Upland Environmental Characterization Report Earley Business Center (EBC) 401 East Alexander Avenue Port of Tacoma, Washington

Prepared for
Anchor Environmental, LLC
and Port of Tacoma
Port Project No. E5209

December 1, 2009
17490-02

HARTCROWSER

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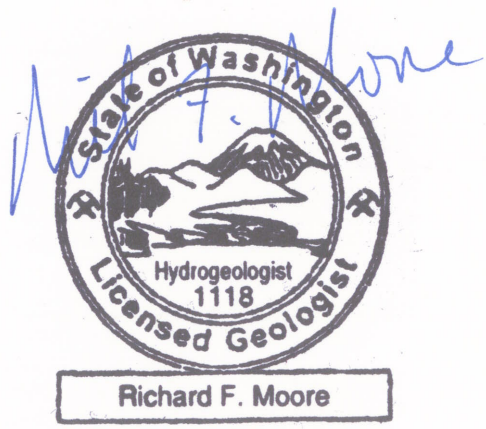
Prepared by
Hart Crowser, Inc.



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UPLAND CHARACTERIZATION REPORT
EARLEY BUSINESS CENTER (EBC)
401 EAST ALEXANDER AVENUE
PORT OF TACOMA, WASHINGTON

1.0 INTRODUCTION

This report presents the results of soil and groundwater quality sampling and testing to evaluate environmental conditions in a targeted portion of the upland area of the Earley Business Center (EBC) at the Port of Tacoma (Port). The EBC is identified on the Figure 1 Vicinity Map. The work was completed to further assess environmental conditions in the northwestern portion of the EBC, including an area of historical industrial filling (Figure 3). Note that the report figures and text reference "project north" defined as being parallel with the axis of the Blair-Hylebos Peninsula. Information from the work was further evaluated to determine potential effects on adjacent aquatic areas.

Work for this targeted EBC environmental characterization included laboratory testing of push probe soil and groundwater samples obtained by Hart Crowser in July and August 2008. This report documents the field and laboratory methods used, and the results of laboratory analytical testing. Work for the project was completed in general accordance with Hart Crowser's project work plan, dated July 16, 2008.

A separate report summarizes results of sediment quality characterization for the offshore portion of the EBC (Hart Crowser 2009c).

2.0 SITE LOCATION AND DESCRIPTION

The EBC comprises about 80 acres at the northern end of the Blair-Hylebos peninsula, including approximately 50 acres of upland area (Figure 2). The investigation area for the July/August 2008 environmental characterization was in the northwestern portion of the EBC (Figure 2). This area includes the paved upland between the Blair Waterway to the west and the US Army Reserve Lease Area to the east. The pavement surface of the EBC lies at approximately 17 feet elevation mean lower low water (MLLW). The northern, shoreward edge of the investigation area grades downward in elevation toward historical shipways in the intertidal area of Commencement Bay, or terminates in a bulkhead retaining structure at the northwest corner. The approximate shoreline and mean higher high water (MHHW) elevation contour (11.8 feet) are identified on Figure 3.

The EBC is owned by the Port and was previously known as the Port Industrial Yard. The Port leases the upland areas to various commercial clients. Several buildings and work structures are located to the south of the investigation area.

3.0 SITE HISTORICAL SUMMARY

The Blair-Hylebos peninsula was formed using sandy and silty materials that resulted from hydraulic dredging of the adjacent waterways. Todd Shipyards' industrial development of a shipyard at the northern end of the peninsula followed creation of this peninsula in the early 20th century.

The EBC has historically been used for shipyard operations, metal fabrication, and other activities. A City of Tacoma aerial photograph from 1931 identifies a large dock structure at the present location of Pier 25 and several buildings established on the adjacent upland. By 1940, the dock and buildings were no longer present, but new buildings were present in the southeast and southwest portions of the current EBC area. Some of the building footprints generally correspond to "steel shed" and "main office building" structures, and various "storage" areas shown on a 1943 Sanborn fire insurance map. Shipways with large vessels apparently under construction are also visible near the present location of Pier 23 in the City of Tacoma 1940 aerial photograph.

Extensive use of the EBC and adjacent properties as a shipyard commenced during the early 1940s with continued development of work facilities by Todd Shipyards. The prominent shipways at the northern end of the EBC were present at this time, along with Outfitting Piers 1, 2, and 3 at the location of current Piers 23, 24, and 25, respectively. These features are visible on aerial photographs from 1946 and later, and on the 1943 Sanborn map. A notation on the map indicates "Original Yard Completed in 1940." Various other features of interest in the upland portion of the current EBC area are also apparent on the Sanborn map including work lofts, a paint shop, transformers, a blacksmith shop, and materials storage areas. A 1952 archive drawing from the Port of Tacoma also identifies underground storage tanks (USTs) as "oil tanks" at several locations within the EBC.

Post-World War II to approximately 1960, historical activities included construction, maintenance, and retrofitting of military vessels. Ship dismantling and salvage operations were also conducted on the EBC property. Upland work construction platforms are also visible in the 1950 City of Tacoma aerial photographs. The 1950 aerial photograph also shows aircraft carriers moored in berthing areas next to the current Pier 23, 24, and 25 locations. A 1950 Sanborn map identifies "Seattle – Tacoma Shipbuilding Corporation" ship

building yard in the vicinity of the EBC shipways. To support these shipyard activities, paint shops, carpentry shops, metalworking facilities, gas/oil and chemical storage areas, and a central heating plant were located within the EBC vicinity.

In 1960, the Port of Tacoma acquired title, from the Navy, to the area known as the Industrial Yard Complex, including the present EBC area. The Port subsequently leased the area to various tenants for commercial and industrial purposes including freight hauling and distribution, furniture manufacturing, drilling services, lumber milling, and vessel decommissioning and dismantling. Tenants also included a diesel engine repair operation that continued into the 1980s. The 1965 Sanborn map indicates that the shipways had been dismantled by this time. A 1969 aerial photograph shows that filling included considerable debris fill extending over the area investigated as part of the current study.

Later uses of the Industrial Yard Complex (later known as the Port Industrial Yard) through the 1970s included ship maintenance, dismantling, and other industrial and commercial operations. These operations included barge construction, materials storage, metal fabrication, and rebar shaping in the west-central portion of the EBC, and Trident Seafoods in the Pier 24 and 25 areas.

The Pier 23 lease area identified on Figure 2 and Figure 3 was operated by the Washington Army National Guard since the mid-1960s, with transfer of operations to the US Army Reserve in 1995. The Army signed a 50-year lease with the Port in 1991 for the use of the Pier 23 aquatic and adjacent upland area shown on Figure 2 and Figure 3. Facility uses have included vessel moorage and maintenance, with additional subleases for ship repair.

4.0 PRIOR ENVIRONMENTAL OBSERVATIONS AND INVESTIGATIONS

Previous environmental assessment efforts included in the EBC include upland source investigations associated with the adjacent Commencement Bay/ Nearshore Tideflats (CB/NT) Superfund Site, Army investigations at Pier 23, and investigations related to the Port's potential redevelopment of the Blair-Hylebos Peninsula. These investigations are summarized below.

4.1 CB/NT Superfund Site

In 1983, the US Environmental Protection Agency (EPA) placed approximately 10 to 12 square miles of shallow water, shoreline, and upland areas located in Commencement Bay on the National Priorities List as the CB/NT Superfund site. The Hylebos Waterway on the east side of the EBC was included within the

CB/NT Superfund Site boundary. Numerous CERCLA and related source control investigations on or adjacent to the EBC associated with the CB/NT have occurred since that time. These have included:

- Sediment investigations along the embankment beneath Piers 24 and 25 at the east and northeast ends of the EBC;

- Upland soil and groundwater investigations adjacent to Piers 24 and 25 in the northeast portion of the EBC; and

- Sediment, soil and groundwater investigations in the northeastern, southern, and southwestern portions of the EBC to evaluate the extent of contamination associated with the adjacent former Occidental Chemical Corporation (OCC) facility.

CERCLA cleanup actions and related ongoing and future monitoring at Piers 24 and 25 and OCC are not associated with the EBC environmental issues reported in this document.

Piers 24 and 25 Remediation and Investigations

The Port conducted CERCLA sediment remediation at Piers 24 and 25 in 2007 and 2008 pursuant to a 2005 RD/RA Consent Decree for the Mouth of the Hylebos Waterway and Statement of Work appended thereto. The Mouth of the Hylebos Waterway is one of the problem areas identified for cleanup within the much larger Commencement Bay Nearshore/Tideflats (CB/NT) Superfund Site. The Piers 24 and 25 project area is identified on Figure 2. Remedial actions conducted under the Consent Decree were under the direction of EPA with additional review and comment provided by the Washington State Department of Ecology (Ecology), the US Army Corps of Engineers, and NOAA Fisheries.

Cleanup actions at Piers 24 and 25 followed numerous investigations by the Port and other parties for the Hylebos Waterway beginning in the mid-1980s. The Port completed further investigations specific to Piers 24 and 25 in the 1990s, prepared pre-remedial design documents (Hart Crowser 1998 and 1999), and evaluated design alternatives for remediation (Hart Crowser 2000). Final design was completed in 2007 (Port of Tacoma) under the RD/RA Consent Decree. The Piers 24 and 25 cleanup effort involved excavation of contaminated sediments and debris and capping along the embankment beneath Pier 24, Pier 25 and along the intervening shoreline areas (Figure 2). CERCLA actions for the Piers 24 and 25 project also included an upland investigation component intended to evaluate whether potential migratory sources of contamination to

the aquatic environment are present. The reporting conclusion was that no upland sources were identified, although a very limited area of elevated zinc in groundwater was identified near the upland head of Pier 24 (Figure 2) (Port 2007). Downgradient groundwater quality sampling verified that elevated levels of zinc were not migrating to the shoreline (Hart Crowser, 2009). No additional remedial actions have been required.

Occidental Chemical Corporation Investigations

The OCC contamination investigations have identified a large area of upland soil and groundwater, as well as intertidal and subtidal sediments, on and adjacent to the former OCC property that are contaminated primarily with chlorinated organic chemicals and highly alkaline conditions. The OCC investigations have also identified elevated levels of PCBs, pesticides, and metals. This contamination has been documented to extend onto the EBC property. Most of the OCC contamination on the EBC property is associated with groundwater transport, and the highest contaminant concentrations are found at significant depth, as illustrated by the profile for one of the indicator contaminants, PCE, on a cross-section that is oriented east-west through the central portion of the EBC (Figure 4).

Lateral migration of contaminant plumes north and west of the former OCC facility in the upper aquifer (to about 50 feet below ground surface) is currently being controlled, at least in part, by a groundwater extraction and treatment system that OCC has been operating since 1996. The extraction system extends onto the EBC property. To date, there has been no indication that soil and/or groundwater contamination attributable to historical activities at the EBC that have intermingled with the OCC contamination.

4.2 Pier 23 Upland and OffShore Investigations and Planned Remediation

As noted earlier, the Army leases upland and offshore areas from the Port for their Pier 23 watercraft facility (Figures 2 and 3). Environmental investigations have occurred both upland and offshore at this facility since 1991. Recent Feasibility Studies were completed by Kemron for the Army in December 2008 and February 2009 for the offshore and upland areas (Army 2008 and 2009, respectively). The Army is conducting these cleanup actions pursuant to CERCLA requirements with oversight from Ecology.

4.3 1998 EBC Utility Trench Soils and Groundwater Characterization

During the 1998 stormwater utility installation in the north and northwest portions of the EBC, significant debris was encountered. As a result, Dames &

Moore conducted a subsurface investigation for the Port to further evaluate environmental conditions through the debris layer and underlying fill soils. Results are summarized in a May 12, 1998, report by Dames & Moore.

Data from the 1998 Dames & Moore assessment indicated that where encountered, debris material extended from the surface to between approximately 1 and 5 feet depth and contained asphalt fragments and former pavement sections, concrete and wood, and other industrial debris such as metal parts and rubber and plastic hoses. An aerial photograph from 1969 shows filling associated with the debris layer over the approximate area shown on Figure 3. This figure also identified locations of test pits completed by Dames & Moore during their 1998 investigation.

Laboratory analytical results from the 1998 debris layer samples contained diesel-, oil-, and gasoline-range petroleum hydrocarbon concentrations exceeding screening criteria for soil established under MTCA. The debris layer also contained leachable concentrations of lead designating the waste material from portions of the utility trench as Dangerous Waste per state Dangerous Waste regulations (Chapter 173-303 WAC). Concentrations of lead and other metals in samples from the soil below the debris layer did not exceed applicable regulatory criteria. Analytical results of a test pit seepage water sample contained elevated concentrations of diesel- and oil-range TPH and polychlorinated biphenyls (PCBs). However, the sample was collected from an open test pit and Dames & Moore noted that it was probably not representative of actual groundwater conditions.

4.4 2007 East Blair Dredge Cutback Sediment/Soils Characterization

As part of the previously planned terminal expansion on the Blair-Hylebos Peninsula, a series of deep borings were advanced along the upland embankment of the Blair Waterway by GeoEngineers under contract to the Port (GeoEngineers 2007). Four of the borings were completed within the EBC. These borings provided deeper subsurface geotechnical information and materials characterization data for soil that were planned for excavation and dredging to widen the Blair Waterway for new berthing facilities. Laboratory test results from a composite sample of soil from the four borings in the EBC indicate that all constituents detected in the upper 4 feet were below applicable MTCA soil criteria for unrestricted land use, except for carcinogenic polycyclic aromatic hydrocarbons (cPAHs). However, cPAH concentrations were below applicable MTCA industrial screening criteria.

4.5 2008 Blair-Hylebos Soil and Groundwater Characterization

Additional shallow soil and groundwater explorations were completed by Hart Crowser within the EBC boundary in 2008 to provide materials characterization data supporting engineering design for a previously planned expansion of terminal operations on the Blair-Hylebos Peninsula (Hart Crowser 2009a). Potential future expansion and site uses continue to be evaluated by the Port.. Environmental explorations in the EBC area consisted of several push probes advanced along some of the previously planned utility corridors, and for other geotechnical testing.

Consistent with data presented in this report, soil and groundwater characterization results identified localized areas of the presence of chemicals of concern. All concentrations of detected chemical constituents in soil from the 2008 Hart Crowser characterization study were below MTCA Method C industrial screening levels. The only detected constituent in groundwater that was detected above an applicable aquatic surface water screening level was vinyl chloride. Vinyl chloride is an OCC contaminant and the detection occurred in a location previously identified as within the OCC plume. This occurrence is, therefore, not associated with EBC activities or conditions of interest.

In a related 2008 effort, Hart Crowser completed push probe soil and groundwater sampling for materials characterization purposes in a geotechnical test area located immediately south of the industrial fill area. The planned geotechnical work involved test installation of stone column and test pile foundation supports that were previously considered for the planned east Blair pier. The test installations were not completed, but 11 push probe explorations were advanced within the test area to evaluate the chemical quality of soil and groundwater that would have been extracted during testing. With one exception, testing results for soil and groundwater samples indicated that chemical constituents were below applicable MTCA screening levels for unrestricted land use. The lone exception was mercury detected marginally above the ambient surface water quality screening level in one push probe groundwater sample. This concentration may have been biased high because of the inherent greater turbidity associated with push probe sampling in comparison to a developed groundwater monitoring well.

4.6 2008 EBC Offshore Sediment Characterization

The Port completed baseline surface sediment characterization sampling and testing in the northwest portion of the EBC in July 2008, as summarized in a separate report (Hart Crowser 2009c). No exceedances of applicable Ecology

Sediment Management Standard (SMS – Chapter 173-204 WAC) criteria were detected.

4.7 Underground Storage Tank (USTs)

EBC environmental legacy issues include a number of USTs supporting historical Naval and other industrial operations. The Port has compiled available assessment reports and UST removal records completed by others to support the assessment. At the time of this report, nineteen potential historical UST locations have been identified in the EBC by the Port. Of these, five are documented as having been removed, two are documented as having been closed in place, and the status of the other 12 is not known. Port records indicate that of the five USTs documented as removed, soil and groundwater were below MTCA cleanup levels at one location, soil was above but groundwater was below MTCA cleanup levels at three locations, and both soil and groundwater were above MTCA cleanup levels at the fifth location. However, the MTCA cleanup levels referenced were likely those developed to protect potable drinking water; therefore, reported exceedances may not correctly characterize the quality of groundwater in the EBC. The Port is currently developing an environmental investigation program to further evaluate the USTs and the nature and extent of their subsurface impacts.

5.0 SCOPE OF WORK

Results of the 1998 Dames & Moore investigation provided background for further evaluating the nature, extent, and chemical characteristics of the industrial debris fill, underlying fill soils, and site groundwater within the EBC target investigation area. The scope of work in this investigation included the following activities:

- Conducting an historical evaluation to identify EBC areas of environmental interest and concern.

- Completing push probe explorations EBC-1 through EBC-15 at the locations shown on Figure 3 between July 29 and August 1, 2008. Push probes EBC-7 through EBC-15 were completed to depths of about 8 feet below ground surface for soil sampling only. Push probes EBC-1 through EBC-6 were completed for soil and shallow groundwater sampling to depths of about 12 to 16 feet below ground surface.

- Retrieving continuous push probe soil samples for description, classification, and field screening of potential contaminants.

- Submitting samples representative of the debris fill soils and underlying non-debris fill soils for chemical analysis. The samples were selected based on field screening observations for the presence of suspect environmental contaminants, and to assess areal distribution across the debris fill area.

- Collecting groundwater samples using temporary well screens installed in each of the six push probe locations. Each temporary screen was placed in the push probe bore to provide a representative sampling interval approximately 2 to 5 feet below the water table, depending on conditions and tidal stage at the time of the work. The groundwater samples, including one field duplicate sample, were submitted for chemical analysis.

- Evaluating laboratory chemical analysis results and completing this report.

Push probes for shallow groundwater sampling included EBC-1 through EBC-3 near the Commencement Bay shoreline, and probes EBC-4 through EBC-6 along the Blair Waterway shoreline (Figure 3). These push probes were placed toward the shoreward edges of the EBC investigation area to provide shallow groundwater sample analytical data near the interface with marine surface waters.

Specific details regarding the soil and groundwater sampling and analysis procedures as well as push probe logs are provided in Appendix A. Complete tabulated analytical results for soil and groundwater samples are provided in Appendix B. Chemical data quality review and laboratory certificates of analysis are provided in Appendix C.

As noted above, other environmental issues associated with the EBC USTs, possible future Blair Waterway shoreline cutback, Pier 23 remediation by the Army, and Piers 24 and 25 CERCLA sediment capping are assessed separately and are not part of the current work scope.

6.0 UPLAND SUBSURFACE CONDITIONS

6.1 Fill Soils

Observation of fill materials from the push probe samples confirmed the presence of asphalt, broken concrete, fabric, wood, brick fragments, and glass debris within the area noted on Figure 3. Suspected sandblast grit was noted in push probes EBC-1, EBC-3, and EBC-4. Where present, the industrial fill layer extended to depths of up to about 6 feet below the ground surface. In general, debris in the industrial fill layer was scattered in a sand matrix with varying

amounts of silt and gravel. The industrial fill was thickest (i.e., greater than about 3 feet) in push probes EBC-1, EBC-2, EBC-3, EBC-7, EBC-13, and EBC-14. Push probes EBC-1 through EBC-3 were located in the EBC industrial fill soil area identified on Figure 3. Observation of the soils samples from EBC-4 during probing indicated that this location is also suspected to be within the industrial fill area.

Sand with local silty and gravelly zones was encountered beneath the industrial fill layer and below surface paving where the industrial fill was not present (i.e., EBC-4, EBC-5, EBC-6, EBC-8, EBC-10, EBC-12, and EBC-15). This non-industrial fill material is consistent with the appearance of hydraulically dredged fill placed to create the upland peninsula in the early 1900s. More gravelly material was noted in push probe EBC-6, indicative of a differing fill history at this location along the Blair Waterway (Figure 3). Native tideflat and estuary sands and silts were not conclusively identifiable in the push probe samples. Deeper sandy soils noted on the Appendix A push probe logs may in fact, be composed of non-industrial fill to depths of 8 to 15 feet below grade.

Petroleum hydrocarbon-like odors were noted in push probes EBC-2 (1-1/2 to 4 feet depth below ground surface), EBC-3 (2 to 3 feet depth), EBC-7 (6 to 8 feet depth), EBC-13 (1 to 2 feet depth), and EBC-15 (0 to 1 foot depth). The push probe logs are in Appendix A. These push probes are located within or near the edge (EBC-15) of the industrial fill layer. Push probe EBC-11 was completed near an apparently treated wooden piling with creosote- and petroleum hydrocarbon-like odors noted in the soil samples from 3 to 12 feet. These conditions were limited to the EBC-11 push probe and are not indicative of a more general condition or abundant pilings in the investigation area.

Dark discoloration and slightly elevated photoionization detector (PID) field screening readings were noted in soil samples and cuttings with identified or suspected petroleum hydrocarbon impacts. In addition, sheen was observed in groundwater from a number of these locations, as identified on the Appendix A push probe logs. However, no visual or olfactory indications of potential contaminant migration from the industrial fill layer into adjacent or underlying sandy fill soils were noted.

6.2 Shallow Groundwater

Shallow groundwater was encountered at depths ranging from 8 to 11 feet below ground surface during the push probe explorations. Based on general groundwater flow patterns on the peninsula, net flow from the EBC investigation area will move radially outward toward Commencement Bay or the Blair and

Hylebos Waterways. Short-term reversals in flow direction are expected to occur at high tide.

The general radial groundwater flow condition on the Blair-Hylebos peninsula, including the general EBC investigation area, is illustrated by the groundwater elevation contours shown on Figures 5 and 6. These figures are excerpted from the March 2008 Conestoga-Rovers & Associates Preliminary Draft Site Characterization Report for the OCC Site. The groundwater elevation contours depicted on the figures are based on freshwater equivalent head elevations that are adjusted for salinity density effects. Contours on Figure 5 represent groundwater table elevations following shutdown of a groundwater extraction system that has been operating since 1996 on the OCC site. The contours represent water table elevations in a non-pumped condition that are somewhat comparable to historical flow condition. However, the groundwater system may also not have fully recovered during this monitoring event, and localized mounding may be a related artifact. Contours on Figure 6 represent groundwater table elevations typical of the flow regime in the pumped condition.

Shallow groundwater is tidally affected and typically becomes brackish or saline toward the edges of the peninsula. Field monitoring of conductivity and salinity during groundwater sampling in push probes EBC-1 through EBC-4 confirmed the presence of saline conditions.

7.0 LABORATORY ANALYSIS RESULTS

Soil and groundwater samples collected during our work were submitted to Analytical Resources, Inc. (ARI) of Tukwila, Washington, for chemical analysis. Samples were delivered to the laboratory following standard chain of custody procedures. A chemical data quality review and laboratory certificates of analysis are provided in Appendix C. Analytical results are summarized in Tables 1 and 2, with additional detail provided in Appendix B Tables B-1 and B-2.

Selected soil samples were submitted for analysis of the following;

- Diesel- and oil-range petroleum hydrocarbons by Ecology Method NWTPH-Dx;
- Gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B;
- Volatile organic compounds (VOCs) by EPA Method 8260B;
- Semivolatile organic compounds (SVOCs) by EPA Method 8270D;

- Polychlorinated biphenyls (PCBs) by EPA Method 8082; and
- Total metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) by EPA Method 6010B/7471.

Samples for NWTPH-Gx and VOC testing were collected in the field using EPA Method 5035.

The push probe groundwater samples were analyzed for the same constituents as the soil samples. Groundwater metals analyses included total and dissolved arsenic, cadmium, chromium, copper, lead, nickel, and zinc by EPA Method 6020. Groundwater samples for dissolved metals analysis were filtered in the field prior to submittal to the laboratory. Total and dissolved mercury were analyzed to obtain low-level detection limits using EPA Method 1631.

An additional reductive precipitation extraction step (EPA Method 1640 Modified) was used for groundwater metals testing through an ARI subcontract to Columbia Analytical Services since field conductivity and salinity readings indicated saline conditions. The reductive precipitation step is used to avoid unrepresentative analytical results from potential high bias of metals concentrations caused by saline conditions.

7.1 MTCA Screening Level Comparison

Table 1 and Table 2 summarize selected analytical results for soil and groundwater samples. Soil and groundwater testing results are compared to applicable MTCA screening criteria. The selected constituents listed in Table 1 and Table 2 are intended to provide an "at a glance" summary of constituents detected above applicable MTCA screening criteria, and other analyte groups of interest including BTEX, PCBs, PAHs, and selected SVOCs. Complete analytical results are presented in Appendix B Tables B-1 and B-2 for soil and groundwater samples, respectively.

Soil Screening Levels

MTCA Method C soil screening levels for direct contact exposure to humans are appropriate for the EBC as an industrial property. For comparative purposes, MTCA Method A soil screening levels applicable to industrial sites are also included for petroleum hydrocarbon constituents. It should be noted that the Method A criteria for petroleum hydrocarbons are based on protection of groundwater as a potential drinking source, which is not applicable to the EBC investigation area. Shallow groundwater beneath the site does not represent a viable source of potable water based on the location, marine water tidal influence, current and planned future use, and zoning of the property.

Groundwater Screening Levels

As noted above, shallow groundwater beneath the EBC is not a potable source of drinking water, and MTCA criteria for groundwater protection are not applicable to the EBC investigation area. Marine waters of Commencement Bay and the Hylebos Waterway are the receptor of interest with regard to potential groundwater contamination associated with the EBC. Analytical results for the EBC groundwater samples, therefore, are compared with surface water quality criteria per MTCA Method B and Ambient Water Quality Criteria (AWQC) listed in Chapter 173-201A WAC to evaluate potential affects to marine waters. Note that the MTCA Method A cleanup level for arsenic is provided as the most representative screening criterion. This cleanup level is based on the state-wide background concentration. In addition, MTCA Method A cleanup levels are provided for petroleum hydrocarbon constituents for comparative purposes but are not applicable criteria with regard to groundwater protection at the site.

7.2 Soil Sample Analytical Results

Soil sample analytical results are presented in Table 1 for selected constituents, and in Appendix B Table B-1 for all constituents tested. Soil samples collected within the industrial fill layer included EBC-1-S1, EBC-2-S1, EBC-3-S1, EBC-5-S1, EBC-6-S1, EBC-7-S1, EBC-7-S2, EBC-11-S1, EBC-13-S1, and EBC-14-S1. The remainder of the soil samples listed in Table 1 and Table B-1 were either collected beneath the industrial fill layer or from locations outside of the area of industrial filling. Sample depth intervals are presented in Tables 1 and B-1.

Review of the analytical results for the EBC soils samples indicates the following:

- All soil samples, except four, contained constituent concentrations below MTCA Method A and Method C screening levels. The four exceptions, all from within the industrial fill layer, included two samples exceeding MTCA Method A screening levels for TPH and arsenic, but below MTCA Method C screening levels. The other two samples contained arsenic exceeding both Method A and Method C screening levels for arsenic.

- Copper, lead, and zinc were detected at elevated concentrations in some of the industrial fill soil samples, but below applicable MTCA Method C cleanup levels.

- Elevated concentrations of petroleum hydrocarbon constituents were detected in samples from push probes EBC-1, EBC-2, EBC-3, and EBC-7 within the industrial fill layer, consistent with petroleum hydrocarbon-like odors noted in the industrial fill soils at these locations during probing.

The detected concentrations of petroleum hydrocarbons exceeded comparative MTCA Method A soil screening levels developed for groundwater protection. As noted above, however, shallow groundwater beneath the EBC is not potable, and the results are not indicative of impairment of a potential drinking water source.

- None of the soils underlying the industrial fill layer contained elevated concentrations of petroleum hydrocarbons or other chemical constituents, indicating little or no migration of contaminants from the overlying industrial fill or other sources. Concentrations of the few detected compounds in soil below the industrial fill layer were generally in the low microgram per kilogram (µg/kg) range, and below applicable MTCA screening levels. Based on detected laboratory method blank contamination, detections of methylene chloride and acetone may be artifacts of common laboratory reagents, and not indicative of site conditions.

7.3 Groundwater Sample Analytical Results

Analytical results for groundwater samples obtained from the shallow groundwater zone beneath the EBC investigation area are presented in Table 2 for selected constituents, and in Appendix B Table B-2 for all constituents tested.

Review of the analytical results for the EBC groundwater samples indicates the following:

- The shallow groundwater sample from push probe EBC-1 contained a dissolved copper concentration of 3.8 microgram per liter (µg/L). This concentration marginally exceeds the marine chronic AWQC level of 3.1 µg/L. The copper concentration in the EBC-5 push probe groundwater sample was detected at the 3.1 µg/L AWQC. Concentrations of other metals were below applicable MTCA Method B and AWQC levels.

- Gasoline-range petroleum hydrocarbons were detected at a concentration of 1.6 µg/L in the push probe EBC-2 groundwater sample. This concentration is just above the comparative MTCA Method A screening level for groundwater protection of 1.0 µg/L. However, this result is not indicative of impairment of a potential drinking water source because the shallow groundwater at the site is non-potable. Diesel-range hydrocarbons were also detected in the EBC-2 groundwater sample at a concentration of 0.38 µg/L, below the Method A screening level of 0.5 µg/L. No other petroleum hydrocarbon constituents were detected in the groundwater samples.

- PCBs were not detected at the specified reporting limit.

- Few VOC and SVOC constituents were detected. Where detected, concentrations were typically in the low µg/L range and below MTCA and AWQC levels.

- Analytical testing results are included in Table 2 and Table B-2 for dissolved and total mercury but are listed as rejected. The mercury data were deemed unusable based on the type of sampling containers that were inadvertently used, sample preservation problems, and exceedances of laboratory holding times. Although data quality issues make the mercury testing results unsuitable for use, it is unlikely that mercury concentrations in EBC groundwater are elevated or exceed regulatory screening criteria based on weight of evidence from the other metals tested.

  Further supporting this conclusion is the absence of detected mercury (both total and dissolved) in shallow groundwater during sampling of upland wells in the Army Lease Area by Kemron Environmental in the summer of 2008. Mercury results were reported in the February 2009 FS for Pier 23. The Army Reserve area wells were screened within both shallow and deeper groundwater zones and included well locations near the southeast corner of the Army Lease Area (not shown on Figure 3). These locations are between Hart Crowser push probes EBC-1 and EBC-7 in an area of industrial fill. Based on the information reported from Kemron, it is unlikely that elevated mercury concentrations are present in the adjacent EBC investigation area.

In summary, the 2008 upland investigation further defined the extent of an historical industrial fill zone and identified the nature of elevated chemical constituents associated with the fill. Investigation results indicate that there is limited environmental concern associated with the industrial fill. The industrial fill is spatially limited to the northwestern end of the upland peninsula within the approximate area shown on Figure 3. Groundwater samples indicate that constituents of concern within the industrial fill are not leaching into groundwater at concentrations of concern.

8.0 LIMITATIONS

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. It is intended for the exclusive use of Anchor Environmental, LLC and the Port of Tacoma for specific application to the referenced property. This report is not meant to represent a legal opinion. No other warranty, express or implied, is made.

The MTCA and SMS cleanup levels included in this report are used for screening and comparison purposes only and are based on our understanding of cleanup levels required by Ecology for similar projects. This comparison does not represent an interpretation of MTCA and SMS cleanup standards applicable to this site, since such standards are established by Ecology through site-specific evaluation and public approval process.

Any questions regarding our work and this report, the presentation of the information, and the interpretation of the data are welcome.

9.0 REFERENCES

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Table 1 - Summarized Analytical Results for Selected Constituents in Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
TPH in mg/kg									
Diesel-Range Hydrocarbons	2,000		180	5.8	900	560	5.7 U	7	15
Motor Oil-Range Hydrocarbons	2,000		960	17	1400	950	11 U	12 U	98
Gasoline-Range Hydrocarbons	100/30 [a]		26	7.7 U	**160**	**150**	6.9 U	9.2 U	9.6
Arsenic in mg/kg	20	88	**240 J**	5 U	**50**	**120**	6 U	6 U	10 U
Total PCBs in µg/kg	10,000	66,000	610	115.5	1446	572	108.5	115.5	115.5
cPAHs in µg/kg									
Benzo(a)anthracene	2,000	18,000	630	58 U	770	740	64 U	61 U	200 U
Chrysene	2,000	18,000	800	58 U	1000	1100	64 U	61 U	200 U
Benzo(b)fluoranthene	2,000	18,000	860	58 U	430	920	64 U	61 U	200 U
Benzo(k)fluoranthene	2,000	18,000	680	58 U	500	600	64 U	61 U	200 U
Benzo(a)pyrene	2,000	18,000	700	58 U	430	580	64 U	61 U	200 U
Indeno(1,2,3-cd)pyrene	2,000	18,000	330	58 U	220 U	180 U	64 U	61 U	200 U
Dibenz(a,h)anthracene	2,000	18,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Total cPAHs [b]	2,000	18,000	968	44 U	632	835	48 U	46 U	151 U
Other Selected LPAHs in µg/kg									
Naphthalene		70,000,000	420	58 U	840	2400	64 U	61 U	200 U
Acenaphthene		210,000,000	190 U	58 U	2400	1000	64 U	61 U	200 U
Fluorene		140,000,000	300	58 U	1900	790	64 U	61 U	200 U
Anthracene		1,100,000,000	340	58 U	2000	1300	64 U	61 U	200 U
Other Selected HPAHs in µg/kg									
Fluoranthene		140,000,000	2200	58 U	3800	3000	64 U	61 U	200 U
Pyrene		110,000,000	1800	58 U	4600	3400	64 U	61 U	200 U
Other Selected Compounds in µg/kg									
Hexachlorobenzene (SVOC)		82,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Hexachlorobutadiene (SVOC)		700,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Hexachlorobutadiene (VOC)		700,000		6.6 U		270 U	5.8 U		

Table 1 - Summarized Analytical Results for Selected Constituents in Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
TPH in mg/kg									
Diesel-Range Hydrocarbons	2,000		10	**3600**	49	5 U	60	5.2 U	18
Motor Oil-Range Hydrocarbons	2,000		58	**5100**	10	10 U	180	10 U	24
Gasoline-Range Hydrocarbons	100/30 [a]		7.2 U	**320**	13	7.1 U	6.2 U	7.4 U	7.4 U
Arsenic in mg/kg	20	88	8	**50**	5 U	5 U	6	5 U	6 U
Total PCBs in µg/kg	10,000	66,000	115.5	9340	112	112	580	112	108.5
cPAHs in µg/kg									
Benzo(a)anthracene	2,000	18,000	58 U	520	64 U	65 U	66 U	64 U	62 U
Chrysene	2,000	18,000	58 U	870	64 U	65 U	66 U	64 U	62 U
Benzo(b)fluoranthene	2,000	18,000	68	490	64 U	65 U	66 U	64 U	62 U
Benzo(k)fluoranthene	2,000	18,000	58 U	390	64 U	65 U	66 U	64 U	62 U
Benzo(a)pyrene	2,000	18,000	58 U	440	64 U	65 U	66 U	64 U	62 U
Indeno(1,2,3-cd)pyrene	2,000	18,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Dibenz(a,h)anthracene	2,000	18,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Total cPAHs [b]	2,000	18,000	48	612	48 U	49 U	50 U	48 U	47 U
Other Selected LPAHs in µg/kg									
Naphthalene		70,000,000	58 U	440	64 U	65 U	66 U	64 U	260
Acenaphthene		210,000,000	58 U	300	64 U	65 U	66 U	64 U	270
Fluorene		140,000,000	58 U	430	64 U	65 U	66 U	64 U	62 U
Anthracene		1,100,000,000	58 U	390	64 U	65 U	66 U	64 U	62 U
Other Selected HPAHs in µg/kg									
Fluoranthene		140,000,000	58 U	1400	64 U	65 U	66 U	64 U	62 U
Pyrene		110,000,000	92	2400	64 U	65 U	66 U	64 U	62 U
Other Selected Compounds in µg/kg									
Hexachlorobenzene (SVOC)		82,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Hexachlorobutadiene (SVOC)		700,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Hexachlorobutadiene (VOC)		700,000	6.1 U	4.6 U		6.6 U		6.4 U	6.1 U

Table 1 - Summarized Analytical Results for Selected Constituents in Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
TPH in mg/kg							
Diesel-Range Hydrocarbons	2,000		140	5.7 U	160	5.3 U	5.6 U
Motor Oil-Range Hydrocarbons	2,000		300	12 U	350	11 U	11 U
Gasoline-Range Hydrocarbons	100/30 [a]		8.9	6.6 U	6.8 U	11 U	7 U
Arsenic in mg/kg	20	88	5 U	5 U	6	5 U	10 U
Total PCBs in µg/kg	10,000	66,000	112	115.5	2362.5	115.5	115.5
cPAHs in µg/kg							
Benzo(a)anthracene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Chrysene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Benzo(b)fluoranthene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Benzo(k)fluoranthene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Benzo(a)pyrene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Indeno(1,2,3-cd)pyrene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Dibenz(a,h)anthracene	2,000	18,000	59 U	64 U	290 U	65 U	61 U
Total cPAHs [b]	2,000	18,000	45 U	48 U	219 U	49 U	46 U
Other Selected LPAHs in µg/kg							
Naphthalene		70,000,000	94	64 U	290 U	65 U	61 U
Acenaphthene		210,000,000	62	64 U	290 U	65 U	61 U
Fluorene		140,000,000	59 U	64 U	290 U	65 U	61 U
Anthracene		1,100,000,000	59 U	64 U	290 U	65 U	61 U
Other Selected HPAHs in µg/kg							
Fluoranthene		140,000,000	59 U	64 U	290 U	65 U	61 U
Pyrene		110,000,000	59 U	64 U	290 U	65 U	61 U
Other Selected Compounds in µg/kg							
Hexachlorobenzene (SVOC)		82,000	59 U	64 U	290 U	65 U	61 U
Hexachlorobutadiene (SVOC)		700,000	59 U	64 U	290 U	65 U	61 U
Hexachlorobutadiene (VOC)		700,000	5.9 U	5.1 UJ			

Bolded sample numbers indicate sample was collected from industrial fill layer.
Blank entry indicates no applicable MTCA criteria established or sample not analyzed for specific analyte.
U: Not detected at reporting limit indicated.
J: Estimated value
Selected LPAHs and HPAHs include constituents for which MTCA Method A and Method C Direct Contact screening criteria are established.
Other constituents were not detected or were detected at concentrations below applicable regulatory criteria.
See Table 1a for complete analytical results for soil samples.
9 Bolded, boxed entry indicates detected concentration exceeds MTCA screening criteria.
MTCA Method A Industrial screening levels for cPAHs are provided for comparative purposes only. MTCA Method A cPAH screening levels are based on groundwater protection, which is not applicable at this site.
[aa] Bolded samples indicate sample collected from the industrial fill layer.
[a] 100 mg/kg when no benzene present, 30 mg/kg when benzene present.
[b] Total cPAHs calculated using the toxicity equivalency methodology in WAC 173-340-708(8). 1/2 detection limit was used for non-detects.

Table 2 - Summarized Analytical Results for Selected Constituents in Groundwater Samples

Sample ID:	MTCA Method B		Water Quality		EBC-1	EBC-2	EBC-3	EBC-4	EBC-5	EBC-6
Sampling Date:	Marine Surface Water Criteria[a]		Criteria - Marine[e] Acute	Chronic	7/30/2008	7/31/2008	7/30/2008	7/30/2008	8/1/2008	8/1/2008
TPH in mg/L										
Diesel-Range Hydrocarbons	0.5	[b]			0.25 U	0.38 J	0.25 U	0.25 U	0.25 U	0.25 U
Motor Oil-Range Hydrocarbons	0.5	[b]			0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Gasoline-Range Hydrocarbons	1.0	[b]			0.25 UJ	1.6	0.25 UJ	0.25 UJ	0.25 U	0.25 U
Dissolved Metals in µg/L										
Arsenic, Dissolved	5	[c]	69	36	0.5 U	0.5 U	0.5 U	0.5 U	0.71	0.5 U
Cadmium, Dissolved	20		42	9.3	0.022	0.02 U	0.02 U	0.02 U	0.023	0.02 U
Chromium, Dissolved	490		1100	50	5.6	1.4	1.9	0.2 U	1.98	0.26
Copper, Dissolved	2,700		4.8	3.1	**3.8**	0.2	0.1 U	0.1 U	3.1	0.3
Lead, Dissolved			210	8.1	1.16	0.133	0.02 U	0.02 U	0.702	0.035
Mercury, Dissolved[d]			1.8	0.025	0.001 R	0.001 R	0.001 R	0.001 R	0.001 R	0.001 R
Nickel, Dissolved	1,100		74	8.2	4.7	1.2	1.6	0.3	3.7	0.6
Zinc, Dissolved	17,000		90	81	8.4	3	1.8	0.5 U	4.7	1
Total PCBs in ug/L	0.00011		10	0.03	1 U	1 UJ	1 U	1 U	1.2 U	1 U
cPAHs in ug/L										
Benzo(a)anthracene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Chrysene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Benzo(b)fluoranthene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Benzo(k)fluoranthene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Benzo(a)pyrene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Indeno(1,2,3-cd)pyrene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Dibenz(a,h)anthracene	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Total cPAHs	0.03				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Other Selected LPAHs in µg/L										
Naphthalene	4,900				1 U	1.8 J	1 U	1 U	1 UJ	1 U
Acenaphthene	640				1 U	120 J	1 U	1 U	1 UJ	1 U
Fluorene	3,500				1 U	27 J	1 U	1 U	1 UJ	1 U
Anthracene	26,000				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Other Selected HPAHs in µg/L										
Fluoranthene	90				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Pyrene	2,600				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Other Selected Compounds in µg/L										
Hexachlorobenzene (SVOC)	0.00047				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Hexachlorobutadiene (SVOC)	3.0				1 U	1 UJ	1 U	1 U	1 UJ	1 U
Hexachlorobutadiene (VOC)	3.0				0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U

Table 2 - Summarized Analytical Results for Selected Constituents in Groundwater Samples

Sample ID:	MTCA Method B		Water Quality		EBC-16	Trip Blank	Trip Blank
Sampling Date:	Marine Surface		Criteria - Marine[e]		8/1/2008	7/31/2008	8/6/2008
	Water Criteria[a]		Acute	Chronic	Dup of EBC-6		
TPH in mg/L							
Diesel-Range Hydrocarbons	0.5	[b]			0.25 U		
Motor Oil-Range Hydrocarbons	0.5	[b]			0.5 U		
Gasoline-Range Hydrocarbons	1.0	[b]			0.25 U		
Dissolved Metals in µg/L							
Arsenic, Dissolved	5	[c]	69	36	0.5 U		
Cadmium, Dissolved	20		42	9.3	0.02 U		
Chromium, Dissolved	490		1100	50	0.25		
Copper, Dissolved	2,700		4.8	3.1	0.1 U		
Lead, Dissolved			210	8.1	0.02 U		
Mercury, Dissolved[d]			1.8	0.025	0.001 R		
Nickel, Dissolved	1,100		74	8.2	0.6		
Zinc, Dissolved	17,000		90	81	0.5 U		
Total PCBs in ug/L	0.00011		10	0.03	1 U		
cPAHs in ug/L							
Benzo(a)anthracene	0.03				1 U		
Chrysene	0.03				1 U		
Benzo(b)fluoranthene	0.03				1 U		
Benzo(k)fluoranthene	0.03				1 U		
Benzo(a)pyrene	0.03				1 U		
Indeno(1,2,3-cd)pyrene	0.03				1 U		
Dibenz(a,h)anthracene	0.03				1 U		
Total cPAHs	0.03				1 U		
Other Selected LPAHs in µg/L							
Naphthalene	4,900				1 U		
Acenaphthene	640				1 U		
Fluorene	3,500				1 U		
Anthracene	26,000				1 U		
Other Selected HPAHs in µg/L							
Fluoranthene	90				1 U		
Pyrene	2,600				1 U		
Other Selected Compounds in µg/L							
Hexachlorobenzene (SVOC)	0.00047				1 U		
Hexachlorobutadiene (SVOC)	3.0				1 U		
Hexachlorobutadiene (VOC)	3.0				0.5 U	0.5 U	0.5 U

Table 2 - Summarized Analytical Results for Selected Constituents in Groundwater Samples

Notes:
U: Not detected at reporting limit indicated.
J: Estimated value
R: Rejected value
3.8 Bolded boxed entry indicates detected concentration exceeds one or more screening criteria.
1.6 Dashed boxed entry indicates detected concentration of gasoline-range hydrocarbons is above MTCA Method A screening level but is not considered to be an exceedance of MTCA criteria per Footnote [b] below.
Constituents not listed were undetected or were detected at concentrations below applicable regulatory criteria.
Blank entry indicates no applicable MTCA criteria established or sample not analyzed for specific analyte.
See Table 2a for complete analytical results for groundwater samples.

[a] MTCA Method B screening levels for surface water are presented except as noted for TPH and arsenic.
[b] MTCA Method A screening levels for TPH are provided for comparative purposes only. MTCA Method A TPH screening levels are based on groundwater protection, which is not applicable at this site.
[c] MTCA Method A arsenic screening level is listed. The MTCA Method A screening level for arsenic is based on state background concentrations. MTCA Method B does not apply for arsenic at this site.
[d] Marine chronic water quality cleanup criteria for mercury is based on total metals concentration and is provided for comparative purposes only.
[e] Based on Washington State Water Quality Standards (Chapter 173-201A WAC) for protection of marine organisms.

Source: Base map prepared from Microsoft Streets and Trips, 2005.

Note: Project area includes the offshore portion of the Earley Business Center west of Pier 23.

True North

Project North

N

0 4000 8000

Scale in Feet

Port of Tacoma Earley Business Center
Tacoma, Washington

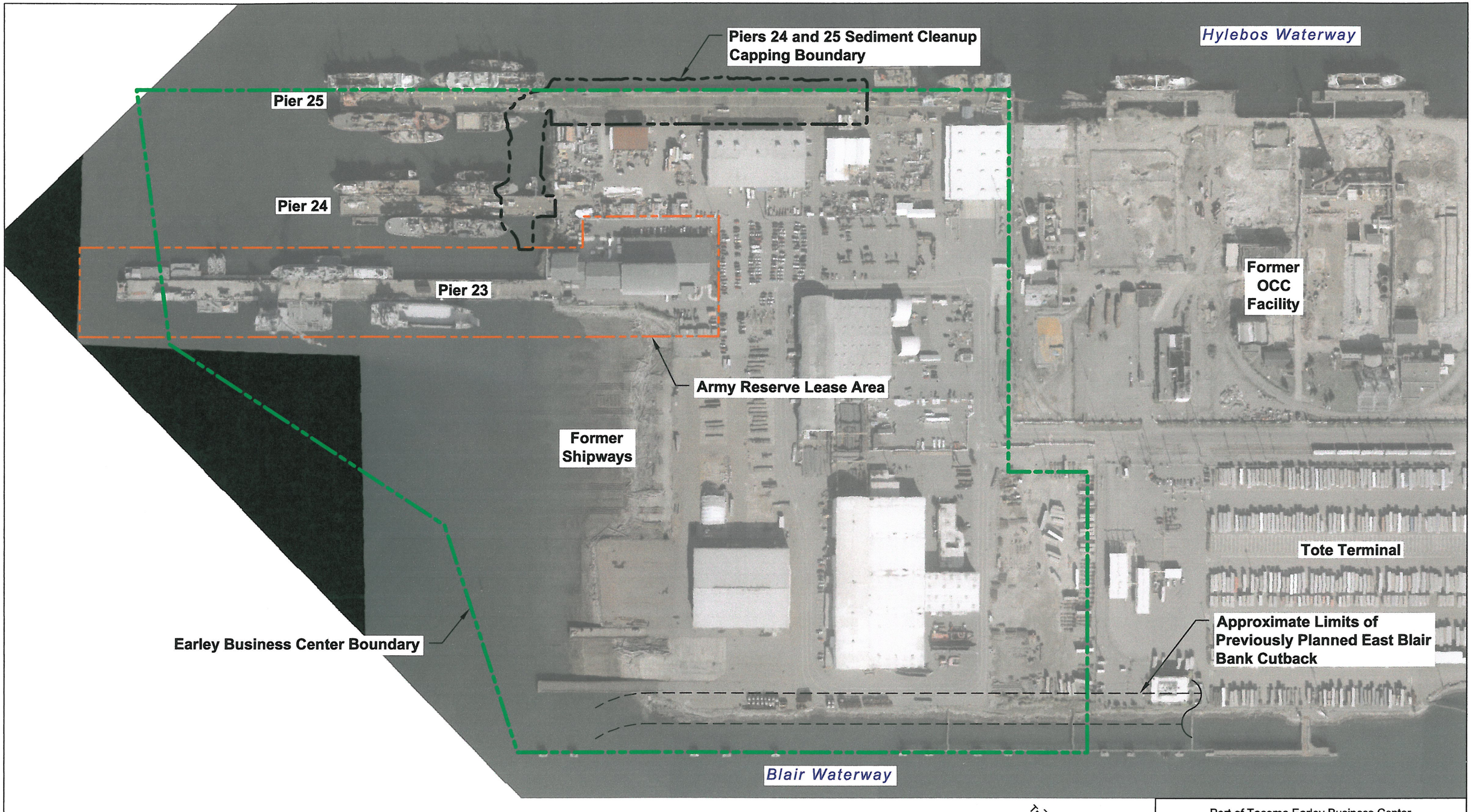
Vicinity Map

17490-02 9/09

HARTCROWSER

Figure
1

EAL 09/18/09 174900201-001.dwg



True North

Project North

0 250 500

Scale in Feet

Port of Tacoma Earley Business Center
Tacoma, Washington

Earley Business Center Areas of Interest

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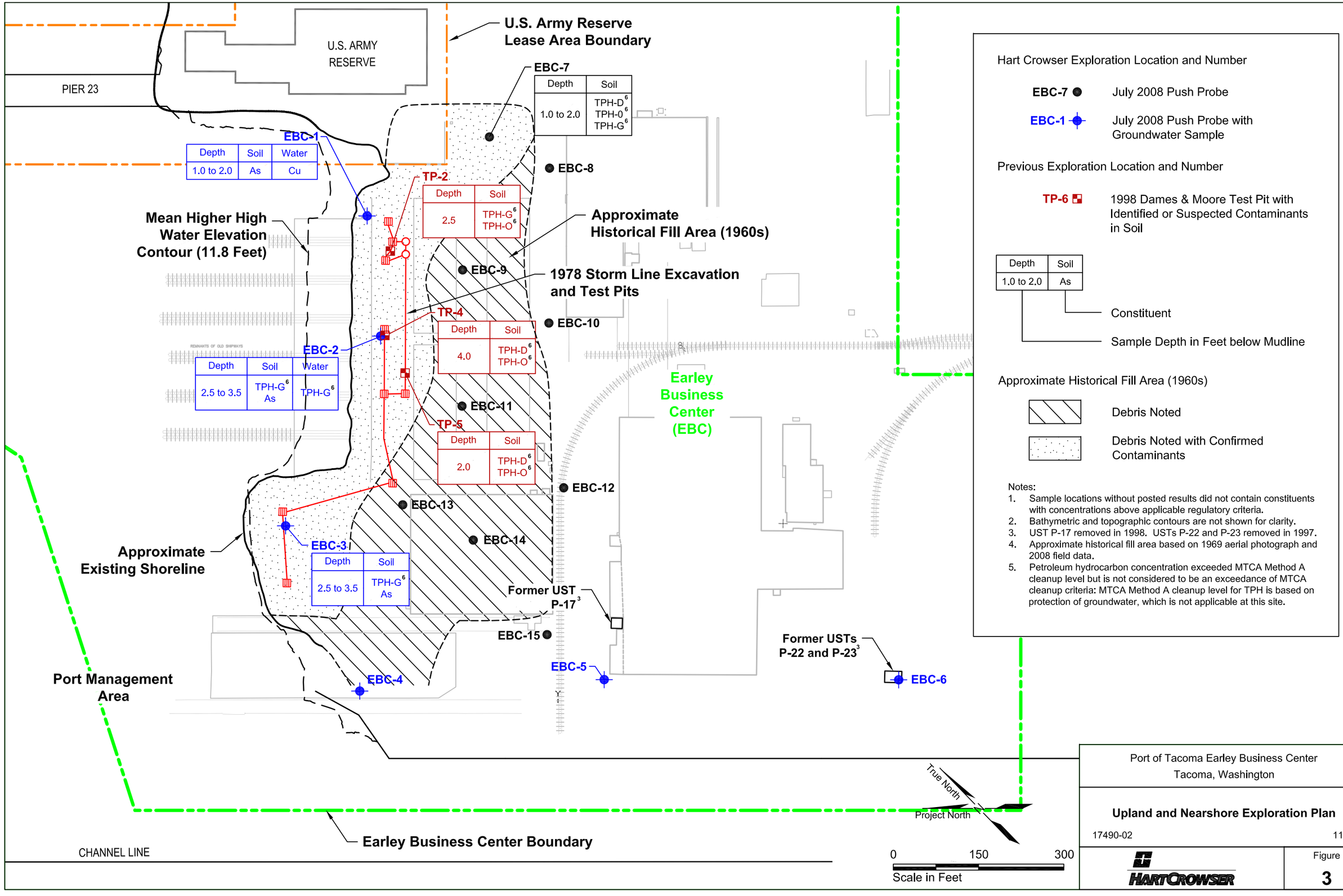
Figure 2

Note: Modified from 2007 aerial photograph provided by the Port of Tacoma.

EAL 11/30/09 174900201-002.dwg



Notes:

1. Sample locations without posted results did not contain constituents with concentrations above applicable regulatory criteria.
2. Bathymetric and topographic contours are not shown for clarity.
3. UST P-17 removed in 1998. USTs P-22 and P-23 removed in 1997.
4. Approximate historical fill area based on 1969 aerial photograph and 2008 field data.
5. Petroleum hydrocarbon concentration exceeded MTCA Method A cleanup level but is not considered to be an exceedance of MTCA cleanup criteria: MTCA Method A cleanup level for TPH is based on protection of groundwater, which is not applicable at this site.

Port of Tacoma Earley Business Center
Tacoma, Washington

Upland and Nearshore Exploration Plan

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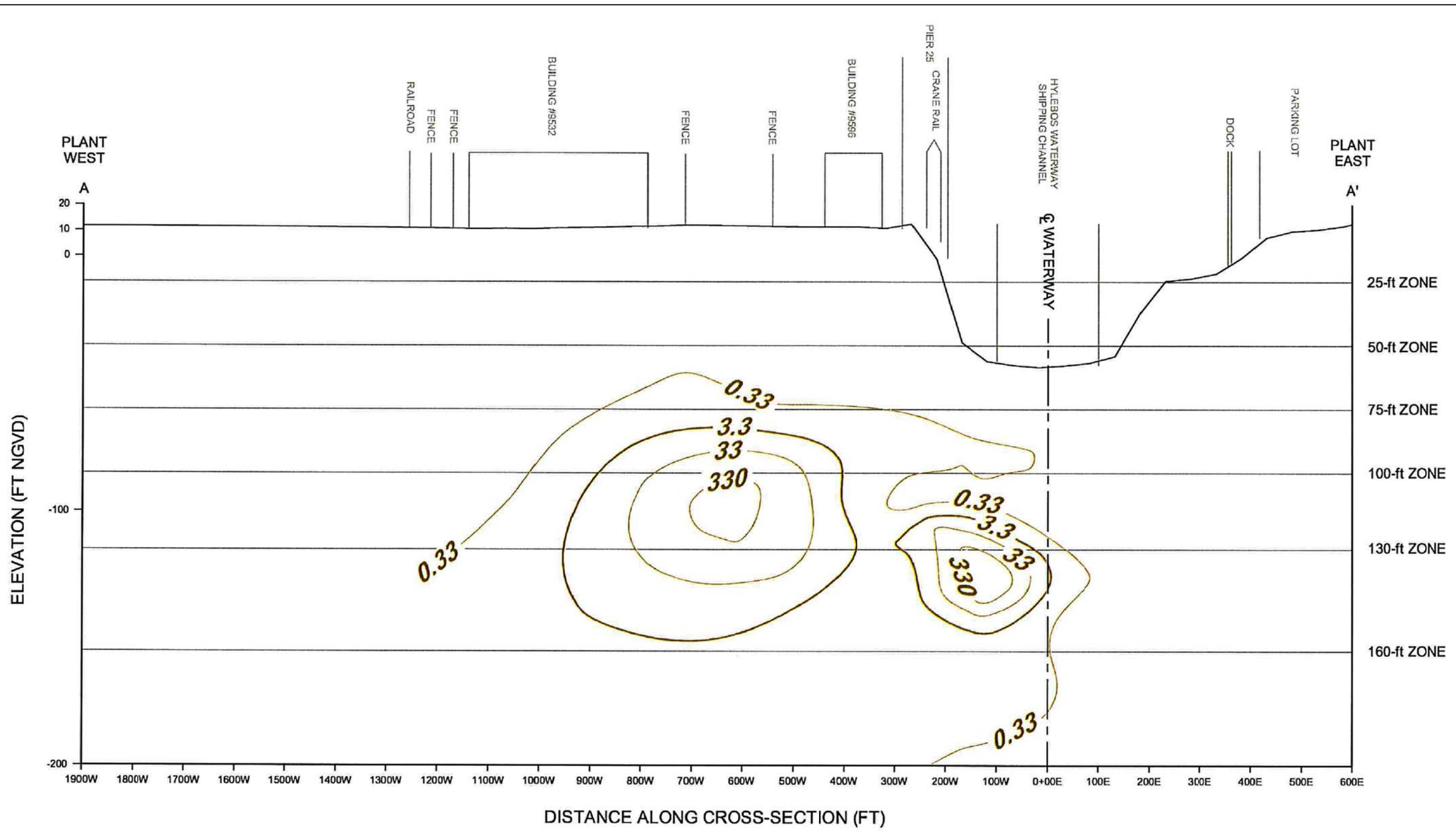
Figure 3

EAL 11/30/09 174900201-003.dwg



NOTE:
CROSS SECTION A-A' CUT AT HYLEBOS WATERWAY SECTION 26+00

GROUNDWATER CLEANUP LEVEL FOR PCE IS 3.3 ug/L

Note: Cross section is representative of profile through south-central portion of the EBC.

Approximate Horizontal Scale in Feet
0 200 400
0 40 80
Approximate Vertical Scale in Feet
Vertical Exaggeration x 5

Source: Figure excerpted and modified from Figure 7.33 from the Conestoga-Rovers & Associates March 2008 Preliminary Draft Site Characterization Report (PCE CONCENTRATION CONTOURS - CROSS SECTION A-A' SITE CHARACTERIZATION).

Port of Tacoma Earley Business Center
Tacoma, Washington

Interpreted PCE Distribution in Groundwater Beneath the Earley Business Center

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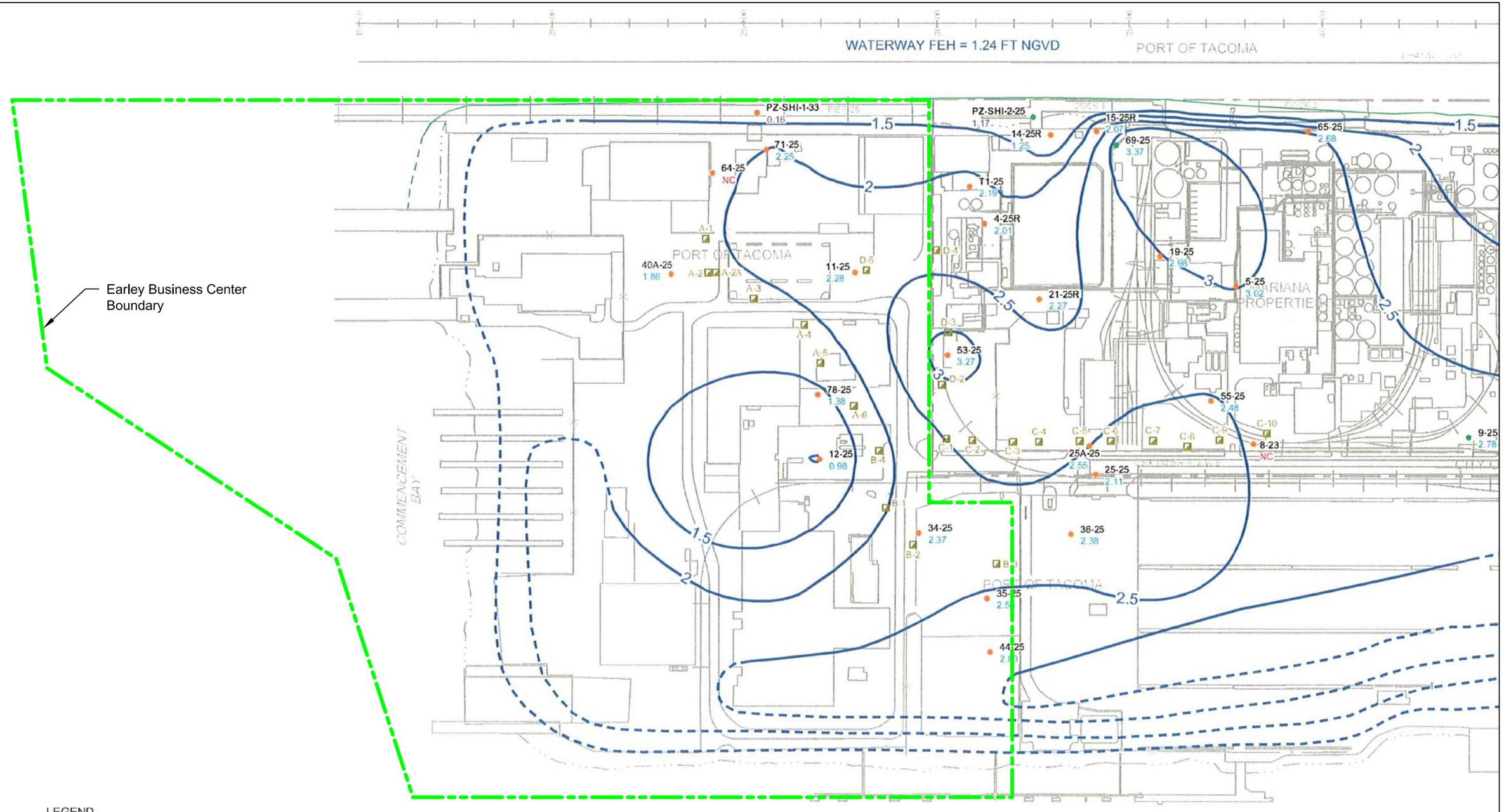
Figure
4

EAL 09/21/09 174900201-004.dwg



Source: Figure excerpted and modified from Figure 8.27 from the Conestoga-Rovers & Associates March 2008 Preliminary Draft Site Characterization Report (EVENT 2 FEH CONTOURS - 25-FOOT ZONE (ELEVATION=-10 FT NGVD)).

Port of Tacoma Earley Business Center
Tacoma, Washington

Interpreted Shallow Groundwater Contours at North End of Blair-Hylebos Peninsula (After OCC Groundwater Recovery Pumping Shutoff)

17490-02 11/09

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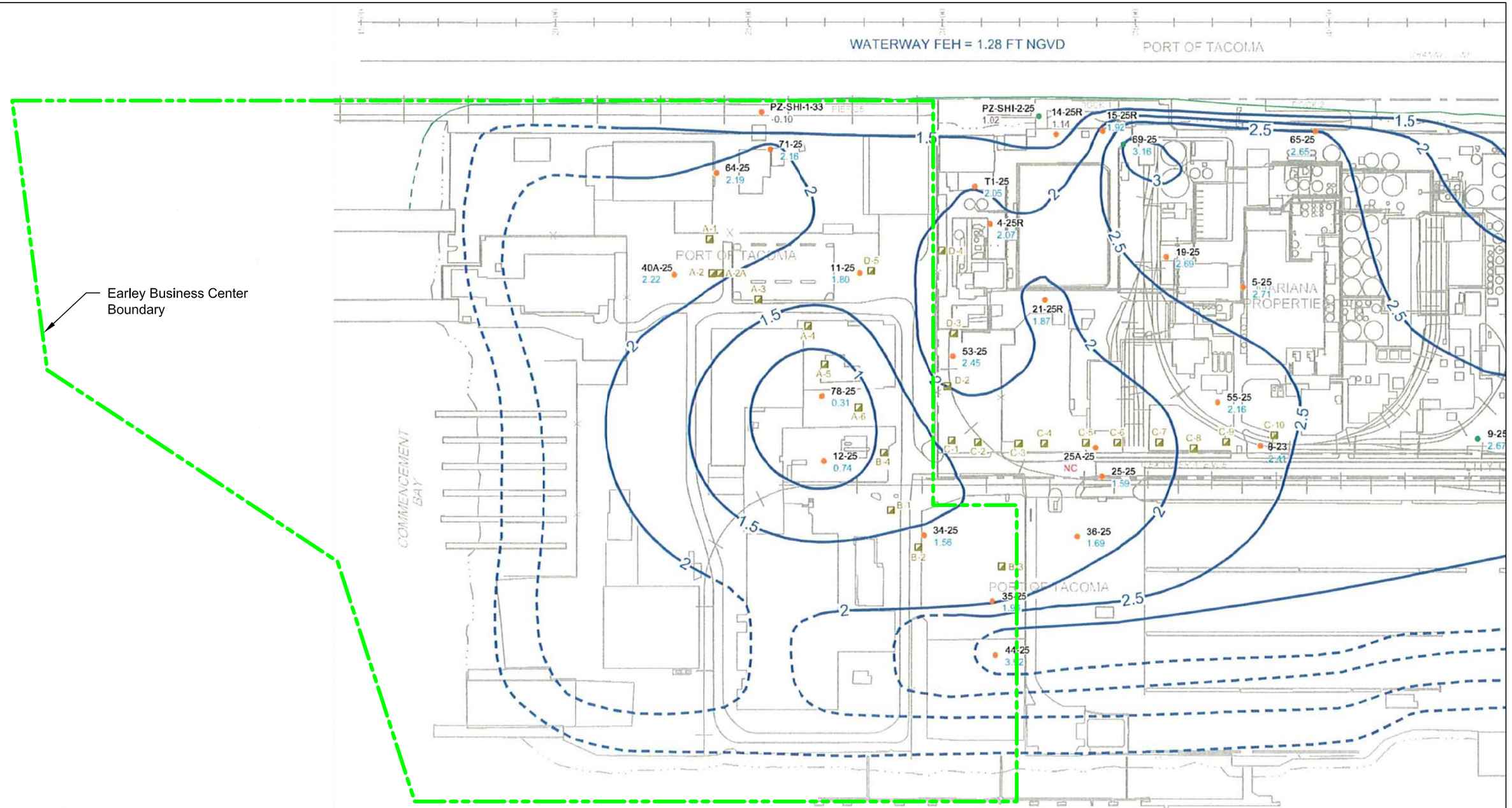
Figure **5**

EAL 11/30/09 174900201-005.dwg



LEGEND

25-50	TYPE 1 TRANSDUCER CONFIGURATION
9-50	TYPE 2 TRANSDUCER CONFIGURATION
WW-C1	TYPE 3 TRANSDUCER CONFIGURATION
11.17	FEH (FT NGVD) USED FOR CONTOURING
11.17	FEH (FT NGVD) NOT USED FOR CONTOURING
—3—	FEH CONTOUR (FT NGVD)
NC	NOT CALCULATED AS NOTED IN TABLE 8.2 OF CRA REPORT
	MUDLINE INTERSECTION WITH ZONE GROUPING PLANE
B-3	EXTRACTION WELL

True North / Project North — N

0 250 500
Approximate Scale in Feet

Source: Figure excerpted and modified from Figure 8.21 from the Conestoga-Rovers & Associates March 2008 Preliminary Draft Site Characterization Report (EVENT 1 FEH CONTOURS - 25-FOOT ZONE (ELEVATION=-10 FT NGVD)).

Port of Tacoma Earley Business Center
Tacoma, Washington

Interpreted Shallow Groundwater Contours at North End of Blair-Hylebos Peninsula (During OCC Groundwater Pumping)

17490-02 11/09

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Figure **6**

EAL 11/30/09 174900201-006.dwg

APPENDIX A
FIELD EXPLORATION METHODS AND PUSH PROBE LOGS

APPENDIX A
FIELD EXPLORATION METHODS AND PUSH PROBE LOGS

This appendix describes the field exploration methods used to advance explorations, to conduct soil and groundwater sampling, and to field screen the soils for sheen and headspace vapor. We also include the July and August 2008 push probe logs at the end of this appendix.

General Field Activities

Soil Exploration Activities and Characterization. Push probe explorations were completed at 15 locations from July 29 through August 1, 2008. The soil exploration locations are illustrated on Figure 3. Six push probe explorations (EBC-1 through EBC-6) were completed for soil and groundwater sampling near the edge of the peninsula next to Commencement Bay, or inboard from the Blair Waterway. The push probe locations on the Blair Waterway side of the peninsula are located landward of the previous planned bank cutback for the future East Blair 3 (EB3) vessel berth. Nine additional push probe explorations (EBC-7 through EBC-15) were completed to evaluate site soil conditions within and around the estimated area of the industrial fill.

Each probe location was cleared for utilities using existing records and typical utility location methods prior to probing. We used Port-provided as-built records and other utility location information as available. In addition, Hart Crowser contracted a private utility location service, APS, to locate utilities prior to probing. Note that the presence of debris and cobbles required multiple push probe attempts at some locations.

Soil probes were advanced at each exploration location with a truck-mounted push probe rig. The push probe explorations EBC-1 through EBC-6 completed for groundwater sampling were advanced to approximately 12 to 16 feet below ground surface. Each push probe bore was screened from approximately 2 to 5 feet below the water table. The remainder of the push probes for soil and debris sampling in the debris fill area (EBC-7 through EBC-15) were completed to target depths of about 8 feet below ground surface. Two probe locations (EBC-11 and EBC-14) were advanced further due to wood obstructions.

Subsurface soil samples were collected using a 4-foot push probe sleeve sampler pushed by the push probe rig. Samples were classified in general accordance with ASTM Method D 2888, and soil logs were prepared (see Figures A-1 through A-16). Soil and debris samples were obtained in approximate 2-foot-depth intervals to approximately 8 feet below ground surface at the probe

locations for field screening (0- to 2-foot, 2- to 4-foot, 4- to 6-foot, and 6- to 8-foot sample retention intervals). Deeper samples were obtained at 2-foot-depth intervals in probes EBC-1 through EBC-6 targeted for completion at 12- to 16-foot depths. The soil and debris samples were field screened using headspace vapor measurements and water sheen testing. A Hart Crowser field representative observed probing and sampling activities, performed field screening, and prepared the field logs.

Soil and debris samples were collected to provide representative materials for testing. The samples were selected based on field screening observations for the presence of suspected environmental contaminants, and to provide areal distribution across the debris fill area.

After the samples were collected, the probe locations were abandoned in accordance with the State of Washington Administrative Code on Minimum Standards for Construction and Maintenance of Wells (Chapter 173-160 WAC).

Soil Screening and Analysis. Field screening results were used as a general guideline to delineate areas of potential contamination in soils. In addition, screening results were used as a basis for selecting soil samples for chemical analysis.

Soil samples were field screened for evidence of contamination using (1) visual examination, (2) sheen screening, and (3) headspace vapor screening using a photoionization detector (PID). Field screening results were site-specific. The effectiveness of field screening varies with temperature, moisture content, organic content, soil type, and age of the contaminant.

Visual examination consisted of inspecting the soil for stains indicative of contamination.

Water sheen testing involved placing a small volume of soil in a pan of water and observing the water surface for signs of sheen. Sheens were classified as follows:

No Sheen (NS)	No visible sheen on water surface.
Slight Sheen (SS)	Light colorless film, spotty to globular; spread was irregular, not rapid, areas of no sheen remain, film dissipates rapidly.
Moderate Sheen (MS)	Light to heavy film, may have some color or iridescence, globular to stringy, spread was irregular

	to flowing; few remaining areas of no sheen on water surface.
Heavy Sheen (HS)	Heavy colorful film with iridescence; stringy, spread was rapid; sheen flows off the sample; most of the water surface might be covered with sheen.

Headspace vapor screening is intended to indicate the presence of volatile organic vapors and involved placing a soil sample in a plastic sample bag. Air was captured in the bag and the bag was shaken to expose the soil to the air trapped in the bag. The probe of the PID was inserted in the bag and the instrument measured the concentration of organic vapors in the air from the sample headspace. The highest vapor reading was recorded for each sample. The PID measures concentrations in ppm (parts per million) and is calibrated to isobutylene. The PID is typically designed to quantify organic vapors concentrations in the range of 0 to 1,000 ppm.

The results of field screening are recorded on the push probe logs and were used to help select the samples to submit for chemical analyses.

Groundwater Sampling. Groundwater samples were obtained from temporary screens installed at the EBC-1 through EBC-6 push probe explorations. The temporary screens were at depths to intercept shallow unconfined groundwater (approximately 12 to 16 feet below ground surface). Each temporary screen was placed to provide a representative sampling interval approximately 2 to 5 feet below the water table. The depth to groundwater level from top of casing in each probe was measured using an electronic water level indicator prior to the collection of the groundwater sample. The time that the depth to groundwater level was taken was documented so that the water levels at the time of drilling could be compared to the tidal stage.

After groundwater elevation data were obtained, sample tubing was lowered to the temporary screen section and a groundwater sample was obtained using a peristaltic pump. The tubing was discarded after each use and the pump was refitted with new tubing at each probe location.

Each temporary screen section was purged until conventional parameters (pH, temperature, and conductivity) varied by less than 10 percent or a minimum of three casing volumes was purged. The sample containers were filled directly from the tubing. One blind field duplicate sample was collected.

Laboratory Analysis and Sample Handling. Soil and groundwater samples were submitted to Analytical Resources, Inc. of Tukwila, Washington, for chemical

analysis. Samples were delivered by courier to the laboratory following the chain of custody procedures. Soil samples were analyzed for the following analytes:

- Diesel- and oil-range petroleum hydrocarbons by Ecology Method NWTPH-Dx;
- Gasoline-range petroleum hydrocarbons by Ecology Method NWTPH-Gx;
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B;
- Volatile organic compounds (VOCs) by EPA Method 8260B;
- Semivolatile organic compounds (SVOCs) by EPA Method 8270D;
- Polychlorinated biphenyls (PCBs) by EPA Method 8082; and
- Total metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc) by EPA Method 6010B/7471.

Groundwater samples were analyzed for the same constituents as noted above, including VOCs, and metals analysis via EPA Method 6020 and 1631. The samples were analyzed for both total and dissolved (field-filtered) metals. The metals analysis included a reductive precipitation extraction step (EPA Method 1640 Modified) through an ARI subcontract to Columbia Analytical Services. Mercury was analyzed using EPA Method 1631 to achieve the low-level detection limit needed for comparison to ambient surface water quality criterion. One field duplicate (EBC-16 for EBC-6) was submitted to the laboratory to assess combined field and laboratory variability.

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Key to Exploration Logs

Sample Description

Classification of soils in this report is based on visual field and laboratory observations which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field nor laboratory testing unless presented herein. Visual-manual classification methods of ASTM D 2488 were used as an identification guide.

Soil descriptions consist of the following:
Density/consistency, moisture, color, minor constituents, MAJOR CONSTITUENT, additional remarks.

Density/Consistency

Soil density/consistency in borings is related primarily to the Standard Penetration Resistance. Soil density/consistency in test pits and probes is estimated based on visual observation and is presented parenthetically on the logs.

SAND or GRAVEL Density	Standard Penetration Resistance (N) in Blows/Foot	SILT or CLAY Consistency	Standard Penetration Resistance (N) in Blows/Foot	Approximate Shear Strength in TSF
Very loose	0 to 4	Very soft	0 to 2	<0.125
Loose	4 to 10	Soft	2 to 4	0.125 to 0.25
Medium dense	10 to 30	Medium stiff	4 to 8	0.25 to 0.5
Dense	30 to 50	Stiff	8 to 15	0.5 to 1.0
Very dense	>50	Very stiff	15 to 30	1.0 to 2.0
		Hard	>30	>2.0

Sampling Test Symbols

- 1.5" I.D. Split Spoon
- Grab (Jar)
- 3.0" I.D. Split Spoon
- Shelby Tube (Pushed)
- Bag
- Cuttings
- Core Run

Moisture

Dry	Little perceptible moisture
Damp	Some perceptible moisture, likely below optimum
Moist	Likely near optimum moisture content
Wet	Much perceptible moisture, likely above optimum

Minor Constituents	Estimated Percentage
Trace	<5
Slightly (clayey, silty, etc.)	5 - 12
Clayey, silty, sandy, gravelly	12 - 30
Very (clayey, silty, etc.)	30 - 50

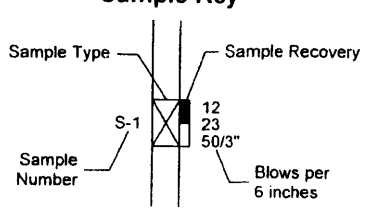
Laboratory Test Symbols

GS	Grain Size Classification
CN	Consolidation
UU	Unconsolidated Undrained Triaxial
CU	Consolidated Undrained Triaxial
CD	Consolidated Drained Triaxial
QU	Unconfined Compression
DS	Direct Shear
K	Permeability
PP	Pocket Penetrometer Approximate Compressive Strength in TSF
TV	Torvane Approximate Shear Strength in TSF
CBR	California Bearing Ratio
MD	Moisture Density Relationship
AL	Atterberg Limits
	Water Content in Percent Liquid Limit Natural Plastic Limit
PID	Photoionization Detector Reading
CA	Chemical Analysis
DT	In Situ Density in PCF

Groundwater Indicators

- Groundwater Level on Date or (ATD) At Time of Drilling
- Groundwater Seepage (Test Pits)

Sample Key



SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

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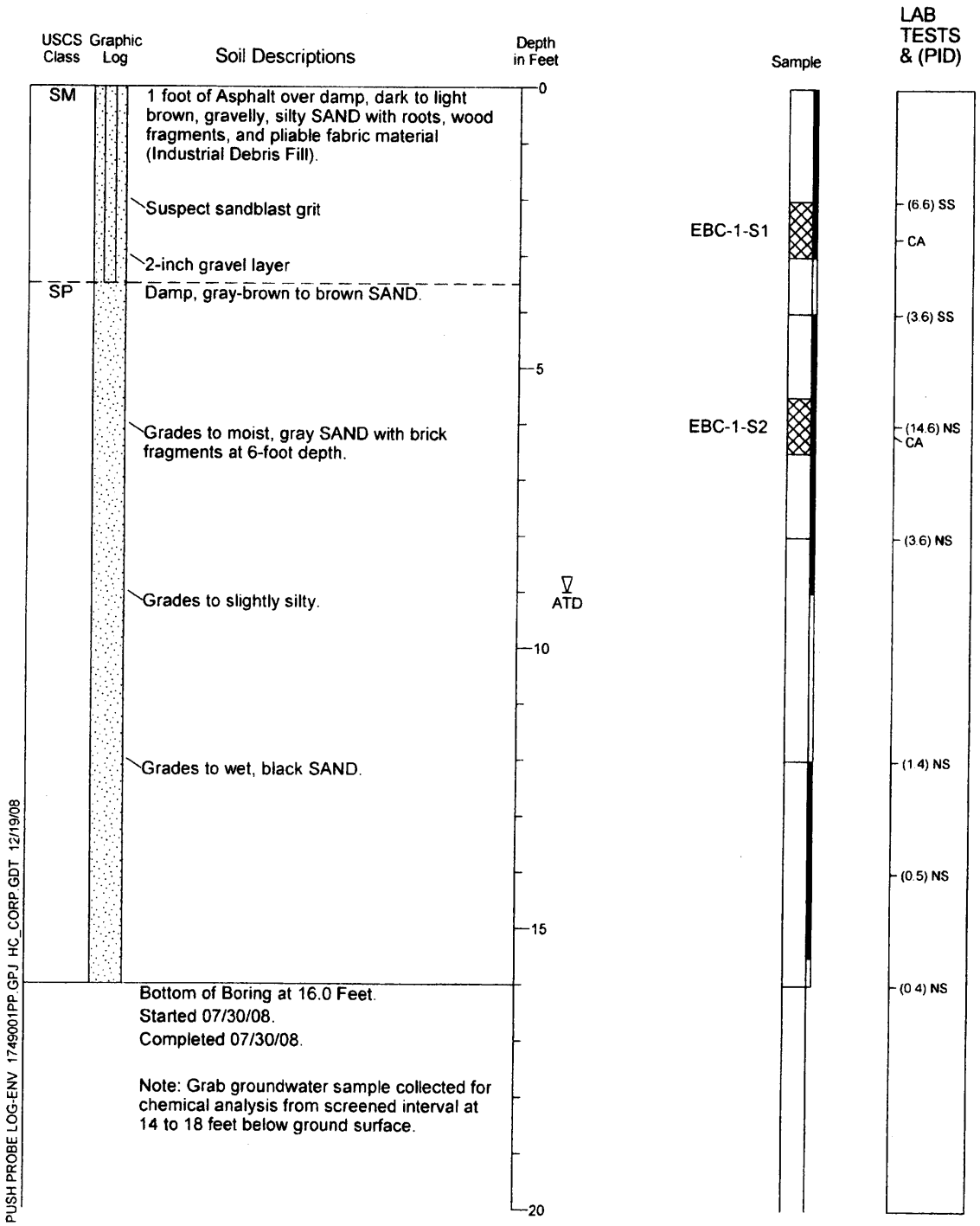
Figure A-1

KEY SHEET 1749001PP.GPJ HC_CORP.GDT 12/19/08

Push Probe Log EBC-1

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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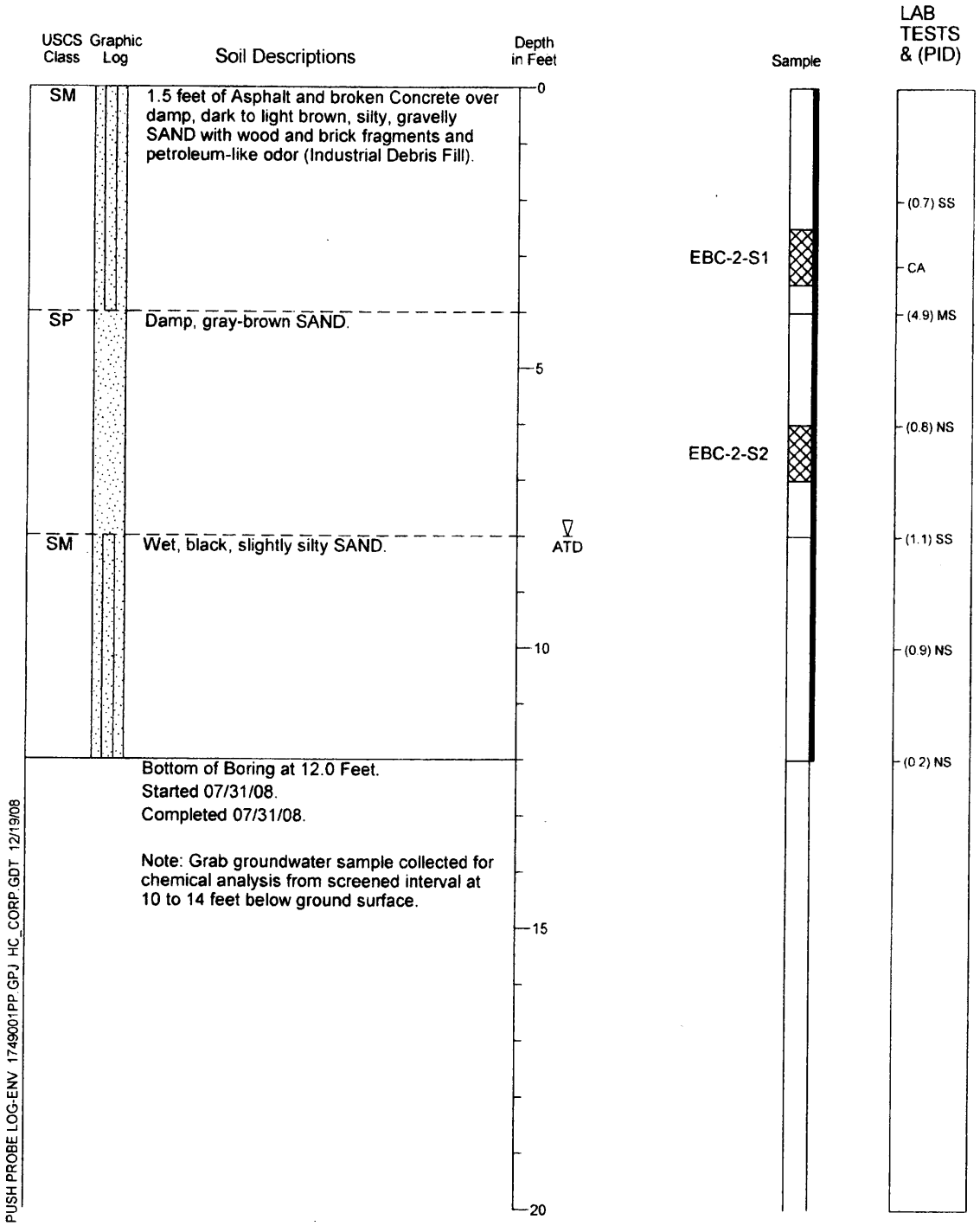
Figure A-2

Push Probe Log EBC-2

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 17490O1PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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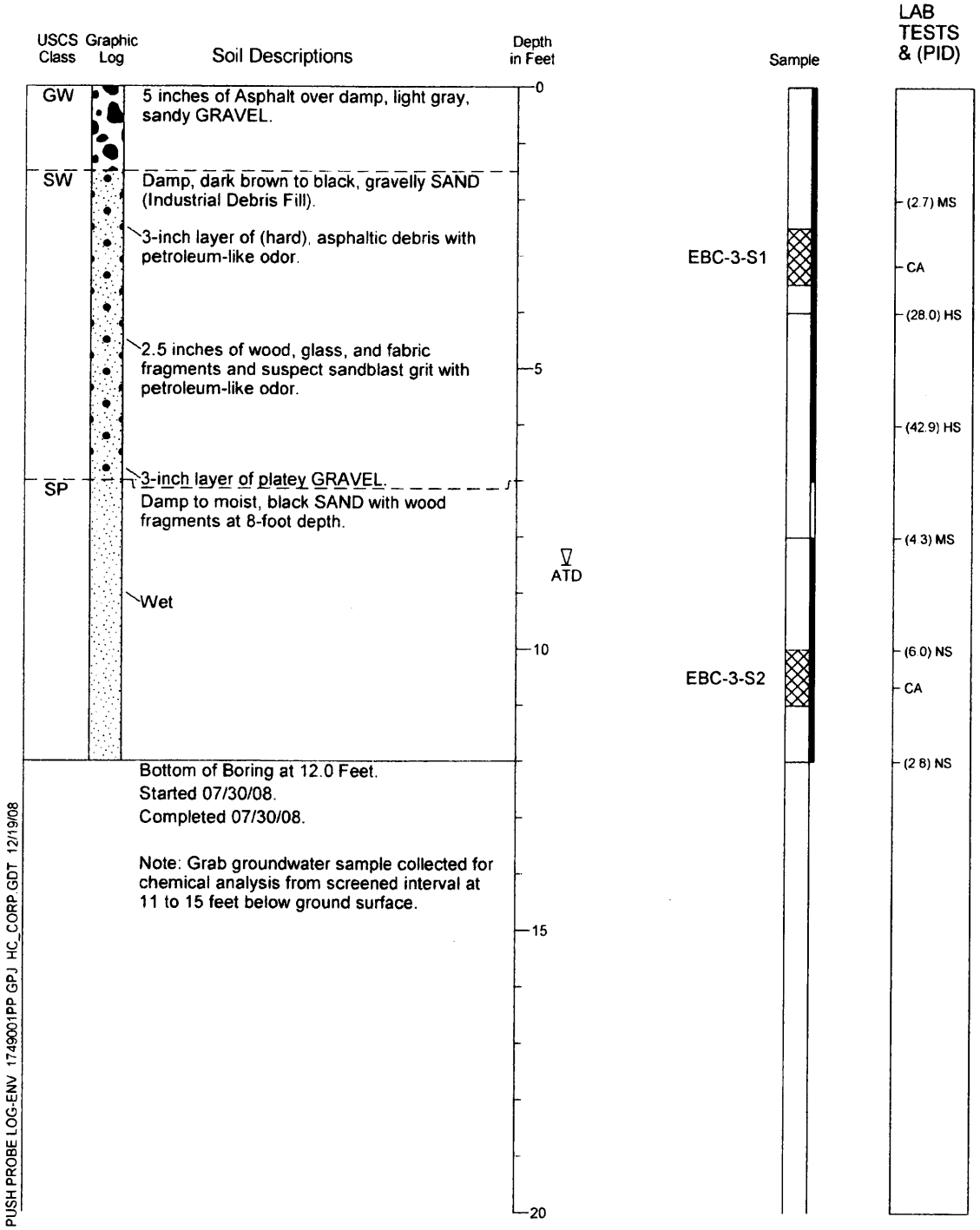
Figure A-3

Push Probe Log EBC-3

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 17490O1PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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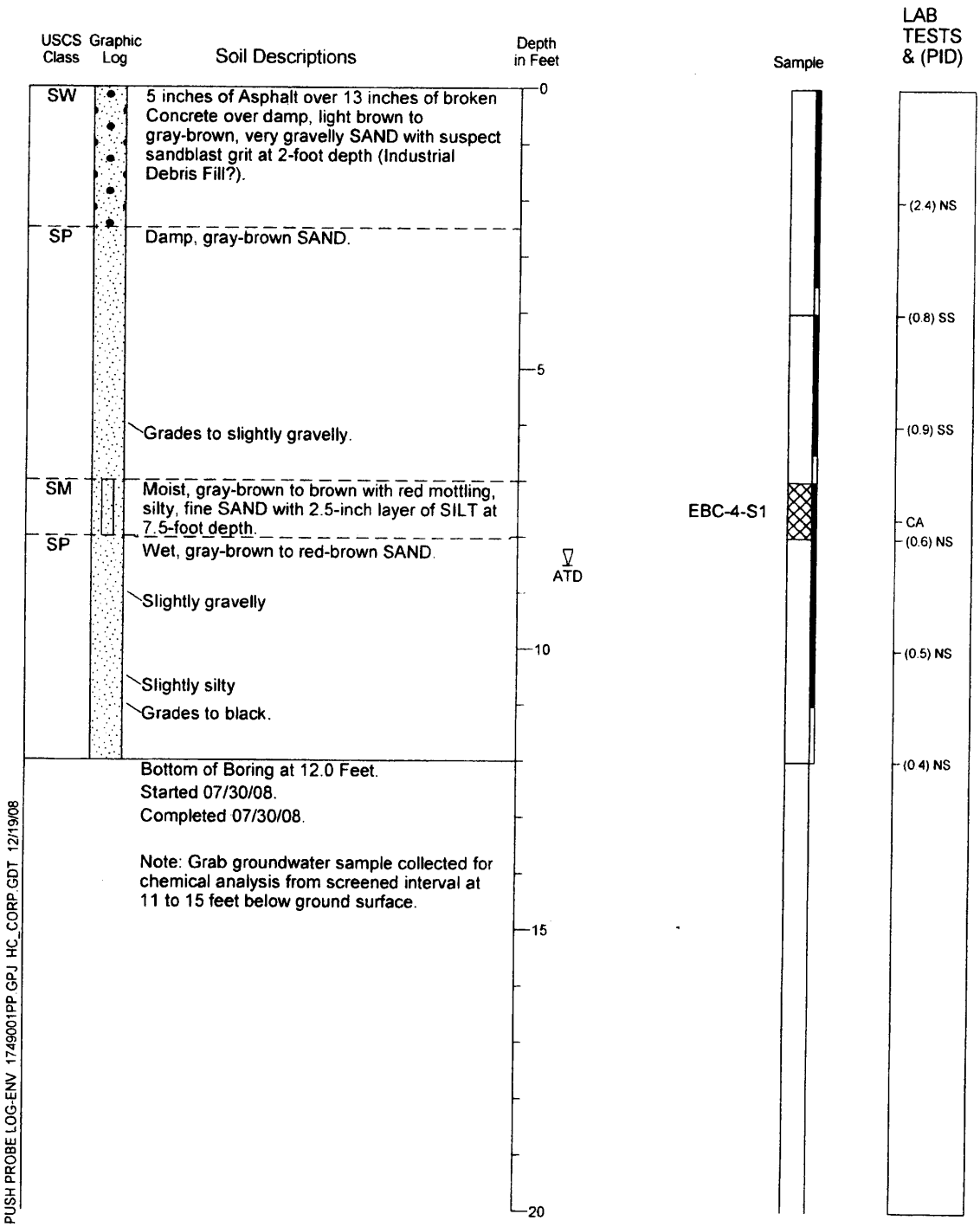
Figure A-4

Push Probe Log EBC-4

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 17490O1PP.GPJ HC_CORP.GDT 12/19/08

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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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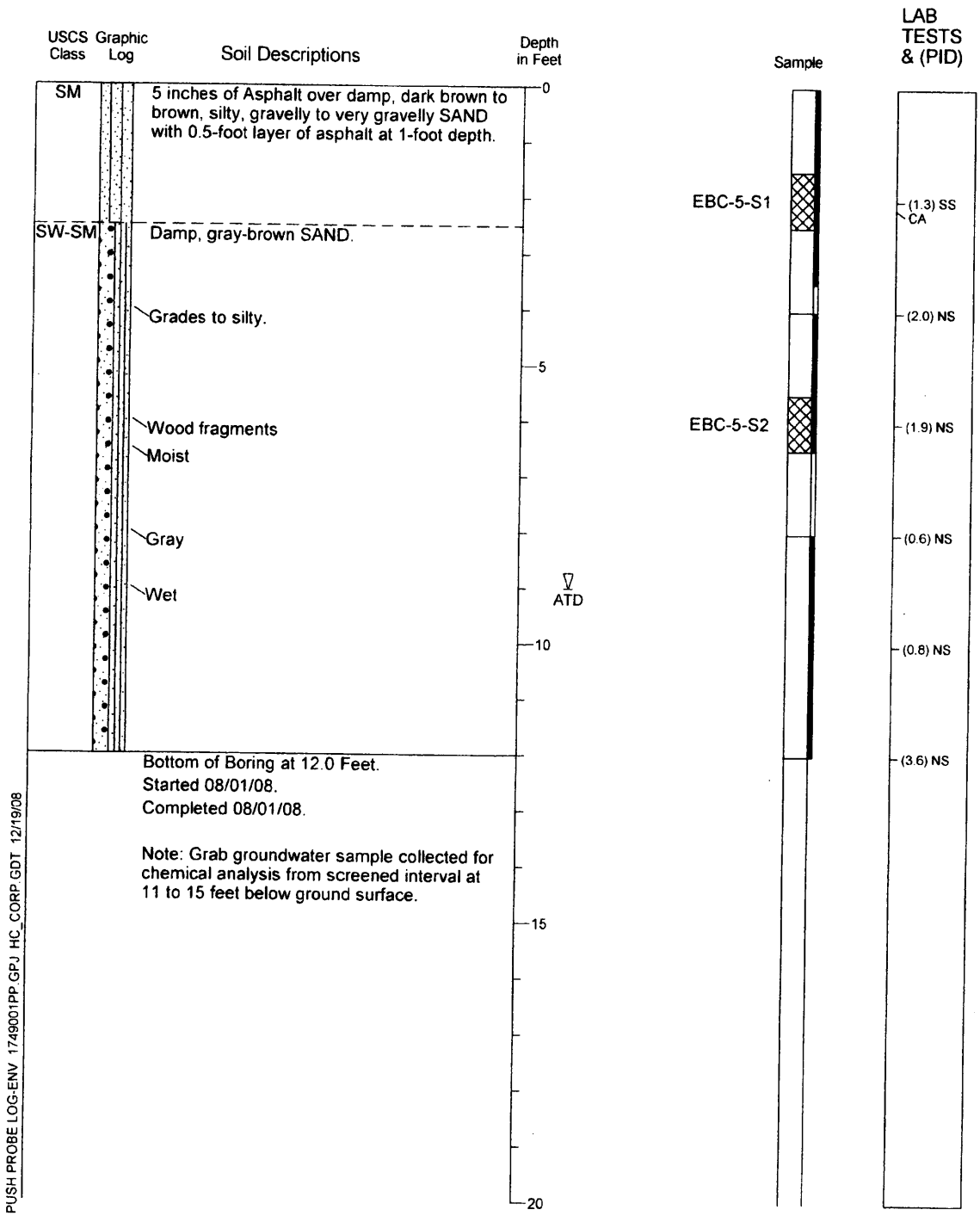
Figure A-5

Push Probe Log EBC-5

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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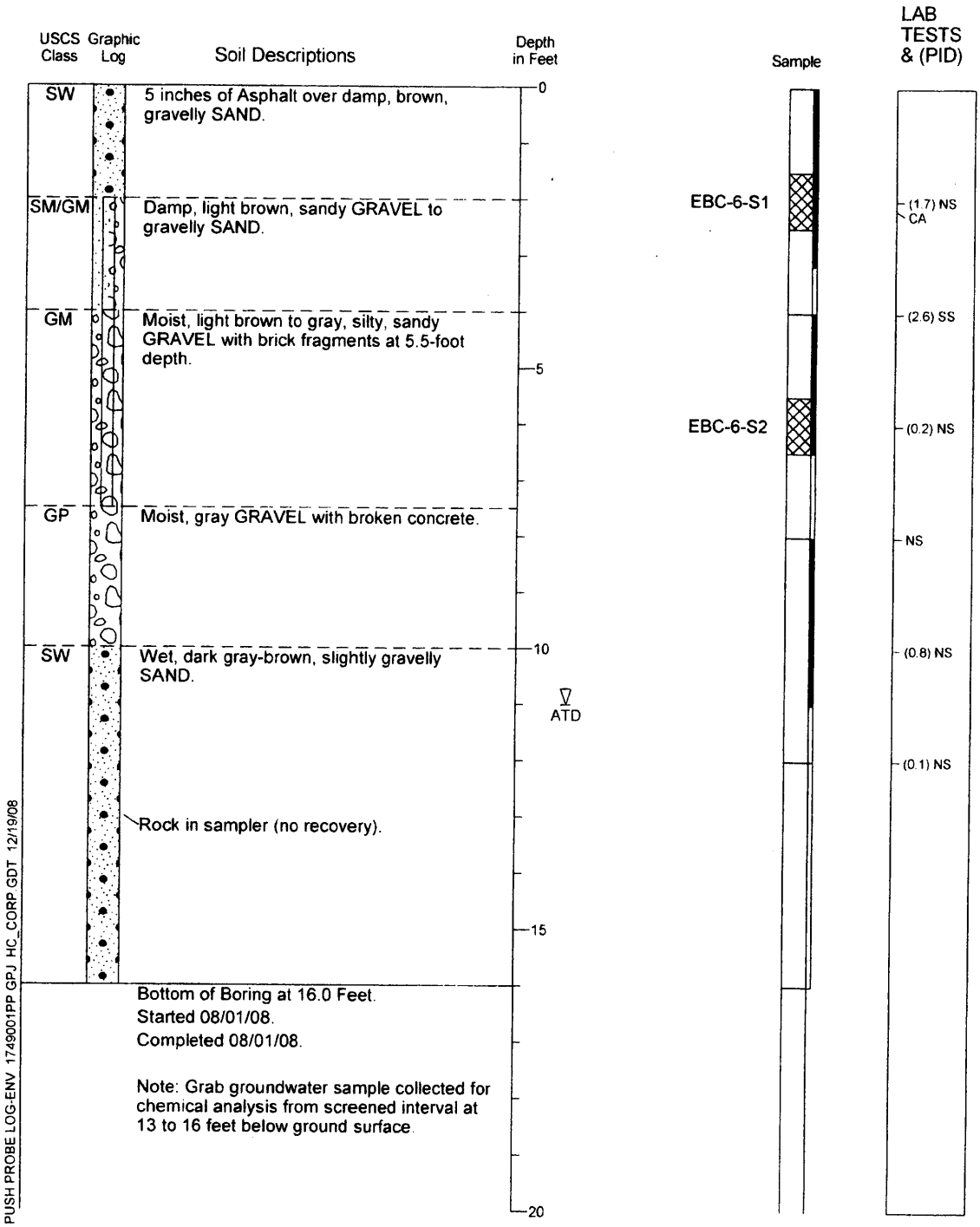
Figure A-6

Push Probe Log EBC-6

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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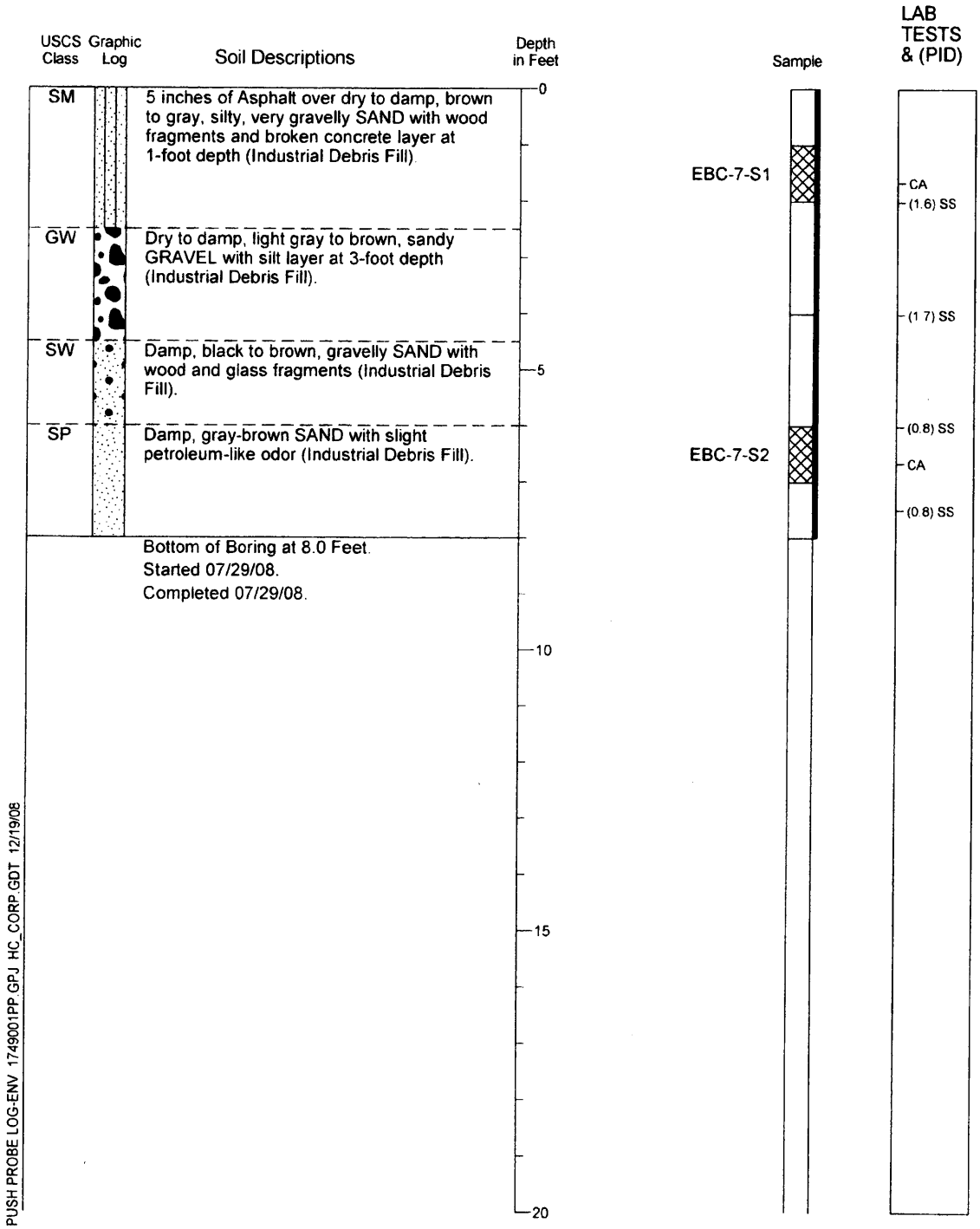
17490-01 *8/08*

Figure A-7

Push Probe Log EBC-7

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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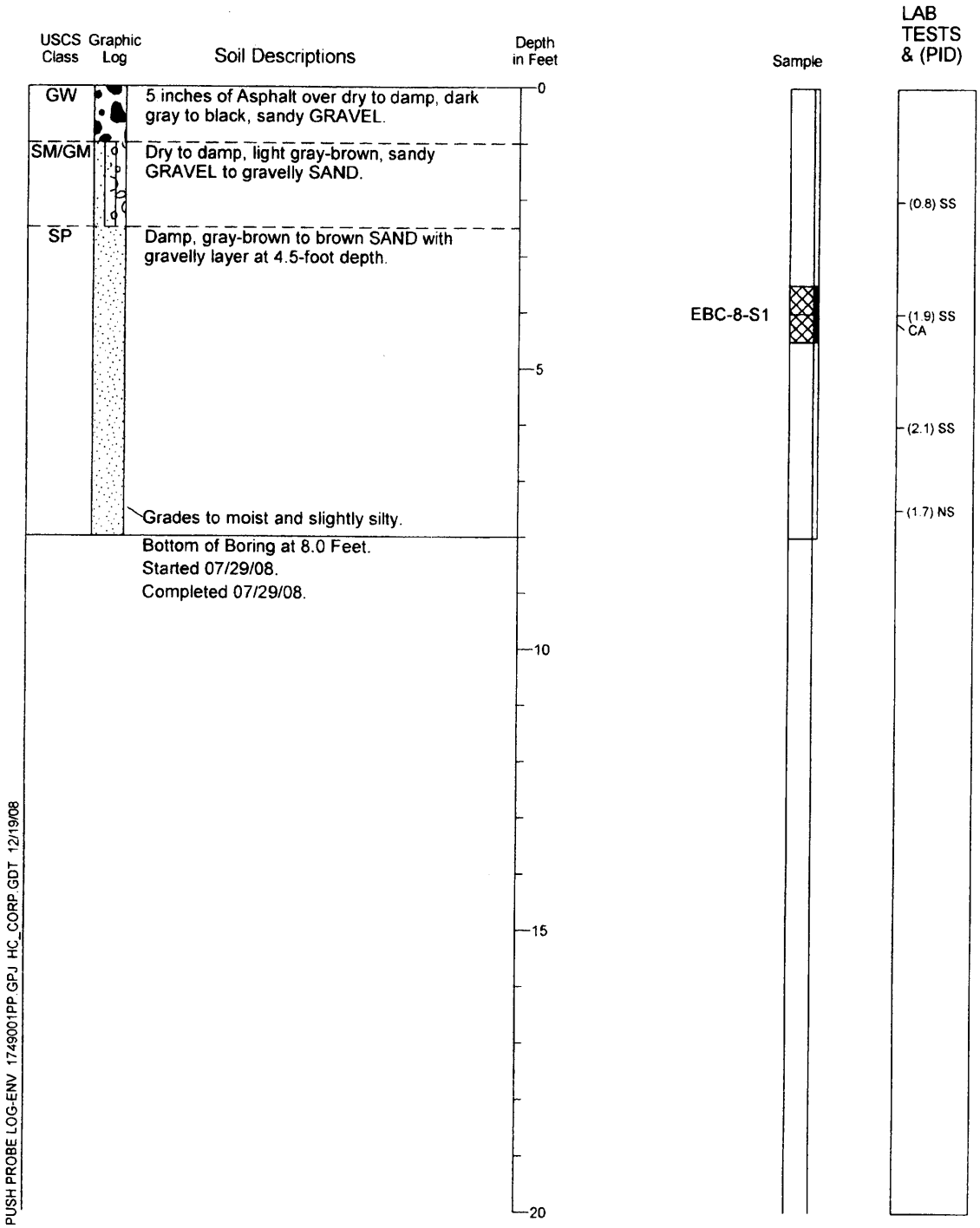
Figure A-8

Push Probe Log EBC-8

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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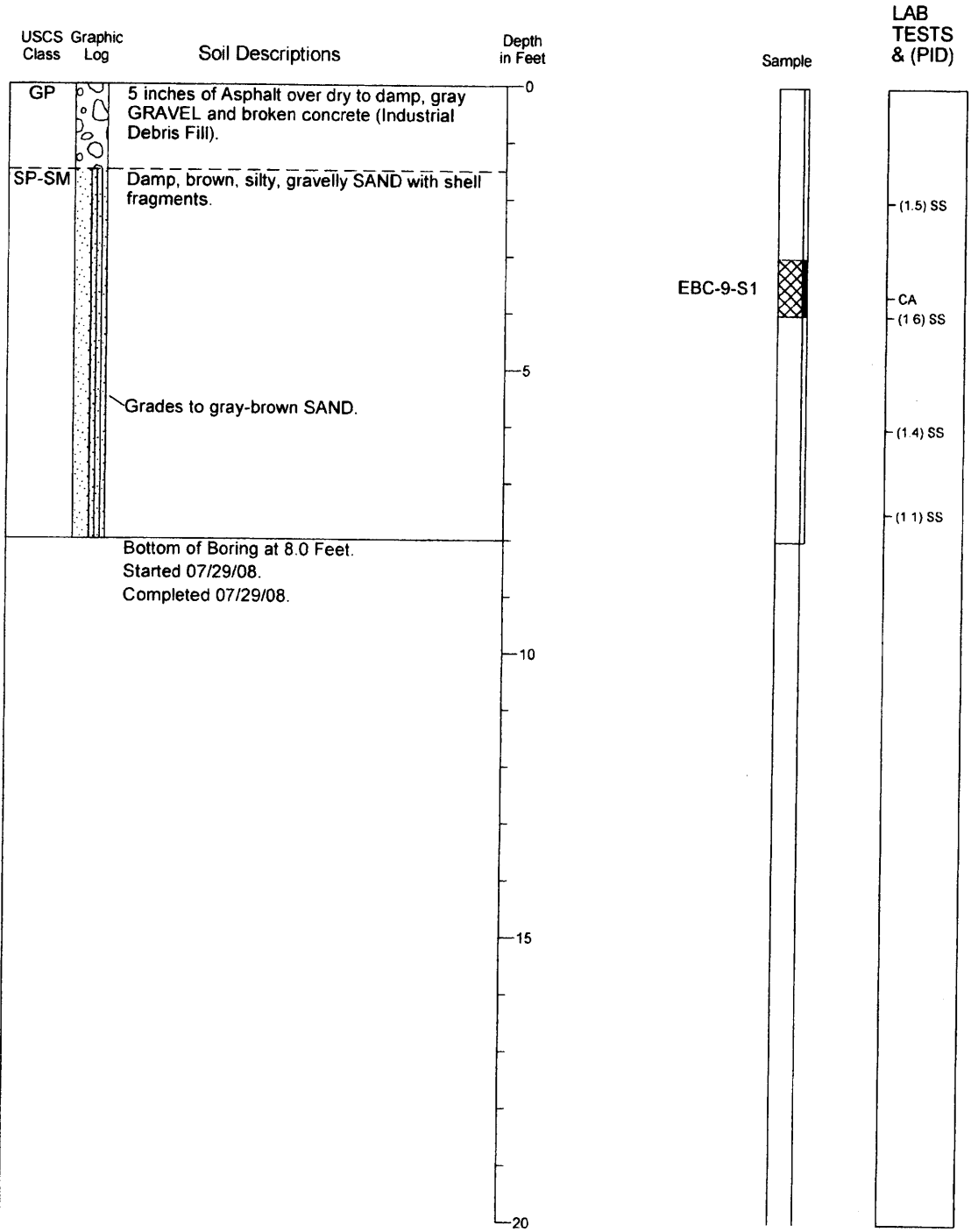
17490-01 *7/08*

Figure A-9

Push Probe Log EBC-9

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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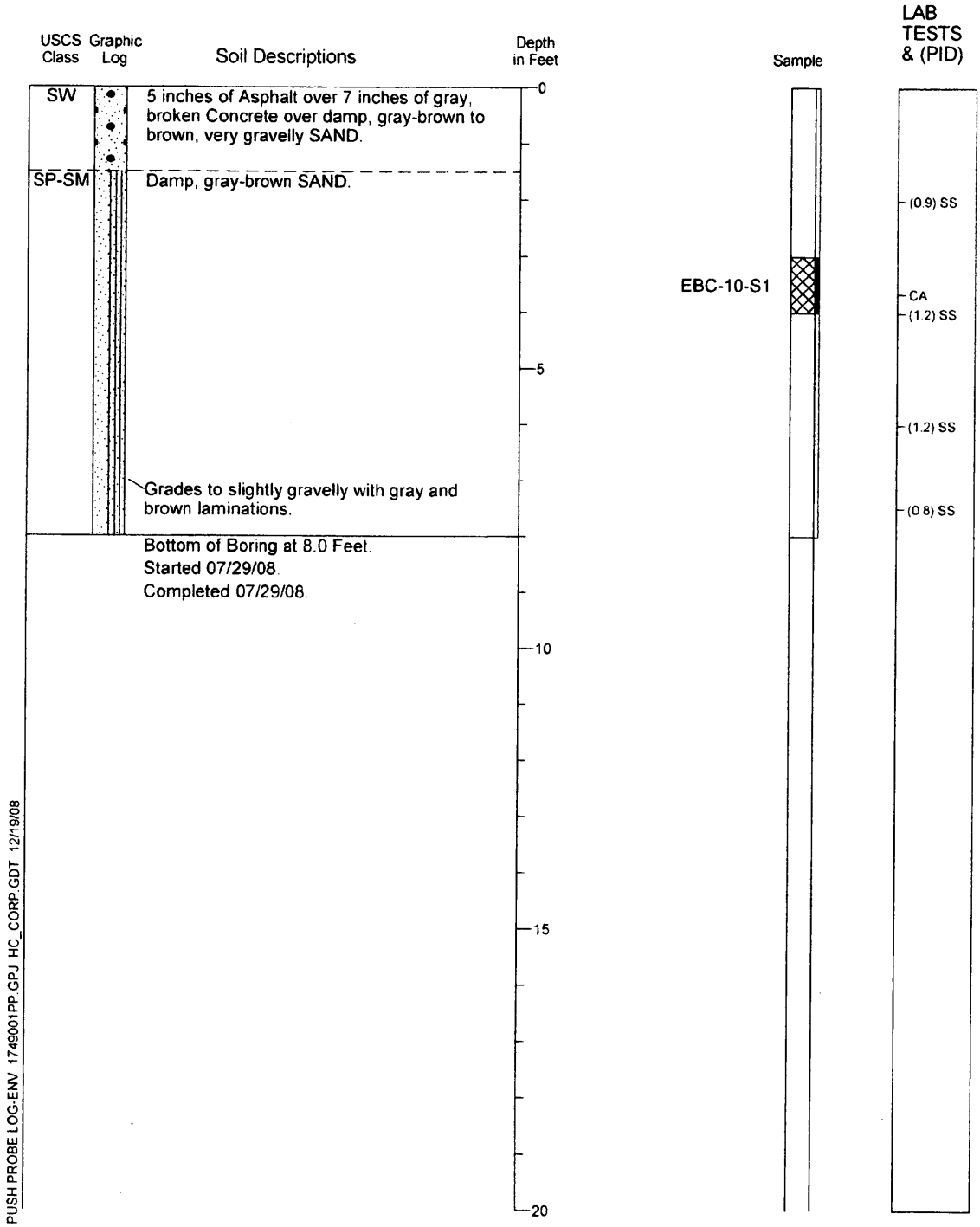
Figure A-10

Push Probe Log EBC-10

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
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4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
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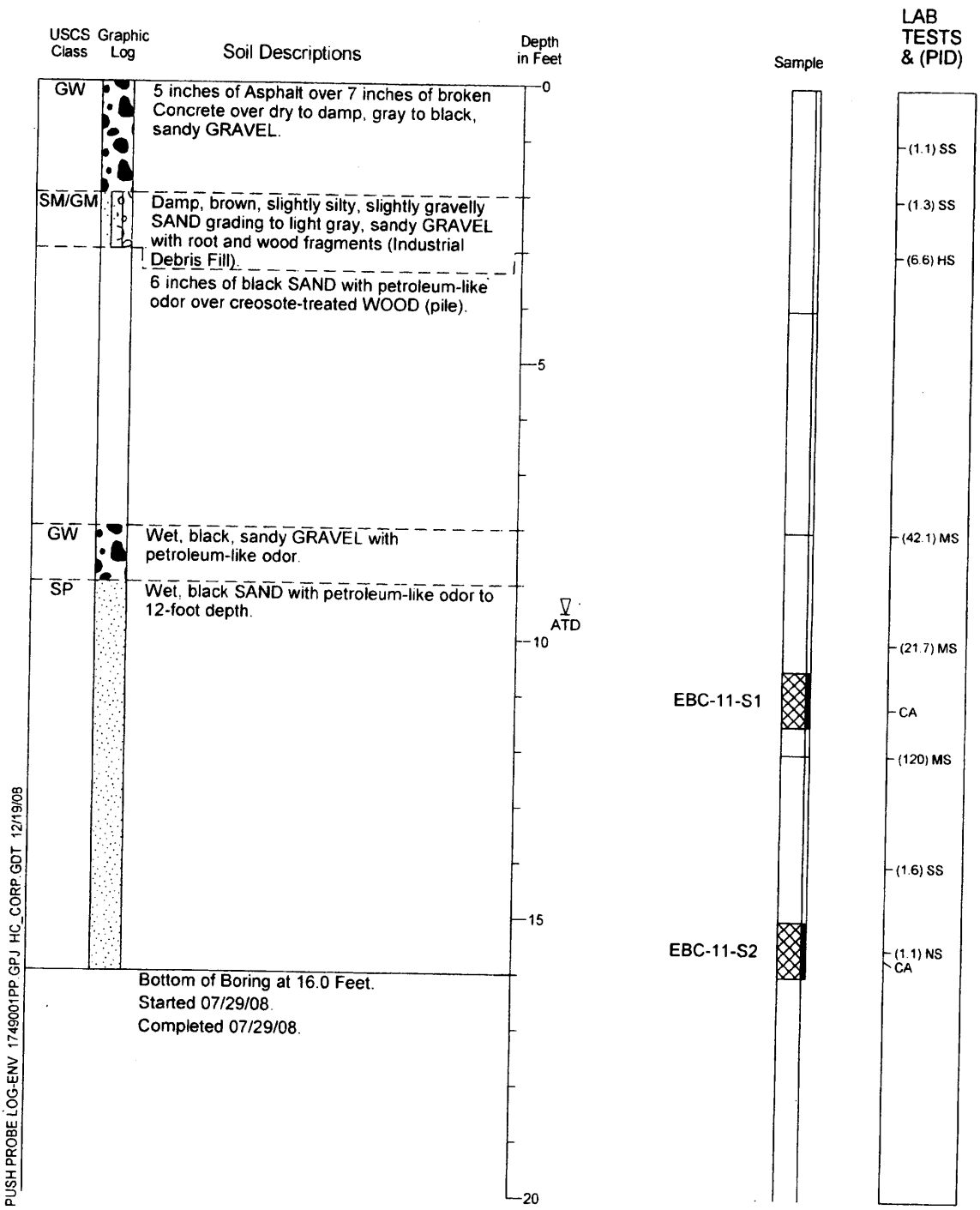
Figure A-11

Push Probe Log EBC-11

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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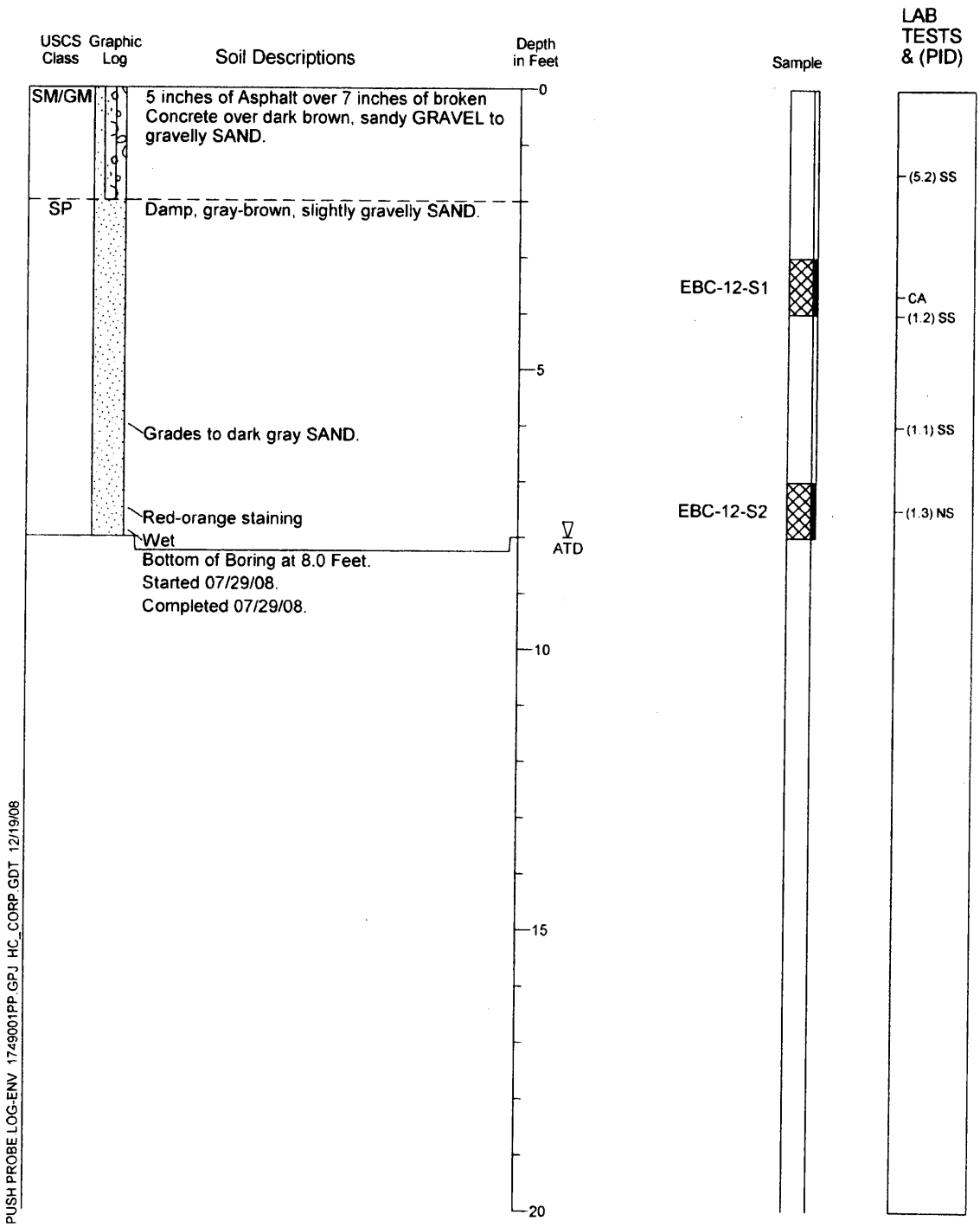
Figure A-12

Push Probe Log EBC-12

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 17490001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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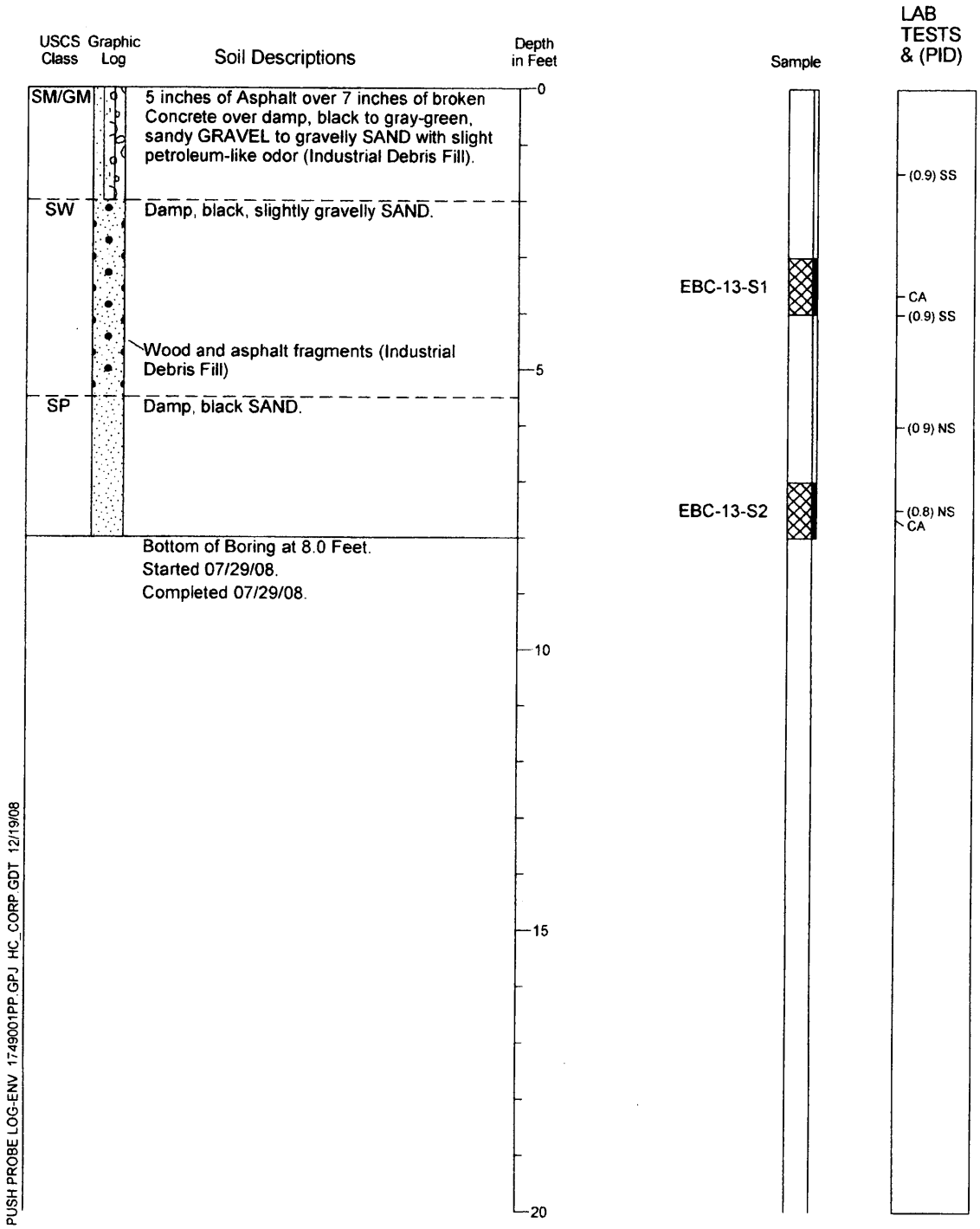
Figure A-13

Push Probe Log EBC-13

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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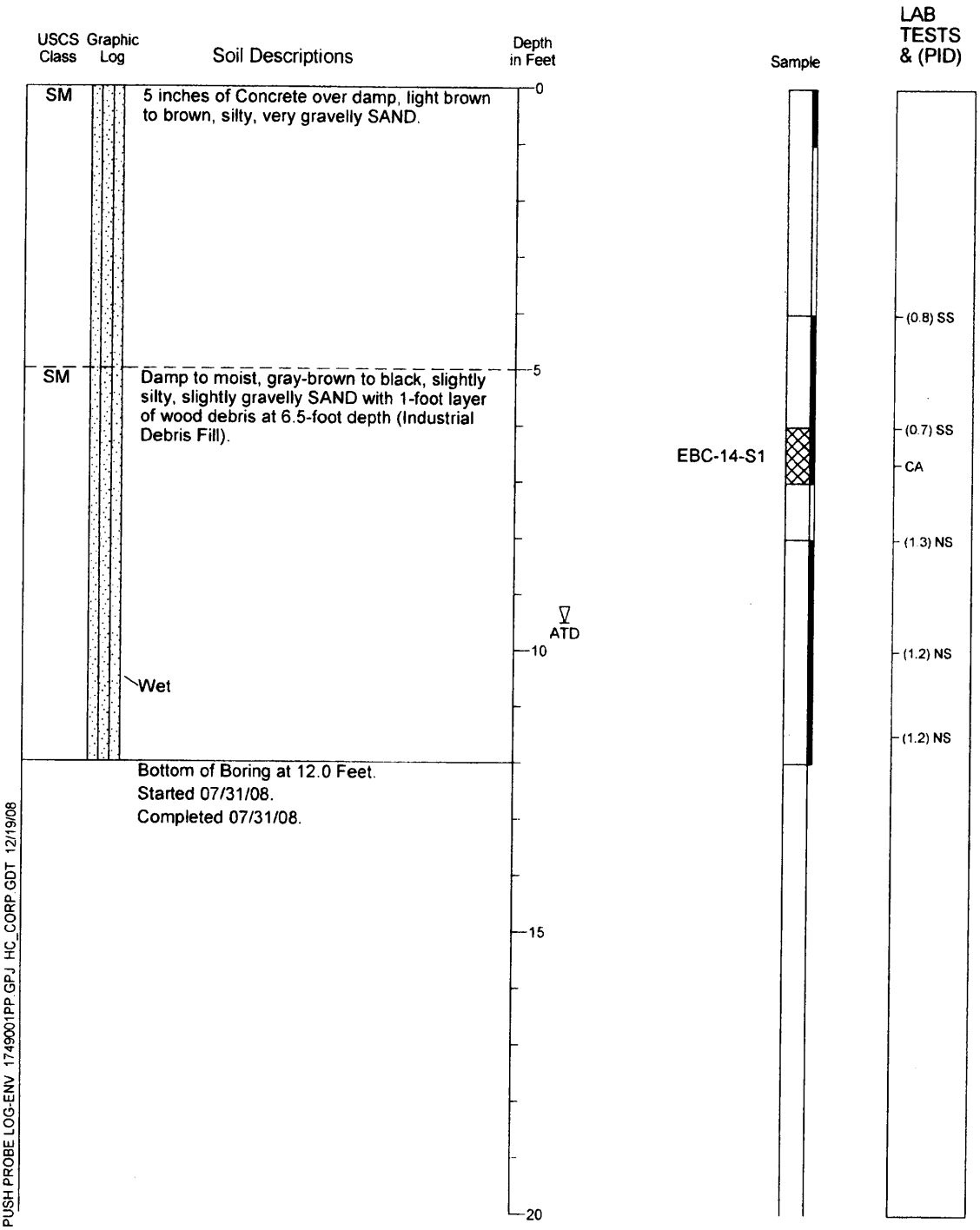
Figure A-14

Push Probe Log EBC-14

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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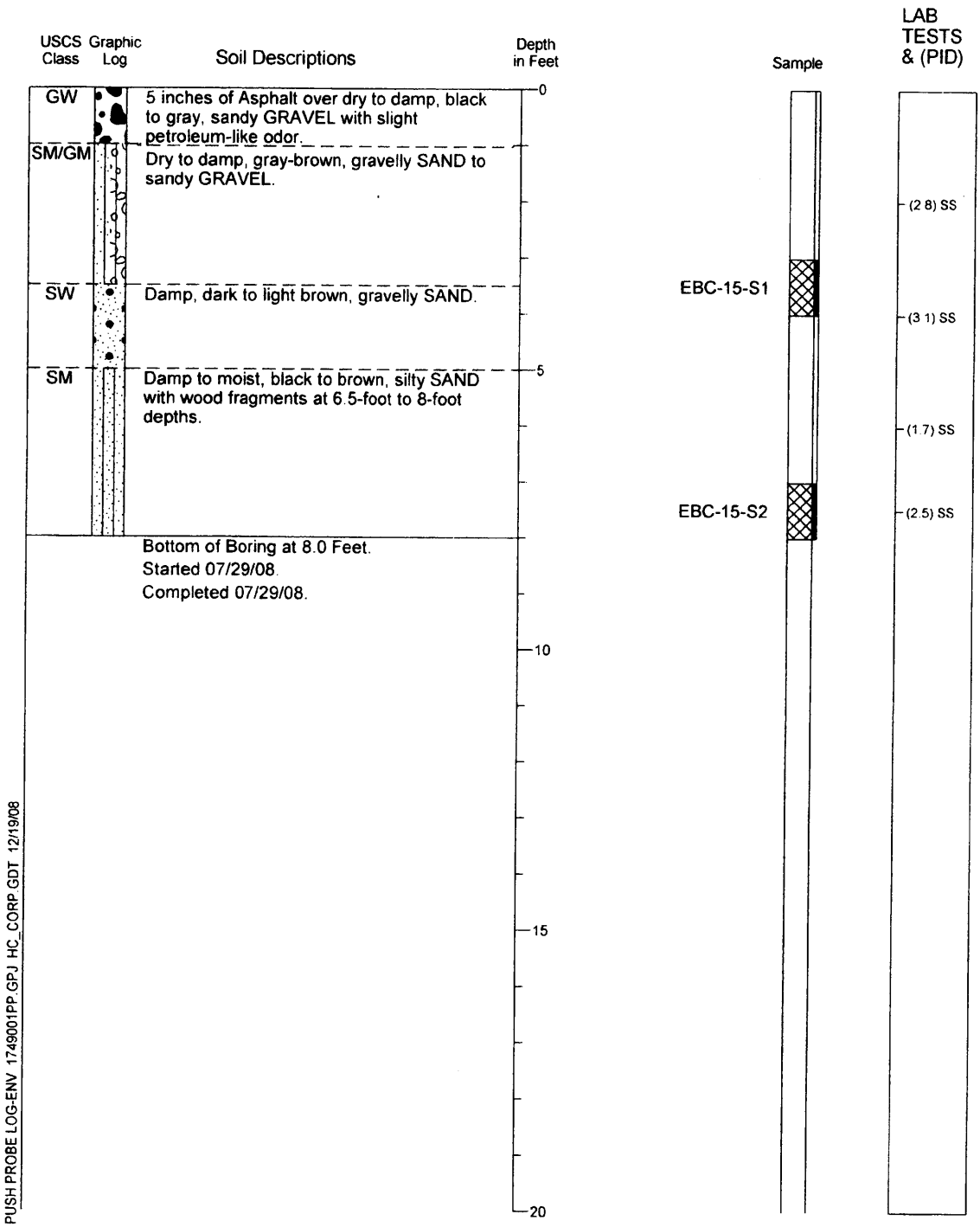
Figure A-15

Push Probe Log EBC-15

Location: See Figure 2.
Approximate Ground Surface Elevation: Feet
Horizontal Datum:
Vertical Datum:

Drill Equipment: Push Probe
Sample Type: Acetate Liner
Hole Diameter: 2 inches
Logged By: C. Ulberg Reviewed By: A. Goodwin



PUSH PROBE LOG-ENV 1749001PP.GPJ HC_CORP.GDT 12/19/08

1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. USCS designations are based on visual manual classification (ASTM D 2488) unless otherwise supported by laboratory testing (ASTM D 2487).
4. Groundwater level, if indicated, is at time of drilling (ATD) or for date specified. Level may vary with time.
5. SS = Slight Sheen, MS = Moderate Sheen, HS = Heavy Sheen, NS = No Sheen.

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Figure A-16

APPENDIX B
ANALYTICAL RESULTS FOR SOIL AND GROUNDWATER SAMPLES

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
TPH in mg/kg									
Diesel-Range Hydrocarbons	2,000		180	5.8	900	560	5.7 U	7	15
Motor Oil-Range Hydrocarbons	2,000		960	17	1400	950	11 U	12 U	98
Gasoline-Range Hydrocarbons	100/30 [a]		26	7.7 U	**160**	**150**	6.9 U	9.2 U	9.6
Metals in mg/kg									
Arsenic	20	88	**240 J**	5 U	**50**	**120**	6 U	6 U	10 U
Cadmium		3,500	3 J	0.2 U	1.6	3.5	0.2 U	0.2 U	0.5 U
Chromium			72 J	14.4	58	67	16.1	15.4	21
Copper		130,000	1630 J	16.9	208	668	13.1	21.4	120
Lead	1,000		790 J	13	923	724	2 U	3	7
Mercury		1,100	0.49 J	0.08	0.86	1.3	0.05 U	0.05 U	0.05 U
Nickel		70,000	50 J	7	51	54	10	8	29
Zinc		1,100,000	2300	42	789	1690	43	25	52
BTEX (8021B) in µg/kg									
Benzene		2,400,000	38	19 U	16 U	210	17 U	23 U	22 U
Ethylbenzene		350,000,000	31 U	19 U	44	56	17 U	23 U	22 U
m,p-Xylene		7,000,000,000	89	38 U	40	100	35 U	46 U	44 U
o-Xylene		7,000,000,000	31 U	19 U	74	20 U	17 U	23 U	22 U
Toluene		280,000,000	110	19 U	28	120	17 U	23 U	22 U
PCBs in µg/kg									
Aroclor 1016		250,000	32 U	33 U	73 U	31 U	31 U	33 U	33 U
Aroclor 1221			32 U	33 U	73 U	31 U	31 U	33 U	33 U
Aroclor 1232			32 U	33 U	73 U	31 U	31 U	33 U	33 U
Aroclor 1242			32 U	33 U	73 U	31 U	31 U	33 U	33 U
Aroclor 1248			32 U	33 U	250	130	31 U	33 U	33 U
Aroclor 1254		70,000	220	33 U	480	280	31 U	33 U	33 U
Aroclor 1260			310	33 U	570	100	31 U	33 U	33 U
Total PCBs	10,000	66,000	610	115.5	1446	572	108.5	115.5	115.5
LPAHs in µg/kg									
Naphthalene		70,000,000	420	58 U	840	2400	64 U	61 U	200 U
2-Methylnaphthalene			190 U	58 U	580	1100	64 U	61 U	200 U
Acenaphthylene			190 U	58 U	220 U	180 U	64 U	61 U	200 U
Acenaphthene		210,000,000	190 U	58 U	2400	1000	64 U	61 U	200 U
Fluorene		140,000,000	300	58 U	1900	790	64 U	61 U	200 U
Phenanthrene			2100	58 U	5200	3100	64 U	61 U	200 U
Anthracene		1,100,000,000	340	58 U	2000	1300	64 U	61 U	200 U
Total LPAHs			3445	203	13030	9780	224	213.5	700

Table B-1 - Complete Analytical Results for Soil Samples

	Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
	Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
	Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
HPAHs in µg/kg										
	Fluoranthene		140,000,000	2200	58 U	3800	3000	64 U	61 U	200 U
	Pyrene		110,000,000	1800	58 U	4600	3400	64 U	61 U	200 U
*	Benzo(a)anthracene		18,000	630	58 U	770	740	64 U	61 U	200 U
*	Chrysene		18,000	800	58 U	1000	1100	64 U	61 U	200 U
*	Benzo(b)fluoranthene		18,000	860	58 U	430	920	64 U	61 U	200 U
*	Benzo(k)fluoranthene		18,000	680	58 U	500	600	64 U	61 U	200 U
*	Benzo(a)pyrene		18,000	700	58 U	430	580	64 U	61 U	200 U
*	Indeno(1,2,3-cd)pyrene		18,000	330	58 U	220 U	180 U	64 U	61 U	200 U
*	Dibenz(a,h)anthracene		18,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
	Benzo(g,h,i)perylene		18,000	400	58 U	220 U	200	64 U	61 U	200 U
	Total HPAHs			4495	290 U	11860	10720	320 U	305 U	1000 U
*	Total cPAHs[b]	2,000	18,000	968	44 U	632	835	48 U	46 U	151 U
Semivolatiles in µg/kg										
	1,2,4-Trichlorobenzene		35,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
	1,2-Dichlorobenzene		320,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
	1,3-Dichlorobenzene			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	1,4-Dichlorobenzene		5,500,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
	1-Methylnaphthalene			190 U	58 U	760	670	64 U	61 U	200 U
	2,2'-Oxybis(1-Chloropropane)			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	2,4,5-Trichlorophenol		350,000,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2,4,6-Trichlorophenol		12,000,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2,4-Dichlorophenol		11,000,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2,4-Dimethylphenol		70,000,000	190 U	58 U	220 U	1100	64 U	61 U	200 U
	2,4-Dinitrophenol		7,000,000	1900 U	580 U	2200 U	1800 U	640 U	610 U	2000 U
	2,4-Dinitrotoluene		7,000,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2,6-Dinitrotoluene		3,500,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2-Chloronaphthalene			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	2-Chlorophenol		18,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
	2-Methylphenol			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	2-Nitroaniline			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	2-Nitrophenol			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	3,3'-Dichlorobenzidine		290,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	3-Nitroaniline			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	4,6-Dinitro-2-Methylphenol			1900 U	580 U	2200 U	1800 U	640 U	610 U	2000 U
	4-Bromophenyl-phenylether			190 U	58 U	220 U	180 U	64 U	61 U	200 U
	4-Chloro-3-methylphenol			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	4-Chloroaniline			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
	4-Chlorophenyl-phenylether			190 U	58 U	220 U	180 U	64 U	61 U	200 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
4-Methylphenol			190 U	58 U	220 U	860	64 U	61 U	200 U
4-Nitroaniline			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
4-Nitrophenol			940 U	290 U	1100 U	920 U	320 U	310 U	990 U
Benzoic Acid		14,000,000,000	1900 U	580 U	2200 U	1800 U	640 U	610 U	2000 U
Benzyl Alcohol		1,100,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
bis(2-Chloroethoxy) Methane			190 U	58 U	220 U	180 U	64 U	61 U	200 U
Bis-(2-Chloroethyl) Ether		120,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
bis(2-Ethylhexyl)phthalate		9,400,000	1800	58 U	650	220	64 U	61 U	200 U
Butylbenzylphthalate		700,000,000	200	58 U	220 U	180 U	64 U	61 U	200 U
Carbazole		6,600,000	240	58 U	700	320	64 U	61 U	200 U
Dibenzofuran		7,000,000	250	58 U	1200	840	64 U	61 U	200 U
Diethylphthalate		2,800,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Dimethylphthalate		3,500,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Di-n-Butylphthalate			190 U	58 U	220 U	180 U	64 U	61 U	200 U
Di-n-Octyl phthalate		70,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Hexachlorobenzene		82,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Hexachlorobutadiene		700,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Hexachlorocyclopentadiene		21,000,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
Hexachloroethane		9,400,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Isophorone		140,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Nitrobenzene		1,800,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
N-Nitroso-Di-N-Propylamine		19,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
N-Nitrosodiphenylamine		27,000,000	190 U	58 U	290 Y	180 U	64 U	61 U	200 U
Pentachlorophenol		1,100,000	940 U	290 U	1100 U	920 U	320 U	310 U	990 U
Phenol		2,100,000,000	190 U	58 U	220 U	180 U	64 U	61 U	200 U
Volatiles in µg/kg									
1,1,1,2-Tetrachloroethane		5,000,000		1.3 U		54 U	1.2 U		
1,1,1-Trichloroethane		3,200,000,000		1.3 U		54 U	1.2 U		
1,1,2,2-Tetrachloroethane		660,000		1.3 U		54 U	1.2 U		
1,1,2-Trichloro-1,2,2-trifluoroethane				2.6 U		110 U	2.3 U		
1,1,2-Trichloroethane		2,300,000		1.3 U		54 U	1.2 U		
1,1-Dichloroethane		700,000,000		1.3 U		54 U	1.2 U		
1,1-Dichloroethene				1.3 U		54 U	1.2 U		
1,1-Dichloropropene				1.3 U		54 U	1.2 U		
1,2,3-Trichlorobenzene				6.6 U		270 U	5.8 U		
1,2,3-Trichloropropane		19,000		2.6 U		110 U	2.3 U		
1,2,4-Trichlorobenzene				6.6 U		270 U	5.8 U		
1,2,4-Trimethylbenzene		180,000,000		1.3 U		2400	1.2 U		
1,2-Dibromo-3-chloropropane		94,000		6.6 U		270 U	5.8 U		

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
1,2-Dichlorobenzene		320,000,000		1.3 U		54 U	1.2 U		
1,2-Dichloroethane		1,400,000		1.3 U		54 U	1.2 U		
1,2-Dichloropropane		1,900,000		1.3 U		54 U	1.2 U		
1,3,5-Trimethylbenzene		180,000,000		1.3 U		1200	1.2 U		
1,3-Dichlorobenzene				1.3 U		54 U	1.2 U		
1,3-Dichloropropane				1.3 U		54 U	1.2 U		
1,4-Dichlorobenzene		5,500,000		1.3 U		54 U	1.2 U		
2,2-Dichloropropane				1.3 U		54 U	1.2 U		
2-Butanone				6.6 U		270 U	5.8 U		
2-Chloroethylvinylether				6.6 U		270 U	5.8 U		
2-Chlorotoluene				1.3 U		54 U	1.2 U		
2-Hexanone				6.6 U		270 U	5.8 U		
4-Chlorotoluene				1.3 U		54 U	1.2 U		
4-Isopropyltoluene				1.3 U		520	1.2 U		
4-Methyl-2-Pentanone (MIBK)				6.6 U		270 U	5.8 U		
Acetone[c]		350,000,000		31		360	27		
Acrolein				66 U		2700 U	58 U		
Acrylonitrile		240,000		6.6 U		270 U	5.8 U		
Benzene		2,400,000		1.3 U		54 U	1.2 U		
Bromobenzene				1.3 U		54 U	1.2 U		
Bromochloromethane				1.3 U		54 U	1.2 U		
Bromodichloromethane		2,100,000		1.3 U		54 U	1.2 U		
Bromoethane				2.6 U		110 U	2.3 U		
Bromoform		17,000,000		1.3 U		54 U	1.2 U		
Bromomethane		4,900,000		1.3 U		54 U	1.2 U		
Carbon Disulfide		350,000,000		1.3 U		54 U	7.6		
Carbon Tetrachloride		1,000,000		1.3 U		54 U	1.2 U		
Chlorobenzene		70,000,000		1.3 U		54 U	1.2 U		
Chloroethane				1.3 U		54 U	1.2 U		
Chloroform		22,000,000		1.3 U		54 U	1.2 U		
Chloromethane		10,000,000		1.3 U		54 U	1.2 U		
cis-1,2-Dichloroethene				1.3 U		54 U	1.2 U		
cis-1,3-Dichloropropene				1.3 U		54 U	1.2 U		

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-1-S1**	EBC-1-S2	**EBC-2-S1**	**EBC-3-S1**	EBC-3-S2	EBC-4-S1	**EBC-5-S1**
Sampling Date:	Method A	Method C	7/30/2008	7/30/2008	7/31/2008	7/30/2008	7/30/2008	7/30/2008	8/1/2008
Sample Depth in Feet:	Industrial	Direct Contact	1 to 2	5.5 to 6.5	2.5 to 3.5	2.5 to 3.5	10 to 11	7 to 8	1.5 to 2.5
Dibromochloromethane		1,600,000		1.3 U		54 U	1.2 U		
Dibromomethane				1.3 U		54 U	1.2 U		
Ethylbenzene		350,000,000		1.3 U		230	1.2 U		
Ethylene Dibromide				1.3 U		54 U	1.2 U		
Hexachlorobutadiene		700,000		6.6 U		270 U	5.8 U		
Isopropylbenzene				1.3 U		91	1.2 U		
m,p-Xylene		7,000,000,000		1.3 U		880	1.2 U		
Methyl Iodide				1.3 U		54 U	1.2 U		
Methylene Chloride[c]		18,000,000		62		270	2.3 U		
Naphthalene		70,000,000		6.6 U		1400	5.8 U		
n-Butylbenzene				1.3 U		54 U	1.2 U		
n-Propylbenzene				1.3 U		160	1.2 U		
o-Xylene		7,000,000,000		1.3 U		680	1.2 U		
sec-Butylbenzene				1.3 U		98	1.2 U		
Styrene		4,400,000		1.3 U		54 U	1.2 U		
tert-Butylbenzene				1.3 U		54 U	1.2 U		
Tetrachloroethene				1.3 U		54 U	1.2 U		
Toluene		280,000,000		1.3 U		100	1.2 U		
trans-1,2-Dichloroethene				1.3 U		54 U	1.2 U		
trans-1,3-Dichloropropene				1.3 U		54 U	1.2 U		
trans-1,4-Dichloro-2-butene				6.6 U		270 U	5.8 U		
Trichloroethene				1.3 U		54 U	1.2 U		
Trichlorofluoromethane				32		54 U	1.2 U		
Vinyl Acetate				6.6 U		270 U	5.8 U		
Vinyl Chloride		88,000		1.3 U		54 U	1.2 U		

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
TPH in mg/kg									
Diesel-Range Hydrocarbons	2,000		10	**3600**	49	5 U	60	5.2 U	18
Motor Oil-Range Hydrocarbons	2,000		58	**5100**	10	10 U	180	10 U	24
Gasoline-Range Hydrocarbons	100/30 [a]		7.2 U	**320**	13	7.1 U	6.2 U	7.4 U	7.4 U
Metals in mg/kg									
Arsenic	20	88	8	**50**	5 U	5 U	6	5 U	6 U
Cadmium		3,500	0.3	4	0.2 U	0.2 U	0.5	0.2 U	0.2 U
Chromium			16.8	162	11.9	11.5	26	11.8	12.2
Copper		130,000	35.4	932	11.1	11.2	80.2	10.4	11.1
Lead	1,000		34	600	2	2 U	83	2 U	2 U
Mercury		1,100	0.05 U	3.31	0.04 U	0.04 U	0.29	0.04 U	0.06 U
Nickel		70,000	15	151	8	8	21	7	8
Zinc		1,100,000	67	2450	22	20	189	20	21
BTEX (8021B) in µg/kg									
Benzene		2,400,000	18 U	19 U	16 U	18 U	16 U	18 U	18 U
Ethylbenzene		350,000,000	18 U	130	16 U	18 U	16 U	18 U	18 U
m,p-Xylene		7,000,000,000	36 U	240	31 U	36 U	31 U	37 U	37 U
o-Xylene		7,000,000,000	18 U	220	16 U	18 U	16 U	18 U	18 U
Toluene		280,000,000	18 U	120	16 U	18 U	16 U	18 U	18 U
PCBs in µg/kg									
Aroclor 1016		250,000	33 U	370 U	32 U	32 U	32 U	32 U	31 U
Aroclor 1221			33 U	370 U	32 U	32 U	32 U	32 U	31 U
Aroclor 1232			33 U	370 U	32 U	32 U	32 U	32 U	31 U
Aroclor 1242			33 U	370 U	32 U	32 U	32 U	32 U	31 U
Aroclor 1248			33 U	2000	32 U	32 U	32 U	32 U	31 U
Aroclor 1254		70,000	33 U	3300	32 U	32 U	190	32 U	31 U
Aroclor 1260			33 U	3300	32 U	32 U	310	32 U	31 U
Total PCBs	10,000	66,000	115.5	9340	112	112	580	112	108.5
LPAHs in µg/kg									
Naphthalene		70,000,000	58 U	440	64 U	65 U	66 U	64 U	260
2-Methylnaphthalene			58 U	1700	64 U	65 U	66 U	64 U	62 U
Acenaphthylene			58 U	230 U	64 U	65 U	66 U	64 U	62 U
Acenaphthene		210,000,000	58 U	300	64 U	65 U	66 U	64 U	270
Fluorene		140,000,000	58 U	430	64 U	65 U	66 U	64 U	62 U
Phenanthrene			58 U	1800	64 U	65 U	66 U	64 U	62 U
Anthracene		1,100,000,000	58 U	390	64 U	65 U	66 U	64 U	62 U
Total LPAHs			203	5175	224	227.5	231	224	685

Table B-1 - Complete Analytical Results for Soil Samples

	Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
	Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
	Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
HPAHs in µg/kg										
	Fluoranthene		140,000,000	58 U	1400	64 U	65 U	66 U	64 U	62 U
	Pyrene		110,000,000	92	2400	64 U	65 U	66 U	64 U	62 U
*	Benzo(a)anthracene		18,000	58 U	520	64 U	65 U	66 U	64 U	62 U
*	Chrysene		18,000	58 U	870	64 U	65 U	66 U	64 U	62 U
*	Benzo(b)fluoranthene		18,000	68	490	64 U	65 U	66 U	64 U	62 U
*	Benzo(k)fluoranthene		18,000	58 U	390	64 U	65 U	66 U	64 U	62 U
*	Benzo(a)pyrene		18,000	58 U	440	64 U	65 U	66 U	64 U	62 U
*	Indeno(1,2,3-cd)pyrene		18,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
*	Dibenz(a,h)anthracene		18,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	Benzo(g,h,i)perylene		18,000	58 U	240	64 U	65 U	66 U	64 U	62 U
	Total HPAHs			392	6980	320 U	325 U	330 U	320 U	310 U
*	Total cPAHs	2,000	18,000	48	612	48 U	49 U	50 U	48 U	47 U
Semivolatiles in µg/kg										
	1,2,4-Trichlorobenzene		35,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	1,2-Dichlorobenzene		320,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	1,3-Dichlorobenzene			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	1,4-Dichlorobenzene		5,500,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	1-Methylnaphthalene			58 U	2000	64 U	65 U	66 U	64 U	62 U
	2,2'-Oxybis(1-Chloropropane)			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	2,4,5-Trichlorophenol		350,000,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2,4,6-Trichlorophenol		12,000,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2,4-Dichlorophenol		11,000,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2,4-Dimethylphenol		70,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	2,4-Dinitrophenol		7,000,000	580 U	2300 U	640 U	650 UJ	660 U	640 U	620 U
	2,4-Dinitrotoluene		7,000,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2,6-Dinitrotoluene		3,500,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2-Chloronaphthalene			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	2-Chlorophenol		18,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
	2-Methylphenol			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	2-Nitroaniline			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	2-Nitrophenol			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	3,3'-Dichlorobenzidine		290,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	3-Nitroaniline			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	4,6-Dinitro-2-Methylphenol			580 U	2300 U	640 U	650 UJ	660 U	640 U	620 U
	4-Bromophenyl-phenylether			58 U	230 U	64 U	65 U	66 U	64 U	62 U
	4-Chloro-3-methylphenol			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	4-Chloroaniline			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
	4-Chlorophenyl-phenylether			58 U	230 U	64 U	65 U	66 U	64 U	62 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
4-Methylphenol			58 U	670	64 U	65 U	66 U	64 U	62 U
4-Nitroaniline			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
4-Nitrophenol			290 U	1200 U	320 U	330 U	330 U	320 U	310 U
Benzoic Acid		14,000,000,000	580 U	2300 U	640 U	650 U	660 U	640 U	620 U
Benzyl Alcohol		1,100,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
bis(2-Chloroethoxy) Methane			58 U	230 U	64 U	65 U	66 U	64 U	62 U
Bis-(2-Chloroethyl) Ether		120,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
bis(2-Ethylhexyl)phthalate		9,400,000	58 U	1100	64 U	65 U	66 U	64 U	62 U
Butylbenzylphthalate		700,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Carbazole		6,600,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Dibenzofuran		7,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Diethylphthalate		2,800,000,000	58 U	230 U	68	65 U	66 U	64 U	62 U
Dimethylphthalate		3,500,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Di-n-Butylphthalate			58 U	230 U	64 U	65 U	66 U	64 U	62 U
Di-n-Octyl phthalate		70,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Hexachlorobenzene		82,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Hexachlorobutadiene		700,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Hexachlorocyclopentadiene		21,000,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
Hexachloroethane		9,400,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Isophorone		140,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Nitrobenzene		1,800,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
N-Nitroso-Di-N-Propylamine		19,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
N-Nitrosodiphenylamine		27,000,000	58 U	960 U	64 U	65 U	66 U	64 U	62 U
Pentachlorophenol		1,100,000	290 U	1200 U	320 U	330 U	330 U	320 U	310 U
Phenol		2,100,000,000	58 U	230 U	64 U	65 U	66 U	64 U	62 U
Volatiles in µg/kg									
1,1,1,2-Tetrachloroethane		5,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1,1-Trichloroethane		3,200,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1,2,2-Tetrachloroethane		660,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane			2.4 U	1.9 U		2.6 U		2.6 U	2.4 U
1,1,2-Trichloroethane		2,300,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1-Dichloroethane		700,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1-Dichloroethene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,1-Dichloropropene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,2,3-Trichlorobenzene			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
1,2,3-Trichloropropane		19,000	2.4 U	1.9 U		2.6 U		2.6 U	2.4 U
1,2,4-Trichlorobenzene			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
1,2,4-Trimethylbenzene		180,000,000	1.2 U	120		1.3 U		1.3 U	1.2 U
1,2-Dibromo-3-chloropropane		94,000	6.1 U	4.6 U		6.6 U		6.4 U	6.1 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
1,2-Dichlorobenzene		320,000,000	1.2 U	3.9 J		1.3 U		1.3 U	1.2 U
1,2-Dichloroethane		1,400,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,2-Dichloropropane		1,900,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,3,5-Trimethylbenzene		180,000,000	1.2 U	56		1.3 U		1.3 U	1.2 U
1,3-Dichlorobenzene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,3-Dichloropropane			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
1,4-Dichlorobenzene		5,500,000	1.2 U	1.6		1.3 U		1.3 U	1.2 U
2,2-Dichloropropane			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
2-Butanone			6.1 U	28		6.6 U		6.4 U	6.1 U
2-Chloroethylvinylether			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
2-Chlorotoluene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
2-Hexanone			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
4-Chlorotoluene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
4-Isopropyltoluene			1.2 U	25		1.3 U		1.3 U	1.2 U
4-Methyl-2-Pentanone (MIBK)			6.1 U	7.8		6.6 U		6.4 U	6.1 U
Acetone[c]		350,000,000	33	190		26		29	28
Acrolein			61 U	46 U		66 U		64 U	61 U
Acrylonitrile		240,000	6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
Benzene		2,400,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Bromobenzene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Bromochloromethane			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Bromodichloromethane		2,100,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Bromoethane			2.4 U	1.9 U		2.6 U		2.6 U	2.4 U
Bromoform		17,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Bromomethane		4,900,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Carbon Disulfide		350,000,000	3.6	6.4		1.3 U		1.3 U	7.8
Carbon Tetrachloride		1,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Chlorobenzene		70,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Chloroethane			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Chloroform		22,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Chloromethane		10,000,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
cis-1,2-Dichloroethene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
cis-1,3-Dichloropropene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		**EBC-6-S1**	**EBC-7-S1**	**EBC-7-S2**	EBC-8-S1	EBC-9-S1	EBC-10-S1	**EBC-11-S1**
Sampling Date:	Method A	Method C	8/1/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/29/2008
Sample Depth in Feet:	Industrial	Direct Contact	1.5 to 2.5	1 to 2	6 to 7	3.5 to 4.5	3 to 4	3 to 4	10.5 to 11.5
Dibromochloromethane		1,600,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Dibromomethane			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Ethylbenzene		350,000,000	1.2 U	8.5		1.3 U		1.3 U	1.2 U
Ethylene Dibromide			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Hexachlorobutadiene		700,000	6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
Isopropylbenzene			1.2 U	5.6		1.3 U		1.3 U	1.2 U
m,p-Xylene		7,000,000,000	1.2 U	24		1.3 U		1.3 U	1.2 U
Methyl Iodide			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Methylene Chloride[c]		18,000,000	2.4 U	7.2		2.6 U		4.1	5.1
Naphthalene		70,000,000	6.1 U	110		6.6 U		6.4 U	6.1 U
n-Butylbenzene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
n-Propylbenzene			1.2 U	10		1.3 U		1.3 U	1.2 U
o-Xylene		7,000,000,000	1.2 U	19		1.3 U		1.3 U	1.2 U
sec-Butylbenzene			1.2 U	6.5		1.3 U		1.3 U	1.2 U
Styrene		4,400,000	1.2 U	1.2 J		1.3 U		1.3 U	1.2 U
tert-Butylbenzene			1.2 U	1.3		1.3 U		1.3 U	1.2 U
Tetrachloroethene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Toluene		280,000,000	1.2 U	6.2		1.3 U		1.3 U	1.2 U
trans-1,2-Dichloroethene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
trans-1,3-Dichloropropene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
trans-1,4-Dichloro-2-butene			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
Trichloroethene			1.2 U	0.9 U		1.3 U		1.3 U	1.2 U
Trichlorofluoromethane			1.2 U	0.9 U		1.3 U		1.3 U	1.4
Vinyl Acetate			6.1 U	4.6 U		6.6 U		6.4 U	6.1 U
Vinyl Chloride		88,000	1.2 U	0.9 U		1.3 U		1.3 U	1.2 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
TPH in mg/kg							
Diesel-Range Hydrocarbons	2,000		140	5.7 U	160	5.3 U	5.6 U
Motor Oil-Range Hydrocarbons	2,000		300	12 U	350	11 U	11 U
Gasoline-Range Hydrocarbons	100/30 [a]		8.9	6.6 U	6.8 U	11 U	7 U
Metals in mg/kg							
Arsenic	20	88	5 U	5 U	6	5 U	10 U
Cadmium		3,500	0.2 U	0.2 U	1.3	0.2 U	0.5 U
Chromium			13.9	23.7	29.7	12.7	26
Copper		130,000	10.3	12.9	83.5	11.6	29.2
Lead	1,000		2 U	3	140	2 U	48
Mercury		1,100	0.04 U	0.05 U	0.43	0.04 U	0.05
Nickel		70,000	9	30	16	8	18
Zinc		1,100,000	21	30	160	23	100
BTEX (8021B) in µg/kg							
Benzene		2,400,000	18 U	16 U	17 U	27 U	18 U
Ethylbenzene		350,000,000	18 U	16 U	17 U	27 U	18 U
m,p-Xylene		7,000,000,000	36 U	33 U	34 U	55 U	35 U
o-Xylene		7,000,000,000	18 U	16 U	17 U	27 U	18 U
Toluene		280,000,000	18 U	16 U	17 U	27 U	18 U
PCBs in µg/kg							
Aroclor 1016		250,000	32 U	33 U	53 U	33 U	33 U
Aroclor 1221			32 U	33 U	53 U	33 U	33 U
Aroclor 1232			32 U	33 U	53 U	33 U	33 U
Aroclor 1242			32 U	33 U	53 U	33 U	33 U
Aroclor 1248			32 U	33 U	53 U	33 U	33 U
Aroclor 1254		70,000	32 U	33 U	1900	33 U	33 U
Aroclor 1260			32 U	33 U	330	33 U	33 U
Total PCBs	10,000	66,000	112	115.5	2362.5	115.5	115.5
LPAHs in µg/kg							
Naphthalene		70,000,000	94	64 U	290 U	65 U	61 U
2-Methylnaphthalene			59 U	64 U	290 U	65 U	61 U
Acenaphthylene			59 U	64 U	290 U	65 U	61 U
Acenaphthene		210,000,000	62	64 U	290 U	65 U	61 U
Fluorene		140,000,000	59 U	64 U	290 U	65 U	61 U
Phenanthrene			75	64 U	290 U	65 U	61 U
Anthracene		1,100,000,000	59 U	64 U	290 U	65 U	61 U
Total LPAHs			349	224	1015	227.5	213.5

Table B-1 - Complete Analytical Results for Soil Samples

	Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
	Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
	Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
HPAHs in µg/kg								
	Fluoranthene		140,000,000	59 U	64 U	290 U	65 U	61 U
	Pyrene		110,000,000	59 U	64 U	290 U	65 U	61 U
*	Benzo(a)anthracene		18,000	59 U	64 U	290 U	65 U	61 U
*	Chrysene		18,000	59 U	64 U	290 U	65 U	61 U
*	Benzo(b)fluoranthene		18,000	59 U	64 U	290 U	65 U	61 U
*	Benzo(k)fluoranthene		18,000	59 U	64 U	290 U	65 U	61 U
*	Benzo(a)pyrene		18,000	59 U	64 U	290 U	65 U	61 U
*	Indeno(1,2,3-cd)pyrene		18,000	59 U	64 U	290 U	65 U	61 U
*	Dibenz(a,h)anthracene		18,000	59 U	64 U	290 U	65 U	61 U
	Benzo(g,h,i)perylene		18,000	59 U	64 U	290 U	65 U	61 U
	Total HPAHs			295 U	320 U	1450 U	325 U	305 U
*	Total cPAHs	2,000	18,000	45 U	48 U	219 U	49 U	46 U
Semivolatiles in µg/kg								
	1,2,4-Trichlorobenzene		35,000,000	59 U	64 U	290 U	65 U	61 U
	1,2-Dichlorobenzene		320,000,000	59 U	64 U	290 U	65 U	61 U
	1,3-Dichlorobenzene			59 U	64 U	290 U	65 U	61 U
	1,4-Dichlorobenzene		5,500,000	59 U	64 U	290 U	65 U	61 U
	1-Methylnaphthalene			59 U	64 U	290 U	65 U	61 U
	2,2'-Oxybis(1-Chloropropane)			59 U	64 U	290 U	65 U	61 U
	2,4,5-Trichlorophenol		350,000,000	300 U	320 U	1500 U	330 U	310 U
	2,4,6-Trichlorophenol		12,000,000	300 U	320 U	1500 U	330 U	310 U
	2,4-Dichlorophenol		11,000,000	300 U	320 U	1500 U	330 U	310 U
	2,4-Dimethylphenol		70,000,000	59 U	64 U	290 U	65 U	61 U
	2,4-Dinitrophenol		7,000,000	590 U	640 U	2900 U	650 U	610 U
	2,4-Dinitrotoluene		7,000,000	300 U	320 U	1500 U	330 U	310 U
	2,6-Dinitrotoluene		3,500,000	300 U	320 U	1500 U	330 U	310 U
	2-Chloronaphthalene			59 U	64 U	290 U	65 U	61 U
	2-Chlorophenol		18,000,000	59 U	64 U	290 U	65 U	61 U
	2-Methylphenol			59 U	64 U	290 U	65 U	61 U
	2-Nitroaniline			300 U	320 U	1500 U	330 U	310 U
	2-Nitrophenol			59 U	64 U	290 U	65 U	61 U
	3,3'-Dichlorobenzidine		290,000	300 U	320 U	1500 U	330 U	310 U
	3-Nitroaniline			300 U	320 U	1500 U	330 U	310 U
	4,6-Dinitro-2-Methylphenol			590 U	640 U	2900 U	650 U	610 U
	4-Bromophenyl-phenylether			59 U	64 U	290 U	65 U	61 U
	4-Chloro-3-methylphenol			300 U	320 U	1500 U	330 U	310 U
	4-Chloroaniline			300 U	320 U	1500 U	330 U	310 U
	4-Chlorophenyl-phenylether			59 U	64 U	290 U	65 U	61 U

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
4-Methylphenol			59 U	64 U	290 U	65 U	61 U
4-Nitroaniline			300 U	320 U	1500 U	330 U	310 U
4-Nitrophenol			300 U	320 U	1500 U	330 U	310 U
Benzoic Acid		14,000,000,000	590 U	640 U	2900 U	650 U	610 U
Benzyl Alcohol		1,100,000,000	59 U	64 U	290 U	65 U	61 U
bis(2-Chloroethoxy) Methane			59 U	64 U	290 U	65 U	61 U
Bis-(2-Chloroethyl) Ether		120,000	59 U	64 U	290 U	65 U	61 U
bis(2-Ethylhexyl)phthalate		9,400,000	59 U	64 U	290 U	65 U	61 U
Butylbenzylphthalate		700,000,000	59 U	64 U	290 U	65 U	61 U
Carbazole		6,600,000	59 U	64 U	290 U	65 U	61 U
Dibenzofuran		7,000,000	59 U	64 U	290 U	65 U	61 U
Diethylphthalate		2,800,000,000	59 U	64 U	290 U	65 U	61 U
Dimethylphthalate		3,500,000,000	59 U	64 U	290 U	65 U	61 U
Di-n-Butylphthalate			59 U	64 U	290 U	65 U	61 U
Di-n-Octyl phthalate		70,000,000	59 U	64 U	290 U	65 U	61 U
Hexachlorobenzene		82,000	59 U	64 U	290 U	65 U	61 U
Hexachlorobutadiene		700,000	59 U	64 U	290 U	65 U	61 U
Hexachlorocyclopentadiene		21,000,000	300 U	320 U	1500 U	330 U	310 U
Hexachloroethane		9,400,000	59 U	64 U	290 U	65 U	61 U
Isophorone		140,000,000	59 U	64 U	290 U	65 U	61 U
Nitrobenzene		1,800,000	59 U	64 U	290 U	65 U	61 U
N-Nitroso-Di-N-Propylamine		19,000	300 U	320 U	1500 U	330 U	310 U
N-Nitrosodiphenylamine		27,000,000	59 U	64 U	290 U	65 U	61 U
Pentachlorophenol		1,100,000	300 U	320 U	1500 U	330 U	310 U
Phenol		2,100,000,000	59 U	64 U	290 U	65 U	61 U
Volatiles in µg/kg							
1,1,1,2-Tetrachloroethane		5,000,000	1.2 U	1 UJ			
1,1,1-Trichloroethane		3,200,000,000	1.2 U	1 UJ			
1,1,2,2-Tetrachloroethane		660,000	1.2 U	1 UJ			
1,1,2-Trichloro-1,2,2-trifluoroethane			2.4 U	2 UJ			
1,1,2-Trichloroethane		2,300,000	1.2 U	1 UJ			
1,1-Dichloroethane		700,000,000	1.2 U	1 UJ			
1,1-Dichloroethene			1.2 U	1 UJ			
1,1-Dichloropropene			1.2 U	1 UJ			
1,2,3-Trichlorobenzene			5.9 U	5.1 UJ			
1,2,3-Trichloropropane		19,000	2.4 U	2 UJ			
1,2,4-Trichlorobenzene			5.9 U	5.1 UJ			
1,2,4-Trimethylbenzene		180,000,000	1.2 U	1 UJ			
1,2-Dibromo-3-chloropropane		94,000	5.9 U	5.1 UJ			

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
1,2-Dichlorobenzene		320,000,000	1.2 U	1 UJ			
1,2-Dichloroethane		1,400,000	1.2 U	1 UJ			
1,2-Dichloropropane		1,900,000	1.2 U	1 UJ			
1,3,5-Trimethylbenzene		180,000,000	1.2 U	1 UJ			
1,3-Dichlorobenzene			1.2 U	1 UJ			
1,3-Dichloropropane			1.2 U	1 UJ			
1,4-Dichlorobenzene		5,500,000	1.2 U	1 UJ			
2,2-Dichloropropane			1.2 U	1 UJ			
2-Butanone			5.9 U	5.1 UJ			
2-Chloroethylvinylether			5.9 U	5.1 UJ			
2-Chlorotoluene			1.2 U	1 UJ			
2-Hexanone			5.9 U	5.1 UJ			
4-Chlorotoluene			1.2 U	1 UJ			
4-Isopropyltoluene			1.2 U	1 UJ			
4-Methyl-2-Pentanone (MIBK)			5.9 U	5.1 UJ			
Acetone[c]		350,000,000	22	5.1 UJ			
Acrolein			59 U	51 UJ			
Acrylonitrile		240,000	5.9 U	5.1 UJ			
Benzene		2,400,000	1.2 U	1 UJ			
Bromobenzene			1.2 U	1 UJ			
Bromochloromethane			1.2 U	1 UJ			
Bromodichloromethane		2,100,000	1.2 U	1 UJ			
Bromoethane			2.4 U	2 UJ			
Bromoform		17,000,000	1.2 U	1 UJ			
Bromomethane		4,900,000	1.2 U	1 UJ			
Carbon Disulfide		350,000,000	22	1 UJ			
Carbon Tetrachloride		1,000,000	1.2 U	1 UJ			
Chlorobenzene		70,000,000	1.2 U	1 UJ			
Chloroethane			1.2 U	1 UJ			
Chloroform		22,000,000	1.2 U	1 UJ			
Chloromethane		10,000,000	1.2 U	1 UJ			
cis-1,2-Dichloroethene			1.2 U	1 UJ			
cis-1,3-Dichloropropene			1.2 U	1 UJ			

Table B-1 - Complete Analytical Results for Soil Samples

Sample ID[aa]:	MTCA Screening Criteria		EBC-11-S2	EBC-12-S1	**EBC-13-S1**	EBC-13-S2	**EBC-14-S1**
Sampling Date:	Method A	Method C	7/29/2008	7/29/2008	7/29/2008	7/29/2008	7/31/2008
Sample Depth in Feet:	Industrial	Direct Contact	15 to 16	3 to 4	3 to 4	7 to 8	6 to 7
Dibromochloromethane		1,600,000	1.2 U	1 UJ			
Dibromomethane			1.2 U	1 UJ			
Ethylbenzene		350,000,000	1.2 U	1 UJ			
Ethylene Dibromide			1.2 U	1 UJ			
Hexachlorobutadiene		700,000	5.9 U	5.1 UJ			
Isopropylbenzene			1.2 U	1 UJ			
m,p-Xylene		7,000,000,000	1.2 U	1 UJ			
Methyl Iodide			1.2 U	1 UJ			
Methylene Chloride[c]		18,000,000	21	2 UJ			
Naphthalene		70,000,000	14	5.1 UJ			
n-Butylbenzene			1.2 U	1 UJ			
n-Propylbenzene			1.2 U	1 UJ			
o-Xylene		7,000,000,000	1.2 U	1 UJ			
sec-Butylbenzene			1.2 U	1 UJ			
Styrene		4,400,000	1.2 U	1 UJ			
tert-Butylbenzene			1.2 U	1 UJ			
Tetrachloroethene			1.2 U	1 UJ			
Toluene		280,000,000	1.2 U	1 UJ			
trans-1,2-Dichloroethene			1.2 U	1 UJ			
trans-1,3-Dichloropropene			1.2 U	1 UJ			
trans-1,4-Dichloro-2-butene			5.9 U	5.1 UJ			
Trichloroethene			1.2 U	1 UJ			
Trichlorofluoromethane			12	1 UJ			
Vinyl Acetate			5.9 U	5.1 UJ			
Vinyl Chloride		88,000	1.2 U	1 UJ			

Bolded sample numbers indicate sample was collected from industrial fill layer.
Blank entry indicates no applicable MTCA criteria established or sample not analyzed for specific analyte.
U: Not detected at reporting limit indicated.
J: Estimated value
9 Bolded, boxed entry indicates concentration exceeds MTCA screening criteria
* denotes cPAH
Other constituents were not detected or were detected at concentrations below applicable regulatory criteria.
[aa] Bolded samples indicate sample collected from the industrial fill layer.
[a] 100 mg/kg when no benzene present, 30 mg/kg when benzene present.
[b] MTCA Method A Industrial screening levels for cPAHs are provided for comparative purposes only. MTCA Method A cPAH screening levels are based on groundwater protection, which is not applicable at this site.
Total cPAHs calculated using the toxicity equivalency methodology in WAC 173-340-708(8). 1/2 detection limit was used for non-detects.
[c] Suspected artifact from laboratory testing process.

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-1	EBC-2	EBC-3
Sampling Date:	Method B Marine Surface Water Criteria[a]		Criteria - Marine[g] Acute	Chronic	7/30/2008	7/31/2008	7/30/2008
TPH in mg/L							
Diesel-Range Hydrocarbons	0.5	[b]			0.25 U	0.38 J	0.25 U
Motor Oil-Range Hydrocarbons	0.5	[b]			0.5 U	0.5 UJ	0.5 U
Gasoline-Range Hydrocarbons	1.0	[b]			0.25 UJ	1.6	0.25 UJ
Total Metals in µg/L[e]							
Arsenic					2.55 U	0.51 U	2.56 U
Cadmium					0.102 U	0.028	0.424
Chromium					23.6	5.65	31.6
Copper					20.5	4.4	17.8
Lead					5.89	1.73	7.1
Mercury, Total				0.025	0.041 R	0.0878 R	0.0117 R
Nickel (soluable salts)					15.1	6.2	22.6
Zinc					53.3	9.8	52.5
Dissolved Metals in µg/L							
Arsenic, Dissolved	5	[c]	69	36	0.5 U	0.5 U	0.5 U
Cadmium, Dissolved	20		42	9.3	0.022	0.02 U	0.02 U
Chromium, Dissolved	490		1100	50	5.6	1.4	1.9
Copper, Dissolved	2,700		4.8	3.1	**3.8**	0.2	0.1 U
Lead, Dissolved			210	8.1	1.16	0.133	0.02 U
Mercury, Dissolved[f]			1.8	0.025	0.001 R	0.001 R	0.001 R
Nickel, Dissolved	1,100		74	8.2	4.7	1.2	1.6
Zinc, Dissolved	17,000		90	81	8.4	3	1.8
BTEX in ug/L							
Benzene	23				1 UJ	4	1 UJ
Ethylbenzene	6,900				1 UJ	1.4	1 UJ
m,p-Xylene					1 UJ	1.5	1 UJ
o-Xylene					1 UJ	1 U	1 UJ
Toluene	19,000				1 UJ	1 U	1 UJ
PCBs in ug/L							
Aroclor 1016	0.0058				1 U	1 UJ	1 U
Aroclor 1221					1 U	1 UJ	1 U
Aroclor 1232					1 U	1 UJ	1 U
Aroclor 1242					1 U	1 UJ	1 U
Aroclor 1248					1 U	1 UJ	1 U
Aroclor 1254	0.0017				1 U	1 UJ	1 U
Aroclor 1260					1 U	1 UJ	1 U
Total PCBs	0.00011		10	0.03	1 U	1 UJ	1 U
Volatiles in ug/L							
1,1,1,2-Tetrachloroethane					0.2 UJ	0.2 U	0.2 UJ
1,1,1-Trichloroethane	420,000				0.2 UJ	0.2 U	0.2 UJ
1,1,2,2-Tetrachloroethane	6.50				0.2 UJ	0.2 U	0.2 UJ
1,1,2-Trichloro-1,2,2-trifluoroethane					0.2 UJ	0.2 U	0.2 UJ
1,1,2-Trichloroethane	25				0.2 UJ	0.2 U	0.2 UJ
1,1-Dichloroethane					0.2 UJ	0.2	0.2 UJ
1,1-Dichloroethene					0.2 UJ	0.2 U	0.2 UJ
1,1-Dichloropropene					0.2 UJ	0.2 U	0.2 UJ
1,2,3-Trichlorobenzene					0.5 UJ	0.5 U	0.5 UJ
1,2,3-Trichloropropane					0.5 UJ	0.5 U	0.5 UJ
1,2,4-Trichlorobenzene					0.5 UJ	0.5 U	0.5 UJ
1,2,4-Trimethylbenzene					0.2 UJ	0.6	0.2 UJ
1,2-Dibromo-3-chloropropane					0.5 UJ	0.5 U	0.5 UJ
1,2-Dichlorobenzene	4,200				0.2 UJ	0.2 U	0.2 UJ

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-1	EBC-2	EBC-3
Sampling Date:	Method B		Criteria - Marine[g]		7/30/2008	7/31/2008	7/30/2008
	Marine Surface		Acute	Chronic			
1,2-Dichloroethane	59				0.2 UJ	0.2 U	0.2 UJ
1,2-Dichloropropane	230				0.2 UJ	0.2 U	0.2 UJ
1,3,5-Trimethylbenzene					0.2 UJ	0.2 U	0.2 UJ
1,3-Dichlorobenzene	2,600	[d]			0.2 UJ	0.2 U	0.2 UJ
1,3-Dichloropropane					0.2 UJ	0.2 U	0.2 UJ
1,4-Dichlorobenzene	4.9				0.2 UJ	0.2 U	0.2 UJ
2,2-Dichloropropane					0.2 UJ	0.2 U	0.2 UJ
2-Butanone					2.5 UJ	2.5 U	2.5 UJ
2-Chloroethylvinylether					1 UJ	1 U	1 UJ
2-Chlorotoluene					0.2 UJ	0.2 U	0.2 UJ
2-Hexanone					2.5 UJ	2.5 U	2.5 UJ
4-Chlorotoluene					0.2 UJ	0.2 U	0.2 UJ
4-Isopropyltoluene					0.2 UJ	0.2 U	0.2 UJ
4-Methyl-2-Pentanone (MIBK)					2.5 UJ	2.5 U	2.5 UJ
Acetone					3 UJ	3.8	3 UJ
Acrolein					5 UJ	5 U	5 UJ
Acrylonitrile	0.40				1 UJ	1 U	1 UJ
Benzene	23				0.2 UJ	4.4	0.2 UJ
Bromobenzene					0.2 UJ	0.2 U	0.2 UJ
Bromochloromethane					0.2 UJ	0.2 U	0.2 UJ
Bromodichloromethane	22	[d]			0.2 UJ	0.2 U	0.2 UJ
Bromoethane					0.2 UJ	0.2 U	0.2 UJ
Bromoform	220	[d]			0.2 UJ	0.2 U	0.2 UJ
Bromomethane	970				0.5 UJ	0.5 U	0.5 UJ
Carbon Disulfide					0.2 UJ	0.2 U	0.2 UJ
Carbon Tetrachloride	4.40	[d]			0.2 UJ	0.2 U	0.2 UJ
Chlorobenzene	5,000				0.2 UJ	0.2 U	0.2 UJ
Chloroethane					0.2 UJ	0.2 U	0.2 UJ
Chloroform	280				0.2 UJ	0.2 U	0.2 UJ
Chloromethane	1,300				0.2 UJ	0.2 U	0.2 UJ
cis-1,2-Dichloroethene					0.2 J	0.2 U	0.2 UJ
cis-1,3-Dichloropropene					0.2 UJ	0.2 U	0.2 UJ
Dibromochloromethane	21				0.2 UJ	0.2 U	0.2 UJ
Dibromomethane					0.2 UJ	0.2 U	0.2 UJ
Ethylbenzene	6,900				0.2 UJ	1	0.2 UJ
Ethylene Dibromide					0.2 UJ	0.2 U	0.2 UJ
Hexachlorobutadiene	3				0.5 UJ	0.5 U	0.5 UJ
Isopropylbenzene					0.2 UJ	1	0.2 UJ
m,p-Xylene					0.4 UJ	1.3	0.4 UJ
Methyl Iodide					1 UJ	1 U	1 UJ
Methylene Chloride	960				0.5 UJ	0.5 U	0.5 UJ
Naphthalene	4,900				0.5 UJ	2.7	0.5 UJ
n-Butylbenzene					0.2 UJ	0.2 U	0.2 UJ
n-Propylbenzene					0.2 UJ	0.2 U	0.2 UJ
o-Xylene					0.2 UJ	0.6	0.2 UJ
sec-Butylbenzene					0.2 UJ	0.2 U	0.2 UJ
Styrene					0.2 UJ	0.2 U	0.2 UJ
tert-Butylbenzene					0.2 UJ	0.2 U	0.2 UJ
Tetrachloroethene					0.2 UJ	0.2 U	0.2 UJ
Toluene	19,000				0.2 UJ	0.3	0.2 UJ
trans-1,2-Dichloroethene					0.2 UJ	0.2 U	0.2 UJ
trans-1,3-Dichloropropene					0.2 UJ	0.2 U	0.2 UJ

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality	EBC-1	EBC-2	EBC-3
Sampling Date:	Method B	Criteria - Marine[g]	7/30/2008	7/31/2008	7/30/2008
	Marine Surface	Acute Chronic			
trans-1,4-Dichloro-2-butene			1 UJ	1 U	1 UJ
Trichloroethene			0.2 UJ	0.2 U	0.2 UJ
Trichlorofluoromethane			0.2 UJ	0.2 U	0.2 UJ
Vinyl Acetate			1 UJ	1 U	1 UJ
Vinyl Chloride	37		0.2 UJ	0.2 U	0.3 J
Semivolatiles in ug/L					
1,2,4-Trichlorobenzene	2,300		1 U	1 UJ	1 U
1,2-Dichlorobenzene	4,200		1 U	1 UJ	1 U
1,3-Dichlorobenzene			1 U	1 UJ	1 U
1,4-Dichlorobenzene	4.9		1 U	1 UJ	1 U
1-Methylnaphthalene			1 U	33 J	1 U
2,2'-Oxybis(1-Chloropropane)			1 U	1 UJ	1 U
2,4,5-Trichlorophenol			5 U	5 UJ	5 U
2,4,6-Trichlorophenol	3.90		5 U	5 UJ	5 U
2,4-Dichlorophenol	190		5 U	5 UJ	5 U
2,4-Dimethylphenol	550		1 U	3.3 J	1 U
2,4-Dinitrophenol	3,500		10 U	10 UJ	10 U
2,4-Dinitrotoluene	9.10 [d]		5 U	5 UJ	5 U
2,6-Dinitrotoluene			5 U	5 UJ	5 U
2-Chloronaphthalene			1 U	1 UJ	1 U
2-Chlorophenol			1 U	1 UJ	1 U
2-Methylnaphthalene			1 U	18 J	1 U
2-Methylphenol			1 U	1 UJ	1 U
2-Nitroaniline			5 U	5 UJ	5 U
2-Nitrophenol			5 U	5 UJ	5 U
3,3'-Dichlorobenzidine	0.046		5 U	5 UJ	5 U
3-Nitroaniline			5 U	5 UJ	5 U
4,6-Dinitro-2-Methylphenol			10 U	10 UJ	10 U
4-Bromophenyl-phenylether			1 U	1 UJ	1 U
4-Chloro-3-methylphenol			5 U	5 UJ	5 U
4-Chloroaniline			5 U	5 UJ	5 U
4-Chlorophenyl-phenylether			1 U	1 UJ	1 U
4-Methylphenol			1 U	1 UJ	1 U
4-Nitroaniline			5 U	5 UJ	5 U
4-Nitrophenol			5 U	5 UJ	5 U
Acenaphthene	640		1 U	120 J	1 U
Acenaphthylene			1 U	1 UJ	1 U
Anthracene	26,000		1 U	1 UJ	1 U
Benzo(a)anthracene	0.030		1 U	1 UJ	1 U
Benzo(a)pyrene	0.030		1 U	1 UJ	1 U
Benzo(b)fluoranthene	0.030		1 U	1 UJ	1 U
Benzo(g,h,i)perylene			1 U	1 UJ	1 U
Benzo(k)fluoranthene	0.030		1 U	1 UJ	1 U
Benzoic Acid			10 U	10 UJ	10 U
Benzyl Alcohol			5 U	5 UJ	5 U
bis(2-Chloroethoxy) Methane			1 U	1 UJ	1 U
Bis-(2-Chloroethyl) Ether	0.85		1 U	1 UJ	1 U
bis(2-Ethylhexyl)phthalate	3.60		1 U	1 UJ	1 U
Butylbenzylphthalate	1,300		1 U	1 UJ	1 U
Carbazole			1 U	22 J	1 U
Chrysene	0.030		1 U	1 UJ	1 U
Dibenz(a,h)anthracene	0.030		1 U	1 UJ	1 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality		EBC-1	EBC-2	EBC-3
Sampling Date:	Method B	Criteria - Marine[g]		7/30/2008	7/31/2008	7/30/2008
	Marine Surface	Acute	Chronic			
Dibenzofuran				1 U	24 J	1 U
Diethylphthalate				1 U	1 UJ	1 U
Dimethylphthalate	72,000			1 U	1 UJ	1 U
Di-n-Butylphthalate				1 U	1 UJ	1 U
Di-n-Octyl phthalate				1 U	1 UJ	1 U
Fluoranthene	90			1 U	1 UJ	1 U
Fluorene	3,500			1 U	27 J	1 U
Hexachlorobenzene	0.00047			1 U	1 UJ	1 U
Hexachlorobutadiene	3.0			1 U	1 UJ	1 U
Hexachlorocyclopentadiene	3,600			5 U	5 UJ	5 U
Hexachloroethane	5.30			1 U	1 UJ	1 U
Indeno(1,2,3-cd)pyrene	0.030			1 U	1 UJ	1 U
Isophorone	600 [d]			1 U	1 UJ	1 U
Naphthalene	4,900			1 U	1.8 J	1 U
Nitrobenzene	450			1 U	1 UJ	1 U
N-Nitroso-Di-N-Propylamine	8.20			5 U	5 UJ	5 U
N-Nitrosodiphenylamine	10			1 U	1 UJ	1 U
Pentachlorophenol	4.90	13	7.9	5 U	5 UJ	5 U
Phenanthrene				1 U	18 J	1 U
Phenol	1,100,000			1 U	1 UJ	1 U
Pyrene	2,600			1 U	1 UJ	1 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-4	EBC-5	EBC-6
Sampling Date:	Method B Marine Surface Water Criteria[a]		Criteria - Marine[g] Acute	Chronic	7/30/2008	8/1/2008	8/1/2008
TPH in mg/L							
Diesel-Range Hydrocarbons	0.5	[b]			0.25 U	0.25 U	0.25 U
Motor Oil-Range Hydrocarbons	0.5	[b]			0.5 U	0.5 U	0.5 U
Gasoline-Range Hydrocarbons	1.0	[b]			0.25 UJ	0.25 U	0.25 U
Total Metals in µg/L[e]							
Arsenic					0.51 U	3.27	0.5 U
Cadmium					0.04	0.485	0.02 U
Chromium					4.07	41.4	2.46
Copper					5.2	13.9	3.1
Lead					1.5	2.89	0.747
Mercury, Total				0.025	0.0029 R	0.0668 R	0.0036 R
Nickel (soluable salts)					4	153	2.7
Zinc					6.6	201	9.2
Dissolved Metals in µg/L							
Arsenic, Dissolved	5	[c]	69	36	0.5 U	0.71 [e]	0.5 U
Cadmium, Dissolved	20		42	9.3	0.02 U	0.023	0.02 U
Chromium, Dissolved	490		1100	50	0.2 U	1.98	0.26
Copper, Dissolved	2,700		4.8	3.1	0.1 U	3.1	0.3
Lead, Dissolved			210	8.1	0.02 U	0.702	0.035
Mercury, Dissolved[f]			1.8	0.025	0.001 R	0.001 R	0.001 R
Nickel, Dissolved	1,100		74	8.2	0.3	3.7	0.6
Zinc, Dissolved	17,000		90	81	0.5 U	4.7	1
BTEX in ug/L							
Benzene	23				1 UJ	1 U	1 U
Ethylbenzene	6,900				1 UJ	1 U	1 U
m,p-Xylene					1 UJ	1 U	1 U
o-Xylene					1 UJ	1 U	1 U
Toluene	19,000				1 UJ	1 U	1 U
PCBs in ug/L							
Aroclor 1016	0.0058				1 U	1.2 U	1 U
Aroclor 1221					1 U	1.2 U	1 U
Aroclor 1232					1 U	1.2 U	1 U
Aroclor 1242					1 U	1.2 U	1 U
Aroclor 1248					1 U	1.2 U	1 U
Aroclor 1254	0.0017				1 U	1.2 U	1 U
Aroclor 1260					1 U	1.2 U	1 U
Total PCBs	0.00011		10	0.03	1 U	1.2 U	1 U
Volatiles in ug/L							
1,1,1,2-Tetrachloroethane					0.2 UJ	0.2 U	0.2 U
1,1,1-Trichloroethane	420,000				0.2 UJ	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	6.50				0.2 UJ	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane					0.2 UJ	0.2 U	0.2 U
1,1,2-Trichloroethane	25				0.2 UJ	0.2 U	0.2 U
1,1-Dichloroethane					0.2 UJ	0.2 U	0.2 U
1,1-Dichloroethene					0.2 UJ	0.2 U	0.2 U
1,1-Dichloropropene					0.2 UJ	0.2 U	0.2 U
1,2,3-Trichlorobenzene					0.5 UJ	0.5 U	0.5 U
1,2,3-Trichloropropane					0.5 UJ	0.5 U	0.5 U
1,2,4-Trichlorobenzene					0.5 UJ	0.5 U	0.5 U
1,2,4-Trimethylbenzene					0.2 UJ	0.2 U	0.2 U
1,2-Dibromo-3-chloropropane					0.5 UJ	0.5 U	0.5 U
1,2-Dichlorobenzene	4,200				0.2 UJ	0.2 U	0.2 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-4	EBC-5	EBC-6
Sampling Date:	Method B		Criteria - Marine[g]		7/30/2008	8/1/2008	8/1/2008
	Marine Surface		Acute	Chronic			
1,2-Dichloroethane	59				0.2 UJ	0.2 U	0.2 U
1,2-Dichloropropane	230				0.2 UJ	0.2 U	0.2 U
1,3,5-Trimethylbenzene					0.2 UJ	0.2 U	0.2 U
1,3-Dichlorobenzene	2,600	[d]			0.2 UJ	0.2 U	0.2 U
1,3-Dichloropropane					0.2 UJ	0.2 U	0.2 U
1,4-Dichlorobenzene	4.9				0.2 UJ	0.2 U	0.2 U
2,2-Dichloropropane					0.2 UJ	0.2 U	0.2 U
2-Butanone					2.5 UJ	2.5 U	2.5 U
2-Chloroethylvinylether					1 UJ	1 U	1 U
2-Chlorotoluene					0.2 UJ	0.2 U	0.2 U
2-Hexanone					2.5 UJ	2.5 U	2.5 U
4-Chlorotoluene					0.2 UJ	0.2 U	0.2 U
4-Isopropyltoluene					0.2 UJ	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)					2.5 UJ	2.5 U	2.5 U
Acetone					3 UJ	7.2	2.5 U
Acrolein					5 UJ	5 U	5 U
Acrylonitrile	0.40				1 UJ	1 U	1 U
Benzene	23				0.2 UJ	0.2 U	0.2 U
Bromobenzene					0.2 UJ	0.2 U	0.2 U
Bromochloromethane					0.2 UJ	0.2 U	0.2 U
Bromodichloromethane	22	[d]			0.2 UJ	0.2 U	0.2 U
Bromoethane					0.2 UJ	0.2 U	0.2 U
Bromoform	220	[d]			0.2 UJ	0.2 U	0.2 U
Bromomethane	970				0.5 UJ	0.5 U	0.5 U
Carbon Disulfide					0.2 UJ	0.4	0.2 U
Carbon Tetrachloride	4.40	[d]			0.2 UJ	0.2 U	0.2 U
Chlorobenzene	5,000				0.2 UJ	0.2 U	0.2 U
Chloroethane					0.2 UJ	0.2 U	0.2 U
Chloroform	280				0.2 UJ	0.2 U	0.2 U
Chloromethane	1,300				0.2 UJ	0.2 U	0.2 U
cis-1,2-Dichloroethene					0.2 UJ	0.2 U	0.2 U
cis-1,3-Dichloropropene					0.2 UJ	0.2 U	0.2 U
Dibromochloromethane	21				0.2 UJ	0.2 U	0.2 U
Dibromomethane					0.2 UJ	0.2 U	0.2 U
Ethylbenzene	6,900				0.2 UJ	0.2 U	0.2 U
Ethylene Dibromide					0.2 UJ	0.2 U	0.2 U
Hexachlorobutadiene	3				0.5 UJ	0.5 U	0.5 U
Isopropylbenzene					0.2 UJ	0.2 U	0.2 U
m,p-Xylene					0.4 UJ	0.4 U	0.4 U
Methyl Iodide					1 UJ	1 U	1 U
Methylene Chloride	960				0.5 UJ	0.5 U	0.5 U
Naphthalene	4,900				0.5 UJ	0.5 U	0.5 U
n-Butylbenzene					0.2 UJ	0.2 U	0.2 U
n-Propylbenzene					0.2 UJ	0.2 U	0.2 U
o-Xylene					0.2 UJ	0.2 U	0.2 U
sec-Butylbenzene					0.2 UJ	0.2 U	0.2 U
Styrene					0.2 UJ	0.2 U	0.2 U
tert-Butylbenzene					0.2 UJ	0.2 U	0.2 U
Tetrachloroethene					0.2 UJ	0.2 U	0.2 U
Toluene	19,000				0.2 UJ	0.2 U	0.2 U
trans-1,2-Dichloroethene					0.2 UJ	0.2 U	0.2 U
trans-1,3-Dichloropropene					0.2 UJ	0.2 U	0.2 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality		EBC-4	EBC-5	EBC-6
Sampling Date:	Method B	Criteria - Marine[g]		7/30/2008	8/1/2008	8/1/2008
	Marine Surface	Acute	Chronic			
trans-1,4-Dichloro-2-butene				1 UJ	1 U	1 U
Trichloroethene				0.2 UJ	0.2 U	0.2 U
Trichlorofluoromethane				0.2 UJ	0.2 U	0.2 U
Vinyl Acetate				1 UJ	1 U	1 U
Vinyl Chloride	37			0.2 UJ	0.2 U	0.2 U
Semivolatiles in ug/L						
1,2,4-Trichlorobenzene	2,300			1 U	1 UJ	1 U
1,2-Dichlorobenzene	4,200			1 U	1 UJ	1 U
1,3-Dichlorobenzene				1 U	1 UJ	1 U
1,4-Dichlorobenzene	4.9			1 U	1 UJ	1 U
1-Methylnaphthalene				1 U	1 UJ	1 U
2,2'-Oxybis(1-Chloropropane)				1 U	1 UJ	1 U
2,4,5-Trichlorophenol				5 U	5 UJ	5 U
2,4,6-Trichlorophenol	3.90			5 U	5 UJ	5 U
2,4-Dichlorophenol	190			5 U	5 UJ	5 U
2,4-Dimethylphenol	550			1 U	1 UJ	1 U
2,4-Dinitrophenol	3,500			10 U	10 UJ	10 U
2,4-Dinitrotoluene	9.10 [d]			5 U	5 UJ	5 U
2,6-Dinitrotoluene				5 U	5 UJ	5 U
2-Chloronaphthalene				1 U	1 UJ	1 U
2-Chlorophenol				1 U	1 UJ	1 U
2-Methylnaphthalene				1 U	1 UJ	1 U
2-Methylphenol				1 U	1 UJ	1 U
2-Nitroaniline				5 U	5 UJ	5 U
2-Nitrophenol				5 U	5 UJ	5 U
3,3'-Dichlorobenzidine	0.046			5 U	5 UJ	5 U
3-Nitroaniline				5 U	5 UJ	5 U
4,6-Dinitro-2-Methylphenol				10 U	10 UJ	10 U
4-Bromophenyl-phenylether				1 U	1 UJ	1 U
4-Chloro-3-methylphenol				5 U	5 UJ	5 U
4-Chloroaniline				5 U	5 UJ	5 U
4-Chlorophenyl-phenylether				1 U	1 UJ	1 U
4-Methylphenol				1 U	1 UJ	1 U
4-Nitroaniline				5 U	5 UJ	5 U
4-Nitrophenol				5 U	5 UJ	5 U
Acenaphthene	640			1 U	1 UJ	1 U
Acenaphthylene				1 U	1 UJ	1 U
Anthracene	26,000			1 U	1 UJ	1 U
Benzo(a)anthracene	0.030			1 U	1 UJ	1 U
Benzo(a)pyrene	0.030			1 U	1 UJ	1 U
Benzo(b)fluoranthene	0.030			1 U	1 UJ	1 U
Benzo(g,h,i)perylene				1 U	1 UJ	1 U
Benzo(k)fluoranthene	0.030			1 U	1 UJ	1 U
Benzoic Acid				10 U	10 UJ	10 U
Benzyl Alcohol				5 U	5 UJ	5 U
bis(2-Chloroethoxy) Methane				1 U	1 UJ	1 U
Bis-(2-Chloroethyl) Ether	0.85			1 U	1 UJ	1 U
bis(2-Ethylhexyl)phthalate	3.60			1	1 UJ	1 U
Butylbenzylphthalate	1,300			1 U	1 UJ	1 U
Carbazole				1 U	1 UJ	1 U
Chrysene	0.030			1 U	1 UJ	1 U
Dibenz(a,h)anthracene	0.030			1 U	1 UJ	1 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality		EBC-4	EBC-5	EBC-6
Sampling Date:	Method B	Criteria - Marine[g]		7/30/2008	8/1/2008	8/1/2008
	Marine Surface	Acute	Chronic			
Dibenzofuran				1 U	1 UJ	1 U
Diethylphthalate				1 U	1 UJ	1 U
Dimethylphthalate	72,000			1 U	1 UJ	1 U
Di-n-Butylphthalate				1 U	1 UJ	1 U
Di-n-Octyl phthalate				1 U	1 UJ	1 U
Fluoranthene	90			1 U	1 UJ	1 U
Fluorene	3,500			1 U	1 UJ	1 U
Hexachlorobenzene	0.00047			1 U	1 UJ	1 U
Hexachlorobutadiene	3.0			1 U	1 UJ	1 U
Hexachlorocyclopentadiene	3,600			5 U	5 UJ	5 U
Hexachloroethane	5.30			1 U	1 UJ	1 U
Indeno(1,2,3-cd)pyrene	0.030			1 U	1 UJ	1 U
Isophorone	600 [d]			1 U	1 UJ	1 U
Naphthalene	4,900			1 U	1 UJ	1 U
Nitrobenzene	450			1 U	1 UJ	1 U
N-Nitroso-Di-N-Propylamine	8.20			5 U	5 UJ	5 U
N-Nitrosodiphenylamine	10			1 U	1 UJ	1 U
Pentachlorophenol	4.90	13	7.9	5 U	5 UJ	5 U
Phenanthrene				1 U	1 UJ	1 U
Phenol	1,100,000			1 U	1 UJ	1 U
Pyrene	2,600			1 U	1 UJ	1 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-16	Trip Blank	Trip Blank
Sampling Date:	Method B		Criteria - Marine[g]		8/1/2008	7/31/2008	8/6/2008
	Marine Surface Water Criteria[a]		Acute	Chronic	Dup of EBC-6		
TPH in mg/L							
Diesel-Range Hydrocarbons	0.5	[b]			0.25 U		
Motor Oil-Range Hydrocarbons	0.5	[b]			0.5 U		
Gasoline-Range Hydrocarbons	1.0	[b]			0.25 U		
Total Metals in µg/L[e]							
Arsenic					0.5 U		
Cadmium					0.02 U		
Chromium					1.97		
Copper					2.8		
Lead					0.656		
Mercury, Total				0.025	0.0036 R		
Nickel (soluable salts)					2.4		
Zinc					5.6		
Dissolved Metals in µg/L							
Arsenic, Dissolved	5	[c]	69	36	0.5 U		
Cadmium, Dissolved	20		42	9.3	0.02 U		
Chromium, Dissolved	490		1100	50	0.25		
Copper, Dissolved	2,700		4.8	3.1	0.1 U		
Lead, Dissolved			210	8.1	0.02 U		
Mercury, Dissolved[f]			1.8	0.025	0.001 R		
Nickel, Dissolved	1,100		74	8.2	0.6		
Zinc, Dissolved	17,000		90	81	0.5 U		
BTEX in ug/L							
Benzene	23				1 U		
Ethylbenzene	6,900				1 U		
m,p-Xylene					1 U		
o-Xylene					1 U		
Toluene	19,000				1 U		
PCBs in ug/L							
Aroclor 1016	0.0058				1 U		
Aroclor 1221					1 U		
Aroclor 1232					1 U		
Aroclor 1242					1 U		
Aroclor 1248					1 U		
Aroclor 1254	0.0017				1 U		
Aroclor 1260					1 U		
Total PCBs	0.00011		10	0.03	1 U		
Volatiles in ug/L							
1,1,1,2-Tetrachloroethane					0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	420,000				0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	6.50				0.2 U	0.2 U	0.2 U
1,1,2-Trichloro-1,2,2-trifluoroethane					0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	25				0.2 U	0.2 U	0.2 U
1,1-Dichloroethane					0.2 U	0.2 U	0.2 U
1,1-Dichloroethene					0.2 U	0.2 U	0.2 U
1,1-Dichloropropene					0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene					0.5 U	0.5 U	0.5 U
1,2,3-Trichloropropane					0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene					0.5 U	0.5 U	0.5 U
1,2,4-Trimethylbenzene					0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-chloropropane					0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene	4,200				0.2 U	0.2 U	0.2 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA		Water Quality		EBC-16	Trip Blank	Trip Blank
Sampling Date:	Method B		Criteria - Marine[g]		8/1/2008	7/31/2008	8/6/2008
	Marine Surface		Acute	Chronic	Dup of EBC-6		
1,2-Dichloroethane	59				0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	230				0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene					0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	2,600	[d]			0.2 U	0.2 U	0.2 U
1,3-Dichloropropane					0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	4.9				0.2 U	0.2 U	0.2 U
2,2-Dichloropropane					0.2 U	0.2 U	0.2 U
2-Butanone					2.5 U	2.5 U	2.5 U
2-Chloroethylvinylether					1 U	1.0 U	1.0 U
2-Chlorotoluene					0.2 U	0.2 U	0.2 U
2-Hexanone					2.5 U	2.5 U	2.5 U
4-Chlorotoluene					0.2 U	0.2 U	0.2 U
4-Isopropyltoluene					0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (MIBK)					2.5 U	2.5 U	2.5 U
Acetone					2.5 U	3.0 U	2.5 U
Acrolein					5 U	5.0 U	5.0 U
Acrylonitrile	0.40				1 U	1.0 U	1.0 U
Benzene	23				0.2 U	0.2 U	0.2 U
Bromobenzene					0.2 U	0.2 U	0.2 U
Bromochloromethane					0.2 U	0.2 U	0.2 U
Bromodichloromethane	22	[d]			0.2 U	0.2 U	0.2 U
Bromoethane					0.2 U	0.2 U	0.2 U
Bromoform	220	[d]			0.2 U	0.2 U	0.2 U
Bromomethane	970				0.5 U	0.5 U	0.5 U
Carbon Disulfide					0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	4.40	[d]			0.2 U	0.2 U	0.2 U
Chlorobenzene	5,000				0.2 U	0.2 U	0.2 U
Chloroethane					0.2 U	0.2 U	0.2 U
Chloroform	280				0.2 U	0.2 U	0.2 U
Chloromethane	1,300				0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene					0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene					0.2 U	0.2 U	0.2 U
Dibromochloromethane	21				0.2 U	0.2 U	0.2 U
Dibromomethane					0.2 U	0.2 U	0.2 U
Ethylbenzene	6,900				0.2 U	0.2 U	0.2 U
Ethylene Dibromide					0.2 U	0.2 U	0.2 U
Hexachlorobutadiene	3				0.5 U	0.5 U	0.5 U
Isopropylbenzene					0.2 U	0.2 U	0.2 U
m,p-Xylene					0.4 U	0.4 U	0.4 U
Methyl Iodide					1 U	1.0 U	1.0 U
Methylene Chloride	960				0.5 U	0.5	0.6 B
Naphthalene	4,900				0.5 U	0.5 U	0.5 U
n-Butylbenzene					0.2 U	0.2 U	0.2 U
n-Propylbenzene					0.2 U	0.2 U	0.2 U
o-Xylene					0.2 U	0.2 U	0.2 U
sec-Butylbenzene					0.2 U	0.2 U	0.2 U
Styrene					0.2 U	0.2 U	0.2 U
tert-Butylbenzene					0.2 U	0.2 U	0.2 U
Tetrachloroethene					0.2 U	0.2 U	0.2 U
Toluene	19,000				0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene					0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene					0.2 U	0.2 U	0.2 U

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality		EBC-16	Trip Blank	Trip Blank
Sampling Date:	Method B	Criteria - Marine[g]		8/1/2008	7/31/2008	8/6/2008
	Marine Surface	Acute	Chronic	Dup of EBC-6		
trans-1,4-Dichloro-2-butene				1 U	1.0 U	1.0 U
Trichloroethene				0.2 U	0.2 U	0.2 U
Trichlorofluoromethane				0.2 U	0.2 U	0.2 U
Vinyl Acetate				1 U	1.0 U	1.0 U
Vinyl Chloride	37			0.2 U	0.2 U	0.2 U
Semivolatiles in ug/L						
1,2,4-Trichlorobenzene	2,300			1 U		
1,2-Dichlorobenzene	4,200			1 U		
1,3-Dichlorobenzene				1 U		
1,4-Dichlorobenzene	4.9			1 U		
1-Methylnaphthalene				1 U		
2,2'-Oxybis(1-Chloropropane)				1 U		
2,4,5-Trichlorophenol				5 U		
2,4,6-Trichlorophenol	3.90			5 U		
2,4-Dichlorophenol	190			5 U		
2,4-Dimethylphenol	550			1 U		
2,4-Dinitrophenol	3,500			10 U		
2,4-Dinitrotoluene	9.10 [d]			5 U		
2,6-Dinitrotoluene				5 U		
2-Chloronaphthalene				1 U		
2-Chlorophenol				1 U		
2-Methylnaphthalene				1 U		
2-Methylphenol				1 U		
2-Nitroaniline				5 U		
2-Nitrophenol				5 U		
3,3'-Dichlorobenzidine	0.046			5 U		
3-Nitroaniline				5 U		
4,6-Dinitro-2-Methylphenol				10 U		
4-Bromophenyl-phenylether				1 U		
4-Chloro-3-methylphenol				5 U		
4-Chloroaniline				5 U		
4-Chlorophenyl-phenylether				1 U		
4-Methylphenol				1 U		
4-Nitroaniline				5 U		
4-Nitrophenol				5 U		
Acenaphthene	640			1 U		
Acenaphthylene				1 U		
Anthracene	26,000			1 U		
Benzo(a)anthracene	0.030			1 U		
Benzo(a)pyrene	0.030			1 U		
Benzo(b)fluoranthene	0.030			1 U		
Benzo(g,h,i)perylene				1 U		
Benzo(k)fluoranthene	0.030			1 U		
Benzoic Acid				10 U		
Benzyl Alcohol				5 U		
bis(2-Chloroethoxy) Methane				1 U		
Bis-(2-Chloroethyl) Ether	0.85			1 U		
bis(2-Ethylhexyl)phthalate	3.60			1 U		
Butylbenzylphthalate	1,300			1 U		
Carbazole				1 U		
Chrysene	0.030			1 U		
Dibenz(a,h)anthracene	0.030			1 U		

Table B-2 - Complete Analytical Results for Groundwater Samples

Sample ID:	MTCA	Water Quality		EBC-16	Trip Blank	Trip Blank
Sampling Date:	Method B	Criteria - Marine[g]		8/1/2008	7/31/2008	8/6/2008
	Marine Surface	Acute	Chronic	Dup of EBC-6		
Dibenzofuran				1 U		
Diethylphthalate				1 U		
Dimethylphthalate	72,000			1 U		
Di-n-Butylphthalate				1 U		
Di-n-Octyl phthalate				1 U		
Fluoranthene	90			1 U		
Fluorene	3,500			1 U		
Hexachlorobenzene	0.00047			1 U		
Hexachlorobutadiene	3.0			1 U		
Hexachlorocyclopentadiene	3,600			5 U		
Hexachloroethane	5.30			1 U		
Indeno(1,2,3-cd)pyrene	0.030			1 U		
Isophorone	600 [d]			1 U		
Naphthalene	4,900			1 U		
Nitrobenzene	450			1 U		
N-Nitroso-Di-N-Propylamine	8.20			5 U		
N-Nitrosodiphenylamine	10			1 U		
Pentachlorophenol	4.90	13	7.9	5 U		
Phenanthrene				1 U		
Phenol	1,100,000			1 U		
Pyrene	2,600			1 U		

Table B-2 - Complete Analytical Results for Groundwater Samples

Notes:
Blank entry indicates no applicable MTCA criteria established or sample not analyzed for specific analyte.
U: Not detected at reporting limit indicated.
J: Estimated value
R: Rejected value
3.8 Bolded boxed entry indicates detected concentration exceeds one or more screening criteria.
1.6 Dashed boxed entry indicates detected concentration of gasoline-range hydrocarbons is above MTCA Method A screening level but is not considered to be an exceedance of MTCA criteria per Footnote [b] below.

[a] MTCA Method B screening levels for surface water are presented except as noted for TPH and arsenic.

[b] MTCA Method A screening levels for TPH are provided for comparative purposes only. MTCA Method A TPH screening levels are based on groundwater protection, which is not applicable at this site.

[c] MTCA Method A arsenic screening level is listed. The MTCA Method A screening level for arsenic is based on state background concentrations. MTCA Method B does not apply for arsenic at this site.

[d] MTCA Method B screening level based on National Toxics Rule (NTR - 40 CFR 131) for consumption of marine organisms as the most stringent criteria.

[e] Total metals data were collected for informational purposes only and are not comparable to regulatory screening criteria. Total mercury results are affected by elevated turbidity and are not considered representative of actual groundwater conditions.

[f] Marine chronic water quality screening criteria for mercury is based on total metals concentration and is provided for comparative purposes only.

[g] Based on Washington State Water Quality Standards (Chapter 173-201A WAC) for protection of marine organisms.

APPENDIX C
CHEMICAL DATA QUALITY REVIEW
AND LABORATORY CERTIFICATES OF ANALYSIS

APPENDIX C
CHEMICAL DATA QUALITY REVIEW
AND LABORATORY CERTIFICATES OF ANALYSIS

Chemical Data Quality Review

Three groundwater samples and one trip blank were collected on July 30, 2008. The samples were submitted to Analytical Resources, Inc. (ARI), for analysis. The cooler temperatures of the samples ranged from 6.6 to 10.4°C, outside the method recommended temperature range of 2 to 6°C. Results for volatile analyses were qualified as estimated (J). The samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), gasoline-range hydrocarbons and BTEX compounds, and diesel- and motor oil-range hydrocarbons. The laboratory reported results as ARI Job No. NI87. The laboratory subcontracted samples to Columbia Analytical Services (CAS) for analysis of total and dissolved metals. CAS reported results as Service Request No. K0807445.

Three groundwater samples, one field duplicate, and one trip blank were collected on July 31, 2008, and August 1, 2008. The samples were submitted to ARI for analysis. The cooler temperatures of the samples were 1.2 and 7.0°C, outside the method recommended temperature range of 2 to 6°C. Results for volatile or semivolatile analytes would not be affected by the colder temperatures. The slight temperature exceedance would not significantly affect volatile or semi-volatile analytes, and results were not qualified. The samples were analyzed for VOCs, SVOCs, PCBs, gasoline-range hydrocarbons and BTEX compounds, and diesel- and motor oil-range hydrocarbons. The laboratory reported results as ARI Job No. NJ87. The laboratory subcontracted samples to CAS for analysis of total and dissolved metals. CAS reported results as Service Request No. K0807486.

Twenty-five soil samples were collected on July 29, 30, and 31, 2008, and August 1, 2008. The samples were submitted to ARI for analysis. The cooler temperatures of the samples ranged from 1.2 to 7.0°C, with two coolers outside the method recommended temperature range of 2 to 6°C. Results for volatile or semivolatile analytes would not be affected by the colder temperatures. The slight temperature exceedance would not significantly affect volatile or semi-volatile analytes, and results were not qualified. The samples were analyzed for VOCs, SVOCs, PCBs, gasoline-range hydrocarbons and BTEX compounds, diesel- and motor oil-range hydrocarbons, and total metals. Soil samples EBC-2-S2, EBC-5-S2, EBC-6-S2, EBC-12-S2, EBC-15-S1, and EBC-15-S2 were archived. The laboratory reported results as ARI Job No. NJ45.

Quality assurance/quality control (QA/QC) reviews of laboratory procedures were performed on an ongoing basis by the laboratory. Hart Crowser performed the data review, using laboratory quality control results summary sheets and raw data, as required, to ensure they met data quality objectives for the project. Data review followed the format outlined in the National Functional Guidelines for Inorganic Data Review (EPA 2004) and the National Functional Guidelines for Organic Data Review (EPA 1999) modified to include specific criteria of the individual analytical methods. The following criteria were evaluated in the standard data quality review process:

- Holding times;
- Method blanks;
- Laboratory control sample (LCS) recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries;
- Laboratory duplicate relative percent differences (RPDs);
- Initial calibration curves and continuing calibration verifications (CCVs); and
- Reporting limits.

Most of the data were determined to be acceptable for use, with certain qualifiers. Results for low level total mercury and low level dissolved mercury were rejected. Full laboratory results are presented at the end of this appendix. Results of the data reviews, organized by analysis class, follow.

Volatile Organic Compounds (VOCs)

Analytical Methods

The samples were analyzed by a Gas Chromatograph fitted with a Mass Spectrometer (GC/MS) following EPA Method 8260B.

Sample Holding Times

The samples were analyzed within the method recommended holding time with the following exception. Soil sample EBC-12-S1 had only methanol preserved jars submitted. To achieve low detection limits, sample volume was taken from the unpreserved total solids jar, past the 48-hour method holding time for unpreserved samples.

Laboratory Detection Limits

The laboratory achieved specified detection limits with the following exception. The detection limit for acrylonitrile exceeded the criteria for all groundwater

samples. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

The method blanks were non-detect with the following exception. The method blank analyzed on August 12, 2008, had a detection for methylene chloride above the reporting limit. The associated samples were non-detect for methylene chloride, and no results were qualified. The associated trip blank had a detection above the reporting limit for methylene chloride and was qualified with a "B."

The trip blank accompanying groundwater samples EBC-1, EBC-3, and EBC-4 had a detection for methylene chloride at the reporting limit. The associated samples were non-detect for methylene chloride.

The trip blank accompanying groundwater samples EBC-2, EBC-5, EBC-6, and EBC-16 had a detection for methylene chloride above the reporting limit. The associated samples were non-detect for methylene chloride.

Surrogate Recovery

Surrogate recoveries were within laboratory control limits with the following exceptions:

- For soil sample EBC-3-S1, the recoveries for the surrogates d4-1,2-dichloroethane, bromofluorobenzene, and d4-1,2-dichlorobenzene were outside the control limits. The sample was reanalyzed at dilution, and all surrogates were within control. The dilution reanalysis was reported.

- For soil sample EBC-7-S1, the recoveries for the surrogates d4-1,2-dichloroethane and d8-toluene were outside the control limits. The sample was reanalyzed with all surrogates within control. The reanalysis was reported.

Laboratory Control Sample (LCS) Recovery

Laboratory control sample recoveries were within laboratory control limits.

Matrix Spike (MS) Recoveries

Matrix spike recoveries were within laboratory control limits with the following exceptions:

- For groundwater sample EBC-4 MS/MSD, the recoveries for 4-methyl-2-pentanone and 2-hexanone exceeded the control limits and the marginal exceedance (ME) limits. The compounds were within control in the LCS and LCSD. As there were no detections for those compounds in the associated samples, the results were not qualified.

- For groundwater sample EBC-4 MS/MSD, 2-chloroethyl vinyl ether did not recover. The results for 2-chloroethyl vinyl ether were within control in the LCS and LCSD, indicating a matrix effect. Results for 2-chloroethyl vinyl ether in EBC-4 were qualified as estimated (J).

- For groundwater sample EBC-4 MSD, the recoveries for acrolein and 1,2-dibromo-3-chloropropane exceeded the control limits. The compounds were within control limits in the MS, LCS, and LCSD. Results were not qualified.

Internal Standard (IS) Recovery

Internal standards were within acceptance criteria with the following exceptions:

- Per the case narrative, all internal standards were outside acceptance criteria for soil sample EBC-3-S1. The sample was reanalyzed at dilution with all IS within acceptance criteria. The diluted sample results were reported.

- Per the case narrative, the IS for d4-1,4-dichlorobenzene were outside acceptance criteria for soil sample EBC-7-S1. The sample was reanalyzed with all IS within acceptance criteria. The reanalyzed sample results were reported.

Field Duplicate Sample Analysis

The results for the sample and field duplicate were non-detect, so the RPD was not applicable.

Initial Calibration Curve and CCVs

The initial calibration curves were within acceptance criteria. The CCV recoveries were within acceptance criteria with the following exception.

- Per the laboratory case narrative, the recoveries of some compounds in the CCV analyzed on August 12, 2008, were outside the acceptance criteria, but were within the laboratory Standard Operating Procedure (SOP) criteria for outliers. The compounds were not specified, and no results were qualified.

Semivolatile Organic Compounds (SVOCs)

Analytical Methods

The samples were analyzed by a GC/MS following EPA Method 8270D.

Sample Holding Times

The samples were extracted and analyzed within the method recommended holding time with the following exception. Groundwater sample EBC-2 was extracted one day past the method recommended holding time. Sample results were qualified as estimated (J).

Laboratory Detection Limits

The laboratory achieved specified detection limits, with the following exceptions. The detection limits for 2,4,6-trichlorophenol, 3,3'-dichlorobenzidine, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-chloroethyl) ether, chrysene, dibenz(a,h)anthracene, hexachlorobenzene, indeno(123-cd)pyrene, and pentachlorophenol exceeded the MTCA Method B Marine Surface Water Criteria for all groundwater samples. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Surrogate Recovery

Surrogate recoveries were within laboratory control limits with the following exceptions:

- For groundwater sample EBC-5, the recoveries for all surrogates were below the control limits. The sample was re-extracted outside of the method recommended holding time, with all surrogates within control. The re-extracted results were reported as estimated (J).

- For groundwater sample EBC-6, the recovery of the surrogate 2-fluorobiphenyl were below the control limits. As all other surrogates were within control, the sample results were not qualified.

- For soil sample EBC-7-S1, the recoveries of the surrogates 2-fluorobiphenyl and 2,4,6-tribromophenol were below the control limits due to sample matrix effects. The recovery for 2,4,6-tribromophenol were below ten percent. As all other surrogates were within control, the sample results were not qualified.

Laboratory Control Sample (LCS) Recovery

LCS recoveries were within laboratory control limits with the following exceptions:

- For LCSD-080808, the recoveries for bis(2-chloroethyl)vinyl ether, 4-nitrophenol, and benzo(a)pyrene were below the control limits. The recoveries were within control in the LCS, and results were not qualified.

- For LCS-082208, the recoveries for phenol and diethylphthalate fell below the control limits. The recoveries for 4-chloroaniline and 4-nitrophenol were below the ME limits. No LCSD was reported. The associated sample, EBC-5, was already qualified as estimated due to hold time issues.

Matrix Spike/Matrix Spike Duplicate Recoveries

Matrix spike recoveries were within laboratory control limits with the following exception. For soil sample EBC-8-S1 MS/MSD, the target analytes 2,4-dinitrophenol and 4,6-dinitro-2-methylphenol did not recover above the reporting limit. The analytes were within control limits in the LCS and LCSD, indicating a matrix effect. The results for those analytes were qualified as estimated (J) in EBC-8-S1.

Field Duplicate Sample Analysis

The results for the sample and field duplicate were non-detect, so the RPD was not applicable.

Initial Calibration Curve and CCVs

The initial calibration curve and CCV recoveries were within acceptance criteria.

Polychlorinated Biphenyls (PCBs)

Analytical Methods

The samples were analyzed by Gas Chromatograph fitted with an Electron Capture Detector (GC/ECD) following EPA Method 8082.

Sample Holding Times

The samples were extracted and analyzed within holding time limits with the following exception. Groundwater sample EBC-2 was extracted one day past the holding time. Sample results were qualified as estimated (J).

Laboratory Detection Limits

Reporting limits did not meet MTCA Method B Marine Surface Water Criteria for water samples. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Surrogate Recovery

Surrogate recoveries were within laboratory control limits with the following exceptions:

- For groundwater sample EBC-1, the recovery for tetrachlorometaxylene (TCMX) was slightly below the control limits. The recovery for decachlorobiphenyl (DCBP) was within the control limits, and results were not qualified.

- For soil samples EBC-1-S1, EBC-7-S1, and EBC-9-S1, the surrogate DCBP was not recovered due to chromatographic interferences. As the recoveries for TCMX were within control, no results were qualified.

Laboratory Control Sample Recovery

Laboratory control sample recoveries were within laboratory control limits with the following exception. For LCS/LCSD-080808, the recoveries for Aroclor 1016

exceeded the control limits. The associated samples were non-detect for that analyte, and no results were qualified.

Matrix Spike/Matrix Spike Duplicate Recovery

Matrix spike recoveries were within laboratory control limits with the following exception. For groundwater sample EBC-4 MS/MSD, the recoveries for Aroclor 1016 exceeded the control limits. The associated samples were non-detect for that analyte, and no results were qualified.

Field Duplicate Sample Analysis

The results for the sample and field duplicate were non-detect, so the RPD was not applicable.

Initial Calibration Curve and CCV Recoveries

The initial calibration curve was within acceptance criteria. The CCV recoveries were within control limits with the following exceptions. Per the laboratory case narrative, the CCVs were outside the control limits, but within the laboratory SOP criteria for outliers. The associated samples were non-detect, and no results were qualified.

Gasoline-Range Hydrocarbons and BTEX Compounds

Analytical Methods

The samples were analyzed by Gas Chromatograph (GC) fitted with a Flame Ionization Detector (FID) and a Photoionization Detector (PID) following Method NWTPH-Gx and EPA Method 8021B.

Sample Holding Times

The samples were prepared and analyzed within the method recommended holding time.

Laboratory Detection Limits

The laboratory achieved specified detection limits. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Surrogate Recovery

Surrogate recoveries were within laboratory control limits.

Laboratory Control Sample (LCS) Recovery

Laboratory control sample recoveries were within laboratory control limits.

Matrix Spike/Matrix Spike Duplicate Recoveries

Matrix spike recoveries were within laboratory control limits.

Field Duplicate Sample Analysis

The results for the sample and field duplicate were non-detect, so the RPD was not applicable.

Initial Calibration Curve and CCVs

The initial calibration curve and CCV recoveries were within acceptance criteria.

Diesel- and Motor Oil-Range Hydrocarbons

Analytical Methods

The samples were analyzed by GC/FID following Method NWTPH-Dx.

Sample Holding Times

The samples were extracted and analyzed within the method recommended holding time with the following exception. Groundwater sample EBC-2 was extracted one day past the method recommended holding time. Sample results were qualified as estimated (J).

Laboratory Detection Limits

The laboratory achieved specified detection limits. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Surrogate Recovery

Surrogate recoveries were within laboratory control limits with the following exception. Soil sample EBC-7-S1 had no surrogate recovery due to the high sample dilution required by high levels of target analyte in the sample. Sample results were not qualified.

Laboratory Control Sample (LCS) Recovery

Laboratory control sample recoveries were within laboratory control limits.

Matrix Spike/Matrix Spike Duplicate Recoveries

Matrix spike recoveries were within laboratory control limits with the following exception. For soil sample EBC-1-S2 MS, the recovery of diesel were below the control limits. The recovery was within control limits for the LCS, LCSD, and MSD, and sample results were not qualified.

Field Duplicate Sample Analysis

The results for the sample and field duplicate were non-detect, so the RPD was not applicable.

Initial Calibration Curve and CCVs

The initial calibration curve and CCV recoveries were within acceptance criteria.

Total Metals

Analytical Methods

Analyses for arsenic, cadmium, chromium, copper, lead, nickel, and zinc in groundwater samples were conducted by ICP following EPA Method 200.8. Analysis for mercury in water samples was conducted by CVAA following EPA Method 1631E.

Analyses for arsenic, cadmium, chromium, copper, lead, nickel, and zinc in soil samples were conducted by ICP following EPA Method 6010B. Analysis for mercury in soil samples was conducted by CVAA following EPA Method 7471A.

Sample Holding Times

The samples were prepared and analyzed within holding time limits with the following exceptions:

- For groundwater samples EBC-1, EBC-2, EBC-3, EBC-4, EBC-5, EBC-6, and EBC-16, the samples were received at the laboratory past the 48-hour holding time for unpreserved samples for the low level mercury test. The samples were submitted in the incorrect containers. Sample results were rejected (R).

Laboratory Detection Limits

The laboratory achieved specified detection limits. Reported detection limits and analytical results were adjusted for any required dilution factors.

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Laboratory Control Sample Recovery

Laboratory control sample recoveries were within QC limits of 80 to 120 percent for all analytes.

Matrix Spike/Matrix Spike Duplicate Recovery

Matrix spike recoveries met QC limits of 75 to 125 percent with the following exceptions:

- For soil sample EBC-1-S1 MS, the recoveries for copper, lead, and zinc were outside the control limits due to high target analytes in the source sample and insufficient spiking amounts. The results were not qualified.

- For soil sample EBC-1-S1 MS, the recoveries for chromium and mercury were outside the control limits. The results for those analytes in soil sample EBC-1-S1 were qualified as estimated (J).

Laboratory Duplicate Sample Analysis

The RPD between replicate measurements was within QC limits with the following exceptions. For soil sample EBC-1-S1, the RPD for arsenic, cadmium, copper, nickel, and lead exceeded the control limits due to sample heterogeneity. Results for those analytes were qualified as estimated (J).

Field Duplicate Sample Analysis

The RPD between replicate measurements was within 50 percent for all analytes.

Dissolved Metals

Analytical Methods

Analysis for arsenic, cadmium, chromium, copper, lead, nickel, and zinc were conducted by ICP following EPA Method 200.8. Analysis for mercury was conducted by CVAA following EPA Method 1631E.

Sample Holding Times

The samples were prepared and analyzed within holding time limits with the following exceptions:

- For groundwater samples EBC-1, EBC-2, EBC-3, EBC-4, EBC-5, EBC-6, and EBC-16, the samples were received at the laboratory past the 24-hour limit for sample filtration for the low level mercury test. The samples were submitted in the incorrect containers. Sample results were rejected (R).

Blank Contamination

No target analytes were detected in laboratory blanks associated with the samples.

Laboratory Control Sample Recovery

Laboratory control sample recoveries were within QC limits.

Matrix Spike/Matrix Spike Duplicate Recovery

Matrix spike recoveries were within QC limits.

Laboratory Duplicate Sample Analysis

The RPD between replicate measurements was within QC limits.

Field Duplicate Sample Analysis

The RPD between replicate measurements was within 50 percent limits for chromium and nickel. The RPD was not applicable for the other metals.

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CERTIFICATES OF ANALYSIS
ANALYTICAL RESOURCES, INC
JOB NOS. NI87, NJ87, NJ45

Analytical Resources, Incorporated
Analytical Chemists and Consultants

September 11, 2008

Rick Moore
Hart Crowser, Inc.
1700 Westlake Avenue N. Suite 200
Seattle, WA 98109-3256

RE: Client Project: Pier 23-EBC
ARI Job No. NI87

Dear Rick;

Please find enclosed the original chain of custody (COC) records, sample receipt documentation, and the final data for samples from the project referenced above. Analytical Resources, Inc. (ARI) received six water samples and a trip blank on August 4, 2008. The samples were received with a cooler temperature range of 6.6 to 10.4°C. Please review the Cooler Receipt Form for any sample discrepancies.

The samples were analyzed for VOCs, SVOCs, PCBs, NWTPH-Gx/BETX, NWTPH-Dx, and Total and Dissolved Metals/Mercury, as requested on the COC. The Total and Dissovled Metals/Mercury analyses were subcontracted to Columbia Analytical Services in Kelso, WA.

For the Volatiles analysis: Continuing Calibrations had compounds outside of the 20% control limit, but were accepted outliers under ARI SOPs. No further corrective action was required.

There were no matrix spike and matrix spike duplicate percent recoveries for 2-Chloroethylvinylether for sample **EBC-4**. Since the LCS and LCSD percent recoveries were within control limits, no further corrective action was required.

Several matrix spike and matrix spike duplicate percent recoveries were outside control limits high for sample **EBC-4**. Since all of the LCS and LCSD percent recoveries were within control limits, no further corrective action was required.

There were no anomalies associated with the Semi-volatiles analysis.

For the PCBs analysis: Continuing Calibrations had compounds outside of the 20% control limit, but were accepted outliers under ARI SOPs. No further corrective action was required.

The surrogate percent recovery for Tetrachlorometaxylene was outside control limits for sample **EBC-1**. All other surrogate recoveries were within control limits. No further corrective action was required.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

There were no anomalies associated with the NWTPH-Gx/BETX analysis.

There were no anomalies associated with the NWTPH-Dx analysis.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206/695-6211
Enclosures

cc: eFile NI87

KFB/co

Sample Custody Record

Samples Shipped to: ~~GASTEL~~ ARI

HARTCROWSER

Hart Crowser, Inc.
1910 Fairview Avenue East
Seattle, Washington 98102-3699
Phone: 206-324-9530 FAX: 206-328-5581

JOB 17490-01 LAB NUMBER

PROJECT NAME Pier 23 - EBC

HART CROWSER CONTACT Angie Goodwin
Rick Moore

SAMPLED BY: Carl Ulberg

REQUESTED ANALYSIS

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	NW TPH-Dx	PCBs 8082	SVOCs 8270D	NW TPH-G/BTEX	Total Metals*	Dissolved Metals* 6020	Dissolved Hg 7470	VOCs 8260B	Total Hg 7471	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	EBC-1	Various	7/30/08	1030	H_2O	X	X	X	X	X	X	X	X	X	17	
	EBC-3	bottles		1400		X	X	X	X	X	X	X	X	X	17	
	EBC-4	↓		1540		X	X	X	X	X	X	X	X	X	49	MS/MSD
	Trip Blank	↓	↓	—	↓								X		3	

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE Angie Goodwin	7/31/08	SIGNATURE Er. L Kasunda	07/31/08
PRINT NAME Angie Goodwin	TIME 1100	PRINT NAME ARI	TIME 11:00
COMPANY HC		COMPANY	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

* As, Cd, Cr, Cu, Pb, Ni, & Zn.
Added extra bottles for reductive precipitation extraction step (1640)

86 TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No.
for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐ 48 HOURS ☒ STANDARD
☐ 72 HOURS OTHER

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: HART CROWSER | Project Name: Pier 23 EBC

COC No: _____ | Delivered by: ARI Courier

Assigned ARI Job No: NI87 | Tracking No: _____

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? (YES) NO

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Record cooler temperature (recommended 2.0-6.0 °C for chemistry #1 7.0 #2 12.3 #3 6.6 #4 6.6 #5 10.4 °C

Cooler Accepted by: ERIK KASARDA Date: 07/31/08 Time: 11:00

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? Bags/Ice/foam

Was sufficient ice used (if appropriate)? (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottle arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation checklist) (YES) NO

Were all VOC vials free of air bubbles? NA YES (NO)

Was sufficient amount of sample sent in each bottle? (YES) NO

Samples Logged by: KR Date: 8/4/08 Time: 1600

***** Notify Project Manager of discrepancies or concerns *****

Explain discrepancies or negative responses:

Some small air bubbles in some vials in all samples

By: KR Date: 8/4/08

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 13:06

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	3.0	< 3.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**0.2**	
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-1**
 SAMPLE

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Date Analyzed: 08/07/08 13:06

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	100%
Bromofluorobenzene	92.2%
d4-1,2-Dichlorobenzene	109%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 13:33

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	**Vinyl Chloride**	**0.2**	**0.3**	
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	3.0	< 3.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3**
 SAMPLE

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Date Analyzed: 08/07/08 13:33

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	101%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 14:00

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	3.0	< 3.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
 SAMPLE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/07/08 14:00

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	100%
Bromofluorobenzene	91.5%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: NI87D
LIMS ID: 08-18790
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 12:46

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	**Methylene Chloride**	**0.5**	**0.5**	
67-64-1	Acetone	3.0	< 3.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: NI87D
LIMS ID: 08-18790
Matrix: Water
Date Analyzed: 08/07/08 12:46

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	99.0%
Bromofluorobenzene	91.5%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
NI87A	EBC-1	20	112%	100%	92.2%	109%	0
NI87B	EBC-3	20	106%	101%	97.2%	106%	0
MB-080708	Method Blank	20	103%	97.2%	89.0%	96.0%	0
LCS-080708	Lab Control	20	100%	99.5%	99.5%	95.0%	0
LCSD-080708	Lab Control Dup	20	101%	97.2%	97.8%	98.8%	0
NI87C	EBC-4	20	111%	100%	91.5%	104%	0
NI87CMS	EBC-4	20	105%	100%	100%	95.5%	0
NI87CMSD	EBC-4	20	105%	100%	101%	102%	0
NI87D	TRIP BLANK	20	105%	99.0%	91.5%	103%	0

SW8260B	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	70-131	64-146
(TOL) = d8-Toluene	80-120	78-125
(BFB) = Bromofluorobenzene	74-121	71-120
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-121

Prep Method: SW5030B
Log Number Range: 08-18787 to 08-18790

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**

MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst MS: FINN3/JZ
MSD: FINN3/JZ
Date Analyzed MS: 08/07/08 14:27
MSD: 08/07/08 14:54

Sample Amount MS: 20.0 mL
MSD: 20.0 mL
Purge Volume MS: 20.0 mL
MSD: 20.0 mL

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Chloromethane	< 0.2 U	4.2	4.0	105%	4.5	4.0	112%	6.9%
Bromomethane	< 0.5 U	4.6	4.0	115%	5.1	4.0	128%	10.3%
Vinyl Chloride	< 0.2 U	4.5	4.0	112%	4.7	4.0	118%	4.3%
Chloroethane	< 0.2 U	4.0	4.0	100%	4.2	4.0	105%	4.9%
Methylene Chloride	< 0.5 U	3.7	4.0	92.5%	3.8	4.0	95.0%	2.7%
Acetone	< 3.0 U	25.0	20.0	125%	27.3	20.0	136%	8.8%
Carbon Disulfide	< 0.2 U	4.5	4.0	112%	4.9	4.0	122%	8.5%
1,1-Dichloroethene	< 0.2 U	4.0	4.0	100%	4.1	4.0	102%	2.5%
1,1-Dichloroethane	< 0.2 U	4.0	4.0	100%	4.2	4.0	105%	4.9%
trans-1,2-Dichloroethene	< 0.2 U	4.0	4.0	100%	4.1	4.0	102%	2.5%
cis-1,2-Dichloroethene	< 0.2 U	4.2	4.0	105%	4.5	4.0	112%	6.9%
Chloroform	< 0.2 U	4.0	4.0	100%	4.2	4.0	105%	4.9%
1,2-Dichloroethane	< 0.2 U	4.0	4.0	100%	4.3	4.0	108%	7.2%
2-Butanone	< 2.5 U	23.4	20.0	117%	25.7	20.0	128%	9.4%
1,1,1-Trichloroethane	< 0.2 U	4.0	4.0	100%	4.1	4.0	102%	2.5%
Carbon Tetrachloride	< 0.2 U	3.8	4.0	95.0%	4.0	4.0	100%	5.1%
Vinyl Acetate	< 1.0 U	4.0	4.0	100%	4.2	4.0	105%	4.9%
Bromodichloromethane	< 0.2 U	4.0	4.0	100%	4.2	4.0	105%	4.9%
1,2-Dichloropropane	< 0.2 U	4.1	4.0	102%	4.4	4.0	110%	7.1%
cis-1,3-Dichloropropene	< 0.2 U	4.2	4.0	105%	4.4	4.0	110%	4.7%
Trichloroethene	< 0.2 U	3.9	4.0	97.5%	4.1	4.0	102%	5.0%
Dibromochloromethane	< 0.2 U	4.1	4.0	102%	4.4	4.0	110%	7.1%
1,1,2-Trichloroethane	< 0.2 U	4.2	4.0	105%	4.6	4.0	115%	9.1%
Benzene	< 0.2 U	4.1	4.0	102%	4.3	4.0	108%	4.8%
trans-1,3-Dichloropropene	< 0.2 U	4.2	4.0	105%	4.5	4.0	112%	6.9%
2-Chloroethylvinylether	< 1.0 U	< 1.0 U	4.0	NA	< 1.0 U	4.0	NA	NA
Bromoform	< 0.2 U	3.6	4.0	90.0%	4.1	4.0	102%	13.0%
4-Methyl-2-Pentanone (MIBK)	< 2.5 U	28.8	20.0	144%	32.4	20.0	162%	11.8%
2-Hexanone	< 2.5 U	29.7	20.0	148%	31.9	20.0	160%	7.1%
Tetrachloroethene	< 0.2 U	3.7	4.0	92.5%	3.9	4.0	97.5%	5.3%
1,1,2,2-Tetrachloroethane	< 0.2 U	3.9	4.0	97.5%	4.4	4.0	110%	12.0%
Toluene	< 0.2 U	3.7	4.0	92.5%	3.8	4.0	95.0%	2.7%
Chlorobenzene	< 0.2 U	3.8	4.0	95.0%	4.2	4.0	105%	10.0%
Ethylbenzene	< 0.2 U	3.9	4.0	97.5%	4.2	4.0	105%	7.4%
Styrene	< 0.2 U	4.2	4.0	105%	4.5	4.0	112%	6.9%
Trichlorofluoromethane	< 0.2 U	4.1	4.0	102%	4.2	4.0	105%	2.4%
1,1,2-Trichloro-1,2,2-trifl	< 0.2 U	4.1	4.0	102%	4.4	4.0	110%	7.1%
m,p-Xylene	< 0.4 U	8.0	8.0	100%	8.6	8.0	108%	7.2%
o-Xylene	< 0.2 U	3.9	4.0	97.5%	4.2	4.0	105%	7.4%
1,2-Dichlorobenzene	< 0.2 U	3.6	4.0	90.0%	4.2	4.0	105%	15.4%
1,3-Dichlorobenzene	< 0.2 U	3.7	4.0	92.5%	4.1	4.0	102%	10.3%
1,4-Dichlorobenzene	< 0.2 U	3.7	4.0	92.5%	4.1	4.0	102%	10.3%
Acrolein	< 5.0 U	24.6	20.0	123%	26.4	20.0	132%	7.1%
Methyl Iodide	< 1.0 U	5.1	4.0	128%	5.7	4.0	142%	11.1%
Bromoethane	< 0.2 U	4.2	4.0	105%	4.6	4.0	115%	9.1%
Acrylonitrile	< 1.0 U	4.3	4.0	108%	4.8	4.0	120%	11.0%
1,1-Dichloropropene	< 0.2 U	3.9	4.0	97.5%	4.2	4.0	105%	7.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
 MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Dibromomethane	< 0.2 U	4.2	4.0	105%	4.4	4.0	110%	4.7%
1,1,1,2-Tetrachloroethane	< 0.2 U	3.9	4.0	97.5%	4.0	4.0	100%	2.5%
1,2-Dibromo-3-chloropropane	< 0.5 U	4.3	4.0	108%	4.9	4.0	122%	13.0%
1,2,3-Trichloropropane	< 0.5 U	3.9	4.0	97.5%	4.4	4.0	110%	12.0%
trans-1,4-Dichloro-2-butene	< 1.0 U	4.2	4.0	105%	4.9	4.0	122%	15.4%
1,3,5-Trimethylbenzene	< 0.2 U	3.6	4.0	90.0%	4.1	4.0	102%	13.0%
1,2,4-Trimethylbenzene	< 0.2 U	3.8	4.0	95.0%	4.3	4.0	108%	12.3%
Hexachlorobutadiene	< 0.5 U	3.6	4.0	90.0%	3.9	4.0	97.5%	8.0%
Ethylene Dibromide	< 0.2 U	4.2	4.0	105%	4.4	4.0	110%	4.7%
Bromochloromethane	< 0.2 U	4.1	4.0	102%	4.4	4.0	110%	7.1%
2,2-Dichloropropane	< 0.2 U	3.9	4.0	97.5%	3.9	4.0	97.5%	0.0%
1,3-Dichloropropane	< 0.2 U	4.1	4.0	102%	4.3	4.0	108%	4.8%
Isopropylbenzene	< 0.2 U	3.6	4.0	90.0%	4.0	4.0	100%	10.5%
n-Propylbenzene	< 0.2 U	3.7	4.0	92.5%	4.1	4.0	102%	10.3%
Bromobenzene	< 0.2 U	3.7	4.0	92.5%	4.2	4.0	105%	12.7%
2-Chlorotoluene	< 0.2 U	3.6	4.0	90.0%	4.0	4.0	100%	10.5%
4-Chlorotoluene	< 0.2 U	3.9	4.0	97.5%	4.3	4.0	108%	9.8%
tert-Butylbenzene	< 0.2 U	3.6	4.0	90.0%	3.9	4.0	97.5%	8.0%
sec-Butylbenzene	< 0.2 U	3.8	4.0	95.0%	4.2	4.0	105%	10.0%
4-Isopropyltoluene	< 0.2 U	3.8	4.0	95.0%	4.1	4.0	102%	7.6%
n-Butylbenzene	< 0.2 U	3.6	4.0	90.0%	3.8	4.0	95.0%	5.4%
1,2,4-Trichlorobenzene	< 0.5 U	3.7	4.0	92.5%	3.8	4.0	95.0%	2.7%
Naphthalene	< 0.5 U	3.9	4.0	97.5%	3.4	4.0	85.0%	13.7%
1,2,3-Trichlorobenzene	< 0.5 U	3.8	4.0	95.0%	3.9	4.0	97.5%	2.6%

Reported in µg/L (ppb)

NA-No recovery due to high concentration of analyte in original sample, calculated negative recovery, or undetected spike.
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
Page 1 of 2 **MATRIX SPIKE**

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 14:27

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	---	
74-83-9	Bromomethane	0.5	---	
75-01-4	Vinyl Chloride	0.2	---	
75-00-3	Chloroethane	0.2	---	
75-09-2	Methylene Chloride	0.5	---	
67-64-1	Acetone	3.0	---	
75-15-0	Carbon Disulfide	0.2	---	
75-35-4	1,1-Dichloroethene	0.2	---	
75-34-3	1,1-Dichloroethane	0.2	---	
156-60-5	trans-1,2-Dichloroethene	0.2	---	
156-59-2	cis-1,2-Dichloroethene	0.2	---	
67-66-3	Chloroform	0.2	---	
107-06-2	1,2-Dichloroethane	0.2	---	
78-93-3	2-Butanone	2.5	---	
71-55-6	1,1,1-Trichloroethane	0.2	---	
56-23-5	Carbon Tetrachloride	0.2	---	
108-05-4	Vinyl Acetate	1.0	---	
75-27-4	Bromodichloromethane	0.2	---	
78-87-5	1,2-Dichloropropane	0.2	---	
10061-01-5	cis-1,3-Dichloropropene	0.2	---	
79-01-6	Trichloroethene	0.2	---	
124-48-1	Dibromochloromethane	0.2	---	
79-00-5	1,1,2-Trichloroethane	0.2	---	
71-43-2	Benzene	0.2	---	
10061-02-6	trans-1,3-Dichloropropene	0.2	---	
110-75-8	2-Chloroethylvinylether	1.0	---	
75-25-2	Bromoform	0.2	---	
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	---	
591-78-6	2-Hexanone	2.5	---	
127-18-4	Tetrachloroethene	0.2	---	
79-34-5	1,1,2,2-Tetrachloroethane	0.2	---	
108-88-3	Toluene	0.2	---	
108-90-7	Chlorobenzene	0.2	---	
100-41-4	Ethylbenzene	0.2	---	
100-42-5	Styrene	0.2	---	
75-69-4	Trichlorofluoromethane	0.2	---	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	---	
1330-20-7	m,p-Xylene	0.4	---	
95-47-6	o-Xylene	0.2	---	
95-50-1	1,2-Dichlorobenzene	0.2	---	
541-73-1	1,3-Dichlorobenzene	0.2	---	
106-46-7	1,4-Dichlorobenzene	0.2	---	
107-02-8	Acrolein	5.0	---	
74-88-4	Methyl Iodide	1.0	---	
74-96-4	Bromoethane	0.2	---	
107-13-1	Acrylonitrile	1.0	---	
563-58-6	1,1-Dichloropropene	0.2	---	
74-95-3	Dibromomethane	0.2	---	
630-20-6	1,1,1,2-Tetrachloroethane	0.2	---	
96-12-8	1,2-Dibromo-3-chloropropane	0.5	---	
96-18-4	1,2,3-Trichloropropane	0.5	---	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
 MATRIX SPIKE

Lab Sample ID: NI87C QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water
Date Analyzed: 08/07/08 14:27

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	---	
108-67-8	1,3,5-Trimethylbenzene	0.2	---	
95-63-6	1,2,4-Trimethylbenzene	0.2	---	
87-68-3	Hexachlorobutadiene	0.5	---	
106-93-4	Ethylene Dibromide	0.2	---	
74-97-5	Bromochloromethane	0.2	---	
594-20-7	2,2-Dichloropropane	0.2	---	
142-28-9	1,3-Dichloropropane	0.2	---	
98-82-8	Isopropylbenzene	0.2	---	
103-65-1	n-Propylbenzene	0.2	---	
108-86-1	Bromobenzene	0.2	---	
95-49-8	2-Chlorotoluene	0.2	---	
106-43-4	4-Chlorotoluene	0.2	---	
98-06-6	tert-Butylbenzene	0.2	---	
135-98-8	sec-Butylbenzene	0.2	---	
99-87-6	4-Isopropyltoluene	0.2	---	
104-51-8	n-Butylbenzene	0.2	---	
120-82-1	1,2,4-Trichlorobenzene	0.5	---	
91-20-3	Naphthalene	0.5	---	
87-61-6	1,2,3-Trichlorobenzene	0.5	---	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	95.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
Page 1 of 2 **MATRIX SPIKE DUP**

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Date Sampled: 07/30/08
Date Received: 08/04/08

Instrument/Analyst: FINN3/JZ
Date Analyzed: 08/07/08 14:54

Sample Amount: 20.0 mL
Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	---	
74-83-9	Bromomethane	0.5	---	
75-01-4	Vinyl Chloride	0.2	---	
75-00-3	Chloroethane	0.2	---	
75-09-2	Methylene Chloride	0.5	---	
67-64-1	Acetone	3.0	---	
75-15-0	Carbon Disulfide	0.2	---	
75-35-4	1,1-Dichloroethene	0.2	---	
75-34-3	1,1-Dichloroethane	0.2	---	
156-60-5	trans-1,2-Dichloroethene	0.2	---	
156-59-2	cis-1,2-Dichloroethene	0.2	---	
67-66-3	Chloroform	0.2	---	
107-06-2	1,2-Dichloroethane	0.2	---	
78-93-3	2-Butanone	2.5	---	
71-55-6	1,1,1-Trichloroethane	0.2	---	
56-23-5	Carbon Tetrachloride	0.2	---	
108-05-4	Vinyl Acetate	1.0	---	
75-27-4	Bromodichloromethane	0.2	---	
78-87-5	1,2-Dichloropropane	0.2	---	
10061-01-5	cis-1,3-Dichloropropene	0.2	---	
79-01-6	Trichloroethene	0.2	---	
124-48-1	Dibromochloromethane	0.2	---	
79-00-5	1,1,2-Trichloroethane	0.2	---	
71-43-2	Benzene	0.2	---	
10061-02-6	trans-1,3-Dichloropropene	0.2	---	
110-75-8	2-Chloroethylvinylether	1.0	---	
75-25-2	Bromoform	0.2	---	
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	---	
591-78-6	2-Hexanone	2.5	---	
127-18-4	Tetrachloroethene	0.2	---	
79-34-5	1,1,2,2-Tetrachloroethane	0.2	---	
108-88-3	Toluene	0.2	---	
108-90-7	Chlorobenzene	0.2	---	
100-41-4	Ethylbenzene	0.2	---	
100-42-5	Styrene	0.2	---	
75-69-4	Trichlorofluoromethane	0.2	---	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	---	
1330-20-7	m,p-Xylene	0.4	---	
95-47-6	o-Xylene	0.2	---	
95-50-1	1,2-Dichlorobenzene	0.2	---	
541-73-1	1,3-Dichlorobenzene	0.2	---	
106-46-7	1,4-Dichlorobenzene	0.2	---	
107-02-8	Acrolein	5.0	---	
74-88-4	Methyl Iodide	1.0	---	
74-96-4	Bromoethane	0.2	---	
107-13-1	Acrylonitrile	1.0	---	
563-58-6	1,1-Dichloropropene	0.2	---	
74-95-3	Dibromomethane	0.2	---	
630-20-6	1,1,1,2-Tetrachloroethane	0.2	---	
96-12-8	1,2-Dibromo-3-chloropropane	0.5	---	
96-18-4	1,2,3-Trichloropropane	0.5	---	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-4**
 MATRIX SPIKE DUP

Lab Sample ID: NI87C QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water
Date Analyzed: 08/07/08 14:54

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	---	
108-67-8	1,3,5-Trimethylbenzene	0.2	---	
95-63-6	1,2,4-Trimethylbenzene	0.2	---	
87-68-3	Hexachlorobutadiene	0.5	---	
106-93-4	Ethylene Dibromide	0.2	---	
74-97-5	Bromochloromethane	0.2	---	
594-20-7	2,2-Dichloropropane	0.2	---	
142-28-9	1,3-Dichloropropane	0.2	---	
98-82-8	Isopropylbenzene	0.2	---	
103-65-1	n-Propylbenzene	0.2	---	
108-86-1	Bromobenzene	0.2	---	
95-49-8	2-Chlorotoluene	0.2	---	
106-43-4	4-Chlorotoluene	0.2	---	
98-06-6	tert-Butylbenzene	0.2	---	
135-98-8	sec-Butylbenzene	0.2	---	
99-87-6	4-Isopropyltoluene	0.2	---	
104-51-8	n-Butylbenzene	0.2	---	
120-82-1	1,2,4-Trichlorobenzene	0.5	---	
91-20-3	Naphthalene	0.5	---	
87-61-6	1,2,3-Trichlorobenzene	0.5	---	

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	100%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN3/JZ
Date Analyzed LCS: 08/07/08 10:09

Sample Amount LCS: 20.0 mL
Purge Volume LCS: 20.0 mL

Analyte	LCS	Spike Added	Recovery
Chloromethane	4.5	4.0	112%
Bromomethane	4.8	4.0	120%
Vinyl Chloride	4.9	4.0	122%
Chloroethane	4.5	4.0	112%
Methylene Chloride	4.0	4.0	100%
Acetone	20.6	20.0	103%
Carbon Disulfide	4.5	4.0	112%
1,1-Dichloroethene	4.3	4.0	108%
1,1-Dichloroethane	4.2	4.0	105%
trans-1,2-Dichloroethene	4.3	4.0	108%
cis-1,2-Dichloroethene	4.2	4.0	105%
Chloroform	4.2	4.0	105%
1,2-Dichloroethane	4.0	4.0	100%
2-Butanone	19.4	20.0	97.0%
1,1,1-Trichloroethane	4.2	4.0	105%
Carbon Tetrachloride	4.1	4.0	102%
Vinyl Acetate	4.0	4.0	100%
Bromodichloromethane	3.9	4.0	97.5%
1,2-Dichloropropane	4.2	4.0	105%
cis-1,3-Dichloropropene	4.1	4.0	102%
Trichloroethene	4.2	4.0	105%
Dibromochloromethane	3.9	4.0	97.5%
1,1,2-Trichloroethane	4.0	4.0	100%
Benzene	4.3	4.0	108%
trans-1,3-Dichloropropene	4.0	4.0	100%
2-Chloroethylvinylether	3.5	4.0	87.5%
Bromoform	3.6	4.0	90.0%
4-Methyl-2-Pentanone (MIBK)	19.5	20.0	97.5%
2-Hexanone	19.1	20.0	95.5%
Tetrachloroethene	4.1	4.0	102%
1,1,2,2-Tetrachloroethane	3.8	4.0	95.0%
Toluene	3.9	4.0	97.5%
Chlorobenzene	4.1	4.0	102%
Ethylbenzene	4.4	4.0	110%
Styrene	4.4	4.0	110%
Trichlorofluoromethane	4.2	4.0	105%
1,1,2-Trichloro-1,2,2-trifluoroetha	4.0	4.0	100%
m,p-Xylene	8.9	8.0	111%
o-Xylene	4.2	4.0	105%
1,2-Dichlorobenzene	3.9	4.0	97.5%
1,3-Dichlorobenzene	4.0	4.0	100%
1,4-Dichlorobenzene	4.1	4.0	102%
Acrolein	21.6	20.0	108%
Methyl Iodide	5.3	4.0	132%
Bromoethane	4.2	4.0	105%
Acrylonitrile	4.1	4.0	102%
1,1-Dichloropropene	4.3	4.0	108%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708 QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water

Analyte	LCS	Spike Added	Recovery
Dibromomethane	4.0	4.0	100%
1,1,1,2-Tetrachloroethane	4.0	4.0	100%
1,2-Dibromo-3-chloropropane	3.8	4.0	95.0%
1,2,3-Trichloropropane	3.7	4.0	92.5%
trans-1,4-Dichloro-2-butene	4.0	4.0	100%
1,3,5-Trimethylbenzene	4.3	4.0	108%
1,2,4-Trimethylbenzene	4.4	4.0	110%
Hexachlorobutadiene	4.3	4.0	108%
Ethylene Dibromide	3.9	4.0	97.5%
Bromochloromethane	4.0	4.0	100%
2,2-Dichloropropane	4.3	4.0	108%
1,3-Dichloropropane	4.0	4.0	100%
Isopropylbenzene	4.3	4.0	108%
n-Propylbenzene	4.3	4.0	108%
Bromobenzene	4.0	4.0	100%
2-Chlorotoluene	4.1	4.0	102%
4-Chlorotoluene	4.4	4.0	110%
tert-Butylbenzene	4.2	4.0	105%
sec-Butylbenzene	4.4	4.0	110%
4-Isopropyltoluene	4.4	4.0	110%
n-Butylbenzene	4.4	4.0	110%
1,2,4-Trichlorobenzene	4.0	4.0	100%
Naphthalene	3.6	4.0	90.0%
1,2,3-Trichlorobenzene	3.9	4.0	97.5%

Reported in µg/L (ppb)

NA-No recovery due to high concentration of analyte in original sample, calculated negative recovery, or undetected spike.

Volatile Surrogate Recovery	
d4-1,2-Dichloroethane	100%
d8-Toluene	99.5%
Bromofluorobenzene	99.5%
d4-1,2-Dichlorobenzene	95.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/08/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN3/JZ
LCSD: FINN3/JZ
Date Analyzed LCS: 08/07/08 10:09
LCSD: 08/07/08 10:45

Sample Amount LCS: 20.0 mL
LCSD: 20.0 mL
Purge Volume LCS: 20.0 mL
LCSD: 20.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	4.5	4.0	112%	4.3	4.0	108%	4.5%
Bromomethane	4.8	4.0	120%	4.6	4.0	115%	4.3%
Vinyl Chloride	4.9	4.0	122%	4.7	4.0	118%	4.2%
Chloroethane	4.5	4.0	112%	4.2	4.0	105%	6.9%
Methylene Chloride	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
Acetone	20.6	20.0	103%	19.4	20.0	97.0%	6.0%
Carbon Disulfide	4.5	4.0	112%	4.3	4.0	108%	4.5%
1,1-Dichloroethene	4.3	4.0	108%	4.2	4.0	105%	2.4%
1,1-Dichloroethane	4.2	4.0	105%	4.1	4.0	102%	2.4%
trans-1,2-Dichloroethene	4.3	4.0	108%	4.1	4.0	102%	4.8%
cis-1,2-Dichloroethene	4.2	4.0	105%	4.2	4.0	105%	0.0%
Chloroform	4.2	4.0	105%	4.0	4.0	100%	4.9%
1,2-Dichloroethane	4.0	4.0	100%	3.9	4.0	97.5%	2.5%
2-Butanone	19.4	20.0	97.0%	19.0	20.0	95.0%	2.1%
1,1,1-Trichloroethane	4.2	4.0	105%	4.1	4.0	102%	2.4%
Carbon Tetrachloride	4.1	4.0	102%	3.9	4.0	97.5%	5.0%
Vinyl Acetate	4.0	4.0	100%	3.7	4.0	92.5%	7.8%
Bromodichloromethane	3.9	4.0	97.5%	3.8	4.0	95.0%	2.6%
1,2-Dichloropropane	4.2	4.0	105%	4.0	4.0	100%	4.9%
cis-1,3-Dichloropropene	4.1	4.0	102%	3.9	4.0	97.5%	5.0%
Trichloroethene	4.2	4.0	105%	4.0	4.0	100%	4.9%
Dibromochloromethane	3.9	4.0	97.5%	3.8	4.0	95.0%	2.6%
1,1,2-Trichloroethane	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
Benzene	4.3	4.0	108%	4.0	4.0	100%	7.2%
trans-1,3-Dichloropropene	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
2-Chloroethylvinylether	3.5	4.0	87.5%	3.4	4.0	85.0%	2.9%
Bromoform	3.6	4.0	90.0%	3.6	4.0	90.0%	0.0%
4-Methyl-2-Pentanone (MIBK)	19.5	20.0	97.5%	19.4	20.0	97.0%	0.5%
2-Hexanone	19.1	20.0	95.5%	18.6	20.0	93.0%	2.7%
Tetrachloroethene	4.1	4.0	102%	4.0	4.0	100%	2.5%
1,1,2,2-Tetrachloroethane	3.8	4.0	95.0%	3.7	4.0	92.5%	2.7%
Toluene	3.9	4.0	97.5%	3.7	4.0	92.5%	5.3%
Chlorobenzene	4.1	4.0	102%	3.9	4.0	97.5%	5.0%
Ethylbenzene	4.4	4.0	110%	4.2	4.0	105%	4.7%
Styrene	4.4	4.0	110%	4.1	4.0	102%	7.1%
Trichlorofluoromethane	4.2	4.0	105%	4.0	4.0	100%	4.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	4.0	4.0	100%	3.7	4.0	92.5%	7.8%
m,p-Xylene	8.9	8.0	111%	8.5	8.0	106%	4.6%
o-Xylene	4.2	4.0	105%	4.1	4.0	102%	2.4%
1,2-Dichlorobenzene	3.9	4.0	97.5%	3.8	4.0	95.0%	2.6%
1,3-Dichlorobenzene	4.0	4.0	100%	3.9	4.0	97.5%	2.5%
1,4-Dichlorobenzene	4.1	4.0	102%	3.9	4.0	97.5%	5.0%
Acrolein	21.6	20.0	108%	21.1	20.0	106%	2.3%
Methyl Iodide	5.3	4.0	132%	5.1	4.0	128%	3.8%
Bromoethane	4.2	4.0	105%	4.1	4.0	102%	2.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708 QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Acrylonitrile	4.1	4.0	102%	4.1	4.0	102%	0.0%
1,1-Dichloropropene	4.3	4.0	108%	4.1	4.0	102%	4.8%
Dibromomethane	4.0	4.0	100%	4.0	4.0	100%	0.0%
1,1,1,2-Tetrachloroethane	4.0	4.0	100%	3.9	4.0	97.5%	2.5%
1,2-Dibromo-3-chloropropane	3.8	4.0	95.0%	3.8	4.0	95.0%	0.0%
1,2,3-Trichloropropane	3.7	4.0	92.5%	3.8	4.0	95.0%	2.7%
trans-1,4-Dichloro-2-butene	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
1,3,5-Trimethylbenzene	4.3	4.0	108%	4.2	4.0	105%	2.4%
1,2,4-Trimethylbenzene	4.4	4.0	110%	4.3	4.0	108%	2.3%
Hexachlorobutadiene	4.3	4.0	108%	4.0	4.0	100%	7.2%
Ethylene Dibromide	3.9	4.0	97.5%	3.7	4.0	92.5%	5.3%
Bromochloromethane	4.0	4.0	100%	4.0	4.0	100%	0.0%
2,2-Dichloropropane	4.3	4.0	108%	4.3	4.0	108%	0.0%
1,3-Dichloropropane	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
Isopropylbenzene	4.3	4.0	108%	4.1	4.0	102%	4.8%
n-Propylbenzene	4.3	4.0	108%	4.2	4.0	105%	2.4%
Bromobenzene	4.0	4.0	100%	3.9	4.0	97.5%	2.5%
2-Chlorotoluene	4.1	4.0	102%	4.0	4.0	100%	2.5%
4-Chlorotoluene	4.4	4.0	110%	4.4	4.0	110%	0.0%
tert-Butylbenzene	4.2	4.0	105%	4.1	4.0	102%	2.4%
sec-Butylbenzene	4.4	4.0	110%	4.3	4.0	108%	2.3%
4-Isopropyltoluene	4.4	4.0	110%	4.4	4.0	110%	0.0%
n-Butylbenzene	4.4	4.0	110%	4.3	4.0	108%	2.3%
1,2,4-Trichlorobenzene	4.0	4.0	100%	3.8	4.0	95.0%	5.1%
Naphthalene	3.6	4.0	90.0%	3.4	4.0	85.0%	5.7%
1,2,3-Trichlorobenzene	3.9	4.0	97.5%	3.6	4.0	90.0%	8.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	100%	101%
d8-Toluene	99.5%	97.2%
Bromofluorobenzene	99.5%	97.8%
d4-1,2-Dichlorobenzene	95.0%	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
Page 1 of 2 **METHOD BLANK**

Lab Sample ID: MB-080708
LIMS ID: 08-19319
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ40-Pacific Groundwater Group
Project: EPHRATA LANDFILL
JE0714
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 08/07/08 11:25

Sample Amount: 100 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	50	< 50	U
74-83-9	Bromomethane	50	< 50	U
75-01-4	Vinyl Chloride	50	< 50	U
75-00-3	Chloroethane	50	< 50	U
75-09-2	Methylene Chloride	100	< 100	U
67-64-1	Acetone	250	< 250	U
75-15-0	Carbon Disulfide	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
75-34-3	1,1-Dichloroethane	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
67-66-3	Chloroform	50	< 50	U
107-06-2	1,2-Dichloroethane	50	< 50	U
78-93-3	2-Butanone	250	< 250	U
71-55-6	1,1,1-Trichloroethane	50	< 50	U
56-23-5	Carbon Tetrachloride	50	< 50	U
108-05-4	Vinyl Acetate	250	< 250	U
75-27-4	Bromodichloromethane	50	< 50	U
78-87-5	1,2-Dichloropropane	50	< 50	U
10061-01-5	cis-1,3-Dichloropropene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
124-48-1	Dibromochloromethane	50	< 50	U
79-00-5	1,1,2-Trichloroethane	50	< 50	U
71-43-2	Benzene	50	< 50	U
10061-02-6	trans-1,3-Dichloropropene	50	< 50	U
110-75-8	2-Chloroethylvinylether	250	< 250	U
75-25-2	Bromoform	50	< 50	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250	< 250	U
591-78-6	2-Hexanone	250	< 250	U
127-18-4	Tetrachloroethene	50	< 50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	< 50	U
108-88-3	Toluene	50	< 50	U
108-90-7	Chlorobenzene	50	< 50	U
100-41-4	Ethylbenzene	50	< 50	U
100-42-5	Styrene	50	< 50	U
75-69-4	Trichlorofluoromethane	50	< 50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	100	< 100	U
1330-20-7	m,p-Xylene	50	< 50	U
95-47-6	o-Xylene	50	< 50	U
95-50-1	1,2-Dichlorobenzene	50	< 50	U
541-73-1	1,3-Dichlorobenzene	50	< 50	U
106-46-7	1,4-Dichlorobenzene	50	< 50	U
107-02-8	Acrolein	2,500	< 2,500	U
74-88-4	Methyl Iodide	50	< 50	U
74-96-4	Bromoethane	100	< 100	U
107-13-1	Acrylonitrile	250	< 250	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
 METHOD BLANK

Lab Sample ID: MB-080708 QC Report No: NJ40-Pacific Groundwater Group
LIMS ID: 08-19319 Project: EPHRATA LANDFILL
Matrix: Soil JE0714
Date Analyzed: 08/07/08 11:25

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	50	< 50	U
74-95-3	Dibromomethane	50	< 50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	< 50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	< 250	U
96-18-4	1,2,3-Trichloropropane	100	< 100	U
110-57-6	trans-1,4-Dichloro-2-butene	250	< 250	U
108-67-8	1,3,5-Trimethylbenzene	50	< 50	U
95-63-6	1,2,4-Trimethylbenzene	50	< 50	U
87-68-3	Hexachlorobutadiene	250	< 250	U
106-93-4	Ethylene Dibromide	50	< 50	U
74-97-5	Bromochloromethane	50	< 50	U
594-20-7	2,2-Dichloropropane	50	< 50	U
142-28-9	1,3-Dichloropropane	50	< 50	U
98-82-8	Isopropylbenzene	50	< 50	U
103-65-1	n-Propylbenzene	50	< 50	U
108-86-1	Bromobenzene	50	< 50	U
95-49-8	2-Chlorotoluene	50	< 50	U
106-43-4	4-Chlorotoluene	50	< 50	U
98-06-6	tert-Butylbenzene	50	< 50	U
135-98-8	sec-Butylbenzene	50	< 50	U
99-87-6	4-Isopropyltoluene	50	< 50	U
104-51-8	n-Butylbenzene	50	< 50	U
120-82-1	1,2,4-Trichlorobenzene	250	< 250	U
91-20-3	Naphthalene	250	< 250	U
87-61-6	1,2,3-Trichlorobenzene	250	< 250	U
1634-04-4	Methyl tert-Butyl Ether	50	< 50	U
110-54-3	Hexane	250	< 250	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.1%
Bromofluorobenzene	94.7%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
 METHOD BLANK

Lab Sample ID: MB-080708 QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water
Data Release Authorized: Date Sampled: NA
Reported: 08/08/08 Date Received: NA

Instrument/Analyst: FINN3/JZ Sample Amount: 20.0 mL
Date Analyzed: 08/07/08 11:07 Purge Volume: 20.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	3.0	< 3.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
 METHOD BLANK

Lab Sample ID: MB-080708 QC Report No: NI87-HART CROWSER,INC.
LIMS ID: 08-18789 Project: PIER 23-EBC
Matrix: Water
Date Analyzed: 08/07/08 11:07

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	97.2%
Bromofluorobenzene	89.0%
d4-1,2-Dichlorobenzene	96.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-1
SAMPLE

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 06:35
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-1
SAMPLE

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Date Analyzed: 08/13/08 06:35

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.4%	2-Fluorobiphenyl	63.2%
d14-p-Terphenyl	78.8%	d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	75.7%	2-Fluorophenol	68.5%
2,4,6-Tribromophenol	69.9%	d4-2-Chlorophenol	71.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-3
SAMPLE

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 07:09
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-3
SAMPLE

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Date Analyzed: 08/13/08 07:09

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.8%	2-Fluorobiphenyl	58.8%
d14-p-Terphenyl	74.8%	d4-1,2-Dichlorobenzene	49.6%
d5-Phenol	57.1%	2-Fluorophenol	60.5%
2,4,6-Tribromophenol	76.0%	d4-2-Chlorophenol	69.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
SAMPLE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized: MW
Reported: 08/13/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 07:43
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
SAMPLE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 07:43

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**1.0**	**1.0**
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.4%	2-Fluorobiphenyl	57.6%
d14-p-Terphenyl	92.4%	d4-1,2-Dichlorobenzene	48.8%
d5-Phenol	68.3%	2-Fluorophenol	63.2%
2,4,6-Tribromophenol	70.7%	d4-2-Chlorophenol	66.4%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
EBC-1	68.4%	63.2%	78.8%	55.2%	75.7%	68.5%	69.9%	71.7%	0
EBC-3	68.8%	58.8%	74.8%	49.6%	57.1%	60.5%	76.0%	69.3%	0
MB-080608	72.4%	66.4%	88.0%	56.8%	76.0%	70.4%	68.3%	73.3%	0
LCS-080608	77.6%	78.4%	100%	61.2%	85.6%	76.5%	85.1%	79.5%	0
LCSD-080608	78.4%	79.6%	107%	62.4%	85.6%	77.6%	90.7%	80.8%	0
EBC-4	62.4%	57.6%	92.4%	48.8%	68.3%	63.2%	70.7%	66.4%	0
EBC-4 MS	78.4%	83.2%	76.8%	62.8%	86.1%	76.0%	91.7%	80.3%	0
EBC-4 MSD	73.2%	76.8%	87.6%	60.8%	82.1%	73.3%	86.1%	76.5%	0

		LCS/MB LIMITS	QC LIMITS
(NBZ)	= d5-Nitrobenzene	(54-102)	(40-103)
(FBP)	= 2-Fluorobiphenyl	(47-99)	(35-98)
(TPH)	= d14-p-Terphenyl	(50-119)	(21-122)
(DCB)	= d4-1,2-Dichlorobenzene	(39-86)	(28-85)
(PHL)	= d5-Phenol	(45-100)	(32-99)
(2FP)	= 2-Fluorophenol	(49-94)	(36-93)
(TBP)	= 2,4,6-Tribromophenol	(49-117)	(37-120)
(2CP)	= d4-2-Chlorophenol	(54-99)	(40-98)

Prep Method: SW3520C
Log Number Range: 08-18787 to 08-18789

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MS/MSD

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted MS/MSD: 08/06/08

Sample Amount MS: 500 mL
MSD: 500 mL

Date Analyzed MS: 08/13/08 08:18
MSD: 08/13/08 08:52

Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL

Instrument/Analyst MS: NT6/LJR
MSD: NT6/LJR

Dilution Factor MS: 1.00
MSD: 1.00

GPC Cleanup: NO

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 1.0 U	18.0	25.0	72.0%	17.5	25.0	70.0%	2.8%
Bis-(2-Chloroethyl) Ether	< 1.0 U	18.9	25.0	75.6%	18.2	25.0	72.8%	3.8%
2-Chlorophenol	< 1.0 U	18.8	25.0	75.2%	17.9	25.0	71.6%	4.9%
1,3-Dichlorobenzene	< 1.0 U	10.1	25.0	40.4%	10.5	25.0	42.0%	3.9%
1,4-Dichlorobenzene	< 1.0 U	10.5	25.0	42.0%	11.0	25.0	44.0%	4.7%
Benzyl Alcohol	< 5.0 U	31.1	50.0	62.2%	28.7	50.0	57.4%	8.0%
1,2-Dichlorobenzene	< 1.0 U	11.1	25.0	44.4%	11.6	25.0	46.4%	4.4%
2-Methylphenol	< 1.0 U	19.5	25.0	78.0%	18.5	25.0	74.0%	5.3%
2,2'-Oxybis(1-Chloropropane)	< 1.0 U	17.7	25.0	70.8%	16.8	25.0	67.2%	5.2%
4-Methylphenol	< 1.0 U	40.5	50.0	81.0%	37.5	50.0	75.0%	7.7%
N-Nitroso-Di-N-Propylamine	< 5.0 U	16.8	25.0	67.2%	15.7	25.0	62.8%	6.8%
Hexachloroethane	< 1.0 U	8.4	25.0	33.6%	9.2	25.0	36.8%	9.1%
Nitrobenzene	< 1.0 U	18.9	25.0	75.6%	18.1	25.0	72.4%	4.3%
Isophorone	< 1.0 U	21.7	25.0	86.8%	19.8	25.0	79.2%	9.2%
2-Nitrophenol	< 5.0 U	19.1	25.0	76.4%	18.0	25.0	72.0%	5.9%
2,4-Dimethylphenol	< 1.0 U	16.9	25.0	67.6%	15.7	25.0	62.8%	7.4%
Benzoic Acid	< 10.0 U	58.2	75.0	77.6%	57.6	75.0	76.8%	1.0%
bis(2-Chloroethoxy) Methane	< 1.0 U	19.7	25.0	78.8%	18.1	25.0	72.4%	8.5%
2,4-Dichlorophenol	< 5.0 U	19.6	25.0	78.4%	18.3	25.0	73.2%	6.9%
1,2,4-Trichlorobenzene	< 1.0 U	11.1	25.0	44.4%	11.4	25.0	45.6%	2.7%
Naphthalene	< 1.0 U	15.4	25.0	61.6%	14.9	25.0	59.6%	3.3%
4-Chloroaniline	< 5.0 U	38.2	60.0	63.7%	28.9	60.0	48.2%	27.7%
Hexachlorobutadiene	< 1.0 U	8.5	25.0	34.0%	9.1	25.0	36.4%	6.8%
4-Chloro-3-methylphenol	< 5.0 U	20.9	25.0	83.6%	19.5	25.0	78.0%	6.9%
2-Methylnaphthalene	< 1.0 U	15.4	25.0	61.6%	14.5	25.0	58.0%	6.0%
Hexachlorocyclopentadiene	< 5.0 U	26.3	75.0	35.1%	24.0	75.0	32.0%	9.1%
2,4,6-Trichlorophenol	< 5.0 U	20.7	25.0	82.8%	19.3	25.0	77.2%	7.0%
2,4,5-Trichlorophenol	< 5.0 U	21.7	25.0	86.8%	20.5	25.0	82.0%	5.7%
2-Chloronaphthalene	< 1.0 U	17.3	25.0	69.2%	16.1	25.0	64.4%	7.2%
2-Nitroaniline	< 5.0 U	20.4	25.0	81.6%	19.2	25.0	76.8%	6.1%
Dimethylphthalate	< 1.0 U	20.2	25.0	80.8%	18.8	25.0	75.2%	7.2%
Acenaphthylene	< 1.0 U	18.9	25.0	75.6%	17.4	25.0	69.6%	8.3%
3-Nitroaniline	< 5.0 U	53.8	64.0	84.1%	51.5	64.0	80.5%	4.4%
Acenaphthene	< 1.0 U	18.6	25.0	74.4%	17.1	25.0	68.4%	8.4%
2,4-Dinitrophenol	< 10.0 U	70.4	75.0	93.9%	67.8	75.0	90.4%	3.8%
4-Nitrophenol	< 5.0 U	18.1	25.0	72.4%	17.4	25.0	69.6%	3.9%
Dibenzofuran	< 1.0 U	19.5	25.0	78.0%	18.2	25.0	72.8%	6.9%
2,6-Dinitrotoluene	< 5.0 U	20.9	25.0	83.6%	19.6	25.0	78.4%	6.4%
2,4-Dinitrotoluene	< 5.0 U	21.1	25.0	84.4%	19.9	25.0	79.6%	5.9%
Diethylphthalate	< 1.0 U	19.0	25.0	76.0%	17.9	25.0	71.6%	6.0%
4-Chlorophenyl-phenylether	< 1.0 U	19.6	25.0	78.4%	18.0	25.0	72.0%	8.5%
Fluorene	< 1.0 U	20.2	25.0	80.8%	18.8	25.0	75.2%	7.2%
4-Nitroaniline	< 5.0 U	17.2	25.0	68.8%	16.6	25.0	66.4%	3.6%
4,6-Dinitro-2-Methylphenol	< 10.0 U	61.4	75.0	81.9%	58.9	75.0	78.5%	4.2%
N-Nitrosodiphenylamine	< 1.0 U	25.2	25.0	101%	23.9	25.0	95.6%	5.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MS/MSD

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 08:18

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
4-Bromophenyl-phenylether	< 1.0 U	20.0	25.0	80.0%	19.1	25.0	76.4%	4.6%
Hexachlorobenzene	< 1.0 U	20.0	25.0	80.0%	19.2	25.0	76.8%	4.1%
Pentachlorophenol	< 5.0 U	18.4	25.0	73.6%	17.5	25.0	70.0%	5.0%
Phenanthrene	< 1.0 U	19.8	25.0	79.2%	18.8	25.0	75.2%	5.2%
Carbazole	< 1.0 U	20.4	25.0	81.6%	19.6	25.0	78.4%	4.0%
Anthracene	< 1.0 U	18.6	25.0	74.4%	18.1	25.0	72.4%	2.7%
Di-n-Butylphthalate	< 1.0 U	20.0	25.0	80.0%	19.1	25.0	76.4%	4.6%
Fluoranthene	< 1.0 U	19.0	25.0	76.0%	18.0	25.0	72.0%	5.4%
Pyrene	< 1.0 U	22.1	25.0	88.4%	21.6	25.0	86.4%	2.3%
Butylbenzylphthalate	< 1.0 U	21.1	25.0	84.4%	20.6	25.0	82.4%	2.4%
3,3'-Dichlorobenzidine	< 5.0 U	22.6	64.0	35.3%	33.8	64.0	52.8%	39.7%
Benzo(a)anthracene	< 1.0 U	20.0	25.0	80.0%	19.6	25.0	78.4%	2.0%
bis(2-Ethylhexyl)phthalate	1.0	20.0	25.0	76.0%	18.8	25.0	71.2%	6.2%
Chrysene	< 1.0 U	19.6	25.0	78.4%	19.0	25.0	76.0%	3.1%
Di-n-Octyl phthalate	< 1.0 U	20.4	25.0	81.6%	19.8	25.0	79.2%	3.0%
Benzo(b)fluoranthene	< 1.0 U	19.6	25.0	78.4%	17.9	25.0	71.6%	9.1%
Benzo(k)fluoranthene	< 1.0 U	19.0	25.0	76.0%	18.9	25.0	75.6%	0.5%
Benzo(a)pyrene	< 1.0 U	17.3	25.0	69.2%	17.4	25.0	69.6%	0.6%
Indeno(1,2,3-cd)pyrene	< 1.0 U	23.6	25.0	94.4%	22.6	25.0	90.4%	4.3%
Dibenz(a,h)anthracene	< 1.0 U	24.2	25.0	96.8%	23.2	25.0	92.8%	4.2%
Benzo(g,h,i)perylene	< 1.0 U	24.8	25.0	99.2%	23.7	25.0	94.8%	4.5%
1-Methylnaphthalene	< 1.0 U	16.1	25.0	64.4%	15.3	25.0	61.2%	5.1%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 08:18
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	---
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	---
95-57-8	2-Chlorophenol	1.0	---
541-73-1	1,3-Dichlorobenzene	1.0	---
106-46-7	1,4-Dichlorobenzene	1.0	---
100-51-6	Benzyl Alcohol	5.0	---
95-50-1	1,2-Dichlorobenzene	1.0	---
95-48-7	2-Methylphenol	1.0	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	---
106-44-5	4-Methylphenol	1.0	---
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	---
67-72-1	Hexachloroethane	1.0	---
98-95-3	Nitrobenzene	1.0	---
78-59-1	Isophorone	1.0	---
88-75-5	2-Nitrophenol	5.0	---
105-67-9	2,4-Dimethylphenol	1.0	---
65-85-0	Benzoic Acid	10	---
111-91-1	bis(2-Chloroethoxy) Methane	1.0	---
120-83-2	2,4-Dichlorophenol	5.0	---
120-82-1	1,2,4-Trichlorobenzene	1.0	---
91-20-3	Naphthalene	1.0	---
106-47-8	4-Chloroaniline	5.0	---
87-68-3	Hexachlorobutadiene	1.0	---
59-50-7	4-Chloro-3-methylphenol	5.0	---
91-57-6	2-Methylnaphthalene	1.0	---
77-47-4	Hexachlorocyclopentadiene	5.0	---
88-06-2	2,4,6-Trichlorophenol	5.0	---
95-95-4	2,4,5-Trichlorophenol	5.0	---
91-58-7	2-Chloronaphthalene	1.0	---
88-74-4	2-Nitroaniline	5.0	---
131-11-3	Dimethylphthalate	1.0	---
208-96-8	Acenaphthylene	1.0	---
99-09-2	3-Nitroaniline	5.0	---
83-32-9	Acenaphthene	1.0	---
51-28-5	2,4-Dinitrophenol	10	---
100-02-7	4-Nitrophenol	5.0	---
132-64-9	Dibenzofuran	1.0	---
606-20-2	2,6-Dinitrotoluene	5.0	---
121-14-2	2,4-Dinitrotoluene	5.0	---
84-66-2	Diethylphthalate	1.0	---

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 08:18

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	---
86-73-7	Fluorene	1.0	---
100-01-6	4-Nitroaniline	5.0	---
534-52-1	4,6-Dinitro-2-Methylphenol	10	---
86-30-6	N-Nitrosodiphenylamine	1.0	---
101-55-3	4-Bromophenyl-phenylether	1.0	---
118-74-1	Hexachlorobenzene	1.0	---
87-86-5	Pentachlorophenol	5.0	---
85-01-8	Phenanthrene	1.0	---
86-74-8	Carbazole	1.0	---
120-12-7	Anthracene	1.0	---
84-74-2	Di-n-Butylphthalate	1.0	---
206-44-0	Fluoranthene	1.0	---
129-00-0	Pyrene	1.0	---
85-68-7	Butylbenzylphthalate	1.0	---
91-94-1	3,3'-Dichlorobenzidine	5.0	---
56-55-3	Benzo(a)anthracene	1.0	---
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	---
218-01-9	Chrysene	1.0	---
117-84-0	Di-n-Octyl phthalate	1.0	---
205-99-2	Benzo(b)fluoranthene	1.0	---
207-08-9	Benzo(k)fluoranthene	1.0	---
50-32-8	Benzo(a)pyrene	1.0	---
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	---
53-70-3	Dibenz(a,h)anthracene	1.0	---
191-24-2	Benzo(g,h,i)perylene	1.0	---
90-12-0	1-Methylnaphthalene	1.0	---

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	78.4%	2-Fluorobiphenyl	83.2%
d14-p-Terphenyl	76.8%	d4-1,2-Dichlorobenzene	62.8%
d5-Phenol	86.1%	2-Fluorophenol	76.0%
2,4,6-Tribromophenol	91.7%	d4-2-Chlorophenol	80.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MATRIX SPIKE DUP

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 08:52
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	---
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	---
95-57-8	2-Chlorophenol	1.0	---
541-73-1	1,3-Dichlorobenzene	1.0	---
106-46-7	1,4-Dichlorobenzene	1.0	---
100-51-6	Benzyl Alcohol	5.0	---
95-50-1	1,2-Dichlorobenzene	1.0	---
95-48-7	2-Methylphenol	1.0	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	---
106-44-5	4-Methylphenol	1.0	---
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	---
67-72-1	Hexachloroethane	1.0	---
98-95-3	Nitrobenzene	1.0	---
78-59-1	Isophorone	1.0	---
88-75-5	2-Nitrophenol	5.0	---
105-67-9	2,4-Dimethylphenol	1.0	---
65-85-0	Benzoic Acid	10	---
111-91-1	bis(2-Chloroethoxy) Methane	1.0	---
120-83-2	2,4-Dichlorophenol	5.0	---
120-82-1	1,2,4-Trichlorobenzene	1.0	---
91-20-3	Naphthalene	1.0	---
106-47-8	4-Chloroaniline	5.0	---
87-68-3	Hexachlorobutadiene	1.0	---
59-50-7	4-Chloro-3-methylphenol	5.0	---
91-57-6	2-Methylnaphthalene	1.0	---
77-47-4	Hexachlorocyclopentadiene	5.0	---
88-06-2	2,4,6-Trichlorophenol	5.0	---
95-95-4	2,4,5-Trichlorophenol	5.0	---
91-58-7	2-Chloronaphthalene	1.0	---
88-74-4	2-Nitroaniline	5.0	---
131-11-3	Dimethylphthalate	1.0	---
208-96-8	Acenaphthylene	1.0	---
99-09-2	3-Nitroaniline	5.0	---
83-32-9	Acenaphthene	1.0	---
51-28-5	2,4-Dinitrophenol	10	---
100-02-7	4-Nitrophenol	5.0	---
132-64-9	Dibenzofuran	1.0	---
606-20-2	2,6-Dinitrotoluene	5.0	---
121-14-2	2,4-Dinitrotoluene	5.0	---
84-66-2	Diethylphthalate	1.0	---

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-4
MATRIX SPIKE DUP

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 08:52

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	---
86-73-7	Fluorene	1.0	---
100-01-6	4-Nitroaniline	5.0	---
534-52-1	4,6-Dinitro-2-Methylphenol	10	---
86-30-6	N-Nitrosodiphenylamine	1.0	---
101-55-3	4-Bromophenyl-phenylether	1.0	---
118-74-1	Hexachlorobenzene	1.0	---
87-86-5	Pentachlorophenol	5.0	---
85-01-8	Phenanthrene	1.0	---
86-74-8	Carbazole	1.0	---
120-12-7	Anthracene	1.0	---
84-74-2	Di-n-Butylphthalate	1.0	---
206-44-0	Fluoranthene	1.0	---
129-00-0	Pyrene	1.0	---
85-68-7	Butylbenzylphthalate	1.0	---
91-94-1	3,3'-Dichlorobenzidine	5.0	---
56-55-3	Benzo(a)anthracene	1.0	---
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	---
218-01-9	Chrysene	1.0	---
117-84-0	Di-n-Octyl phthalate	1.0	---
205-99-2	Benzo(b)fluoranthene	1.0	---
207-08-9	Benzo(k)fluoranthene	1.0	---
50-32-8	Benzo(a)pyrene	1.0	---
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	---
53-70-3	Dibenz(a,h)anthracene	1.0	---
191-24-2	Benzo(g,h,i)perylene	1.0	---
90-12-0	1-Methylnaphthalene	1.0	---

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.2%	2-Fluorobiphenyl	76.8%
d14-p-Terphenyl	87.6%	d4-1,2-Dichlorobenzene	60.8%
d5-Phenol	82.1%	2-Fluorophenol	73.3%
2,4,6-Tribromophenol	86.1%	d4-2-Chlorophenol	76.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-080608
LCS/LCSD

Lab Sample ID: LCS-080608
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted LCS/LCSD: 08/06/08

Date Analyzed LCS: 08/13/08 05:27
LCSD: 08/13/08 06:01
Instrument/Analyst LCS: NT6/LJR
LCSD: NT6/LJR
GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	17.4	25.0	69.6%	17.3	25.0	69.2%	0.6%
Bis-(2-Chloroethyl) Ether	18.6	25.0	74.4%	18.7	25.0	74.8%	0.5%
2-Chlorophenol	18.3	25.0	73.2%	18.6	25.0	74.4%	1.6%
1,3-Dichlorobenzene	10.0	25.0	40.0%	10.4	25.0	41.6%	4.0%
1,4-Dichlorobenzene	10.4	25.0	41.6%	10.7	25.0	42.8%	2.8%
Benzyl Alcohol	27.4	50.0	54.8%	27.8	50.0	55.6%	1.4%
1,2-Dichlorobenzene	11.0	25.0	44.0%	11.3	25.0	45.2%	2.7%
2-Methylphenol	18.1	25.0	72.4%	18.1	25.0	72.4%	0.0%
2,2'-Oxybis(1-Chloropropane)	17.4	25.0	69.6%	17.6	25.0	70.4%	1.1%
4-Methylphenol	37.6	50.0	75.2%	38.3	50.0	76.6%	1.8%
N-Nitroso-Di-N-Propylamine	15.7	25.0	62.8%	16.3	25.0	65.2%	3.8%
Hexachloroethane	8.6	25.0	34.4%	9.4	25.0	37.6%	8.6%
Nitrobenzene	18.4	25.0	73.6%	18.1	25.0	72.4%	1.6%
Isophorone	20.3	25.0	81.2%	21.0	25.0	84.0%	3.4%
2-Nitrophenol	18.3	25.0	73.2%	18.5	25.0	74.0%	1.1%
2,4-Dimethylphenol	11.3	25.0	45.2%	11.6	25.0	46.4%	2.6%
Benzoic Acid	53.9	75.0	71.9%	54.9	75.0	73.2%	1.8%
bis(2-Chloroethoxy) Methane	18.7	25.0	74.8%	18.9	25.0	75.6%	1.1%
2,4-Dichlorophenol	18.6	25.0	74.4%	18.6	25.0	74.4%	0.0%
1,2,4-Trichlorobenzene	10.9	25.0	43.6%	11.3	25.0	45.2%	3.6%
Naphthalene	15.2	25.0	60.8%	15.2	25.0	60.8%	0.0%
4-Chloroaniline	44.0	60.0	73.3%	44.4	60.0	74.0%	0.9%
Hexachlorobutadiene	8.2	25.0	32.8%	9.1	25.0	36.4%	9.6%
4-Chloro-3-methylphenol	18.6	25.0	74.4%	20.0	25.0	80.0%	7.3%
2-Methylnaphthalene	14.6	25.0	58.4%	15.0	25.0	60.0%	2.7%
Hexachlorocyclopentadiene	18.8	75.0	25.1%	22.8	75.0	30.4%	19.2%
2,4,6-Trichlorophenol	18.8	25.0	75.2%	19.5	25.0	78.0%	3.7%
2,4,5-Trichlorophenol	18.7	25.0	74.8%	19.5	25.0	78.0%	4.2%
2-Chloronaphthalene	16.0	25.0	64.0%	16.4	25.0	65.6%	2.5%
2-Nitroaniline	19.5	25.0	78.0%	20.7	25.0	82.8%	6.0%
Dimethylphthalate	18.8	25.0	75.2%	19.8	25.0	79.2%	5.2%
Acenaphthylene	18.4	25.0	73.6%	19.6	25.0	78.4%	6.3%
3-Nitroaniline	55.7	64.0	87.0%	56.9	64.0	88.9%	2.1%
Acenaphthene	17.2	25.0	68.8%	18.1	25.0	72.4%	5.1%
2,4-Dinitrophenol	64.6	75.0	86.1%	70.1	75.0	93.5%	8.2%
4-Nitrophenol	16.0	25.0	64.0%	16.9	25.0	67.6%	5.5%
Dibenzofuran	17.9	25.0	71.6%	19.2	25.0	76.8%	7.0%
2,6-Dinitrotoluene	19.5	25.0	78.0%	21.0	25.0	84.0%	7.4%
2,4-Dinitrotoluene	19.9	25.0	79.6%	21.3	25.0	85.2%	6.8%
Diethylphthalate	17.7	25.0	70.8%	18.6	25.0	74.4%	5.0%
4-Chlorophenyl-phenylether	17.5	25.0	70.0%	18.5	25.0	74.0%	5.6%
Fluorene	18.7	25.0	74.8%	20.0	25.0	80.0%	6.7%
4-Nitroaniline	17.9	25.0	71.6%	18.6	25.0	74.4%	3.8%
4,6-Dinitro-2-Methylphenol	57.2	75.0	76.3%	61.2	75.0	81.6%	6.8%
N-Nitrosodiphenylamine	24.1	25.0	96.4%	26.0	25.0	104%	7.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 2 of 2

Sample ID: LCS-080608
LCS/LCSD

Lab Sample ID: LCS-080608
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 05:27

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	18.0	25.0	72.0%	19.3	25.0	77.2%	7.0%
Hexachlorobenzene	18.5	25.0	74.0%	19.5	25.0	78.0%	5.3%
Pentachlorophenol	16.0	25.0	64.0%	16.8	25.0	67.2%	4.9%
Phenanthrene	18.4	25.0	73.6%	19.6	25.0	78.4%	6.3%
Carbazole	19.5	25.0	78.0%	20.4	25.0	81.6%	4.5%
Anthracene	17.9	25.0	71.6%	18.9	25.0	75.6%	5.4%
Di-n-Butylphthalate	18.7	25.0	74.8%	19.8	25.0	79.2%	5.7%
Fluoranthene	17.9	25.0	71.6%	18.9	25.0	75.6%	5.4%
Pyrene	21.7	25.0	86.8%	23.4	25.0	93.6%	7.5%
Butylbenzylphthalate	20.6	25.0	82.4%	21.5	25.0	86.0%	4.3%
3,3'-Dichlorobenzidine	40.2	64.0	62.8%	41.4	64.0	64.7%	2.9%
Benzo(a)anthracene	18.9	25.0	75.6%	19.4	25.0	77.6%	2.6%
bis(2-Ethylhexyl)phthalate	20.4	25.0	81.6%	19.5	25.0	78.0%	4.5%
Chrysene	18.6	25.0	74.4%	19.5	25.0	78.0%	4.7%
Di-n-Octyl phthalate	19.4	25.0	77.6%	19.7	25.0	78.8%	1.5%
Benzo(b)fluoranthene	18.0	25.0	72.0%	19.5	25.0	78.0%	8.0%
Benzo(k)fluoranthene	17.7	25.0	70.8%	17.5	25.0	70.0%	1.1%
Benzo(a)pyrene	17.0	25.0	68.0%	17.5	25.0	70.0%	2.9%
Indeno(1,2,3-cd)pyrene	22.2	25.0	88.8%	23.4	25.0	93.6%	5.3%
Dibenz(a,h)anthracene	22.4	25.0	89.6%	23.8	25.0	95.2%	6.1%
Benzo(g,h,i)perylene	23.9	25.0	95.6%	24.8	25.0	99.2%	3.7%
1-Methylnaphthalene	15.5	25.0	62.0%	15.8	25.0	63.2%	1.9%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	77.6%	78.4%
2-Fluorobiphenyl	78.4%	79.6%
d14-p-Terphenyl	100%	107%
d4-1,2-Dichlorobenzene	61.2%	62.4%
d5-Phenol	85.6%	85.6%
2-Fluorophenol	76.5%	77.6%
2,4,6-Tribromophenol	85.1%	90.7%
d4-2-Chlorophenol	79.5%	80.8%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-080608
METHOD BLANK

Lab Sample ID: MB-080608
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
NA
Date Sampled: NA
Date Received: NA

Date Extracted: 08/06/08
Date Analyzed: 08/13/08 04:52
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-080608
METHOD BLANK

Lab Sample ID: MB-080608
LIMS ID: 08-18789
Matrix: Water
Date Analyzed: 08/13/08 04:52

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
NA

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.4%	2-Fluorobiphenyl	66.4%
d14-p-Terphenyl	88.0%	d4-1,2-Dichlorobenzene	56.8%
d5-Phenol	76.0%	2-Fluorophenol	70.4%
2,4,6-Tribromophenol	68.3%	d4-2-Chlorophenol	73.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-1
SAMPLE

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 06:29
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	45.5%
Tetrachlorometaxylene	54.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082

Sample ID: EBC-3
SAMPLE

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 06:47
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in μg/L (ppb)

PCB Surrogate Recovery	
Decachlorobiphenyl	47.0%
Tetrachlorometaxylene	61.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-4
SAMPLE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 07:05
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	68.2%
Tetrachlorometaxylene	92.0%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
EBC-1	45.5%	42-120	54.0%*	55-102	1
EBC-3	47.0%	42-120	61.5%	55-102	0
MB-080608	51.5%	47-101	72.0%	61-104	0
LCS-080608	54.5%	47-101	86.2%	61-104	0
LCSD-080608	53.5%	47-101	72.8%	61-104	0
EBC-4	68.2%	42-120	92.0%	55-102	0
EBC-4 MS	74.2%	42-120	83.5%	55-102	0
EBC-4 MSD	77.8%	42-120	84.8%	55-102	0

Prep Method: SW3510C
Log Number Range: 08-18787 to 08-18789

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

Sample ID: EBC-4
MS/MSD

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted MS/MSD: 08/06/08

Date Analyzed MS: 08/09/08 07:22
MSD: 08/09/08 07:40
Instrument/Analyst MS: ECD5/VTS
MSD: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: No
Acid Cleanup: No

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 1.00	4.86	5.00	97.2%	4.86	5.00	97.2%	0.0%
Aroclor 1260	< 1.00	4.09	5.00	81.8%	4.09	5.00	81.8%	0.0%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-4
MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 07:22
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	---
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	---
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	74.2%
Tetrachlorometaxylene	83.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-4
MATRIX SPIKE DUP

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 07:40
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	---
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	---
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	77.8%
Tetrachlorometaxylene	84.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-080608
LCS/LCSD

Lab Sample ID: LCS-080608
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 08/06/08

Date Analyzed LCS: 08/09/08 05:54
LCSD: 08/09/08 06:12

Instrument/Analyst LCS: ECD5/VTS
LCSD: ECD5/VTS

GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount LCS: 500 mL
LCSD: 500 mL

Final Extract Volume LCS: 5.0 mL
LCSD: 5.0 mL

Dilution Factor LCS: 1.00
LCSD: 1.00

Silica Gel: No
Acid Cleanup: No

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	4.53	5.00	90.6%	4.66	5.00	93.2%	2.8%
Aroclor 1260	3.66	5.00	73.2%	3.42	5.00	68.4%	6.8%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	54.5%	53.5%
Tetrachlorometaxylene	86.2%	72.8%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-080608
METHOD BLANK

Lab Sample ID: MB-080608
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/21/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: NA
Date Received: NA

Date Extracted: 08/06/08
Date Analyzed: 08/09/08 05:37
Instrument/Analyst: ECD5/VTS
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	51.5%
Tetrachlorometaxylene	72.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-1
SAMPLE

Lab Sample ID: NI87A
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Analyzed: 08/06/08 17:43
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	97.5%
Bromobenzene	94.7%

Gasoline Surrogate Recovery

Trifluorotoluene	95.0%
Bromobenzene	92.2%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

RC
8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a021.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a021.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NI87A
Client ID: EBC-1
Injection Date: 06-AUG-2008 17:43
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.410	0.000	6283	81812	95.0	TFT(Surr)
14.970	0.000	4380	36009	92.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	4629	0.006
8015B (2MP-TMB)	9976	0.007
AKGas (nC6-nC10)	9975	0.009
NWGas (Tol-Nap)	5704	0.007

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.000	23678	97.5	TFT(Surr)
14.968	0.000	57397	94.7	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

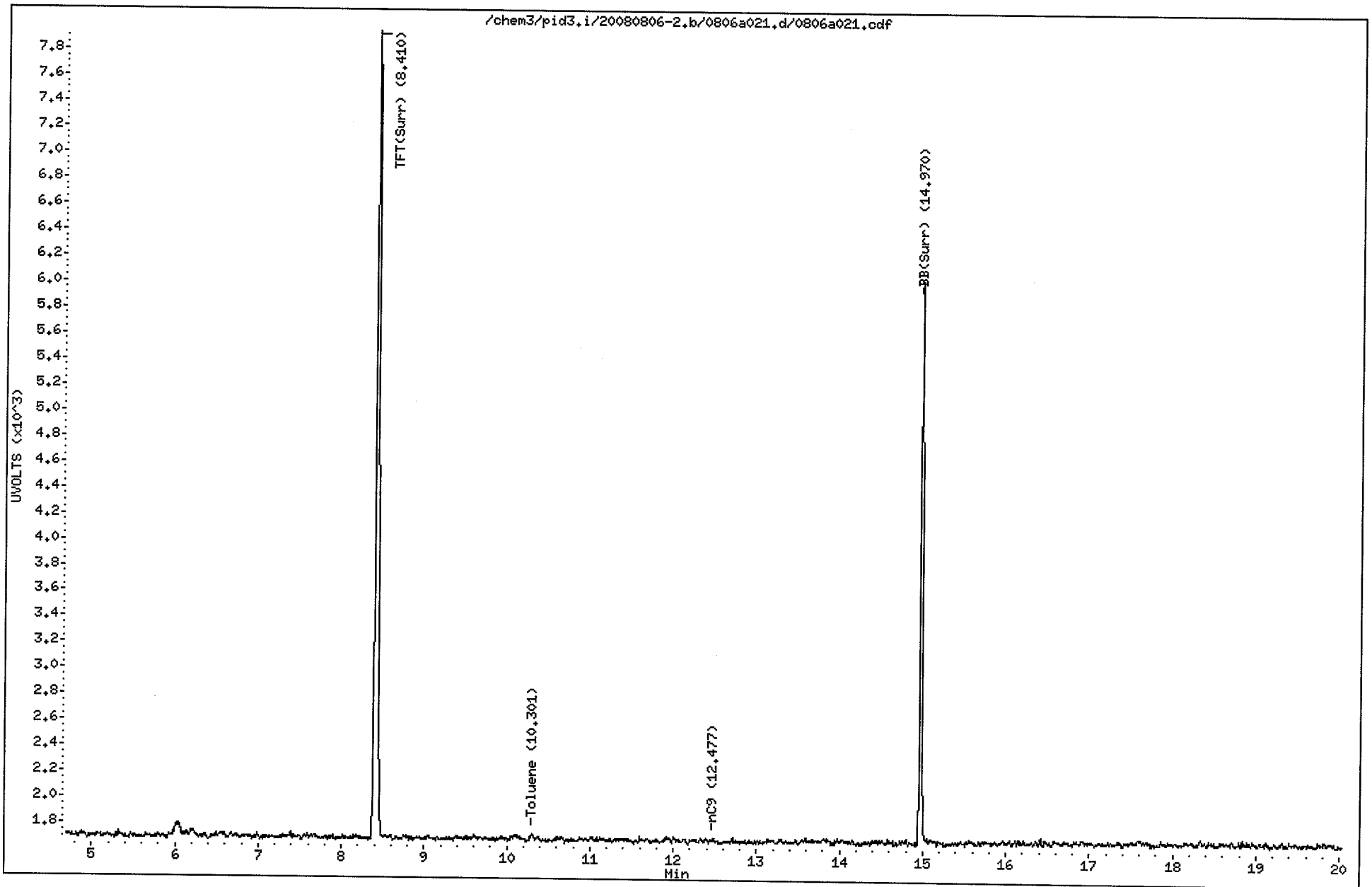
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a021.d
Date : 06-AUG-2008 17:43
Client ID: EBC-1
Sample Info: NI87A

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

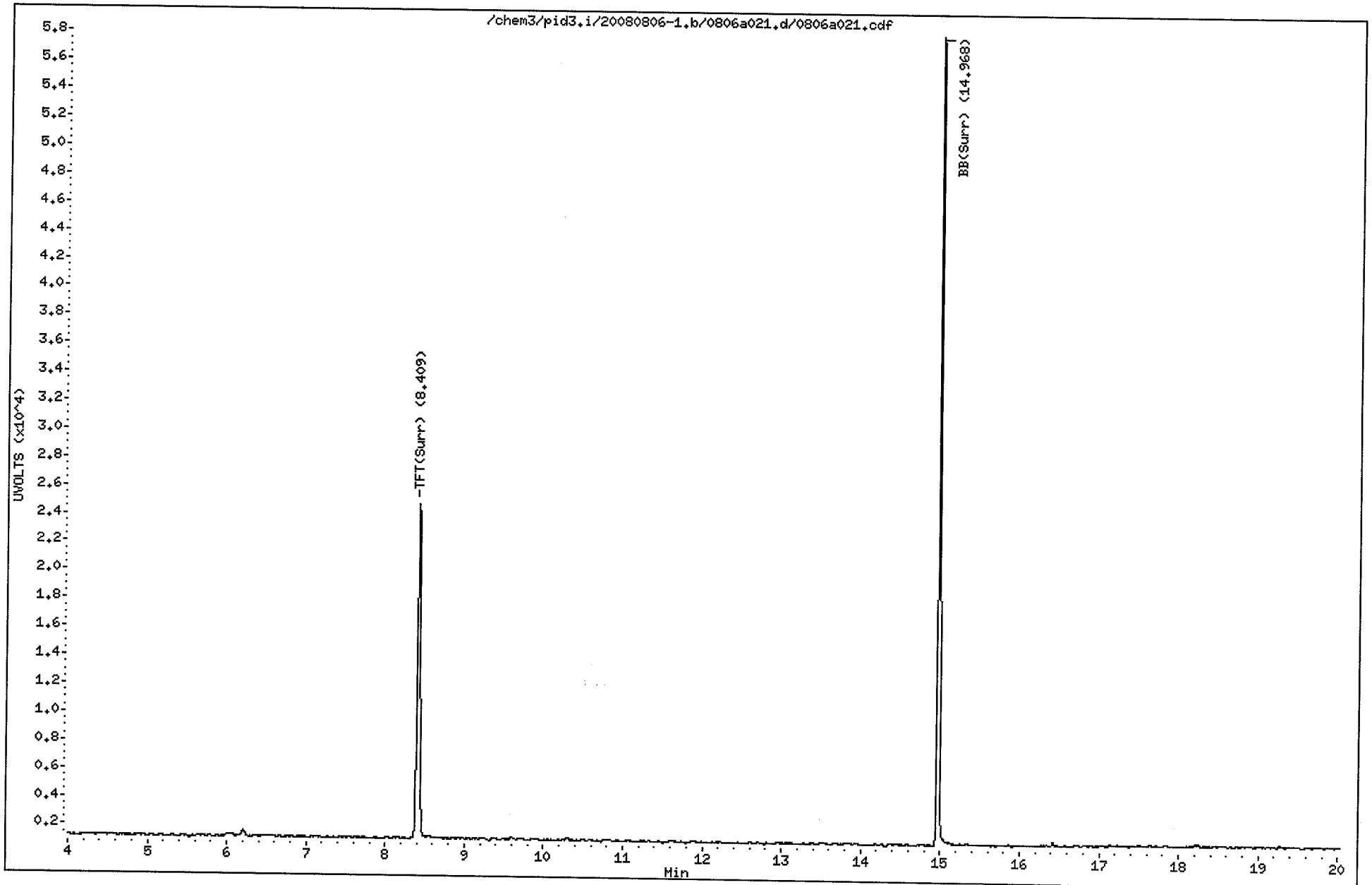


Data File: /chem3/pid3.i/20080806-1.b/0806a021.d
Date : 06-AUG-2008 17:43
Client ID: EBC-1
Sample Info: NI87A

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-3
SAMPLE

Lab Sample ID: NI87B
LIMS ID: 08-18788
Matrix: Water
Data Release Authorized: WW
Reported: 08/07/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Analyzed: 08/06/08 18:08
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	99.5%
Bromobenzene	95.7%

Gasoline Surrogate Recovery

Trifluorotoluene	96.9%
Bromobenzene	92.6%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC
8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a022.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a022.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NI87B
Client ID: EBC-3
Injection Date: 06-AUG-2008 18:08
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.409	-0.001	6403	83664	96.9	TFT(Surr)
14.969	0.000	4402	36259	92.6	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	13699	0.019
8015B (2MP-TMB)	4982	0.003
AKGas (nC6-nC10)	3668	0.003
NWGas (Tol-Nap)	24242	0.031

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	-0.001	24162	99.5	TFT(Surr)
14.968	0.000	57972	95.7	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

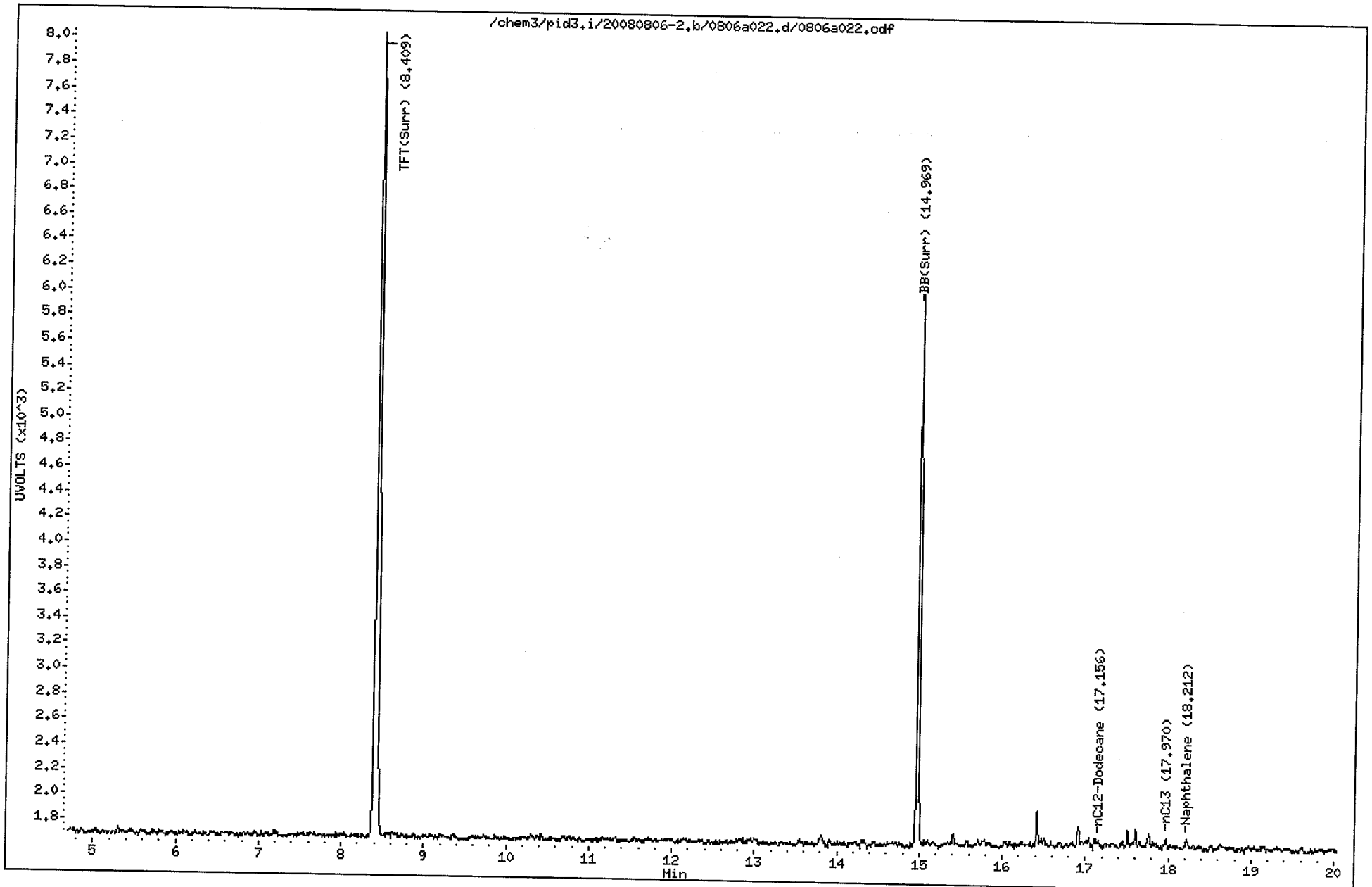
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a022.d
Date : 06-AUG-2008 18:08
Client ID: EBC-3
Sample Info: NI87B

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

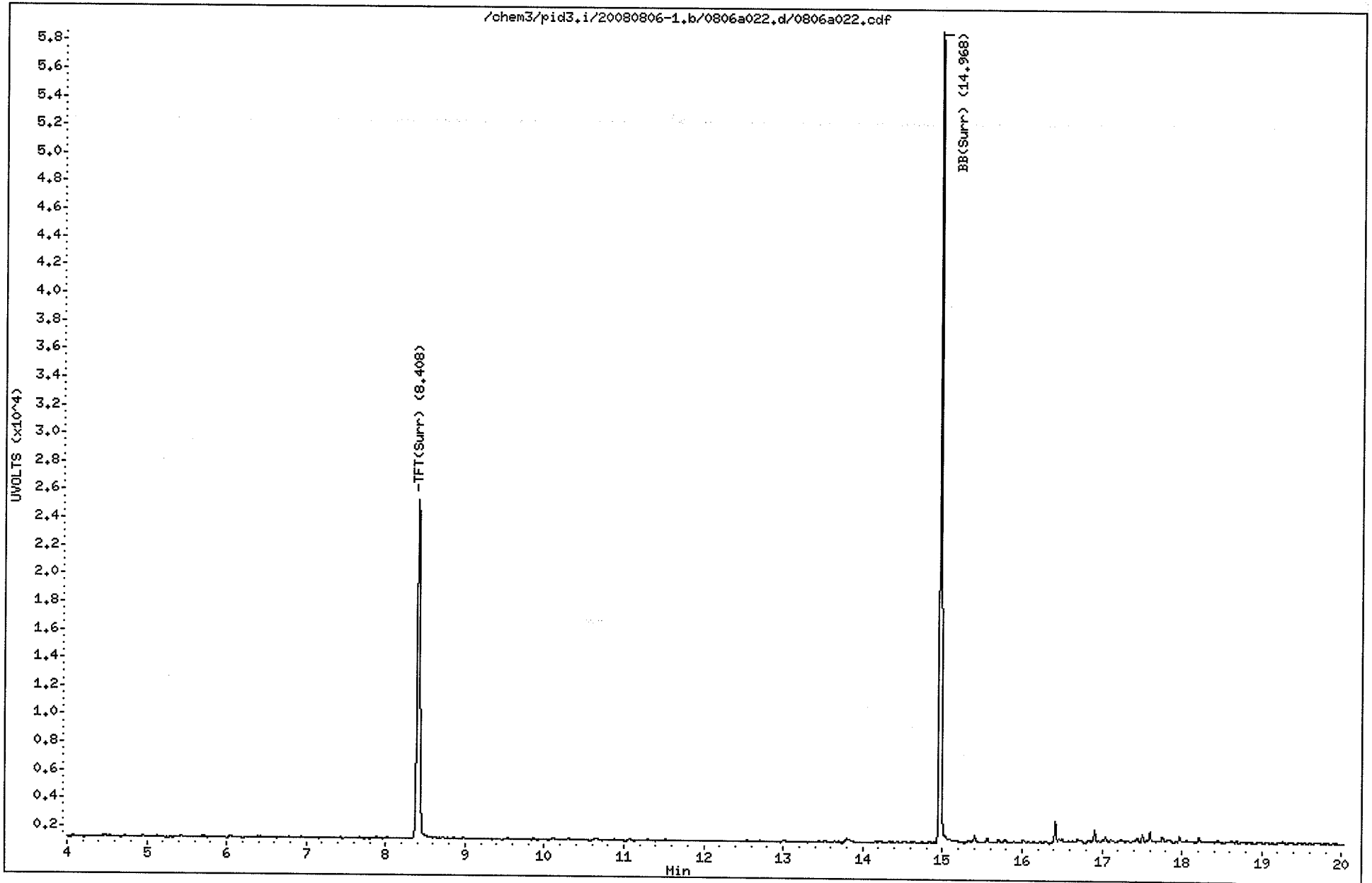


Data File: /chem3/pid3.i/20080806-1.b/0806a022.d
Date : 06-AUG-2008 18:08
Client ID: EBC-3
Sample Info: NI87B

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-4
SAMPLE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Analyzed: 08/06/08 18:33
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	99.5%
Bromobenzene	97.4%

Gasoline Surrogate Recovery

Trifluorotoluene	97.3%
Bromobenzene	94.4%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC
8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a023.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a023.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NI87C
Client ID: EBC-4
Injection Date: 06-AUG-2008 18:33
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6433	82973	97.3	TFT(Surr)
14.970	0.000	4484	37181	94.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	0	0.000
8015B (2MP-TMB)	1	0.000
AKGas (nC6-nC10)	1	0.000
NWGas (Tol-Nap)	2304	0.003

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.001	24170	99.5	TFT(Surr)
14.968	0.000	59037	97.4	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

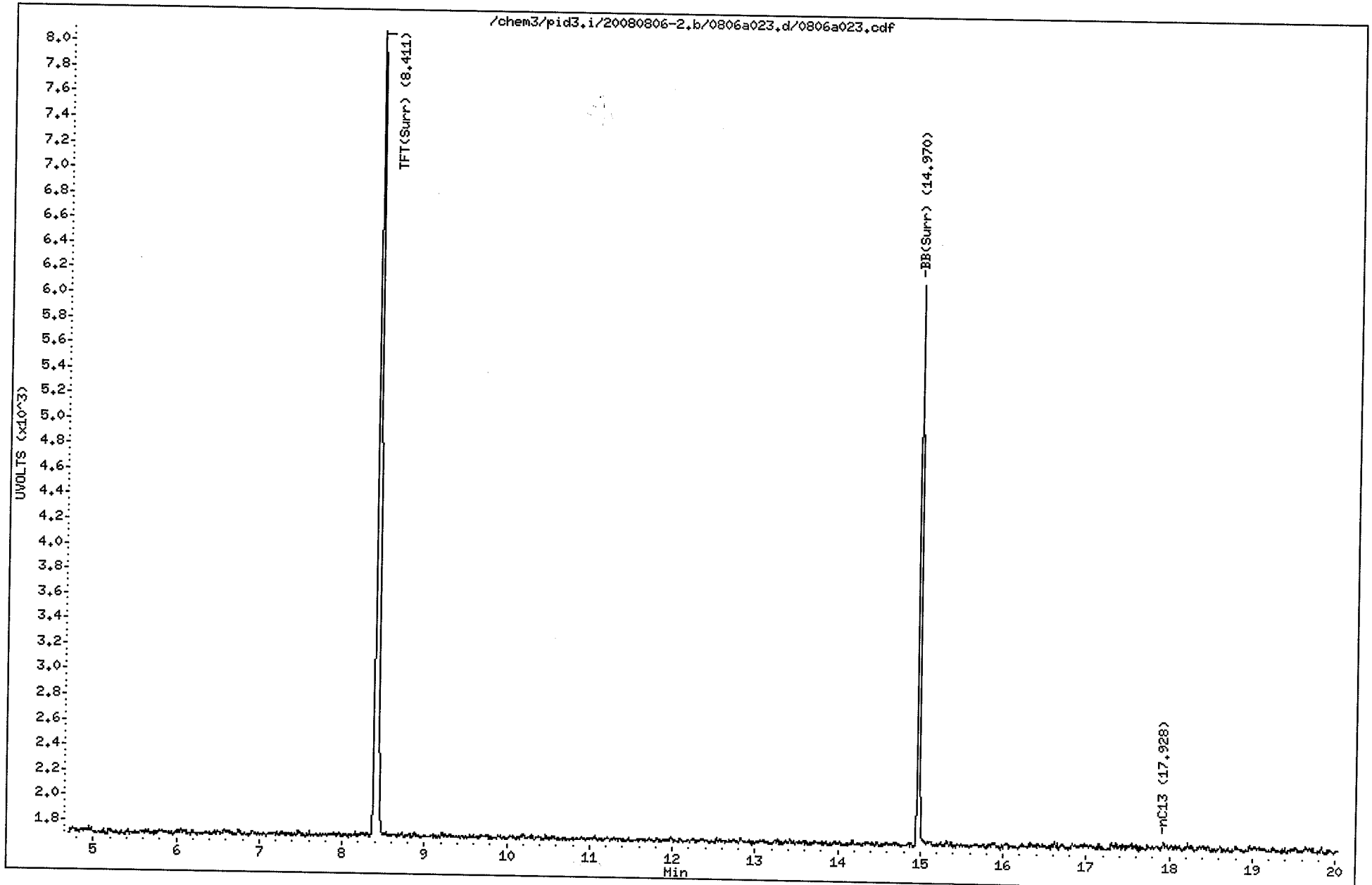
A Indicates Peak Area was used for quantitation instead of Height
M Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a023.d
Date : 06-AUG-2008 18:33
Client ID: EBC-4
Sample Info: NI87C

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

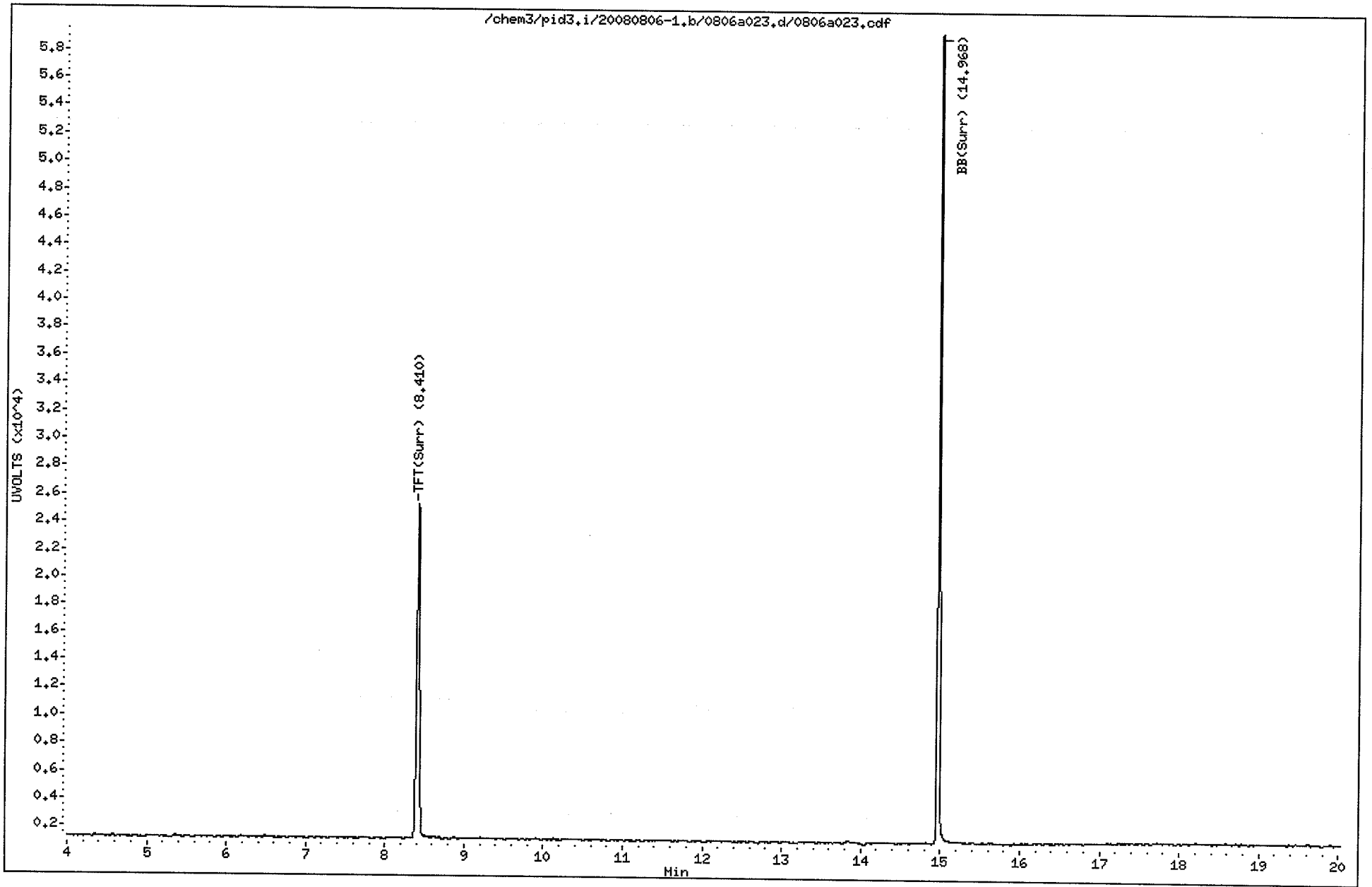


Data File: /chem3/pid3.i/20080806-1.b/0806a023.d
Date : 06-AUG-2008 18:33
Client ID: EBC-4
Sample Info: NI87C

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: NI87
Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA

Client ID	TFT	BBZ	TOT OUT
MB-080608	96.8%	94.3%	0
LCS-080608	102%	97.0%	0
LCSD-080608	101%	96.3%	0
EBC-1	97.5%	94.7%	0
EBC-3	99.5%	95.7%	0
EBC-4	99.5%	97.4%	0
EBC-4 MS	100%	98.6%	0
EBC-4 MSD	96.7%	96.2%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 08-18787 to 08-18789

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: NI87
Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA

Client ID	TFT	BBZ	TOT OUT
MB-080608	94.4%	92.2%	0
LCS-080608	99.7%	93.8%	0
LCSD-080608	98.3%	92.7%	0
EBC-1	95.0%	92.2%	0
EBC-3	96.9%	92.6%	0
EBC-4	97.3%	94.4%	0
EBC-4 MS	98.8%	94.4%	0
EBC-4 MSD	94.8%	92.9%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 08-18787 to 08-18789

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-4
MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized: MW
Reported: 08/07/08

QC Report No: NI87-HART CROWSER, INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Analyzed MS: 08/06/08 18:57
MSD: 08/06/08 19:22
Instrument/Analyst MS: PID3/PKC
MSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor MS: 1.0
MSD: 1.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Gasoline Range Hydrocarbons	< 0.25 U	0.97	1.00	97.0%	0.95	1.00	95.0%	2.1%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	MS	MSD
Trifluorotoluene	98.8%	94.8%
Bromobenzene	94.4%	92.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: EBC-4
MATRIX SPIKE

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized: MW
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: 07/30/08
Date Received: 08/04/08

Date Analyzed MS: 08/06/08 18:57
MSD: 08/06/08 19:22
Instrument/Analyst MS: PID3/PKC
MSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor MS: 1.0
MSD: 1.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Benzene	< 1.00 U	4.93	5.30	93.0%	5.00	5.30	94.3%	1.4%
Toluene	< 1.00 U	38.3	41.2	93.0%	38.3	41.2	93.0%	0.0%
Ethylbenzene	< 1.00 U	9.44	10.0	94.4%	9.51	10.0	95.1%	0.7%
m,p-Xylene	< 1.00 U	39.3	42.3	92.9%	39.3	42.3	92.9%	0.0%
o-Xylene	< 1.00 U	13.9	14.9	93.3%	13.9	14.9	93.3%	0.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	MS	MSD
Trifluorotoluene	100%	96.7%
Bromobenzene	98.6%	96.2%

PC 8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a024.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a024.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NI87CMS
Client ID: EBC-4 MS
Injection Date: 06-AUG-2008 18:57
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.406	-0.004	6532	85343	98.8	TFT(Surr)
14.969	-0.001	4486	38199	94.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	716324	0.968
8015B (2MP-TMB)	1392993	0.970
AKGas (nC6-nC10)	1109002	0.970
NWGas (Tol-Nap)	763128	0.968

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.405	-0.004	24330	100.2	TFT(Surr)
14.967	-0.001	59758	98.6	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.662	-0.002	7514	4.93	Benzene
10.297	-0.003	56378	38.32	Toluene
12.868	-0.002	12728	9.44	Ethylbenzene
13.010	0.000	58913	39.30	M/P-Xylene
13.797	-0.002	20628	13.92	O-Xylene
5.207	-0.015	2681	4.91	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a024.d

Date : 06-AUG-2008 18:57

Client ID: EBC-4 MS

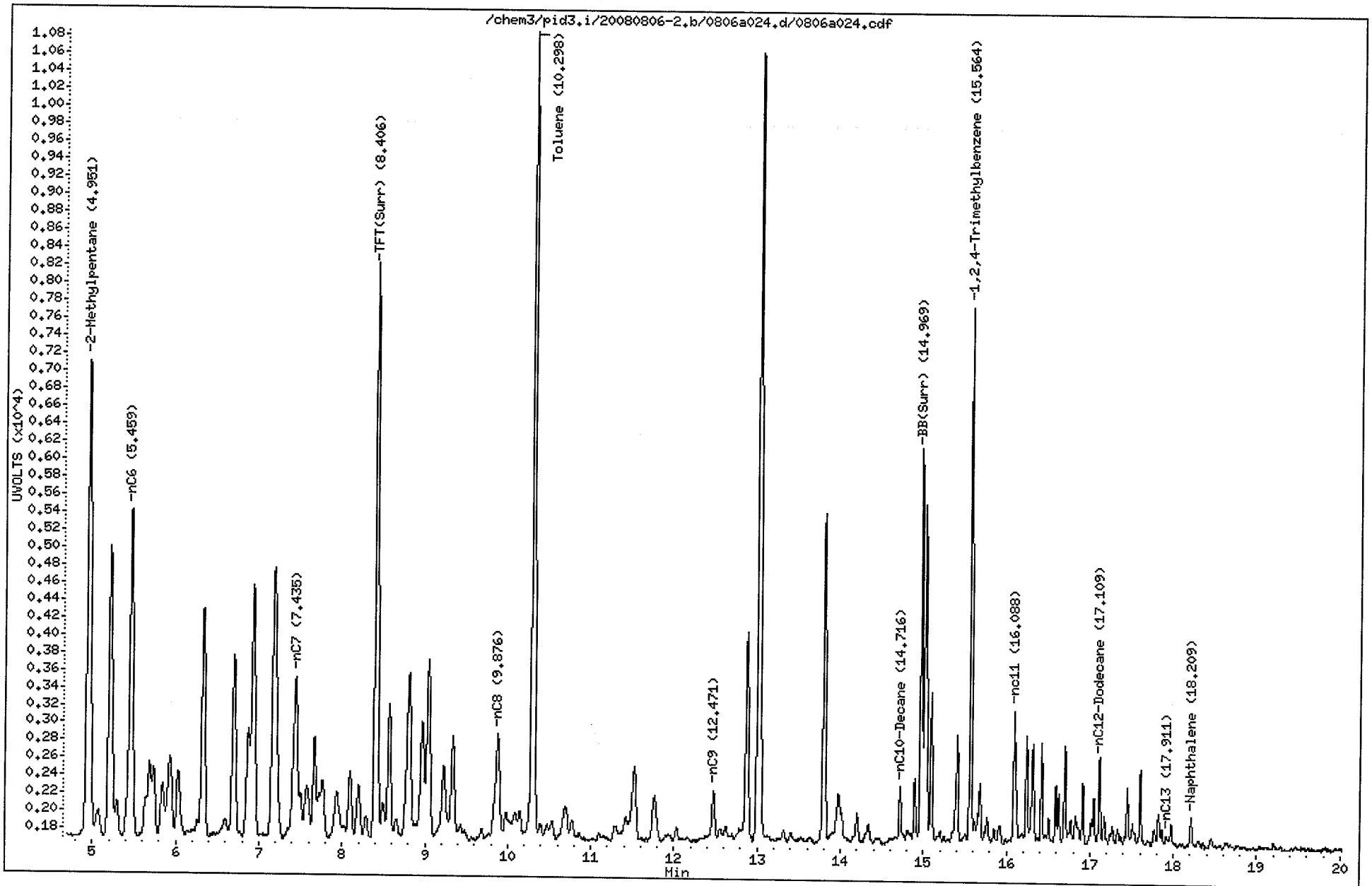
Sample Info: NI87CMS

Instrument: pid3.i

Operator: PKC

Column phase: RTX 502-2 FID

Column diameter: 0.18

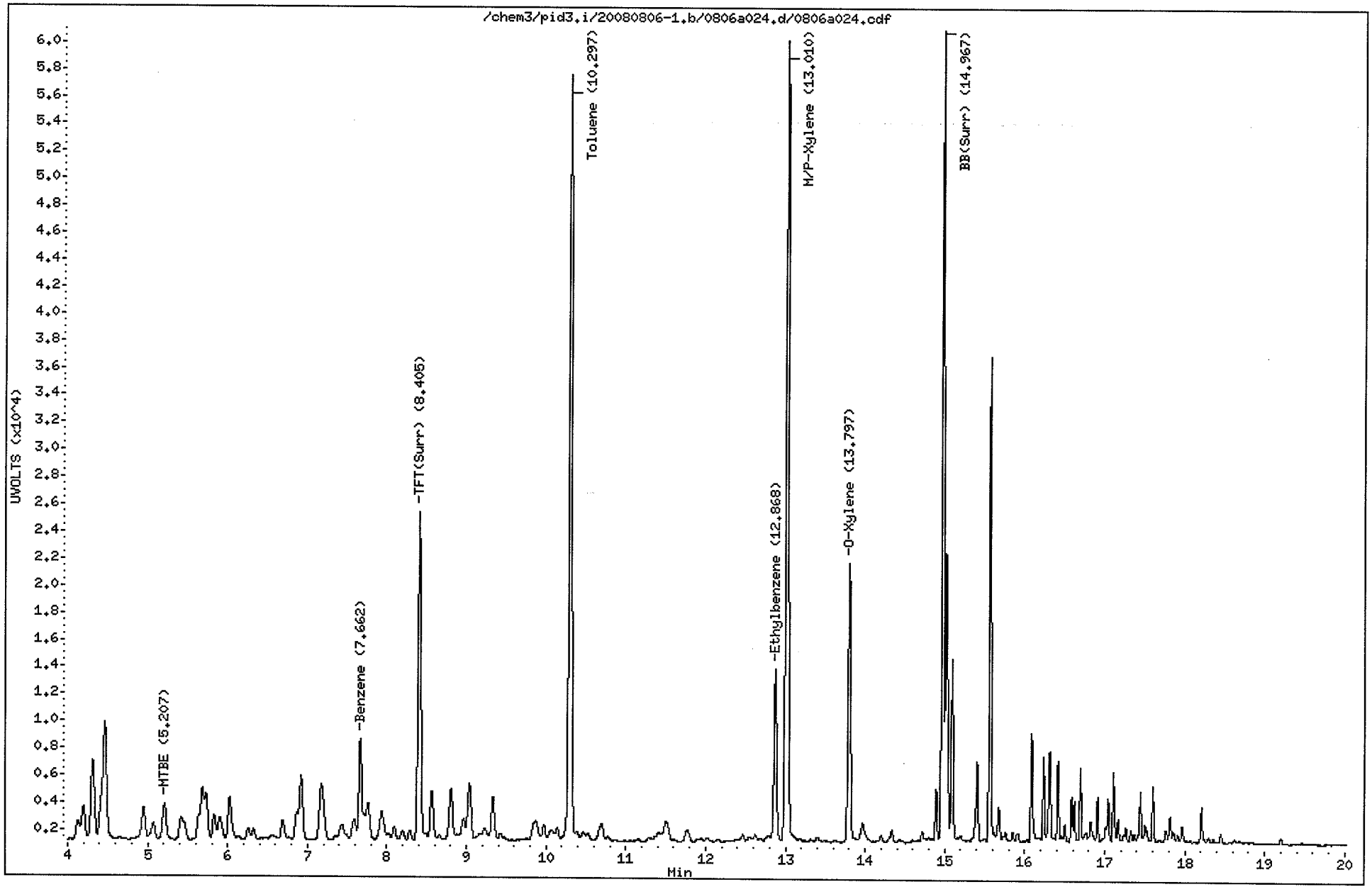


Data File: /chem3/pid3.i/20080806-1.b/0806a024.d
Date : 06-AUG-2008 18:57
Client ID: EBC-4 MS
Sample Info: NI87CMS

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



PC
8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a025.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a025.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NI87CMSD
Client ID: EBC-4 MSD
Injection Date: 06-AUG-2008 19:22
Matrix: WATER
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6265	83492	94.8	TFT(Surr)
14.970	0.000	4415	37351	92.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	707790	0.956
8015B (2MP-TMB)	1389519	0.967
AKGas (nC6-nC10)	1103036	0.965
NWGas (Tol-Nap)	750674	0.952

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.001	23493	96.7	TFT(Surr)
14.968	0.000	58277	96.2	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.665	0.000	7624	5.00	Benzene
10.300	0.000	56381	38.32	Toluene
12.870	0.000	12830	9.51	Ethylbenzene
13.012	0.001	58892	39.28	M/P-Xylene
13.798	-0.001	20638	13.93	O-Xylene
5.211	-0.011	2686	4.92	MTBE

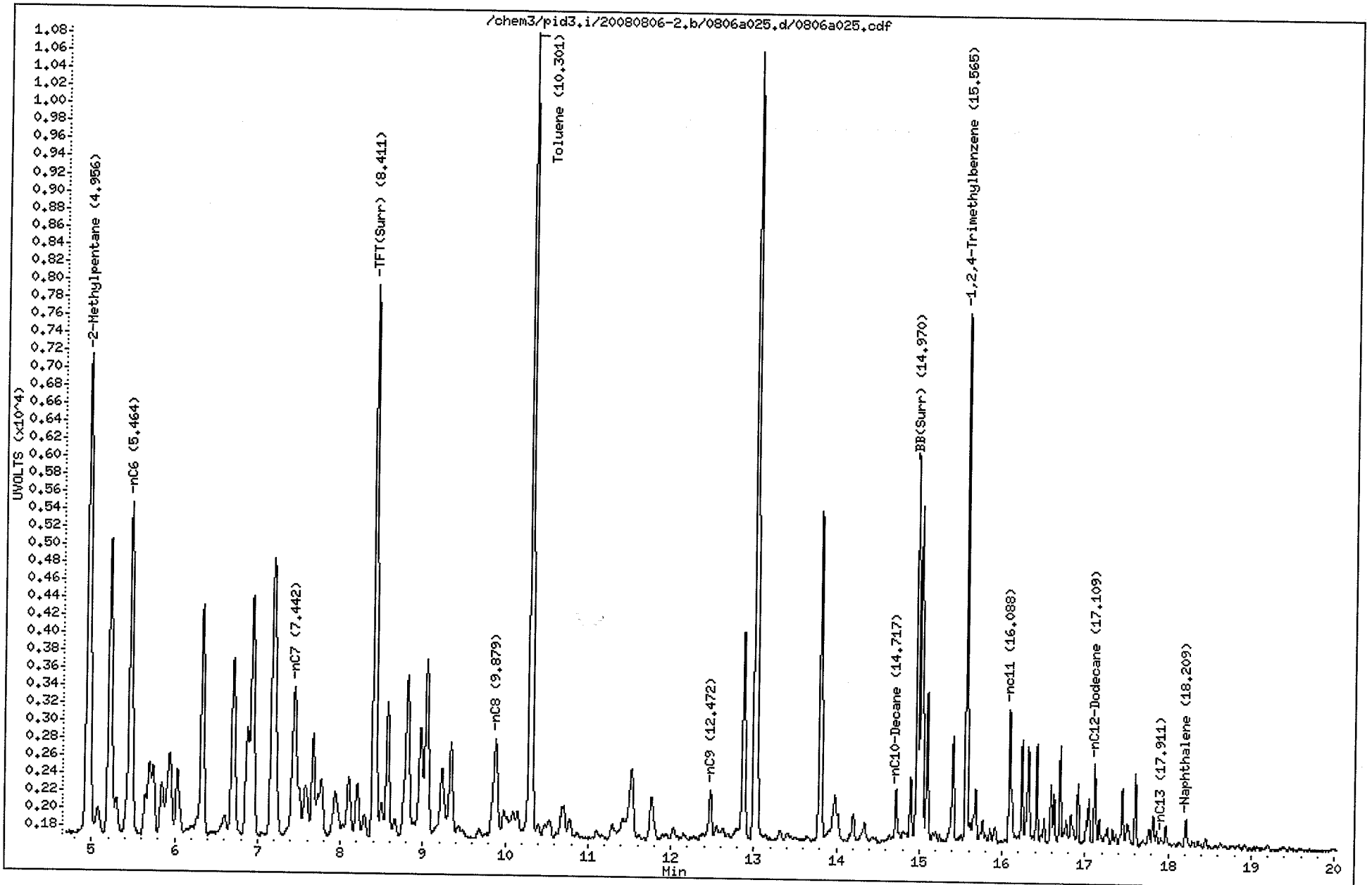
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a025.d
Date : 06-AUG-2008 19:22
Client ID: EBC-4 MSD
Sample Info: NI87CMSD

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

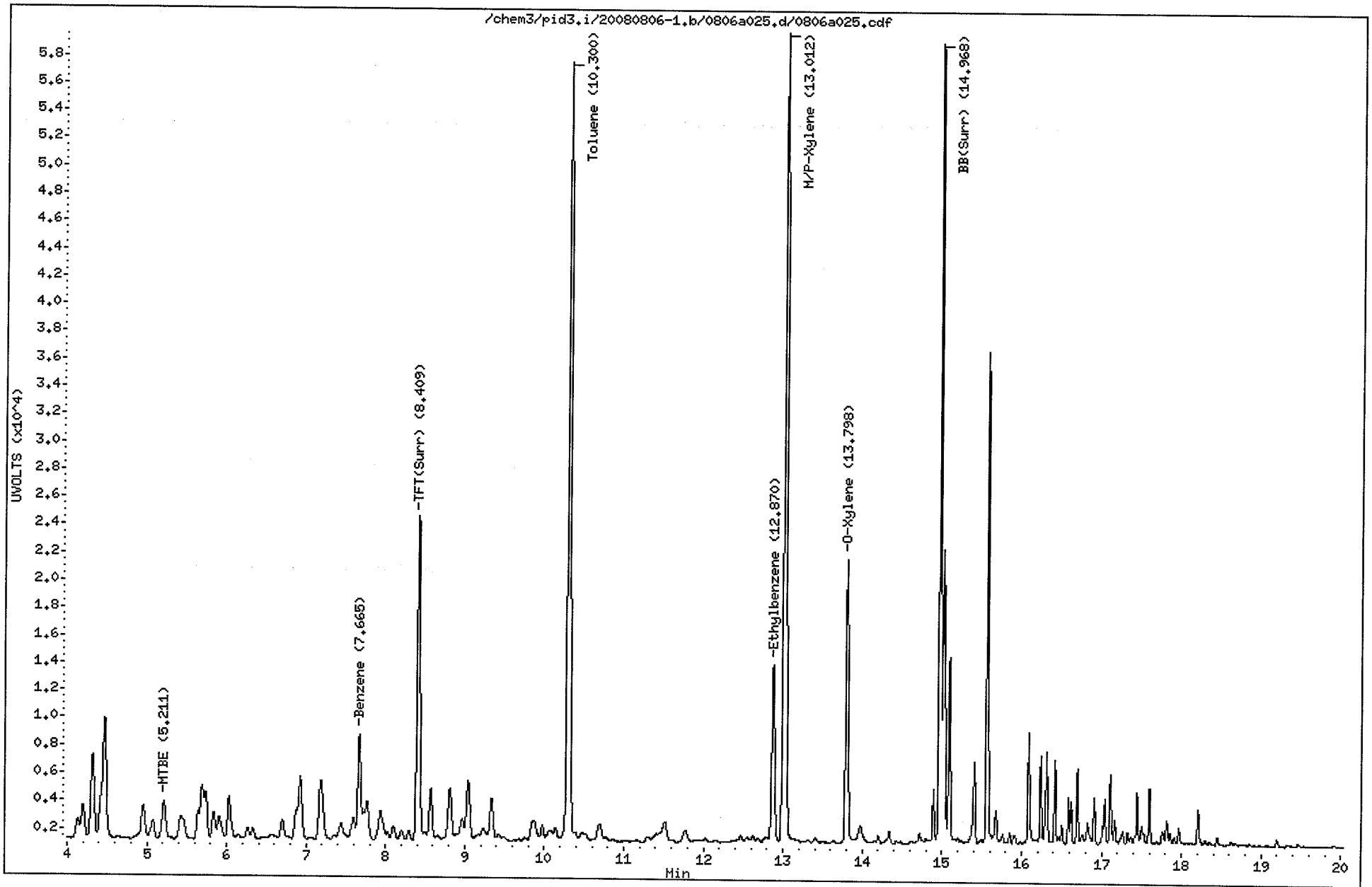


Data File: /chem3/pid3.i/20080806-1.b/0806a025.d
Date : 06-AUG-2008 19:22
Client ID: EBC-4 MSD
Sample Info: NI87CMSD

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod

ANALYTICAL RESOURCES INCORPORATED

Sample ID: LCS-080608
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080608
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/06/08 10:43
LCSD: 08/06/08 11:08
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4.99	5.30	94.2%	4.94	5.30	93.2%	1.0%
Toluene	38.6	41.2	93.7%	37.6	41.2	91.3%	2.6%
Ethylbenzene	9.62	10.0	96.2%	9.36	10.0	93.6%	2.7%
m,p-Xylene	39.9	42.3	94.3%	38.5	42.3	91.0%	3.6%
o-Xylene	14.2	14.9	95.3%	13.7	14.9	91.9%	3.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	102%	101%
Bromobenzene	97.0%	96.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG

Sample ID: LCS-080608
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080608
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized: MW
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/06/08 10:43
LCSD: 08/06/08 11:08
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.98	1.00	98.0%	0.92	1.00	92.0%	6.3%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.7%	98.3%
Bromobenzene	93.8%	92.7%

PG 8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a004.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a004.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCS080608W1
Client ID:
Injection Date: 06-AUG-2008 10:43
Matrix: WATER
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6593	86680	99.7	TFT(Surr)
14.970	0.000	4459	37449	93.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	722370	0.976
8015B (2MP-TMB)	1434512	0.999
AKGas (nC6-nC10)	1141176	0.998
NWGas (Tol-Nap)	768784	0.975

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.001	24680	101.6	TFT(Surr)
14.968	0.000	58808	97.0	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.665	0.001	7604	4.99	Benzene
10.300	0.000	56829	38.63	Toluene
12.870	-0.001	12969	9.62	Ethylbenzene
13.012	0.002	59854	39.93	M/P-Xylene
13.799	-0.001	21062	14.21	O-Xylene
5.212	-0.010	2648	4.85	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a004.d

Date : 06-AUG-2008 10:43

Client ID:

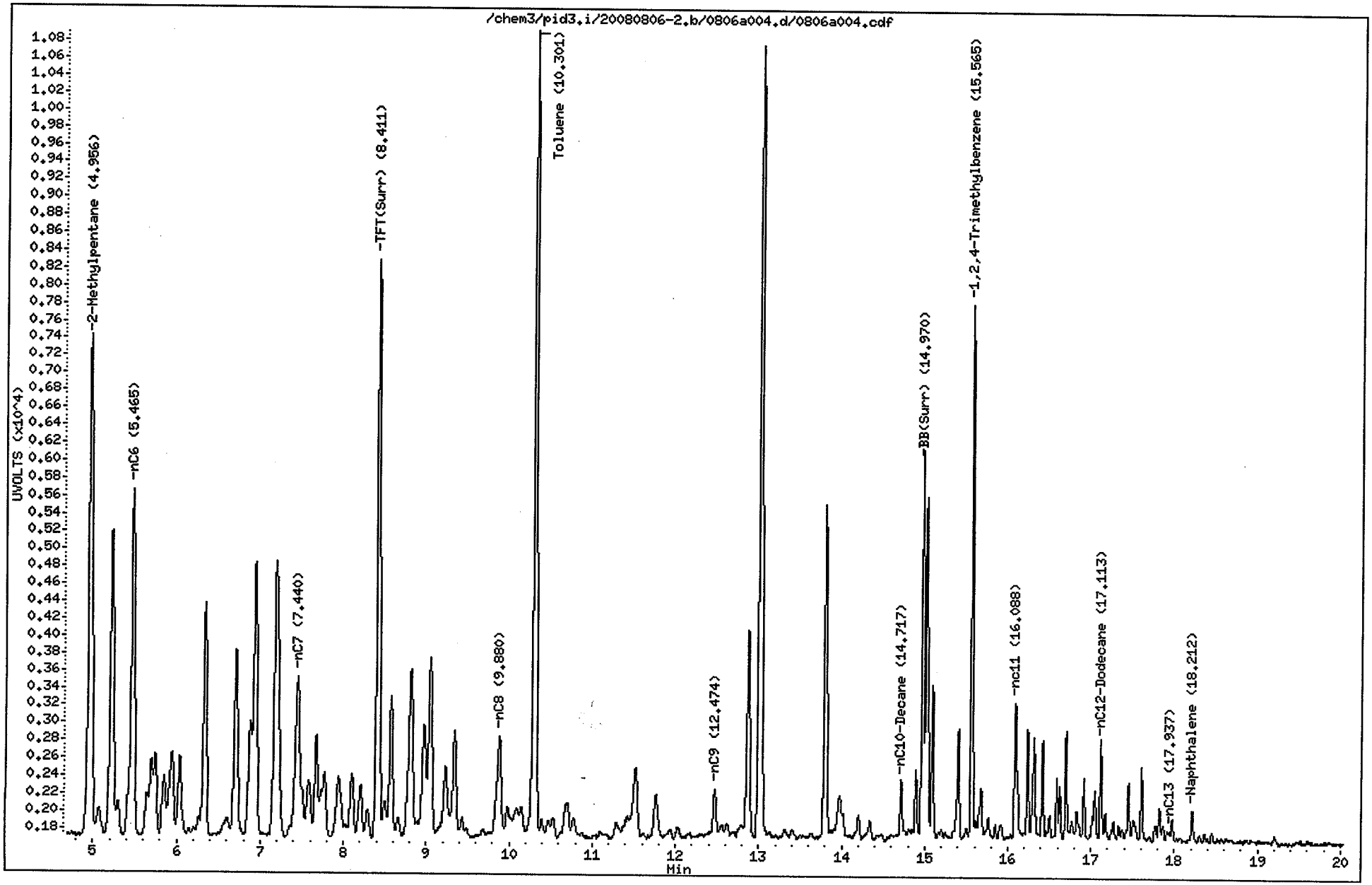
Sample Info: LCS080608W1

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: PKC

Column diameter: 0.18



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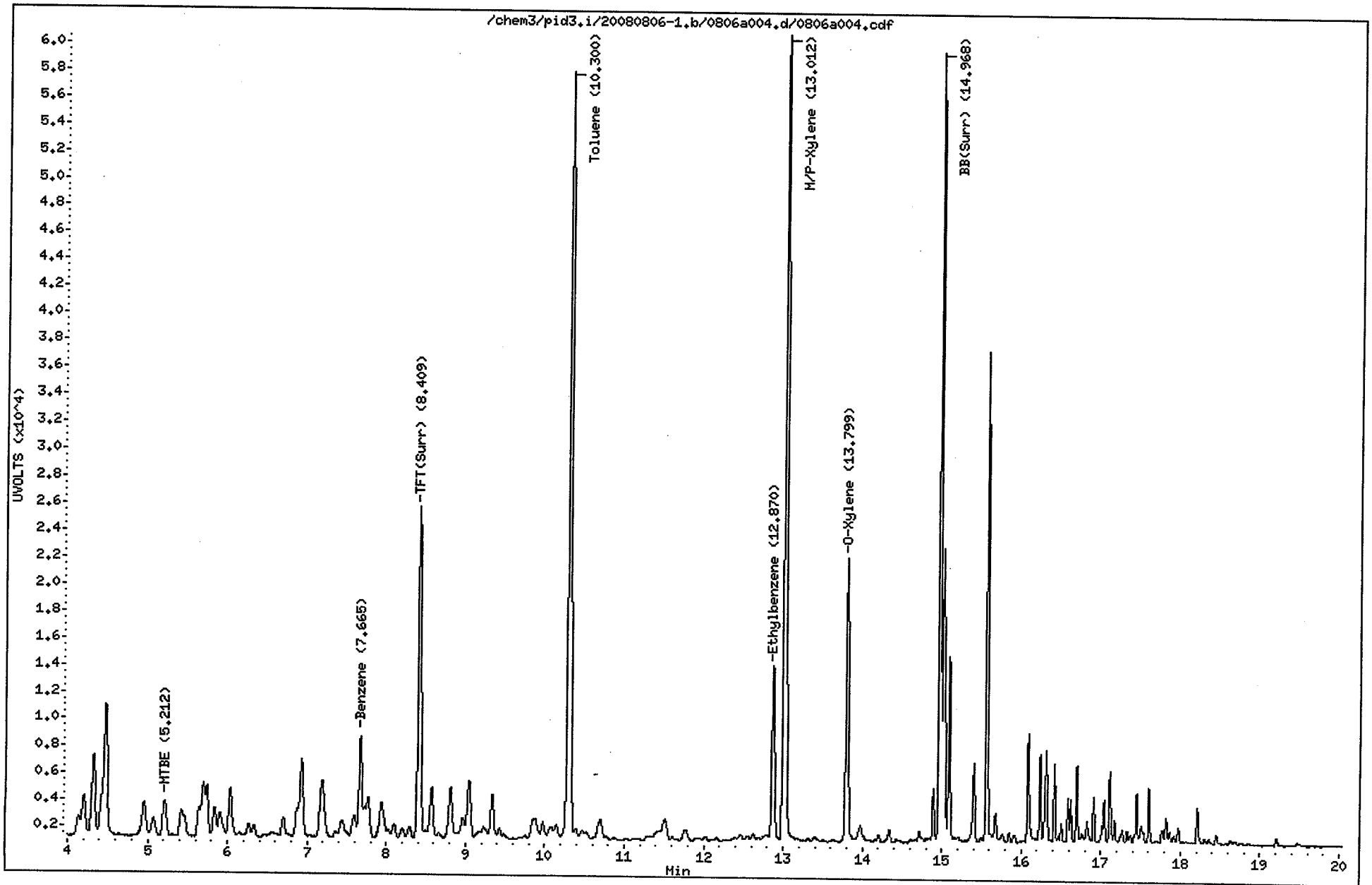
Date : 06-AUG-2008 10:43
Client ID:
Sample Info: LCS080608W1

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



RC
8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a005.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a005.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCSD080608W1
Client ID:
Injection Date: 06-AUG-2008 11:08
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.410	0.000	6498	85523	98.3	TFT(Surr)
14.969	-0.001	4405	37463	92.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	681522	0.921
8015B (2MP-TMB)	1378090	0.959
AKGas (nC6-nC10)	1097964	0.960
NWGas (Tol-Nap)	722814	0.917

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.000	24419	100.6	TFT(Surr)
14.967	-0.001	58383	96.3	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.664	0.000	7531	4.94	Benzene
10.299	0.000	55367	37.64	Toluene
12.870	-0.001	12620	9.36	Ethylbenzene
13.011	0.001	57734	38.51	M/P-Xylene
13.798	-0.001	20364	13.74	O-Xylene
5.210	-0.012	2705	4.96	MTBE

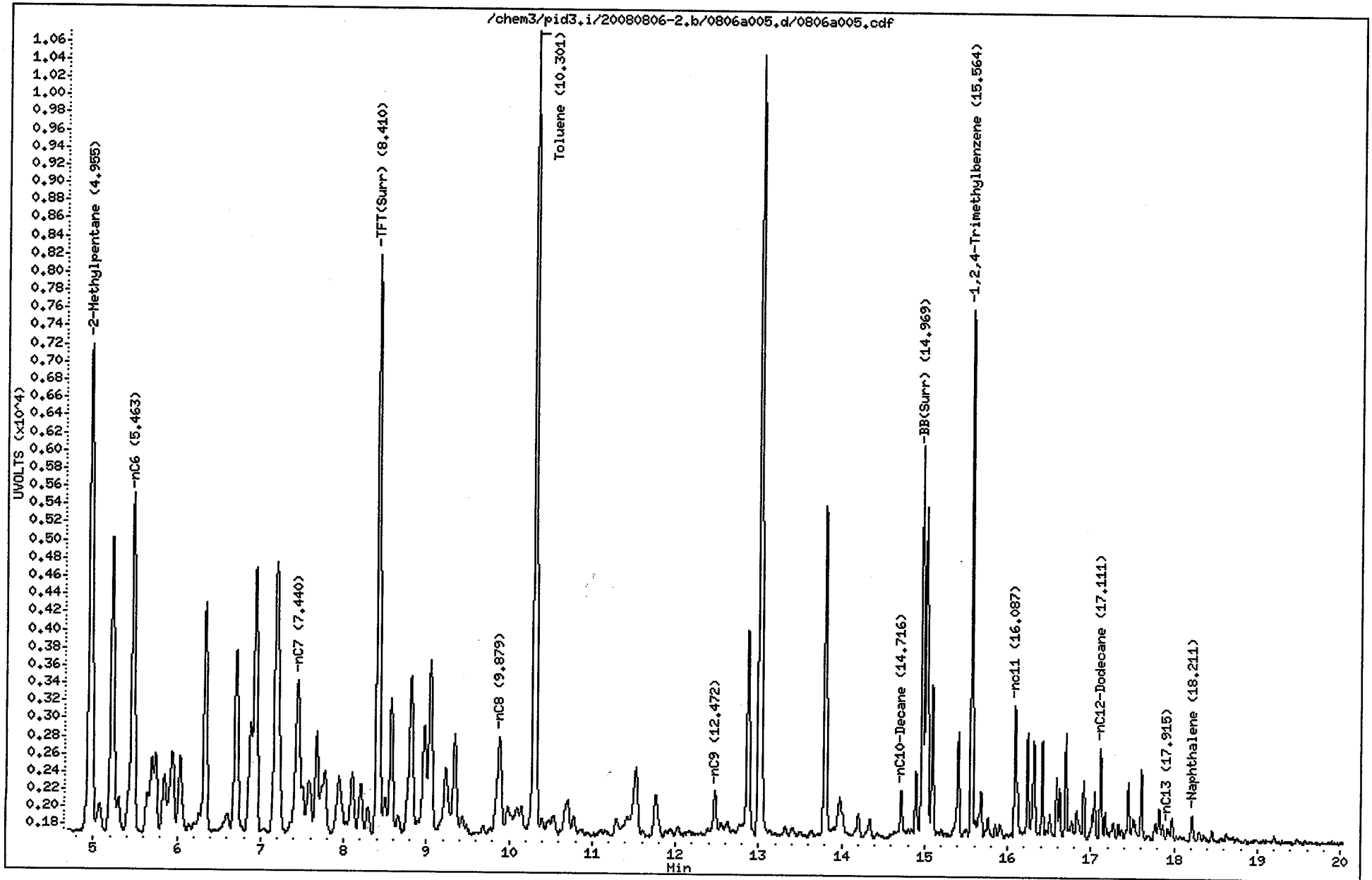
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a005.d
Date : 06-AUG-2008 11:08
Client ID:
Sample Info: LCSD080608W1

Column phase: RTX 502-2 FID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



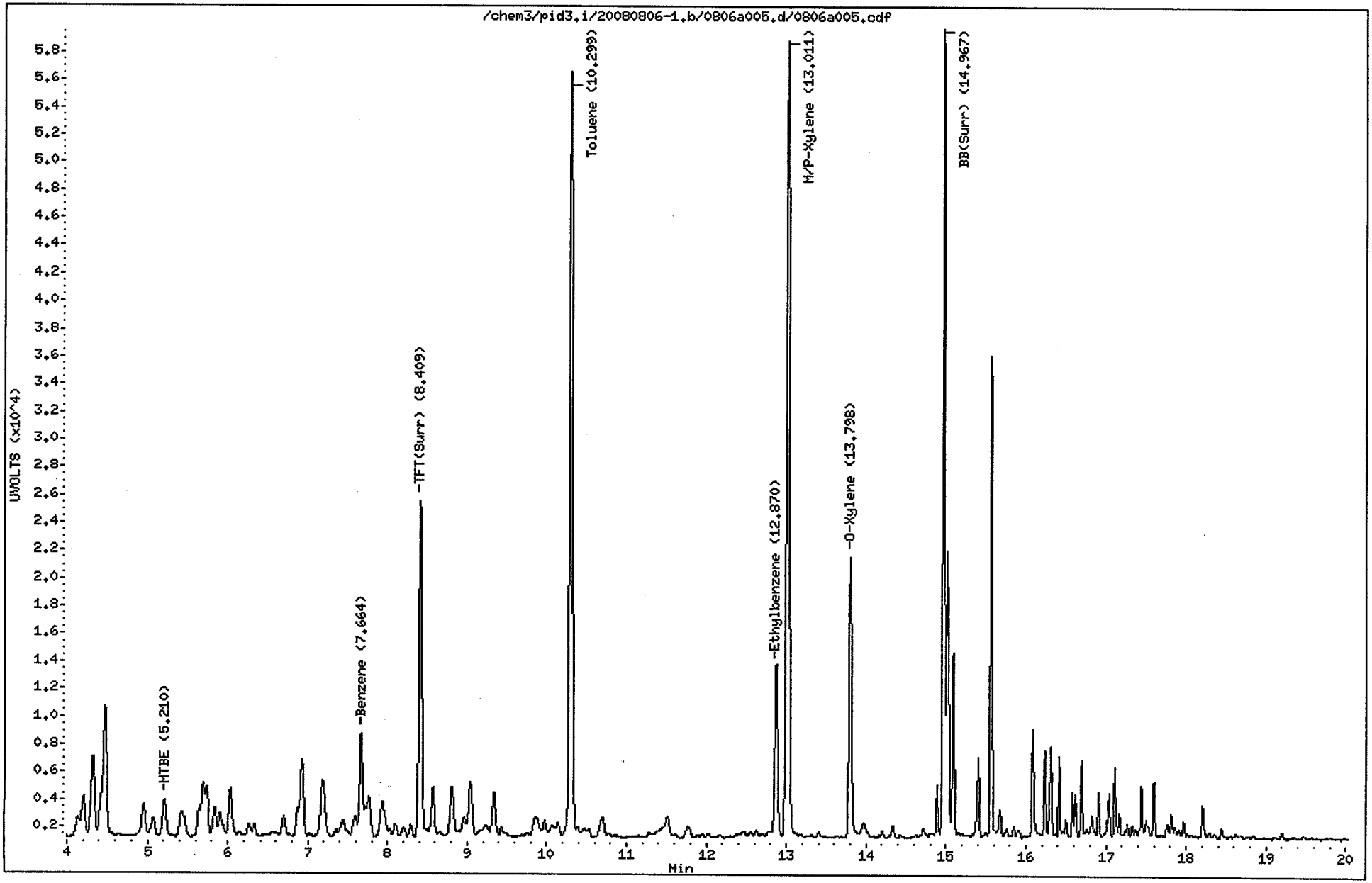
Data File: /chem3/pid3.i/20080806-1.b/0806a005.d
Date : 06-AUG-2008 11:08
Client ID:
Sample Info: LCSD080608W1

Instrument: pid3.i

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MB-080608
METHOD BLANK

Lab Sample ID: MB-080608
LIMS ID: 08-18787
Matrix: Water
Data Release Authorized:
Reported: 08/07/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: NA
Date Sampled: NA
Date Received: NA

Date Analyzed: 08/06/08 11:33
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	96.8%
Bromobenzene	94.3%

Gasoline Surrogate Recovery

Trifluorotoluene	94.4%
Bromobenzene	92.2%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC 8/7/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080806-2.b/0806a006.d
Data file 2: /chem3/pid3.i/20080806-1.b/0806a006.d
Method: /chem3/pid3.i/20080806-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: MB080608W1
Client ID:
Injection Date: 06-AUG-2008 11:33
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6244	82934	94.4	TFT(Surr)
14.969	0.000	4383	36625	92.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	8529	0.012
8015B (2MP-TMB)	4868	0.003
AKGas (nC6-nC10)	3373	0.003
NWGas (Tol-Nap)	10023	0.013

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.001	23517	96.8	TFT(Surr)
14.968	0.000	57148	94.3	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

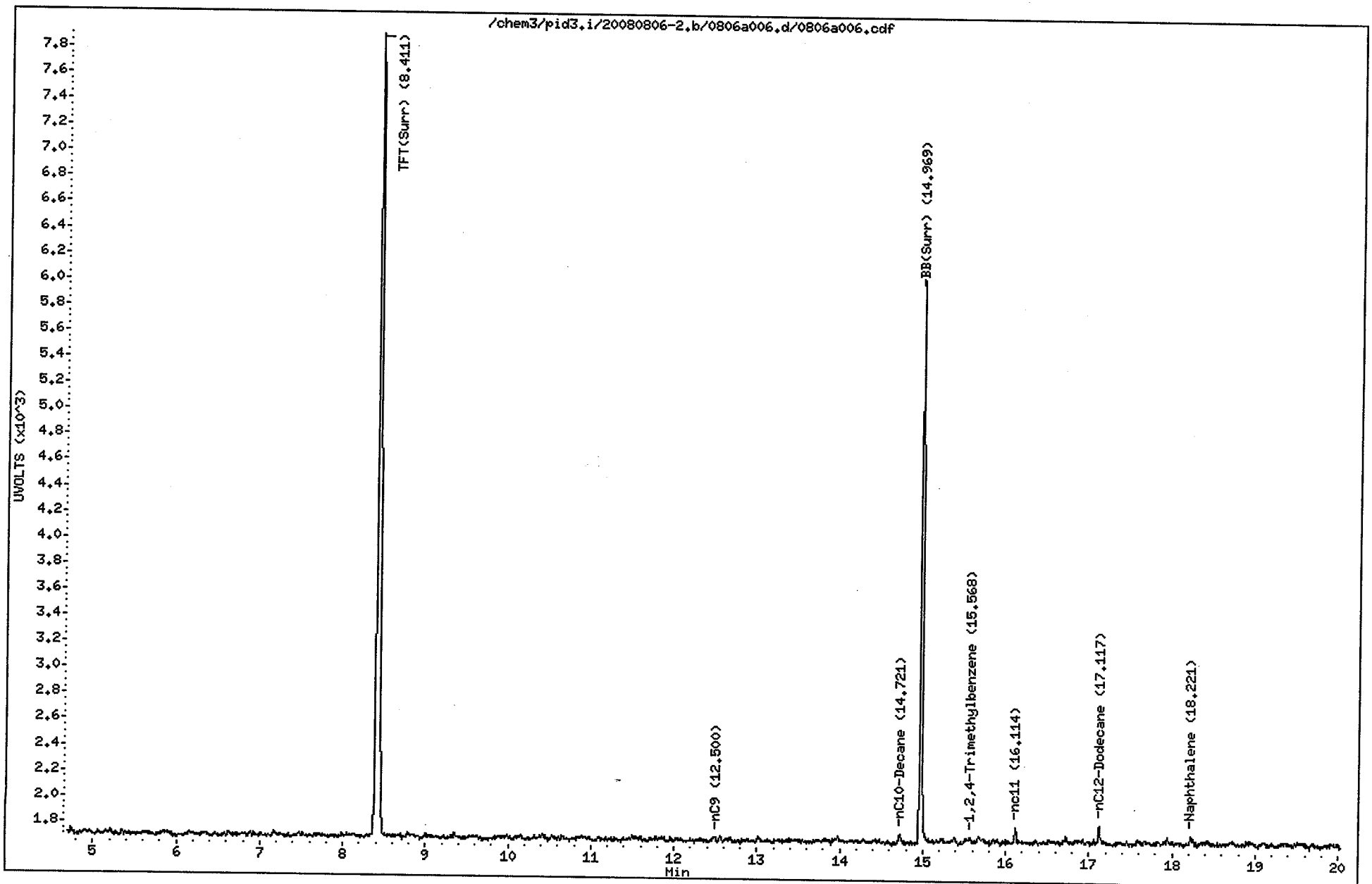
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080806-2.b/0806a006.d
Date : 06-AUG-2008 11:33
Client ID:
Sample Info: MB080608W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

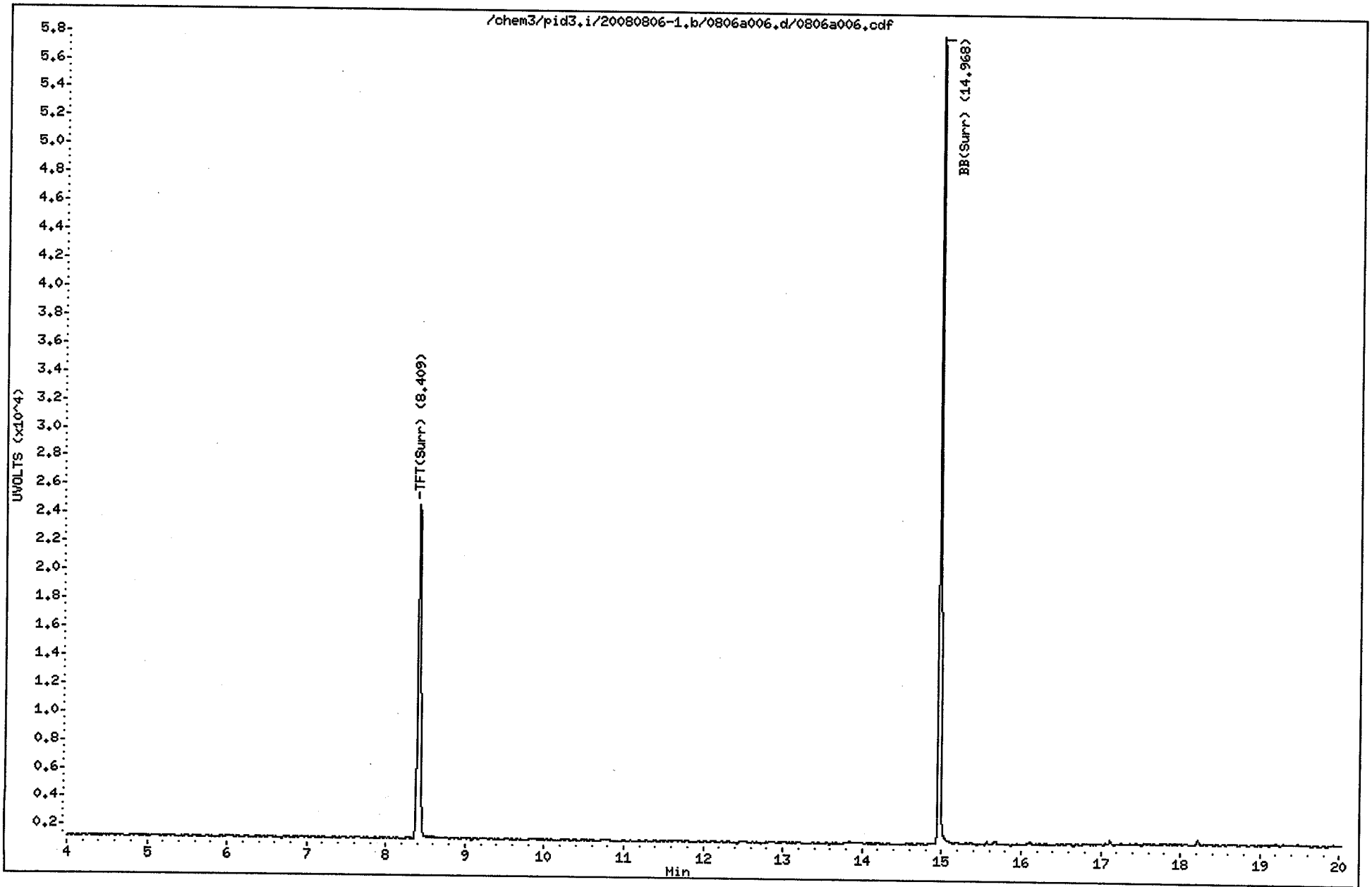


Data File: /chem3/pid3.i/20080806-1.b/0806a006.d
Date : 06-AUG-2008 11:33
Client ID:
Sample Info: MB080608W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Data Release Authorized:
Reported: 08/14/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
NI87A	EBC-1	08/06/08	08/08/08	1.00	Diesel	0.25	< 0.25 U
08-18787	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		90.4%
NI87B	EBC-3	08/06/08	08/08/08	1.00	Diesel	0.25	< 0.25 U
08-18788	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		94.7%
MB-080608	Method Blank	08/06/08	08/08/08	1.00	Diesel	0.25	< 0.25 U
08-18789	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		84.4%
NI87C	EBC-4	08/06/08	08/08/08	1.00	Diesel	0.25	< 0.25 U
08-18789	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		95.6%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a028.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87MBW1
Client ID:
Injection: 08-AUG-2008 15:51
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.741	0.009	7082	12212	GAS (Tol-C12)	172250	7
C8	1.864	0.007	2904	3160	DIESEL (C12-C24)	56238	5
C10	2.440	-0.009	3372	3411	M.OIL (C24-C38)	241284	25
C12	2.929	-0.007	1317	992	AK-102 (C10-C25)	109164	8
C14	3.358	0.009	803	540	AK-103 (C25-C36)	178393	25
C16	3.706	-0.004	474	213	OR.DIES (C10-C28)	129531	9
C18	4.083	0.000	110	55	OR.MOIL (C28-C40)	300735	33
C20	4.508	0.000	179	89	JET-A (C10-C18)	95479	6
C22	4.867	-0.003	109	96	MIN.OIL (C24-C38)	241284	19
C24	5.179	0.003	389	334	MSPIRIT (Tol-C12)	172250	11
C25	5.310	0.000	401	396			
C26	5.436	0.003	574	192			
C28	5.659	0.001	1142	338			
C32	6.095	0.009	4111	5308			
C34	6.342	0.004	2971	2422			
Filter Peak	6.997	0.004	2742	437	JP-4 (Tol-C14)	196682	17
C36	6.640	-0.011	2904	1329	CREOSOT (C8-C22)	186962	30
C38	7.058	0.003	2751	1146			
C40	7.592	-0.003	2901	3851	BUNKERC (C10-C38)	349674	44
AZDIESEL (C10-C22)			90427	6			
AZMOIL (C22-C32)			84115	13			

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	598821	38.0	84.5
Triacontane	523590	42.7	94.8

ms 8/14/08

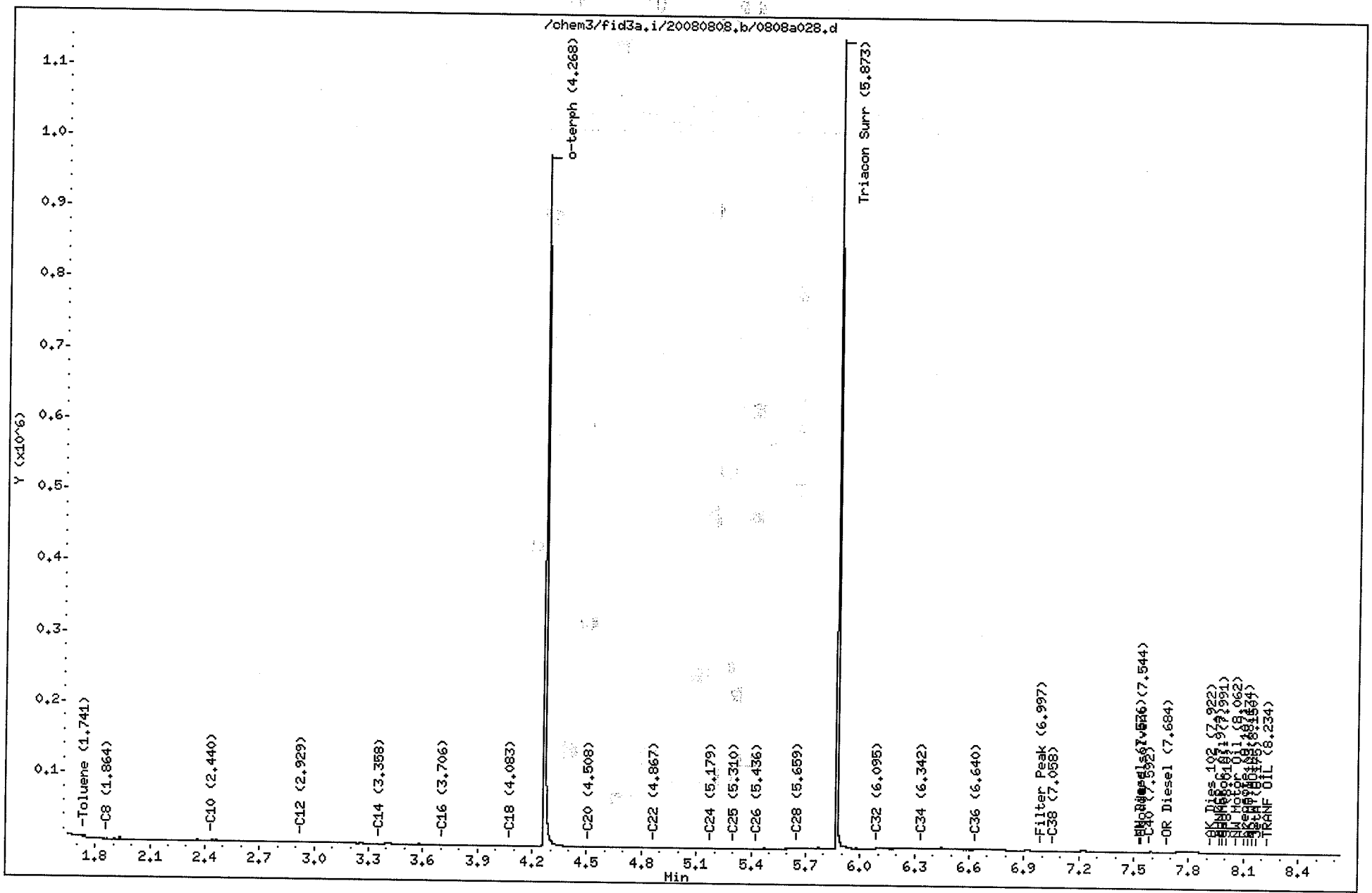
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a028.d
Date : 08-AUG-2008 15:51
Client ID:
Sample Info: NI87MBW1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a031.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87A
Client ID:
Injection: 08-AUG-2008 16:38
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.740	0.008	8720	12570	GAS (Tol-C12)	212671	8
C8	1.862	0.005	3718	4400	DIESEL (C12-C24)	111614	9
C10	2.439	-0.010	3550	3052	M.OIL (C24-C38)	249420	26
C12	2.935	0.000	1726	240	AK-102 (C10-C25)	183771	13
C14	3.351	0.002	1334	185	AK-103 (C25-C36)	187600	27
C16	3.712	0.002	1363	1023	OR.DIES (C10-C28)	211737	14
C18	4.090	0.008	1704	2030	OR.MOIL (C28-C40)	298744	33
C20	4.501	-0.007	474	298	JET-A (C10-C18)	157648	11
C22	4.870	0.000	303	95	MIN.OIL (C24-C38)	249420	19
C24	5.176	0.000	499	68	MSPIRIT (Tol-C12)	212671	13
C25	5.308	-0.001	569	156			
C26	5.434	0.001	783	240			
C28	5.664	0.006	2284	3288			
C32	6.093	0.007	3738	3290			
C34	6.342	0.003	3117	1361			
Filter Peak	6.991	-0.002	2713	1883	JP-4 (Tol-C14)	251156	22
C36	6.648	-0.003	2929	581	CREOSOT (C8-C22)	274767	44
C38	7.056	0.000	2677	798			
C40	7.593	-0.001	2765	3975	BUNKERC (C10-C38)	432290	54

AZDIESEL (C10-C22)	159003	10
AZMOIL (C22-C32)	96114	15

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	640235	40.7	90.4
Triacontane	563342	45.9	102.0

mo 8/14/08

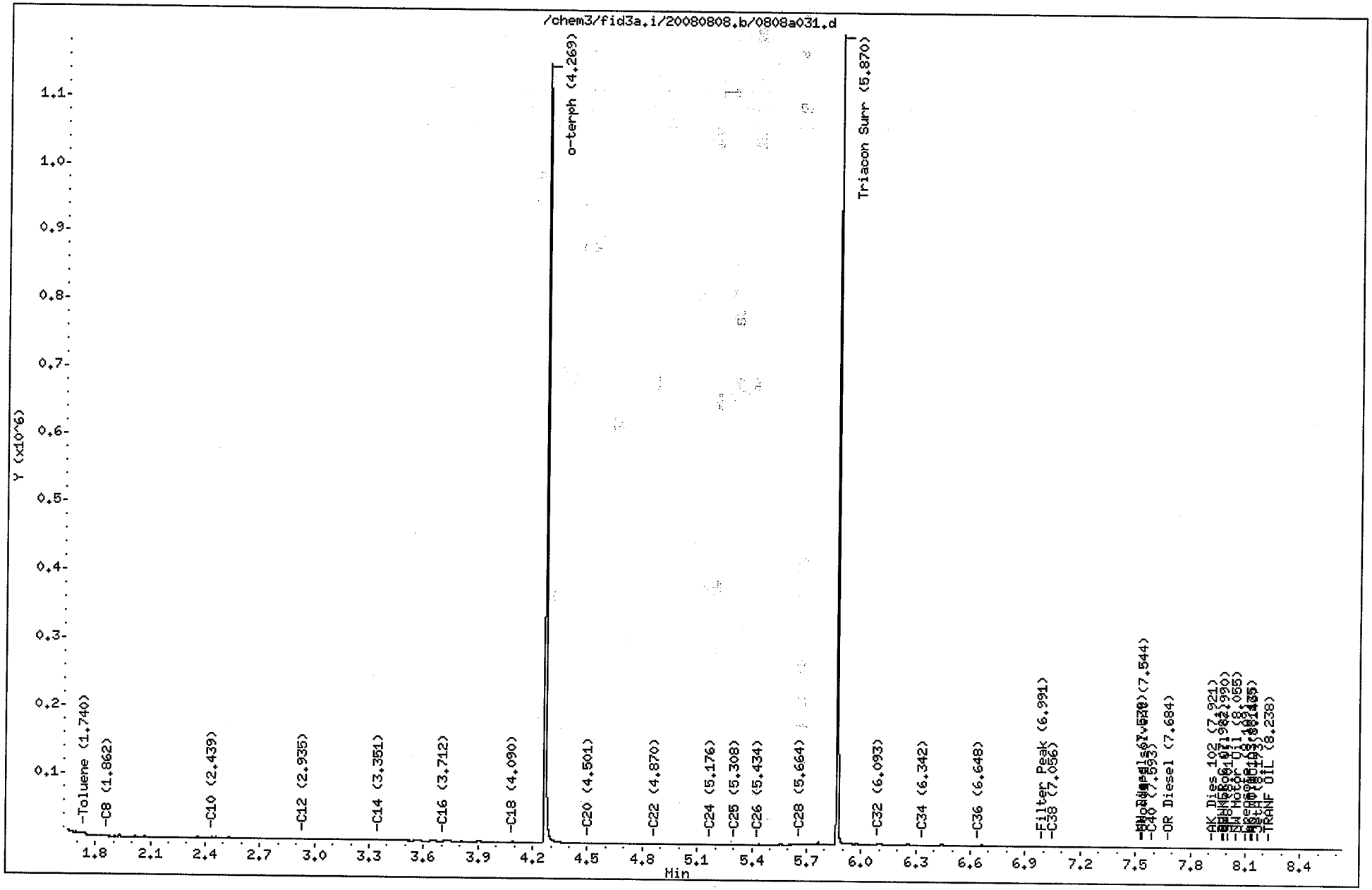
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a031.d
Date : 08-AUG-2008 16:38
Client ID:
Sample Info: NI87A

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a032.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87B
Client ID:
Injection: 08-AUG-2008 16:54
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.740	0.009	8560	9181	GAS (Tol-C12)	231950	9
C8	1.861	0.004	3363	3747	DIESEL (C12-C24)	122738	10
C10	2.440	-0.010	3637	3857	M.OIL (C24-C38)	242197	25
C12	2.926	-0.010	2306	2661	AK-102 (C10-C25)	207465	14
C14	3.329	-0.020	1867	2235	AK-103 (C25-C36)	179465	26
C16	3.716	0.006	1683	1532	OR.DIES (C10-C28)	236916	16
C18	4.074	-0.008	721	606	OR.MOIL (C28-C40)	288108	32
C20	4.513	0.005	607	249	JET-A (C10-C18)	172832	12
C22	4.872	0.003	571	298	MIN.OIL (C24-C38)	242197	19
C24	5.175	-0.001	700	329	MSPIRIT (Tol-C12)	231950	15
C25	5.302	-0.008	751	631			
C26	5.433	0.000	907	304			
C28	5.654	-0.004	1366	488			
C32	6.077	-0.009	2841	1182			
C34	6.344	0.005	2988	1546			
Filter Peak	6.994	0.001	2664	1960	JP-4 (Tol-C14)	274984	24
C36	6.646	-0.005	2833	508	CREOSOT (C8-C22)	298763	48
C38	7.053	-0.003	2644	633			
C40	7.595	0.000	2756	5143	BUNKERC (C10-C38)	448349	56

AZDIESEL (C10-C22)	180486	11
AZMOIL (C22-C32)	93233	14

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	670831	42.6	94.7
Triacontane	580947	47.4	105.2

mo 8/14/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a032.d
Date : 08-AUG-2008 16:54
Client ID:
Sample Info: NI87B

Instrument: fid3a.i

Operator: ms
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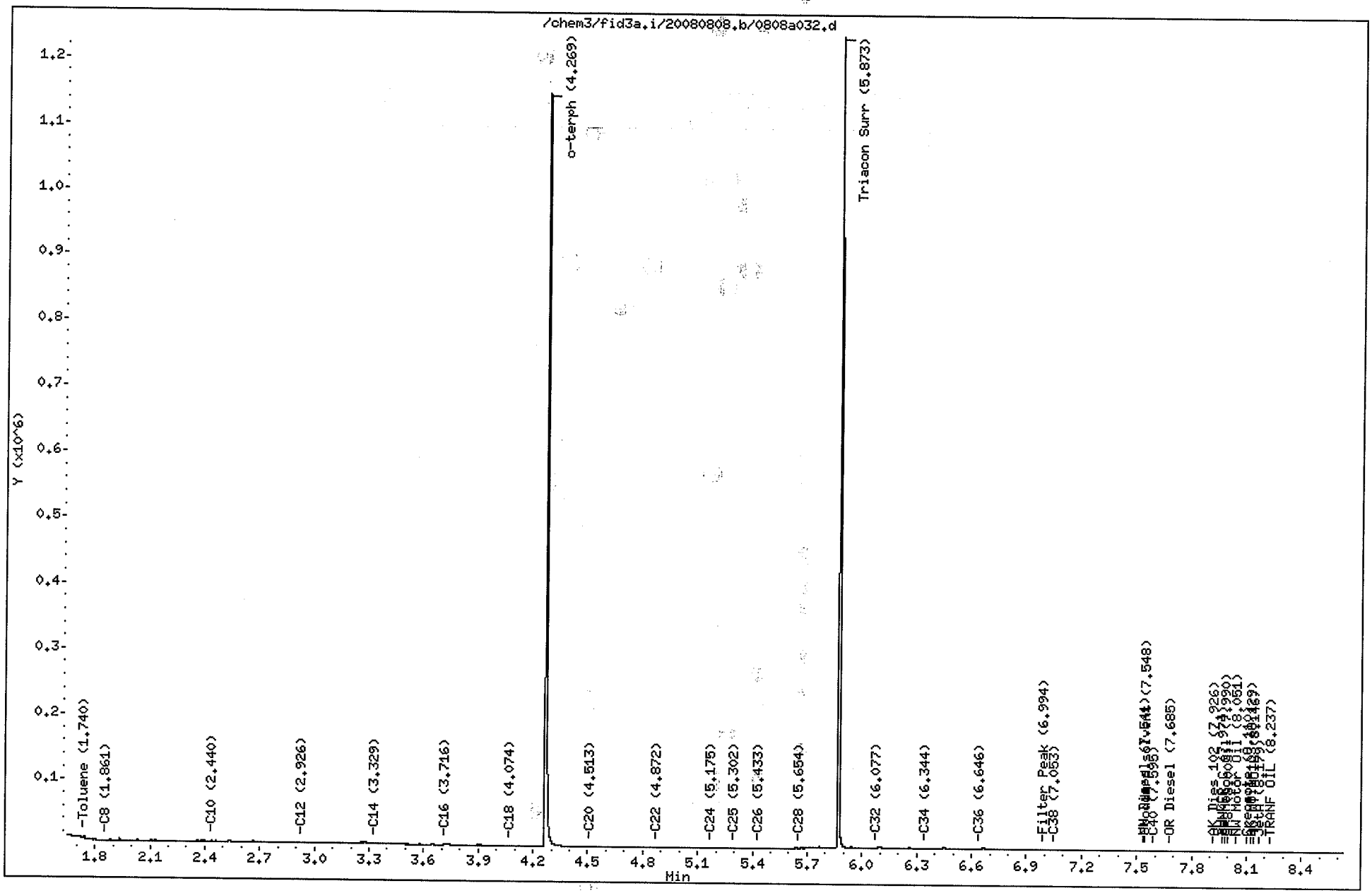
Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a033.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87C
Client ID:
Injection: 08-AUG-2008 17:09
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.740	0.008	8727	11962	GAS (Tol-C12)	191893	8
C8	1.861	0.004	3115	3756	DIESEL (C12-C24)	54409	5
C10	2.440	-0.010	3201	2941	M.OIL (C24-C38)	254289	26
C12	2.937	0.001	1417	1065	AK-102 (C10-C25)	112205	8
C14	3.351	0.002	911	622	AK-103 (C25-C36)	193482	27
C16	3.709	-0.001	563	132	OR.DIES (C10-C28)	133100	9
C18	4.076	-0.006	236	146	OR.MOIL (C28-C40)	307498	34
C20	4.511	0.003	124	57	JET-A (C10-C18)	102254	7
C22	4.867	-0.003	63	15	MIN.OIL (C24-C38)	254289	20
C24	5.176	0.000	350	274	MSPIRIT (Tol-C12)	191893	12
C25	5.310	0.001	358	217			
C26	5.432	-0.001	572	112			
C28	5.654	-0.004	1106	306			
C32	6.089	0.004	9155	8052			
C34	6.331	-0.008	3070	3442			
Filter Peak	6.990	-0.003	2622	1407	JP-4 (Tol-C14)	218192	19
C36	6.658	0.007	9237	14452	CREOSOT (C8-C22)	196686	32
C38	7.051	-0.004	2658	738			
C40	7.586	-0.009	3118	5365	BUNKERC (C10-C38)	366042	46
AZDIESEL (C10-C22)			94756	6			
AZMOIL (C22-C32)			80585	13			

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	676483	43.0	95.5
Triacontane	602819	49.1	109.2

mo 8/14/08

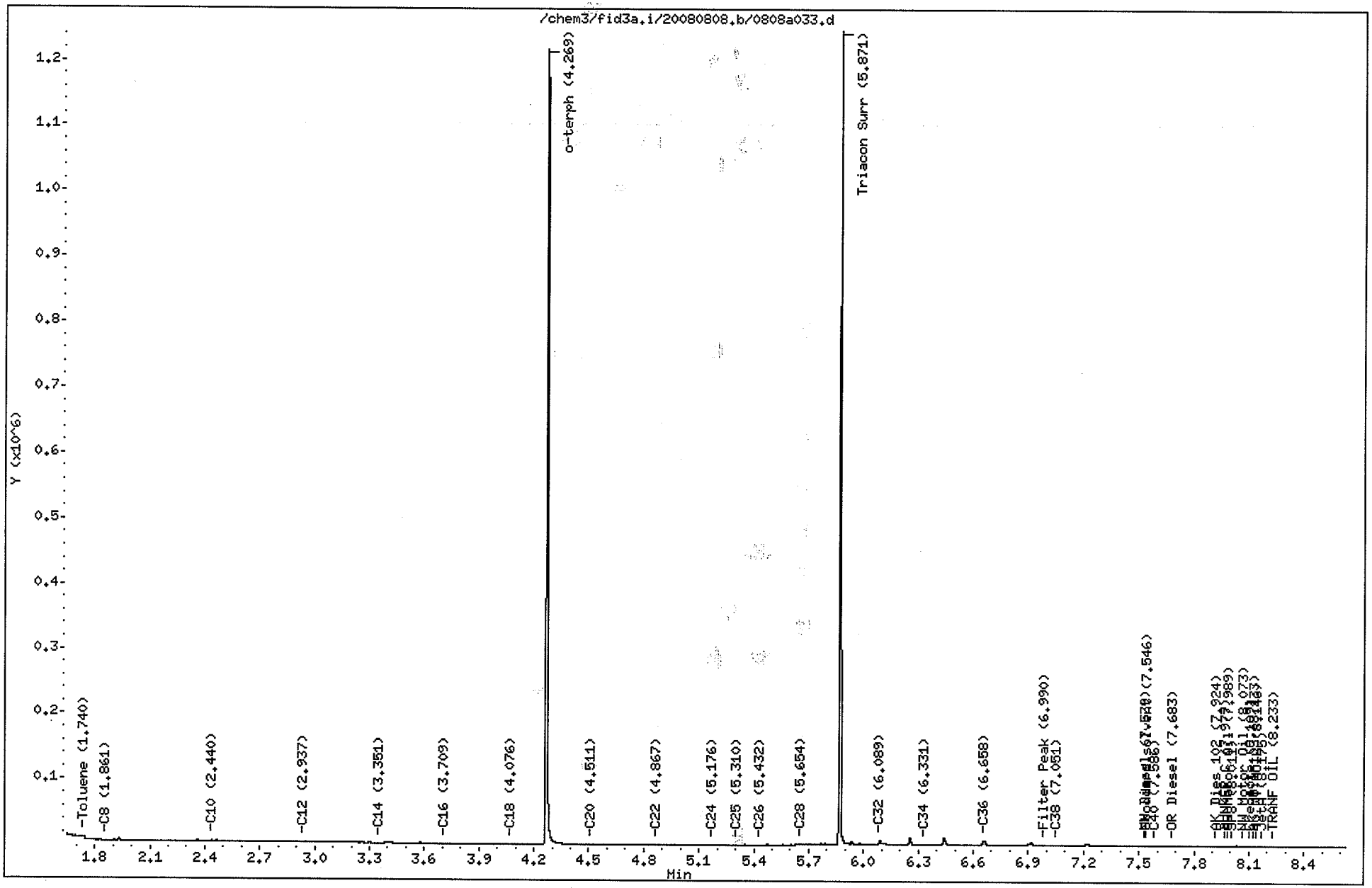
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a033.d
Date : 08-AUG-2008 17:09
Client ID:
Sample Info: NI87C

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Client ID	OTER	TOT OUT
EBC-1	90.4%	0
EBC-3	94.7%	0
MB-080608	84.4%	0
LCS-080608	97.3%	0
LCSD-080608	94.9%	0
EBC-4	95.6%	0
EBC-4 MS	97.1%	0
EBC-4 MSD	92.9%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(49-118)	(45-112)

Prep Method: SW3510C
Log Number Range: 08-18787 to 08-18789

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1

Sample ID: EBC-4
MS/MSD

Lab Sample ID: NI87C
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/14/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted MS/MSD: 08/06/08

Date Analyzed MS: 08/08/08 17:25
MSD: 08/08/08 17:40
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 500 mL
MSD: 500 mL
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	< 0.25	2.23	3.00	74.3%	2.22	3.00	74.0%	0.4%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	97.1%	92.9%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a034.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87CMS
Client ID:
Injection: 08-AUG-2008 17:25
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	0.005	21420	17229	GAS (Tol-C12)	2798475	111
C8	1.860	0.003	20505	13110	DIESEL (C12-C24)	13208556	1114
C10	2.452	0.002	283599	118197	M.OIL (C24-C38)	490898	50
C12	2.937	0.002	488882	237317	AK-102 (C10-C25)	15475822	1080
C14	3.349	0.000	678085	311001	AK-103 (C25-C36)	406912	58
C16	3.712	0.001	764849	529387	OR.DIES (C10-C28)	15695371	1061
C18	4.086	0.004	493016	311305	OR.MOIL (C28-C40)	322546	35
C20	4.510	0.002	361655	230732	JET-A (C10-C18)	11600899	781
C22	4.870	0.000	140748	97011	MIN.OIL (C24-C38)	490898	38
C24	5.177	0.001	59909	36719	MSPIRIT (Tol-C12)	2798475	177
C25	5.311	0.002	34900	36067			
C26	5.436	0.003	19816	21846			
C28	5.664	0.005	6225	8463			
C32	6.079	-0.007	3171	631			
C34	6.337	-0.001	3261	1101			
Filter Peak	6.988	-0.005	2696	698	JP-4 (Tol-C14)	5779497	509
C36	6.644	-0.007	2985	475	CREOSOT (C8-C22)	15477218	2483
C38	7.056	0.001	2729	1027			
C40	7.589	-0.005	3037	4590	BUNKERC (C10-C38)	15940258	2005
AZDIESEL (C10-C22)			14714903	916			
AZMOIL (C22-C32)			782648	122			

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	687385	43.7	97.0
Triacontane	614815	50.1	111.4

ms 8/14/08

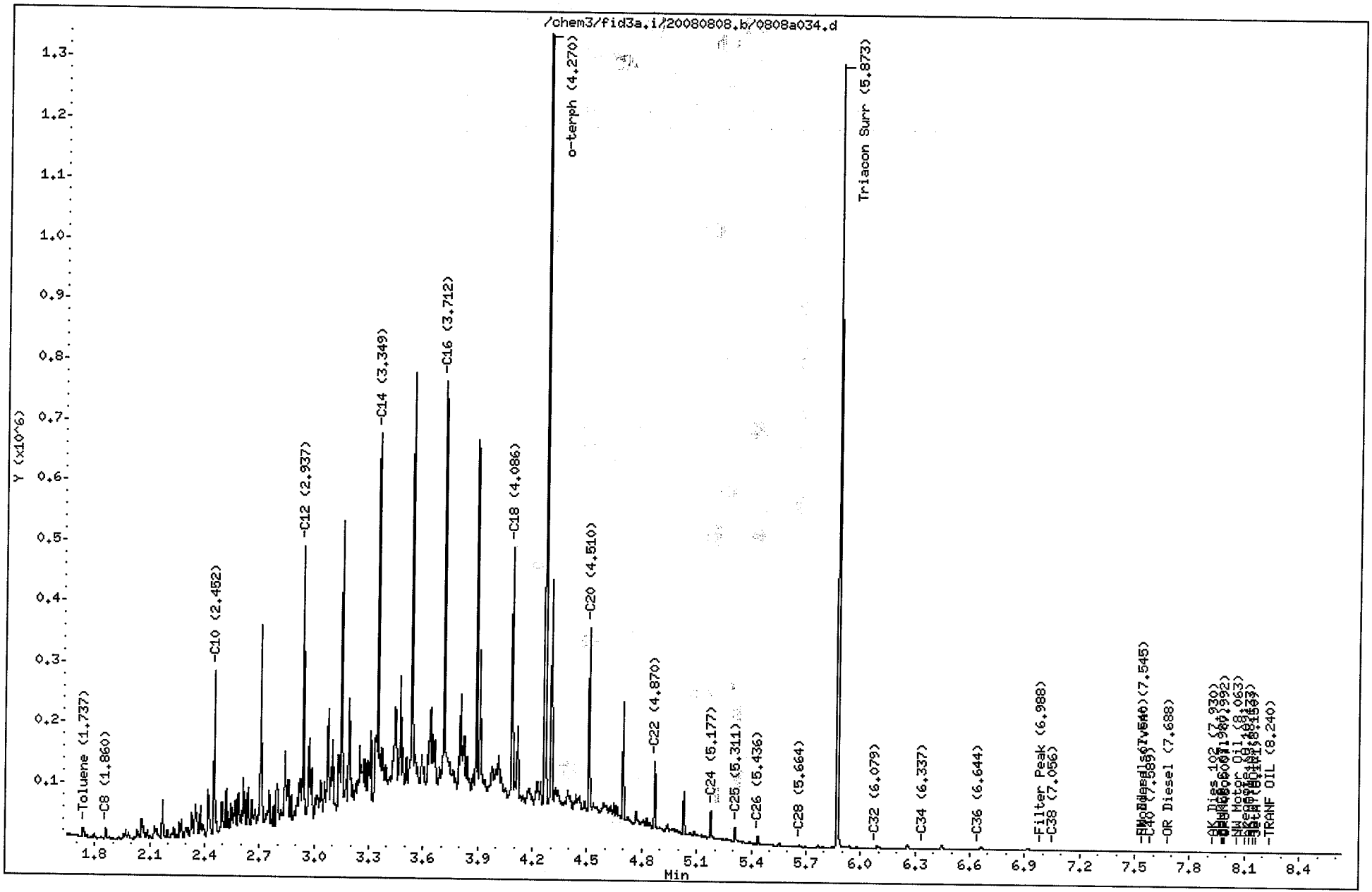
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a034.d
Date : 08-AUG-2008 17:25
Client ID:
Sample Info: NI87CMS

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a035.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87CMSD
Client ID:
Injection: 08-AUG-2008 17:40
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.727	-0.005	7886	3286	GAS (Tol-C12)	2728648	108
C8	1.862	0.004	17964	13010	DIESEL (C12-C24)	13147191	1108
C10	2.453	0.003	261936	116437	M.OIL (C24-C38)	473580	49
C12	2.937	0.001	492295	235434	AK-102 (C10-C25)	15357460	1072
C14	3.349	0.000	680460	309553	AK-103 (C25-C36)	386504	55
C16	3.712	0.002	774548	437646	OR.DIES (C10-C28)	15575748	1053
C18	4.087	0.005	487383	327004	OR.MOIL (C28-C40)	308481	34
C20	4.511	0.003	346815	228452	JET-A (C10-C18)	11483981	774
C22	4.871	0.001	149059	103054	MIN.OIL (C24-C38)	473580	37
C24	5.178	0.002	58011	41105	MSPIRIT (Tol-C12)	2728648	172
C25	5.312	0.003	34344	35947			
C26	5.430	-0.003	7856	2030			
C28	5.656	-0.003	3958	1014			
C32	6.083	-0.003	3161	882			
C34	6.341	0.002	3208	3174			
Filter Peak	6.990	-0.003	2695	1776	JP-4 (Tol-C14)	5694908	501
C36	6.652	0.001	2973	830	CREOSOT (C8-C22)	15356484	2463
C38	7.057	0.001	2677	480			
C40	7.595	0.000	2723	2106	BUNKERC (C10-C38)	15806949	1988
AZDIESEL (C10-C22)				14612806	910		
AZMOIL (C22-C32)				763739	119		

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	657948	41.8	92.9
Triacontane	576789	47.0	104.5

ms 8/14/08

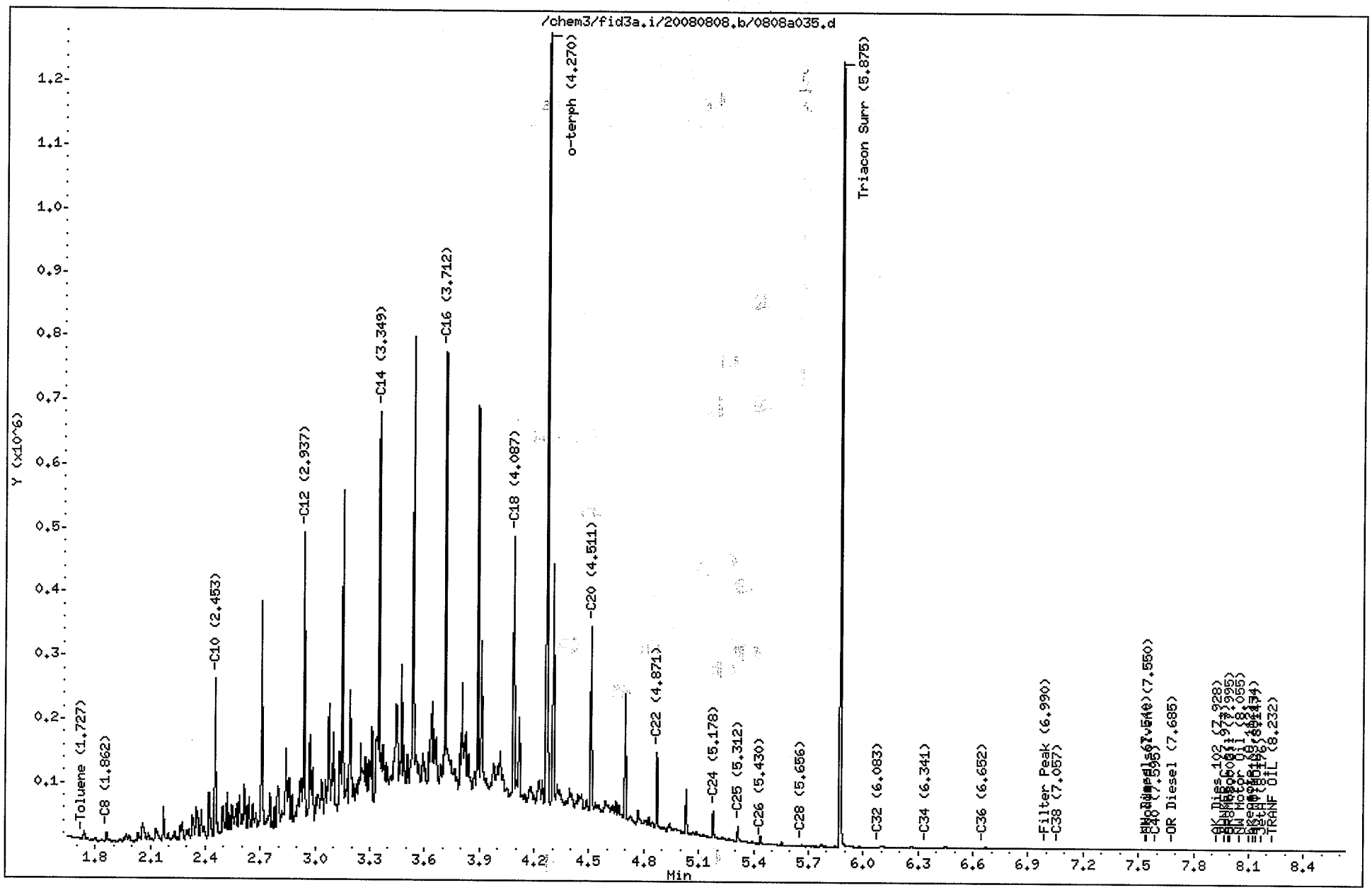
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a035.d
Date : 08-AUG-2008 17:40
Client ID:
Sample Info: NI87CMSD

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-080608**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-080608
LIMS ID: 08-18789
Matrix: Water
Data Release Authorized:
Reported: 08/14/08

QC Report No: NI87-HART CROWSER,INC.
Project: PIER 23-EBC

Date Sampled: 07/30/08
Date Received: 08/04/08

Date Extracted LCS/LCSD: 08/06/08

Date Analyzed LCS: 08/08/08 16:07
LCSD: 08/08/08 16:23
Instrument/Analyst LCS: FID/MS
LCSD: FID/MS

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.20	3.00	73.3%	2.17	3.00	72.3%	1.4%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	97.3%	94.9%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a029.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87LCSW1
Client ID:
Injection: 08-AUG-2008 16:07
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.739	0.007	20405	16145	GAS (Tol-C12)	2574931	102
C8	1.861	0.004	19819	13084	DIESEL (C12-C24)	13037292	1099
C10	2.453	0.003	261488	110949	M.OIL (C24-C38)	489142	50
C12	2.938	0.002	465909	229961	AK-102 (C10-C25)	15095467	1054
C14	3.350	0.000	675593	305752	AK-103 (C25-C36)	400041	57
C16	3.713	0.002	786221	433283	OR.DIES (C10-C28)	15314980	1036
C18	4.087	0.004	490276	315440	OR.MOIL (C28-C40)	322530	35
C20	4.510	0.002	358542	231622	JET-A (C10-C18)	11259773	758
C22	4.871	0.001	145531	91082	MIN.OIL (C24-C38)	489142	38
C24	5.178	0.002	59309	37009	MSPIRIT (Tol-C12)	2574931	163
C25	5.312	0.003	34040	37260			
C26	5.437	0.004	19009	22679			
C28	5.666	0.007	6396	8557			
C32	6.096	0.011	4571	14422			
C34	6.340	0.001	3231	2183			
Filter Peak	6.992	-0.001	2800	1665	JP-4 (Tol-C14)	5560598	489
C36	6.646	-0.005	3034	846	CREOSOT (C8-C22)	15085234	2420
C38	7.057	0.001	2796	942			
C40	7.594	-0.001	2975	3100	BUNKERC (C10-C38)	15556249	1956
AZDIESEL (C10-C22)				14362660	894		
AZMOIL (C22-C32)				775693	120		

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	689521	43.8	97.3
Triacontane	605491	49.4	109.7

ms 8/14/08

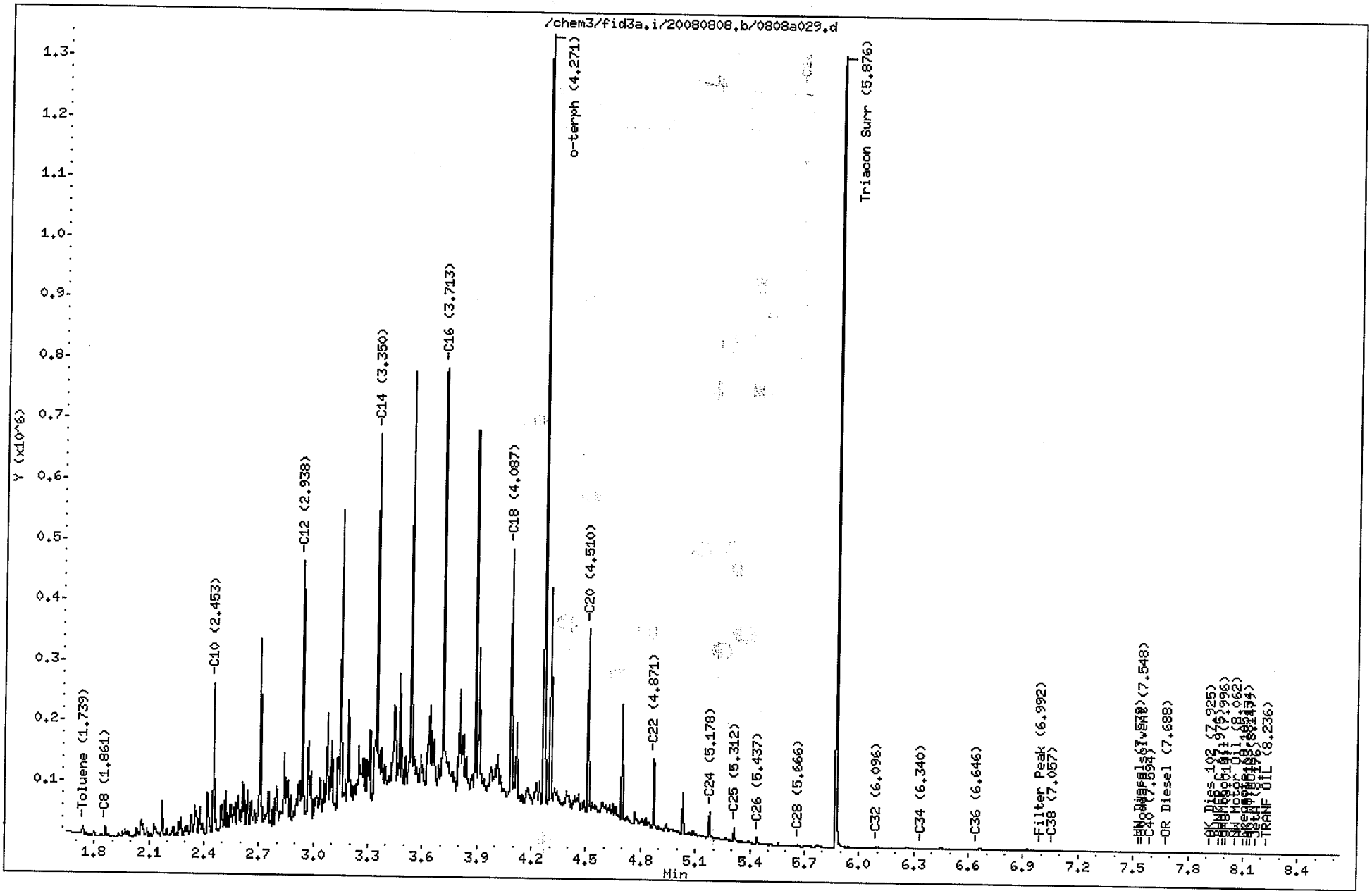
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a029.d
Date : 08-AUG-2008 16:07
Client ID:
Sample Info: NI87LCSW1

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080808.b/0808a030.d
Method: /chem3/fid3a.i/20080808.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/12/2008
Macro: FID:3A080808

ARI ID: NI87LCSDW1
Client ID:
Injection: 08-AUG-2008 16:23
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	0.007	21389	17186	GAS (Tol-C12)	2900008	115
C8	1.861	0.004	20888	13680	DIESEL (C12-C24)	12845259	1083
C10	2.453	0.004	277954	125530	M.OIL (C24-C38)	476234	49
C12	2.938	0.002	510200	248788	AK-102 (C10-C25)	15191960	1060
C14	3.350	0.001	673050	309412	AK-103 (C25-C36)	387452	55
C16	3.713	0.002	772408	502455	OR.DIES (C10-C28)	15408612	1042
C18	4.088	0.005	499817	319526	OR.MOIL (C28-C40)	308265	34
C20	4.511	0.002	351527	234786	JET-A (C10-C18)	11554392	778
C22	4.871	0.001	140842	100168	MIN.OIL (C24-C38)	476234	37
C24	5.178	0.003	57308	36182	MSPIRIT (Tol-C12)	2900008	183
C25	5.313	0.004	33968	34044			
C26	5.439	0.006	19353	18650			
C28	5.668	0.010	6016	8340			
C32	6.085	0.000	3096	493			
C34	6.338	0.000	3215	768			
Filter Peak	6.994	0.002	2759	933	JP-4 (Tol-C14)	5868546	517
C36	6.647	-0.005	2968	1596	CREOSOT (C8-C22)	15226404	2442
C38	7.053	-0.002	2736	1088			
C40	7.601	0.007	2912	3755	BUNKERC (C10-C38)	15642120	1967
AZDIESEL (C10-C22)			14434441	899			
AZMOIL (C22-C32)			759204	118			

Range Times: NW Diesel(2.986 - 5.226) NW Gas(1.682 - 2.986) NW M.Oil(5.226 - 7.106)
AK102(2.399 - 5.259) AK103(5.259 - 6.701) Jet A(2.399 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	672501	42.7	94.9
Triacontane	597381	48.7	108.2

ms 8/14/08

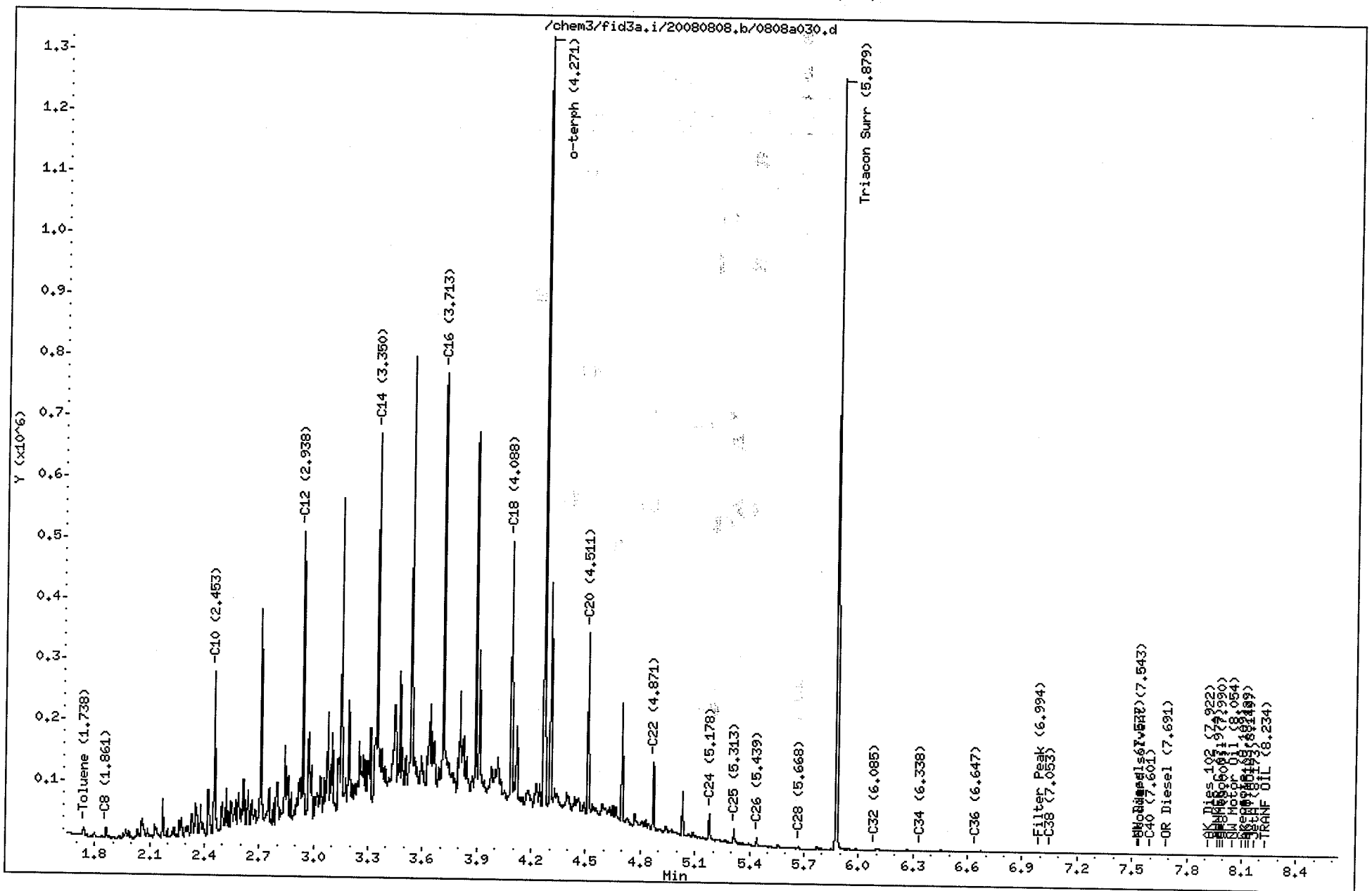
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	25240.2	07-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080808.b/0808a030.d
Date : 08-AUG-2008 16:23
Client ID:
Sample Info: NI87LCSDW1

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 08/04/08

ARI Job: NI87
Project: PIER 23-EBC

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
08-18787-NI87A	EBC-1	500 mL	1.00 mL	08/06/08
08-18788-NI87B	EBC-3	500 mL	1.00 mL	08/06/08
08-18789-080608MB1	Method Blank	500 mL	1.00 mL	08/06/08
08-18789-080608LCS1	Lab Control	500 mL	1.00 mL	08/06/08
08-18789-080608LCSD1	Lab Control Dup	500 mL	1.00 mL	08/06/08
08-18789-NI87C	EBC-4	500 mL	1.00 mL	08/06/08
08-18789-NI87CMS	EBC-4	500 mL	1.00 mL	08/06/08
08-18789-NI87CMSD	EBC-4	500 mL	1.00 mL	08/06/08

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

September 9, 2008 Analytical Report for Service Request No: K0807445

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 07, 2008. For your reference, these analyses have been assigned our service request number K0807445.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807445
Project:	Pier 23-EBC	**Date Received:**	08/17/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 08/07/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-1, EBC-3, and EBC-4 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

Approved by_____ Date 09/10/08

Chain of Custody Documentation

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/12/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER, INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **05/30/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-18787-NI87A	EBC-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
08-18788-NI87B	EBC-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
08-18789-NI87C	EBC-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
08-18791-NI87E	EBC-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18792-NI87F	EBC-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18793-NI87G	EBC-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

Carrier: UPS	Airbill: 1Z832695 03 4432 1270	Date: 8/12/08	
Relinquished by:	Company: ARI	Date: 8/12/08	Time: 1600
Received by:	Company: CAS	Date: 8/13/08	Time: 1030

Subcontractor Custody Form - **NI87**
Page 1 of 1

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/05/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER, INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

K0807445

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: 05/30/08
Fax Results (Y/N): email

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

	ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
1	08-18787-NI87A	E3C-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
2	08-18788-NI87B	E3C-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
3	08-18789-NI87C	E3C-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
1	08-18791-NI87E	E3C-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18792-NI87F	E3C-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18793-NI87F	E3C-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

only Rec'd 6 bottles for EBC-3
Rec'd QC for EBC-4. 16 bottles total

Carrier: UPS	Airbill: 1Z 832 698 03 4458 1978		Date: 8/6/08
Relinquished by: [signature]	Company: ARI	Date: 8/6/08	Time: 1600
Received by: [signature]	Company: CAS	Date: 8/7/08	Time: 1030

Subcontractor Custody Form - **NI87**
Page 1 of 1

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC_____

Client / Project: Analytical Resources Service Request K08_____

Received: 8-13-8 Opened: 8-13-8 By: Lin

1. Samples were received via? *US Mail* *FedEx* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 1Z83269503 4432 1230 NA Y N
   XGVSSAP WAKEL105 Aug 13 07 45:31 2008
5. **Temperature of cooler(s) upon receipt (°C):** -0.4
   Temperature Blank (°C):
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other*_____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA Y N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA Y N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

*Additional Notes, Discrepancies, & Resolutions:*_____

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC 12

Client / Project: A2L Service Request K08 07445

Received: 8/7/08 Opened: 8/7/08 By: BT

1. Samples were received via? *US Mail* *Fed Ex* (UPS) *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (Cooler) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N
4. Is shipper's air-bill filed? If not, record air-bill number: 12 532 695 03 4458 1978 NA (N) N

5. **Temperature of cooler(s) upon receipt (°C):** 5.9
   Temperature Blank (°C): -
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* (Bubble Wrap) (Gel Packs) *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA (Y) N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA (Y) N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* (NA) Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** (NA) Y N
16. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions:

Metals

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
Sample Matrix: Water

Service Request: K0807445
Date Collected: 07/30/08
Date Received: 08/07/08

Mercury, Dissolved

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-3	K0807445-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-4	K0807445-003 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807445-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/18/08	08/22/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	08/18/08
		Date Analyzed:	08/22/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	Batch QC		Units: ng/L
Lab Code:	K0807759-001S,	K0807759-001SD	Basis: NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	ND	29.3	28.3	117	113	71-125	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
LCS Matrix: Water

Service Request: K0807445
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.28	106	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
LCS Matrix: Water

Service Request: K0807445
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.34	87	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
LCS Matrix: Water

Service Request: K0807445
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 08/22/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.72	114	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08

Mercury, Total

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001	5.0	5	08/13/08	08/15/08	41.0	
EBC-3	K0807445-002	1.0	1	08/13/08	08/15/08	11.7	
EBC-4	K0807445-003	1.0	1	08/13/08	08/15/08	2.9	
Method Blank 1	K0807445-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08
		Date Extracted:	08/13/08
		Date Analyzed:	08/15/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	EBC-4	Units:	ng/L
Lab Code:	K0807445-003S, K0807445-003SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	2.9	29.1	29.5	105	106	71-125	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary

Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L

Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.94	99	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
LCS Matrix: Water

Service Request: K0807445
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.64	93	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.24	105	77-123	

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:
Service Request: K0807445

Sample Name:	Lab Code:
EBC-1	K0807445-001
EBC-1	K0807445-001 DISS
EBC-3	K0807445-002
EBC-3	K0807445-002 DISS
EBC-4	K0807445-003
EBC-4	K0807445-003 DISS
EBC-4D	K0807445-003D
EBC-4D	K0807445-003D DISS
EBC-4S	K0807445-003S
EBC-4S	K0807445-003S DISS
Method Blank	K0807445-MB

Comments:

Approved By: _____ **Date:** 9/9/08

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-1
Lab Code: K0807445-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.55	5.0	08/27/08	09/03/08	2.55	U	
Cadmium	200.8	0.102	5.0	08/27/08	09/03/08	0.102	U	
Chromium	200.8	1.02	5.0	08/27/08	09/03/08	23.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	20.5		
Lead	200.8	0.102	5.0	08/27/08	09/03/08	5.890		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	15.1		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	53.3		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-1
Lab Code: K0807445-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.022		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	5.60		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.160		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	8.4		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.56	5.0	08/27/08	09/03/08	2.56	U	
Cadmium	200.8	0.103	5.0	08/27/08	09/03/08	0.424		
Chromium	200.8	1.03	5.0	08/27/08	09/03/08	31.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	17.8		
Lead	200.8	0.103	5.0	08/27/08	09/03/08	7.100		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	22.6		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	52.5		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.90		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.8		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.040		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	4.07		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	5.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.500		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.0		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	6.6		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.3		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected:
Date Received:
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0807445-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

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SPIKE SAMPLE RECOVERY

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4S
Lab Code: K0807445-003S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.58		0.51	U	2.04	77.5		200.8
Cadmium	65 - 114	1.940		0.040		2.04	93.1		200.8
Chromium	50 - 130	6.18		4.07		2.04	103.4		200.8
Copper	50 - 120	6.7		5.2		2.04	73.5		200.8
Lead	55 - 118	3.450		1.500		2.04	95.6		200.8
Nickel	60 - 126	5.9		4.0		2.04	93.1		200.8
Zinc	50 - 133	8.1		6.6		2.04	73.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

- 5A -

SPIKE SAMPLE RECOVERY

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4S
Lab Code: K0807445-003S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.75		0.50	U	2.00	87.5		200.8
Cadmium	65 - 114	1.910		0.020	U	2.00	95.5		200.8
Chromium	50 - 130	2.18		0.20	U	2.00	109.0		200.8
Copper	50 - 120	1.9		0.1	U	2.00	95.0		200.8
Lead	55 - 118	1.970		0.020	U	2.00	98.5		200.8
Nickel	60 - 126	2.3		0.3		2.00	100.0		200.8
Zinc	50 - 133	2.2		0.5	U	2.00	110.0		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

- 6 -

DUPLICATES

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4D
Lab Code: K0807445-003D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.51	U	0.51	U			200.8
Cadmium		0.040		0.030		28.6		200.8
Chromium	20	4.07		4.22		3.6		200.8
Copper	20	5.2		5.2		0.0		200.8
Lead	20	1.500		1.520		1.3		200.8
Nickel	20	4.0		4.0		0.0		200.8
Zinc	20	6.6		6.7		1.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

- 6 -

DUPLICATES

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4D
Lab Code: K0807445-003D DISS

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.50	U	0.50	U			200.8
Cadmium		0.020	U	0.020	U			200.8
Chromium		0.20	U	0.20	U			200.8
Copper		0.1	U	0.1	U			200.8
Lead		0.020	U	0.020	U			200.8
Nickel		0.3		0.3		0.0		200.8
Zinc		0.5	U	0.5	U			200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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LABORATORY CONTROL SAMPLE

Client: Analytical Resources, Incorporat **Service Request:** K0807445

Project No.: NA

Project Name: Pier 23-EBC

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	2	1.84	92.0					
Cadmium	2	1.950	97.5					
Chromium	2	2.03	101.5					
Copper	2	2.0	100.0					
Lead	2	2.040	102.0					
Nickel	2	2.1	105.0					
Zinc	2	2.0	100.0					

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

September 9, 2008 Analytical Report for Service Request No: K0807445

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 07, 2008. For your reference, these analyses have been assigned our service request number K0807445.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807445
Project:	Pier 23-EBC	**Date Received:**	08/17/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 08/07/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-1, EBC-3, and EBC-4 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

Approved by_____ **Date**_____

Chain of Custody Documentation

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/12/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER,INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **05/30/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-18787-NI87A	EBC-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
08-18788-NI87B	EBC-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
08-18789-NI87C	EBC-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
08-18791-NI87E	EBC-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18792-NI87F	EBC-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18793-NI87G	EBC-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

Carrier UPS	Airbill 1Z 832 695 03 4432 1270		Date 8/12/08
Relinquished by	Company ARI	Date 8/12/08	Time 1600
Received by	Company CAS	Date 8/13/08	Time 1030

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/05/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER, INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

1080744

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: 05/30/08
Fax Results (Y/N): email

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

	ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
1	08-18787-NI87A	E3C-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
2	08-18788-NI87B	E3C-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
3	08-18789-NI87C	E3C-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
1	08-18791-NI87E	E3C-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18792-NI87F	E3C-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18793-NI87F	E3C-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

only Rec'd 6 bottles for EBC-3
Rec'd QC for EBC-4. 16 bottles total

Carrier: UPS	Airbill: 1Z 832 695 03 4458 1928		Date: 8/6/08
Relinquished by:	Company: ARI	Date: 8/6/08	Time: 1600
Received by:	Company: CAS	Date: 8/7/08	Time: 1030

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC_____

Client / Project: Analytical Resources Service Request *K08*_____

Received: 8-13-8 Opened: 8-13-8 By: Lm

1. Samples were received via? *US Mail* *FedEx* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 1Z83269503 4432 1230 NA Y N
   XGVSSAP WAKEL105 Aug 13 07:45:31 2008
5. **Temperature of cooler(s) upon receipt (°C):** -0.4
   Temperature Blank (°C):
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other*_____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA Y N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA Y N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

*Additional Notes, Discrepancies, & Resolutions:*_____

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC 1-1

Client / Project: A21 Service Request K08 07445

Received: 8/7/08 Opened: 8/7/08 By: BT

1. Samples were received via? *US Mail* *Fed Ex* (*UPS*) *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N
4. Is shipper's air-bill filed? If not, record air-bill number: 12 832 695 03 4458 1978 NA (Y) N

5. **Temperature of cooler(s) upon receipt (°C):** 5.9
   Temperature Blank (°C): -
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA (Y) N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA (Y) N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* (NA) Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** (NA) Y N
16. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: _____

Metals

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08

Mercury, Dissolved

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-3	K0807445-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-4	K0807445-003 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807445-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/18/08	08/22/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	08/18/08
		Date Analyzed:	08/22/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	Batch QC	Units:	ng/L
Lab Code:	K0807759-001S, K0807759-001SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	ND	29.3	28.3	117	113	71-125	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.28	106	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.34	87	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.72	114	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
Sample Matrix: Water

Service Request: K0807445
Date Collected: 07/30/08
Date Received: 08/07/08

Mercury, Total

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001	5.0	5	08/13/08	08/15/08	41.0	
EBC-3	K0807445-002	1.0	1	08/13/08	08/15/08	11.7	
EBC-4	K0807445-003	1.0	1	08/13/08	08/15/08	2.9	
Method Blank 1	K0807445-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08
		Date Extracted:	08/13/08
		Date Analyzed:	08/15/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	EBC-4	Units:	ng/L
Lab Code:	K0807445-003S, K0807445-003SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	2.9	29.1	29.5	105	106	71-125	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.94	99	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.64	93	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.24	105	77-123	

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:

Service Request: K0807445

Sample Name:	Lab Code:
EBC-1	K0807445-001
EBC-1	K0807445-001 DISS
EBC-3	K0807445-002
EBC-3	K0807445-002 DISS
EBC-4	K0807445-003
EBC-4	K0807445-003 DISS
EBC-4D	K0807445-003D
EBC-4D	K0807445-003D DISS
EBC-4S	K0807445-003S
EBC-4S	K0807445-003S DISS
Method Blank	K0807445-MB

Comments:

Approved By: _____ **Date:** 9/9/08

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Date Collected:**	7/30/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/7/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-1 **Lab Code:** K0807445-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.55	5.0	08/27/08	09/03/08	2.55	U	
Cadmium	200.8	0.102	5.0	08/27/08	09/03/08	0.102	U	
Chromium	200.8	1.02	5.0	08/27/08	09/03/08	23.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	20.5		
Lead	200.8	0.102	5.0	08/27/08	09/03/08	5.890		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	15.1		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	53.3		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-1
Lab Code: K0807445-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.022		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	5.60		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.160		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	8.4		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected: 7/30/2008
Project Name: Pier 23-EBC
Date Received: 8/7/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.56	5.0	08/27/08	09/03/08	2.56	U	
Cadmium	200.8	0.103	5.0	08/27/08	09/03/08	0.424		
Chromium	200.8	1.03	5.0	08/27/08	09/03/08	31.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	17.8		
Lead	200.8	0.103	5.0	08/27/08	09/03/08	7.100		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	22.6		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	52.5		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected: 7/30/2008
Project Name: Pier 23-EBC
Date Received: 8/7/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.90		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.8		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.040		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	4.07		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	5.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.500		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.0		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	6.6		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.3		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected:
Project Name: Pier 23-EBC
Date Received:
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0807445-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4S **Lab Code:** K0807445-003S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.58		0.51	U	2.04	77.5		200.8
Cadmium	65 - 114	1.940		0.040		2.04	93.1		200.8
Chromium	50 - 130	6.18		4.07		2.04	103.4		200.8
Copper	50 - 120	6.7		5.2		2.04	73.5		200.8
Lead	55 - 118	3.450		1.500		2.04	95.6		200.8
Nickel	60 - 126	5.9		4.0		2.04	93.1		200.8
Zinc	50 - 133	8.1		6.6		2.04	73.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

- 5A -

SPIKE SAMPLE RECOVERY

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4S **Lab Code:** K0807445-003S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.75		0.50	U	2.00	87.5		200.8
Cadmium	65 - 114	1.910		0.020	U	2.00	95.5		200.8
Chromium	50 - 130	2.18		0.20	U	2.00	109.0		200.8
Copper	50 - 120	1.9		0.1	U	2.00	95.0		200.8
Lead	55 - 118	1.970		0.020	U	2.00	98.5		200.8
Nickel	60 - 126	2.3		0.3		2.00	100.0		200.8
Zinc	50 - 133	2.2		0.5	U	2.00	110.0		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

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DUPLICATES

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4D **Lab Code:** K0807445-003D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.51	U	0.51	U			200.8
Cadmium		0.040		0.030		28.6		200.8
Chromium	20	4.07		4.22		3.6		200.8
Copper	20	5.2		5.2		0.0		200.8
Lead	20	1.500		1.520		1.3		200.8
Nickel	20	4.0		4.0		0.0		200.8
Zinc	20	6.6		6.7		1.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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DUPLICATES

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4D
Lab Code: K0807445-003D DISS

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.50	U	0.50	U			200.8
Cadmium		0.020	U	0.020	U			200.8
Chromium		0.20	U	0.20	U			200.8
Copper		0.1	U	0.1	U			200.8
Lead		0.020	U	0.020	U			200.8
Nickel		0.3		0.3		0.0		200.8
Zinc		0.5	U	0.5	U			200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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LABORATORY CONTROL SAMPLE

Client: Analytical Resources, Incorporat **Service Request:** K0807445

Project No.: NA

Project Name: Pier 23-EBC

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	2	1.84	92.0					
Cadmium	2	1.950	97.5					
Chromium	2	2.03	101.5					
Copper	2	2.0	100.0					
Lead	2	2.040	102.0					
Nickel	2	2.1	105.0					
Zinc	2	2.0	100.0					

Analytical Resources, Incorporated
Analytical Chemists and Consultants
September 10, 2008

Rick Moore
Hart Crowser, Inc.
1700 Westlake Avenue N. Suite 200
Seattle, WA 98109-3256

RE: Client Project: Pier 23-EBC
ARI Job No. NJ87

Dear Rick;

Please find enclosed the original chain of custody (COC) records, sample receipt documentation, and the final data for samples from the project referenced above. Analytical Resources, Inc. (ARI) received four water samples and a trip blank on August 7, 2008. The samples were received in good condition with a cooler temperature range of 1.2 to 7.0°C. **Please note that sample **EBC-2** was received on the last day of the recommended holding time for SVOCs, PCBs, and NWTPH-Dx analyses. Please reference the comments below for the analyses that were extracted and/or analyzed outside of the recommended holding times.*

The samples were analyzed for VOCs, SVOCs, PCBs, NWTPH-Gx/BETX, NWTPH-Dx, and Total and Dissolved Metals/Mercury, as requested on the COC. The Total and Dissovled Metals/Mercury analyses were subcontracted to Columbia Analytical Services in Kelso, WA.

For the Volatiles analysis: Continuing Calibrations had compounds outside of the 20% control limit, but were accepted outliers under ARI SOPs. No further corrective action was required.

Methylene chloride was present in the method blank at a level greater than the reporting limit. All samples contained concentrations of methylene chloride that were less than the reporting limit, except for sample **Trip Blank**. Sample **Trip Blank** was flagged with a "B" qualifier on the Form I. No further corrective action was required.

For the Semi-volatiles analysis: Please note that sample **EBC-2** was extracted one day outside the recommended holding time. Data have been reported as is for this sample and have been included in this report for your review.

Multiple surrogate percent recoveries were outside the control limits low for sample **EBC-5**. Sample **EBC-5** was re-extracted outside the recommended holding time and re-analyzed and all surrogate recoveries were within control limits. Both sets of data have been included in this report for your review.

The surrogate percent recovery for 2-Fluorobiphenyl fell outside the control limits low for sample **EBC-6**. All other surrogate recoveries for this sample were within the control limits, therefore no further corrective action was required.

The LCSD percent recovery of 4-Nitrophenol was outside the control limits low but within the marginal exceedance control limits for **LCS-080808**. Since the LCS percent recovery was within both sets of control limits, no further corrective action was required.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

The LCS percent recovery of Phenol was outside the control limits low for **LCS-082208**. Since **LCS-082208** was within the marginal exceedance control limits, no further corrective action was required.

The LCS percent recoveries for 4-Chloroaniline and 4-Nitrophenol fell outside the ARI recommended control limits low for **LCS-082208**. These analytes are considered "Poor Performing Analytes" by the DoD-QSM and have no recommended control limits. Data have been reported as is. No further corrective action was required.

For the PCBs analysis: Please note that sample **EBC-2** was extracted one day outside the recommended holding time. Data have been reported as is for this sample and have been included in this report for your review.

The LCS and LCSD percent recoveries for Aroclor 1260 were outside the control limits high for **LCS-080808**. All samples contained concentrations of Aroclor that were less than the reporting limit. No further corrective action was required.

There were no anomalies associated with the NWTPH-Gx/BETX analysis.

For the NWTPH-Dx analysis: Please note that sample **EBC-2** was extracted one day outside of the recommended holding time. Data have been reported as is for this sample and have been included in this report for your review.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206/695-6211
Enclosures

cc: eFile NJ87

KFB/co

Sample Custody Record

NJ87 1 of 1

Samples Shipped to: AKI

HARTCROWSER

Hart Crowser, Inc.
1910 Fairview Avenue East
Seattle, Washington 98102-3699
Phone: 206-324-9530 FAX: 206-328-5581

JOB 17490-01 LAB NUMBER

PROJECT NAME Pier 23-EBC

HART CROWSER CONTACT Angie Goodwin
Rick Moore

SAMPLED BY: Carl Ulberg

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	NWTPH-Dx	NWTPH-G/BTEX	VOCs 8260B	SVOCs 8270D	PCBs 8082	Total Metals 6020	Diss. Metals 6020	Total Hg 1631	Diss. Hg 7470A	↳ low level for Hg			NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	EBC-2	Various	7/31/08	1330	H_2O	X	X	X	X	X	X	X	X	X	X			17	
	EBC-5	bottles	8/1/08	0945		X	X	X	X	X	X	X	X	X				17	
	EBC-6			1215		X	X	X	X	X	X	X	X	X				17	
	EBC-16			1245		X	X	X	X	X	X	X	X	X				17	
	Trip blank		–	–				X										3	

RELINQUISHED BY	DATE	RECEIVED BY	DATE
Angie Goodwin	8/6/08	E. L	08/07/08
SIGNATURE		SIGNATURE	
Angie Goodwin	TIME	Erik Kasarda	TIME
PRINT NAME		PRINT NAME	
HC	0800	AKI	1600
COMPANY		COMPANY	

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

* As, Cd, Cr, Cu, Pb, Ni, & Zn.
Extra bottles for reductive ppt. (16+D)

Total & dissolved Metals and total and dissolved Hg to CAS

71 TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE _____
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____
for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐ 48 HOURS ☒ STANDARD
☐ 72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Hart Crowser
Project Name: Pier 23-EDC
COC No:
Delivered by: ARI
Assigned ARI Job No:
Tracking No:

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Record cooler temperature (recommended 2.0-6.0 °C for chemistry	1.2, 7.0 °C	

Cooler Accepted by: EIR Date: 8/7/08 Time: 1600

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?		SB/BW	
Was sufficient ice used (if appropriate)?		(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottle arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation checklist)		(YES)	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO

Samples Logged by: ICR Date: 8/8/08 Time: 1236

*** Notify Project Manager of discrepancies or concerns ****

Explain discrepancies or negative responses:

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-2**
 SAMPLE

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER, INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 17:57

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	**Acetone**	**2.5**	**3.8**	
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	**1,1-Dichloroethane**	**0.2**	**0.2**	
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**4.4**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	**Toluene**	**0.2**	**0.3**	
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	**Ethylbenzene**	**0.2**	**1.0**	
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	**m,p-Xylene**	**0.4**	**1.3**	
95-47-6	**o-Xylene**	**0.2**	**0.6**	
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-2**
 SAMPLE

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/12/08 17:57

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	**1,2,4-Trimethylbenzene**	**0.2**	**0.6**	
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**1.0**	
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**2.7**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	103%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	116%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 18:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	**Acetone**	**2.5**	**7.2**	
75-15-0	**Carbon Disulfide**	**0.2**	**0.4**	
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-5**
 SAMPLE

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Date Analyzed: 08/12/08 18:22

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	103%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	110%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-6**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 18:47

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	2.5	< 2.5	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Date Analyzed: 08/12/08 18:47

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	103%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	108%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-16**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 19:37

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	0.5	< 0.5	U
67-64-1	Acetone	2.5	< 2.5	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-16**
 SAMPLE

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Date Analyzed: 08/12/08 19:37

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	102%
Bromofluorobenzene	96.9%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: NJ87E
LIMS ID: 08-19938
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER, INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/23/08
Date Received: 08/06/08

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 17:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	**Methylene Chloride**	**0.5**	**0.6**	**B**
67-64-1	Acetone	2.5	< 2.5	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: NJ87E
LIMS ID: 08-19938
Matrix: Water
Date Analyzed: 08/12/08 17:32

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	103%
Bromofluorobenzene	95.0%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-081208	Method Blank	10	110%	102%	98.1%	106%	0
LCS-081208	Lab Control	10	110%	102%	106%	97.4%	0
LCSD-081208	Lab Control Dup	10	114%	102%	106%	97.6%	0
NJ87A	EBC-2	10	109%	103%	105%	116%	0
NJ87B	EBC-5	10	114%	103%	97.7%	110%	0
NJ87C	EBC-6	10	111%	103%	96.3%	108%	0
NJ87D	EBC-16	10	115%	102%	96.9%	104%	0
NJ87E	TRIP BLANK	10	113%	103%	95.0%	106%	0

	LCS/MB LIMITS	QC LIMITS
SW8260B		
(DCE) = d4-1,2-Dichloroethane	70-130	70-130
(TOL) = d8-Toluene	70-130	70-130
(BFB) = Bromofluorobenzene	70-130	70-130
(DCB) = d4-1,2-Dichlorobenzene	70-130	70-130

Prep Method: SW5030B
Log Number Range: 08-19934 to 08-19938

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-081208
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT5/JZ
LCSD: NT5/JZ
Date Analyzed LCS: 08/12/08 16:17
LCSD: 08/12/08 19:12

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.3	10.0	93.0%	7.7	10.0	77.0%	18.8%
Bromomethane	10.5	10.0	105%	7.2	10.0	72.0%	37.3%
Vinyl Chloride	8.4	10.0	84.0%	7.5	10.0	75.0%	11.3%
Chloroethane	9.2	10.0	92.0%	8.5	10.0	85.0%	7.9%
Methylene Chloride	10.4	10.0	104%	10.0	10.0	100%	3.9%
Acetone	51.7	50.0	103%	51.7	50.0	103%	0.0%
Carbon Disulfide	9.0	10.0	90.0%	9.0	10.0	90.0%	0.0%
1,1-Dichloroethene	9.5	10.0	95.0%	9.0	10.0	90.0%	5.4%
1,1-Dichloroethane	10.6	10.0	106%	10.0	10.0	100%	5.8%
trans-1,2-Dichloroethene	9.6	10.0	96.0%	9.3	10.0	93.0%	3.2%
cis-1,2-Dichloroethene	10.4	10.0	104%	9.6	10.0	96.0%	8.0%
Chloroform	10.6	10.0	106%	10.2	10.0	102%	3.8%
1,2-Dichloroethane	11.0	10.0	110%	10.2	10.0	102%	7.5%
2-Butanone	52.2	50.0	104%	53.1	50.0	106%	1.7%
1,1,1-Trichloroethane	10.5	10.0	105%	10.2	10.0	102%	2.9%
Carbon Tetrachloride	10.6	10.0	106%	11.9	10.0	119%	11.6%
Vinyl Acetate	8.5	10.0	85.0%	8.7	10.0	87.0%	2.3%
Bromodichloromethane	11.5	10.0	115%	10.9	10.0	109%	5.4%
1,2-Dichloropropane	9.8	10.0	98.0%	9.1	10.0	91.0%	7.4%
cis-1,3-Dichloropropene	10.7	10.0	107%	9.7	10.0	97.0%	9.8%
Trichloroethene	10.3	10.0	103%	9.8	10.0	98.0%	5.0%
Dibromochloromethane	11.4	10.0	114%	10.8	10.0	108%	5.4%
1,1,2-Trichloroethane	10.6	10.0	106%	10.0	10.0	100%	5.8%
Benzene	10.2	10.0	102%	9.4	10.0	94.0%	8.2%
trans-1,3-Dichloropropene	11.0	10.0	110%	10.2	10.0	102%	7.5%
2-Chloroethylvinylether	9.7	10.0	97.0%	9.6	10.0	96.0%	1.0%
Bromoform	10.8	10.0	108%	10.3	10.0	103%	4.7%
4-Methyl-2-Pentanone (MIBK)	51.8	50.0	104%	52.2	50.0	104%	0.8%
2-Hexanone	52.8	50.0	106%	54.1	50.0	108%	2.4%
Tetrachloroethene	10.9	10.0	109%	10.7	10.0	107%	1.9%
1,1,2,2-Tetrachloroethane	10.5	10.0	105%	10.0	10.0	100%	4.9%
Toluene	10.3	10.0	103%	9.7	10.0	97.0%	6.0%
Chlorobenzene	10.0	10.0	100%	9.5	10.0	95.0%	5.1%
Ethylbenzene	11.0	10.0	110%	10.5	10.0	105%	4.7%
Styrene	9.9	10.0	99.0%	9.1	10.0	91.0%	8.4%
Trichlorofluoromethane	10.2	10.0	102%	9.7	10.0	97.0%	5.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.8	10.0	98.0%	10.3	10.0	103%	5.0%
m,p-Xylene	22.5	20.0	112%	21.3	20.0	106%	5.5%
o-Xylene	11.0	10.0	110%	10.5	10.0	105%	4.7%
1,2-Dichlorobenzene	11.2	10.0	112%	10.6	10.0	106%	5.5%
1,3-Dichlorobenzene	11.0	10.0	110%	10.4	10.0	104%	5.6%
1,4-Dichlorobenzene	10.9	10.0	109%	10.4	10.0	104%	4.7%
Acrolein	40.4	50.0	80.8%	39.2	50.0	78.4%	3.0%
Methyl Iodide	10.5	10.0	105%	9.9	10.0	99.0%	5.9%
Bromoethane	10.0	10.0	100%	10.2	10.0	102%	2.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-081208 QC Report No: NJ87-HART CROWSER,INC.
LIMS ID: 08-19934 Project: PIER 23-EBC
Matrix: Water 17490-01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Acrylonitrile	9.9	10.0	99.0%	10.3	10.0	103%	4.0%
1,1-Dichloropropene	11.1	10.0	111%	10.3	10.0	103%	7.5%
Dibromomethane	11.5	10.0	115%	10.4	10.0	104%	10.0%
1,1,1,2-Tetrachloroethane	11.5	10.0	115%	10.8	10.0	108%	6.3%
1,2-Dibromo-3-chloropropane	11.6	10.0	116%	10.6	10.0	106%	9.0%
1,2,3-Trichloropropane	11.3	10.0	113%	10.5	10.0	105%	7.3%
trans-1,4-Dichloro-2-butene	10.0	10.0	100%	10.3	10.0	103%	3.0%
1,3,5-Trimethylbenzene	11.4	10.0	114%	10.9	10.0	109%	4.5%
1,2,4-Trimethylbenzene	11.5	10.0	115%	11.1	10.0	111%	3.5%
Hexachlorobutadiene	10.3	10.0	103%	9.9	10.0	99.0%	4.0%
Ethylene Dibromide	10.1	10.0	101%	9.6	10.0	96.0%	5.1%
Bromochloromethane	10.9	10.0	109%	10.6	10.0	106%	2.8%
2,2-Dichloropropane	10.7	10.0	107%	10.2	10.0	102%	4.8%
1,3-Dichloropropane	10.3	10.0	103%	9.5	10.0	95.0%	8.1%
Isopropylbenzene	10.9	10.0	109%	10.4	10.0	104%	4.7%
n-Propylbenzene	10.6	10.0	106%	10.1	10.0	101%	4.8%
Bromobenzene	10.5	10.0	105%	10.3	10.0	103%	1.9%
2-Chlorotoluene	10.3	10.0	103%	9.7	10.0	97.0%	6.0%
4-Chlorotoluene	10.7	10.0	107%	10.2	10.0	102%	4.8%
tert-Butylbenzene	11.2	10.0	112%	10.8	10.0	108%	3.6%
sec-Butylbenzene	11.2	10.0	112%	10.8	10.0	108%	3.6%
4-Isopropyltoluene	10.5	10.0	105%	10.1	10.0	101%	3.9%
n-Butylbenzene	11.1	10.0	111%	10.5	10.0	105%	5.6%
1,2,4-Trichlorobenzene	10.0	10.0	100%	9.2	10.0	92.0%	8.3%
Naphthalene	10.2	10.0	102%	9.2	10.0	92.0%	10.3%
1,2,3-Trichlorobenzene	9.8	10.0	98.0%	8.8	10.0	88.0%	10.8%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	110%	114%
d8-Toluene	102%	102%
Bromofluorobenzene	106%	106%
d4-1,2-Dichlorobenzene	97.4%	97.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/13/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT5/JZ
Date Analyzed: 08/12/08 17:07

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.2	< 0.2	U
74-83-9	Bromomethane	0.5	< 0.5	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	**Methylene Chloride**	**0.5**	**0.6**	
67-64-1	Acetone	2.5	< 2.5	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	1.0	< 1.0	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	2.5	< 2.5	U
591-78-6	2-Hexanone	2.5	< 2.5	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	0.2	< 0.2	U
1330-20-7	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/12/08 17:07

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	102%
Bromofluorobenzene	98.1%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/14/08 13:51
Instrument/Analyst: NT4/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	**2,4-Dimethylphenol**	**1.0**	**3.3**
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	**Naphthalene**	**1.0**	**1.8**
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	**2-Methylnaphthalene**	**1.0**	**18**
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	**Acenaphthene**	**1.0**	**130 E**
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	**Dibenzofuran**	**1.0**	**24**
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-2**
 SAMPLE

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/14/08 13:51

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	**Fluorene**	**1.0**	**27**
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	**Phenanthrene**	**1.0**	**18**
86-74-8	**Carbazole**	**1.0**	**22**
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	**1-Methylnaphthalene**	**1.0**	**33**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.4%	2-Fluorobiphenyl	64.0%
d14-p-Terphenyl	64.0%	d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	33.6%	2-Fluorophenol	44.8%
2,4,6-Tribromophenol	78.1%	d4-2-Chlorophenol	60.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-2**
 DILUTION

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/15/08 21:46
Instrument/Analyst: NT4/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 3.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	3.0	< 3.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	3.0	< 3.0 U
95-57-8	2-Chlorophenol	3.0	< 3.0 U
541-73-1	1,3-Dichlorobenzene	3.0	< 3.0 U
106-46-7	1,4-Dichlorobenzene	3.0	< 3.0 U
100-51-6	Benzyl Alcohol	15	< 15 U
95-50-1	1,2-Dichlorobenzene	3.0	< 3.0 U
95-48-7	2-Methylphenol	3.0	< 3.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	3.0	< 3.0 U
106-44-5	4-Methylphenol	3.0	< 3.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	15	< 15 U
67-72-1	Hexachloroethane	3.0	< 3.0 U
98-95-3	Nitrobenzene	3.0	< 3.0 U
78-59-1	Isophorone	3.0	< 3.0 U
88-75-5	2-Nitrophenol	15	< 15 U
105-67-9	2,4-Dimethylphenol	3.0	< 3.0 U
65-85-0	Benzoic Acid	30	< 30 U
111-91-1	bis(2-Chloroethoxy) Methane	3.0	< 3.0 U
120-83-2	2,4-Dichlorophenol	15	< 15 U
120-82-1	1,2,4-Trichlorobenzene	3.0	< 3.0 U
91-20-3	Naphthalene	3.0	< 3.0 U
106-47-8	4-Chloroaniline	15	< 15 U
87-68-3	Hexachlorobutadiene	3.0	< 3.0 U
59-50-7	4-Chloro-3-methylphenol	15	< 15 U
91-57-6	**2-Methylnaphthalene**	**3.0**	**20**
77-47-4	Hexachlorocyclopentadiene	15	< 15 U
88-06-2	2,4,6-Trichlorophenol	15	< 15 U
95-95-4	2,4,5-Trichlorophenol	15	< 15 U
91-58-7	2-Chloronaphthalene	3.0	< 3.0 U
88-74-4	2-Nitroaniline	15	< 15 U
131-11-3	Dimethylphthalate	3.0	< 3.0 U
208-96-8	Acenaphthylene	3.0	< 3.0 U
99-09-2	3-Nitroaniline	15	< 15 U
83-32-9	**Acenaphthene**	**3.0**	**120**
51-28-5	2,4-Dinitrophenol	30	< 30 U
100-02-7	4-Nitrophenol	15	< 15 U
132-64-9	**Dibenzofuran**	**3.0**	**24**
606-20-2	2,6-Dinitrotoluene	15	< 15 U
121-14-2	2,4-Dinitrotoluene	15	< 15 U
84-66-2	Diethylphthalate	3.0	< 3.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-2
DILUTION

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/15/08 21:46

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	3.0	< 3.0 U
86-73-7	**Fluorene**	**3.0**	**28**
100-01-6	4-Nitroaniline	15	< 15 U
534-52-1	4,6-Dinitro-2-Methylphenol	30	< 30 U
86-30-6	N-Nitrosodiphenylamine	3.0	< 3.0 U
101-55-3	4-Bromophenyl-phenylether	3.0	< 3.0 U
118-74-1	Hexachlorobenzene	3.0	< 3.0 U
87-86-5	Pentachlorophenol	15	< 15 U
85-01-8	**Phenanthrene**	**3.0**	**19**
86-74-8	**Carbazole**	**3.0**	**26**
120-12-7	Anthracene	3.0	< 3.0 U
84-74-2	Di-n-Butylphthalate	3.0	< 3.0 U
206-44-0	Fluoranthene	3.0	< 3.0 U
129-00-0	Pyrene	3.0	< 3.0 U
85-68-7	Butylbenzylphthalate	3.0	< 3.0 U
91-94-1	3,3'-Dichlorobenzidine	15	< 15 U
56-55-3	Benzo(a)anthracene	3.0	< 3.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	3.0	< 3.0 U
218-01-9	Chrysene	3.0	< 3.0 U
117-84-0	Di-n-Octyl phthalate	3.0	< 3.0 U
205-99-2	Benzo(b)fluoranthene	3.0	< 3.0 U
207-08-9	Benzo(k)fluoranthene	3.0	< 3.0 U
50-32-8	Benzo(a)pyrene	3.0	< 3.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	3.0	< 3.0 U
53-70-3	Dibenz(a,h)anthracene	3.0	< 3.0 U
191-24-2	Benzo(g,h,i)perylene	3.0	< 3.0 U
90-12-0	**1-Methylnaphthalene**	**3.0**	**34**

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.6%	2-Fluorobiphenyl	67.3%
d14-p-Terphenyl	60.6%	d4-1,2-Dichlorobenzene	58.7%
d5-Phenol	34.4%	2-Fluorophenol	47.4%
2,4,6-Tribromophenol	66.9%	d4-2-Chlorophenol	59.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-5
SAMPLE

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/14/08 14:26
Instrument/Analyst: NT4/LJR

Sample Amount: 350 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.4	< 1.4 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.4	< 1.4 U
95-57-8	2-Chlorophenol	1.4	< 1.4 U
541-73-1	1,3-Dichlorobenzene	1.4	< 1.4 U
106-46-7	1,4-Dichlorobenzene	1.4	< 1.4 U
100-51-6	Benzyl Alcohol	7.1	< 7.1 U
95-50-1	1,2-Dichlorobenzene	1.4	< 1.4 U
95-48-7	2-Methylphenol	1.4	< 1.4 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.4	< 1.4 U
106-44-5	4-Methylphenol	1.4	< 1.4 U
621-64-7	N-Nitroso-Di-N-Propylamine	7.1	< 7.1 U
67-72-1	Hexachloroethane	1.4	< 1.4 U
98-95-3	Nitrobenzene	1.4	< 1.4 U
78-59-1	Isophorone	1.4	< 1.4 U
88-75-5	2-Nitrophenol	7.1	< 7.1 U
105-67-9	2,4-Dimethylphenol	1.4	< 1.4 U
65-85-0	Benzoic Acid	14	< 14 U
111-91-1	bis(2-Chloroethoxy) Methane	1.4	< 1.4 U
120-83-2	2,4-Dichlorophenol	7.1	< 7.1 U
120-82-1	1,2,4-Trichlorobenzene	1.4	< 1.4 U
91-20-3	Naphthalene	1.4	< 1.4 U
106-47-8	4-Chloroaniline	7.1	< 7.1 U
87-68-3	Hexachlorobutadiene	1.4	< 1.4 U
59-50-7	4-Chloro-3-methylphenol	7.1	< 7.1 U
91-57-6	2-Methylnaphthalene	1.4	< 1.4 U
77-47-4	Hexachlorocyclopentadiene	7.1	< 7.1 U
88-06-2	2,4,6-Trichlorophenol	7.1	< 7.1 U
95-95-4	2,4,5-Trichlorophenol	7.1	< 7.1 U
91-58-7	2-Chloronaphthalene	1.4	< 1.4 U
88-74-4	2-Nitroaniline	7.1	< 7.1 U
131-11-3	Dimethylphthalate	1.4	< 1.4 U
208-96-8	Acenaphthylene	1.4	< 1.4 U
99-09-2	3-Nitroaniline	7.1	< 7.1 U
83-32-9	Acenaphthene	1.4	< 1.4 U
51-28-5	2,4-Dinitrophenol	14	< 14 U
100-02-7	4-Nitrophenol	7.1	< 7.1 U
132-64-9	Dibenzofuran	1.4	< 1.4 U
606-20-2	2,6-Dinitrotoluene	7.1	< 7.1 U
121-14-2	2,4-Dinitrotoluene	7.1	< 7.1 U
84-66-2	Diethylphthalate	1.4	< 1.4 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-5
SAMPLE

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Date Analyzed: 08/14/08 14:26

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.4	< 1.4 U
86-73-7	Fluorene	1.4	< 1.4 U
100-01-6	4-Nitroaniline	7.1	< 7.1 U
534-52-1	4,6-Dinitro-2-Methylphenol	14	< 14 U
86-30-6	N-Nitrosodiphenylamine	1.4	< 1.4 U
101-55-3	4-Bromophenyl-phenylether	1.4	< 1.4 U
118-74-1	Hexachlorobenzene	1.4	< 1.4 U
87-86-5	Pentachlorophenol	7.1	< 7.1 U
85-01-8	Phenanthrene	1.4	< 1.4 U
86-74-8	Carbazole	1.4	< 1.4 U
120-12-7	Anthracene	1.4	< 1.4 U
84-74-2	Di-n-Butylphthalate	1.4	< 1.4 U
206-44-0	Fluoranthene	1.4	< 1.4 U
129-00-0	Pyrene	1.4	< 1.4 U
85-68-7	Butylbenzylphthalate	1.4	< 1.4 U
91-94-1	3,3'-Dichlorobenzidine	7.1	< 7.1 U
56-55-3	Benzo(a)anthracene	1.4	< 1.4 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.4	< 1.4 U
218-01-9	Chrysene	1.4	< 1.4 U
117-84-0	Di-n-Octyl phthalate	1.4	< 1.4 U
205-99-2	Benzo(b)fluoranthene	1.4	< 1.4 U
207-08-9	Benzo(k)fluoranthene	1.4	< 1.4 U
50-32-8	Benzo(a)pyrene	1.4	< 1.4 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.4	< 1.4 U
53-70-3	Dibenz(a,h)anthracene	1.4	< 1.4 U
191-24-2	Benzo(g,h,i)perylene	1.4	< 1.4 U
90-12-0	1-Methylnaphthalene	1.4	< 1.4 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	43.6%	2-Fluorobiphenyl	35.2%
d14-p-Terphenyl	40.0%	d4-1,2-Dichlorobenzene	33.8%
d5-Phenol	28.3%	2-Fluorophenol	36.0%
2,4,6-Tribromophenol	39.2%	d4-2-Chlorophenol	39.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-5
REEXTRACT

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 09/04/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/22/08
Date Analyzed: 08/30/08 23:39
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-5**
Page 2 of 2 **REEXTRACT**

Lab Sample ID: NJ87B QC Report No: NJ87-HART CROWSER,INC.
LIMS ID: 08-19935 Project: PIER 23-EBC
Matrix: Water 17490-01
Date Analyzed: 08/30/08 23:39

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	53.2%	2-Fluorobiphenyl	54.0%
d14-p-Terphenyl	63.6%	d4-1,2-Dichlorobenzene	54.8%
d5-Phenol	39.5%	2-Fluorophenol	45.1%
2,4,6-Tribromophenol	59.2%	d4-2-Chlorophenol	56.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-6 SAMPLE

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER, INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/14/08 15:01
Instrument/Analyst: NT4/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-6**
 SAMPLE

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Date Analyzed: 08/14/08 15:01

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	55.2%	2-Fluorobiphenyl	43.6%
d14-p-Terphenyl	62.0%	d4-1,2-Dichlorobenzene	44.4%
d5-Phenol	22.8%	2-Fluorophenol	36.0%
2,4,6-Tribromophenol	60.3%	d4-2-Chlorophenol	49.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-16
SAMPLE

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/14/08 15:35
Instrument/Analyst: NT4/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-16**
 SAMPLE

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Date Analyzed: 08/14/08 15:35

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.4%	2-Fluorobiphenyl	59.6%
d14-p-Terphenyl	65.6%	d4-1,2-Dichlorobenzene	51.6%
d5-Phenol	27.7%	2-Fluorophenol	42.1%
2,4,6-Tribromophenol	64.8%	d4-2-Chlorophenol	58.7%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-080808	68.4%	56.8%	74.0%	55.2%	31.5%	46.4%	66.9%	64.5%	0
LCS-080808	75.2%	68.4%	71.2%	62.4%	38.4%	52.3%	82.9%	71.5%	0
LCSD-080808	64.4%	62.0%	65.6%	51.6%	32.8%	44.5%	73.3%	59.5%	0
EBC-2	64.4%	64.0%	64.0%	54.0%	33.6%	44.8%	78.1%	60.0%	0
EBC-2 DL	73.6%	67.3%	60.6%	58.7%	34.4%	47.4%	66.9%	59.9%	0
MB-082208	65.6%	69.6%	82.0%	66.0%	38.9%	50.1%	81.1%	68.8%	0
LCS-082208	64.8%	70.0%	80.0%	65.6%	42.9%	52.0%	78.9%	67.5%	0
EBC-5	43.6%*	35.2%*	40.0%*	33.8%*	28.3%	36.0%	39.2%*	39.2%*	6
EBC-5 RE	53.2%	54.0%	63.6%	54.8%	39.5%	45.1%	59.2%	56.0%	0
EBC-6	55.2%	43.6%*	62.0%	44.4%	22.8%	36.0%	60.3%	49.1%	1
EBC-16	66.4%	59.6%	65.6%	51.6%	27.7%	42.1%	64.8%	58.7%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-104)	(45-98)
(FBP) = 2-Fluorobiphenyl	(49-98)	(53-89)
(TPH) = d14-p-Terphenyl	(48-120)	(46-119)
(DCB) = d4-1,2-Dichlorobenzene	(40-92)	(41-87)
(PHL) = d5-Phenol	(20-62)	(10-66)
(2FP) = 2-Fluorophenol	(17-98)	(23-74)
(TBP) = 2,4,6-Tribromophenol	(56-110)	(51-105)
(2CP) = d4-2-Chlorophenol	(51-97)	(42-93)

Prep Method: SW3510C
Log Number Range: 08-19934 to 08-19937

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-080808
LCS/LCSD

Lab Sample ID: LCS-080808
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted LCS/LCSD: 08/08/08

Date Analyzed LCS: 08/13/08 16:50
LCSD: 08/13/08 17:25
Instrument/Analyst LCS: NT4/LJR
LCSD: NT4/LJR
GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	14.0	25.0	56.0%	11.7	25.0	46.8%	17.9%
Bis-(2-Chloroethyl) Ether	18.0	25.0	72.0%	14.9	25.0	59.6%	18.8%
2-Chlorophenol	17.2	25.0	68.8%	14.4	25.0	57.6%	17.7%
1,3-Dichlorobenzene	13.4	25.0	53.6%	11.4	25.0	45.6%	16.1%
1,4-Dichlorobenzene	13.4	25.0	53.6%	11.5	25.0	46.0%	15.3%
Benzyl Alcohol	27.3	50.0	54.6%	23.1	50.0	46.2%	16.7%
1,2-Dichlorobenzene	13.7	25.0	54.8%	11.8	25.0	47.2%	14.9%
2-Methylphenol	16.6	25.0	66.4%	14.2	25.0	56.8%	15.6%
2,2'-Oxybis(1-Chloropropane)	16.1	25.0	64.4%	13.2	25.0	52.8%	19.8%
4-Methylphenol	33.3	50.0	66.6%	29.1	50.0	58.2%	13.5%
N-Nitroso-Di-N-Propylamine	18.6	25.0	74.4%	16.6	25.0	66.4%	11.4%
Hexachloroethane	13.9	25.0	55.6%	12.1	25.0	48.4%	13.8%
Nitrobenzene	18.7	25.0	74.8%	16.1	25.0	64.4%	14.9%
Isophorone	21.6	25.0	86.4%	19.8	25.0	79.2%	8.7%
2-Nitrophenol	16.7	25.0	66.8%	14.7	25.0	58.8%	12.7%
2,4-Dimethylphenol	13.9	25.0	55.6%	13.6	25.0	54.4%	2.2%
Benzoic Acid	27.9	75.0	37.2%	27.2	75.0	36.3%	2.5%
bis(2-Chloroethoxy) Methane	18.2	25.0	72.8%	16.2	25.0	64.8%	11.6%
2,4-Dichlorophenol	16.7	25.0	66.8%	14.6	25.0	58.4%	13.4%
1,2,4-Trichlorobenzene	14.4	25.0	57.6%	12.2	25.0	48.8%	16.5%
Naphthalene	15.5	25.0	62.0%	13.5	25.0	54.0%	13.8%
4-Chloroaniline	57.3	60.0	95.5%	49.9	60.0	83.2%	13.8%
Hexachlorobutadiene	14.5	25.0	58.0%	12.2	25.0	48.8%	17.2%
4-Chloro-3-methylphenol	18.1	25.0	72.4%	16.7	25.0	66.8%	8.0%
2-Methylnaphthalene	15.5	25.0	62.0%	14.0	25.0	56.0%	10.2%
Hexachlorocyclopentadiene	45.6	75.0	60.8%	39.5	75.0	52.7%	14.3%
2,4,6-Trichlorophenol	16.7	25.0	66.8%	15.5	25.0	62.0%	7.5%
2,4,5-Trichlorophenol	16.9	25.0	67.6%	15.7	25.0	62.8%	7.4%
2-Chloronaphthalene	15.8	25.0	63.2%	14.7	25.0	58.8%	7.2%
2-Nitroaniline	19.2	25.0	76.8%	17.9	25.0	71.6%	7.0%
Dimethylphthalate	19.6	25.0	78.4%	18.0	25.0	72.0%	8.5%
Acenaphthylene	18.4	25.0	73.6%	16.9	25.0	67.6%	8.5%
3-Nitroaniline	62.9	64.0	98.3%	57.8	64.0	90.3%	8.5%
Acenaphthene	16.7	25.0	66.8%	15.4	25.0	61.6%	8.1%
2,4-Dinitrophenol	53.0	75.0	70.7%	49.6	75.0	66.1%	6.6%
4-Nitrophenol	11.0	25.0	44.0%	10.4	25.0	41.6%	5.6%
Dibenzofuran	17.8	25.0	71.2%	16.3	25.0	65.2%	8.8%
2,6-Dinitrotoluene	18.8	25.0	75.2%	17.4	25.0	69.6%	7.7%
2,4-Dinitrotoluene	19.0	25.0	76.0%	17.4	25.0	69.6%	8.8%
Diethylphthalate	17.8	25.0	71.2%	16.1	25.0	64.4%	10.0%
4-Chlorophenyl-phenylether	18.2	25.0	72.8%	16.8	25.0	67.2%	8.0%
Fluorene	18.4	25.0	73.6%	16.8	25.0	67.2%	9.1%
4-Nitroaniline	19.0	25.0	76.0%	17.1	25.0	68.4%	10.5%
4,6-Dinitro-2-Methylphenol	56.1	75.0	74.8%	53.5	75.0	71.3%	4.7%
N-Nitrosodiphenylamine	24.7	25.0	98.8%	22.8	25.0	91.2%	8.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-080808
LCS/LCSD

Lab Sample ID: LCS-080808
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/13/08 16:50

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	17.2	25.0	68.8%	15.7	25.0	62.8%	9.1%
Hexachlorobenzene	17.3	25.0	69.2%	16.0	25.0	64.0%	7.8%
Pentachlorophenol	17.0	25.0	68.0%	16.5	25.0	66.0%	3.0%
Phenanthrene	17.9	25.0	71.6%	16.4	25.0	65.6%	8.7%
Carbazole	19.4	25.0	77.6%	17.5	25.0	70.0%	10.3%
Anthracene	18.1	25.0	72.4%	16.6	25.0	66.4%	8.6%
Di-n-Butylphthalate	19.2	25.0	76.8%	17.7	25.0	70.8%	8.1%
Fluoranthene	19.5	25.0	78.0%	17.4	25.0	69.6%	11.4%
Pyrene	16.8	25.0	67.2%	16.0	25.0	64.0%	4.9%
Butylbenzylphthalate	17.3	25.0	69.2%	16.3	25.0	65.2%	6.0%
3,3'-Dichlorobenzidine	54.3	64.0	84.8%	46.9	64.0	73.3%	14.6%
Benzo(a)anthracene	20.7	25.0	82.8%	18.9	25.0	75.6%	9.1%
bis(2-Ethylhexyl)phthalate	19.3	25.0	77.2%	18.3	25.0	73.2%	5.3%
Chrysene	17.4	25.0	69.6%	15.9	25.0	63.6%	9.0%
Di-n-Octyl phthalate	19.3	25.0	77.2%	17.6	25.0	70.4%	9.2%
Benzo(b)fluoranthene	16.9	25.0	67.6%	16.7	25.0	66.8%	1.2%
Benzo(k)fluoranthene	19.1	25.0	76.4%	16.2	25.0	64.8%	16.4%
Benzo(a)pyrene	16.7	25.0	66.8%	14.8	25.0	59.2%	12.1%
Indeno(1,2,3-cd)pyrene	16.2	25.0	64.8%	14.9	25.0	59.6%	8.4%
Dibenz(a,h)anthracene	15.6	25.0	62.4%	14.3	25.0	57.2%	8.7%
Benzo(g,h,i)perylene	17.4	25.0	69.6%	16.1	25.0	64.4%	7.8%
1-Methylnaphthalene	16.3	25.0	65.2%	14.8	25.0	59.2%	9.6%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	75.2%	64.4%
2-Fluorobiphenyl	68.4%	62.0%
d14-p-Terphenyl	71.2%	65.6%
d4-1,2-Dichlorobenzene	62.4%	51.6%
d5-Phenol	38.4%	32.8%
2-Fluorophenol	52.3%	44.5%
2,4,6-Tribromophenol	82.9%	73.3%
d4-2-Chlorophenol	71.5%	59.5%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-082208
LAB CONTROL

Lab Sample ID: LCS-082208
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 09/04/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/22/08
Date Analyzed: 08/30/08 23:05
Instrument/Analyst: NT6/LJR
GPC Cleanup: NO

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
Phenol	9.5	25.0	38.0%
Bis-(2-Chloroethyl) Ether	16.7	25.0	66.8%
2-Chlorophenol	16.2	25.0	64.8%
1,3-Dichlorobenzene	14.1	25.0	56.4%
1,4-Dichlorobenzene	14.2	25.0	56.8%
Benzyl Alcohol	24.8	50.0	49.6%
1,2-Dichlorobenzene	14.6	25.0	58.4%
2-Methylphenol	15.9	25.0	63.6%
2,2'-Oxybis(1-Chloropropane)	17.6	25.0	70.4%
4-Methylphenol	33.0	50.0	66.0%
N-Nitroso-Di-N-Propylamine	17.2	25.0	68.8%
Hexachloroethane	13.1	25.0	52.4%
Nitrobenzene	16.1	25.0	64.4%
Isophorone	19.5	25.0	78.0%
2-Nitrophenol	17.0	25.0	68.0%
2,4-Dimethylphenol	15.7	25.0	62.8%
Benzoic Acid	29.7	75.0	39.6%
bis(2-Chloroethoxy) Methane	17.6	25.0	70.4%
2,4-Dichlorophenol	17.9	25.0	71.6%
1,2,4-Trichlorobenzene	13.8	25.0	55.2%
Naphthalene	15.8	25.0	63.2%
4-Chloroaniline	5.2	60.0	8.7%
Hexachlorobutadiene	12.4	25.0	49.6%
4-Chloro-3-methylphenol	18.0	25.0	72.0%
2-Methylnaphthalene	16.2	25.0	64.8%
Hexachlorocyclopentadiene	42.5	75.0	56.7%
2,4,6-Trichlorophenol	16.9	25.0	67.6%
2,4,5-Trichlorophenol	18.2	25.0	72.8%
2-Chloronaphthalene	16.3	25.0	65.2%
2-Nitroaniline	17.3	25.0	69.2%
Dimethylphthalate	16.8	25.0	67.2%
Acenaphthylene	18.1	25.0	72.4%
3-Nitroaniline	51.8	64.0	80.9%
Acenaphthene	16.0	25.0	64.0%
2,4-Dinitrophenol	61.0	75.0	81.3%
4-Nitrophenol	7.0	25.0	28.0%
Dibenzofuran	17.5	25.0	70.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-082208
LAB CONTROL

Lab Sample ID: LCS-082208
LIMS ID: 08-19935
Matrix: Water
Date Analyzed: 08/30/08 23:05

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Analyte	Lab Control	Spike Added	Recovery
2,6-Dinitrotoluene	18.4	25.0	73.6%
2,4-Dinitrotoluene	18.0	25.0	72.0%
Diethylphthalate	15.4	25.0	61.6%
4-Chlorophenyl-phenylether	16.2	25.0	64.8%
Fluorene	17.9	25.0	71.6%
4-Nitroaniline	18.5	25.0	74.0%
4,6-Dinitro-2-Methylphenol	54.5	75.0	72.7%
N-Nitrosodiphenylamine	25.6	25.0	102%
4-Bromophenyl-phenylether	17.5	25.0	70.0%
Hexachlorobenzene	18.2	25.0	72.8%
Pentachlorophenol	15.5	25.0	62.0%
Phenanthrene	17.8	25.0	71.2%
Carbazole	19.7	25.0	78.8%
Anthracene	18.5	25.0	74.0%
Di-n-Butylphthalate	18.1	25.0	72.4%
Fluoranthene	18.6	25.0	74.4%
Pyrene	19.4	25.0	77.6%
Butylbenzylphthalate	18.0	25.0	72.0%
3,3'-Dichlorobenzidine	46.6	64.0	72.8%
Benzo(a)anthracene	17.8	25.0	71.2%
bis(2-Ethylhexyl)phthalate	18.7	25.0	74.8%
Chrysene	17.0	25.0	68.0%
Di-n-Octyl phthalate	18.4	25.0	73.6%
Benzo(b)fluoranthene	16.6	25.0	66.4%
Benzo(k)fluoranthene	19.1	25.0	76.4%
Benzo(a)pyrene	18.3	25.0	73.2%
Indeno(1,2,3-cd)pyrene	21.8	25.0	87.2%
Dibenz(a,h)anthracene	21.8	25.0	87.2%
Benzo(g,h,i)perylene	22.6	25.0	90.4%
1-Methylnaphthalene	16.5	25.0	66.0%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.8%
2-Fluorobiphenyl	70.0%
d14-p-Terphenyl	80.0%
d4-1,2-Dichlorobenzene	65.6%
d5-Phenol	42.9%
2-Fluorophenol	52.0%
2,4,6-Tribromophenol	78.9%
d4-2-Chlorophenol	67.5%

Results reported in µg/L

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-080808
METHOD BLANK

Lab Sample ID: MB-080808
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/18/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted: 08/08/08
Date Analyzed: 08/13/08 16:15
Instrument/Analyst: NT4/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-080808
METHOD BLANK

Lab Sample ID: MB-080808
LIMS ID: 08-19934
Matrix: Water
Date Analyzed: 08/13/08 16:15

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.4%	2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	74.0%	d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	31.5%	2-Fluorophenol	46.4%
2,4,6-Tribromophenol	66.9%	d4-2-Chlorophenol	64.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-082208
METHOD BLANK

Lab Sample ID: MB-082208
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 09/04/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted: 08/22/08
Date Analyzed: 08/30/08 22:31
Instrument/Analyst: NT6/LJR

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	5.0	< 5.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-082208
METHOD BLANK

Lab Sample ID: MB-082208
LIMS ID: 08-19935
Matrix: Water
Date Analyzed: 08/30/08 22:31

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
205-99-2	Benzo(b)fluoranthene	1.0	< 1.0 U
207-08-9	Benzo(k)fluoranthene	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	65.6%	2-Fluorobiphenyl	69.6%
d14-p-Terphenyl	82.0%	d4-1,2-Dichlorobenzene	66.0%
d5-Phenol	38.9%	2-Fluorophenol	50.1%
2,4,6-Tribromophenol	81.1%	d4-2-Chlorophenol	68.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-2
SAMPLE

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/11/08 18:17
Instrument/Analyst: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	42.5%
Tetrachlorometaxylene	73.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082

Sample ID: EBC-5
SAMPLE

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/11/08 18:35
Instrument/Analyst: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 400 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.2	< 1.2 U
53469-21-9	Aroclor 1242	1.2	< 1.2 U
12672-29-6	Aroclor 1248	1.2	< 1.2 U
11097-69-1	Aroclor 1254	1.2	< 1.2 U
11096-82-5	Aroclor 1260	1.2	< 1.2 U
11104-28-2	Aroclor 1221	1.2	< 1.2 U
11141-16-5	Aroclor 1232	1.2	< 1.2 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	76.2%
Tetrachlorometaxylene	75.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-6
SAMPLE

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/11/08 18:53
Instrument/Analyst: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	70.2%
Tetrachlorometaxylene	75.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-16
SAMPLE

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/08/08
Date Analyzed: 08/11/08 19:11
Instrument/Analyst: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	68.8%
Tetrachlorometaxylene	74.8%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-080808	81.5%	47-101	92.5%	61-104	0
LCS-080808	81.5%	47-101	97.2%	61-104	0
LCSD-080808	83.5%	47-101	101%	61-104	0
EBC-2	42.5%	42-120	73.8%	55-102	0
EBC-5	76.2%	42-120	75.5%	55-102	0
EBC-6	70.2%	42-120	75.5%	55-102	0
EBC-16	68.8%	42-120	74.8%	55-102	0

Prep Method: SW3510C
Log Number Range: 08-19934 to 08-19937

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-080808
LCS/LCSD

Lab Sample ID: LCS-080808
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 08/08/08

Date Analyzed LCS: 08/11/08 17:42
LCSD: 08/11/08 18:00
Instrument/Analyst LCS: ECD5/PKC
LCSD: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 5.0 mL
LCSD: 5.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: No
Acid Cleanup: No

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	5.58	5.00	112%	5.74	5.00	115%	2.8%
Aroclor 1260	5.21	5.00	104%	5.48	5.00	110%	5.1%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	81.5%	83.5%
Tetrachlorometaxylene	97.2%	101%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-080808
METHOD BLANK

Lab Sample ID: MB-080808
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/20/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted: 08/08/08
Date Analyzed: 08/11/08 17:25
Instrument/Analyst: ECD5/PKC
GPC Cleanup: No
Sulfur Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: No

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	81.5%
Tetrachlorometaxylene	92.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-2
SAMPLE

Lab Sample ID: NJ87A
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Analyzed: 08/11/08 13:52
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result	
71-43-2	**Benzene**	**1.0**	**4.0**	
108-88-3	Toluene	1.0	< 1.0 U	
100-41-4	**Ethylbenzene**	**1.0**	**1.4**	
	m,p-Xylene	**1.0**	**1.5**	
95-47-6	o-Xylene	1.0	< 1.0 U	
	Gasoline Range Hydrocarbons	**0.25**	**1.6**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	105%
Bromobenzene	99.2%

Gasoline Surrogate Recovery

Trifluorotoluene	103%
Bromobenzene	97.2%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC
8/12/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a008.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a008.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ87A
Client ID: EBC-2
Injection Date: 11-AUG-2008 13:52
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.408	-0.001	6801	86552	102.9	TFT(Surr)
14.968	-0.001	4619	37289	97.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	1248526	1.687
8015B (2MP-TMB)	61692	0.043
AKGas (nC6-nC10)	48895	0.043
NWGas (Tol-Nap)	1297523	1.645

~87% area from one peak

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.407	-0.001	25417	104.7	TFT(Surr)
14.966	0.000	60115	99.2	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.665	-0.001	6102	4.00	Benzene
10.296	-0.002	440	0.30	Toluene
12.869	0.000	1836	1.36	Ethylbenzene
13.005	-0.004	2256	1.50	M/P-Xylene
13.797	0.000	1206	0.81	O-Xylene
ND	---	---	---	MTBE

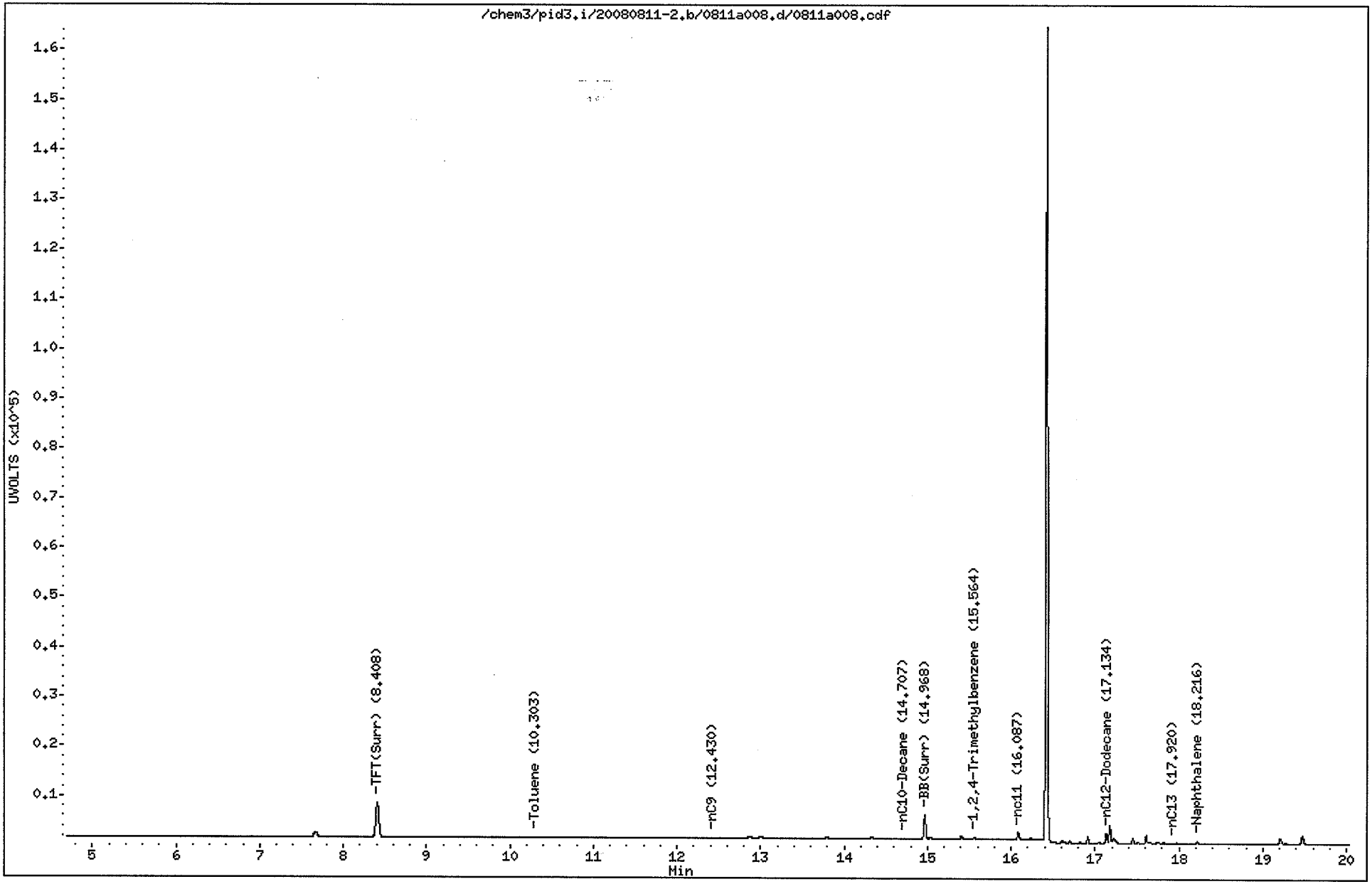
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a008.d
Date : 11-AUG-2008 13:52
Client ID: EBC-2
Sample Info: NJ87A

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

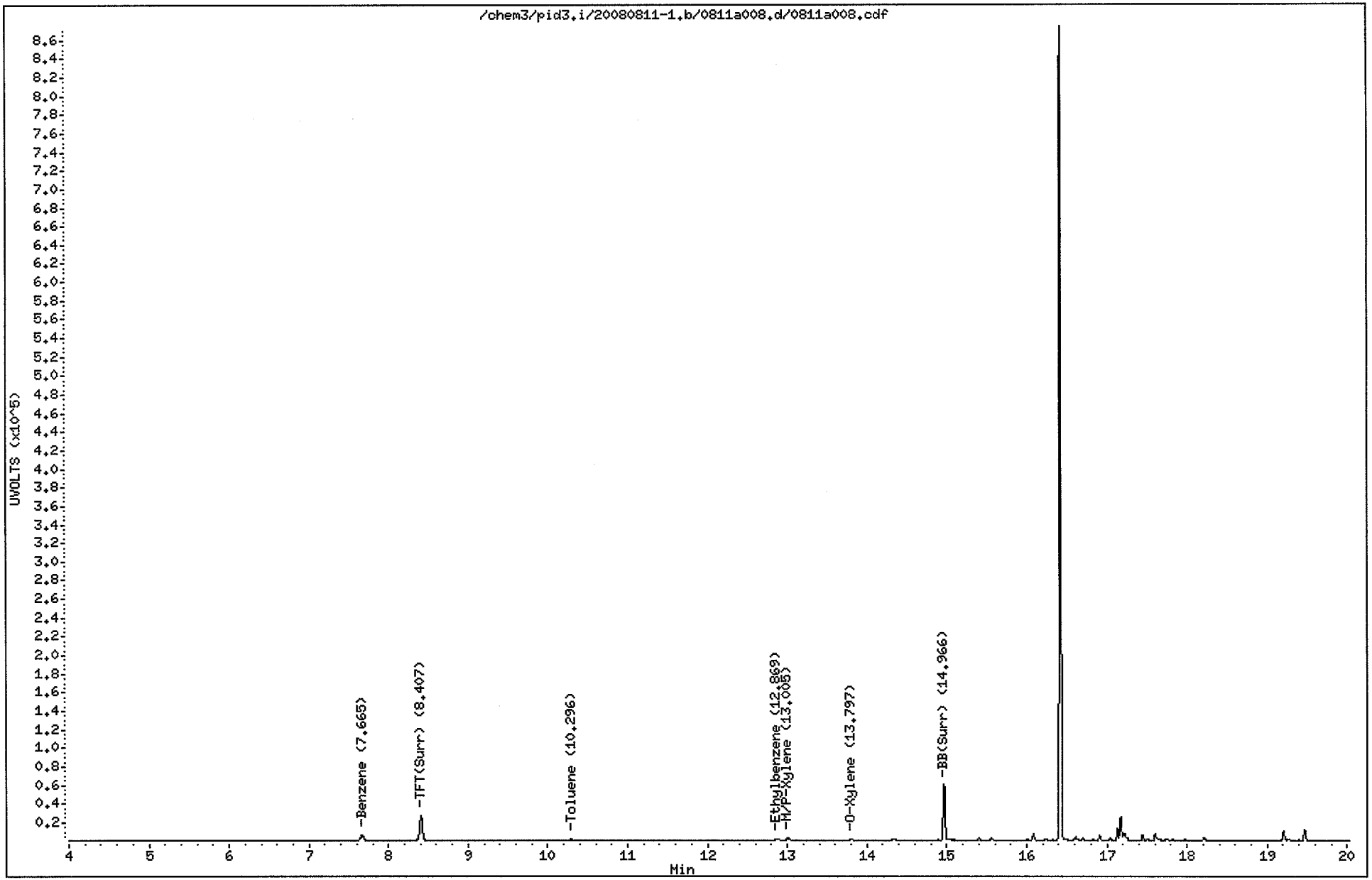


Data File: /chem3/pid3.i/20080811-1.b/0811a008.d
Date : 11-AUG-2008 13:52
Client ID: EBC-2
Sample Info: NJ87A

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod **Sample ID: EBC-5**
TPHG by Method NWTPHG **SAMPLE**
Page 1 of 1

Lab Sample ID: NJ87B
LIMS ID: 08-19935
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Analyzed: 08/11/08 14:17
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	108%
Bromobenzene	102%

Gasoline Surrogate Recovery

Trifluorotoluene	107%
Bromobenzene	100%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PG 8/12/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a009.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a009.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ87B
Client ID: EBC-5
Injection Date: 11-AUG-2008 14:17
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.409	-0.001	7047	89587	106.6	TFT(Surr)
14.968	0.000	4758	38982	100.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	6779	0.009
8015B (2MP-TMB)	2426	0.002
AKGas (nC6-nC10)	2426	0.002
NWGas (Tol-Nap)	6779	0.009

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	-0.001	26237	108.0	TFT(Surr)
14.967	0.000	61529	101.5	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

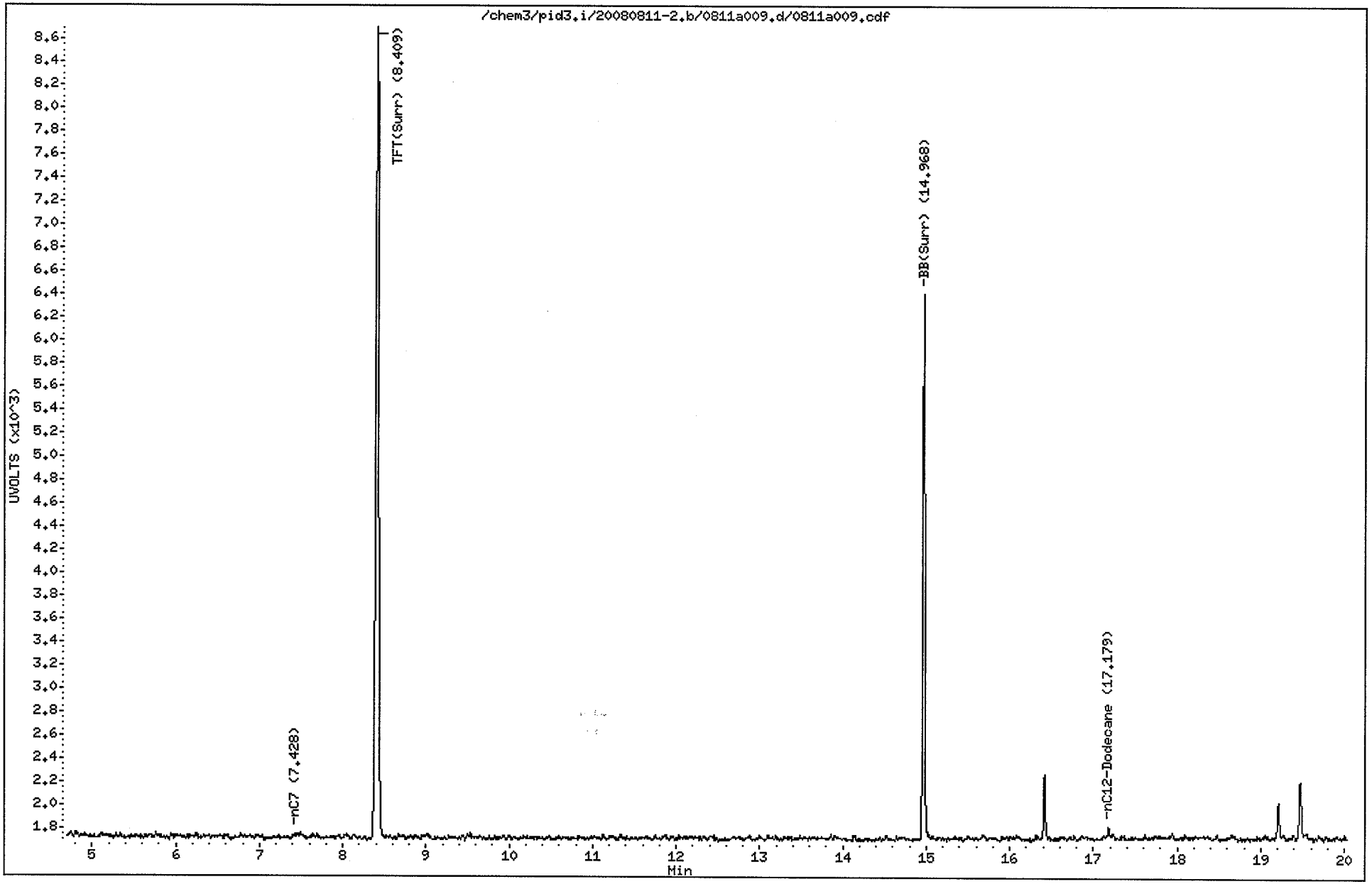
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a009.d
Date : 11-AUG-2008 14:17
Client ID: EBC-5
Sample Info: NJ87B

Instrument: pid3.i

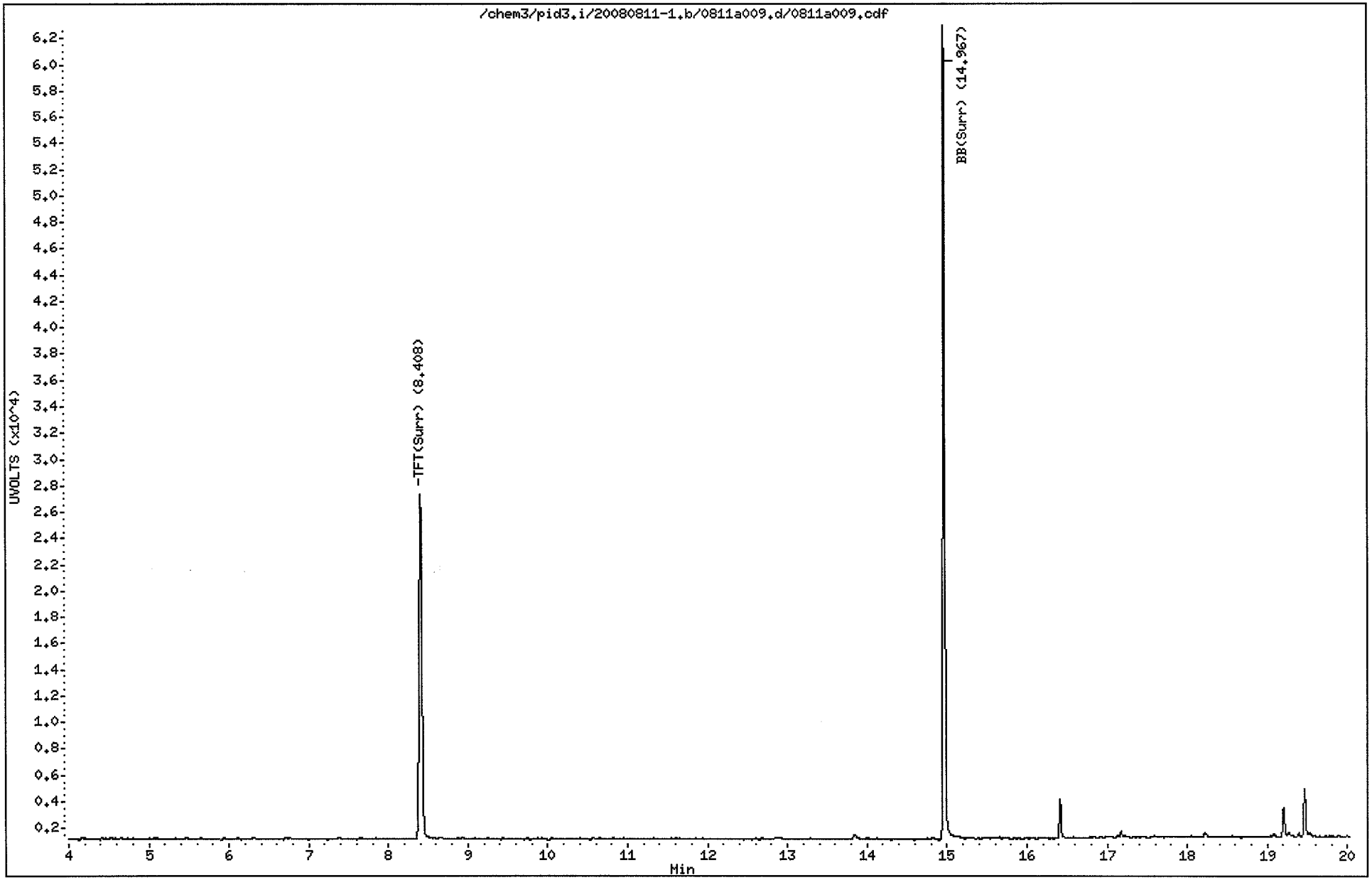
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080811-1.b/0811a009.d
Date : 11-AUG-2008 14:17
Client ID: EBC-5
Sample Info: NJ87B

Instrument: pid3.i
Operator: PKC
Column phase: RTX 502-2 PID
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-6
SAMPLE

Lab Sample ID: NJ87C
LIMS ID: 08-19936
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Analyzed: 08/11/08 14:41
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
	Gasoline Range Hydrocarbons	0.25	< 0.25 U ---

BETX Surrogate Recovery

Trifluorotoluene	103%
Bromobenzene	97.6%

Gasoline Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	95.6%

· BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC
8/12/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a010.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a010.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ87C
Client ID: EBC-6
Injection Date: 11-AUG-2008 14:41
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.409	-0.001	6722	84977	101.7	TFT(Surr)
14.968	0.000	4543	37773	95.6	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	14305	0.019
8015B (2MP-TMB)	13826	0.010
AKGas (nC6-nC10)	13825	0.012
NWGas (Tol-Nap)	20141	0.026

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	-0.001	25044	103.1	TFT(Surr)
14.966	-0.001	59136	97.6	BB(Surr)

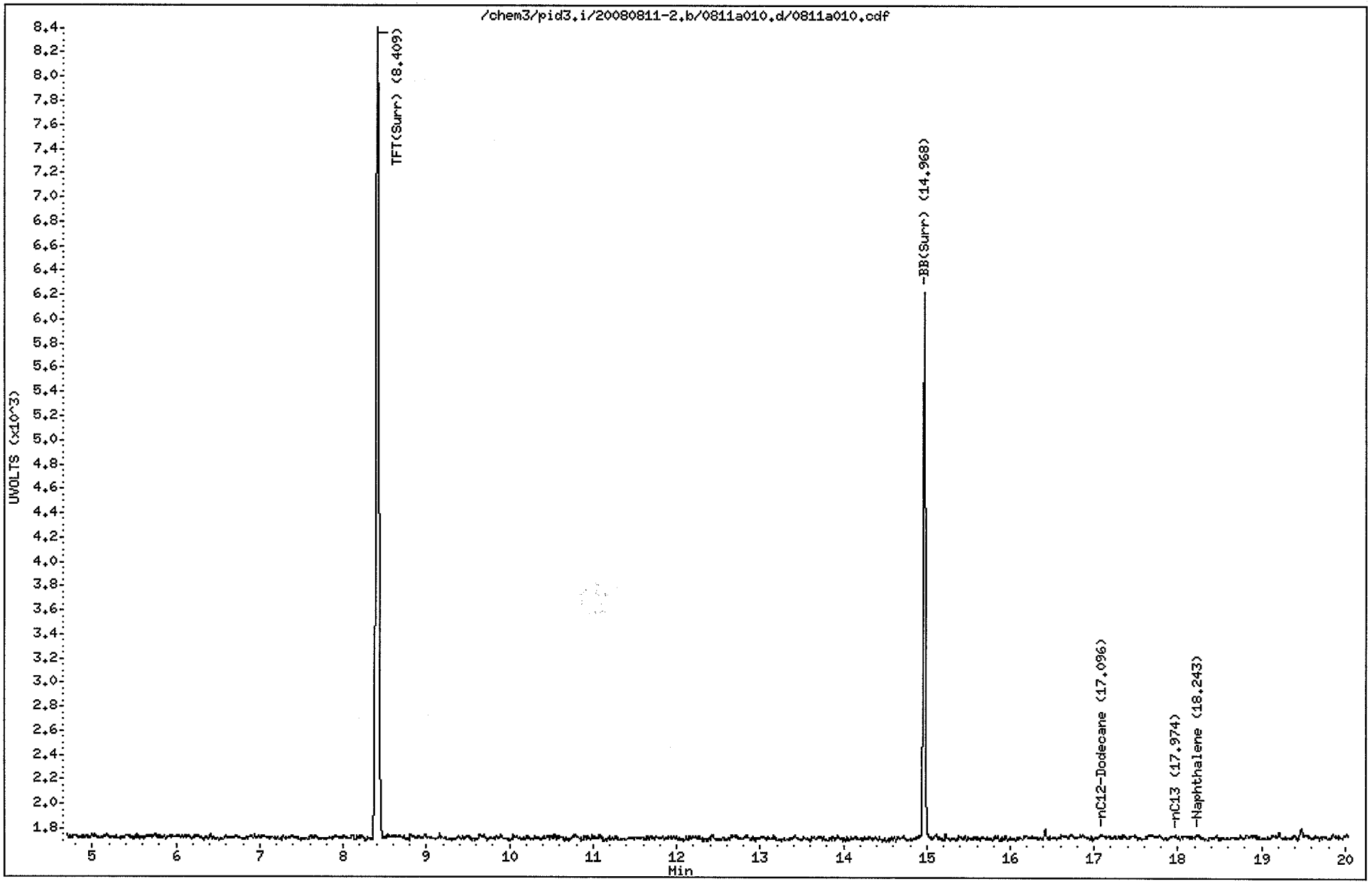
AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a010.d
Date : 11-AUG-2008 14:41
Client ID: EBC-6
Sample Info: NJ87C

Instrument: pid3.i
Operator: PKC
Column phase: RTX 502-2 FID
Column diameter: 0.18

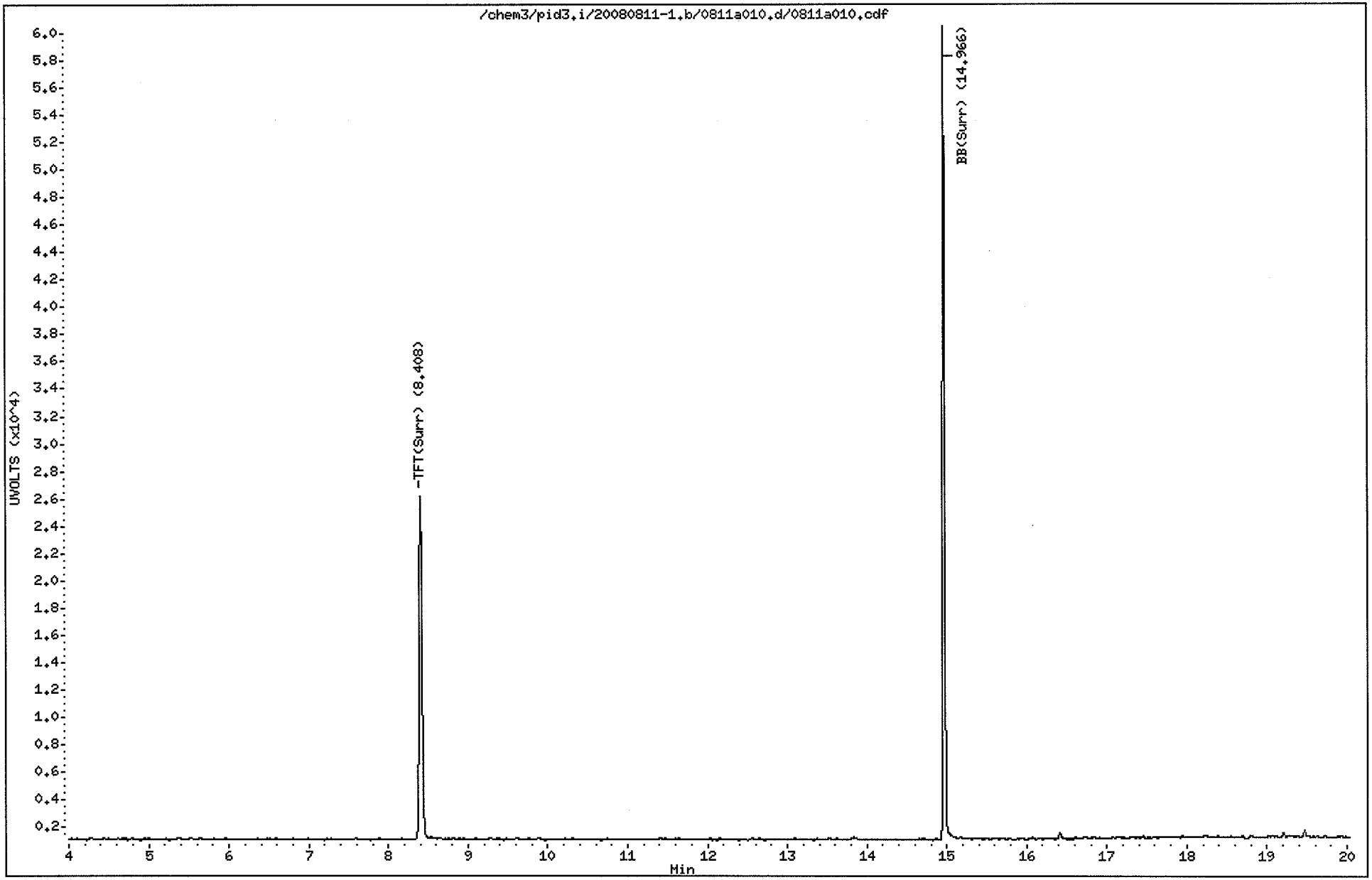


Data File: /chem3/pid3.i/20080811-1.b/0811a010.d
Date : 11-AUG-2008 14:41
Client ID: EBC-6
Sample Info: NJ87C

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-16
SAMPLE

Lab Sample ID: NJ87D
LIMS ID: 08-19937
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Analyzed: 08/11/08 15:06
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
Gasoline Range Hydrocarbons	0.25	< 0.25 U	---

BETX Surrogate Recovery

Trifluorotoluene	105%
Bromobenzene	95.2%

Gasoline Surrogate Recovery

Trifluorotoluene	104%
Bromobenzene	94.7%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC 8/14/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a011.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a011.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ87D
Client ID: EBC-16
Injection Date: 11-AUG-2008 15:06
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.406	-0.004	6862	85496	103.8	TFT(Surr)
14.967	-0.001	4500	36500	94.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	2238	0.003
8015B (2MP-TMB)	2238	0.002
AKGas (nC6-nC10)	2237	0.002
NWGas (Tol-Nap)	4498	0.006

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.404	-0.004	25470	104.9	TFT(Surr)
14.966	-0.001	57696	95.2	BB(Surr)

AROMATICS (PID)

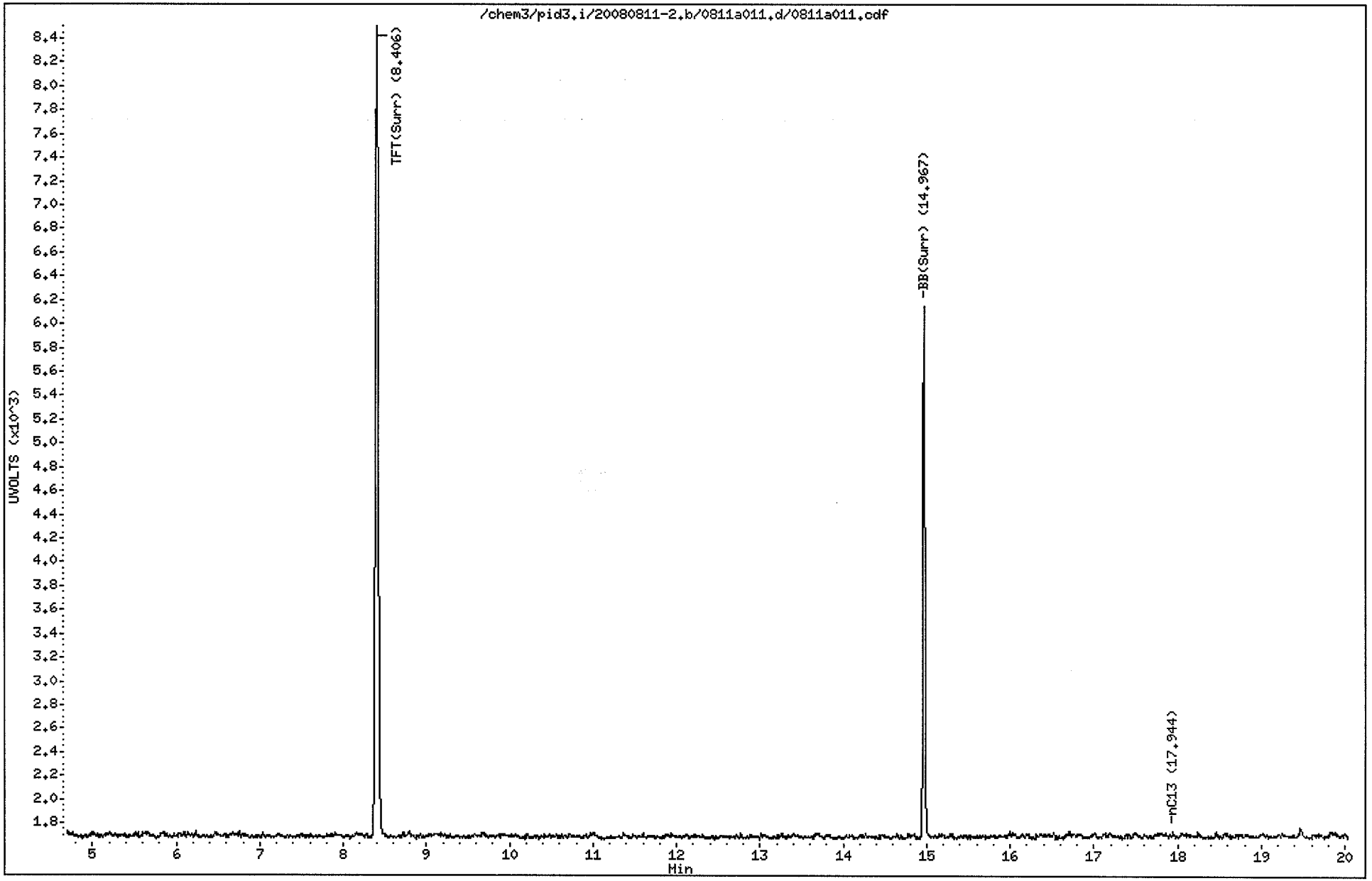
RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a011.d
Date : 11-AUG-2008 15:06
Client ID: EBC-16
Sample Info: NJ87D

Instrument: pid3.i

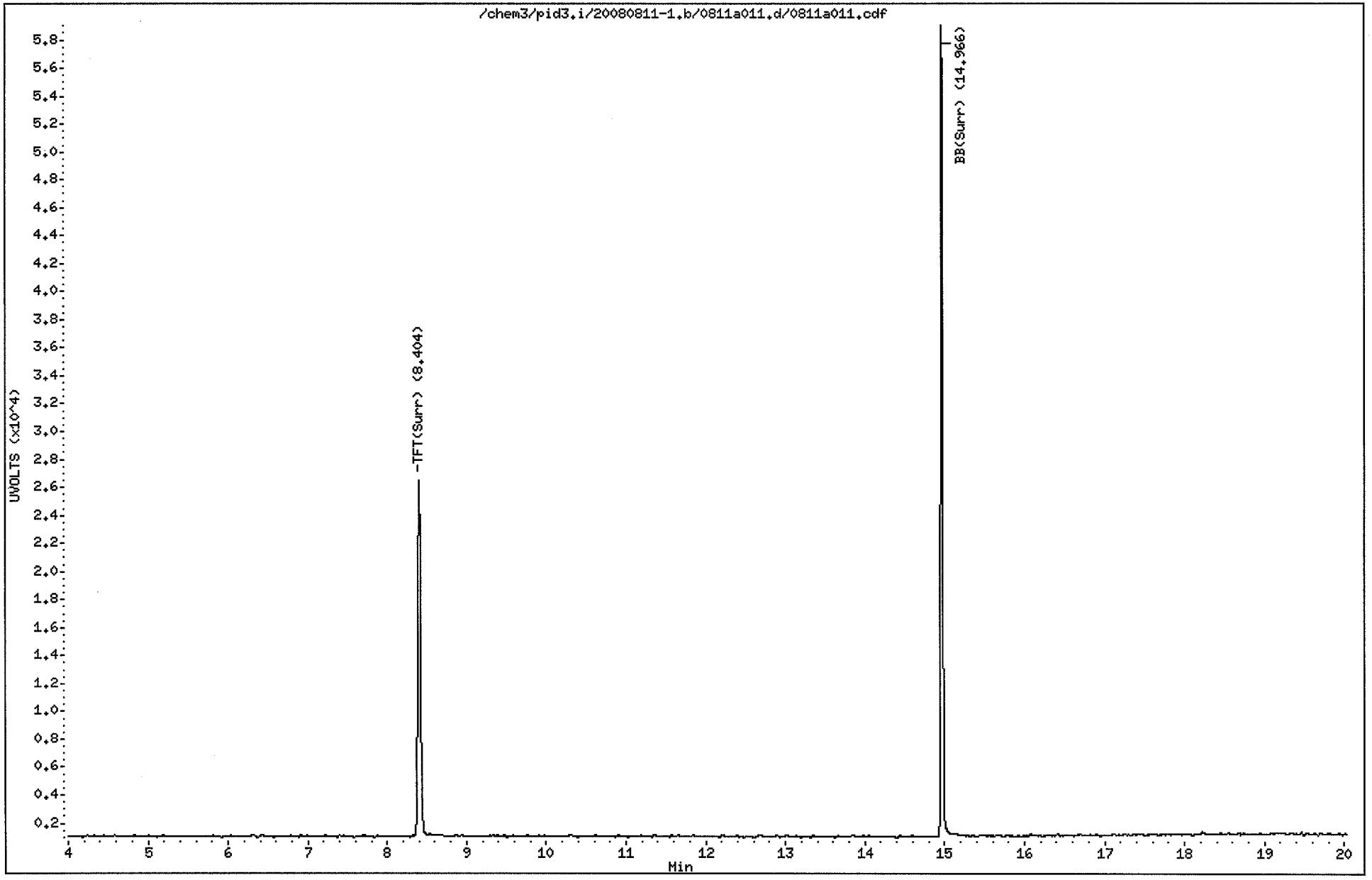
Operator: PKC
Column phase: RTX 502-2 FID
Column diameter: 0.18



Data File: /chem3/pid3.i/20080811-1.b/0811a011.d
Date : 11-AUG-2008 15:06
Client ID: EBC-16
Sample Info: NJ87D

Instrument: pid3.i
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

BETX WATER SURROGATE RECOVERY SUMMARY

ARI Job: NJ87
Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01

Client ID	TFT	BBZ	TOT OUT
MB-081108	100%	93.5%	0
LCS-081108	96.8%	89.9%	0
LCSD-081108	96.9%	90.4%	0
EBC-2	105%	99.2%	0
EBC-5	108%	102%	0
EBC-6	103%	97.6%	0
EBC-16	105%	95.2%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 08-19934 to 08-19937

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: NJ87
Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01

Client ID	TFT	BBZ	TOT OUT
MB-081108	99.0%	93.5%	0
LCS-081108	96.1%	88.7%	0
LCSD-081108	95.3%	89.4%	0
EBC-2	103%	97.2%	0
EBC-5	107%	100%	0
EBC-6	102%	95.6%	0
EBC-16	104%	94.7%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 08-19934 to 08-19937

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-081108
LAB CONTROL SAMPLE

Lab Sample ID: LCS-081108
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/11/08 11:27
LCSD: 08/11/08 11:52
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.95	1.00	95.0%	0.89	1.00	89.0%	6.5%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	96.1%	95.3%
Bromobenzene	88.7%	89.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: LCS-081108
LAB CONTROL SAMPLE

Lab Sample ID: LCS-081108
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/11/08 11:27
LCSD: 08/11/08 11:52
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4.63	5.30	87.4%	4.59	5.30	86.6%	0.9%
Toluene	35.8	41.2	86.9%	35.4	41.2	85.9%	1.1%
Ethylbenzene	8.81	10.0	88.1%	8.66	10.0	86.6%	1.7%
m,p-Xylene	36.6	42.3	86.5%	36.0	42.3	85.1%	1.7%
o-Xylene	12.9	14.9	86.6%	12.7	14.9	85.2%	1.6%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	96.8%	96.9%
Bromobenzene	89.9%	90.4%

PC
8/12/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a004.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a004.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCS081108S1
Client ID:
Injection Date: 11-AUG-2008 11:27
Matrix: WATER
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.410	0.000	6350	81208	96.1	TFT(Surr)
14.967	-0.001	4213	35284	88.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	701128	0.947
8015B (2MP-TMB)	1405433	0.978
AKGas (nC6-nC10)	1116805	0.977
NWGas (Tol-Nap)	748036	0.948

* Surrogate areas are subtracted from Total Area

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PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	0.000	23514	96.8	TFT(Surr)
14.966	-0.001	54510	89.9	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.666	0.000	7060	4.63	Benzene
10.297	-0.001	52698	35.82	Toluene
12.868	-0.001	11880	8.81	Ethylbenzene
13.009	0.000	54862	36.60	M/P-Xylene
13.796	-0.001	19096	12.89	O-Xylene
5.219	-0.012	2829	5.18	MTBE

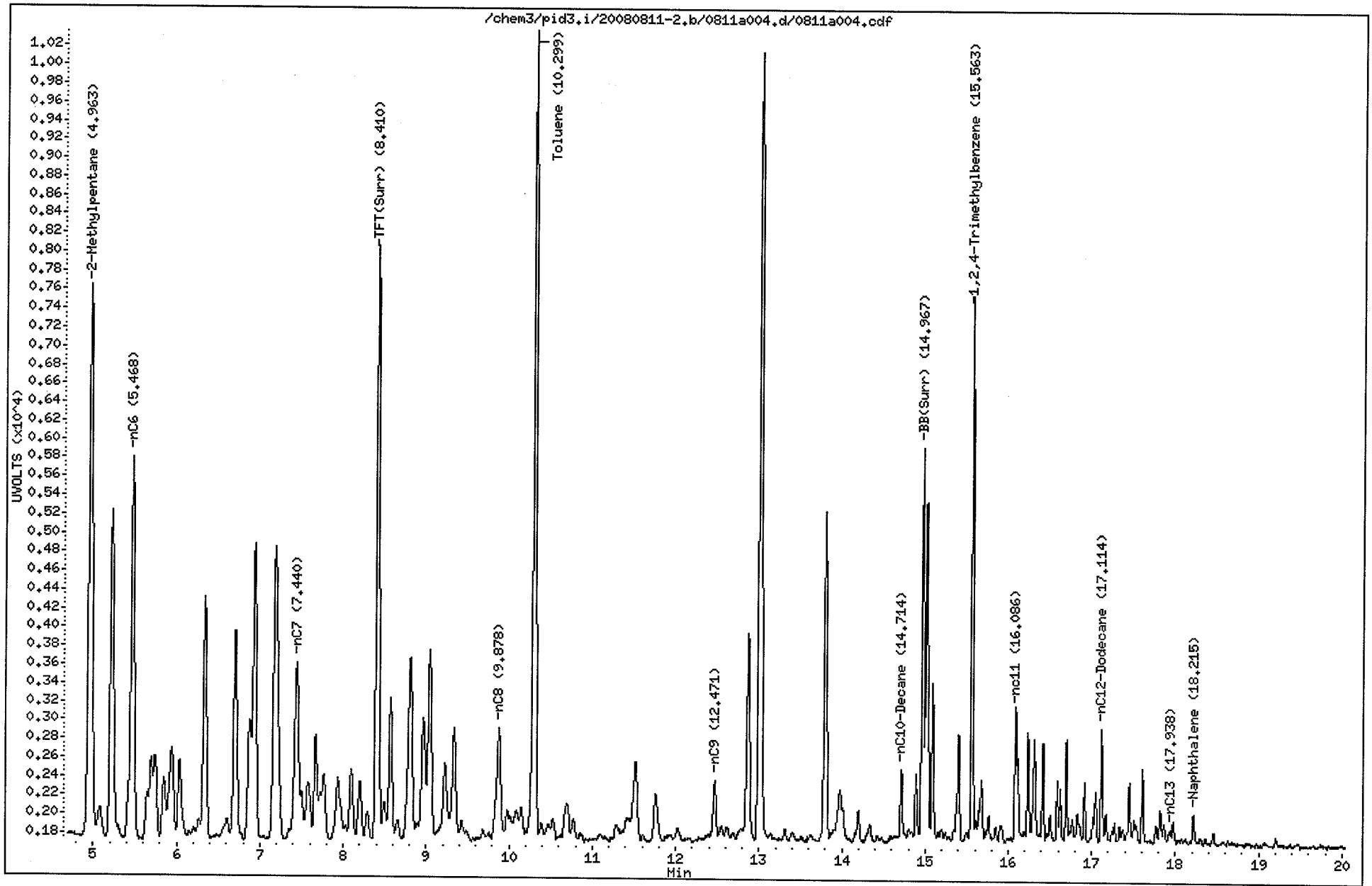
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a004.d
Date : 11-AUG-2008 11:27
Client ID:
Sample Info: LCS08110881

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

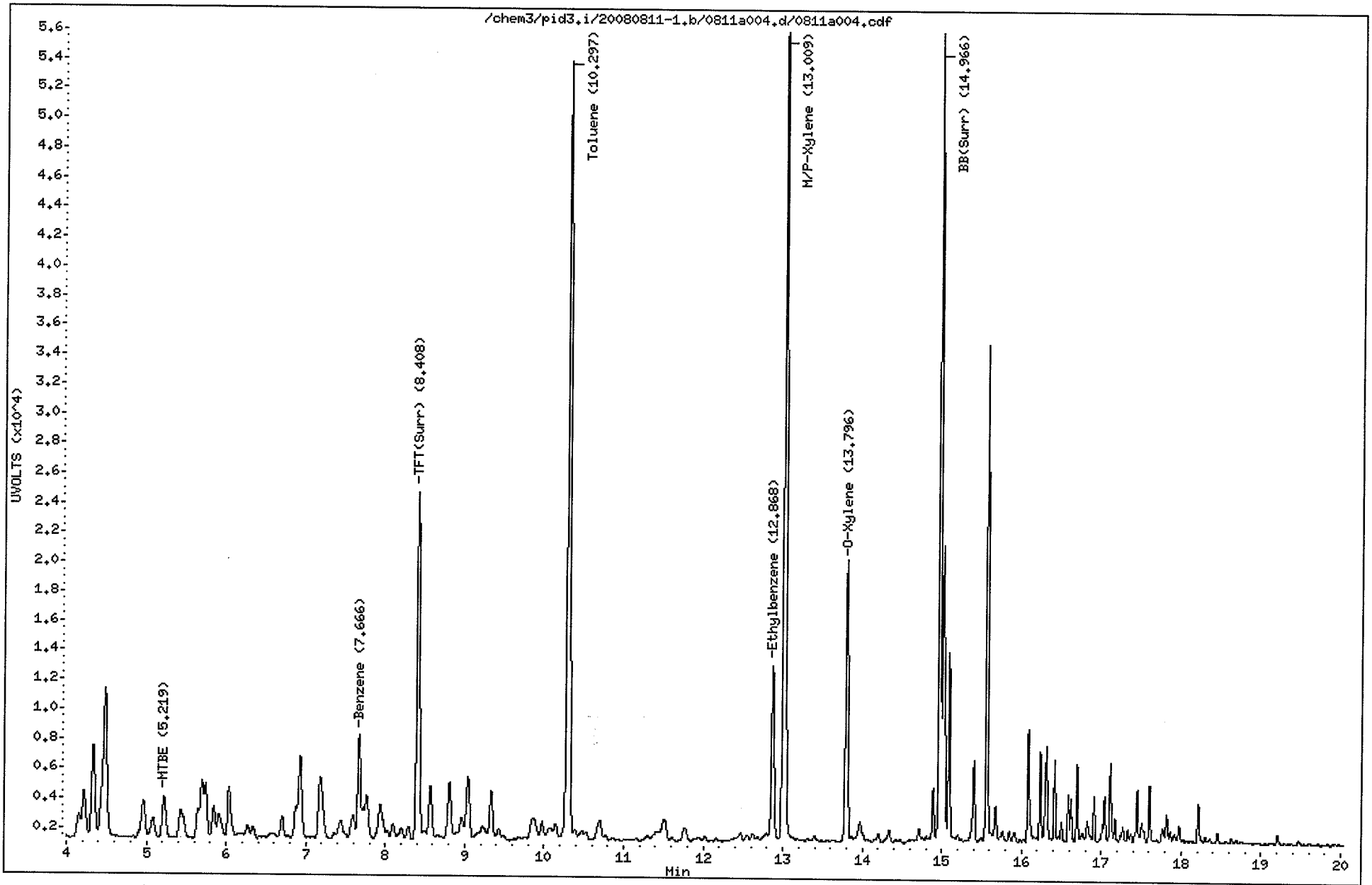


Data File: /chem3/pid3.i/20080811-1.b/0811a004.d
Date : 11-AUG-2008 11:27
Client ID:
Sample Info: LCS08110881

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



RC 8/12/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a005.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a005.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCSD081108S1
Client ID:
Injection Date: 11-AUG-2008 11:52
Matrix: WATER
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.408	-0.001	6302	80708	95.3	TFT(Surr)
14.967	-0.001	4250	35176	89.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	657778	0.889
8015B (2MP-TMB)	1329354	0.925
AKGas (nC6-nC10)	1054718	0.923
NWGas (Tol-Nap)	700790	0.889

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.407	-0.001	23527	96.9	TFT(Surr)
14.966	-0.001	54798	90.4	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.665	-0.001	6997	4.59	Benzene
10.296	-0.002	52008	35.35	Toluene
12.867	-0.002	11682	8.66	Ethylbenzene
13.008	0.000	54005	36.02	M/P-Xylene
13.795	-0.002	18799	12.68	O-Xylene
5.218	-0.013	2727	5.00	MTBE

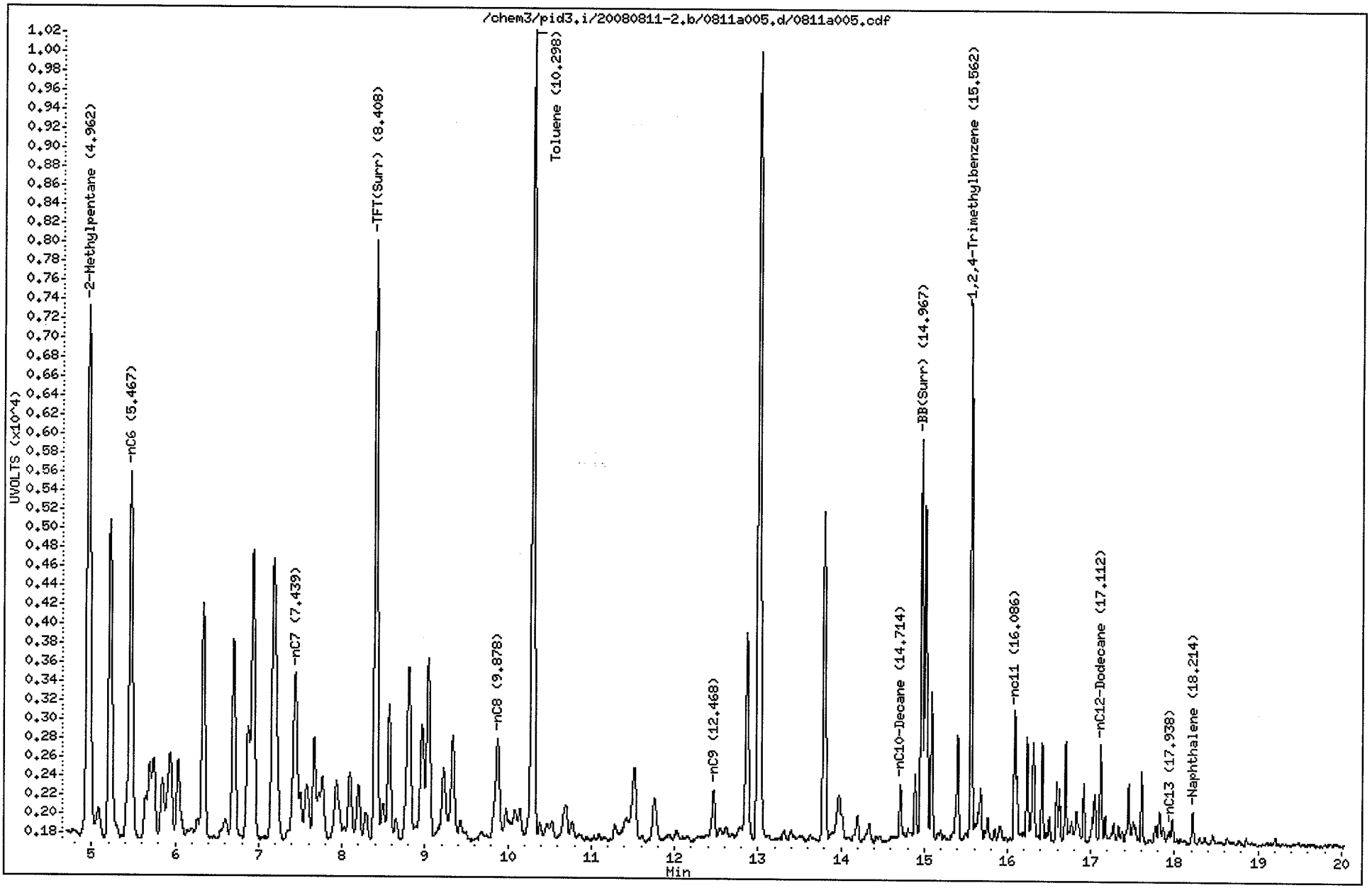
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a005.d
Date : 11-AUG-2008 11:52
Client ID:
Sample Info: LCSD08110881

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

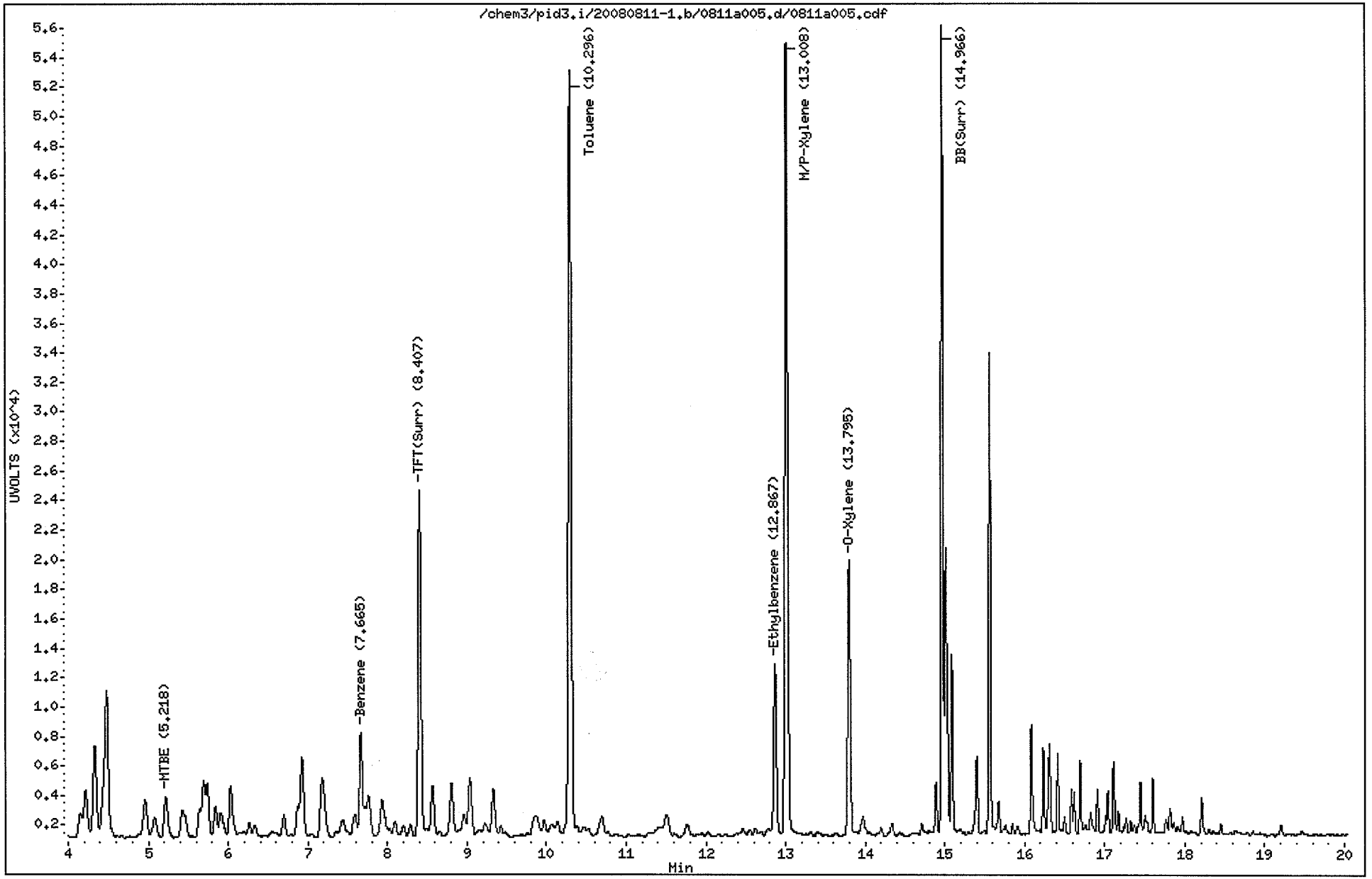


Data File: /chem3/pid3.i/20080811-1.b/0811a005.d
Date : 11-AUG-2008 11:52
Client ID:
Sample Info: LCSD08110881

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MB-081108
METHOD BLANK

Lab Sample ID: MB-081108
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/12/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed: 08/11/08 12:16
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1.0	< 1.0 U
108-88-3	Toluene	1.0	< 1.0 U
100-41-4	Ethylbenzene	1.0	< 1.0 U
	m,p-Xylene	1.0	< 1.0 U
95-47-6	o-Xylene	1.0	< 1.0 U

			GAS ID
	Gasoline Range Hydrocarbons	0.25	< 0.25 U ---

BETX Surrogate Recovery

Trifluorotoluene	100%
Bromobenzene	93.5%

Gasoline Surrogate Recovery

Trifluorotoluene	99.0%
Bromobenzene	93.5%

BETX values reported in µg/L (ppb)
Gasoline values reported in mg/L (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

PC 8/11/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080811-2.b/0811a006.d
Data file 2: /chem3/pid3.i/20080811-1.b/0811a006.d
Method: /chem3/pid3.i/20080811-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: MB081108S1
Client ID:
Injection Date: 11-AUG-2008 12:16
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.409	-0.001	6546	83788	99.0	TFT(Surr)
14.967	-0.001	4442	39512	93.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	27149	0.037
8015B (2MP-TMB)	12519	0.009
AKGas (nC6-nC10)	8658	0.008
NWGas (Tol-Nap)	34946	0.044

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.407	-0.001	24369	100.4	TFT(Surr)
14.966	-0.001	56671	93.5	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

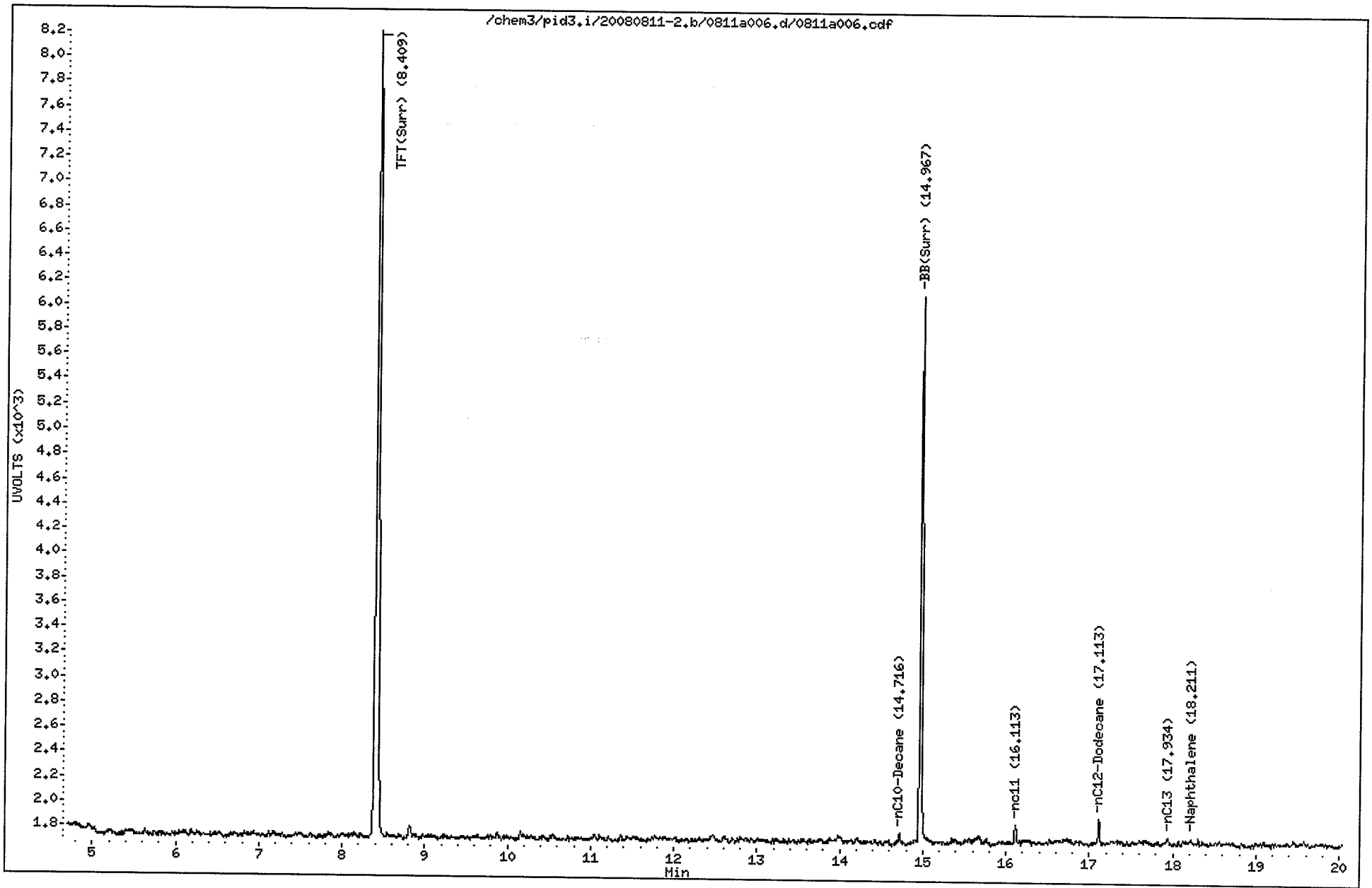
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080811-2.b/0811a006.d
Date : 11-AUG-2008 12:16
Client ID:
Sample Info: MB08110881

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

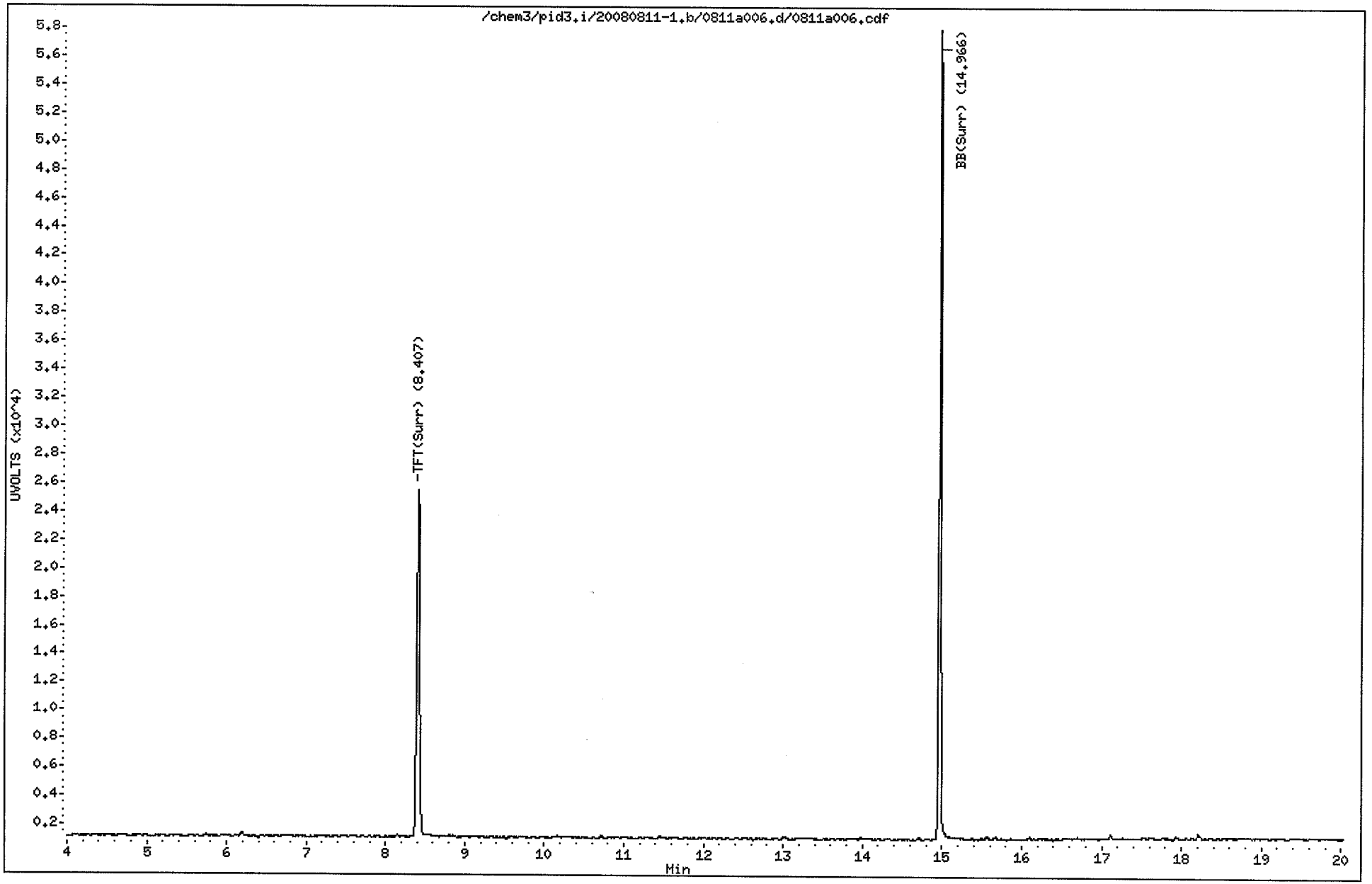


Data File: /chem3/pid3.i/20080811-1.b/0811a006.d
Date : 11-AUG-2008 12:16
Client ID:
Sample Info: MB08110881

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1
Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Data Release Authorized:
Reported: 08/19/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
MB-080808	Method Blank	08/08/08	08/13/08	1.00	Diesel	0.25	< 0.25 U
08-19934	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		95.8%
NJ87A	EBC-2	08/08/08	08/13/08	1.00	**Diesel**	**0.25**	**0.38**
08-19934	HC ID: **DRO**		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		91.1%
NJ87B	EBC-5	08/08/08	08/13/08	1.00	Diesel	0.25	< 0.25 U
08-19935	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		53.1%
NJ87C	EBC-6	08/08/08	08/13/08	1.00	Diesel	0.25	< 0.25 U
08-19936	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		96.2%
NJ87D	EBC-16	08/08/08	08/13/08	1.00	Diesel	0.25	< 0.25 U
08-19937	HC ID: ---		FID3A	1.0	Motor Oil	0.50	< 0.50 U
					o-Terphenyl		91.8%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a011.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87MBW1
Client ID:
Injection: 13-AUG-2008 15:03
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.742	0.004	15333	18819	GAS (Tol-C12)	206148	12
C8	1.864	0.001	2937	2458	DIESEL (C12-C24)	107411	9
C10	2.463	0.011	3056	2835	M.OIL (C24-C38)	227456	23
C12	2.938	0.001	1636	747	AK-102 (C10-C25)	174628	12
C14	3.353	0.003	1254	631	AK-103 (C25-C36)	170906	24
C16	3.715	0.004	1145	885	OR.DIES (C10-C28)	207329	14
C18	4.083	0.001	469	148	OR.MOIL (C28-C40)	262705	29
C20	4.506	-0.001	583	144	JET-A (C10-C18)	138939	9
C22	4.876	0.007	790	278	MIN.OIL (C24-C38)	227456	18
C24	5.172	-0.003	705	400	MSPIRIT (Tol-C12)	206148	13
C25	5.311	0.000	755	194			
C26	5.433	-0.003	859	152			
C28	5.663	0.000	1847	2034			
C32	6.089	-0.006	4593	8091			
C34	6.350	0.000	2660	793			
Filter Peak	6.991	-0.001	2146	1064	JP-4 (Tol-C14)	241508	21
C36	6.655	-0.008	5933	8972	CREOSOT (C8-C22)	261972	42
C38	7.070	0.003	2110	336			
C40	7.608	0.002	2002	755	BUNKERC (C10-C38)	400498	50
AZDIESEL (C10-C22)				148831	9		
AZMOIL (C22-C32)				94423	15		

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	678375	43.1	95.7
Triacontane	668931	54.5	121.2

ms 8/19/08

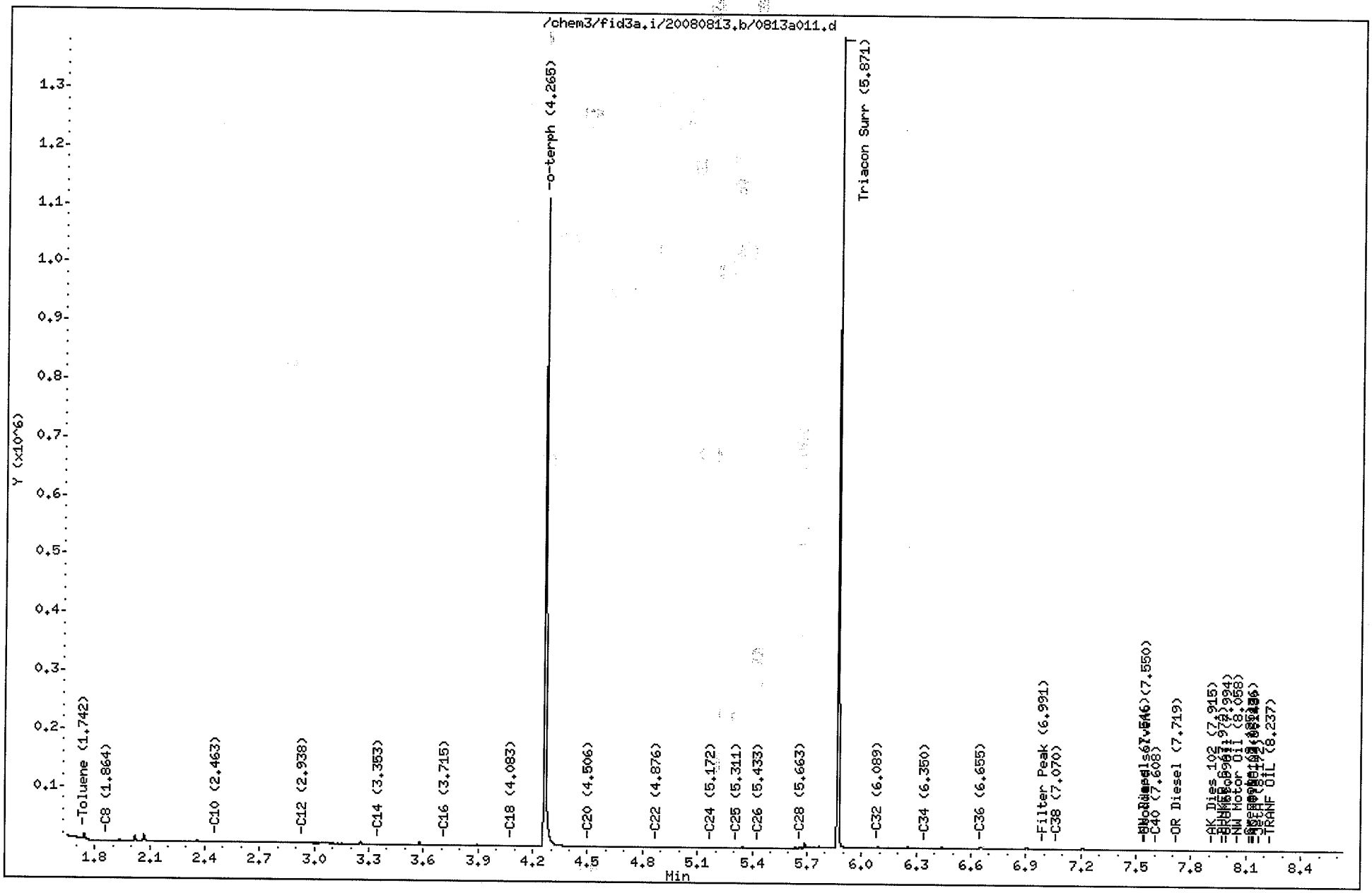
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a011.d
Date : 13-AUG-2008 15:03
Client ID:
Sample Info: NJ87MBW1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a014.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87A
Client ID:
Injection: 13-AUG-2008 15:49
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.744	0.006	11526	15304	GAS (Tol-C12)	3267887	183
C8	1.867	0.003	2959	3455	DIESEL (C12-C24)	2282336	192
C10	2.462	0.010	4031	5511	M.OIL (C24-C38)	281324	29
C12	2.930	-0.007	12923	19424	AK-102 (C10-C25)	5364720	374
C14	3.340	-0.010	36027	28253	AK-103 (C25-C36)	219854	31
C16	3.711	0.000	37572	22256	OR.DIES (C10-C28)	5424121	367
C18	4.066	-0.016	204326	170849	OR.MOIL (C28-C40)	277055	30
C20	4.507	0.000	2896	2251	JET-A (C10-C18)	5208548	351
C22	4.873	0.004	1911	376	MIN.OIL (C24-C38)	281324	22
C24	5.170	-0.005	1866	1017	MSPIRIT (Tol-C12)	3267887	206
C25	5.305	-0.006	1883	261			
C26	5.437	0.001	2014	358			
C28	5.667	0.003	2958	3916			
C32	6.097	0.002	4501	8417			
C34	6.352	0.002	3536	1047			
Filter Peak	6.996	0.004	2483	643	JP-4 (Tol-C14)	3886806	342
C36	6.665	0.003	4578	9206	CREOSOT (C8-C22)	5477285	879
C38	7.063	-0.004	2575	1541			
C40	7.622	0.016	1798	571	BUNKERC (C10-C38)	5642312	710
AZDIESEL (C10-C22)				5286580	329		
AZMOIL (C22-C32)				155936	24		

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	645593	41.0	91.1
Triacontane	622046	50.7	112.7

ms 8/19/08

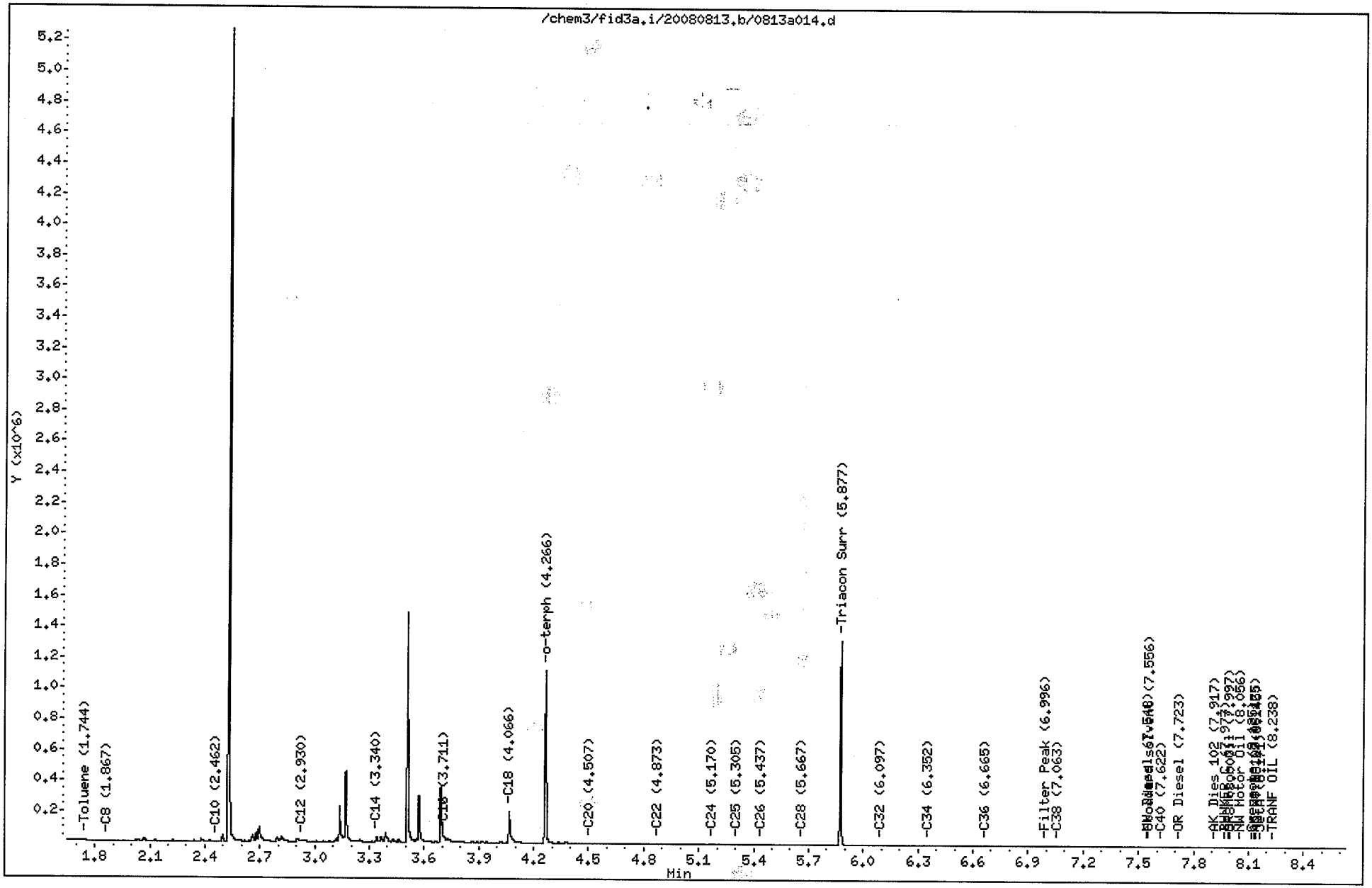
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a014.d
Date : 13-AUG-2008 15:49
Client ID:
Sample Info: NJ87A

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a015.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87B
Client ID:
Injection: 13-AUG-2008 16:05
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.744	0.005	13241	17657	GAS (Tol-C12)	202439	11
C8	1.865	0.001	2914	3471	DIESEL (C12-C24)	181381	15
C10	2.441	-0.012	3360	4026	M.OIL (C24-C38)	293590	30
C12	2.938	0.000	1698	637	AK-102 (C10-C25)	250657	17
C14	3.361	0.011	1423	1137	AK-103 (C25-C36)	236330	34
C16	3.713	0.001	1424	840	OR.DIES (C10-C28)	313564	21
C18	4.088	0.006	1885	1716	OR.MOIL (C28-C40)	288939	32
C20	4.515	0.007	1704	1827	JET-A (C10-C18)	164773	11
C22	4.865	-0.004	1370	271	MIN.OIL (C24-C38)	293590	23
C24	5.174	-0.002	1454	1157	MSPIRIT (Tol-C12)	202439	13
C25	5.318	0.007	5281	4414			
C26	5.442	0.007	3677	4576			
C28	5.670	0.006	4530	5290			
C32	6.102	0.006	5105	7849			
C34	6.350	0.000	2849	962			
Filter Peak	6.994	0.001	2166	430	JP-4 (Tol-C14)	240284	21
C36	6.672	0.009	4980	9791	CREOSOT (C8-C22)	318613	51
C38	7.065	-0.002	2117	1177			
C40	7.595	-0.011	2677	4736	BUNKERC (C10-C38)	540704	68

AZDIESEL (C10-C22)	206986	13
AZMOIL (C22-C32)	173085	27

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	375776	23.9	53.0
Triacontane	362896	29.6	65.7

ms 8/19/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a015.d

Date : 13-AUG-2008 16:05

Client ID:

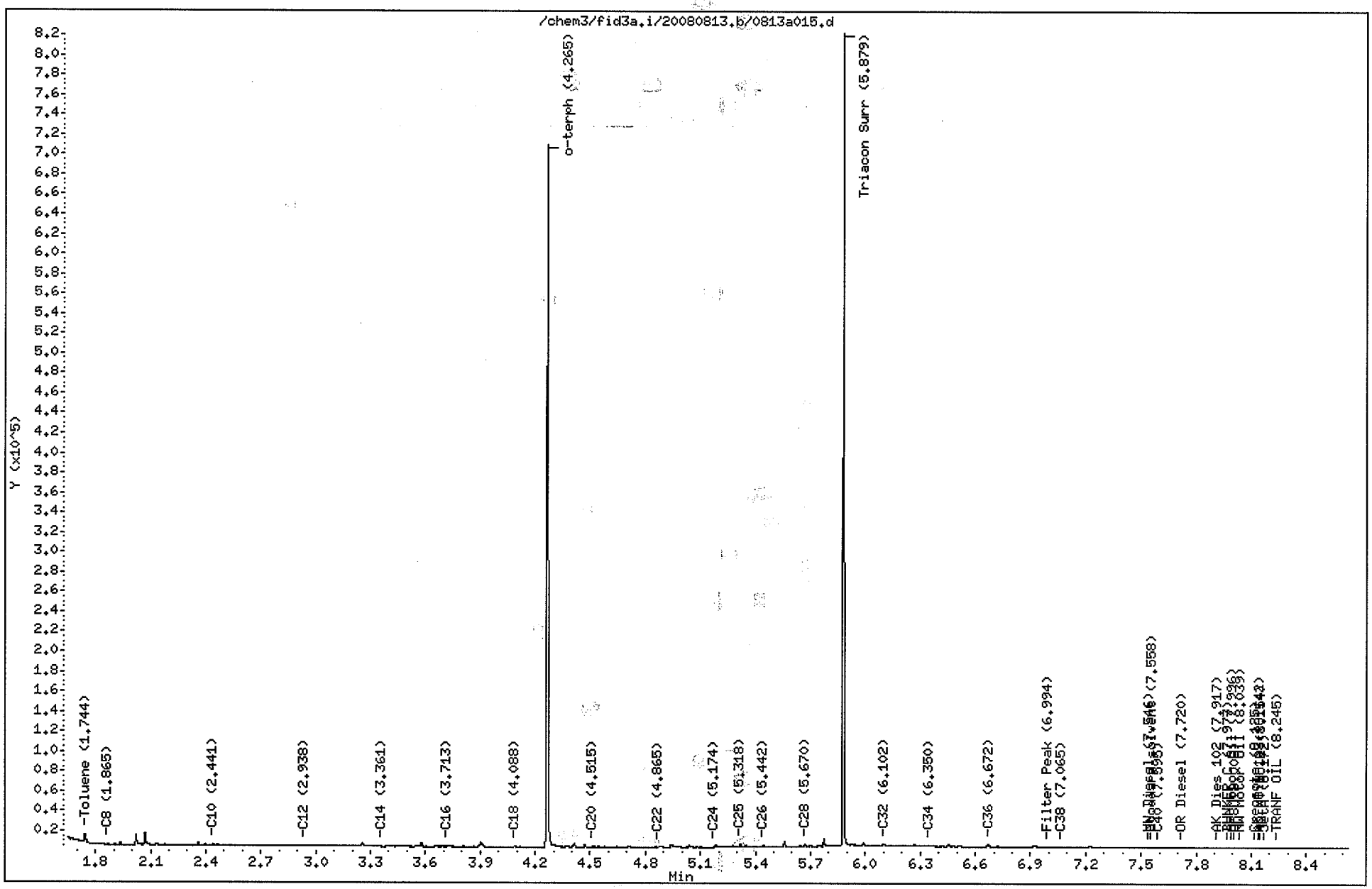
Sample Info: NJ87B

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a016.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87C
Client ID:
Injection: 13-AUG-2008 16:20
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.742	0.004	10322	15443	GAS (Tol-C12)	192324	11
C8	1.863	-0.001	2848	1749	DIESEL (C12-C24)	103994	9
C10	2.463	0.011	2944	2717	M.OIL (C24-C38)	223625	23
C12	2.939	0.002	1485	702	AK-102 (C10-C25)	166341	12
C14	3.346	-0.004	1103	560	AK-103 (C25-C36)	173172	25
C16	3.706	-0.005	904	589	OR.DIES (C10-C28)	203219	14
C18	4.081	-0.001	473	73	OR.MOIL (C28-C40)	244874	27
C20	4.509	0.002	576	166	JET-A (C10-C18)	126777	9
C22	4.869	0.000	630	318	MIN.OIL (C24-C38)	223625	17
C24	5.174	-0.001	754	396	MSPIRIT (Tol-C12)	192324	12
C25	5.321	0.010	2231	2566			
C26	5.425	-0.010	1027	662			
C28	5.671	0.008	2715	3437			
C32	6.101	0.006	3821	3414			
C34	6.346	-0.004	2422	1712			
Filter Peak	6.994	0.001	1979	1053	JP-4 (Tol-C14)	223062	20
C36	6.656	-0.007	2172	388	CREOSOT (C8-C22)	247432	40
C38	7.063	-0.003	1973	1176			
C40	7.597	-0.009	2361	3894	BUNKERC (C10-C38)	388412	49

AZDIESEL (C10-C22)	138093	9
AZMOIL (C22-C32)	109023	17

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	681126	43.3	96.1
Triacontane	664836	54.2	120.4

ms 8/19/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a016.d

Date : 13-AUG-2008 16:20

Client ID:

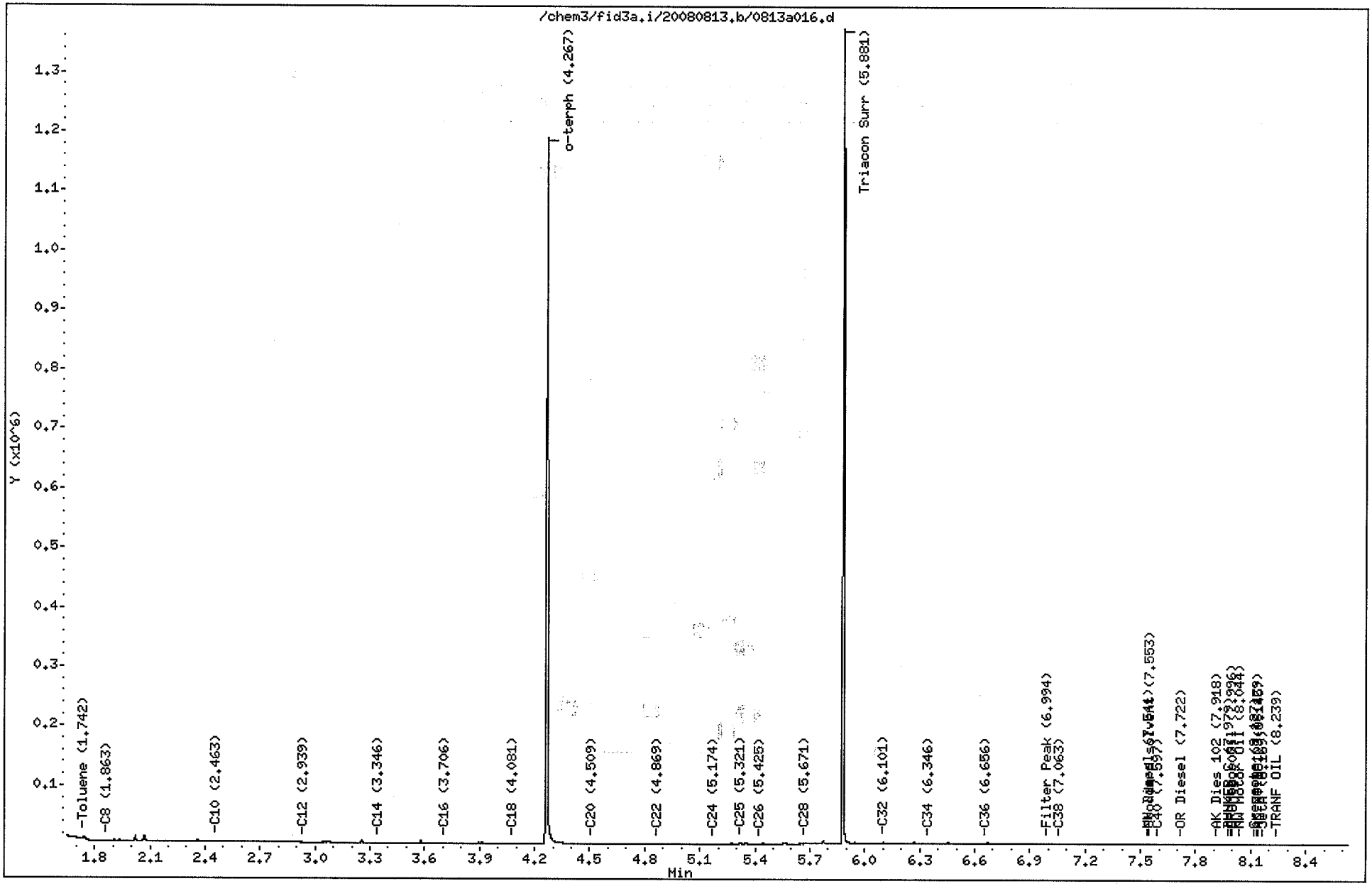
Sample Info: NJ87C

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a017.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87D
Client ID:
Injection: 13-AUG-2008 16:36
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.745	0.006	11985	16419	GAS (Tol-C12)	193820	11
C8	1.861	-0.003	2750	764	DIESEL (C12-C24)	68593	6
C10	2.441	-0.012	3234	4083	M.OIL (C24-C38)	179404	18
C12	2.934	-0.003	1342	897	AK-102 (C10-C25)	125228	9
C14	3.348	-0.002	866	218	AK-103 (C25-C36)	135046	19
C16	3.706	-0.005	713	515	OR.DIES (C10-C28)	148127	10
C18	4.085	0.002	211	62	OR.MOIL (C28-C40)	214761	24
C20	4.510	0.003	390	193	JET-A (C10-C18)	105823	7
C22	4.870	0.002	249	36	MIN.OIL (C24-C38)	179404	14
C24	5.173	-0.003	427	269	MSPIRIT (Tol-C12)	193820	12
C25	5.310	-0.001	492	135			
C26	5.433	-0.002	657	166			
C28	5.667	0.003	1448	1726			
C32	6.092	-0.003	3259	3263			
C34	6.348	-0.002	1970	623			
Filter Peak	6.993	0.000	1769	280	JP-4 (Tol-C14)	220781	19
C36	6.662	-0.001	3719	6290	CREOSOT (C8-C22)	212725	34
C38	7.067	0.000	1766	978			
C40	7.617	0.011	1981	1053	BUNKERC (C10-C38)	303442	38
AZDIESEL (C10-C22)				105737	7		
AZMOIL (C22-C32)				69760	11		

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	650855	41.3	91.9
Triacontane	619391	50.5	112.2

8/19/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a017.d

Date : 13-AUG-2008 16:36

Client ID:

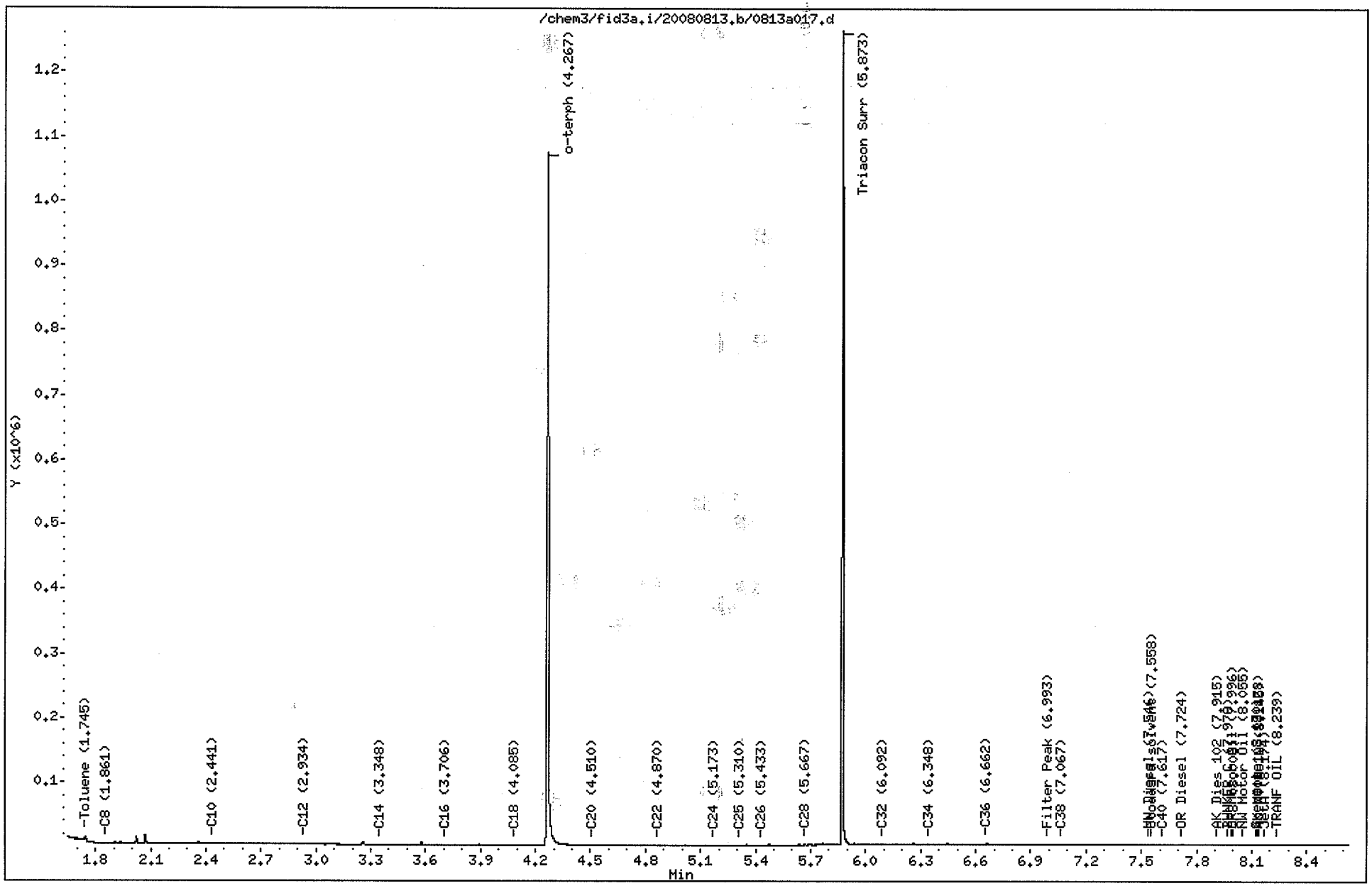
Sample Info: NJ87D

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01

Client ID	OTER	TOT OUT
MB-080808	95.8%	0
LCS-080808	101%	0
LCSD-080808	96.7%	0
EBC-2	91.1%	0
EBC-5	53.1%	0
EBC-6	96.2%	0
EBC-16	91.8%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(49-118)	(45-112)

Prep Method: SW3510C
Log Number Range: 08-19934 to 08-19937

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned **Sample ID: LCS-080808**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-080808
LIMS ID: 08-19934
Matrix: Water
Data Release Authorized:
Reported: 08/19/08

QC Report No: NJ87-HART CROWSER,INC.
Project: PIER 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted LCS/LCSD: 08/08/08

Date Analyzed LCS: 08/13/08 15:19
LCSD: 08/13/08 15:34
Instrument/Analyst LCS: FID/MS
LCSD: FID/MS

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.54	3.00	84.7%	2.52	3.00	84.0%	0.8%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	101%	96.7%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a012.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87LCSW1
Client ID:
Injection: 13-AUG-2008 15:19
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.743	0.004	25606	17843	GAS (Tol-C12)	3015452	169
C8	1.865	0.002	19832	12773	DIESEL (C12-C24)	15044087	1268
C10	2.453	0.001	288555	125476	M.OIL (C24-C38)	499399	51
C12	2.937	0.000	509256	245273	AK-102 (C10-C25)	17499507	1222
C14	3.348	-0.002	714743	320931	AK-103 (C25-C36)	409555	58
C16	3.710	-0.001	842555	462466	OR.DIES (C10-C28)	17758006	1201
C18	4.085	0.002	501156	331101	OR.MOIL (C28-C40)	266908	29
C20	4.508	0.001	372979	255247	JET-A (C10-C18)	13051083	879
C22	4.868	0.000	151473	114156	MIN.OIL (C24-C38)	499399	39
C24	5.176	0.000	62282	48687	MSPIRIT (Tol-C12)	3015452	191
C25	5.310	0.000	36990	38685			
C26	5.436	0.001	21481	21823			
C28	5.664	0.001	6995	8557			
C32	6.094	-0.001	4837	8697			
C34	6.347	-0.003	2424	480			
Filter Peak	6.994	0.001	2103	1323	JP-4 (Tol-C14)	6496480	572
C36	6.663	0.001	4316	6674	CREOSOT (C8-C22)	17475375	2803
C38	7.068	0.002	2053	402			
C40	7.617	0.011	1921	303	BUNKERC (C10-C38)	17962162	2259
AZDIESEL (C10-C22)				16648329	1037		
AZMOIL (C22-C32)				880525	137		

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	718368	45.6	101.4
Triacontane	664957	54.2	120.4

MS 8/19/08

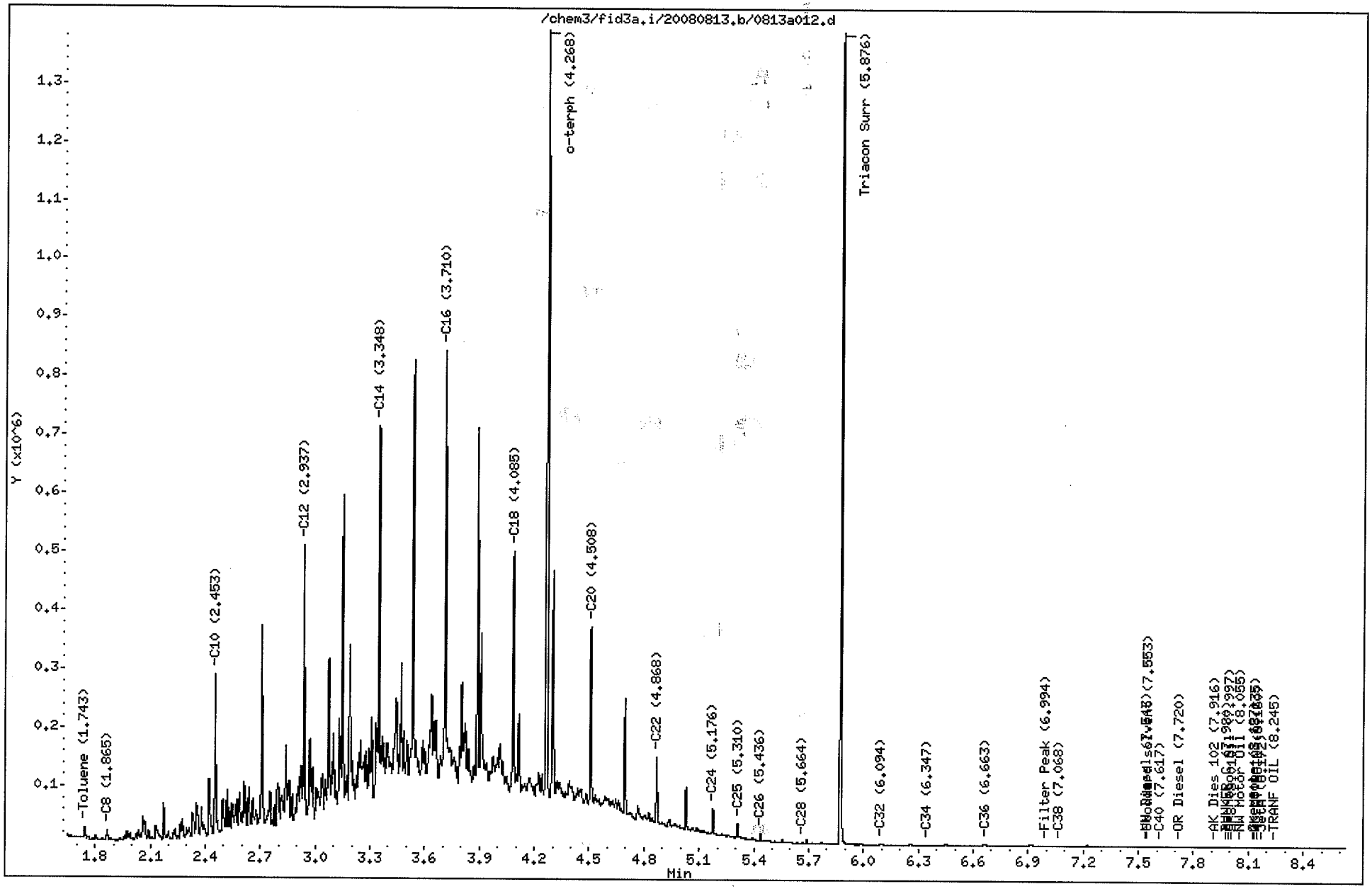
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a012.d
Date : 13-AUG-2008 15:19
Client ID:
Sample Info: NJ87LCSW1

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080813.b/0813a013.d
Method: /chem3/fid3a.i/20080813.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ87LCSDW1
Client ID:
Injection: 13-AUG-2008 15:34
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.735	-0.004	8147	1294	GAS (Tol-C12)	2839283	159
C8	1.866	0.002	18552	12071	DIESEL (C12-C24)	14972766	1262
C10	2.453	0.001	251626	115617	M.OIL (C24-C38)	475462	49
C12	2.938	0.001	492927	233864	AK-102 (C10-C25)	17301024	1208
C14	3.349	-0.001	689978	317059	AK-103 (C25-C36)	391947	56
C16	3.712	0.001	810272	480201	OR.DIES (C10-C28)	17546416	1186
C18	4.086	0.003	488253	387877	OR.MOIL (C28-C40)	255304	28
C20	4.509	0.002	368150	257982	JET-A (C10-C18)	12869577	867
C22	4.869	0.001	150869	115764	MIN.OIL (C24-C38)	475462	37
C24	5.177	0.001	61689	48663	MSPIRIT (Tol-C12)	2839283	179
C25	5.312	0.002	36935	43321			
C26	5.438	0.003	20693	26207			
C28	5.668	0.005	6528	8458			
C32	6.099	0.004	5165	4245			
C34	6.346	-0.004	2333	1102			
Filter Peak	6.989	-0.003	2001	951	JP-4 (Tol-C14)	6236524	549
C36	6.670	0.007	4880	7937	CREOSOT (C8-C22)	17218005	2762
C38	7.069	0.002	1965	704			
C40	7.594	-0.012	2723	4501	BUNKERC (C10-C38)	17741275	2231

AZDIESEL (C10-C22)	16462037	1025
AZMOIL (C22-C32)	873834	136

Range Times: NW Diesel(2.987 - 5.225) NW Gas(1.689 - 2.987) NW M.Oil(5.225 - 7.117)
AK102(2.402 - 5.261) AK103(5.261 - 6.713) Jet A(2.402 - 4.132)

Surrogate	Area	Amount	%Rec
o-Terphenyl	685150	43.5	96.7
Triacontane	649305	52.9	117.6

ms 8/19/08

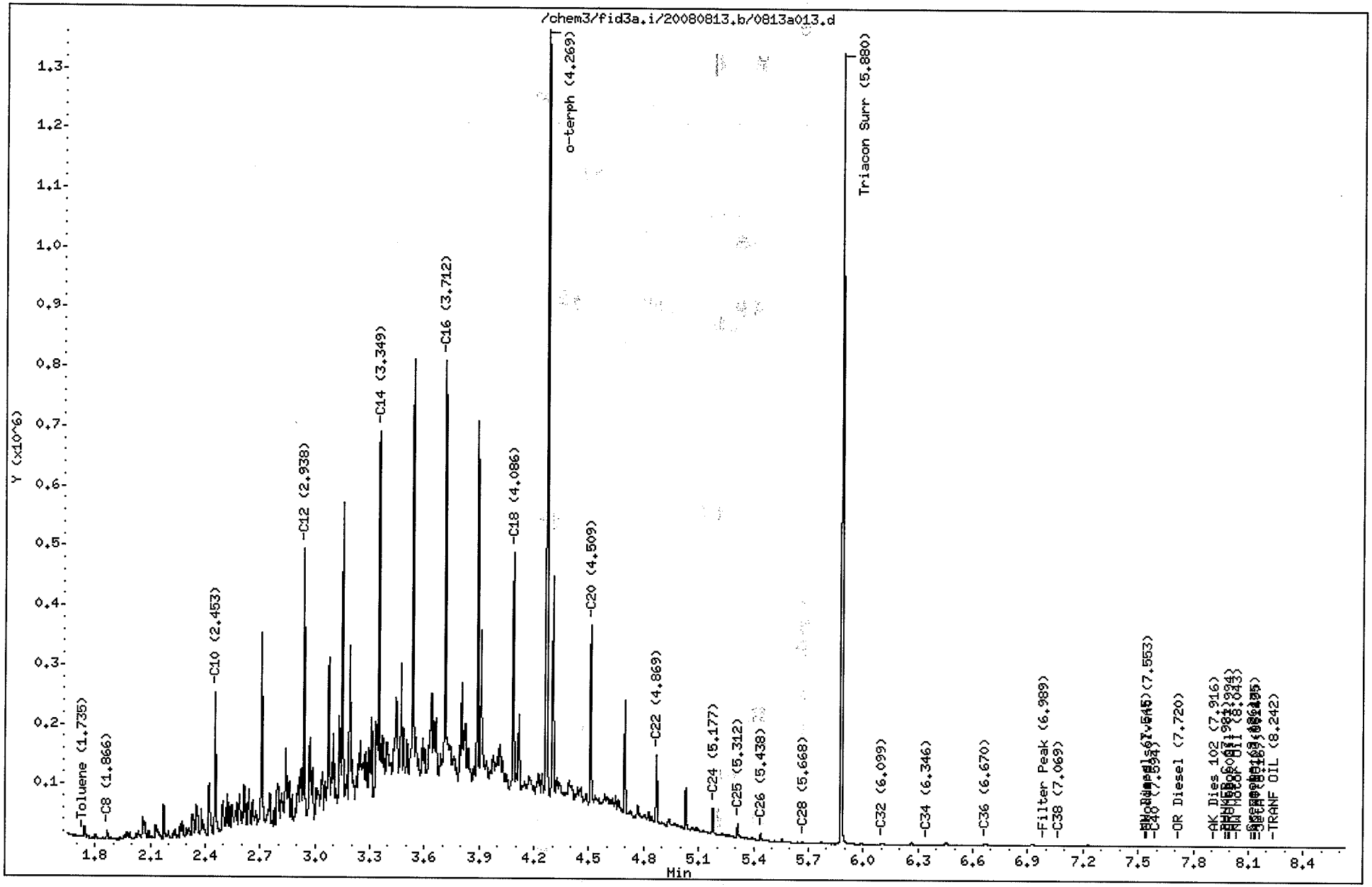
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080813.b/0813a013.d
Date : 13-AUG-2008 15:34
Client ID:
Sample Info: NJ87LCSDW1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: NJ87
Matrix: Water — Project: PIER 23-EBC
Date Received: 08/06/08 — 17490-01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
08-19934-080808MB1	Method Blank	500 mL	1.00 mL	08/08/08
08-19934-080808LCS1	Lab Control	500 mL	1.00 mL	08/08/08
08-19934-080808LCSD1	Lab Control Dup	500 mL	1.00 mL	08/08/08
08-19934-NJ87A	EBC-2	500 mL	1.00 mL	08/08/08
08-19935-NJ87B	EBC-5	500 mL	1.00 mL	08/08/08
08-19936-NJ87C	EBC-6	500 mL	1.00 mL	08/08/08
08-19937-NJ87D	EBC-16	500 mL	1.00 mL	08/08/08

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

September 9, 2008 Analytical Report for Service Request No: K0807486

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 11, 2008. For your reference, these analyses have been assigned our service request number K0807486.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807486
Project:	Pier 23-EBC	**Date Received:**	08/11/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Four water samples were received for analysis at Columbia Analytical Services on 08/11/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-2, EBC-5, EBC-6, and EBC-16 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

09/10/01

Approved by_____ **Date**_____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807486
Project:	Pier 23-EBC	**Date Collected:**	07/31-08/01/08
Sample Matrix:	Water	**Date Received:**	08/11/08

Mercury, Total

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001	5.0	5	08/13/08	08/15/08	87.8	
EBC-5	K0807486-002	5.0	5	08/13/08	08/15/08	66.8	
EBC-6	K0807486-003	1.0	1	08/13/08	08/15/08	3.5	
EBC-16	K0807486-004	1.0	1	08/13/08	08/15/08	3.6	
Method Blank 1	K0807486-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807486
Project:	Pier 23-EBC	**Date Collected:**	07/31-08/08/08
Sample Matrix:	Water	**Date Received:**	08/11/08

Mercury, Dissolved

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-5	K0807486-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-6	K0807486-003 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-16	K0807486-004 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807486-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/18/08	08/22/08	ND	

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:

Service Request: K0807486

Sample Name:	Lab Code:
EBC-2	K0807486-001
EBC-2	K0807486-001 DISS
EBC-5	K0807486-002
EBC-5	K0807486-002 DISS
EBC-6	K0807486-003
EBC-6	K0807486-003 DISS
EBC-16	K0807486-004
EBC-16	K0807486-004 DISS
Method Blank	K0807486-MB

Comments:

Approved By: _____ **Date:** _____

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 7/31/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.021	1.0	08/27/08	09/02/08	0.028		
Chromium	200.8	0.21	1.0	08/27/08	09/02/08	5.65		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	4.4		
Lead	200.8	0.021	1.0	08/27/08	09/02/08	1.730		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	6.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.8		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 7/31/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.40		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.133		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	3.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-5
Lab Code: K0807486-002

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.98	2.98	5.0	08/27/08	09/03/08	3.27		
Cadmium	200.8	0.119	0.119	5.0	08/27/08	09/03/08	0.485		
Chromium	200.8	1.19	1.19	5.0	08/27/08	09/03/08	41.4		
Copper	200.8	0.6	0.6	5.0	08/27/08	09/03/08	13.9		
Lead	200.8	0.119	0.119	5.0	08/27/08	09/03/08	2.890		
Nickel	200.8	1.2	1.2	5.0	08/27/08	09/03/08	153		
Zinc	200.8	3.0	3.0	5.0	08/27/08	09/03/08	201		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807486
Project No.:	NA	**Date Collected:**	8/1/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/11/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-5 **Lab Code:** K0807486-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.71		
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.023		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.98		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.702		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	3.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	4.7		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	2.46		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.747		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.2		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.26		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.3		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.035		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-16
Lab Code: K0807486-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.97		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	2.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.656		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.4		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	5.6		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-16
Lab Code: K0807486-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.25		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat **Service Request:** K0807486

Project No.: NA **Date Collected:**

Project Name: Pier 23-EBC **Date Received:**

Matrix: WATER **Units:** ug/L

Basis: N/A

Sample Name: Method Blank **Lab Code:** K0807486-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

PC PV

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

Client / Project: Hart Crowser/ARI Service Request K08 07486

Received: 8-11-8 Opened: 8-11-8 By: um

1. Samples were received via? *US Mail* *Fed Ex* (UPS) *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (Cooler) *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y (N) If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 12832 69583 4578 7469 NA (Y) N

5. **Temperature of cooler(s) upon receipt (°C):**	1.8			
Temperature Blank (°C):				
6. If applicable, list Chain of Custody Numbers:				

7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other*_____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y (N)
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA (Y) N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA (Y) N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* (NA) Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** (NA) Y N
16. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials
all			/							um

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: COC not signed

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/08/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NJ87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER, INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **08/22/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-19934-NJ87A	EBC-2	07/31/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19935-NJ87B	EBC-5	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19936-NJ87C	EBC-6	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19937-NJ87D	EBC-16	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					

Carrier	Airbill		Date
Relinquished by	Company	Date	Time
Received by	Company CAS	Date 8-11-8	Time 1030

Subcontractor Custody Form - **NJ87**
Page 1 of 1

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

September 9, 2008 Analytical Report for Service Request No: K0807486

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 11, 2008. For your reference, these analyses have been assigned our service request number K0807486.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807486
Project:	Pier 23-EBC	**Date Received:**	08/11/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Four water samples were received for analysis at Columbia Analytical Services on 08/11/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-2, EBC-5, EBC-6, and EBC-16 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

09/10/01

Approved by_____ **Date**_____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807486
Project:	Pier 23-EBC	**Date Collected:**	07/31-08/01/08
Sample Matrix:	Water	**Date Received:**	08/11/08

Mercury, Total

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001	5.0	5	08/13/08	08/15/08	87.8	
EBC-5	K0807486-002	5.0	5	08/13/08	08/15/08	66.8	
EBC-6	K0807486-003	1.0	1	08/13/08	08/15/08	3.5	
EBC-16	K0807486-004	1.0	1	08/13/08	08/15/08	3.6	
Method Blank 1	K0807486-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
Sample Matrix: Water

Service Request: K0807486
Date Collected: 07/31-08/08/08
Date Received: 08/11/08

Mercury, Dissolved

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-5	K0807486-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-6	K0807486-003 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-16	K0807486-004 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807486-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/18/08	08/22/08	ND	

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:
Service Request: K0807486

Sample Name:	Lab Code:
EBC-2	K0807486-001
EBC-2	K0807486-001 DISS
EBC-5	K0807486-002
EBC-5	K0807486-002 DISS
EBC-6	K0807486-003
EBC-6	K0807486-003 DISS
EBC-16	K0807486-004
EBC-16	K0807486-004 DISS
Method Blank	K0807486-MB

Comments:

Approved By: _____ **Date:** _____

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 7/31/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.021	1.0	08/27/08	09/02/08	0.028		
Chromium	200.8	0.21	1.0	08/27/08	09/02/08	5.65		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	4.4		
Lead	200.8	0.021	1.0	08/27/08	09/02/08	1.730		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	6.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.8		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 7/31/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.40		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.133		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	3.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807486
Project No.:	NA	**Date Collected:**	8/1/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/11/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-5 **Lab Code:** K0807486-002

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.98	2.98	5.0	08/27/08	09/03/08	3.27		
Cadmium	200.8	0.119	0.119	5.0	08/27/08	09/03/08	0.485		
Chromium	200.8	1.19	1.19	5.0	08/27/08	09/03/08	41.4		
Copper	200.8	0.6	0.6	5.0	08/27/08	09/03/08	13.9		
Lead	200.8	0.119	0.119	5.0	08/27/08	09/03/08	2.890		
Nickel	200.8	1.2	1.2	5.0	08/27/08	09/03/08	153		
Zinc	200.8	3.0	3.0	5.0	08/27/08	09/03/08	201		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-5
Lab Code: K0807486-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.71		
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.023		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.98		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.702		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	3.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	4.7		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	2.46		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.747		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.2		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.26		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.3		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.035		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-16
Lab Code: K0807486-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.97		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	2.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.656		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.4		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	5.6		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807486
Project No.:	NA	**Date Collected:**	8/1/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/11/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-16 **Lab Code:** K0807486-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.25		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected:
Project Name: Pier 23-EBC
Date Received:
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0807486-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC PV

Client / Project: Hart Crowser/ARI Service Request *K08* 07486

Received: 8-11-8 Opened: 8-11-8 By: LM

1. Samples were received via? *US Mail* *Fed Ex* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 12832 69503 4578 7469 NA Y N

5. **Temperature of cooler(s) upon receipt (°C):** 18.2
   Temperature Blank (°C): —
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA Y N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA Y N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials
all			/							LM

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: COC not signed

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/08/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NJ87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER,INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **08/22/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-19934-NJ87A	EBC-2	07/31/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19935-NJ87B	EBC-5	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19936-NJ87C	EBC-6	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19937-NJ87D	EBC-16	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					

Carrier	Airbill	Date

Relinquished by	Company	Date	Time
Received by	Company CAS	Date 6-11-8	Time 1030

Analytical Resources, Incorporated
Analytical Chemists and Consultants
September 8, 2008

Rick Moore
Hart Crowser, Inc.
1700 Westlake Avenue N. Suite 200
Seattle, WA 98109-3256

RE: Client Project: Pier 23-EBC
ARI Job No. NJ45

Dear Rick;

Please find enclosed the original chain of custody (COC) records, sample receipt documentation, and the final data for samples from the project referenced above. Analytical Resources, Inc. (ARI) received twenty-five soil samples on August 8, 2008. The samples were received in good condition with a cooler temperature range of 6.6 to 12.2°C. Sample Please note that select samples were put on hold pending further client instruction. For sample ID's and analyses that are on hold, please refer to the original COC. All samples were frozen upon receipt.

The samples were analyzed for VOCs, SVOCs, PCBs, NWTPH-Gx/BTEX, NWTPH-Dx, and Total Metals.

For the Volatiles analysis: It was noted upon the receipt of sample **EBC-12-S1** that all sample vials were preserved with MeoH. An aliquot of sample **EBC-12-S1** was taken from the total solids jar for analysis.

The internal standard percent recovery for d4-1,4-Dichlorobenzene was outside the recommended control limits for sample **EBC-7-S1**. The sample was re-analyzed and all internal standard recoveries were within control limits. Both sets of data have been included in this report for your review. No further corrective action was required.

All internal standard percent recoveries were outside the recommended control limits for sample **EBC-3-S1**. The sample was re-analyzed and all internal standard recoveries were within control limits. Both sets of data have been included in this report for your review. No further action was required.

The surrogate percent recoveries for d4-1,2-Dichloroethane, Bromofluorobenzene, and d4-1,2-Dichlorobenzene were outside control limits both low and high for sample **EBC-3-S1**. The sample was re-analyzed and all surrogate recoveries were within control limits. No further corrective action was required.

The surrogate percent recoveries for d4-1,2-Dichloroethane and d8-Toluene were outside control limits both high and low for sample **EBC-7-S1**. The sample was re-analyzed and all surrogate recoveries were within control limits. No further corrective action was required.

For the Semi-volatiles analysis: The surrogate percent recoveries for 2-Fluorophenol and 2,4,6-Tribromophenol were outside control limits low for sample **EBC-7-S1** due to sample matrix effects. All other surrogate recoveries were within control limits. No further corrective action was required.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Several matrix spike and matrix spike duplicate percent recoveries were outside the advisory control limits high for sample **EBC-8-S1**. Since all LCS and LCSD percent recoveries were within the control limits, no further corrective action was taken.

There were no matrix spike and matrix spike duplicate percent recoveries for 2,4-Dinitrophenol and 4,6-Dinitro-2-Methylphenol for sample **EBC-8-S1**. Since all LCS and LCSD percent recoveries were within control limits, no further corrective action was required.

For the PCBs analysis: There were no surrogate percent recoveries for Decachlorobiphenyl for samples **EBC-1-S1**, **EBC-7-S1**, and **EBC-9-S1**. This is due to chromatographic interferences. All other surrogate recoveries were within control limits, therefore no further corrective action was required.

There were no anomalies associated with the NWTPH-Gx/BETX analysis.

For the NWTPH-Dx analysis: The matrix spike duplicate percent recovery for diesel was outside advisory control limits low for sample **EBC-1-S2**. Since the matrix spike duplicate percent recovery was within advisory control limits, no further corrective action was required.

The LCS percent recovery for diesel was outside control limits high. Since the LCSD percent recovery was within control limits, no further corrective action was required.

For the Total Metals analysis: The duplicate relative percent differences for arsenic, copper, lead, and nickel were outside control limits for sample **EBC-1-S1**. All relevant data have been flagged with an "*" qualifier on Forms VI. No further corrective action was required.

The matrix spike percent recoveries for chromium and mercury were outside control limits both low and high for sample **EBC-1-S1**. Since the LCS percent recoveries were within control limits, no further corrective action was taken. Data have been flagged with an "N" qualifier on Forms V.

The matrix spike percent recoveries for copper, lead, and zinc were outside control limits both low and high for sample **EBC-1-S1**. The sample concentrations of these elements exceed the spike concentrations by a factor of four or more, therefore no further corrective action was required. Data have been flagged with an "H" qualifier on Forms V.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Kelly Bottem
Client Services Manager
kellyb@arilabs.com
206/695-6211
Enclosures
cc: eFile NJ45
KFB/co

Sample Custody Record

1 of 3

Samples Shipped to: ARI

HARTCROWSER

NT45

Hart Crowser, Inc.
1910 Fairview Avenue East
Seattle, Washington 98102-3699
Phone: 206-324-9530 FAX: 206-328-5581

JOB 17490-01 LAB NUMBER

PROJECT NAME Pier 23-EBL

HART CROWSER CONTACT Angie Goodwin
Rick Moore

SAMPLED BY: Carl Ulberg

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	NWTPH-Dx *	NWTPH-G/BTEX *	VOCs 8260B*	SVOCs 8270D	PCBs 8082	Metals **	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	EBC-1-S1	Various bottles	7/30/08	0910	Soil	X	X		X	X	X	* 8	Were already submitted to ARI on 7/31/08 Poor recovery in 16 oz jar/Please archive VOCs
	EBC-1-S2	↓	↓	0920	↓	X	X	X	X	X	X	* 8	
	EBC-2-S1		7/31/08	1240		X	X		X	X	X	8	Archive VOCs
	EBC-2-S2		↓	1250								8	Please archive all
	EBC-3-S1		7/30/08	1320		X	X	X	X	X	X	* 8	
	EBC-3-S2		↓	1330		X	X	X	X	X	X	* 8	
	EBC-4-S1		↓	1515		X	X		X	X	X	* 8	Archive [redacted]
	EBC-5-S1		8/1/08	0830		X	X		X	X	X	8	Archive VOCs
	EBC-5-S2		↓	0840								8	Archive all
	EBC-6-S1			1120		X	X	X	X	X	X	8	
	EBC-6-S2		↓	1130								8	Archive all
	EBC-7-S1	↓	7/29/08	0910	↓	X	X	X	X	X	X	* 8	

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE Angie Goodwin	8/6/08	SIGNATURE	8/6/08
PRINT NAME Angie Goodwin	TIME 0800	PRINT NAME Joe Cheak Hon Li	TIME 1300
COMPANY HC		COMPANY ARI	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

* ~~Hat~~ additional 2oz jar for Volatile Total Solids

** ~~AS~~, Cd, Cr, Cu, Pb, Hg, Ni, & Zn Please hold for TCLP (1311)

96 TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____ for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐ 48 HOURS ☒ STANDARD
☐ 72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Sample Custody Record

2 of 3

Samples Shipped to: ARI

NJ45

HARTCROWSER

Hart Crowser, Inc.
1910 Fairview Avenue East
Seattle, Washington 98102-3699
Phone: 206-324-9530 FAX: 206-328-5581

JOB 17490-01 LAB NUMBER

PROJECT NAME Pier 23 - EBL

HART CROWSER CONTACT Angie Goodwin
Rick Moore

SAMPLED BY: Carl Ulberg

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	NWTPH-Dx *	NWTPH-G/BTEX *	VOCs 8260B *	SVOCs 8270D	PCBs 8082	Metals **	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	EBC-7-S2	Various bottles	7/29/08	0920	Soil	X	X		X	X	X	*8	Were already submitted to ARI on 7/31/08
	EBC-8-S1			1000		X	X	X	X	X	X	*8	Please archive VOCs
	EBC-9-S1			1050		X	X		X	X	X	*8	
	EBC-10-S1			1320		X	X	X	X	X	X	*8	Archive VOCs
	EBC-11-S1			1145		X	X	X	X	X	X	*8	
	EBC-11-S2			1215		X	X	X	X	X	X	*8	
	EBC-12-S1			1400		X	X	X	X	X	X	*8	
	EBC-12-S2			1410								8	Archive all
	EBC-13-S1			1440		X	X		X	X	X	*8	Archive VOCs
	EBC-13-S2			1450		X	X		X	X	X	*8	Archive VOCs
	EBC-14-S1		7/31/08	1550		X	X		X	X	X	8	Archive VOCs
	EBC-15-S1		7/29/08	1530								*8	Archive all

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE Angie Goodwin	8/6/08	SIGNATURE	8/6/08
PRINT NAME Angie Goodwin	TIME 0800	PRINT NAME Isa Cheuk Hin Li	TIME 1306
COMPANY HC		COMPANY ARI	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

* Had additional 2 oz jar for Volatile Total Solids

** As, Cd, Cr, Cu, Pb, Hg, Ni, Zn Please hold for TCLP (1311)

96 TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. for Other Contract Requirements

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐ 48 HOURS ☒ STANDARD
☐ 72 HOURS OTHER

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Sample Custody Record

383

Samples Shipped to: ARI

NJ45

HARTCROWSER

Hart Crowser, Inc.
1910 Fairview Avenue East
Seattle, Washington 98102-3699
Phone: 206-324-9530 FAX: 206-328-5581

JOB 17490-01 LAB NUMBER

PROJECT NAME Pier 23 - EBC

HART CROWSER CONTACT Angie Goodwin
Rick Moore

SAMPLED BY: Carl Ulberg

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	NWTPH-Dx*	NWTPH-G/BTEX*	VOCs 8260B*	SVOCs 8270D	PCBs 8082	Metals**	NO. OF CONTAINERS	OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
	EBC-15-S2	Various bottles	7/29/08	1540	Soil							8	Please archive all

RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE: Angie Goodwin	8/6/08	SIGNATURE: Joe Gerke for Li	8/6/08
PRINT NAME: Angie Goodwin	TIME: 0800	PRINT NAME: ARI	TIME: 1300
COMPANY: HC		COMPANY:	
RELINQUISHED BY	DATE	RECEIVED BY	DATE
SIGNATURE	TIME	SIGNATURE	TIME
PRINT NAME		PRINT NAME	
COMPANY		COMPANY	

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

* Has additional 2 oz jar for Volatile Total Solids

** As, Cd, Cr, Cu, Pb, Hg, Ni, & Zn

Please hold for TCLP (1311)

COOLER NO.: STORAGE LOCATION:

See Lab Work Order No. _____ for Other Contract Requirements

8 TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION
CUSTODY SEALS: ☐YES ☐NO ☐N/A
GOOD CONDITION ☐YES ☐NO
TEMPERATURE
SHIPMENT METHOD: ☐HAND ☐COURIER ☐OVERNIGHT

TURNAROUND TIME:
☐ 24 HOURS ☐ 1 WEEK
☐ 48 HOURS ☒ STANDARD
☐ 72 HOURS OTHER _____

White and Yellow Copies to Lab Pink to Project Manager Lab to Return White Copy to Hart Crowser Gold to Sample Custodian

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Hart Crowser Project Name: Pier 24 Debris Pile I

COC No: _____ Delivered by: Hand

Assigned ARI Job No: NJ55/NJ45 Tracking No: _____

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Record cooler temperature (recommended 2.0-6.0 °C for chemistry 2.8/5.0/4.2/1.2/7.0/2.6 °C

Cooler Accepted by: JL Date: 8/6/08 Time: 1300

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ICE → 5 of 6

Was sufficient ice used (if appropriate)? (YES) NO

Were all bottles sealed in individual plastic bags? (YES) NO → EXCLUDING VIALS

Did all bottle arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation checklist) YES (NO)

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Samples Logged by: Bob Coughlin Date: 8/7/08 Time: 1152

***** Notify Project Manager of discrepancies or concerns *****

Explain discrepancies or negative responses:

By: Date:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-1-S2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 14:47

Sample Amount: 3.79 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.0%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.3	< 1.3	U
74-83-9	Bromomethane	1.3	< 1.3	U
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-00-3	Chloroethane	1.3	< 1.3	U
75-09-2	**Methylene Chloride**	**2.6**	**62**	
67-64-1	**Acetone**	**6.6**	**31**	
75-15-0	Carbon Disulfide	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
75-34-3	1,1-Dichloroethane	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
107-06-2	1,2-Dichloroethane	1.3	< 1.3	U
78-93-3	2-Butanone	6.6	< 6.6	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
56-23-5	Carbon Tetrachloride	1.3	< 1.3	U
108-05-4	Vinyl Acetate	6.6	< 6.6	U
75-27-4	Bromodichloromethane	1.3	< 1.3	U
78-87-5	1,2-Dichloropropane	1.3	< 1.3	U
10061-01-5	cis-1,3-Dichloropropene	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
124-48-1	Dibromochloromethane	1.3	< 1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
10061-02-6	trans-1,3-Dichloropropene	1.3	< 1.3	U
110-75-8	2-Chloroethylvinylether	6.6	< 6.6	U
75-25-2	Bromoform	1.3	< 1.3	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.6	< 6.6	U
591-78-6	2-Hexanone	6.6	< 6.6	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	1.3	< 1.3	U
108-88-3	Toluene	1.3	< 1.3	U
108-90-7	Chlorobenzene	1.3	< 1.3	U
100-41-4	Ethylbenzene	1.3	< 1.3	U
100-42-5	Styrene	1.3	< 1.3	U
75-69-4	**Trichlorofluoromethane**	**1.3**	**32**	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.6	< 2.6	U
1330-20-7	m,p-Xylene	1.3	< 1.3	U
95-47-6	o-Xylene	1.3	< 1.3	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
107-02-8	Acrolein	66	< 66	U
74-88-4	Methyl Iodide	1.3	< 1.3	U
74-96-4	Bromoethane	2.6	< 2.6	U
107-13-1	Acrylonitrile	6.6	< 6.6	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-1-S2**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45B QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19395 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/07/08 14:47

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.3	< 1.3	U
74-95-3	Dibromomethane	1.3	< 1.3	U
630-20-6	1,1,1,2-Tetrachloroethane	1.3	< 1.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.6	< 6.6	U
96-18-4	1,2,3-Trichloropropane	2.6	< 2.6	U
110-57-6	trans-1,4-Dichloro-2-butene	6.6	< 6.6	U
108-67-8	1,3,5-Trimethylbenzene	1.3	< 1.3	U
95-63-6	1,2,4-Trimethylbenzene	1.3	< 1.3	U
87-68-3	Hexachlorobutadiene	6.6	< 6.6	U
106-93-4	Ethylene Dibromide	1.3	< 1.3	U
74-97-5	Bromochloromethane	1.3	< 1.3	U
594-20-7	2,2-Dichloropropane	1.3	< 1.3	U
142-28-9	1,3-Dichloropropane	1.3	< 1.3	U
98-82-8	Isopropylbenzene	1.3	< 1.3	U
103-65-1	n-Propylbenzene	1.3	< 1.3	U
108-86-1	Bromobenzene	1.3	< 1.3	U
95-49-8	2-Chlorotoluene	1.3	< 1.3	U
106-43-4	4-Chlorotoluene	1.3	< 1.3	U
98-06-6	tert-Butylbenzene	1.3	< 1.3	U
135-98-8	sec-Butylbenzene	1.3	< 1.3	U
99-87-6	4-Isopropyltoluene	1.3	< 1.3	U
104-51-8	n-Butylbenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.6	< 6.6	U
91-20-3	Naphthalene	6.6	< 6.6	U
87-61-6	1,2,3-Trichlorobenzene	6.6	< 6.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	98.4%
Bromofluorobenzene	95.5%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/12/08 13:16

Sample Amount: 4.62 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.5%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.1	< 1.1	U
74-83-9	Bromomethane	1.1	< 1.1	U
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-00-3	Chloroethane	1.1	< 1.1	U
75-09-2	**Methylene Chloride**	**2.2**	**8.4**	
67-64-1	**Acetone**	**5.4**	**86**	
75-15-0	Carbon Disulfide	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
75-34-3	1,1-Dichloroethane	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	< 1.1	U
67-66-3	Chloroform	1.1	< 1.1	U
107-06-2	1,2-Dichloroethane	1.1	< 1.1	U
78-93-3	**2-Butanone**	**5.4**	**13**	
71-55-6	1,1,1-Trichloroethane	1.1	< 1.1	U
56-23-5	Carbon Tetrachloride	1.1	< 1.1	U
108-05-4	Vinyl Acetate	5.4	< 5.4	U
75-27-4	Bromodichloromethane	1.1	< 1.1	U
78-87-5	1,2-Dichloropropane	1.1	< 1.1	U
10061-01-5	cis-1,3-Dichloropropene	1.1	< 1.1	U
79-01-6	**Trichloroethene**	**1.1**	**8.8**	**M**
124-48-1	Dibromochloromethane	1.1	< 1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	< 1.1	U
71-43-2	**Benzene**	**1.1**	**16**	
10061-02-6	trans-1,3-Dichloropropene	1.1	< 1.1	U
110-75-8	2-Chloroethylvinylether	5.4	< 5.4	U
75-25-2	Bromoform	1.1	< 1.1	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.4	< 5.4	U
591-78-6	2-Hexanone	5.4	< 5.4	U
127-18-4	**Tetrachloroethene**	**1.1**	**1.1**	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	< 1.1	U
108-88-3	**Toluene**	**1.1**	**81**	
108-90-7	Chlorobenzene	1.1	< 1.1	U
100-41-4	**Ethylbenzene**	**1.1**	**210**	
100-42-5	Styrene	1.1	< 1.1	U
75-69-4	Trichlorofluoromethane	1.1	< 1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.2	< 2.2	U
1330-20-7	**m,p-Xylene**	**1.1**	**780**	**ES**
95-47-6	**o-Xylene**	**1.1**	**540**	**ES**
95-50-1	1,2-Dichlorobenzene	1.1	< 1.1	U
541-73-1	1,3-Dichlorobenzene	1.1	< 1.1	U
106-46-7	**1,4-Dichlorobenzene**	**1.1**	**1.1**	
107-02-8	Acrolein	54	< 54	U
74-88-4	Methyl Iodide	1.1	< 1.1	U
74-96-4	Bromoethane	2.2	< 2.2	U
107-13-1	Acrylonitrile	5.4	< 5.4	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S1**
 SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Date Analyzed: 08/12/08 13:16

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.1	< 1.1	U
74-95-3	Dibromomethane	1.1	< 1.1	U
630-20-6	1,1,1,2-Tetrachloroethane	1.1	< 1.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.4	< 5.4	U
96-18-4	1,2,3-Trichloropropane	2.2	< 2.2	U
110-57-6	trans-1,4-Dichloro-2-butene	5.4	< 5.4	U
108-67-8	**1,3,5-Trimethylbenzene**	**1.1**	**610**	**E**
95-63-6	**1,2,4-Trimethylbenzene**	**1.1**	**820**	**ES**
87-68-3	Hexachlorobutadiene	5.4	< 5.4	U
106-93-4	Ethylene Dibromide	1.1	< 1.1	U
74-97-5	Bromochloromethane	1.1	< 1.1	U
594-20-7	2,2-Dichloropropane	1.1	< 1.1	U
142-28-9	1,3-Dichloropropane	1.1	< 1.1	U
98-82-8	**Isopropylbenzene**	**1.1**	**76**	
103-65-1	**n-Propylbenzene**	**1.1**	**120**	
108-86-1	Bromobenzene	1.1	< 1.1	U
95-49-8	2-Chlorotoluene	1.1	< 1.1	U
106-43-4	4-Chlorotoluene	1.1	< 1.1	U
98-06-6	**tert-Butylbenzene**	**1.1**	**9.6**	**M**
135-98-8	**sec-Butylbenzene**	**1.1**	**50**	
99-87-6	**4-Isopropyltoluene**	**1.1**	**210**	
104-51-8	n-Butylbenzene	1.1	< 1.1	U
120-82-1	1,2,4-Trichlorobenzene	5.4	< 5.4	U
91-20-3	**Naphthalene**	**5.4**	**140**	
87-61-6	1,2,3-Trichlorobenzene	5.4	< 5.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	157%
d8-Toluene	83.1%
Bromofluorobenzene	63.9%
d4-1,2-Dichlorobenzene	50.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S1**
Page 1 of 2 **REANALYSIS**

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/12/08 21:47

Sample Amount: 92.7 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.5%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	54	< 54	U
74-83-9	Bromomethane	54	< 54	U
75-01-4	Vinyl Chloride	54	< 54	U
75-00-3	Chloroethane	54	< 54	U
75-09-2	**Methylene Chloride**	**110**	**270**	
67-64-1	**Acetone**	**270**	**360**	
75-15-0	Carbon Disulfide	54	< 54	U
75-35-4	1,1-Dichloroethene	54	< 54	U
75-34-3	1,1-Dichloroethane	54	< 54	U
156-60-5	trans-1,2-Dichloroethene	54	< 54	U
156-59-2	cis-1,2-Dichloroethene	54	< 54	U
67-66-3	Chloroform	54	< 54	U
107-06-2	1,2-Dichloroethane	54	< 54	U
78-93-3	2-Butanone	270	< 270	U
71-55-6	1,1,1-Trichloroethane	54	< 54	U
56-23-5	Carbon Tetrachloride	54	< 54	U
108-05-4	Vinyl Acetate	270	< 270	U
75-27-4	Bromodichloromethane	54	< 54	U
78-87-5	1,2-Dichloropropane	54	< 54	U
10061-01-5	cis-1,3-Dichloropropene	54	< 54	U
79-01-6	Trichloroethene	54	< 54	U
124-48-1	Dibromochloromethane	54	< 54	U
79-00-5	1,1,2-Trichloroethane	54	< 54	U
71-43-2	Benzene	54	< 54	U
10061-02-6	trans-1,3-Dichloropropene	54	< 54	U
110-75-8	2-Chloroethylvinylether	270	< 270	U
75-25-2	Bromoform	54	< 54	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	270	< 270	U
591-78-6	2-Hexanone	270	< 270	U
127-18-4	Tetrachloroethene	54	< 54	U
79-34-5	1,1,2,2-Tetrachloroethane	54	< 54	U
108-88-3	**Toluene**	**54**	**100**	
108-90-7	Chlorobenzene	54	< 54	U
100-41-4	**Ethylbenzene**	**54**	**230**	
100-42-5	Styrene	54	< 54	U
75-69-4	Trichlorofluoromethane	54	< 54	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	110	< 110	U
1330-20-7	**m,p-Xylene**	**54**	**880**	
95-47-6	**o-Xylene**	**54**	**680**	
95-50-1	1,2-Dichlorobenzene	54	< 54	U
541-73-1	1,3-Dichlorobenzene	54	< 54	U
106-46-7	1,4-Dichlorobenzene	54	< 54	U
107-02-8	Acrolein	2,700	< 2,700	U
74-88-4	Methyl Iodide	54	< 54	U
74-96-4	Bromoethane	110	< 110	U
107-13-1	Acrylonitrile	270	< 270	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S1**
Page 2 of 2 **REANALYSIS**

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Date Analyzed: 08/12/08 21:47

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	54	< 54	U
74-95-3	Dibromomethane	54	< 54	U
630-20-6	1,1,1,2-Tetrachloroethane	54	< 54	U
96-12-8	1,2-Dibromo-3-chloropropane	270	< 270	U
96-18-4	1,2,3-Trichloropropane	110	< 110	U
110-57-6	trans-1,4-Dichloro-2-butene	270	< 270	U
108-67-8	**1,3,5-Trimethylbenzene**	**54**	**1,200**	
95-63-6	**1,2,4-Trimethylbenzene**	**54**	**2,400**	
87-68-3	Hexachlorobutadiene	270	< 270	U
106-93-4	Ethylene Dibromide	54	< 54	U
74-97-5	Bromochloromethane	54	< 54	U
594-20-7	2,2-Dichloropropane	54	< 54	U
142-28-9	1,3-Dichloropropane	54	< 54	U
98-82-8	**Isopropylbenzene**	**54**	**91**	
103-65-1	**n-Propylbenzene**	**54**	**160**	
108-86-1	Bromobenzene	54	< 54	U
95-49-8	2-Chlorotoluene	54	< 54	U
106-43-4	4-Chlorotoluene	54	< 54	U
98-06-6	tert-Butylbenzene	54	< 54	U
135-98-8	**sec-Butylbenzene**	**54**	**98**	
99-87-6	**4-Isopropyltoluene**	**54**	**520**	
104-51-8	n-Butylbenzene	54	< 54	U
120-82-1	1,2,4-Trichlorobenzene	270	< 270	U
91-20-3	**Naphthalene**	**270**	**1,400**	
87-61-6	1,2,3-Trichlorobenzene	270	< 270	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	91.8%
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	103%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 15:39

Sample Amount: 4.29 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 15.1%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.2	< 1.2	U
74-83-9	Bromomethane	1.2	< 1.2	U
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-00-3	Chloroethane	1.2	< 1.2	U
75-09-2	Methylene Chloride	2.3	< 2.3	U
67-64-1	**Acetone**	**5.8**	**27**	
75-15-0	**Carbon Disulfide**	**1.2**	**7.6**	
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
75-34-3	1,1-Dichloroethane	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
67-66-3	Chloroform	1.2	< 1.2	U
107-06-2	1,2-Dichloroethane	1.2	< 1.2	U
78-93-3	2-Butanone	5.8	< 5.8	U
71-55-6	1,1,1-Trichloroethane	1.2	< 1.2	U
56-23-5	Carbon Tetrachloride	1.2	< 1.2	U
108-05-4	Vinyl Acetate	5.8	< 5.8	U
75-27-4	Bromodichloromethane	1.2	< 1.2	U
78-87-5	1,2-Dichloropropane	1.2	< 1.2	U
10061-01-5	cis-1,3-Dichloropropene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
124-48-1	Dibromochloromethane	1.2	< 1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	< 1.2	U
71-43-2	Benzene	1.2	< 1.2	U
10061-02-6	trans-1,3-Dichloropropene	1.2	< 1.2	U
110-75-8	2-Chloroethylvinylether	5.8	< 5.8	U
75-25-2	Bromoform	1.2	< 1.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.8	< 5.8	U
591-78-6	2-Hexanone	5.8	< 5.8	U
127-18-4	Tetrachloroethene	1.2	< 1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	1.2	< 1.2	U
108-88-3	Toluene	1.2	< 1.2	U
108-90-7	Chlorobenzene	1.2	< 1.2	U
100-41-4	Ethylbenzene	1.2	< 1.2	U
100-42-5	Styrene	1.2	< 1.2	U
75-69-4	Trichlorofluoromethane	1.2	< 1.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.3	< 2.3	U
1330-20-7	m,p-Xylene	1.2	< 1.2	U
95-47-6	o-Xylene	1.2	< 1.2	U
95-50-1	1,2-Dichlorobenzene	1.2	< 1.2	U
541-73-1	1,3-Dichlorobenzene	1.2	< 1.2	U
106-46-7	1,4-Dichlorobenzene	1.2	< 1.2	U
107-02-8	Acrolein	58	< 58	U
74-88-4	Methyl Iodide	1.2	< 1.2	U
74-96-4	Bromoethane	2.3	< 2.3	U
107-13-1	Acrylonitrile	5.8	< 5.8	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-3-S2**
 SAMPLE

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Date Analyzed: 08/07/08 15:39

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.2	< 1.2	U
74-95-3	Dibromomethane	1.2	< 1.2	U
630-20-6	1,1,1,2-Tetrachloroethane	1.2	< 1.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.8	< 5.8	U
96-18-4	1,2,3-Trichloropropane	2.3	< 2.3	U
110-57-6	trans-1,4-Dichloro-2-butene	5.8	< 5.8	U
108-67-8	1,3,5-Trimethylbenzene	1.2	< 1.2	U
95-63-6	1,2,4-Trimethylbenzene	1.2	< 1.2	U
87-68-3	Hexachlorobutadiene	5.8	< 5.8	U
106-93-4	Ethylene Dibromide	1.2	< 1.2	U
74-97-5	Bromochloromethane	1.2	< 1.2	U
594-20-7	2,2-Dichloropropane	1.2	< 1.2	U
142-28-9	1,3-Dichloropropane	1.2	< 1.2	U
98-82-8	Isopropylbenzene	1.2	< 1.2	U
103-65-1	n-Propylbenzene	1.2	< 1.2	U
108-86-1	Bromobenzene	1.2	< 1.2	U
95-49-8	2-Chlorotoluene	1.2	< 1.2	U
106-43-4	4-Chlorotoluene	1.2	< 1.2	U
98-06-6	tert-Butylbenzene	1.2	< 1.2	U
135-98-8	sec-Butylbenzene	1.2	< 1.2	U
99-87-6	4-Isopropyltoluene	1.2	< 1.2	U
104-51-8	n-Butylbenzene	1.2	< 1.2	U
120-82-1	1,2,4-Trichlorobenzene	5.8	< 5.8	U
91-20-3	Naphthalene	5.8	< 5.8	U
87-61-6	1,2,3-Trichlorobenzene	5.8	< 5.8	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	98.7%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-6-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 16:05

Sample Amount: 4.11 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 6.7%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.2	< 1.2	U
74-83-9	Bromomethane	1.2	< 1.2	U
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-00-3	Chloroethane	1.2	< 1.2	U
75-09-2	Methylene Chloride	2.4	< 2.4	U
67-64-1	**Acetone**	**6.1**	**33**	
75-15-0	**Carbon Disulfide**	**1.2**	**3.6**	
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
75-34-3	1,1-Dichloroethane	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
67-66-3	Chloroform	1.2	< 1.2	U
107-06-2	1,2-Dichloroethane	1.2	< 1.2	U
78-93-3	2-Butanone	6.1	< 6.1	U
71-55-6	1,1,1-Trichloroethane	1.2	< 1.2	U
56-23-5	Carbon Tetrachloride	1.2	< 1.2	U
108-05-4	Vinyl Acetate	6.1	< 6.1	U
75-27-4	Bromodichloromethane	1.2	< 1.2	U
78-87-5	1,2-Dichloropropane	1.2	< 1.2	U
10061-01-5	cis-1,3-Dichloropropene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
124-48-1	Dibromochloromethane	1.2	< 1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	< 1.2	U
71-43-2	Benzene	1.2	< 1.2	U
10061-02-6	trans-1,3-Dichloropropene	1.2	< 1.2	U
110-75-8	2-Chloroethylvinylether	6.1	< 6.1	U
75-25-2	Bromoform	1.2	< 1.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.1	< 6.1	U
591-78-6	2-Hexanone	6.1	< 6.1	U
127-18-4	Tetrachloroethene	1.2	< 1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	1.2	< 1.2	U
108-88-3	Toluene	1.2	< 1.2	U
108-90-7	Chlorobenzene	1.2	< 1.2	U
100-41-4	Ethylbenzene	1.2	< 1.2	U
100-42-5	Styrene	1.2	< 1.2	U
75-69-4	Trichlorofluoromethane	1.2	< 1.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.4	< 2.4	U
1330-20-7	m,p-Xylene	1.2	< 1.2	U
95-47-6	o-Xylene	1.2	< 1.2	U
95-50-1	1,2-Dichlorobenzene	1.2	< 1.2	U
541-73-1	1,3-Dichlorobenzene	1.2	< 1.2	U
106-46-7	1,4-Dichlorobenzene	1.2	< 1.2	U
107-02-8	Acrolein	61	< 61	U
74-88-4	Methyl Iodide	1.2	< 1.2	U
74-96-4	Bromoethane	2.4	< 2.4	U
107-13-1	Acrylonitrile	6.1	< 6.1	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-6-S1**
 SAMPLE

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Date Analyzed: 08/07/08 16:05

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.2	< 1.2	U
74-95-3	Dibromomethane	1.2	< 1.2	U
630-20-6	1,1,1,2-Tetrachloroethane	1.2	< 1.2	U
96-12-8	1,2-Dibromo-3-chloropropane	6.1	< 6.1	U
96-18-4	1,2,3-Trichloropropane	2.4	< 2.4	U
110-57-6	trans-1,4-Dichloro-2-butene	6.1	< 6.1	U
108-67-8	1,3,5-Trimethylbenzene	1.2	< 1.2	U
95-63-6	1,2,4-Trimethylbenzene	1.2	< 1.2	U
87-68-3	Hexachlorobutadiene	6.1	< 6.1	U
106-93-4	Ethylene Dibromide	1.2	< 1.2	U
74-97-5	Bromochloromethane	1.2	< 1.2	U
594-20-7	2,2-Dichloropropane	1.2	< 1.2	U
142-28-9	1,3-Dichloropropane	1.2	< 1.2	U
98-82-8	Isopropylbenzene	1.2	< 1.2	U
103-65-1	n-Propylbenzene	1.2	< 1.2	U
108-86-1	Bromobenzene	1.2	< 1.2	U
95-49-8	2-Chlorotoluene	1.2	< 1.2	U
106-43-4	4-Chlorotoluene	1.2	< 1.2	U
98-06-6	tert-Butylbenzene	1.2	< 1.2	U
135-98-8	sec-Butylbenzene	1.2	< 1.2	U
99-87-6	4-Isopropyltoluene	1.2	< 1.2	U
104-51-8	n-Butylbenzene	1.2	< 1.2	U
120-82-1	1,2,4-Trichlorobenzene	6.1	< 6.1	U
91-20-3	Naphthalene	6.1	< 6.1	U
87-61-6	1,2,3-Trichlorobenzene	6.1	< 6.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	121%
d8-Toluene	98.0%
Bromofluorobenzene	94.1%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-7-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 16:32

Sample Amount: 2.51 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.9%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	2.0	< 2.0	U
74-83-9	Bromomethane	2.0	< 2.0	U
75-01-4	Vinyl Chloride	2.0	< 2.0	U
75-00-3	Chloroethane	2.0	< 2.0	U
75-09-2	**Methylene Chloride**	**4.0**	**4.7**	
67-64-1	**Acetone**	**10**	**490**	
75-15-0	**Carbon Disulfide**	**2.0**	**11**	
75-35-4	1,1-Dichloroethene	2.0	< 2.0	U
75-34-3	1,1-Dichloroethane	2.0	< 2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	< 2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	< 2.0	U
67-66-3	Chloroform	2.0	< 2.0	U
107-06-2	1,2-Dichloroethane	2.0	< 2.0	U
78-93-3	**2-Butanone**	**10**	**93**	
71-55-6	1,1,1-Trichloroethane	2.0	< 2.0	U
56-23-5	Carbon Tetrachloride	2.0	< 2.0	U
108-05-4	Vinyl Acetate	10	< 10	U
75-27-4	Bromodichloromethane	2.0	< 2.0	U
78-87-5	1,2-Dichloropropane	2.0	< 2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	< 2.0	U
79-01-6	Trichloroethene	2.0	< 2.0	U
124-48-1	Dibromochloromethane	2.0	< 2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	< 2.0	U
71-43-2	**Benzene**	**2.0**	**12**	
10061-02-6	trans-1,3-Dichloropropene	2.0	< 2.0	U
110-75-8	2-Chloroethylvinylether	10	< 10	U
75-25-2	Bromoform	2.0	< 2.0	U
108-10-1	**4-Methyl-2-Pentanone (MIBK)**	**10**	**29**	**M**
591-78-6	2-Hexanone	10	< 10	U
127-18-4	Tetrachloroethene	2.0	< 2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	< 2.0	U
108-88-3	**Toluene**	**2.0**	**29**	
108-90-7	Chlorobenzene	2.0	< 2.0	U
100-41-4	**Ethylbenzene**	**2.0**	**22**	
100-42-5	Styrene	2.0	< 2.0	U
75-69-4	Trichlorofluoromethane	2.0	< 2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	4.0	< 4.0	U
1330-20-7	**m,p-Xylene**	**2.0**	**65**	
95-47-6	**o-Xylene**	**2.0**	**50**	
95-50-1	**1,2-Dichlorobenzene**	**2.0**	**12**	**M**
541-73-1	1,3-Dichlorobenzene	2.0	< 2.0	U
106-46-7	**1,4-Dichlorobenzene**	**2.0**	**5.0**	
107-02-8	Acrolein	100	< 100	U
74-88-4	Methyl Iodide	2.0	< 2.0	U
74-96-4	Bromoethane	4.0	< 4.0	U
107-13-1	Acrylonitrile	10	< 10	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-7-S1**
 SAMPLE

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Date Analyzed: 08/07/08 16:32

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	2.0	< 2.0	U
74-95-3	Dibromomethane	2.0	< 2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	< 2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	< 10	U
96-18-4	1,2,3-Trichloropropane	4.0	< 4.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	< 10	U
108-67-8	**1,3,5-Trimethylbenzene**	**2.0**	**150**	
95-63-6	**1,2,4-Trimethylbenzene**	**2.0**	**330**	
87-68-3	Hexachlorobutadiene	10	< 10	U
106-93-4	Ethylene Dibromide	2.0	< 2.0	U
74-97-5	Bromochloromethane	2.0	< 2.0	U
594-20-7	2,2-Dichloropropane	2.0	< 2.0	U
142-28-9	1,3-Dichloropropane	2.0	< 2.0	U
98-82-8	**Isopropylbenzene**	**2.0**	**14**	
103-65-1	**n-Propylbenzene**	**2.0**	**27**	
108-86-1	Bromobenzene	2.0	< 2.0	U
95-49-8	2-Chlorotoluene	2.0	< 2.0	U
106-43-4	4-Chlorotoluene	2.0	< 2.0	U
98-06-6	**tert-Butylbenzene**	**2.0**	**2.8**	**M**
135-98-8	**sec-Butylbenzene**	**2.0**	**17**	
99-87-6	**4-Isopropyltoluene**	**2.0**	**66**	
104-51-8	**n-Butylbenzene**	**2.0**	**78**	**M**
120-82-1	1,2,4-Trichlorobenzene	10	< 10	U
91-20-3	**Naphthalene**	**10**	**320**	
87-61-6	1,2,3-Trichlorobenzene	10	< 10	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	170%
d8-Toluene	75.1%
Bromofluorobenzene	84.4%
d4-1,2-Dichlorobenzene	96.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-7-S1**
Page 1 of 2 **REANALYSIS**

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/12/08 21:21

Sample Amount: 5.37 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.9%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.9	< 0.9	U
74-83-9	Bromomethane	0.9	< 0.9	U
75-01-4	Vinyl Chloride	0.9	< 0.9	U
75-00-3	Chloroethane	0.9	< 0.9	U
75-09-2	**Methylene Chloride**	**1.9**	**7.2**	
67-64-1	**Acetone**	**4.6**	**190**	
75-15-0	**Carbon Disulfide**	**0.9**	**6.4**	
75-35-4	1,1-Dichloroethene	0.9	< 0.9	U
75-34-3	1,1-Dichloroethane	0.9	< 0.9	U
156-60-5	trans-1,2-Dichloroethene	0.9	< 0.9	U
156-59-2	cis-1,2-Dichloroethene	0.9	< 0.9	U
67-66-3	Chloroform	0.9	< 0.9	U
107-06-2	1,2-Dichloroethane	0.9	< 0.9	U
78-93-3	**2-Butanone**	**4.6**	**28**	
71-55-6	1,1,1-Trichloroethane	0.9	< 0.9	U
56-23-5	Carbon Tetrachloride	0.9	< 0.9	U
108-05-4	Vinyl Acetate	4.6	< 4.6	U
75-27-4	Bromodichloromethane	0.9	< 0.9	U
78-87-5	1,2-Dichloropropane	0.9	< 0.9	U
10061-01-5	cis-1,3-Dichloropropene	0.9	< 0.9	U
79-01-6	Trichloroethene	0.9	< 0.9	U
124-48-1	Dibromochloromethane	0.9	< 0.9	U
79-00-5	1,1,2-Trichloroethane	0.9	< 0.9	U
71-43-2	Benzene	0.9	< 0.9	U
10061-02-6	trans-1,3-Dichloropropene	0.9	< 0.9	U
110-75-8	2-Chloroethylvinylether	4.6	< 4.6	U
75-25-2	Bromoform	0.9	< 0.9	U
108-10-1	**4-Methyl-2-Pentanone (MIBK)**	**4.6**	**7.8**	
591-78-6	2-Hexanone	4.6	< 4.6	U
127-18-4	Tetrachloroethene	0.9	< 0.9	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	< 0.9	U
108-88-3	**Toluene**	**0.9**	**6.2**	
108-90-7	Chlorobenzene	0.9	< 0.9	U
100-41-4	**Ethylbenzene**	**0.9**	**8.5**	
100-42-5	**Styrene**	**0.9**	**1.2**	**M**
75-69-4	Trichlorofluoromethane	0.9	< 0.9	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	1.9	< 1.9	U
1330-20-7	**m,p-Xylene**	**0.9**	**24**	
95-47-6	**o-Xylene**	**0.9**	**19**	
95-50-1	**1,2-Dichlorobenzene**	**0.9**	**3.9**	**M**
541-73-1	1,3-Dichlorobenzene	0.9	< 0.9	U
106-46-7	**1,4-Dichlorobenzene**	**0.9**	**1.6**	
107-02-8	Acrolein	46	< 46	U
74-88-4	Methyl Iodide	0.9	< 0.9	U
74-96-4	Bromoethane	1.9	< 1.9	U
107-13-1	Acrylonitrile	4.6	< 4.6	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-7-S1**
Page 2 of 2 **REANALYSIS**

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Date Analyzed: 08/12/08 21:21

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	0.9	< 0.9	U
74-95-3	Dibromomethane	0.9	< 0.9	U
630-20-6	1,1,1,2-Tetrachloroethane	0.9	< 0.9	U
96-12-8	1,2-Dibromo-3-chloropropane	4.6	< 4.6	U
96-18-4	1,2,3-Trichloropropane	1.9	< 1.9	U
110-57-6	trans-1,4-Dichloro-2-butene	4.6	< 4.6	U
108-67-8	**1,3,5-Trimethylbenzene**	**0.9**	**56**	
95-63-6	**1,2,4-Trimethylbenzene**	**0.9**	**120**	
87-68-3	Hexachlorobutadiene	4.6	< 4.6	U
106-93-4	Ethylene Dibromide	0.9	< 0.9	U
74-97-5	Bromochloromethane	0.9	< 0.9	U
594-20-7	2,2-Dichloropropane	0.9	< 0.9	U
142-28-9	1,3-Dichloropropane	0.9	< 0.9	U
98-82-8	**Isopropylbenzene**	**0.9**	**5.6**	
103-65-1	**n-Propylbenzene**	**0.9**	**10**	
108-86-1	Bromobenzene	0.9	< 0.9	U
95-49-8	2-Chlorotoluene	0.9	< 0.9	U
106-43-4	4-Chlorotoluene	0.9	< 0.9	U
98-06-6	**tert-Butylbenzene**	**0.9**	**1.3**	
135-98-8	**sec-Butylbenzene**	**0.9**	**6.5**	
99-87-6	**4-Isopropyltoluene**	**0.9**	**25**	
104-51-8	n-Butylbenzene	0.9	< 0.9	U
120-82-1	1,2,4-Trichlorobenzene	4.6	< 4.6	U
91-20-3	**Naphthalene**	**4.6**	**110**	
87-61-6	1,2,3-Trichlorobenzene	4.6	< 4.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	132%
d8-Toluene	84.0%
Bromofluorobenzene	90.0%
d4-1,2-Dichlorobenzene	96.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-8-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 16:58

Sample Amount: 3.78 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 4.6%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.3	< 1.3	U
74-83-9	Bromomethane	1.3	< 1.3	U
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-00-3	Chloroethane	1.3	< 1.3	U
75-09-2	Methylene Chloride	2.6	< 2.6	U
67-64-1	**Acetone**	**6.6**	**26**	
75-15-0	Carbon Disulfide	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
75-34-3	1,1-Dichloroethane	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
107-06-2	1,2-Dichloroethane	1.3	< 1.3	U
78-93-3	2-Butanone	6.6	< 6.6	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
56-23-5	Carbon Tetrachloride	1.3	< 1.3	U
108-05-4	Vinyl Acetate	6.6	< 6.6	U
75-27-4	Bromodichloromethane	1.3	< 1.3	U
78-87-5	1,2-Dichloropropane	1.3	< 1.3	U
10061-01-5	cis-1,3-Dichloropropene	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
124-48-1	Dibromochloromethane	1.3	< 1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
10061-02-6	trans-1,3-Dichloropropene	1.3	< 1.3	U
110-75-8	2-Chloroethylvinylether	6.6	< 6.6	U
75-25-2	Bromoform	1.3	< 1.3	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.6	< 6.6	U
591-78-6	2-Hexanone	6.6	< 6.6	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	1.3	< 1.3	U
108-88-3	Toluene	1.3	< 1.3	U
108-90-7	Chlorobenzene	1.3	< 1.3	U
100-41-4	Ethylbenzene	1.3	< 1.3	U
100-42-5	Styrene	1.3	< 1.3	U
75-69-4	Trichlorofluoromethane	1.3	< 1.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.6	< 2.6	U
1330-20-7	m,p-Xylene	1.3	< 1.3	U
95-47-6	o-Xylene	1.3	< 1.3	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
107-02-8	Acrolein	66	< 66	U
74-88-4	Methyl Iodide	1.3	< 1.3	U
74-96-4	Bromoethane	2.6	< 2.6	U
107-13-1	Acrylonitrile	6.6	< 6.6	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-8-S1**
 SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Date Analyzed: 08/07/08 16:58

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.3	< 1.3	U
74-95-3	Dibromomethane	1.3	< 1.3	U
630-20-6	1,1,1,2-Tetrachloroethane	1.3	< 1.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.6	< 6.6	U
96-18-4	1,2,3-Trichloropropane	2.6	< 2.6	U
110-57-6	trans-1,4-Dichloro-2-butene	6.6	< 6.6	U
108-67-8	1,3,5-Trimethylbenzene	1.3	< 1.3	U
95-63-6	1,2,4-Trimethylbenzene	1.3	< 1.3	U
87-68-3	Hexachlorobutadiene	6.6	< 6.6	U
106-93-4	Ethylene Dibromide	1.3	< 1.3	U
74-97-5	Bromochloromethane	1.3	< 1.3	U
594-20-7	2,2-Dichloropropane	1.3	< 1.3	U
142-28-9	1,3-Dichloropropane	1.3	< 1.3	U
98-82-8	Isopropylbenzene	1.3	< 1.3	U
103-65-1	n-Propylbenzene	1.3	< 1.3	U
108-86-1	Bromobenzene	1.3	< 1.3	U
95-49-8	2-Chlorotoluene	1.3	< 1.3	U
106-43-4	4-Chlorotoluene	1.3	< 1.3	U
98-06-6	tert-Butylbenzene	1.3	< 1.3	U
135-98-8	sec-Butylbenzene	1.3	< 1.3	U
99-87-6	4-Isopropyltoluene	1.3	< 1.3	U
104-51-8	n-Butylbenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.6	< 6.6	U
91-20-3	Naphthalene	6.6	< 6.6	U
87-61-6	1,2,3-Trichlorobenzene	6.6	< 6.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	95.4%
Bromofluorobenzene	94.7%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-10-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 17:25

Sample Amount: 3.91 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 5.0%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.3	< 1.3	U
74-83-9	Bromomethane	1.3	< 1.3	U
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-00-3	Chloroethane	1.3	< 1.3	U
75-09-2	**Methylene Chloride**	**2.6**	**4.1**	
67-64-1	**Acetone**	**6.4**	**29**	
75-15-0	Carbon Disulfide	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
75-34-3	1,1-Dichloroethane	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
107-06-2	1,2-Dichloroethane	1.3	< 1.3	U
78-93-3	2-Butanone	6.4	< 6.4	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
56-23-5	Carbon Tetrachloride	1.3	< 1.3	U
108-05-4	Vinyl Acetate	6.4	< 6.4	U
75-27-4	Bromodichloromethane	1.3	< 1.3	U
78-87-5	1,2-Dichloropropane	1.3	< 1.3	U
10061-01-5	cis-1,3-Dichloropropene	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
124-48-1	Dibromochloromethane	1.3	< 1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
10061-02-6	trans-1,3-Dichloropropene	1.3	< 1.3	U
110-75-8	2-Chloroethylvinylether	6.4	< 6.4	U
75-25-2	Bromoform	1.3	< 1.3	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.4	< 6.4	U
591-78-6	2-Hexanone	6.4	< 6.4	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	1.3	< 1.3	U
108-88-3	Toluene	1.3	< 1.3	U
108-90-7	Chlorobenzene	1.3	< 1.3	U
100-41-4	Ethylbenzene	1.3	< 1.3	U
100-42-5	Styrene	1.3	< 1.3	U
75-69-4	Trichlorofluoromethane	1.3	< 1.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.6	< 2.6	U
1330-20-7	m,p-Xylene	1.3	< 1.3	U
95-47-6	o-Xylene	1.3	< 1.3	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
107-02-8	Acrolein	64	< 64	U
74-88-4	Methyl Iodide	1.3	< 1.3	U
74-96-4	Bromoethane	2.6	< 2.6	U
107-13-1	Acrylonitrile	6.4	< 6.4	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-10-S1**
 SAMPLE

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Date Analyzed: 08/07/08 17:25

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.3	< 1.3	U
74-95-3	Dibromomethane	1.3	< 1.3	U
630-20-6	1,1,1,2-Tetrachloroethane	1.3	< 1.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.4	< 6.4	U
96-18-4	1,2,3-Trichloropropane	2.6	< 2.6	U
110-57-6	trans-1,4-Dichloro-2-butene	6.4	< 6.4	U
108-67-8	1,3,5-Trimethylbenzene	1.3	< 1.3	U
95-63-6	1,2,4-Trimethylbenzene	1.3	< 1.3	U
87-68-3	Hexachlorobutadiene	6.4	< 6.4	U
106-93-4	Ethylene Dibromide	1.3	< 1.3	U
74-97-5	Bromochloromethane	1.3	< 1.3	U
594-20-7	2,2-Dichloropropane	1.3	< 1.3	U
142-28-9	1,3-Dichloropropane	1.3	< 1.3	U
98-82-8	Isopropylbenzene	1.3	< 1.3	U
103-65-1	n-Propylbenzene	1.3	< 1.3	U
108-86-1	Bromobenzene	1.3	< 1.3	U
95-49-8	2-Chlorotoluene	1.3	< 1.3	U
106-43-4	4-Chlorotoluene	1.3	< 1.3	U
98-06-6	tert-Butylbenzene	1.3	< 1.3	U
135-98-8	sec-Butylbenzene	1.3	< 1.3	U
99-87-6	4-Isopropyltoluene	1.3	< 1.3	U
104-51-8	n-Butylbenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.4	< 6.4	U
91-20-3	Naphthalene	6.4	< 6.4	U
87-61-6	1,2,3-Trichlorobenzene	6.4	< 6.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	97.3%
Bromofluorobenzene	94.3%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-11-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 17:51

Sample Amount: 4.10 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.3%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.2	< 1.2	U
74-83-9	Bromomethane	1.2	< 1.2	U
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-00-3	Chloroethane	1.2	< 1.2	U
75-09-2	**Methylene Chloride**	**2.4**	**5.1**	
67-64-1	**Acetone**	**6.1**	**28**	
75-15-0	**Carbon Disulfide**	**1.2**	**7.8**	
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
75-34-3	1,1-Dichloroethane	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
67-66-3	Chloroform	1.2	< 1.2	U
107-06-2	1,2-Dichloroethane	1.2	< 1.2	U
78-93-3	2-Butanone	6.1	< 6.1	U
71-55-6	1,1,1-Trichloroethane	1.2	< 1.2	U
56-23-5	Carbon Tetrachloride	1.2	< 1.2	U
108-05-4	Vinyl Acetate	6.1	< 6.1	U
75-27-4	Bromodichloromethane	1.2	< 1.2	U
78-87-5	1,2-Dichloropropane	1.2	< 1.2	U
10061-01-5	cis-1,3-Dichloropropene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
124-48-1	Dibromochloromethane	1.2	< 1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	< 1.2	U
71-43-2	Benzene	1.2	< 1.2	U
10061-02-6	trans-1,3-Dichloropropene	1.2	< 1.2	U
110-75-8	2-Chloroethylvinylether	6.1	< 6.1	U
75-25-2	Bromoform	1.2	< 1.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.1	< 6.1	U
591-78-6	2-Hexanone	6.1	< 6.1	U
127-18-4	Tetrachloroethene	1.2	< 1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	1.2	< 1.2	U
108-88-3	Toluene	1.2	< 1.2	U
108-90-7	Chlorobenzene	1.2	< 1.2	U
100-41-4	Ethylbenzene	1.2	< 1.2	U
100-42-5	Styrene	1.2	< 1.2	U
75-69-4	**Trichlorofluoromethane**	**1.2**	**1.4**	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.4	< 2.4	U
1330-20-7	m,p-Xylene	1.2	< 1.2	U
95-47-6	o-Xylene	1.2	< 1.2	U
95-50-1	1,2-Dichlorobenzene	1.2	< 1.2	U
541-73-1	1,3-Dichlorobenzene	1.2	< 1.2	U
106-46-7	1,4-Dichlorobenzene	1.2	< 1.2	U
107-02-8	Acrolein	61	< 61	U
74-88-4	Methyl Iodide	1.2	< 1.2	U
74-96-4	Bromoethane	2.4	< 2.4	U
107-13-1	Acrylonitrile	6.1	< 6.1	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-11-S1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Date Analyzed: 08/07/08 17:51

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.2	< 1.2	U
74-95-3	Dibromomethane	1.2	< 1.2	U
630-20-6	1,1,1,2-Tetrachloroethane	1.2	< 1.2	U
96-12-8	1,2-Dibromo-3-chloropropane	6.1	< 6.1	U
96-18-4	1,2,3-Trichloropropane	2.4	< 2.4	U
110-57-6	trans-1,4-Dichloro-2-butene	6.1	< 6.1	U
108-67-8	1,3,5-Trimethylbenzene	1.2	< 1.2	U
95-63-6	1,2,4-Trimethylbenzene	1.2	< 1.2	U
87-68-3	Hexachlorobutadiene	6.1	< 6.1	U
106-93-4	Ethylene Dibromide	1.2	< 1.2	U
74-97-5	Bromochloromethane	1.2	< 1.2	U
594-20-7	2,2-Dichloropropane	1.2	< 1.2	U
142-28-9	1,3-Dichloropropane	1.2	< 1.2	U
98-82-8	Isopropylbenzene	1.2	< 1.2	U
103-65-1	n-Propylbenzene	1.2	< 1.2	U
108-86-1	Bromobenzene	1.2	< 1.2	U
95-49-8	2-Chlorotoluene	1.2	< 1.2	U
106-43-4	4-Chlorotoluene	1.2	< 1.2	U
98-06-6	tert-Butylbenzene	1.2	< 1.2	U
135-98-8	sec-Butylbenzene	1.2	< 1.2	U
99-87-6	4-Isopropyltoluene	1.2	< 1.2	U
104-51-8	n-Butylbenzene	1.2	< 1.2	U
120-82-1	1,2,4-Trichlorobenzene	6.1	< 6.1	U
91-20-3	Naphthalene	6.1	< 6.1	U
87-61-6	1,2,3-Trichlorobenzene	6.1	< 6.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	97.1%
Bromofluorobenzene	94.4%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-11-S2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 18:18

Sample Amount: 4.26 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 16.5%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.2	< 1.2	U
74-83-9	Bromomethane	1.2	< 1.2	U
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-00-3	Chloroethane	1.2	< 1.2	U
75-09-2	**Methylene Chloride**	**2.4**	**21**	
67-64-1	**Acetone**	**5.9**	**22**	
75-15-0	**Carbon Disulfide**	**1.2**	**22**	
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
75-34-3	1,1-Dichloroethane	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
67-66-3	Chloroform	1.2	< 1.2	U
107-06-2	1,2-Dichloroethane	1.2	< 1.2	U
78-93-3	2-Butanone	5.9	< 5.9	U
71-55-6	1,1,1-Trichloroethane	1.2	< 1.2	U
56-23-5	Carbon Tetrachloride	1.2	< 1.2	U
108-05-4	Vinyl Acetate	5.9	< 5.9	U
75-27-4	Bromodichloromethane	1.2	< 1.2	U
78-87-5	1,2-Dichloropropane	1.2	< 1.2	U
10061-01-5	cis-1,3-Dichloropropene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
124-48-1	Dibromochloromethane	1.2	< 1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	< 1.2	U
71-43-2	Benzene	1.2	< 1.2	U
10061-02-6	trans-1,3-Dichloropropene	1.2	< 1.2	U
110-75-8	2-Chloroethylvinylether	5.9	< 5.9	U
75-25-2	Bromoform	1.2	< 1.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.9	< 5.9	U
591-78-6	2-Hexanone	5.9	< 5.9	U
127-18-4	Tetrachloroethene	1.2	< 1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	1.2	< 1.2	U
108-88-3	Toluene	1.2	< 1.2	U
108-90-7	Chlorobenzene	1.2	< 1.2	U
100-41-4	Ethylbenzene	1.2	< 1.2	U
100-42-5	Styrene	1.2	< 1.2	U
75-69-4	**Trichlorofluoromethane**	**1.2**	**12**	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.4	< 2.4	U
1330-20-7	m,p-Xylene	1.2	< 1.2	U
95-47-6	o-Xylene	1.2	< 1.2	U
95-50-1	1,2-Dichlorobenzene	1.2	< 1.2	U
541-73-1	1,3-Dichlorobenzene	1.2	< 1.2	U
106-46-7	1,4-Dichlorobenzene	1.2	< 1.2	U
107-02-8	Acrolein	59	< 59	U
74-88-4	Methyl Iodide	1.2	< 1.2	U
74-96-4	Bromoethane	2.4	< 2.4	U
107-13-1	Acrylonitrile	5.9	< 5.9	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-11-S2**
 SAMPLE

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Date Analyzed: 08/07/08 18:18

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.2	< 1.2	U
74-95-3	Dibromomethane	1.2	< 1.2	U
630-20-6	1,1,1,2-Tetrachloroethane	1.2	< 1.2	U
96-12-8	1,2-Dibromo-3-chloropropane	5.9	< 5.9	U
96-18-4	1,2,3-Trichloropropane	2.4	< 2.4	U
110-57-6	trans-1,4-Dichloro-2-butene	5.9	< 5.9	U
108-67-8	1,3,5-Trimethylbenzene	1.2	< 1.2	U
95-63-6	1,2,4-Trimethylbenzene	1.2	< 1.2	U
87-68-3	Hexachlorobutadiene	5.9	< 5.9	U
106-93-4	Ethylene Dibromide	1.2	< 1.2	U
74-97-5	Bromochloromethane	1.2	< 1.2	U
594-20-7	2,2-Dichloropropane	1.2	< 1.2	U
142-28-9	1,3-Dichloropropane	1.2	< 1.2	U
98-82-8	Isopropylbenzene	1.2	< 1.2	U
103-65-1	n-Propylbenzene	1.2	< 1.2	U
108-86-1	Bromobenzene	1.2	< 1.2	U
95-49-8	2-Chlorotoluene	1.2	< 1.2	U
106-43-4	4-Chlorotoluene	1.2	< 1.2	U
98-06-6	tert-Butylbenzene	1.2	< 1.2	U
135-98-8	sec-Butylbenzene	1.2	< 1.2	U
99-87-6	4-Isopropyltoluene	1.2	< 1.2	U
104-51-8	n-Butylbenzene	1.2	< 1.2	U
120-82-1	1,2,4-Trichlorobenzene	5.9	< 5.9	U
91-20-3	**Naphthalene**	**5.9**	**14**	
87-61-6	1,2,3-Trichlorobenzene	5.9	< 5.9	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	123%
d8-Toluene	97.9%
Bromofluorobenzene	94.8%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-12-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 18:44

Sample Amount: 4.88 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 4.7%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	Acetone	5.1	< 5.1	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.1	< 5.1	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.1	< 5.1	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.1	< 5.1	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.1	< 5.1	U
591-78-6	2-Hexanone	5.1	< 5.1	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0	U
1330-20-7	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	51	< 51	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.1	< 5.1	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: EBC-12-S1**
 SAMPLE

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Date Analyzed: 08/07/08 18:44

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.1	< 5.1	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.1	< 5.1	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.1	< 5.1	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.1	< 5.1	U
91-20-3	Naphthalene	5.1	< 5.1	U
87-61-6	1,2,3-Trichlorobenzene	5.1	< 5.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	101%
Bromofluorobenzene	93.9%
d4-1,2-Dichlorobenzene	99.7%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-080708	Method Blank	Low	115%	99.2%	95.5%	100%	0
LCS-080708	Lab Control	Low	104%	99.2%	100%	100%	0
LCSD-080708	Lab Control Dup	Low	113%	106%	98.7%	101%	0
NJ45B	EBC-1-S2	Low	119%	98.4%	95.5%	102%	0
MB-081208	Method Blank	Med	116%	96.7%	93.2%	102%	0
LCS-081208	Lab Control	Med	109%	97.2%	101%	98.7%	0
LCSD-081208	Lab Control Dup	Med	109%	98.4%	100%	100%	0
NJ45E	EBC-3-S1	Low	157%*	83.1%	63.9%*	50.3%*	3
NJ45ERE	EBC-3-S1	Med	105%	91.8%	106%	103%	0
NJ45F	EBC-3-S2	Low	116%	98.7%	95.8%	102%	0
NJ45J	EBC-6-S1	Low	121%	98.0%	94.1%	103%	0
MB-081208	Method Blank	Low	116%	96.7%	93.2%	102%	0
LCS-081208	Lab Control	Low	109%	97.2%	101%	98.7%	0
LCSD-081208	Lab Control Dup	Low	109%	98.4%	100%	100%	0
NJ45L	EBC-7-S1	Low	170%*	75.1%*	84.4%	96.0%	2
NJ45LRE	EBC-7-S1	Low	132%	84.0%	90.0%	96.1%	0
NJ45N	EBC-8-S1	Low	118%	95.4%	94.7%	101%	0
NJ45P	EBC-10-S1	Low	122%	97.3%	94.3%	101%	0
NJ45Q	EBC-11-S1	Low	119%	97.1%	94.4%	105%	0
NJ45R	EBC-11-S2	Low	123%	97.9%	94.8%	103%	0
NJ45S	EBC-12-S1	Low	104%	101%	93.9%	99.7%	0

SW8260B	LCS/MB LIMITS Low	LCS/MB LIMITS Med	QC LIMITS Low	QC LIMITS Med
(DCE) = d4-1,2-Dichloroethane	75-120	76-120	72-134	69-120
(TOL) = d8-Toluene	80-122	80-120	78-124	80-120
(BFB) = Bromofluorobenzene	79-120	80-120	66-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	79-120	80-120

Log Number Range: 08-19395 to 08-19412

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/PAB
LCSD: FINN5/PAB
Date Analyzed LCS: 08/07/08 09:13
LCSD: 08/07/08 09:47

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	51.2	50.0	102%	51.5	50.0	103%	0.6%
Bromomethane	48.2	50.0	96.4%	47.5	50.0	95.0%	1.5%
Vinyl Chloride	44.9	50.0	89.8%	41.7	50.0	83.4%	7.4%
Chloroethane	45.7	50.0	91.4%	45.4	50.0	90.8%	0.7%
Methylene Chloride	51.9	50.0	104%	52.8	50.0	106%	1.7%
Acetone	226	250	90.4%	239	250	95.6%	5.6%
Carbon Disulfide	47.6	50.0	95.2%	49.0	50.0	98.0%	2.9%
1,1-Dichloroethene	50.4	50.0	101%	53.0	50.0	106%	5.0%
1,1-Dichloroethane	48.5	50.0	97.0%	51.6	50.0	103%	6.2%
trans-1,2-Dichloroethene	48.5	50.0	97.0%	48.5	50.0	97.0%	0.0%
cis-1,2-Dichloroethene	47.9	50.0	95.8%	49.4	50.0	98.8%	3.1%
Chloroform	50.0	50.0	100%	51.3	50.0	103%	2.6%
1,2-Dichloroethane	48.9	50.0	97.8%	52.3	50.0	105%	6.7%
2-Butanone	226	250	90.4%	251	250	100%	10.5%
1,1,1-Trichloroethane	51.2	50.0	102%	51.3	50.0	103%	0.2%
Carbon Tetrachloride	51.7	50.0	103%	51.2	50.0	102%	1.0%
Vinyl Acetate	49.7	50.0	99.4%	49.2	50.0	98.4%	1.0%
Bromodichloromethane	48.0	50.0	96.0%	50.3	50.0	101%	4.7%
1,2-Dichloropropane	46.3	50.0	92.6%	50.8	50.0	102%	9.3%
cis-1,3-Dichloropropene	47.4	50.0	94.8%	50.8	50.0	102%	6.9%
Trichloroethene	49.9	50.0	99.8%	49.5	50.0	99.0%	0.8%
Dibromochloromethane	40.5	50.0	81.0%	41.0	50.0	82.0%	1.2%
1,1,2-Trichloroethane	47.0	50.0	94.0%	50.6	50.0	101%	7.4%
Benzene	51.0	50.0	102%	52.0	50.0	104%	1.9%
trans-1,3-Dichloropropene	39.1	50.0	78.2%	41.8	50.0	83.6%	6.7%
2-Chloroethylvinylether	45.0	50.0	90.0%	50.5	50.0	101%	11.5%
Bromoform	39.4	50.0	78.8%	40.0	50.0	80.0%	1.5%
4-Methyl-2-Pentanone (MIBK)	219	250	87.6%	253	250	101%	14.4%
2-Hexanone	248	250	99.2%	268	250	107%	7.8%
Tetrachloroethene	51.6	50.0	103%	48.8	50.0	97.6%	5.6%
1,1,2,2-Tetrachloroethane	47.8	50.0	95.6%	50.0	50.0	100%	4.5%
Toluene	47.5	50.0	95.0%	50.0	50.0	100%	5.1%
Chlorobenzene	50.6	50.0	101%	47.9	50.0	95.8%	5.5%
Ethylbenzene	51.2	50.0	102%	48.8	50.0	97.6%	4.8%
Styrene	51.4	50.0	103%	49.2	50.0	98.4%	4.4%
Trichlorofluoromethane	50.1	50.0	100%	50.5	50.0	101%	0.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	51.1	50.0	102%	50.8	50.0	102%	0.6%
m,p-Xylene	104	100	104%	98.5	100	98.5%	5.4%
o-Xylene	49.8	50.0	99.6%	47.6	50.0	95.2%	4.5%
1,2-Dichlorobenzene	48.8	50.0	97.6%	47.0	50.0	94.0%	3.8%
1,3-Dichlorobenzene	51.6	50.0	103%	49.2	50.0	98.4%	4.8%
1,4-Dichlorobenzene	50.8	50.0	102%	48.4	50.0	96.8%	4.8%
Acrolein	223	250	89.2%	249	250	99.6%	11.0%
Methyl Iodide	47.4	50.0	94.8%	50.5	50.0	101%	6.3%
Bromoethane	49.5	50.0	99.0%	50.7	50.0	101%	2.4%
Acrylonitrile	44.3	50.0	88.6%	49.9	50.0	99.8%	11.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-080708**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19395 Project: Pier 23-EBC
Matrix: Soil 17490-01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	50.4	50.0	101%	50.3	50.0	101%	0.2%
Dibromomethane	47.6	50.0	95.2%	51.3	50.0	103%	7.5%
1,1,1,2-Tetrachloroethane	49.9	50.0	99.8%	48.7	50.0	97.4%	2.4%
1,2-Dibromo-3-chloropropane	39.6	50.0	79.2%	42.4	50.0	84.8%	6.8%
1,2,3-Trichloropropane	48.6	50.0	97.2%	50.5	50.0	101%	3.8%
trans-1,4-Dichloro-2-butene	47.9	50.0	95.8%	49.3	50.0	98.6%	2.9%
1,3,5-Trimethylbenzene	54.5	50.0	109%	51.2	50.0	102%	6.2%
1,2,4-Trimethylbenzene	54.7	50.0	109%	51.3	50.0	103%	6.4%
Hexachlorobutadiene	47.4	50.0	94.8%	42.3	50.0	84.6%	11.4%
Ethylene Dibromide	45.8	50.0	91.6%	51.4	50.0	103%	11.5%
Bromochloromethane	50.2	50.0	100%	52.6	50.0	105%	4.7%
2,2-Dichloropropane	46.9	50.0	93.8%	48.0	50.0	96.0%	2.3%
1,3-Dichloropropane	50.0	50.0	100%	50.1	50.0	100%	0.2%
Isopropylbenzene	53.9	50.0	108%	51.4	50.0	103%	4.7%
n-Propylbenzene	54.0	50.0	108%	51.1	50.0	102%	5.5%
Bromobenzene	49.5	50.0	99.0%	48.0	50.0	96.0%	3.1%
2-Chlorotoluene	51.5	50.0	103%	47.9	50.0	95.8%	7.2%
4-Chlorotoluene	55.2	50.0	110%	53.3	50.0	107%	3.5%
tert-Butylbenzene	52.3	50.0	105%	48.3	50.0	96.6%	8.0%
sec-Butylbenzene	52.0	50.0	104%	48.7	50.0	97.4%	6.6%
4-Isopropyltoluene	54.7	50.0	109%	50.3	50.0	101%	8.4%
n-Butylbenzene	54.6	50.0	109%	49.8	50.0	99.6%	9.2%
1,2,4-Trichlorobenzene	50.4	50.0	101%	47.0	50.0	94.0%	7.0%
Naphthalene	40.9	50.0	81.8%	42.2	50.0	84.4%	3.1%
1,2,3-Trichlorobenzene	46.2	50.0	92.4%	44.9	50.0	89.8%	2.9%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	113%
d8-Toluene	99.2%	106%
Bromofluorobenzene	100%	98.7%
d4-1,2-Dichlorobenzene	100%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-081208 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19398 Project: Pier 23-EBC
Matrix: Soil 17490-01
Data Release Authorized: Date Sampled: NA
Reported: 08/15/08 Date Received: NA

Instrument/Analyst LCS: FINN5/PAB Sample Amount LCS: 100 mg-dry-wt
LCSD: FINN5/PAB LCSD: 100 mg-dry-wt
Date Analyzed LCS: 08/12/08 11:17 Purge Volume LCS: 5.0 mL
LCSD: 08/12/08 11:56 LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	2550	2500	102%	2480	2500	99.2%	2.8%
Bromomethane	2480	2500	99.2%	2380	2500	95.2%	4.1%
Vinyl Chloride	2340	2500	93.6%	2270	2500	90.8%	3.0%
Chloroethane	2550	2500	102%	2510	2500	100%	1.6%
Methylene Chloride	2850	2500	114%	2820	2500	113%	1.1%
Acetone	12000	12500	96.0%	12900	12500	103%	7.2%
Carbon Disulfide	2560	2500	102%	2530	2500	101%	1.2%
1,1-Dichloroethene	2700	2500	108%	2630	2500	105%	2.6%
1,1-Dichloroethane	2650	2500	106%	2600	2500	104%	1.9%
trans-1,2-Dichloroethene	2610	2500	104%	2580	2500	103%	1.2%
cis-1,2-Dichloroethene	2680	2500	107%	2520	2500	101%	6.2%
Chloroform	2690	2500	108%	2670	2500	107%	0.7%
1,2-Dichloroethane	2640	2500	106%	2710	2500	108%	2.6%
2-Butanone	12500	12500	100%	12900	12500	103%	3.1%
1,1,1-Trichloroethane	2680	2500	107%	2610	2500	104%	2.6%
Carbon Tetrachloride	2630	2500	105%	2690	2500	108%	2.3%
Vinyl Acetate	2720	2500	109%	2600	2500	104%	4.5%
Bromodichloromethane	2620	2500	105%	2600	2500	104%	0.8%
1,2-Dichloropropane	2390	2500	95.6%	2370	2500	94.8%	0.8%
cis-1,3-Dichloropropene	2630	2500	105%	2610	2500	104%	0.8%
Trichloroethene	2440	2500	97.6%	2450	2500	98.0%	0.4%
Dibromochloromethane	2120	2500	84.8%	2120	2500	84.8%	0.0%
1,1,2-Trichloroethane	2490	2500	99.6%	2560	2500	102%	2.8%
Benzene	2610	2500	104%	2650	2500	106%	1.5%
trans-1,3-Dichloropropene	2150	2500	86.0%	2240	2500	89.6%	4.1%
2-Chloroethylvinylether	2420	2500	96.8%	2520	2500	101%	4.0%
Bromoform	1990	2500	79.6%	1950	2500	78.0%	2.0%
4-Methyl-2-Pentanone (MIBK)	12600	12500	101%	13100	12500	105%	3.9%
2-Hexanone	13200	12500	106%	14100	12500	113%	6.6%
Tetrachloroethene	2600	2500	104%	2520	2500	101%	3.1%
1,1,2,2-Tetrachloroethane	2420	2500	96.8%	2440	2500	97.6%	0.8%
Toluene	2530	2500	101%	2530	2500	101%	0.0%
Chlorobenzene	2510	2500	100%	2480	2500	99.2%	1.2%
Ethylbenzene	2650	2500	106%	2590	2500	104%	2.3%
Styrene	2640	2500	106%	2650	2500	106%	0.4%
Trichlorofluoromethane	2660	2500	106%	2560	2500	102%	3.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	2720	2500	109%	2660	2500	106%	2.2%
m,p-Xylene	5220	5000	104%	5180	5000	104%	0.8%
o-Xylene	2530	2500	101%	2500	2500	100%	1.2%
1,2-Dichlorobenzene	2450	2500	98.0%	2410	2500	96.4%	1.6%
1,3-Dichlorobenzene	2560	2500	102%	2500	2500	100%	2.4%
1,4-Dichlorobenzene	2560	2500	102%	2460	2500	98.4%	4.0%
Acrolein	12500	12500	100%	13000	12500	104%	3.9%
Methyl Iodide	2610	2500	104%	2500	2500	100%	4.3%
Bromoethane	2600	2500	104%	2590	2500	104%	0.4%
Acrylonitrile	2480	2500	99.2%	2580	2500	103%	4.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-081208 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19398 Project: Pier 23-EBC
Matrix: Soil 17490-01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	2680	2500	107%	2640	2500	106%	1.5%
Dibromomethane	2410	2500	96.4%	2540	2500	102%	5.3%
1,1,1,2-Tetrachloroethane	2610	2500	104%	2600	2500	104%	0.4%
1,2-Dibromo-3-chloropropane	2180	2500	87.2%	2250	2500	90.0%	3.2%
1,2,3-Trichloropropane	2630	2500	105%	2690	2500	108%	2.3%
trans-1,4-Dichloro-2-butene	2500	2500	100%	2540	2500	102%	1.6%
1,3,5-Trimethylbenzene	2680	2500	107%	2560	2500	102%	4.6%
1,2,4-Trimethylbenzene	2730	2500	109%	2620	2500	105%	4.1%
Hexachlorobutadiene	2590	2500	104%	2590	2500	104%	0.0%
Ethylene Dibromide	2490	2500	99.6%	2480	2500	99.2%	0.4%
Bromochloromethane	2630	2500	105%	2660	2500	106%	1.1%
2,2-Dichloropropane	2720	2500	109%	2660	2500	106%	2.2%
1,3-Dichloropropane	2650	2500	106%	2700	2500	108%	1.9%
Isopropylbenzene	2640	2500	106%	2530	2500	101%	4.3%
n-Propylbenzene	2680	2500	107%	2550	2500	102%	5.0%
Bromobenzene	2410	2500	96.4%	2360	2500	94.4%	2.1%
2-Chlorotoluene	2590	2500	104%	2410	2500	96.4%	7.2%
4-Chlorotoluene	2710	2500	108%	2670	2500	107%	1.5%
tert-Butylbenzene	2490	2500	99.6%	2480	2500	99.2%	0.4%
sec-Butylbenzene	2590	2500	104%	2500	2500	100%	3.5%
4-Isopropyltoluene	2730	2500	109%	2640	2500	106%	3.4%
n-Butylbenzene	2720	2500	109%	2590	2500	104%	4.9%
1,2,4-Trichlorobenzene	2650	2500	106%	2610	2500	104%	1.5%
Naphthalene	2240	2500	89.6%	2300	2500	92.0%	2.6%
1,2,3-Trichlorobenzene	2580	2500	103%	2590	2500	104%	0.4%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	109%	109%
d8-Toluene	97.2%	98.4%
Bromofluorobenzene	101%	100%
d4-1,2-Dichlorobenzene	98.7%	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-081208
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/PAB
LCSD: FINN5/PAB
Date Analyzed LCS: 08/12/08 11:17
LCSD: 08/12/08 11:56

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	51.0	50.0	102%	49.6	50.0	99.2%	2.8%
Bromomethane	49.7	50.0	99.4%	47.5	50.0	95.0%	4.5%
Vinyl Chloride	46.8	50.0	93.6%	45.3	50.0	90.6%	3.3%
Chloroethane	51.1	50.0	102%	50.3	50.0	101%	1.6%
Methylene Chloride	57.0	50.0	114%	56.3	50.0	113%	1.2%
Acetone	240	250	96.0%	259	250	104%	7.6%
Carbon Disulfide	51.3	50.0	103%	50.6	50.0	101%	1.4%
1,1-Dichloroethene	54.1	50.0	108%	52.5	50.0	105%	3.0%
1,1-Dichloroethane	53.1	50.0	106%	51.9	50.0	104%	2.3%
trans-1,2-Dichloroethene	52.3	50.0	105%	51.6	50.0	103%	1.3%
cis-1,2-Dichloroethene	53.5	50.0	107%	50.4	50.0	101%	6.0%
Chloroform	53.9	50.0	108%	53.4	50.0	107%	0.9%
1,2-Dichloroethane	52.9	50.0	106%	54.3	50.0	109%	2.6%
2-Butanone	249	250	99.6%	258	250	103%	3.6%
1,1,1-Trichloroethane	53.5	50.0	107%	52.3	50.0	105%	2.3%
Carbon Tetrachloride	52.6	50.0	105%	53.8	50.0	108%	2.3%
Vinyl Acetate	54.4	50.0	109%	52.0	50.0	104%	4.5%
Bromodichloromethane	52.3	50.0	105%	52.0	50.0	104%	0.6%
1,2-Dichloropropane	47.8	50.0	95.6%	47.4	50.0	94.8%	0.8%
cis-1,3-Dichloropropene	52.7	50.0	105%	52.1	50.0	104%	1.1%
Trichloroethene	48.9	50.0	97.8%	49.0	50.0	98.0%	0.2%
Dibromochloromethane	42.4	50.0	84.8%	42.5	50.0	85.0%	0.2%
1,1,2-Trichloroethane	49.9	50.0	99.8%	51.3	50.0	103%	2.8%
Benzene	52.3	50.0	105%	53.0	50.0	106%	1.3%
trans-1,3-Dichloropropene	43.0	50.0	86.0%	44.8	50.0	89.6%	4.1%
2-Chloroethylvinylether	48.5	50.0	97.0%	50.5	50.0	101%	4.0%
Bromoform	39.9	50.0	79.8%	39.0	50.0	78.0%	2.3%
4-Methyl-2-Pentanone (MIBK)	251	250	100%	262	250	105%	4.3%
2-Hexanone	265	250	106%	281	250	112%	5.9%
Tetrachloroethene	52.0	50.0	104%	50.5	50.0	101%	2.9%
1,1,2,2-Tetrachloroethane	48.4	50.0	96.8%	48.7	50.0	97.4%	0.6%
Toluene	50.7	50.0	101%	50.6	50.0	101%	0.2%
Chlorobenzene	50.3	50.0	101%	49.5	50.0	99.0%	1.6%
Ethylbenzene	53.0	50.0	106%	51.9	50.0	104%	2.1%
Styrene	52.8	50.0	106%	53.0	50.0	106%	0.4%
Trichlorofluoromethane	53.2	50.0	106%	51.1	50.0	102%	4.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	54.4	50.0	109%	53.2	50.0	106%	2.2%
m,p-Xylene	104	100	104%	104	100	104%	0.0%
o-Xylene	50.6	50.0	101%	49.9	50.0	99.8%	1.4%
1,2-Dichlorobenzene	48.9	50.0	97.8%	48.1	50.0	96.2%	1.6%
1,3-Dichlorobenzene	51.2	50.0	102%	50.0	50.0	100%	2.4%
1,4-Dichlorobenzene	51.1	50.0	102%	49.3	50.0	98.6%	3.6%
Acrolein	249	250	99.6%	260	250	104%	4.3%
Methyl Iodide	52.3	50.0	105%	50.1	50.0	100%	4.3%
Bromoethane	51.9	50.0	104%	51.7	50.0	103%	0.4%
Acrylonitrile	49.7	50.0	99.4%	51.7	50.0	103%	3.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-081208**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-081208 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19405 Project: Pier 23-EBC
Matrix: Soil 17490-01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	53.5	50.0	107%	52.8	50.0	106%	1.3%
Dibromomethane	48.2	50.0	96.4%	50.8	50.0	102%	5.3%
1,1,1,2-Tetrachloroethane	52.3	50.0	105%	51.9	50.0	104%	0.8%
1,2-Dibromo-3-chloropropane	43.7	50.0	87.4%	45.0	50.0	90.0%	2.9%
1,2,3-Trichloropropane	52.6	50.0	105%	53.9	50.0	108%	2.4%
trans-1,4-Dichloro-2-butene	50.0	50.0	100%	50.8	50.0	102%	1.6%
1,3,5-Trimethylbenzene	53.6	50.0	107%	51.2	50.0	102%	4.6%
1,2,4-Trimethylbenzene	54.5	50.0	109%	52.3	50.0	105%	4.1%
Hexachlorobutadiene	51.8	50.0	104%	51.8	50.0	104%	0.0%
Ethylene Dibromide	49.9	50.0	99.8%	49.6	50.0	99.2%	0.6%
Bromochloromethane	52.6	50.0	105%	53.2	50.0	106%	1.1%
2,2-Dichloropropane	54.5	50.0	109%	53.1	50.0	106%	2.6%
1,3-Dichloropropane	52.9	50.0	106%	54.0	50.0	108%	2.1%
Isopropylbenzene	52.8	50.0	106%	50.6	50.0	101%	4.3%
n-Propylbenzene	53.7	50.0	107%	51.1	50.0	102%	5.0%
Bromobenzene	48.1	50.0	96.2%	47.1	50.0	94.2%	2.1%
2-Chlorotoluene	51.7	50.0	103%	48.2	50.0	96.4%	7.0%
4-Chlorotoluene	54.2	50.0	108%	53.5	50.0	107%	1.3%
tert-Butylbenzene	49.8	50.0	99.6%	49.5	50.0	99.0%	0.6%
sec-Butylbenzene	51.8	50.0	104%	50.0	50.0	100%	3.5%
4-Isopropyltoluene	54.6	50.0	109%	52.8	50.0	106%	3.4%
n-Butylbenzene	54.4	50.0	109%	51.9	50.0	104%	4.7%
1,2,4-Trichlorobenzene	53.0	50.0	106%	52.2	50.0	104%	1.5%
Naphthalene	44.8	50.0	89.6%	46.0	50.0	92.0%	2.6%
1,2,3-Trichlorobenzene	51.6	50.0	103%	51.8	50.0	104%	0.4%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	109%	109%
d8-Toluene	97.2%	98.4%
Bromofluorobenzene	101%	100%
d4-1,2-Dichlorobenzene	98.7%	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
 METHOD BLANK

Lab Sample ID: MB-080708
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/07/08 10:14

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0	U
1330-20-7	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-080708**
 METHOD BLANK

Lab Sample ID: MB-080708 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19395 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/07/08 10:14

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	99.2%
Bromofluorobenzene	95.5%
d4-1,2-Dichlorobenzene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
 METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/12/08 12:22

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	2.0	< 2.0	U
1330-20-7	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
 METHOD BLANK

Lab Sample ID: MB-081208 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19405 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/12/08 12:22

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	96.7%
Bromofluorobenzene	93.2%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
 METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 08/15/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/PAB
Date Analyzed: 08/12/08 12:22

Sample Amount: 100 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	50	< 50	U
74-83-9	Bromomethane	50	< 50	U
75-01-4	Vinyl Chloride	50	< 50	U
75-00-3	Chloroethane	50	< 50	U
75-09-2	Methylene Chloride	100	< 100	U
67-64-1	Acetone	250	< 250	U
75-15-0	Carbon Disulfide	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
75-34-3	1,1-Dichloroethane	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
67-66-3	Chloroform	50	< 50	U
107-06-2	1,2-Dichloroethane	50	< 50	U
78-93-3	2-Butanone	250	< 250	U
71-55-6	1,1,1-Trichloroethane	50	< 50	U
56-23-5	Carbon Tetrachloride	50	< 50	U
108-05-4	Vinyl Acetate	250	< 250	U
75-27-4	Bromodichloromethane	50	< 50	U
78-87-5	1,2-Dichloropropane	50	< 50	U
10061-01-5	cis-1,3-Dichloropropene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
124-48-1	Dibromochloromethane	50	< 50	U
79-00-5	1,1,2-Trichloroethane	50	< 50	U
71-43-2	Benzene	50	< 50	U
10061-02-6	trans-1,3-Dichloropropene	50	< 50	U
110-75-8	2-Chloroethylvinylether	250	< 250	U
75-25-2	Bromoform	50	< 50	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250	< 250	U
591-78-6	2-Hexanone	250	< 250	U
127-18-4	Tetrachloroethene	50	< 50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	< 50	U
108-88-3	Toluene	50	< 50	U
108-90-7	Chlorobenzene	50	< 50	U
100-41-4	Ethylbenzene	50	< 50	U
100-42-5	Styrene	50	< 50	U
75-69-4	Trichlorofluoromethane	50	< 50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroe	100	< 100	U
1330-20-7	m,p-Xylene	50	< 50	U
95-47-6	o-Xylene	50	< 50	U
95-50-1	1,2-Dichlorobenzene	50	< 50	U
541-73-1	1,3-Dichlorobenzene	50	< 50	U
106-46-7	1,4-Dichlorobenzene	50	< 50	U
107-02-8	Acrolein	2,500	< 2,500	U
74-88-4	Methyl Iodide	50	< 50	U
74-96-4	Bromoethane	100	< 100	U
107-13-1	Acrylonitrile	250	< 250	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-081208**
 METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19398
Matrix: Soil
Date Analyzed: 08/12/08 12:22

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result	Q
563-58-6	1,1-Dichloropropene	50	< 50	U
74-95-3	Dibromomethane	50	< 50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	< 50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	< 250	U
96-18-4	1,2,3-Trichloropropane	100	< 100	U
110-57-6	trans-1,4-Dichloro-2-butene	250	< 250	U
108-67-8	1,3,5-Trimethylbenzene	50	< 50	U
95-63-6	1,2,4-Trimethylbenzene	50	< 50	U
87-68-3	Hexachlorobutadiene	250	< 250	U
106-93-4	Ethylene Dibromide	50	< 50	U
74-97-5	Bromochloromethane	50	< 50	U
594-20-7	2,2-Dichloropropane	50	< 50	U
142-28-9	1,3-Dichloropropane	50	< 50	U
98-82-8	Isopropylbenzene	50	< 50	U
103-65-1	n-Propylbenzene	50	< 50	U
108-86-1	Bromobenzene	50	< 50	U
95-49-8	2-Chlorotoluene	50	< 50	U
106-43-4	4-Chlorotoluene	50	< 50	U
98-06-6	tert-Butylbenzene	50	< 50	U
135-98-8	sec-Butylbenzene	50	< 50	U
99-87-6	4-Isopropyltoluene	50	< 50	U
104-51-8	n-Butylbenzene	50	< 50	U
120-82-1	1,2,4-Trichlorobenzene	250	< 250	U
91-20-3	Naphthalene	250	< 250	U
87-61-6	1,2,3-Trichlorobenzene	250	< 250	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	96.7%
Bromofluorobenzene	93.2%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-1-S1
SAMPLE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 14:13
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 4.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	190	< 190 U
111-44-4	Bis-(2-Chloroethyl) Ether	190	< 190 U
95-57-8	2-Chlorophenol	190	< 190 U
541-73-1	1,3-Dichlorobenzene	190	< 190 U
106-46-7	1,4-Dichlorobenzene	190	< 190 U
100-51-6	Benzyl Alcohol	190	< 190 U
95-50-1	1,2-Dichlorobenzene	190	< 190 U
95-48-7	2-Methylphenol	190	< 190 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	190	< 190 U
106-44-5	4-Methylphenol	190	< 190 U
621-64-7	N-Nitroso-Di-N-Propylamine	940	< 940 U
67-72-1	Hexachloroethane	190	< 190 U
98-95-3	Nitrobenzene	190	< 190 U
78-59-1	Isophorone	190	< 190 U
88-75-5	2-Nitrophenol	190	< 190 U
105-67-9	2,4-Dimethylphenol	190	< 190 U
65-85-0	Benzoic Acid	1,900	< 1,900 U
111-91-1	bis(2-Chloroethoxy) Methane	190	< 190 U
120-83-2	2,4-Dichlorophenol	940	< 940 U
120-82-1	1,2,4-Trichlorobenzene	190	< 190 U
91-20-3	**Naphthalene**	**190**	**420**
106-47-8	4-Chloroaniline	940	< 940 U
87-68-3	Hexachlorobutadiene	190	< 190 U
59-50-7	4-Chloro-3-methylphenol	940	< 940 U
91-57-6	2-Methylnaphthalene	190	< 190 U
77-47-4	Hexachlorocyclopentadiene	940	< 940 U
88-06-2	2,4,6-Trichlorophenol	940	< 940 U
95-95-4	2,4,5-Trichlorophenol	940	< 940 U
91-58-7	2-Chloronaphthalene	190	< 190 U
88-74-4	2-Nitroaniline	940	< 940 U
131-11-3	Dimethylphthalate	190	< 190 U
208-96-8	Acenaphthylene	190	< 190 U
99-09-2	3-Nitroaniline	940	< 940 U
83-32-9	Acenaphthene	190	< 190 U
51-28-5	2,4-Dinitrophenol	1,900	< 1,900 U
100-02-7	4-Nitrophenol	940	< 940 U
132-64-9	**Dibenzofuran**	**190**	**250**
606-20-2	2,6-Dinitrotoluene	940	< 940 U
121-14-2	2,4-Dinitrotoluene	940	< 940 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-1-S1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45A QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19394 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 14:13

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	190	< 190 U
7005-72-3	4-Chlorophenyl-phenylether	190	< 190 U
86-73-7	**Fluorene**	**190**	**300**
100-01-6	4-Nitroaniline	940	< 940 U
534-52-1	4,6-Dinitro-2-Methylphenol	1,900	< 1,900 U
86-30-6	N-Nitrosodiphenylamine	190	< 190 U
101-55-3	4-Bromophenyl-phenylether	190	< 190 U
118-74-1	Hexachlorobenzene	190	< 190 U
87-86-5	Pentachlorophenol	940	< 940 U
85-01-8	**Phenanthrene**	**190**	**2,100**
86-74-8	**Carbazole**	**190**	**240**
120-12-7	**Anthracene**	**190**	**340**
84-74-2	Di-n-Butylphthalate	190	< 190 U
206-44-0	**Fluoranthene**	**190**	**2,200**
129-00-0	**Pyrene**	**190**	**1,800**
85-68-7	**Butylbenzylphthalate**	**190**	**200**
91-94-1	3,3'-Dichlorobenzidine	940	< 940 U
56-55-3	**Benzo(a)anthracene**	**190**	**630**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**190**	**1,800**
218-01-9	**Chrysene**	**190**	**800**
117-84-0	Di-n-Octyl phthalate	190	< 190 U
205-99-2	**Benzo(b)fluoranthene**	**190**	**860**
207-08-9	**Benzo(k)fluoranthene**	**190**	**680**
50-32-8	**Benzo(a)pyrene**	**190**	**700**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**190**	**330**
53-70-3	Dibenz(a,h)anthracene	190	< 190 U
191-24-2	**Benzo(g,h,i)perylene**	**190**	**400**
90-12-0	1-Methylnaphthalene	190	< 190 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.8%	2-Fluorobiphenyl	71.3%
d14-p-Terphenyl	85.4%	d4-1,2-Dichlorobenzene	65.8%
d5-Phenol	69.4%	2-Fluorophenol	60.1%
2,4,6-Tribromophenol	68.4%	d4-2-Chlorophenol	65.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-1-S2
SAMPLE

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 14:47
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.54 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 6.8%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	58	< 58 U
111-44-4	Bis-(2-Chloroethyl) Ether	58	< 58 U
95-57-8	2-Chlorophenol	58	< 58 U
541-73-1	1,3-Dichlorobenzene	58	< 58 U
106-46-7	1,4-Dichlorobenzene	58	< 58 U
100-51-6	Benzyl Alcohol	58	< 58 U
95-50-1	1,2-Dichlorobenzene	58	< 58 U
95-48-7	2-Methylphenol	58	< 58 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	58	< 58 U
106-44-5	4-Methylphenol	58	< 58 U
621-64-7	N-Nitroso-Di-N-Propylamine	290	< 290 U
67-72-1	Hexachloroethane	58	< 58 U
98-95-3	Nitrobenzene	58	< 58 U
78-59-1	Isophorone	58	< 58 U
88-75-5	2-Nitrophenol	58	< 58 U
105-67-9	2,4-Dimethylphenol	58	< 58 U
65-85-0	Benzoic Acid	580	< 580 U
111-91-1	bis(2-Chloroethoxy) Methane	58	< 58 U
120-83-2	2,4-Dichlorophenol	290	< 290 U
120-82-1	1,2,4-Trichlorobenzene	58	< 58 U
91-20-3	Naphthalene	58	< 58 U
106-47-8	4-Chloroaniline	290	< 290 U
87-68-3	Hexachlorobutadiene	58	< 58 U
59-50-7	4-Chloro-3-methylphenol	290	< 290 U
91-57-6	2-Methylnaphthalene	58	< 58 U
77-47-4	Hexachlorocyclopentadiene	290	< 290 U
88-06-2	2,4,6-Trichlorophenol	290	< 290 U
95-95-4	2,4,5-Trichlorophenol	290	< 290 U
91-58-7	2-Chloronaphthalene	58	< 58 U
88-74-4	2-Nitroaniline	290	< 290 U
131-11-3	Dimethylphthalate	58	< 58 U
208-96-8	Acenaphthylene	58	< 58 U
99-09-2	3-Nitroaniline	290	< 290 U
83-32-9	Acenaphthene	58	< 58 U
51-28-5	2,4-Dinitrophenol	580	< 580 U
100-02-7	4-Nitrophenol	290	< 290 U
132-64-9	Dibenzofuran	58	< 58 U
606-20-2	2,6-Dinitrotoluene	290	< 290 U
121-14-2	2,4-Dinitrotoluene	290	< 290 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-1-S2**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45B QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19395 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 14:47

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	58	< 58 U
7005-72-3	4-Chlorophenyl-phenylether	58	< 58 U
86-73-7	Fluorene	58	< 58 U
100-01-6	4-Nitroaniline	290	< 290 U
534-52-1	4,6-Dinitro-2-Methylphenol	580	< 580 U
86-30-6	N-Nitrosodiphenylamine	58	< 58 U
101-55-3	4-Bromophenyl-phenylether	58	< 58 U
118-74-1	Hexachlorobenzene	58	< 58 U
87-86-5	Pentachlorophenol	290	< 290 U
85-01-8	Phenanthrene	58	< 58 U
86-74-8	Carbazole	58	< 58 U
120-12-7	Anthracene	58	< 58 U
84-74-2	Di-n-Butylphthalate	58	< 58 U
206-44-0	Fluoranthene	58	< 58 U
129-00-0	Pyrene	58	< 58 U
85-68-7	Butylbenzylphthalate	58	< 58 U
91-94-1	3,3'-Dichlorobenzidine	290	< 290 U
56-55-3	Benzo(a)anthracene	58	< 58 U
117-81-7	bis(2-Ethylhexyl)phthalate	58	< 58 U
218-01-9	Chrysene	58	< 58 U
117-84-0	Di-n-Octyl phthalate	58	< 58 U
205-99-2	Benzo(b)fluoranthene	58	< 58 U
207-08-9	Benzo(k)fluoranthene	58	< 58 U
50-32-8	Benzo(a)pyrene	58	< 58 U
193-39-5	Indeno(1,2,3-cd)pyrene	58	< 58 U
53-70-3	Dibenz(a,h)anthracene	58	< 58 U
191-24-2	Benzo(g,h,i)perylene	58	< 58 U
90-12-0	1-Methylnaphthalene	58	< 58 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.6%	2-Fluorobiphenyl	75.6%
d14-p-Terphenyl	91.2%	d4-1,2-Dichlorobenzene	76.8%
d5-Phenol	78.9%	2-Fluorophenol	73.6%
2,4,6-Tribromophenol	88.5%	d4-2-Chlorophenol	74.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-2-S1
SAMPLE

Lab Sample ID: NJ45C
LIMS ID: 08-19396
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 15:21
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 6.73 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 9.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	220	< 220 U
111-44-4	Bis-(2-Chloroethyl) Ether	220	< 220 U
95-57-8	2-Chlorophenol	220	< 220 U
541-73-1	1,3-Dichlorobenzene	220	< 220 U
106-46-7	1,4-Dichlorobenzene	220	< 220 U
100-51-6	Benzyl Alcohol	220	< 220 U
95-50-1	1,2-Dichlorobenzene	220	< 220 U
95-48-7	2-Methylphenol	220	< 220 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	220	< 220 U
106-44-5	4-Methylphenol	220	< 220 U
621-64-7	N-Nitroso-Di-N-Propylamine	1,100	< 1,100 U
67-72-1	Hexachloroethane	220	< 220 U
98-95-3	Nitrobenzene	220	< 220 U
78-59-1	Isophorone	220	< 220 U
88-75-5	2-Nitrophenol	220	< 220 U
105-67-9	2,4-Dimethylphenol	220	< 220 U
65-85-0	Benzoic Acid	2,200	< 2,200 U
111-91-1	bis(2-Chloroethoxy) Methane	220	< 220 U
120-83-2	2,4-Dichlorophenol	1,100	< 1,100 U
120-82-1	1,2,4-Trichlorobenzene	220	< 220 U
91-20-3	**Naphthalene**	**220**	**840**
106-47-8	4-Chloroaniline	1,100	< 1,100 U
87-68-3	Hexachlorobutadiene	220	< 220 U
59-50-7	4-Chloro-3-methylphenol	1,100	< 1,100 U
91-57-6	**2-Methylnaphthalene**	**220**	**580**
77-47-4	Hexachlorocyclopentadiene	1,100	< 1,100 U
88-06-2	2,4,6-Trichlorophenol	1,100	< 1,100 U
95-95-4	2,4,5-Trichlorophenol	1,100	< 1,100 U
91-58-7	2-Chloronaphthalene	220	< 220 U
88-74-4	2-Nitroaniline	1,100	< 1,100 U
131-11-3	Dimethylphthalate	220	< 220 U
208-96-8	Acenaphthylene	220	< 220 U
99-09-2	3-Nitroaniline	1,100	< 1,100 U
83-32-9	**Acenaphthene**	**220**	**2,400**
51-28-5	2,4-Dinitrophenol	2,200	< 2,200 U
100-02-7	4-Nitrophenol	1,100	< 1,100 U
132-64-9	**Dibenzofuran**	**220**	**1,200**
606-20-2	2,6-Dinitrotoluene	1,100	< 1,100 U
121-14-2	2,4-Dinitrotoluene	1,100	< 1,100 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-2-S1
SAMPLE

Lab Sample ID: NJ45C
LIMS ID: 08-19396
Matrix: Soil
Date Analyzed: 08/20/08 15:21

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	220	< 220 U
7005-72-3	4-Chlorophenyl-phenylether	220	< 220 U
86-73-7	**Fluorene**	**220**	**1,900**
100-01-6	4-Nitroaniline	1,100	< 1,100 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,200	< 2,200 U
86-30-6	N-Nitrosodiphenylamine	290	< 290 Y
101-55-3	4-Bromophenyl-phenylether	220	< 220 U
118-74-1	Hexachlorobenzene	220	< 220 U
87-86-5	Pentachlorophenol	1,100	< 1,100 U
85-01-8	**Phenanthrene**	**220**	**5,200**
86-74-8	**Carbazole**	**220**	**700**
120-12-7	**Anthracene**	**220**	**2,000**
84-74-2	Di-n-Butylphthalate	220	< 220 U
206-44-0	**Fluoranthene**	**220**	**3,800**
129-00-0	**Pyrene**	**220**	**4,600**
85-68-7	Butylbenzylphthalate	220	< 220 U
91-94-1	3,3'-Dichlorobenzidine	1,100	< 1,100 U
56-55-3	**Benzo(a)anthracene**	**220**	**770**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**220**	**650**
218-01-9	**Chrysene**	**220**	**1,000**
117-84-0	Di-n-Octyl phthalate	220	< 220 U
205-99-2	**Benzo(b)fluoranthene**	**220**	**430**
207-08-9	**Benzo(k)fluoranthene**	**220**	**500**
50-32-8	**Benzo(a)pyrene**	**220**	**430**
193-39-5	Indeno(1,2,3-cd)pyrene	220	< 220 U
53-70-3	Dibenz(a,h)anthracene	220	< 220 U
191-24-2	Benzo(g,h,i)perylene	220	< 220 U
90-12-0	**1-Methylnaphthalene**	**220**	**760**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.8%	2-Fluorobiphenyl	71.4%
d14-p-Terphenyl	88.1%	d4-1,2-Dichlorobenzene	69.8%
d5-Phenol	72.6%	2-Fluorophenol	65.0%
2,4,6-Tribromophenol	80.8%	d4-2-Chlorophenol	70.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-3-S1
SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 15:55
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.17 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 20.4%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	180	< 180 U
111-44-4	Bis-(2-Chloroethyl) Ether	180	< 180 U
95-57-8	2-Chlorophenol	180	< 180 U
541-73-1	1,3-Dichlorobenzene	180	< 180 U
106-46-7	1,4-Dichlorobenzene	180	< 180 U
100-51-6	Benzyl Alcohol	180	< 180 U
95-50-1	1,2-Dichlorobenzene	180	< 180 U
95-48-7	2-Methylphenol	180	< 180 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	180	< 180 U
106-44-5	**4-Methylphenol**	**180**	**860**
621-64-7	N-Nitroso-Di-N-Propylamine	920	< 920 U
67-72-1	Hexachloroethane	180	< 180 U
98-95-3	Nitrobenzene	180	< 180 U
78-59-1	Isophorone	180	< 180 U
88-75-5	2-Nitrophenol	180	< 180 U
105-67-9	**2,4-Dimethylphenol**	**180**	**1,100**
65-85-0	Benzoic Acid	1,800	< 1,800 U
111-91-1	bis(2-Chloroethoxy) Methane	180	< 180 U
120-83-2	2,4-Dichlorophenol	920	< 920 U
120-82-1	1,2,4-Trichlorobenzene	180	< 180 U
91-20-3	**Naphthalene**	**180**	**2,400**
106-47-8	4-Chloroaniline	920	< 920 U
87-68-3	Hexachlorobutadiene	180	< 180 U
59-50-7	4-Chloro-3-methylphenol	920	< 920 U
91-57-6	**2-Methylnaphthalene**	**180**	**1,100**
77-47-4	Hexachlorocyclopentadiene	920	< 920 U
88-06-2	2,4,6-Trichlorophenol	920	< 920 U
95-95-4	2,4,5-Trichlorophenol	920	< 920 U
91-58-7	2-Chloronaphthalene	180	< 180 U
88-74-4	2-Nitroaniline	920	< 920 U
131-11-3	Dimethylphthalate	180	< 180 U
208-96-8	Acenaphthylene	180	< 180 U
99-09-2	3-Nitroaniline	920	< 920 U
83-32-9	**Acenaphthene**	**180**	**1,000**
51-28-5	2,4-Dinitrophenol	1,800	< 1,800 U
100-02-7	4-Nitrophenol	920	< 920 U
132-64-9	**Dibenzofuran**	**180**	**840**
606-20-2	2,6-Dinitrotoluene	920	< 920 U
121-14-2	2,4-Dinitrotoluene	920	< 920 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-3-S1**
 SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Date Analyzed: 08/20/08 15:55

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	180	< 180 U
7005-72-3	4-Chlorophenyl-phenylether	180	< 180 U
86-73-7	**Fluorene**	**180**	**790**
100-01-6	4-Nitroaniline	920	< 920 U
534-52-1	4,6-Dinitro-2-Methylphenol	1,800	< 1,800 U
86-30-6	N-Nitrosodiphenylamine	180	< 180 U
101-55-3	4-Bromophenyl-phenylether	180	< 180 U
118-74-1	Hexachlorobenzene	180	< 180 U
87-86-5	Pentachlorophenol	920	< 920 U
85-01-8	**Phenanthrene**	**180**	**3,100**
86-74-8	**Carbazole**	**180**	**320**
120-12-7	**Anthracene**	**180**	**1,300**
84-74-2	Di-n-Butylphthalate	180	< 180 U
206-44-0	**Fluoranthene**	**180**	**3,000**
129-00-0	**Pyrene**	**180**	**3,400**
85-68-7	Butylbenzylphthalate	180	< 180 U
91-94-1	3,3'-Dichlorobenzidine	920	< 920 U
56-55-3	**Benzo(a)anthracene**	**180**	**740**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**180**	**220**
218-01-9	**Chrysene**	**180**	**1,100**
117-84-0	Di-n-Octyl phthalate	180	< 180 U
205-99-2	**Benzo(b)fluoranthene**	**180**	**920**
207-08-9	**Benzo(k)fluoranthene**	**180**	**600**
50-32-8	**Benzo(a)pyrene**	**180**	**580**
193-39-5	Indeno(1,2,3-cd)pyrene	180	< 180 U
53-70-3	Dibenz(a,h)anthracene	180	< 180 U
191-24-2	**Benzo(g,h,i)perylene**	**180**	**200**
90-12-0	**1-Methylnaphthalene**	**180**	**670**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.4%	2-Fluorobiphenyl	66.5%
d14-p-Terphenyl	84.5%	d4-1,2-Dichlorobenzene	58.4%
d5-Phenol	59.5%	2-Fluorophenol	52.3%
2,4,6-Tribromophenol	66.0%	d4-2-Chlorophenol	59.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-3-S2
SAMPLE

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 16:29
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.75 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 14.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	64	< 64 U
111-44-4	Bis-(2-Chloroethyl) Ether	64	< 64 U
95-57-8	2-Chlorophenol	64	< 64 U
541-73-1	1,3-Dichlorobenzene	64	< 64 U
106-46-7	1,4-Dichlorobenzene	64	< 64 U
100-51-6	Benzyl Alcohol	64	< 64 U
95-50-1	1,2-Dichlorobenzene	64	< 64 U
95-48-7	2-Methylphenol	64	< 64 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	64	< 64 U
106-44-5	4-Methylphenol	64	< 64 U
621-64-7	N-Nitroso-Di-N-Propylamine	320	< 320 U
67-72-1	Hexachloroethane	64	< 64 U
98-95-3	Nitrobenzene	64	< 64 U
78-59-1	Isophorone	64	< 64 U
88-75-5	2-Nitrophenol	64	< 64 U
105-67-9	2,4-Dimethylphenol	64	< 64 U
65-85-0	Benzoic Acid	640	< 640 U
111-91-1	bis(2-Chloroethoxy) Methane	64	< 64 U
120-83-2	2,4-Dichlorophenol	320	< 320 U
120-82-1	1,2,4-Trichlorobenzene	64	< 64 U
91-20-3	Naphthalene	64	< 64 U
106-47-8	4-Chloroaniline	320	< 320 U
87-68-3	Hexachlorobutadiene	64	< 64 U
59-50-7	4-Chloro-3-methylphenol	320	< 320 U
91-57-6	2-Methylnaphthalene	64	< 64 U
77-47-4	Hexachlorocyclopentadiene	320	< 320 U
88-06-2	2,4,6-Trichlorophenol	320	< 320 U
95-95-4	2,4,5-Trichlorophenol	320	< 320 U
91-58-7	2-Chloronaphthalene	64	< 64 U
88-74-4	2-Nitroaniline	320	< 320 U
131-11-3	Dimethylphthalate	64	< 64 U
208-96-8	Acenaphthylene	64	< 64 U
99-09-2	3-Nitroaniline	320	< 320 U
83-32-9	Acenaphthene	64	< 64 U
51-28-5	2,4-Dinitrophenol	640	< 640 U
100-02-7	4-Nitrophenol	320	< 320 U
132-64-9	Dibenzofuran	64	< 64 U
606-20-2	2,6-Dinitrotoluene	320	< 320 U
121-14-2	2,4-Dinitrotoluene	320	< 320 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-3-S2**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45F QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19399 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 16:29

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	64	< 64 U
7005-72-3	4-Chlorophenyl-phenylether	64	< 64 U
86-73-7	Fluorene	64	< 64 U
100-01-6	4-Nitroaniline	320	< 320 U
534-52-1	4,6-Dinitro-2-Methylphenol	640	< 640 U
86-30-6	N-Nitrosodiphenylamine	64	< 64 U
101-55-3	4-Bromophenyl-phenylether	64	< 64 U
118-74-1	Hexachlorobenzene	64	< 64 U
87-86-5	Pentachlorophenol	320	< 320 U
85-01-8	Phenanthrene	64	< 64 U
86-74-8	Carbazole	64	< 64 U
120-12-7	Anthracene	64	< 64 U
84-74-2	Di-n-Butylphthalate	64	< 64 U
206-44-0	Fluoranthene	64	< 64 U
129-00-0	Pyrene	64	< 64 U
85-68-7	Butylbenzylphthalate	64	< 64 U
91-94-1	3,3'-Dichlorobenzidine	320	< 320 U
56-55-3	Benzo(a)anthracene	64	< 64 U
117-81-7	bis(2-Ethylhexyl)phthalate	64	< 64 U
218-01-9	Chrysene	64	< 64 U
117-84-0	Di-n-Octyl phthalate	64	< 64 U
205-99-2	Benzo(b)fluoranthene	64	< 64 U
207-08-9	Benzo(k)fluoranthene	64	< 64 U
50-32-8	Benzo(a)pyrene	64	< 64 U
193-39-5	Indeno(1,2,3-cd)pyrene	64	< 64 U
53-70-3	Dibenz(a,h)anthracene	64	< 64 U
191-24-2	Benzo(g,h,i)perylene	64	< 64 U
90-12-0	1-Methylnaphthalene	64	< 64 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.4%	2-Fluorobiphenyl	80.4%
d14-p-Terphenyl	101%	d4-1,2-Dichlorobenzene	83.6%
d5-Phenol	85.3%	2-Fluorophenol	80.5%
2,4,6-Tribromophenol	94.4%	d4-2-Chlorophenol	81.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-4-S1
SAMPLE

Lab Sample ID: NJ45G
LIMS ID: 08-19400
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 17:04
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.17 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 19.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	61	< 61 U
111-44-4	Bis-(2-Chloroethyl) Ether	61	< 61 U
95-57-8	2-Chlorophenol	61	< 61 U
541-73-1	1,3-Dichlorobenzene	61	< 61 U
106-46-7	1,4-Dichlorobenzene	61	< 61 U
100-51-6	Benzyl Alcohol	61	< 61 U
95-50-1	1,2-Dichlorobenzene	61	< 61 U
95-48-7	2-Methylphenol	61	< 61 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	61	< 61 U
106-44-5	4-Methylphenol	61	< 61 U
621-64-7	N-Nitroso-Di-N-Propylamine	310	< 310 U
67-72-1	Hexachloroethane	61	< 61 U
98-95-3	Nitrobenzene	61	< 61 U
78-59-1	Isophorone	61	< 61 U
88-75-5	2-Nitrophenol	61	< 61 U
105-67-9	2,4-Dimethylphenol	61	< 61 U
65-85-0	Benzoic Acid	610	< 610 U
111-91-1	bis(2-Chloroethoxy) Methane	61	< 61 U
120-83-2	2,4-Dichlorophenol	310	< 310 U
120-82-1	1,2,4-Trichlorobenzene	61	< 61 U
91-20-3	Naphthalene	61	< 61 U
106-47-8	4-Chloroaniline	310	< 310 U
87-68-3	Hexachlorobutadiene	61	< 61 U
59-50-7	4-Chloro-3-methylphenol	310	< 310 U
91-57-6	2-Methylnaphthalene	61	< 61 U
77-47-4	Hexachlorocyclopentadiene	310	< 310 U
88-06-2	2,4,6-Trichlorophenol	310	< 310 U
95-95-4	2,4,5-Trichlorophenol	310	< 310 U
91-58-7	2-Chloronaphthalene	61	< 61 U
88-74-4	2-Nitroaniline	310	< 310 U
131-11-3	Dimethylphthalate	61	< 61 U
208-96-8	Acenaphthylene	61	< 61 U
99-09-2	3-Nitroaniline	310	< 310 U
83-32-9	Acenaphthene	61	< 61 U
51-28-5	2,4-Dinitrophenol	610	< 610 U
100-02-7	4-Nitrophenol	310	< 310 U
132-64-9	Dibenzofuran	61	< 61 U
606-20-2	2,6-Dinitrotoluene	310	< 310 U
121-14-2	2,4-Dinitrotoluene	310	< 310 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-4-S1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45G QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19400 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 17:04

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	61	< 61 U
7005-72-3	4-Chlorophenyl-phenylether	61	< 61 U
86-73-7	Fluorene	61	< 61 U
100-01-6	4-Nitroaniline	310	< 310 U
534-52-1	4,6-Dinitro-2-Methylphenol	610	< 610 U
86-30-6	N-Nitrosodiphenylamine	61	< 61 U
101-55-3	4-Bromophenyl-phenylether	61	< 61 U
118-74-1	Hexachlorobenzene	61	< 61 U
87-86-5	Pentachlorophenol	310	< 310 U
85-01-8	Phenanthrene	61	< 61 U
86-74-8	Carbazole	61	< 61 U
120-12-7	Anthracene	61	< 61 U
84-74-2	Di-n-Butylphthalate	61	< 61 U
206-44-0	Fluoranthene	61	< 61 U
129-00-0	Pyrene	61	< 61 U
85-68-7	Butylbenzylphthalate	61	< 61 U
91-94-1	3,3'-Dichlorobenzidine	310	< 310 U
56-55-3	Benzo(a)anthracene	61	< 61 U
117-81-7	bis(2-Ethylhexyl)phthalate	61	< 61 U
218-01-9	Chrysene	61	< 61 U
117-84-0	Di-n-Octyl phthalate	61	< 61 U
205-99-2	Benzo(b)fluoranthene	61	< 61 U
207-08-9	Benzo(k)fluoranthene	61	< 61 U
50-32-8	Benzo(a)pyrene	61	< 61 U
193-39-5	Indeno(1,2,3-cd)pyrene	61	< 61 U
53-70-3	Dibenz(a,h)anthracene	61	< 61 U
191-24-2	Benzo(g,h,i)perylene	61	< 61 U
90-12-0	1-Methylnaphthalene	61	< 61 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.6%	2-Fluorobiphenyl	82.0%
d14-p-Terphenyl	101%	d4-1,2-Dichlorobenzene	80.4%
d5-Phenol	85.6%	2-Fluorophenol	77.9%
2,4,6-Tribromophenol	95.7%	d4-2-Chlorophenol	79.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-5-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45H
LIMS ID: 08-19401
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 17:38
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.58 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 6.0%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	200	< 200 U
111-44-4	Bis-(2-Chloroethyl) Ether	200	< 200 U
95-57-8	2-Chlorophenol	200	< 200 U
541-73-1	1,3-Dichlorobenzene	200	< 200 U
106-46-7	1,4-Dichlorobenzene	200	< 200 U
100-51-6	Benzyl Alcohol	200	< 200 U
95-50-1	1,2-Dichlorobenzene	200	< 200 U
95-48-7	2-Methylphenol	200	< 200 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	200	< 200 U
106-44-5	4-Methylphenol	200	< 200 U
621-64-7	N-Nitroso-Di-N-Propylamine	990	< 990 U
67-72-1	Hexachloroethane	200	< 200 U
98-95-3	Nitrobenzene	200	< 200 U
78-59-1	Isophorone	200	< 200 U
88-75-5	2-Nitrophenol	200	< 200 U
105-67-9	2,4-Dimethylphenol	200	< 200 U
65-85-0	Benzoic Acid	2,000	< 2,000 U
111-91-1	bis(2-Chloroethoxy) Methane	200	< 200 U
120-83-2	2,4-Dichlorophenol	990	< 990 U
120-82-1	1,2,4-Trichlorobenzene	200	< 200 U
91-20-3	Naphthalene	200	< 200 U
106-47-8	4-Chloroaniline	990	< 990 U
87-68-3	Hexachlorobutadiene	200	< 200 U
59-50-7	4-Chloro-3-methylphenol	990	< 990 U
91-57-6	2-Methylnaphthalene	200	< 200 U
77-47-4	Hexachlorocyclopentadiene	990	< 990 U
88-06-2	2,4,6-Trichlorophenol	990	< 990 U
95-95-4	2,4,5-Trichlorophenol	990	< 990 U
91-58-7	2-Chloronaphthalene	200	< 200 U
88-74-4	2-Nitroaniline	990	< 990 U
131-11-3	Dimethylphthalate	200	< 200 U
208-96-8	Acenaphthylene	200	< 200 U
99-09-2	3-Nitroaniline	990	< 990 U
83-32-9	Acenaphthene	200	< 200 U
51-28-5	2,4-Dinitrophenol	2,000	< 2,000 U
100-02-7	4-Nitrophenol	990	< 990 U
132-64-9	Dibenzofuran	200	< 200 U
606-20-2	2,6-Dinitrotoluene	990	< 990 U
121-14-2	2,4-Dinitrotoluene	990	< 990 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-5-S1**
 SAMPLE

Lab Sample ID: NJ45H
LIMS ID: 08-19401
Matrix: Soil
Date Analyzed: 08/20/08 17:38

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	200	< 200 U
7005-72-3	4-Chlorophenyl-phenylether	200	< 200 U
86-73-7	Fluorene	200	< 200 U
100-01-6	4-Nitroaniline	990	< 990 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,000	< 2,000 U
86-30-6	N-Nitrosodiphenylamine	200	< 200 U
101-55-3	4-Bromophenyl-phenylether	200	< 200 U
118-74-1	Hexachlorobenzene	200	< 200 U
87-86-5	Pentachlorophenol	990	< 990 U
85-01-8	Phenanthrene	200	< 200 U
86-74-8	Carbazole	200	< 200 U
120-12-7	Anthracene	200	< 200 U
84-74-2	Di-n-Butylphthalate	200	< 200 U
206-44-0	Fluoranthene	200	< 200 U
129-00-0	Pyrene	200	< 200 U
85-68-7	Butylbenzylphthalate	200	< 200 U
91-94-1	3,3'-Dichlorobenzidine	990	< 990 U
56-55-3	Benzo(a)anthracene	200	< 200 U
117-81-7	bis(2-Ethylhexyl)phthalate	200	< 200 U
218-01-9	Chrysene	200	< 200 U
117-84-0	Di-n-Octyl phthalate	200	< 200 U
205-99-2	Benzo(b)fluoranthene	200	< 200 U
207-08-9	Benzo(k)fluoranthene	200	< 200 U
50-32-8	Benzo(a)pyrene	200	< 200 U
193-39-5	Indeno(1,2,3-cd)pyrene	200	< 200 U
53-70-3	Dibenz(a,h)anthracene	200	< 200 U
191-24-2	Benzo(g,h,i)perylene	200	< 200 U
90-12-0	1-Methylnaphthalene	200	< 200 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.2%	2-Fluorobiphenyl	79.9%
d14-p-Terphenyl	102%	d4-1,2-Dichlorobenzene	74.5%
d5-Phenol	79.8%	2-Fluorophenol	71.4%
2,4,6-Tribromophenol	86.4%	d4-2-Chlorophenol	75.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-6-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 18:12
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.58 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.5%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	58	< 58 U
111-44-4	Bis-(2-Chloroethyl) Ether	58	< 58 U
95-57-8	2-Chlorophenol	58	< 58 U
541-73-1	1,3-Dichlorobenzene	58	< 58 U
106-46-7	1,4-Dichlorobenzene	58	< 58 U
100-51-6	Benzyl Alcohol	58	< 58 U
95-50-1	1,2-Dichlorobenzene	58	< 58 U
95-48-7	2-Methylphenol	58	< 58 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	58	< 58 U
106-44-5	4-Methylphenol	58	< 58 U
621-64-7	N-Nitroso-Di-N-Propylamine	290	< 290 U
67-72-1	Hexachloroethane	58	< 58 U
98-95-3	Nitrobenzene	58	< 58 U
78-59-1	Isophorone	58	< 58 U
88-75-5	2-Nitrophenol	58	< 58 U
105-67-9	2,4-Dimethylphenol	58	< 58 U
65-85-0	Benzoic Acid	580	< 580 U
111-91-1	bis(2-Chloroethoxy) Methane	58	< 58 U
120-83-2	2,4-Dichlorophenol	290	< 290 U
120-82-1	1,2,4-Trichlorobenzene	58	< 58 U
91-20-3	Naphthalene	58	< 58 U
106-47-8	4-Chloroaniline	290	< 290 U
87-68-3	Hexachlorobutadiene	58	< 58 U
59-50-7	4-Chloro-3-methylphenol	290	< 290 U
91-57-6	2-Methylnaphthalene	58	< 58 U
77-47-4	Hexachlorocyclopentadiene	290	< 290 U
88-06-2	2,4,6-Trichlorophenol	290	< 290 U
95-95-4	2,4,5-Trichlorophenol	290	< 290 U
91-58-7	2-Chloronaphthalene	58	< 58 U
88-74-4	2-Nitroaniline	290	< 290 U
131-11-3	Dimethylphthalate	58	< 58 U
208-96-8	Acenaphthylene	58	< 58 U
99-09-2	3-Nitroaniline	290	< 290 U
83-32-9	Acenaphthene	58	< 58 U
51-28-5	2,4-Dinitrophenol	580	< 580 U
100-02-7	4-Nitrophenol	290	< 290 U
132-64-9	Dibenzofuran	58	< 58 U
606-20-2	2,6-Dinitrotoluene	290	< 290 U
121-14-2	2,4-Dinitrotoluene	290	< 290 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-6-S1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45J QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19403 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 18:12

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	58	< 58 U
7005-72-3	4-Chlorophenyl-phenylether	58	< 58 U
86-73-7	Fluorene	58	< 58 U
100-01-6	4-Nitroaniline	290	< 290 U
534-52-1	4,6-Dinitro-2-Methylphenol	580	< 580 U
86-30-6	N-Nitrosodiphenylamine	58	< 58 U
101-55-3	4-Bromophenyl-phenylether	58	< 58 U
118-74-1	Hexachlorobenzene	58	< 58 U
87-86-5	Pentachlorophenol	290	< 290 U
85-01-8	Phenanthrene	58	< 58 U
86-74-8	Carbazole	58	< 58 U
120-12-7	Anthracene	58	< 58 U
84-74-2	Di-n-Butylphthalate	58	< 58 U
206-44-0	Fluoranthene	58	< 58 U
129-00-0	**Pyrene**	**58**	**92**
85-68-7	Butylbenzylphthalate	58	< 58 U
91-94-1	3,3'-Dichlorobenzidine	290	< 290 U
56-55-3	Benzo(a)anthracene	58	< 58 U
117-81-7	bis(2-Ethylhexyl)phthalate	58	< 58 U
218-01-9	Chrysene	58	< 58 U
117-84-0	Di-n-Octyl phthalate	58	< 58 U
205-99-2	**Benzo(b)fluoranthene**	**58**	**68**
207-08-9	Benzo(k)fluoranthene	58	< 58 U
50-32-8	Benzo(a)pyrene	58	< 58 U
193-39-5	Indeno(1,2,3-cd)pyrene	58	< 58 U
53-70-3	Dibenz(a,h)anthracene	58	< 58 U
191-24-2	Benzo(g,h,i)perylene	58	< 58 U
90-12-0	1-Methylnaphthalene	58	< 58 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.0%	2-Fluorobiphenyl	79.2%
d14-p-Terphenyl	103%	d4-1,2-Dichlorobenzene	80.0%
d5-Phenol	84.5%	2-Fluorophenol	76.0%
2,4,6-Tribromophenol	92.5%	d4-2-Chlorophenol	78.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-7-S1
SAMPLE

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 18:47
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 6.43 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 8.9%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	230	< 230 U
111-44-4	Bis-(2-Chloroethyl) Ether	230	< 230 U
95-57-8	2-Chlorophenol	230	< 230 U
541-73-1	1,3-Dichlorobenzene	230	< 230 U
106-46-7	1,4-Dichlorobenzene	230	< 230 U
100-51-6	Benzyl Alcohol	230	< 230 U
95-50-1	1,2-Dichlorobenzene	230	< 230 U
95-48-7	2-Methylphenol	230	< 230 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	230	< 230 U
106-44-5	**4-Methylphenol**	**230**	**670**
621-64-7	N-Nitroso-Di-N-Propylamine	1,200	< 1,200 U
67-72-1	Hexachloroethane	230	< 230 U
98-95-3	Nitrobenzene	230	< 230 U
78-59-1	Isophorone	230	< 230 U
88-75-5	2-Nitrophenol	230	< 230 U
105-67-9	2,4-Dimethylphenol	230	< 230 U
65-85-0	Benzoic Acid	2,300	< 2,300 U
111-91-1	bis(2-Chloroethoxy) Methane	230	< 230 U
120-83-2	2,4-Dichlorophenol	1,200	< 1,200 U
120-82-1	1,2,4-Trichlorobenzene	230	< 230 U
91-20-3	**Naphthalene**	**230**	**440**
106-47-8	4-Chloroaniline	1,200	< 1,200 U
87-68-3	Hexachlorobutadiene	230	< 230 U
59-50-7	4-Chloro-3-methylphenol	1,200	< 1,200 U
91-57-6	**2-Methylnaphthalene**	**230**	**1,700**
77-47-4	Hexachlorocyclopentadiene	1,200	< 1,200 U
88-06-2	2,4,6-Trichlorophenol	1,200	< 1,200 U
95-95-4	2,4,5-Trichlorophenol	1,200	< 1,200 U
91-58-7	2-Chloronaphthalene	230	< 230 U
88-74-4	2-Nitroaniline	1,200	< 1,200 U
131-11-3	Dimethylphthalate	230	< 230 U
208-96-8	Acenaphthylene	230	< 230 U
99-09-2	3-Nitroaniline	1,200	< 1,200 U
83-32-9	**Acenaphthene**	**230**	**300**
51-28-5	2,4-Dinitrophenol	2,300	< 2,300 U
100-02-7	4-Nitrophenol	1,200	< 1,200 U
132-64-9	Dibenzofuran	230	< 230 U
606-20-2	2,6-Dinitrotoluene	1,200	< 1,200 U
121-14-2	2,4-Dinitrotoluene	1,200	< 1,200 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-7-S1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: NJ45L QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19405 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 18:47

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	230	< 230 U
7005-72-3	4-Chlorophenyl-phenylether	230	< 230 U
86-73-7	**Fluorene**	**230**	**430**
100-01-6	4-Nitroaniline	1,200	< 1,200 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,300	< 2,300 U
86-30-6	N-Nitrosodiphenylamine	960	< 960 Y
101-55-3	4-Bromophenyl-phenylether	230	< 230 U
118-74-1	Hexachlorobenzene	230	< 230 U
87-86-5	Pentachlorophenol	1,200	< 1,200 U
85-01-8	**Phenanthrene**	**230**	**1,800**
86-74-8	Carbazole	230	< 230 U
120-12-7	**Anthracene**	**230**	**390**
84-74-2	Di-n-Butylphthalate	230	< 230 U
206-44-0	**Fluoranthene**	**230**	**1,400**
129-00-0	**Pyrene**	**230**	**2,400**
85-68-7	Butylbenzylphthalate	230	< 230 U
91-94-1	3,3'-Dichlorobenzidine	1,200	< 1,200 U
56-55-3	**Benzo(a)anthracene**	**230**	**520**
117-81-7	**bis(2-Ethylhexyl)phthalate**	**230**	**1,100**
218-01-9	**Chrysene**	**230**	**870**
117-84-0	Di-n-Octyl phthalate	230	< 230 U
205-99-2	**Benzo(b)fluoranthene**	**230**	**490**
207-08-9	**Benzo(k)fluoranthene**	**230**	**390**
50-32-8	**Benzo(a)pyrene**	**230**	**440**
193-39-5	Indeno(1,2,3-cd)pyrene	230	< 230 U
53-70-3	Dibenz(a,h)anthracene	230	< 230 U
191-24-2	**Benzo(g,h,i)perylene**	**230**	**240**
90-12-0	**1-Methylnaphthalene**	**230**	**2,000**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.2%	2-Fluorobiphenyl	73.7%
d14-p-Terphenyl	96.5%	d4-1,2-Dichlorobenzene	64.2%
d5-Phenol	62.0%	2-Fluorophenol	29.8%
2,4,6-Tribromophenol	4.6%	d4-2-Chlorophenol	44.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-7-S2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45M
LIMS ID: 08-19406
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 19:21
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.79 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 4.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	64	< 64 U
111-44-4	Bis-(2-Chloroethyl) Ether	64	< 64 U
95-57-8	2-Chlorophenol	64	< 64 U
541-73-1	1,3-Dichlorobenzene	64	< 64 U
106-46-7	1,4-Dichlorobenzene	64	< 64 U
100-51-6	Benzyl Alcohol	64	< 64 U
95-50-1	1,2-Dichlorobenzene	64	< 64 U
95-48-7	2-Methylphenol	64	< 64 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	64	< 64 U
106-44-5	4-Methylphenol	64	< 64 U
621-64-7	N-Nitroso-Di-N-Propylamine	320	< 320 U
67-72-1	Hexachloroethane	64	< 64 U
98-95-3	Nitrobenzene	64	< 64 U
78-59-1	Isophorone	64	< 64 U
88-75-5	2-Nitrophenol	64	< 64 U
105-67-9	2,4-Dimethylphenol	64	< 64 U
65-85-0	Benzoic Acid	640	< 640 U
111-91-1	bis(2-Chloroethoxy) Methane	64	< 64 U
120-83-2	2,4-Dichlorophenol	320	< 320 U
120-82-1	1,2,4-Trichlorobenzene	64	< 64 U
91-20-3	Naphthalene	64	< 64 U
106-47-8	4-Chloroaniline	320	< 320 U
87-68-3	Hexachlorobutadiene	64	< 64 U
59-50-7	4-Chloro-3-methylphenol	320	< 320 U
91-57-6	2-Methylnaphthalene	64	< 64 U
77-47-4	Hexachlorocyclopentadiene	320	< 320 U
88-06-2	2,4,6-Trichlorophenol	320	< 320 U
95-95-4	2,4,5-Trichlorophenol	320	< 320 U
91-58-7	2-Chloronaphthalene	64	< 64 U
88-74-4	2-Nitroaniline	320	< 320 U
131-11-3	Dimethylphthalate	64	< 64 U
208-96-8	Acenaphthylene	64	< 64 U
99-09-2	3-Nitroaniline	320	< 320 U
83-32-9	Acenaphthene	64	< 64 U
51-28-5	2,4-Dinitrophenol	640	< 640 U
100-02-7	4-Nitrophenol	320	< 320 U
132-64-9	Dibenzofuran	64	< 64 U
606-20-2	2,6-Dinitrotoluene	320	< 320 U
121-14-2	2,4-Dinitrotoluene	320	< 320 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-7-S2**
 SAMPLE

Lab Sample ID: NJ45M
LIMS ID: 08-19406
Matrix: Soil
Date Analyzed: 08/20/08 19:21

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	**Diethylphthalate**	**64**	**68**
7005-72-3	4-Chlorophenyl-phenylether	64	< 64 U
86-73-7	Fluorene	64	< 64 U
100-01-6	4-Nitroaniline	320	< 320 U
534-52-1	4,6-Dinitro-2-Methylphenol	640	< 640 U
86-30-6	N-Nitrosodiphenylamine	64	< 64 U
101-55-3	4-Bromophenyl-phenylether	64	< 64 U
118-74-1	Hexachlorobenzene	64	< 64 U
87-86-5	Pentachlorophenol	320	< 320 U
85-01-8	Phenanthrene	64	< 64 U
86-74-8	Carbazole	64	< 64 U
120-12-7	Anthracene	64	< 64 U
84-74-2	Di-n-Butylphthalate	64	< 64 U
206-44-0	Fluoranthene	64	< 64 U
129-00-0	Pyrene	64	< 64 U
85-68-7	Butylbenzylphthalate	64	< 64 U
91-94-1	3,3'-Dichlorobenzidine	320	< 320 U
56-55-3	Benzo(a)anthracene	64	< 64 U
117-81-7	bis(2-Ethylhexyl)phthalate	64	< 64 U
218-01-9	Chrysene	64	< 64 U
117-84-0	Di-n-Octyl phthalate	64	< 64 U
205-99-2	Benzo(b)fluoranthene	64	< 64 U
207-08-9	Benzo(k)fluoranthene	64	< 64 U
50-32-8	Benzo(a)pyrene	64	< 64 U
193-39-5	Indeno(1,2,3-cd)pyrene	64	< 64 U
53-70-3	Dibenz(a,h)anthracene	64	< 64 U
191-24-2	Benzo(g,h,i)perylene	64	< 64 U
90-12-0	1-Methylnaphthalene	64	< 64 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.8%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	92.8%	d4-1,2-Dichlorobenzene	68.8%
d5-Phenol	71.7%	2-Fluorophenol	65.1%
2,4,6-Tribromophenol	81.6%	d4-2-Chlorophenol	66.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-8-S1
SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 19:55
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.66 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 4.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	65	< 65 U
111-44-4	Bis-(2-Chloroethyl) Ether	65	< 65 U
95-57-8	2-Chlorophenol	65	< 65 U
541-73-1	1,3-Dichlorobenzene	65	< 65 U
106-46-7	1,4-Dichlorobenzene	65	< 65 U
100-51-6	Benzyl Alcohol	65	< 65 U
95-50-1	1,2-Dichlorobenzene	65	< 65 U
95-48-7	2-Methylphenol	65	< 65 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	65	< 65 U
106-44-5	4-Methylphenol	65	< 65 U
621-64-7	N-Nitroso-Di-N-Propylamine	330	< 330 U
67-72-1	Hexachloroethane	65	< 65 U
98-95-3	Nitrobenzene	65	< 65 U
78-59-1	Isophorone	65	< 65 U
88-75-5	2-Nitrophenol	65	< 65 U
105-67-9	2,4-Dimethylphenol	65	< 65 U
65-85-0	Benzoic Acid	650	< 650 U
111-91-1	bis(2-Chloroethoxy) Methane	65	< 65 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	65	< 65 U
91-20-3	Naphthalene	65	< 65 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	65	< 65 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	65	< 65 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	65	< 65 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	65	< 65 U
208-96-8	Acenaphthylene	65	< 65 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	65	< 65 U
51-28-5	2,4-Dinitrophenol	650	< 650 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	65	< 65 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-8-S1**
 SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Date Analyzed: 08/20/08 19:55

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	65	< 65 U
7005-72-3	4-Chlorophenyl-phenylether	65	< 65 U
86-73-7	Fluorene	65	< 65 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	650	< 650 U
86-30-6	N-Nitrosodiphenylamine	65	< 65 U
101-55-3	4-Bromophenyl-phenylether	65	< 65 U
118-74-1	Hexachlorobenzene	65	< 65 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	65	< 65 U
86-74-8	Carbazole	65	< 65 U
120-12-7	Anthracene	65	< 65 U
84-74-2	Di-n-Butylphthalate	65	< 65 U
206-44-0	Fluoranthene	65	< 65 U
129-00-0	Pyrene	65	< 65 U
85-68-7	Butylbenzylphthalate	65	< 65 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	65	< 65 U
117-81-7	bis(2-Ethylhexyl)phthalate	65	< 65 U
218-01-9	Chrysene	65	< 65 U
117-84-0	Di-n-Octyl phthalate	65	< 65 U
205-99-2	Benzo(b)fluoranthene	65	< 65 U
207-08-9	Benzo(k)fluoranthene	65	< 65 U
50-32-8	Benzo(a)pyrene	65	< 65 U
193-39-5	Indeno(1,2,3-cd)pyrene	65	< 65 U
53-70-3	Dibenz(a,h)anthracene	65	< 65 U
191-24-2	Benzo(g,h,i)perylene	65	< 65 U
90-12-0	1-Methylnaphthalene	65	< 65 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.0%	2-Fluorobiphenyl	70.0%
d14-p-Terphenyl	98.4%	d4-1,2-Dichlorobenzene	62.8%
d5-Phenol	66.1%	2-Fluorophenol	60.5%
2,4,6-Tribromophenol	89.6%	d4-2-Chlorophenol	61.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-9-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ450
LIMS ID: 08-19408
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 22:18
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.63 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 5.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	66	< 66 U
111-44-4	Bis-(2-Chloroethyl) Ether	66	< 66 U
95-57-8	2-Chlorophenol	66	< 66 U
541-73-1	1,3-Dichlorobenzene	66	< 66 U
106-46-7	1,4-Dichlorobenzene	66	< 66 U
100-51-6	Benzyl Alcohol	66	< 66 U
95-50-1	1,2-Dichlorobenzene	66	< 66 U
95-48-7	2-Methylphenol	66	< 66 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	66	< 66 U
106-44-5	4-Methylphenol	66	< 66 U
621-64-7	N-Nitroso-Di-N-Propylamine	330	< 330 U
67-72-1	Hexachloroethane	66	< 66 U
98-95-3	Nitrobenzene	66	< 66 U
78-59-1	Isophorone	66	< 66 U
88-75-5	2-Nitrophenol	66	< 66 U
105-67-9	2,4-Dimethylphenol	66	< 66 U
65-85-0	Benzoic Acid	660	< 660 U
111-91-1	bis(2-Chloroethoxy) Methane	66	< 66 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	66	< 66 U
91-20-3	Naphthalene	66	< 66 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	66	< 66 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	66	< 66 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	66	< 66 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	66	< 66 U
208-96-8	Acenaphthylene	66	< 66 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	66	< 66 U
51-28-5	2,4-Dinitrophenol	660	< 660 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	66	< 66 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-9-S1**
 SAMPLE

Lab Sample ID: NJ450 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19408 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/21/08 22:18

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	66	< 66 U
7005-72-3	4-Chlorophenyl-phenylether	66	< 66 U
86-73-7	Fluorene	66	< 66 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	660	< 660 U
86-30-6	N-Nitrosodiphenylamine	66	< 66 U
101-55-3	4-Bromophenyl-phenylether	66	< 66 U
118-74-1	Hexachlorobenzene	66	< 66 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	66	< 66 U
86-74-8	Carbazole	66	< 66 U
120-12-7	Anthracene	66	< 66 U
84-74-2	Di-n-Butylphthalate	66	< 66 U
206-44-0	Fluoranthene	66	< 66 U
129-00-0	Pyrene	66	< 66 U
85-68-7	Butylbenzylphthalate	66	< 66 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	66	< 66 U
117-81-7	bis(2-Ethylhexyl)phthalate	66	< 66 U
218-01-9	Chrysene	66	< 66 U
117-84-0	Di-n-Octyl phthalate	66	< 66 U
205-99-2	Benzo(b)fluoranthene	66	< 66 U
207-08-9	Benzo(k)fluoranthene	66	< 66 U
50-32-8	Benzo(a)pyrene	66	< 66 U
193-39-5	Indeno(1,2,3-cd)pyrene	66	< 66 U
53-70-3	Dibenz(a,h)anthracene	66	< 66 U
191-24-2	Benzo(g,h,i)perylene	66	< 66 U
90-12-0	1-Methylnaphthalene	66	< 66 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.0%	2-Fluorobiphenyl	70.0%
d14-p-Terphenyl	86.4%	d4-1,2-Dichlorobenzene	65.2%
d5-Phenol	70.9%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	88.5%	d4-2-Chlorophenol	65.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-10-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 22:12
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.80 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 4.6%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	64	< 64 U
111-44-4	Bis-(2-Chloroethyl) Ether	64	< 64 U
95-57-8	2-Chlorophenol	64	< 64 U
541-73-1	1,3-Dichlorobenzene	64	< 64 U
106-46-7	1,4-Dichlorobenzene	64	< 64 U
100-51-6	Benzyl Alcohol	64	< 64 U
95-50-1	1,2-Dichlorobenzene	64	< 64 U
95-48-7	2-Methylphenol	64	< 64 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	64	< 64 U
106-44-5	4-Methylphenol	64	< 64 U
621-64-7	N-Nitroso-Di-N-Propylamine	320	< 320 U
67-72-1	Hexachloroethane	64	< 64 U
98-95-3	Nitrobenzene	64	< 64 U
78-59-1	Isophorone	64	< 64 U
88-75-5	2-Nitrophenol	64	< 64 U
105-67-9	2,4-Dimethylphenol	64	< 64 U
65-85-0	Benzoic Acid	640	< 640 U
111-91-1	bis(2-Chloroethoxy) Methane	64	< 64 U
120-83-2	2,4-Dichlorophenol	320	< 320 U
120-82-1	1,2,4-Trichlorobenzene	64	< 64 U
91-20-3	Naphthalene	64	< 64 U
106-47-8	4-Chloroaniline	320	< 320 U
87-68-3	Hexachlorobutadiene	64	< 64 U
59-50-7	4-Chloro-3-methylphenol	320	< 320 U
91-57-6	2-Methylnaphthalene	64	< 64 U
77-47-4	Hexachlorocyclopentadiene	320	< 320 U
88-06-2	2,4,6-Trichlorophenol	320	< 320 U
95-95-4	2,4,5-Trichlorophenol	320	< 320 U
91-58-7	2-Chloronaphthalene	64	< 64 U
88-74-4	2-Nitroaniline	320	< 320 U
131-11-3	Dimethylphthalate	64	< 64 U
208-96-8	Acenaphthylene	64	< 64 U
99-09-2	3-Nitroaniline	320	< 320 U
83-32-9	Acenaphthene	64	< 64 U
51-28-5	2,4-Dinitrophenol	640	< 640 U
100-02-7	4-Nitrophenol	320	< 320 U
132-64-9	Dibenzofuran	64	< 64 U
606-20-2	2,6-Dinitrotoluene	320	< 320 U
121-14-2	2,4-Dinitrotoluene	320	< 320 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-10-S1**
 SAMPLE

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Date Analyzed: 08/20/08 22:12

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	64	< 64 U
7005-72-3	4-Chlorophenyl-phenylether	64	< 64 U
86-73-7	Fluorene	64	< 64 U
100-01-6	4-Nitroaniline	320	< 320 U
534-52-1	4,6-Dinitro-2-Methylphenol	640	< 640 U
86-30-6	N-Nitrosodiphenylamine	64	< 64 U
101-55-3	4-Bromophenyl-phenylether	64	< 64 U
118-74-1	Hexachlorobenzene	64	< 64 U
87-86-5	Pentachlorophenol	320	< 320 U
85-01-8	Phenanthrene	64	< 64 U
86-74-8	Carbazole	64	< 64 U
120-12-7	Anthracene	64	< 64 U
84-74-2	Di-n-Butylphthalate	64	< 64 U
206-44-0	Fluoranthene	64	< 64 U
129-00-0	Pyrene	64	< 64 U
85-68-7	Butylbenzylphthalate	64	< 64 U
91-94-1	3,3'-Dichlorobenzidine	320	< 320 U
56-55-3	Benzo(a)anthracene	64	< 64 U
117-81-7	bis(2-Ethylhexyl)phthalate	64	< 64 U
218-01-9	Chrysene	64	< 64 U
117-84-0	Di-n-Octyl phthalate	64	< 64 U
205-99-2	Benzo(b)fluoranthene	64	< 64 U
207-08-9	Benzo(k)fluoranthene	64	< 64 U
50-32-8	Benzo(a)pyrene	64	< 64 U
193-39-5	Indeno(1,2,3-cd)pyrene	64	< 64 U
53-70-3	Dibenz(a,h)anthracene	64	< 64 U
191-24-2	Benzo(g,h,i)perylene	64	< 64 U
90-12-0	1-Methylnaphthalene	64	< 64 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.8%	2-Fluorobiphenyl	72.4%
d14-p-Terphenyl	100%	d4-1,2-Dichlorobenzene	64.4%
d5-Phenol	68.8%	2-Fluorophenol	61.3%
2,4,6-Tribromophenol	88.0%	d4-2-Chlorophenol	62.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-11-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 22:53
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.08 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 20.2%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	62	< 62 U
111-44-4	Bis-(2-Chloroethyl) Ether	62	< 62 U
95-57-8	2-Chlorophenol	62	< 62 U
541-73-1	1,3-Dichlorobenzene	62	< 62 U
106-46-7	1,4-Dichlorobenzene	62	< 62 U
100-51-6	Benzyl Alcohol	62	< 62 U
95-50-1	1,2-Dichlorobenzene	62	< 62 U
95-48-7	2-Methylphenol	62	< 62 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	62	< 62 U
106-44-5	4-Methylphenol	62	< 62 U
621-64-7	N-Nitroso-Di-N-Propylamine	310	< 310 U
67-72-1	Hexachloroethane	62	< 62 U
98-95-3	Nitrobenzene	62	< 62 U
78-59-1	Isophorone	62	< 62 U
88-75-5	2-Nitrophenol	62	< 62 U
105-67-9	2,4-Dimethylphenol	62	< 62 U
65-85-0	Benzoic Acid	620	< 620 U
111-91-1	bis(2-Chloroethoxy) Methane	62	< 62 U
120-83-2	2,4-Dichlorophenol	310	< 310 U
120-82-1	1,2,4-Trichlorobenzene	62	< 62 U
91-20-3	**Naphthalene**	**62**	**260**
106-47-8	4-Chloroaniline	310	< 310 U
87-68-3	Hexachlorobutadiene	62	< 62 U
59-50-7	4-Chloro-3-methylphenol	310	< 310 U
91-57-6	2-Methylnaphthalene	62	< 62 U
77-47-4	Hexachlorocyclopentadiene	310	< 310 U
88-06-2	2,4,6-Trichlorophenol	310	< 310 U
95-95-4	2,4,5-Trichlorophenol	310	< 310 U
91-58-7	2-Chloronaphthalene	62	< 62 U
88-74-4	2-Nitroaniline	310	< 310 U
131-11-3	Dimethylphthalate	62	< 62 U
208-96-8	Acenaphthylene	62	< 62 U
99-09-2	3-Nitroaniline	310	< 310 U
83-32-9	**Acenaphthene**	**62**	**270**
51-28-5	2,4-Dinitrophenol	620	< 620 U
100-02-7	4-Nitrophenol	310	< 310 U
132-64-9	Dibenzofuran	62	< 62 U
606-20-2	2,6-Dinitrotoluene	310	< 310 U
121-14-2	2,4-Dinitrotoluene	310	< 310 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-11-S1**
 SAMPLE

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Date Analyzed: 08/21/08 22:53

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	62	< 62 U
7005-72-3	4-Chlorophenyl-phenylether	62	< 62 U
86-73-7	Fluorene	62	< 62 U
100-01-6	4-Nitroaniline	310	< 310 U
534-52-1	4,6-Dinitro-2-Methylphenol	620	< 620 U
86-30-6	N-Nitrosodiphenylamine	62	< 62 U
101-55-3	4-Bromophenyl-phenylether	62	< 62 U
118-74-1	Hexachlorobenzene	62	< 62 U
87-86-5	Pentachlorophenol	310	< 310 U
85-01-8	Phenanthrene	62	< 62 U
86-74-8	Carbazole	62	< 62 U
120-12-7	Anthracene	62	< 62 U
84-74-2	Di-n-Butylphthalate	62	< 62 U
206-44-0	Fluoranthene	62	< 62 U
129-00-0	Pyrene	62	< 62 U
85-68-7	Butylbenzylphthalate	62	< 62 U
91-94-1	3,3'-Dichlorobenzidine	310	< 310 U
56-55-3	Benzo(a)anthracene	62	< 62 U
117-81-7	bis(2-Ethylhexyl)phthalate	62	< 62 U
218-01-9	Chrysene	62	< 62 U
117-84-0	Di-n-Octyl phthalate	62	< 62 U
205-99-2	Benzo(b)fluoranthene	62	< 62 U
207-08-9	Benzo(k)fluoranthene	62	< 62 U
50-32-8	Benzo(a)pyrene	62	< 62 U
193-39-5	Indeno(1,2,3-cd)pyrene	62	< 62 U
53-70-3	Dibenz(a,h)anthracene	62	< 62 U
191-24-2	Benzo(g,h,i)perylene	62	< 62 U
90-12-0	1-Methylnaphthalene	62	< 62 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.4%	2-Fluorobiphenyl	71.2%
d14-p-Terphenyl	85.2%	d4-1,2-Dichlorobenzene	72.8%
d5-Phenol	69.9%	2-Fluorophenol	68.3%
2,4,6-Tribromophenol	93.3%	d4-2-Chlorophenol	68.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-11-S2**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/22/08 15:32
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.45 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 16.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	59	< 59 U
111-44-4	Bis-(2-Chloroethyl) Ether	59	< 59 U
95-57-8	2-Chlorophenol	59	< 59 U
541-73-1	1,3-Dichlorobenzene	59	< 59 U
106-46-7	1,4-Dichlorobenzene	59	< 59 U
100-51-6	Benzyl Alcohol	59	< 59 U
95-50-1	1,2-Dichlorobenzene	59	< 59 U
95-48-7	2-Methylphenol	59	< 59 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	59	< 59 U
106-44-5	4-Methylphenol	59	< 59 U
621-64-7	N-Nitroso-Di-N-Propylamine	300	< 300 U
67-72-1	Hexachloroethane	59	< 59 U
98-95-3	Nitrobenzene	59	< 59 U
78-59-1	Isophorone	59	< 59 U
88-75-5	2-Nitrophenol	59	< 59 U
105-67-9	2,4-Dimethylphenol	59	< 59 U
65-85-0	Benzoic Acid	590	< 590 U
111-91-1	bis(2-Chloroethoxy) Methane	59	< 59 U
120-83-2	2,4-Dichlorophenol	300	< 300 U
120-82-1	1,2,4-Trichlorobenzene	59	< 59 U
91-20-3	**Naphthalene**	**59**	**94**
106-47-8	4-Chloroaniline	300	< 300 U
87-68-3	Hexachlorobutadiene	59	< 59 U
59-50-7	4-Chloro-3-methylphenol	300	< 300 U
91-57-6	2-Methylnaphthalene	59	< 59 U
77-47-4	Hexachlorocyclopentadiene	300	< 300 U
88-06-2	2,4,6-Trichlorophenol	300	< 300 U
95-95-4	2,4,5-Trichlorophenol	300	< 300 U
91-58-7	2-Chloronaphthalene	59	< 59 U
88-74-4	2-Nitroaniline	300	< 300 U
131-11-3	Dimethylphthalate	59	< 59 U
208-96-8	Acenaphthylene	59	< 59 U
99-09-2	3-Nitroaniline	300	< 300 U
83-32-9	**Acenaphthene**	**59**	**62**
51-28-5	2,4-Dinitrophenol	590	< 590 U
100-02-7	4-Nitrophenol	300	< 300 U
132-64-9	Dibenzofuran	59	< 59 U
606-20-2	2,6-Dinitrotoluene	300	< 300 U
121-14-2	2,4-Dinitrotoluene	300	< 300 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-11-S2**
 SAMPLE

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Date Analyzed: 08/22/08 15:32

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	59	< 59 U
7005-72-3	4-Chlorophenyl-phenylether	59	< 59 U
86-73-7	Fluorene	59	< 59 U
100-01-6	4-Nitroaniline	300	< 300 U
534-52-1	4,6-Dinitro-2-Methylphenol	590	< 590 U
86-30-6	N-Nitrosodiphenylamine	59	< 59 U
101-55-3	4-Bromophenyl-phenylether	59	< 59 U
118-74-1	Hexachlorobenzene	59	< 59 U
87-86-5	Pentachlorophenol	300	< 300 U
85-01-8	**Phenanthrene**	**59**	**75**
86-74-8	Carbazole	59	< 59 U
120-12-7	Anthracene	59	< 59 U
84-74-2	Di-n-Butylphthalate	59	< 59 U
206-44-0	Fluoranthene	59	< 59 U
129-00-0	Pyrene	59	< 59 U
85-68-7	Butylbenzylphthalate	59	< 59 U
91-94-1	3,3'-Dichlorobenzidine	300	< 300 U
56-55-3	Benzo(a)anthracene	59	< 59 U
117-81-7	bis(2-Ethylhexyl)phthalate	59	< 59 U
218-01-9	Chrysene	59	< 59 U
117-84-0	Di-n-Octyl phthalate	59	< 59 U
205-99-2	Benzo(b)fluoranthene	59	< 59 U
207-08-9	Benzo(k)fluoranthene	59	< 59 U
50-32-8	Benzo(a)pyrene	59	< 59 U
193-39-5	Indeno(1,2,3-cd)pyrene	59	< 59 U
53-70-3	Dibenz(a,h)anthracene	59	< 59 U
191-24-2	Benzo(g,h,i)perylene	59	< 59 U
90-12-0	1-Methylnaphthalene	59	< 59 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.0%	2-Fluorobiphenyl	79.2%
d14-p-Terphenyl	95.2%	d4-1,2-Dichlorobenzene	79.6%
d5-Phenol	75.5%	2-Fluorophenol	74.4%
2,4,6-Tribromophenol	96.0%	d4-2-Chlorophenol	75.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-12-S1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 19:59
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.78 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 13.8%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	64	< 64 U
111-44-4	Bis-(2-Chloroethyl) Ether	64	< 64 U
95-57-8	2-Chlorophenol	64	< 64 U
541-73-1	1,3-Dichlorobenzene	64	< 64 U
106-46-7	1,4-Dichlorobenzene	64	< 64 U
100-51-6	Benzyl Alcohol	64	< 64 U
95-50-1	1,2-Dichlorobenzene	64	< 64 U
95-48-7	2-Methylphenol	64	< 64 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	64	< 64 U
106-44-5	4-Methylphenol	64	< 64 U
621-64-7	N-Nitroso-Di-N-Propylamine	320	< 320 U
67-72-1	Hexachloroethane	64	< 64 U
98-95-3	Nitrobenzene	64	< 64 U
78-59-1	Isophorone	64	< 64 U
88-75-5	2-Nitrophenol	64	< 64 U
105-67-9	2,4-Dimethylphenol	64	< 64 U
65-85-0	Benzoic Acid	640	< 640 U
111-91-1	bis(2-Chloroethoxy) Methane	64	< 64 U
120-83-2	2,4-Dichlorophenol	320	< 320 U
120-82-1	1,2,4-Trichlorobenzene	64	< 64 U
91-20-3	Naphthalene	64	< 64 U
106-47-8	4-Chloroaniline	320	< 320 U
87-68-3	Hexachlorobutadiene	64	< 64 U
59-50-7	4-Chloro-3-methylphenol	320	< 320 U
91-57-6	2-Methylnaphthalene	64	< 64 U
77-47-4	Hexachlorocyclopentadiene	320	< 320 U
88-06-2	2,4,6-Trichlorophenol	320	< 320 U
95-95-4	2,4,5-Trichlorophenol	320	< 320 U
91-58-7	2-Chloronaphthalene	64	< 64 U
88-74-4	2-Nitroaniline	320	< 320 U
131-11-3	Dimethylphthalate	64	< 64 U
208-96-8	Acenaphthylene	64	< 64 U
99-09-2	3-Nitroaniline	320	< 320 U
83-32-9	Acenaphthene	64	< 64 U
51-28-5	2,4-Dinitrophenol	640	< 640 U
100-02-7	4-Nitrophenol	320	< 320 U
132-64-9	Dibenzofuran	64	< 64 U
606-20-2	2,6-Dinitrotoluene	320	< 320 U
121-14-2	2,4-Dinitrotoluene	320	< 320 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-12-S1**
 SAMPLE

Lab Sample ID: NJ45S QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19412 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/21/08 19:59

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	64	< 64 U
7005-72-3	4-Chlorophenyl-phenylether	64	< 64 U
86-73-7	Fluorene	64	< 64 U
100-01-6	4-Nitroaniline	320	< 320 U
534-52-1	4,6-Dinitro-2-Methylphenol	640	< 640 U
86-30-6	N-Nitrosodiphenylamine	64	< 64 U
101-55-3	4-Bromophenyl-phenylether	64	< 64 U
118-74-1	Hexachlorobenzene	64	< 64 U
87-86-5	Pentachlorophenol	320	< 320 U
85-01-8	Phenanthrene	64	< 64 U
86-74-8	Carbazole	64	< 64 U
120-12-7	Anthracene	64	< 64 U
84-74-2	Di-n-Butylphthalate	64	< 64 U
206-44-0	Fluoranthene	64	< 64 U
129-00-0	Pyrene	64	< 64 U
85-68-7	Butylbenzylphthalate	64	< 64 U
91-94-1	3,3'-Dichlorobenzidine	320	< 320 U
56-55-3	Benzo(a)anthracene	64	< 64 U
117-81-7	bis(2-Ethylhexyl)phthalate	64	< 64 U
218-01-9	Chrysene	64	< 64 U
117-84-0	Di-n-Octyl phthalate	64	< 64 U
205-99-2	Benzo(b)fluoranthene	64	< 64 U
207-08-9	Benzo(k)fluoranthene	64	< 64 U
50-32-8	Benzo(a)pyrene	64	< 64 U
193-39-5	Indeno(1,2,3-cd)pyrene	64	< 64 U
53-70-3	Dibenz(a,h)anthracene	64	< 64 U
191-24-2	Benzo(g,h,i)perylene	64	< 64 U
90-12-0	1-Methylnaphthalene	64	< 64 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.0%	2-Fluorobiphenyl	77.2%
d14-p-Terphenyl	90.4%	d4-1,2-Dichlorobenzene	79.6%
d5-Phenol	76.8%	2-Fluorophenol	74.1%
2,4,6-Tribromophenol	96.5%	d4-2-Chlorophenol	74.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-13-S1
SAMPLE

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 20:34
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.49 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 5.00
Percent Moisture: 6.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	290	< 290 U
111-44-4	Bis-(2-Chloroethyl) Ether	290	< 290 U
95-57-8	2-Chlorophenol	290	< 290 U
541-73-1	1,3-Dichlorobenzene	290	< 290 U
106-46-7	1,4-Dichlorobenzene	290	< 290 U
100-51-6	Benzyl Alcohol	290	< 290 U
95-50-1	1,2-Dichlorobenzene	290	< 290 U
95-48-7	2-Methylphenol	290	< 290 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	290	< 290 U
106-44-5	4-Methylphenol	290	< 290 U
621-64-7	N-Nitroso-Di-N-Propylamine	1,500	< 1,500 U
67-72-1	Hexachloroethane	290	< 290 U
98-95-3	Nitrobenzene	290	< 290 U
78-59-1	Isophorone	290	< 290 U
88-75-5	2-Nitrophenol	290	< 290 U
105-67-9	2,4-Dimethylphenol	290	< 290 U
65-85-0	Benzoic Acid	2,900	< 2,900 U
111-91-1	bis(2-Chloroethoxy) Methane	290	< 290 U
120-83-2	2,4-Dichlorophenol	1,500	< 1,500 U
120-82-1	1,2,4-Trichlorobenzene	290	< 290 U
91-20-3	Naphthalene	290	< 290 U
106-47-8	4-Chloroaniline	1,500	< 1,500 U
87-68-3	Hexachlorobutadiene	290	< 290 U
59-50-7	4-Chloro-3-methylphenol	1,500	< 1,500 U
91-57-6	2-Methylnaphthalene	290	< 290 U
77-47-4	Hexachlorocyclopentadiene	1,500	< 1,500 U
88-06-2	2,4,6-Trichlorophenol	1,500	< 1,500 U
95-95-4	2,4,5-Trichlorophenol	1,500	< 1,500 U
91-58-7	2-Chloronaphthalene	290	< 290 U
88-74-4	2-Nitroaniline	1,500	< 1,500 U
131-11-3	Dimethylphthalate	290	< 290 U
208-96-8	Acenaphthylene	290	< 290 U
99-09-2	3-Nitroaniline	1,500	< 1,500 U
83-32-9	Acenaphthene	290	< 290 U
51-28-5	2,4-Dinitrophenol	2,900	< 2,900 U
100-02-7	4-Nitrophenol	1,500	< 1,500 U
132-64-9	Dibenzofuran	290	< 290 U
606-20-2	2,6-Dinitrotoluene	1,500	< 1,500 U
121-14-2	2,4-Dinitrotoluene	1,500	< 1,500 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-13-S1**
 SAMPLE

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Date Analyzed: 08/21/08 20:34

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	290	< 290 U
7005-72-3	4-Chlorophenyl-phenylether	290	< 290 U
86-73-7	Fluorene	290	< 290 U
100-01-6	4-Nitroaniline	1,500	< 1,500 U
534-52-1	4,6-Dinitro-2-Methylphenol	2,900	< 2,900 U
86-30-6	N-Nitrosodiphenylamine	290	< 290 U
101-55-3	4-Bromophenyl-phenylether	290	< 290 U
118-74-1	Hexachlorobenzene	290	< 290 U
87-86-5	Pentachlorophenol	1,500	< 1,500 U
85-01-8	Phenanthrene	290	< 290 U
86-74-8	Carbazole	290	< 290 U
120-12-7	Anthracene	290	< 290 U
84-74-2	Di-n-Butylphthalate	290	< 290 U
206-44-0	Fluoranthene	290	< 290 U
129-00-0	Pyrene	290	< 290 U
85-68-7	Butylbenzylphthalate	290	< 290 U
91-94-1	3,3'-Dichlorobenzidine	1,500	< 1,500 U
56-55-3	Benzo(a)anthracene	290	< 290 U
117-81-7	bis(2-Ethylhexyl)phthalate	290	< 290 U
218-01-9	Chrysene	290	< 290 U
117-84-0	Di-n-Octyl phthalate	290	< 290 U
205-99-2	Benzo(b)fluoranthene	290	< 290 U
207-08-9	Benzo(k)fluoranthene	290	< 290 U
50-32-8	Benzo(a)pyrene	290	< 290 U
193-39-5	Indeno(1,2,3-cd)pyrene	290	< 290 U
53-70-3	Dibenz(a,h)anthracene	290	< 290 U
191-24-2	Benzo(g,h,i)perylene	290	< 290 U
90-12-0	1-Methylnaphthalene	290	< 290 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.8%	2-Fluorobiphenyl	75.0%
d14-p-Terphenyl	94.2%	d4-1,2-Dichlorobenzene	65.8%
d5-Phenol	67.3%	2-Fluorophenol	61.3%
2,4,6-Tribromophenol	92.4%	d4-2-Chlorophenol	67.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-13-S2
SAMPLE

Lab Sample ID: NJ45V
LIMS ID: 08-19415
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 21:09
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.65 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 6.2%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	65	< 65 U
111-44-4	Bis-(2-Chloroethyl) Ether	65	< 65 U
95-57-8	2-Chlorophenol	65	< 65 U
541-73-1	1,3-Dichlorobenzene	65	< 65 U
106-46-7	1,4-Dichlorobenzene	65	< 65 U
100-51-6	Benzyl Alcohol	65	< 65 U
95-50-1	1,2-Dichlorobenzene	65	< 65 U
95-48-7	2-Methylphenol	65	< 65 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	65	< 65 U
106-44-5	4-Methylphenol	65	< 65 U
621-64-7	N-Nitroso-Di-N-Propylamine	330	< 330 U
67-72-1	Hexachloroethane	65	< 65 U
98-95-3	Nitrobenzene	65	< 65 U
78-59-1	Isophorone	65	< 65 U
88-75-5	2-Nitrophenol	65	< 65 U
105-67-9	2,4-Dimethylphenol	65	< 65 U
65-85-0	Benzoic Acid	650	< 650 U
111-91-1	bis(2-Chloroethoxy) Methane	65	< 65 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	65	< 65 U
91-20-3	Naphthalene	65	< 65 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	65	< 65 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	65	< 65 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	65	< 65 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	65	< 65 U
208-96-8	Acenaphthylene	65	< 65 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	65	< 65 U
51-28-5	2,4-Dinitrophenol	650	< 650 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	65	< 65 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-13-S2
SAMPLE

Lab Sample ID: NJ45V
LIMS ID: 08-19415
Matrix: Soil
Date Analyzed: 08/21/08 21:09

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	65	< 65 U
7005-72-3	4-Chlorophenyl-phenylether	65	< 65 U
86-73-7	Fluorene	65	< 65 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	650	< 650 U
86-30-6	N-Nitrosodiphenylamine	65	< 65 U
101-55-3	4-Bromophenyl-phenylether	65	< 65 U
118-74-1	Hexachlorobenzene	65	< 65 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	65	< 65 U
86-74-8	Carbazole	65	< 65 U
120-12-7	Anthracene	65	< 65 U
84-74-2	Di-n-Butylphthalate	65	< 65 U
206-44-0	Fluoranthene	65	< 65 U
129-00-0	Pyrene	65	< 65 U
85-68-7	Butylbenzylphthalate	65	< 65 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	65	< 65 U
117-81-7	bis(2-Ethylhexyl)phthalate	65	< 65 U
218-01-9	Chrysene	65	< 65 U
117-84-0	Di-n-Octyl phthalate	65	< 65 U
205-99-2	Benzo(b)fluoranthene	65	< 65 U
207-08-9	Benzo(k)fluoranthene	65	< 65 U
50-32-8	Benzo(a)pyrene	65	< 65 U
193-39-5	Indeno(1,2,3-cd)pyrene	65	< 65 U
53-70-3	Dibenz(a,h)anthracene	65	< 65 U
191-24-2	Benzo(g,h,i)perylene	65	< 65 U
90-12-0	1-Methylnaphthalene	65	< 65 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.4%	2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	90.0%	d4-1,2-Dichlorobenzene	73.2%
d5-Phenol	71.5%	2-Fluorophenol	70.1%
2,4,6-Tribromophenol	95.5%	d4-2-Chlorophenol	69.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-14-S1
SAMPLE

Lab Sample ID: NJ45W
LIMS ID: 08-19416
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/21/08 21:43
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.18 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 14.3%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	61	< 61 U
111-44-4	Bis-(2-Chloroethyl) Ether	61	< 61 U
95-57-8	2-Chlorophenol	61	< 61 U
541-73-1	1,3-Dichlorobenzene	61	< 61 U
106-46-7	1,4-Dichlorobenzene	61	< 61 U
100-51-6	Benzyl Alcohol	61	< 61 U
95-50-1	1,2-Dichlorobenzene	61	< 61 U
95-48-7	2-Methylphenol	61	< 61 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	61	< 61 U
106-44-5	4-Methylphenol	61	< 61 U
621-64-7	N-Nitroso-Di-N-Propylamine	310	< 310 U
67-72-1	Hexachloroethane	61	< 61 U
98-95-3	Nitrobenzene	61	< 61 U
78-59-1	Isophorone	61	< 61 U
88-75-5	2-Nitrophenol	61	< 61 U
105-67-9	2,4-Dimethylphenol	61	< 61 U
65-85-0	Benzoic Acid	610	< 610 U
111-91-1	bis(2-Chloroethoxy) Methane	61	< 61 U
120-83-2	2,4-Dichlorophenol	310	< 310 U
120-82-1	1,2,4-Trichlorobenzene	61	< 61 U
91-20-3	Naphthalene	61	< 61 U
106-47-8	4-Chloroaniline	310	< 310 U
87-68-3	Hexachlorobutadiene	61	< 61 U
59-50-7	4-Chloro-3-methylphenol	310	< 310 U
91-57-6	2-Methylnaphthalene	61	< 61 U
77-47-4	Hexachlorocyclopentadiene	310	< 310 U
88-06-2	2,4,6-Trichlorophenol	310	< 310 U
95-95-4	2,4,5-Trichlorophenol	310	< 310 U
91-58-7	2-Chloronaphthalene	61	< 61 U
88-74-4	2-Nitroaniline	310	< 310 U
131-11-3	Dimethylphthalate	61	< 61 U
208-96-8	Acenaphthylene	61	< 61 U
99-09-2	3-Nitroaniline	310	< 310 U
83-32-9	Acenaphthene	61	< 61 U
51-28-5	2,4-Dinitrophenol	610	< 610 U
100-02-7	4-Nitrophenol	310	< 310 U
132-64-9	Dibenzofuran	61	< 61 U
606-20-2	2,6-Dinitrotoluene	310	< 310 U
121-14-2	2,4-Dinitrotoluene	310	< 310 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-14-S1**
 SAMPLE

Lab Sample ID: NJ45W
LIMS ID: 08-19416
Matrix: Soil
Date Analyzed: 08/21/08 21:43

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	61	< 61 U
7005-72-3	4-Chlorophenyl-phenylether	61	< 61 U
86-73-7	Fluorene	61	< 61 U
100-01-6	4-Nitroaniline	310	< 310 U
534-52-1	4,6-Dinitro-2-Methylphenol	610	< 610 U
86-30-6	N-Nitrosodiphenylamine	61	< 61 U
101-55-3	4-Bromophenyl-phenylether	61	< 61 U
118-74-1	Hexachlorobenzene	61	< 61 U
87-86-5	Pentachlorophenol	310	< 310 U
85-01-8	Phenanthrene	61	< 61 U
86-74-8	Carbazole	61	< 61 U
120-12-7	Anthracene	61	< 61 U
84-74-2	Di-n-Butylphthalate	61	< 61 U
206-44-0	Fluoranthene	61	< 61 U
129-00-0	Pyrene	61	< 61 U
85-68-7	Butylbenzylphthalate	61	< 61 U
91-94-1	3,3'-Dichlorobenzidine	310	< 310 U
56-55-3	Benzo(a)anthracene	61	< 61 U
117-81-7	bis(2-Ethylhexyl)phthalate	61	< 61 U
218-01-9	Chrysene	61	< 61 U
117-84-0	Di-n-Octyl phthalate	61	< 61 U
205-99-2	Benzo(b)fluoranthene	61	< 61 U
207-08-9	Benzo(k)fluoranthene	61	< 61 U
50-32-8	Benzo(a)pyrene	61	< 61 U
193-39-5	Indeno(1,2,3-cd)pyrene	61	< 61 U
53-70-3	Dibenz(a,h)anthracene	61	< 61 U
191-24-2	Benzo(g,h,i)perylene	61	< 61 U
90-12-0	1-Methylnaphthalene	61	< 61 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.0%	2-Fluorobiphenyl	67.2%
d14-p-Terphenyl	81.6%	d4-1,2-Dichlorobenzene	60.8%
d5-Phenol	65.6%	2-Fluorophenol	58.9%
2,4,6-Tribromophenol	87.5%	d4-2-Chlorophenol	61.1%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
EBC-1-S1	61.8%	71.3%	85.4%	65.8%	69.4%	60.1%	68.4%	65.7%	0
EBC-1-S2	67.6%	75.6%	91.2%	76.8%	78.9%	73.6%	88.5%	74.7%	0
EBC-2-S1	66.8%	71.4%	88.1%	69.8%	72.6%	65.0%	80.8%	70.1%	0
EBC-3-S1	56.4%	66.5%	84.5%	58.4%	59.5%	52.3%	66.0%	59.0%	0
EBC-3-S2	74.4%	80.4%	101%	83.6%	85.3%	80.5%	94.4%	81.3%	0
EBC-4-S1	73.6%	82.0%	101%	80.4%	85.6%	77.9%	95.7%	79.7%	0
EBC-5-S1	67.2%	79.9%	102%	74.5%	79.8%	71.4%	86.4%	75.4%	0
EBC-6-S1	72.0%	79.2%	103%	80.0%	84.5%	76.0%	92.5%	78.9%	0
EBC-7-S1	64.2%	73.7%	96.5%	64.2%	62.0%	29.8%*	4.6%*	44.2%	2
EBC-7-S2	60.8%	70.8%	92.8%	68.8%	71.7%	65.1%	81.6%	66.4%	0
MB-081108	69.2%	73.2%	99.2%	74.4%	79.5%	72.8%	77.1%	73.9%	0
LCS-081108	67.2%	81.2%	102%	70.0%	78.4%	72.3%	94.1%	70.1%	0
LCSD-081108	68.8%	82.8%	104%	70.4%	79.5%	72.5%	95.5%	70.4%	0
EBC-8-S1	56.0%	70.0%	98.4%	62.8%	66.1%	60.5%	89.6%	61.6%	0
EBC-8-S1 MS	69.6%	82.4%	115%	73.2%	79.2%	75.2%	99.2%	72.3%	0
EBC-8-S1 MSD	74.8%	87.6%	122%	80.8%	87.2%	82.9%	107%	79.2%	0
EBC-9-S1	60.0%	70.0%	86.4%	65.2%	70.9%	60.3%	88.5%	65.6%	0
EBC-10-S1	58.8%	72.4%	100%	64.4%	68.8%	61.3%	88.0%	62.9%	0
EBC-11-S1	62.4%	71.2%	85.2%	72.8%	69.9%	68.3%	93.3%	68.5%	0
EBC-11-S2	74.0%	79.2%	95.2%	79.6%	75.5%	74.4%	96.0%	75.5%	0
EBC-12-S1	68.0%	77.2%	90.4%	79.6%	76.8%	74.1%	96.5%	74.9%	0
EBC-13-S1	62.8%	75.0%	94.2%	65.8%	67.3%	61.3%	92.4%	67.6%	0
EBC-13-S2	66.4%	71.6%	90.0%	73.2%	71.5%	70.1%	95.5%	69.9%	0
EBC-14-S1	58.0%	67.2%	81.6%	60.8%	65.6%	58.9%	87.5%	61.1%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(30-160)	(30-160)
(FBP) = 2-Fluorobiphenyl	(30-160)	(30-160)
(TPH) = d14-p-Terphenyl	(30-160)	(30-160)
(DCB) = d4-1,2-Dichlorobenzene	(30-160)	(30-160)
(PHL) = d5-Phenol	(30-160)	(30-160)
(2FP) = 2-Fluorophenol	(30-160)	(30-160)
(TBP) = 2,4,6-Tribromophenol	(30-160)	(30-160)
(2CP) = d4-2-Chlorophenol	(30-160)	(30-160)

Prep Method: SW3546
Log Number Range: 08-19394 to 08-19416

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-8-S1
MS/MSD

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted MS/MSD: 08/11/08

Date Analyzed MS: 08/20/08 20:29
MSD: 08/20/08 21:04
Instrument/Analyst MS: NT6/LJR
MSD: NT6/LJR
GPC Cleanup: NO

Sample Amount MS: 7.68 g-dry-wt
MSD: 8.04 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 4.7 %

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 65.3	1190	1630	73.0%	1230	1550	79.4%	3.3%
Bis-(2-Chloroethyl) Ether	< 65.3	1190	1630	73.0%	1230	1550	79.4%	3.3%
2-Chlorophenol	< 65.3	1200	1630	73.6%	1260	1550	81.3%	4.9%
1,3-Dichlorobenzene	< 65.3	1170	1630	71.8%	1220	1550	78.7%	4.2%
1,4-Dichlorobenzene	< 65.3	1170	1630	71.8%	1230	1550	79.4%	5.0%
Benzyl Alcohol	< 65.3	1910	3260	58.6%	1970	3110	63.3%	3.1%
1,2-Dichlorobenzene	< 65.3	1110	1630	68.1%	1140	1550	73.5%	2.7%
2-Methylphenol	< 65.3	1290	1630	79.1%	1330	1550	85.8%	3.1%
2,2'-Oxybis(1-Chloropropane	< 65.3	1170	1630	71.8%	1220	1550	78.7%	4.2%
4-Methylphenol	< 65.3	2630	3260	80.7%	2680	3110	86.2%	1.9%
N-Nitroso-Di-N-Propylamine	< 326	1250	1630	76.7%	1300	1550	83.9%	3.9%
Hexachloroethane	< 65.3	892	1630	54.7%	927	1550	59.8%	3.8%
Nitrobenzene	< 65.3	1150	1630	70.6%	1150	1550	74.2%	0.0%
Isophorone	< 65.3	1450	1630	89.0%	1450	1550	93.5%	0.0%
2-Nitrophenol	< 65.3	1090	1630	66.9%	1140	1550	73.5%	4.5%
2,4-Dimethylphenol	< 65.3	1250	1630	76.7%	1250	1550	80.6%	0.0%
Benzoic Acid	< 653	3780	4880	77.5%	3740	4660	80.3%	1.1%
bis(2-Chloroethoxy) Methane	< 65.3	1300	1630	79.8%	1300	1550	83.9%	0.0%
2,4-Dichlorophenol	< 326	1320	1630	81.0%	1320	1550	85.2%	0.0%
1,2,4-Trichlorobenzene	< 65.3	1120	1630	68.7%	1140	1550	73.5%	1.8%
Naphthalene	< 65.3	1210	1630	74.2%	1230	1550	79.4%	1.6%
4-Chloroaniline	< 326	3660	3910	93.6%	3650	3730	97.9%	0.3%
Hexachlorobutadiene	< 65.3	1050	1630	64.4%	1070	1550	69.0%	1.9%
4-Chloro-3-methylphenol	< 326	1470	1630	90.2%	1480	1550	95.5%	0.7%
2-Methylnaphthalene	< 65.3	1290	1630	79.1%	1280	1550	82.6%	0.8%
Hexachlorocyclopentadiene	< 326	799	4880	16.4%	748	4660	16.1%	6.6%
2,4,6-Trichlorophenol	< 326	1430	1630	87.7%	1440	1550	92.9%	0.7%
2,4,5-Trichlorophenol	< 326	1470	1630	90.2%	1500	1550	96.8%	2.0%
2-Chloronaphthalene	< 65.3	1330	1630	81.6%	1340	1550	86.5%	0.7%
2-Nitroaniline	< 326	1540	1630	94.5%	1550	1550	100%	0.6%
Dimethylphthalate	< 65.3	1400	1630	85.9%	1420	1550	91.6%	1.4%
Acenaphthylene	< 65.3	1490	1630	91.4%	1500	1550	96.8%	0.7%
3-Nitroaniline	< 326	4650	4170	112%	4690	3980	118%	0.9%
Acenaphthene	< 65.3	1360	1630	83.4%	1390	1550	89.7%	2.2%
2,4-Dinitrophenol	< 653	< 651 U	4880	NA	< 622 U	4660	NA	NA
4-Nitrophenol	< 326	1220	1630	74.8%	1340	1550	86.5%	9.4%
Dibenzofuran	< 65.3	1450	1630	89.0%	1480	1550	95.5%	2.0%
2,6-Dinitrotoluene	< 326	1460	1630	89.6%	1500	1550	96.8%	2.7%
2,4-Dinitrotoluene	< 326	1470	1630	90.2%	1520	1550	98.1%	3.3%
Diethylphthalate	< 65.3	1280	1630	78.5%	1300	1550	83.9%	1.6%
4-Chlorophenyl-phenylether	< 65.3	1410	1630	86.5%	1440	1550	92.9%	2.1%
Fluorene	< 65.3	1410	1630	86.5%	1440	1550	92.9%	2.1%
4-Nitroaniline	< 326	1920	1630	118%	1940	1550	125%	1.0%
4,6-Dinitro-2-Methylphenol	< 653	< 651 U	4880	NA	< 622 U	4660	NA	NA
N-Nitrosodiphenylamine	< 65.3	1960	1630	120%	1990	1550	128%	1.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 2 of 2

Sample ID: EBC-8-S1
MS/MSD

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Date Analyzed MS: 08/20/08 20:29
MSD: 08/20/08 21:04

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
4-Bromophenyl-phenylether	< 65.3	1310	1630	80.4%	1340	1550	86.5%	2.3%
Hexachlorobenzene	< 65.3	1320	1630	81.0%	1340	1550	86.5%	1.5%
Pentachlorophenol	< 326	1290	1630	79.1%	1290	1550	83.2%	0.0%
Phenanthrene	< 65.3	1310	1630	80.4%	1330	1550	85.8%	1.5%
Carbazole	< 65.3	1480	1630	90.8%	1490	1550	96.1%	0.7%
Anthracene	< 65.3	1380	1630	84.7%	1380	1550	89.0%	0.0%
Di-n-Butylphthalate	< 65.3	1390	1630	85.3%	1420	1550	91.6%	2.1%
Fluoranthene	< 65.3	1400	1630	85.9%	1420	1550	91.6%	1.4%
Pyrene	< 65.3	1730	1630	106%	1770	1550	114%	2.3%
Butylbenzylphthalate	< 65.3	1720	1630	106%	1760	1550	114%	2.3%
3,3'-Dichlorobenzidine	< 326	4270	4170	102%	4300	3980	108%	0.7%
Benzo(a)anthracene	< 65.3	1540	1630	94.5%	1580	1550	102%	2.6%
bis(2-Ethylhexyl)phthalate	< 65.3	1550	1630	95.1%	1570	1550	101%	1.3%
Chrysene	< 65.3	1410	1630	86.5%	1470	1550	94.8%	4.2%
Di-n-Octyl phthalate	< 65.3	1400	1630	85.9%	1420	1550	91.6%	1.4%
Benzo(b)fluoranthene	< 65.3	1870	1630	115%	1910	1550	123%	2.1%
Benzo(k)fluoranthene	< 65.3	1710	1630	105%	1770	1550	114%	3.4%
Benzo(a)pyrene	< 65.3	1440	1630	88.3%	1460	1550	94.2%	1.4%
Indeno(1,2,3-cd)pyrene	< 65.3	846	1630	51.9%	835	1550	53.9%	1.3%
Dibenz(a,h)anthracene	< 65.3	917	1630	56.3%	884	1550	57.0%	3.7%
Benzo(g,h,i)perylene	< 65.3	803	1630	49.3%	771	1550	49.7%	4.1%
1-Methylnaphthalene	< 65.3	1330	1630	81.6%	1340	1550	86.5%	0.7%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: EBC-8-S1
MATRIX SPIKE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 20:29
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.68 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 4.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	65	---
111-44-4	Bis-(2-Chloroethyl) Ether	65	---
95-57-8	2-Chlorophenol	65	---
541-73-1	1,3-Dichlorobenzene	65	---
106-46-7	1,4-Dichlorobenzene	65	---
100-51-6	Benzyl Alcohol	65	---
95-50-1	1,2-Dichlorobenzene	65	---
95-48-7	2-Methylphenol	65	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	65	---
106-44-5	4-Methylphenol	65	---
621-64-7	N-Nitroso-Di-N-Propylamine	330	---
67-72-1	Hexachloroethane	65	---
98-95-3	Nitrobenzene	65	---
78-59-1	Isophorone	65	---
88-75-5	2-Nitrophenol	65	---
105-67-9	2,4-Dimethylphenol	65	---
65-85-0	Benzoic Acid	650	---
111-91-1	bis(2-Chloroethoxy) Methane	65	---
120-83-2	2,4-Dichlorophenol	330	---
120-82-1	1,2,4-Trichlorobenzene	65	---
91-20-3	Naphthalene	65	---
106-47-8	4-Chloroaniline	330	---
87-68-3	Hexachlorobutadiene	65	---
59-50-7	4-Chloro-3-methylphenol	330	---
91-57-6	2-Methylnaphthalene	65	---
77-47-4	Hexachlorocyclopentadiene	330	---
88-06-2	2,4,6-Trichlorophenol	330	---
95-95-4	2,4,5-Trichlorophenol	330	---
91-58-7	2-Chloronaphthalene	65	---
88-74-4	2-Nitroaniline	330	---
131-11-3	Dimethylphthalate	65	---
208-96-8	Acenaphthylene	65	---
99-09-2	3-Nitroaniline	330	---
83-32-9	Acenaphthene	65	---
51-28-5	2,4-Dinitrophenol	650	---
100-02-7	4-Nitrophenol	330	---
132-64-9	Dibenzofuran	65	---
606-20-2	2,6-Dinitrotoluene	330	---
121-14-2	2,4-Dinitrotoluene	330	---

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: EBC-8-S1**
 MATRIX SPIKE

Lab Sample ID: NJ45N QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19407 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed: 08/20/08 20:29

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	65	---
7005-72-3	4-Chlorophenyl-phenylether	65	---
86-73-7	Fluorene	65	---
100-01-6	4-Nitroaniline	330	---
534-52-1	4,6-Dinitro-2-Methylphenol	650	---
86-30-6	N-Nitrosodiphenylamine	65	---
101-55-3	4-Bromophenyl-phenylether	65	---
118-74-1	Hexachlorobenzene	65	---
87-86-5	Pentachlorophenol	330	---
85-01-8	Phenanthrene	65	---
86-74-8	Carbazole	65	---
120-12-7	Anthracene	65	---
84-74-2	Di-n-Butylphthalate	65	---
206-44-0	Fluoranthene	65	---
129-00-0	Pyrene	65	---
85-68-7	Butylbenzylphthalate	65	---
91-94-1	3,3'-Dichlorobenzidine	330	---
56-55-3	Benzo(a)anthracene	65	---
117-81-7	bis(2-Ethylhexyl)phthalate	65	---
218-01-9	Chrysene	65	---
117-84-0	Di-n-Octyl phthalate	65	---
205-99-2	Benzo(b)fluoranthene	65	---
207-08-9	Benzo(k)fluoranthene	65	---
50-32-8	Benzo(a)pyrene	65	---
193-39-5	Indeno(1,2,3-cd)pyrene	65	---
53-70-3	Dibenz(a,h)anthracene	65	---
191-24-2	Benzo(g,h,i)perylene	65	---
90-12-0	1-Methylnaphthalene	65	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.6%	2-Fluorobiphenyl	82.4%
d14-p-Terphenyl	115%	d4-1,2-Dichlorobenzene	73.2%
d5-Phenol	79.2%	2-Fluorophenol	75.2%
2,4,6-Tribromophenol	99.2%	d4-2-Chlorophenol	72.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-8-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized: 
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 21:04
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 8.04 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 4.7%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	62	---
111-44-4	Bis-(2-Chloroethyl) Ether	62	---
95-57-8	2-Chlorophenol	62	---
541-73-1	1,3-Dichlorobenzene	62	---
106-46-7	1,4-Dichlorobenzene	62	---
100-51-6	Benzyl Alcohol	62	---
95-50-1	1,2-Dichlorobenzene	62	---
95-48-7	2-Methylphenol	62	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	62	---
106-44-5	4-Methylphenol	62	---
621-64-7	N-Nitroso-Di-N-Propylamine	310	---
67-72-1	Hexachloroethane	62	---
98-95-3	Nitrobenzene	62	---
78-59-1	Isophorone	62	---
88-75-5	2-Nitrophenol	62	---
105-67-9	2,4-Dimethylphenol	62	---
65-85-0	Benzoic Acid	620	---
111-91-1	bis(2-Chloroethoxy) Methane	62	---
120-83-2	2,4-Dichlorophenol	310	---
120-82-1	1,2,4-Trichlorobenzene	62	---
91-20-3	Naphthalene	62	---
106-47-8	4-Chloroaniline	310	---
87-68-3	Hexachlorobutadiene	62	---
59-50-7	4-Chloro-3-methylphenol	310	---
91-57-6	2-Methylnaphthalene	62	---
77-47-4	Hexachlorocyclopentadiene	310	---
88-06-2	2,4,6-Trichlorophenol	310	---
95-95-4	2,4,5-Trichlorophenol	310	---
91-58-7	2-Chloronaphthalene	62	---
88-74-4	2-Nitroaniline	310	---
131-11-3	Dimethylphthalate	62	---
208-96-8	Acenaphthylene	62	---
99-09-2	3-Nitroaniline	310	---
83-32-9	Acenaphthene	62	---
51-28-5	2,4-Dinitrophenol	620	---
100-02-7	4-Nitrophenol	310	---
132-64-9	Dibenzofuran	62	---
606-20-2	2,6-Dinitrotoluene	310	---
121-14-2	2,4-Dinitrotoluene	310	---

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: EBC-8-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Date Analyzed: 08/20/08 21:04

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	62	---
7005-72-3	4-Chlorophenyl-phenylether	62	---
86-73-7	Fluorene	62	---
100-01-6	4-Nitroaniline	310	---
534-52-1	4,6-Dinitro-2-Methylphenol	620	---
86-30-6	N-Nitrosodiphenylamine	62	---
101-55-3	4-Bromophenyl-phenylether	62	---
118-74-1	Hexachlorobenzene	62	---
87-86-5	Pentachlorophenol	310	---
85-01-8	Phenanthrene	62	---
86-74-8	Carbazole	62	---
120-12-7	Anthracene	62	---
84-74-2	Di-n-Butylphthalate	62	---
206-44-0	Fluoranthene	62	---
129-00-0	Pyrene	62	---
85-68-7	Butylbenzylphthalate	62	---
91-94-1	3,3'-Dichlorobenzidine	310	---
56-55-3	Benzo(a)anthracene	62	---
117-81-7	bis(2-Ethylhexyl)phthalate	62	---
218-01-9	Chrysene	62	---
117-84-0	Di-n-Octyl phthalate	62	---
205-99-2	Benzo(b)fluoranthene	62	---
207-08-9	Benzo(k)fluoranthene	62	---
50-32-8	Benzo(a)pyrene	62	---
193-39-5	Indeno(1,2,3-cd)pyrene	62	---
53-70-3	Dibenz(a,h)anthracene	62	---
191-24-2	Benzo(g,h,i)perylene	62	---
90-12-0	1-Methylnaphthalene	62	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.8%	2-Fluorobiphenyl	87.6%
d14-p-Terphenyl	122%	d4-1,2-Dichlorobenzene	80.8%
d5-Phenol	87.2%	2-Fluorophenol	82.9%
2,4,6-Tribromophenol	107%	d4-2-Chlorophenol	79.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: LCS-081108
LCS/LCSD

Lab Sample ID: LCS-081108
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted LCS/LCSD: 08/11/08

Date Analyzed LCS: 08/20/08 13:04
LCSD: 08/20/08 13:38
Instrument/Analyst LCS: NT6/LJR
LCSD: NT6/LJR
GPC Cleanup: NO

Sample Amount LCS: 7.50 g
LCSD: 7.50 g
Final Extract Volume LCS: 0.5 mL
LCSD: 0.5 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	1270	1670	76.0%	1280	1670	76.6%	0.8%
Bis-(2-Chloroethyl) Ether	1210	1670	72.5%	1220	1670	73.1%	0.8%
2-Chlorophenol	1210	1670	72.5%	1220	1670	73.1%	0.8%
1,3-Dichlorobenzene	1160	1670	69.5%	1190	1670	71.3%	2.6%
1,4-Dichlorobenzene	1170	1670	70.1%	1170	1670	70.1%	0.0%
Benzyl Alcohol	1930	3330	58.0%	1940	3330	58.3%	0.5%
1,2-Dichlorobenzene	1100	1670	65.9%	1100	1670	65.9%	0.0%
2-Methylphenol	1300	1670	77.8%	1310	1670	78.4%	0.8%
2,2'-Oxybis(1-Chloropropane)	1220	1670	73.1%	1230	1670	73.7%	0.8%
4-Methylphenol	2620	3330	78.7%	2620	3330	78.7%	0.0%
N-Nitroso-Di-N-Propylamine	1280	1670	76.6%	1310	1670	78.4%	2.3%
Hexachloroethane	1030	1670	61.7%	1050	1670	62.9%	1.9%
Nitrobenzene	1160	1670	69.5%	1190	1670	71.3%	2.6%
Isophorone	1470	1670	88.0%	1500	1670	89.8%	2.0%
2-Nitrophenol	1240	1670	74.3%	1280	1670	76.6%	3.2%
2,4-Dimethylphenol	1220	1670	73.1%	1240	1670	74.3%	1.6%
Benzoic Acid	4170	5000	83.4%	4260	5000	85.2%	2.1%
bis(2-Chloroethoxy) Methane	1310	1670	78.4%	1340	1670	80.2%	2.3%
2,4-Dichlorophenol	1270	1670	76.0%	1320	1670	79.0%	3.9%
1,2,4-Trichlorobenzene	1100	1670	65.9%	1130	1670	67.7%	2.7%
Naphthalene	1200	1670	71.9%	1240	1670	74.3%	3.3%
4-Chloroaniline	3050	4000	76.2%	2950	4000	73.8%	3.3%
Hexachlorobutadiene	1050	1670	62.9%	1080	1670	64.7%	2.8%
4-Chloro-3-methylphenol	1430	1670	85.6%	1450	1670	86.8%	1.4%
2-Methylnaphthalene	1240	1670	74.3%	1290	1670	77.2%	4.0%
Hexachlorocyclopentadiene	3920	5000	78.4%	4040	5000	80.8%	3.0%
2,4,6-Trichlorophenol	1430	1670	85.6%	1450	1670	86.8%	1.4%
2,4,5-Trichlorophenol	1500	1670	89.8%	1530	1670	91.6%	2.0%
2-Chloronaphthalene	1360	1670	81.4%	1390	1670	83.2%	2.2%
2-Nitroaniline	1470	1670	88.0%	1480	1670	88.6%	0.7%
Dimethylphthalate	1450	1670	86.8%	1470	1670	88.0%	1.4%
Acenaphthylene	1500	1670	89.8%	1530	1670	91.6%	2.0%
3-Nitroaniline	4210	4270	98.6%	4360	4270	102%	3.5%
Acenaphthene	1370	1670	82.0%	1410	1670	84.4%	2.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCSD-081108**
 LCS/LCSD

Lab Sample ID: LCS-081108 QC Report No: NJ45-Hart Crowser, Inc.
LIMS ID: 08-19407 Project: Pier 23-EBC
Matrix: Soil 17490-01
Date Analyzed LCS: 08/20/08 13:04
LCSD: 08/20/08 13:38

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
2,4-Dinitrophenol	5330	5000	107%	5530	5000	111%	3.7%
4-Nitrophenol	1310	1670	78.4%	1240	1670	74.3%	5.5%
Dibenzofuran	1450	1670	86.8%	1470	1670	88.0%	1.4%
2,6-Dinitrotoluene	1530	1670	91.6%	1570	1670	94.0%	2.6%
2,4-Dinitrotoluene	1580	1670	94.6%	1620	1670	97.0%	2.5%
Diethylphthalate	1340	1670	80.2%	1360	1670	81.4%	1.5%
4-Chlorophenyl-phenylether	1400	1670	83.8%	1430	1670	85.6%	2.1%
Fluorene	1420	1670	85.0%	1450	1670	86.8%	2.1%
4-Nitroaniline	1650	1670	98.8%	1710	1670	102%	3.6%
4,6-Dinitro-2-Methylphenol	4340	5000	86.8%	4450	5000	89.0%	2.5%
N-Nitrosodiphenylamine	2040	1670	122%	2040	1670	122%	0.0%
4-Bromophenyl-phenylether	1390	1670	83.2%	1410	1670	84.4%	1.4%
Hexachlorobenzene	1400	1670	83.8%	1410	1670	84.4%	0.7%
Pentachlorophenol	1380	1670	82.6%	1380	1670	82.6%	0.0%
Phenanthrene	1390	1670	83.2%	1400	1670	83.8%	0.7%
Carbazole	1590	1670	95.2%	1590	1670	95.2%	0.0%
Anthracene	1450	1670	86.8%	1450	1670	86.8%	0.0%
Di-n-Butylphthalate	1530	1670	91.6%	1550	1670	92.8%	1.3%
Fluoranthene	1510	1670	90.4%	1520	1670	91.0%	0.7%
Pyrene	1650	1670	98.8%	1660	1670	99.4%	0.6%
Butylbenzylphthalate	1700	1670	102%	1710	1670	102%	0.6%
3,3'-Dichlorobenzidine	4100	4270	96.0%	4080	4270	95.6%	0.5%
Benzo(a)anthracene	1610	1670	96.4%	1620	1670	97.0%	0.6%
bis(2-Ethylhexyl)phthalate	1580	1670	94.6%	1660	1670	99.4%	4.9%
Chrysene	1520	1670	91.0%	1530	1670	91.6%	0.7%
Di-n-Octyl phthalate	1510	1670	90.4%	1530	1670	91.6%	1.3%
Benzo(b)fluoranthene	1570	1670	94.0%	1430	1670	85.6%	9.3%
Benzo(k)fluoranthene	1350	1670	80.8%	1500	1670	89.8%	10.5%
Benzo(a)pyrene	1490	1670	89.2%	1470	1670	88.0%	1.4%
Indeno(1,2,3-cd)pyrene	1640	1670	98.2%	1630	1670	97.6%	0.6%
Dibenz(a,h)anthracene	1650	1670	98.8%	1650	1670	98.8%	0.0%
Benzo(g,h,i)perylene	1770	1670	106%	1770	1670	106%	0.0%
1-Methylnaphthalene	1290	1670	77.2%	1330	1670	79.6%	3.1%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	67.2%	68.8%
2-Fluorobiphenyl	81.2%	82.8%
d14-p-Terphenyl	102%	104%
d4-1,2-Dichlorobenzene	70.0%	70.4%
d5-Phenol	78.4%	79.5%
2-Fluorophenol	72.3%	72.5%
2,4,6-Tribromophenol	94.1%	95.5%
d4-2-Chlorophenol	70.1%	70.4%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-081108
METHOD BLANK

Lab Sample ID: MB-081108
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/26/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted: 08/11/08
Date Analyzed: 08/20/08 12:30
Instrument/Analyst: NT6/LJR
GPC Cleanup: No

Sample Amount: 7.50 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	67	< 67 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	330	< 330 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	67	< 67 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-081108
METHOD BLANK

Lab Sample ID: MB-081108
LIMS ID: 08-19407
Matrix: Soil
Date Analyzed: 08/20/08 12:30

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	bis(2-Ethylhexyl)phthalate	67	< 67 U
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
205-99-2	Benzo(b)fluoranthene	67	< 67 U
207-08-9	Benzo(k)fluoranthene	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.2%	2-Fluorobiphenyl	73.2%
d14-p-Terphenyl	99.2%	d4-1,2-Dichlorobenzene	74.4%
d5-Phenol	79.5%	2-Fluorophenol	72.8%
2,4,6-Tribromophenol	77.1%	d4-2-Chlorophenol	73.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-1-S1
SAMPLE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 15:46
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.4 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 4.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	**Aroclor 1254**	**32**	**220**
11096-82-5	**Aroclor 1260**	**32**	**310**
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	NR
Tetrachlorometaxylene	63.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-1-S2
SAMPLE

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 16:08
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.1 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 6.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	64.8%
Tetrachlorometaxylene	66.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-2-S1
SAMPLE

Lab Sample ID: NJ45C
LIMS ID: 08-19396
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 16:31
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 5.50 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 9.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	73	< 73 U
53469-21-9	Aroclor 1242	73	< 73 U
12672-29-6	**Aroclor 1248**	**73**	**250**
11097-69-1	**Aroclor 1254**	**73**	**480**
11096-82-5	**Aroclor 1260**	**73**	**570**
11104-28-2	Aroclor 1221	73	< 73 U
11141-16-5	Aroclor 1232	73	< 73 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	123%
Tetrachlorometaxylene	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-3-S1
SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 17:15
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.8 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 20.4%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	31	< 31 U
53469-21-9	Aroclor 1242	31	< 31 U
12672-29-6	**Aroclor 1248**	**31**	**130**
11097-69-1	**Aroclor 1254**	**31**	**280**
11096-82-5	**Aroclor 1260**	**31**	**100**
11104-28-2	Aroclor 1221	31	< 31 U
11141-16-5	Aroclor 1232	31	< 31 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	51.8%
Tetrachlorometaxylene	74.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-3-S2
SAMPLE

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 17:38
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.8 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 14.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	31	< 31 U
53469-21-9	Aroclor 1242	31	< 31 U
12672-29-6	Aroclor 1248	31	< 31 U
11097-69-1	Aroclor 1254	31	< 31 U
11096-82-5	Aroclor 1260	31	< 31 U
11104-28-2	Aroclor 1221	31	< 31 U
11141-16-5	Aroclor 1232	31	< 31 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	75.8%
Tetrachlorometaxylene	61.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-4-S1
SAMPLE

Lab Sample ID: NJ45G
LIMS ID: 08-19400
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 18:00
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.1 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 19.7%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	70.0%
Tetrachlorometaxylene	69.2%

ANALYTICAL RESOURCES INCORPORATED

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PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-5-S1
SAMPLE

Lab Sample ID: NJ45H
LIMS ID: 08-19401
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 18:22
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.3 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 6.0%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	81.0%
Tetrachlorometaxylene	84.0%

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Sample ID: EBC-6-S1
SAMPLE

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 18:45
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 7.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	73.5%
Tetrachlorometaxylene	70.5%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-7-S1
SAMPLE

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/28/08 15:09
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 5.47 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 5.00
Silica Gel: No

Percent Moisture: 8.9%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	370	< 370 U
53469-21-9	Aroclor 1242	370	< 370 U
12672-29-6	**Aroclor 1248**	**370**	**2,000**
11097-69-1	**Aroclor 1254**	**370**	**3,300**
11096-82-5	**Aroclor 1260**	**370**	**3,300**
11104-28-2	Aroclor 1221	370	< 370 U
11141-16-5	Aroclor 1232	370	< 370 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	NR
Tetrachlorometaxylene	106%

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PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-7-S2
SAMPLE

Lab Sample ID: NJ45M
LIMS ID: 08-19406
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 21:43
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 4.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	84.5%
Tetrachlorometaxylene	66.0%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-8-S1
SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 22:05
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 4.7%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	59.2%
Tetrachlorometaxylene	57.8%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-9-S1
SAMPLE

Lab Sample ID: NJ45O
LIMS ID: 08-19408
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 22:27
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.3 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 5.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	**Aroclor 1254**	**32**	**190**
11096-82-5	**Aroclor 1260**	**32**	**310**
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	NR
Tetrachlorometaxylene	82.8%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-10-S1
SAMPLE

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 22:50
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 4.6%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.8%
Tetrachlorometaxylene	72.0%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-11-S1
SAMPLE

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 23:12
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.8 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 20.2%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	31	< 31 U
53469-21-9	Aroclor 1242	31	< 31 U
12672-29-6	Aroclor 1248	31	< 31 U
11097-69-1	Aroclor 1254	31	< 31 U
11096-82-5	Aroclor 1260	31	< 31 U
11104-28-2	Aroclor 1221	31	< 31 U
11141-16-5	Aroclor 1232	31	< 31 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	67.5%
Tetrachlorometaxylene	76.0%

ANALYTICAL RESOURCES INCORPORATED

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-11-S2
SAMPLE

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 23:34
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.5 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 16.7%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	74.8%
Tetrachlorometaxylene	76.0%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-12-S1
SAMPLE

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 23:56
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.1 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 13.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.0%
Tetrachlorometaxylene	72.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
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Sample ID: EBC-13-S1
SAMPLE

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/28/08 00:19
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 7.50 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 6.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	53	< 53 U
53469-21-9	Aroclor 1242	53	< 53 U
12672-29-6	Aroclor 1248	53	< 53 U
11097-69-1	**Aroclor 1254**	**53**	**1,500 E**
11096-82-5	**Aroclor 1260**	**53**	**330**
11104-28-2	Aroclor 1221	53	< 53 U
11141-16-5	Aroclor 1232	53	< 53 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	84.5%
Tetrachlorometaxylene	79.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
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Sample ID: EBC-13-S1
DILUTION

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/28/08 15:31
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 7.50 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 5.00
Silica Gel: No

Percent Moisture: 6.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	270	< 270 U
53469-21-9	Aroclor 1242	270	< 270 U
12672-29-6	Aroclor 1248	270	< 270 U
11097-69-1	**Aroclor 1254**	**270**	**1,900**
11096-82-5	**Aroclor 1260**	**270**	**460**
11104-28-2	Aroclor 1221	270	< 270 U
11141-16-5	Aroclor 1232	270	< 270 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	106%
Tetrachlorometaxylene	102%

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-13-S2
SAMPLE

Lab Sample ID: NJ45V
LIMS ID: 08-19415
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/28/08 00:41
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.2 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 6.2%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	65.2%
Tetrachlorometaxylene	64.5%

ANALYTICAL RESOURCES INCORPORATED

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PCB by GC/ECD Method SW8082
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Sample ID: EBC-14-S1
SAMPLE

Lab Sample ID: NJ45W
LIMS ID: 08-19416
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/28/08 01:03
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 14.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	75.2%
Tetrachlorometaxylene	72.5%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-081208	84.0%	30-160	85.0%	30-160	0
LCS-081208	80.8%	30-160	83.0%	30-160	0
LCSD-081208	81.8%	30-160	83.0%	30-160	0
EBC-1-S1	NR	30-160	63.5%	30-160	0
EBC-1-S2	64.8%	30-160	66.2%	30-160	0
EBC-2-S1	123%	30-160	76.0%	30-160	0
EBC-3-S1	51.8%	30-160	74.2%	30-160	0
EBC-3-S2	75.8%	30-160	61.8%	30-160	0
EBC-4-S1	70.0%	30-160	69.2%	30-160	0
EBC-5-S1	81.0%	30-160	84.0%	30-160	0
EBC-6-S1	73.5%	30-160	70.5%	30-160	0
EBC-6-S1 MS	83.5%	30-160	77.5%	30-160	0
EBC-6-S1 MSD	74.0%	30-160	71.0%	30-160	0
EBC-7-S1	NR	30-160	106%	30-160	0
EBC-7-S2	84.5%	30-160	66.0%	30-160	0
EBC-8-S1	59.2%	30-160	57.8%	30-160	0
EBC-9-S1	NR	30-160	82.8%	30-160	0
EBC-10-S1	72.8%	30-160	72.0%	30-160	0
EBC-11-S1	67.5%	30-160	76.0%	30-160	0
EBC-11-S2	74.8%	30-160	76.0%	30-160	0
EBC-12-S1	72.0%	30-160	72.8%	30-160	0
EBC-13-S1	84.5%	30-160	79.5%	30-160	0
EBC-13-S1 DL	106%	30-160	102%	30-160	0
EBC-13-S2	65.2%	30-160	64.5%	30-160	0
EBC-14-S1	75.2%	30-160	72.5%	30-160	0

Microwave (MARS) Control Limits
Prep Method: SW3546
Log Number Range: 08-19394 to 08-19416

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
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Sample ID: EBC-6-S1
MS/MSD

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted MS/MSD: 08/12/08

Date Analyzed MS: 08/27/08 20:36
MSD: 08/27/08 20:58
Instrument/Analyst MS: ECD6/YZ
MSD: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 12.0 g-dry-wt
MSD: 12.0 g-dry-wt
Final Extract Volume MS: 4.0 mL
MSD: 4.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: No

Percent Moisture: 7.5%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 33.3 U	117	166	70.5%	112	166	67.5%	4.4%
Aroclor 1260	< 33.3 U	133	166	80.1%	124	166	74.7%	7.0%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-6-S1
MATRIX SPIKE

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 20:36
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 7.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	---
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	---
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	83.5%
Tetrachlorometaxylene	77.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: EBC-6-S1
MATRIX SPIKE DUP

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 20:58
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 7.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	---
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	---
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	74.0%
Tetrachlorometaxylene	71.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-081208
LCS/LCSD

Lab Sample ID: LCS-081208
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 08/12/08
Date Analyzed LCS: 08/27/08 15:02
LCSD: 08/27/08 15:24
Instrument/Analyst LCS: ECD6/YZ
LCSD: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount LCS: 12.0 g-dry-wt
LCSD: 12.0 g-dry-wt
Final Extract Volume LCS: 4.0 mL
LCSD: 4.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: No

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	130	167	78.0%	131	167	78.6%	0.8%
Aroclor 1260	140	167	84.0%	141	167	84.6%	0.7%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	80.8%	81.8%
Tetrachlorometaxylene	83.0%	83.0%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-081208
METHOD BLANK

Lab Sample ID: MB-081208
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/02/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Date Extracted: 08/12/08
Date Analyzed: 08/27/08 14:39
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.0 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	84.0%
Tetrachlorometaxylene	85.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-1-S1
SAMPLE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 14:07
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 40 mg-dry-wt
Percent Moisture: 9.3%

CAS Number	Analyte	RL	Result	
71-43-2	**Benzene**	**31**	**38**	
108-88-3	**Toluene**	**31**	**110**	
100-41-4	Ethylbenzene	31	< 31 U	
	m,p-Xylene	**62**	**89**	
95-47-6	o-Xylene	31	< 31 U	
				GAS ID
	Gasoline Range Hydrocarbons	**12**	**26**	**GRO**

BETX Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	94.8%

Gasoline Surrogate Recovery

Trifluorotoluene	99.4%
Bromobenzene	90.3%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a007.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a007.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45A
Client ID: EBC-1-S1
Injection Date: 07-AUG-2008 14:07
Matrix: SOIL
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.403	-0.007	6574	82607	99.4	TFT(Surr)
14.969	-0.002	4289	35987	90.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	79216	0.107
8015B (2MP-TMB)	55756	0.039
AKGas (nC6-nC10)	53952	0.047
NWGas (Tol-Nap)	166104	0.211

GRO

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.402	-0.007	24792	102.1	TFT(Surr)
14.967	-0.002	57425	94.8	BB(Surr)

AROMATICS (PID)

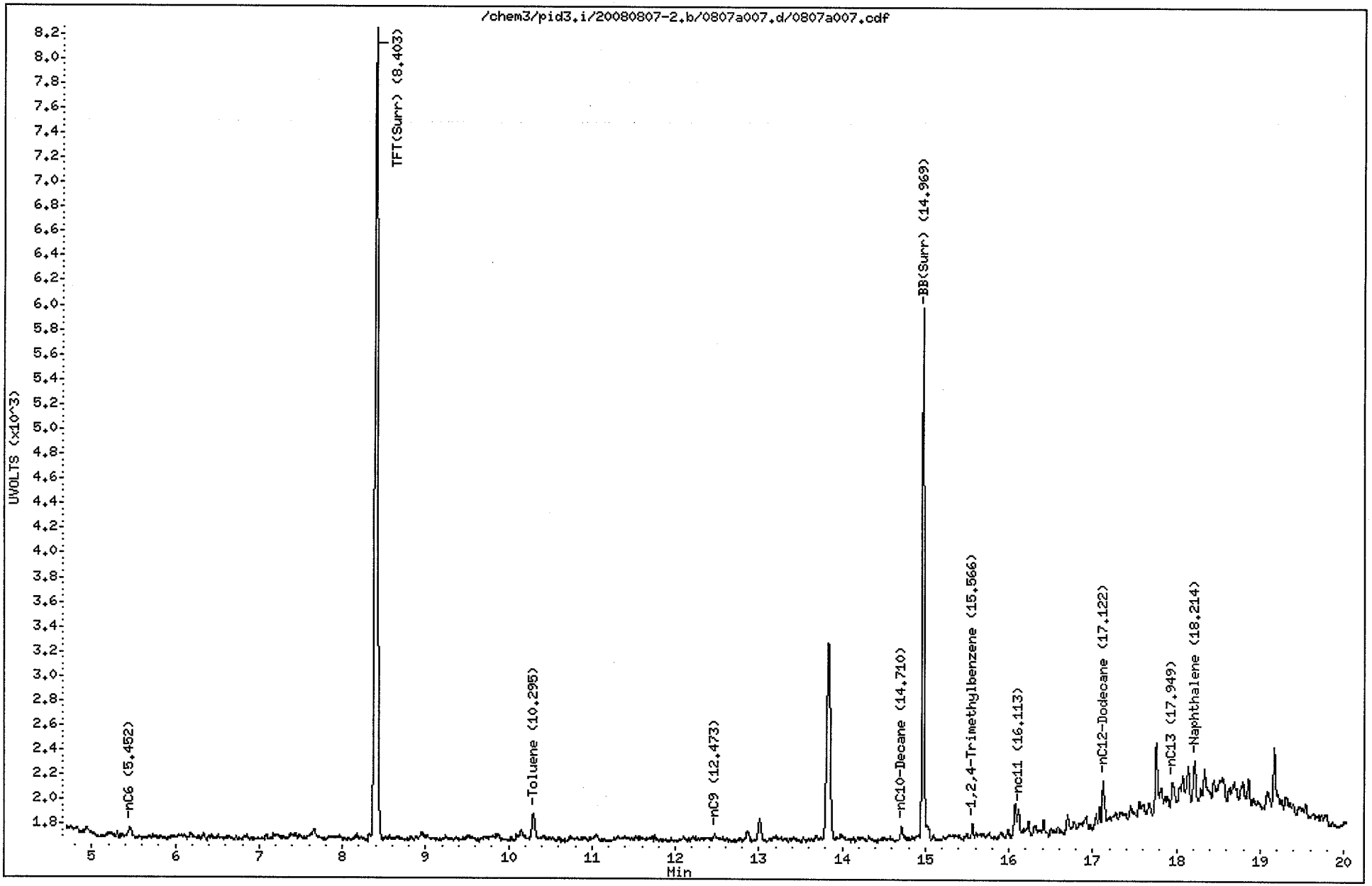
RT	Shift	Response	Amount	Compound
7.660	-0.005	479	0.31N	Benzene
10.295	-0.005	1308	0.89	Toluene
ND	---	---	---	Ethylbenzene
13.007	-0.003	1078	0.72	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a007.d
Date : 07-AUG-2008 14:07
Client ID: EBC-1-S1
Sample Info: NJ45A

Instrument: pid3.i
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

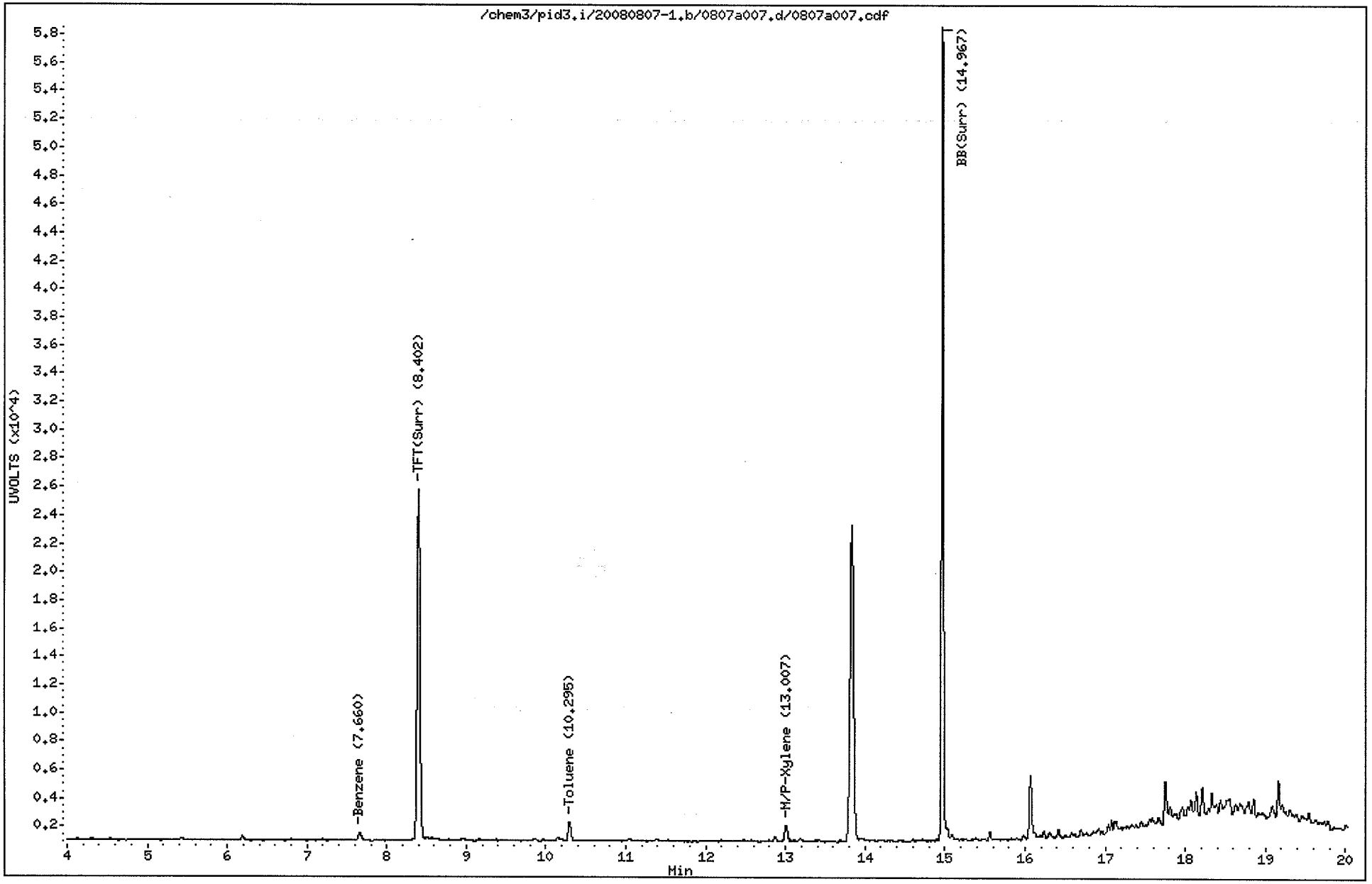


Data File: /chem3/pid3.i/20080807-1.b/0807a007.d
Date : 07-AUG-2008 14:07
Client ID: EBC-1-S1
Sample Info: NJ45A

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-1-S2
SAMPLE

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 14:32
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 65 mg-dry-wt
Percent Moisture: 7.0%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	19	< 19 U
108-88-3	Toluene	19	< 19 U
100-41-4	Ethylbenzene	19	< 19 U
	m,p-Xylene	38	< 38 U
95-47-6	o-Xylene	19	< 19 U

			GAS ID
Gasoline Range Hydrocarbons	7.7	< 7.7 U	---

BETX Surrogate Recovery

Trifluorotoluene	99.2%
Bromobenzene	93.9%

Gasoline Surrogate Recovery

Trifluorotoluene	97.6%
Bromobenzene	91.1%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a008.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a008.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45B
Client ID: EBC-1-S2
Injection Date: 07-AUG-2008 14:32
Matrix: SOIL
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.413	0.003	6451	83594	97.6	TFT(Surr)
14.970	0.000	4331	35673	91.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	17656	0.024
8015B (2MP-TMB)	8525	0.006
AKGas (nC6-nC10)	8524	0.007
NWGas (Tol-Nap)	18675	0.024

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.411	0.003	24099	99.2	TFT(Surr)
14.969	0.000	56883	93.9	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

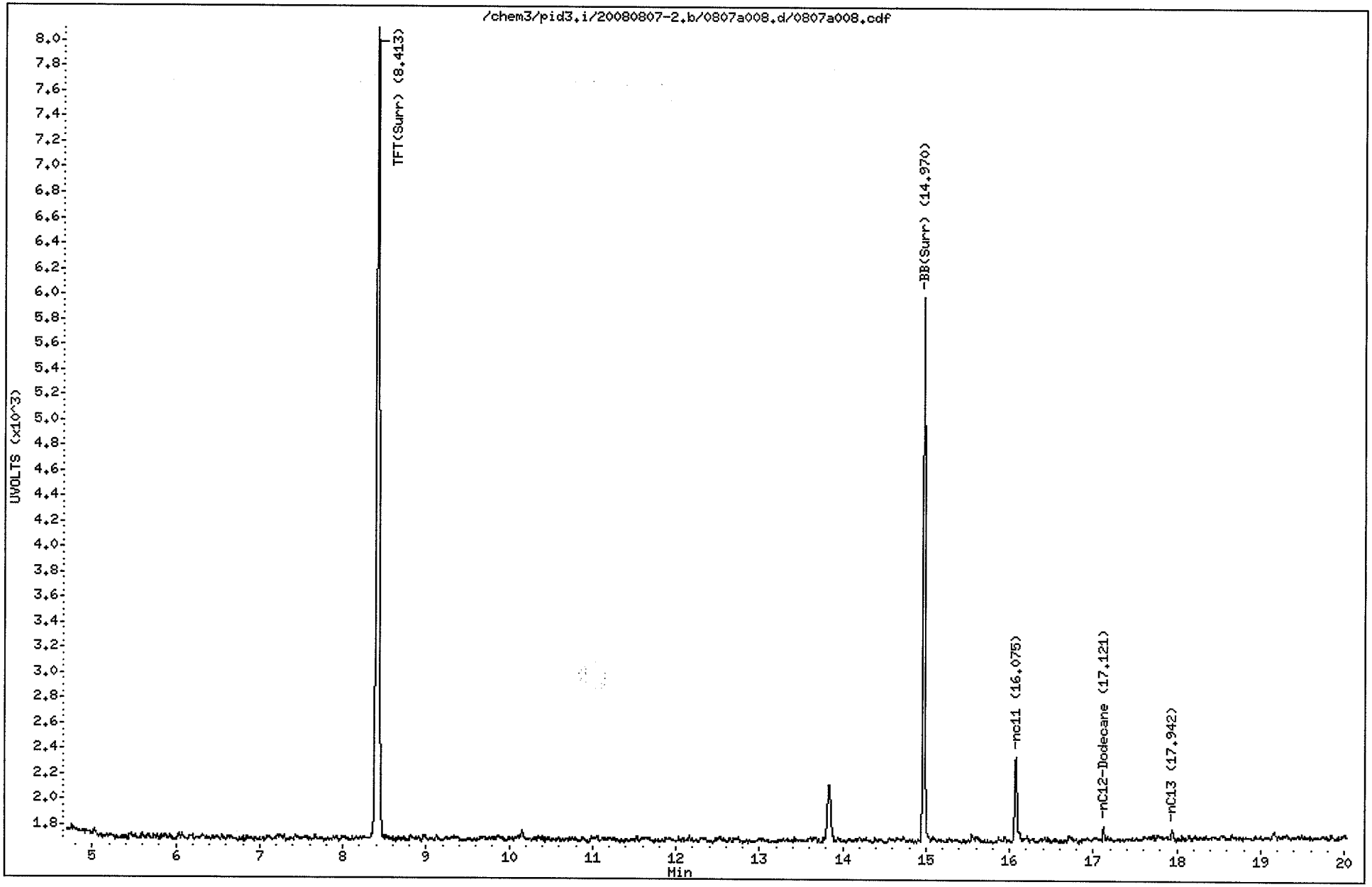
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a008.d
Date : 07-AUG-2008 14:32
Client ID: EBC-1-S2
Sample Info: NJ45B

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a008.d

Date : 07-AUG-2008 14:32

Client ID: EBC-1-S2

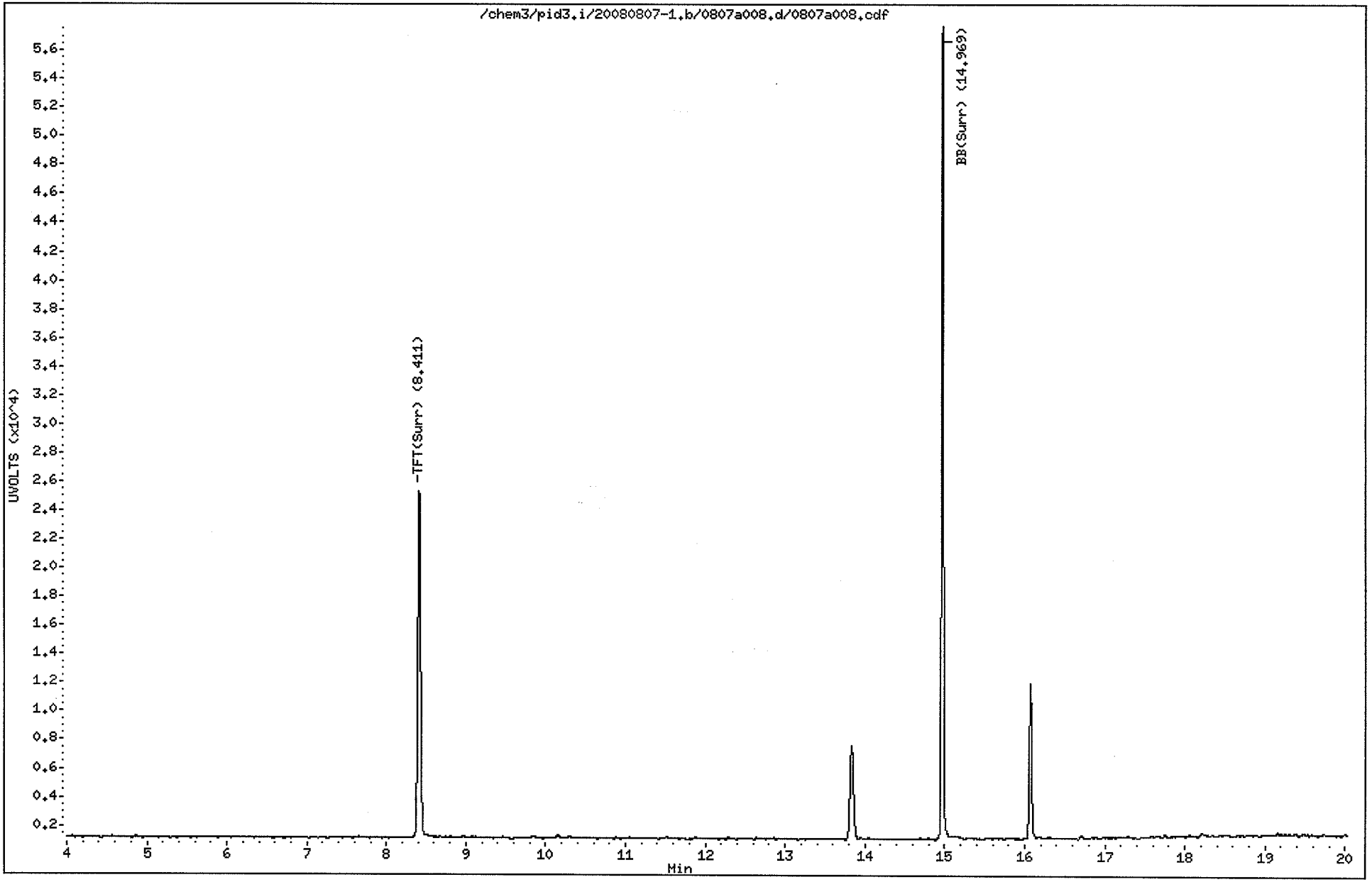
Sample Info: NJ45B

Instrument: pid3.i

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-2-S1
SAMPLE

Lab Sample ID: NJ45C
LIMS ID: 08-19396
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 14:57
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 80 mg-dry-wt
Percent Moisture: 9.2%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	16	< 16 U	
108-88-3	**Toluene**	**16**	**28**	
100-41-4	**Ethylbenzene**	**16**	**44**	
	m,p-Xylene	**31**	**40**	
95-47-6	**o-Xylene**	**16**	**74**	
				GAS ID
	Gasoline Range Hydrocarbons	**6.2**	**160**	**GRO**

BETX Surrogate Recovery

Trifluorotoluene	94.8%
Bromobenzene	93.8%

Gasoline Surrogate Recovery

Trifluorotoluene	92.7%
Bromobenzene	94.8%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PZ
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a009.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a009.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45C
Client ID: EBC-2-S1
Injection Date: 07-AUG-2008 14:57
Matrix: SOIL
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6127	80151	92.7	TFT(Surr)
14.970	0.000	4504	43045	94.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	1142134	1.543
8015B (2MP-TMB)	326966	0.228
AKGas (nC6-nC10)	155533	0.136
NWGas (Tol-Nap)	1967350	2.495

SMO

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.001	23020	94.8	TFT(Surr)
14.969	0.000	56860	93.8	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
10.301	0.002	664	0.45	Toluene
12.869	-0.002	961	0.71	Ethylbenzene
13.012	0.001	966	0.64	M/P-Xylene
13.808	0.009	1763	1.19	O-Xylene
ND	---	---	---	MTBE

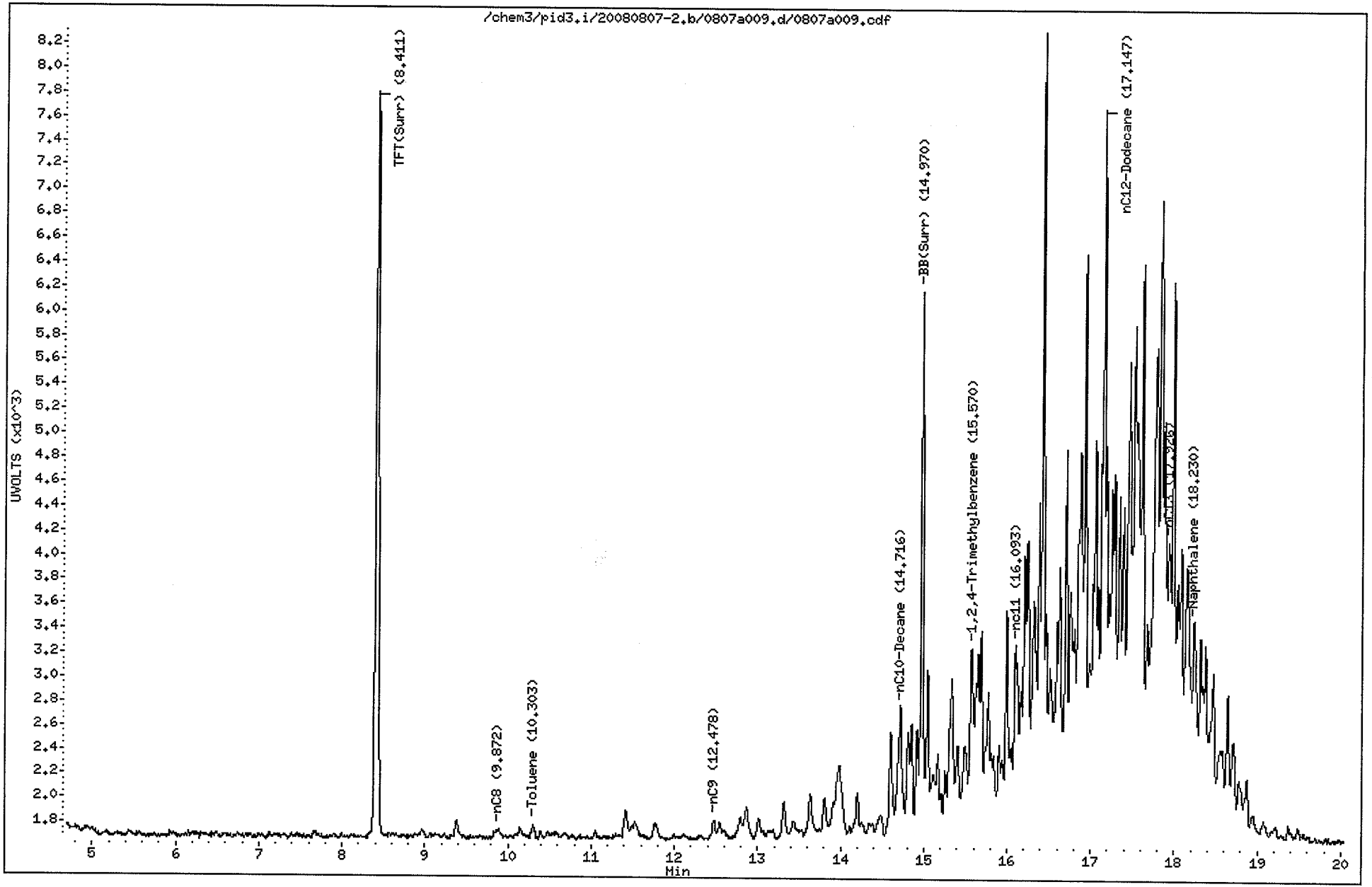
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a009.d
Date : 07-AUG-2008 14:57
Client ID: EBC-2-S1
Sample Info: NJ45C

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a009.d

Date : 07-AUG-2008 14:57

Client ID: EBC-2-S1

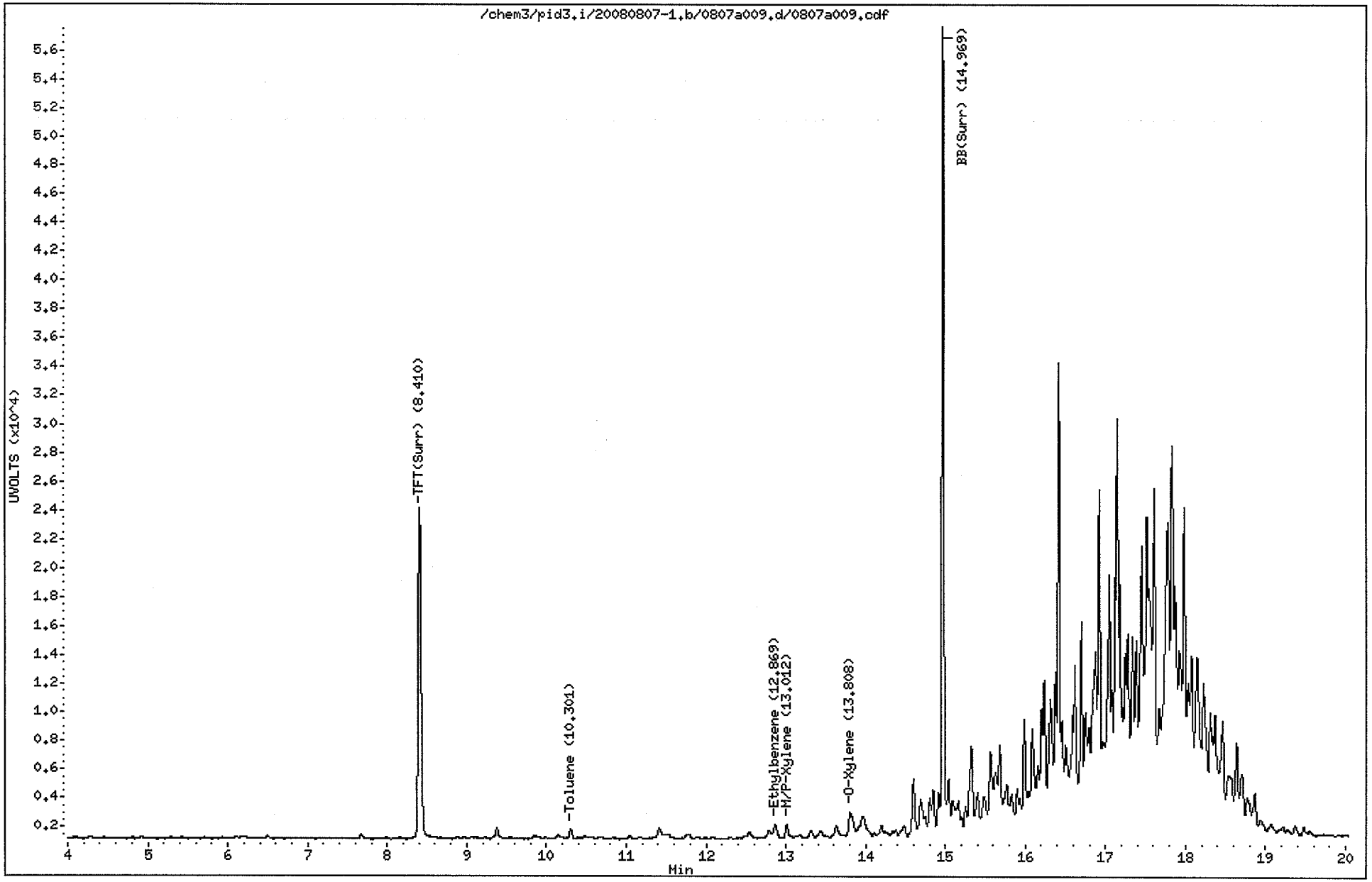
Instrument: pid3.i

Sample Info: NJ45C

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-3-S1
SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 15:21
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 61 mg-dry-wt
Percent Moisture: 7.5%

CAS Number	Analyte	RL	Result	
71-43-2	**Benzene**	**20**	**210**	
108-88-3	**Toluene**	**20**	**120**	
100-41-4	**Ethylbenzene**	**20**	**56**	
	m,p-Xylene	**41**	**100**	
95-47-6	o-Xylene	20	< 20 U	
	Gasoline Range Hydrocarbons	**8.2**	**150**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	100%

Gasoline Surrogate Recovery

Trifluorotoluene	97.9%
Bromobenzene	99.3%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a010.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a010.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45E
Client ID: EBC-3-S1
Injection Date: 07-AUG-2008 15:21
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.002	6472	83527	97.9	TFT(Surr)
14.970	0.000	4720	41781	99.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	900527	1.216
8015B (2MP-TMB)	341932	0.238
AKGas (nC6-nC10)	145836	0.128
NWGas (Tol-Nap)	1405974	1.783 GRO

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.002	24688	101.7	TFT(Surr)
14.969	0.000	60847	100.4	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.667	0.002	3951	2.59	Benzene
10.300	0.001	2258	1.53	Toluene
12.869	-0.002	929	0.69	Ethylbenzene
13.013	0.003	1903	1.27	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

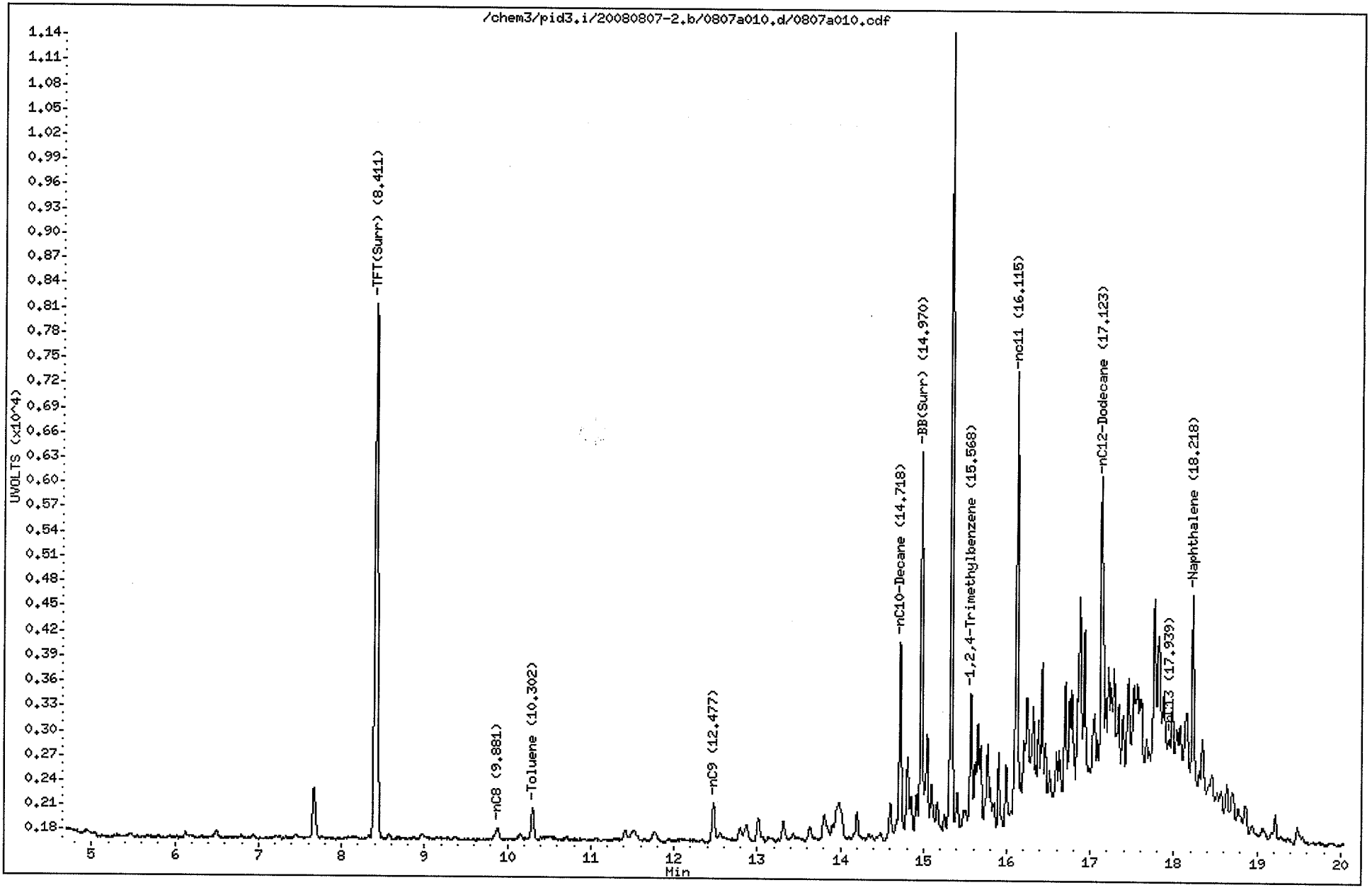
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a010.d
Date : 07-AUG-2008 15:21
Client ID: EBC-3-S1
Sample Info: NJ45E

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a010.d

Date : 07-AUG-2008 15:21

Client ID: EBC-3-S1

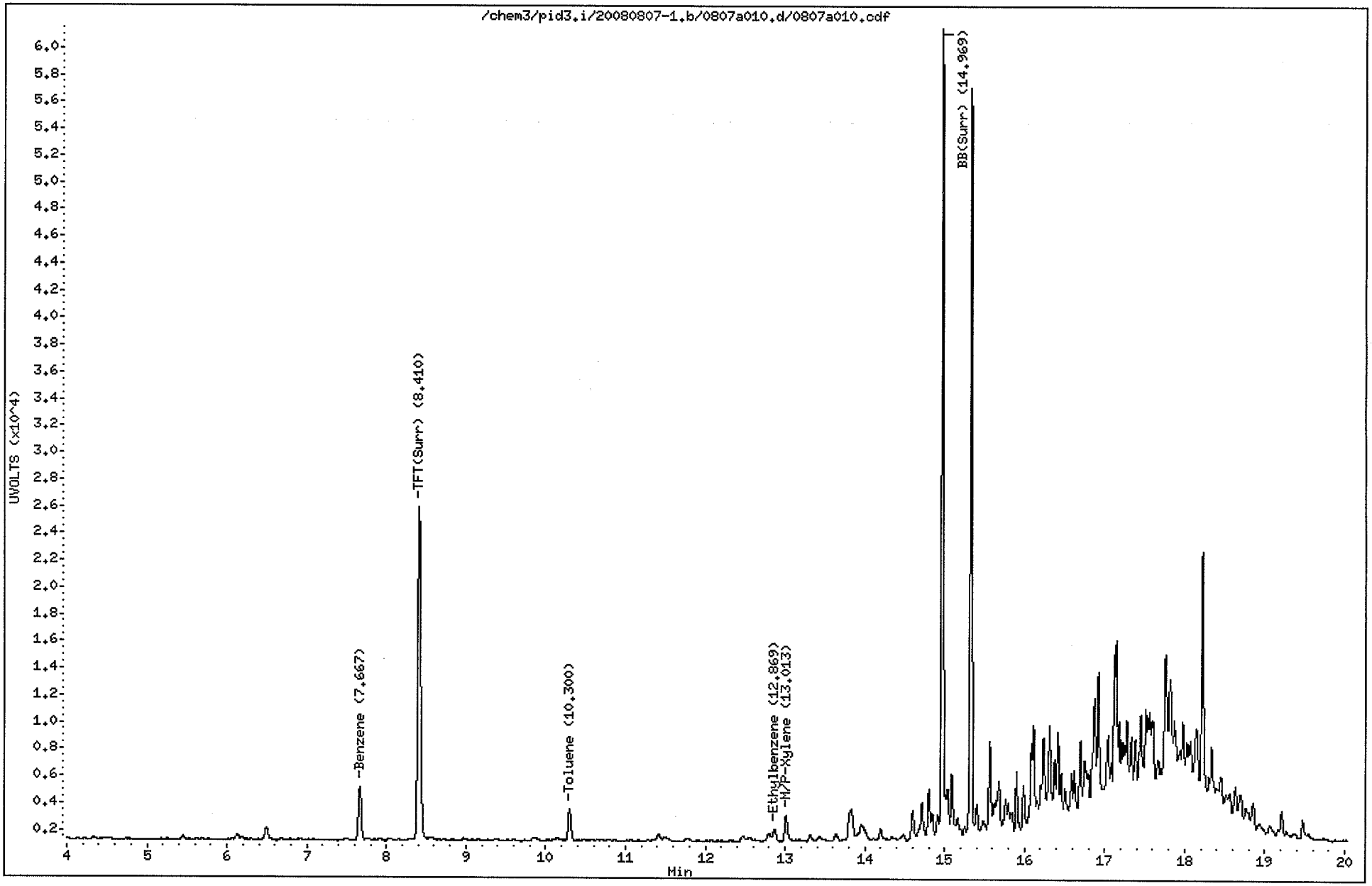
Instrument: pid3.i

Sample Info: NJ45E

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-3-S2
SAMPLE

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 15:46
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 72 mg-dry-wt
Percent Moisture: 15.1%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	17	< 17 U
108-88-3	Toluene	17	< 17 U
100-41-4	Ethylbenzene	17	< 17 U
	m,p-Xylene	35	< 35 U
95-47-6	o-Xylene	17	< 17 U

			GAS ID
Gasoline Range Hydrocarbons	6.9	< 6.9 U	---

BETX Surrogate Recovery

Trifluorotoluene	98.8%
Bromobenzene	93.6%

Gasoline Surrogate Recovery

Trifluorotoluene	96.7%
Bromobenzene	90.3%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

RC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a011.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a011.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45F
Client ID: EBC-3-S2
Injection Date: 07-AUG-2008 15:46
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.412	0.002	6393	82272	96.7	TFT(Surr)
14.970	0.000	4289	35373	90.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	40296	0.054
8015B (2MP-TMB)	13169	0.009
AKGas (nC6-nC10)	6907	0.006
NWGas (Tol-Nap)	75000	0.095

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.002	24004	98.8	TFT(Surr)
14.969	0.000	56704	93.6	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

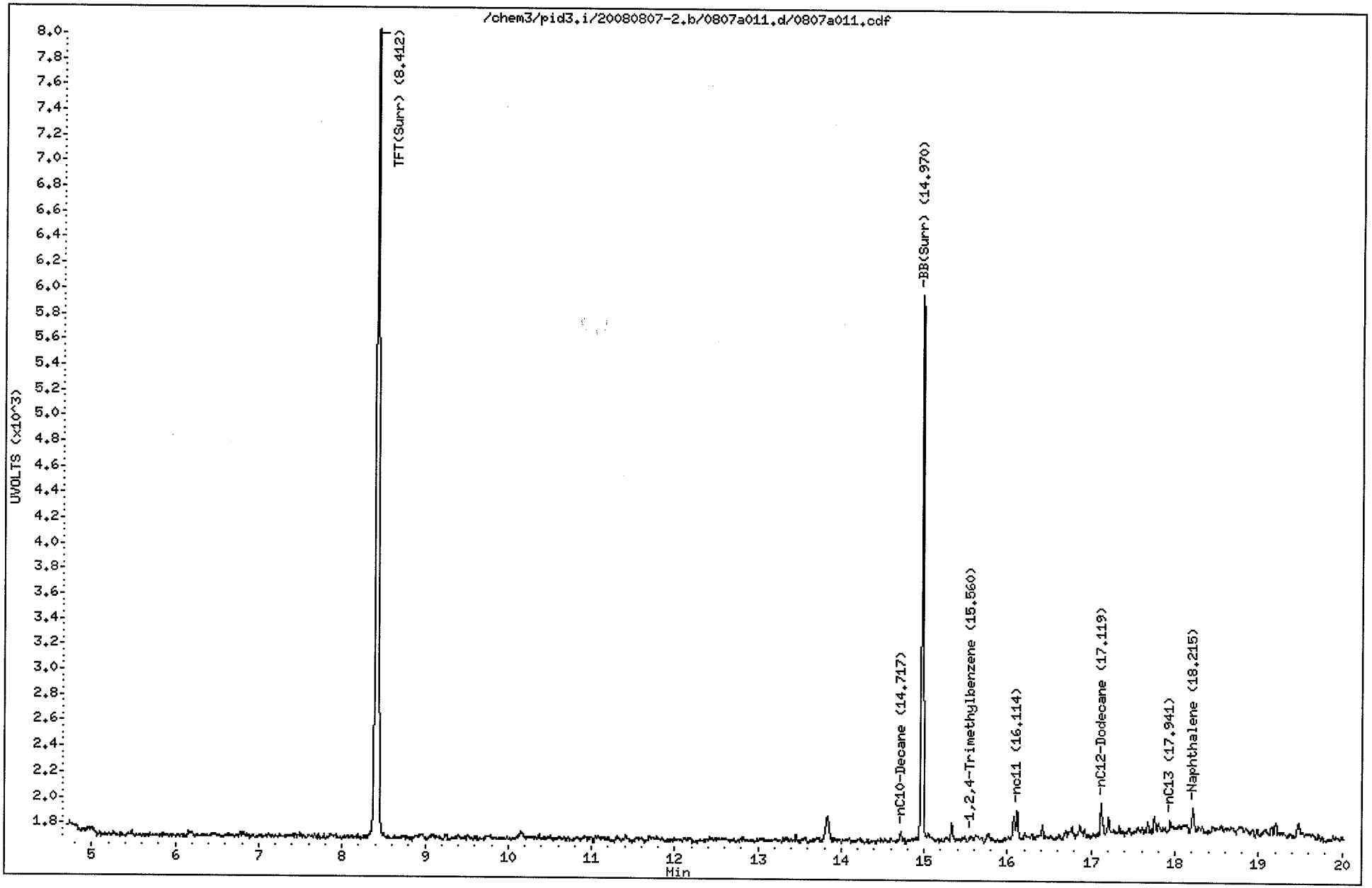
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a011.d
Date : 07-AUG-2008 15:46
Client ID: EBC-3-S2
Sample Info: NJ45F

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



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Date : 07-AUG-2008 15:46

Client ID: EBC-3-S2

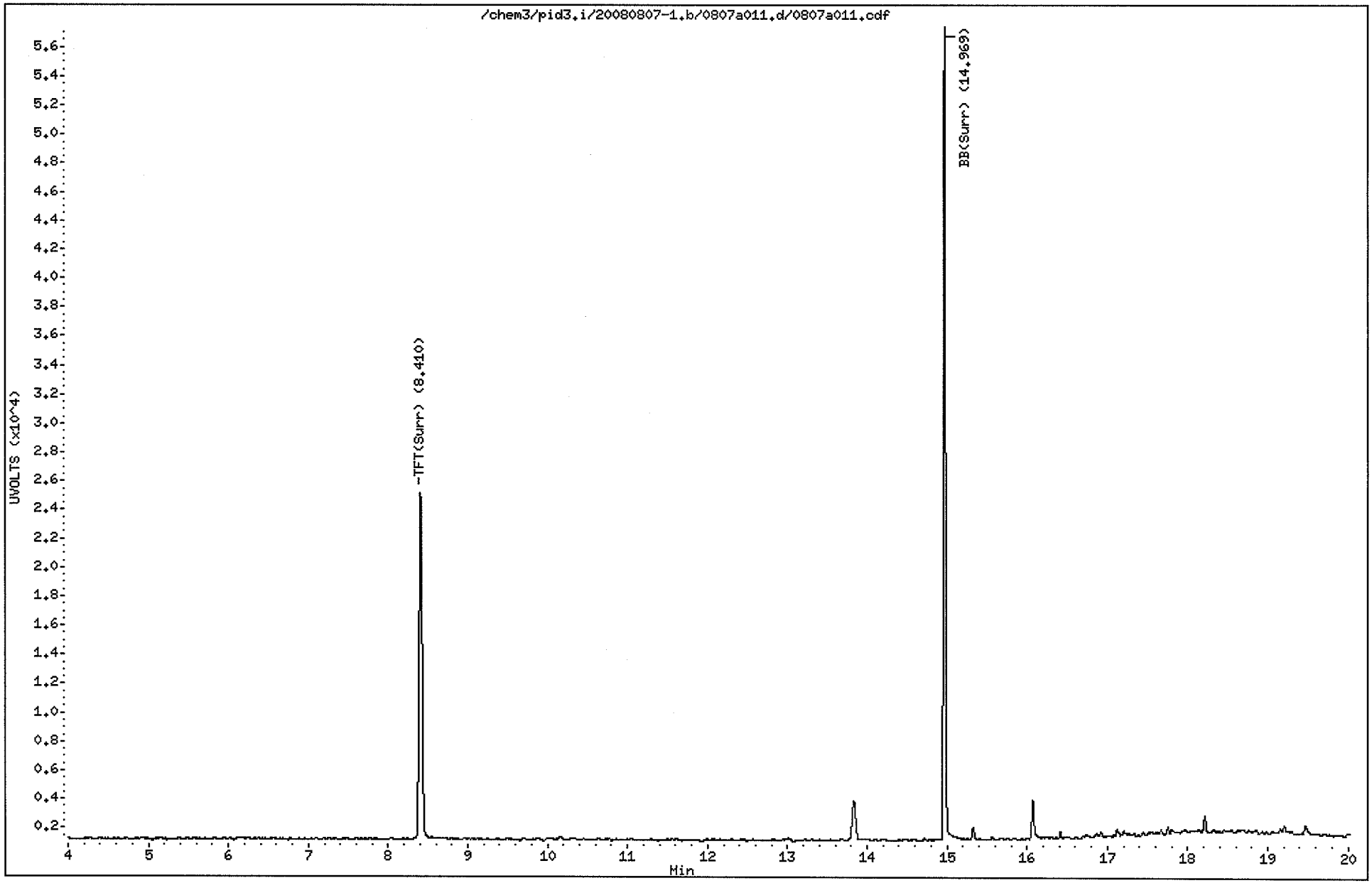
Sample Info: NJ45F

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-4-S1
SAMPLE

Lab Sample ID: NJ45G
LIMS ID: 08-19400
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 16:11
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 54 mg-dry-wt
Percent Moisture: 20.8%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	23	< 23 U
108-88-3	Toluene	23	< 23 U
100-41-4	Ethylbenzene	23	< 23 U
	m,p-Xylene	46	< 46 U
95-47-6	o-Xylene	23	< 23 U

			GAS ID
Gasoline Range Hydrocarbons	9.2	< 9.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	96.4%
Bromobenzene	92.3%

Gasoline Surrogate Recovery

Trifluorotoluene	94.2%
Bromobenzene	90.8%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

RC
8/18/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a012.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a012.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45G
Client ID: EBC-4-S1
Injection Date: 07-AUG-2008 16:11
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.412	0.002	6230	80461	94.2	TFT(Surr)
14.971	0.000	4317	35503	90.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	63533	0.086
8015B (2MP-TMB)	42215	0.029
AKGas (nC6-nC10)	38393	0.034
NWGas (Tol-Nap)	67013	0.085

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.002	23417	96.4	TFT(Surr)
14.969	0.000	55911	92.3	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

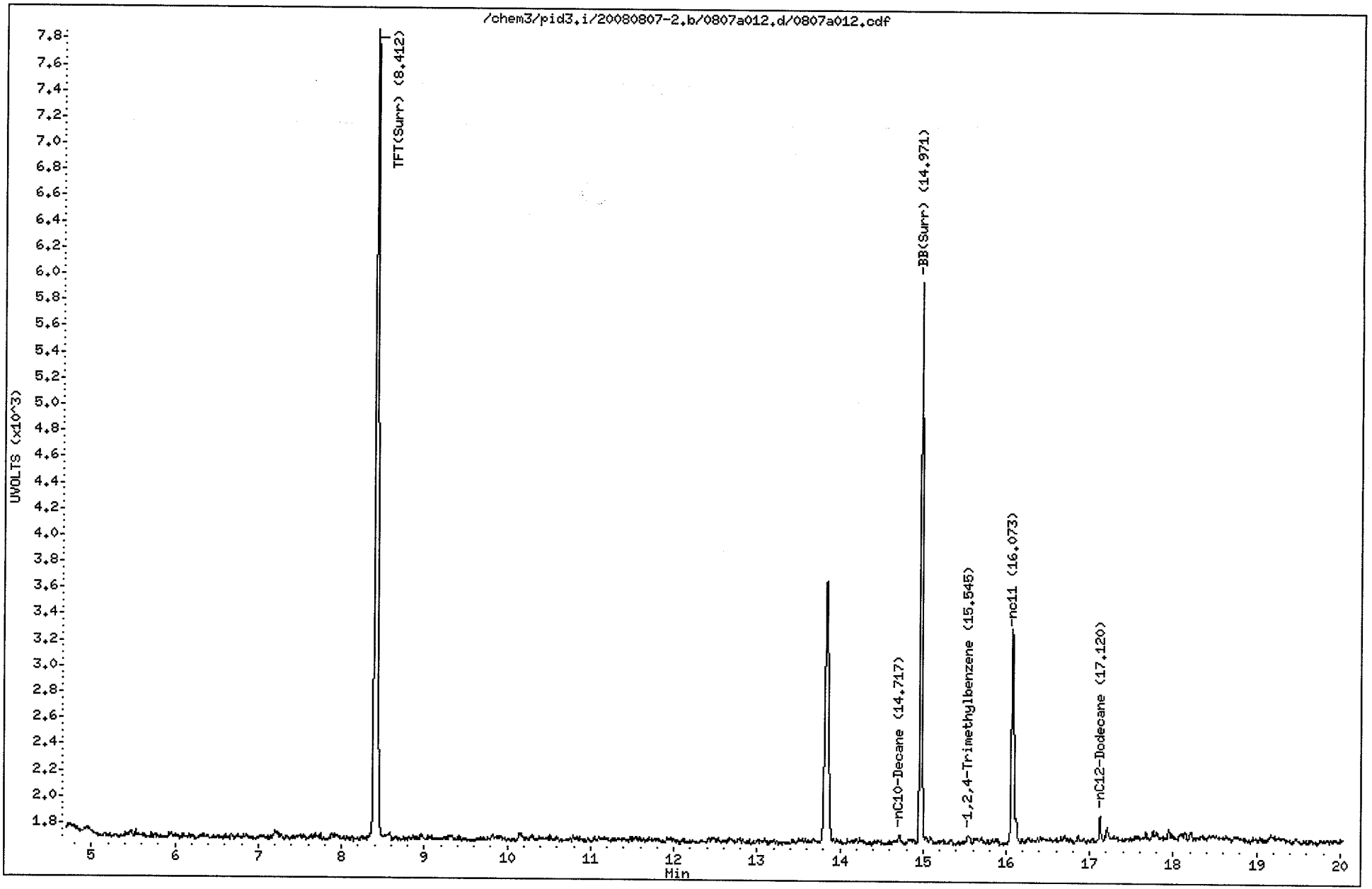
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a012.d
Date : 07-AUG-2008 16:11
Client ID: EBC-4-S1
Sample Info: NJ45G

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



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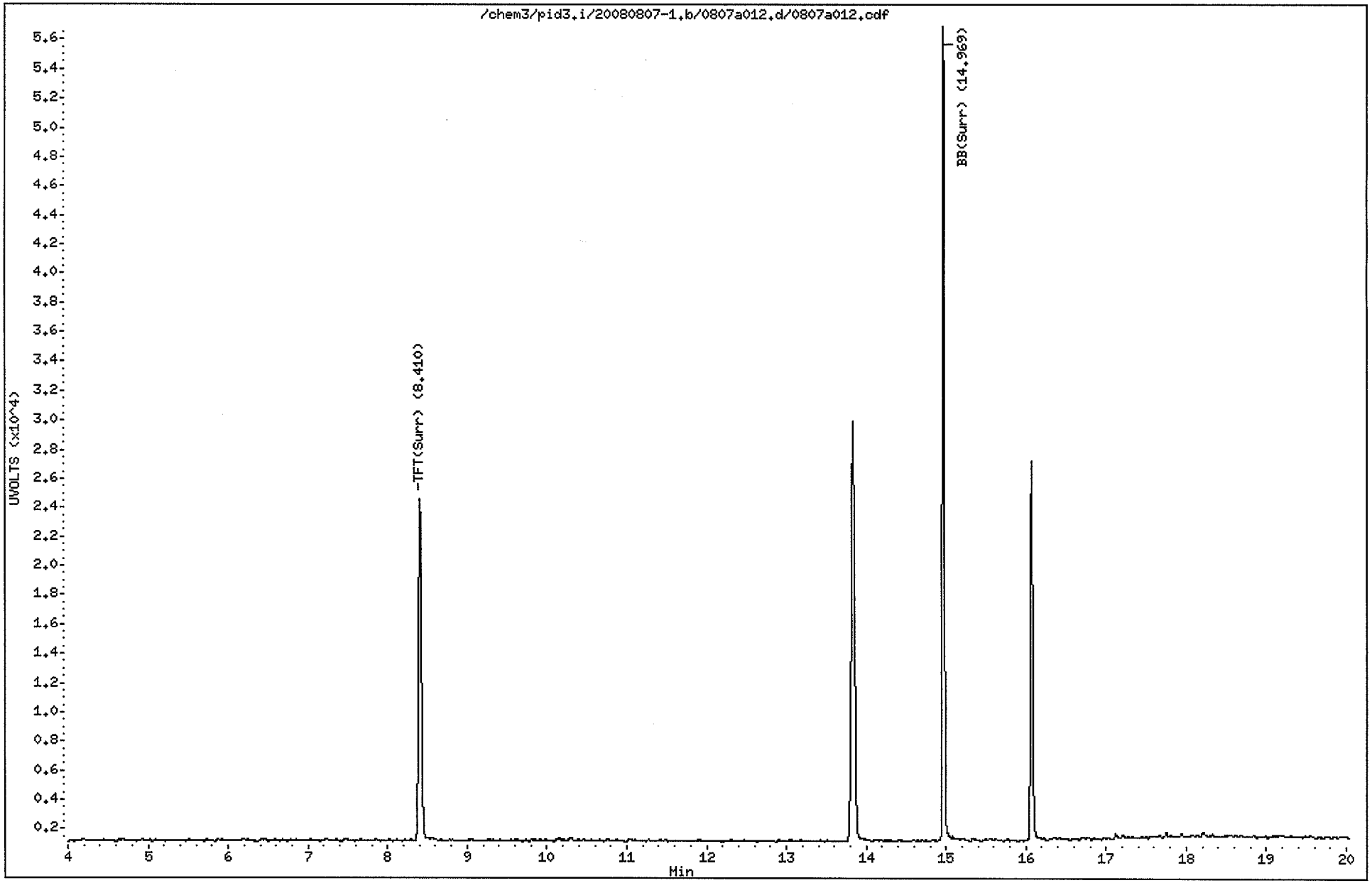
Date : 07-AUG-2008 16:11
Client ID: EBC-4-S1
Sample Info: NJ45G

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
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Sample ID: EBC-5-S1
SAMPLE

Lab Sample ID: NJ45H
LIMS ID: 08-19401
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 17:50
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 57 mg-dry-wt
Percent Moisture: 6.0%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	22	< 22 U	
108-88-3	Toluene	22	< 22 U	
100-41-4	Ethylbenzene	22	< 22 U	
	m,p-Xylene	44	< 44 U	
95-47-6	o-Xylene	22	< 22 U	
	Gasoline Range Hydrocarbons	**8.7**	**9.6**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	95.9%
Bromobenzene	93.8%

Gasoline Surrogate Recovery

Trifluorotoluene	94.3%
Bromobenzene	91.5%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a016.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a016.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45H
Client ID: EBC-5-S1
Injection Date: 07-AUG-2008 17:50
Matrix: SOIL
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.412	0.003	6234	79501	94.3	TFT(Surr)
14.971	0.001	4348	36787	91.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	78615	0.106
8015B (2MP-TMB)	49789	0.035
AKGas (nC6-nC10)	44875	0.039
NWGas (Tol-Nap)	86569	0.110

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.411	0.003	23284	95.9	TFT(Surr)
14.969	0.000	56869	93.8	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

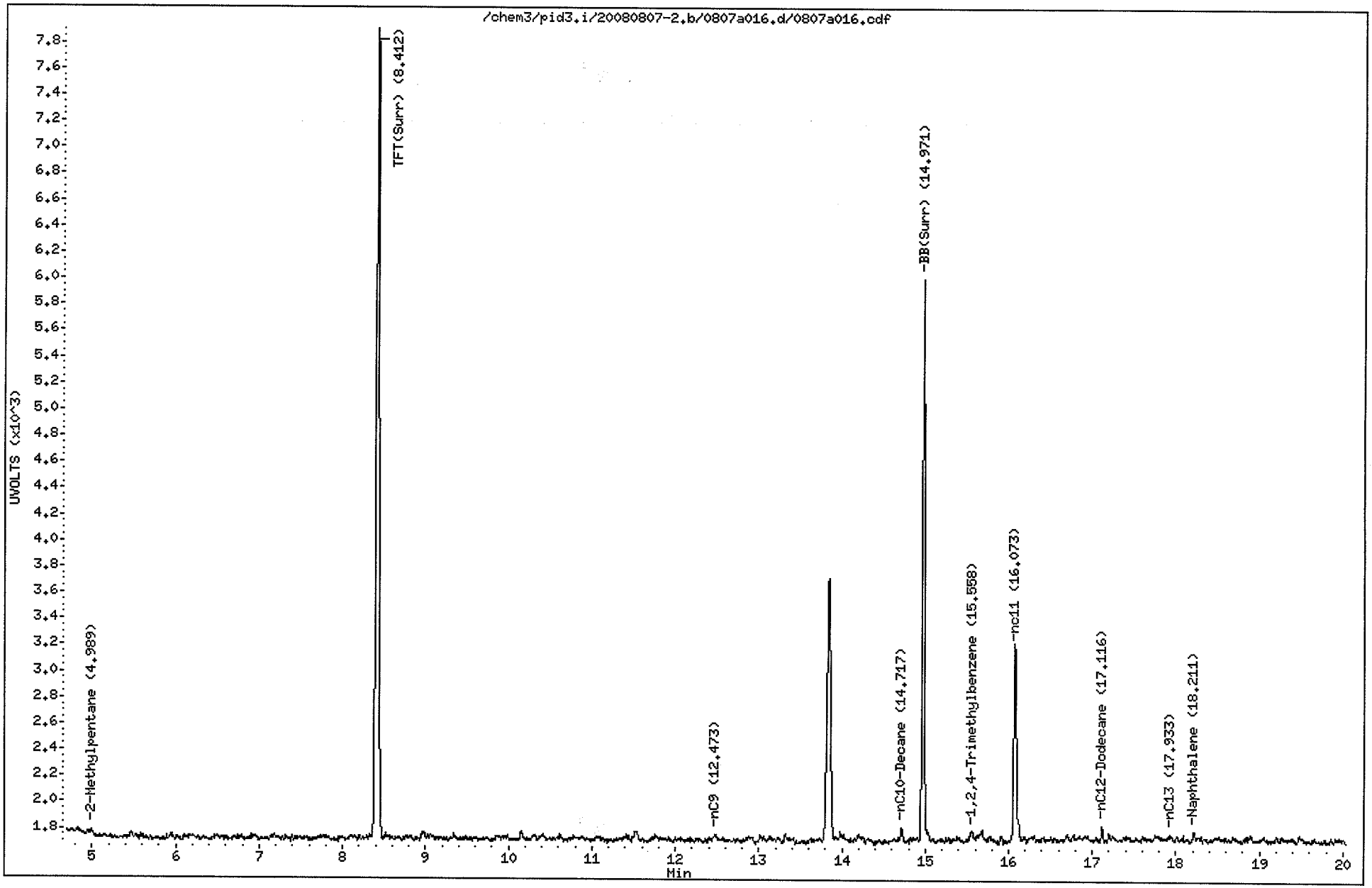
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a016.d
Date : 07-AUG-2008 17:50
Client ID: EBC-5-S1
Sample Info: NJ45H

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

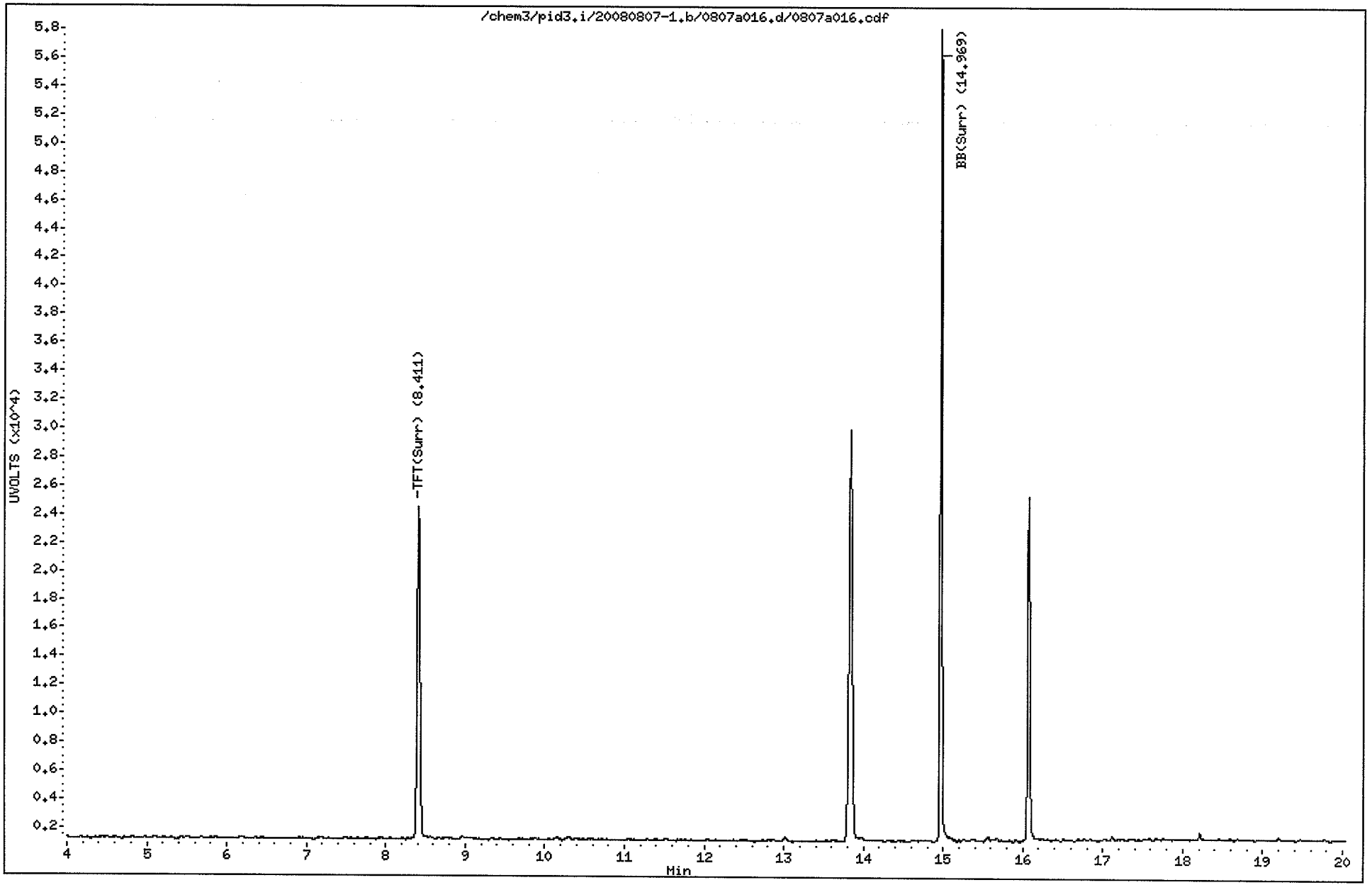


Data File: /chem3/pid3.i/20080807-1.b/0807a016.d
Date : 07-AUG-2008 17:50
Client ID: EBC-5-S1
Sample Info: NJ45H

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
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Sample ID: EBC-6-S1
SAMPLE

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 18:14
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 70 mg-dry-wt
Percent Moisture: 6.7%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	18	< 18 U
108-88-3	Toluene	18	< 18 U
100-41-4	Ethylbenzene	18	< 18 U
	m,p-Xylene	36	< 36 U
95-47-6	o-Xylene	18	< 18 U

			GAS ID
Gasoline Range Hydrocarbons	7.2	< 7.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	102%
Bromobenzene	97.0%

Gasoline Surrogate Recovery

Trifluorotoluene	99.5%
Bromobenzene	94.6%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a017.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a017.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45J
Client ID: EBC-6-S1
Injection Date: 07-AUG-2008 18:14
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.413	0.003	6576	83641	99.5	TFT(Surr)
14.971	0.001	4496	36842	94.6	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	23910	0.032
8015B (2MP-TMB)	22227	0.015
AKGas (nC6-nC10)	17497	0.015
NWGas (Tol-Nap)	25617	0.032

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.411	0.003	24733	101.9	TFT(Surr)
14.969	0.001	58775	97.0	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

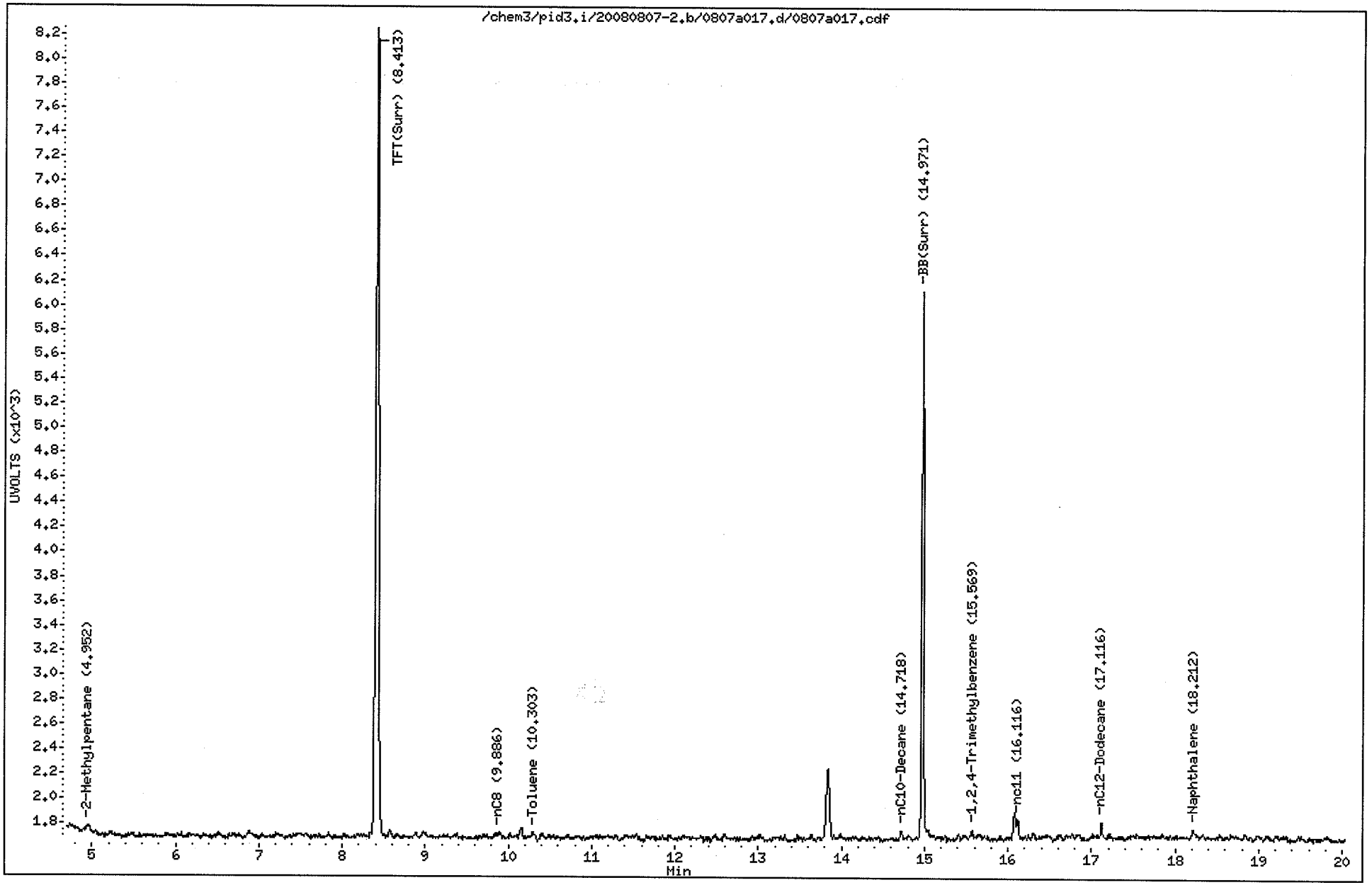
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a017.d
Date : 07-AUG-2008 18:14
Client ID: EBC-6-S1
Sample Info: NJ45J

Instrument: pid3.i

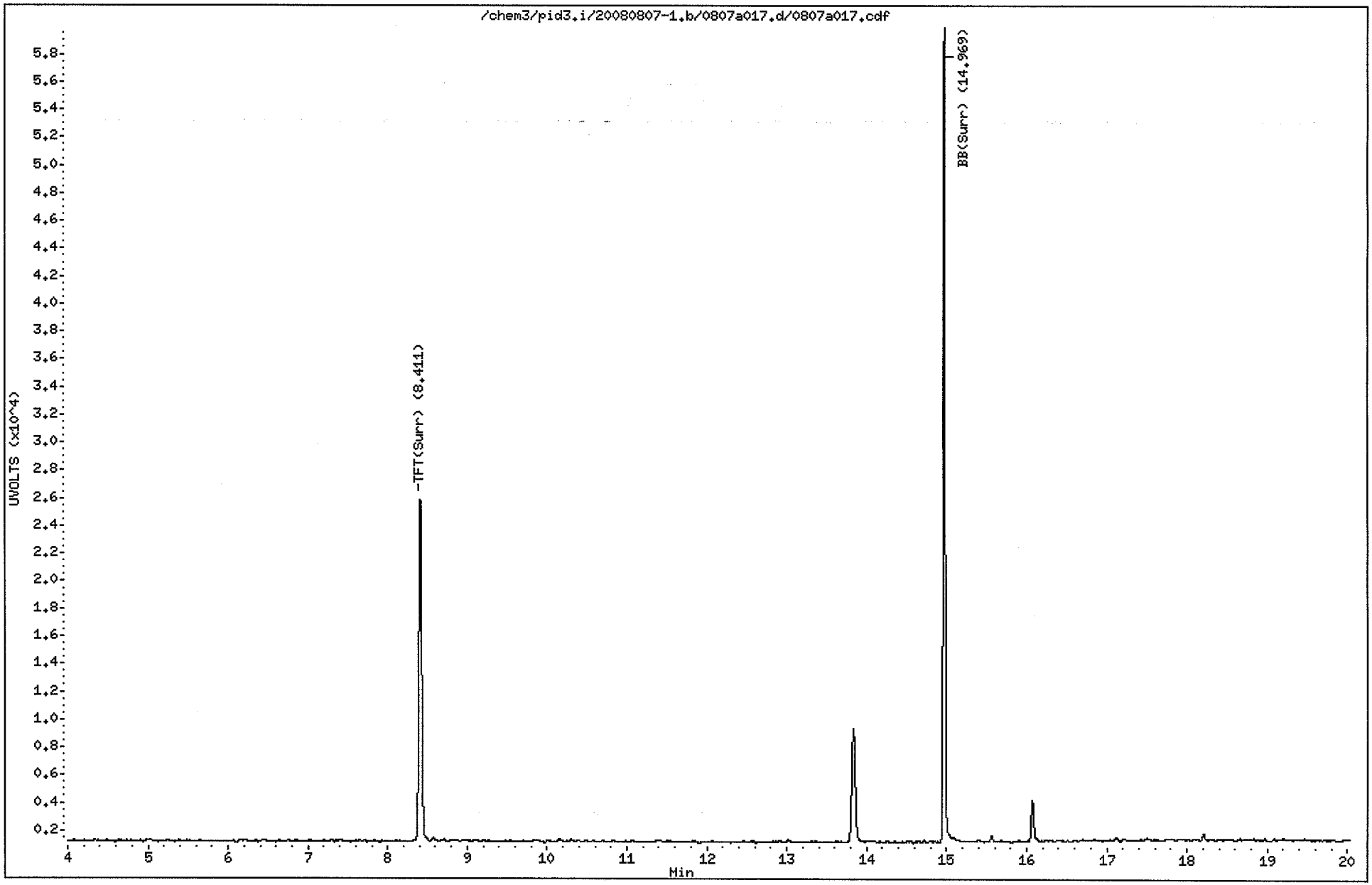
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a017.d
Date : 07-AUG-2008 18:14
Client ID: EBC-6-S1
Sample Info: NJ45J

Instrument: pid3.i
Operator: PKC
Column phase: RTX 502-2 PID
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
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Sample ID: EBC-7-S1
SAMPLE

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 18:39
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 66 mg-dry-wt
Percent Moisture: 8.9%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	19	< 19 U	
108-88-3	**Toluene**	**19**	**120**	
100-41-4	**Ethylbenzene**	**19**	**130**	
	m,p-Xylene	**38**	**240**	
95-47-6	**o-Xylene**	**19**	**220**	
	Gasoline Range Hydrocarbons	**7.5**	**320**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	99.4%
Bromobenzene	103%

Gasoline Surrogate Recovery

Trifluorotoluene	97.4%
Bromobenzene	109%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PG 8/18/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a018.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a018.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45L
Client ID: EBC-7-S1
Injection Date: 07-AUG-2008 18:39
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.412	0.002	6442	82730	97.4	TFT(Surr)
14.971	0.001	5183	50030	109.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	2450378	3.310
8015B (2MP-TMB)	896668	0.624
AKGas (nC6-nC10)	488712	0.427
NWGas (Tol-Nap)	3401536	4.313

EDD

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.411	0.002	24138	99.4	TFT(Surr)
14.969	0.001	62497	103.1	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
10.300	0.001	2289	1.56	Toluene
12.867	-0.004	2374	1.76	Ethylbenzene
13.013	0.003	4835	3.23	M/P-Xylene
13.805	0.005	4282	2.89	O-Xylene
ND	---	---	---	MTBE

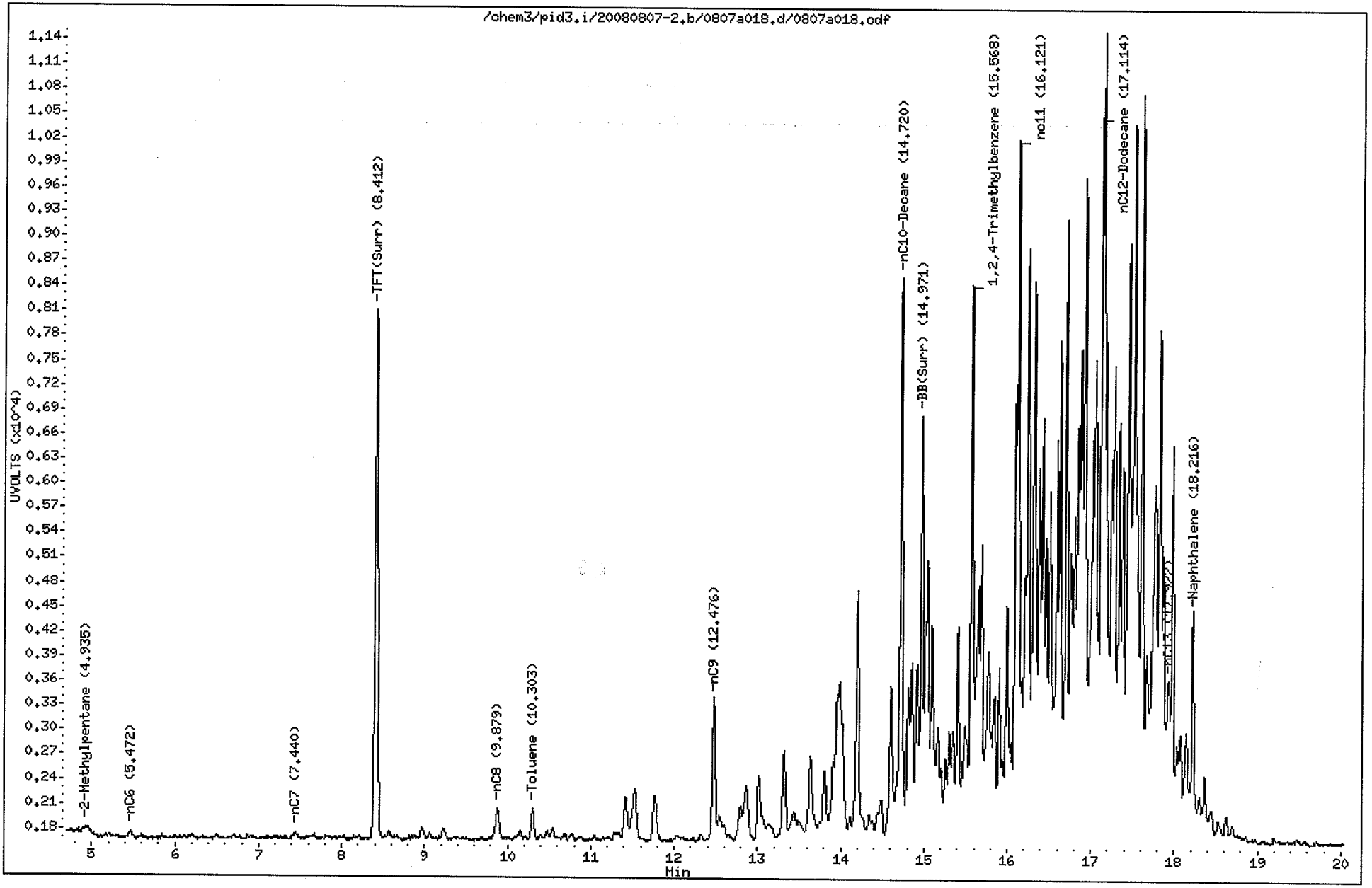
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a018.d
Date : 07-AUG-2008 18:39
Client ID: EBC-7-S1
Sample Info: NJ45L

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

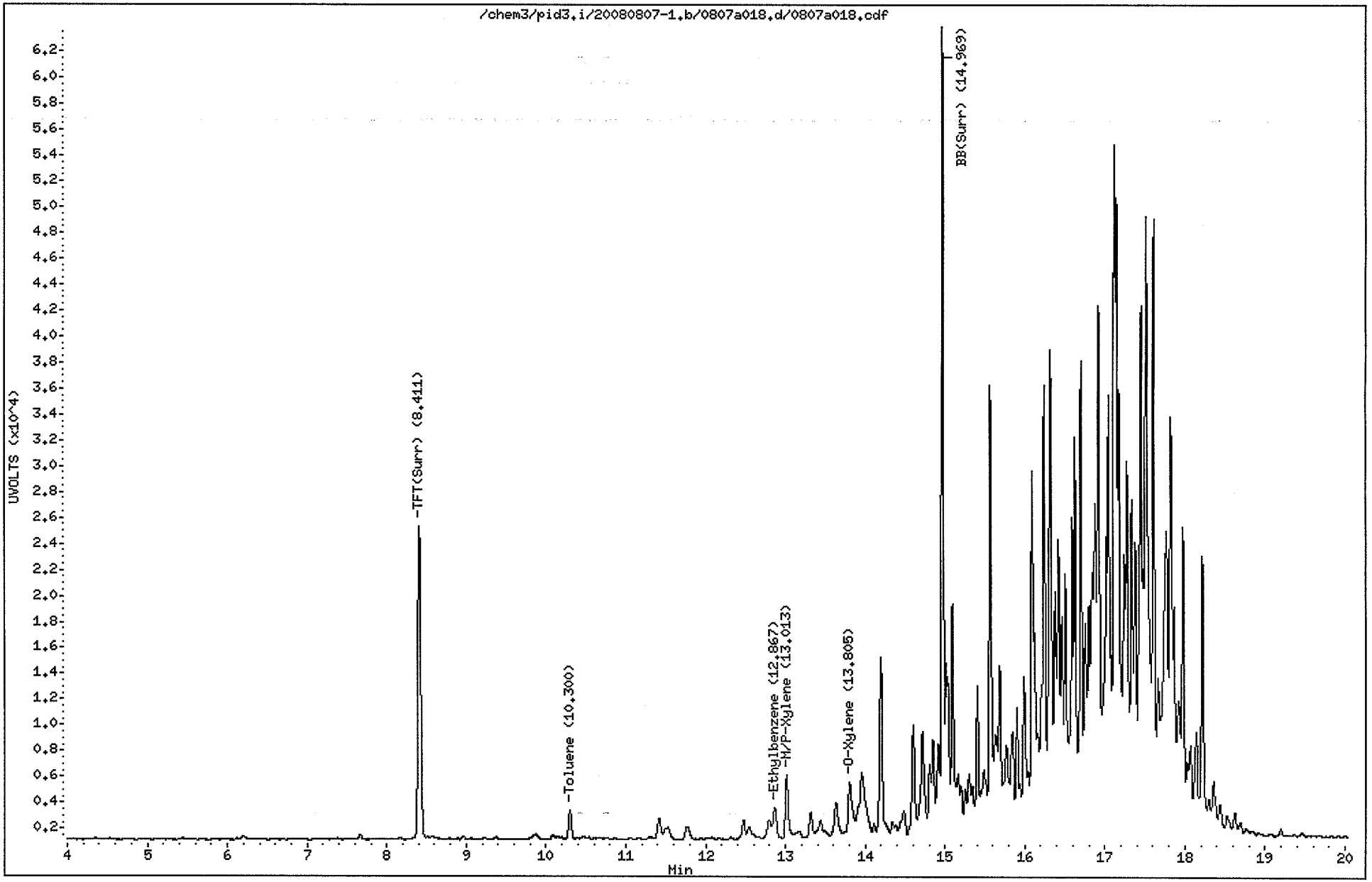


Data File: /chem3/pid3.i/20080807-1.b/0807a018.d
Date : 07-AUG-2008 18:39
Client ID: EBC-7-S1
Sample Info: NJ45L

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-7-S2
SAMPLE

Lab Sample ID: NJ45M
LIMS ID: 08-19406
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 19:04
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 80 mg-dry-wt
Percent Moisture: 3.5%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	16	< 16 U	
108-88-3	Toluene	16	< 16 U	
100-41-4	Ethylbenzene	16	< 16 U	
	m,p-Xylene	31	< 31 U	
95-47-6	o-Xylene	16	< 16 U	
	Gasoline Range Hydrocarbons	**6.2**	**13**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	98.0%
Bromobenzene	93.7%

Gasoline Surrogate Recovery

Trifluorotoluene	96.7%
Bromobenzene	90.1%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

NG 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a019.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a019.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45M
Client ID: EBC-7-S2
Injection Date: 07-AUG-2008 19:04
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.410	0.001	6394	80551	96.7	TFT(Surr)
14.971	0.000	4280	34936	90.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	65218	0.088
8015B (2MP-TMB)	16217	0.011
AKGas (nC6-nC10)	8170	0.007
NWGas (Tol-Nap)	166340	0.211

GRO

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.001	23805	98.0	TFT(Surr)
14.969	0.000	56801	93.7	BB(Surr)

AROMATICS (PID)

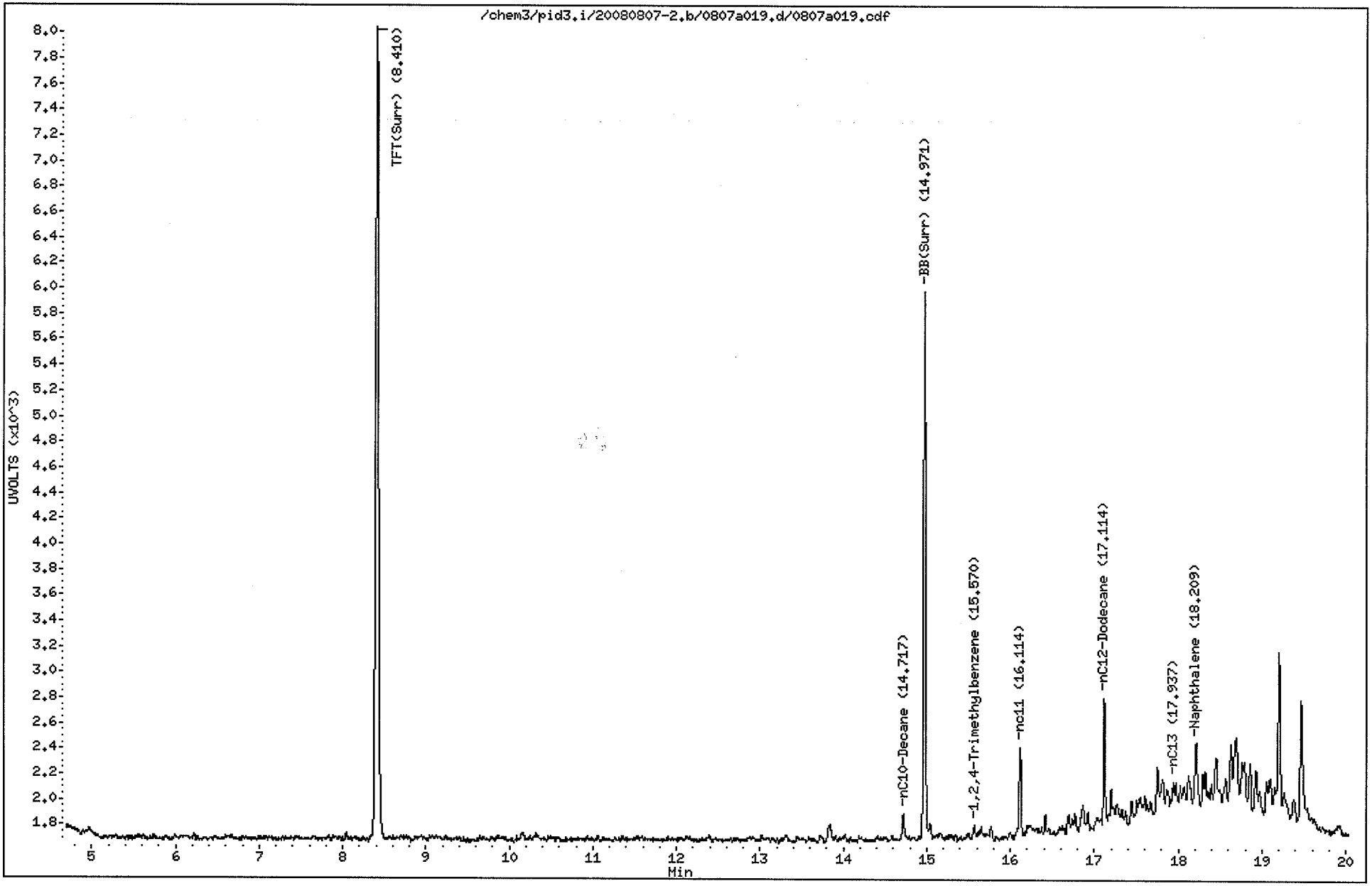
RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a019.d
Date : 07-AUG-2008 19:04
Client ID: EBC-7-S2
Sample Info: NJ45M

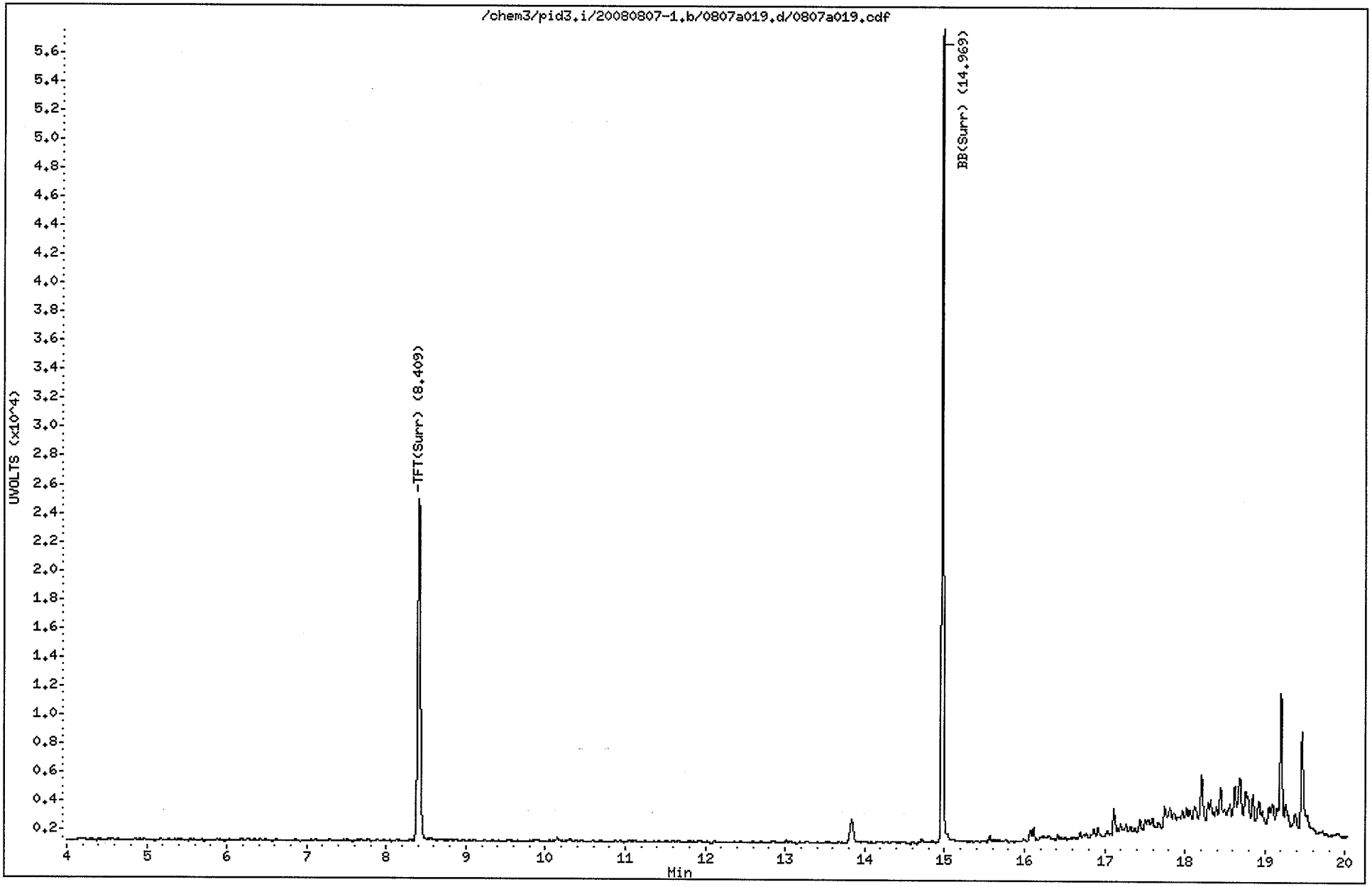
Instrument: pid3.i
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a019.d
Date : 07-AUG-2008 19:04
Client ID: EBC-7-S2
Sample Info: NJ45M

Instrument: pid3.i
Operator: PKC
Column phase: RTX 502-2 PID
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-8-S1
SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 19:28
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 70 mg-dry-wt
Percent Moisture: 4.6%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	18	< 18 U
108-88-3	Toluene	18	< 18 U
100-41-4	Ethylbenzene	18	< 18 U
	m,p-Xylene	36	< 36 U
95-47-6	o-Xylene	18	< 18 U

			GAS ID
Gasoline Range Hydrocarbons	7.1	< 7.1 U	---

BETX Surrogate Recovery

Trifluorotoluene	90.7%
Bromobenzene	88.3%

Gasoline Surrogate Recovery

Trifluorotoluene	89.5%
Bromobenzene	87.1%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a020.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a020.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45N
Client ID: EBC-8-S1
Injection Date: 07-AUG-2008 19:28
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.414	0.005	5917	75429	89.5	TFT(Surr)
14.972	0.002	4138	33475	87.1	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	16873	0.023
8015B (2MP-TMB)	6780	0.005
AKGas (nC6-nC10)	6780	0.006
NWGas (Tol-Nap)	30589	0.039

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.413	0.005	22034	90.7	TFT(Surr)
14.970	0.002	53537	88.3	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

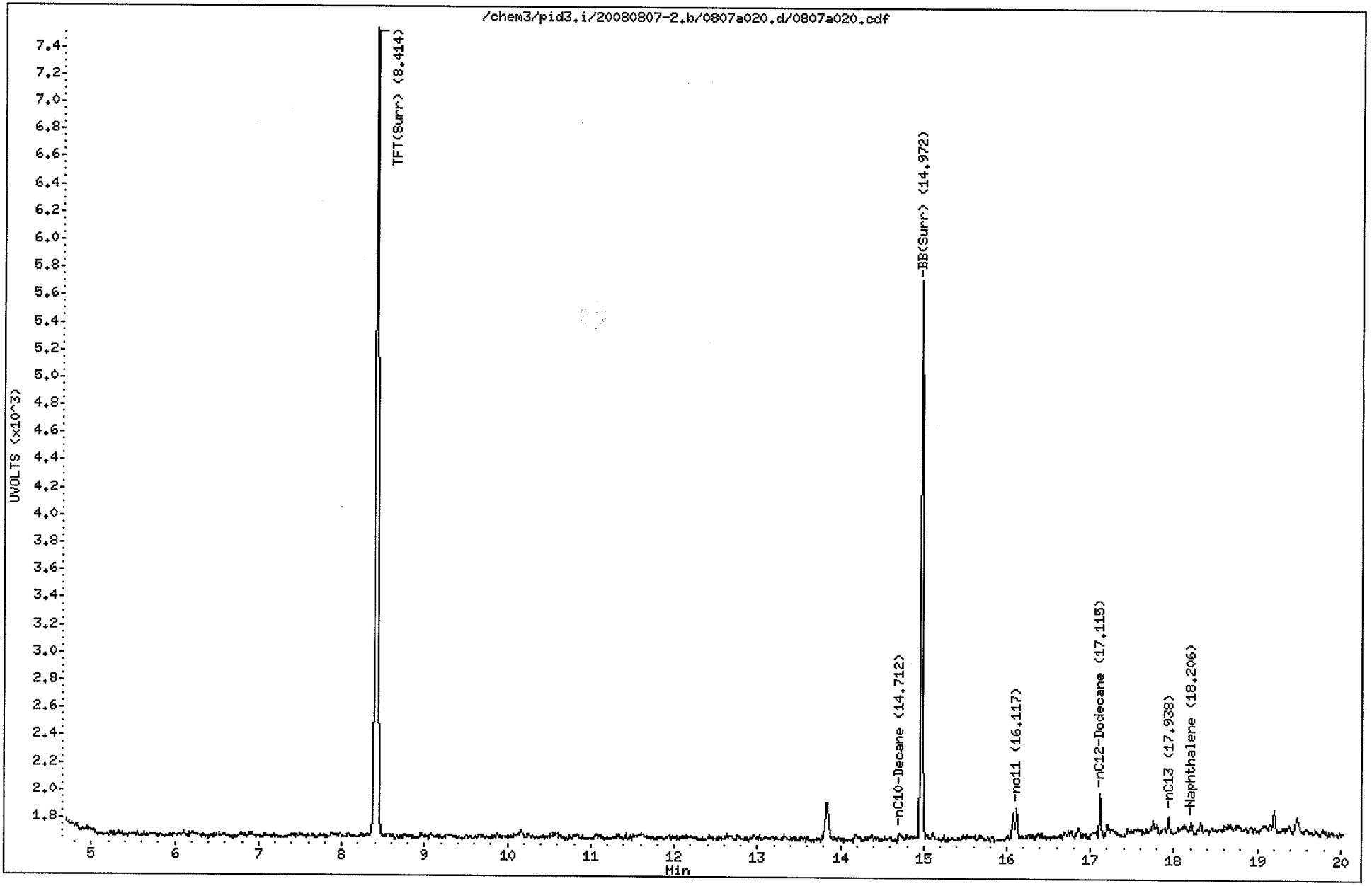
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a020.d
Date : 07-AUG-2008 19:28
Client ID: EBC-8-S1
Sample Info: NJ45N

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



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Date : 07-AUG-2008 19:28

Client ID: EBC-8-S1

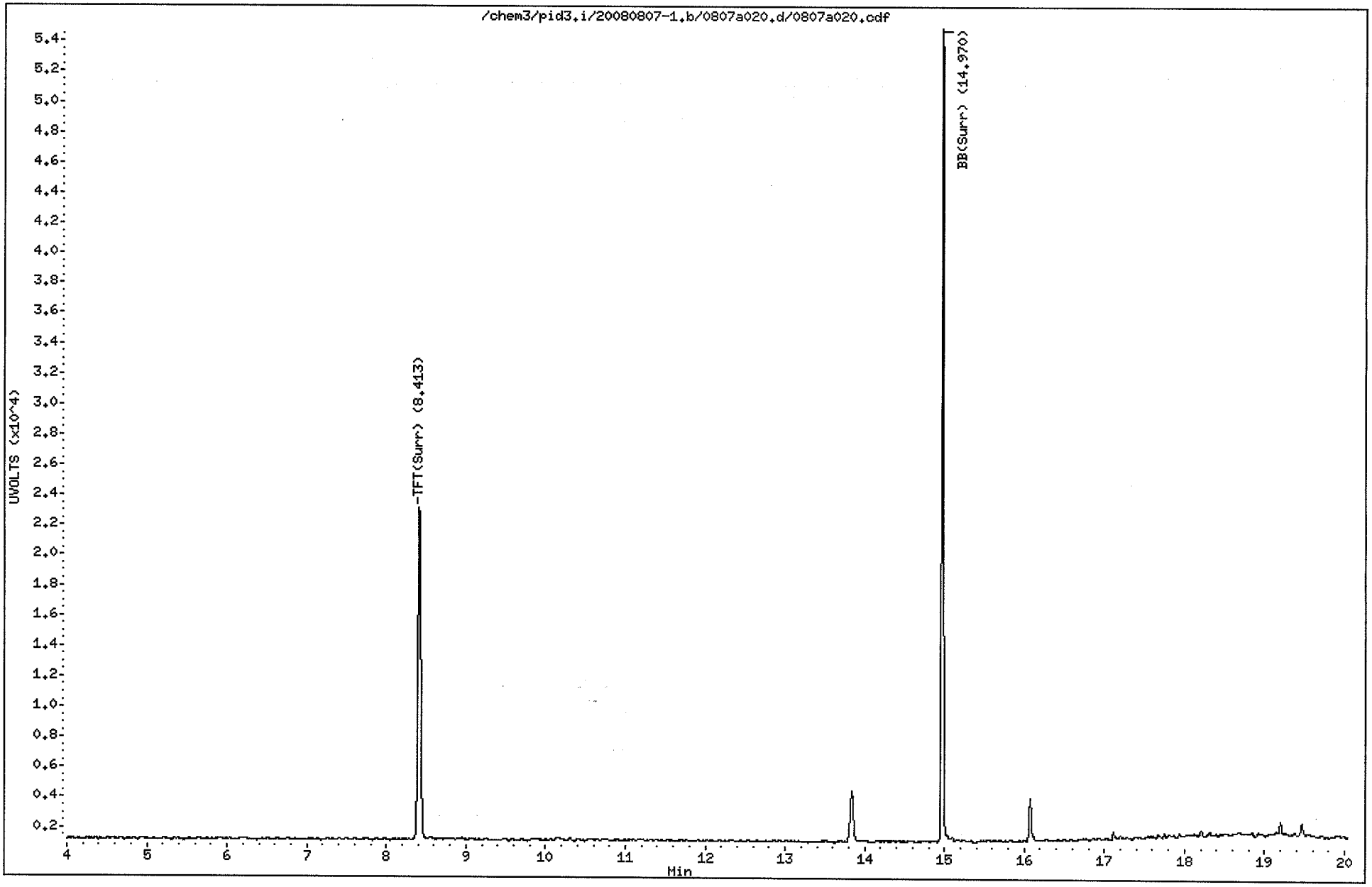
Sample Info: NJ45N

Instrument: pid3.i

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-9-S1
SAMPLE

Lab Sample ID: NJ450
LIMS ID: 08-19408
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 19:53
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 81 mg-dry-wt
Percent Moisture: 5.6%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	16	< 16 U
108-88-3	Toluene	16	< 16 U
100-41-4	Ethylbenzene	16	< 16 U
	m,p-Xylene	31	< 31 U
95-47-6	o-Xylene	16	< 16 U

			GAS ID
Gasoline Range Hydrocarbons	6.2	< 6.2 U	---

BETX Surrogate Recovery

Trifluorotoluene	93.3%
Bromobenzene	91.4%

Gasoline Surrogate Recovery

Trifluorotoluene	91.7%
Bromobenzene	89.7%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC
8/18/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a021.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a021.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45O
Client ID: EBC-9-S1
Injection Date: 07-AUG-2008 19:53
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.413	0.004	6065	77981	91.7	TFT(Surr)
14.971	0.001	4264	35099	89.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	14055	0.019
8015B (2MP-TMB)	3373	0.002
AKGas (nC6-nC10)	3373	0.003
NWGas (Tol-Nap)	40393	0.051

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.412	0.004	22649	93.3	TFT(Surr)
14.970	0.001	55393	91.4	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

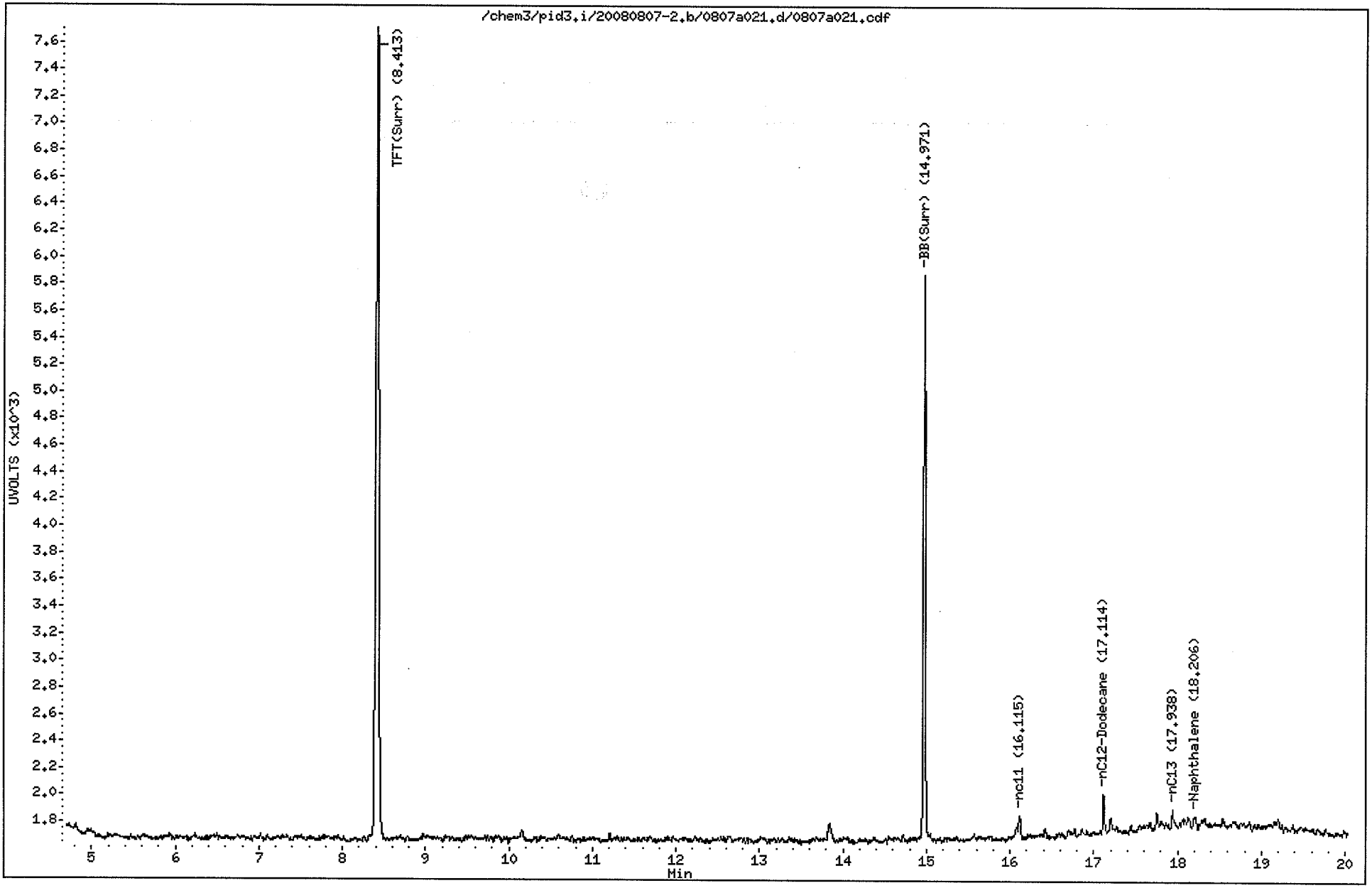
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a021.d
Date : 07-AUG-2008 19:53
Client ID: EBC-9-S1
Sample Info: NJ450

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a021.d

Date : 07-AUG-2008 19:53

Client ID: EBC-9-S1

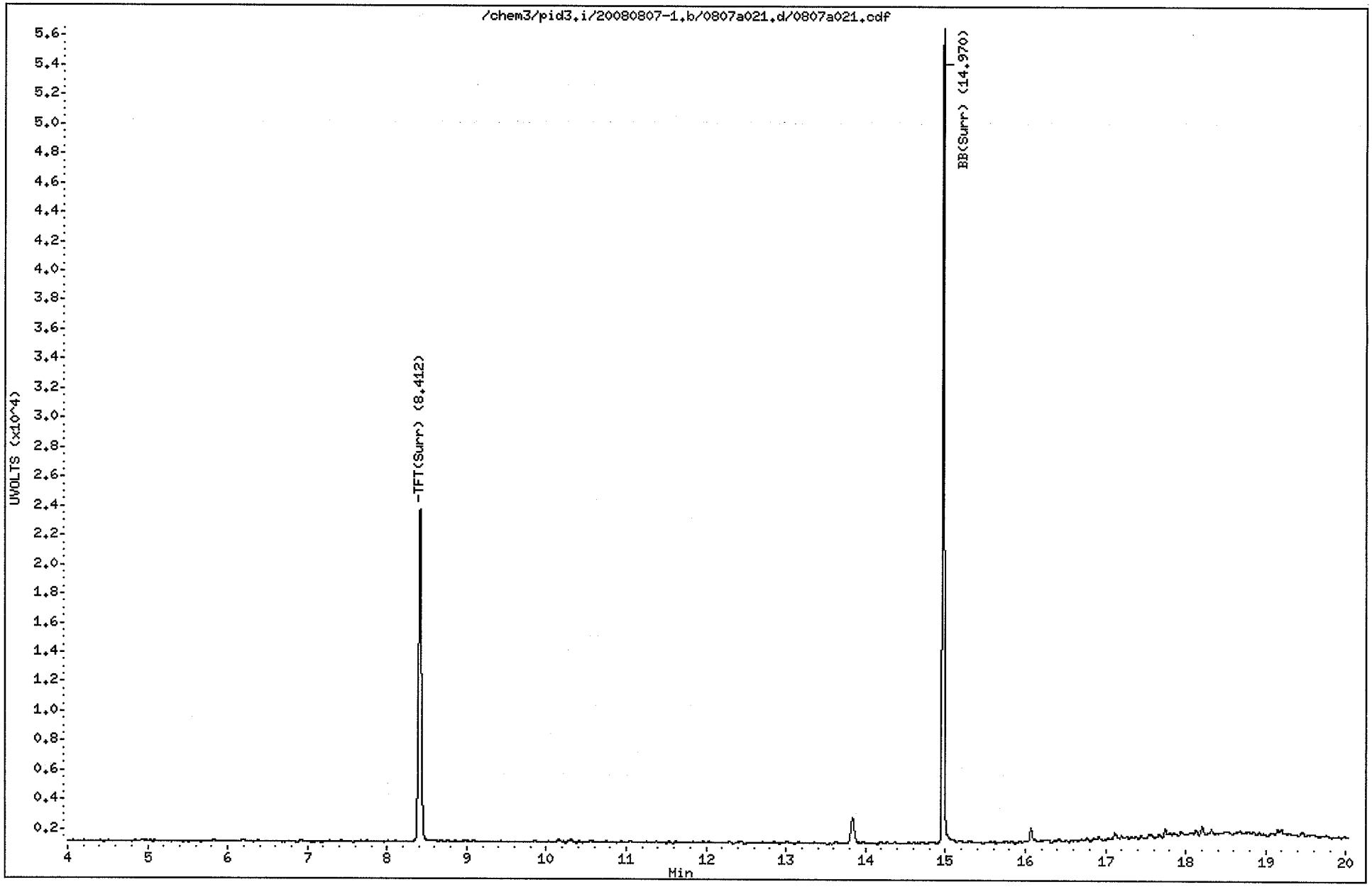
Sample Info: NJ450

Column phase: RTX 502-2 PID

Instrument: pid3.i

Operator: PKC

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
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Sample ID: EBC-10-S1
SAMPLE

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 20:18
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 67 mg-dry-wt
Percent Moisture: 5.0%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	18	< 18 U
108-88-3	Toluene	18	< 18 U
100-41-4	Ethylbenzene	18	< 18 U
	m,p-Xylene	37	< 37 U
95-47-6	o-Xylene	18	< 18 U

			GAS ID
Gasoline Range Hydrocarbons	7.4	< 7.4 U	---

BETX Surrogate Recovery

Trifluorotoluene	91.3%
Bromobenzene	89.5%

Gasoline Surrogate Recovery

Trifluorotoluene	89.9%
Bromobenzene	87.7%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PZ 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a022.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a022.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45P
Client ID: EBC-10-S1
Injection Date: 07-AUG-2008 20:18
Matrix: SOIL
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.415	0.006	5944	75412	89.9	TFT(Surr)
14.971	0.001	4166	33705	87.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	7405	0.010
8015B (2MP-TMB)	6598	0.005
AKGas (nC6-nC10)	6598	0.006
NWGas (Tol-Nap)	9921	0.013

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.414	0.006	22175	91.3	TFT(Surr)
14.970	0.001	54236	89.5	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

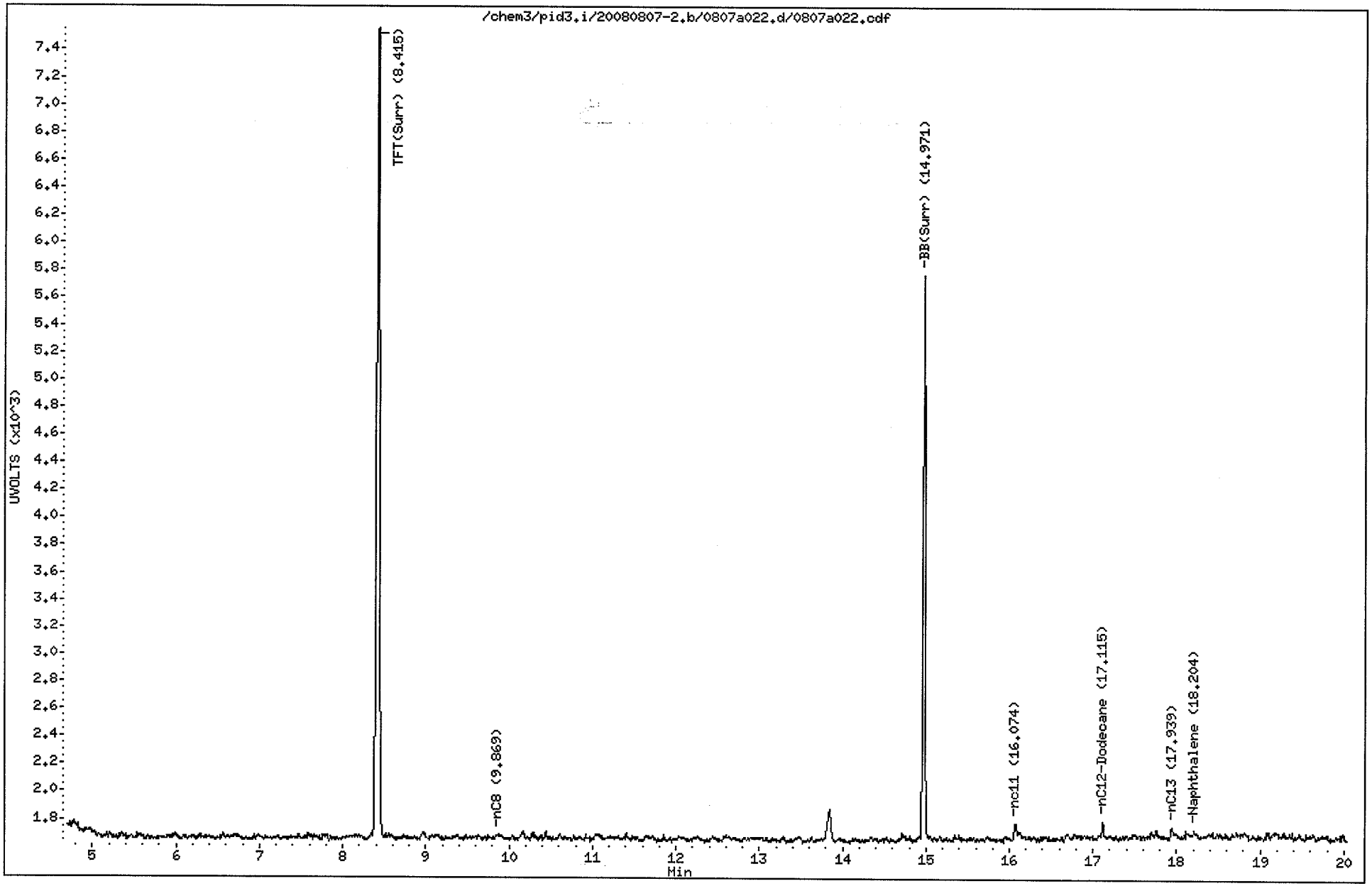
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a022.d
Date : 07-AUG-2008 20:18
Client ID: EBC-10-S1
Sample Info: NJ45P

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

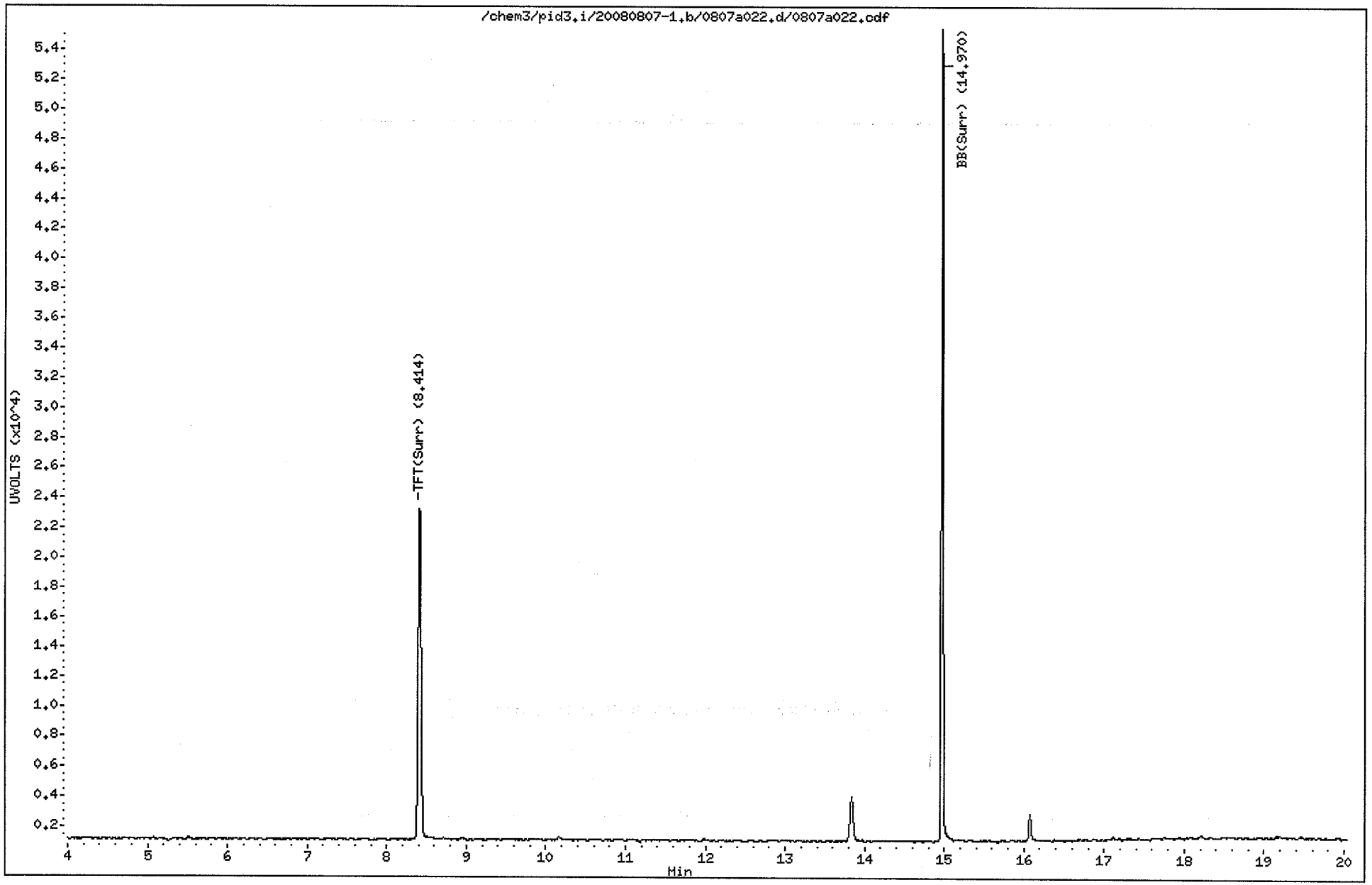


Data File: /chem3/pid3.i/20080807-1.b/0807a022.d
Date : 07-AUG-2008 20:18
Client ID: EBC-10-S1
Sample Info: NJ45P

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
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Sample ID: EBC-11-S1
SAMPLE

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 20:42
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 68 mg-dry-wt
Percent Moisture: 21.3%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	18	< 18 U
108-88-3	Toluene	18	< 18 U
100-41-4	Ethylbenzene	18	< 18 U
	m,p-Xylene	37	< 37 U
95-47-6	o-Xylene	18	< 18 U

			GAS ID
Gasoline Range Hydrocarbons	7.4	< 7.4 U	---

BETX Surrogate Recovery

Trifluorotoluene	98.4%
Bromobenzene	95.9%

Gasoline Surrogate Recovery

Trifluorotoluene	97.0%
Bromobenzene	93.9%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

FC
8/18/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a023.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a023.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45Q
Client ID: EBC-11-S1
Injection Date: 07-AUG-2008 20:42
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.413	0.003	6415	81305	97.0	TFT(Surr)
14.971	0.000	4463	36808	93.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	25191	0.034
8015B (2MP-TMB)	4014	0.003
AKGas (nC6-nC10)	4014	0.004
NWGas (Tol-Nap)	35764	0.045

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.411	0.003	23896	98.4	TFT(Surr)
14.969	0.000	58092	95.9	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

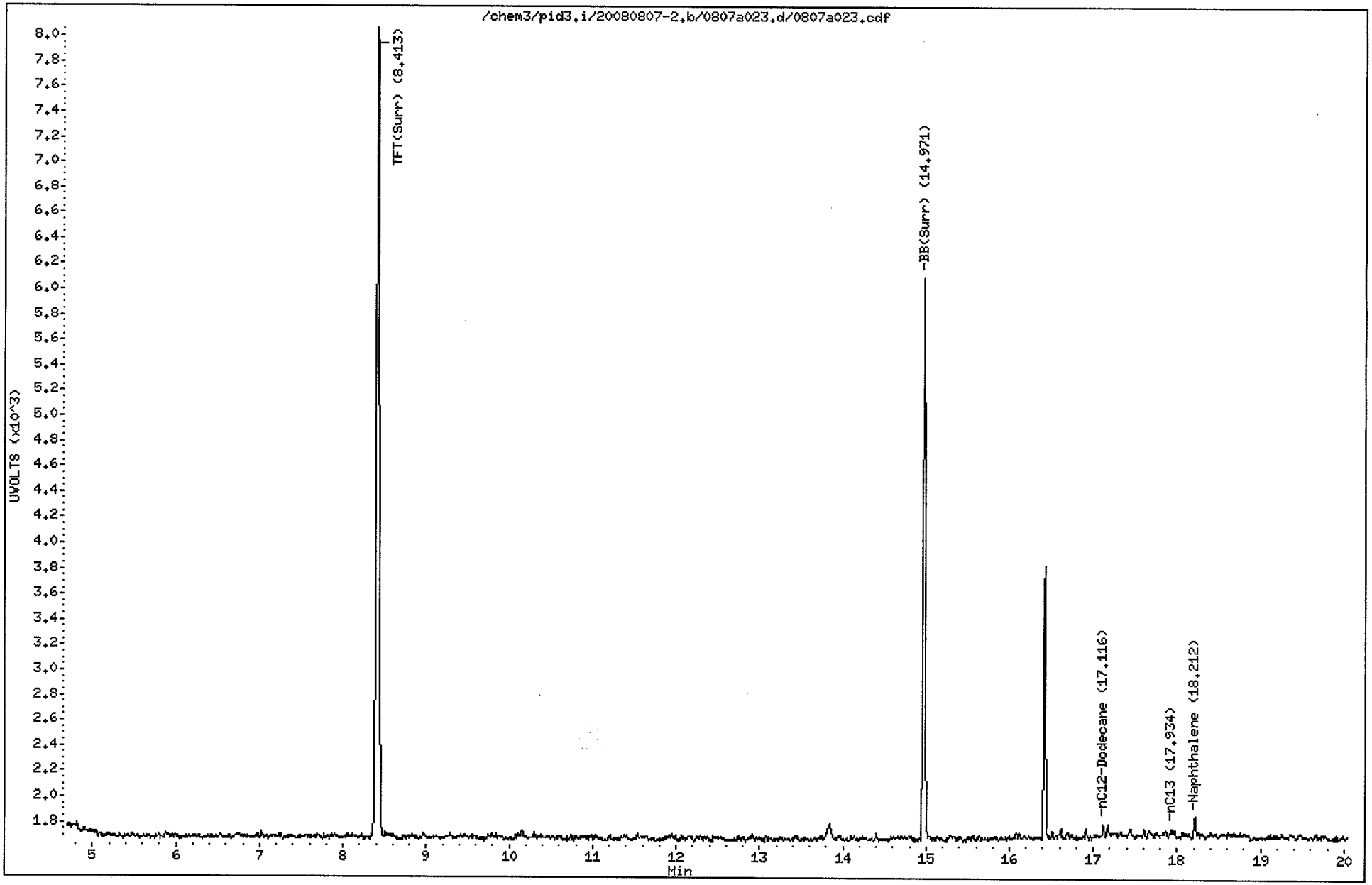
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a023.d
Date : 07-AUG-2008 20:42
Client ID: EBC-11-S1
Sample Info: NJ45Q

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



Data File: /chem3/pid3.i/20080807-1.b/0807a023.d

Date : 07-AUG-2008 20:42

Client ID: EBC-11-S1

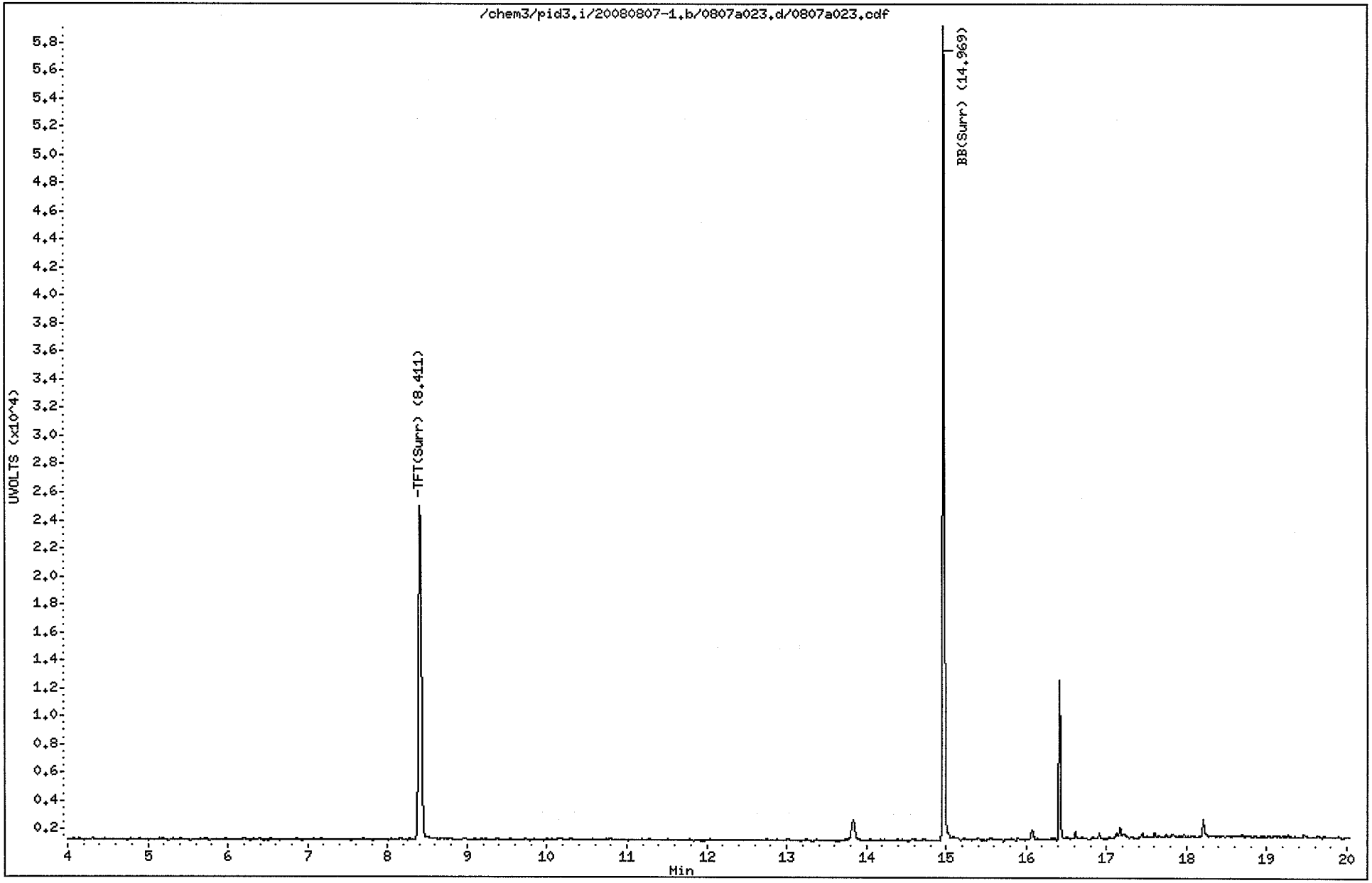
Instrument: pid3.i

Sample Info: NJ45Q

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-11-S2
SAMPLE

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 21:07
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 68 mg-dry-wt
Percent Moisture: 16.5%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	18	< 18 U	
108-88-3	Toluene	18	< 18 U	
100-41-4	Ethylbenzene	18	< 18 U	
	m,p-Xylene	36	< 36 U	
95-47-6	o-Xylene	18	< 18 U	
	Gasoline Range Hydrocarbons	**7.3**	**8.9**	GAS ID **GRO**

BETX Surrogate Recovery

Trifluorotoluene	92.4%
Bromobenzene	92.2%

Gasoline Surrogate Recovery

Trifluorotoluene	90.8%
Bromobenzene	89.4%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a024.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a024.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45R
Client ID: EBC-11-S2
Injection Date: 07-AUG-2008 21:07
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.413	0.003	6003	75237	90.8	TFT(Surr)
14.971	0.001	4250	34629	89.4	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	93835	0.127
8015B (2MP-TMB)	65455	0.046
AKGas (nC6-nC10)	64319	0.056
NWGas (Tol-Nap)	96238	0.122

GRO

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.412	0.003	22442	92.4	TFT(Surr)
14.970	0.001	55898	92.2	BB(Surr)

AROMATICS (PID)

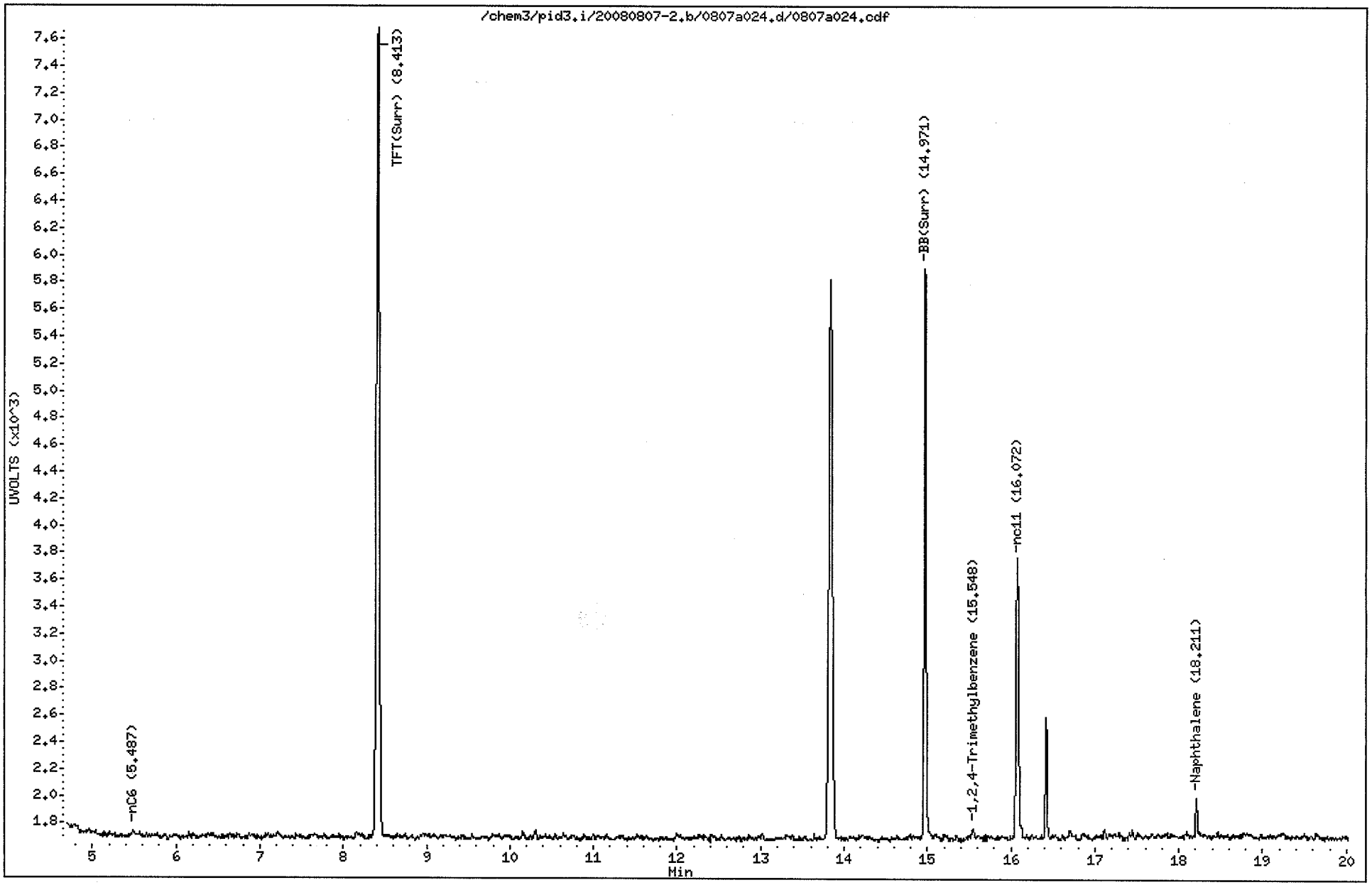
RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a024.d
Date : 07-AUG-2008 21:07
Client ID: EBC-11-S2
Sample Info: NJ45R

Instrument: pid3.i

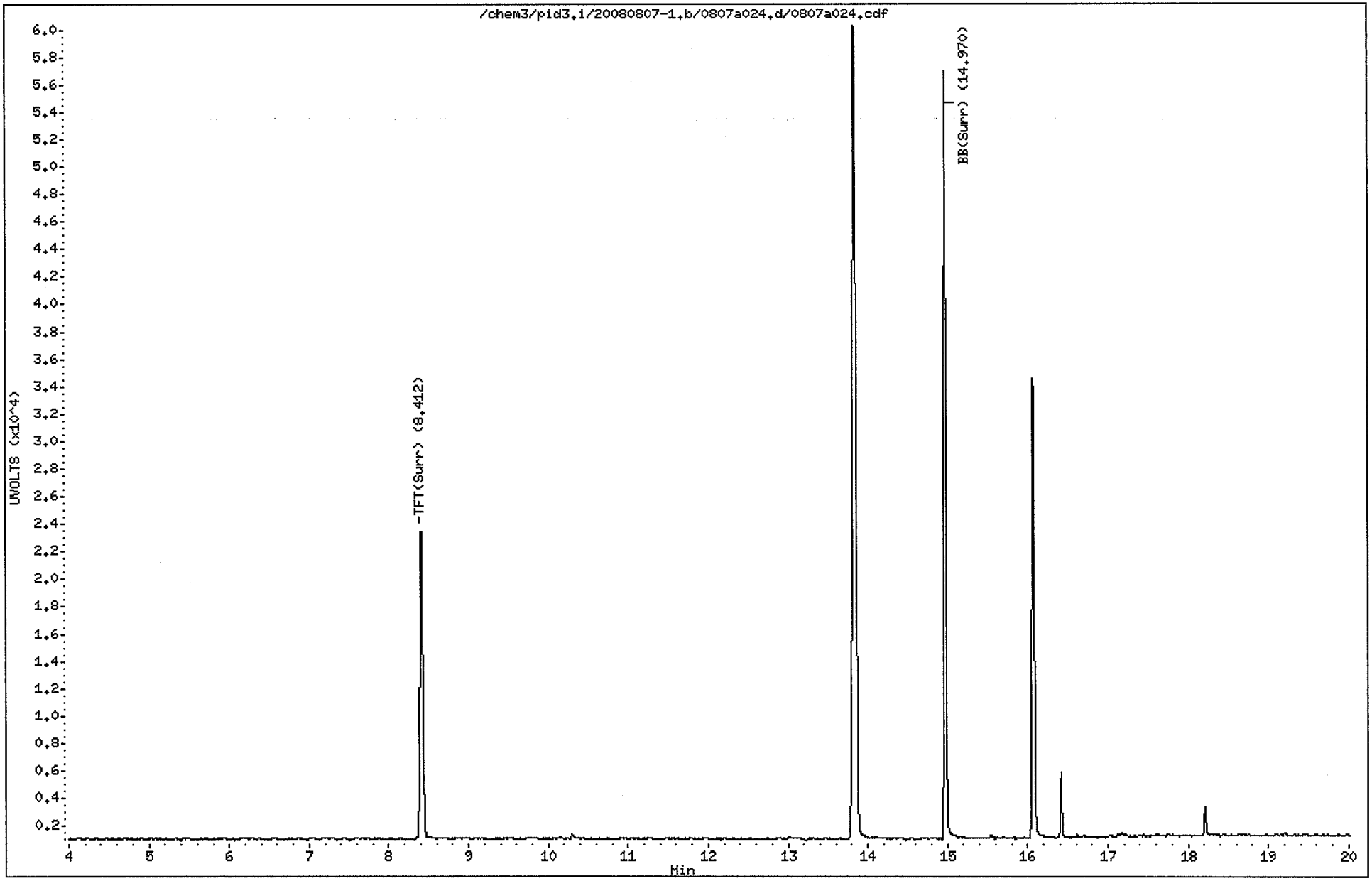
Operator: PKC
Column phase: RTX 502-2 FID
Column diameter: 0.18



Data File: /chem3/pid3.i/20080807-1.b/0807a024.d
Date : 07-AUG-2008 21:07
Client ID: EBC-11-S2
Sample Info: NJ45R

Instrument: pid3.i
Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-12-S1
SAMPLE

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 22:46
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 76 mg-dry-wt
Percent Moisture: 4.7%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	16	< 16 U
108-88-3	Toluene	16	< 16 U
100-41-4	Ethylbenzene	16	< 16 U
	m,p-Xylene	33	< 33 U
95-47-6	o-Xylene	16	< 16 U

			GAS ID
	Gasoline Range Hydrocarbons	6.6	< 6.6 U ---

BETX Surrogate Recovery

Trifluorotoluene	88.6%
Bromobenzene	89.3%

Gasoline Surrogate Recovery

Trifluorotoluene	89.1%
Bromobenzene	88.9%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

RC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a028.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a028.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45S
Client ID: EBC-12-S1
Injection Date: 07-AUG-2008 22:46
Matrix: SOIL
Dilution Factor: 1.000

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	5889	74565	89.1	TFT(Surr)
14.971	0.001	4227	36411	88.9	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	30775	0.042
8015B (2MP-TMB)	24089	0.017
AKGas (nC6-nC10)	20019	0.018
NWGas (Tol-Nap)	38262	0.049

* Surrogate areas are subtracted from Total Area

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.001	21516	88.6	TFT(Surr)
14.969	0.000	54099	89.3	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a028.d

Date : 07-AUG-2008 22:46

Client ID: EBC-12-S1

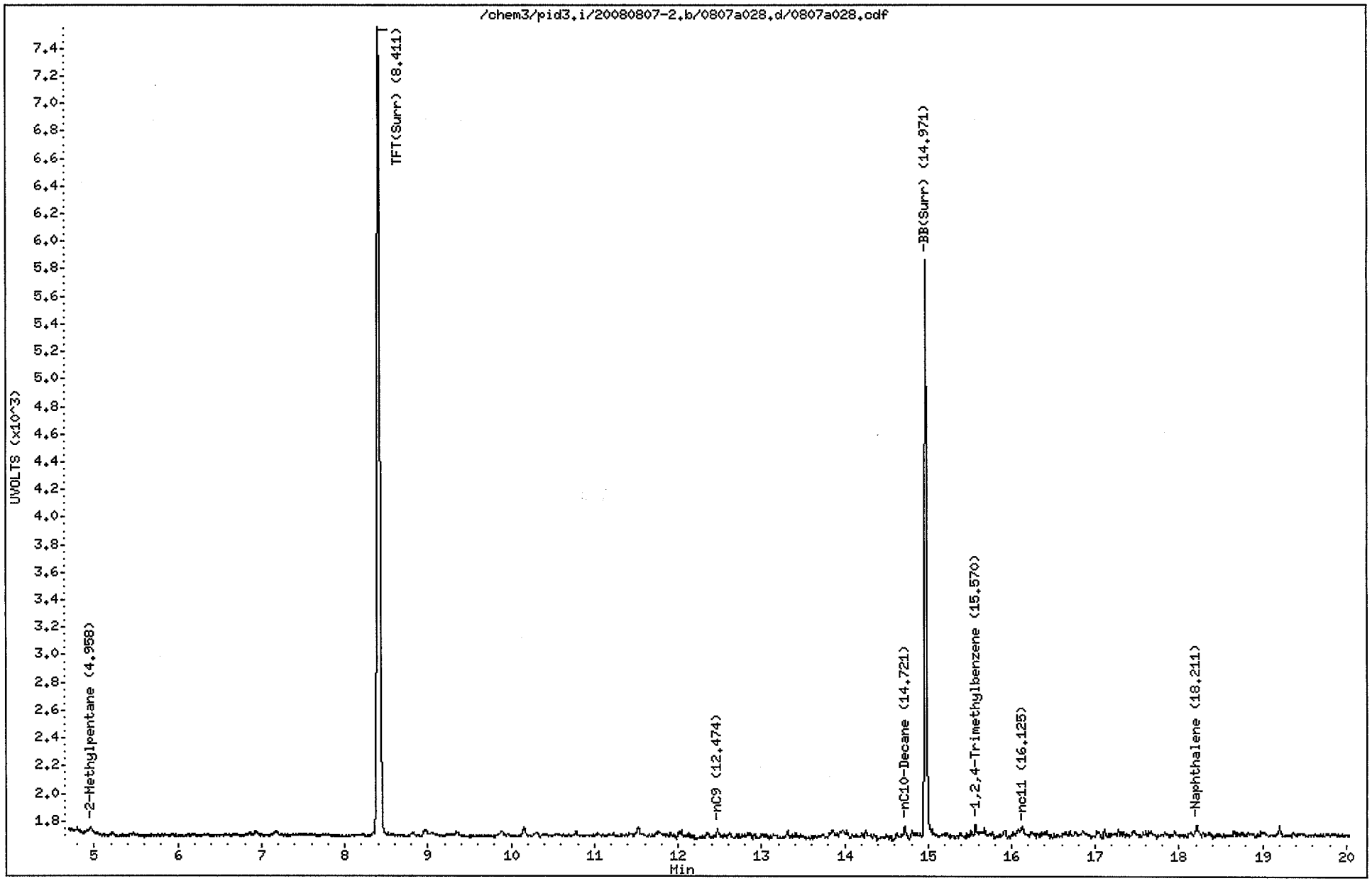
Sample Info: NJ45S

Instrument: pid3.i

Operator: PKC

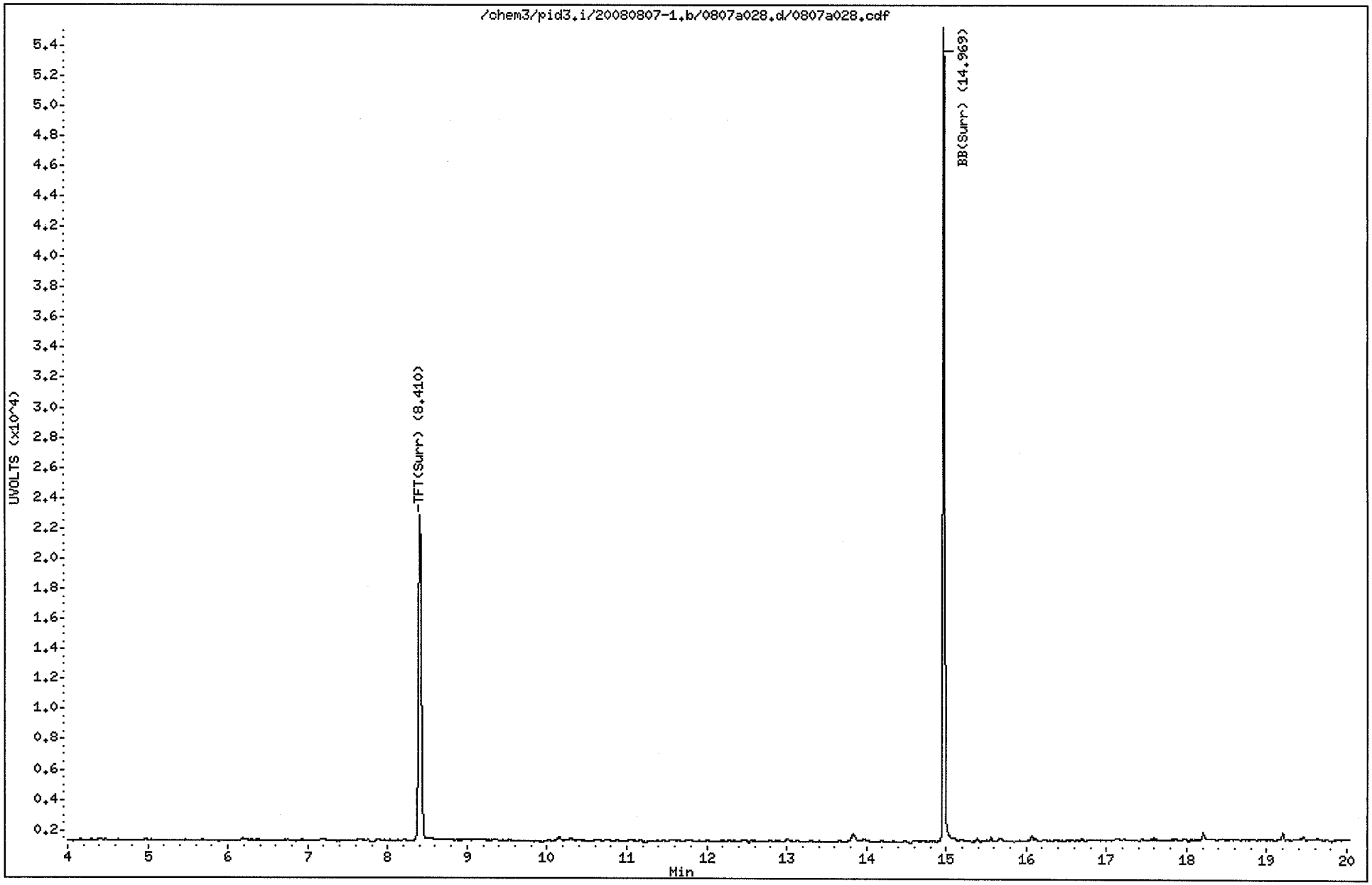
Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid3.i/20080807-1.b/0807a028.d
Date : 07-AUG-2008 22:46
Client ID: EBC-12-S1
Sample Info: NJ45S

Instrument: pid3.i
Operator: PKC
Column phase: RTX 502-2 PID
Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG

Sample ID: EBC-13-S1
SAMPLE

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 23:10
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 74 mg-dry-wt
Percent Moisture: 6.0%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	17	< 17 U	
108-88-3	Toluene	17	< 17 U	
100-41-4	Ethylbenzene	17	< 17 U	
	m,p-Xylene	34	< 34 U	
95-47-6	o-Xylene	17	< 17 U	
	Gasoline Range Hydrocarbons	6.8	< 6.8 U	GAS ID ---

BETX Surrogate Recovery

Trifluorotoluene	86.3%
Bromobenzene	88.6%

Gasoline Surrogate Recovery

Trifluorotoluene	86.2%
Bromobenzene	87.0%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PG 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a029.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a029.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45U
Client ID: EBC-13-S1
Injection Date: 07-AUG-2008 23:10
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.409	0.000	5698	71651	86.2	TFT(Surr)
14.970	0.000	4133	33598	87.0	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	25559	0.035
8015B (2MP-TMB)	23524	0.016
AKGas (nC6-nC10)	23524	0.021
NWGas (Tol-Nap)	25559	0.032

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	0.000	20949	86.3	TFT(Surr)
14.969	0.000	53676	88.6	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a029.d

Date : 07-AUG-2008 23:10

Client ID: EBC-13-S1

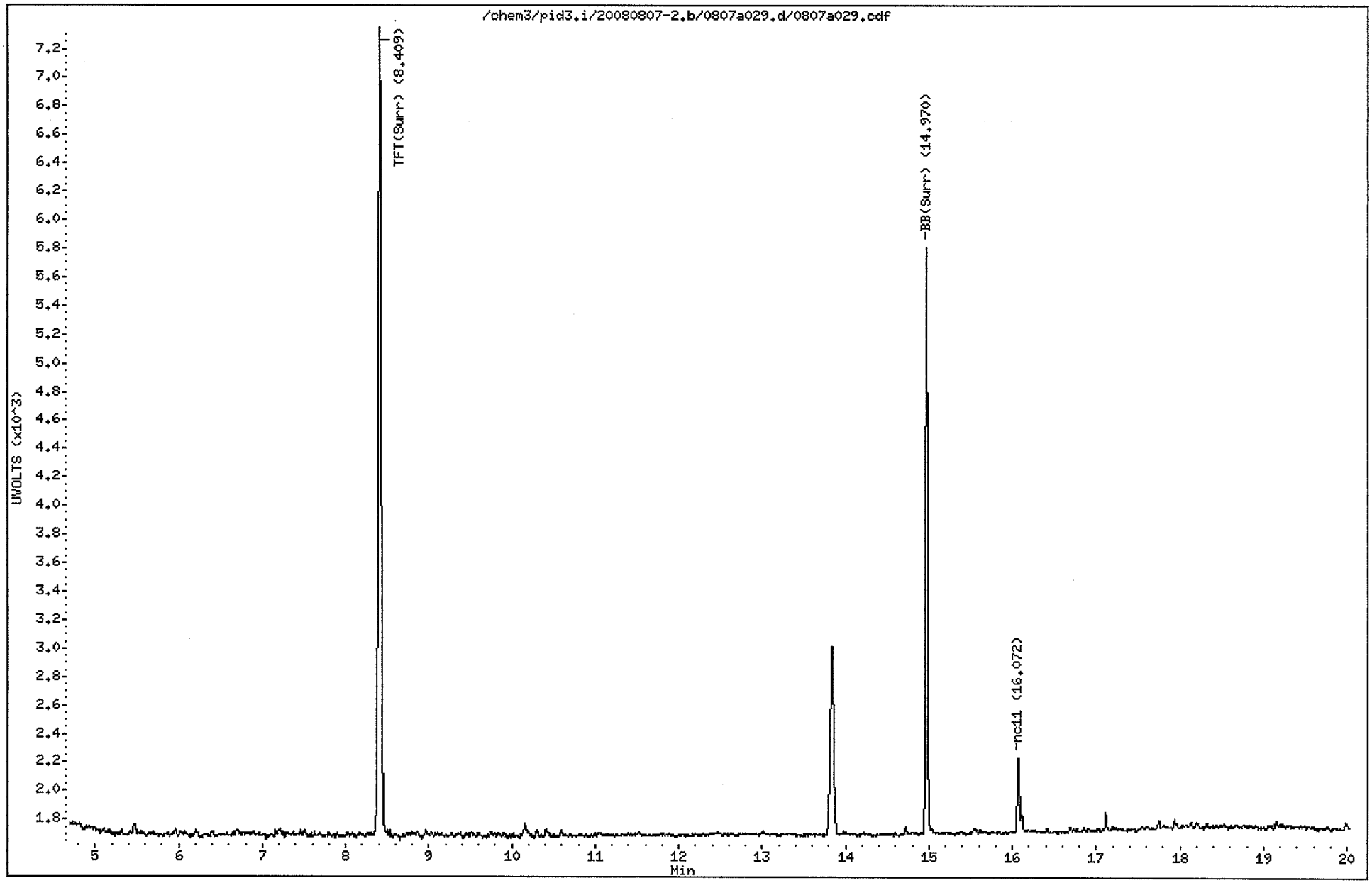
Instrument: pid3.i

Sample Info: NJ45U

Operator: PKC

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid3.i/20080807-1.b/0807a029.d

Date : 07-AUG-2008 23:10

Client ID: EBC-13-S1

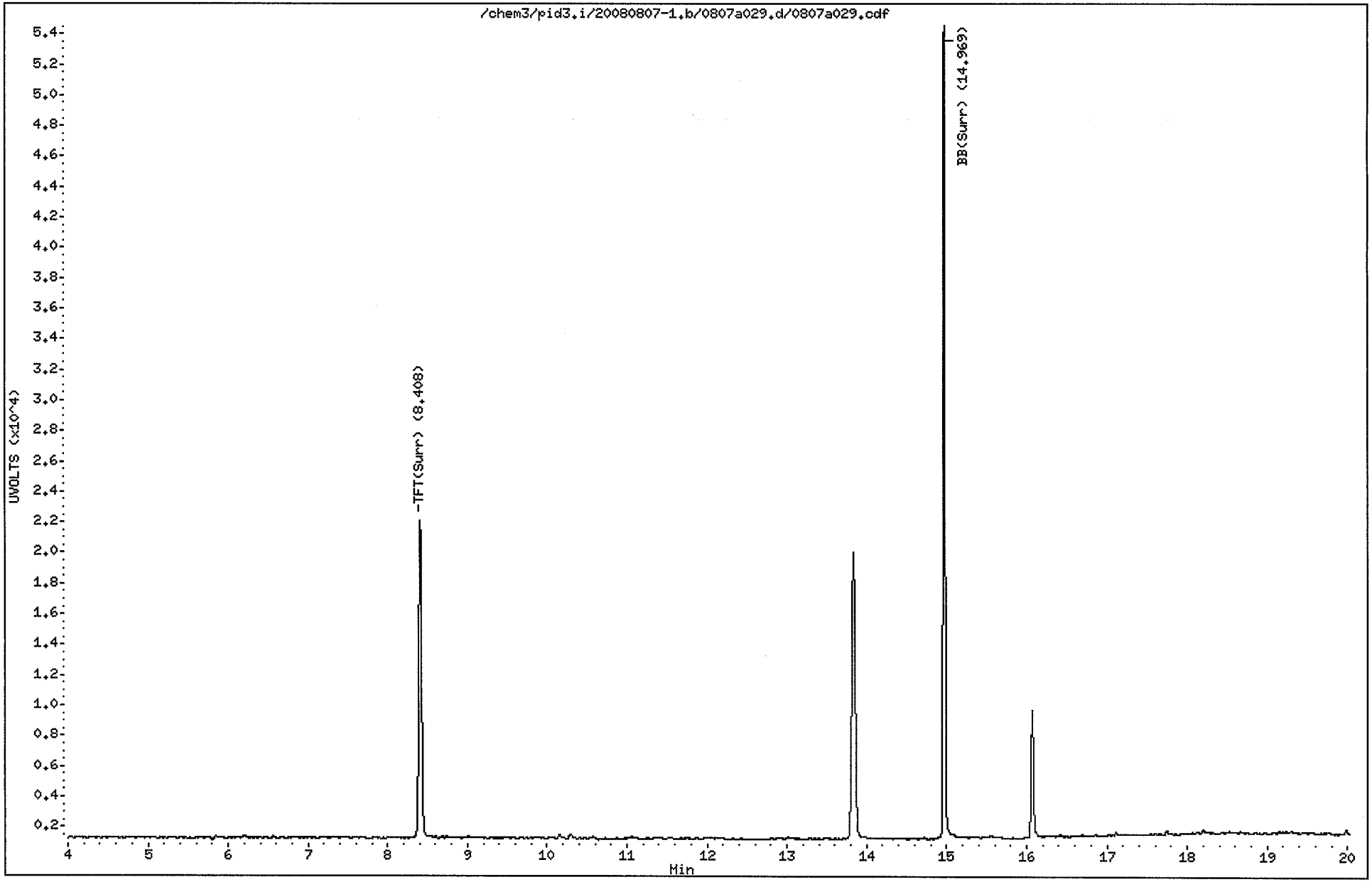
Instrument: pid3.i

Sample Info: NJ45U

Operator: PKC

Column phase: RTX 502-2 PID

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-13-S2
SAMPLE

Lab Sample ID: NJ45V
LIMS ID: 08-19415
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 23:35
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 46 mg-dry-wt
Percent Moisture: 9.4%

CAS Number	Analyte	RL	Result	
71-43-2	Benzene	27	< 27 U	
108-88-3	Toluene	27	< 27 U	
100-41-4	Ethylbenzene	27	< 27 U	
	m,p-Xylene	55	< 55 U	
95-47-6	o-Xylene	27	< 27 U	
				GAS ID
	Gasoline Range Hydrocarbons	11	< 11 U	---

BETX Surrogate Recovery

Trifluorotoluene	88.1%
Bromobenzene	90.4%

Gasoline Surrogate Recovery

Trifluorotoluene	87.7%
Bromobenzene	89.7%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

PC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a030.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a030.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45V
Client ID: EBC-13-S2
Injection Date: 07-AUG-2008 23:35
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.002	5799	72688	87.7	TFT(Surr)
14.971	0.000	4265	34912	89.7	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	72587	0.098
8015B (2MP-TMB)	47526	0.033
AKGas (nC6-nC10)	45246	0.040
NWGas (Tol-Nap)	72587	0.092

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.002	21399	88.1	TFT(Surr)
14.969	0.000	54781	90.4	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

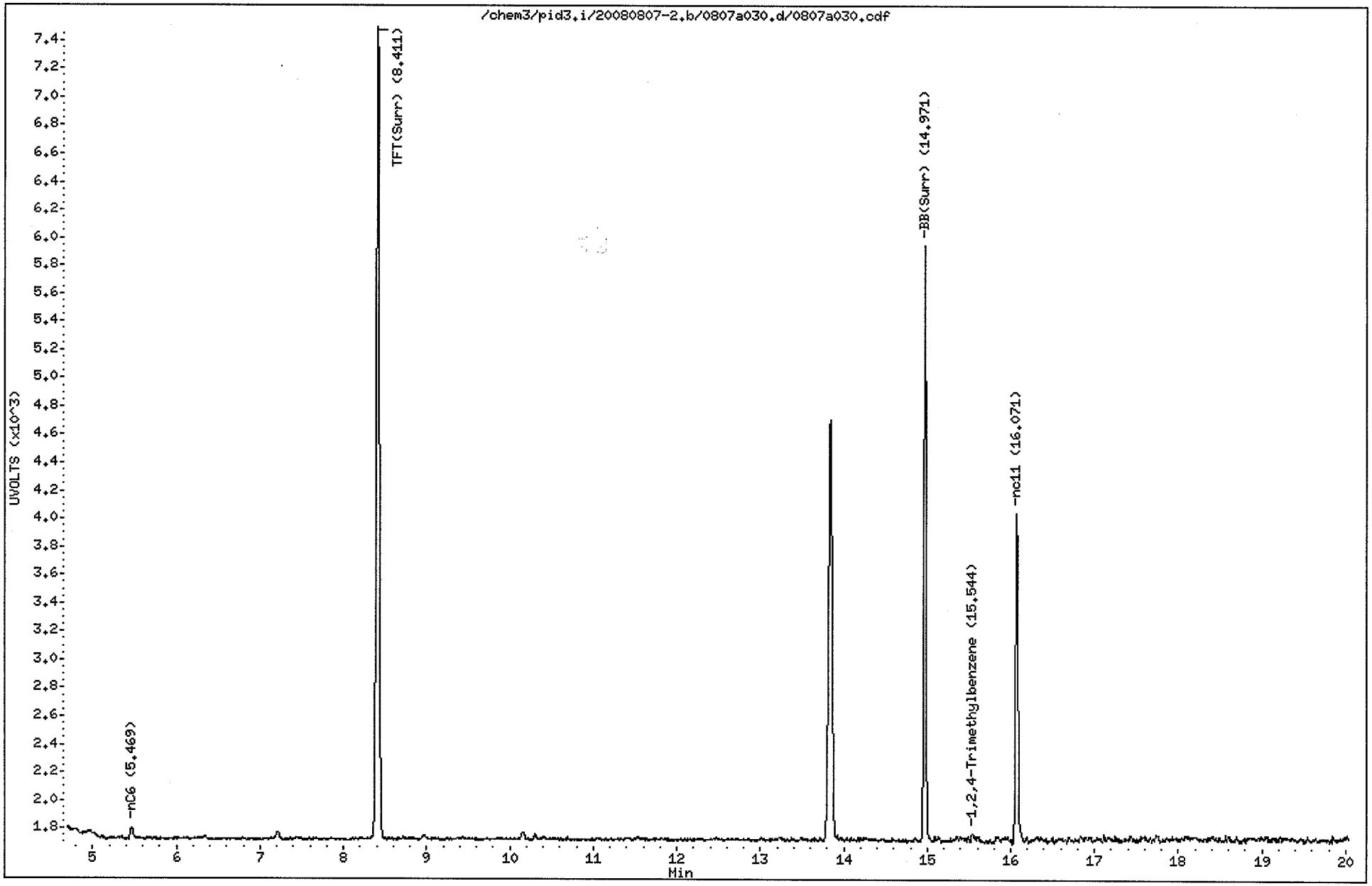
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a030.d
Date : 07-AUG-2008 23:35
Client ID: EBC-13-S2
Sample Info: NJ45V

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

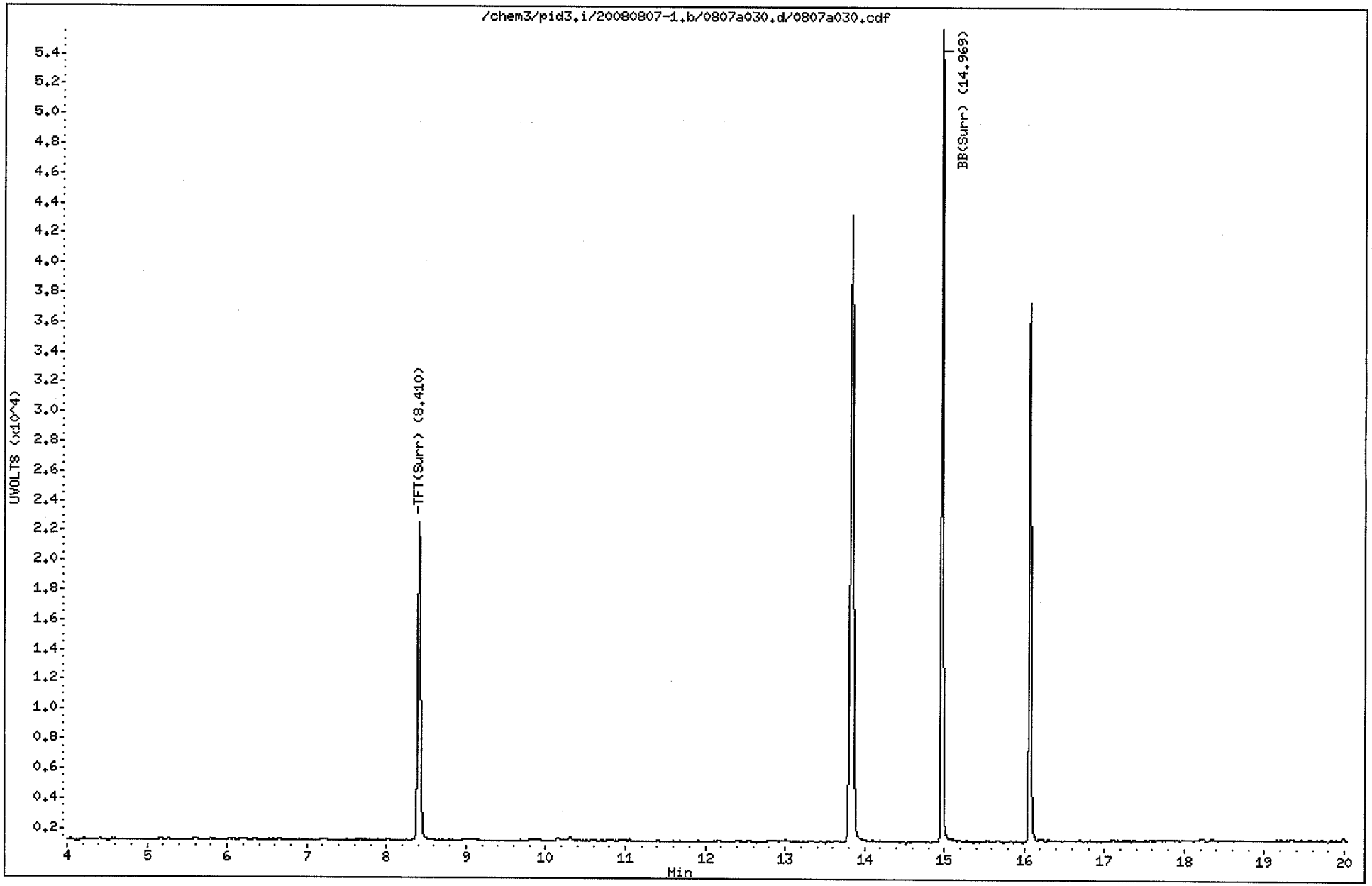


Data File: /chem3/pid3.i/20080807-1.b/0807a030.d
Date : 07-AUG-2008 23:35
Client ID: EBC-13-S2
Sample Info: NJ45V

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: EBC-14-S1
SAMPLE

Lab Sample ID: NJ45W
LIMS ID: 08-19416
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Date Analyzed: 08/07/08 00:00
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 71 mg-dry-wt
Percent Moisture: 8.9%

CAS Number	Analyte	RL	Result
71-43-2	Benzene	18	< 18 U
108-88-3	Toluene	18	< 18 U
100-41-4	Ethylbenzene	18	< 18 U
	m,p-Xylene	35	< 35 U
95-47-6	o-Xylene	18	< 18 U

			GAS ID
Gasoline Range Hydrocarbons	7.0	< 7.0 U	---

BETX Surrogate Recovery

Trifluorotoluene	93.1%
Bromobenzene	90.9%

Gasoline Surrogate Recovery

Trifluorotoluene	93.6%
Bromobenzene	90.5%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

RC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a031.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a031.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: NJ45W
Client ID: EBC-14-S1
Injection Date: 07-AUG-2008 00:00
Matrix: SOIL
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.416	0.006	6190	78768	93.6	TFT(Surr)
14.971	0.001	4301	34469	90.5	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	4037	0.005
8015B (2MP-TMB)	3871	0.003
AKGas (nC6-nC10)	3870	0.003
NWGas (Tol-Nap)	4037	0.005

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.414	0.006	22617	93.1	TFT(Surr)
14.970	0.001	55114	90.9	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

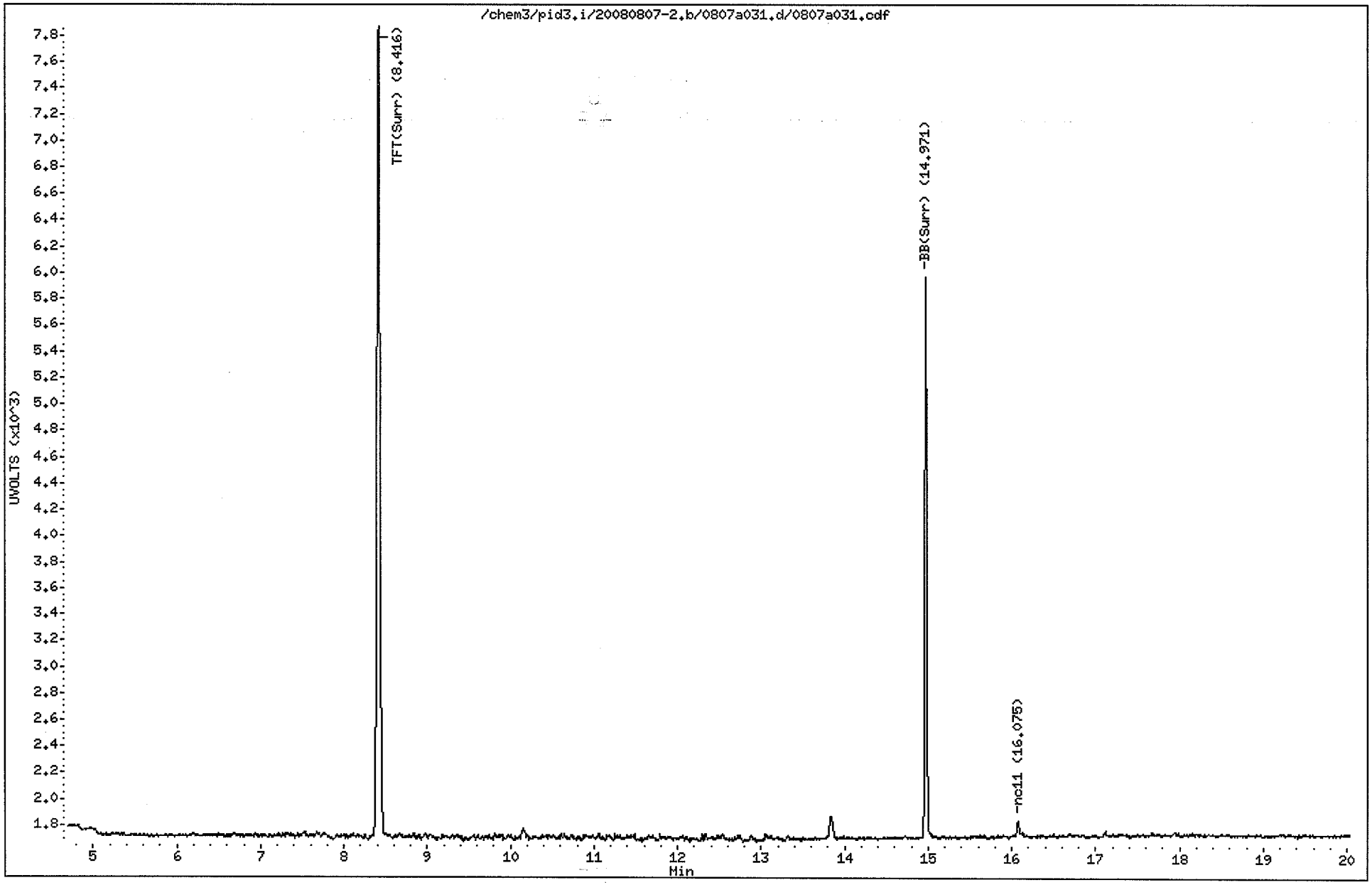
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a031.d
Date : 07-AUG-2008 00:00
Client ID: EBC-14-S1
Sample Info: NJ45W

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

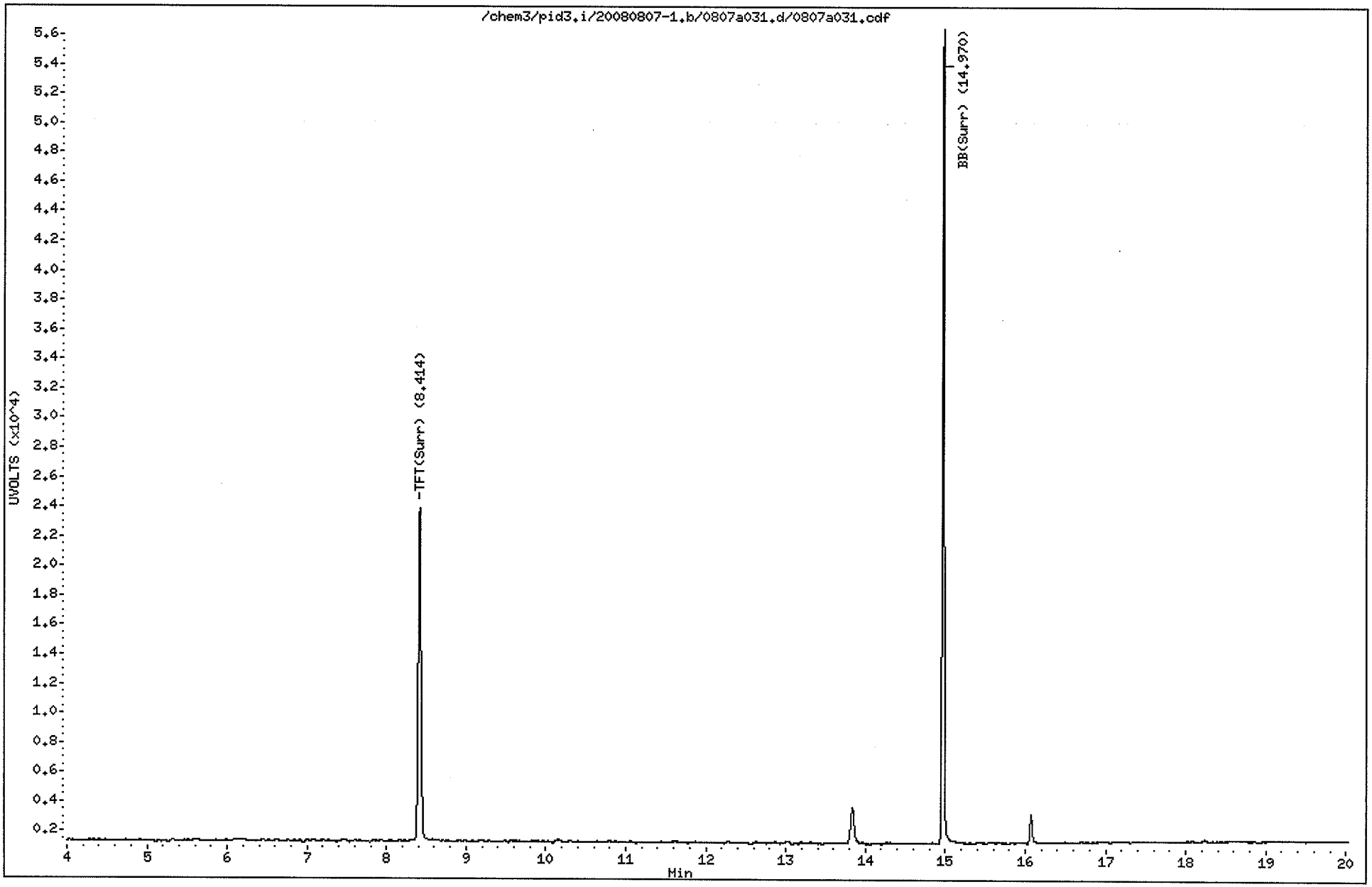


Data File: /chem3/pid3.i/20080807-1.b/0807a031.d
Date : 07-AUG-2008 00:00
Client ID: EBC-14-S1
Sample Info: NJ45W

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

BETX SOIL SURROGATE RECOVERY SUMMARY

ARI Job: NJ45
Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01

Client ID	TFT	BBZ	TOT OUT
MB-080708	95.7%	91.8%	0
LCS-080708	94.4%	89.9%	0
LCSD-080708	98.4%	92.8%	0
EBC-1-S1	102%	94.8%	0
EBC-1-S2	99.2%	93.9%	0
EBC-2-S1	94.8%	93.8%	0
EBC-3-S1	102%	100%	0
EBC-3-S2	98.8%	93.6%	0
EBC-4-S1	96.4%	92.3%	0
EBC-5-S1	95.9%	93.8%	0
EBC-6-S1	102%	97.0%	0
EBC-7-S1	99.4%	103%	0
EBC-7-S2	98.0%	93.7%	0
EBC-8-S1	90.7%	88.3%	0
EBC-9-S1	93.3%	91.4%	0
EBC-10-S1	91.3%	89.5%	0
EBC-11-S1	98.4%	95.9%	0
EBC-11-S2	92.4%	92.2%	0
EBC-12-S1	88.6%	89.3%	0
EBC-13-S1	86.3%	88.6%	0
EBC-13-S2	88.1%	90.4%	0
EBC-14-S1	93.1%	90.9%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(61-137)
(BBZ) = Bromobenzene	(80-120)	(58-139)

Log Number Range: 08-19394 to 08-19416

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: NJ45
Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01

Client ID	BFB	TFT	BBZ	TOT OUT
MB-080708	NA	93.3%	89.2%	0
LCS-080708	NA	92.2%	87.3%	0
LCSD-080708	NA	96.1%	89.8%	0
EBC-1-S1	NA	99.4%	90.3%	0
EBC-1-S2	NA	97.6%	91.1%	0
EBC-2-S1	NA	92.7%	94.8%	0
EBC-3-S1	NA	97.9%	99.3%	0
EBC-3-S2	NA	96.7%	90.3%	0
EBC-4-S1	NA	94.2%	90.8%	0
EBC-5-S1	NA	94.3%	91.5%	0
EBC-6-S1	NA	99.5%	94.6%	0
EBC-7-S1	NA	97.4%	109%	0
EBC-7-S2	NA	96.7%	90.1%	0
EBC-8-S1	NA	89.5%	87.1%	0
EBC-9-S1	NA	91.7%	89.7%	0
EBC-10-S1	NA	89.9%	87.7%	0
EBC-11-S1	NA	97.0%	93.9%	0
EBC-11-S2	NA	90.8%	89.4%	0
EBC-12-S1	NA	89.1%	88.9%	0
EBC-13-S1	NA	86.2%	87.0%	0
EBC-13-S2	NA	87.7%	89.7%	0
EBC-14-S1	NA	93.6%	90.5%	0

	LCS/MB LIMITS	QC LIMITS
(BFB) = Bromofluorobenzene	(70-130)	(70-130)
(TFT) = Trifluorotoluene	(80-120)	(65-137)
(BBZ) = Bromobenzene	(80-120)	(54-144)

Log Number Range: 08-19394 to 08-19416

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-080708
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/07/08 12:34
LCSD: 08/07/08 12:58
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	45.3	50.0	90.6%	46.6	50.0	93.2%	2.8%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	92.2%	96.1%
Bromobenzene	87.3%	89.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
Page 1 of 1

Sample ID: LCS-080708
LAB CONTROL SAMPLE

Lab Sample ID: LCS-080708
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 08/07/08 12:34
LCSD: 08/07/08 12:58
Instrument/Analyst LCS: PID3/PKC
LCSD: PID3/PKC

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	236	265	89.1%	242	265	91.3%	2.5%
Toluene	1820	2060	88.3%	1870	2060	90.8%	2.7%
Ethylbenzene	444	500	88.8%	458	500	91.6%	3.1%
m,p-Xylene	1820	2120	85.8%	1890	2120	89.2%	3.8%
o-Xylene	646	745	86.7%	671	745	90.1%	3.8%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

BETX Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	94.4%	98.4%
Bromobenzene	89.9%	92.8%

PL
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a004.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a004.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCS080708W1
Client ID:
Injection Date: 07-AUG-2008 12:34
Matrix: WATER
Dilution Factor: 1.000

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FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.411	0.001	6098	78978	92.2	TFT(Surr)
14.970	0.000	4151	34590	87.3	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	671950	0.908
8015B (2MP-TMB)	1392103	0.969
AKGas (nC6-nC10)	1102008	0.964
NWGas (Tol-Nap)	714623	0.906

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.409	0.001	22930	94.4	TFT(Surr)
14.968	0.000	54480	89.9	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.665	0.001	7195	4.72	Benzene
10.300	0.000	53466	36.34	Toluene
12.871	0.000	11992	8.89	Ethylbenzene
13.013	0.002	54701	36.49	M/P-Xylene
13.799	0.000	19159	12.93	O-Xylene
5.212	-0.010	2890	5.29	MTBE

A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a004.d

Page 1

Date : 07-AUG-2008 12:34

Client ID:

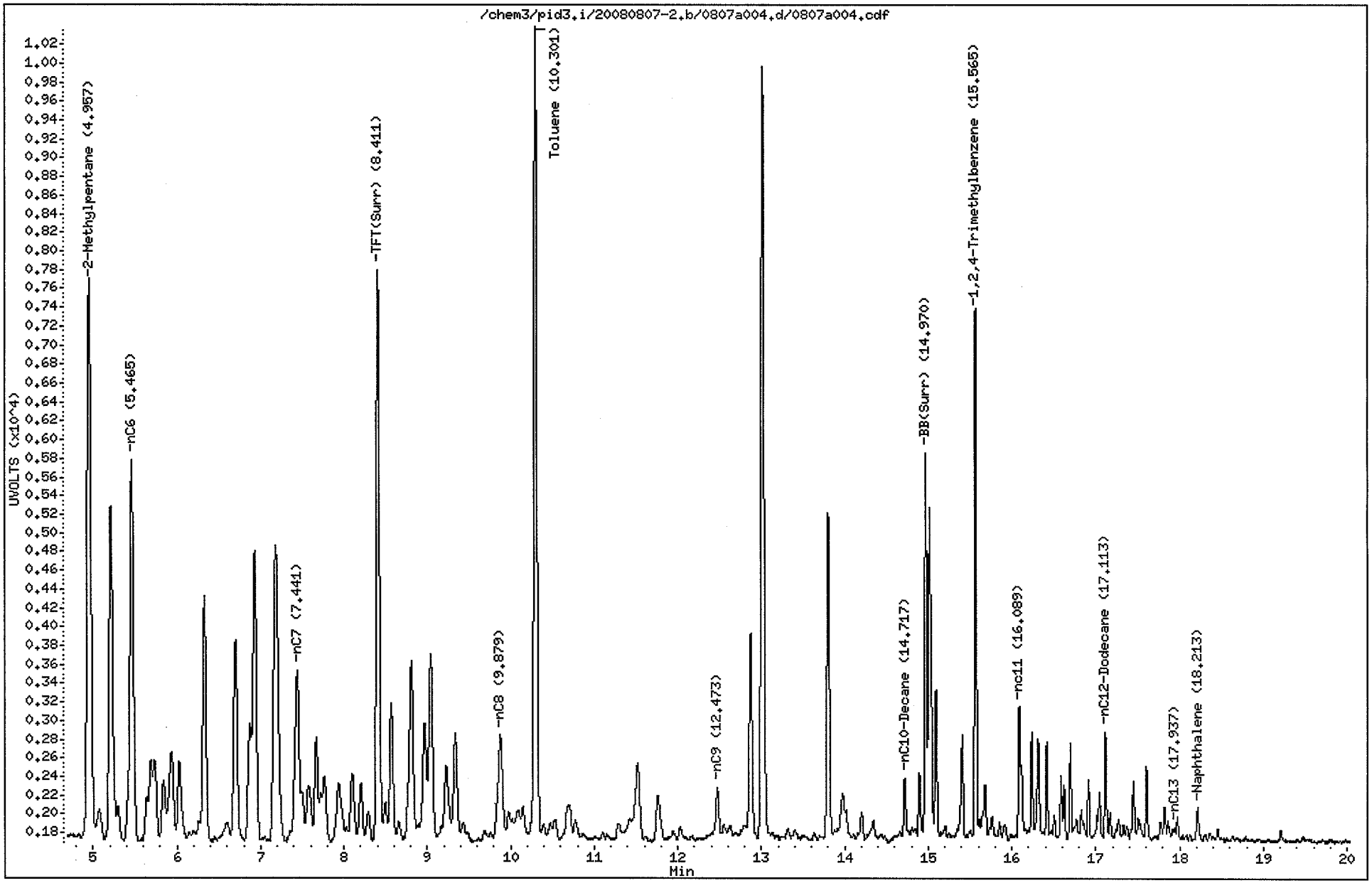
Instrument: pid3.i

Sample Info: LCS080708W1

Operator: PKC

Column phase: RTX 502-2 FID

Column diameter: 0.18



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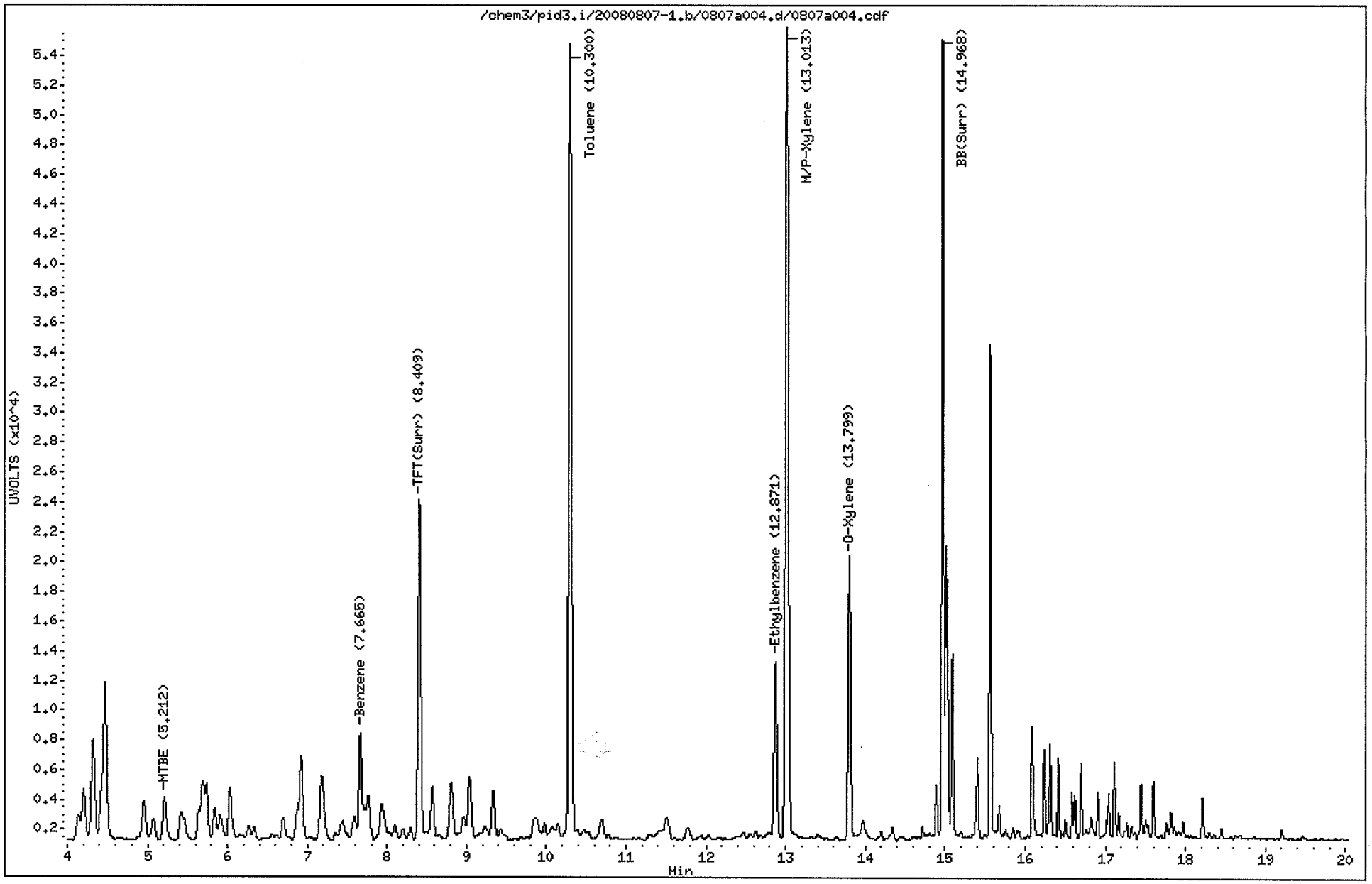
Date : 07-AUG-2008 12:34
Client ID:
Sample Info: LCS080708W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



RC
8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a005.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a005.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: LCSD080708W1
Client ID:
Injection Date: 07-AUG-2008 12:58
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.410	0.000	6351	81067	96.1	TFT(Surr)
14.970	-0.001	4267	35463	89.8	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	691791	0.934
8015B (2MP-TMB)	1434574	0.999
AKGas (nC6-nC10)	1136988	0.995
NWGas (Tol-Nap)	735025	0.932

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.408	0.000	23890	98.4	TFT(Surr)
14.968	-0.001	56233	92.8	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
7.666	0.001	7368	4.83	Benzene
10.299	0.000	55009	37.39	Toluene
12.870	-0.001	12360	9.16	Ethylbenzene
13.012	0.001	56604	37.76	M/P-Xylene
13.799	-0.001	19889	13.42	O-Xylene
5.213	-0.010	2982	5.46	MTBE

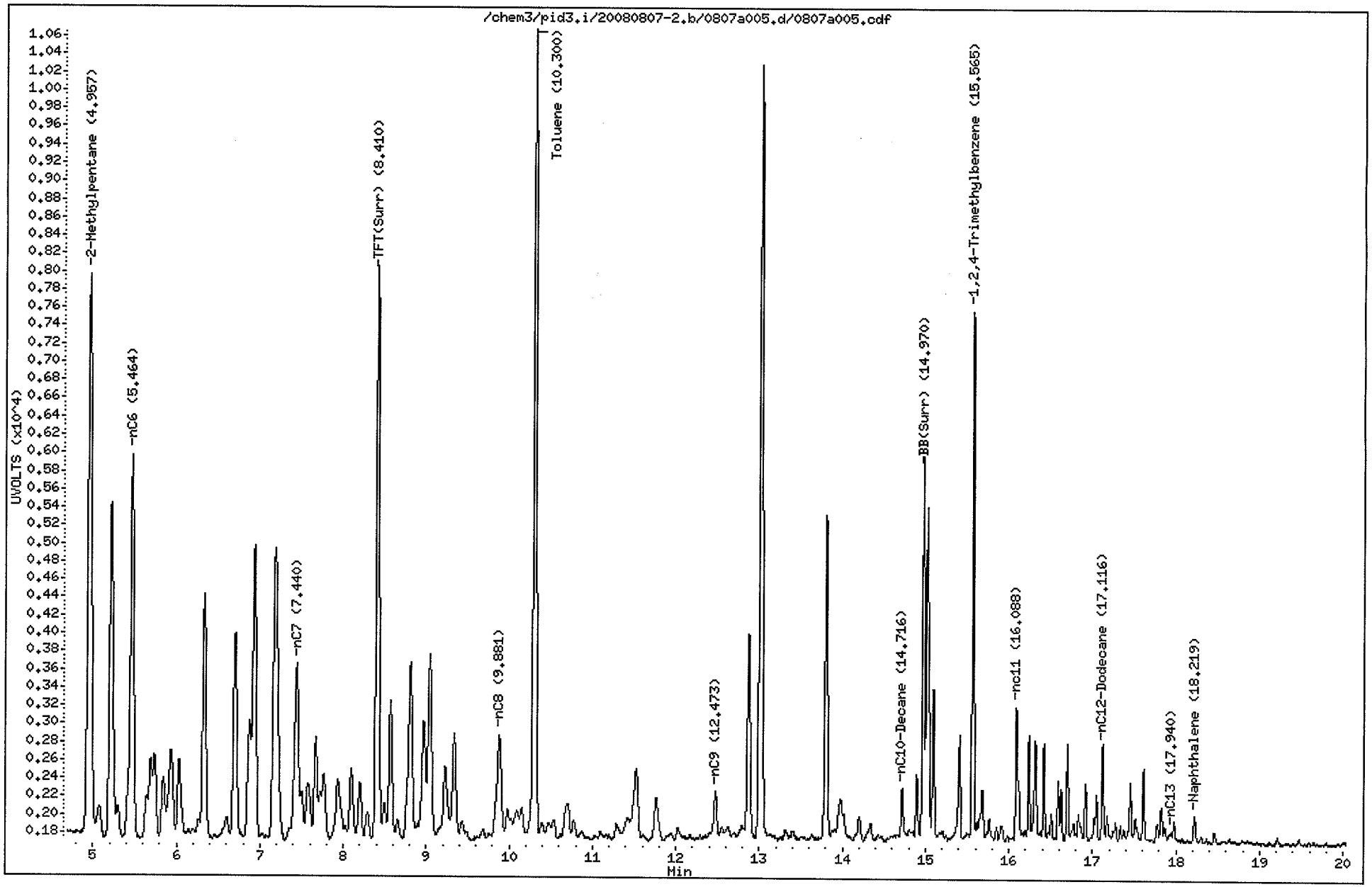
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a005.d
Date : 07-AUG-2008 12:58
Client ID:
Sample Info: LCSD080708W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID



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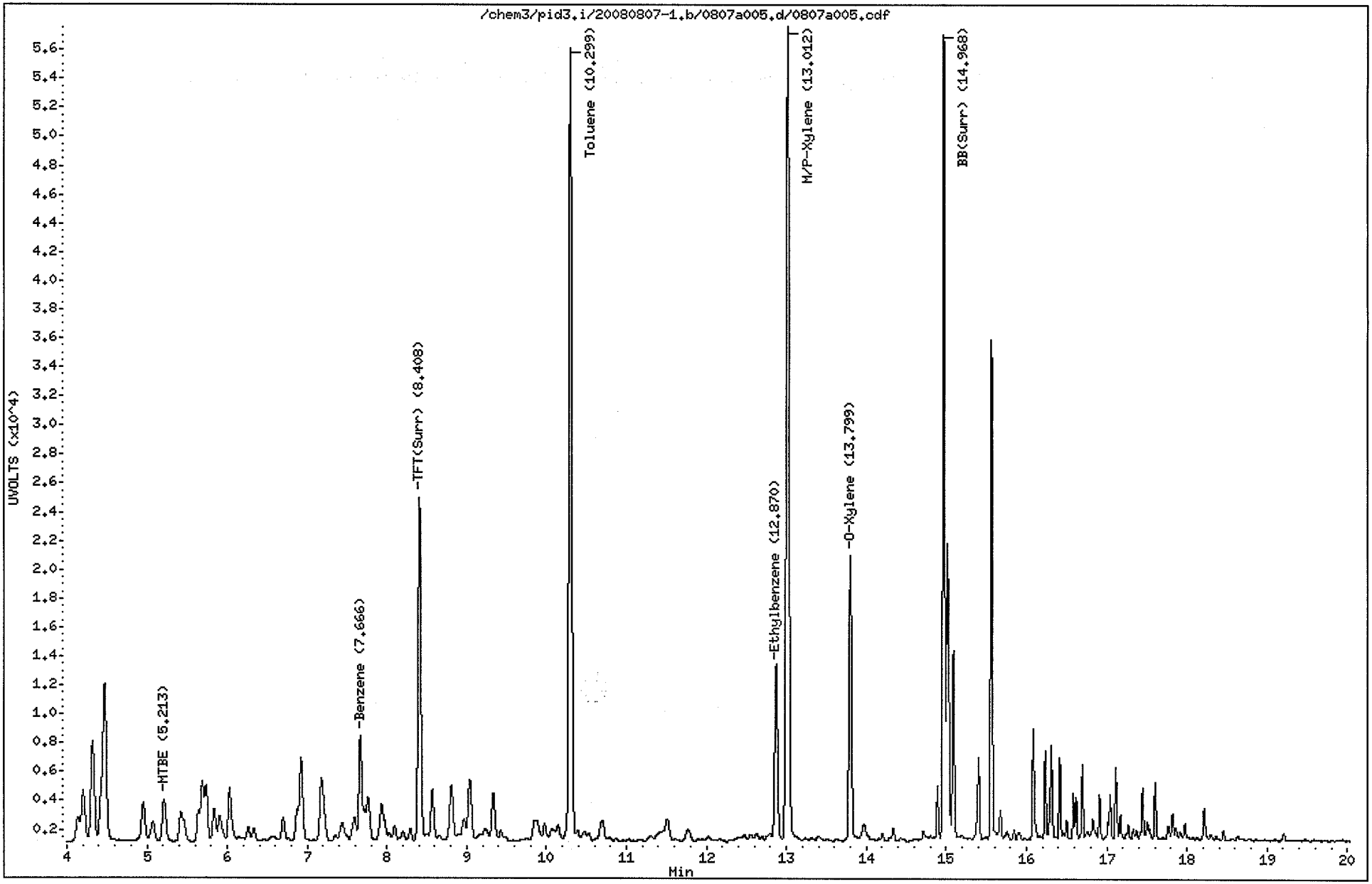
Date : 07-AUG-2008 12:58
Client ID:
Sample Info: LCSD080708W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
BETX by Method SW8021BMod
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: MB-080708
METHOD BLANK

Lab Sample ID: MB-080708
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 08/08/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
Event: 17490-01
Date Sampled: NA
Date Received: NA

Date Analyzed: 08/07/08 13:23
Instrument/Analyst: PID3/PKC

Purge Volume: 5.0 mL
Sample Amount: 100 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	12	< 12 U
108-88-3	Toluene	12	< 12 U
100-41-4	Ethylbenzene	12	< 12 U
	m,p-Xylene	25	< 25 U
95-47-6	o-Xylene	12	< 12 U

			GAS ID
Gasoline Range Hydrocarbons	5.0	< 5.0 U	---

BETX Surrogate Recovery

Trifluorotoluene	95.7%
Bromobenzene	91.8%

Gasoline Surrogate Recovery

Trifluorotoluene	93.3%
Bromobenzene	89.2%

BETX values reported in µg/kg (ppb)
Gasoline values reported in mg/kg (ppm)

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

VC 8/8/08

Analytical Resources Inc.
BETX/Gas Quantitation Report

Data file 1: /chem3/pid3.i/20080807-2.b/0807a006.d
Data file 2: /chem3/pid3.i/20080807-1.b/0807a006.d
Method: /chem3/pid3.i/20080807-1.b/PIDB.m
Instrument: pid3.i
Gas Ical Date: 27-JUN-2008
BETX Ical Date: 27-JUN-2008

ARI ID: MB080708W1
Client ID:
Injection Date: 07-AUG-2008 13:23
Matrix: WATER
Dilution Factor: 1.000

==========

FID Surrogates

RT	Shift	Height	Area	%Rec	Compound
8.412	0.002	6166	78684	93.3	TFT(Surr)
14.970	-0.001	4240	35555	89.2	BB(Surr)

PETROLEUM HYDROCARBONS (FID)

Range	Total Area*	Amount
WAGas (Tol-C12)	5220	0.007
8015B (2MP-TMB)	3445	0.002
AKGas (nC6-nC10)	3445	0.003
NWGas (Tol-Nap)	5220	0.007

* Surrogate areas are subtracted from Total Area

==========

PID Surrogates

RT	Shift	Response	%Rec	Compound
8.410	0.002	23235	95.7	TFT(Surr)
14.968	-0.001	55614	91.8	BB(Surr)

AROMATICS (PID)

RT	Shift	Response	Amount	Compound
ND	---	---	---	Benzene
ND	---	---	---	Toluene
ND	---	---	---	Ethylbenzene
ND	---	---	---	M/P-Xylene
ND	---	---	---	O-Xylene
ND	---	---	---	MTBE

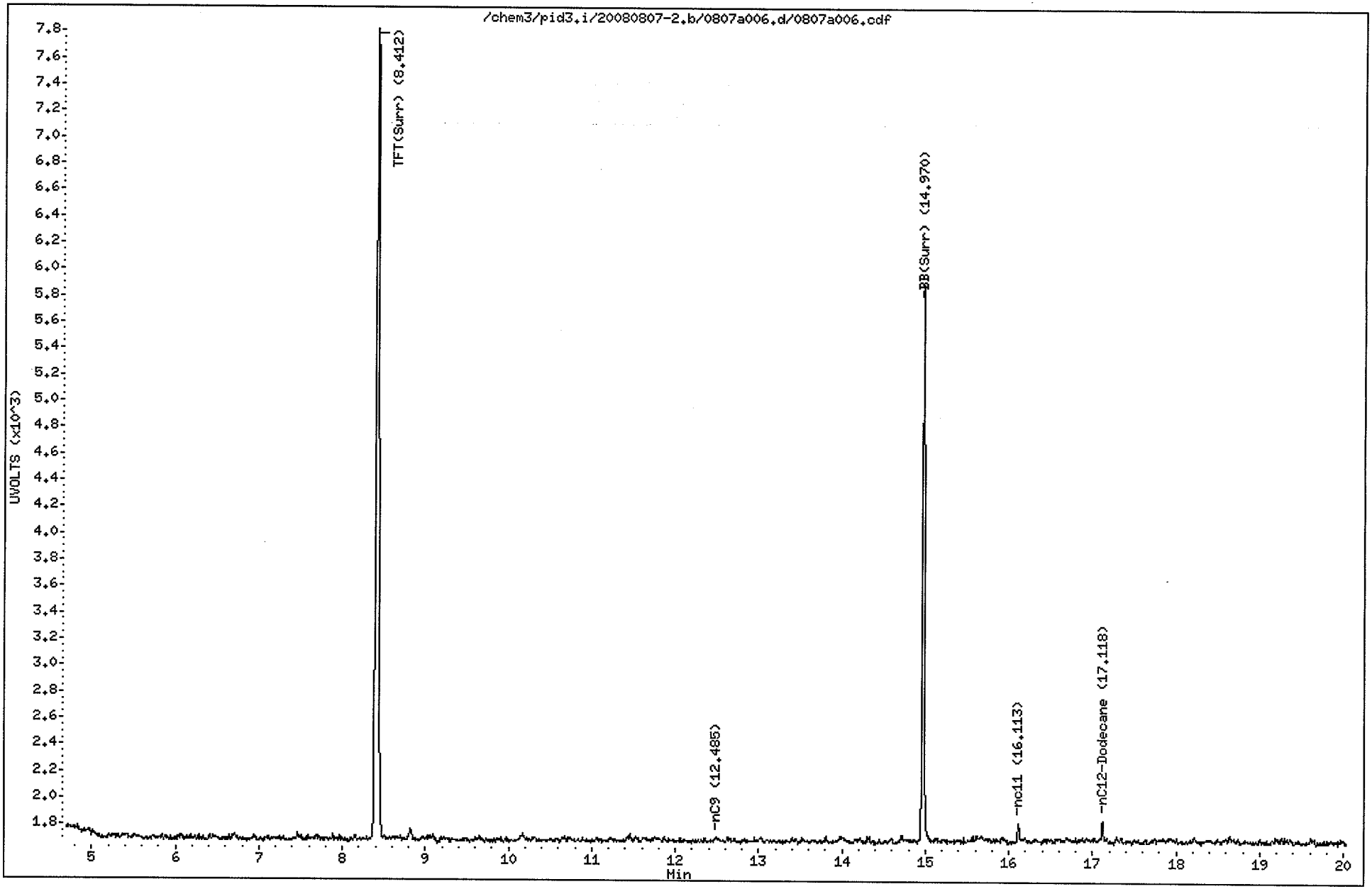
A Indicates Peak Area was used for quantitation instead of Height
N Indicates peak peak was manually integrated

Data File: /chem3/pid3.i/20080807-2.b/0807a006.d
Date : 07-AUG-2008 13:23
Client ID:
Sample Info: MB080708W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 FID

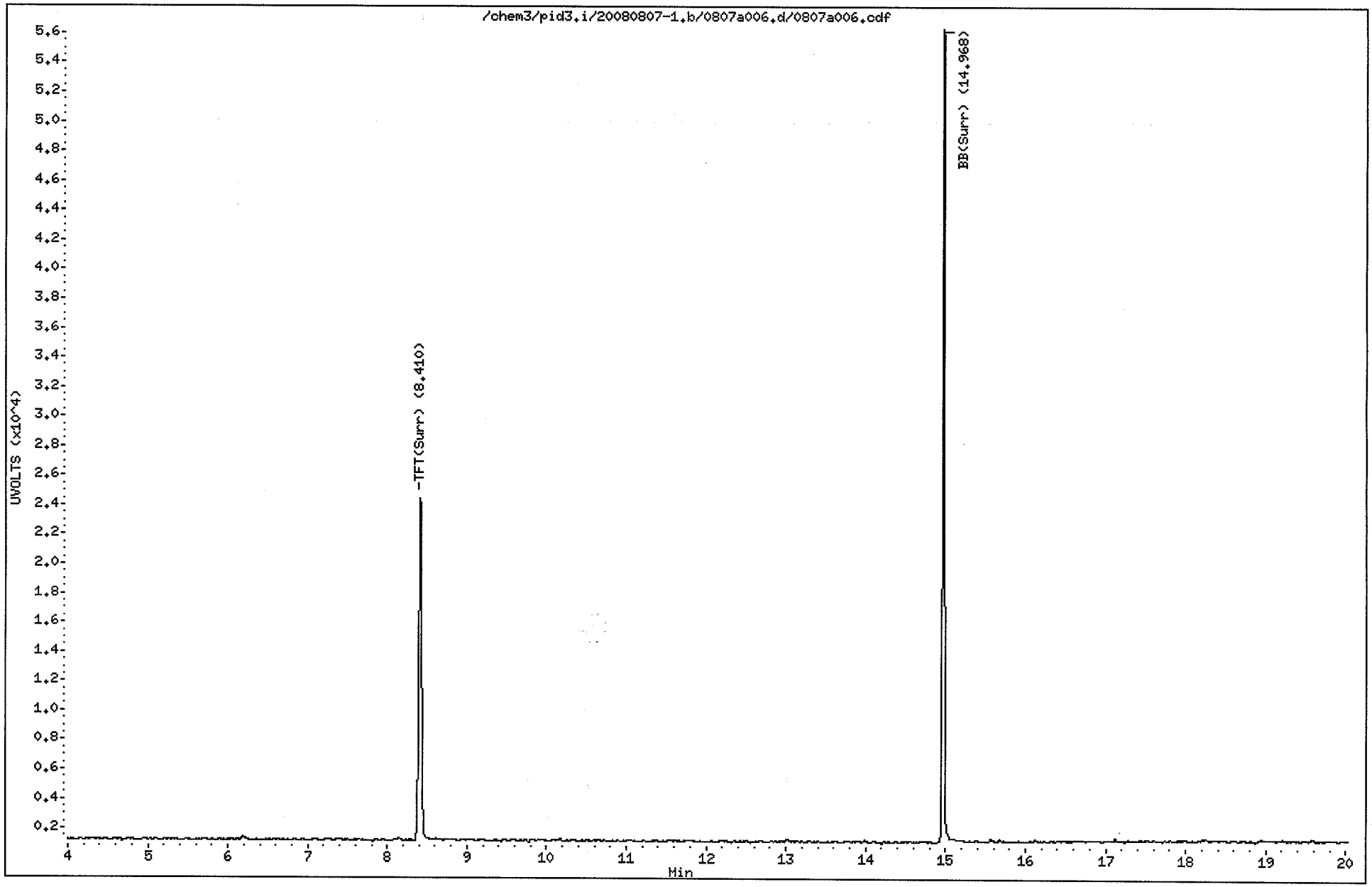


Data File: /chem3/pid3.i/20080807-1.b/0807a006.d
Date : 07-AUG-2008 13:23
Client ID:
Sample Info: MB080708W1

Instrument: pid3.i

Operator: PKC
Column diameter: 0.18

Column phase: RTX 502-2 PID



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 2
Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Data Release Authorized:
Reported: 08/28/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
NJ45A	EBC-1-S1	08/11/08	08/15/08	1.00	**Diesel**	**100**	**180**
08-19394	HC ID: **DRO/MOTOR OIL**		FID3A	20	**Motor Oil**	**200**	**960**
					o-Terphenyl		60.0%
MB-081108	Method Blank	08/11/08	08/15/08	1.00	Diesel	5.0	< 5.0 U
08-19395	HC ID: ---		FID3A	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		90.4%
NJ45B	EBC-1-S2	08/11/08	08/15/08	1.00	**Diesel**	**5.3**	**5.8**
08-19395	HC ID: **DRO/MOTOR OIL**		FID3A	1.0	**Motor Oil**	**11**	**17**
					o-Terphenyl		91.3%
NJ45C	EBC-2-S1	08/11/08	08/15/08	1.00	**Diesel**	**110**	**900**
08-19396	HC ID: **DIESEL/MOTOR OIL**		FID3A	20	**Motor Oil**	**220**	**1400**
					o-Terphenyl		72.0%
NJ45E	EBC-3-S1	08/11/08	08/15/08	1.00	**Diesel**	**62**	**560**
08-19398	HC ID: **DIESEL/MOTOR OIL**		FID3A	10	**Motor Oil**	**120**	**950**
					o-Terphenyl		84.9%
NJ45F	EBC-3-S2	08/11/08	08/15/08	1.00	Diesel	5.7	< 5.7 U
08-19399	HC ID: ---		FID3A	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		86.4%
NJ45G	EBC-4-S1	08/11/08	08/15/08	1.00	**Diesel**	**6.0**	**7.0**
08-19400	HC ID: **DRO**		FID3A	1.0	Motor Oil	12	< 12 U
					o-Terphenyl		76.2%
NJ45H	EBC-5-S1	08/11/08	08/15/08	1.00	**Diesel**	**5.2**	**15**
08-19401	HC ID: **DRO/MOTOR OIL**		FID3A	1.0	**Motor Oil**	**10**	**98**
					o-Terphenyl		79.8%
NJ45J	EBC-6-S1	08/11/08	08/16/08	1.00	**Diesel**	**5.2**	**10**
08-19403	HC ID: **DRO/MOTOR OIL**		FID3A	1.0	**Motor Oil**	**10**	**58**
					o-Terphenyl		72.2%
NJ45L	EBC-7-S1	08/11/08	08/16/08	1.00	**Diesel**	**1000**	**3600**
08-19405	HC ID: **DIESEL/MOTOR OIL**		FID3A	200	**Motor Oil**	**2100**	**5100**
					o-Terphenyl		D
NJ45M	EBC-7-S2	08/11/08	08/16/08	1.00	**Diesel**	**5.0**	**49**
08-19406	HC ID: **DRO/RRO**		FID3A	1.0	**Motor Oil**	**10**	**10**
					o-Terphenyl		70.9%
NJ45N	EBC-8-S1	08/11/08	08/16/08	1.00	Diesel	5.0	< 5.0 U
08-19407	HC ID: ---		FID3A	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		68.9%
NJ45O	EBC-9-S1	08/11/08	08/16/08	1.00	**Diesel**	**26**	**60**
08-19408	HC ID: **DRO/MOTOR OIL**		FID3A	5.0	**Motor Oil**	**52**	**180**
					o-Terphenyl		86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 2 of 2
Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Data Release Authorized: MW
Reported: 08/28/08

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range	RL	Result
NJ45P	EBC-10-S1	08/11/08	08/16/08	1.00	Diesel	5.2	< 5.2 U
08-19409	HC ID: ---		FID3A	1.0	Motor Oil	10	< 10 U
					o-Terphenyl		80.4%
NJ45Q	EBC-11-S1	08/11/08	08/16/08	1.00	**Diesel**	**6.2**	**18**
08-19410	HC ID: **DRO/MOTOR OIL**		FID3A	1.0	**Motor Oil**	**12**	**24**
					o-Terphenyl		95.8%
NJ45R	EBC-11-S2	08/11/08	08/16/08	1.00	**Diesel**	**56**	**140**
08-19411	HC ID: **DRO/MOTOR OIL**		FID3A	10	**Motor Oil**	**110**	**300**
					o-Terphenyl		80.4%
NJ45S	EBC-12-S1	08/11/08	08/16/08	1.00	Diesel	5.7	< 5.7 U
08-19412	HC ID: ---		FID3A	1.0	Motor Oil	12	< 12 U
					o-Terphenyl		87.8%
NJ45U	EBC-13-S1	08/11/08	08/16/08	1.00	**Diesel**	**53**	**160**
08-19414	HC ID: **DIESEL/MOTOR OIL**		FID3A	10	**Motor Oil**	**110**	**350**
					o-Terphenyl		87.8%
NJ45V	EBC-13-S2	08/11/08	08/16/08	1.00	Diesel	5.3	< 5.3 U
08-19415	HC ID: ---		FID3A	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		72.9%
NJ45W	EBC-14-S1	08/11/08	08/16/08	1.00	Diesel	5.6	< 5.6 U
08-19416	HC ID: ---		FID3A	1.0	Motor Oil	11	< 11 U
					o-Terphenyl		86.2%

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel quantitation on total peaks in the range from C12 to C24.
Motor Oil quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicate results of organics or additional hydrocarbons in ranges are not identifiable.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a020.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45MBS1
Client ID:
Injection: 15-AUG-2008 20:16
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.749	0.010	5080	2520	GAS (Tol-C12)	595506	33
C8	1.876	0.014	6466	4688	DIESEL (C12-C24)	497300	42
C10	2.444	-0.004	3698	2849	M.OIL (C24-C38)	490700	50
C12	2.934	0.001	18279	16420	AK-102 (C10-C25)	673585	47
C14	3.347	0.000	3145	1127	AK-103 (C25-C36)	376514	54
C16	3.716	0.008	5209	4362	OR.DIES (C10-C28)	761052	51
C18	4.082	0.003	2684	3386	OR.MOIL (C28-C40)	552445	61
C20	4.505	0.001	3274	3437	JET-A (C10-C18)	452690	30
C22	4.864	-0.001	4834	3717	MIN.OIL (C24-C38)	490700	38
C24	5.172	-0.004	2851	2196	MSPIRIT (Tol-C12)	595506	38
C25	5.316	0.003	2677	2052			
C26	5.449	0.010	2786	1204			
C28	5.675	0.002	4520	3589			
C32	6.110	0.000	5486	2299			
C34	6.365	-0.001	5252	2834			
Filter Peak	6.994	-0.003	4634	1754	JP-4 (Tol-C14)	710199	63
C36	6.659	-0.020	5520	13810	CREOSOT (C8-C22)	995963	160
C38	7.082	0.000	4602	2293			
C40	7.622	0.002	4670	1583	BUNKERC (C10-C38)	1161108	146

AZDIESEL (C10-C22)	588774	37
AZMOIL (C22-C32)	264057	41

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	640191	40.7	90.4
Triacontane	583745	47.6	105.7

ws 8/27/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a020.d

Date : 15-AUG-2008 20:16

Client ID:

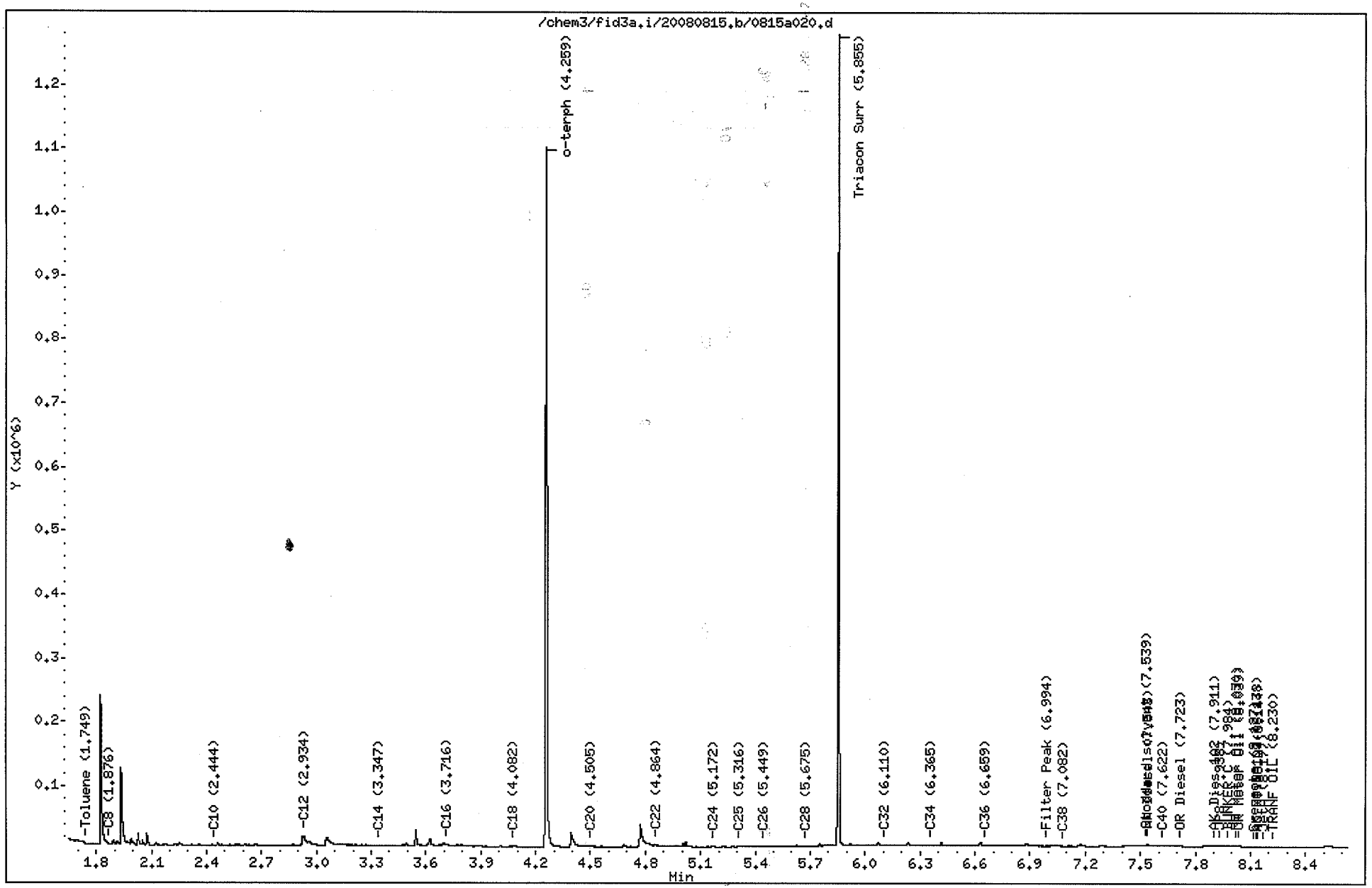
Sample Info: NJ45MBS1

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a026.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45A
Client ID:
Injection: 15-AUG-2008 21:50
Dilution Factor: 20

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	4619	3342	GAS (Tol-C12)	204122	11
C8	1.858	-0.003	3267	2070	DIESEL (C12-C24)	1004266	85
C10	2.456	0.009	3083	2615	M.OIL (C24-C38)	4558137	468
C12	2.941	0.008	1873	1559	AK-102 (C10-C25)	1128645	79
C14	3.360	0.014	2243	2596	AK-103 (C25-C36)	3757042	534
C16	3.703	-0.005	3866	3629	OR.DIES (C10-C28)	2058383	139
C18	4.073	-0.005	5372	855	OR.MOIL (C28-C40)	4274315	470
C20	4.508	0.004	10553	11922	JET-A (C10-C18)	303340	20
C22	4.866	0.001	15874	12263	MIN.OIL (C24-C38)	4558137	355
C24	5.180	0.005	19968	5153	MSPIRIT (Tol-C12)	204122	13
C25	5.310	-0.003	26579	26070			
C26	5.440	0.000	27207	9642			
C28	5.675	0.002	50415	42543			
C32	6.104	-0.005	90342	91433			
C34	6.368	0.001	43285	63380			
Filter Peak	6.991	-0.006	30395	21173	JP-4 (Tol-C14)	251444	22
C36	6.680	0.001	32393	12845	CREOSOT (C8-C22)	845765	136
C38	7.077	-0.005	27710	22126			
C40	7.620	0.000	17934	7377	BUNKERC (C10-C38)	5634873	709
AZDIESEL (C10-C22)				728080	45		
AZMOIL (C22-C32)				2863450	445		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	21278	1.4	60.1
Triacontane	22029	1.8	79.8

ms 8/27/08

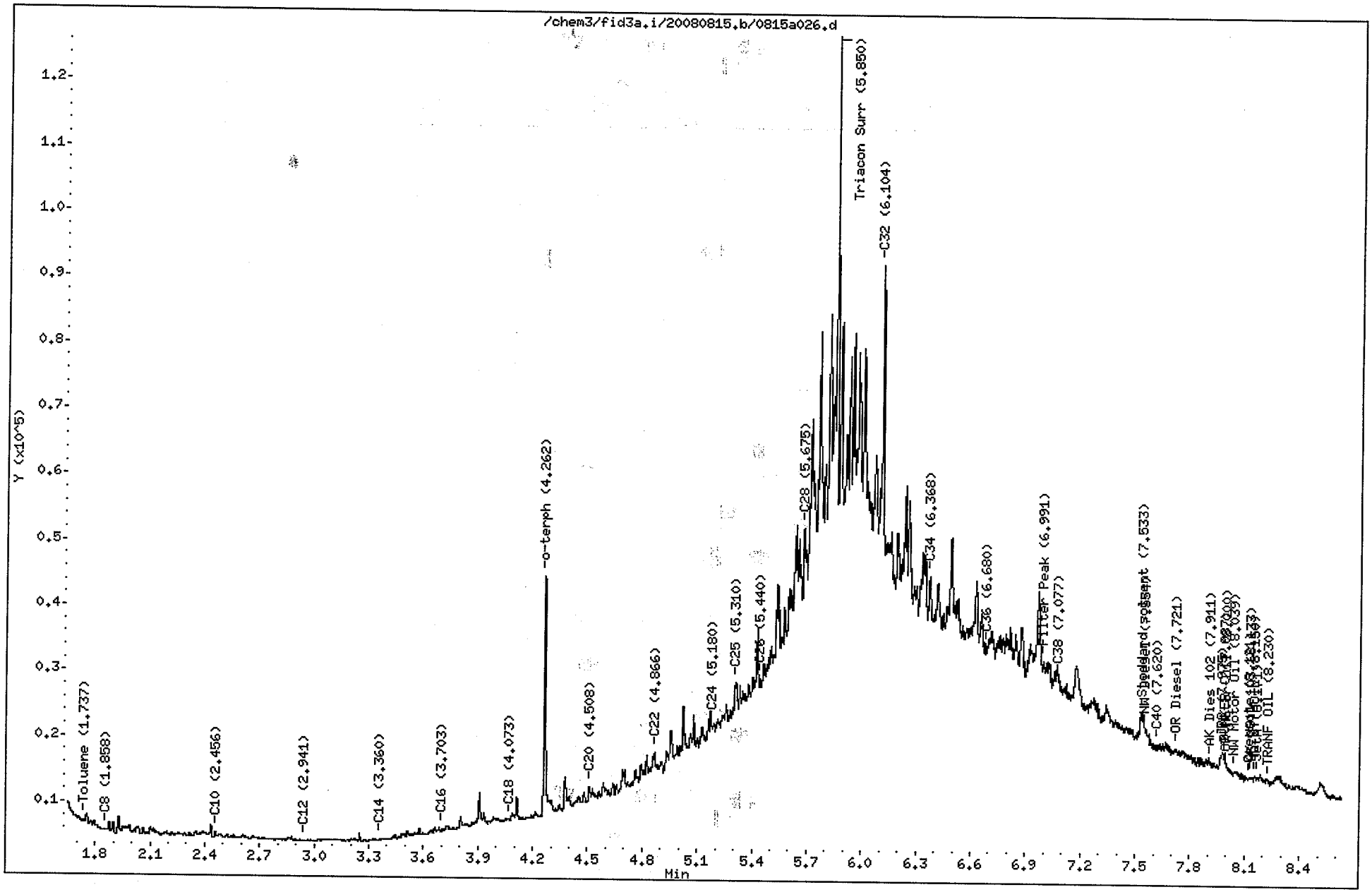
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a026.d
Date : 15-AUG-2008 21:50
Client ID:
Sample Info: NJ45A,20

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a027.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45B
Client ID:
Injection: 15-AUG-2008 22:05
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.739	0.000	11276	10919	GAS (Tol-C12)	342512	19
C8	1.861	0.000	3765	4181	DIESEL (C12-C24)	636492	54
C10	2.457	0.010	5756	5411	M.OIL (C24-C38)	1544723	159
C12	2.937	0.004	2766	1423	AK-102 (C10-C25)	809661	57
C14	3.371	0.024	3090	4761	AK-103 (C25-C36)	1302245	185
C16	3.704	-0.004	3336	3314	OR.DIES (C10-C28)	1157802	78
C18	4.079	0.001	6533	7797	OR.MOIL (C28-C40)	1419864	156
C20	4.507	0.004	7489	7324	JET-A (C10-C18)	420826	28
C22	4.864	-0.001	9014	8016	MIN.OIL (C24-C38)	1544723	120
C24	5.170	-0.005	11069	10012	MSPIRIT (Tol-C12)	342512	22
C25	5.321	0.008	9783	1555			
C26	5.438	-0.002	11225	6854			
C28	5.674	0.001	16538	10551			
C32	6.107	-0.002	20515	27250			
C34	6.365	-0.002	12915	7820			
Filter Peak	6.994	-0.003	9194	6315	JP-4 (Tol-C14)	439059	39
C36	6.684	0.005	10226	6252	CREOSOT (C8-C22)	781165	125
C38	7.078	-0.004	9108	5336			
C40	7.620	0.000	7000	2502	BUNKERC (C10-C38)	2334872	294
AZDIESEL (C10-C22)				615454	38		
AZMOIL (C22-C32)				1034506	161		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	646766	41.1	91.3
Triacontane	538394	43.9	97.5

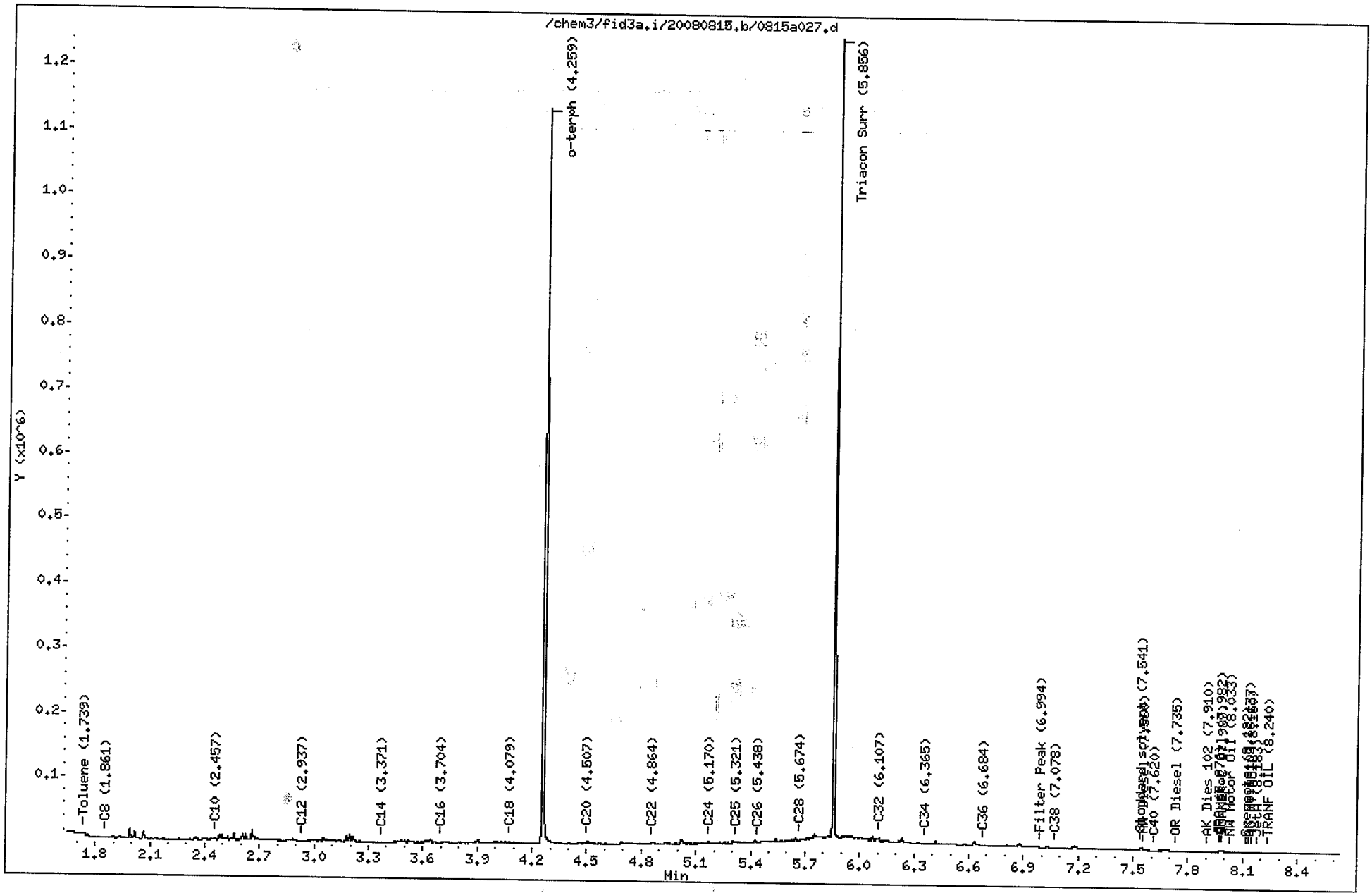
ms 8/29/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a027.d
Date : 15-AUG-2008 22:05
Client ID:
Sample Info: NJ45B

Instrument: fid3a.i
Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a030.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45C
Client ID:
Injection: 15-AUG-2008 22:52
Dilution Factor: 20

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	4477	3588	GAS (Tol-C12)	316926	18
C8	1.857	-0.005	3162	3095	DIESEL (C12-C24)	4873777	411
C10	2.453	0.005	3913	4095	M.OIL (C24-C38)	6103836	627
C12	2.931	-0.002	8273	5643	AK-102 (C10-C25)	5257592	367
C14	3.351	0.004	26665	16164	AK-103 (C25-C36)	5368461	763
C16	3.708	0.001	33786	22085	OR.DIES (C10-C28)	7394230	500
C18	4.077	-0.002	45465	51427	OR.MOIL (C28-C40)	4271068	469
C20	4.503	0.000	48914	66777	JET-A (C10-C18)	1939769	131
C22	4.863	-0.002	61194	79254	MIN.OIL (C24-C38)	6103836	476
C24	5.175	-0.001	64543	8980	MSPIRIT (Tol-C12)	316926	20
C25	5.312	-0.001	79428	82016			
C26	5.438	-0.001	74812	63819			
C28	5.679	0.006	97025	134523			
C32	6.106	-0.003	94698	94854			
C34	6.369	0.003	43550	41939			
Filter Peak	6.996	-0.001	21916	6855	JP-4 (Tol-C14)	719625	63
C36	6.678	-0.001	27145	8046	CREOSOT (C8-C22)	4057010	651
C38	7.081	-0.002	19376	10624			
C40	7.623	0.003	12946	4107	BUNKERC (C10-C38)	11164808	1404
AZDIESEL (C10-C22)				3936849	245		
AZMOIL (C22-C32)				5435740	844		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	25554	1.6	72.1
Triacontane	22474	1.8	81.4

ms 8/27/08

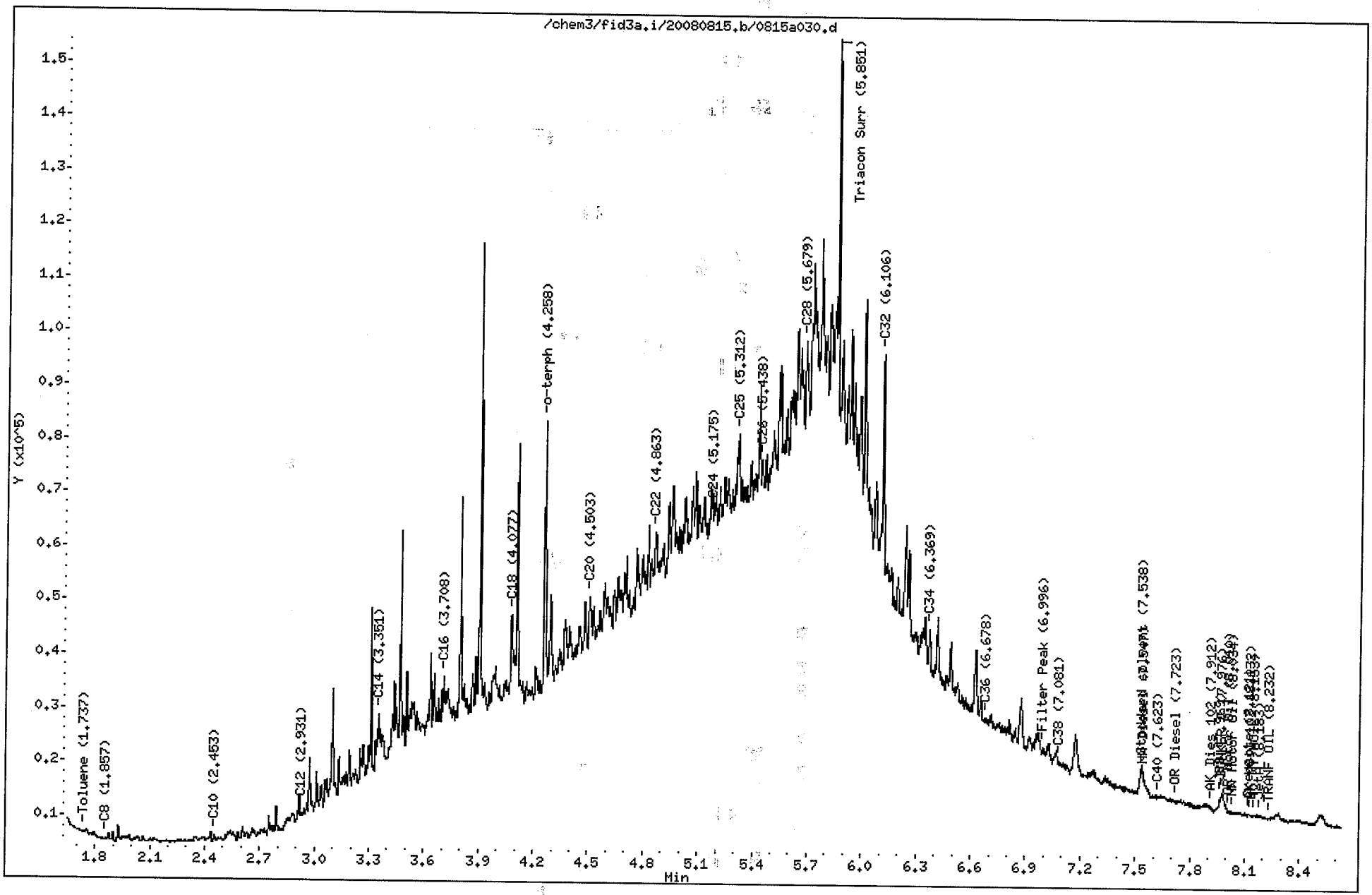
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a030.d
Date : 15-AUG-2008 22:52
Client ID:
Sample Info: NJ45C,20

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a031.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45E
Client ID:
Injection: 15-AUG-2008 23:07
Dilution Factor: 10

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	-0.001	10478	9336	GAS (Tol-C12)	827646	46
C8	1.859	-0.002	4765	4755	DIESEL (C12-C24)	5361979	452
C10	2.449	0.001	34579	21998	M.OIL (C24-C38)	7445964	765
C12	2.935	0.002	63102	50354	AK-102 (C10-C25)	6166317	430
C14	3.350	0.003	39337	26428	AK-103 (C25-C36)	6632282	943
C16	3.708	0.001	37882	28178	OR.DIES (C10-C28)	8864932	599
C18	4.078	-0.001	59845	46231	OR.MOIL (C28-C40)	5095565	560
C20	4.502	-0.001	63725	76336	JET-A (C10-C18)	2447503	165
C22	4.863	-0.002	81927	88002	MIN.OIL (C24-C38)	7445964	581
C24	5.179	0.004	75988	20838	MSPIRIT (Tol-C12)	827646	52
C25	5.301	-0.012	115323	126540			
C26	5.437	-0.003	92257	75090			
C28	5.676	0.003	121615	174489			
C32	6.105	-0.004	105997	116347			
C34	6.368	0.002	50959	55260			
Filter Peak	6.990	-0.007	23777	15348	JP-4 (Tol-C14)	1432670	126
C36	6.676	-0.003	35639	17988	CREOSOT (C8-C22)	4842778	777
C38	7.085	0.002	21106	5839			
C40	7.619	-0.001	13971	7956	BUNKERC (C10-C38)	13420678	1688
AZDIESEL (C10-C22)				4621744	288		
AZMOIL (C22-C32)				6648808	1033		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	60100	3.8	84.8
Triacontane	71770	5.9	130.0

ms 8/27/08

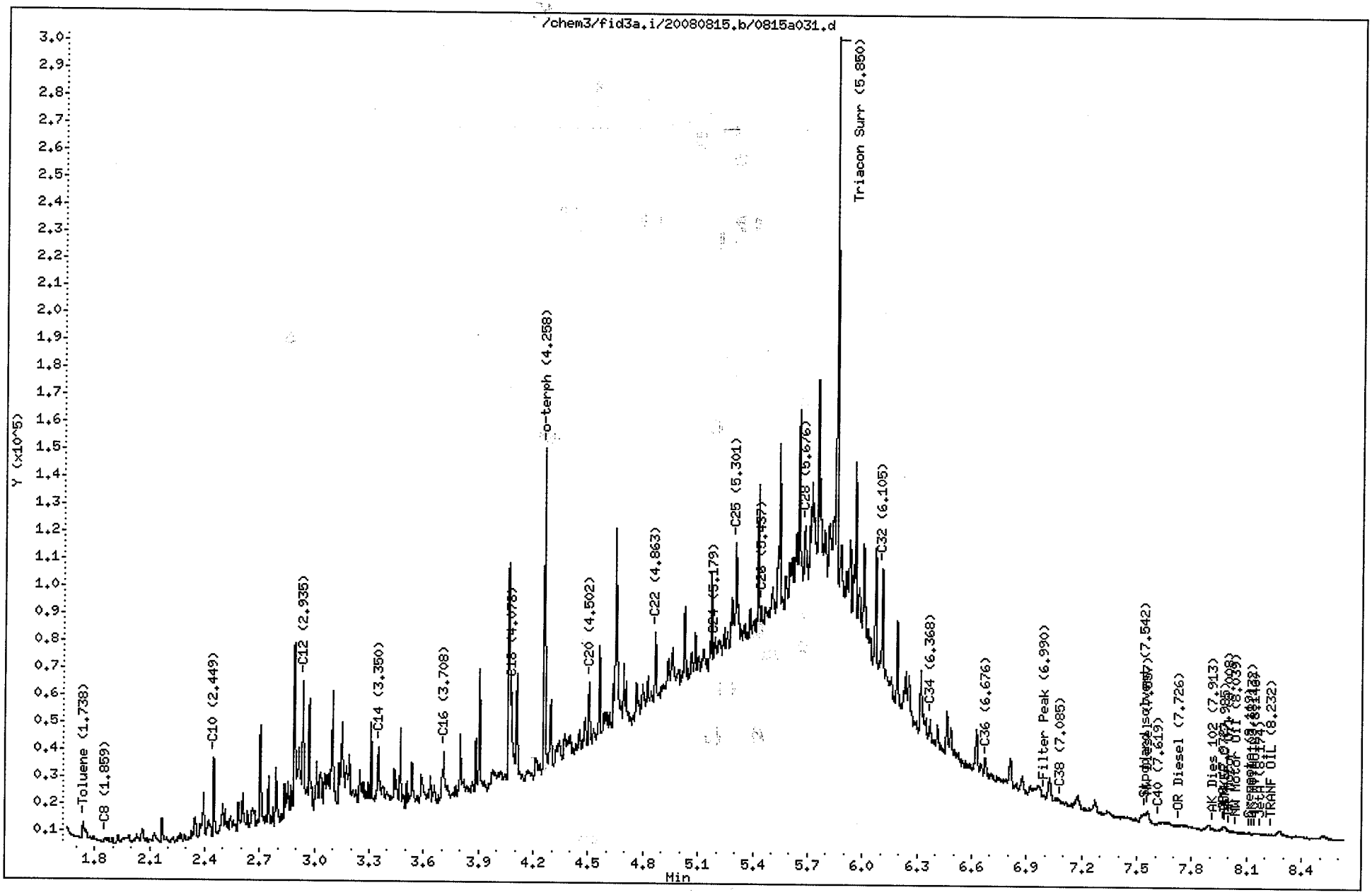
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a031.d
Date : 15-AUG-2008 23:07
Client ID:
Sample Info: NJ45E,10

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a032.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45F
Client ID:
Injection: 15-AUG-2008 23:22
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.740	0.001	18078	28992	GAS (Tol-C12)	912011	51
C8	1.864	0.002	8516	10329	DIESEL (C12-C24)	518330	44
C10	2.455	0.007	10853	8996	M.OIL (C24-C38)	789207	81
C12	2.938	0.005	14719	11894	AK-102 (C10-C25)	844353	59
C14	3.350	0.003	4073	2311	AK-103 (C25-C36)	640001	91
C16	3.700	-0.007	4337	4018	OR.DIES (C10-C28)	1003263	68
C18	4.079	0.000	5420	5012	OR.MOIL (C28-C40)	794746	87
C20	4.508	0.005	4421	4539	JET-A (C10-C18)	647239	44
C22	4.866	0.001	4870	4414	MIN.OIL (C24-C38)	789207	62
C24	5.172	-0.004	5515	4739	MSPIRIT (Tol-C12)	912011	58
C25	5.304	-0.009	6122	10028			
C26	5.448	0.008	4890	1363			
C28	5.673	0.000	7805	5837			
C32	6.108	-0.002	8710	7495			
C34	6.368	0.002	7127	8335			
Filter Peak	6.984	-0.013	5715	3176	JP-4 (Tol-C14)	1066459	94
C36	6.686	0.008	5931	2487	CREOSOT (C8-C22)	1288344	207
C38	7.083	0.000	5523	1210			
C40	7.620	0.000	4900	1464	BUNKERC (C10-C38)	1626760	205

AZDIESEL (C10-C22)	685494	43
AZMOIL (C22-C32)	463841	72

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	612699	38.9	86.5
Triacontane	519136	42.3	94.0

mo 8/27/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a032.d
Date : 15-AUG-2008 23:22
Client ID:
Sample Info: NJ45F

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

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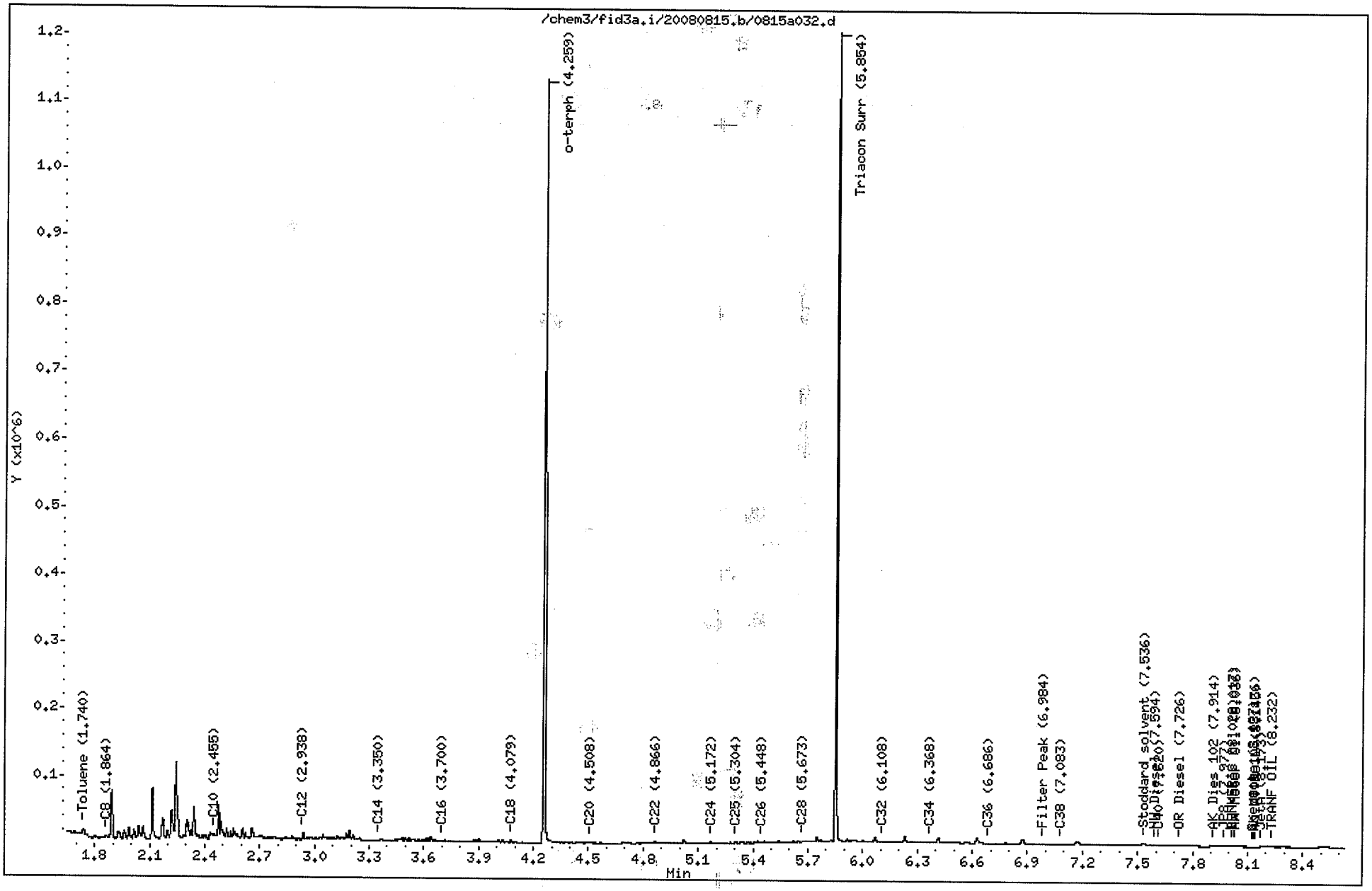


Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a033.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45G
Client ID:
Injection: 15-AUG-2008 23:38
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	-0.001	13320	13162	GAS (Tol-C12)	403982	23
C8	1.858	-0.004	4349	5705	DIESEL (C12-C24)	683167	58
C10	2.454	0.007	6705	6683	M.OIL (C24-C38)	783290	80
C12	2.934	0.001	3702	1977	AK-102 (C10-C25)	883257	62
C14	3.337	-0.010	5687	3991	AK-103 (C25-C36)	651911	93
C16	3.714	0.007	8843	15537	OR.DIES (C10-C28)	1055545	71
C18	4.079	0.000	10866	8892	OR.MOIL (C28-C40)	762297	84
C20	4.505	0.002	10682	9157	JET-A (C10-C18)	551927	37
C22	4.865	0.000	13571	12205	MIN.OIL (C24-C38)	783290	61
C24	5.170	-0.006	13992	11134	MSPIRIT (Tol-C12)	403982	26
C25	5.302	-0.011	21361	16017			
C26	5.453	0.014	5826	4225			
C28	5.676	0.003	10336	15861			
C32	6.106	-0.004	10690	17997			
C34	6.361	-0.006	6404	2031			
Filter Peak	6.991	-0.006	4918	4098	JP-4 (Tol-C14)	538573	47
C36	6.660	-0.019	7075	14734	CREOSOT (C8-C22)	928289	149
C38	7.080	-0.003	4829	2117			
C40	7.620	0.000	4568	3714	BUNKERC (C10-C38)	1653569	208

AZDIESEL (C10-C22)	738661	46
AZMOIL (C22-C32)	530892	82

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

ms 8/27/08

Surrogate	Area	Amount	%Rec
o-Terphenyl	539860	34.3	76.2
Triacontane	459412	37.4	83.2

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a033.d

Date : 15-AUG-2008 23:38

Client ID:

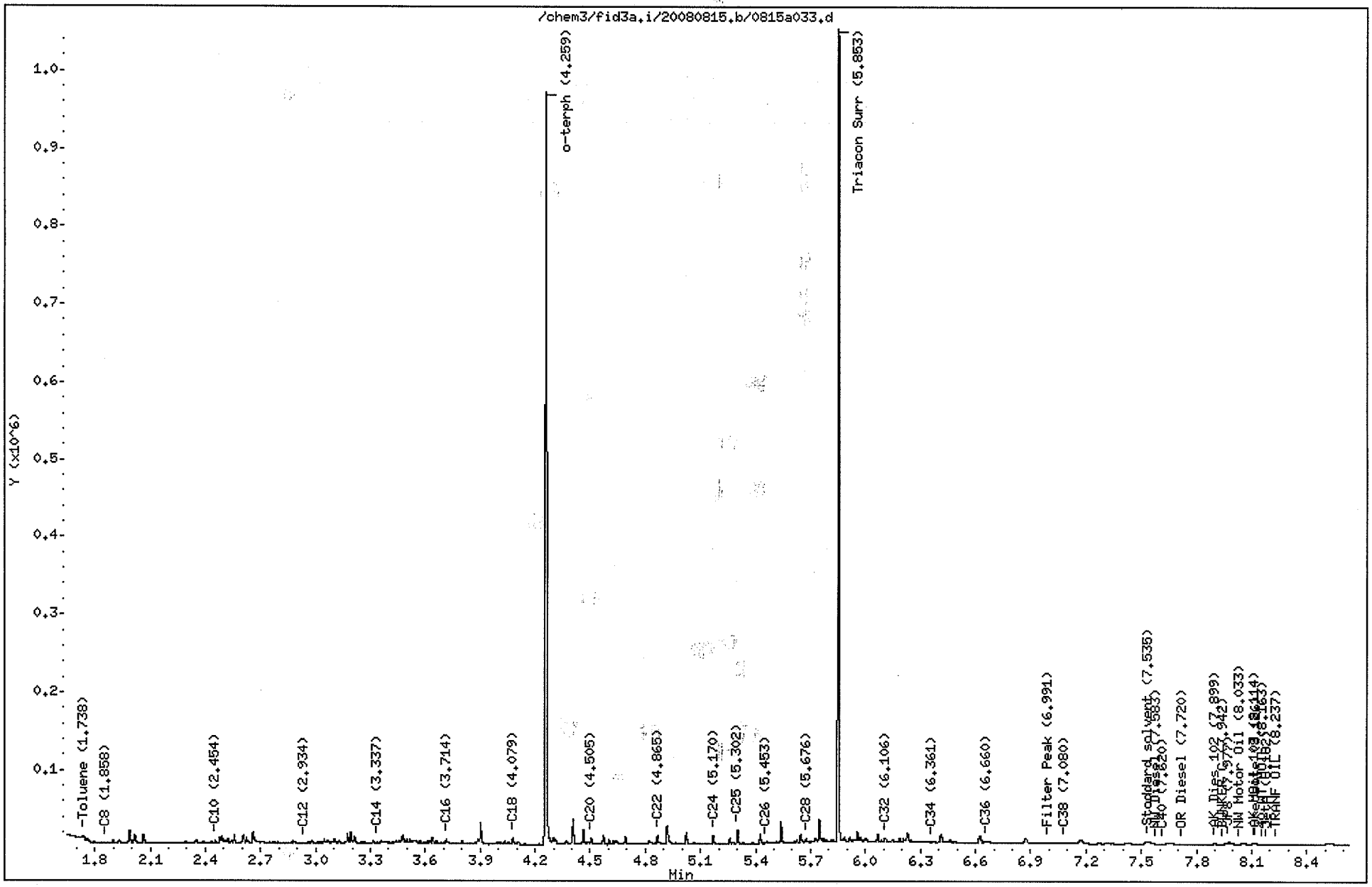
Sample Info: NJ45G

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a034.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45H
Client ID:
Injection: 15-AUG-2008 23:53
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	14455	14817	GAS (Tol-C12)	425397	24
C8	1.857	-0.004	4307	4063	DIESEL (C12-C24)	1749025	147
C10	2.455	0.008	5291	5374	M.OIL (C24-C38)	9105483	936
C12	2.938	0.005	4111	5204	AK-102 (C10-C25)	2049167	143
C14	3.337	-0.010	4127	2542	AK-103 (C25-C36)	7543033	1072
C16	3.712	0.005	7929	10856	OR.DIES (C10-C28)	4198557	284
C18	4.078	-0.001	12287	12216	OR.MOIL (C28-C40)	8205045	902
C20	4.503	0.000	17072	18354	JET-A (C10-C18)	598524	40
C22	4.862	-0.003	28930	41443	MIN.OIL (C24-C38)	9105483	710
C24	5.178	0.002	42637	15180	MSPIRIT (Tol-C12)	425397	27
C25	5.311	-0.002	60904	53609			
C26	5.439	0.000	71900	64415			
C28	5.679	0.006	121621	138979			
C32	6.110	0.001	148031	156171			
C34	6.365	-0.001	75107	22030			
Filter Peak	6.996	-0.001	61021	20106	JP-4 (Tol-C14)	554560	49
C36	6.678	-0.001	65044	30565	CREOSOT (C8-C22)	1447622	232
C38	7.085	0.002	54652	26397			
C40	7.618	-0.002	36955	8091	BUNKERC (C10-C38)	11033859	1388

AZDIESEL (C10-C22)	1238817	77
AZMOIL (C22-C32)	5884610	914

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	565010	35.9	79.7
Triacontane	502377	40.9	91.0

ms 8/27/08

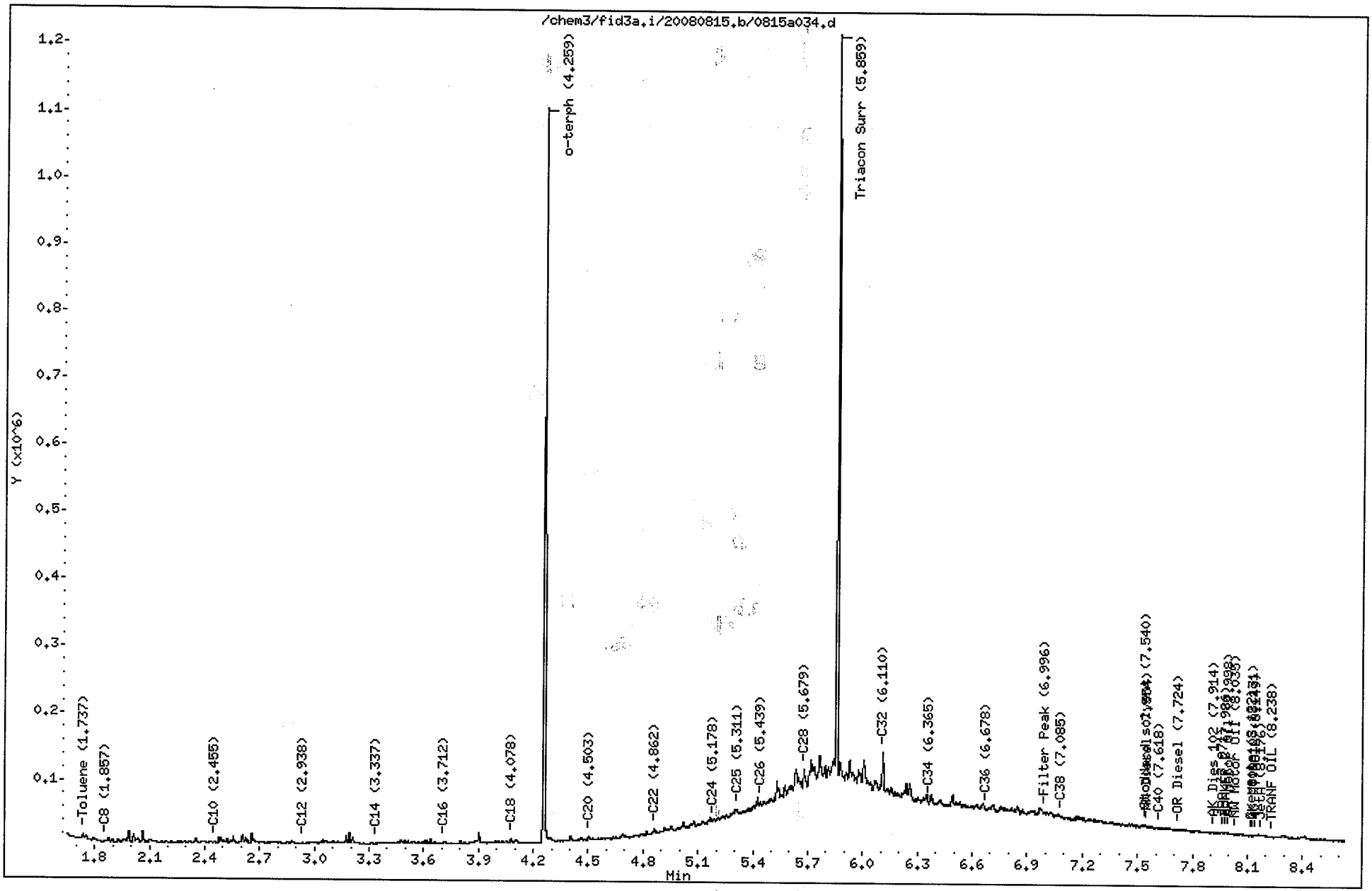
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a034.d
Date : 15-AUG-2008 23:53
Client ID:
Sample Info: NJ45H

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a035.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45J
Client ID:
Injection: 16-AUG-2008 00:09
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	18324	16509	GAS (Tol-C12)	425772	24
C8	1.857	-0.005	4617	5000	DIESEL (C12-C24)	1170558	99
C10	2.454	0.007	6667	6777	M.OIL (C24-C38)	5491040	564
C12	2.939	0.006	3897	2744	AK-102 (C10-C25)	1410350	98
C14	3.350	0.003	3935	1932	AK-103 (C25-C36)	4596812	653
C16	3.715	0.008	7540	9541	OR.DIES (C10-C28)	2605894	176
C18	4.080	0.001	9817	10668	OR.MOIL (C28-C40)	5021857	552
C20	4.505	0.002	12713	12752	JET-A (C10-C18)	551258	37
C22	4.864	-0.001	21137	26314	MIN.OIL (C24-C38)	5491040	428
C24	5.169	-0.007	34773	40286	MSPIRIT (Tol-C12)	425772	27
C25	5.315	0.002	32359	9604			
C26	5.437	-0.003	37331	32648			
C28	5.678	0.005	64383	57782			
C32	6.108	-0.002	85182	127566			
C34	6.364	-0.003	44319	6161			
Filter Peak	7.003	0.006	31583	9261	JP-4 (Tol-C14)	546845	48
C36	6.677	-0.001	35612	12686	CREOSOT (C8-C22)	1141779	183
C38	7.083	0.000	30114	4192			
C40	7.615	-0.005	20544	12818	BUNKERC (C10-C38)	6843930	861

AZDIESEL (C10-C22)	934245	58
AZMOIL (C22-C32)	3603939	560

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	512040	32.5	72.3
Triacontane	444431	36.2	80.5

ms 8/27/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a035.d
Date : 16-AUG-2008 00:09
Client ID:
Sample Info: NJ45J

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

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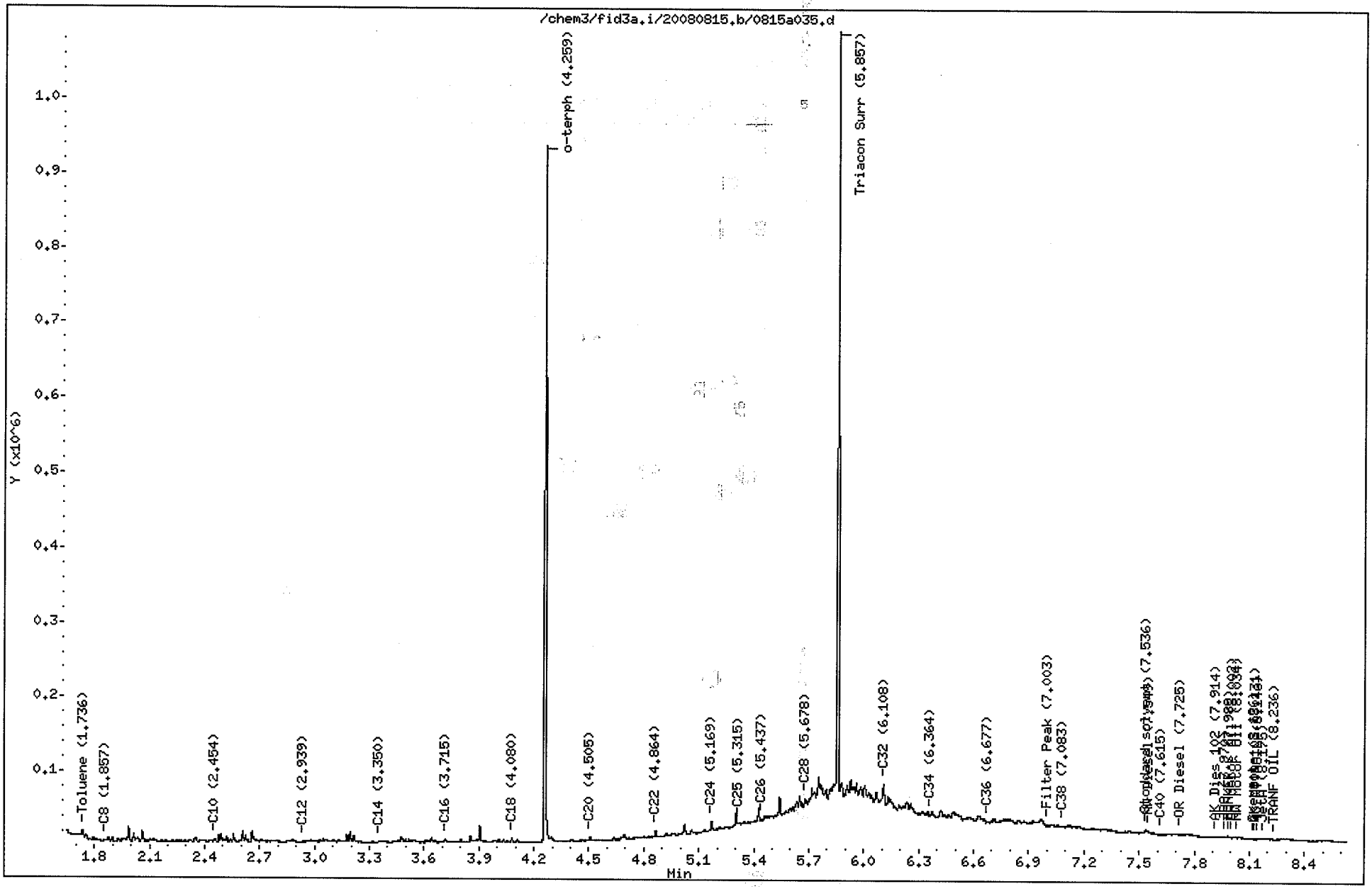


Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a036.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45L
Client ID:
Injection: 16-AUG-2008 00:24
Dilution Factor: 200

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	4090	2516	GAS (Tol-C12)	229557	13
C8	1.858	-0.004	3083	2181	DIESEL (C12-C24)	2053435	173
C10	2.454	0.007	3568	4892	M.OIL (C24-C38)	2408152	247
C12	2.931	-0.002	4705	2985	AK-102 (C10-C25)	2224935	155
C14	3.349	0.002	32876	34332	AK-103 (C25-C36)	2080728	296
C16	3.708	0.001	46770	34390	OR.DIES (C10-C28)	2970148	201
C18	4.079	0.000	36625	27889	OR.MOIL (C28-C40)	1871326	206
C20	4.502	-0.001	32562	32988	JET-A (C10-C18)	1017507	69
C22	4.862	-0.003	31782	37438	MIN.OIL (C24-C38)	2408152	188
C24	5.180	0.005	21656	9906	MSPIRIT (Tol-C12)	229557	15
C25	5.302	-0.011	34777	44092			
C26	5.441	0.001	26441	13961			
C28	5.670	-0.003	29261	7582			
C32	6.109	0.000	29730	31918			
C34	6.367	0.001	18273	9520			
Filter Peak	7.003	0.006	10656	8336	JP-4 (Tol-C14)	446986	39
C36	6.677	-0.002	13659	6480	CREOSOT (C8-C22)	1867902	300
C38	7.084	0.002	10305	5915			
C40	7.620	0.000	7694	3351	BUNKERC (C10-C38)	4580600	576

AZDIESEL (C10-C22)	1756597	109
AZMOIL (C22-C32)	1958285	304

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	0	0.0	0.0 D
Triacontane	0	0.0	0.0

mo 8/27/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a036.d

Date : 16-AUG-2008 00:24

Client ID:

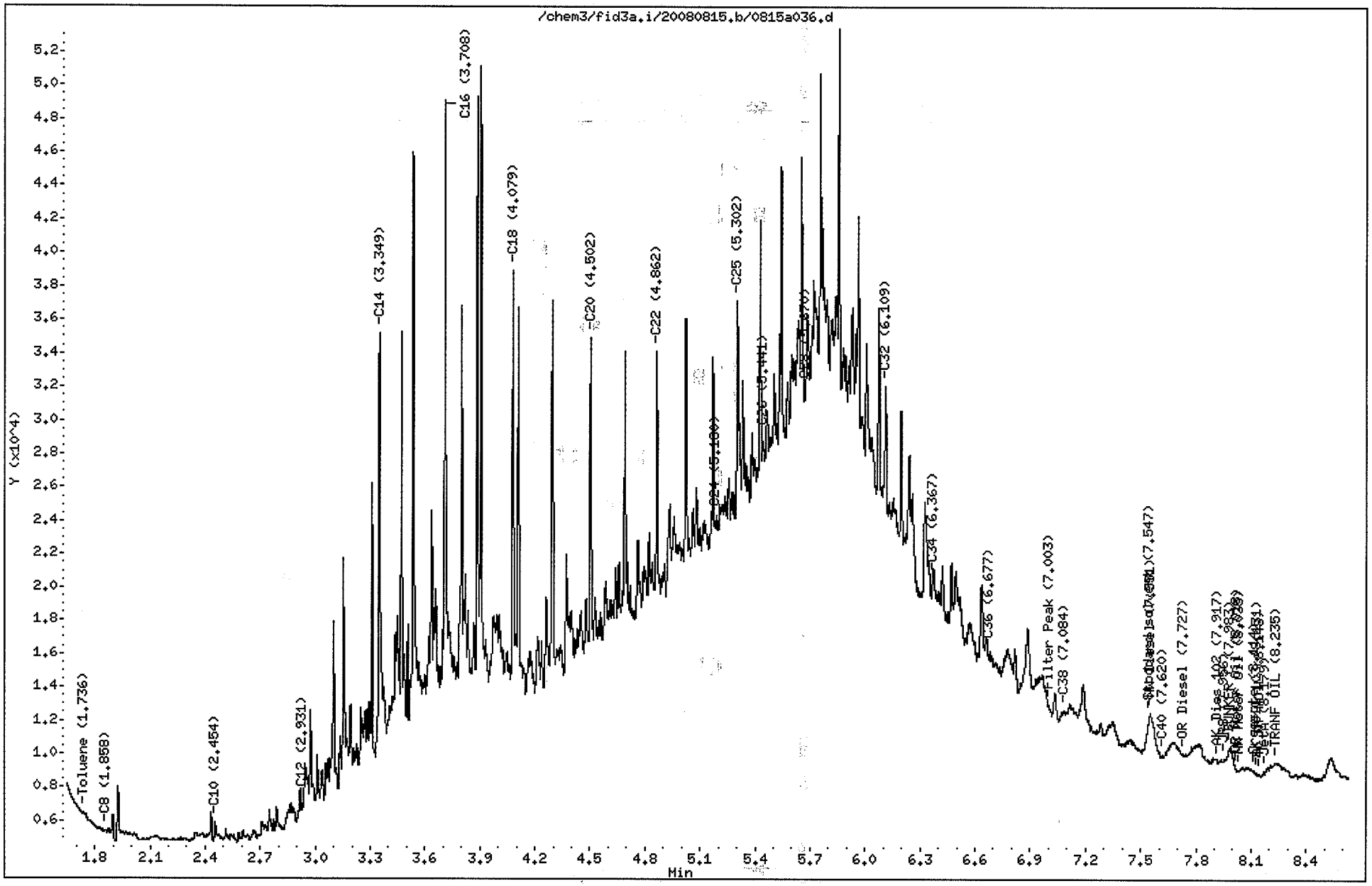
Sample Info: NJ45L,200

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms

Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a040.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45M
Client ID:
Injection: 16-AUG-2008 01:27
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	14409	25188	GAS (Tol-C12)	291603	16
C8	1.857	-0.005	3562	4376	DIESEL (C12-C24)	5837878	492
C10	2.454	0.007	4967	4885	M.OIL (C24-C38)	998098	103
C12	2.935	0.002	3247	1090	AK-102 (C10-C25)	5985725	418
C14	3.351	0.004	11212	9058	AK-103 (C25-C36)	838614	119
C16	3.710	0.003	58910	11729	OR.DIES (C10-C28)	6323676	428
C18	4.078	-0.001	83977	31210	OR.MOIL (C28-C40)	785426	86
C20	4.503	-0.001	67602	35692	JET-A (C10-C18)	2821844	190
C22	4.863	-0.002	36632	19035	MIN.OIL (C24-C38)	998098	78
C24	5.169	-0.006	21062	20722	MSPIRIT (Tol-C12)	291603	18
C25	5.323	0.010	13492	2142			
C26	5.437	-0.002	12150	6610			
C28	5.676	0.003	11687	11414			
C32	6.107	-0.003	9321	16374			
C34	6.367	0.001	6787	1218			
Filter Peak	6.999	0.002	5196	3315	JP-4 (Tol-C14)	441092	39
C36	6.687	0.009	5497	2408	CREOSOT (C8-C22)	5656734	907
C38	7.084	0.002	5328	1274			
C40	7.614	-0.006	4617	1566	BUNKERC (C10-C38)	6953959	875

AZDIESEL (C10-C22)	5510245	343
AZMOIL (C22-C32)	1055097	164

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	501726	31.9	70.8
Triacontane	436484	35.6	79.1

ms 8/29/08

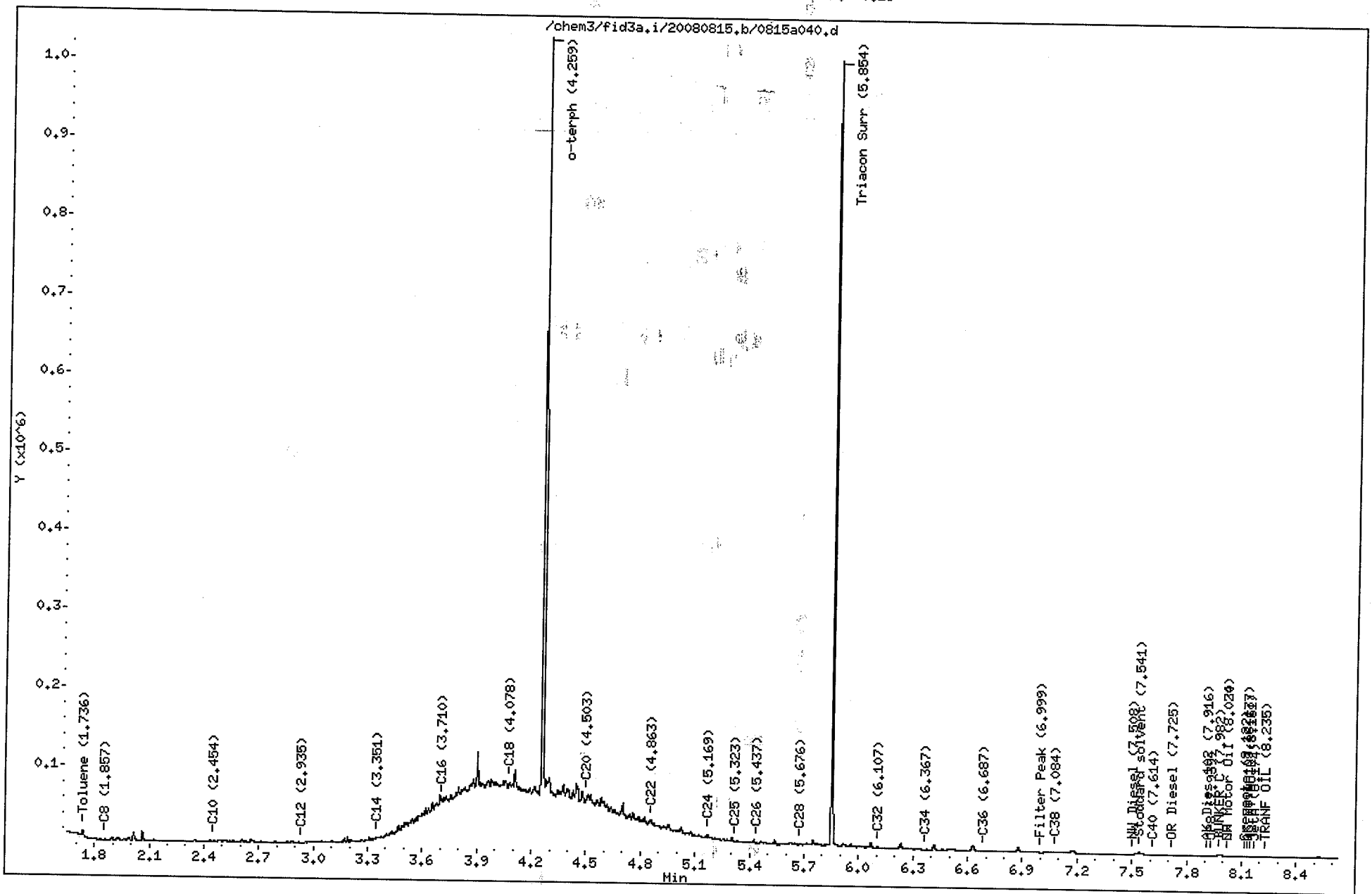
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a040.d
Date : 16-AUG-2008 01:27
Client ID:
Sample Info: NJ45M

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a041.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45N
Client ID:
Injection: 16-AUG-2008 01:42
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	-0.001	16636	30488	GAS (Tol-C12)	260602	15
C8	1.859	-0.003	3510	2877	DIESEL (C12-C24)	274337	23
C10	2.458	0.010	4090	4432	M.OIL (C24-C38)	635989	65
C12	2.928	-0.005	2382	1798	AK-102 (C10-C25)	379232	26
C14	3.342	-0.005	2064	1271	AK-103 (C25-C36)	510468	73
C16	3.705	-0.003	1955	1809	OR.DIES (C10-C28)	510849	35
C18	4.080	0.002	3146	3199	OR.MOIL (C28-C40)	648572	71
C20	4.495	-0.008	2113	2319	JET-A (C10-C18)	255487	17
C22	4.867	0.002	3688	6810	MIN.OIL (C24-C38)	635989	50
C24	5.171	-0.004	4674	5186	MSPIRIT (Tol-C12)	260602	16
C25	5.303	-0.010	5369	7487			
C26	5.439	0.000	4012	1353			
C28	5.676	0.003	6340	6166			
C32	6.118	0.008	6922	5223			
C34	6.363	-0.003	6124	4365			
Filter Peak	7.000	0.003	4836	1345	JP-4 (Tol-C14)	328229	29
C36	6.680	0.001	5401	1506	CREOSOT (C8-C22)	440705	71
C38	7.084	0.001	4821	3822			
C40	7.621	0.001	4532	2343	BUNKERC (C10-C38)	1007958	127

AZDIESEL (C10-C22)	302334	19
AZMOIL (C22-C32)	362758	56

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	488132	31.0	68.9
Triacontane	442395	36.1	80.1

ms 8/27/08

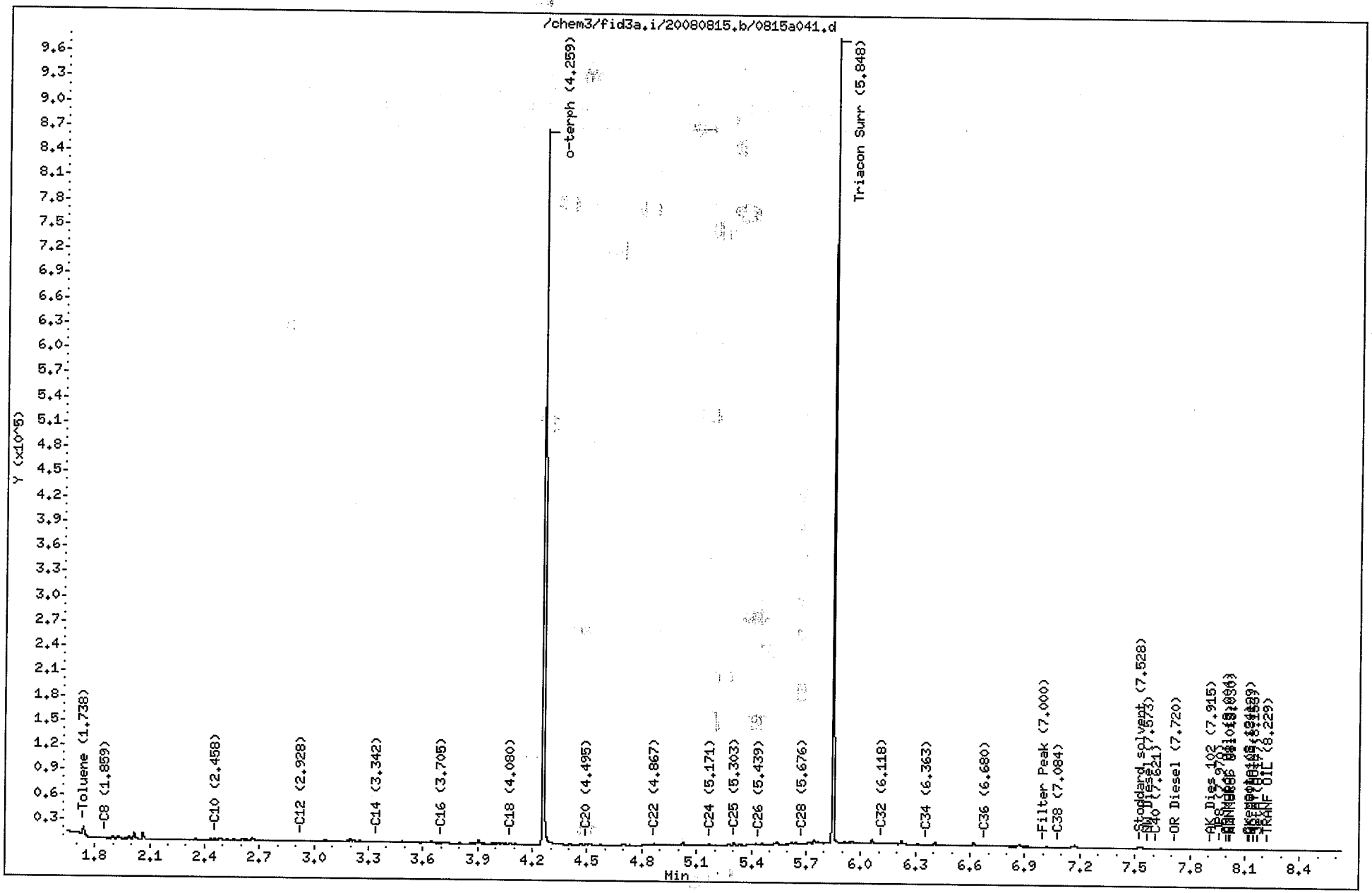
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a041.d
Date : 16-AUG-2008 01:42
Client ID:
Sample Info: NJ45N

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a042.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ450
Client ID:
Injection: 16-AUG-2008 01:57
Dilution Factor: 5

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	5596	4731	GAS (Tol-C12)	209973	12
C8	1.859	-0.002	3152	2830	DIESEL (C12-C24)	1349069	114
C10	2.456	0.008	3238	3273	M.OIL (C24-C38)	3303594	340
C12	2.933	0.000	1881	449	AK-102 (C10-C25)	1508593	105
C14	3.339	-0.007	2044	885	AK-103 (C25-C36)	2917877	415
C16	3.702	-0.005	4436	3709	OR.DIES (C10-C28)	2549215	172
C18	4.082	0.003	9836	11168	OR.MOIL (C28-C40)	2470871	272
C20	4.505	0.001	14734	13879	JET-A (C10-C18)	359906	24
C22	4.864	-0.001	22851	22539	MIN.OIL (C24-C38)	3303594	258
C24	5.177	0.002	28105	6645	MSPIRIT (Tol-C12)	209973	13
C25	5.311	-0.002	33744	28472			
C26	5.437	-0.003	34697	11548			
C28	5.675	0.002	55362	50227			
C32	6.104	-0.006	49385	51823			
C34	6.366	-0.001	22684	20039			
Filter Peak	6.995	-0.002	11875	4207	JP-4 (Tol-C14)	265438	23
C36	6.675	-0.003	15688	7926	CREOSOT (C8-C22)	1061843	170
C38	7.078	-0.004	11133	6989			
C40	7.621	0.001	7803	2628	BUNKERC (C10-C38)	4734792	595

AZDIESEL (C10-C22)	948071	59
AZMOIL (C22-C32)	2803653	435

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	122790	7.8	86.6
Triacontane	112250	9.1	101.7

ms 8/27/08

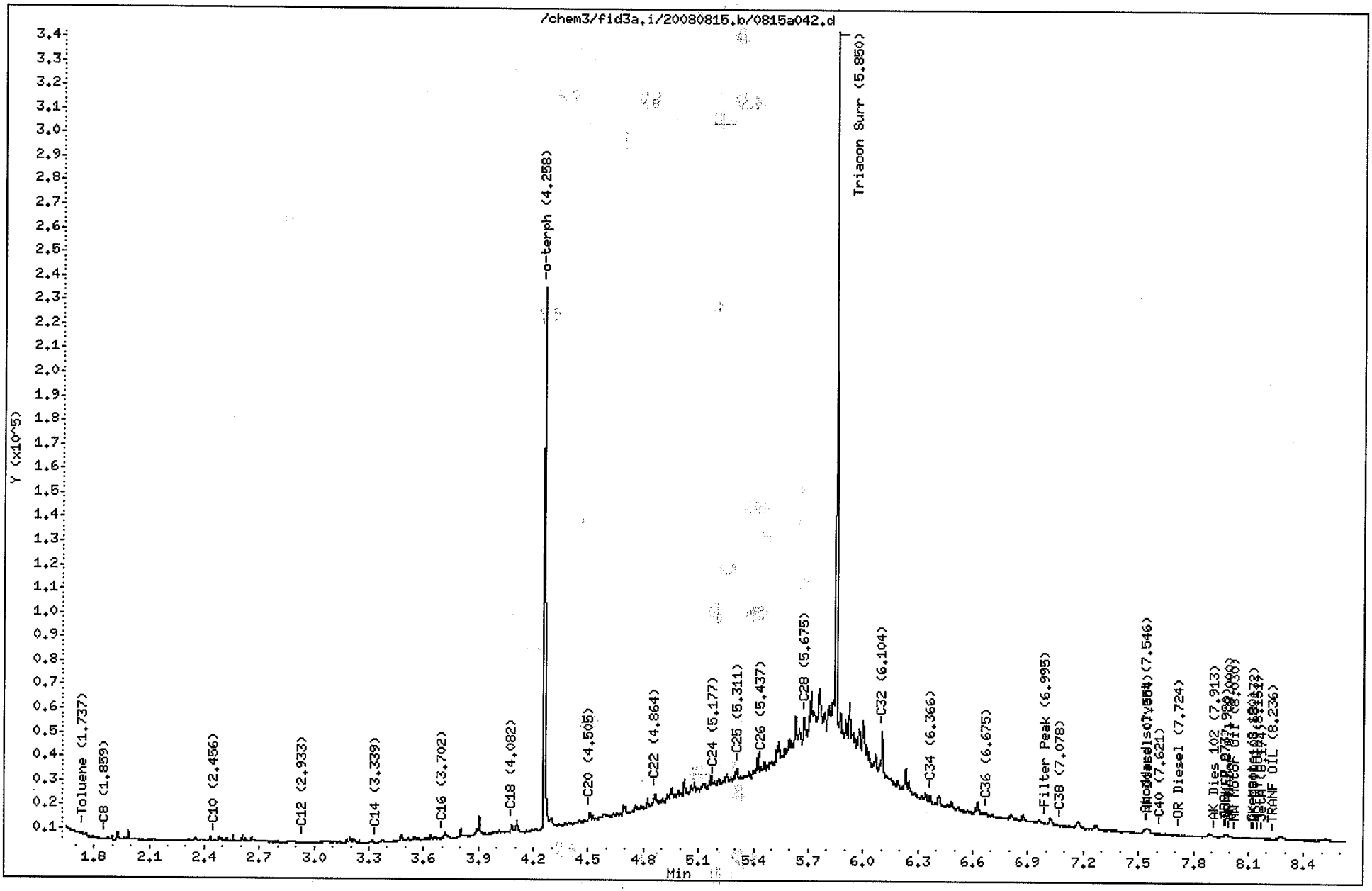
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a042.d
Date : 16-AUG-2008 01:57
Client ID:
Sample Info: NJ450,5

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a043.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45P
Client ID:
Injection: 16-AUG-2008 02:13
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	10655	9146	GAS (Tol-C12)	336326	19
C8	1.860	-0.002	3666	4718	DIESEL (C12-C24)	386861	33
C10	2.456	0.008	5131	5002	M.OIL (C24-C38)	550749	57
C12	2.935	0.002	2656	1781	AK-102 (C10-C25)	542437	38
C14	3.339	-0.007	2315	1740	AK-103 (C25-C36)	439095	62
C16	3.702	-0.006	3372	3798	OR.DIES (C10-C28)	655975	44
C18	4.080	0.001	4566	4659	OR.MOIL (C28-C40)	570146	63
C20	4.510	0.007	4027	3676	JET-A (C10-C18)	389848	26
C22	4.868	0.003	4105	5569	MIN.OIL (C24-C38)	550749	43
C24	5.171	-0.004	4834	5308	MSPIRIT (Tol-C12)	336326	21
C25	5.304	-0.009	5329	7466			
C26	5.450	0.011	3989	2396			
C28	5.672	-0.001	5298	5161			
C32	6.104	-0.006	6412	6556			
C34	6.368	0.002	5307	6130			
Filter Peak	6.995	-0.002	4402	2625	JP-4 (Tol-C14)	438565	39
C36	6.678	-0.001	4719	752	CREOSOT (C8-C22)	622603	100
C38	7.086	0.003	4496	1342			
C40	7.618	-0.002	4360	1303	BUNKERC (C10-C38)	1087843	137

AZDIESEL (C10-C22)	455186	28
AZMOIL (C22-C32)	313557	49

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	570147	36.2	80.5
Triacontane	514556	41.9	93.2

ms 8/27/08

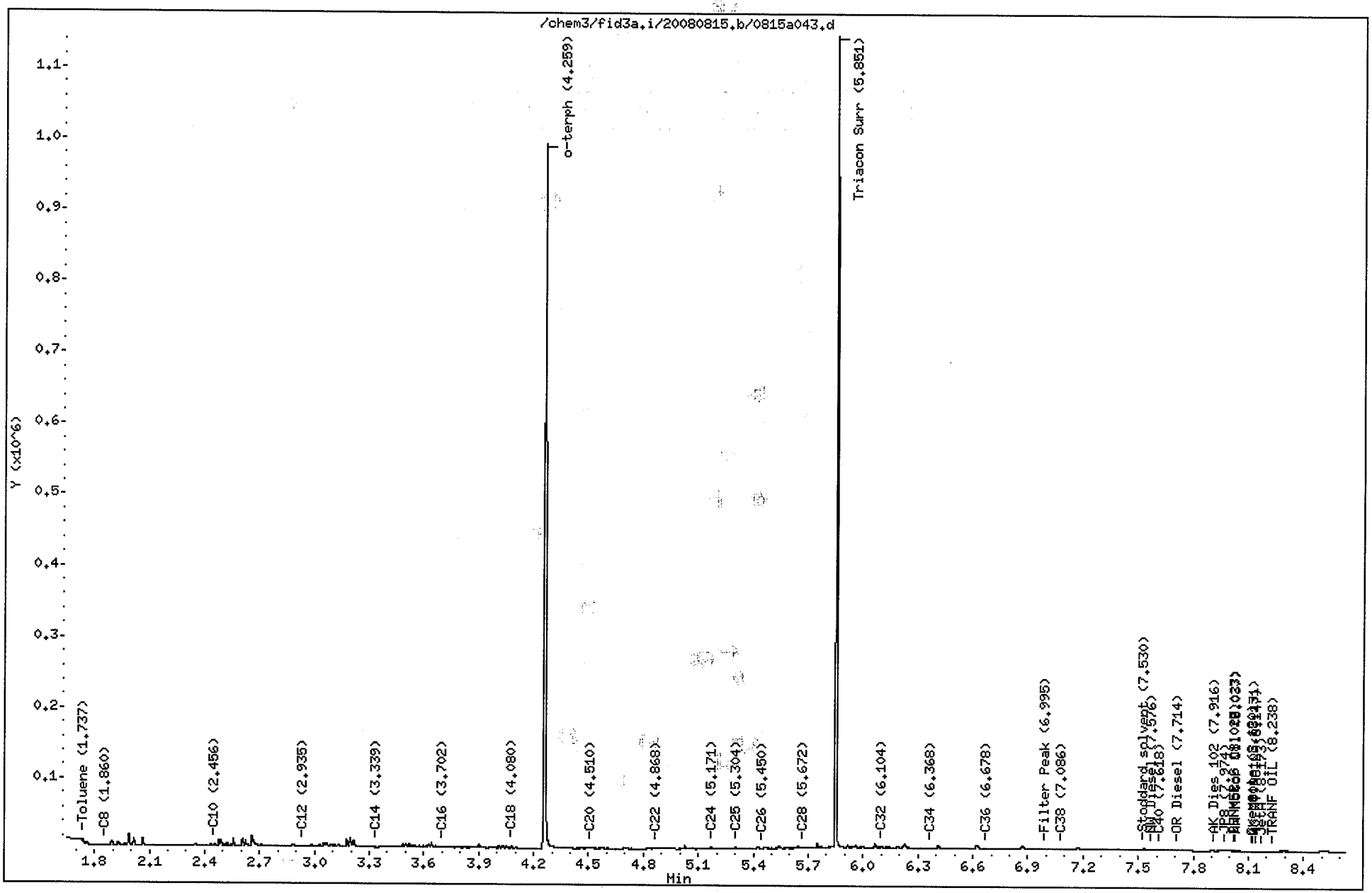
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a043.d
Date : 16-AUG-2008 02:13
Client ID:
Sample Info: NJ45P

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a044.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45Q
Client ID:
Injection: 16-AUG-2008 02:28
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	10816	9211	GAS (Tol-C12)	393907	22
C8	1.860	-0.002	3691	4805	DIESEL (C12-C24)	1774814	150
C10	2.455	0.008	5929	5965	M.OIL (C24-C38)	1865225	192
C12	2.932	-0.001	7135	4479	AK-102 (C10-C25)	2018129	141
C14	3.354	0.008	10203	9770	AK-103 (C25-C36)	1626944	231
C16	3.710	0.002	17359	13807	OR.DIES (C10-C28)	2621621	177
C18	4.078	0.000	17278	18403	OR.MOIL (C28-C40)	1432558	157
C20	4.504	0.000	19154	22669	JET-A (C10-C18)	958803	65
C22	4.864	-0.001	21040	20283	MIN.OIL (C24-C38)	1865225	145
C24	5.178	0.002	18431	3665	MSPIRIT (Tol-C12)	393907	25
C25	5.320	0.007	18858	2614			
C26	5.434	-0.006	20638	18026			
C28	5.671	-0.002	25445	11348			
C32	6.108	-0.002	18615	4417			
C34	6.361	-0.006	14556	8155			
Filter Peak	7.001	0.004	7858	2342	JP-4 (Tol-C14)	567695	50
C36	6.679	0.000	10102	6970	CREOSOT (C8-C22)	1786566	287
C38	7.080	-0.003	7182	2992			
C40	7.621	0.001	5865	2200	BUNKERC (C10-C38)	3839948	483
AZDIESEL (C10-C22)				1618428	101		
AZMOIL (C22-C32)				1555444	242		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	678627	43.1	95.8
Triacontane	608494	49.6	110.2

ms 8/22/08

Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a044.d
Date : 16-AUG-2008 02:28
Client ID:
Sample Info: NJ45Q

Instrument: fid3a.i

Operator: ms
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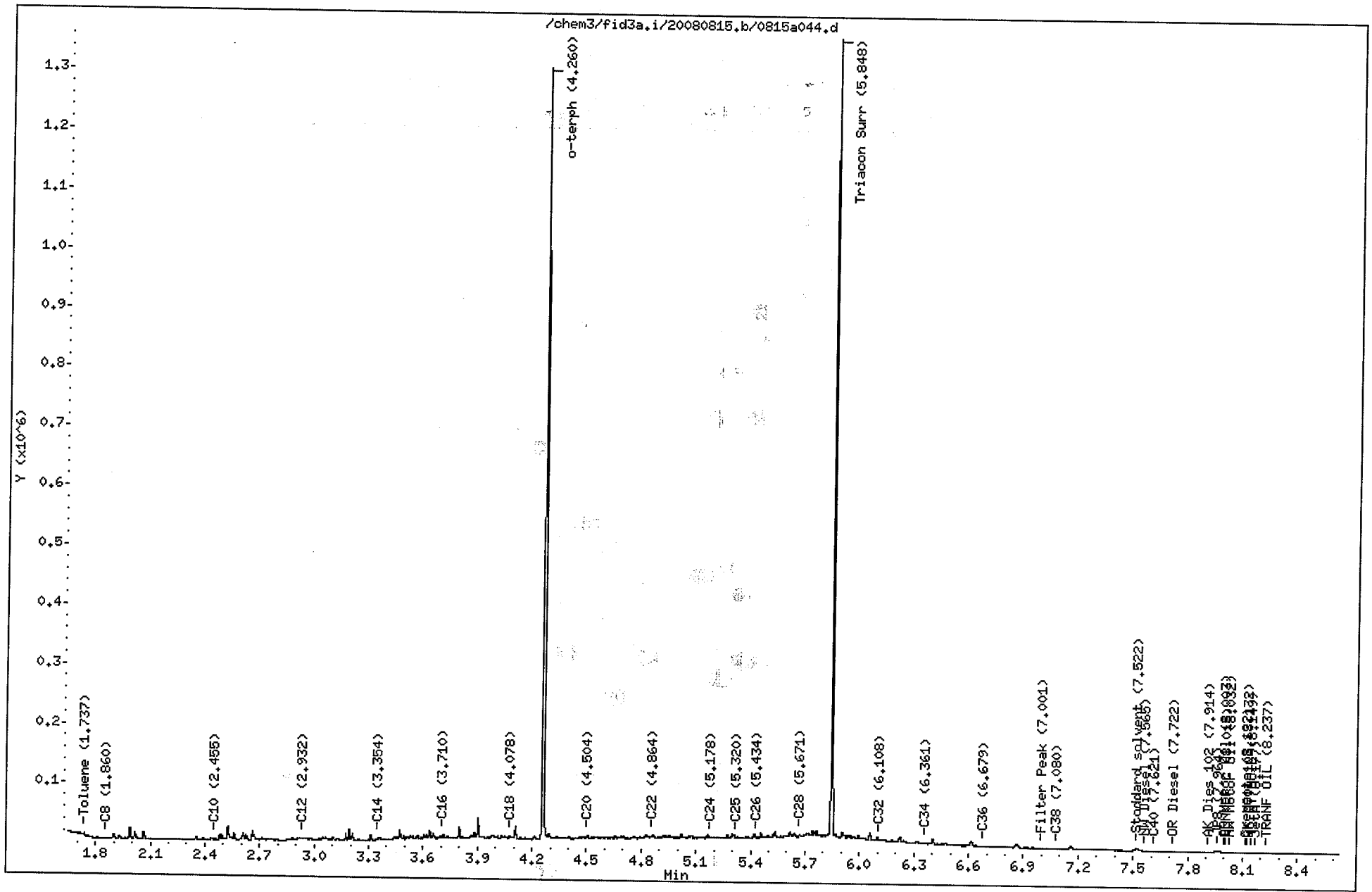
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a045.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45R
Client ID:
Injection: 16-AUG-2008 02:44
Dilution Factor: 10

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	4674	4052	GAS (Tol-C12)	192376	11
C8	1.859	-0.003	3085	2359	DIESEL (C12-C24)	1532221	129
C10	2.457	0.010	3196	3809	M.OIL (C24-C38)	2622895	270
C12	2.932	-0.001	1912	567	AK-102 (C10-C25)	1666588	116
C14	3.338	-0.009	3515	2050	AK-103 (C25-C36)	2291445	326
C16	3.705	-0.003	7792	4000	OR.DIES (C10-C28)	2469892	167
C18	4.079	0.001	10870	4483	OR.MOIL (C28-C40)	2031860	223
C20	4.511	0.007	15966	12124	JET-A (C10-C18)	490400	33
C22	4.866	0.001	19246	6114	MIN.OIL (C24-C38)	2622895	205
C24	5.176	0.000	23402	11115	MSPIRIT (Tol-C12)	192376	12
C25	5.310	-0.003	27592	23773			
C26	5.436	-0.004	27485	23055			
C28	5.672	-0.001	40269	32768			
C32	6.118	0.008	25203	5444			
C34	6.361	-0.005	19917	19126			
Filter Peak	6.997	0.000	10998	4806	JP-4 (Tol-C14)	258006	23
C36	6.681	0.002	13340	6358	CREOSOT (C8-C22)	1289815	207
C38	7.081	-0.001	10160	3403			
C40	7.615	-0.005	7712	4564	BUNKERC (C10-C38)	4231637	532
AZDIESEL (C10-C22)				1179751	73		
AZMOIL (C22-C32)				2186051	340		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	57000	3.6	80.4
Triacontane	51510	4.2	93.3

ms 8/27/08

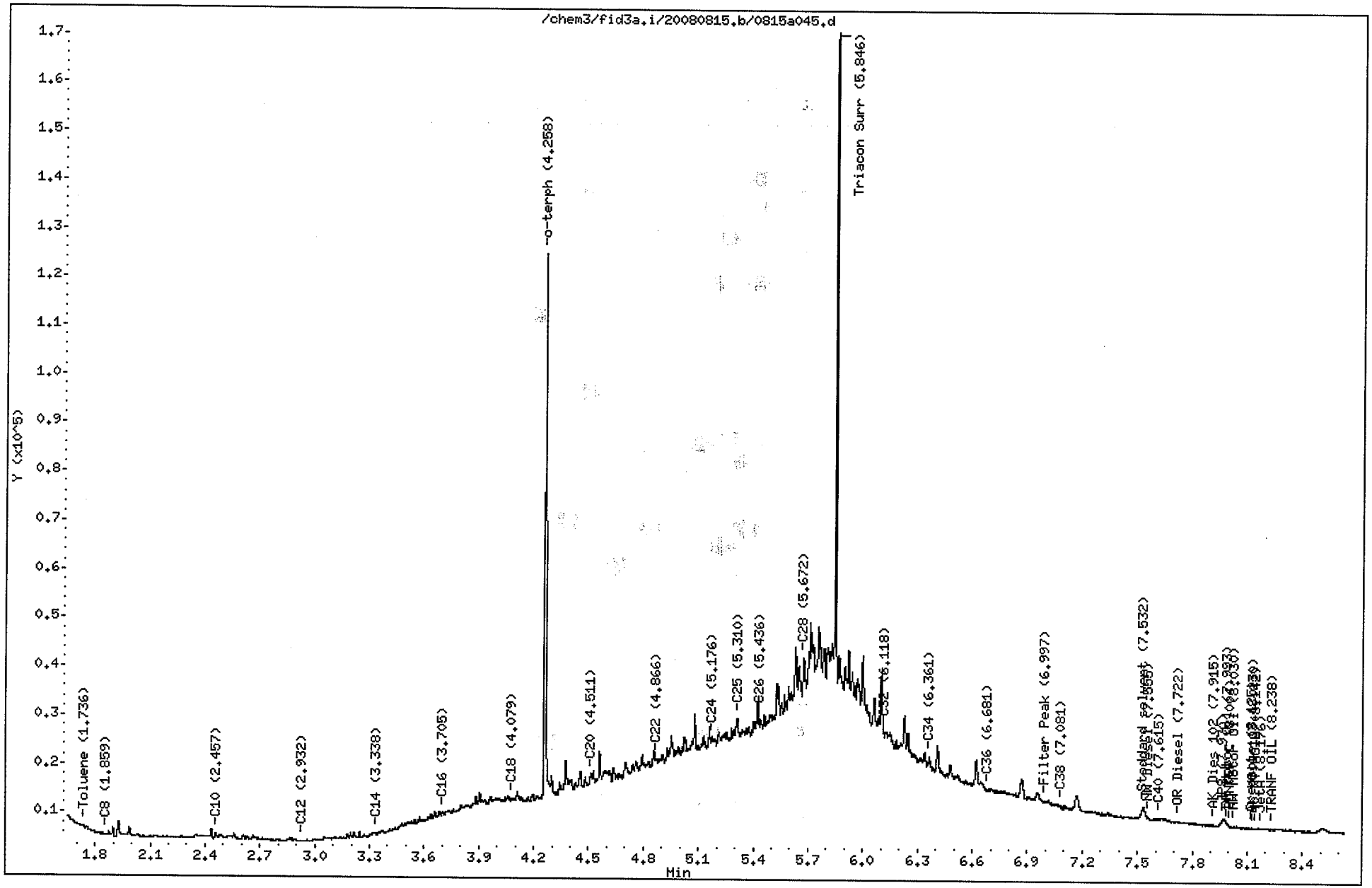
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a045.d
Date : 16-AUG-2008 02:44
Client ID:
Sample Info: NJ45R,10

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a046.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45S
Client ID:
Injection: 16-AUG-2008 03:00
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	15695	27675	GAS (Tol-C12)	254606	14
C8	1.859	-0.003	3574	3656	DIESEL (C12-C24)	246115	21
C10	2.457	0.010	4023	3971	M.OIL (C24-C38)	599881	62
C12	2.929	-0.004	2147	1407	AK-102 (C10-C25)	347062	24
C14	3.349	0.002	1564	248	AK-103 (C25-C36)	480277	68
C16	3.701	-0.007	1669	1190	OR.DIES (C10-C28)	474507	32
C18	4.080	0.001	2400	2623	OR.MOIL (C28-C40)	608567	67
C20	4.494	-0.010	2077	1822	JET-A (C10-C18)	227188	15
C22	4.861	-0.004	2558	2097	MIN.OIL (C24-C38)	599881	47
C24	5.173	-0.003	3314	2681	MSPIRIT (Tol-C12)	254606	16
C25	5.307	-0.006	3670	6596			
C26	5.443	0.004	4295	1771			
C28	5.670	-0.003	7280	8828			
C32	6.118	0.009	6503	1804			
C34	6.362	-0.004	5911	4857			
Filter Peak	6.998	0.001	4731	1975	JP-4 (Tol-C14)	309058	27
C36	6.682	0.003	4885	2729	CREOSOT (C8-C22)	396613	64
C38	7.083	0.001	4597	1099			
C40	7.621	0.001	4432	1322	BUNKERC (C10-C38)	939054	118

AZDIESEL (C10-C22)	274000	17
AZMOIL (C22-C32)	342549	53

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	622591	39.5	87.9
Triacontane	579406	47.2	105.0

mo 8/27/08

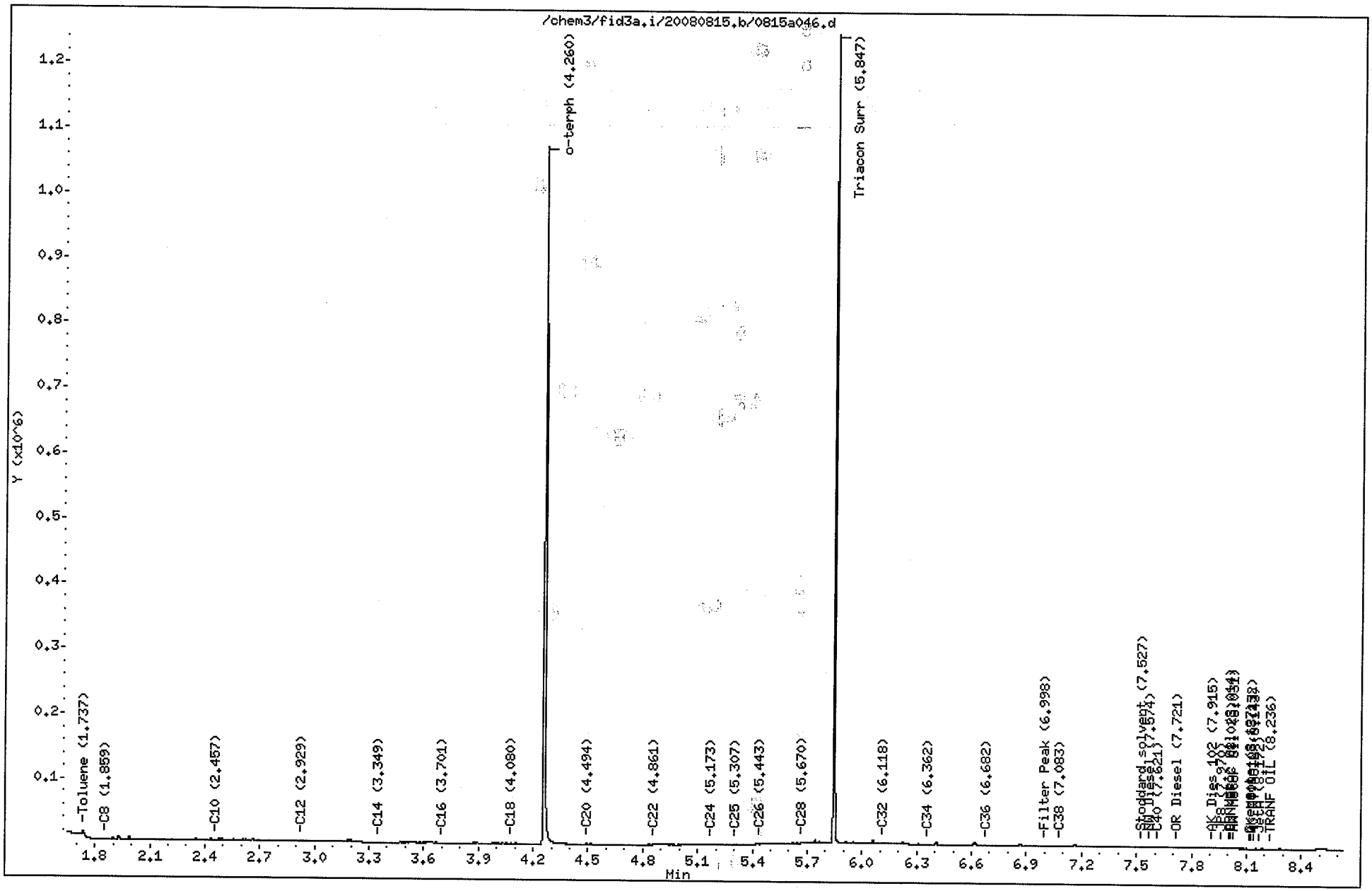
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a046.d
Date : 16-AUG-2008 03:00
Client ID:
Sample Info: NJ45S

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a047.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45U
Client ID:
Injection: 16-AUG-2008 03:15
Dilution Factor: 10

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	-0.001	4988	4550	GAS (Tol-C12)	214662	12
C8	1.858	-0.003	3109	1833	DIESEL (C12-C24)	1786490	151
C10	2.447	0.000	2358	422	M.OIL (C24-C38)	3229184	332
C12	2.934	0.001	2669	743	AK-102 (C10-C25)	1928034	135
C14	3.353	0.007	8178	8034	AK-103 (C25-C36)	2764263	393
C16	3.711	0.003	14955	14756	OR.DIES (C10-C28)	2791307	189
C18	4.079	0.000	16126	19292	OR.MOIL (C28-C40)	2720614	299
C20	4.503	-0.001	17140	8933	JET-A (C10-C18)	775268	52
C22	4.858	-0.007	21193	27780	MIN.OIL (C24-C38)	3229184	252
C24	5.178	0.003	22044	5269	MSPIRIT (Tol-C12)	214662	14
C25	5.309	-0.004	28040	27679			
C26	5.439	-0.001	28413	14419			
C28	5.673	0.000	44526	58318			
C32	6.114	0.005	32389	8351			
C34	6.369	0.002	25347	12737			
Filter Peak	6.999	0.002	16730	4967	JP-4 (Tol-C14)	335651	30
C36	6.677	-0.001	19876	6647	CREOSOT (C8-C22)	1582066	254
C38	7.082	-0.001	14829	4987			
C40	7.621	0.001	10616	4406	BUNKERC (C10-C38)	5107603	642

AZDIESEL (C10-C22)	1471741	92
AZMOIL (C22-C32)	2374704	369

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	62252	4.0	87.9
Triacontane	59988	4.9	108.7

mo 8/27/08

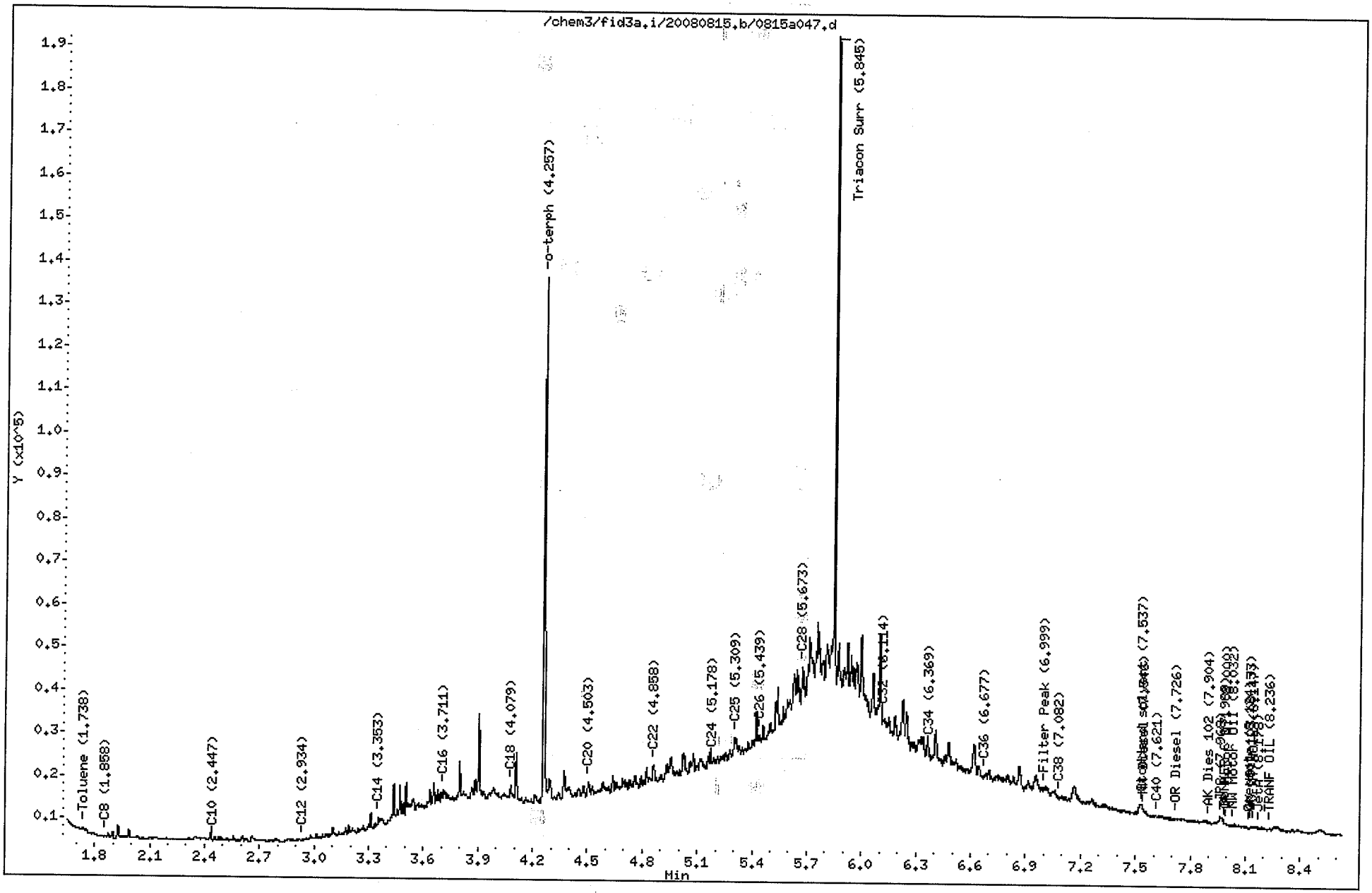
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a047.d
Date : 16-AUG-2008 03:15
Client ID:
Sample Info: NJ45U,10

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a048.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45V
Client ID:
Injection: 16-AUG-2008 03:31
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	15389	15681	GAS (Tol-C12)	572963	32
C8	1.861	-0.001	5655	6685	DIESEL (C12-C24)	427279	36
C10	2.454	0.007	7238	5751	M.OIL (C24-C38)	625562	64
C12	2.941	0.008	7241	7502	AK-102 (C10-C25)	649358	45
C14	3.353	0.007	3158	1999	AK-103 (C25-C36)	495655	70
C16	3.703	-0.005	4009	4452	OR.DIES (C10-C28)	777556	53
C18	4.081	0.002	4523	4787	OR.MOIL (C28-C40)	647060	71
C20	4.511	0.008	3777	4939	JET-A (C10-C18)	493490	33
C22	4.861	-0.004	3141	2938	MIN.OIL (C24-C38)	625562	49
C24	5.172	-0.003	4495	3695	MSPIRIT (Tol-C12)	572963	36
C25	5.319	0.006	3902	2116			
C26	5.443	0.004	4517	2057			
C28	5.669	-0.004	5967	4091			
C32	6.109	-0.001	6727	2393			
C34	6.367	0.000	6044	5617			
Filter Peak	7.003	0.006	4628	646	JP-4 (Tol-C14)	692523	61
C36	6.680	0.001	4925	2445	CREOSOT (C8-C22)	893643	143
C38	7.083	0.000	4816	2288			
C40	7.622	0.002	4520	3149	BUNKERC (C10-C38)	1269480	160

AZDIESEL (C10-C22)	528250	33
AZMOIL (C22-C32)	351819	55

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	515819	32.8	72.8
Triacontane	475857	38.8	86.2

mo 8/27/08

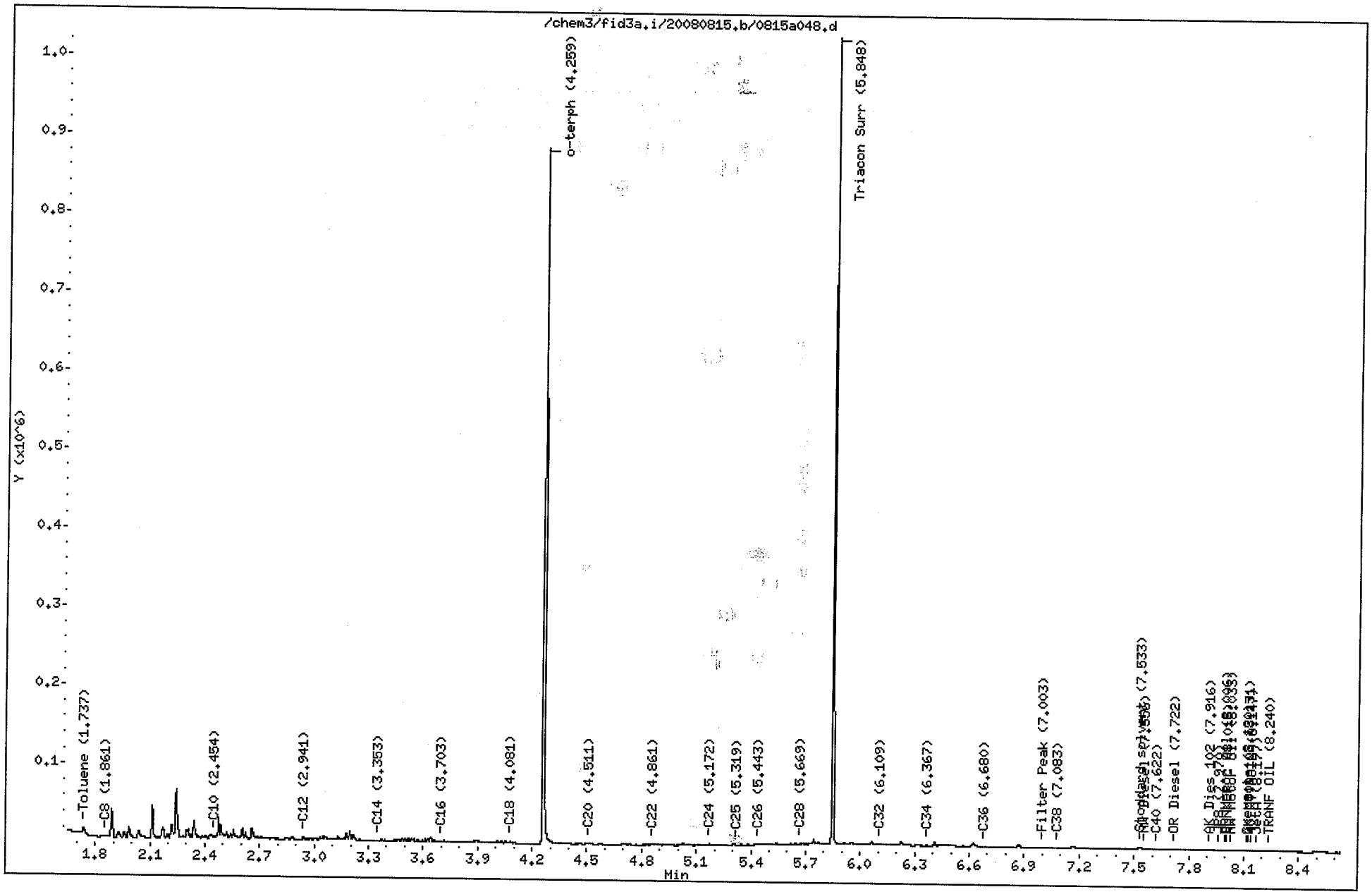
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a048.d
Date : 16-AUG-2008 03:31
Client ID:
Sample Info: NJ45V

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a049.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45W
Client ID:
Injection: 16-AUG-2008 03:46
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.739	0.000	11042	10395	GAS (Tol-C12)	326505	18
C8	1.860	-0.002	3663	3752	DIESEL (C12-C24)	448016	38
C10	2.456	0.009	5392	5116	M.OIL (C24-C38)	678458	70
C12	2.922	-0.011	3116	2774	AK-102 (C10-C25)	615467	43
C14	3.340	-0.007	2708	1629	AK-103 (C25-C36)	566131	80
C16	3.702	-0.005	3438	2883	OR.DIES (C10-C28)	777835	53
C18	4.080	0.001	6398	4824	OR.MOIL (C28-C40)	634089	70
C20	4.508	0.005	5105	4657	JET-A (C10-C18)	422848	28
C22	4.866	0.001	5563	4911	MIN.OIL (C24-C38)	678458	53
C24	5.170	-0.005	6203	4597	MSPIRIT (Tol-C12)	326505	21
C25	5.324	0.011	4220	2011			
C26	5.452	0.012	6102	5451			
C28	5.668	-0.005	8026	9119			
C32	6.113	0.004	7658	6109			
C34	6.368	0.002	5767	4341			
Filter Peak	6.997	0.000	4350	694	JP-4 (Tol-C14)	436464	38
C36	6.690	0.011	4860	2023	CREOSOT (C8-C22)	671453	108
C38	7.082	-0.001	4319	1809			
C40	7.622	0.002	4450	2303	BUNKERC (C10-C38)	1285787	162
AZDIESEL (C10-C22)				516055	32		
AZMOIL (C22-C32)				444673	69		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	610331	38.8	86.1
Triacontane	527747	43.0	95.6

MS 8/27/08

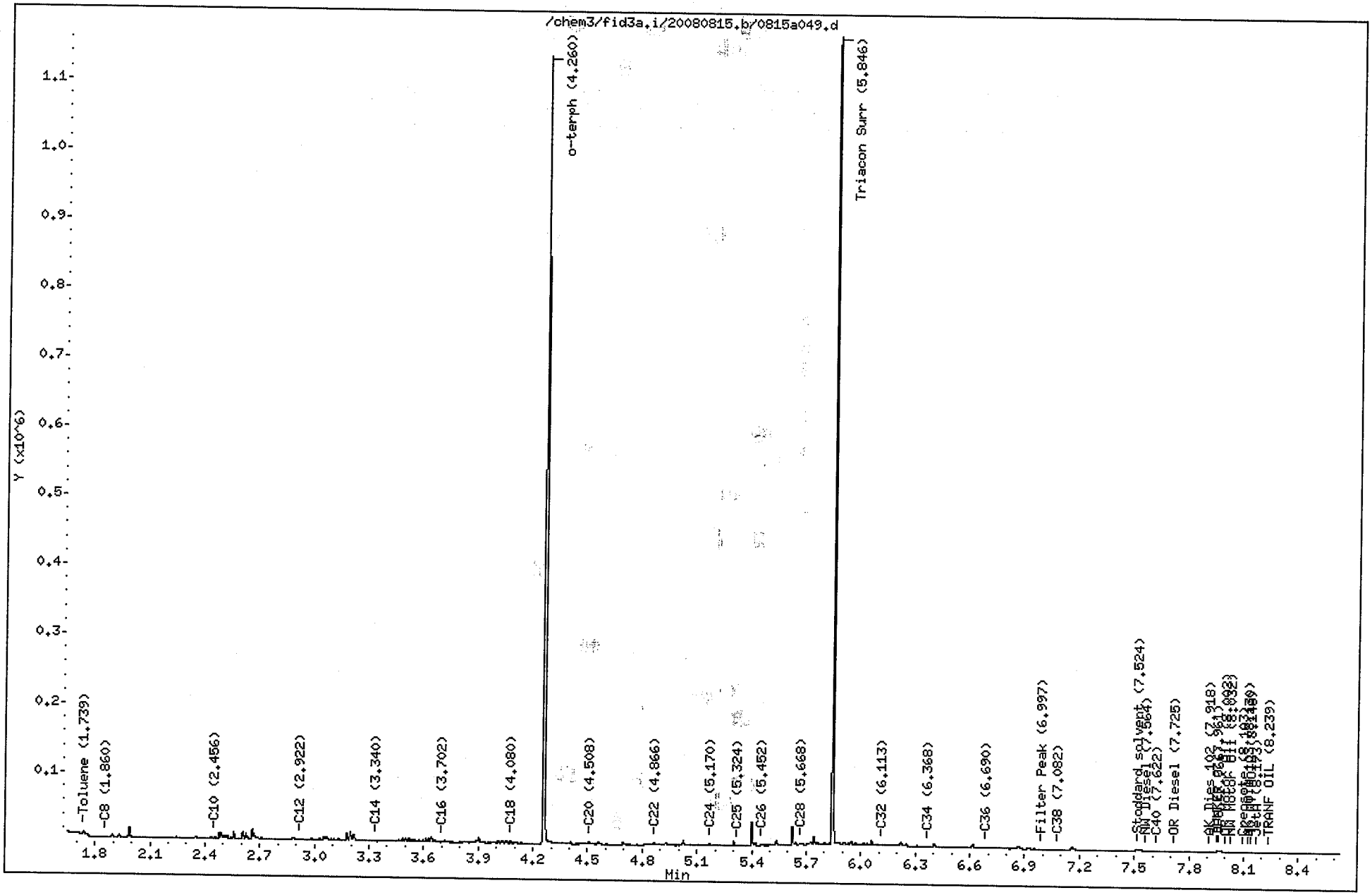
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a049.d
Date : 16-AUG-2008 03:46
Client ID:
Sample Info: NJ45W

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

CLEANED TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01

Client ID	OTER	TOT OUT
EBC-1-S1	60.0%	0
MB-081108	90.4%	0
LCS-081108	104%	0
LCSD-081108	92.4%	0
EBC-1-S2	91.3%	0
EBC-1-S2 MS	72.2%	0
EBC-1-S2 MSD	83.3%	0
EBC-2-S1	72.0%	0
EBC-3-S1	84.9%	0
EBC-3-S2	86.4%	0
EBC-4-S1	76.2%	0
EBC-5-S1	79.8%	0
EBC-6-S1	72.2%	0
EBC-7-S1	D	0
EBC-7-S2	70.9%	0
EBC-8-S1	68.9%	0
EBC-9-S1	86.7%	0
EBC-10-S1	80.4%	0
EBC-11-S1	95.8%	0
EBC-11-S2	80.4%	0
EBC-12-S1	87.8%	0
EBC-13-S1	87.8%	0
EBC-13-S2	72.9%	0
EBC-14-S1	86.2%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(62-118)	(49-125)

Prep Method: SW3546
Log Number Range: 08-19394 to 08-19416

FORM-II TPHD

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1

Sample ID: EBC-1-S2
MS/MSD

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/28/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted MS/MSD: 08/11/08

Date Analyzed MS: 08/15/08 22:21
MSD: 08/15/08 22:36
Instrument/Analyst MS: FID/MS
MSD: FID/MS

Sample Amount MS: 9.73 g-dry-wt
MSD: 9.41 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.0
MSD: 1.0
Percent Moisture: 6.8%

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	5.8	85.3	154	51.6%	106	159	63.0%	21.6%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	72.2%	83.3%

Results reported in mg/kg
RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a028.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45BMS
Client ID:
Injection: 15-AUG-2008 22:21
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	17095	23086	GAS (Tol-C12)	2466993	138
C8	1.858	-0.004	13432	12124	DIESEL (C12-C24)	9845544	830
C10	2.447	-0.001	235289	104907	M.OIL (C24-C38)	1076843	111
C12	2.932	-0.001	391258	194010	AK-102 (C10-C25)	11756146	821
C14	3.343	-0.004	511652	232332	AK-103 (C25-C36)	889252	126
C16	3.705	-0.002	582707	329779	OR.DIES (C10-C28)	12076517	817
C18	4.078	0.000	377971	231530	OR.MOIL (C28-C40)	897023	99
C20	4.502	-0.001	262350	176480	JET-A (C10-C18)	8822532	594
C22	4.862	-0.003	114121	82433	MIN.OIL (C24-C38)	1076843	84
C24	5.168	-0.007	52063	37966	MSPIRIT (Tol-C12)	2466993	156
C25	5.302	-0.011	35457	38710			
C26	5.446	0.006	10414	5135			
C28	5.673	0.000	10480	5966			
C32	6.106	-0.004	10944	13696			
C34	6.368	0.001	8019	4907			
Filter Peak	7.005	0.008	6090	2544	JP-4 (Tol-C14)	4688086	413
C36	6.691	0.012	6863	3524	CREOSOT (C8-C22)	11842432	1900
C38	7.082	-0.001	6082	1935			
C40	7.622	0.002	5399	1826	BUNKERC (C10-C38)	12805958	1610

AZDIESEL (C10-C22)	11065960	689
AZMOIL (C22-C32)	1062855	165

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	511443	32.5	72.2
Triacontane	429518	35.0	77.8

ms 8/27/08

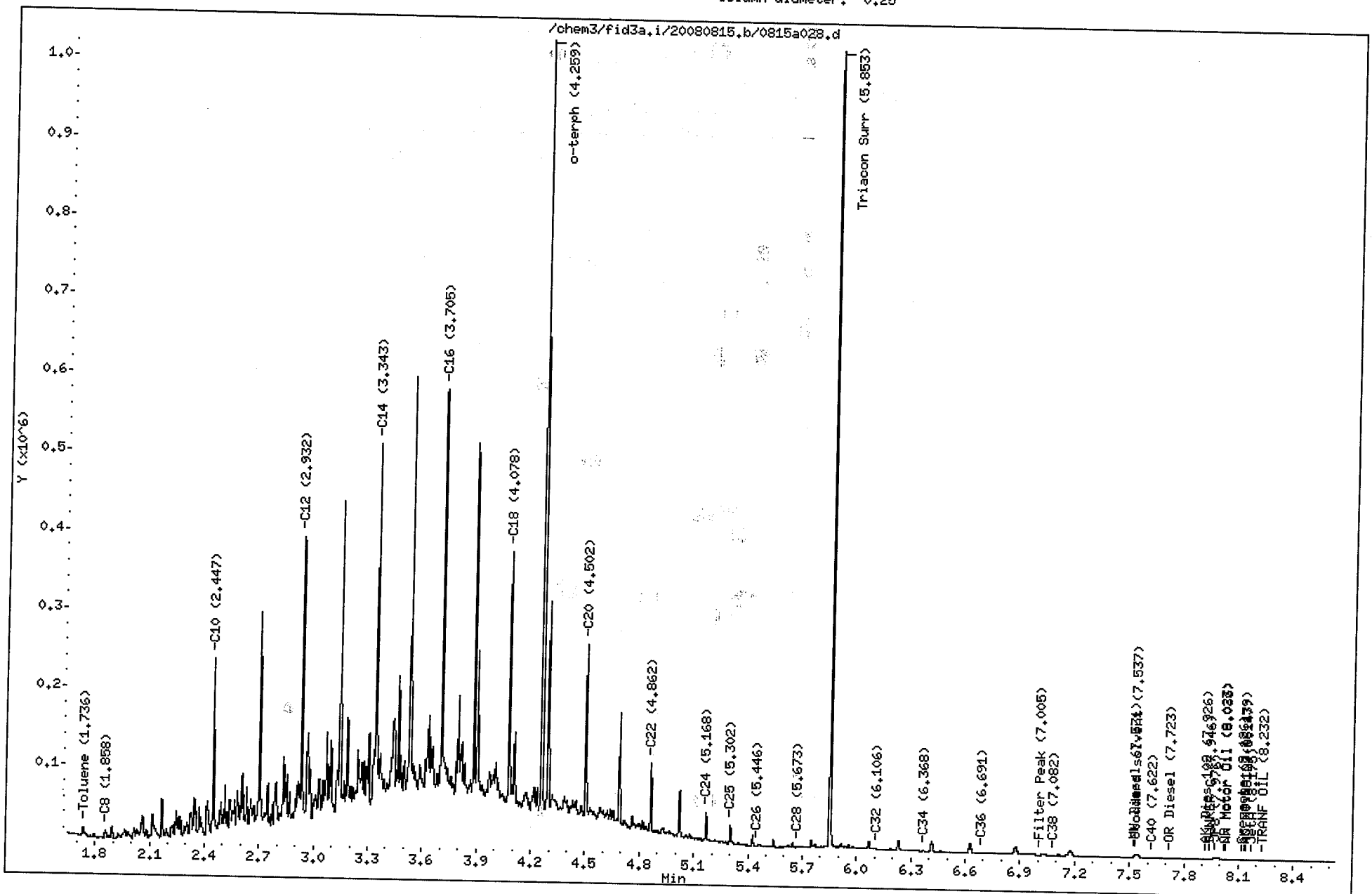
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a028.d
Date : 15-AUG-2008 22:21
Client ID:
Sample Info: NJ45BMS

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a029.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45BMSD
Client ID:
Injection: 15-AUG-2008 22:36
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.736	-0.003	22339	19296	GAS (Tol-C12)	2844887	160
C8	1.856	-0.006	16613	14530	DIESEL (C12-C24)	11810970	996
C10	2.445	-0.002	284885	124384	M.OIL (C24-C38)	1236360	127
C12	2.932	-0.001	472910	226703	AK-102 (C10-C25)	14098994	984
C14	3.344	-0.003	617273	270923	AK-103 (C25-C36)	1029216	146
C16	3.706	-0.001	691857	377854	OR.DIES (C10-C28)	14488674	980
C18	4.078	0.000	437978	276244	OR.MOIL (C28-C40)	999395	110
C20	4.501	-0.002	308617	203208	JET-A (C10-C18)	10577815	713
C22	4.862	-0.003	131393	85601	MIN.OIL (C24-C38)	1236360	96
C24	5.167	-0.008	61203	45935	MSPIRIT (Tol-C12)	2844887	180
C25	5.325	0.012	15490	3651			
C26	5.441	0.002	12844	4054			
C28	5.673	0.000	12931	12964			
C32	6.117	0.008	10644	2321			
C34	6.361	-0.006	8799	7919			
Filter Peak	6.998	0.001	6516	1687	JP-4 (Tol-C14)	5579369	491
C36	6.676	-0.003	7300	4322	CREOSOT (C8-C22)	14074234	2258
C38	7.084	0.002	6400	2792			
C40	7.619	-0.001	5598	3341	BUNKERC (C10-C38)	15295692	1924
AZDIESEL (C10-C22)				13269741	826		
AZMOIL (C22-C32)				1288652	200		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	591044	37.5	83.4
Triacontane	510476	41.6	92.5

ms 8/27/08

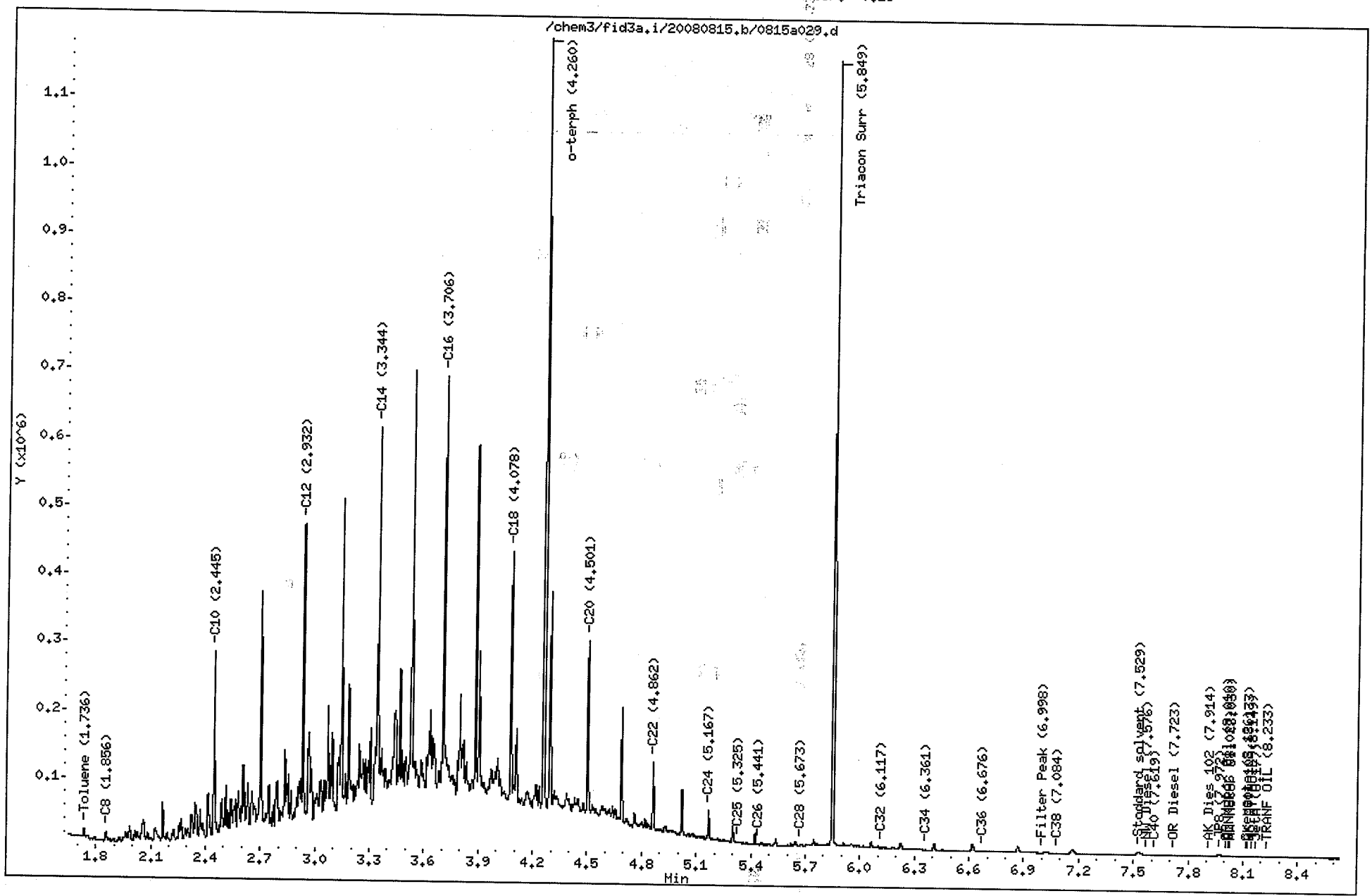
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a029.d
Date : 15-AUG-2008 22:36
Client ID:
Sample Info: NJ45BMSD

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID-Silica and Acid Cleaned
Page 1 of 1

Sample ID: LCS-081108
LCS/LCSD

Lab Sample ID: LCS-081108
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 08/28/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Date Extracted LCS/LCSD: 08/11/08

Date Analyzed LCS: 08/15/08 20:32
LCSD: 08/15/08 20:47
Instrument/Analyst LCS: FID/MS
LCSD: FID/MS

Sample Amount LCS: 10.0 g
LCSD: 10.0 g
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.0
LCSD: 1.0

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	139	150	92.7%	122	150	81.3%	13.0%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	104%	92.4%

Results reported in mg/kg
RPD calculated using sample concentrations per SW846.

Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a021.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45LCSS1
Client ID:
Injection: 15-AUG-2008 20:32
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.738	-0.001	24887	23807	GAS (Tol-C12)	3636104	204
C8	1.860	-0.002	18547	17404	DIESEL (C12-C24)	16453849	1387
C10	2.447	0.000	345173	150834	M.OIL (C24-C38)	846452	87
C12	2.932	-0.001	591132	277641	AK-102 (C10-C25)	19390775	1354
C14	3.344	-0.003	737152	339257	AK-103 (C25-C36)	688776	98
C16	3.707	-0.001	863022	415284	OR.DIES (C10-C28)	19718150	1333
C18	4.080	0.001	527974	348480	OR.MOIL (C28-C40)	638796	70
C20	4.502	-0.001	396955	282381	JET-A (C10-C18)	14453634	974
C22	4.862	-0.003	164197	123886	MIN.OIL (C24-C38)	846452	66
C24	5.182	0.007	24640	21429	MSPIRIT (Tol-C12)	3636104	230
C25	5.301	-0.012	41986	46334			
C26	5.444	0.004	11622	7029			
C28	5.675	0.002	8556	7630			
C32	6.105	-0.004	6480	4241			
C34	6.367	0.001	5872	5546			
Filter Peak	6.997	0.000	4919	784	JP-4 (Tol-C14)	7473131	658
C36	6.661	-0.018	5755	16966	CREOSOT (C8-C22)	19396424	3111
C38	7.086	0.004	4861	2127			
C40	7.619	-0.001	5078	1114	BUNKERC (C10-C38)	20194130	2540
AZDIESEL (C10-C22)				18366812	1144		
AZMOIL (C22-C32)				1149209	179		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	732901	46.5	103.4
Triacontane	649596	52.9	117.7

ms 8/20/08

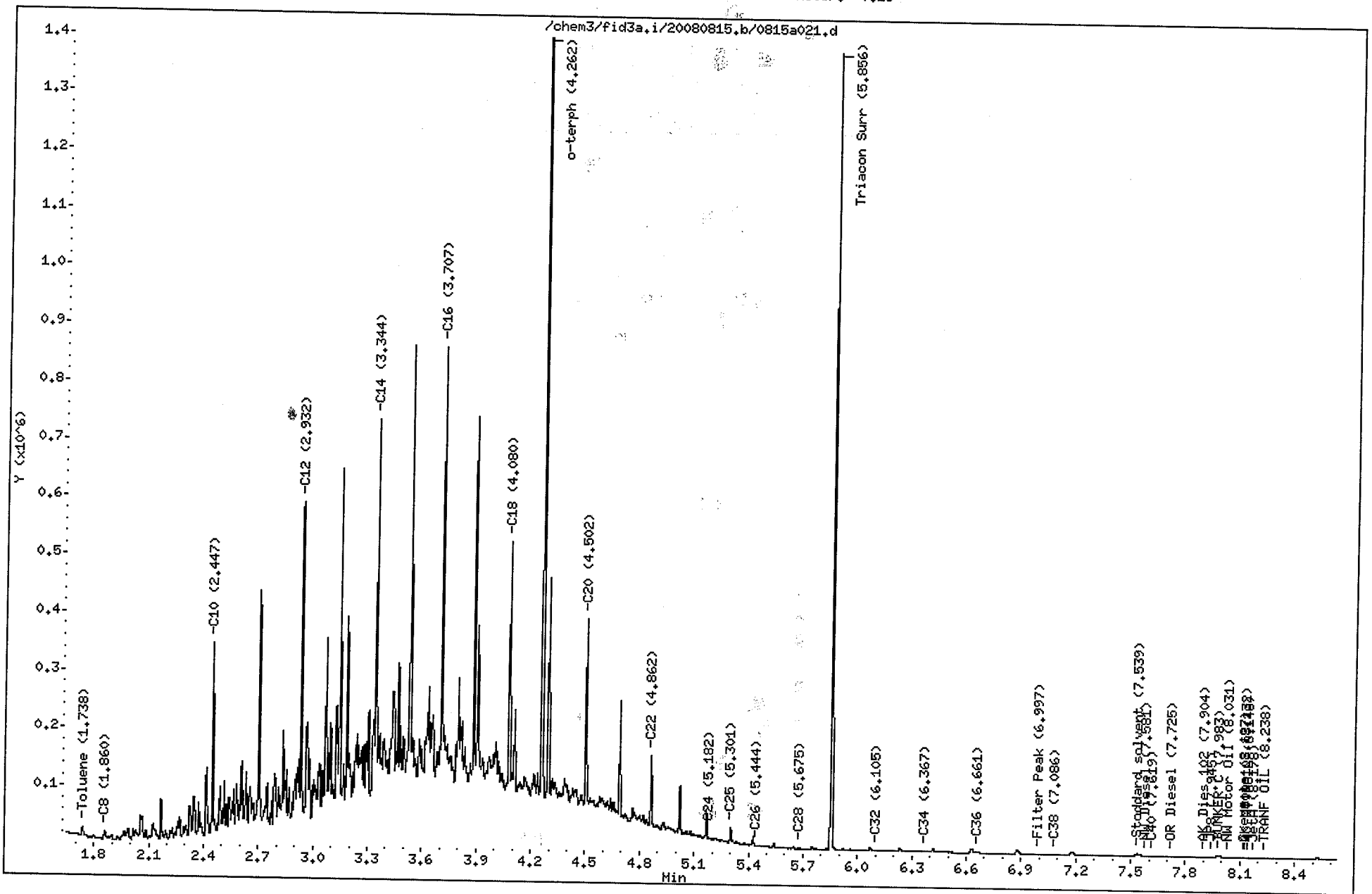
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a021.d
Date : 15-AUG-2008 20:32
Client ID:
Sample Info: NJ45LCSS1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25

Column phase: RTX-1



Analytical Resources Inc.
TPH Quantitation Report

Data file: /chem3/fid3a.i/20080815.b/0815a022.d
Method: /chem3/fid3a.i/20080815.b/ftphfid3a.m
Instrument: fid3a.i
Operator: ms
Report Date: 08/19/2008
Macro: FID:3A081308

ARI ID: NJ45LCSDS1
Client ID:
Injection: 15-AUG-2008 20:47
Dilution Factor: 1

FID:3A RESULTS

Compound	RT	Shift	Height	Area	Range	Total Area	Conc
Toluene	1.737	-0.002	25587	21993	GAS (Tol-C12)	3371471	189
C8	1.858	-0.004	19733	16620	DIESEL (C12-C24)	14515989	1224
C10	2.445	-0.002	318961	138073	M.OIL (C24-C38)	775259	80
C12	2.931	-0.002	535178	254491	AK-102 (C10-C25)	17199050	1201
C14	3.344	-0.003	683375	301232	AK-103 (C25-C36)	637399	91
C16	3.706	-0.002	768219	379896	OR.DIES (C10-C28)	17496623	1183
C18	4.078	-0.001	468755	341513	OR.MOIL (C28-C40)	592717	65
C20	4.502	-0.002	341325	241714	JET-A (C10-C18)	12959358	873
C22	4.862	-0.003	143139	101691	MIN.OIL (C24-C38)	775259	60
C24	5.181	0.005	21234	13769	MSPIRIT (Tol-C12)	3371471	213
C25	5.303	-0.010	37125	40509			
C26	5.444	0.005	10527	6911			
C28	5.680	0.007	7509	6610			
C32	6.110	0.000	6193	3583			
C34	6.366	0.000	5590	892			
Filter Peak	6.999	0.002	4777	1426	JP-4 (Tol-C14)	6817960	600
C36	6.682	0.003	5636	9766	CREOSOT (C8-C22)	17253059	2767
C38	7.081	-0.001	4747	2746			
C40	7.616	-0.004	4656	2320	BUNKERC (C10-C38)	17942127	2256
AZDIESEL (C10-C22)				16277011	1013		
AZMOIL (C22-C32)				1033027	160		

Range Times: NW Diesel(2.983 - 5.225) NW Gas(1.689 - 2.983) NW M.Oil(5.225 - 7.133)
AK102(2.397 - 5.263) AK103(5.263 - 6.729) Jet A(2.397 - 4.129)

Surrogate	Area	Amount	%Rec
o-Terphenyl	655196	41.6	92.5
Triacontane	584408	47.6	105.9

ms 8/29/08

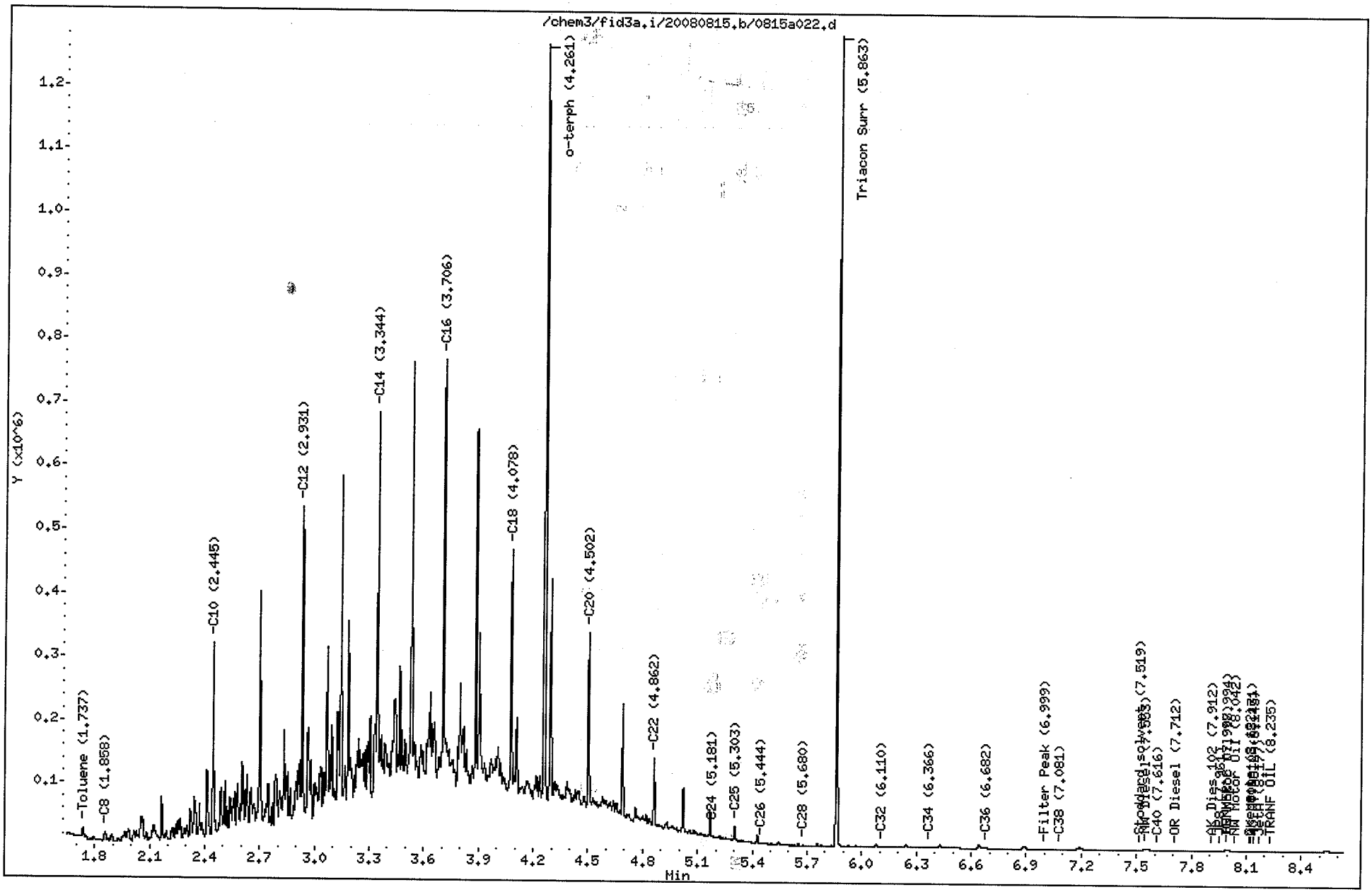
Analyte	RF	Curve Date
o-Terph Surr	15745.7	26-JUL-2008
Triacon Surr	12268.2	26-JUL-2008
Gas	17825.4	13-AUG-2008
Diesel	11860.8	26-JULY-2008
Motor Oil	9730.4	26-JULY--2008
AK102	14326.1	26-JULY-2008
AK103	7036.1	26-JULY-2008
JP4	11362.0	05-FEB-2007
JetA	14845.5	11-JUL-2008
Min Oil	12823.0	27-JUN-2008
Min Spirit	15825.3	15-APR-2005
OR Diesel	14789.5	
OR M.Oil	9098.1	
Bunker C	7951.9	01-APR-2008
Creosote	6234.4	08-AUG-2008

Data File: /chem3/fid3a.i/20080815.b/0815a022.d
Date : 15-AUG-2008 20:47
Client ID:
Sample Info: NJ45LCSDS1

Column phase: RTX-1

Instrument: fid3a.i

Operator: ms
Column diameter: 0.25



ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: NJ45
Project: Pier 23-EBC
17490-01

Matrix: Soil
Date Received: 08/06/08

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
08-19394-NJ45A	EBC-1-S1	9.74 g	1.00 mL	D	08/11/08
08-19395-081108MB1	Method Blank	10.0 g	1.00 mL	-	08/11/08
08-19395-081108LCS1	Lab Control	10.0 g	1.00 mL	-	08/11/08
08-19395-081108LCSD1	Lab Control Dup	10.0 g	1.00 mL	-	08/11/08
08-19395-NJ45B	EBC-1-S2	9.39 g	1.00 mL	D	08/11/08
08-19395-NJ45BMS	EBC-1-S2	9.73 g	1.00 mL	D	08/11/08
08-19395-NJ45BMSD	EBC-1-S2	9.41 g	1.00 mL	D	08/11/08
08-19396-NJ45C	EBC-2-S1	9.09 g	1.00 mL	D	08/11/08
08-19398-NJ45E	EBC-3-S1	8.06 g	1.00 mL	D	08/11/08
08-19399-NJ45F	EBC-3-S2	8.77 g	1.00 mL	D	08/11/08
08-19400-NJ45G	EBC-4-S1	8.29 g	1.00 mL	D	08/11/08
08-19401-NJ45H	EBC-5-S1	9.55 g	1.00 mL	D	08/11/08
08-19403-NJ45J	EBC-6-S1	9.69 g	1.00 mL	D	08/11/08
08-19405-NJ45L	EBC-7-S1	9.67 g	1.00 mL	D	08/11/08
08-19406-NJ45M	EBC-7-S2	10.1 g	1.00 mL	D	08/11/08
08-19407-NJ45N	EBC-8-S1	10.2 g	1.00 mL	D	08/11/08
08-19408-NJ45O	EBC-9-S1	9.53 g	1.00 mL	D	08/11/08
08-19409-NJ45P	EBC-10-S1	9.64 g	1.00 mL	D	08/11/08
08-19410-NJ45Q	EBC-11-S1	8.11 g	1.00 mL	D	08/11/08
08-19411-NJ45R	EBC-11-S2	8.93 g	1.00 mL	D	08/11/08
08-19412-NJ45S	EBC-12-S1	8.72 g	1.00 mL	D	08/11/08
08-19414-NJ45U	EBC-13-S1	9.37 g	1.00 mL	D	08/11/08
08-19415-NJ45V	EBC-13-S2	9.46 g	1.00 mL	D	08/11/08
08-19416-NJ45W	EBC-14-S1	8.90 g	1.00 mL	D	08/11/08

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: EBC-1-S1
SAMPLE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Percent Total Solids: 95.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	**7440-38-2**	**Arsenic**	50	**240**	
3050B	08/25/08	6010B	09/04/08	**7440-43-9**	**Cadmium**	2	**3**	
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	5	**72**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	2	**1,630**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	20	**790**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.49**	
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	10	**50**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	10	**2,300**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-1-S2
SAMPLE

Lab Sample ID: NJ45B
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Percent Total Solids: 91.4%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/03/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/03/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/03/08	**7440-47-3**	**Chromium**	0.5	**14.4**	
3050B	08/25/08	6010B	09/03/08	**7440-50-8**	**Copper**	0.2	**16.9**	
3050B	08/25/08	6010B	09/03/08	**7439-92-1**	**Lead**	2	**13**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.08**	
3050B	08/25/08	6010B	09/03/08	**7440-02-0**	**Nickel**	1	**7**	
3050B	08/25/08	6010B	09/03/08	**7440-66-6**	**Zinc**	1	**42**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-2-S1
SAMPLE

Lab Sample ID: NJ45C
LIMS ID: 08-19396
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Percent Total Solids: 91.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/03/08	**7440-38-2**	**Arsenic**	10	**50**	
3050B	08/25/08	6010B	09/03/08	**7440-43-9**	**Cadmium**	0.5	**1.6**	
3050B	08/25/08	6010B	09/03/08	**7440-47-3**	**Chromium**	1	**58**	
3050B	08/25/08	6010B	09/03/08	**7440-50-8**	**Copper**	0.5	**208**	
3050B	08/25/08	6010B	09/03/08	**7439-92-1**	**Lead**	5	**923**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.86**	
3050B	08/25/08	6010B	09/03/08	**7440-02-0**	**Nickel**	3	**51**	
3050B	08/25/08	6010B	09/03/08	**7440-66-6**	**Zinc**	3	**789**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-3-S1
SAMPLE

Lab Sample ID: NJ45E
LIMS ID: 08-19398
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Percent Total Solids: 80.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/03/08	**7440-38-2**	**Arsenic**	10	**120**	
3050B	08/25/08	6010B	09/03/08	**7440-43-9**	**Cadmium**	0.6	**3.5**	
3050B	08/25/08	6010B	09/03/08	**7440-47-3**	**Chromium**	1	**67**	
3050B	08/25/08	6010B	09/03/08	**7440-50-8**	**Copper**	0.6	**668**	
3050B	08/25/08	6010B	09/03/08	**7439-92-1**	**Lead**	6	**724**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**1.30**	
3050B	08/25/08	6010B	09/03/08	**7440-02-0**	**Nickel**	3	**54**	
3050B	08/25/08	6010B	09/03/08	**7440-66-6**	**Zinc**	3	**1,690**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-3-S2
SAMPLE

Lab Sample ID: NJ45F
LIMS ID: 08-19399
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Percent Total Solids: 84.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	6	6	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.6	**16.1**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**13.1**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**10**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**43**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-4-S1
SAMPLE

Lab Sample ID: NJ45G
LIMS ID: 08-19400
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

Percent Total Solids: 79.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	6	6	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.6	**15.4**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**21.4**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**3**	
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**25**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-5-S1
SAMPLE

Lab Sample ID: NJ45H
LIMS ID: 08-19401
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Percent Total Solids: 93.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	10	10	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.5	0.5	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	1	**21**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.5	**120**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	5	**7**	
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	2	**29**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	2	**52**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-6-S1
SAMPLE

Lab Sample ID: NJ45J
LIMS ID: 08-19403
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 08/01/08
Date Received: 08/06/08

Percent Total Solids: 92.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	**7440-38-2**	**Arsenic**	5	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-43-9**	**Cadmium**	0.2	**0.3**	
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**16.8**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**35.4**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**34**	
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**15**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**67**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-7-S1
SAMPLE

Lab Sample ID: NJ45L
LIMS ID: 08-19405
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 92.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	**7440-38-2**	**Arsenic**	30	**50**	
3050B	08/25/08	6010B	09/04/08	**7440-43-9**	**Cadmium**	1	**4**	
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	3	**162**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	1	**932**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	10	**600**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**3.31**	
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	5	**151**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	5	**2,450**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-7-S2
SAMPLE

Lab Sample ID: NJ45M
LIMS ID: 08-19406
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 96.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**11.9**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**11.1**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**2**	
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.04	0.04	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**22**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-8-S1
SAMPLE

Lab Sample ID: NJ45N
LIMS ID: 08-19407
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 95.4%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**11.5**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**11.2**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.04	0.04	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**20**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: EBC-9-S1
SAMPLE

Lab Sample ID: NJ45O
LIMS ID: 08-19408
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 94.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	**7440-38-2**	**Arsenic**	5	**6**	
3050B	08/25/08	6010B	09/04/08	**7440-43-9**	**Cadmium**	0.2	**0.5**	
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**26.0**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**80.2**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**83**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.29**	
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**21**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**189**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-10-S1
SAMPLE

Lab Sample ID: NJ45P
LIMS ID: 08-19409
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 94.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**11.8**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**10.4**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.04	0.04	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**7**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**20**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-11-S1
SAMPLE

Lab Sample ID: NJ45Q
LIMS ID: 08-19410
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 80.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	6	6	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.6	**12.2**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**11.1**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.06	0.06	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**21**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-11-S2
SAMPLE

Lab Sample ID: NJ45R
LIMS ID: 08-19411
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 85.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**13.9**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**10.3**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.04	0.04	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**9**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**21**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-12-S1
SAMPLE

Lab Sample ID: NJ45S
LIMS ID: 08-19412
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 94.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**23.7**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**12.9**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**3**	
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**30**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**30**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-13-S1
SAMPLE

Lab Sample ID: NJ45U
LIMS ID: 08-19414
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 92.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	**7440-38-2**	**Arsenic**	5	**6**	
3050B	08/25/08	6010B	09/04/08	**7440-43-9**	**Cadmium**	0.2	**1.3**	
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**29.7**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**83.5**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	2	**140**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.43**	
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**16**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**160**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-13-S2
SAMPLE

Lab Sample ID: NJ45V
LIMS ID: 08-19415
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/29/08
Date Received: 08/06/08

Percent Total Solids: 93.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	0.5	**12.7**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.2	**11.6**	
3050B	08/25/08	6010B	09/04/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.04	0.04	U
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	1	**8**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	1	**23**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: EBC-14-S1
SAMPLE

Lab Sample ID: NJ45W
LIMS ID: 08-19416
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/31/08
Date Received: 08/06/08

Percent Total Solids: 90.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/04/08	7440-38-2	Arsenic	10	10	U
3050B	08/25/08	6010B	09/04/08	7440-43-9	Cadmium	0.5	0.5	U
3050B	08/25/08	6010B	09/04/08	**7440-47-3**	**Chromium**	1	**26**	
3050B	08/25/08	6010B	09/04/08	**7440-50-8**	**Copper**	0.5	**29.2**	
3050B	08/25/08	6010B	09/04/08	**7439-92-1**	**Lead**	5	**48**	
CLP	08/25/08	7471A	08/25/08	**7439-97-6**	**Mercury**	0.05	**0.05**	
3050B	08/25/08	6010B	09/04/08	**7440-02-0**	**Nickel**	3	**18**	
3050B	08/25/08	6010B	09/04/08	**7440-66-6**	**Zinc**	3	**100**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: EBC-1-S1
MATRIX SPIKE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010B	240	440	191	105%	
Cadmium	6010B	3	46	47.8	90.0%	
Chromium	6010B	72	105	47.8	69.0%	N
Copper	6010B	1,630	1,650	47.8	41.8%	H
Lead	6010B	790	610	191	-94.2%	H
Mercury	7471A	0.49	1.59	0.471	234%	N
Nickel	6010B	50	90	47.8	83.7%	
Zinc	6010B	2,300	2,490	47.8	397%	H

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: EBC-1-S1
DUPLICATE

Lab Sample ID: NJ45A
LIMS ID: 08-19394
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: 07/30/08
Date Received: 08/06/08

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010B	240	320	28.6%	+/- 50	L*
Cadmium	6010B	3	3	0.0%	+/- 2	L
Chromium	6010B	72	76	5.4%	+/- 20%	
Copper	6010B	1,630	2,080	24.3%	+/- 20%	*
Lead	6010B	790	410	63.3%	+/- 20%	*
Mercury	7471A	0.49	0.49	0.0%	+/- 20%	
Nickel	6010B	50	40	22.2%	+/- 10	L
Zinc	6010B	2,300	2,530	9.5%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: NJ45LCS
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	6010B	213	200	106%	
Cadmium	6010B	51.8	50.0	104%	
Chromium	6010B	49.5	50.0	99.0%	
Copper	6010B	52.1	50.0	104%	
Lead	6010B	203	200	102%	
Mercury	7471A	0.96	1.00	96.0%	
Nickel	6010B	50	50	100%	
Zinc	6010B	52	50	104%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Sample ID: METHOD BLANK

Lab Sample ID: NJ45MB
LIMS ID: 08-19395
Matrix: Soil
Data Release Authorized:
Reported: 09/05/08

QC Report No: NJ45-Hart Crowser, Inc.
Project: Pier 23-EBC
17490-01
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	08/25/08	6010B	09/03/08	7440-38-2	Arsenic	5	5	U
3050B	08/25/08	6010B	09/03/08	7440-43-9	Cadmium	0.2	0.2	U
3050B	08/25/08	6010B	09/03/08	7440-47-3	Chromium	0.5	0.5	U
3050B	08/25/08	6010B	09/03/08	7440-50-8	Copper	0.2	0.2	U
3050B	08/25/08	6010B	09/03/08	7439-92-1	Lead	2	2	U
CLP	08/25/08	7471A	08/25/08	7439-97-6	Mercury	0.05	0.05	U
3050B	08/25/08	6010B	09/03/08	7440-02-0	Nickel	1	1	U
3050B	08/25/08	6010B	09/03/08	7440-66-6	Zinc	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

CERTIFICATES OF ANALYSIS
COLUMBIA ANALYTICAL SERVICES
JOB NO. K0807445 AND K0807486

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

September 9, 2008 Analytical Report for Service Request No: K0807445

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 07, 2008. For your reference, these analyses have been assigned our service request number K0807445.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807445
Project:	Pier 23-EBC	**Date Received:**	08/17/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 08/07/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-1, EBC-3, and EBC-4 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

Approved by_____ **Date**_____

Chain of Custody Documentation

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/12/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER,INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **05/30/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-18787-NI87A	EBC-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
08-18788-NI87B	EBC-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
08-18789-NI87C	EBC-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
08-18791-NI87E	EBC-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18792-NI87F	EBC-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
08-18793-NI87G	EBC-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

Carrier UPS	Airbill 1Z 832 695 03 4432 1270		Date 8/12/08
Relinquished by	Company ARI	Date 8/12/08	Time 1600
Received by	Company CAS	Date 8/13/08	Time 1030

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/05/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NI87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER, INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

1080744

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: 05/30/08
Fax Results (Y/N): email

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

	ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
1	08-18787-NI87A	E3C-1	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB NI ZN					
2	08-18788-NI87B	E3C-3	07/30/08	Water	4	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: T-LL HG, T-AS CD CR CU PB ZN					
3	08-18789-NI87C	E3C-4	07/30/08	Water	10	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD T-AS CD CR CU PB NI ZN&LL HG					
1	08-18791-NI87E	E3C-1	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18792-NI87F	E3C-3	07/30/08	Water	2	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: D-AS CD CR CU PB NI ZN&LL HG					
2	08-18793-NI87F	E3C-4	07/30/08	Water	6	Metals (Sub) Low Level Hg (Sub)
	Special Instructions: MS/MSD D-AS CD CR CU PB NI ZN&LL HG					

only Rec'd 6 bottles for EBC-3
Rec'd QC for EBC-4. 16 bottles total

Carrier: UPS	Airbill: 1Z 832 695 03 4458 1928		Date: 8/6/08
Relinquished by:	Company: ARI	Date: 8/6/08	Time: 1600
Received by:	Company: CAS	Date: 8/7/08	Time: 1030

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC_____

Client / Project: Analytical Resources Service Request *K08*_____

Received: 8-13-8 Opened: 8-13-8 By: Lm

1. Samples were received via? *US Mail* *FedEx* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other*_____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where?_____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 1Z83269503 4432 1230 NA Y N
   XGVSSAP WAKEL105 Aug 13 07:45:31 2008
5. **Temperature of cooler(s) upon receipt (°C):** -0.4
   Temperature Blank (°C):
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other*_____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA Y N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA Y N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

*Additional Notes, Discrepancies, & Resolutions:*_____

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC 1-1

Client / Project: A21 Service Request K08 07445

Received: 8/7/08 Opened: 8/7/08 By: BT

1. Samples were received via? *US Mail* *Fed Ex* (*UPS*) *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) (*Cooler*) *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA (Y) N If yes, how many and where? 1 front
   If present, were custody seals intact? (Y) N If present, were they signed and dated? (Y) N
4. Is shipper's air-bill filed? If not, record air-bill number: 12 832 695 03 4458 1978 NA (Y) N

5. **Temperature of cooler(s) upon receipt (°C):** 5.9
   Temperature Blank (°C): -
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* (*Bubble Wrap*) (*Gel Packs*) *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA (Y) N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA (Y) N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA (Y) N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA (Y) N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA (Y) N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA (Y) N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* (NA) Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** (NA) Y N
16. Was C12/Res negative? (NA) Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: _____

Metals

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08

Mercury, Dissolved

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-3	K0807445-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-4	K0807445-003 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807445-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/18/08	08/22/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	08/18/08
		Date Analyzed:	08/22/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	Batch QC	Units:	ng/L
Lab Code:	K0807759-001S, K0807759-001SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	ND	29.3	28.3	117	113	71-125	3	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.28	106	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.34	87	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/22/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.72	114	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
Sample Matrix: Water

Service Request: K0807445
Date Collected: 07/30/08
Date Received: 08/07/08

Mercury, Total

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-1	K0807445-001	5.0	5	08/13/08	08/15/08	41.0	
EBC-3	K0807445-002	1.0	1	08/13/08	08/15/08	11.7	
EBC-4	K0807445-003	1.0	1	08/13/08	08/15/08	2.9	
Method Blank 1	K0807445-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807445-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807445-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	07/30/08
Sample Matrix:	Water	**Date Received:**	08/07/08
		Date Extracted:	08/13/08
		Date Analyzed:	08/15/08

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	EBC-4	Units:	ng/L
Lab Code:	K0807445-003S, K0807445-003SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	2.9	29.1	29.5	105	106	71-125	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.94	99	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.64	93	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807445
Project:	Pier 23-EBC	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	08/15/08

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.24	105	77-123	

Columbia Analytical Services

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:

Service Request: K0807445

Sample Name:	Lab Code:
EBC-1	K0807445-001
EBC-1	K0807445-001 DISS
EBC-3	K0807445-002
EBC-3	K0807445-002 DISS
EBC-4	K0807445-003
EBC-4	K0807445-003 DISS
EBC-4D	K0807445-003D
EBC-4D	K0807445-003D DISS
EBC-4S	K0807445-003S
EBC-4S	K0807445-003S DISS
Method Blank	K0807445-MB

Comments:

Approved By: _____ **Date:** 9/9/08

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Date Collected:**	7/30/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/7/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-1 **Lab Code:** K0807445-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.55	5.0	08/27/08	09/03/08	2.55	U	
Cadmium	200.8	0.102	5.0	08/27/08	09/03/08	0.102	U	
Chromium	200.8	1.02	5.0	08/27/08	09/03/08	23.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	20.5		
Lead	200.8	0.102	5.0	08/27/08	09/03/08	5.890		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	15.1		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	53.3		

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-1
Lab Code: K0807445-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.022		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	5.60		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.160		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	8.4		

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected: 7/30/2008
Project Name: Pier 23-EBC
Date Received: 8/7/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.56	5.0	08/27/08	09/03/08	2.56	U	
Cadmium	200.8	0.103	5.0	08/27/08	09/03/08	0.424		
Chromium	200.8	1.03	5.0	08/27/08	09/03/08	31.6		
Copper	200.8	0.5	5.0	08/27/08	09/03/08	17.8		
Lead	200.8	0.103	5.0	08/27/08	09/03/08	7.100		
Nickel	200.8	1.0	5.0	08/27/08	09/03/08	22.6		
Zinc	200.8	2.6	5.0	08/27/08	09/03/08	52.5		

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected: 7/30/2008
Project Name: Pier 23-EBC
Date Received: 8/7/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-3
Lab Code: K0807445-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.90		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.8		

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.040		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	4.07		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	5.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	1.500		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	4.0		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	6.6		

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807445
Date Collected: 7/30/2008
Date Received: 8/7/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-4
Lab Code: K0807445-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.3		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807445
Project No.: NA
Date Collected:
Project Name: Pier 23-EBC
Date Received:
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0807445-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

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SPIKE SAMPLE RECOVERY

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4S **Lab Code:** K0807445-003S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.58		0.51	U	2.04	77.5		200.8
Cadmium	65 - 114	1.940		0.040		2.04	93.1		200.8
Chromium	50 - 130	6.18		4.07		2.04	103.4		200.8
Copper	50 - 120	6.7		5.2		2.04	73.5		200.8
Lead	55 - 118	3.450		1.500		2.04	95.6		200.8
Nickel	60 - 126	5.9		4.0		2.04	93.1		200.8
Zinc	50 - 133	8.1		6.6		2.04	73.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

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SPIKE SAMPLE RECOVERY

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4S **Lab Code:** K0807445-003S DISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	50 - 147	1.75		0.50	U	2.00	87.5		200.8
Cadmium	65 - 114	1.910		0.020	U	2.00	95.5		200.8
Chromium	50 - 130	2.18		0.20	U	2.00	109.0		200.8
Copper	50 - 120	1.9		0.1	U	2.00	95.0		200.8
Lead	55 - 118	1.970		0.020	U	2.00	98.5		200.8
Nickel	60 - 126	2.3		0.3		2.00	100.0		200.8
Zinc	50 - 133	2.2		0.5	U	2.00	110.0		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

Metals

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DUPLICATES

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807445
Project No.:	NA	**Units:**	UG/L
Project Name:	Pier 23-EBC	**Basis:**	N/A
Matrix:	WATER	**% Solids:**	0.0

Sample Name: EBC-4D **Lab Code:** K0807445-003D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.51	U	0.51	U			200.8
Cadmium		0.040		0.030		28.6		200.8
Chromium	20	4.07		4.22		3.6		200.8
Copper	20	5.2		5.2		0.0		200.8
Lead	20	1.500		1.520		1.3		200.8
Nickel	20	4.0		4.0		0.0		200.8
Zinc	20	6.6		6.7		1.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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DUPLICATES

Client: Analytical Resources, Incorporat
Service Request: K0807445

Project No.: NA
Units: UG/L

Project Name: Pier 23-EBC
Basis: N/A

Matrix: WATER
% Solids: 0.0

Sample Name: EBC-4D
Lab Code: K0807445-003D DISS

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		0.50	U	0.50	U			200.8
Cadmium		0.020	U	0.020	U			200.8
Chromium		0.20	U	0.20	U			200.8
Copper		0.1	U	0.1	U			200.8
Lead		0.020	U	0.020	U			200.8
Nickel		0.3		0.3		0.0		200.8
Zinc		0.5	U	0.5	U			200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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LABORATORY CONTROL SAMPLE

Client: Analytical Resources, Incorporat **Service Request:** K0807445

Project No.: NA

Project Name: Pier 23-EBC

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Arsenic	2	1.84	92.0					
Cadmium	2	1.950	97.5					
Chromium	2	2.03	101.5					
Copper	2	2.0	100.0					
Lead	2	2.040	102.0					
Nickel	2	2.1	105.0					
Zinc	2	2.0	100.0					

1317 South 13th Avenue Kelso, Washington 98626 (360) 577-7222 (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

September 9, 2008 Analytical Report for Service Request No: K0807486

Kelly Bottem
Analytical Resources, Incorporated
4611 So. 134th Place
Suite 100
Tukwila, WA 98168

RE: Pier 23-EBC

Dear Kelly:

Enclosed are the results of the samples submitted to our laboratory on August 11, 2008. For your reference, these analyses have been assigned our service request number K0807486.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at PDivvela@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

09/10/08

Pradeep Divvela
Project Chemist

PD/ll

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Analytical Resources, Incorporated	**Service Request No.:**	K0807486
Project:	Pier 23-EBC	**Date Received:**	08/11/2008
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier I data deliverables. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Four water samples were received for analysis at Columbia Analytical Services on 08/11/2008. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total Metals

Holding Time Exceptions:
Samples EBC-2, EBC-5, EBC-6, and EBC-16 were received past the recommended holding time for filtration prior to analysis of Mercury via method 1631. The filtration was performed as soon as possible after receipt by the laboratory.

No other anomalies associated with the analysis of these samples were observed

09/10/01

Approved by_____ **Date**_____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Analytical Resources, Incorporated	**Service Request:**	K0807486
Project:	Pier 23-EBC	**Date Collected:**	07/31-08/01/08
Sample Matrix:	Water	**Date Received:**	08/11/08

Mercury, Total

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001	5.0	5	08/13/08	08/15/08	87.8	
EBC-5	K0807486-002	5.0	5	08/13/08	08/15/08	66.8	
EBC-6	K0807486-003	1.0	1	08/13/08	08/15/08	3.5	
EBC-16	K0807486-004	1.0	1	08/13/08	08/15/08	3.6	
Method Blank 1	K0807486-MB1	1.0	1	08/13/08	08/15/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/13/08	08/15/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/13/08	08/15/08	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: Analytical Resources, Incorporated
Project: Pier 23-EBC
Sample Matrix: Water

Service Request: K0807486
Date Collected: 07/31-08/08/08
Date Received: 08/11/08

Mercury, Dissolved

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
EBC-2	K0807486-001 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-5	K0807486-002 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-6	K0807486-003 DISS	1.0	1	08/18/08	08/22/08	ND	
EBC-16	K0807486-004 DISS	1.0	1	08/18/08	08/22/08	ND	
Method Blank 1	K0807486-MB1	1.0	1	08/18/08	08/22/08	ND	
Method Blank 2	K0807486-MB2	1.0	1	08/18/08	08/22/08	ND	
Method Blank 3	K0807486-MB3	1.0	1	08/18/08	08/22/08	ND	

Columbia Analytical Services

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporated
Project Name: Pier 23-EBC
Project No.:
Service Request: K0807486

Sample Name:	Lab Code:
EBC-2	K0807486-001
EBC-2	K0807486-001 DISS
EBC-5	K0807486-002
EBC-5	K0807486-002 DISS
EBC-6	K0807486-003
EBC-6	K0807486-003 DISS
EBC-16	K0807486-004
EBC-16	K0807486-004 DISS
Method Blank	K0807486-MB

Comments:

Approved By: _____ **Date:** _____

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 7/31/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.51	1.0	08/27/08	09/02/08	0.51	U	
Cadmium	200.8	0.021	1.0	08/27/08	09/02/08	0.028		
Chromium	200.8	0.21	1.0	08/27/08	09/02/08	5.65		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	4.4		
Lead	200.8	0.021	1.0	08/27/08	09/02/08	1.730		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	6.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.8		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 7/31/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-2
Lab Code: K0807486-001 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.40		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.2		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.133		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	1.2		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	3.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807486
Project No.:	NA	**Date Collected:**	8/1/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/11/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-5 **Lab Code:** K0807486-002

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	2.98	2.98	5.0	08/27/08	09/03/08	3.27		
Cadmium	200.8	0.119	0.119	5.0	08/27/08	09/03/08	0.485		
Chromium	200.8	1.19	1.19	5.0	08/27/08	09/03/08	41.4		
Copper	200.8	0.6	0.6	5.0	08/27/08	09/03/08	13.9		
Lead	200.8	0.119	0.119	5.0	08/27/08	09/03/08	2.890		
Nickel	200.8	1.2	1.2	5.0	08/27/08	09/03/08	153		
Zinc	200.8	3.0	3.0	5.0	08/27/08	09/03/08	201		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected: 8/1/2008
Project Name: Pier 23-EBC
Date Received: 8/11/2008
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: EBC-5
Lab Code: K0807486-002 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.71		
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.023		
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.98		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.702		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	3.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	4.7		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	2.46		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	3.1		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.747		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.7		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	9.2		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-6
Lab Code: K0807486-003 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.26		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.3		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.035		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	1.0		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Project No.: NA
Project Name: Pier 23-EBC
Matrix: WATER

Service Request: K0807486
Date Collected: 8/1/2008
Date Received: 8/11/2008
Units: ug/L
Basis: N/A

Sample Name: EBC-16
Lab Code: K0807486-004

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	1.97		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	2.8		
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.656		
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	2.4		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	5.6		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Analytical Resources, Incorporat	**Service Request:**	K0807486
Project No.:	NA	**Date Collected:**	8/1/2008
Project Name:	Pier 23-EBC	**Date Received:**	8/11/2008
Matrix:	WATER	**Units:**	ug/L
		Basis:	N/A

Sample Name: EBC-16 **Lab Code:** K0807486-004 DISS

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.25		
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.6		
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Analytical Resources, Incorporat
Service Request: K0807486
Project No.: NA
Date Collected:
Project Name: Pier 23-EBC
Date Received:
Matrix: WATER
Units: ug/L
Basis: N/A

Sample Name: Method Blank
Lab Code: K0807486-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Arsenic	200.8	0.50	1.0	08/27/08	09/02/08	0.50	U	
Cadmium	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Chromium	200.8	0.20	1.0	08/27/08	09/02/08	0.20	U	
Copper	200.8	0.1	1.0	08/27/08	09/02/08	0.1	U	
Lead	200.8	0.020	1.0	08/27/08	09/02/08	0.020	U	
Nickel	200.8	0.2	1.0	08/27/08	09/02/08	0.2	U	
Zinc	200.8	0.5	1.0	08/27/08	09/02/08	0.5	U	

% Solids: 0.0

Comments:

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC PV

Client / Project: Hart Crowser/ARI Service Request *K08* 07486

Received: 8-11-8 Opened: 8-11-8 By: LM

1. Samples were received via? *US Mail* *Fed Ex* *UPS* *DHL* *GH* *GS* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N
4. Is shipper's air-bill filed? If not, record air-bill number: 12832 69503 4578 7469 NA Y N

5. **Temperature of cooler(s) upon receipt (°C):** 18.2
   Temperature Blank (°C): —
6. If applicable, list Chain of Custody Numbers:
7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. **Did all bottles arrive in good condition (unbroken)?** *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate in the table below* NA Y N
12. **Were appropriate bottles/containers and volumes received for the tests indicated?** NA Y N
13. Were the pH-preserved bottles tested* received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials and 1631 Mercury bottles received without headspace? *Indicate in the table below.* NA Y N
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** NA Y N
16. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Sample ID	Bottle Count	Bottle Type	Out of Temp	Head-space	Broken	pH	Reagent	Volume added	Reagent Lot Number	Initials
all			/							LM

*Does not include all pH preserved sample aliquots received. See sample receiving SOP (SMO-GEN).

Additional Notes, Discrepancies, & Resolutions: COC not signed

SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 08/08/08

ANALYTICAL RESOURCES INCORPORATED

ARI Project: NJ87

Laboratory: Columbia Analytical Services Inc.
Lab Contact: Ed Wallace
Lab Address: 1317 South 13th Street
Kelso, WA 98626
Phone: 360-577-7222
Fax: 360-636-1068

ARI Client: HART CROWSER,INC.
Project ID: PIER 23-EBC
ARI PM: KELLY BOTTEM
Phone: 206-695-6211
Fax: 206-695-6201

Analytical Protocol: In-house
Special Instructions:

Requested Turn Around: **08/22/08**
Fax Results (Y/N): **email**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
08-19934-NJ87A	EBC-2	07/31/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19935-NJ87B	EBC-5	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19936-NJ87C	EBC-6	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					
08-19937-NJ87D	EBC-16	08/01/08	Water	6	Metals (Sub) Low Level Hg (Sub)
Special Instructions: TOT/DIS[As,Cd,Cr,Cu,Pb,Ni,Zn,Hg]					

Carrier	Airbill	Date

Relinquished by	Company	Date	Time
Received by	Company CAS	Date 6-11-8	Time 1030