-Xylene	2.5	1.57		0.003	0.001	63
Isopropylbenzene	2.5	1.63		0.003	0.001	65
n-Propylbenzene	2.5	1.6		0.003	0.001	64
1,3,5-Trimethylbenzene	2.5	1.63		0.003	0.001	65
1,2,4-Trimethylbenzene	2.5	1.57		0.003	0.001	63
t-Butylbenzene			U	0.003	0.001	
sec-Butylbenzene	2.5	1.6		0.003	0.001	64
p-Isopropyltoluene	2.5	1.64		0.003	0.001	66
n-Butylbenzene	2.5	1.6		0.003	0.001	64
C1 - Benzene			BU	0.003	0.001	
C2 - Benzene			U	0.003	0.001	
C3 - Benzene			U	0.003	0.001	
C4 - Benzene			U	0.003	0.001	
C5 - Benzene			U	0.003	0.001	
trans-Decalin			U	0.003	0.001	
cis-Decalin			U	0.003	0.001	
Naphthalene	2.5	1.63		0.003	0.001	65
2-Methylnaphthalene	2.5	1.65	B	0.003	0.001	66
1-Methylnaphthalene	2.5	1.67		0.003	0.001	67
C1 - Naphthalene			BU	0.003	0.001	
C2 - Naphthalene			U	0.003	0.001	
C3 - Naphthalene			U	0.003	0.001	
C4 - Naphthalene			BU	0.003	0.001	
Acenaphthylene	2.5	1.79	B	0.003	0.001	72
Acenaphthene	2.5	1.71		0.003	0.001	68
Dibenzofuran	2.5	1.73		0.003	0.001	69
Fluorene	2.5	1.76		0.003	0.001	70
C1 - Fluorene			U	0.003	0.001	
C2 - Fluorene			U	0.003	0.001	
C3 - Fluorene			U	0.003	0.001	
Phenanthrene	2.5	1.8	B	0.003	0.001	72
Anthracene	2.5	1.81		0.003	0.001	72

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SBS1		
File ID:	E071929.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)			RL	EDL	Comments
C1 - Phenanthrene/Anthracene			BU	0.003	0.001	
C2 - Phenanthrene/Anthracene			BU	0.003	0.001	
C3 - Phenanthrene/Anthracene			BU	0.003	0.001	
C4 - Phenanthrene/Anthracene			U	0.003	0.001	
Dibenzothiophene	2.5	1.84		0.003	0.001	74
C1 - Dibenzothiophene			U	0.003	0.001	
C2 - Dibenzothiophene			BU	0.003	0.001	
C3 - Dibenzothiophene			U	0.003	0.001	
C4 - Dibenzothiophene			U	0.003	0.001	
Benzo(b)naphtho(2,1-d)thiophene			U	0.003	0.001	
Fluoranthene	2.5	1.88		0.003	0.001	75
Pyrene	2.5	1.86	B	0.003	0.001	74
C1 - Fluoranthene/Pyrene			BU	0.003	0.001	
C2 - Fluoranthene/Pyrene			U	0.003	0.001	
C3 - Fluoranthene/Pyrene			U	0.003	0.001	
Benz(a)anthracene	2.5	1.87		0.003	0.001	75
Chrysene*	2.5	1.84		0.003	0.001	74
C1 - Benz(a)anthracene/Chrysene			U	0.003	0.001	
C2 - Benz(a)anthracene/Chrysene			U	0.003	0.001	
C3 - Benz(a)anthracene/Chrysene			U	0.003	0.001	
C4 - Benz(a)anthracene/Chrysene			U	0.003	0.001	
Benzo(b)fluoranthene	2.5	1.81		0.003	0.001	72
Benzo(j/k)fluoranthene	2.5	1.8		0.003	0.001	72
Benzo(e)pyrene	2.5	1.73		0.003	0.001	69
Benzo(a)pyrene	2.5	1.74		0.003	0.001	70
Perylene			U	0.003	0.001	
Indeno(1,2,3-cd)pyrene	2.5	1.59		0.003	0.001	64
Dibenz(a,h)anthracene	2.5	1.71		0.003	0.001	68
Benzo(g,h,i)perylene	2.5	1.58		0.003	0.001	63
Coronene			U	0.003	0.001	
Retene			U	0.003	0.001	
Benzo(b/c)fluorenes			U	0.003	0.001	
2-Methylpyrene			U	0.003	0.001	
4-Methylpyrene			U	0.003	0.001	
1-Methylpyrene			U	0.003	0.001	
Heptadecane			BU	0.003	0.001	
Pristane			BU	0.003	0.001	
Octadecane			BU	0.003	0.001	
Phytane			BU	0.003	0.001	

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Soil Blank Spike

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	QC100716-SBS1		
File ID:	E071929.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	NA	Decanted:	None
Date Received:	NA		
Date Prepared:	7/16/2010	Sample Size (g):	4.00
Date Cleanup:	NA	Percent Solid:	100.0%
Date Analyzed:	7/21/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
2,6,10-trimethyldodecane		U	0.003	0.001	
2,6,10-trimethyltridecane		U	0.003	0.001	
Norpristane		U	0.003	0.001	

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	58	50 - 120
Phenanthrene-d10	67	50 - 120
Benzo(a)pyrene-d12	69	50 - 120
Perylene-d12	69	50 - 120

NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04DUP		
File ID:	E071940.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.23
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)		RL	EDL	Comments
MAH & PAH COMPOUNDS:					RPD
Benzene	0.117	B	0.005	0.003	40
Toluene	0.117	B	0.005	0.003	40
Ethylbenzene	0.179		0.005	0.003	54.8
m/p-Xylenes	0.123		0.005	0.003	48.5
Styrene	0.082	B	0.005	0.003	27.4
o-Xylene	0.068		0.005	0.003	59
Isopropylbenzene	0.036		0.005	0.003	44.1
n-Propylbenzene	0.036		0.005	0.003	28.6
1,3,5-Trimethylbenzene	0.024		0.005	0.003	40
1,2,4-Trimethylbenzene	0.067		0.005	0.003	45.9
t-Butylbenzene		U	0.005	0.003	NA
sec-Butylbenzene		U	0.005	0.003	NA
p-Isopropyltoluene	19.2		0.005	0.003	41.5
n-Butylbenzene	0.034		0.005	0.003	30.5
C1 - Benzene	0.083	B	0.005	0.003	38.8
C2 - Benzene	0.200		0.005	0.003	51.6
C3 - Benzene	2.92		0.005	0.003	40.8
C4 - Benzene	6.66		0.005	0.003	40.9
C5 - Benzene	0.266		0.005	0.003	39.1
trans-Decalin		U	0.005	0.003	NA
cis-Decalin	0.019		0.005	0.003	62.1
Naphthalene	0.606		0.005	0.003	43.1
2-Methylnaphthalene	0.077	B	0.005	0.003	21.6
1-Methylnaphthalene	0.105		0.005	0.003	38.6
C1 - Naphthalene	0.110	B	0.005	0.003	29.2
C2 - Naphthalene	0.065		0.005	0.003	22.2
C3 - Naphthalene	0.048		0.005	0.003	49.4
C4 - Naphthalene	0.031	B	0.005	0.003	75.6
Acenaphthylene	0.054	B	0.005	0.003	3.8
Acenaphthene	0.039		0.005	0.003	29.4
Dibenzofuran	0.005		0.005	0.003	0
Fluorene	0.030		0.005	0.003	26.4
C1 - Fluorene	0.032		0.005	0.003	20.7
C2 - Fluorene	0.044		0.005	0.003	14.6
C3 - Fluorene	0.041		0.005	0.003	21.6
Phenanthrene	0.177	B	0.005	0.003	17.8
Anthracene	0.056		0.005	0.003	13.3

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04DUP		
File ID:	E071940.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.23
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
C1 - Phenanthrene/Anthracene	0.200 B	0.005	0.003	18
C2 - Phenanthrene/Anthracene	0.184 B	0.005	0.003	20.4
C3 - Phenanthrene/Anthracene	1.28 B	0.005	0.003	45.8
C4 - Phenanthrene/Anthracene	3.67	0.005	0.003	47.6
Dibenzothiophene	0.024	0.005	0.003	18.2
C1 - Dibenzothiophene	0.031	0.005	0.003	17.5
C2 - Dibenzothiophene	0.053 B	0.005	0.003	5.5
C3 - Dibenzothiophene	0.038	0.005	0.003	33.8
C4 - Dibenzothiophene	0.406	0.005	0.003	3.6
Benzo(b)naphtho(2,1-d)thiophene	0.009	0.005	0.003	10.5
Fluoranthene	0.089	0.005	0.003	10.7
Pyrene	0.114 B	0.005	0.003	8.2
C1 - Fluoranthene/Pyrene	0.250 B	0.005	0.003	29.9
C2 - Fluoranthene/Pyrene	0.062	0.005	0.003	13.8
C3 - Fluoranthene/Pyrene	0.053	0.005	0.003	49.4
Benz(a)anthracene	0.048	0.005	0.003	0
Chrysene*	0.061	0.005	0.003	12.2
C1 - Benz(a)anthracene/Chrysene	0.064	0.005	0.003	20.7
C2 - Benz(a)anthracene/Chrysene	0.060	0.005	0.003	58.1
C3 - Benz(a)anthracene/Chrysene	0.062	0.005	0.003	91.8
C4 - Benz(a)anthracene/Chrysene	0.031	0.005	0.003	NA
Benzo(b)fluoranthene	0.028	0.005	0.003	15.4
Benzo(j/k)fluoranthene	0.029	0.005	0.003	3.5
Benzo(e)pyrene	0.040	0.005	0.003	38.8
Benzo(a)pyrene	0.037	0.005	0.003	5.6
Perylene	0.011	0.005	0.003	31.6
Indeno(1,2,3-cd)pyrene	0.021	0.005	0.003	15.4
Dibenz(a,h)anthracene	0.008	0.005	0.003	46.2
Benzo(g,h,i)perylene	0.025	0.005	0.003	27.3
Coronene	0.007	0.005	0.003	54.5
Retene	23.2 E	0.005	0.003	47.9
Benzo(b/c)fluorenes	0.011	0.005	0.003	0
2-Methylpyrene	0.014	0.005	0.003	0
4-Methylpyrene	0.016	0.005	0.003	6.5
1-Methylpyrene	0.013	0.005	0.003	7.4
Heptadecane	0.061 B	0.005	0.003	121.1
Pristane	0.053 B	0.005	0.003	131.3
Octadecane	0.060 B	0.005	0.003	107.7
Phytane	0.028 B	0.005	0.003	120

Analytical Results for Volatile and Semivolatile Organics
META Environmental, Inc.

Field ID: Duplicate of SB-1(18-20)

Client:	Parsons	Preparation Method:	EPA 3570
Project:	Ludlow St. Works	Cleanup Method(s):	NA
		Analysis Method:	EPA 8270M
Lab ID	PA100709-04DUP		
File ID:	E071940.D	Matrix:	Soil
		Preservation:	None
Date Sampled:	7/2/2010	Decanted:	None
Date Received:	7/9/2010		
Date Prepared:	7/16/2010	Sample Size (g):	2.23
Date Cleanup:	NA	Percent Solid:	87.5%
Date Analyzed:	7/22/2010	Extract Volume (µl):	2000
Instrument:	El Camino	Prep DF:	1
Operator:	ERL	Analysis DF:	1
		Injection Volume (µl):	1.00
Batch QC:	QC100716-SB		

Analyte	Concentration (mg/kg dry wt.)	RL	EDL	Comments
2,6,10-trimethyldodecane	0.012	0.005	0.003	28.6
2,6,10-trimethyltridecane	0.023	0.005	0.003	106.7
Norpristane	0.017	0.005	0.003	123.8
Total PAH (16)	1.42	0.005	0.003	24.5
Total PAH (42)	8.32	0.005	0.003	25.9

Extraction Surrogate Recoveries (%)		Limits
Toluene-d8	57	50 - 120
Phenanthrene-d10	68	50 - 120
Benzo(a)pyrene-d12	66	50 - 120
Perylene-d12	67	50 - 120

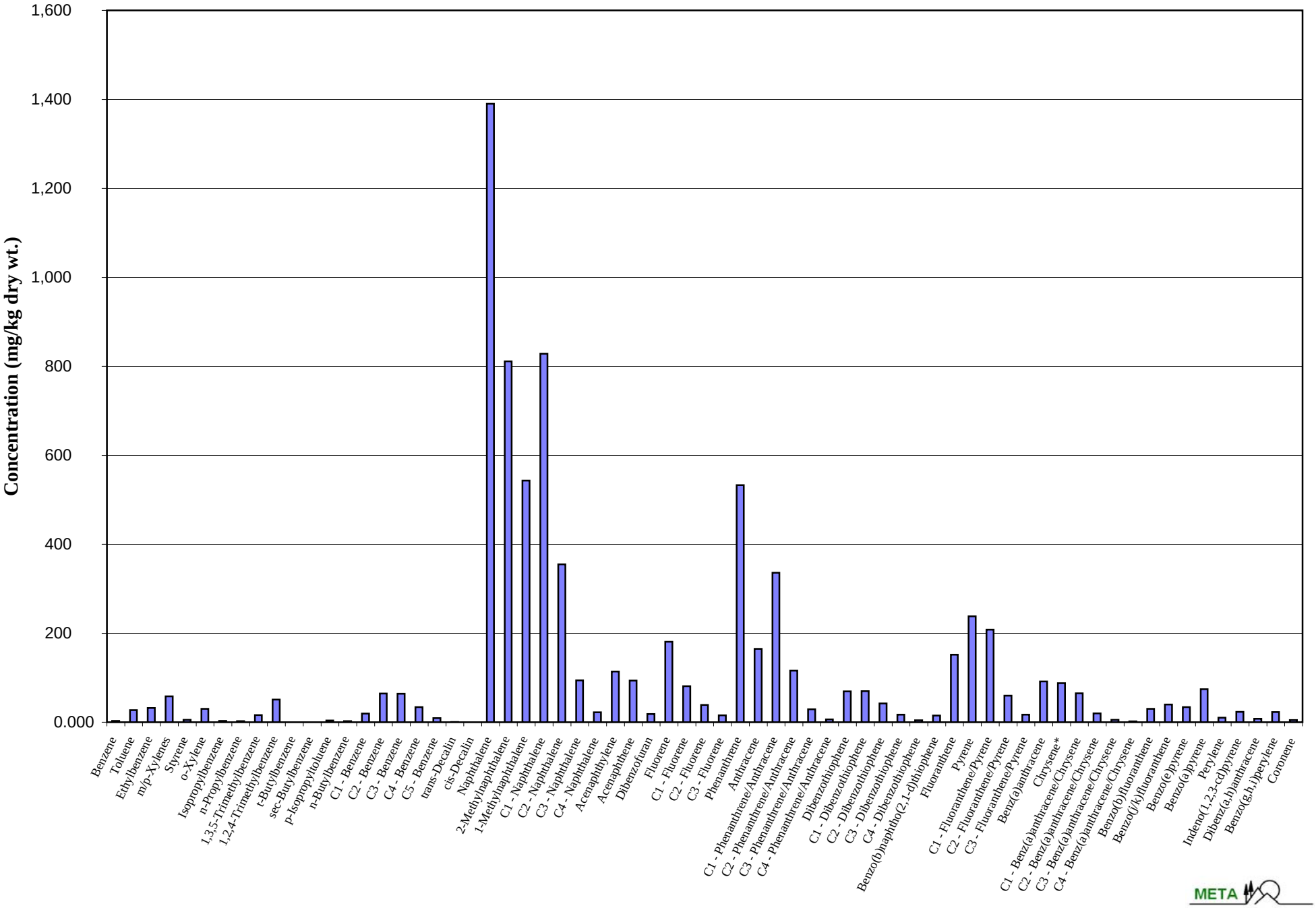
NA - Not applicable.
B - Analyte detected in the Blank.
J - Estimated value; detected between the RL and DL.
U - Analyte not detected above DL.
D - Analyte reported from a diluted extract.
E - Estimate, result detected above calibration range.
I - Concentration/Peak ID uncertain due to potential interference.
RL - Reporting limit is the sample equivalent of the lowest linear calibration concentration.
EDL - Estimated detection limit is 50% of RL.
* - Triphenylene is known to coelute with this compound.

Appendix D

Extended MAH/PAH Profiles – Histograms

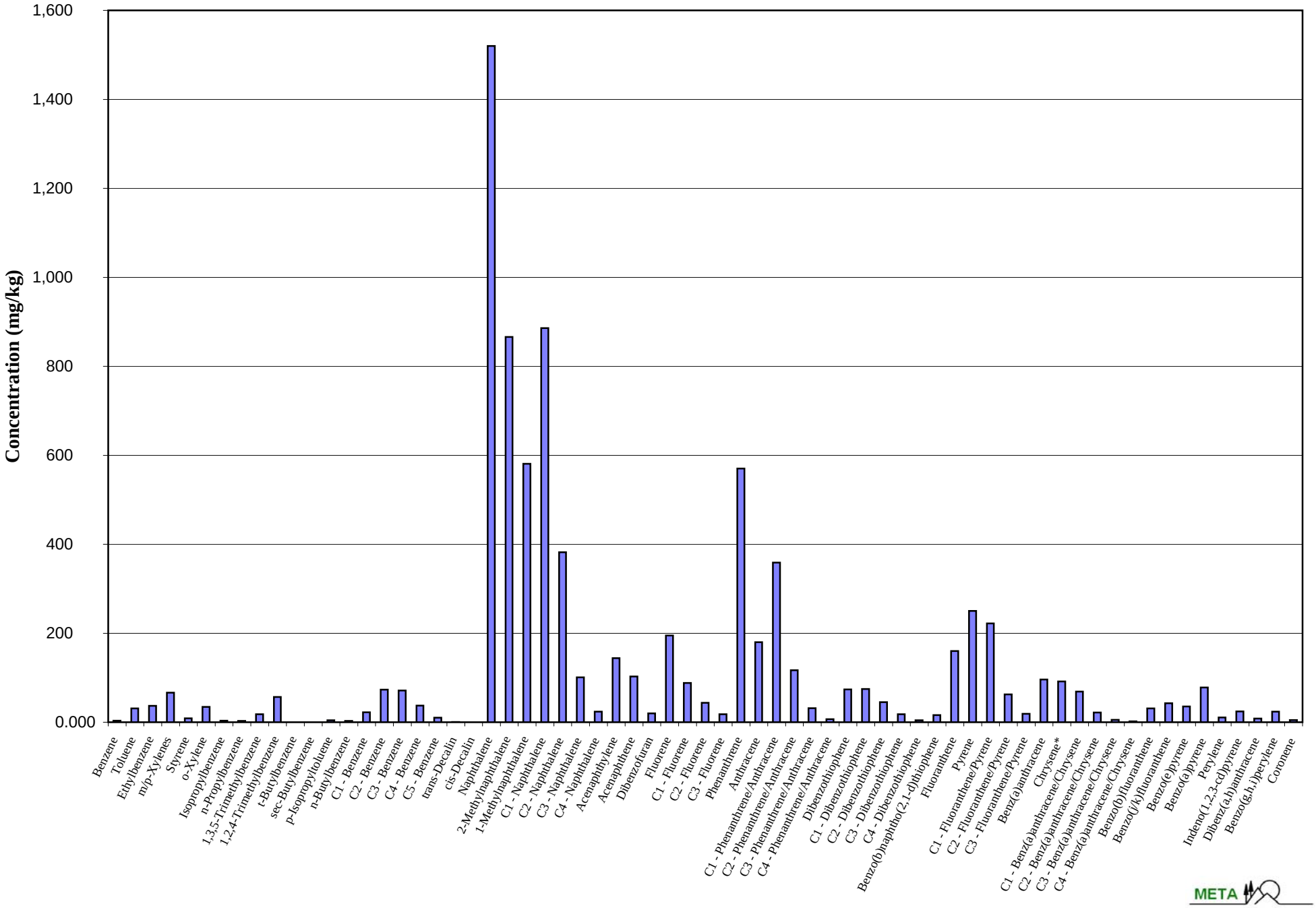
MW-3(9-11)

PA100709-01-R-D1



Duplicate of MW-3(9-11)

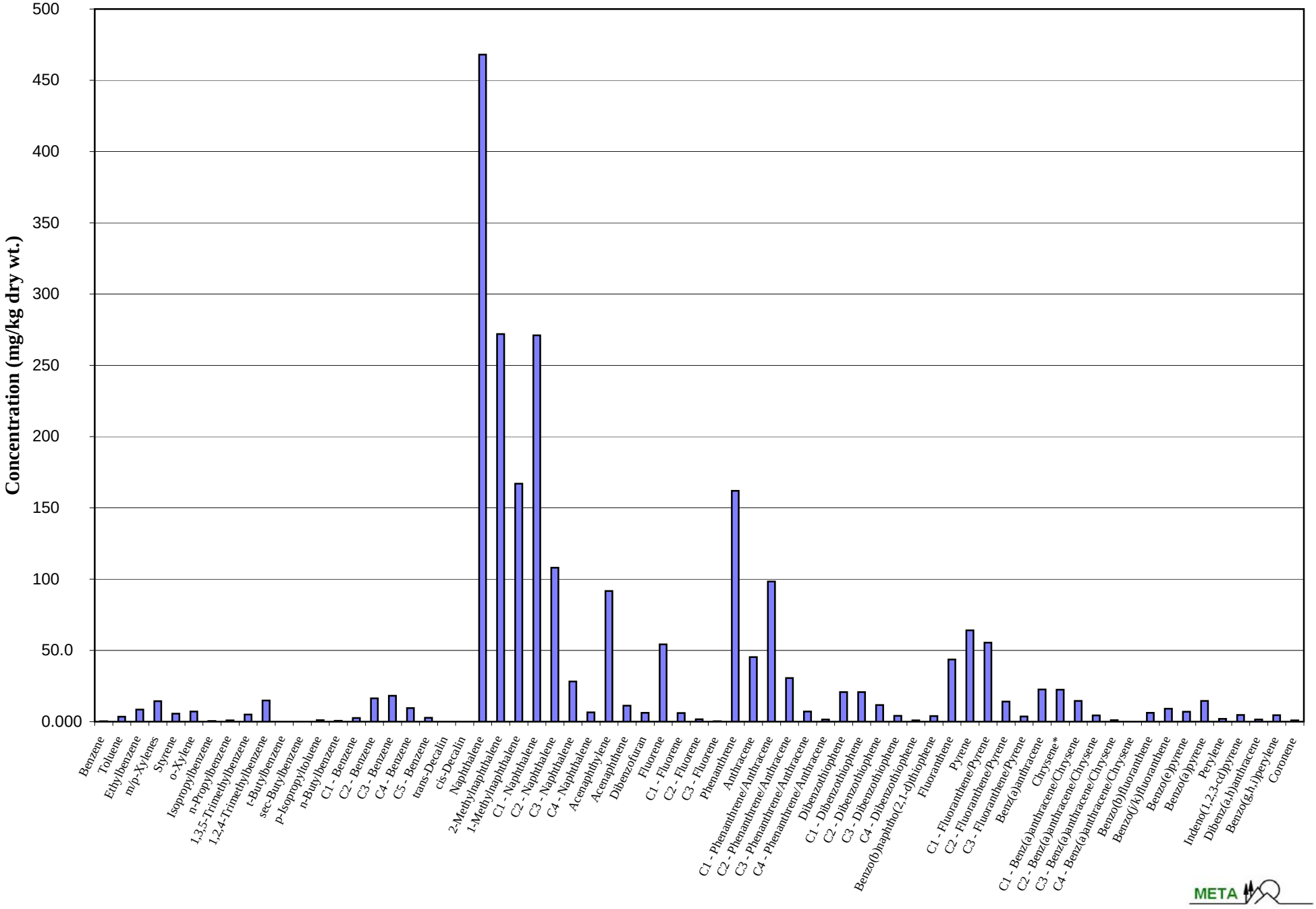
PA100709-01DUP-R-D1



META

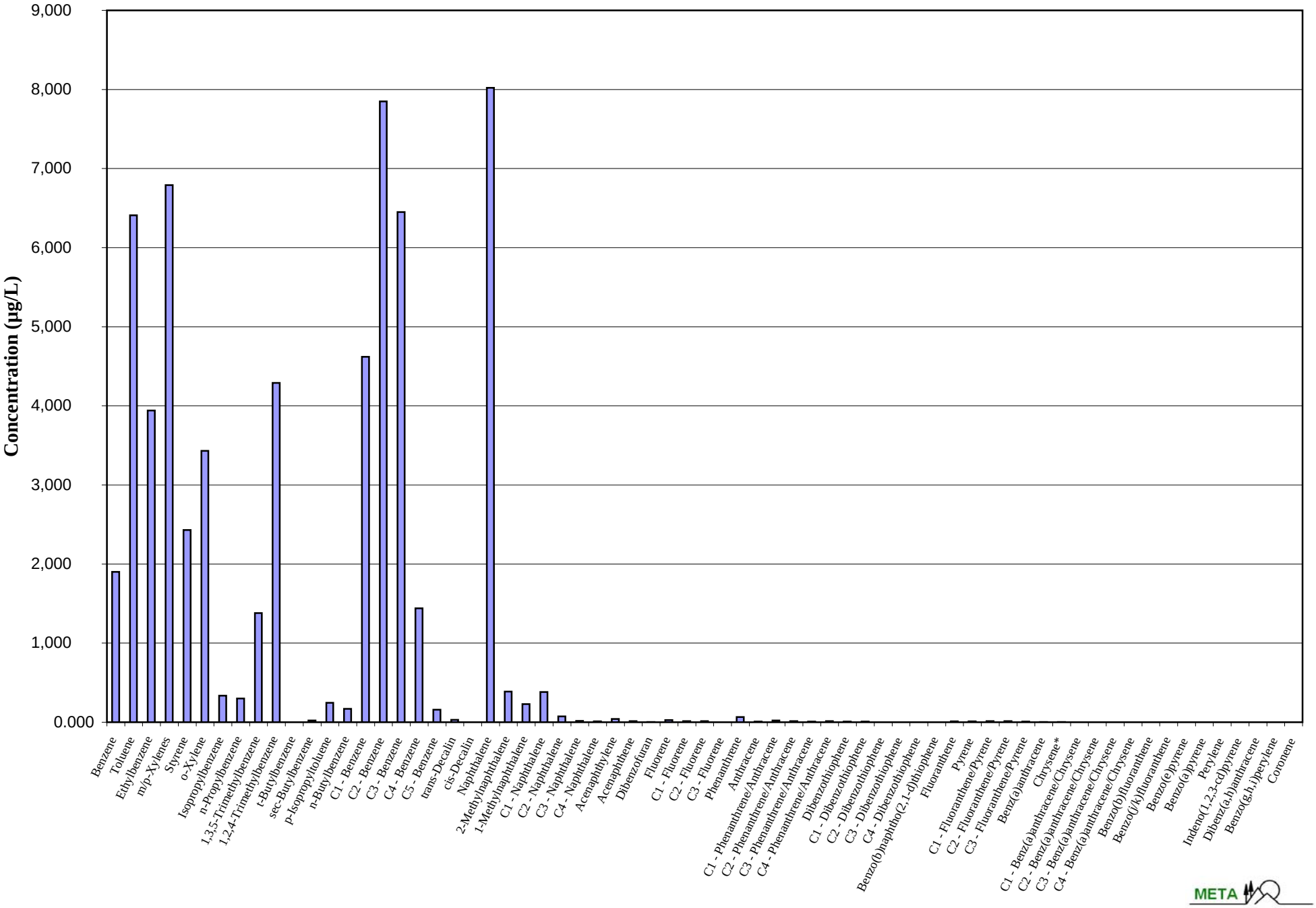
SB-7(17-19)

PA100709-02-R-D1



Exposed Pipe 1

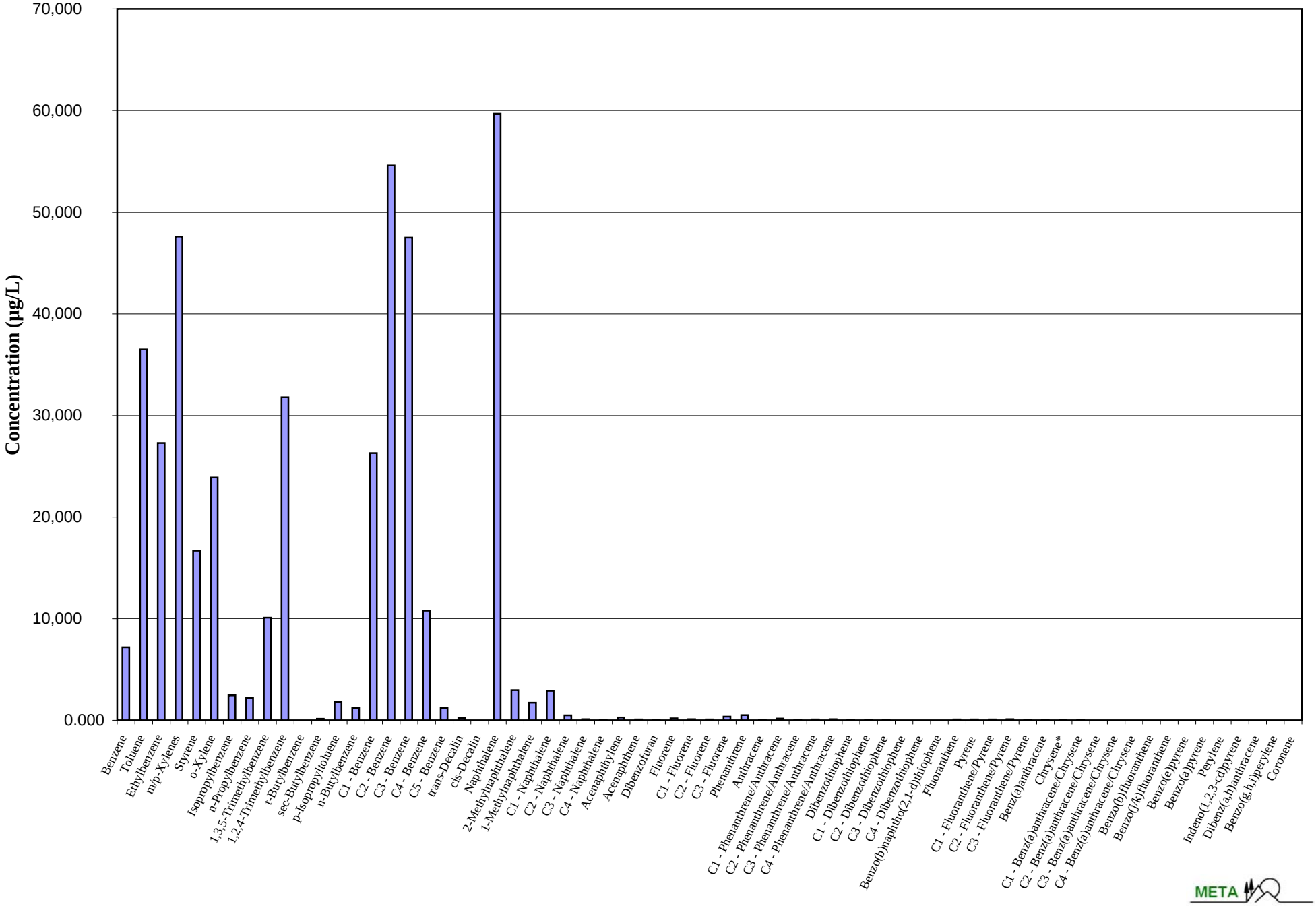
PA100709-03-R-D



META

Duplicate of Exposed Pipe 1

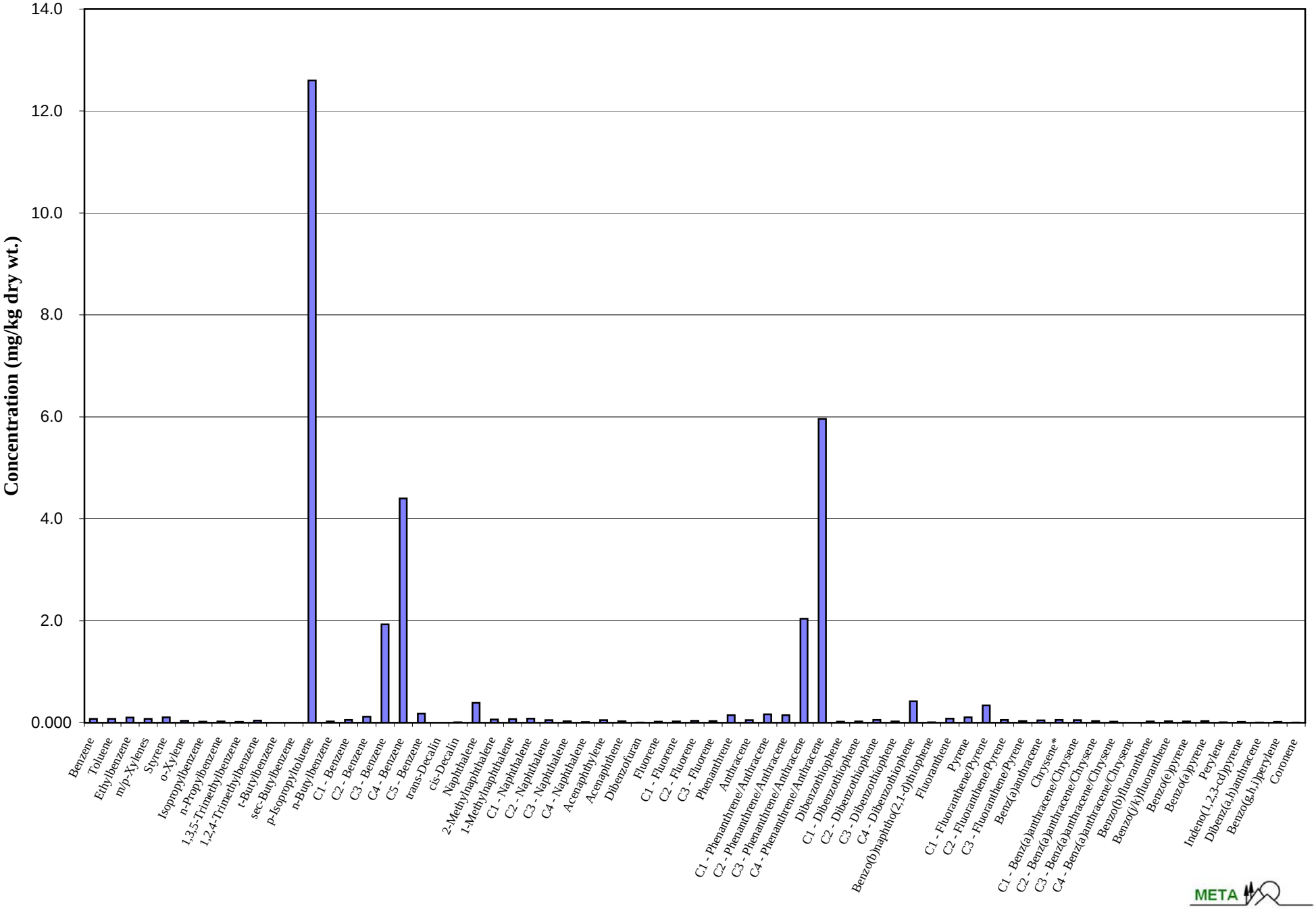
PA100709-03DUP-R-D



META

SB-1(18-20)

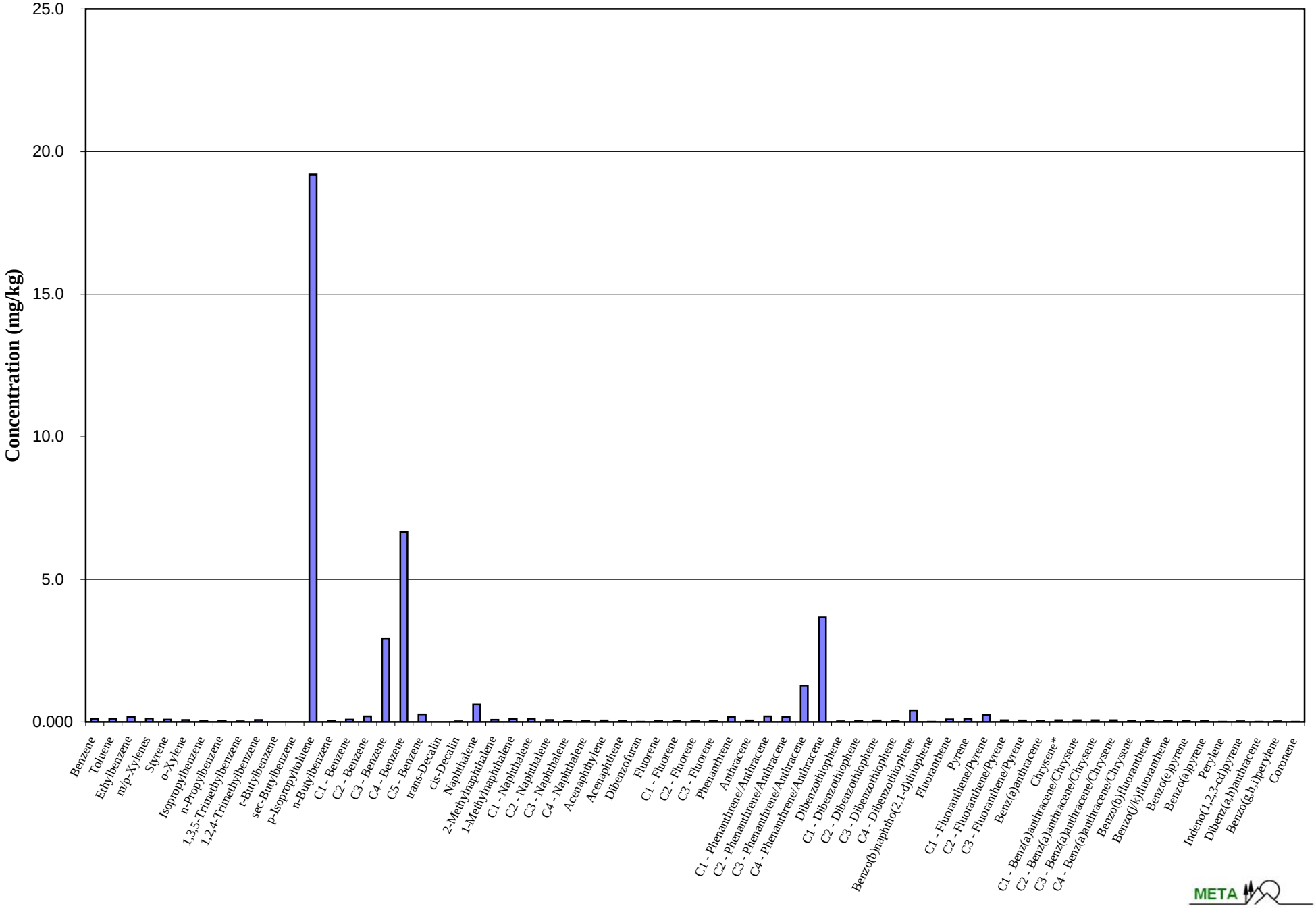
PA100709-04



META

Duplicate of SB-1(18-20)

PA100709-04DUP



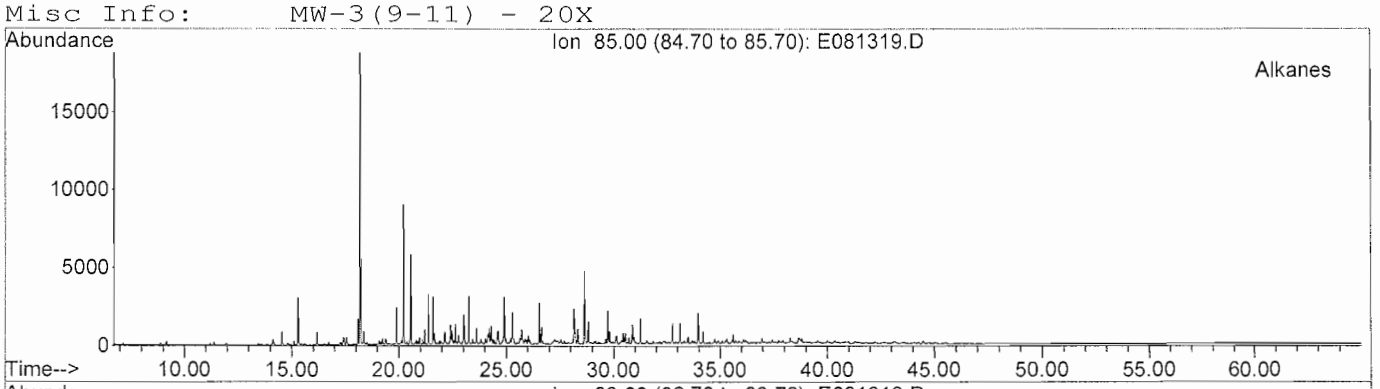
Appendix E

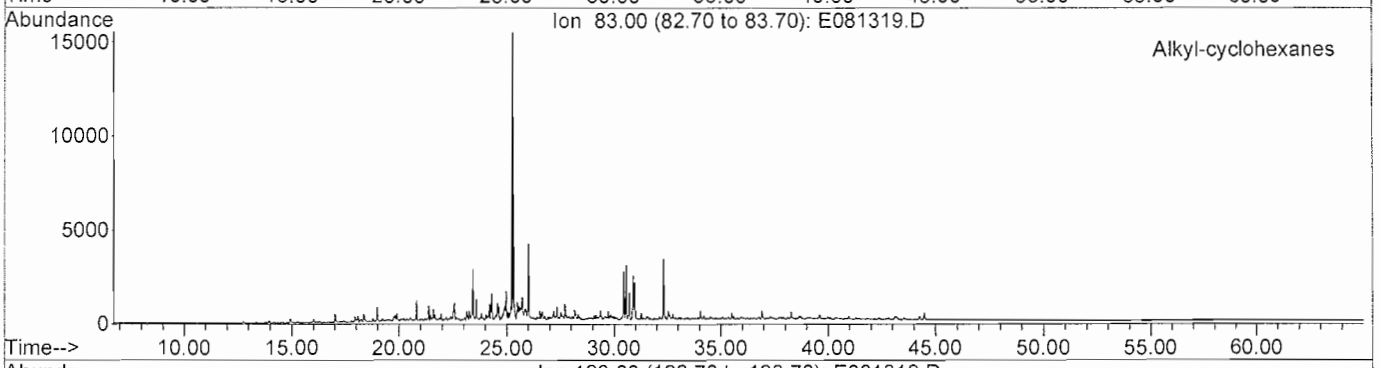
Extracted Ion Current Profiles (EICPs)

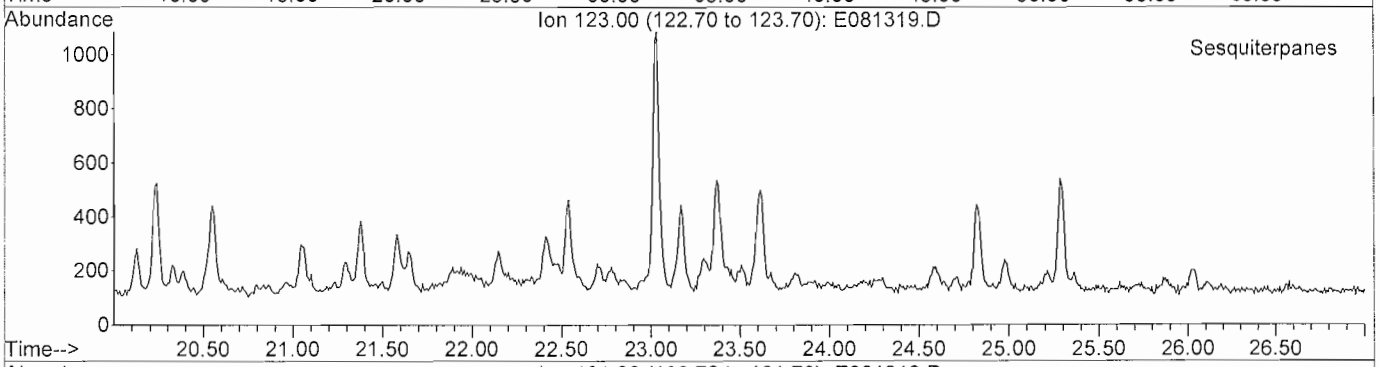
META Environmental, Inc.

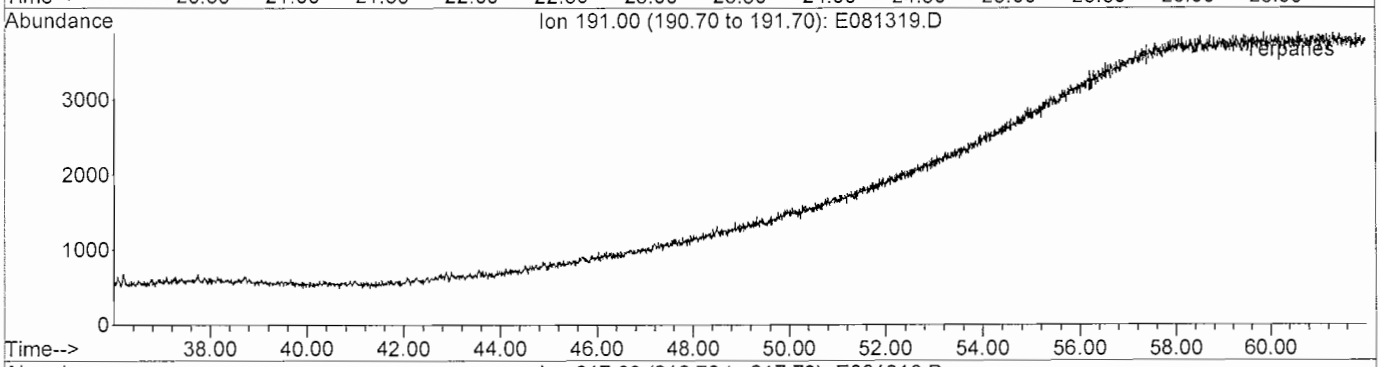
GC/MS EXTRACTED ION CHROMATOGRAM

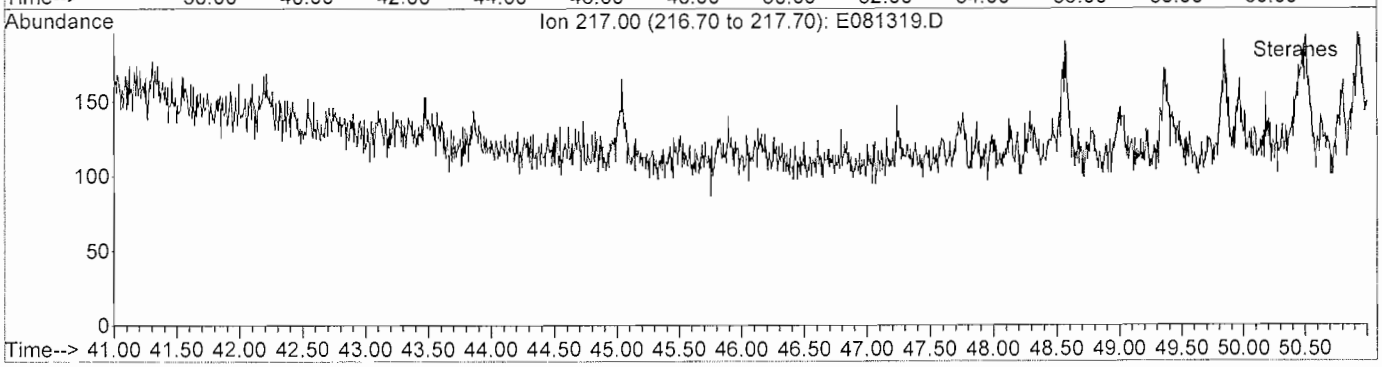
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X







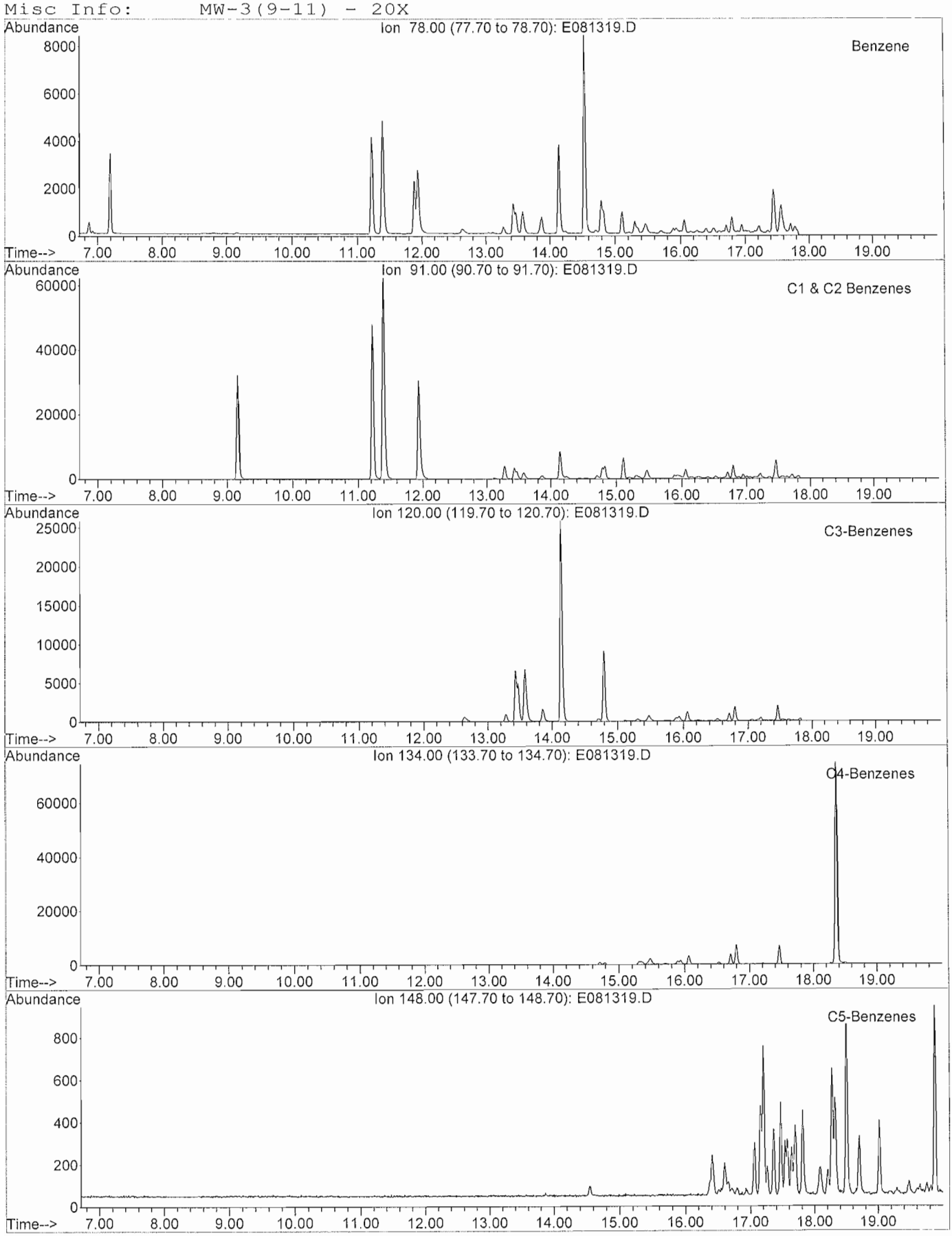




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

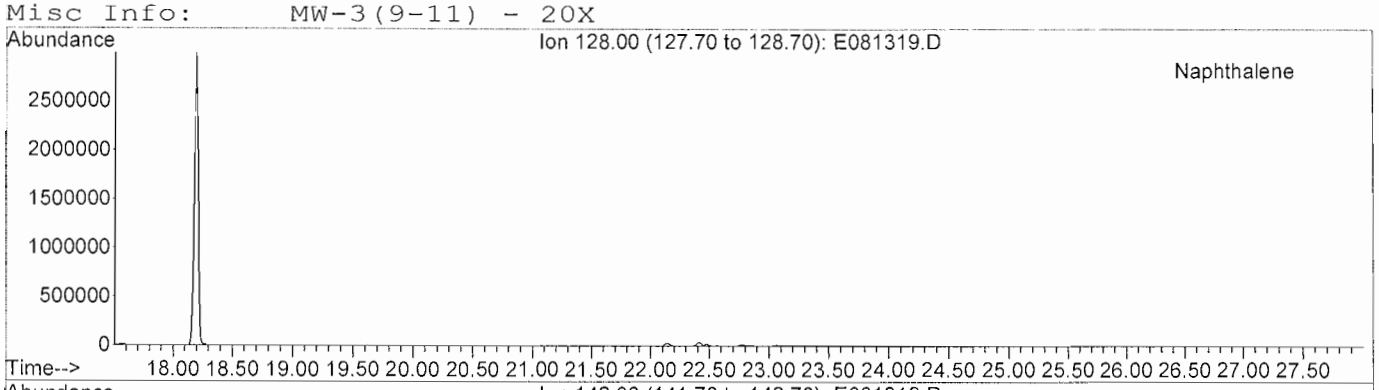
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X

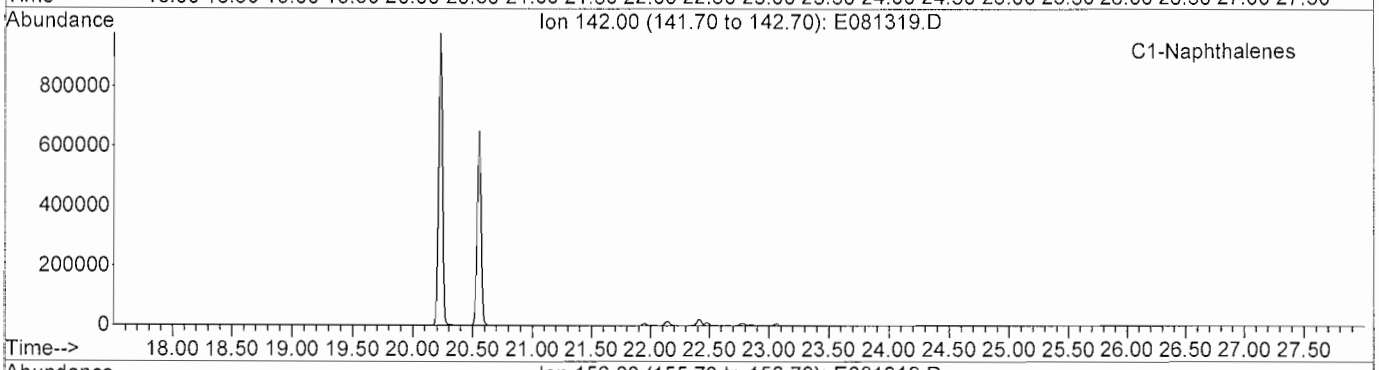


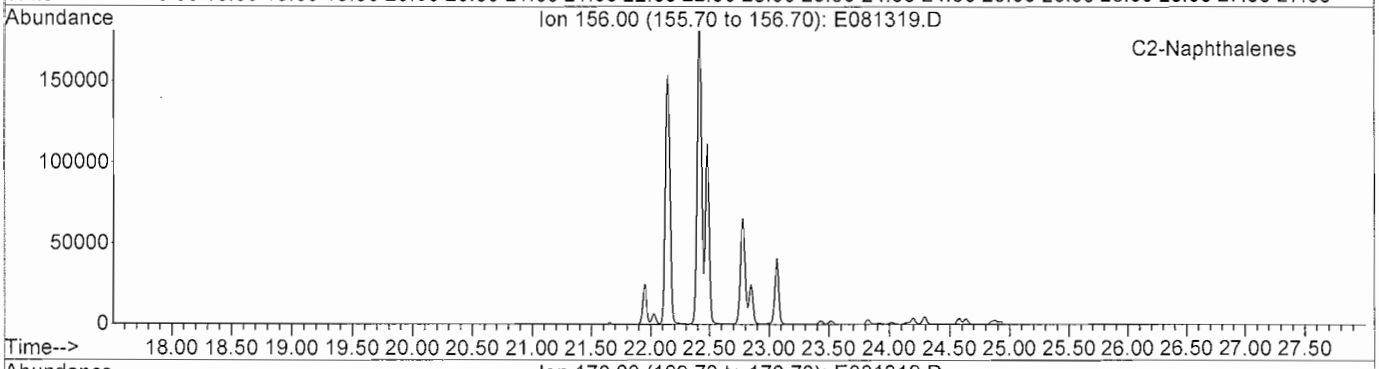
META Environmental, Inc.

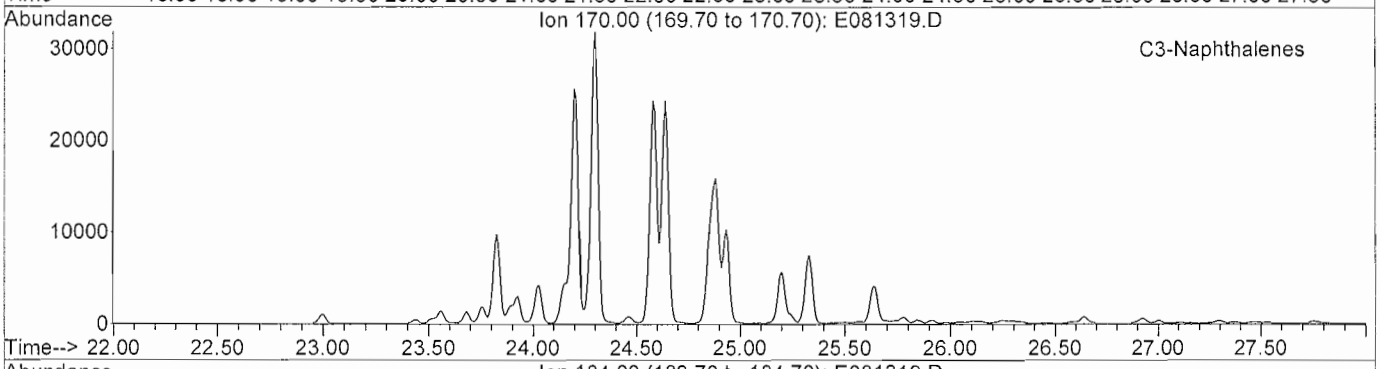
GC/MS EXTRACTED ION CHROMATOGRAM

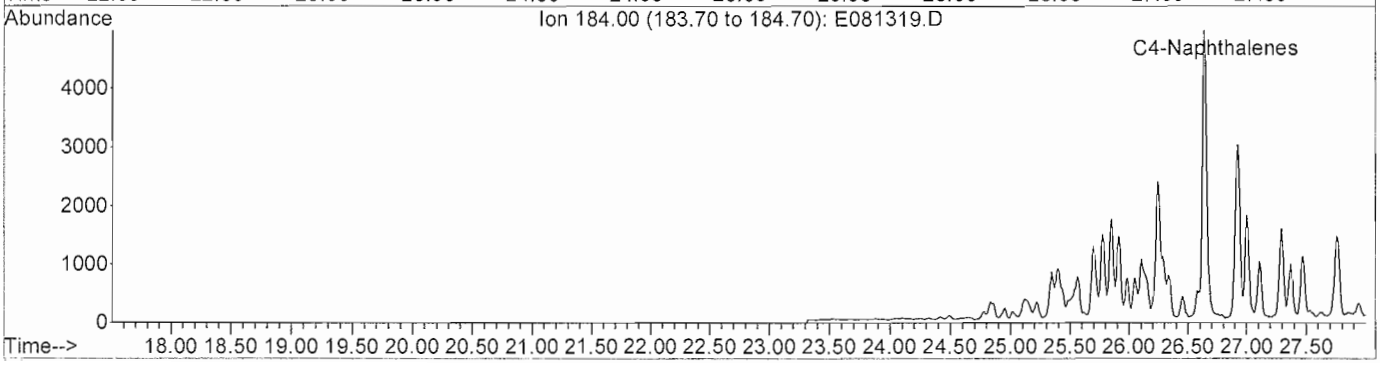
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X







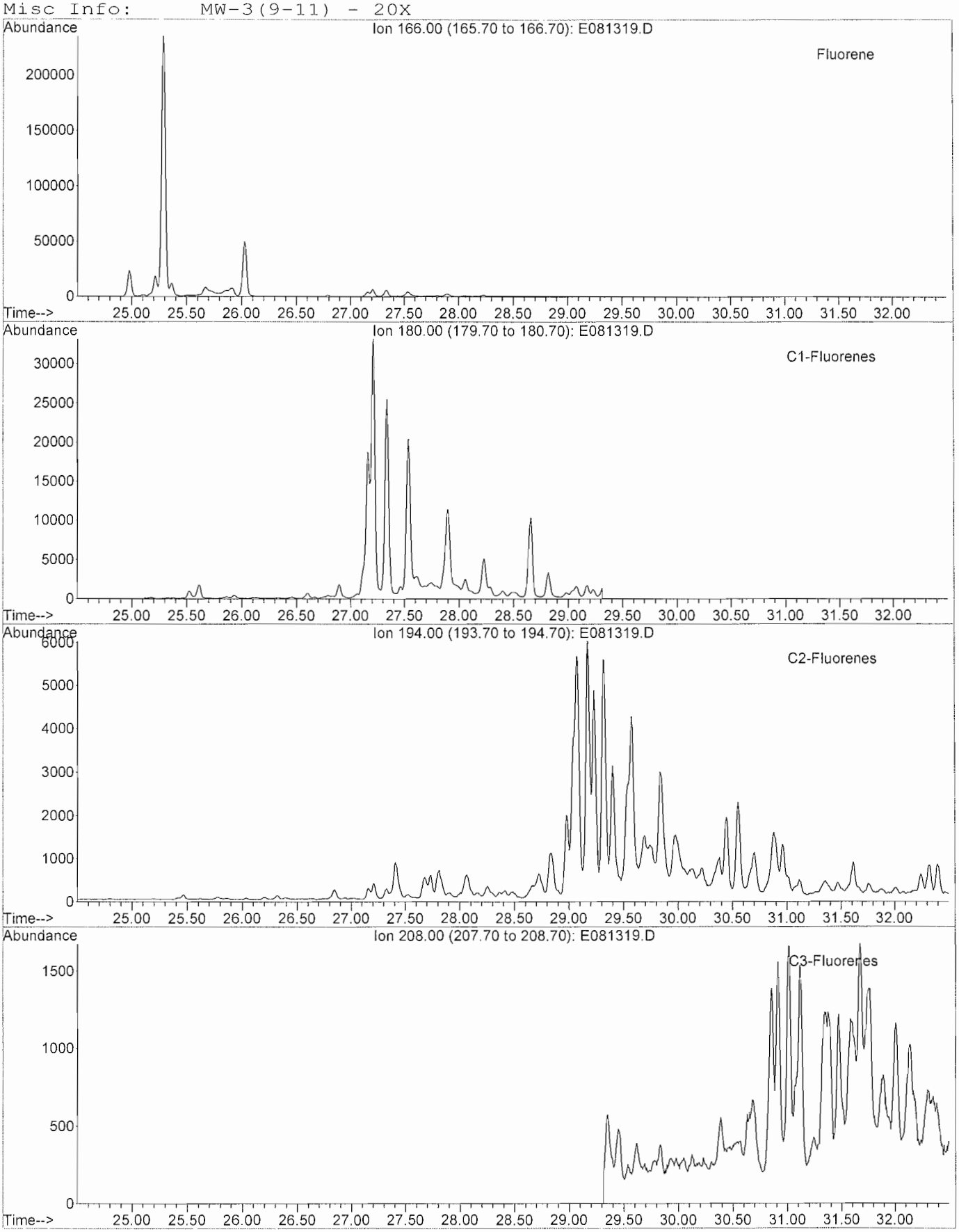




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

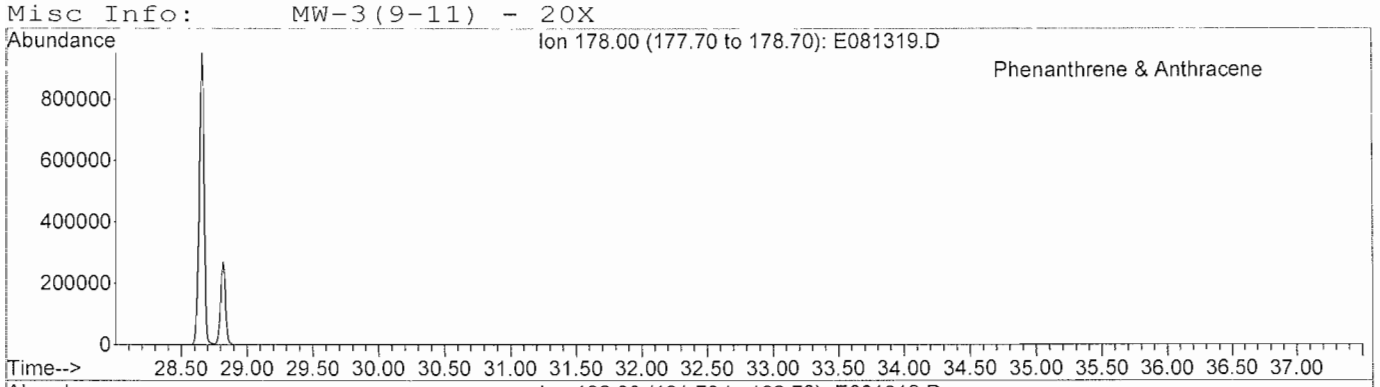
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X

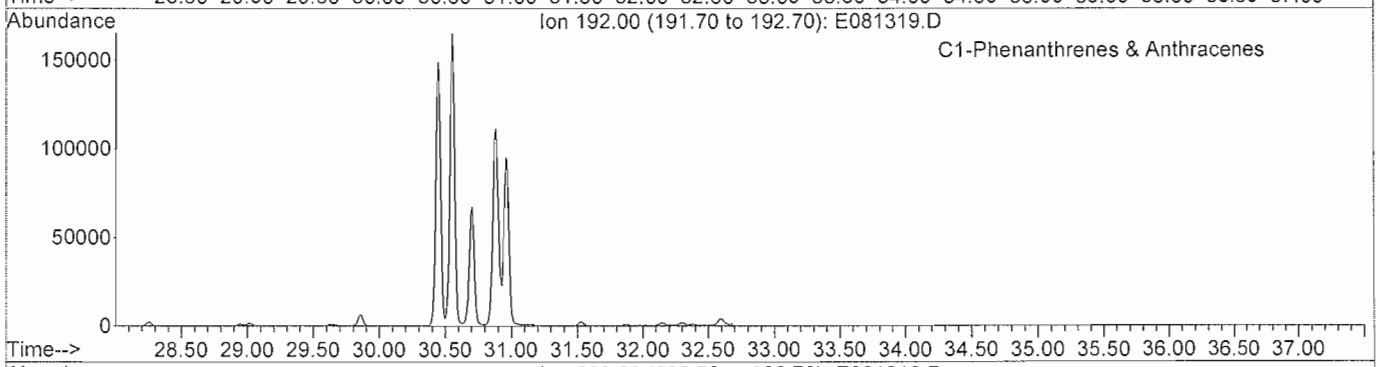


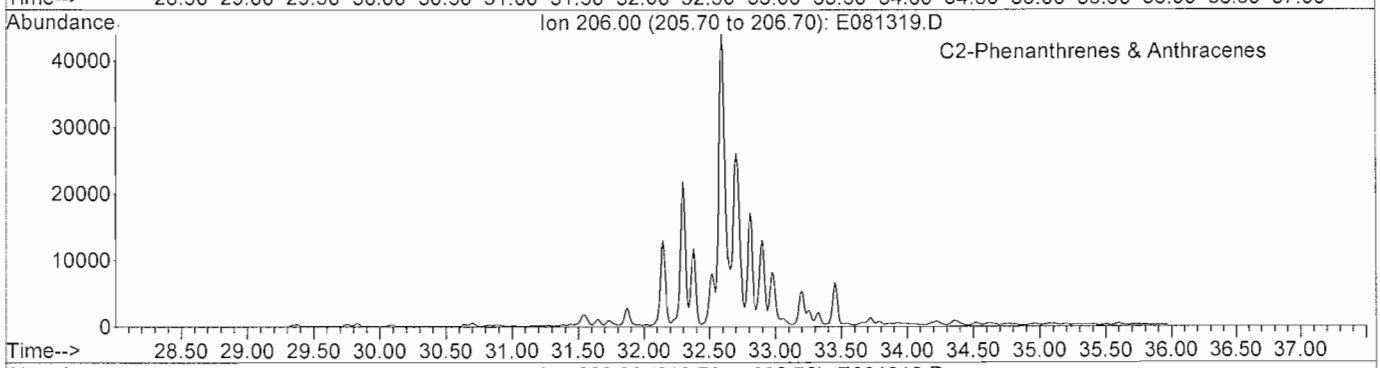
META Environmental, Inc.

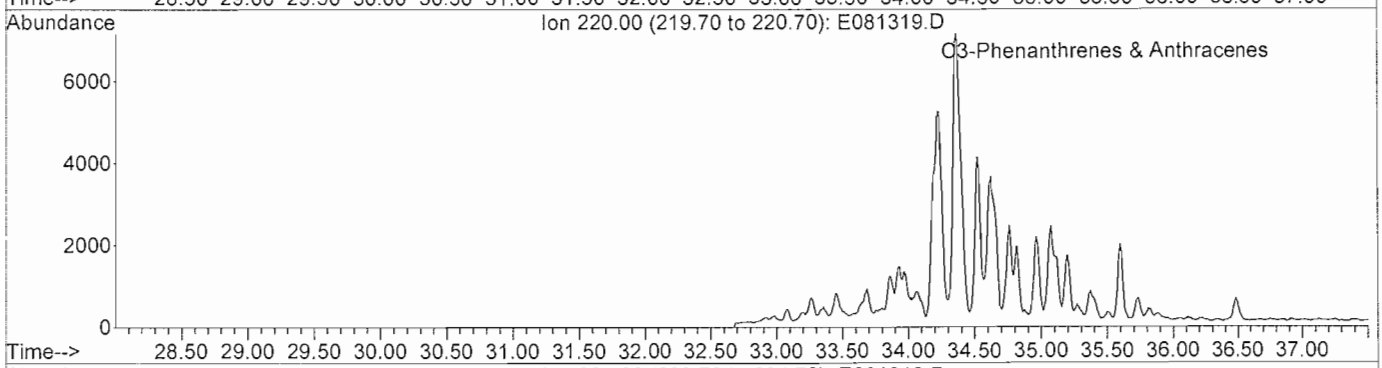
GC/MS EXTRACTED ION CHROMATOGRAM

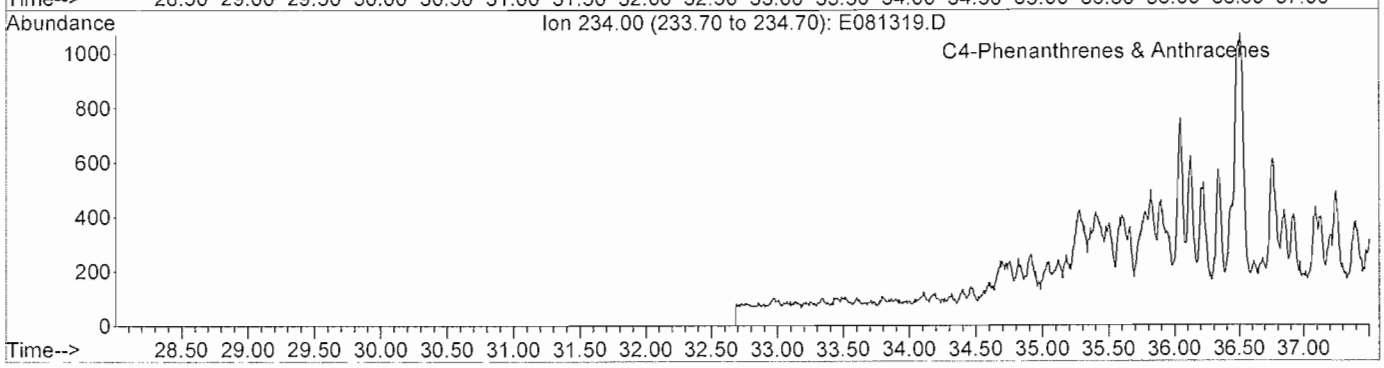
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X







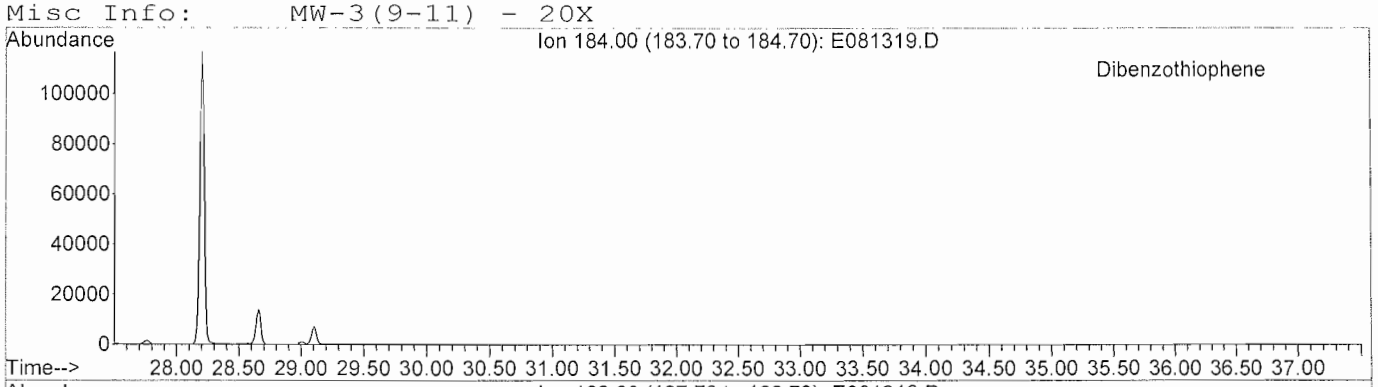


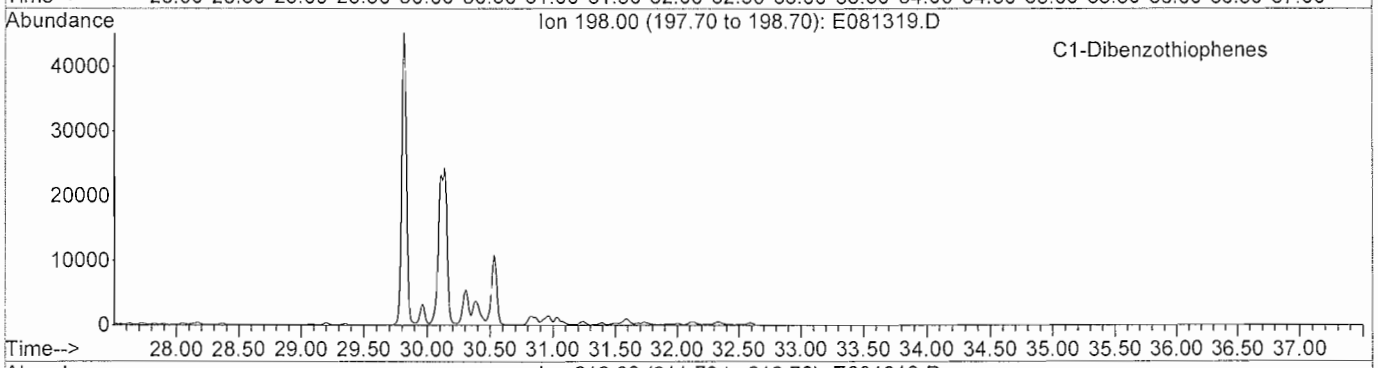


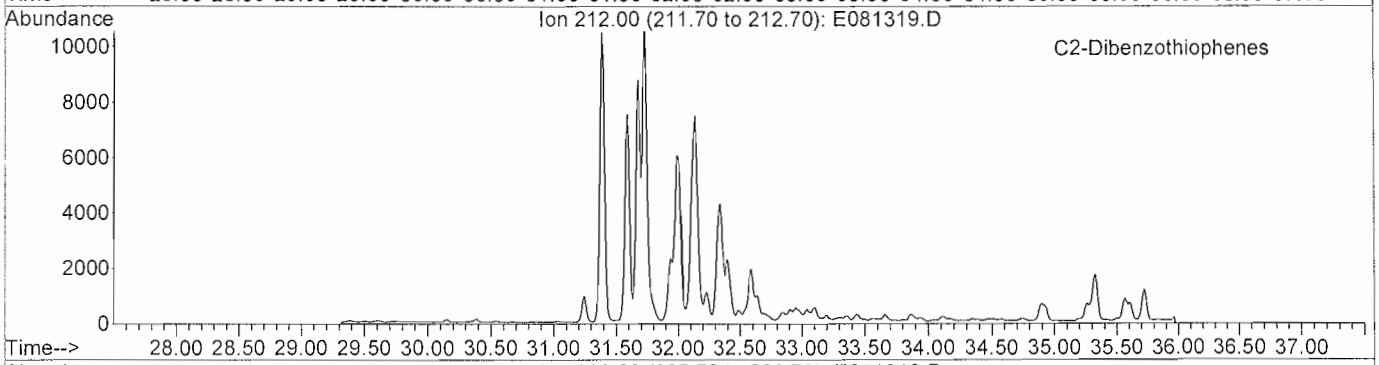
META Environmental, Inc.

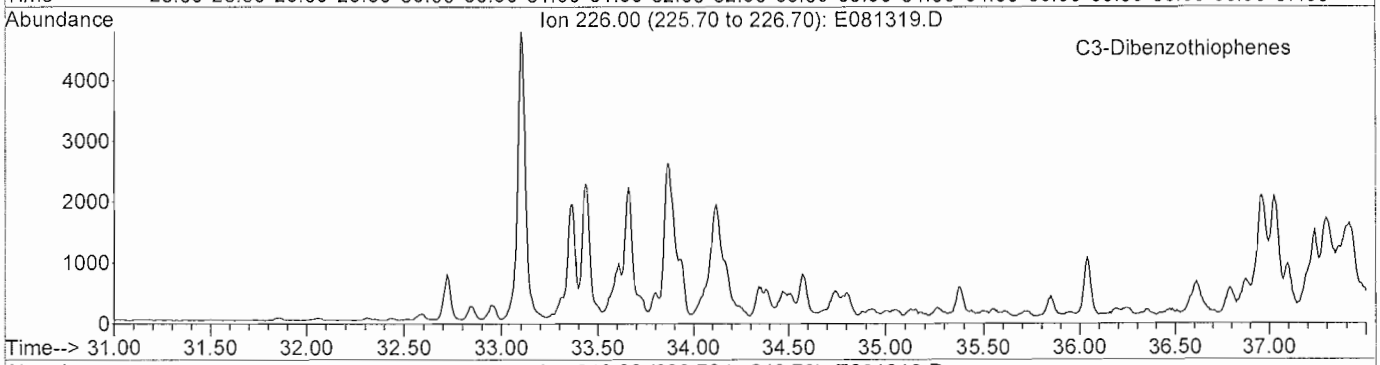
GC/MS EXTRACTED ION CHROMATOGRAM

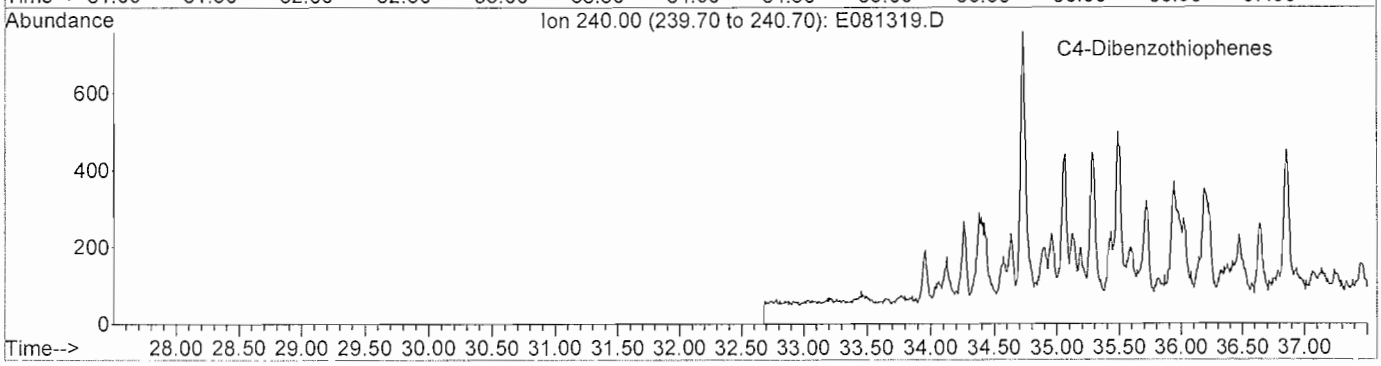
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X







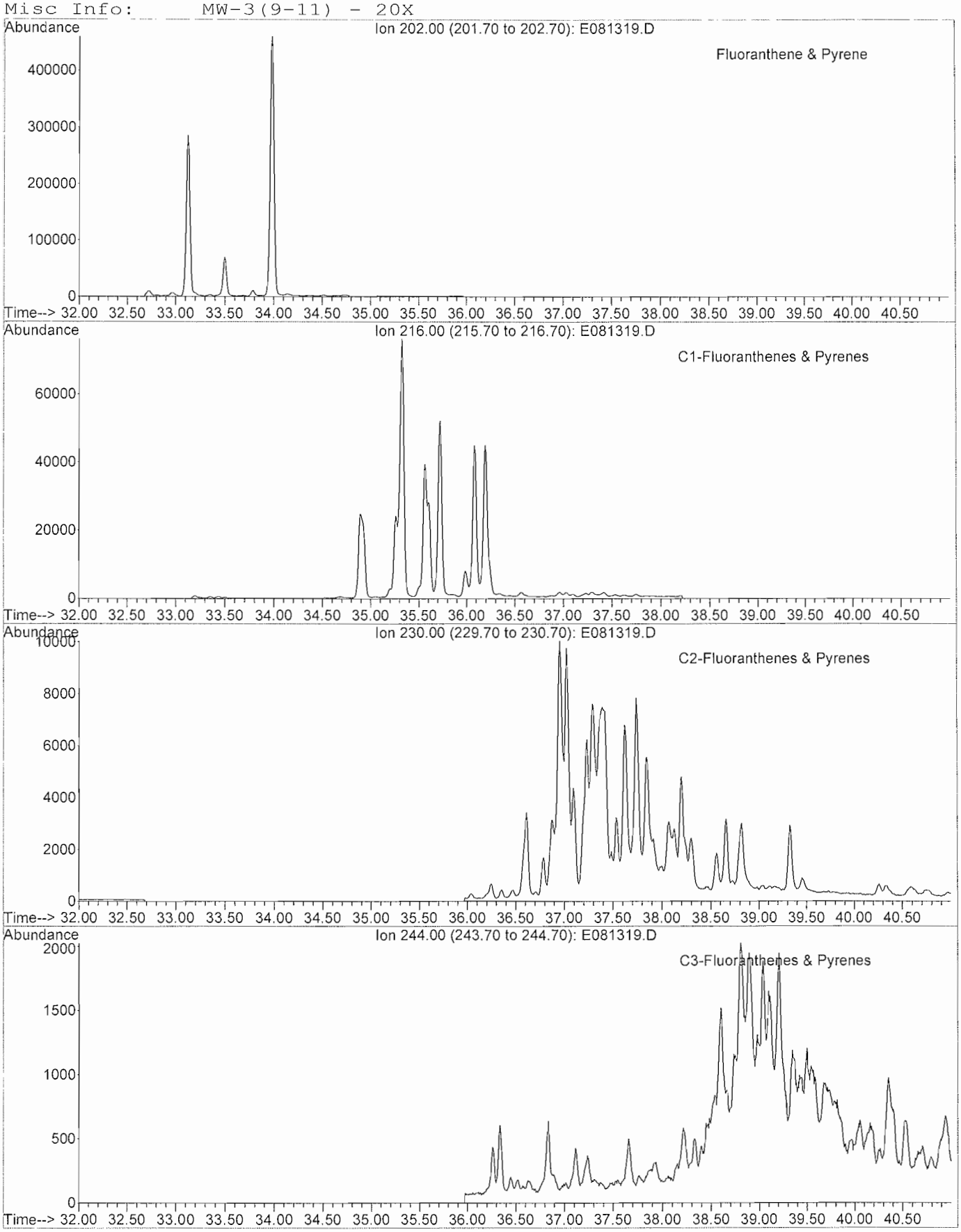




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

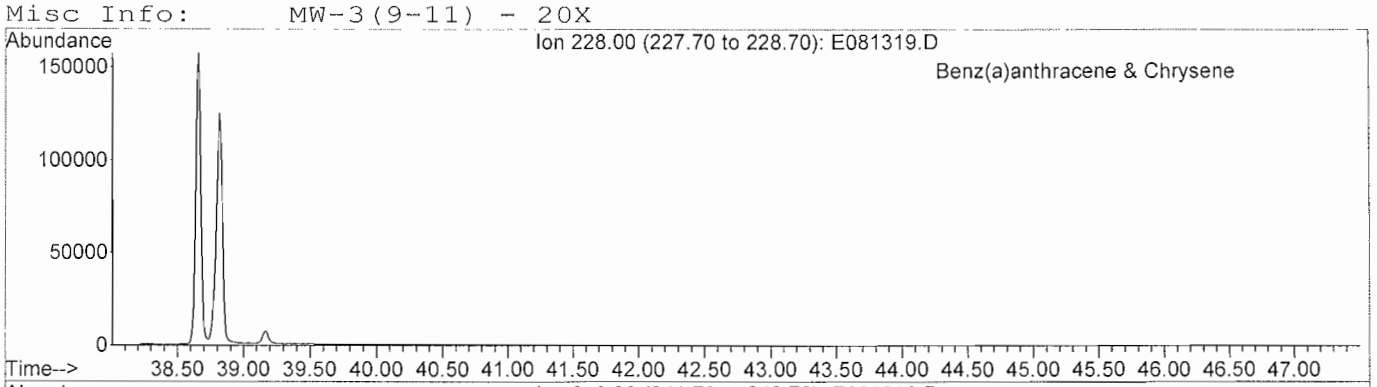
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X

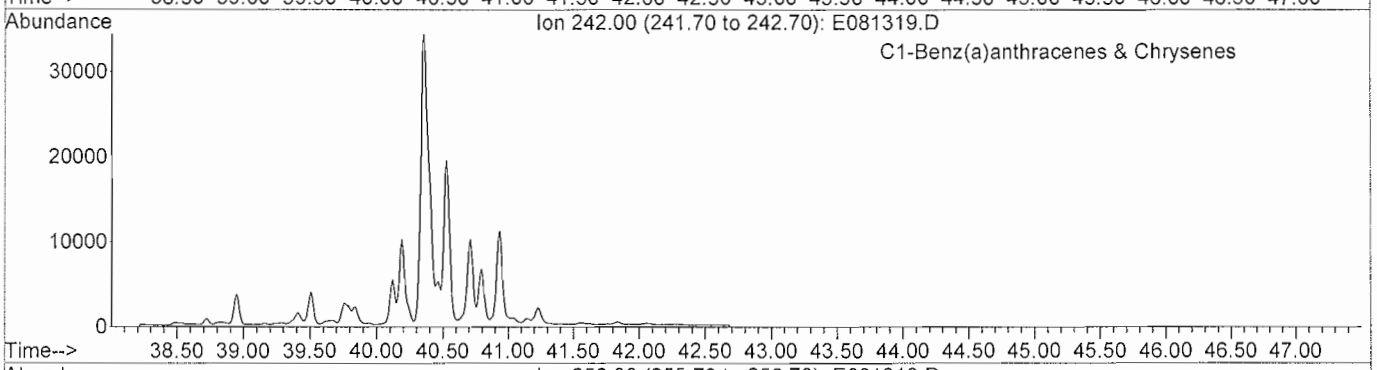


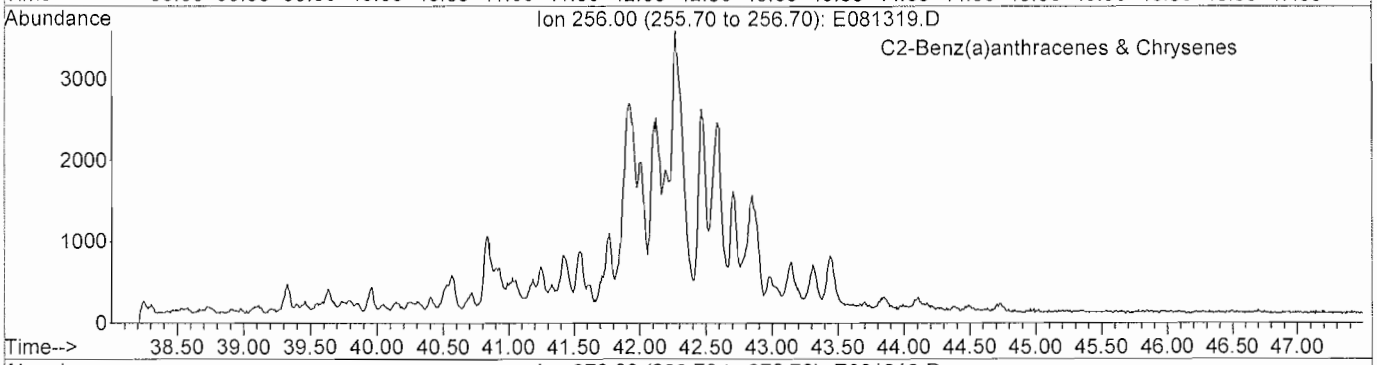
META Environmental, Inc.

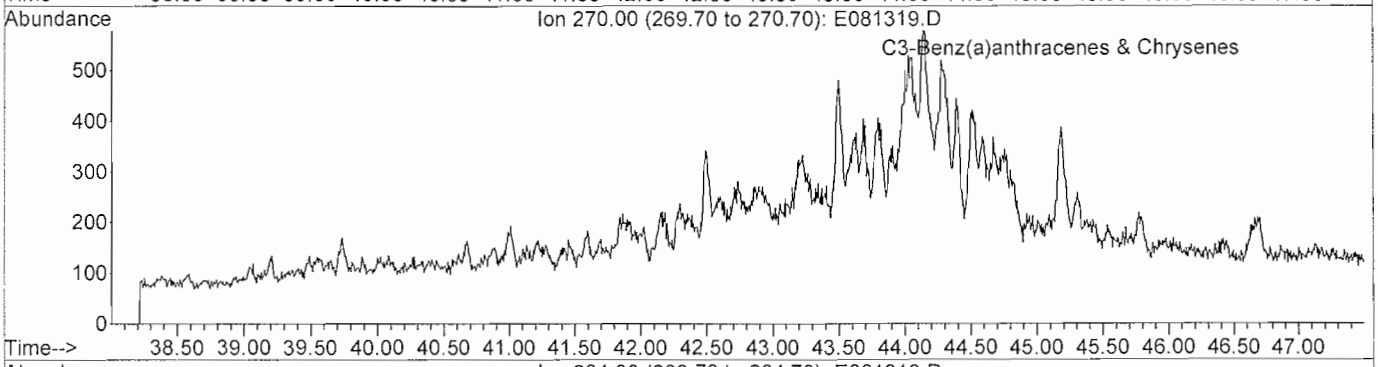
GC/MS EXTRACTED ION CHROMATOGRAM

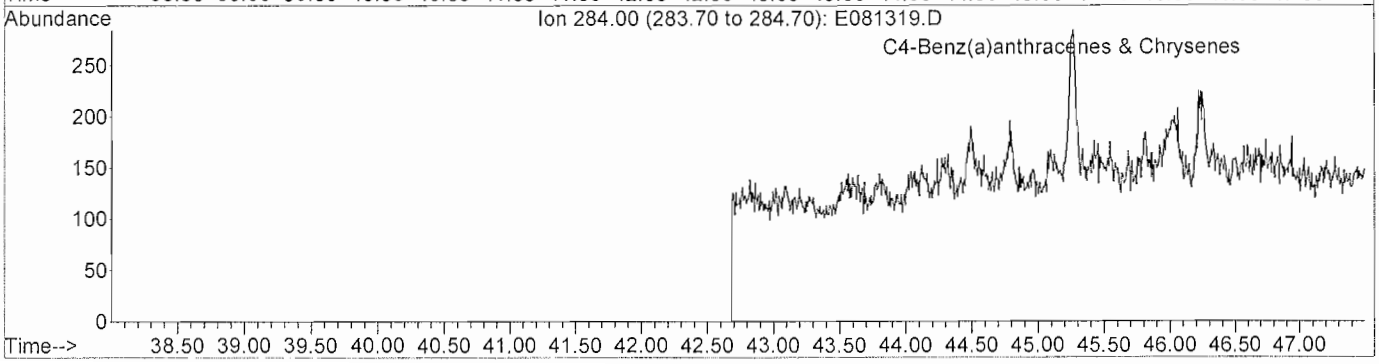
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X







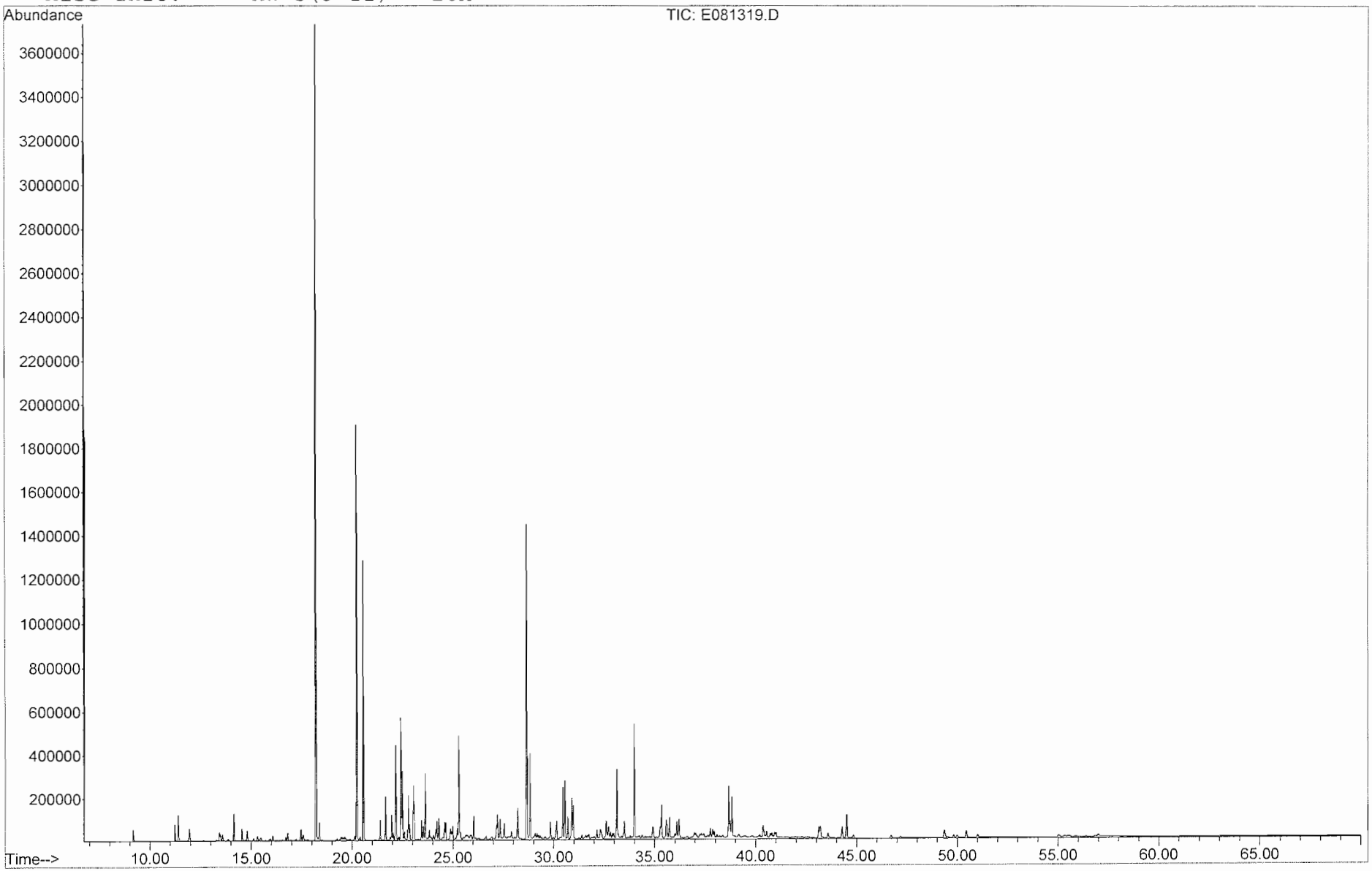




META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

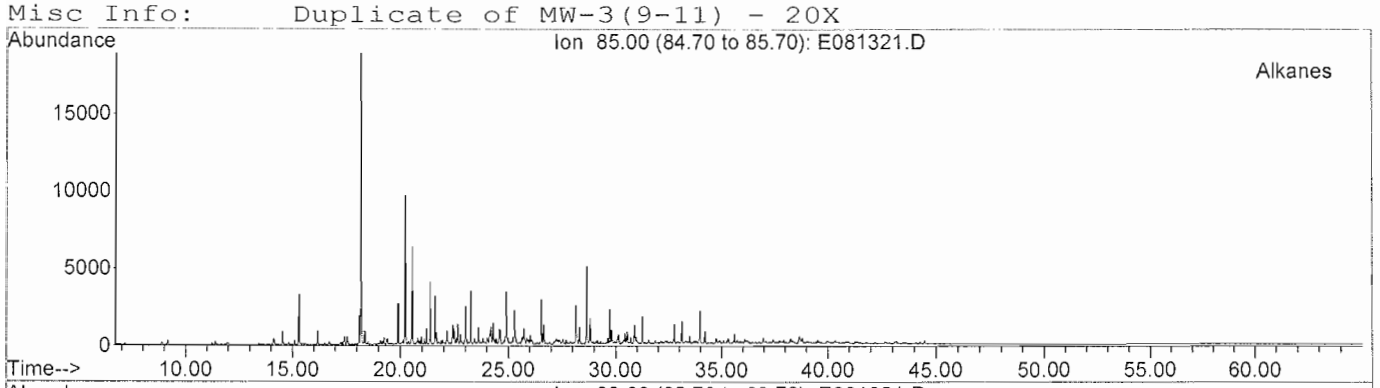
File: J:\1\DATA\E100813\E081319.D
Date Acquired: 14 Aug 2010 6:26 pm
Sample Name: PA100709-01-R-D1
Misc Info: MW-3(9-11) - 20X

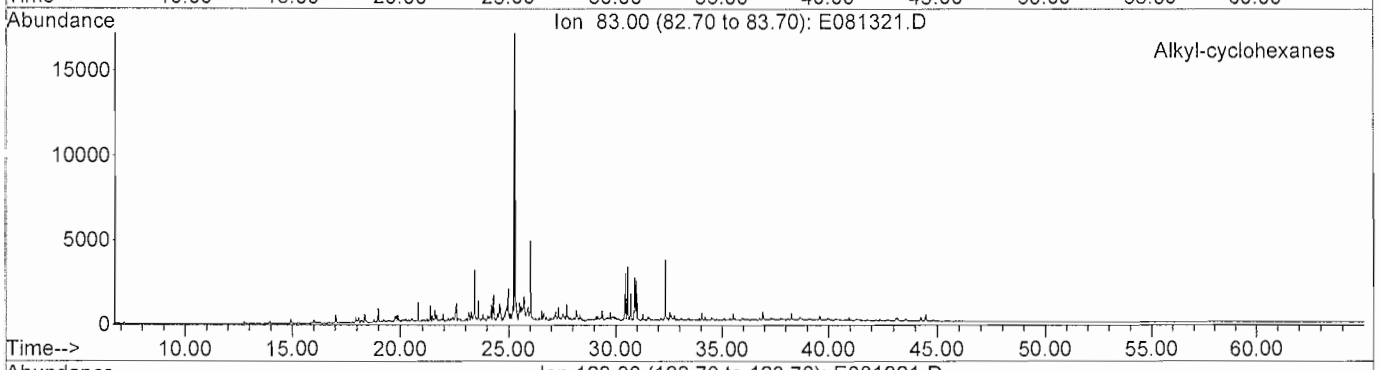


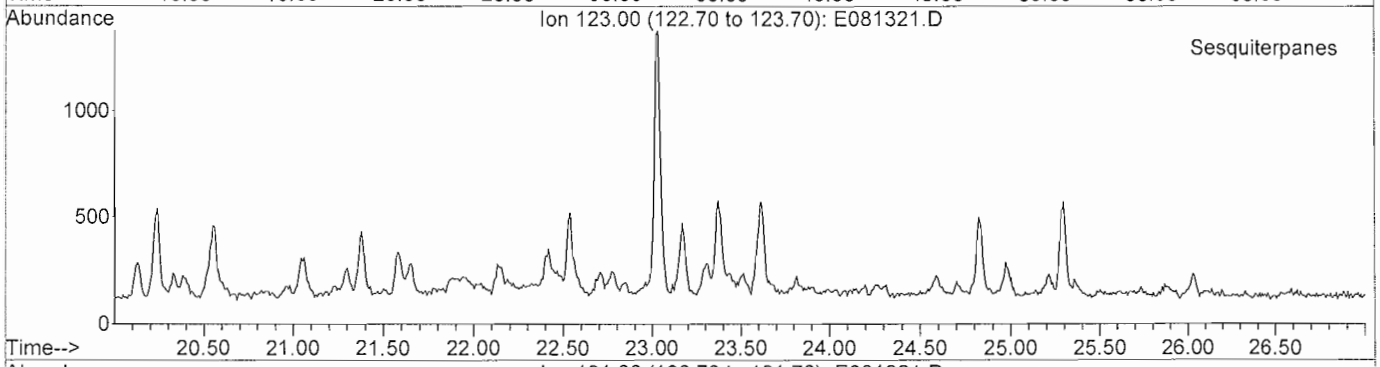
META Environmental, Inc.

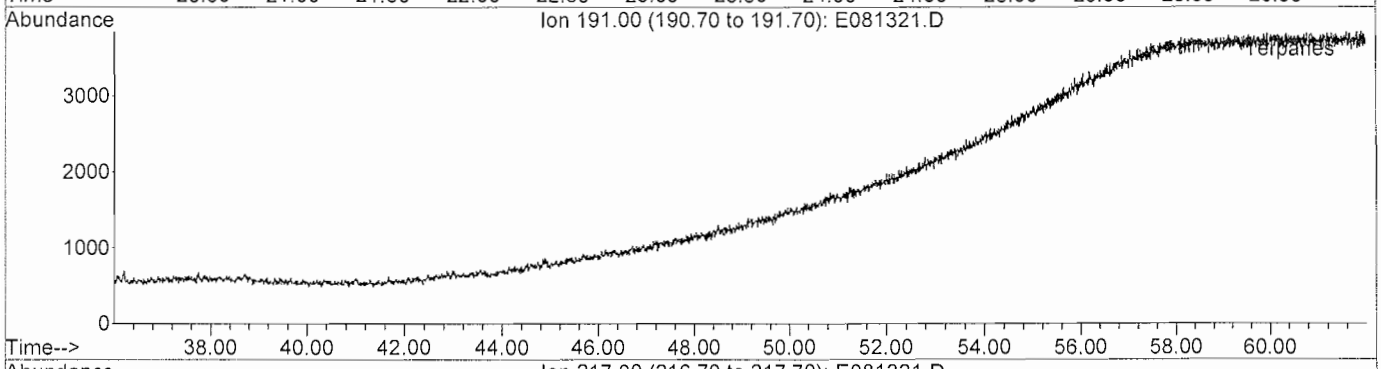
GC/MS EXTRACTED ION CHROMATOGRAM

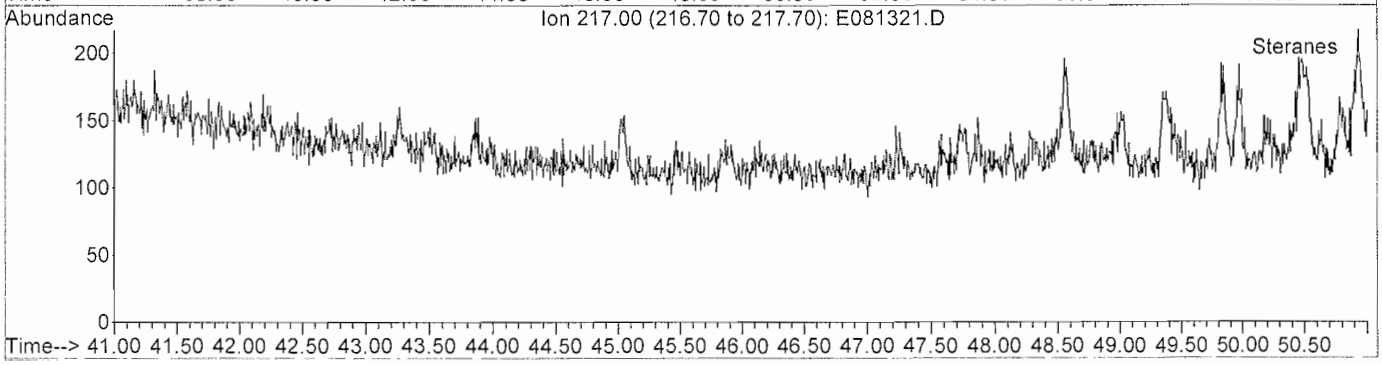
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X







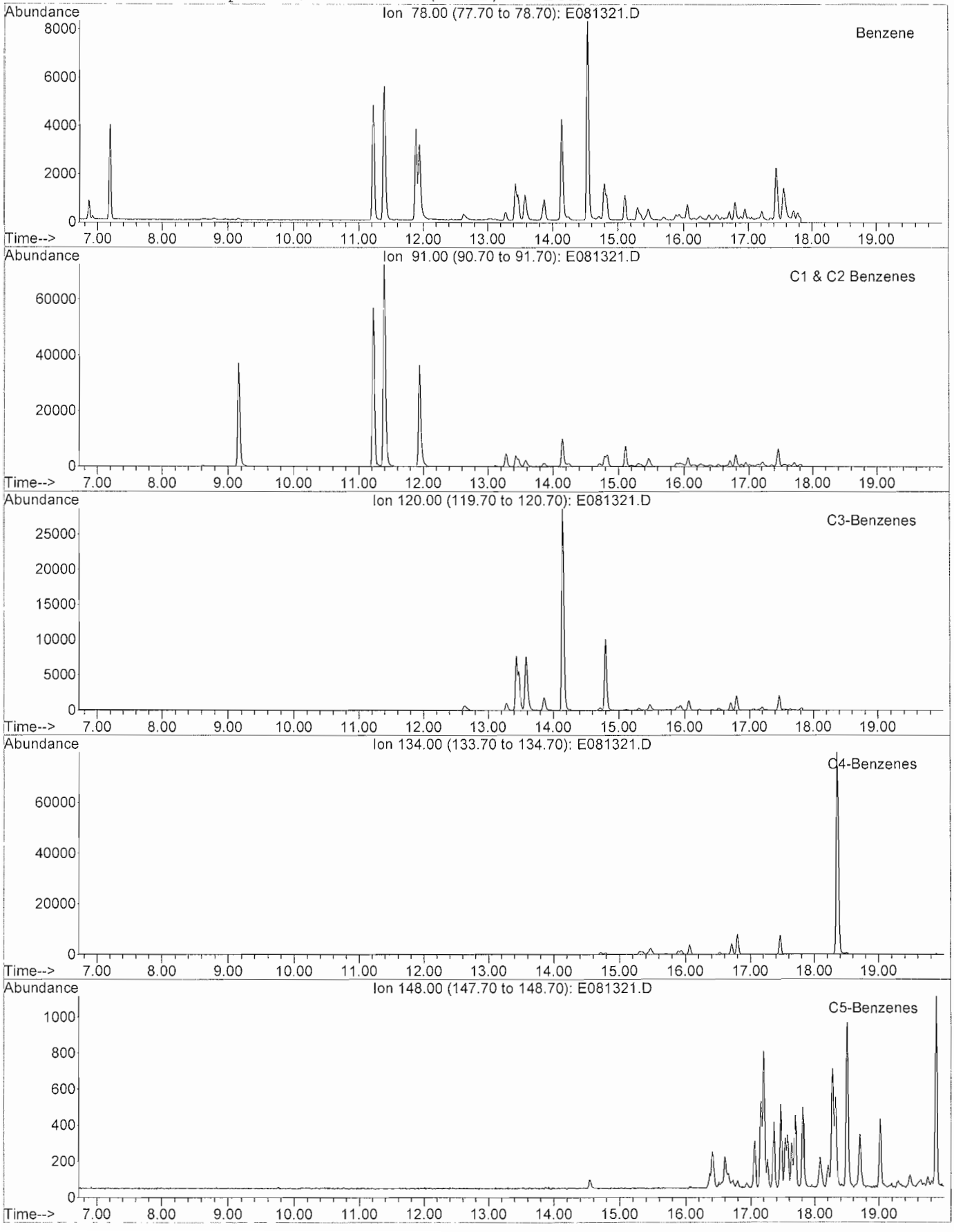




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

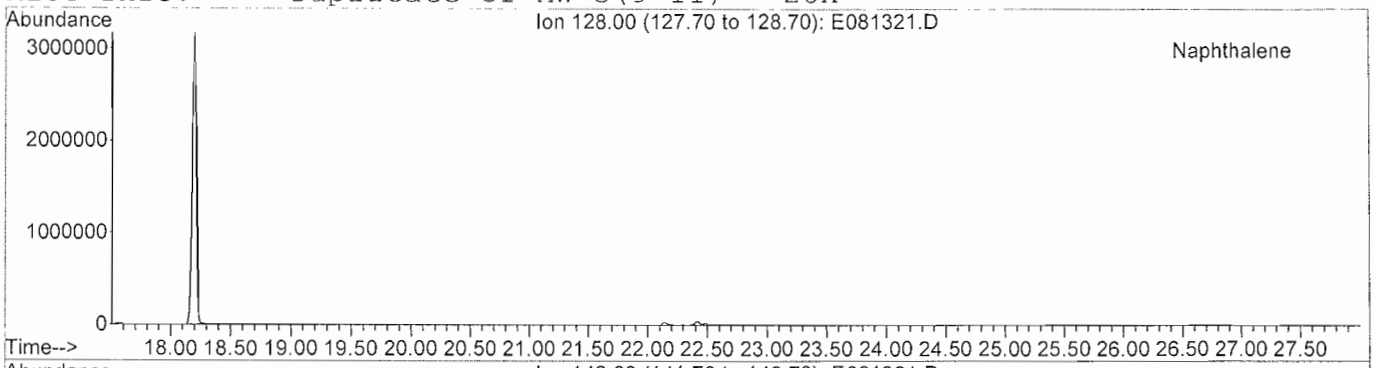
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X

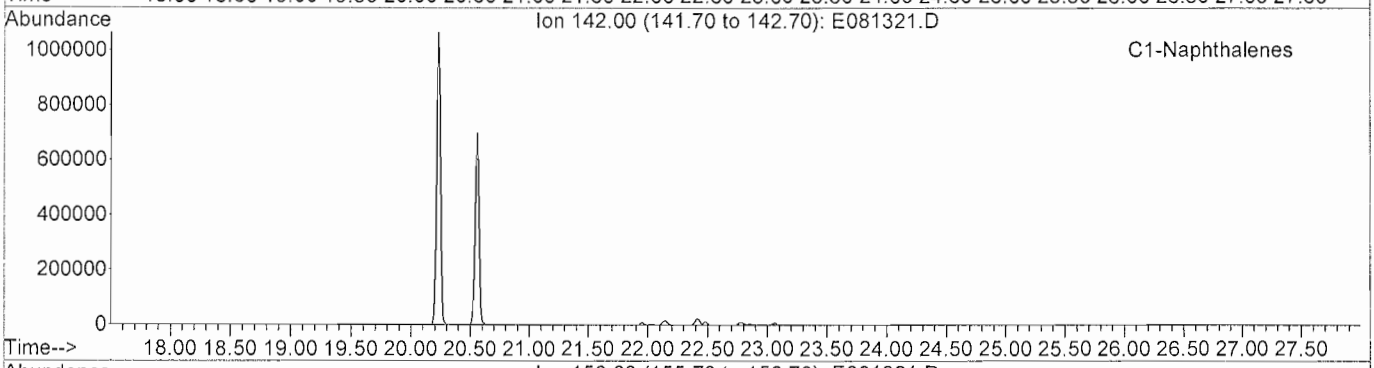


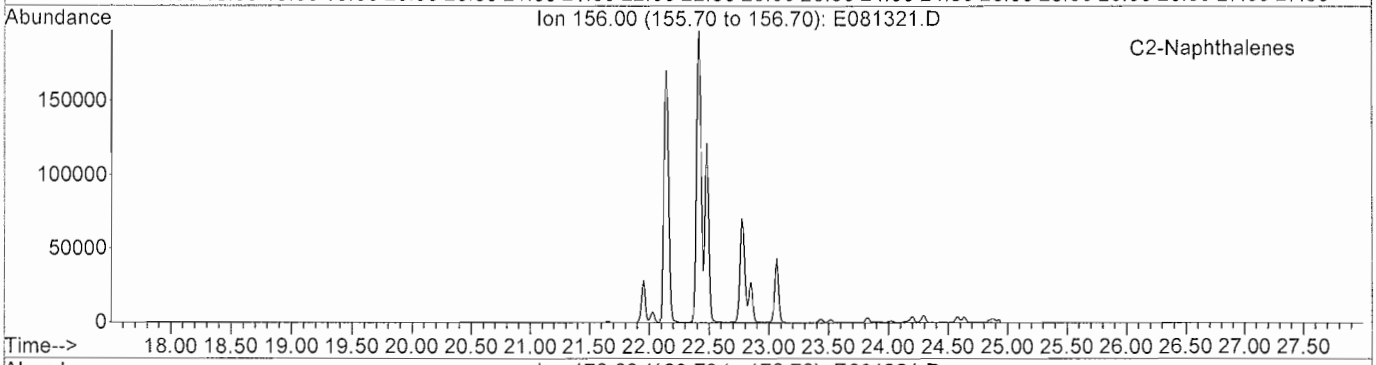
META Environmental, Inc.

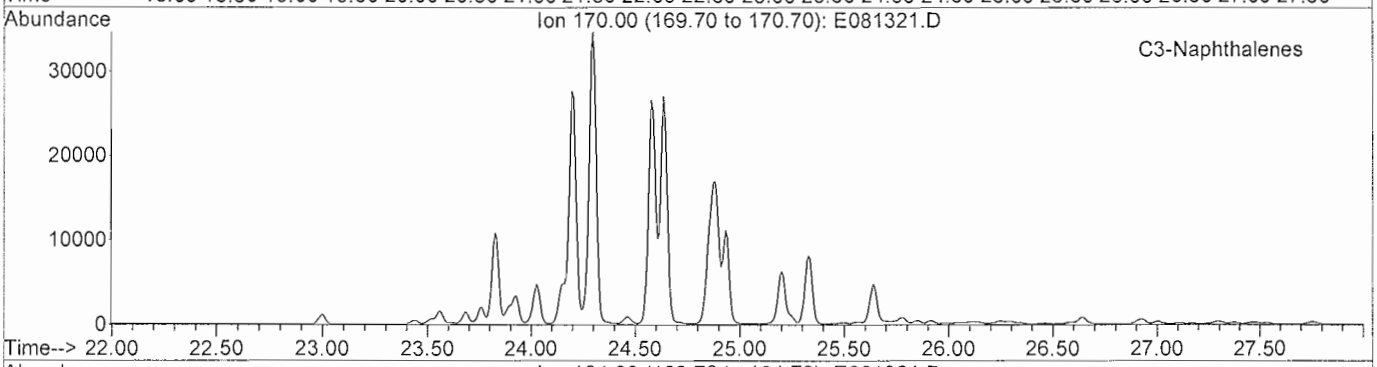
GC/MS EXTRACTED ION CHROMATOGRAM

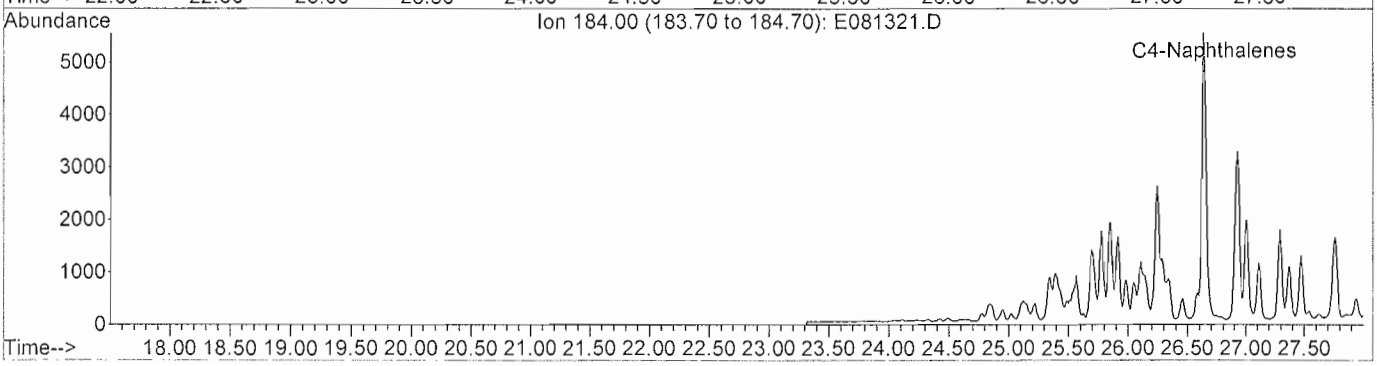
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X







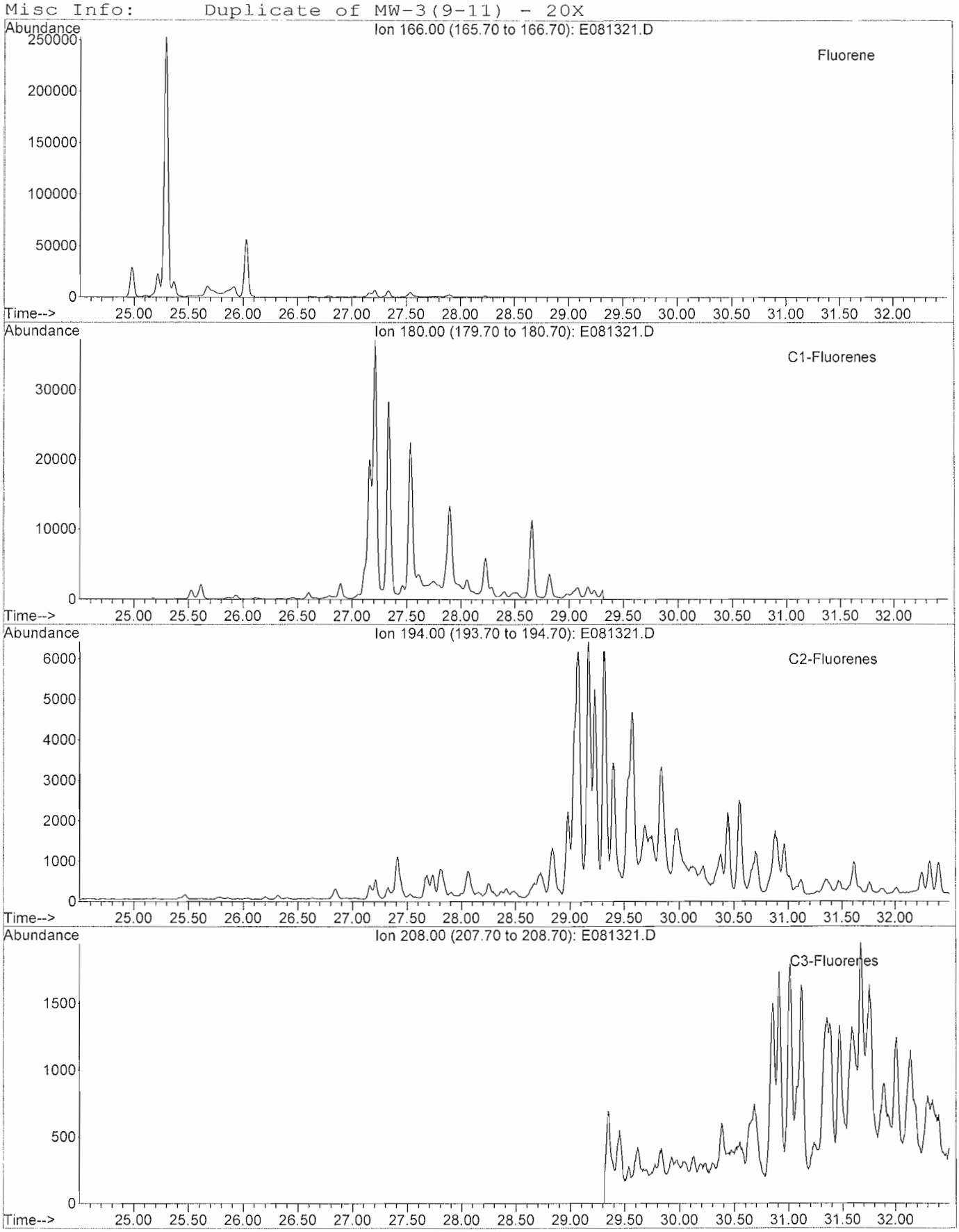




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

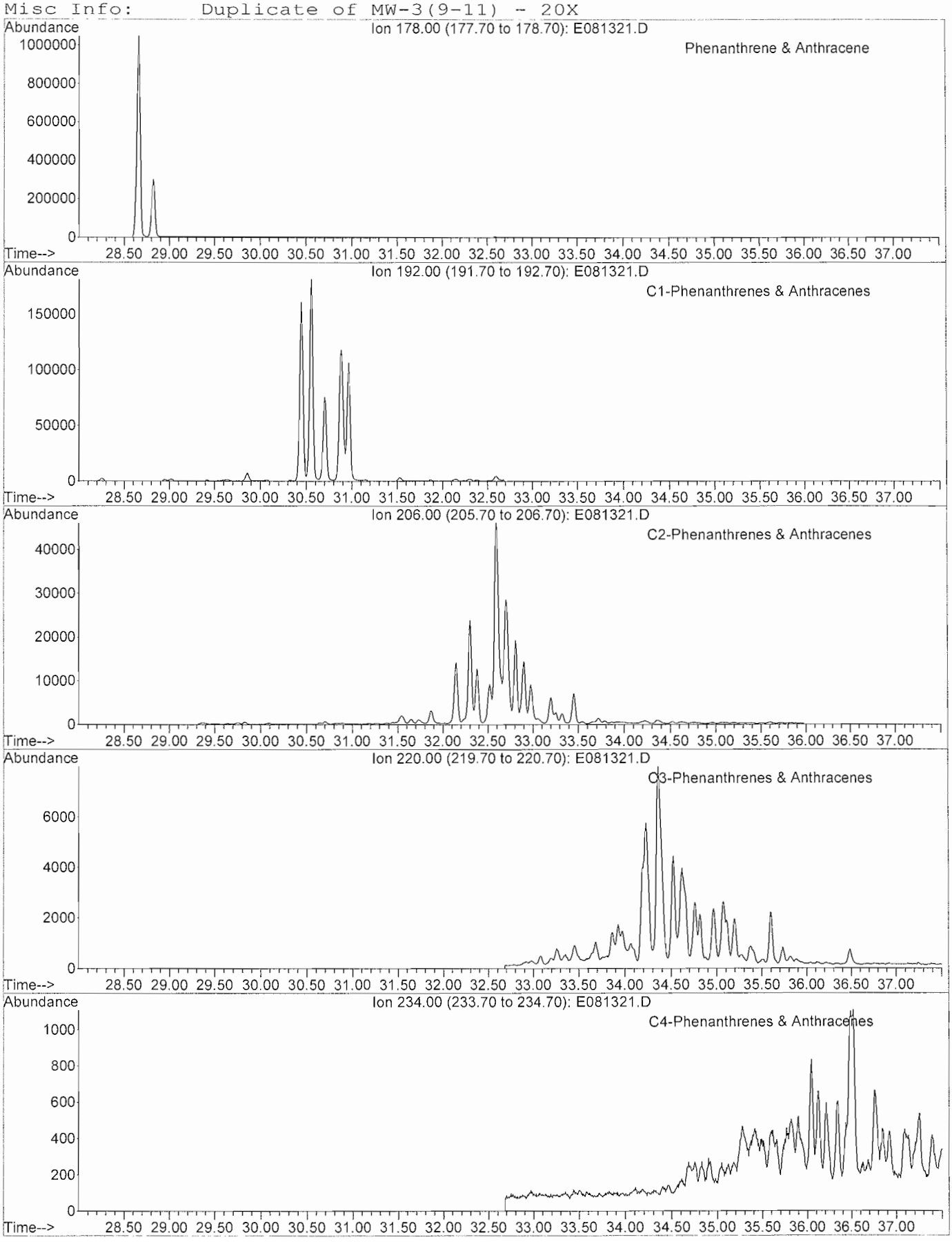
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

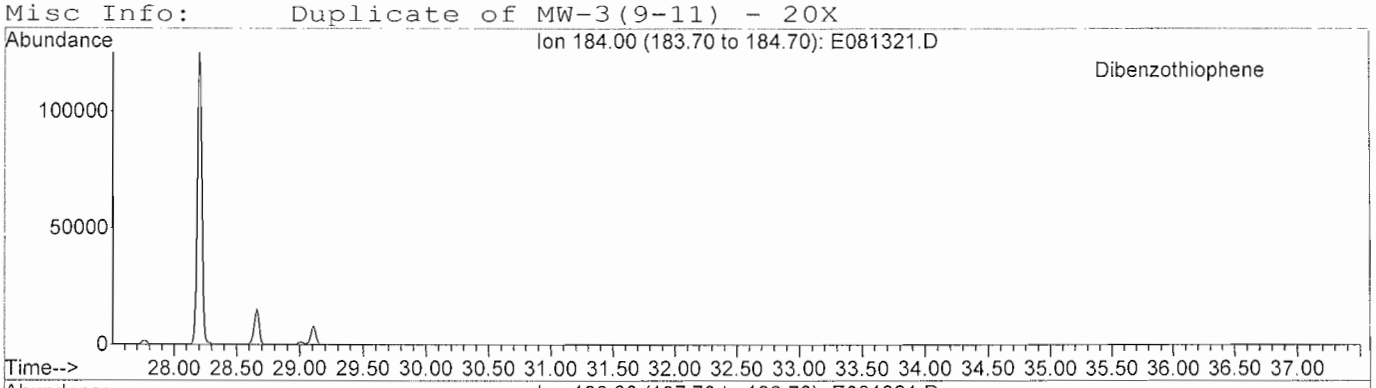
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X

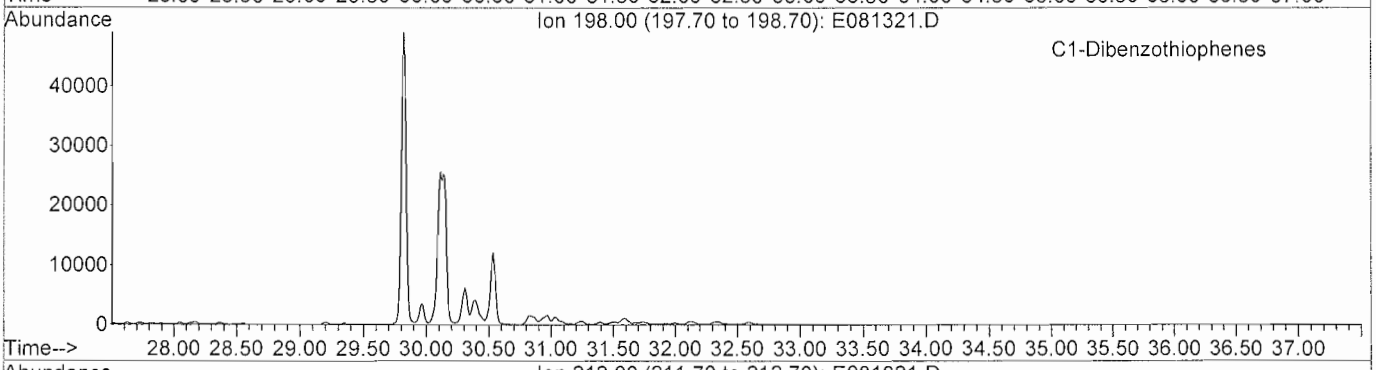


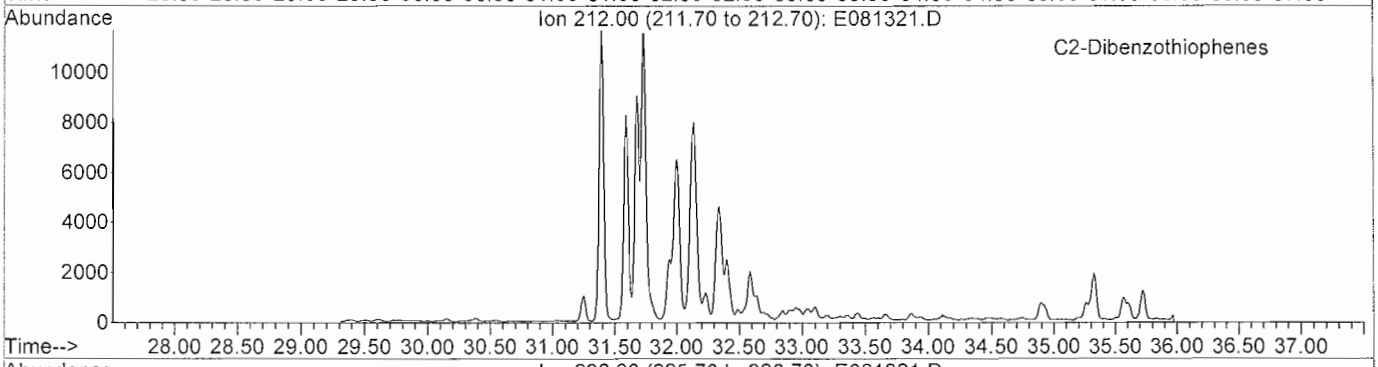
META Environmental, Inc.

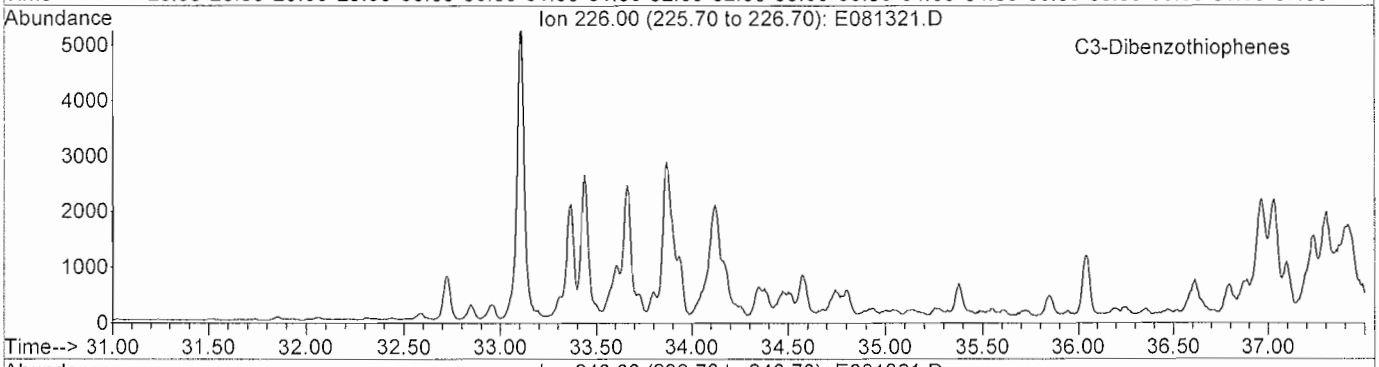
GC/MS EXTRACTED ION CHROMATOGRAM

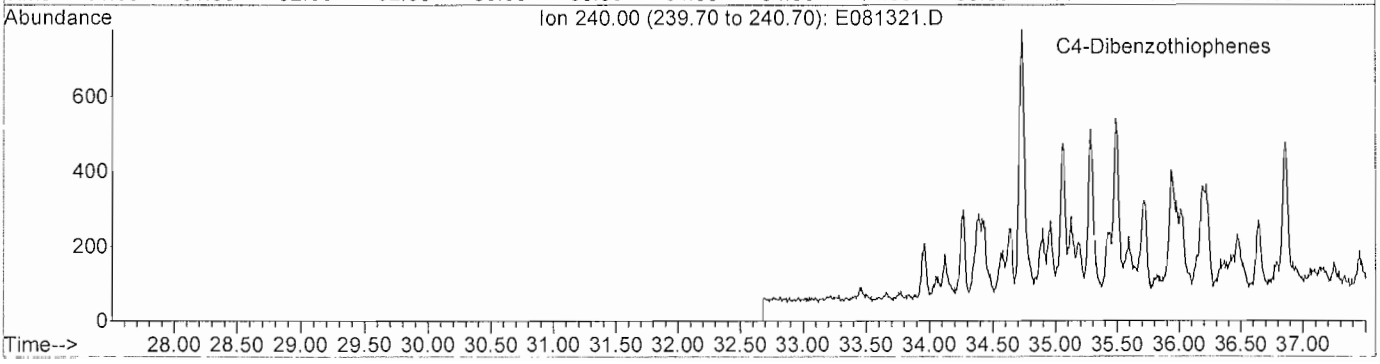
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X







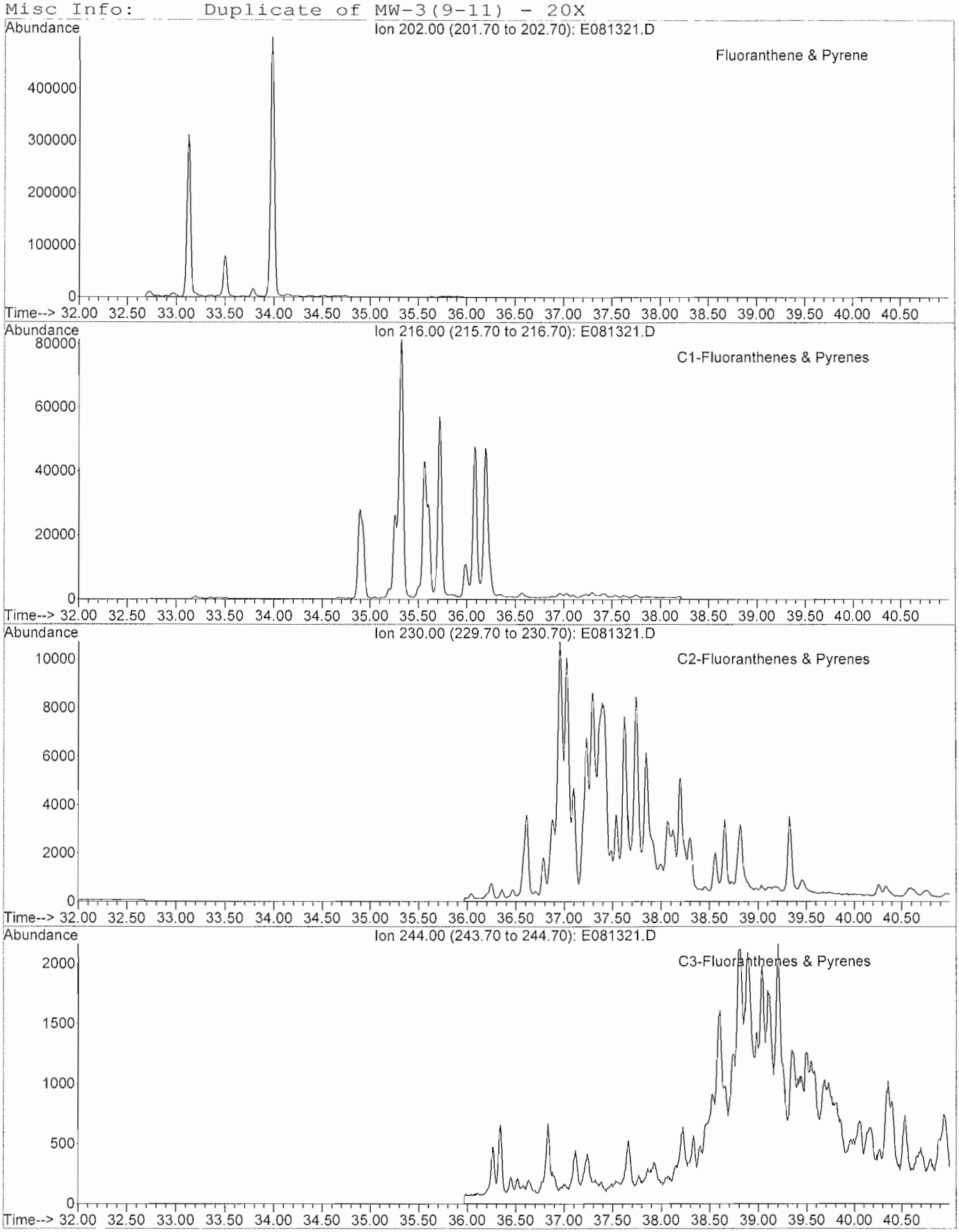




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

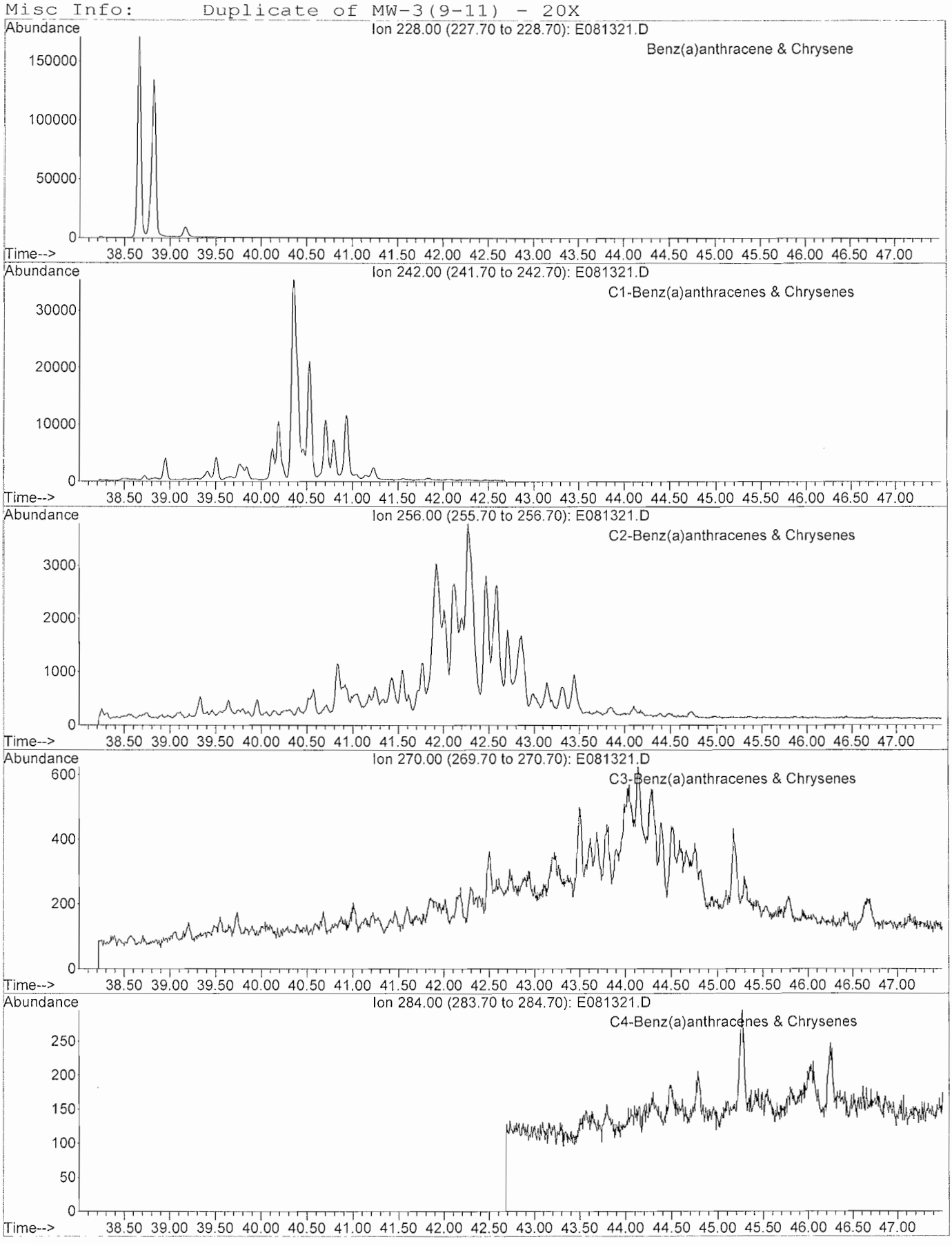
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

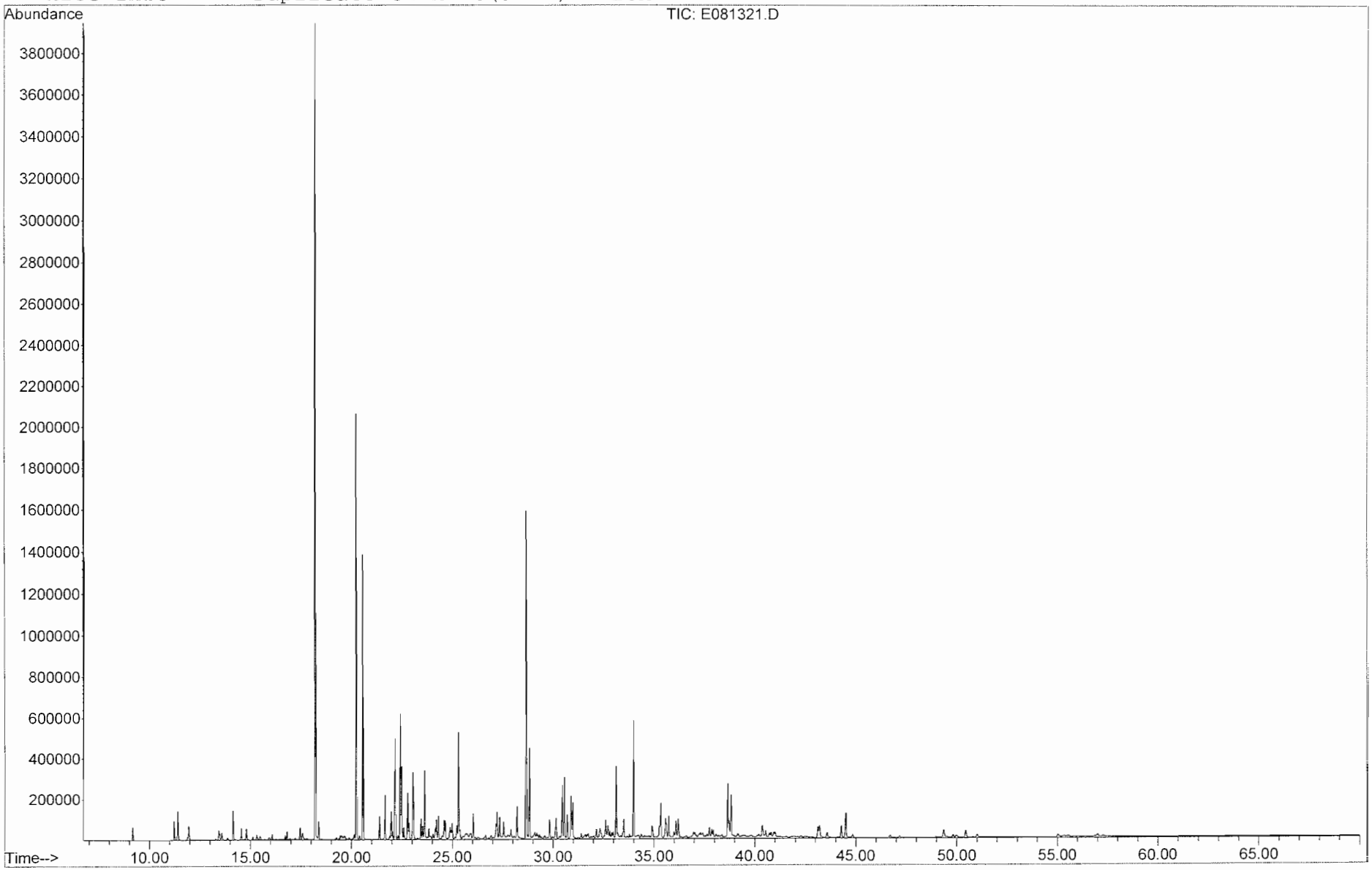
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X



META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

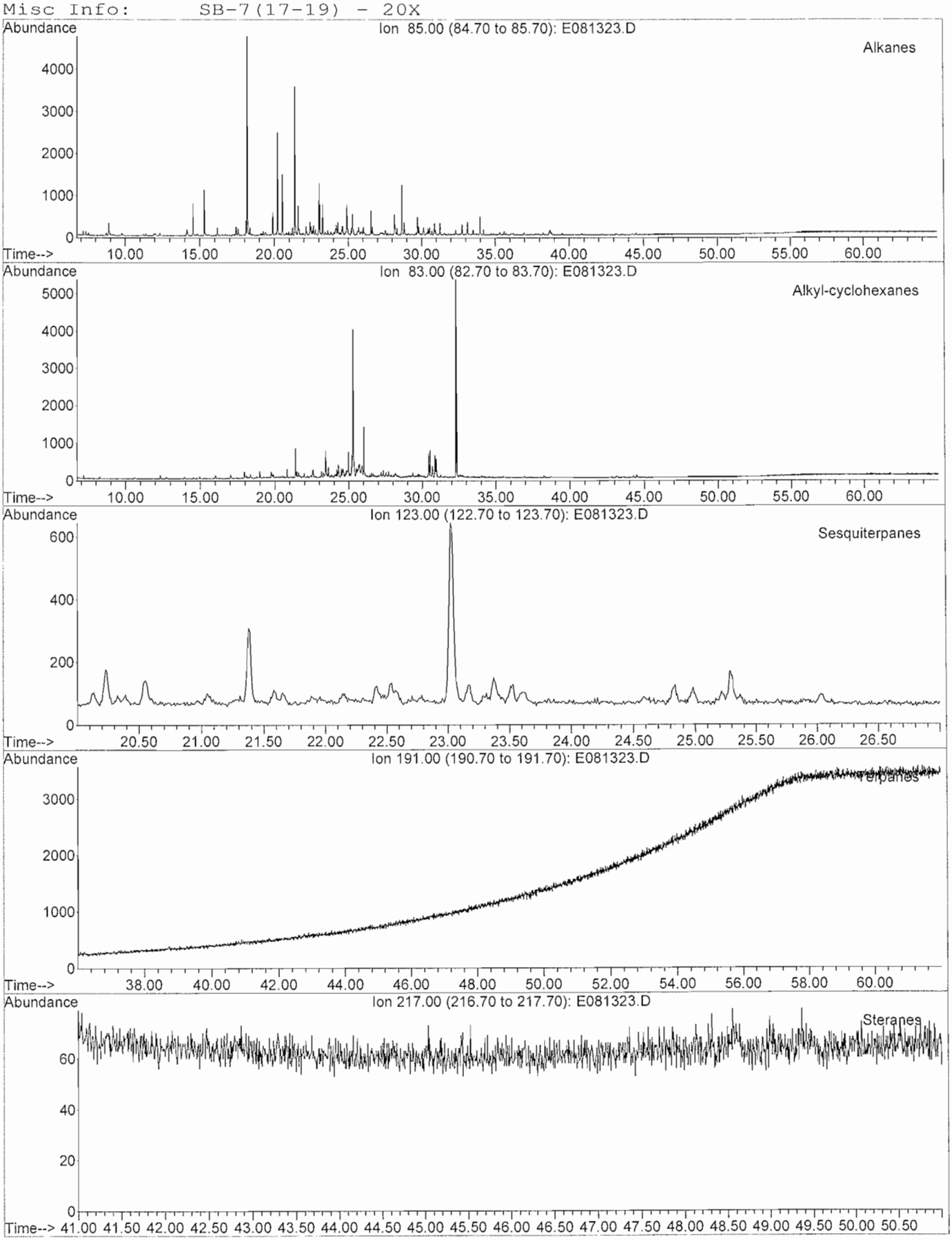
File: J:\1\DATA\E100813\E081321.D
Date Acquired: 14 Aug 2010 9:14 pm
Sample Name: PA100709-01DUP-R-D1
Misc Info: Duplicate of MW-3(9-11) - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

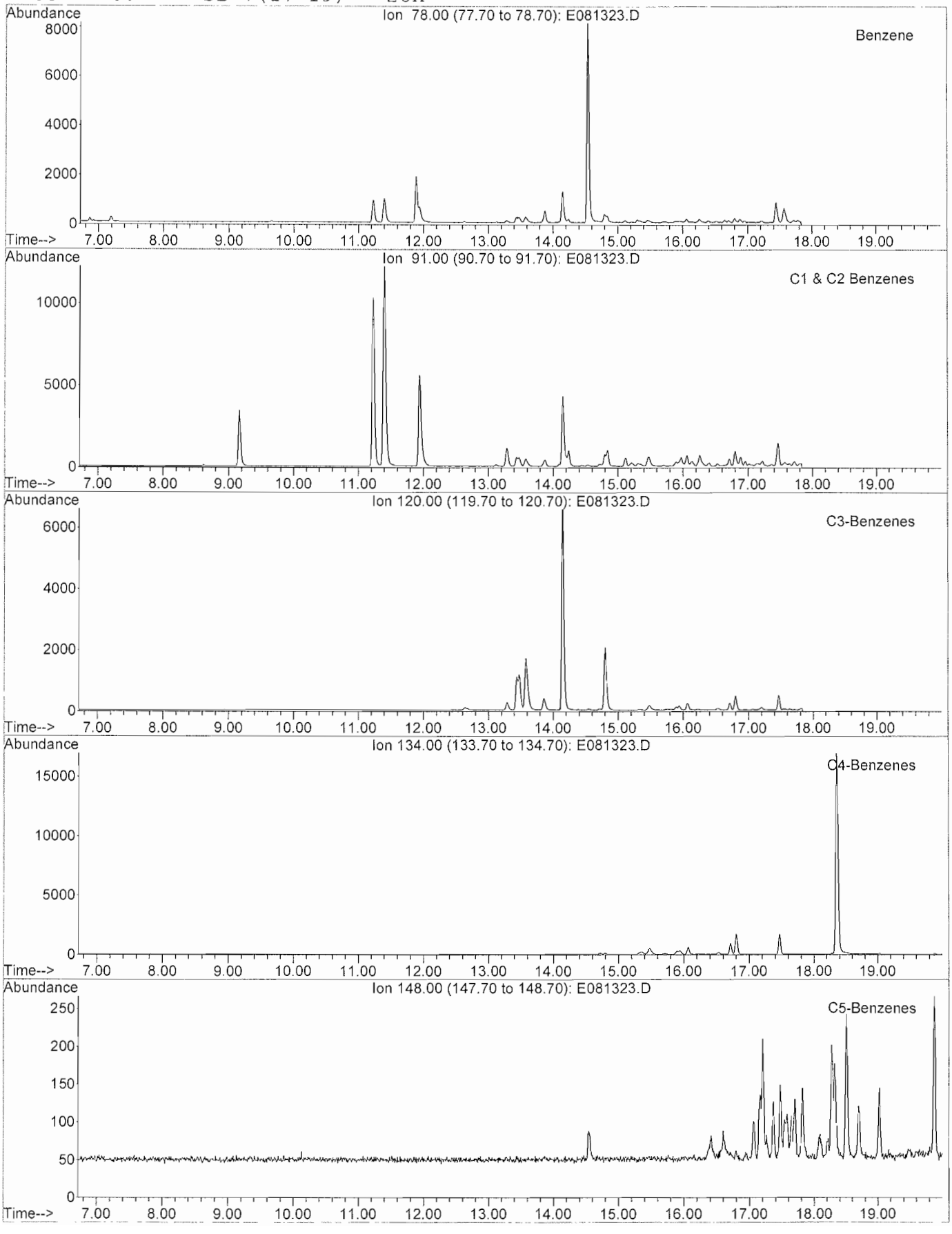
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

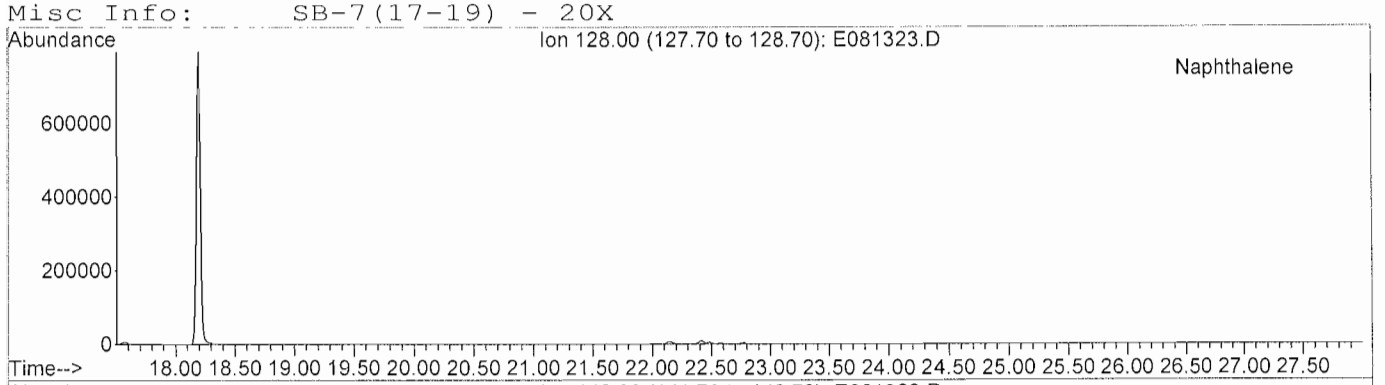
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X

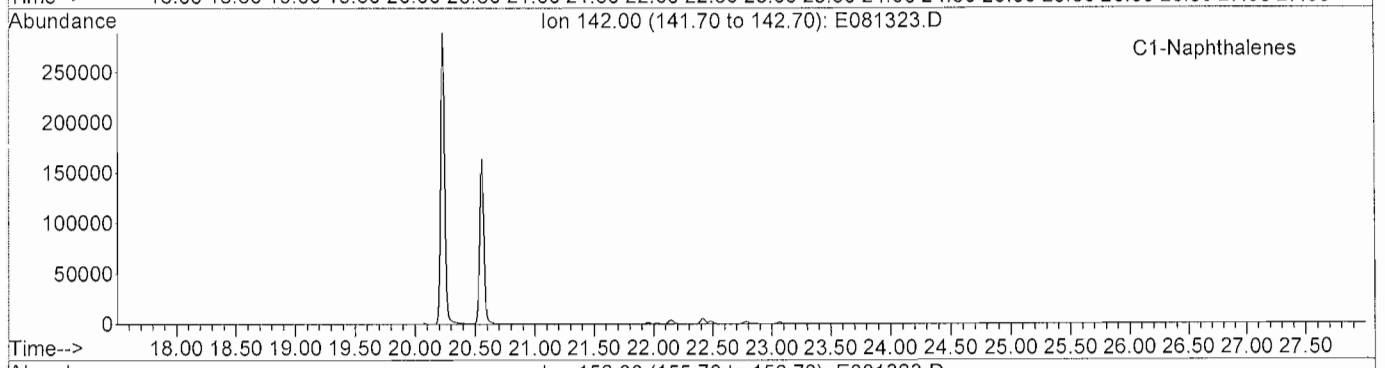


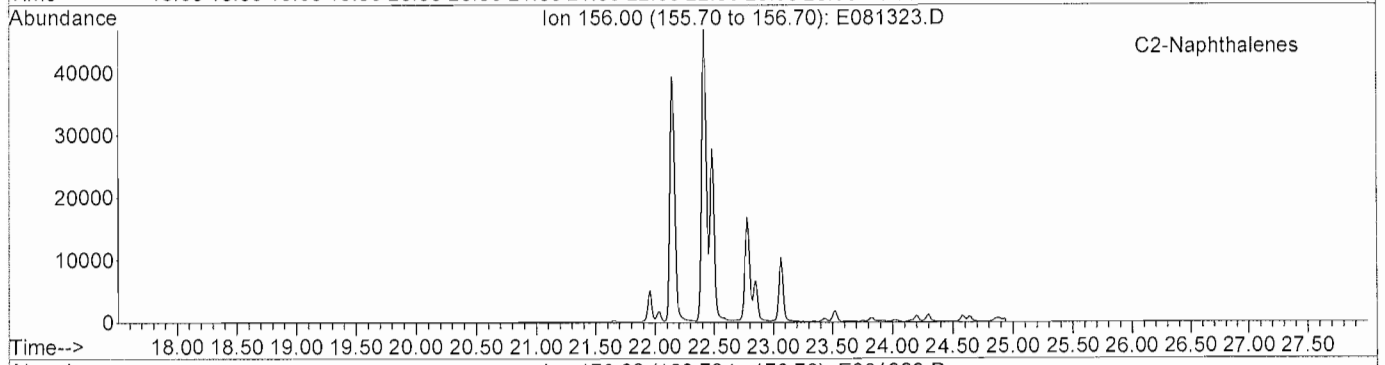
META Environmental, Inc.

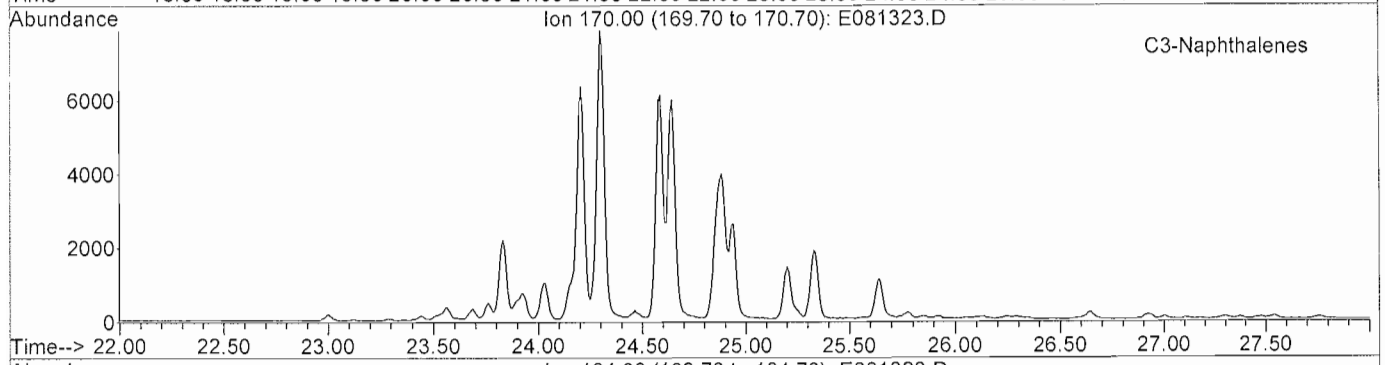
GC/MS EXTRACTED ION CHROMATOGRAM

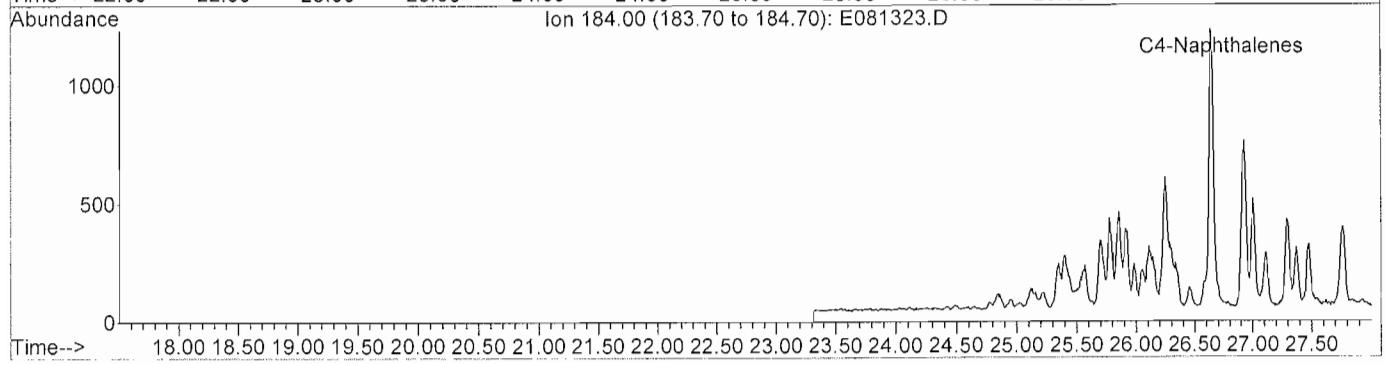
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X







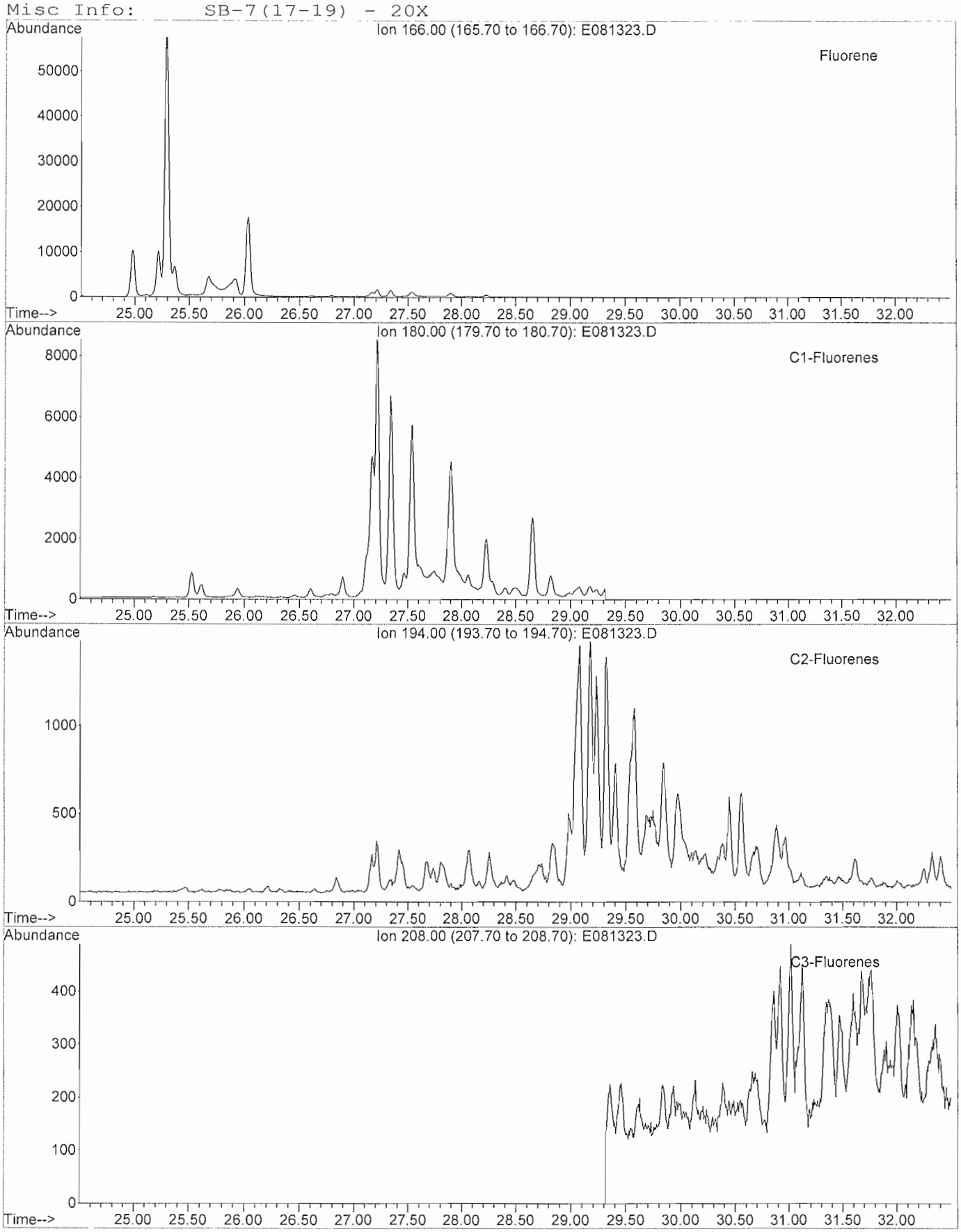




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

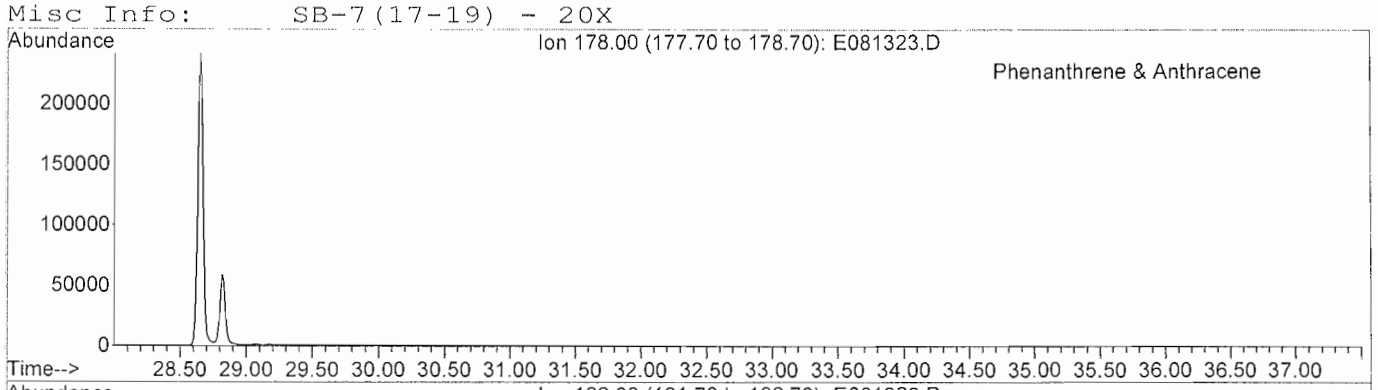
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X

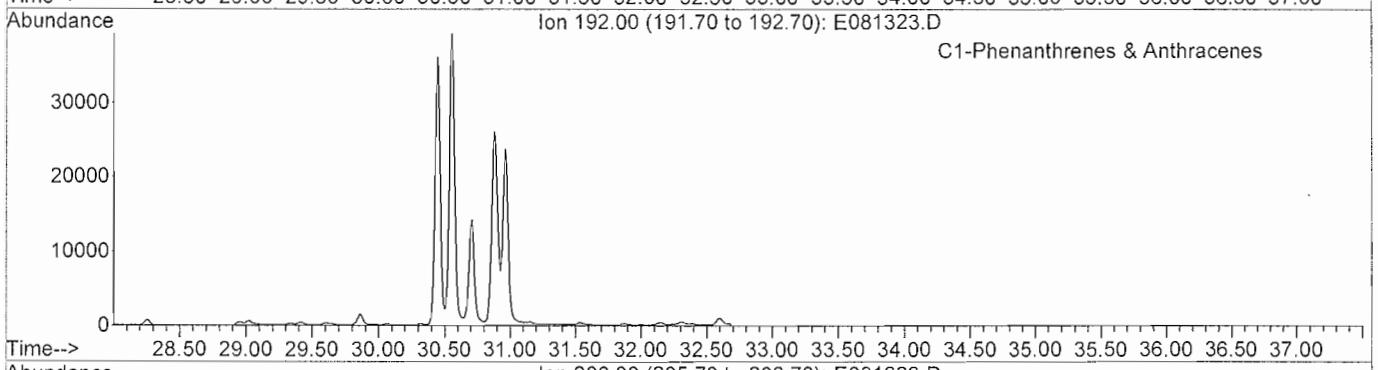


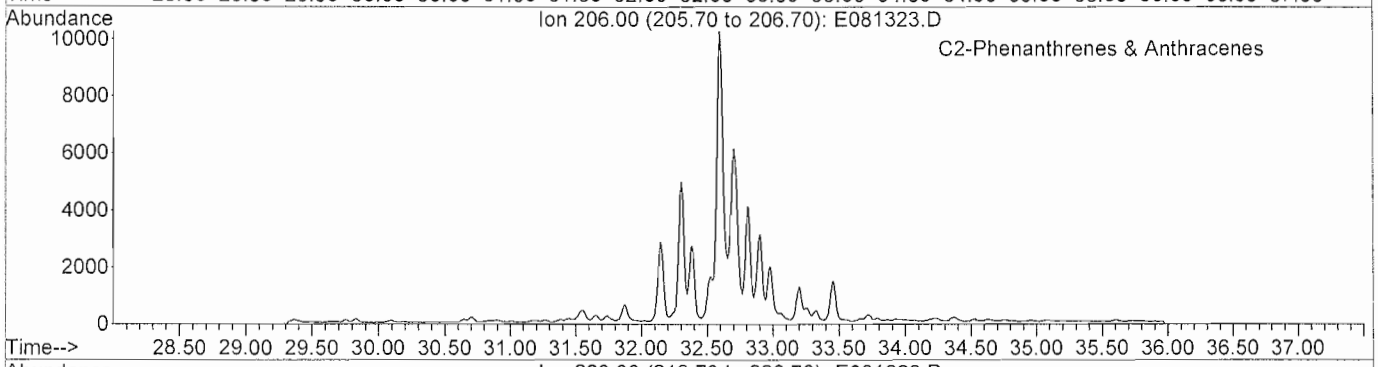
META Environmental, Inc.

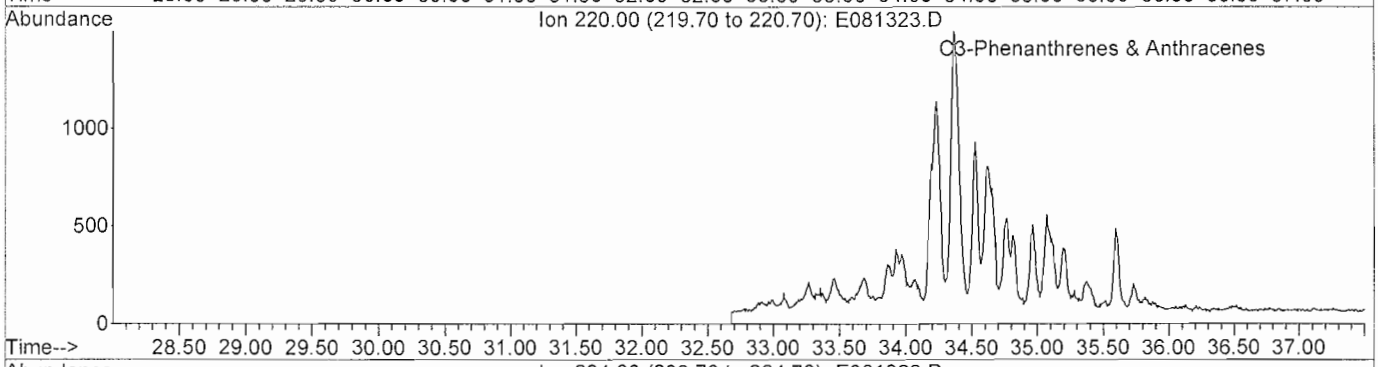
GC/MS EXTRACTED ION CHROMATOGRAM

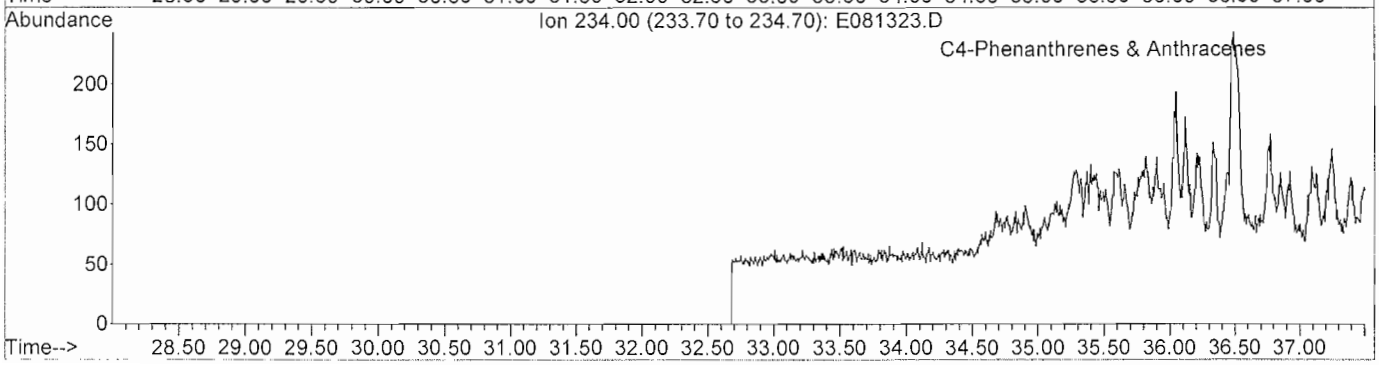
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X







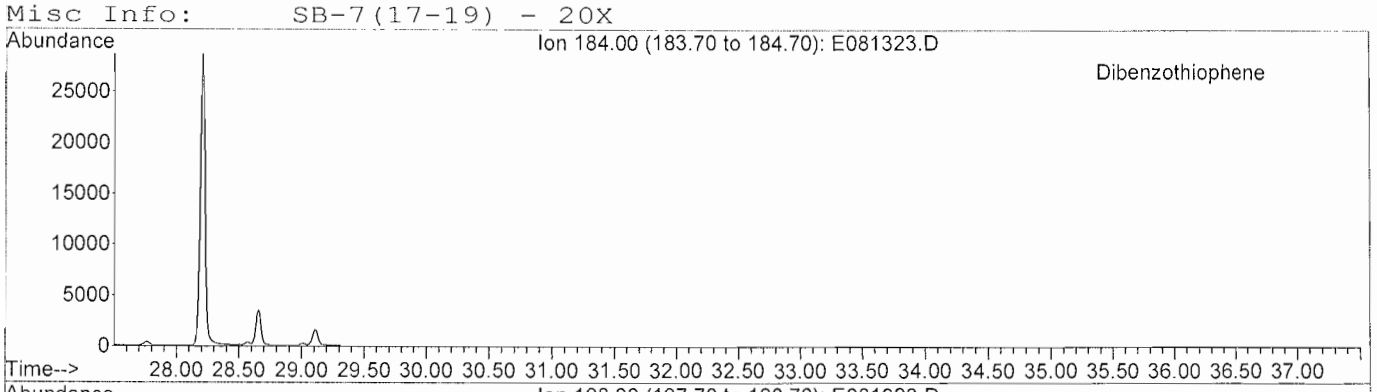


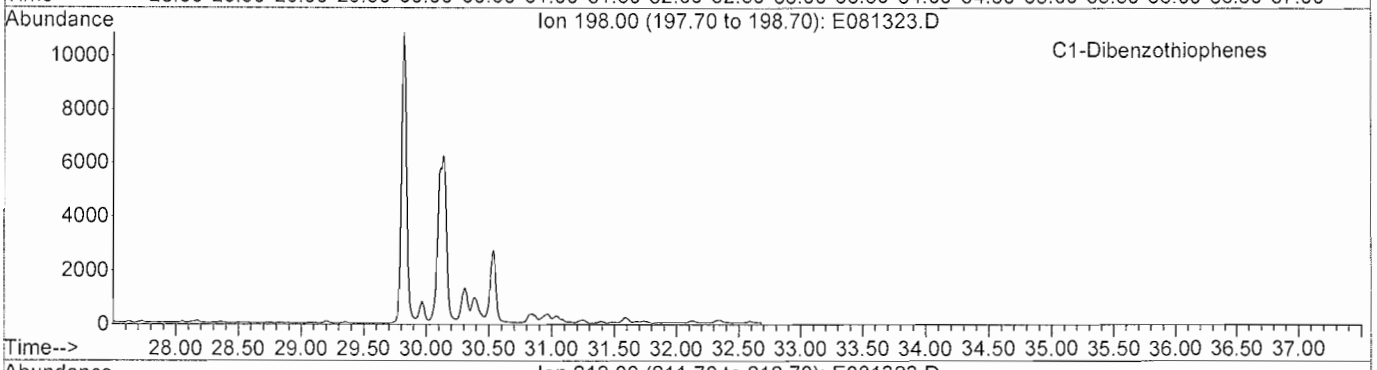


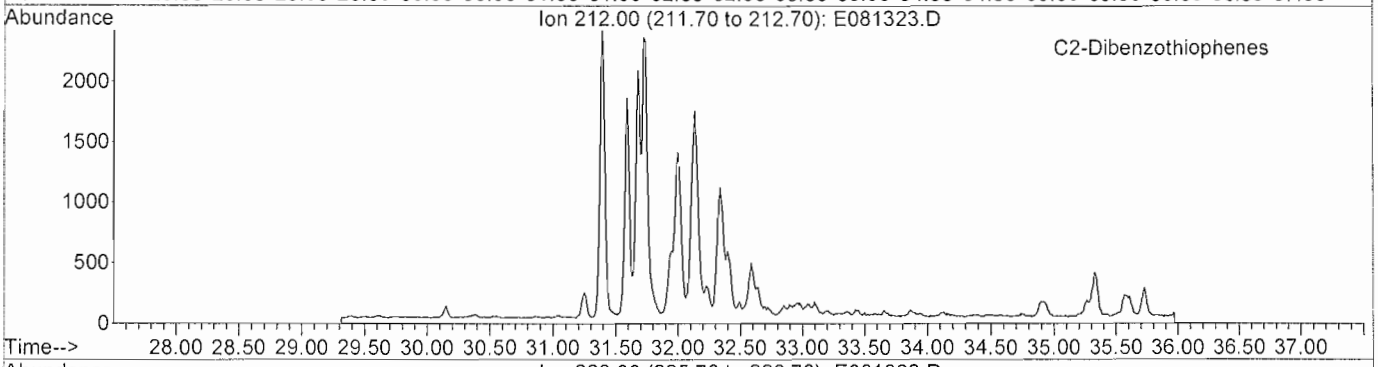
META Environmental, Inc.

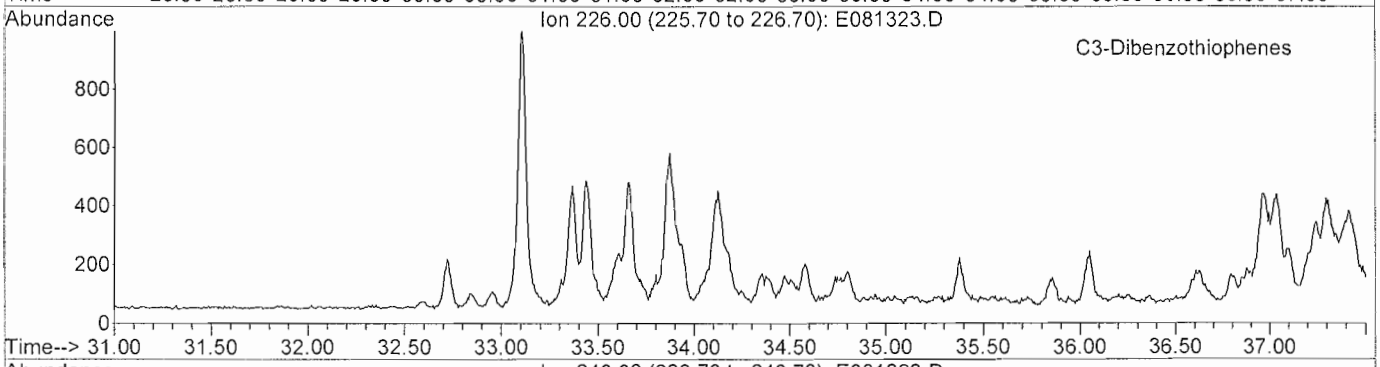
GC/MS EXTRACTED ION CHROMATOGRAM

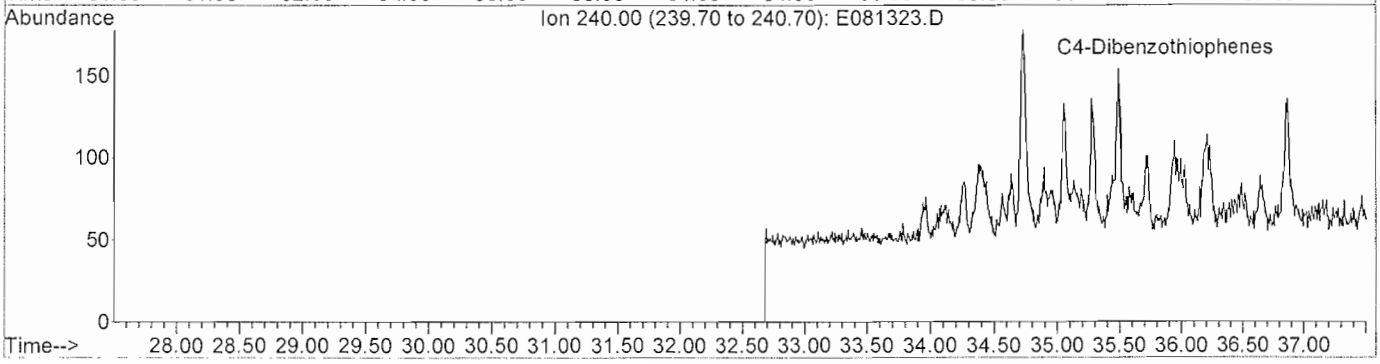
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X







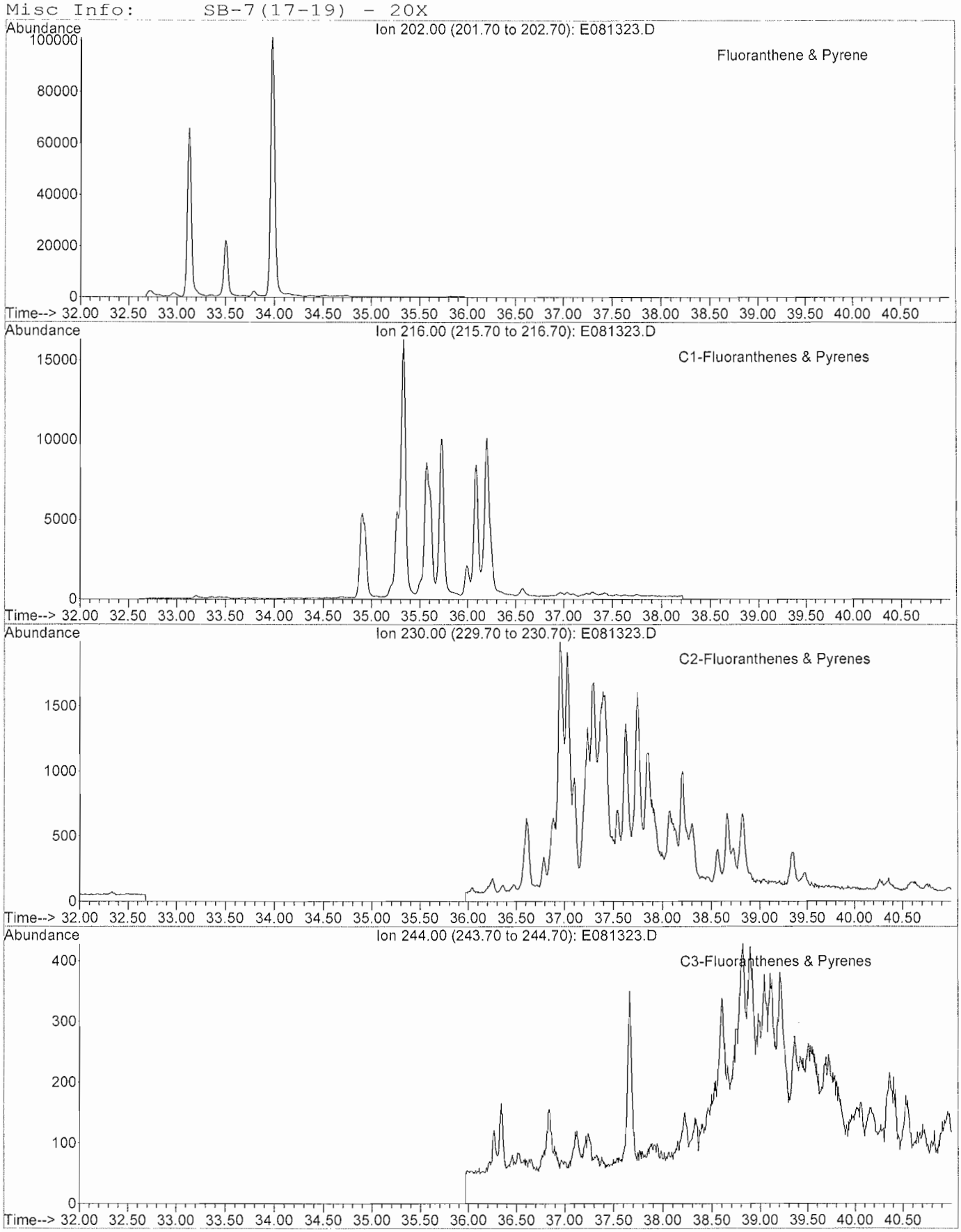




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

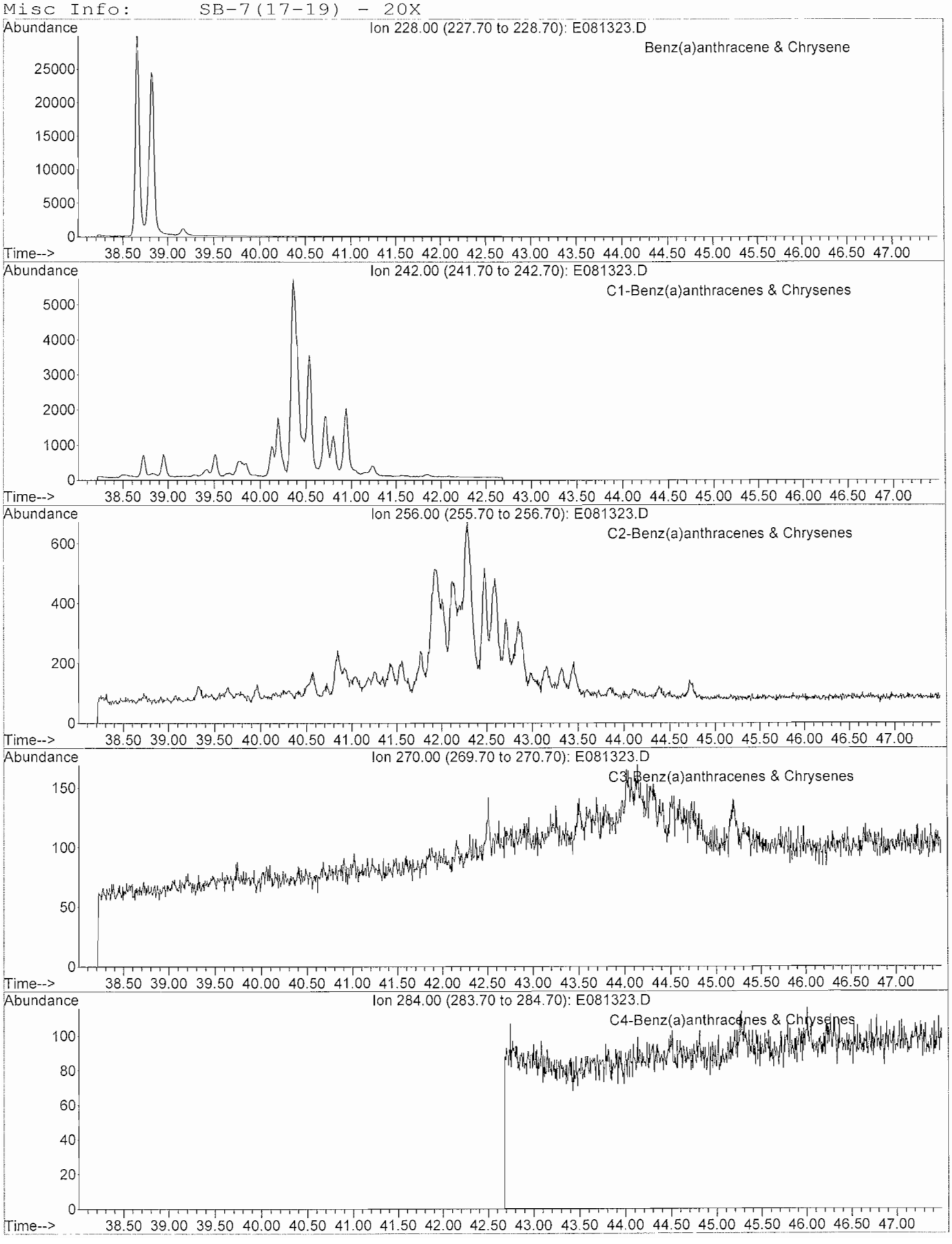
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

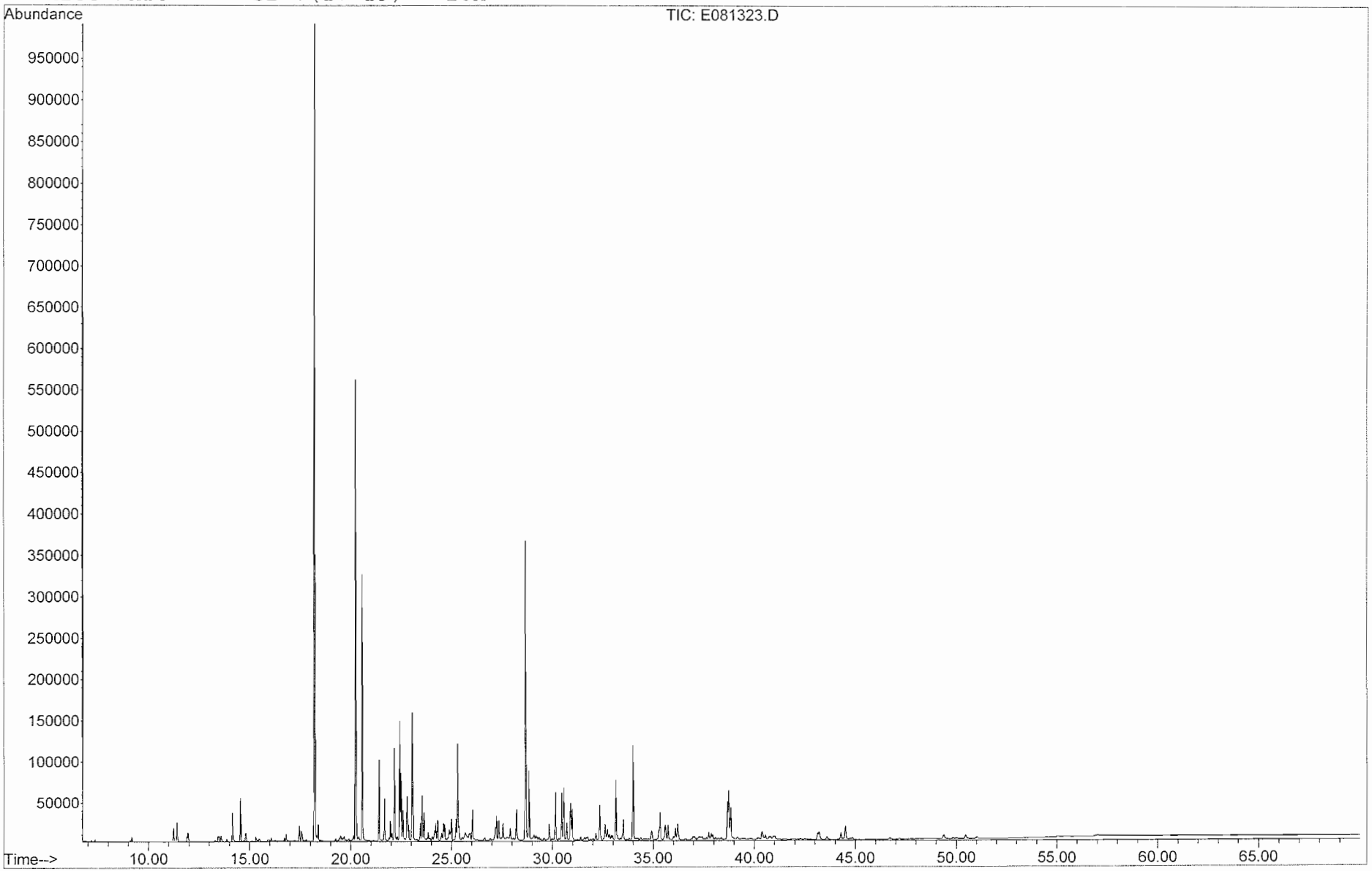
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X



META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

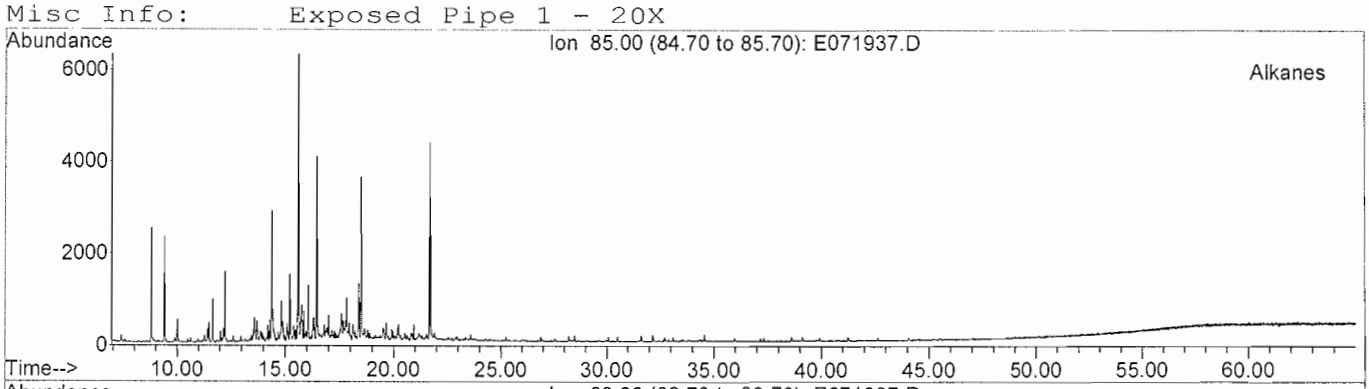
File: J:\1\DATA\E100813\E081323.D
Date Acquired: 15 Aug 2010 12:02 am
Sample Name: PA100709-02-R-D1
Misc Info: SB-7(17-19) - 20X

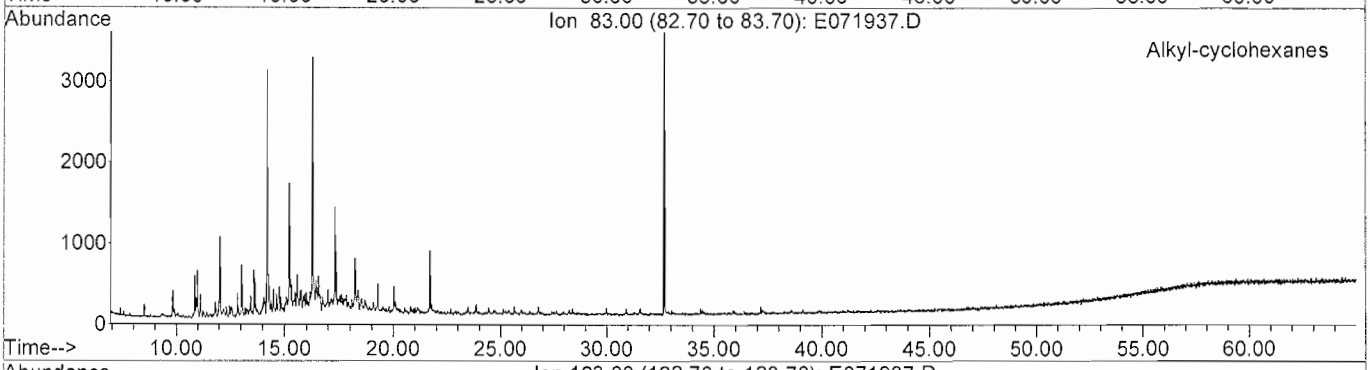


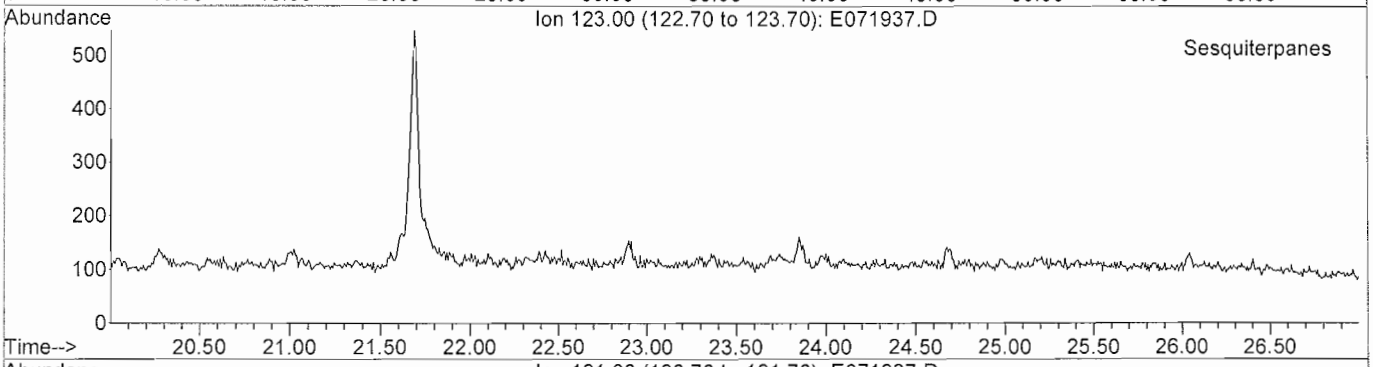
META Environmental, Inc.

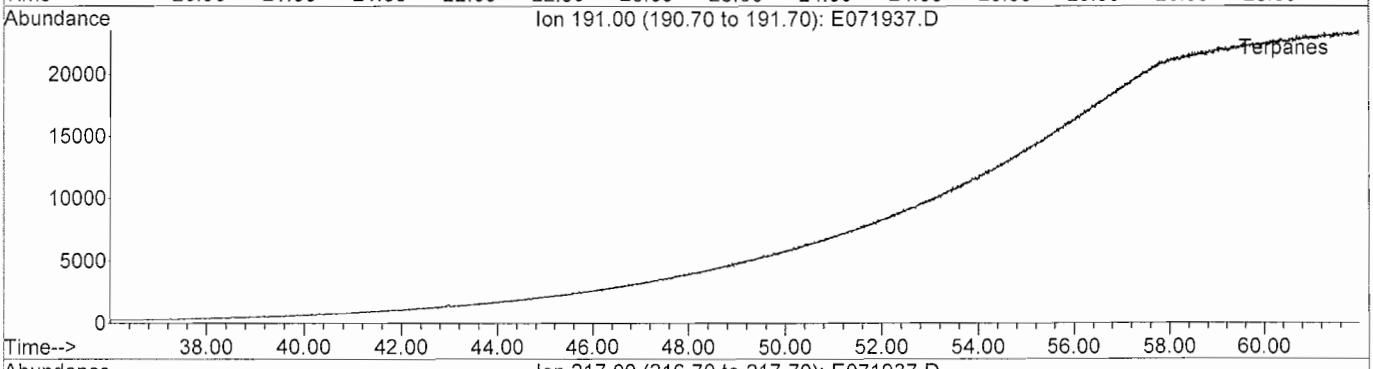
GC/MS EXTRACTED ION CHROMATOGRAM

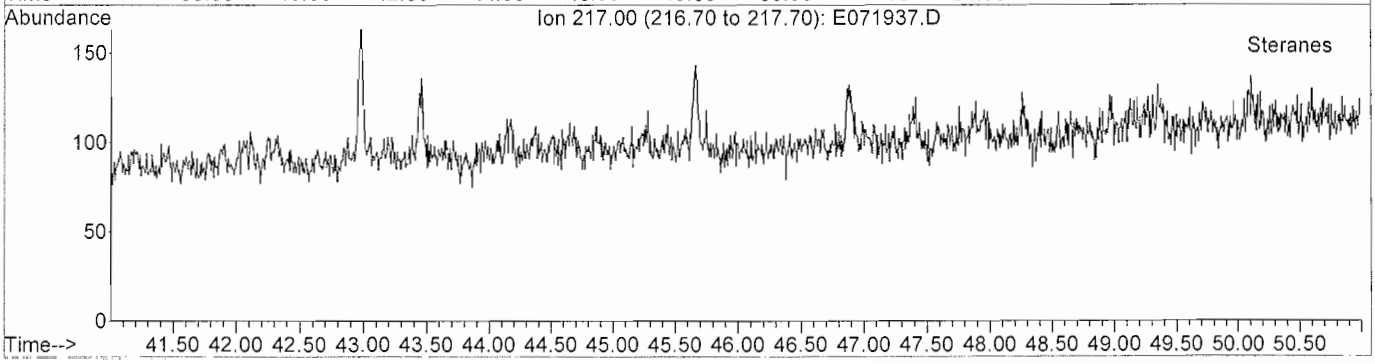
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X







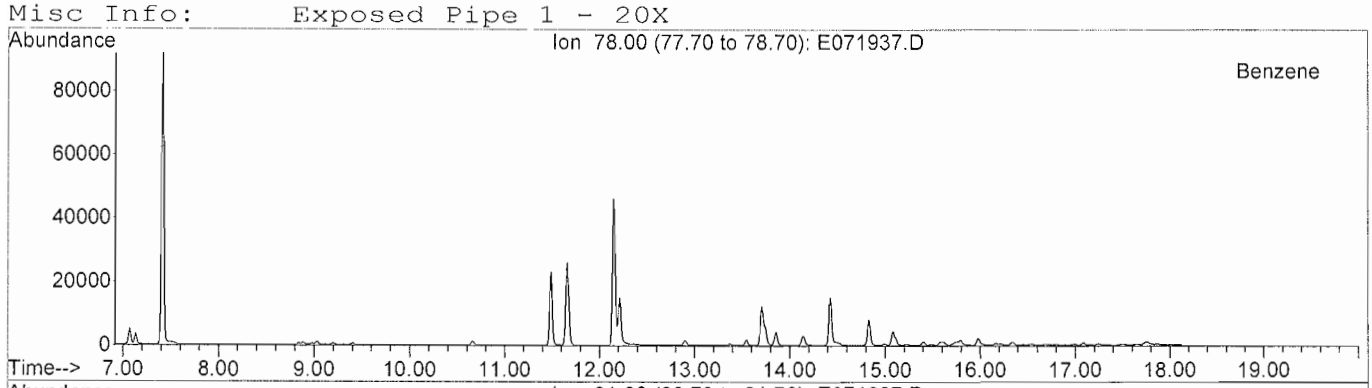


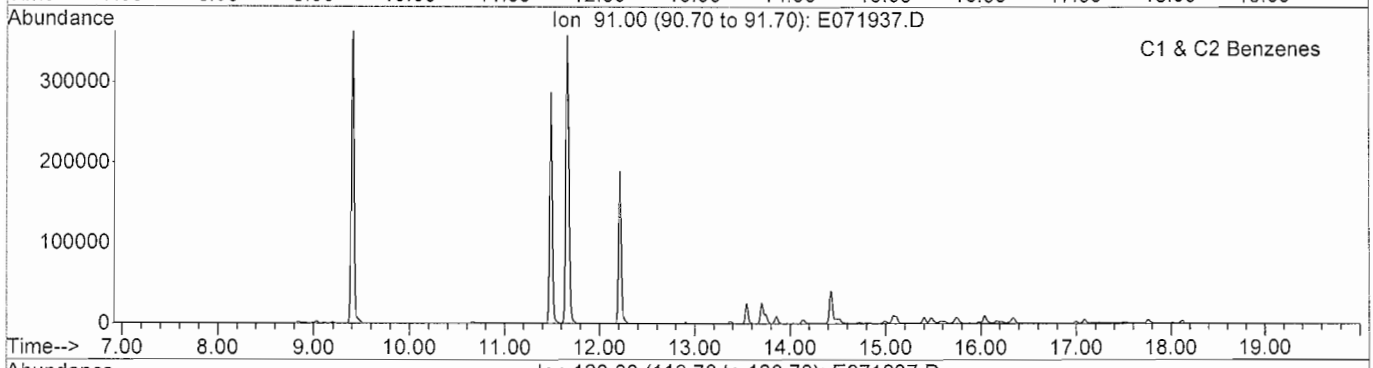


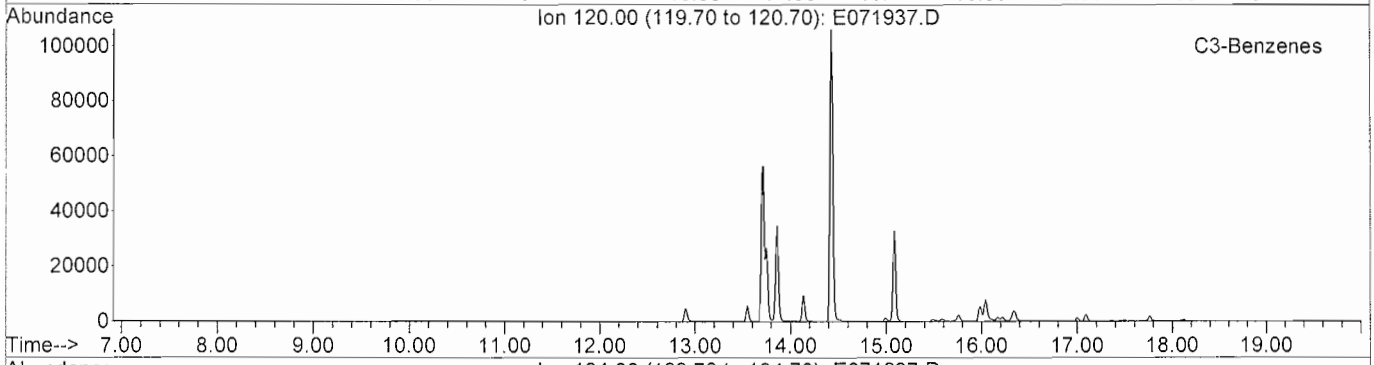
META Environmental, Inc.

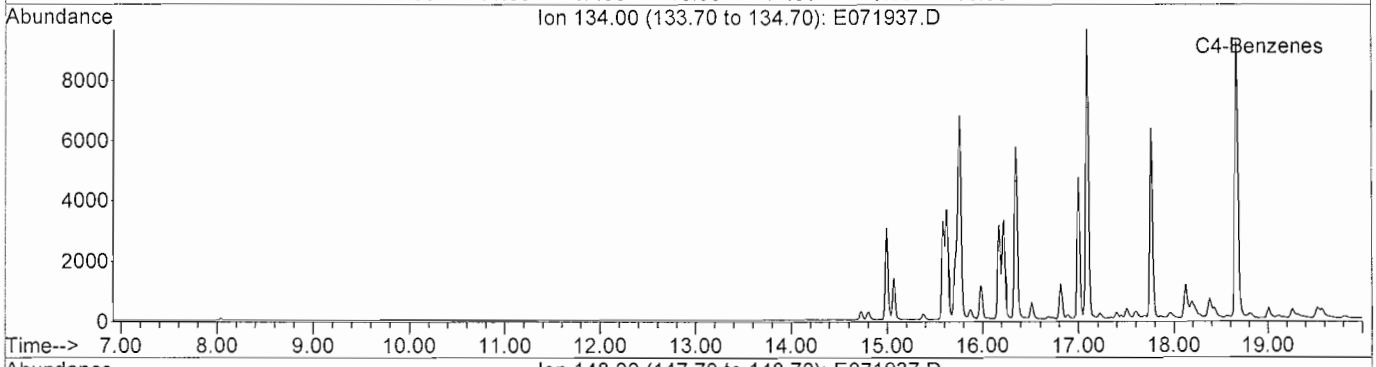
GC/MS EXTRACTED ION CHROMATOGRAM

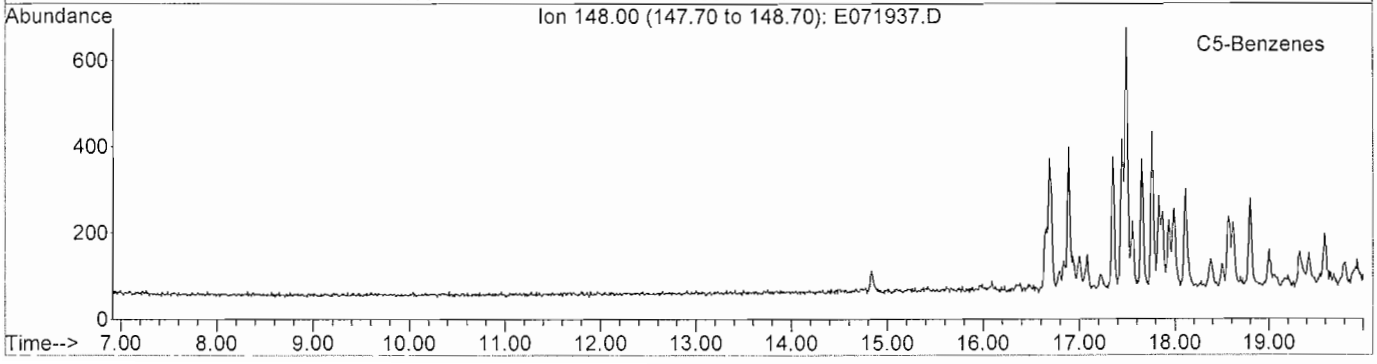
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X







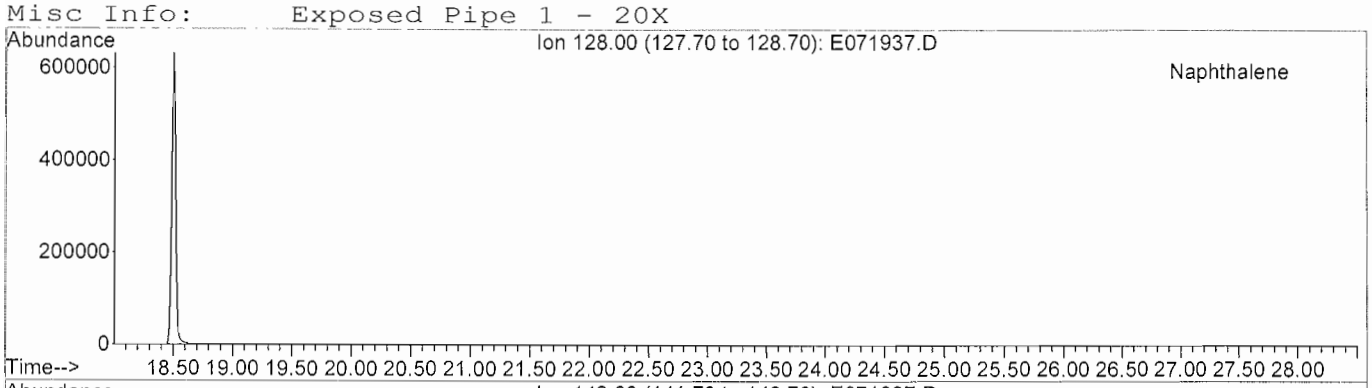


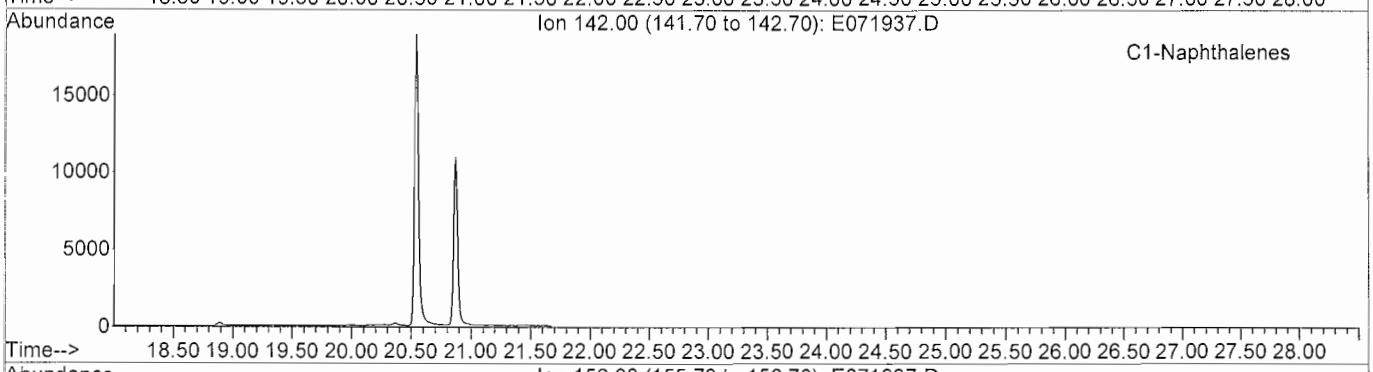


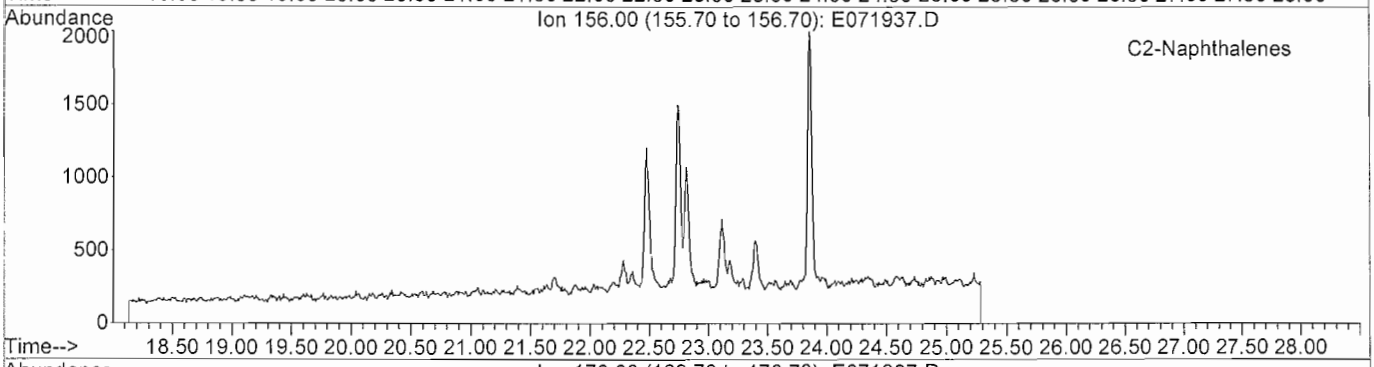
META Environmental, Inc.

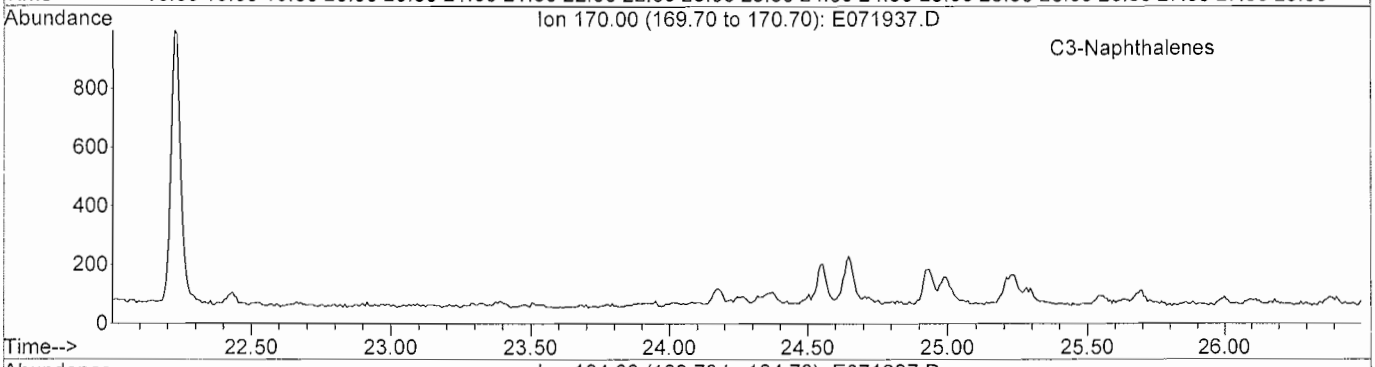
GC/MS EXTRACTED ION CHROMATOGRAM

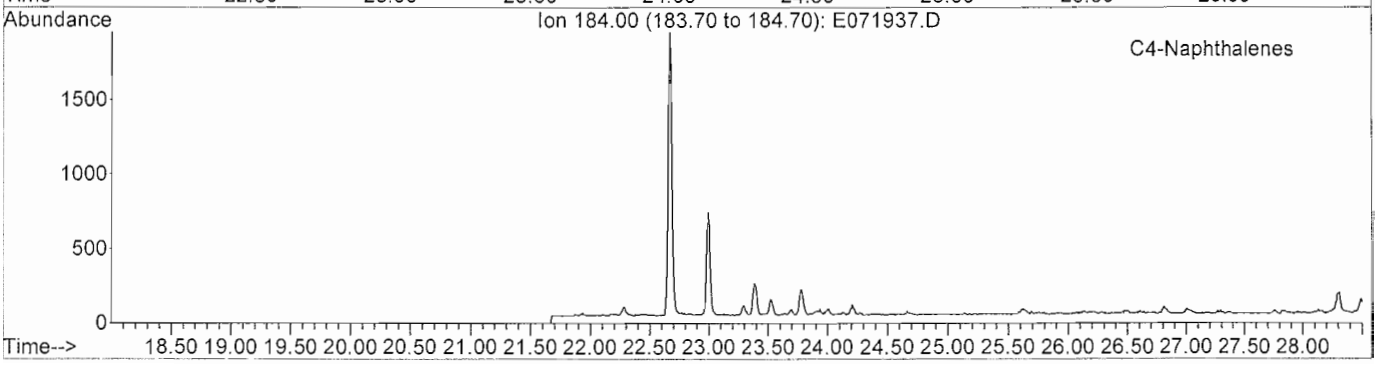
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X







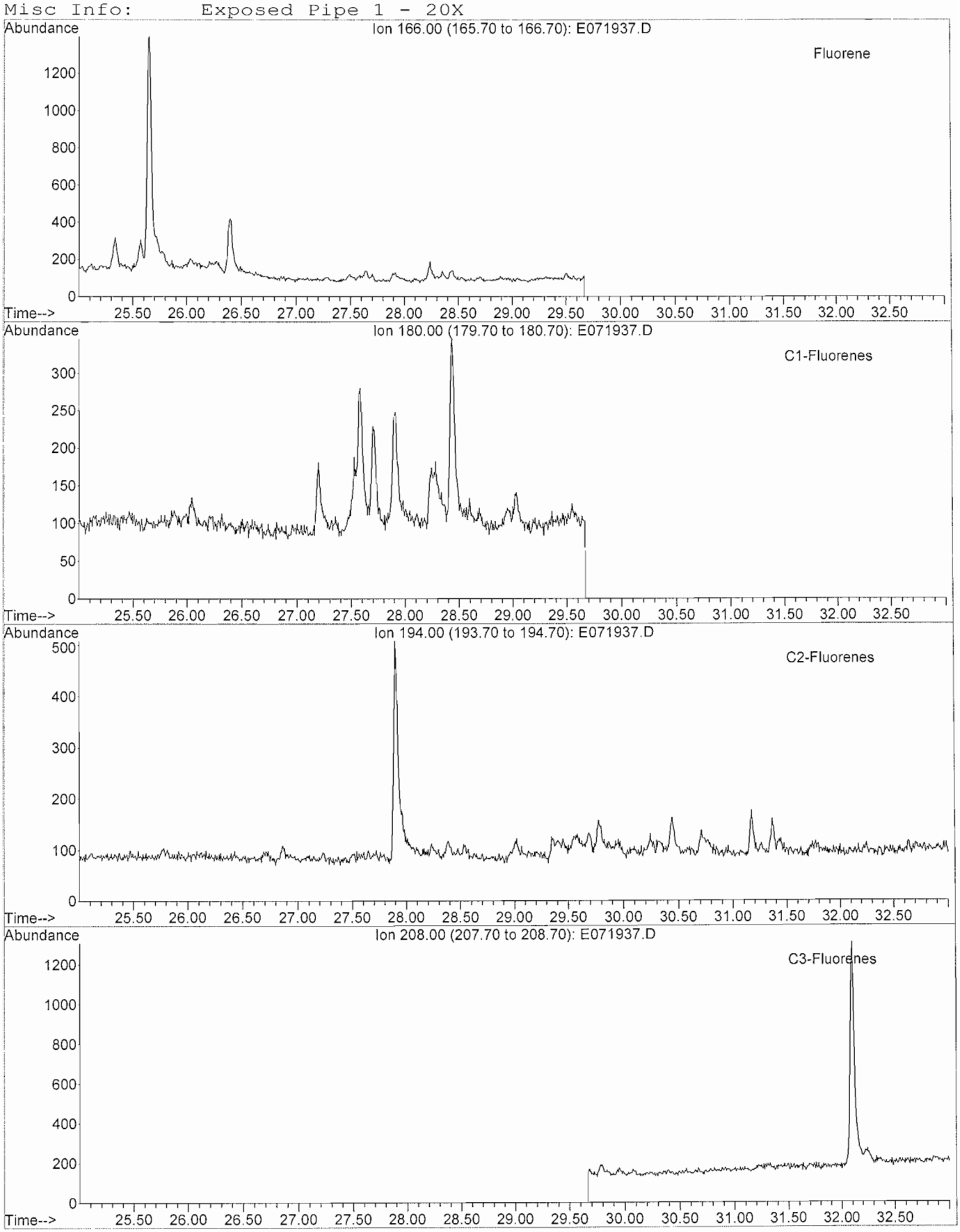




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

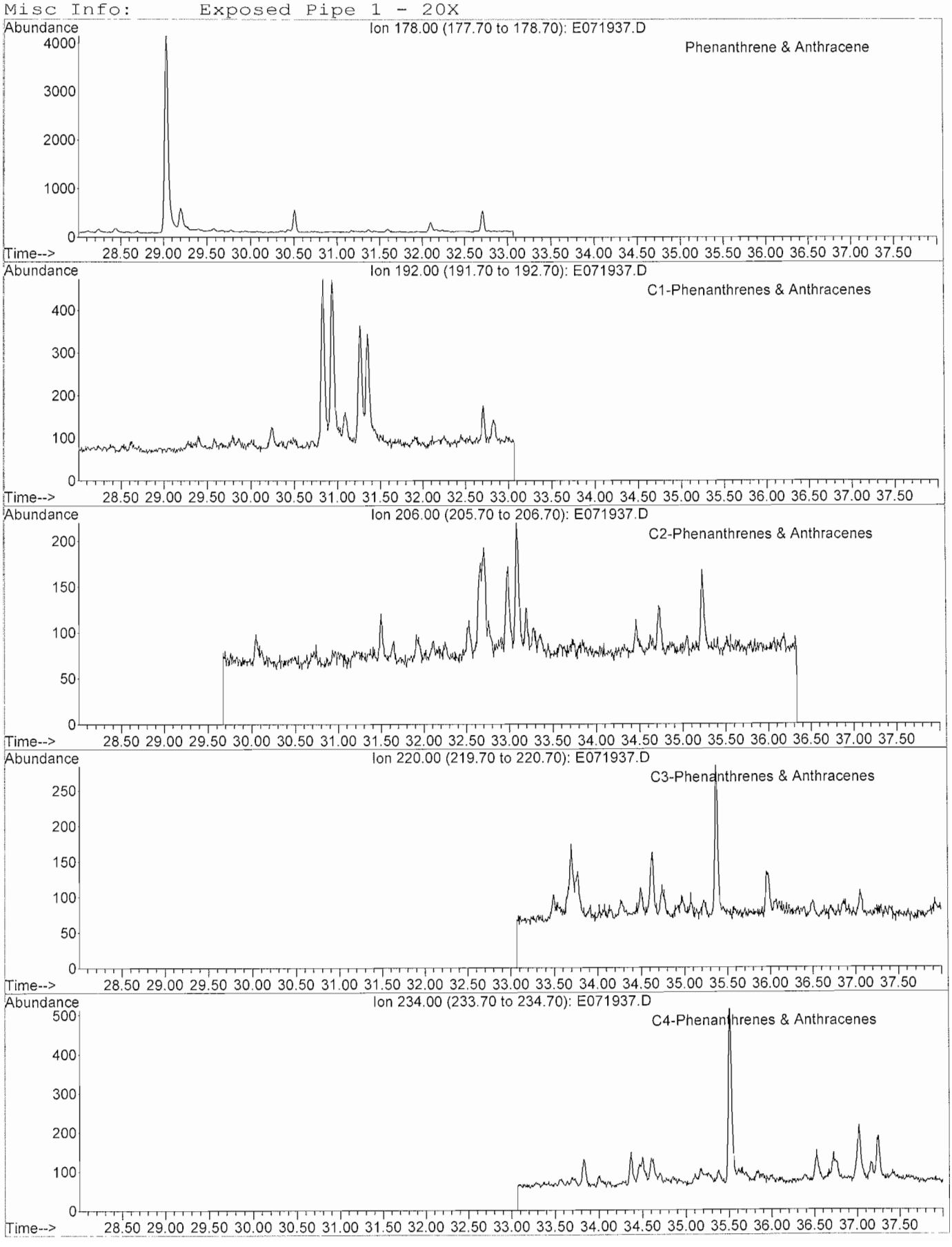
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
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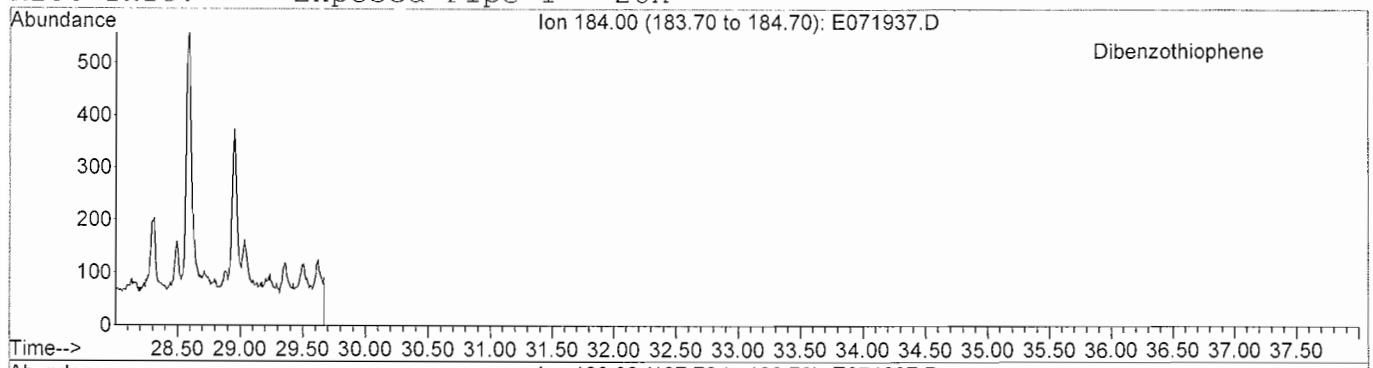
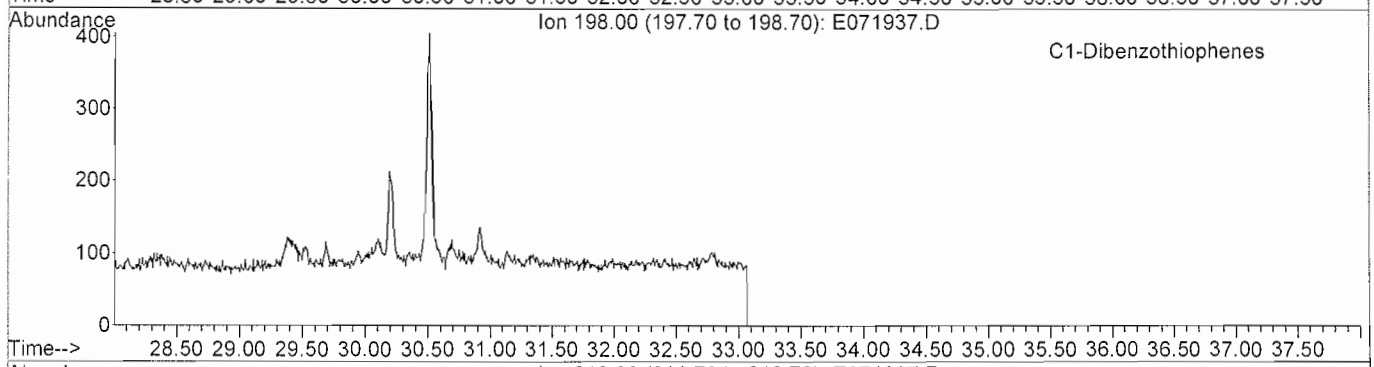
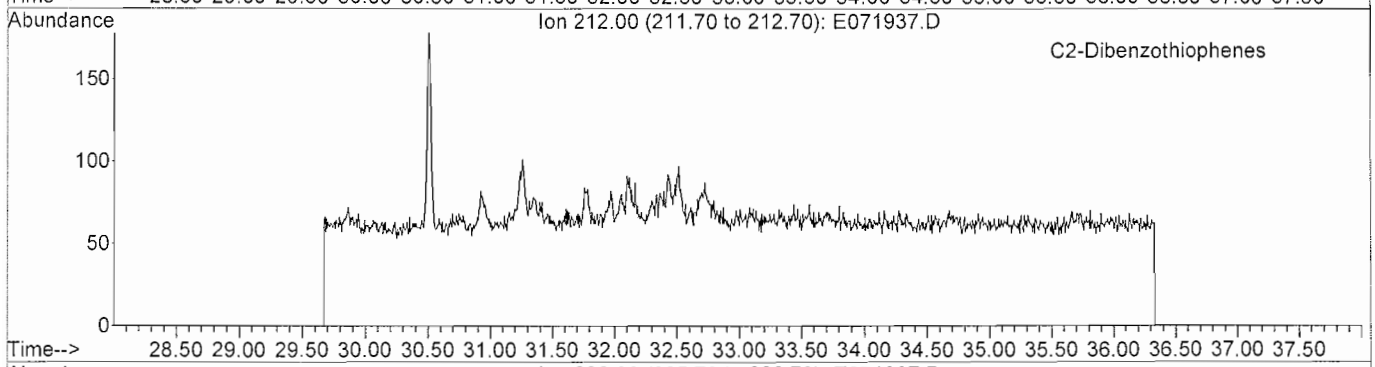
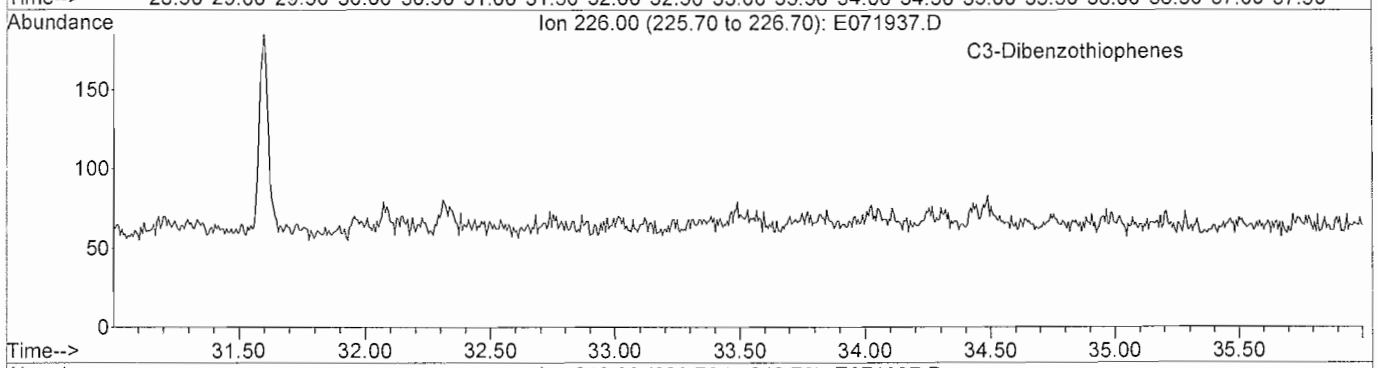
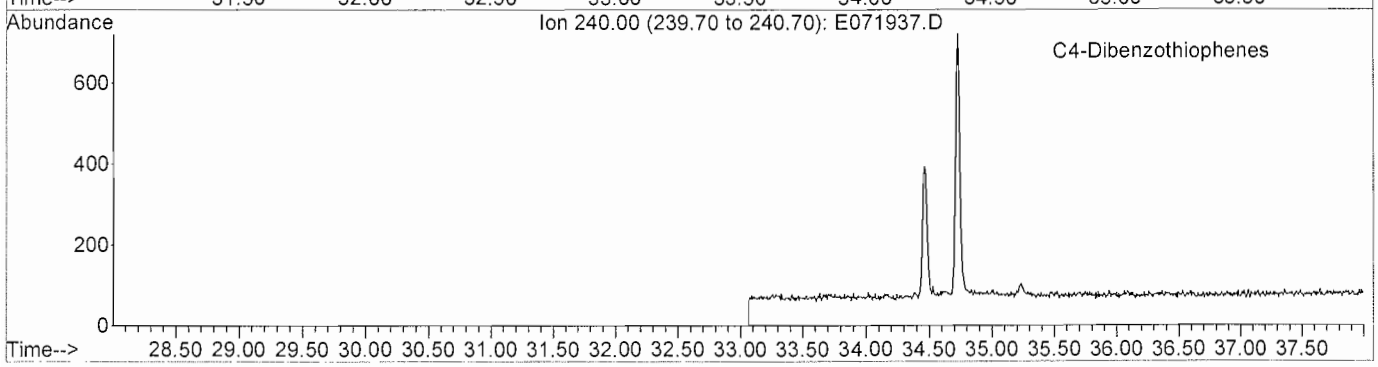






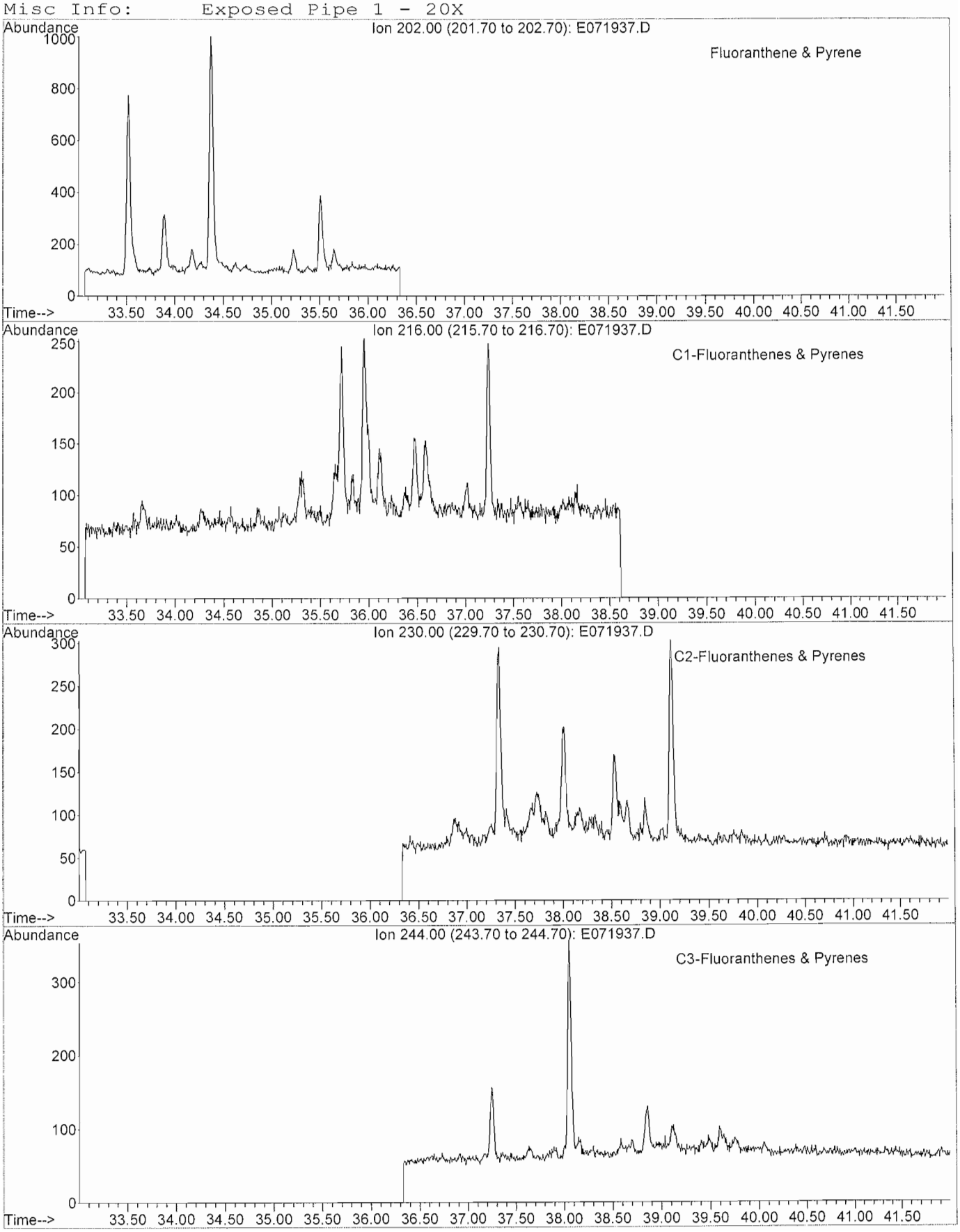




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

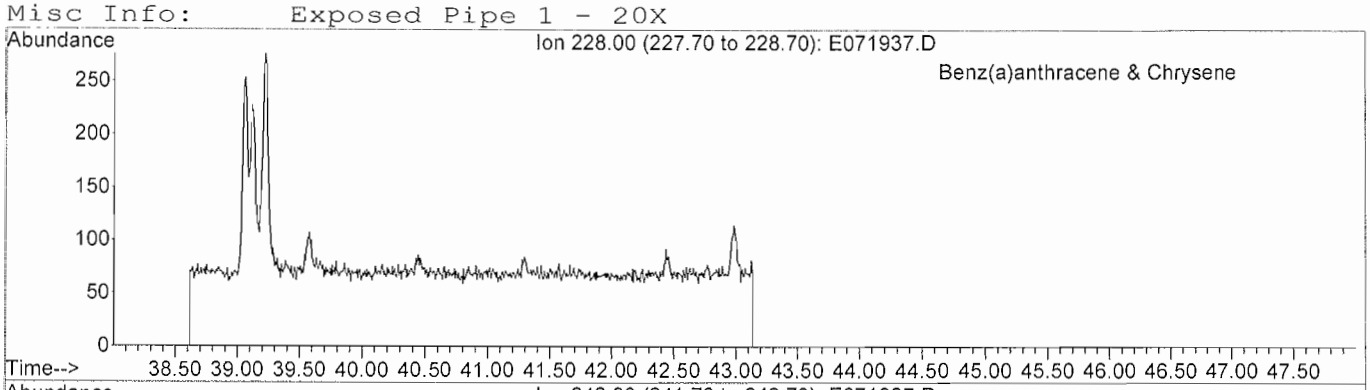
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X

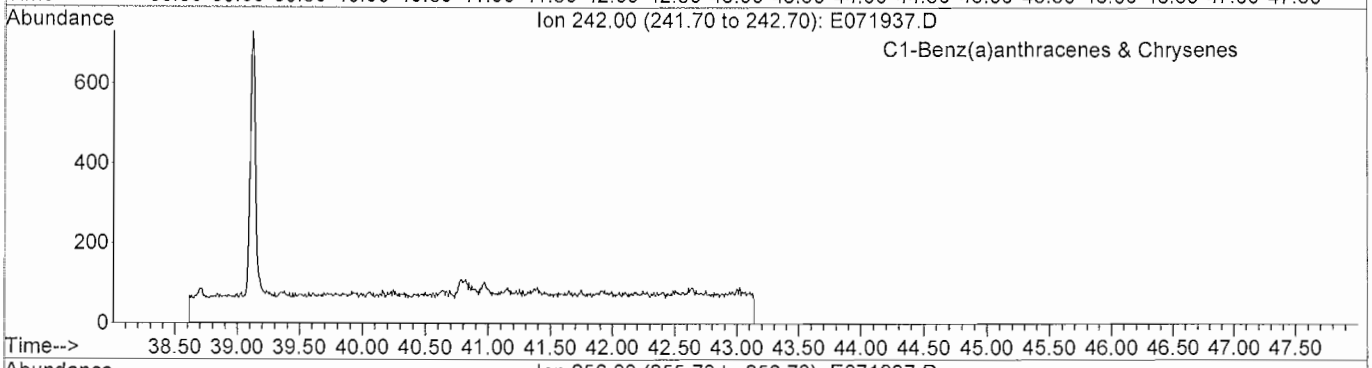


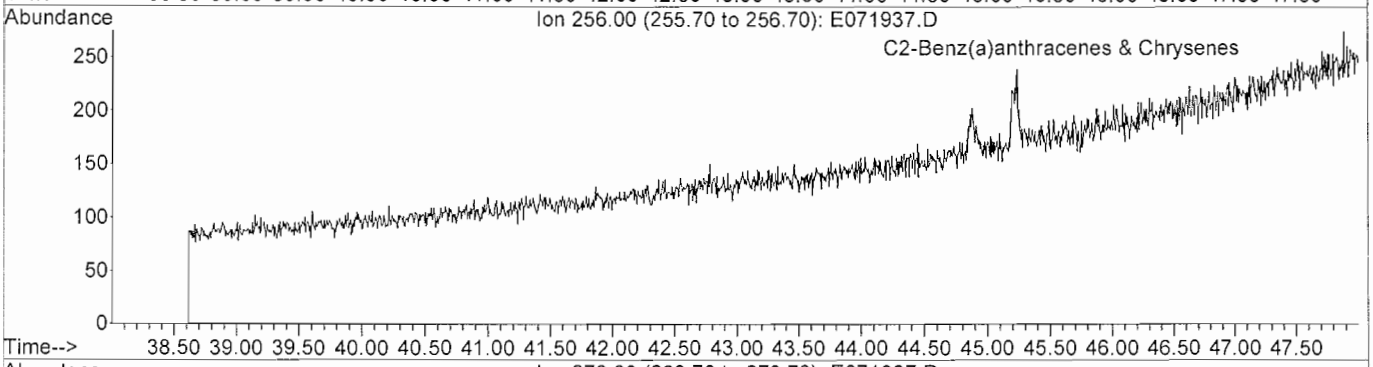
META Environmental, Inc.

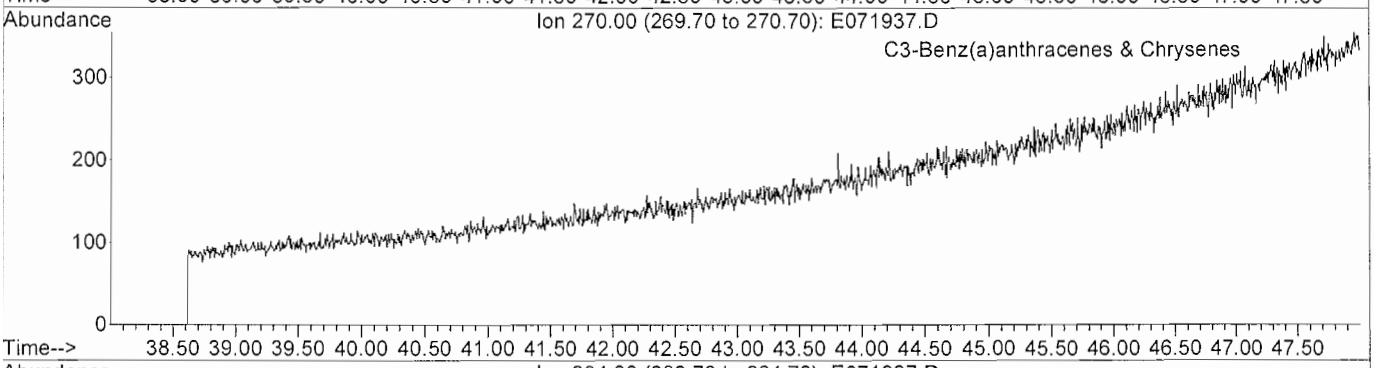
GC/MS EXTRACTED ION CHROMATOGRAM

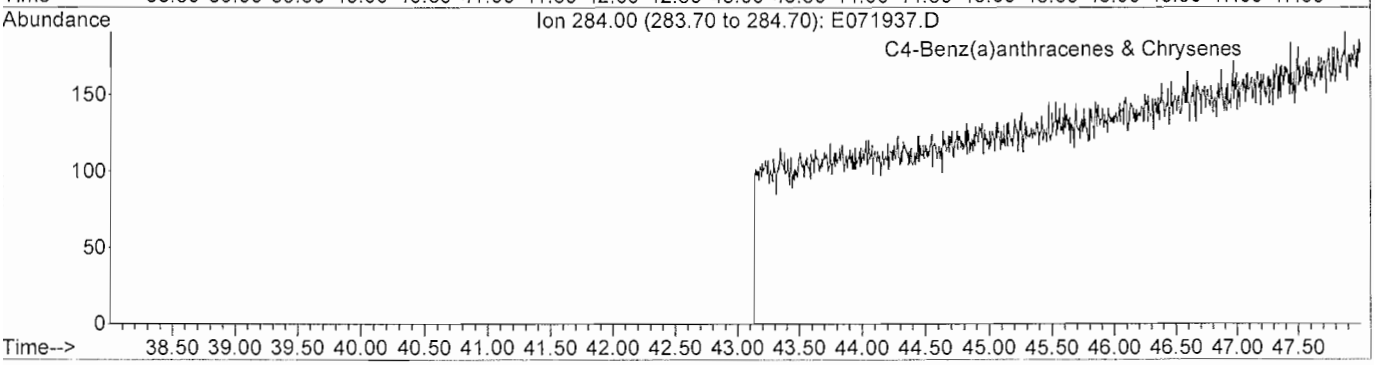
File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
Sample Name: PA100709-03-R-D
Misc Info: Exposed Pipe 1 - 20X











META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071937.D
Date Acquired: 22 Jul 2010 1:04 am
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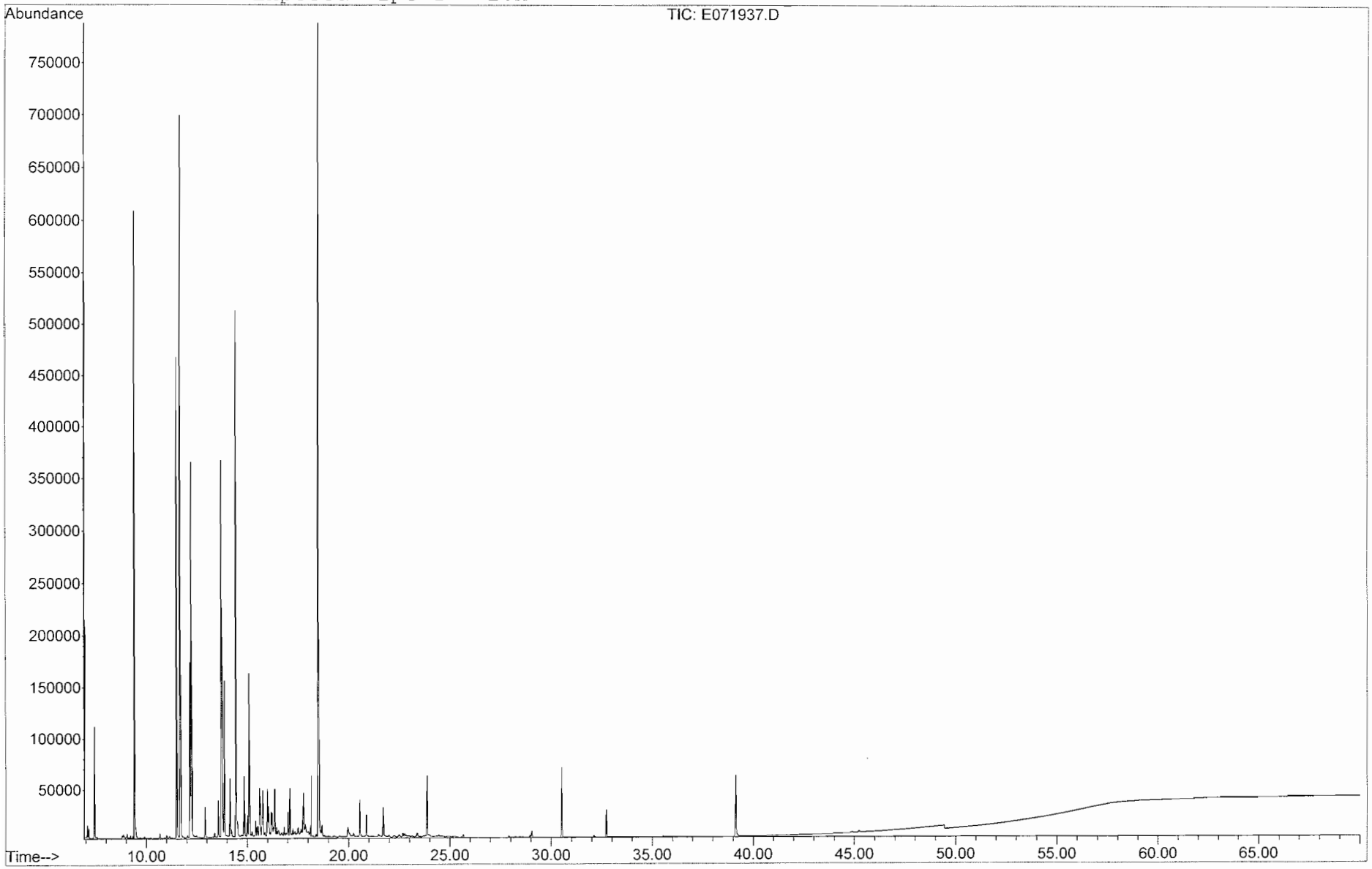
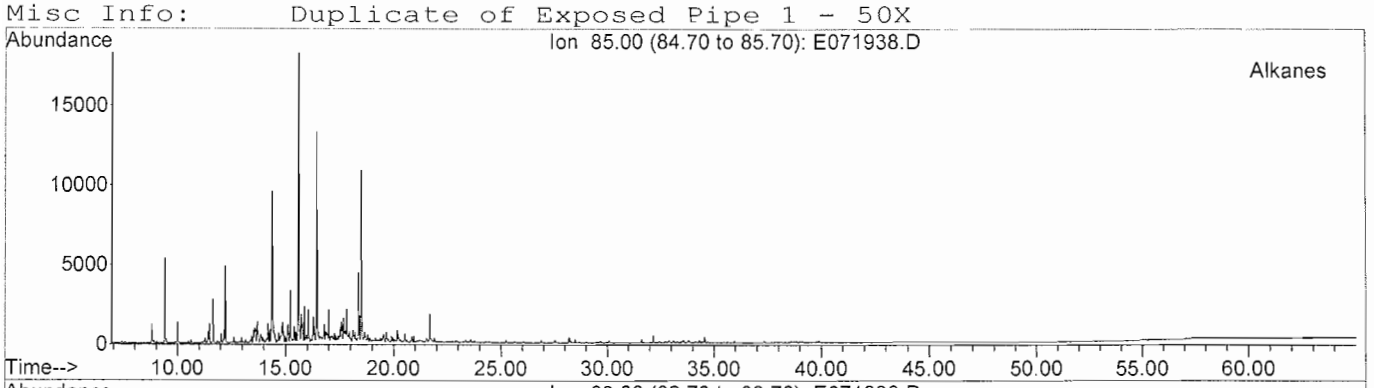
Misc Info: Exposed Pipe 1 - 20X

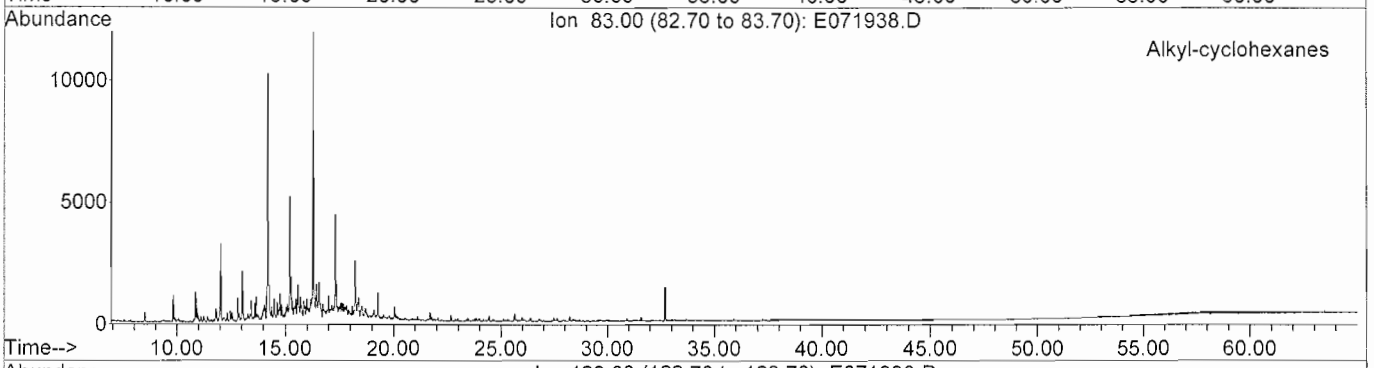


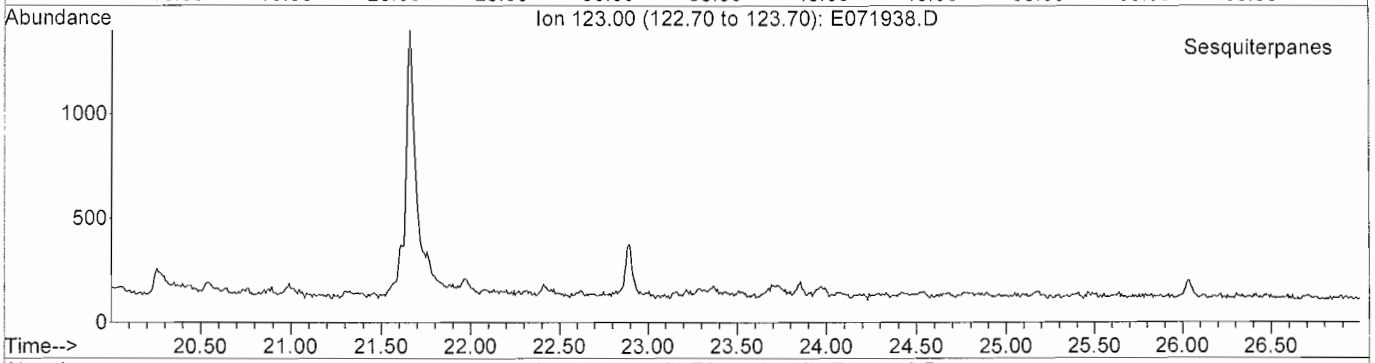
META Environmental, Inc.

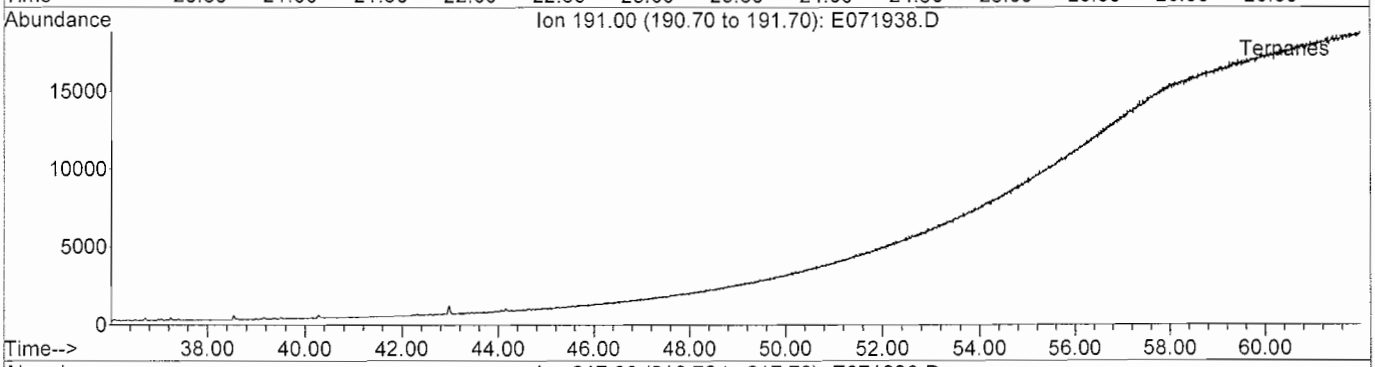
GC/MS EXTRACTED ION CHROMATOGRAM

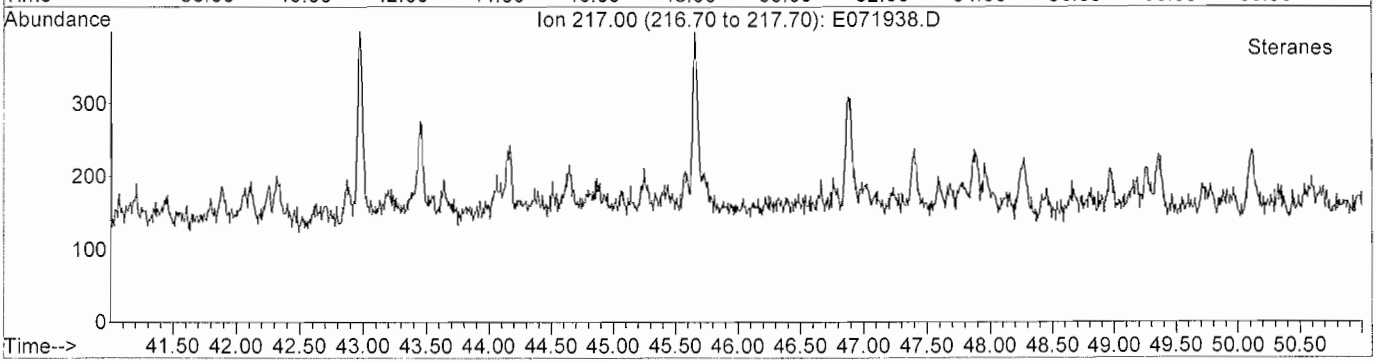
File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X







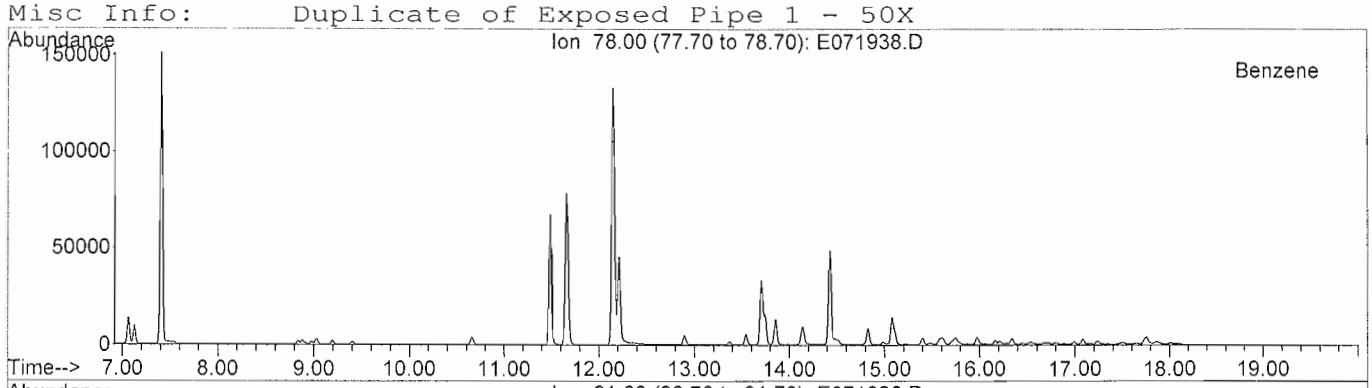


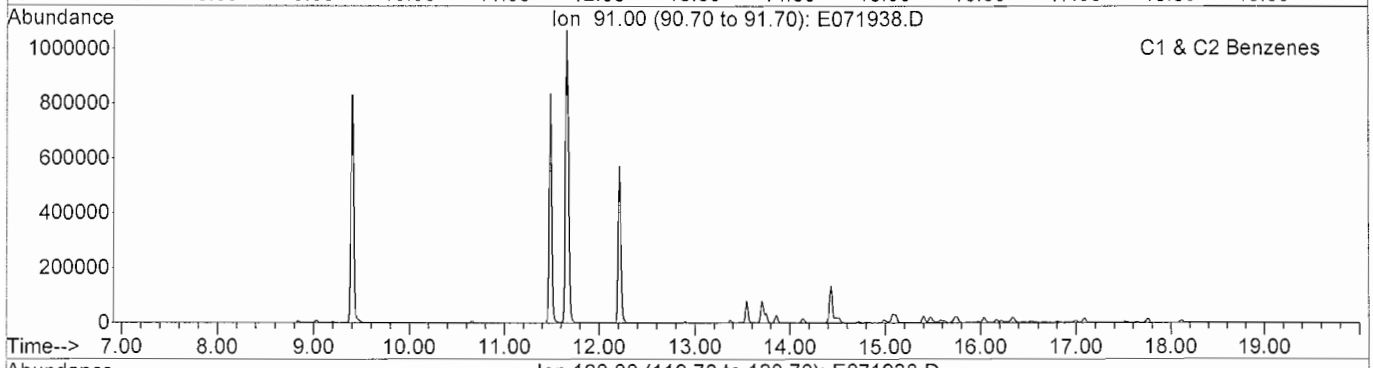


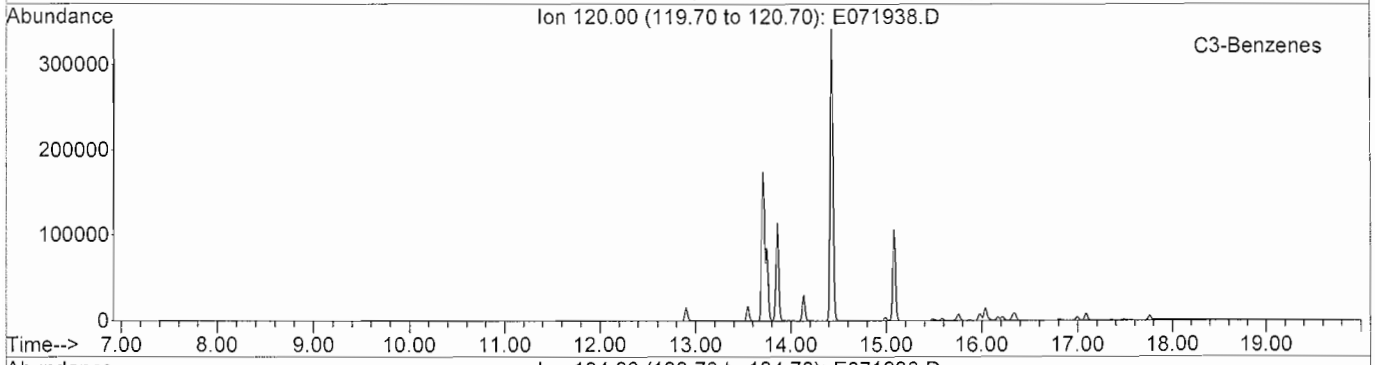
META Environmental, Inc.

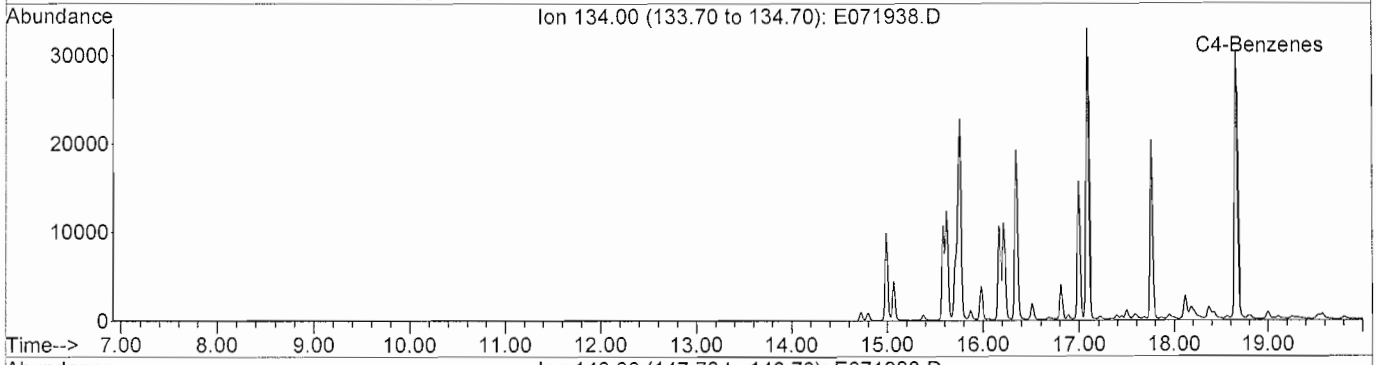
GC/MS EXTRACTED ION CHROMATOGRAM

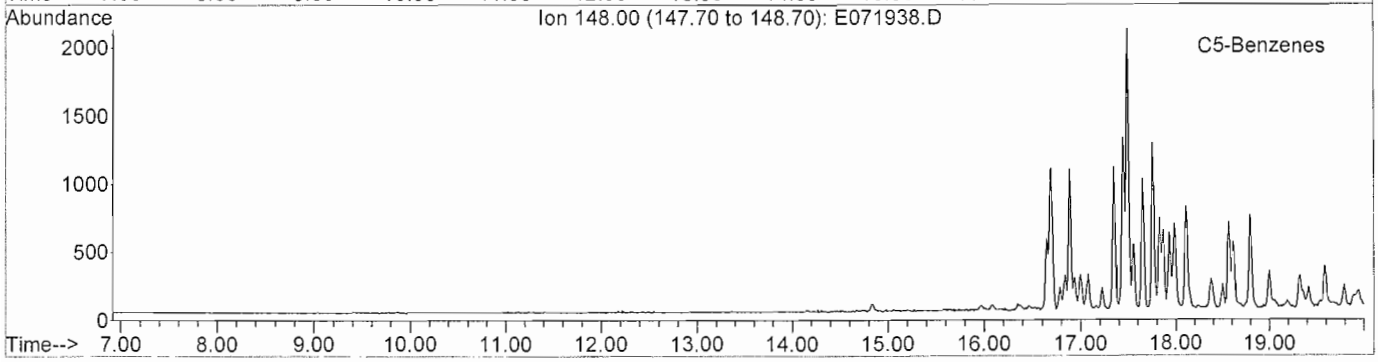
File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X







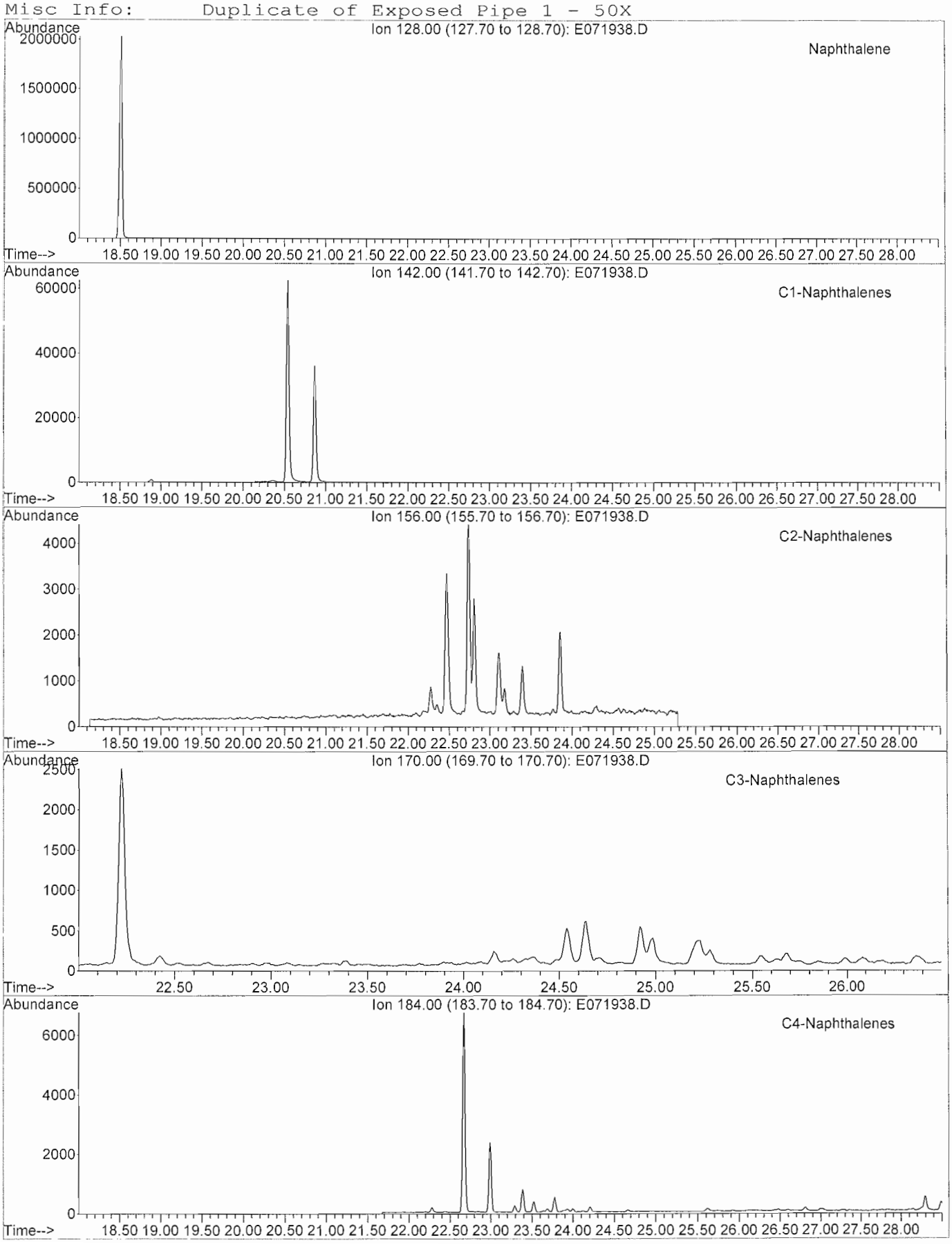




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

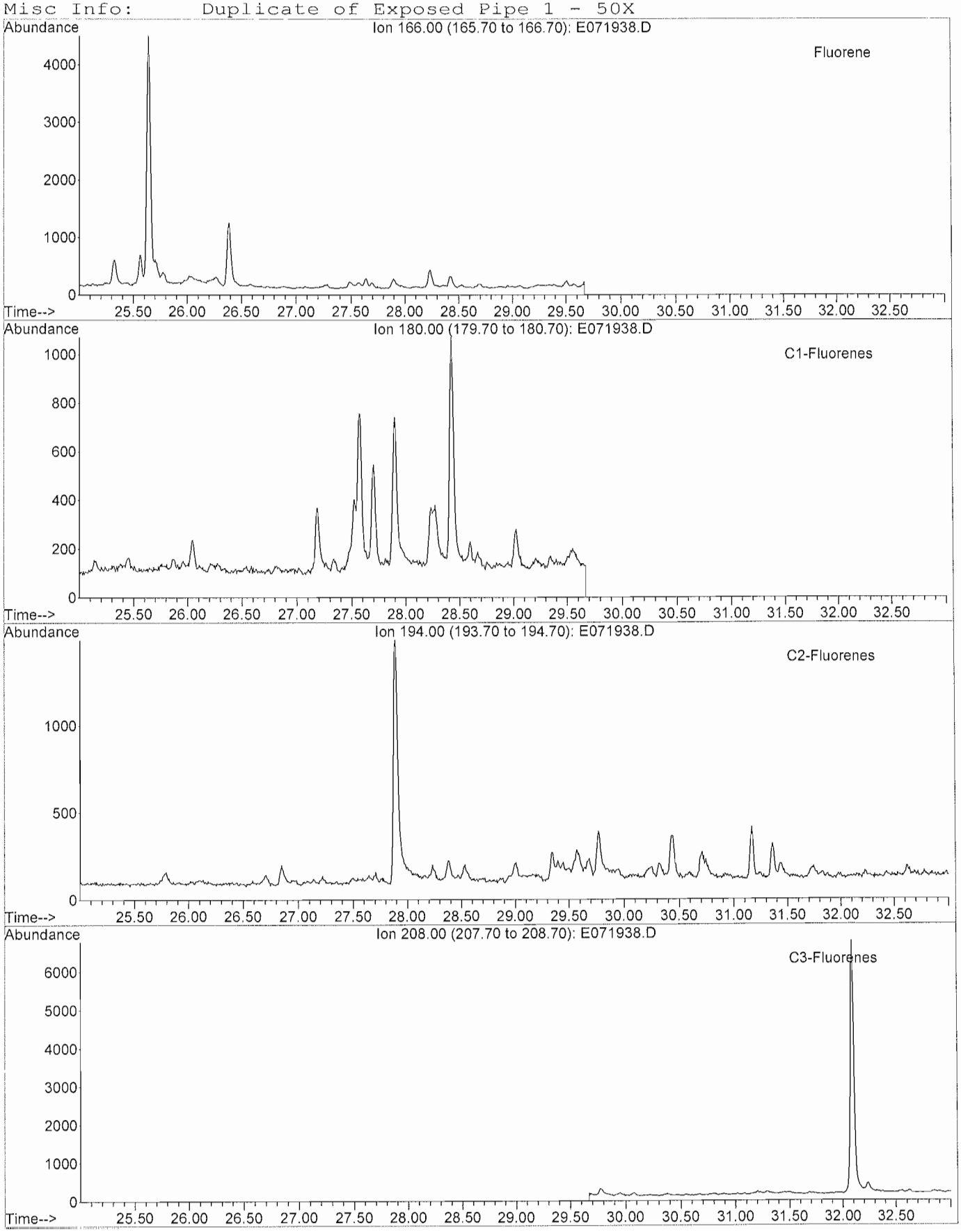
File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071938.D
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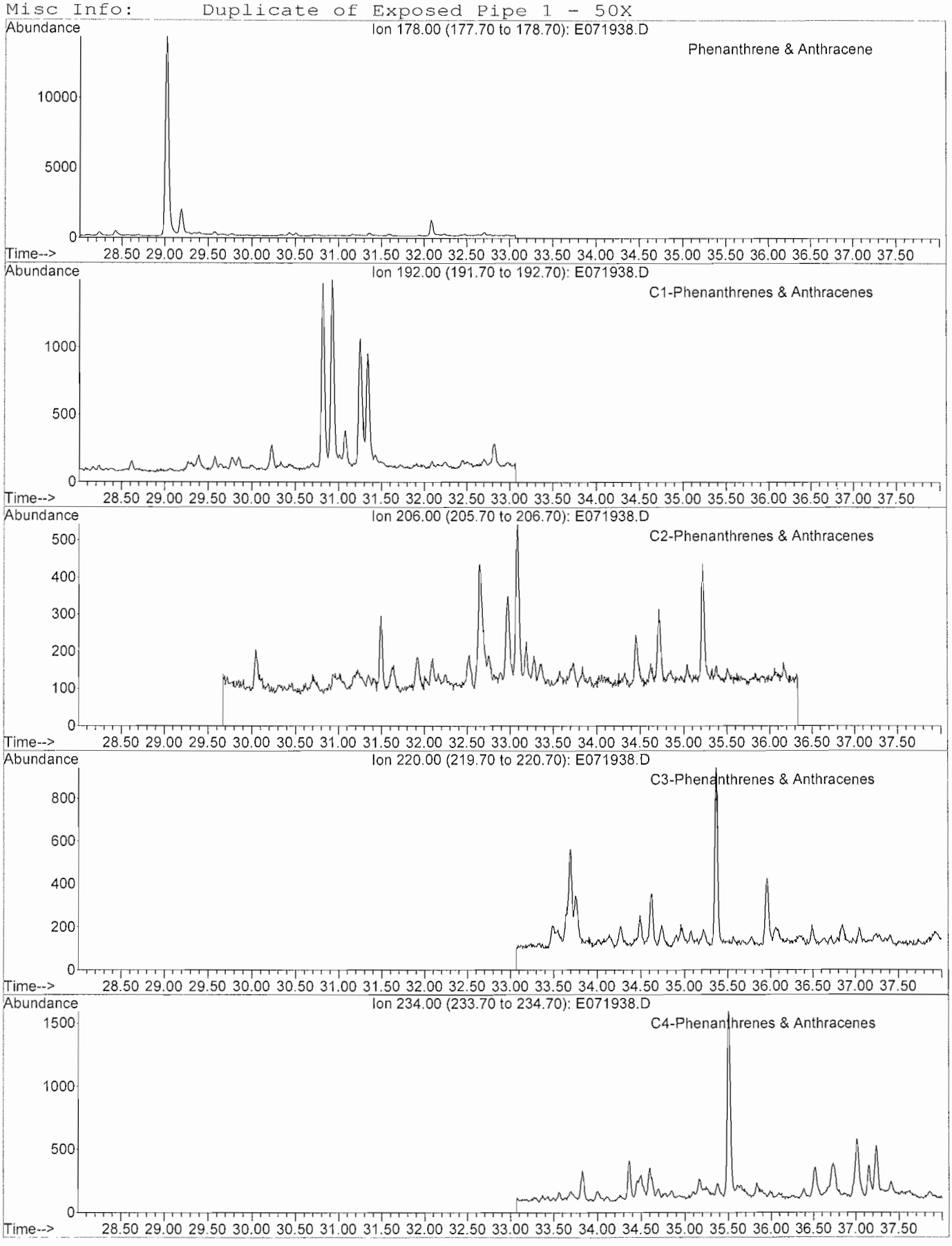
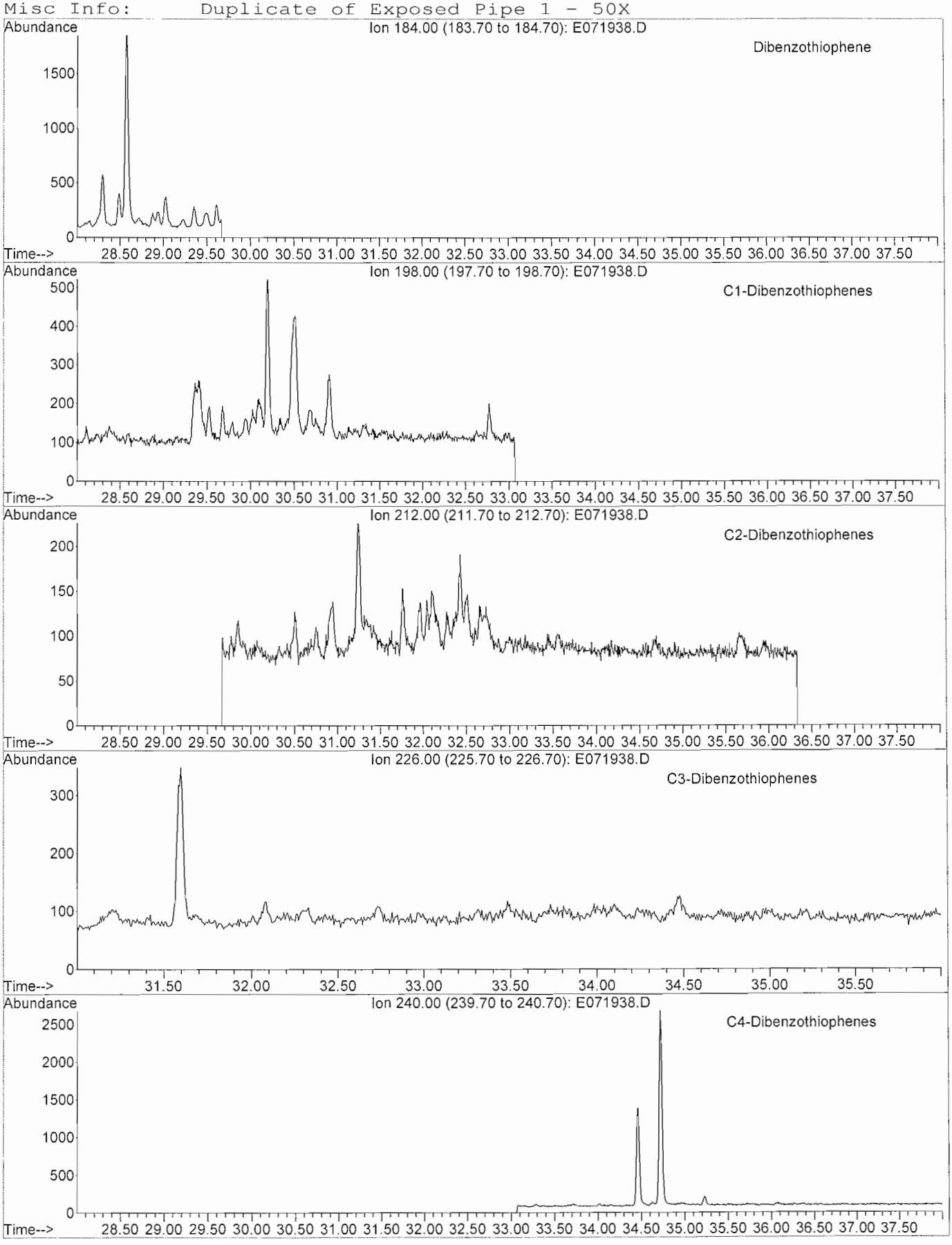


META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

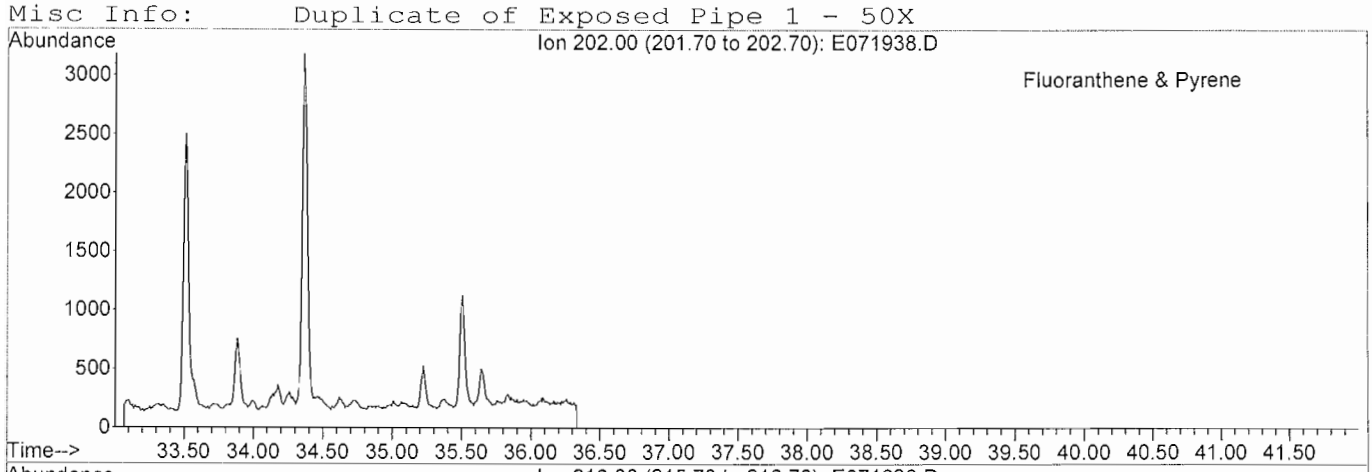
File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X

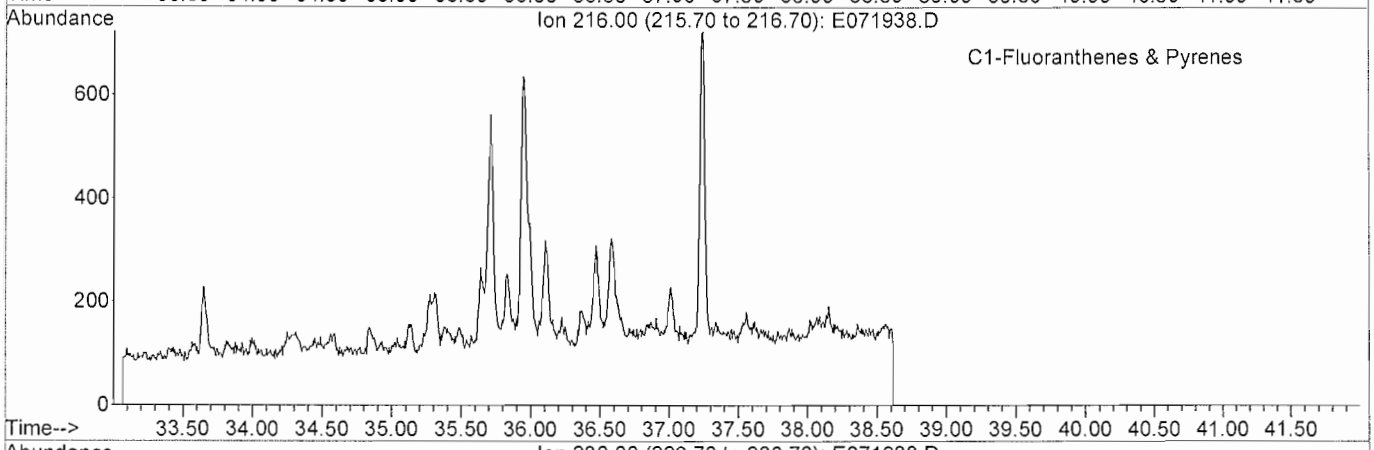


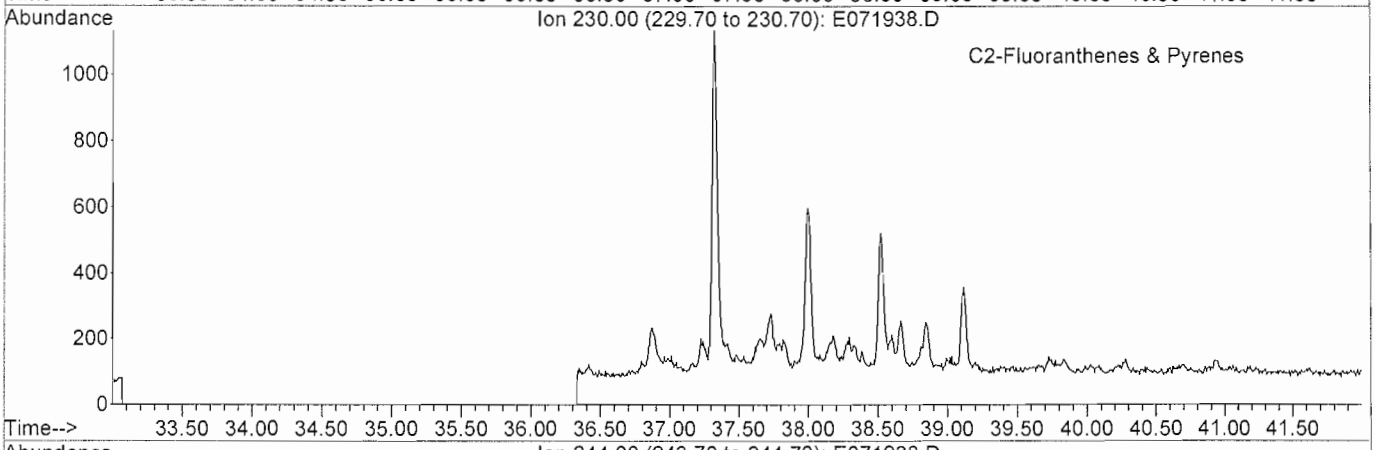
META Environmental, Inc.

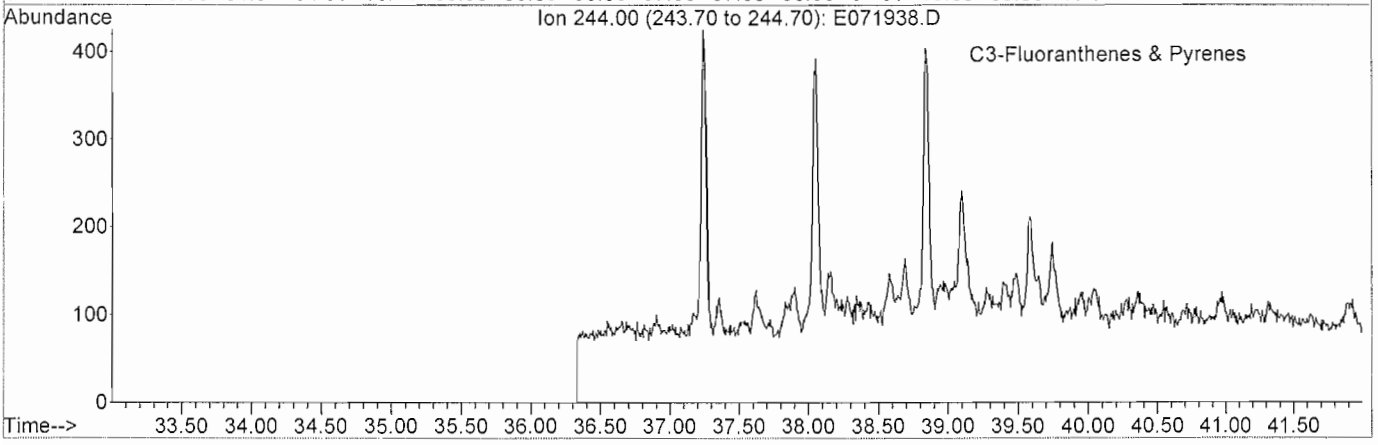
GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
Sample Name: PA100709-03DUP-R-D
Misc Info: Duplicate of Exposed Pipe 1 - 50X









META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071938.D
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Sample Name: PA100709-03DUP-R-D
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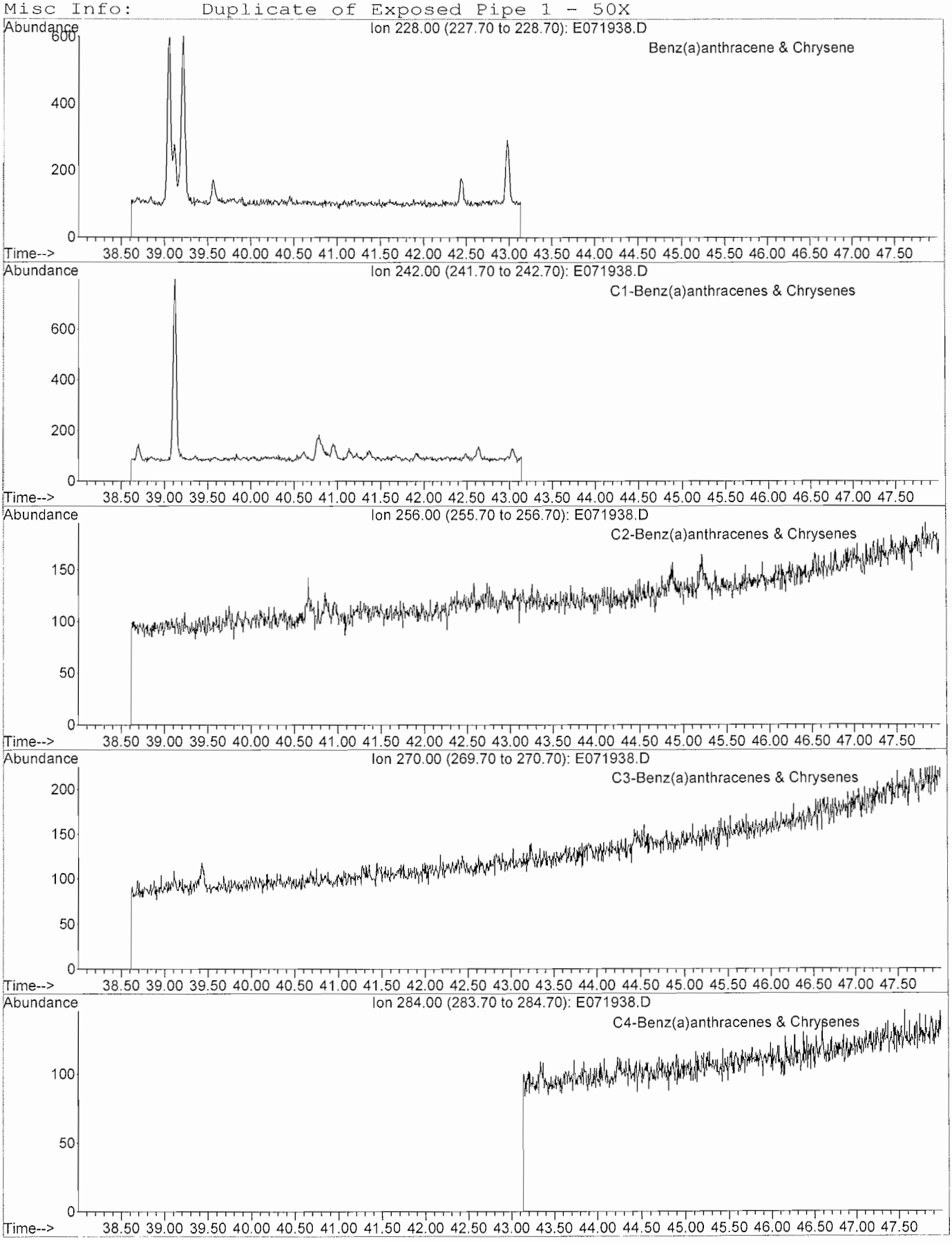

META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071938.D
Date Acquired: 22 Jul 2010 2:28 am
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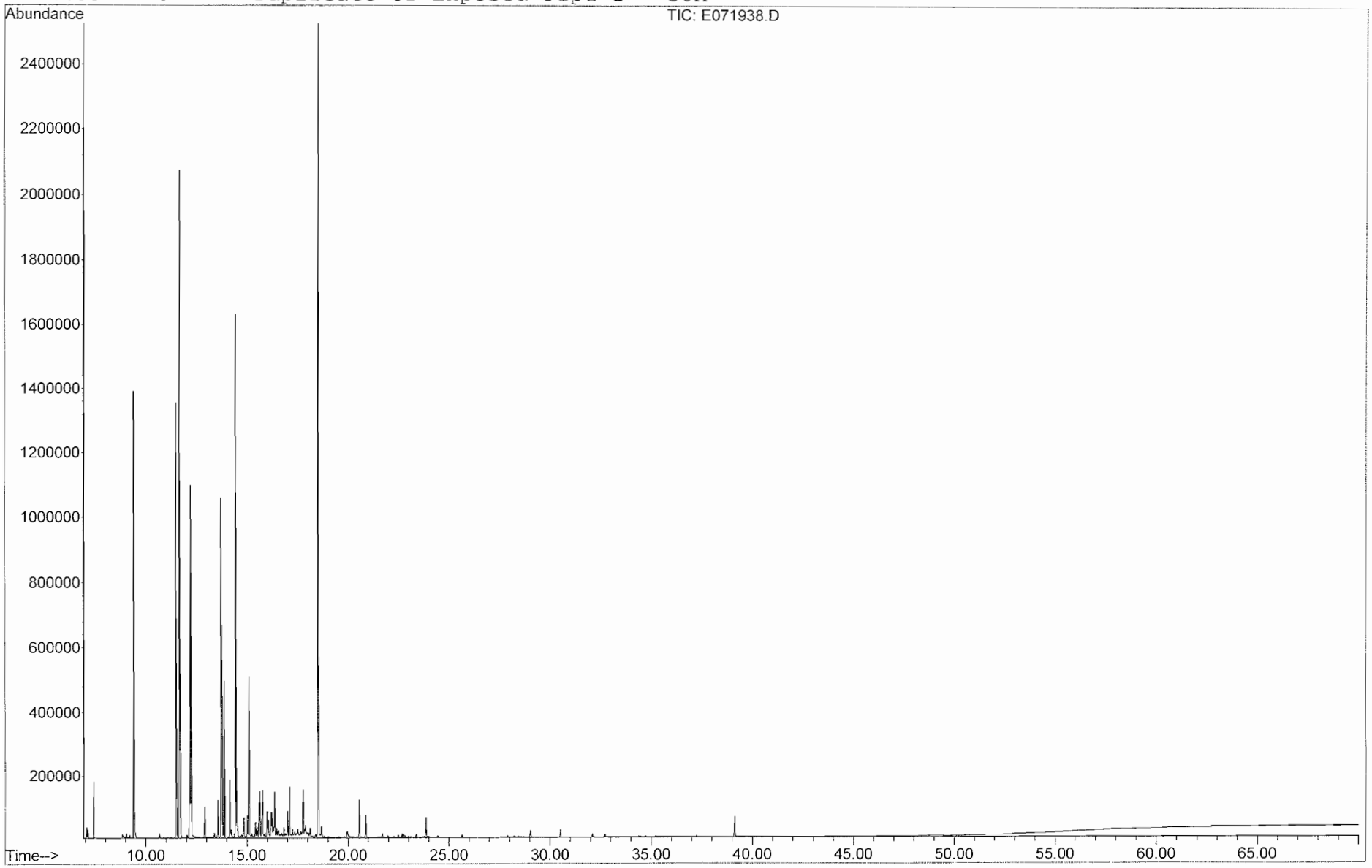
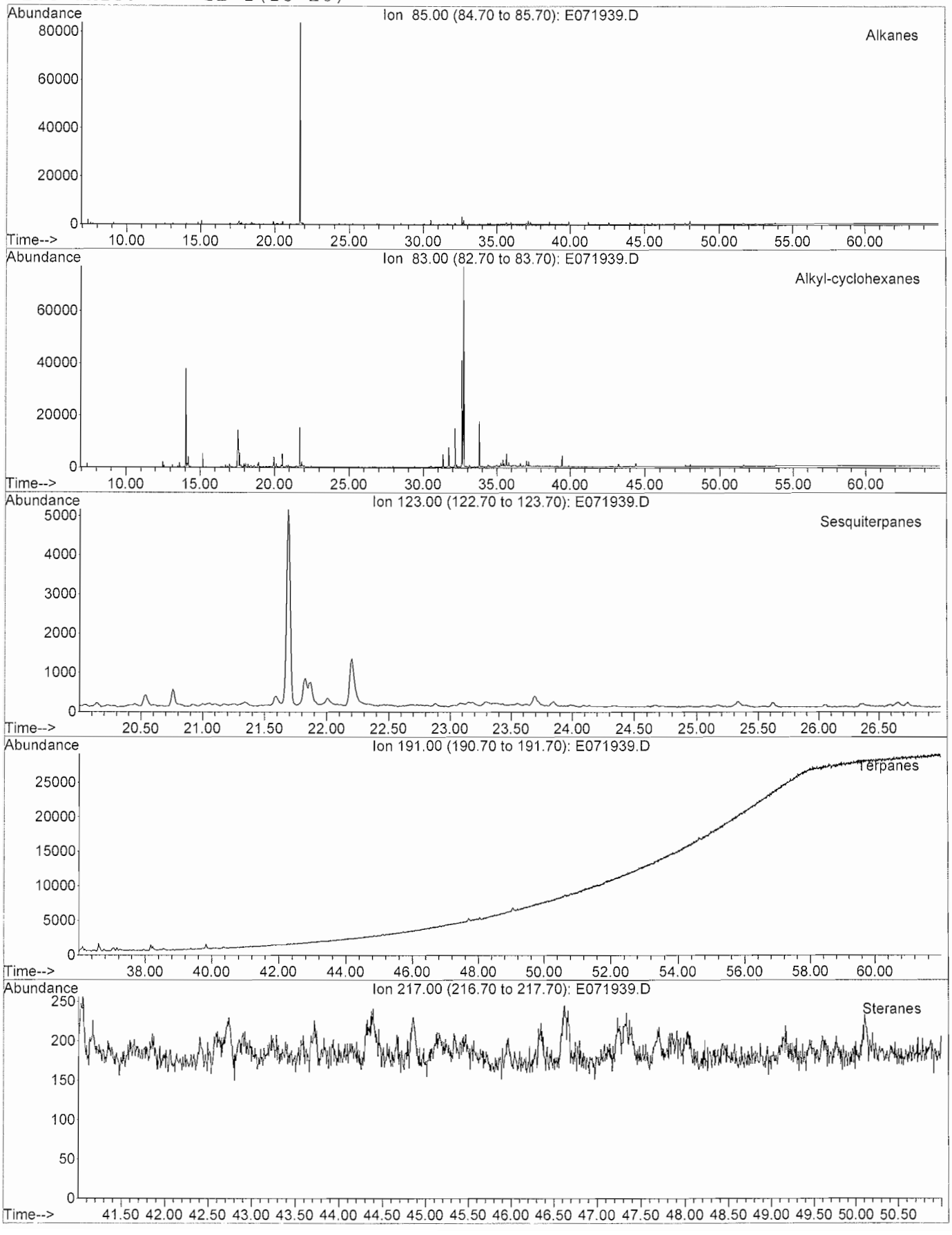
Misc Info: Duplicate of Exposed Pipe 1 - 50X



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

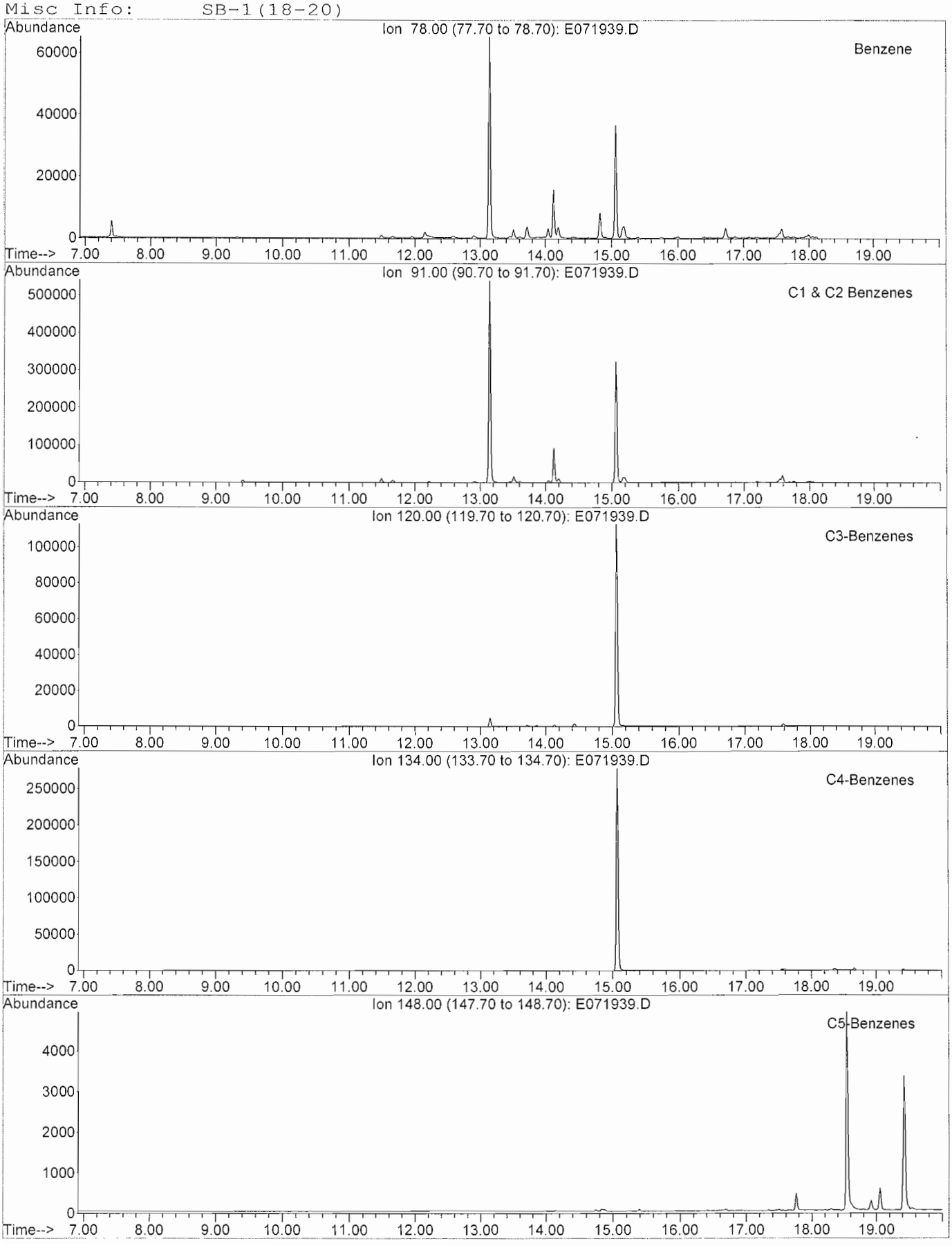
File: J:\1\DATA\E100719\E071939.D
Date Acquired: 22 Jul 2010 3:52 am
Sample Name: PA100709-04
Misc Info: SB-1(18-20)



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071939.D
Date Acquired: 22 Jul 2010 3:52 am
Sample Name: PA100709-04
Misc Info: SB-1(18-20)



META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071939.D
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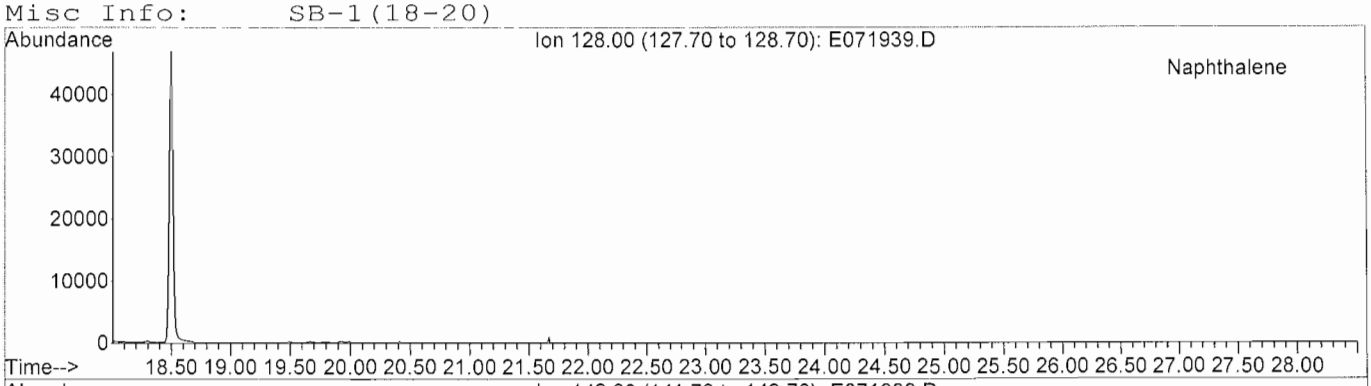
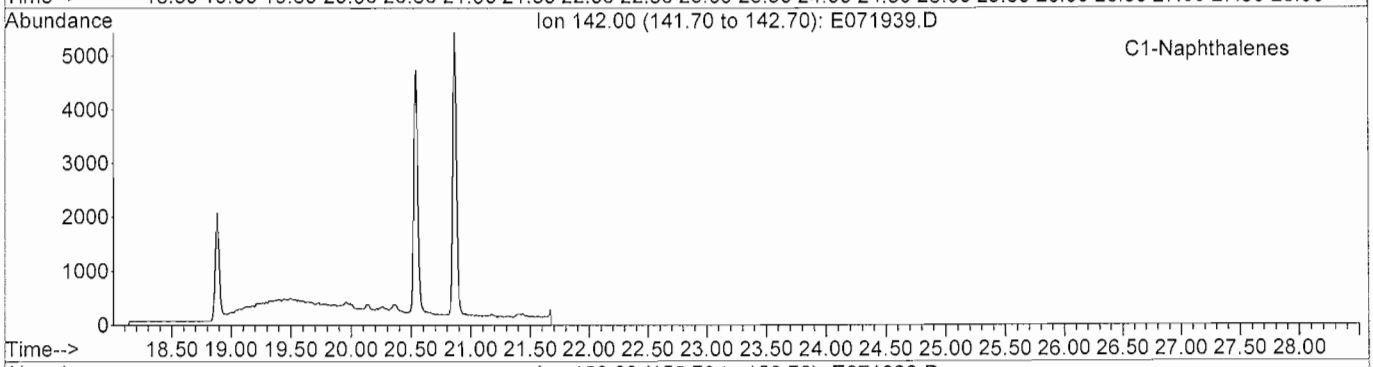
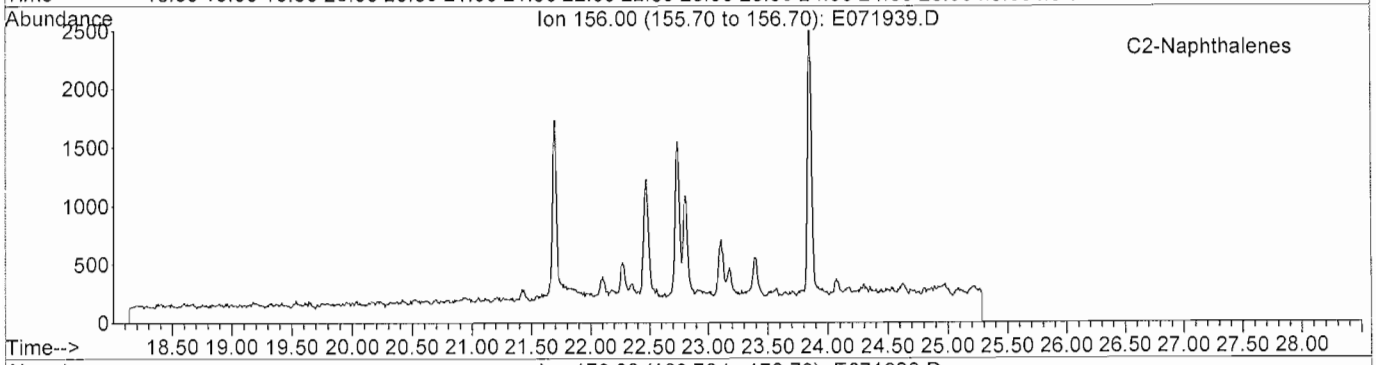
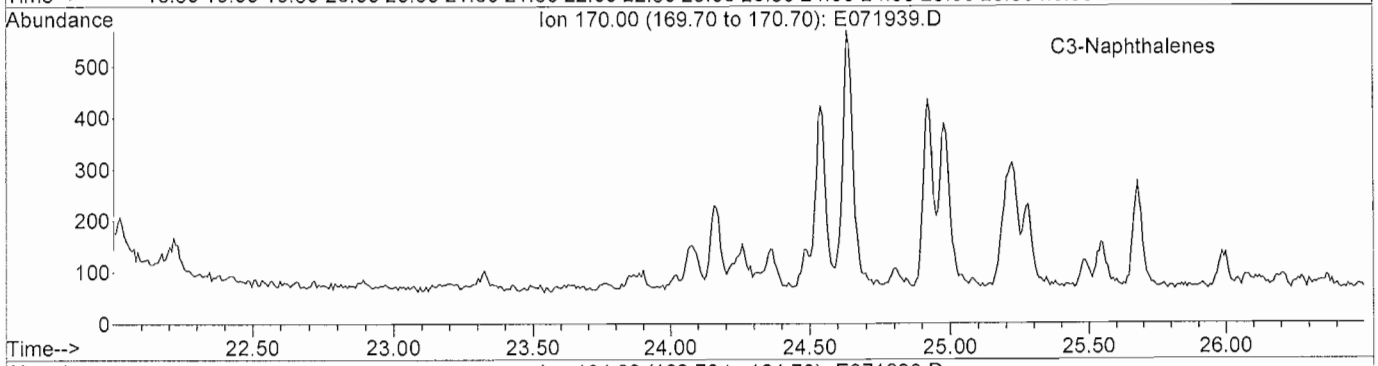
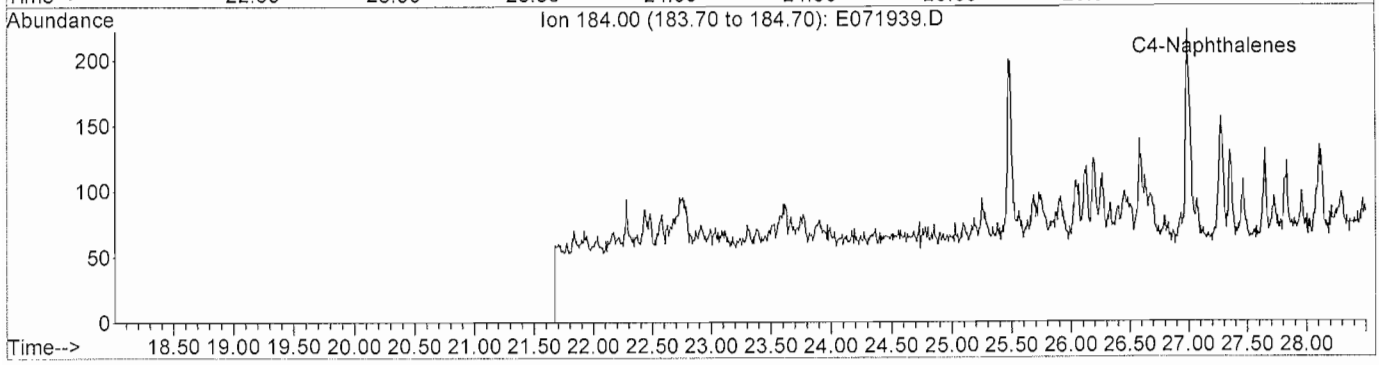
Sample Name: PA100709-04
Misc Info: SB-1(18-20)







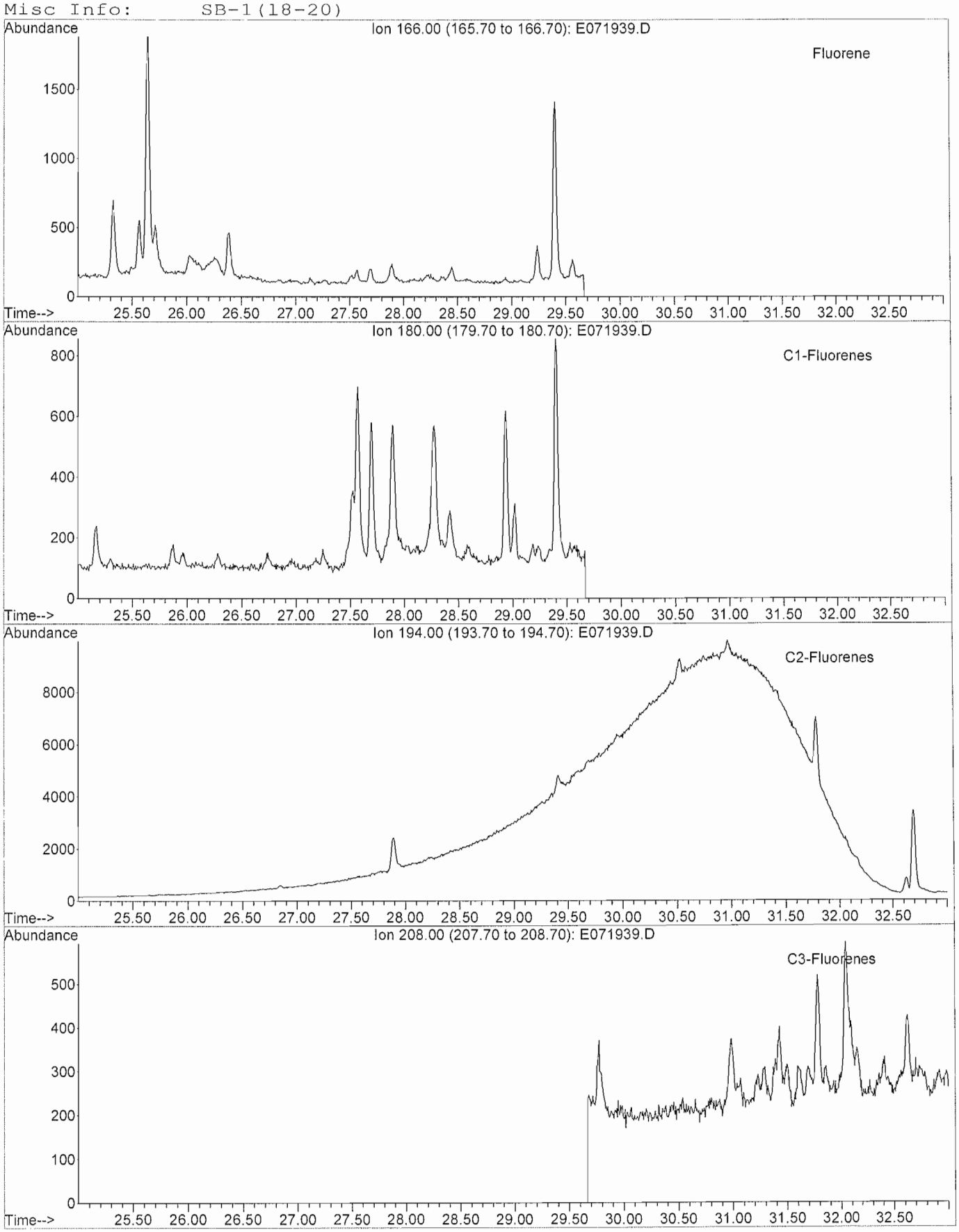




META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071939.D
Date Acquired: 22 Jul 2010 3:52 am
Sample Name: PA100709-04
Misc Info: SB-1(18-20)



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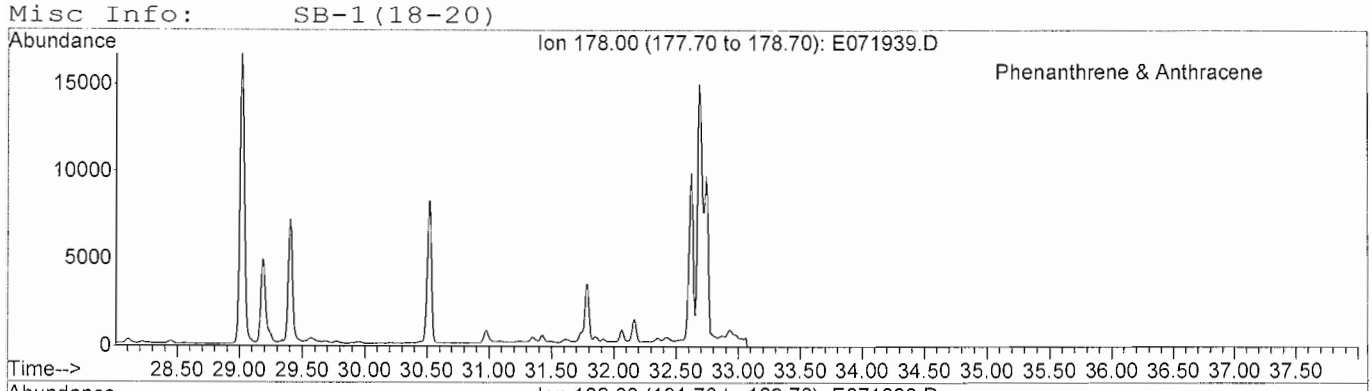

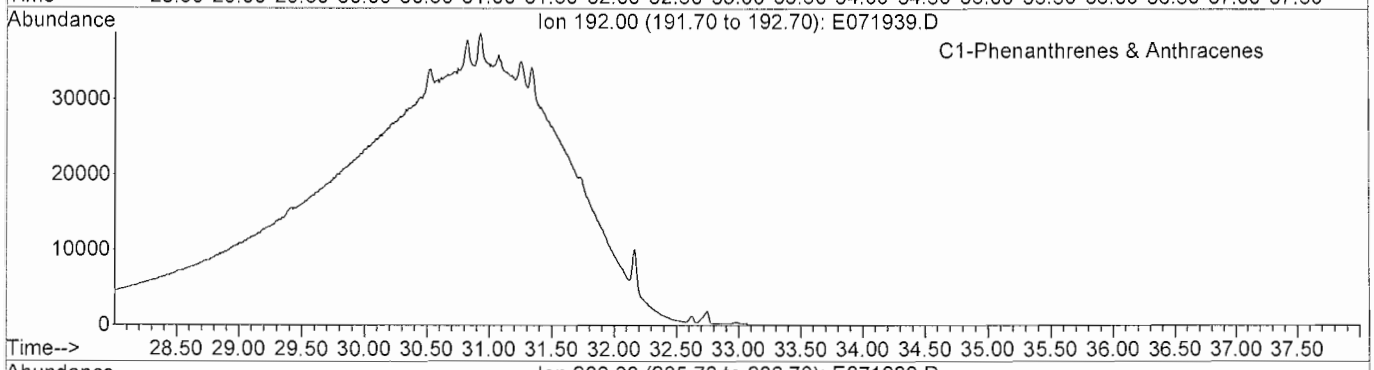

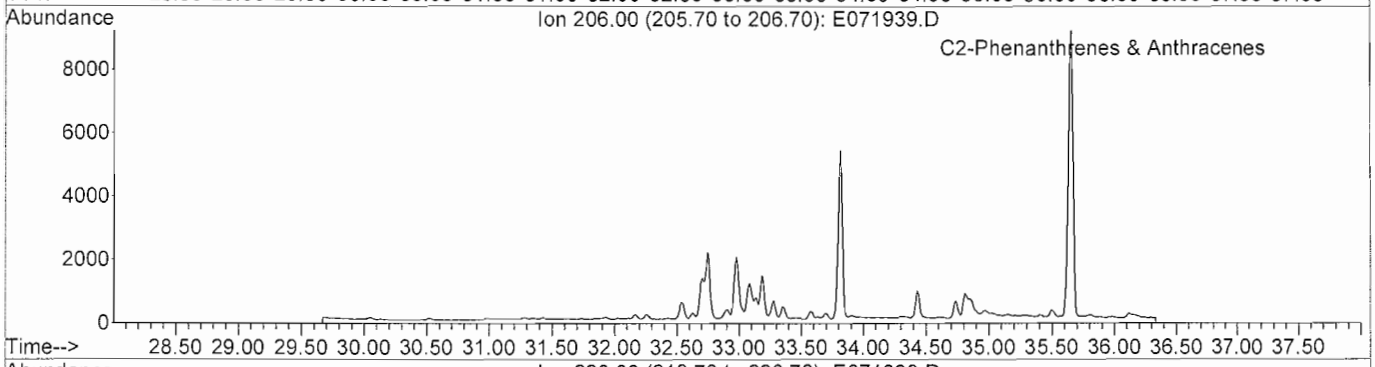

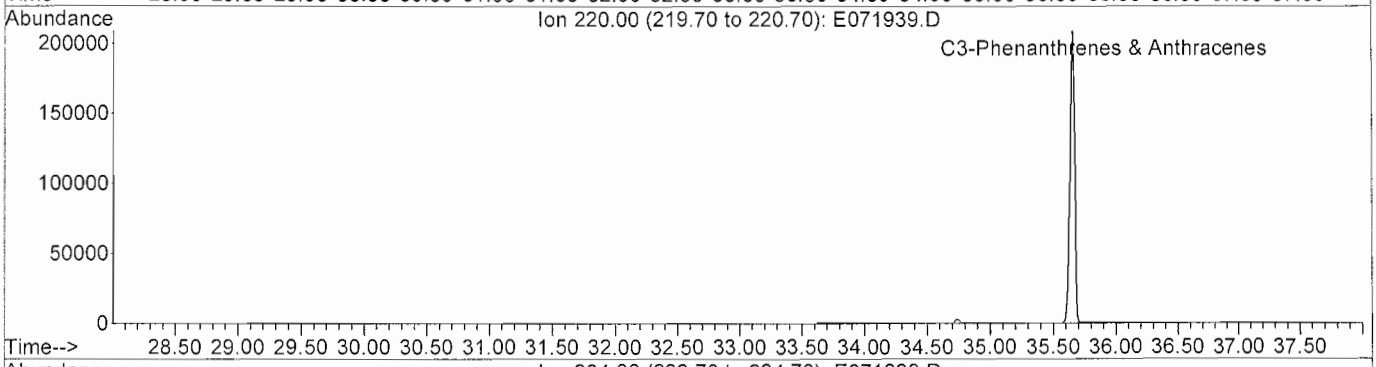

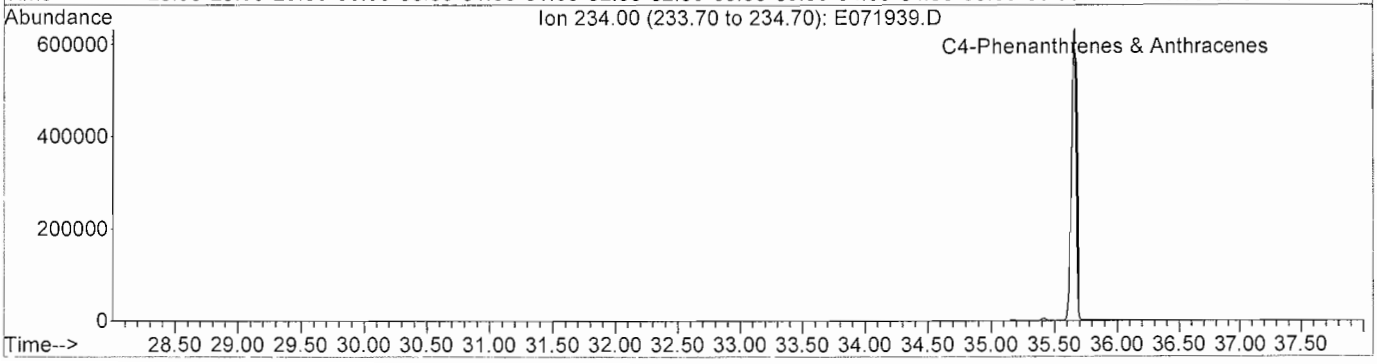

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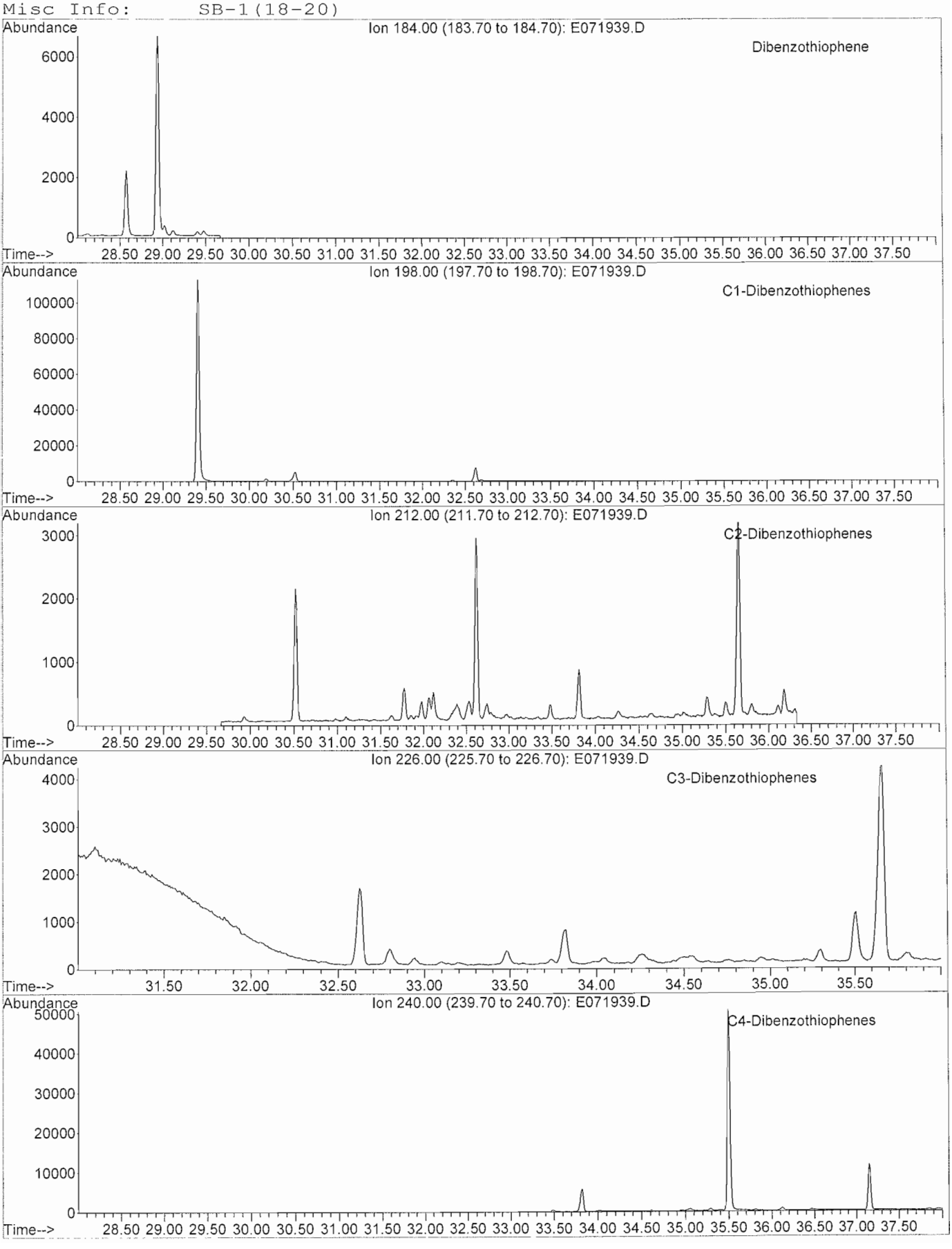
Misc Info: SB-1(18-20)



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GC/MS EXTRACTED ION CHROMATOGRAM

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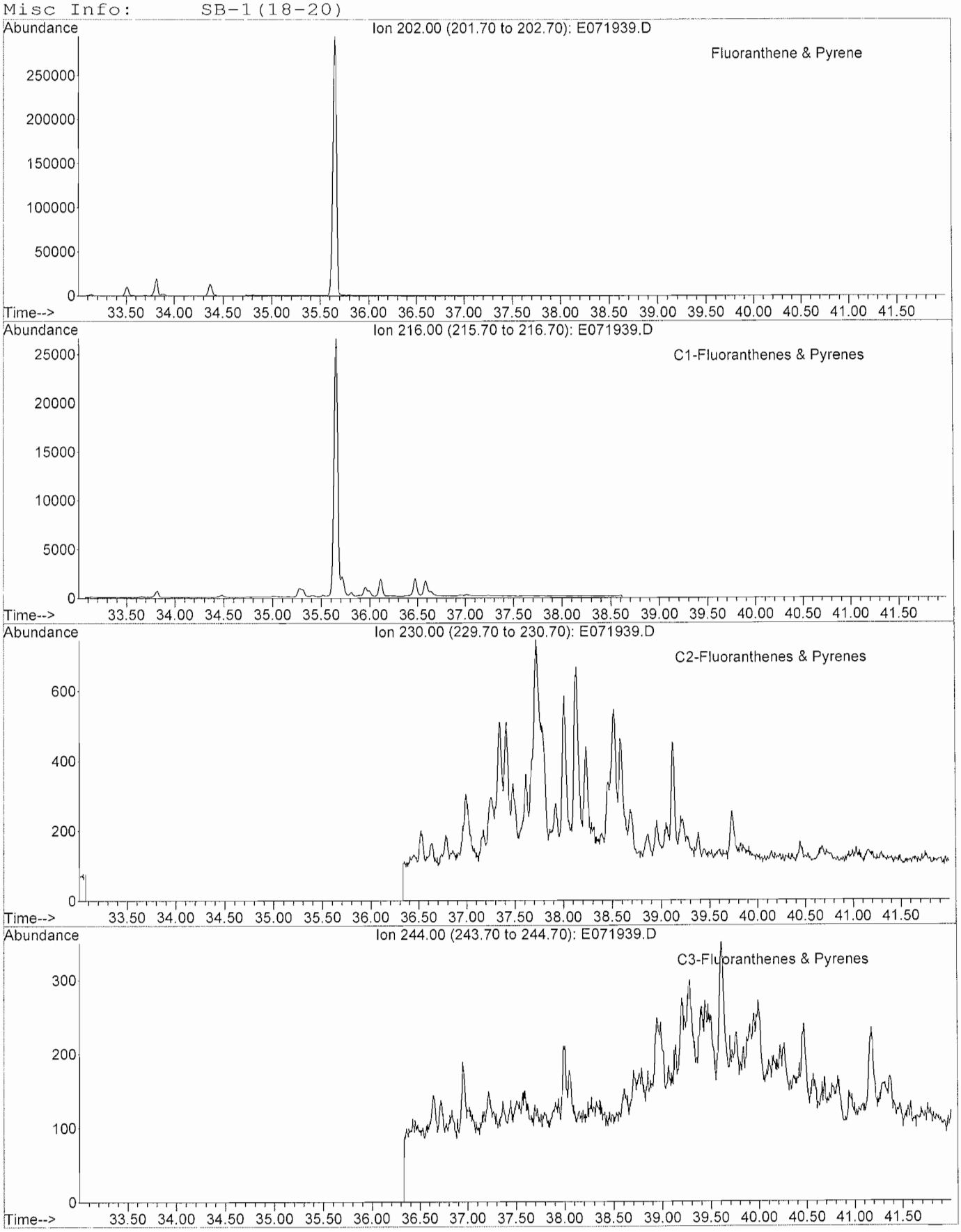

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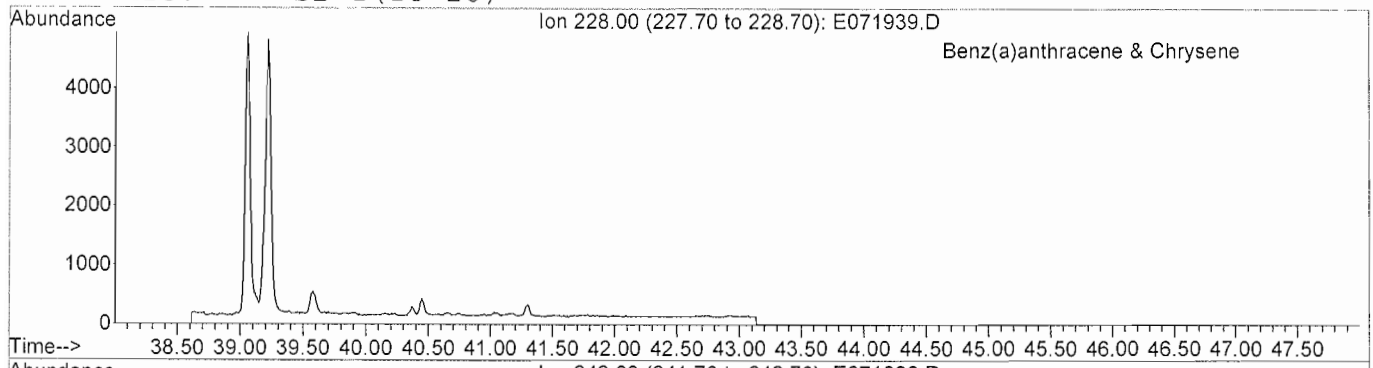

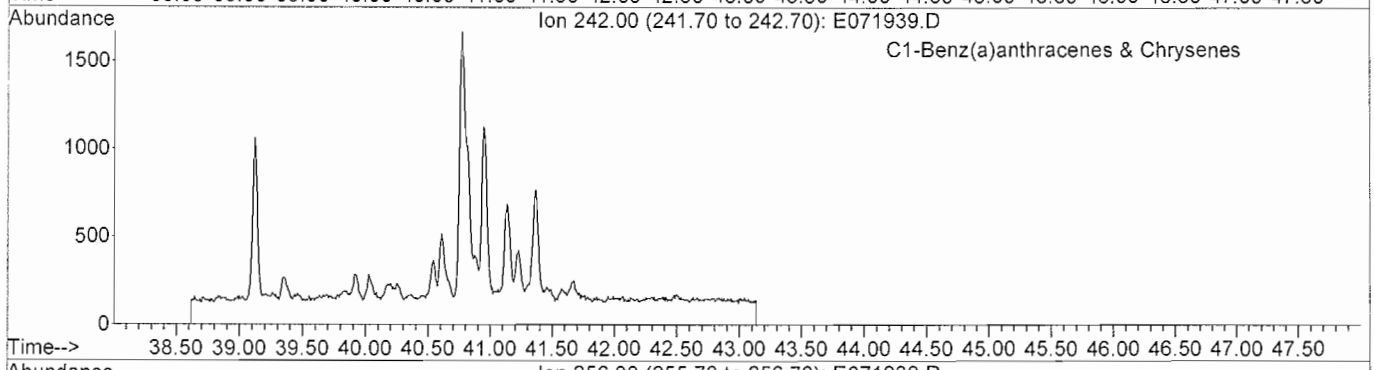

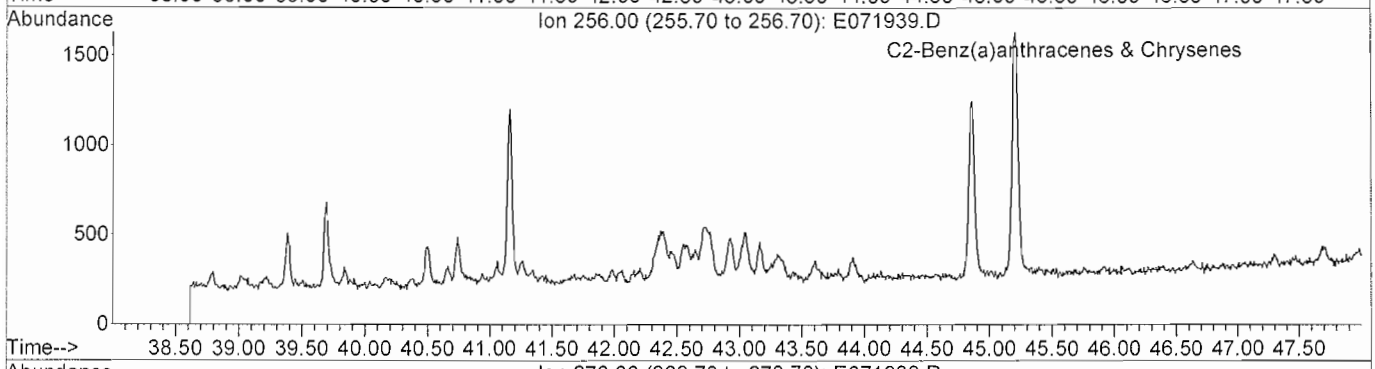

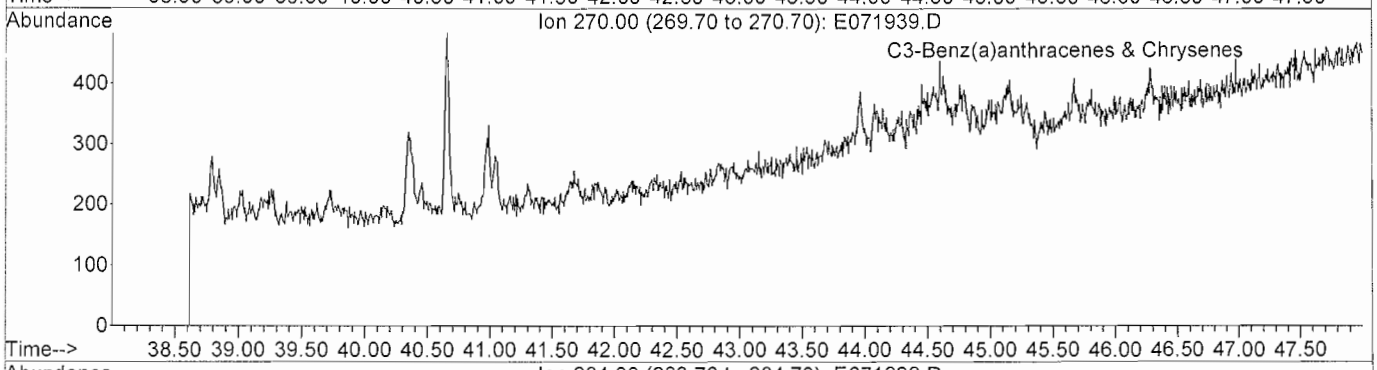

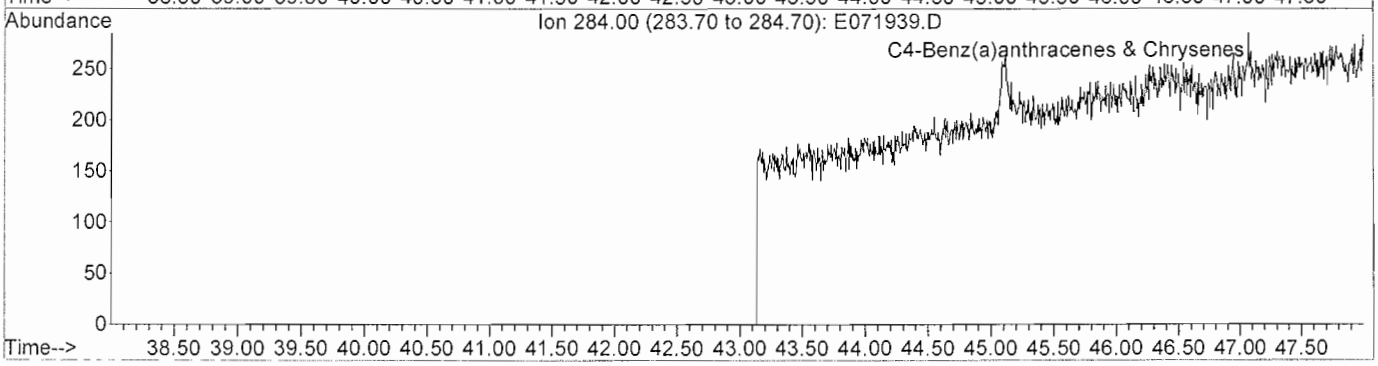

META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071939.D
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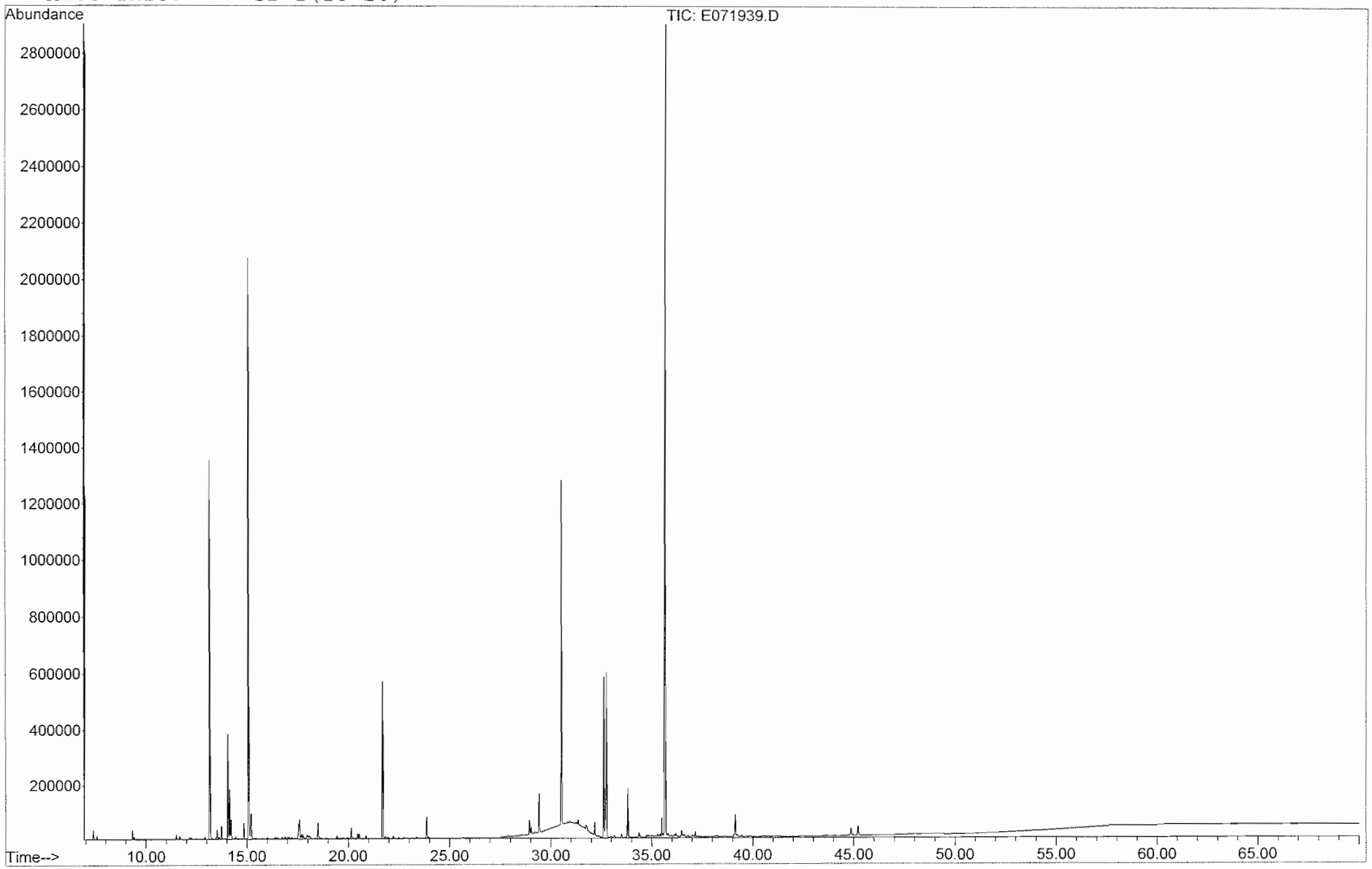

META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

File: J:\1\DATA\E100719\E071940.D
Date Acquired: 22 Jul 2010 5:15 am
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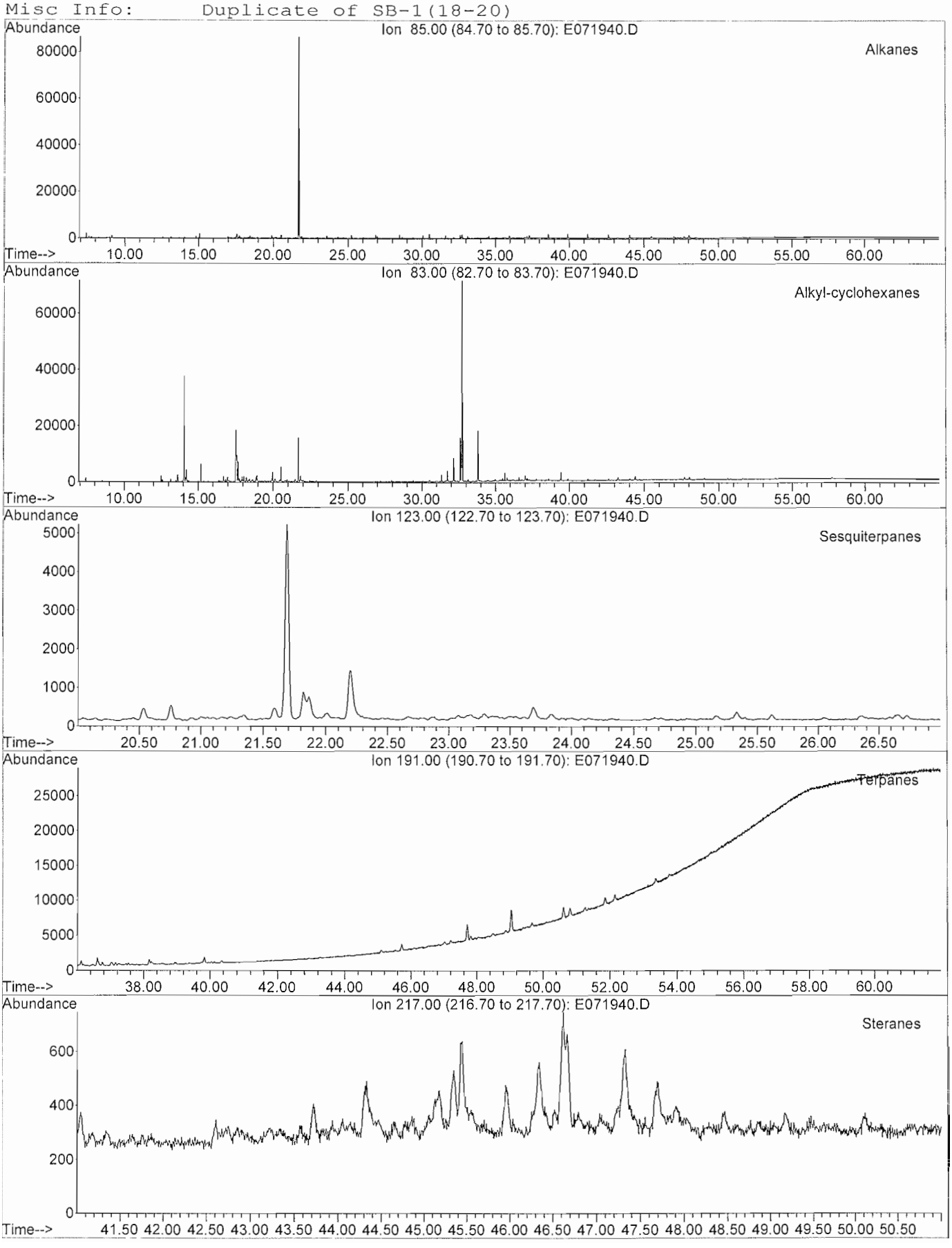

META Environmental, Inc.

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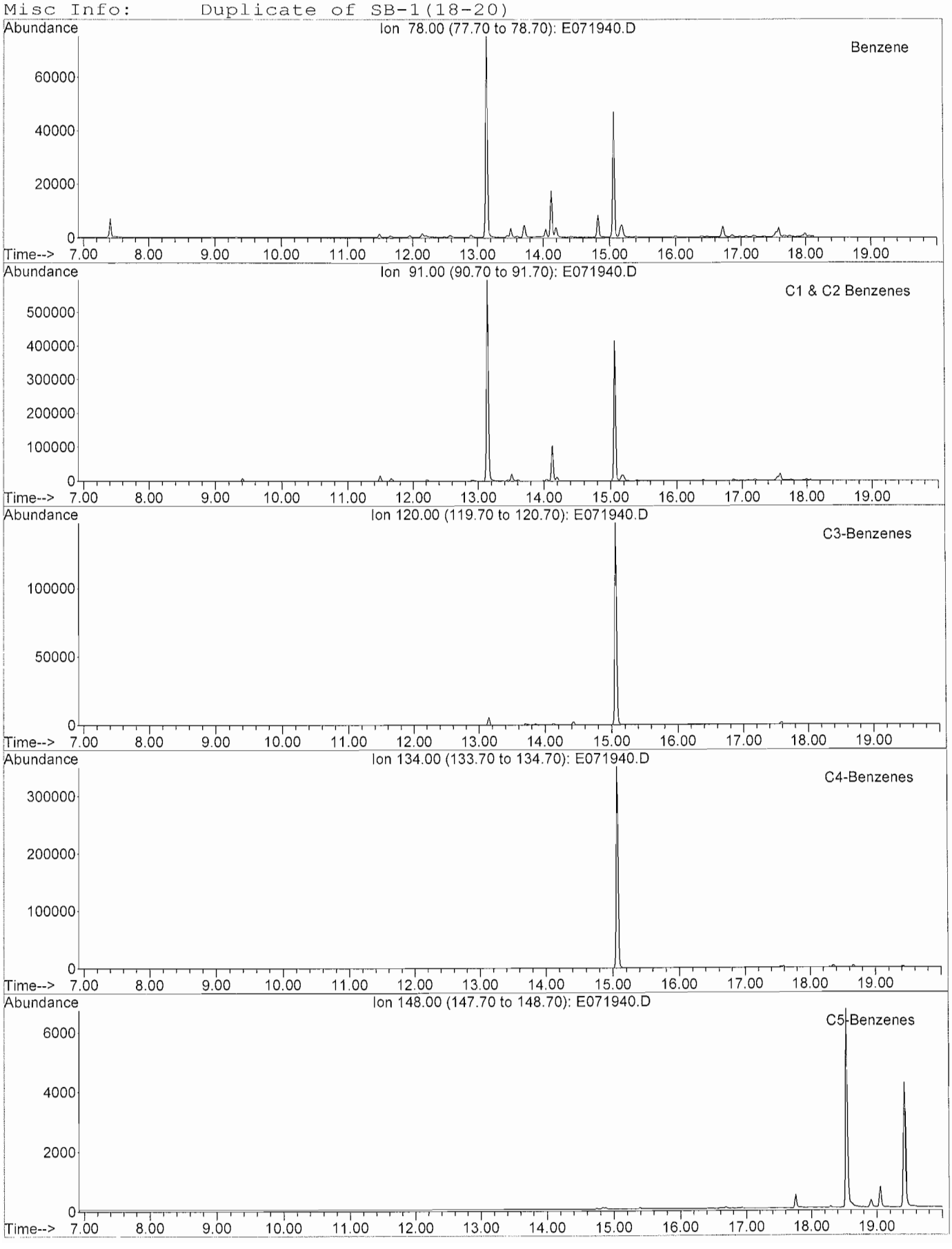

META Environmental, Inc.

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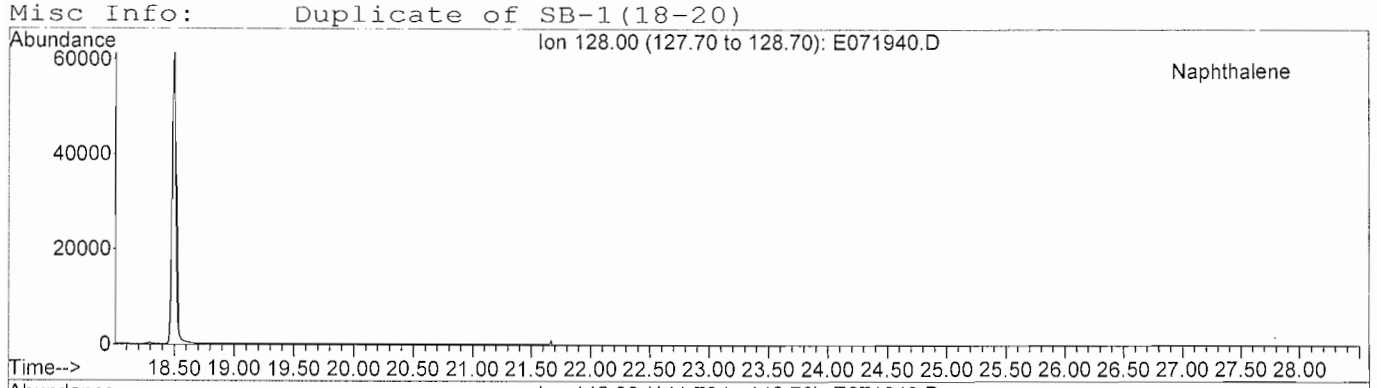

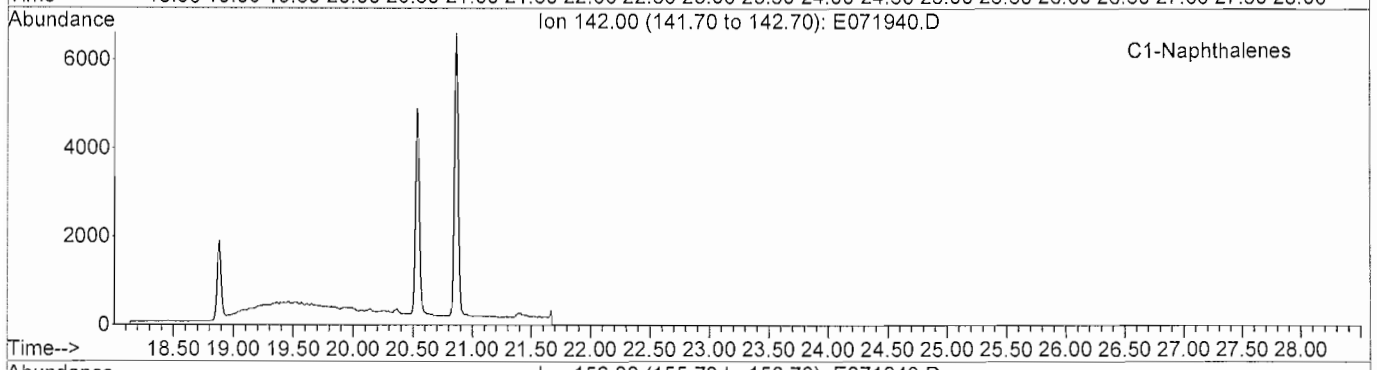

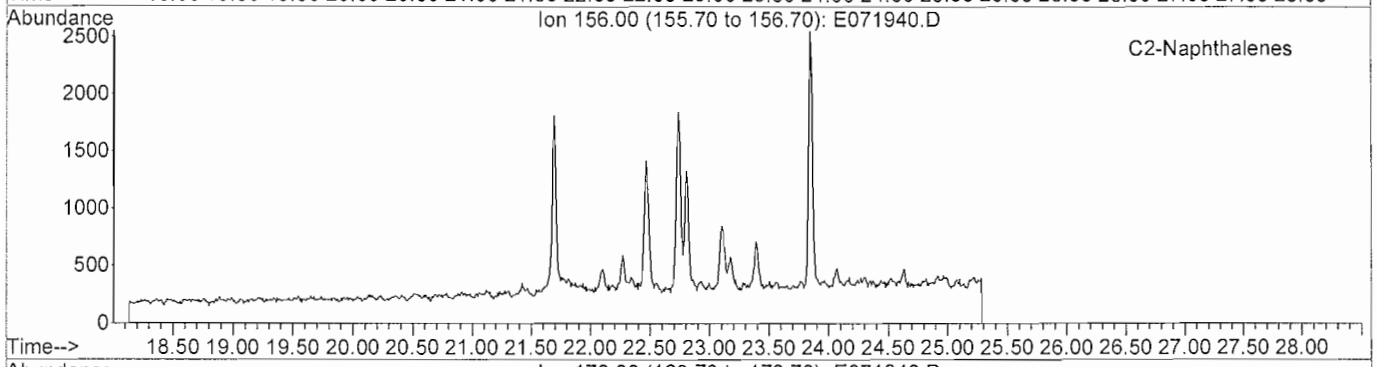

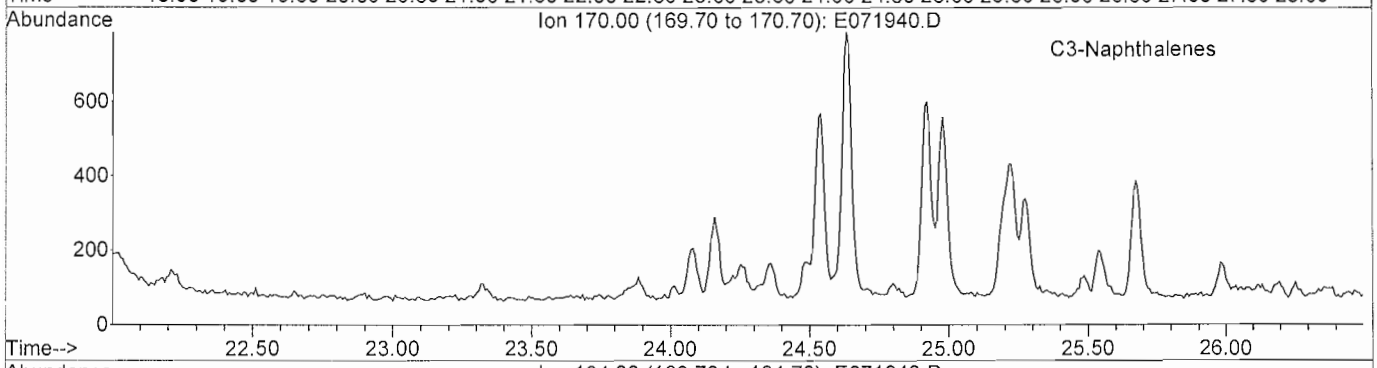

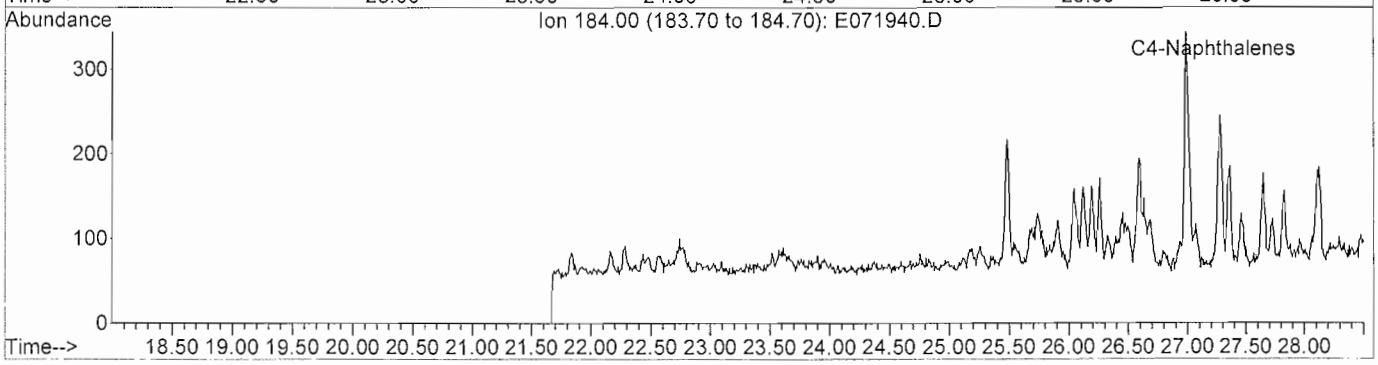

META Environmental, Inc.

GC/MS EXTRACTED ION CHROMATOGRAM

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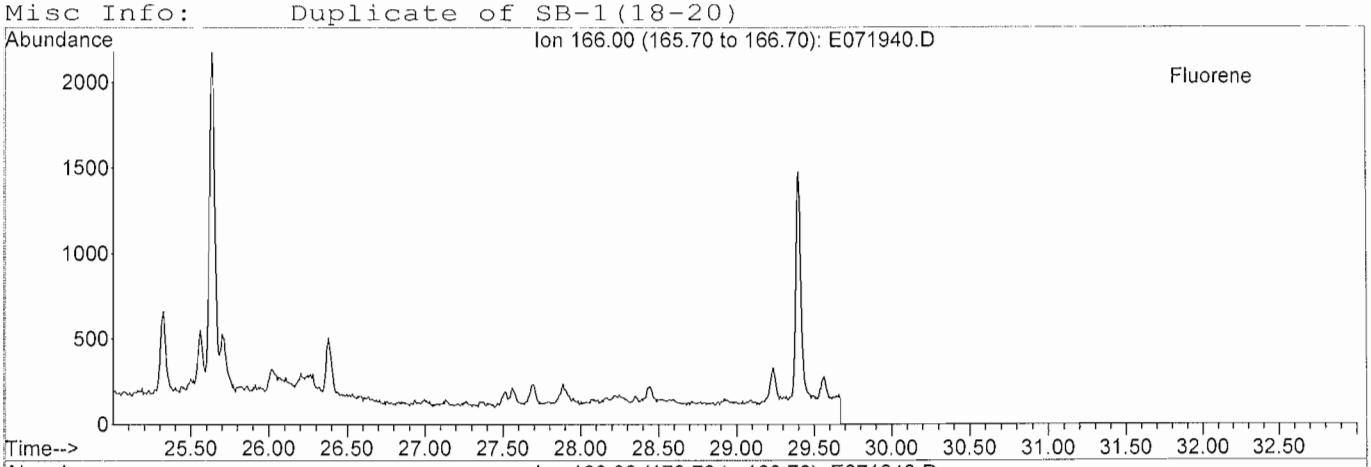

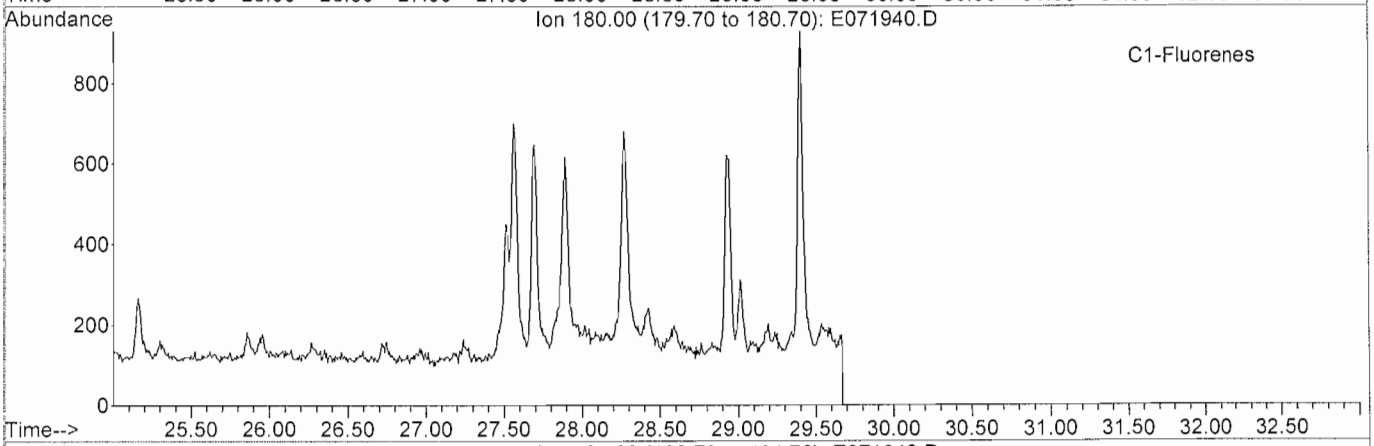

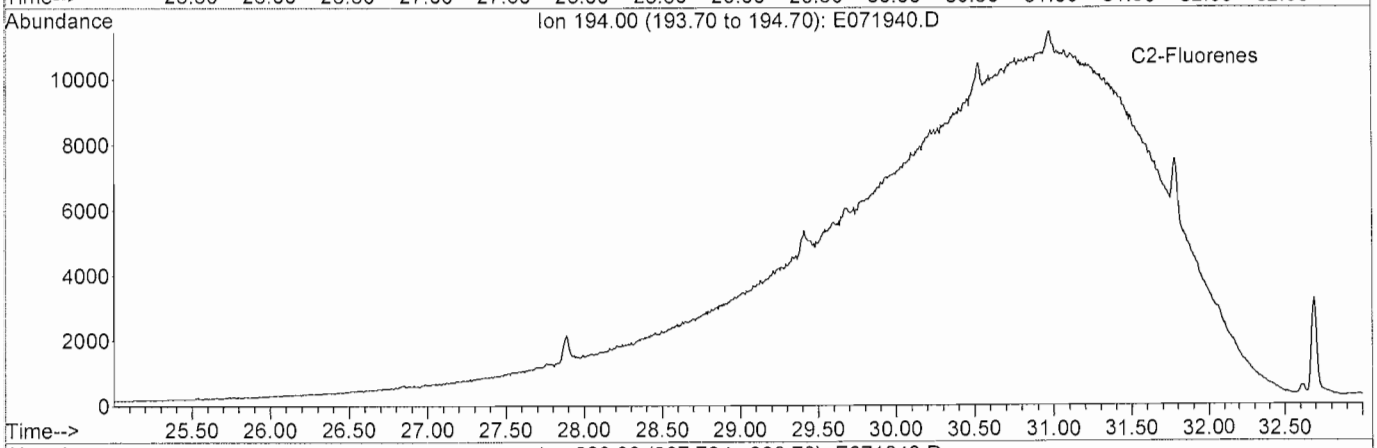

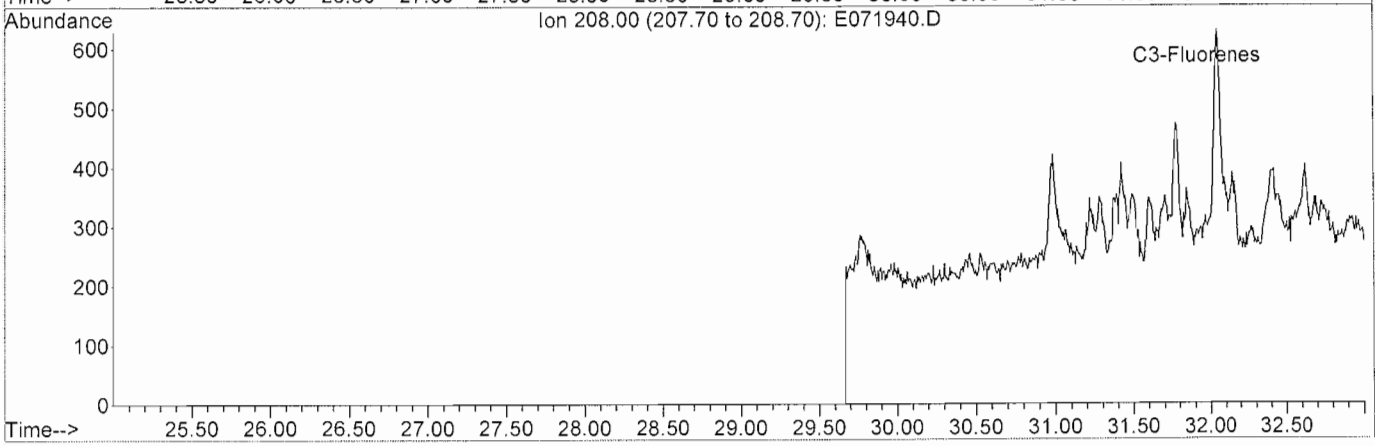

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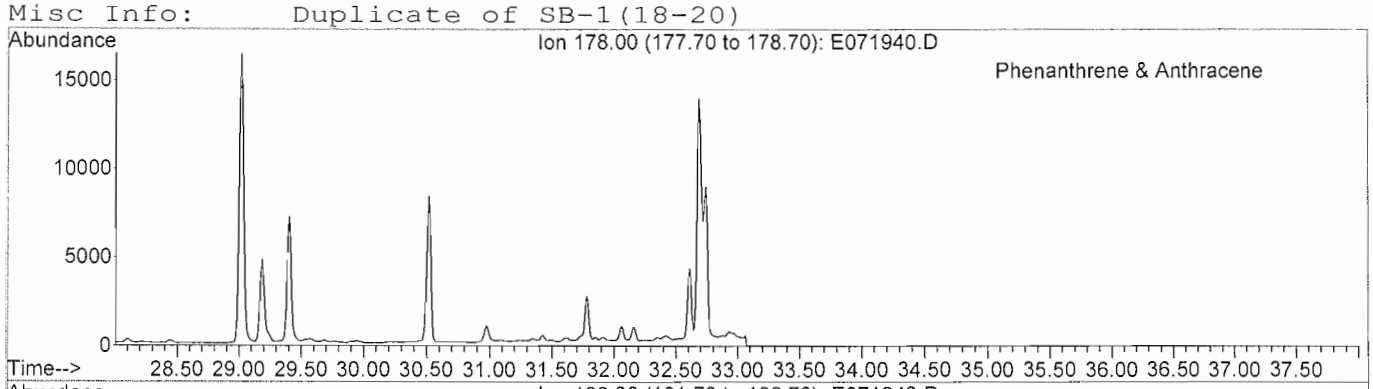

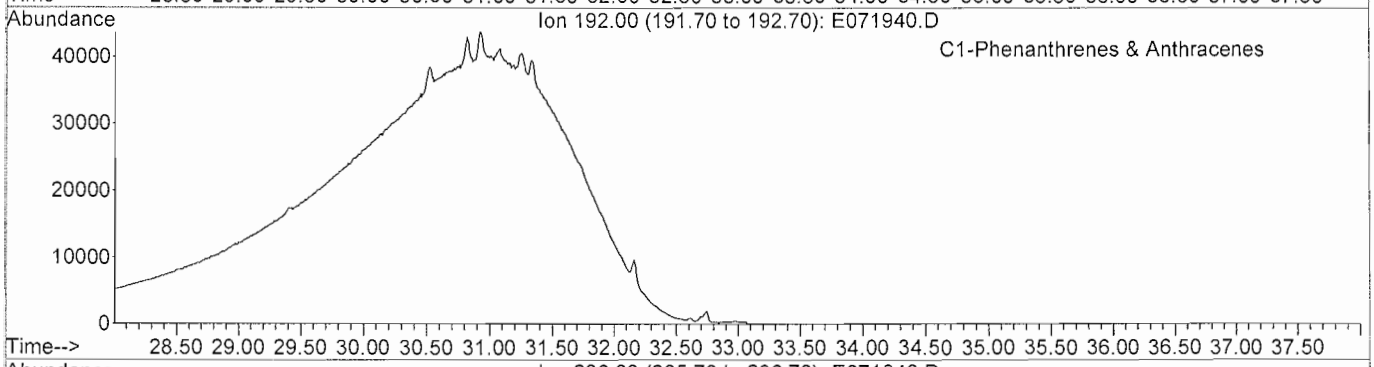

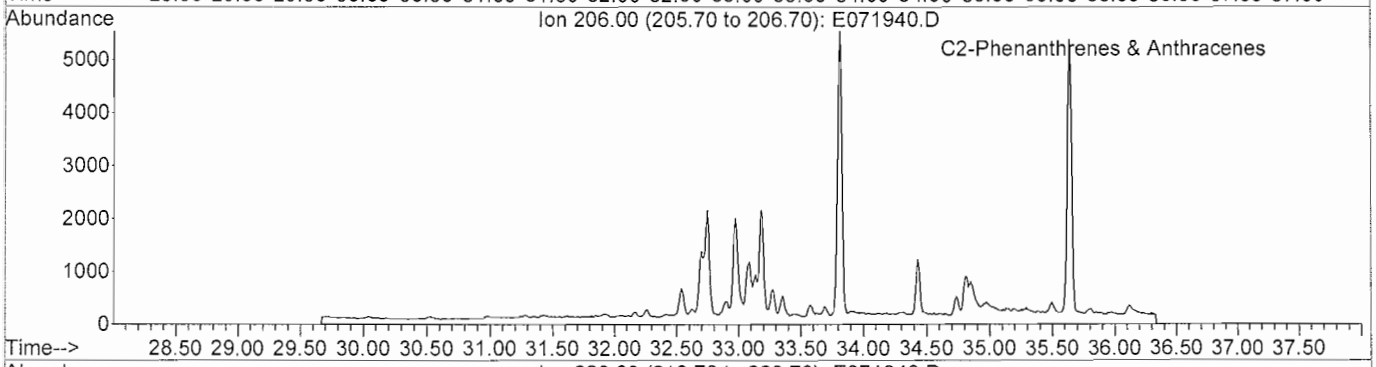

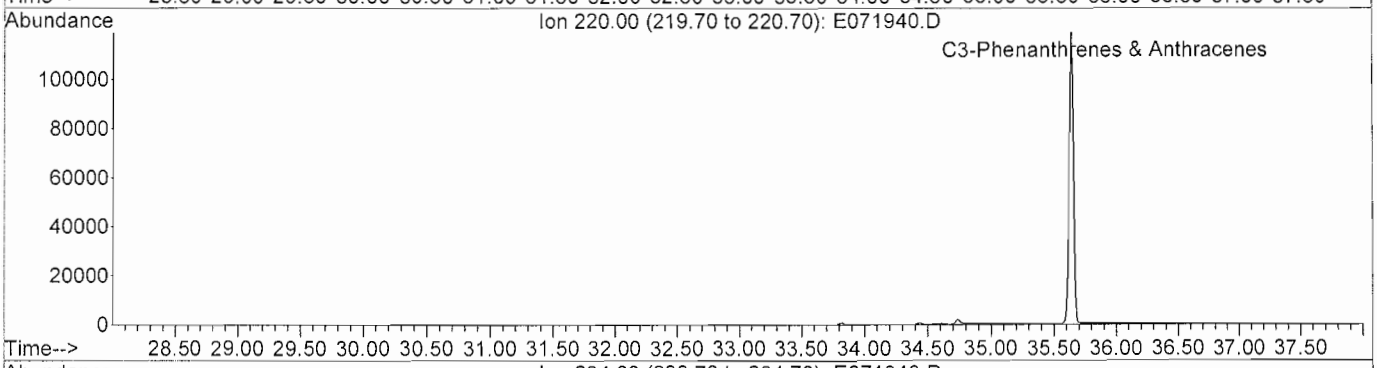

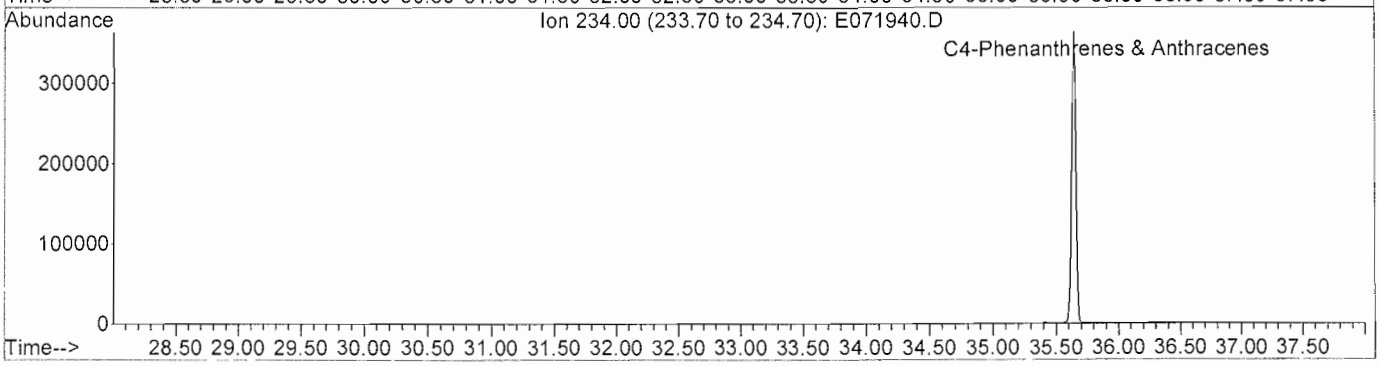

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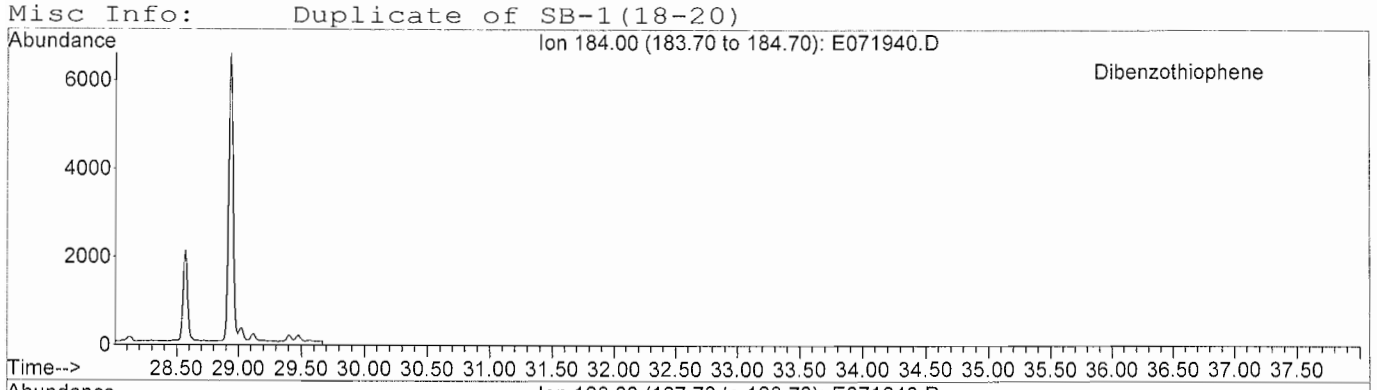

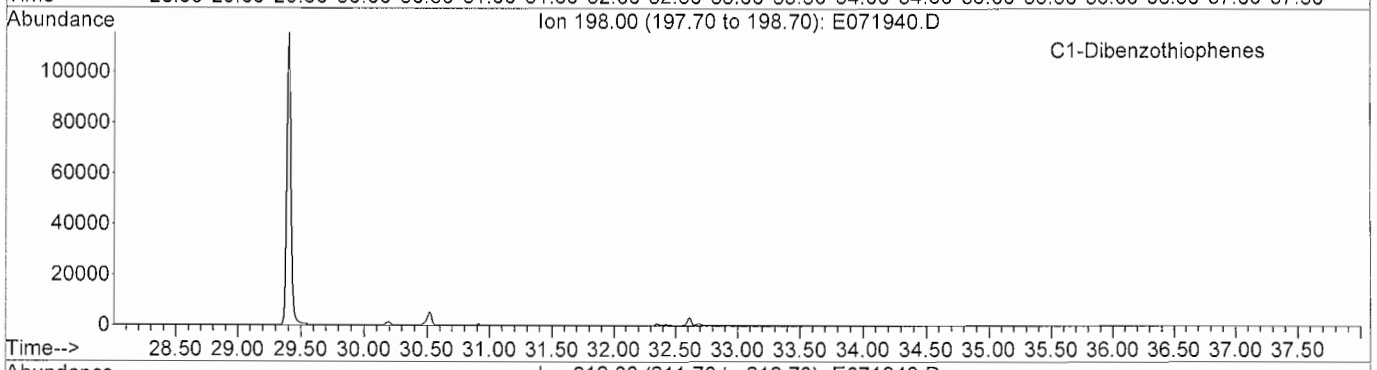

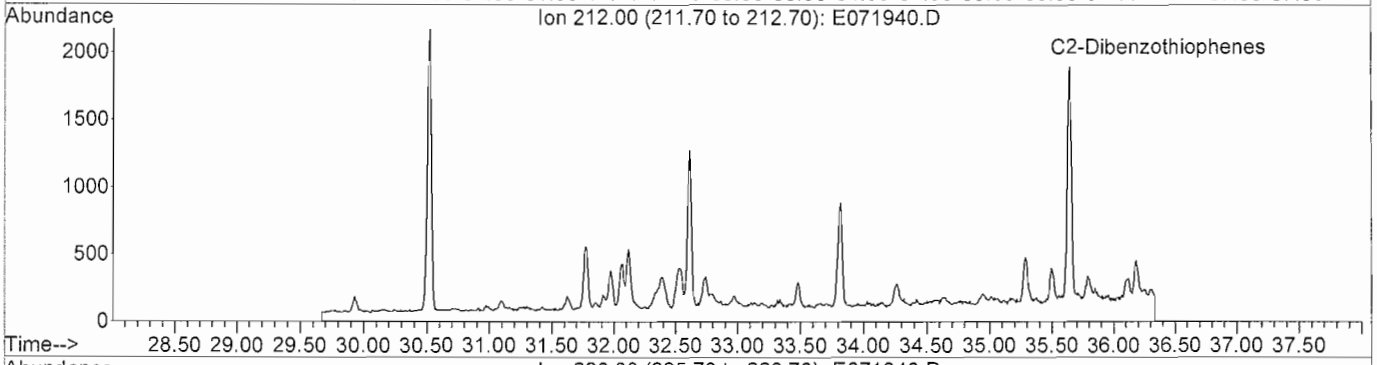

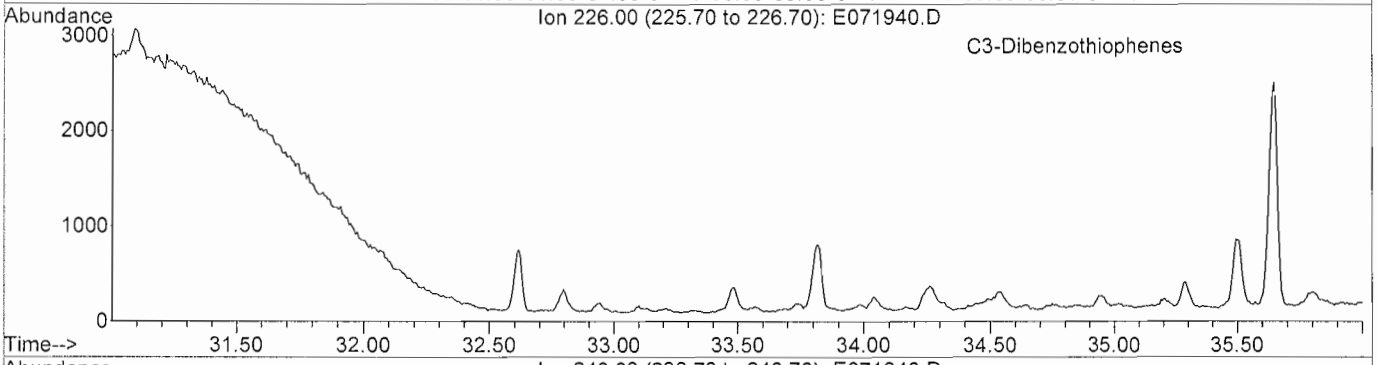

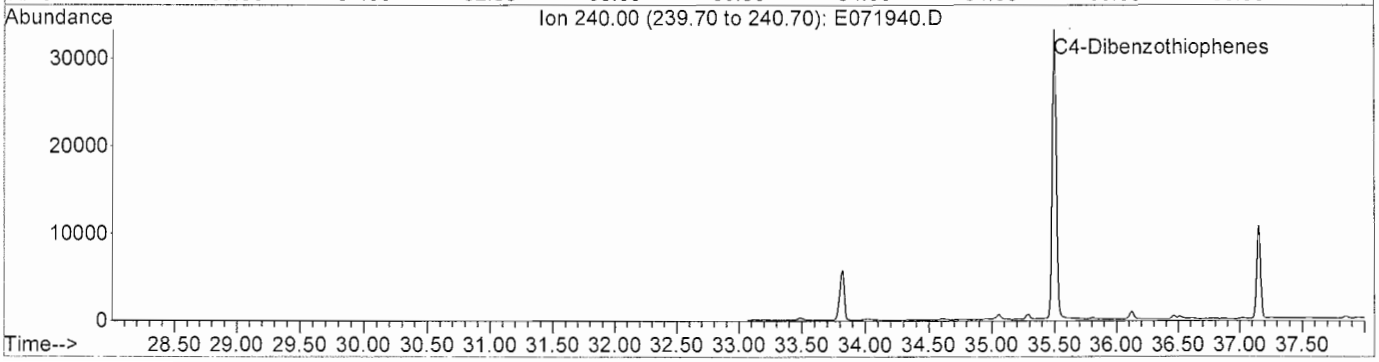

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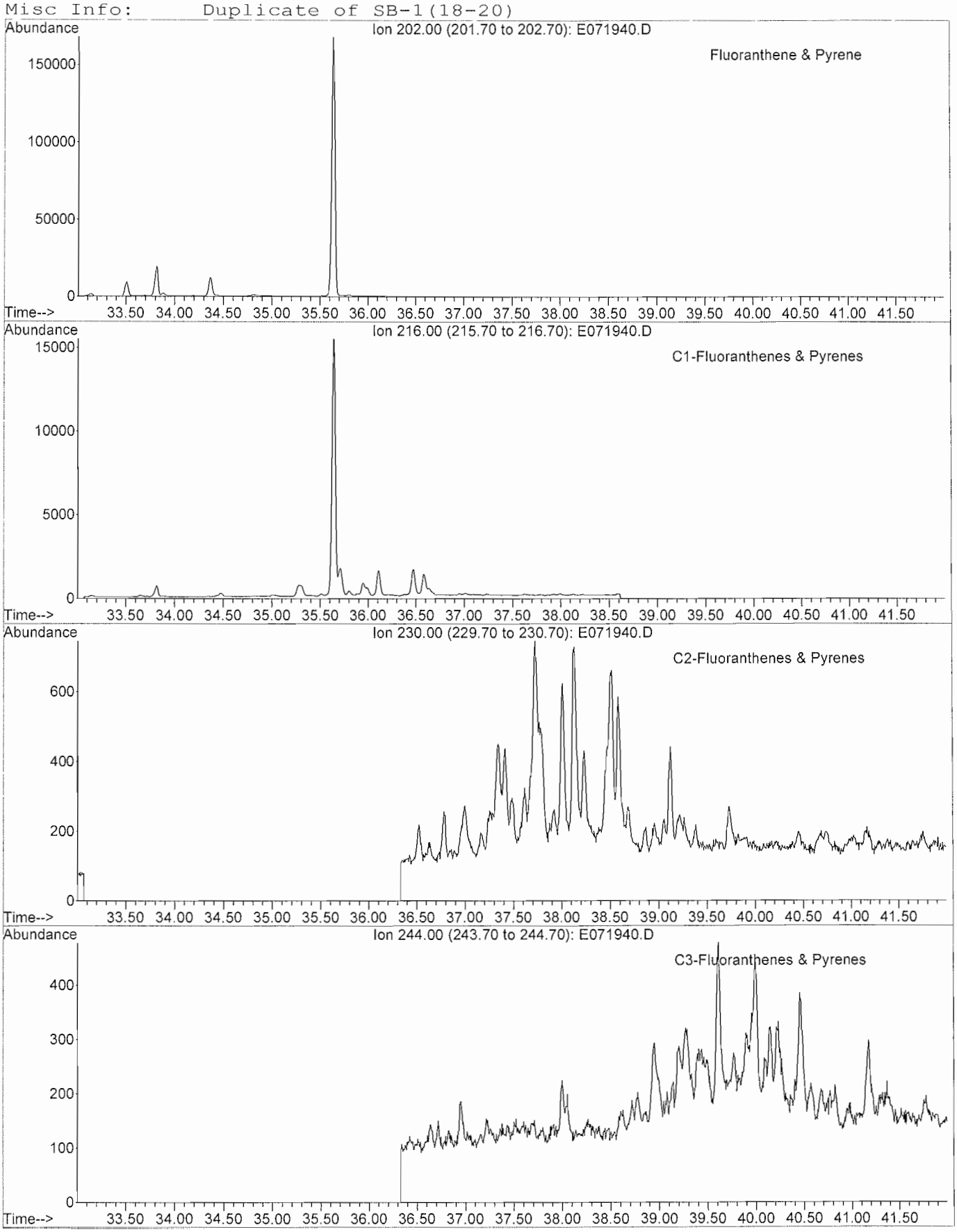

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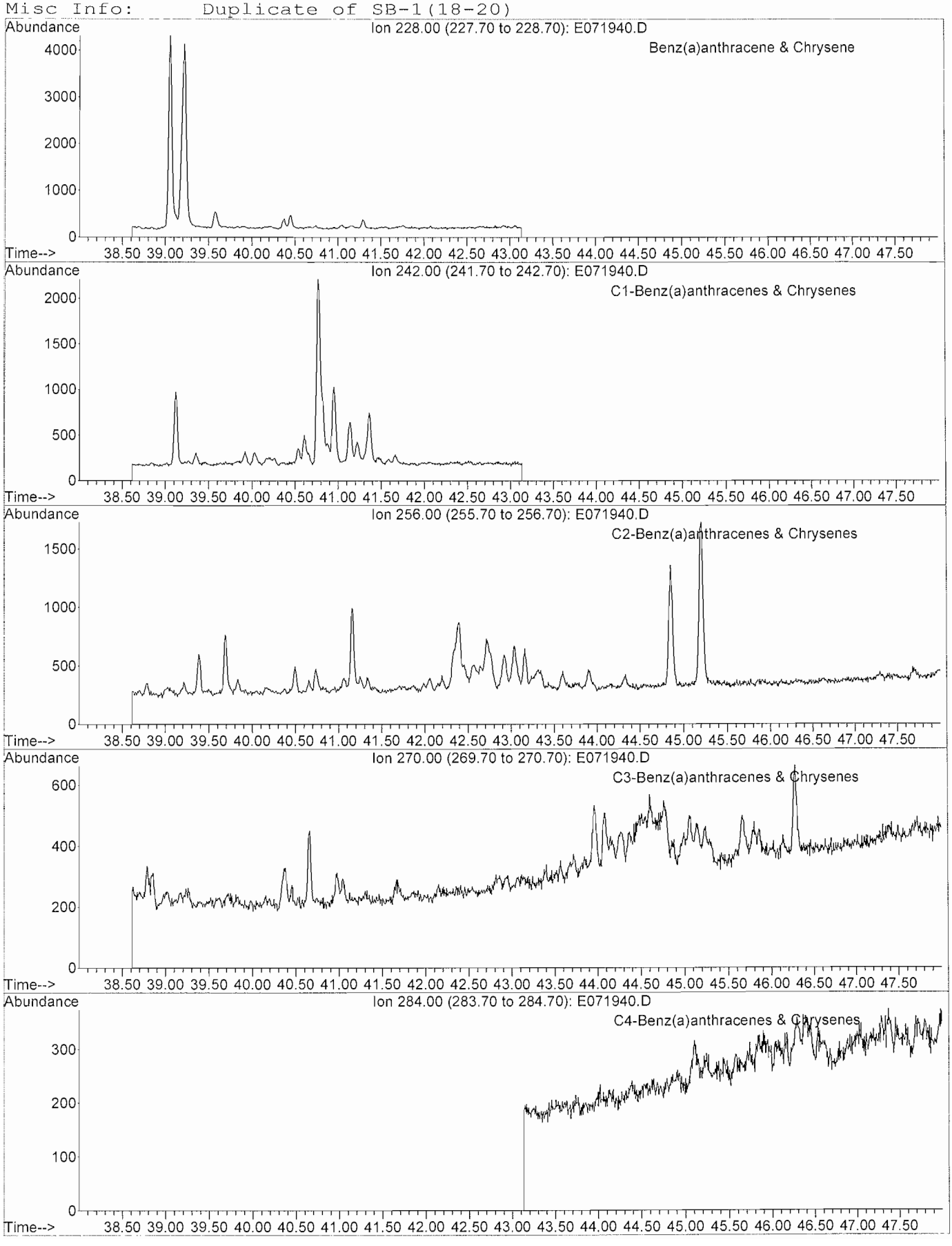

META Environmental, Inc.

GC/MS TOTAL ION CHROMATOGRAM

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