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PHASE II SOIL INVESTIGATION REPORT AND ADDITIONAL INVESTIGATION WORK PLAN

FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET, MIDDLETOWN, CONNECTICUT

Prepared For:

Olin Corporation
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Charleston, Tennessee

Prepared By:

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January 2005

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Olin

1186 Lower River Road, P.O. Box 248, Charleston, TN 37310

January 3, 2005 HAND DELIVERED

Ms. Sandra Brunelli
Planning & Standards Division
Bureau of Waste Management
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Re: Phase II Soil Investigation Report and Additional Investigation Work Plan
Former Tri-Star Sports Facility
475 Smith Street, Middletown, Connecticut

Dear Ms. Brunelli:

Olin Corporation is pleased to submit a copy of the Phase II Soil Investigation Report and the Additional Investigation Work Plan for the above-referenced property for your review.

Since DEP is the lead agency for this project, copies of future plans and reports with not be sent to USEPA.

If you have any questions or comments, please feel free to contact me at (423) 336-4064 or David Clymer of MACTEC Engineering and Consulting, Inc at (860) 529-7191.

Sincerely,

OLIN CORPORATION

James E. Young

James E. Young
Associate Environmental Specialist

cc: David Clymer, MACTEC Engineering and Consulting, Inc.
Tom Anderson, Lyman Products
Matt Hoagland, USEPA

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EXECUTIVE SUMMARY

On behalf of Olin Corporation, MACTEC Engineering and Consulting, Inc. (MACTEC) performed a Phase II Soil Investigation of the Former Tri-Star Sports Facility located at 475 Smith Street in Middletown, Connecticut. The Phase II Investigation was conducted in accordance with the Work Plan developed by MACTEC for the subject property that was submitted to the CTDEP and USEPA on June 16, 2004.

Based on the assessment and investigation work previously conducted at the subject property, a list of eighteen (18) potential Areas of Concern (AOCs) were developed by MACTEC and presented in the Phase II Investigation Work Plan. Several of the AOCs were identified in prior environmental reports and the remaining AOCs were determined by MACTEC following review of prior data and additional research.

Direct push technology was utilized to advance twenty borings on the property. Shallow soil samples were collected from six additional locations using a hand auger. The majority of the borings were advanced to the groundwater surface, while a few select borings, where a surficial release scenario was the concern, were terminated after two feet of advancement.

Detected constituents in the soil samples have been compared against the Residential Direct Exposure Criteria (RDEC) and the Pollutant Mobility Criteria for soil in a "GA" groundwater classification area (GA PMC) from the RSR (Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies).

An evaluation of the data from the Phase II Soil Investigation indicated that no additional investigation or remediation is required in fourteen (14) of the AOCs including the Hazardous Materials Storage Area (HMSA), Non-Hazardous Waste Storage Area, the Former Trench and Sumps, the Former Painting Pit, the Former Degreaser Area, the Loading Docks, the Current and Former Site Dumpsters, the Storm Water Runoff Discharge Point, the Current and Former Backdoors, the Current Rear Overhead Door, the Area of Reported Fill Material, the Current and Former Paint Shop, the Former Dust Baghouse Locations, the Current Site Transformer and the Former Flammable Chemicals Storage Area.

Additional work is planned at three AOCs (AOCs 6, 12 and 13) during the next phase of investigation, and continued groundwater monitoring is planned for the Former Emergency Spill Collection Vault. In AOC 6 – Former Raw Chemical Storage Area the reported levels of 1,1-dichloroethene (1.1 mg/kg) was above the applicable Remediation Standard Regulation (RSR) criteria, indicating the need for additional delineation of the area of impacts. In AOC 12 – Discharge Point for the Roof Drain Leaders the reported levels of SVOCs (various compounds), ETPH (1,200 mg/kg) and SPLP lead (0.021 mg/L) were above applicable RSR criteria and will required additional investigation and/or remediation to address. In AOC 13 - Former Non-contact Cooling Water Recovery System the underground tank was located, and it is recommended that the tank be removed or properly abandoned in accordance with prevailing laws, regulations and industry standards. This would involve collecting samples from beneath the bottom of the tank prior to abandonment. The additional investigation for these three AOCs is detailed in the work plan included within this report.

A well search was also conducted to determine if any private groundwater supply wells are located within a one-half mile radius of the subject property. Well installation logs were reviewed at the United States Geological Survey (USGS) office located in East Hartford, Connecticut and records maintained by the City of Middletown Health Department were reviewed. In addition, water connection records were obtained from the City of Middletown Water Department.

A total twenty-two developed properties within a one-half mile radius of the site did not have water connections with the local water company. The majority of the properties are residential parcels located along Miner Street and Boardman Lane, which are not adjacent to the site and are not downgradient with respect to the calculated groundwater flow direction. Several properties on Middle Street were noted that do not have city water and are not adjacent to the site, however these properties are not located downgradient with respect to the groundwater flow direction. 475 Middle Street is a residential parcel located across Middle Street from the subject parcel that appears to be supplied water from a private well. However, the parcel is located up a steep hillside, well above the subject property, and it is also located upgradient from the subject parcel with respect to the groundwater flow direction. Based on this, no additional investigation is warranted for the private wells in the vicinity of the site.

1.0 BACKGROUND

On behalf of Olin Corporation, MACTEC Engineering and Consulting, Inc. (MACTEC) performed a Phase II Soil Investigation of the Former Tri-Star Sports Facility located at 475 Smith Street in Middletown, Connecticut (**Figures 1 and 2**). The Phase II Investigation was conducted in accordance with the Work Plan developed by MACTEC for the subject property that was submitted to the CTDEP and USEPA on June 16, 2004. The majority of the Phase II investigation activities were completed between July 21, 2004 and August 6, 2004; other associated tasks were also completed in late August 2004 and on October 1, 2004.

In 1970, Olin Ski Company, Inc. purchased the Site from the City of Middletown and an industrial building was constructed for the manufacture of alpine skis. The ski manufacturing operations were present at the Site from 1970 to 1986. Olin's processes involved ski manufacturing, acrylonitrile butadiene-styrene plastic coating and ski finishing. An addition was added to the southern portion of the building in 1977 for additional warehouse and manufacturing space and to contain a Hazardous Materials Storage Area (HMSA). An underground emergency spill containment tank was installed south of the addition to contain any spills that may occur within the HMSA. The tank was connected to a floor drain located within the HWSA.

In 1986, Tri-Star Sports, Inc. took over the manufacturing of alpine ski equipment. Tri-Star's processes involved ski manufacturing, acrylonitrile butadiene-styrene plastic coating and ski finishing. The ski fabrication process involved core molding, steel and fiberglass grinding, painting, sand blasting, cutting and cleaning. The primary chemical waste streams generated included waste paint, 1,1,1-trichloroethane (TCA), methylene chloride (MeCl), and other chlorinated solvents. Tri-Star sold its alpine ski manufacturing to another company in 1989 and closed the Middletown operations.

The site is currently occupied by Lyman Products Corporation (Lyman). Lyman is a manufacturer and distributor of shooting equipment and supplies.

1.1 Environmental History

In August 1990, the containment tank, associated piping, and soils surrounding the tank were removed and disposed of off-site. The area of the former tank was then backfilled. A history of

these closure activities is provided in the RCRA Closure Plan Parts 1, 2 and 3 for the former Tri-Star Sports Facility, Middletown, Connecticut (Woodward-Clyde, 1994, 1995 and 1996). In 1994, after additional closure activities, such as power scrubbing the interior of the HMSA, the HMSA was approved by CTDEP for clean closure. The activities completed as a part of the clean closure of the HMSA are presented in the RCRA Closure Plan Part 2 (Woodward-Clyde, 1995).

The RCRA Closure Plan Part 3 (Woodward-Clyde, 1996a) presents the remedial alternatives for the closure of the former underground containment tank area. Natural attenuation was selected as the preferred remedial response, due to the technical infeasibility of active remedial alternatives, remedial effectiveness, appropriateness of the expected duration of operation, the ease of implementation and cost effectiveness. Furthermore, the results of a site-specific risk assessment presented in the same document demonstrated that the risk to human health and the environment associated with constituents of concern (COCs) in groundwater in the tank area were within acceptable standards.

Numerous investigations, RCRA closure activities and groundwater monitoring events have been performed at the Site from 1992 through present. Investigations and monitoring programs have utilized and built upon data from previous investigations.

Prior environmental reports completed for the site include the following:

- Final Preliminary Assessment Plus Report, Roy F. Weston Inc., June 1, 1992
- Phase I Environmental Site Assessment, TRC Environmental Corporation (TRC), January 1994 (completed on behalf of Lyman Products)
- Phase II Environmental Site Assessment, TRC, April 1994 (completed on behalf of Lyman Products)
- RCRA Closure Plan – Part 1, Woodward-Clyde Consultants (WCC), June 17, 1994
- RCRA Closure Plan – Part 2, WCC, July 1995
- RCRA Closure Plan – Part 3, WCC, October 1996
- Post-Closure Plan, WCC, December 1996
- Groundwater Monitoring Reports, WCC and MACTEC Engineering and Consulting, Inc. (f.k.a. LAW Engineering and Environmental Services, Inc.), 1997 to the present

1.2 Physical Setting

The site is located in the Central Connecticut Lowlands Region. The surficial geology of the area is described as glaciofluvial melt water deposits consisting of sand, silt and gravel (Weston, 1992). Glacial till is also present in the area and consists of non-sorted stony till and clay (Weston, 1992).

The site geology is characterized by approximately 20 to 30 feet (ft) of glacial drift overlying the Portland Arkose bedrock. The glacial overburden is generally classified as low plasticity clays with very low hydraulic conductivity. Occasional zones of fine sands have been encountered in the matrix at a number of drilling locations during previous explorations; however, these fine sand zones have been classified as discontinuous and localized. The Portland Arkose is a fine to coarse arkose with interbedded conglomerate, shale and feldspathic sandstone (Weston, 1992).

Typical depths to groundwater on-site vary from 8 to 12 ft throughout the seasons. Site characterization data presented in previous annual reports indicate that the predominant groundwater flow direction is to the east-southeast, toward Sawmill Brook. Sawmill Brook is located approximately 250 ft from the former underground tank area on the eastern property boundary (Figure 2), and flows from the south to the north.

Results of slug tests performed in the glacial overburden at existing monitoring well MW-3 indicated that the hydraulic conductivity is low, at about 0.01 ft/day or 3.6×10^{-6} centimeters per second (cm/sec). Seepage velocities reported since 1997 have ranged between 0.4 and 0.6 ft/year using a hydraulic conductivity of 0.01 ft/day and an assumed effective porosity of 0.25 (Woodward-Clyde, 1995).

Groundwater beneath the Site has been classified as GA by the CTDEP (CTDEP, 1993). Based on Connecticut Water Quality Standards and Criteria, GA groundwater sources are presumed to be suitable for public or private drinking water use without treatment, but is not currently being used as a public water supply source.

Sawmill Brook has a surface water classification of "A" as designated by the CTDEP.

2.0 AREAS OF CONCERN

Based on the assessment and investigation work that has previously been conducted at the subject property, a list of potential Areas of Concern (AOCs) were developed by MACTEC and presented in the Phase II Investigation Work Plan prepared by MACTEC in June 2004. Several of the AOCs were identified in prior environmental reports and the remaining AOCs were determined by MACTEC following review of prior data and additional research. Descriptions of the AOCs are described below and are identified on **Figure 3**.

- AOC-1: Hazardous Materials Storage Area (HMSA). This area is located at the southeast corner of the building and was used for storage of drums of hazardous wastes from 1980 to 1990. The HMSA was clean closed as part of the RCRA Closure Plan.

- AOC-2: Non-Hazardous Waste Storage Area. This area is located within the south side of the building, adjacent to the HMSA, and was used for storage of drums of non-hazardous waste (oils and non-regulated wastes) from 1980-1990.

- AOC-3: Former Emergency Spill Collection Vault. This consisted of a 5,000 gallon underground tank located outside of the HMSA at the southeast corner of the building. This tank was used to contain any spills or leaks in the HMSA from 1982 to 1990. The vault was removed in 1990 as part of the RCRA Closure.

- AOC-4: Former Trench and Sumps. This system was located along the western side of the building. It consisted of concrete trenches and weirs used to collect contact cooling wastewater from 1969 to 1989. The system discharged to the sanitary sewer system. The trench system has been filled with concrete.

- AOC-5: Former Painting Pit. This unlined pit was located at the east side of the building and was used for ski painting from 1970 to 1989. The pit had a capacity of approximately 1,000 gallons. The pit has been filled with concrete.

- AOC-6: Former Raw Chemical Storage Area. This area is located at the east side of the building. An aboveground 1,000 gallon tank used to store 1,1,1-TCA, was located in this area from 1970 to 1989. Other raw chemicals were also stored in this area.

- AOC-7: Former Degreaser Area. The degreaser was located in the central portion of the building and was in operation from 1970 to 1989. No secondary containment was present.

- AOC-8: Loading Docks. Five loading docks are currently located along the eastern side of the building. Three of these loading docks were also historically used as loading docks before the 1977 addition.

- AOC-9: Current and Former Site Dumpsters. Two dumpsters are currently located along the eastern side of the building, adjacent to the southern most loading dock. One historic dumpster was located at the southwest corner of the original building.

- AOC-10: Storm Water Runoff Discharge Point. A location on the eastern side of the property appears to receive storm water runoff from the paved areas on the eastern side of the building, including the area of the loading docks and dumpsters. Storm water flows via sheet flow and discharges to the unpaved ground on the edge of the woods at this location.

- AOC-11: The Current and Former Backdoors, and the Current Rear Overhead Door. The two current doors are located at the southern side of the building. The former back door was located at the south side of the former building and is now in the central portion of the existing building.

- AOC-12: Discharge Point for the Roof Drain Leaders. Storm water discharges from the roof at the southeast corner of the building into the storm water collection system. Water is then discharged to soil approximately 50 ft from the Sawmill Brook at the east side of the property.

- AOC-13: Former Non-contact Cooling Water Recovery System. This system consisted of an underground recovery tank and piping located up the embankment on the western side of the property. The tank was used to hold non-contact cooling water and circulate it through an adjacent cooling tower prior to reuse. Most of this water was recirculated, however, excess volume was occasionally discharged to the Sawmill Brook through the storm water collection system to the northeast side of the property.

- AOC-14: Area of Reported Fill Material. This area, located along the south and southeast corner of the property was identified by the EPA (Weston, 1992) as a potential fill area. Scrap metal and other debris was reportedly observed and reported in the EPA report to be protruding from the ground in this area. No metal debris was observed in this area during a recent site walkover completed in preparation of this work plan. Also, a review of construction drawings indicate the specification of engineered fill soil, with specific sieve sizing requirements, indicating that this was not an area that was arbitrarily filled.

- AOC-15: Current and Former Paint Shop. This area is located on the western side of the building. No additional information about this area was available.

- AOC-16: Former Dust Baghouse Locations. The building's two bag filtration systems were used to remove and collect manufacturing dust generated from grinding and other operations. One of the baghouses was on the eastern side of the building and had a concrete slab beneath it. The second was located on the western side of the building and was mounted on concrete piers over exposed dirt. Both areas are on the exterior of the building.

- AOC-17: Current Site Transformer. The transformer is located on the eastern side of the building. No evidence of stained soil or releases was observed during a recent site walkover completed in preparation of this work plan.

- AOC-18: Former Flammable Chemicals Storage Area. This area is located within the eastern side of the building and was used to store flammable chemicals. A floor drain is present in the area.

3.0 PHASE II INVESTIGATION ACTIVITIES AND RESULTS

Prior to mobilizing to the site, the proposed ground surface sample locations were identified and reviewed with the property owners. Each location was identified with marking paint. The call-before-you-dig public utility locating service was then notified to confirm the location of underground public utilities.

Direct push technology was utilized to advance twenty borings on the property. Shallow soil samples were collected from six additional locations using a hand auger. The sampling plan provided the depths for advancement of each boring, which were based on the AOCs and their potential release mechanisms. The majority of the borings were advanced to the groundwater surface, while a select few borings were terminated after two feet of advancement. Each sample interval was screened for the presence of site related constituents through visual inspection as well as by using a photoionization detector (PID) for the presence volatile organic compounds (VOCs). Field screening results were used to select one sample from each boring for laboratory analysis. Sample locations are shown on **Figure 4** and a summary of samples collected is presented on **Table 1**. Field boring logs and data records are included in **Appendix A**.

Sampling equipment was decontaminated before, between and after collection of each soil sample interval. Soil borings were backfilled with cuttings upon completion of sampling. Any soil volume that remained after sample collection was containerized for future characterization and disposal. Boring locations were restored to blend in with their surroundings.

All samples were handled in accordance with USEPA approved protocols and the Quality Assurance Plan. The samples were shipped via overnight delivery to Severn Trent Laboratories in North Canton, Ohio for laboratory analysis.

Specific nine digit sample identifications were used for this investigation. The first two digits represent the type of sample collected. For this investigation "DP" is direct push sample and "HA" is a hand auger sample. The third digit represents whether sample is a normal sample "S" or a duplicate sample "D". The forth and fifth digits represent the exploration identification. The sixth and seventh digits represent the top of the sample interval and the eighth and ninth digits represent the bottom of the sample interval. For example a sample with the identification of DPS010408 is a sample collected during direct push drilling, is not a duplicate, was collected

in boring number one (01) and is from the 4 to 8 foot depth interval. A summary of the samples collected and the analyses requested for each sample is provided on **Table 1**.

Table 2 provides a summary of all soil analytical results and **Table 3** provides a summary of only those compounds that were detected above the minimum laboratory detection limit (MDL) in at least one sample. These tables also provide a comparison to the applicable State of Connecticut Remediation Standard Regulations (RSR) Criteria. **Table 4** provides the analytical results of the QA/QC water samples.

Detected constituents in the soil samples have been compared against the Residential Direct Exposure Criteria (RDEC) and the Pollutant Mobility Criteria for soil in a "GA" groundwater classification area (GA PMC) from the RSR (Sections 22a-133k-1 through 22a-133k-3 of the Regulations of Connecticut State Agencies).

3.1 AOC-1: Hazardous Material Storage Area

This area was previously addressed through the RCRA Closure Plan and no further investigation was necessary.

3.2 AOC-2: Non-Hazardous Waste Storage Area

A visual inspection was conducted of the former non-hazardous waste storage area. The flooring in the area consisted of concrete that was noted to be in good condition, with no cracks or other pathways to the subsurface observed. There was no staining noted on the flooring or on the exterior building wall located to the east of the area. Several borings were historically completed directly downgradient of AOC-2 and no additional borings were completed during this investigation.

3.3 AOC-3: Former Emergency Spill Collection Vault

This area was previously addressed through the RCRA Closure Plan. Groundwater monitoring is continuing semi-annually and the results are presented to the CTDEP in an annual groundwater monitoring report.

3.4 AOC-4: Former Trench and Sumps

Three soil borings (DP-1, DP-2 and DP-3) were advanced within the building adjacent to the former trench and sumps. One boring (DP-4) was advanced adjacent to the subsurface vault that contains the drainage line which connected to the sanitary sewer system. Borings DP-1 and DP-2 were advanced to a depth of 12 feet and DP-3 and DP-4 were advanced to a depth of 16 feet. PID responses up to 111 response units (r.u., approximately equal to ppm) were noted in the soils from boring DP-2. PID responses were noted in the soils collected from borings DP-1 and DP-3; however, the responses were not above background concentrations observed within the building.

A soil sample was collected for laboratory analysis from DP-1 from the 4 to 6 foot interval. A soil sample was collected from DP-2 from the 4 to 8 foot interval for VOC analysis only, and a soil sample was collected for additional analyses from the 8 to 10 foot depth interval. Although a higher PID response was noted in soils from shallower depths in DP-2, soil recovery was not adequate to collect a soil sample for laboratory analysis. Also, the soil volume recovered from the second interval from DP-2 was not adequate to collect a soil sample for any analysis other than VOC analysis. A soil sample was collected from the 0 to 2 foot interval below the sub-slab at location DP-3 and one sample was collected from the 8 to 10 foot interval in DP-4. The 8 to 10 foot depth interval at DP-4 was selected to target the approximate bottom depth of the subsurface vault. A duplicate sample was also collected from DP-4.

The soil samples from DP-1, DP-3 and DP-4 were analyzed for VOCs, semi-volatile organic compounds (SVOCs), extractable total petroleum hydrocarbons by the CTDEP extractable TPH method (ETPH), total metals (antimony, barium, cadmium, chromium, lead and zinc), synthetic precipitation leaching procedure (SPLP) metals (barium, chromium and lead) and total cyanide. The soil sample from the 4 to 8 foot depth interval from DP-2 was analyzed for VOCs. The soil sample collected from the 8 to 10 foot depth interval from DP-2 was analyzed for SVOCs, total metals, SPLP metals and total cyanide.

Trace concentrations of acetone and methylene chloride were detected in several samples from AOC-4, and benzene was detected in the 4 to 6 foot sample from DP-1. Acetone data for these samples received either an "R" (rejected) qualifier due to an initial laboratory calibration that was outside of quality control limits or a "J" (estimated) qualifier was used where the relative percent difference between a sample and its duplicate was outside of acceptable limits. Methylene

chloride was reported in the trip blanks that accompanied the samples leading to a "JB" (estimated due to blank contamination) qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank.

Several total metals were also detected in the soil samples from this area and SVOCs were detected in one of the soil samples collected from DP-4. ETPH, total cyanide and SPLP metals were not detected in any of the samples above the MDL. The detectable concentrations reported in samples from this area were all below the applicable RDEC and GA PMC.

The duplicate sample (DPD040810) reported detectable concentrations of SVOC but the original sample (DPS040810) did not report any SVOCs above the MDL.

3.5 AOC-5: Former Paint Pit

One soil boring (DP-5) was advanced within the former paint pit location in the eastern side of the building. The boring was advanced to a depth of 16 feet, and PID responses up to 85.7 r.u. were noted in the soils collected from the boring. A soil sample was collected for laboratory analysis from the 0 to 2 foot interval below the slab and was analyzed for VOCs.

Trace concentrations of acetone and methylene chloride were detected in the soil sample from this area. The reported concentrations are below applicable RSR criteria and no other VOCs were detected above the MDL. Acetone data for this sample received an "R" qualifier due to an initial laboratory calibration that was outside of quality control limits. Methylene chloride was reported in the trip blanks that accompanied the samples, but the reported concentration in the sample was greater then 10 times the blank concentration, so a "J" qualifier was assigned to indicate that the concentration was only estimated.

3.6 AOC-6: Former Raw Chemical Storage Area

One soil boring (DP-6) was advanced within the former raw chemical storage area, which was located in the small addition on the eastern side of the building, and a second boring (DP-7) was advanced directly east of the former area on the exterior of the building. Both borings were advanced to a depth of 16 feet. PID responses up to 112 r.u. were noted in the soils from boring DP-6. A slight PID response was noted in the soils collected from DP-7. A soil sample was collected for laboratory analysis from the 4 to 6 foot interval below the slab from DP-6 and a soil

sample was collected for laboratory analysis from DP-7 from the 0 to 2 foot interval. Both samples were submitted for VOC analyses.

Several chlorinated VOCs were detected in the soil samples from this AOC. At location DP-6, 1,1-dichoroethene (1,1-DCE) was detected at a concentration above the GA PMC but below the RDEC. The remaining VOCs detected in DP-6 and DP-7 were at concentrations below the RDEC and GA PMC. Acetone and methylene chloride were detected in one of the soil samples at trace levels. However, methylene chloride was reported in the trip blanks that accompanied the samples, therefore a "JB" qualifier was assigned to indicate an estimated quantity due to detectable levels of methylene chloride in the blank.

3.7 AOC-7: Former Vapor Degreaser

One soil boring (DP-8) was advanced within the former vapor degreaser area in the central portion of the building. The boring was advanced to a depth of 12 feet. PID responses were noted in the soils collected from the boring; however, the responses were not above background concentrations observed within the building. A soil sample was collected from the 0 to 2 foot interval below the slab for laboratory analysis for VOCs.

Trace concentrations of acetone and methylene chloride were detected in the soil sample from this area. Acetone data for this sample received an "R" qualifier due to an initial laboratory calibration that was outside of acceptable limits. Methylene chloride was reported in the trip blanks that accompanied the samples, so a "JB" qualifier was assigned to indicate that the concentration was estimated due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL.

3.8 AOC-8: Loading Docks

Six soil borings (DP-9, DP-10, DP-11, DP-12, DP-13 and DP-14) were advanced adjacent to the loading docks located on the eastern side of the building. Borings DP-10 and DP-12 were advanced to a depth of 2 feet and DP-14 was advanced to a depth of 3 feet. Borings DP-9 and DP-13 were advanced to a depth of 12 feet. Boring DP-11 was initially advanced to a depth of 2 feet; however, due to moderate PID responses noted in the soils collected, the boring was advanced to a final depth of 12 feet.

PID responses up to 78 r.u. were noted in the soils from boring DP-11. Minimal PID responses were noted in the soils collected from the other borings. Soil samples were collected for laboratory analysis from the 0 to 2 foot depth interval from borings DP-9, DP-10, DP-11, DP-12 and DP-13. A soil sample was also collected for laboratory analysis from the 1 to 3 foot depth interval from DP-14. A duplicate sample was also collected from DP-14. All of the samples were analyzed for VOCs, SVOCs, total metals, SPLP metals (barium, chromium and lead) and total cyanide.

Methylene chloride was detected in all of the soil samples at trace levels and acetone was detected in several of the soil samples at trace levels. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. Benzene was detected in the sample (DPS090002) from DP-9. Several total metals and SPLP chromium were detected in the soil samples from this area. SVOCs, ETPH and total cyanide were not detected in any of the samples above the MDL. The detectable concentrations reported were all below the applicable RDEC and GA PMC.

3.9 AOC-9: Current and Former On-site Dumpsters

Soil borings (DP-13 and DP-14) were advanced adjacent to current dumpster locations on the eastern side of the building. Soil boring DP-3 was advanced inside the building at a former exterior dumpster location. This boring was also used to investigate AOC-4. The former dumpster was located in this area prior to the building addition in 1977. Boring DP-3 was advanced to a depth of 16 feet and boring DP-13 was advanced to a depth of 12 feet. Soil boring DP-14 was advanced to a depth of 3 feet. Soil borings DP-13 and DP-14 were also used to investigate AOC-8 and DP-3 was also used to investigate AOC-4.

PID responses were noted in the soils collected from DP-3; however, the responses were not above background concentrations observed within the building. Minimal PID responses were noted in the soils collected from DP-13 and no PID response was noted in soils collected from DP-14. Soil samples were collected for laboratory analysis from the 0 to 2 foot depth interval from borings DP-3 and DP-13. A soil sample was collected for laboratory analysis from the 1 to 3 foot depth interval from DP-14. A duplicate sample was also collected from DP-14. All of the

samples were analyzed for VOCs, SVOCs, total metals, SPLP metals (barium, chromium and lead) and total cyanide.

Methylene chloride was detected in all of the soil samples at trace levels and acetone was detected in two of the soil samples at trace levels. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. Several total metals and SPLP chromium were detected in the soil samples from this area. SVOCs, ETPH and total cyanide were not detected in any of the samples above the MDL. The reported concentrations were all below the applicable RDEC and GA PMC.

3.10 AOC-10: Storm Water Run-off Discharge Point

One shallow boring (HA-15) was advanced with a hand auger at the point where storm water runs-off from the paved area on the eastern side of the building. The boring was advanced to a depth of 1 foot. No PID response was noted in the soil collected. A soil sample was collected for laboratory analysis from the 0 to 1 foot depth interval. The sample was submitted for the analysis of VOCs, SVOCs, total metals, SPLP metals (barium, cadmium, chromium, lead and zinc) and total cyanide.

Trace concentrations of acetone and methylene chloride were detected in the soil sample from this area. Methylene chloride was reported in the trip blanks that accompanied the sample leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL. Several SVOCs, total metals, SPLP chromium and ETPH were detected in the soil sample. Total cyanide was not detected in any of the samples above the MDL. The detectable concentrations reported were all below the applicable RDEC and GA PMC.

3.11 AOC-11: Current and Former Back Doors, and Current Rear Overhead Door

Soil boring DP-3 was advanced inside the building at the former backdoor located in this area prior to the building addition in 1977. One shallow boring (HA-16) was advanced with a hand auger adjacent to a back door located along the south side of the current building. No borings were advanced adjacent to the overhead door along the south side of the building since this area

was investigated during the RCRA closure activities. Boring DP-3 was advanced to a depth of 16 feet and boring HA-16 was advanced to a depth of 1 foot. Soil boring DP-3 was also used to investigate AOC-4.

PID responses were noted in the soils collected from DP-3; however, the responses were not above background concentrations observed within the building. A slight PID response was noted from the soil collected at HA-16. A soil sample was collected for laboratory analysis from the 0 to 2 foot interval below the slab at location DP-3 and a soil sample was collected for laboratory analysis from HA-16 from the 0 to 1 foot depth interval. The samples were submitted for the analysis of VOCs, SVOCs, total metals, SPLP barium, chromium and lead and for total cyanide. The soil sample from HA-16 was also submitted for the analysis of SPLP cadmium and zinc.

Trace concentrations of acetone and methylene chloride were detected in the soil samples from this area. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL. Several SVOCs and ETPH were detected in the soil sample (HAS160001) from HA-16 and several total metals were detected in both soil samples. SPLP metals and total cyanide were not detected in any of the samples above the MDL. The detectable concentrations reported were all below the applicable RDEC and GA PMC.

3.12 AOC-12: Discharge Point for the Roof Drain Leaders

One shallow boring (HA-17) was advanced with a hand auger at the outfall of the discharge system that receives stormwater from the roof drains. The boring was advanced to a depth of 1 foot. No PID response was noted in the soil collected. A soil sample was collected for laboratory analysis from the 0 to 1 foot depth interval. The sample was submitted for the analysis of VOCs, SVOCs, total metals, SPLP barium, cadmium, chromium, lead and zinc and for total cyanide

Trace concentrations of acetone and methylene chloride were detected in the soil sample from this area. Methylene chloride was reported in the trip blanks that accompanied the sample leading to a "JB" qualifier being assigned to indicate an estimated quantity due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL. Several SVOCs, total metals, SPLP metals and ETPH were detected in the soil sample. Several

concentrations of SVOCs and the detected concentration of ETPH were above the RDEC and/or GA PMC. The concentration of SPLP lead was above the GA PMC. The total metals concentrations were below the applicable RDEC. Total cyanide was detected at a concentration below the applicable RDEC and GA PMC.

3.13 AOC-13: Former Non-Contact Cooling Water Recovery System

The cooling water system is currently abandoned and is located on the multi-tiered hillside to the west of the building. The area is overgrown with bushes and trees. A path was cut through the bush and trees allowing for visual inspection of the former system. It was observed that a subsurface vault was present that stored the non-contact cooling water. The subsurface vault was made of concrete and measured approximately 40 feet long by 12 to 14 feet wide, with a depth of approximately 8.5 feet. The subsurface vault contained approximately 6 inches of water. Since visual observations confirmed the presence, size and orientation of the underground storage tank, the originally proposed ground penetrating radar (GPR) study was not completed.

3.14 AOC-14: Area of Reported Filling

Three soil borings (DP-18, DP-19 and DP-20) were advanced within areas that reportedly contained fill material. Borings DP-18 and DP-19 were advanced to a depth of 12 feet and DP-20 was advanced to a depth of 11 feet. Slight PID responses were noted in soils from each boring. A soil sample was collected from DP-18 for laboratory analysis from the 6 to 8 foot depth interval and soil samples were collected for laboratory analysis from DP-19 and DP-20 from the 2 to 4 foot depth interval. A duplicate sample was also collected from DP-14. These samples were analyzed for VOCs, SVOCs, total metals, SPLP metals (barium, chromium and lead) and for total cyanide.

Trace concentrations of acetone and methylene chloride were detected in all soil samples from this area. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL. Several SVOCs, total metals and SPLP metals were detected in the soil samples. ETPH was also detected in the soil sample (DPS200204) from DP-20. Total cyanide was not detected in any of the samples above the MDL. The detectable concentrations reported were all below the applicable RDEC and GA PMC.

3.15 AOC-15: Current and Former Paint Shop

Two soil borings (DP-2 and DP-21) were advanced within the current and former paint shop area within the building. Boring DP-2 was advanced to a depth of 12 feet and DP-21 was advanced to a depth of 16 feet. PID responses up to 111 r.u. were noted in the soils from boring DP-2 and PID responses up to 24.6 r.u. were noted in the soils collected from boring DP-21. A soil sample was collected from DP-2 from the 4 to 8 foot interval for VOC analysis only, and a soil sample was collected for additional analyses from the 8 to 10 foot depth interval. Although a higher PID response was noted in soils from shallower depths in DP-2, soil recovery was not adequate to collect a soil sample for laboratory analysis. Also, the soil volume recovered from the second interval from DP-2 was not adequate to collect a soil sample for any analysis other than VOC analysis. A soil sample was collected for laboratory analysis from the 0 to 2 foot interval below the slab at location DP-21. Soil boring DP-2 was also used to investigate AOC-4.

The soil sample from the 4 to 8 foot depth interval from DP-2 and soil sample DP-21 were analyzed for VOCs. The soil sample collected from the 8 to 10 foot depth interval from DP-2 was analyzed for SVOCs, total metals, SPLP metals (barium, chromium and lead) and total cyanide.

Trace concentrations of acetone and methylene chloride were detected in the soil samples from this area analyzed for VOCs. Acetone data for these samples received an "R" qualifier due to an initial laboratory calibration that was outside of acceptable limits. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. No other VOCs were detected above the MDL. Several total metals were detected in the soil sample (DPS020810) from DP-2. ETPH, SPLP metals and total cyanide were not detected in soil sample DPS020810 above the MDL. The detectable concentrations reported were all below the applicable RDEC and/or GA PMC.

3.16 AOC-16: Former Dust Baghouse Locations

Two soil borings (DP-22 and DP-23) were advanced within the former dust baghouse area located to the east of the building. Two shallow borings (HA-24 and HA-25) were advanced with a hand auger within the former dust baghouse area located to the west of the building. Boring

DP-22 was advanced to a depth of 2 feet and DP-23 was advanced to a depth of 12 feet. Both hand auger borings were advanced to a depth of 1 foot. A slight PID response was noted in soil collected from DP-22. No PID response was noted in soils screened from the remaining borings. Soil samples were collected for laboratory analysis from the 0 to 2 foot depth interval from DP-22 and DP-23 and soil samples were collected for laboratory analysis from HA-24 and HA-25 from the 0 to 1 foot interval. The samples were submitted for analysis for VOCs, total metals, SPLP metals (barium, chromium and lead) and total cyanide. The samples from DP-22 and HA-24 were also submitted for SPLP zinc.

Several chlorinated VOCs were detected in the soil sample from DP-23. Methylene chloride was detected in all four of the soil samples and acetone was detected in three of the soil samples at trace levels. Methylene chloride was reported in the trip blanks that accompanied the samples leading to a "JB" qualifier being assigned to indicate estimated quantities due to detectable levels of methylene chloride in the blank. The VOCs were all detected at concentrations below the RDEC and GA PMC. In addition, several total metals were detected in the soil samples (barium, chromium, lead and zinc) and SPLP chromium was detected in DP-23. The total metals concentrations were all below the applicable RDEC and the SPLP chromium concentration was below the GA PMC. Total cyanide was not detected in the soil samples above the MDL.

3.17 AOC-17: Site Transformer

One shallow boring (HA-26) was advanced with a hand auger in the transformer area. The boring was advanced to a depth of one foot adjacent to a fence which encloses the transformer. No PID response or evidence of staining was noted in soil screened from the boring, but a soil sample and a duplicate sample were collected for laboratory analysis from the 0 to 1 foot depth. The samples were submitted for the analysis of ETPH and polychlorinated biphenyls (PCBs).

ETPH was detected in both soil samples and PCBs were detected in the original sample but not the duplicate. The reported concentrations of ETPH were below the applicable RDEC and GA PMC and the total PCBs were below the RDEC.

3.18 AOC-18: Former Flammable Chemical Storage Area

Dye tests were conducted on the floor drain within the area on two occasions. Both tests were conducted by pouring fluorescent dyed water (first yellow, then red) into the floor drain. Dye

tablets were added to 5-gallon buckets of water. Each test was conducted by pouring two 5-gallon buckets of water down the drain and observing whether the dyed water was observed within two sanitary sewer manholes located on-site. One of the manholes was located to the east of the building adjacent to the transformer area, and the second man-hole was located at the northeastern corner of the property along Smith Street. Dyed water was not observed in either manhole during either test.

A plumber with Rooter Express was contracted to attempt to determine the discharge location of the floor drain using a pipe video/GPS system. The plumber was unable to snake the system into the pipe due to the size of the pipe (1.5 inch inside diameter) and the presence of a bend in the pipe (a p-trap); however, it was determined that the system contains a p-trap which is used to prevent sewer gases from backing up the pipe from a sanitary sewer system. There is no record of a septic system being installed at the site and the site has been connected to the sanitary sewer system since its construction. The plumber also observed and opened a discharge pipe cleanout located between the floor drain and the manhole near the transformer. Since no other pipe discharge point is located to the south of the cleanout, the plumber was confident that the floor drain was connected through this cleanout to the manhole. This, combined with the presence of a p-trap, indicate that it is likely that the floor drain connects to the sanitary sewer, and that a blockage in the line from the granular media used by Lyman Products in this area has blocked the drain line, preventing the dye test water from flowing to the manhole.

3.19 QA/QC Samples

Duplicate samples were collected from soil borings DP-4, DP-14, DP-20 and HA-26, each collected from the same depth interval as the original samples. The duplicate soil samples from DP-4, DP-14 and HA-26 were submitted for the same analyses as the original sample. The duplicate soil sample from DP-20 was submitted for VOC analysis only. Results of the analysis are discussed within the associated AOC sections where the original sample was collected.

An equipment blank sample (Equip Blank) was prepared by pouring deionized water through the hand auger followed by collection of the water into appropriate sample containers. The sample was prepared following completion of all of the hand auger locations and following equipment decontamination. The sample was submitted for analysis of VOCs, SVOCs, ETPH and total metals. Phenol and bis(2-ethylhexyl)phthalate were detected in the sample at trace levels. Phenol

was also detected in the associated method blank and bis(2-ethylhexyl)phthalate is a common laboratory contaminant. VOCs, ETPH and total metals were not detected in the sample above the MDL.

Trip blank samples were prepared by the laboratory and accompanied the sample coolers throughout the investigation. Trip blank samples were shipped with the empty containers and returned to the lab with the samples. The trip blank samples were submitted for VOC analysis. Methylene chloride, also a common laboratory contaminant, was detected in each sample at trace levels.

Results of the trip blank samples and the equipment blank sample are shown on Table 4. Based on the data validation completed by MACTEC, the laboratory results received from STL are useable with minor qualifications, as discussed previously in the text.

4.0 WELL SEARCH

A well search was conducted to determine if any private groundwater supply wells are located within a one-half mile radius of the subject property. Well installation logs were reviewed at the United States Geological Survey (USGS) office located in East Hartford, Connecticut and records maintained by the City of Middletown Health Department were reviewed. In addition, water connection records were obtained from the City of Middletown Water Department. The properties for which records indicated that water connections existed were verified in field, and any developed properties that did not have water connections and were located within the one-half mile radius were considered to be supplied water from on-site wells. A summary of the well search is included in Table 5.

Twenty-two of fifty developed parcels located within one-half mile of the subject property are not connected to public water and appear to be supplied by private wells. The majority of the properties are residential parcels located along Miner Street and Boardman Lane. Miner Street is located southeast of the subject parcel and Boardman Lane is located southwest of the subject parcel. Miner Street is located downgradient of the subject parcel but at a much higher elevation and on the opposite side of Sawmill Brook. Boardman Street is located cross-gradient of the subject property with respect to groundwater flow.

Several properties on Middle Street (numbers 138, 152, 193 and 275) appear to be supplied with water by private wells. Residential properties located south of the subject property are more than 1,000 feet away. These properties are also located cross-gradient from the subject parcel with respect to the groundwater flow direction.

475 Middle Street is a residential parcel located across Middle Street from the subject parcel that appears to be supplied water from a private well. The parcel is located on hillside well above the subject property. The parcel is also located upgradient from the subject parcel with respect to calculated groundwater flow direction.

Several properties are located to the north of the subject property along Middle Street (numbers 688 and 701-705) that appear to be supplied water from private wells. These properties are located crossgradient of the subject parcel with respect to the groundwater flow direction.

Well completion reports were reviewed at the USGS for parcels located within a one-half mile radius of the subject property. Reports were available for wells located at 245 and 247 Miner Street, 699 Middle Street and 90 Industrial Park Road. The 245 Miner Street property is residential and the well is used for domestic purposes. The 247 Miner Street property is a golf course and the well is 900 feet deep. The 699 Middle Street and 90 Industrial Park Road properties are industrial properties that are currently connected to public water. Water from the well at 90 Industrial Park Road is reportedly used for industrial use. The well at 699 Middle Street is reportedly a test well.

Several well completion reports were reviewed for properties located on Middle and Miner Streets; however, the numerical address was not listed and the exact location of these wells was not determined. Copies of well completion reports are included in Appendix C.

Based on the distance and direction of these properties that may be served by private wells from the subject property, no further assessment or testing is warranted.

5.0 CONCLUSIONS

A Phase II Subsurface Investigation was conducted of the Former Tri-Star Sports facility located at 475 Smith Street in Middletown, Connecticut. The investigation was conducted in accordance with the June 2004 Phase II Investigation Work Plan. The following sections summarize the findings along with recommendations for each of the AOCs.

5.1 AOC-1: Hazardous Material Storage Area

No investigation was conducted in this area since it has previously been addressed under the RCRA Closure Plan.

5.2 AOC-2: Non-Hazardous Waste Storage Area

A visual inspection was conducted of the former non-hazardous waste storage area. The flooring in the area consisted of concrete and was in good condition with on cracks or other pathways to the subsurface noted. There was no staining noted on the flooring or on the exterior building wall located to the east of the area. Several borings were historically completed directly downgradient of the area and no additional borings were completed during this investigation. No additional investigation is warranted for this AOC.

5.3 AOC-3: Former Emergency Spill Collection Vault

No investigation was conducted in this area since it has previously been addressed under the RCRA Closure Plan. Groundwater monitoring is continuing as indicated in the groundwater monitoring plan which was included in the Post Closure Plan (WCC, 1996).

5.4 AOC-4: Former Trench and Sumps

Five soil samples, including a duplicate sample, were collected from this area. A low level of benzene and low levels of select total metals were detected in this area. Also low levels of potential laboratory and method preservation contaminants (methylene chloride and acetone) were reported. The reported concentrations were below applicable RSR criteria. The remaining COC were not detected above the MDL. The concentration of benzene detected may indicate that

a release has occurred; however, no other aromatic VOCs or petroleum related compounds were detected. The soil sample that contained the benzene concentration was located directly adjacent to one of the pits and would represent a "worst case" scenario. No additional investigation is warranted for this AOC.

5.5 AOC-5: Former Paint Pit

One soil sample was collected within the former paint pit area. No VOCs were detected in soil sample above the MDL except for trace concentrations of acetone and methylene chloride which are potentially laboratory induced contamination. No additional investigation is warranted for this AOC.

5.6 AOC-6: Former Raw Chemical Storage Area

One soil sample was collected from directly within this area and one soil sample was collected directly downgradient. Several chlorinated VOCs were detected in both soil samples. 1,1-Dichoroethene was detected from the soil sample collected within the former area at a concentration above applicable RSR criteria. The remaining VOCs were detected at concentrations below applicable RSR criteria. Additional investigation is recommended to delineate the extent of impacts to site soils from VOCs and to evaluate the condition of groundwater in this area.

5.7 AOC-7: Former Vapor Degreaser

One soil sample was collected from within this area. No VOCs were detected in soil sample above the MDL except for trace concentrations of acetone and methylene chloride which are potentially laboratory induced contamination. No additional investigation is warranted for this AOC.

5.8 AOC-8: Loading Docks

Six soil samples, including a duplicate sample, were collected from this area. A low level of benzene, low levels of select total metals and SPLP chromium were detected in this area. The reported concentrations were below applicable RSR criteria. The remaining COC were not detected above the MDL. The concentration of benzene detected may indicate that a release has

occurred; however, no other aromatic VOCs or petroleum related compounds were detected. No additional investigation is warranted for this AOC.

5.9 AOC-9: Current and Former On-site Dumpsters

Three soil samples, including a duplicate sample, were collected from this area. No VOCs were detected in soil sample above the MDL except for trace concentrations of acetone and methylene chloride which are potentially laboratory induced contamination. Low levels of select total metals and SPLP chromium were detected in this area. The reported concentrations were below applicable RSR criteria. The remaining COC were not detected above the MDL. No additional investigation is warranted for this AOC.

5.10 AOC-10: Storm Water Run-off Discharge Point

One soil sample was collected from this area. Several SVOCs, total metals, SPLP chromium and ETPH were detected in the soil sample. Trace concentrations of acetone and methylene chloride were also detected which is potentially laboratory induced contamination. The detectable concentrations reported were all below applicable RSR criteria. The remaining COCs were not detected above the MDL. The sample was collected from an area directly adjacent to the paved area which would be expected to exhibit the highest impacts. Therefore, it is highly unlikely that any soils surrounding the discharge point would contain higher concentrations of SVOCs, total metals and ETPH then those detected. In addition, the concentrations of SVOCs, total metals and ETPH detected in the sample were well below RSR criteria. No additional investigation is warranted for this AOC.

5.11 AOC-11: Current and Former Back Doors, and Current Rear Overhead Door

One soil sample was collected from a former back door and one soil sample was collected from a currently in use back door. Several SVOCs and ETPH were detected in one soil sample and several total metals were detected in both soil samples. Trace concentrations of acetone and methylene chloride were also detected which are potentially laboratory induced contaminants. The detectable concentrations reported were all below applicable RSR criteria. The remaining COCs were not detected above the MDL. No additional investigation is warranted for this AOC.

5.12 AOC-12: Discharge Point for the Roof Drain Leaders

One soil sample was collected from this area. Several SVOCs, ETPH and SPLP lead were detected in the soil sample above applicable RSR criteria. Total metals and total cyanide were detected at concentrations below applicable RSR criteria. The remaining COCs were not detected above the MDL with the exception of acetone and methylene chloride which are potentially laboratory induced contamination. Additional investigation is recommended to delineate the extent of the soil impact at the point of discharge of the roof drain leader, and to evaluate the condition of groundwater in this area.

5.13 AOC-13: Former Non-Contact Cooling Water Recovery System

The cooling water system is currently abandoned and is located on an overgrown, multi-tiered hillside to the west of the building. A subsurface vault is present which historically stored the non-contact cooling water. It is recommended that the tank be removed or properly abandoned in accordance with prevailing laws, regulations and industry standards.

5.14 AOC-14: Area of Reported Filling

Four soil samples, including a duplicate sample, were collected from this area. Several SVOCs, ETPH, total metals and SPLP metals were detected in the soil samples. The detectable concentrations reported were all below applicable RSR criteria. The remaining COCs were not detected above the MDL with the exception of acetone and methylene chloride which are potentially laboratory induced contamination. The samples from soil borings DP-19 and DP-20 were collected from the 2 to 4 foot interval below an asphalt surface. The concentrations of SVOCs and ETPH may be attributed to the overlying asphalt. No additional investigation is warranted for this AOC.

5.15 AOC-15: Current and Former Paint Shop

Three soil samples, including a duplicate sample, were collected from this area. Several total metals were detected in one of the soil samples. The total metals concentrations were below applicable RSR criteria and appear constant with possible background concentrations. The remaining COCs were not detected above the MDL with the exception of acetone and methylene

chloride which are potentially laboratory induced contamination. No additional investigation is warranted for this AOC.

5.16 AOC-16: Former Dust Baghouse Locations

Four soil samples were collected from two former dust baghouse locations. Several chlorinated VOCs were detected in one of the soil samples and several total metals were detected in all of the soil samples. SPLP chromium was also detected in one of the samples. The detected concentrations were all below applicable RSR criteria. The remaining COCs were not detected above the MDL with the exception of acetone and methylene chloride which are potentially laboratory induced contamination. The soil sample that reported concentrations of chlorinated VOCs is in the vicinity of AOC-6 that also reported concentrations of chlorinated VOCs. The VOCs noted in the area of the eastern baghouse location will be addressed as part of AOC-6. No additional investigation is warranted for the detected level of SPLP chromium.

5.17 AOC-17: Site Transformer

Two soil samples, one of which was a duplicate, were collected from AOC-17. ETPH and PCBs were detected in only one of the soil samples (the duplicate) from this AOC; however, the reported concentrations were well below RSR criteria. No additional investigation is warranted for this AOC.

5.18 AOC-18: Former Flammable Chemical Storage Area

Dye tests were conducted on the floor drain within the area. The tests were conducted by pouring fluorescent died water into the floor drain. Dyed water was not observed in sanitary sewer manholes during the tests.

A plumber was contracted to attempt to determine the discharge location of the floor drain. The plumber was unable to snake the system; however, based on the construction and presence of sanitary sewer connections on the site and lack of a prior septic system, it appears likely that the floor drain connects to the sanitary sewer. No additional investigation is warranted for this AOC.

5.19 Private Well Search

A total twenty-two developed properties within a one-half mile radius of the site did not have water connections with the local water company. The majority of the properties are residential parcels located along Miner Street and Boardman Lane, which are not adjacent to the site and are not downgradient with respect to the calculated groundwater flow direction. Several properties on Middle Street were noted that do not have city water and are not adjacent to the site, however these properties are not located downgradient with respect to the groundwater flow direction. 475 Middle Street is a residential parcel located across Middle Street from the subject parcel that appears to be supplied water from a private well. However, the parcel is located up a steep hillside, well above the subject property, and it is also located upgradient from the subject parcel with respect to the groundwater flow direction. No additional investigation is warranted for this AOC.

6.0 WORK PLAN

Based on the results of the Phase II soil investigation, a work plan has been developed to propose further evaluation of the AOCs where additional investigation or other environmental related activities are warranted. The goal of the investigation is to further delineate areas where impact has been identified and investigate any areas where data gaps exist. This work plan will also present a plan to evaluate groundwater conditions since groundwater was not evaluated during the Phase II investigation.

The following subsections describe the proposed activities to be completed. Field tasks are designed to characterize the presence and spatial distribution of site-related constituents, as well as potential pathways of migration using data collected from this investigation and previous investigations.

This section provides the scope of the proposed investigation for each AOC. **Table 6** details the planned soil analytical program and **Table 7** details the planned groundwater sampling program. Actual sample quantities may be modified in the field based upon field observations and preliminary screening (PID/FID results, visual and olfactory indications). Proposed monitoring well installation locations are shown on **Figure 5**.

The detailed technical specifications, standard operating procedures, and quality assurance program are presented in the Quality Assurance Plan (QAPP) which was attached to the Phase II Investigation Work Plan prepared by MACTEC in June 2004.

6.1 Soil Sampling Program

Soil sampling points are proposed to further evaluate and/or delineate the extent of possible site related constituents in soil at on-site locations.

AOC-6: Former Raw Chemical Storage Area

Additional soil boring locations are proposed to delineate the lateral and vertical extent of the previously identified soil impacts at this AOC. Six soil borings are proposed in this area with twelve soil samples collected from these borings. The borings will be installed inside and outside

of the building. The borings are proposed to be installed a couple feet into the groundwater table which is estimated to be approximately 12 feet. These borings are proposed to be installed using direct push methods. The soil samples will be submitted for VOCs, which is the only COC for this area.

AOC-12: Discharge Point for the Roof Drain Leaders

Additional soil boring locations are proposed to delineate the lateral and vertical extent of the impacted soils at this AOC. Six soil borings are proposed for this area with eight samples collected from these borings; however, the quantity of borings and soil samples may be adjusted based on field observations. The borings are proposed to be installed to a depth of a couple of feet into the water table. These borings will be installed using direct push methods. Since the terrain is wooded, a path will need to be cut through the woods to access these sample locations.

The soil samples will be submitted for analysis of SVOCs, ETPH, total metals (chromium, lead and zinc), total cyanide, SPLP metals (chromium, lead and zinc) and SPLP cyanide.

AOC-13: Former Non-contact Cooling Water System

The subsurface concrete holding tank associated with the former non-contact cooling water system that was identified during prior activities will be further evaluated and potentially abandoned in place.

The liquid inside of the vault will be removed using a vacuum truck, if possible. Following removal, the liquid will be characterized and properly disposed of. The top of the structure will be removed or the structure will be entered under a confined space entry permit. Observations will be made of the interior of the structure and determine its structural integrity. Holes will be drilled through the flooring of the structure at several locations and soil samples will be collected of the underlying soils. Collection of soil samples from up to four locations has been estimated. These samples will be submitted for laboratory analysis of VOCs, SVOCs, ETPH, total metals and total cyanide. Based on the results of the total metals and total cyanide analysis, SPLP metals and cyanide analysis may have to be conducted.

If subsurface releases are not identified that will require additional environmental investigation, then the structure will be abandoned in place using flowable fill. If additional activities are required, these activities will be discussed in a future work plan.

6.2 Groundwater Sampling

A groundwater sampling program has been developed to evaluate and obtain a comprehensive groundwater contaminant distribution data set using consistent sampling techniques and analytical methods. Groundwater elevation measurements will be collected during the groundwater sampling event to further refine the mapped groundwater flow directions. Groundwater samples will be collected via the United States Environmental Protection Agency Low-Stress (Low-Flow) sampling protocol and analyzed for site related constituents (metals detected during the Phase II investigation, VOCs, SVOCs, ETPH and cyanide).

A summary of the groundwater sampling program is included in **Table 7**. The groundwater program includes sampling of existing monitoring wells and sampling of temporary piezometers to be installed. Temporary piezometers are proposed to be installed to the east of the former non-contact cooling water recovery system, east of the former raw chemical storage area and east of the loading dock area. A temporary piezometer will also be installed adjacent to the roof drain leader outfall. The piezometers will be installed to evaluate the shallow aquifer and be constructed so that the screened portion intersects the top of the water table.

One round of groundwater sampling will be conducted. Based on the results of the initial round of sampling, additional rounds of sampling or additional groundwater plume delineation may be required.

6.3 Ecological Risk Assessment

An ecological risk assessment will be completed that will utilize data from the Phase II soil investigation and additional sampling activities discussed in the prior paragraphs to assess the potential for ecological receptors to be exposed to contaminants from the site. The scope of the assessment will be determined following review of all of the sampling data.

6.4 Schedule and Reporting

This site has been delegated to a Licensed Environmental Professional (LEP); however, the work plan will be submitted to CTDEP for their review.

The exact time frame to conduct the activities presented in this work plan has not been determined; however, it is anticipated that these activities will be conducted in early 2005. Evaluation of the subsurface vault associated with the former non-contact cooling water recovery system will be conducted first followed by the additional soil sampling and the monitoring well installation program which will be conducted concurrently. Completion of the groundwater sampling program will then follow.

An investigation of findings, and additional investigation work plan if necessary, will be submitted to the CTDEP following completion of field activities. The ecological risk assessment report will also be generated following completion of the field activities.

7.0 REFERENCES

Connecticut Department of Environmental Protection, (CTDEP), 1993, *Water Quality Classifications Map of the Connecticut River and Southcentral Coastal Basin.*

Connecticut Department of Environmental Protection, (CTDEP), 1996, *State of Connecticut's Remediation Standard Regulations.*

MACTEC Engineering and Consulting, Inc. (f.k.a. LAW Engineering and Environmental Services, Inc.), 1997-2004, *Annual Groundwater Monitoring Reports.*

MACTEC Engineering and Consulting, Inc., 2004, *Work Plan Phase II Investigation.*

Roy F. Weston Inc., 1992, *Final Preliminary Assessment Report, June.*

TRC Environmental Corporation, 1994, *Phase I Environmental Site Assessment Report, January.*

TRC Environmental Corporation, 1994, *Phase II Environmental Site Assessment Report, April.*

Woodward-Clyde, 1994, *RCRA Closure Plan for Tri-Star Sports, Inc., Middletown, CT, June.*

Woodward-Clyde, 1995, *RCRA Closure Plan: Part 2, Former Tri-Star Sports, Inc. Facility, Middletown, CT, July.*

Woodward-Clyde, 1996a, *RCRA Closure Plan: Part 3, Former Tri-Star Sports, Inc. Facility, Middletown, CT, October.*

Woodward-Clyde, 1996b, *Post Closure Plan: Former Underground Spill Containment Tank Area, December.*

TABLES

TABLE 1
ANALYTICAL PROGRAM SUMMARY

PHASE II INVESTIGATION AND WORK PLAN
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

EXPLORATION TYPE	MEDIA	LOCATION ID	SAMPLE DEPTH	SAMPLE ID	VOCs	SVOCs	CT ETPH	TOTAL METALS	SPLP Ba	SPLP Cd	SPLP Cr	SPLP Pb	SPLP Zn	TOTAL CYANIDE	PCBs	QA/QC
AOC #1: Hazardous Materials Storage Area																
No Further Investigation Required																
AOC #2: Non-Hazardous Waste Materials Storage Area																
No evidence of staining on or cracks/seams in the concrete in this AOC; therefore, no sampling was conducted.																
AOC #3: Former Emergency Spill Collection Vault																
No Further Investigation Required																
AOC #4: Former Trench and Sumps																
DIRECT PUSH	SOIL	DP-1	4'-6'	DPS010406	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-2	4'-8'	DPS020408	X											
DIRECT PUSH	SOIL	DP-2	8'-10'	DPS020810		X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-3	0'-2'	DPS030002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-4	8'-10'	DPS040810	X	X	X	X	X		X	X		X		
	SOIL	DP-4 (Dup)	8'-10' (Dup)	DPD040810	X	X	X	X	X		X	X		X		yes
AOC #5: Former Paint Pit																
DIRECT PUSH	SOIL	DP-5	0'-2'	DPS050002	X											
AOC #6: Former Raw Chemical Storage Area																
DIRECT PUSH	SOIL	DP-6	4'-6'	DPS060406	X											
DIRECT PUSH	SOIL	DP-7	0'-2'	DPS070002	X											
AOC #7: Former Vapor Degreaser Area																
DIRECT PUSH	SOIL	DP-8	0'-2'	DPS080002	X											
AOC #8: Current Loading Docks																
DIRECT PUSH	SOIL	DP-9	0'-2'	DPS090002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-10	0'-2'	DPS100002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-11	0'-2'	DPS110002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-12	0'-2'	DPS120002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-13	0'-2'	DPS130002	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-14	1'-3'	DPS140103	X	X	X	X	X		X	X		X		
	SOIL	DP-14 (Dup)	1'-3' (Dup)	DPD140103	X	X	X	X	X		X	X		X		yes
AOC #9: Current and Former On-Site Dumpster																
DIRECT PUSH	SOIL	DP-13			Included with AOC #8											
DIRECT PUSH	SOIL	DP-14			Included with AOC #8											
DIRECT PUSH	SOIL	DP-3			Included with AOC #4											
AOC #10: Storm Water Run-off Discharge Point																
HAND AUGER	SOIL	HA-15	0'-1'	HAS150001	X	X	X	X	X	X	X	X	X	X		
AOC #11: The Current and Former Backdoors, and the Current Rear Overhead Door																
HAND AUGER	SOIL	HA-16	0'-1'	HAS160001	X	X	X	X	X	X	X	X	X	X		
DIRECT PUSH	SOIL	DP-3			Included with AOC #4											
AOC #12: Discharge Point for Roof Drain Leaders																
HAND AUGER	SOIL	HA-17	0'-1'	HAS170001	X	X	X	X	X	X	X	X	X	X		
AOC #13: Former Non-Contact Cooling Water recovery System																
Soil sampling to be conducted during abandonment of system.																
AOC #14: Area of Reported Filling																
DIRECT PUSH	SOIL	DP-18	6'-8'	DPS180608	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-19	2'-4'	DPS190204	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-20	2'-4'	DPS200204	X	X	X	X	X		X	X		X		
DIRECT PUSH	SOIL	DP-20 (Dup)	2'-4' (Dup)	DPD200204	X											yes
AOC #15: Paint Shop																
DIRECT PUSH	SOIL	DP-21	0'-2'	DPS210002	X											
DIRECT PUSH	SOIL	DP-2			Included with AOC #4											
AOC #16: Former Dust Bag House Locations																
DIRECT PUSH	SOIL	DP-22	0'-2'	DPS220002	X			X	X		X	X	X	X		
DIRECT PUSH	SOIL	DP-23	0'-2'	DPS230002	X			X	X		X	X		X		
HAND AUGER	SOIL	HA-24	0'-1'	HAS240001	X			X	X		X	X	X	X		
HAND AUGER	SOIL	HA-25	0'-1'	HAS250001	X			X	X		X	X		X		
AOC #17: Site Transformer																
HAND AUGER	SOIL	HA-26	0'-1'	HAS260001			X								X	
	SOIL	HA-26 (Dup)	0'-1' (Dup)	HAD260001			X								X	yes
AOC #18: Flammable Chemicals Storage Area																
Dye test was inconclusive. Inspection by a plumber indicated a high likelihood that the floor drain is connected to the sewer. No additional testing warranted.																

Notes:

ID - Identification
VOCs = Volatile Organic Compounds
SVOCS = Semi-Volatile Organic Compounds
CT ETPH = Connecticut Extractable Total Petroleum Hydrocarbons
Metals = antimony, barium, cadmium, chromium, lead and zinc
PCBs = Polychlorinated Biphenyls
AOC = Area of Concern
Where levels of total metals exceeded the PMC using the 20X dilution factor, SPLP analysis was conducted on that particular metal and sample.

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS010406	DPS020408	DPS020810	DPS030002	DPS040810	DPD040810	DPS050002	DPS060406	DPS070002	DPS080002	DPS090002
Sample Depth (ft.):	RDEC	GA PMC	4 - 6	4 - 8	8 - 10	0 - 2	8 - 10	8 - 10	0 - 2	4 - 6	0 - 2	0 - 2	0 - 2
Sample Date:			7/23/2004	7/23/2004	7/23/2004	7/23/2004	7/21/2004	7/21/2004	7/23/2004	7/23/2004	7/21/2004	7/23/2004	7/21/2004
Volatile Organic Compounds - SW846 8260B, mg/kg													
Acetone	500	14	<0.031 R	0.67 R	NA	0.15 R	0.037 J	0.057 J	0.12 R	<2.6 UJ	0.037	0.1 R	0.49
Acrylonitrile	11	0.01	<0.15	<0.17	NA	<0.19	<0.16	<0.15	<0.19	<13	<0.12	<0.13	<0.13
Benzene	21	0.02	0.01	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	0.0078
Bromodichloromethane	9.9	0.011	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Bromoform	78	0.06	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Bromomethane	95	0.2	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
n-Butylbenzene	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
sec-Butylbenzene	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
tert-Butylbenzene	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Carbon disulfide	500	14	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Carbon tetrachloride	4.7	0.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Chlorobenzene	500	2	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Chloroethane	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Chloroform	100	0.12	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Chloromethane	47	0.054	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
2-Chlorotoluene	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
4-Chlorotoluene	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Dibromochloromethane	7.3	0.01	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,2-Dibromoethane	0.0072	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,2-Dibromo-3-chloropropane	0.44	--	<0.015	<0.017	NA	<0.019	<0.016	<0.015	<0.019	<1.3	<0.012	<0.013	<0.013
1,2-Dichlorobenzene	500	3.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,3-Dichlorobenzene	500	12	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,4-Dichlorobenzene	26	1.5	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Dichlorodifluoromethane	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1-Dichloroethane	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	0.025	<0.0067	<0.0063
1,2-Dichloroethane	6.7	0.02	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1-Dichloroethene	1	0.14	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	1.1	0.065	<0.0067	<0.0063
cis-1,2-Dichloroethene	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
trans-1,2-Dichloroethene	500	2	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
trans-1,4-Dichloro-2-butene	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,2-Dichloropropane	9	0.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,3-Dichloropropene (total)	3.4	0.01	<0.015	<0.017	NA	<0.019	<0.016	<0.015	<0.019	<1.3	<0.012	<0.013	<0.013
Ethylbenzene	500	10.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Isopropylbenzene	500	0.6	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
p-Isopropyltoluene	--	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Methylene chloride	82	0.1	0.013 JB	0.018 JB	NA	0.019 JB	0.014 JB	0.013 JB	0.023 J	<0.64	0.0086 JB	0.011 JB	0.0085 JB
Methyl ethyl ketone	500	8	<0.031	<0.034	NA	<0.037	<0.033	<0.03	<0.037	<2.6	<0.024	<0.027	<0.025
Methyl tert-butyl ether	500	2	<0.031	<0.034	NA	<0.037	<0.033	<0.03	<0.037	<2.6	<0.024	<0.027	<0.025
4-Methyl-2-pentanone (MIBK)	500	7	<0.031	<0.034	NA	<0.037	<0.033	<0.03	<0.037	<2.6	<0.024	<0.027	<0.025
n-Propylbenzene	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Styrene	500	2	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1,1,2-Tetrachloroethane	24	0.02	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1,2,2-Tetrachloroethane	3.1	0.01	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Tetrachloroethene	12	0.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Toluene	500	20	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,2,4-Trichlorobenzene	680	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1,1-Trichloroethane	500	4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	1.7	0.012	<0.0067	<0.0063
1,1,2-Trichloroethane	11	0.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Trichloroethene	56	0.1	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Trichlorofluoromethane	500	26	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,2,4-Trimethylbenzene	500	7	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
1,3,5-Trimethylbenzene	500	7	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Vinyl chloride	0.32	0.04	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	<0.0063
Xylenes (total)	500	19.5	<0.015	<0.017	NA	<0.019	<0.016	<0.015	<0.019	<1.3	<0.012	<0.013	<0.013

Notes:

mg/kg = milligrams per kilogram
B = Blank contamination associated with this sample group
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria.
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Result exceeds the RDEC and/or the GA PMC

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS100002	DPS110002	DPS120002	DPS130002	DPS140103	DPD140103	HAS150001	HAS160001	HAS170001	DPS180608	DPS190204
Sample Depth (ft.):	RDEC	GA PMC	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	1 - 3	0 - 1	0 - 1	0 - 1	6 - 8	2 - 4
Sample Date:			7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004
Volatile Organic Compounds - SW846 8260B, mg/kg													
Acetone	500	14	0.036	0.12	0.31	<0.019	<0.022	0.048	0.081	0.22	0.34	0.034	0.022
Acrylonitrile	1 1	0.01	<0.12	<0.11	<0.11	<0.097	<0.11	<0.08	<0.2	<0.18	<0.17	<0.11	<0.1
Benzene	21	0.02	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Bromodichloromethane	9 9	0.011	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Bromoform	78	0.06	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Bromomethane	95	0.2	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
n-Butylbenzene	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
sec-Butylbenzene	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
tert-Butylbenzene	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Carbon disulfide	500	14	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Carbon tetrachloride	4.7	0.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Chlorobenzene	500	2	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Chloroethane	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Chloroform	100	0.12	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Chloromethane	47	0.054	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
2-Chlorotoluene	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
4-Chlorotoluene	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Dibromochloromethane	7.3	0.01	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2-Dibromoethane	0.0072	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2-Dibromo-3-chloropropane	0.44	--	<0.012	<0.011	<0.011	<0.0097	<0.011	<0.008	<0.02	<0.018	<0.017	<0.011	<0.01
1,2-Dichlorobenzene	500	3.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,3-Dichlorobenzene	500	12	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,4-Dichlorobenzene	26	1.5	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Dichlorodifluoromethane	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1-Dichloroethane	500	1 4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2-Dichloroethane	6.7	0.02	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1-Dichloroethene	1	0.14	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
cis-1,2-Dichloroethene	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
trans-1,2-Dichloroethene	500	2	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
trans-1,4-Dichloro-2-butene	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2-Dichloropropane	9	0.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,3-Dichloropropene (total)	3.4	0.01	<0.012	<0.011	<0.011	<0.0097	<0.011	<0.008	<0.02	<0.018	<0.017	<0.011	<0.01
Ethylbenzene	500	10 1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Isopropylbenzene	500	0.6	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
p-Isopropyltoluene	--	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Methylene chloride	82	0.1	0.0086 JB	0.0091 JB	0.012 JB	0.0083 JB	0.011 JB	0.0067 JB	0.02 JB	0.014 JB	0.014 JB	0.011 JB	0.0087 JB
Methyl ethyl ketone	500	8	<0.025	<0.022	<0.022	<0.019	<0.022	<0.016	<0.04	<0.035	<0.034	<0.022	<0.021
Methyl tert-butyl ether	500	2	<0.025	<0.022	<0.022	<0.019	<0.022	<0.016	<0.04	<0.035	<0.034	<0.022	<0.021
4-Methyl-2-pentanone (MIBK)	500	7	<0.025	<0.022	<0.022	<0.019	<0.022	<0.016	<0.04	<0.035	<0.034	<0.022	<0.021
n-Propylbenzene	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Styrene	500	2	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1,1,2-Tetrachloroethane	24	0.02	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1,2,2-Tetrachloroethane	3 1	0.01	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Tetrachloroethene	12	0.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Toluene	500	20	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2,4-Trichlorobenzene	680	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1,1-Trichloroethane	500	4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1,2-Trichloroethane	11	0.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Trichloroethene	56	0.1	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Trichlorofluoromethane	500	26	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,2,4-Trimethylbenzene	500	7	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,3,5-Trimethylbenzene	500	7	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Vinyl chloride	0.32	0.04	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Xylenes (total)	500	19.5	<0.012	<0.011	<0.011	<0.0097	<0.011	<0.008	<0.02	<0.018	<0.017	<0.011	<0.01

Notes:

mg/kg = milligrams per kilogram
B = Blank contamination associated with this sample group
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria.
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
Result exceeds the RDEC and/or the GA PMC

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS200204	DPD200204	DPS210002	DPS220002	DPS230002	HAS240001	HAS250001	HAS260001	HAD260001
Sample Depth (ft.):	RDEC	GA PMC	2 - 4	2 - 4	0 - 2	0 - 2	0 - 2	0 - 1	0 - 1	0 - 1	0 - 1
Sample Date:			7/21/2004	7/21/2004	7/23/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/22/2004
Volatile Organic Compounds - SW846 8260B, mg/kg											
Acetone	500	14	0.038	0.034	0.32 R	0.52	<0.026	0.14	0.14	NA	NA
Acrylonitrile	1 1	0.01	<0.16	<0.12	<0.21	<0.16	<0.13	<0.16	<0.13	NA	NA
Benzene	21	0.02	<0.008	<0.0062	<0 01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Bromodichloromethane	9 9	0.011	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Bromoform	78	0.06	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Bromomethane	95	0.2	<0 008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
n-Butylbenzene	500	1.4	<0.008	<0.0062	<0.01	<0.0082	<0 0066	<0.0082	<0.0067	NA	NA
sec-Butylbenzene	500	1.4	<0 008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
tert-Butylbenzene	500	1.4	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Carbon disulfide	500	14	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Carbon tetrachloride	4.7	0.1	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Chlorobenzene	500	2	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Chloroethane	--	--	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
Chloroform	100	0.12	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Chloromethane	47	0.054	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0 0082	<0.0067	NA	NA
2-Chlorotoluene	--	--	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0 0067	NA	NA
4-Chlorotoluene	--	--	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0 0082	<0.0067	NA	NA
Dibromochloromethane	7.3	0.01	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,2-Dibromoethane	0.0072	--	<0.008	<0.0062	<0 01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,2-Dibromo-3-chloropropane	0 44	--	<0.016	<0.012	<0.021	<0.016	<0.013	<0.016	<0.013	NA	NA
1,2-Dichlorobenzene	500	3.1	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,3-Dichlorobenzene	500	12	<0.008	<0.0062	<0 01	<0.0082	<0 0066	<0.0082	<0.0067	NA	NA
1,4-Dichlorobenzene	26	1.5	<0 008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Dichlorodifluoromethane	--	--	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,1-Dichloroethane	500	1.4	<0.008	<0.0062	<0.01	<0.0082	0.0085	<0 0082	<0.0067	NA	NA
1,2-Dichloroethane	6.7	0 02	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
1,1-Dichloroethene	1	0.14	<0.008	<0.0062	<0.01	<0.0082	0.01	<0.0082	<0.0067	NA	NA
cis-1,2-Dichloroethene	500	1.4	<0.008	<0 0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
trans-1,2-Dichloroethene	500	2	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
trans-1,4-Dichloro-2-butene	--	--	<0.008	<0.0062	<0 01	<0.0082	<0 0066	<0.0082	<0.0067	NA	NA
1,2-Dichloropropane	9	0 1	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0 0067	NA	NA
1,3-Dichloropropene (total)	3.4	0.01	<0.016	<0.012	<0.021	<0.016	<0.013	<0.016	<0.013	NA	NA
Ethylbenzene	500	10.1	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Isopropylbenzene	500	0.6	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
p-Isopropyltoluene	--	1.4	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Methylene chloride	82	0.1	0.018 JB	0.013 JB	0.012 JB	0.011 JB	0.015 JB	0.012 JB	0.012 JB	NA	NA
Methyl ethyl ketone	500	8	<0 032	<0.025	<0.041	<0 033	<0.026	<0.033	<0.027	NA	NA
Methyl tert-butyl ether	500	2	<0.032	<0.025	<0.041	<0.033	<0.026	<0.033	<0.027	NA	NA
4-Methyl-2-pentanone (MIBK)	500	7	<0.032	<0.025	<0.041	<0.033	<0.026	<0 033	<0.027	NA	NA
n-Propylbenzene	500	1.4	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0 0067	NA	NA
Styrene	500	2	<0.008	<0.0062	<0 01	<0.0082	<0 0066	<0.0082	<0.0067	NA	NA
1,1,1,2-Tetrachloroethane	24	0.02	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,1,2,2-Tetrachloroethane	3.1	0.01	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
Tetrachloroethene	12	0 1	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Toluene	500	20	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0 0082	<0.0067	NA	NA
1,2,4-Trichlorobenzene	680	1.4	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
1,1,1-Trichloroethane	500	4	<0.008	<0.0062	<0.01	<0.0082	0.025	<0.0082	<0.0067	NA	NA
1,1,2-Trichloroethane	11	0.1	<0.008	<0 0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Trichloroethene	56	0.1	<0 008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
Trichlorofluoromethane	500	26	<0.008	<0.0062	<0 01	<0.0082	<0 0066	<0.0082	<0.0067	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	--	--	<0.008	<0 0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,2,4-Trimethylbenzene	500	7	<0.008	<0.0062	<0 01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,3,5-Trimethylbenzene	500	7	<0.008	<0.0062	<0.01	<0 0082	<0.0066	<0.0082	<0.0067	NA	NA
Vinyl chloride	0.32	0.04	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0 0082	<0.0067	NA	NA
Xylenes (total)	500	19.5	<0.016	<0.012	<0.021	<0.016	<0.013	<0.016	<0.013	NA	NA

Notes:

mg/kg = milligrams per kilogram
B = Blank contamination associated with this sample group
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria.
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
Result exceeds the RDEC and/or the GA PMC

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS010406	DPS020408	DPS020810	DPS030002	DPS040810	DPD040810	DPS050002	DPS060406	DPS070002	DPS080002	DPS090002
Sample Depth (ft.):	RDEC	GA PMC	4 - 6	4 - 8	8 - 10	0 - 2	8 - 10	8 - 10	0 - 2	4 - 6	0 - 2	0 - 2	0 - 2
Sample Date:			7/23/2004	7/23/2004	7/23/2004	7/23/2004	7/21/2004	7/21/2004	7/23/2004	7/23/2004	7/21/2004	7/23/2004	7/21/2004
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg													
Acenaphthene	1,000	8.4	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Acenaphthylene	1,000	8.4	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Anthracene	1,000	40	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Benzo(a)anthracene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.018	NA	NA	NA	NA	<0.0072
Benzo(b)fluoranthene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.041 J	NA	NA	NA	NA	<0.0072
Benzo(k)fluoranthene	8.4	1	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.049 J	NA	NA	NA	NA	<0.0072
Benzo(g,h,i)perylene	1,000	4.2	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.016	NA	NA	NA	NA	<0.0072
Benzo(a)pyrene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.019	NA	NA	NA	NA	<0.0072
Benzoic acid	1,000	1,000	<0.82	NA	<0.8	<0.81	<0.72	<0.76	NA	NA	NA	NA	<0.72
4-Bromophenyl phenyl ether	500	8.2	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Butyl benzyl phthalate	1,000	20	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Carbazole	31	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
4-Chloroaniline	270	1	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16
bis(2-Chloroethyl) ether	1	1	<0.12	NA	<0.12	<0.12	<0.11	<0.12	NA	NA	NA	NA	<0.11
bis(2-Chloroisopropyl) ether	8.8	1	<0.12	NA	<0.12	<0.12	<0.11	<0.12	NA	NA	NA	NA	<0.11
2-Chloronaphthalene	1,000	11	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
2-Chlorophenol	340	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
4-Chlorophenyl phenyl ether	500	8.2	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Chrysene	84	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.025	NA	NA	NA	NA	<0.0072
Dibenz(a,h)anthracene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Dibenzofuran	270	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
3,3'-Dichlorobenzidine	1.4	0.33	<0.12	NA	<0.12	<0.12	<0.11	<0.12	NA	NA	NA	NA	<0.11
2,4-Dichlorophenol	200	1	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16
Diethyl phthalate	1,000	110	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Dimethyl phthalate	1,000	110	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
2,4-Dimethylphenol	1,000	2.8	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16
2,4-Dinitrophenol	140	1.65	<0.41	NA	<0.4	<0.4	<0.36	<0.38	NA	NA	NA	NA	<0.36
2,4-Dinitrotoluene	140	1	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
2,6-Dinitrotoluene	68	1	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
Di-n-butyl phthalate	1,000	14	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Di-n-octyl phthalate	1,000	2	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
bis(2-Ethylhexyl) phthalate	44	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Fluoranthene	1,000	5.6	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.048 J	NA	NA	NA	NA	<0.0072
Fluorene	1,000	5.6	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Hexachlorobenzene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Hexachlorobutadiene	7.9	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Hexachlorocyclopentadiene	470	1	<0.41	NA	<0.4	<0.4	<0.36	<0.38	NA	NA	NA	NA	<0.36
Hexachloroethane	44	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Indeno(1,2,3-cd)pyrene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Isophorone	640	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
2-Methylnaphthalene	474	0.98	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
2-Methylphenol	1,000	7	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
3-Methylphenol	--	--	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
4-Methylphenol	340	1	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
Naphthalene	1,000	5.6	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
2-Nitroaniline	4.1	1.65	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
3-Nitroaniline	200	1.65	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
4-Nitroaniline	200	1	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
Nitrobenzene	34	1	<0.12	NA	<0.12	<0.12	<0.11	<0.12	NA	NA	NA	NA	<0.11
2-Nitrophenol	540	1.1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
N-Nitrosodiphenylamine	130	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
N-Nitrosodi-n-propylamine	1	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Pentachlorophenol	5.1	1	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16
Phenanthrene	1,000	4	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.021	NA	NA	NA	NA	<0.0072
Phenol	1,000	80	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Pyrene	1,000	4	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.036	NA	NA	NA	NA	<0.0072
2,4,5-Trichlorophenol	1,000	14	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16
2,4,6-Trichlorophenol	56	1	<0.19	NA	<0.18	<0.18	<0.16	<0.17	NA	NA	NA	NA	<0.16

Notes:

mg/kg = milligrams per kilogram
J = Estimated; Exact concentration could not be determined
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS100002	DPS110002	DPS120002	DPS130002	DPS140103	DPD140103	HAS150001	HAS160001	HAS170001	DPS180608	DPS190204
Sample Depth (ft):	RDEC	GA PMC	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	1 - 3	0 - 1	0 - 1	0 - 1	6 - 8	2 - 4
Sample Date:			7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg													
Acenaphthene	1,000	8.4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	0.55	<0.0082	<0.0074
Acenaphthylene	1,000	8.4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	<0.093	<0.0082	0.022
Anthracene	1,000	40	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.027	<0.0084	1.4	<0.0082	0.017
Benzo(a)anthracene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.18	<0.0084	7.6	<0.0082	0.072
Benzo(b)fluoranthene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.36	<0.0084	9.9	0.02	0.1
Benzo(k)fluoranthene	8.4	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.2	<0.0084	4.9	<0.0082	0.06
Benzo(g,h,i)perylene	1,000	4.2	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.19	<0.0084	5.4	<0.0082	0.056
Benzo(a)pyrene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.26	<0.0084	8.6	<0.0082	0.075
Benzoic acid	1,000	1,000	<0.74	<0.82	<0.77	<0.78	<0.75	<0.76	<0.82	<0.83	<9.2	<0.81	<0.73
4-Bromophenyl phenyl ether	500	8.2	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Butyl benzyl phthalate	1,000	20	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	0.082	<0.063	<0.7	<0.061	0.065
Carbazole	31	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	0.87	<0.061	<0.055
4-Chloroaniline	270	1	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17
bis(2-Chloroethyl) ether	1	1	<0.11	<0.12	<0.12	<0.12	<0.11	<0.12	<0.12	<0.13	<1.4	<0.12	<0.11
bis(2-Chloroisopropyl) ether	8.8	1	<0.11	<0.12	<0.12	<0.12	<0.11	<0.12	<0.12	<0.13	<1.4	<0.12	<0.11
2-Chloronaphthalene	1,000	11	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
2-Chlorophenol	340	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
4-Chlorophenyl phenyl ether	500	8.2	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Chrysene	84	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.3	<0.0084	7.6	<0.0082	0.062
Dibenz(a,h)anthracene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.039	<0.0084	1.5	<0.0082	<0.0074
Dibenzofuran	270	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
3,3'-Dichlorobenzidine	1.4	0.33	<0.11	<0.12	<0.12	<0.12	<0.11	<0.12	<0.12	<0.13	<1.4	<0.12	<0.11
2,4-Dichlorophenol	200	1	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17
Diethyl phthalate	1,000	110	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Dimethyl phthalate	1,000	110	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
2,4-Dimethylphenol	1,000	2.8	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17
2,4-Dinitrophenol	140	1.65	<0.37	<0.41	<0.38	<0.39	<0.38	<0.38	<0.41	<0.41	<4.6	<0.4	<0.37
2,4-Dinitrotoluene	140	1	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
2,6-Dinitrotoluene	68	1	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
Di-n-butyl phthalate	1,000	14	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Di-n-octyl phthalate	1,000	2	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
bis(2-Ethylhexyl) phthalate	44	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	0.076	0.89	1.2	<0.061	0.065
Fluoranthene	1,000	5.6	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.49	0.036	15	0.017	0.16
Fluorene	1,000	5.6	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	0.65	<0.0082	<0.0074
Hexachlorobenzene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	<0.093	<0.0082	<0.0074
Hexachlorobutadiene	7.9	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Hexachlorocyclopentadiene	470	1	<0.37	<0.41	<0.38	<0.39	<0.38	<0.38	<0.41	<0.41	<4.6	<0.4	<0.37
Hexachloroethane	44	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Indeno(1,2,3-cd)pyrene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.17	<0.0084	4.9	<0.0082	0.046
Isophorone	640	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
2-Methylnaphthalene	474	0.98	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	<0.093	<0.0082	<0.0074
2-Methylphenol	1,000	7	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
3-Methylphenol	--	--	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
4-Methylphenol	340	1	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
Naphthalene	1,000	5.6	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	<0.093	<0.0082	<0.0074
2-Nitroaniline	4.1	1.65	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
3-Nitroaniline	200	1.65	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
4-Nitroaniline	200	1	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	<0.25	<0.25	<2.8	<0.24	<0.22
Nitrobenzene	34	1	<0.11	<0.12	<0.12	<0.12	<0.11	<0.12	<0.12	<0.13	<1.4	<0.12	<0.11
2-Nitrophenol	540	1.1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
N-Nitrosodiphenylamine	130	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
N-Nitrosodi-n-propylamine	1	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Pentachlorophenol	5.1	1	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17
Phenanthrene	1,000	4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.2	<0.0084	7.6	<0.0082	0.019
Phenol	1,000	80	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	<0.7	<0.061	<0.055
Pyrene	1,000	4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.4	0.039	12	<0.0082	0.18
2,4,5-*Trichlorophenol*	1,000	14	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17
2,4,6-Trichlorophenol	56	1	<0.17	<0.19	<0.17	<0.18	<0.17	<0.17	<0.19	<0.19	<2.1	<0.18	<0.17

Notes:

mg/kg = milligrams per kilogram
J = Estimated; Exact concentration could not be determined
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS200204	DPD200204	DPS210002	DPS220002	DPS230002	HAS240001	HAS250001	HAS260001	HAD260001
Sample Depth (ft.):	RDEC	GA PMC	2 - 4	2 - 4	0 - 2	0 - 2	0 - 2	0 - 1	0 - 1	0 - 1	0 - 1
Sample Date:			7/21/2004	7/21/2004	7/23/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/22/2004
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg											
Acenaphthene	1,000	8.4	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1,000	8.4	0.019	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1,000	40	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	0.05	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	0.072	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	8.4	1	0.057	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	1,000	4.2	0.046	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	0.045	NA	NA	NA	NA	NA	NA	NA	NA
Benzoic acid	1,000	1,000	<0.78	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	500	8.2	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	1,000	20	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	31	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	270	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	1	1	<0.12	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl) ether	8.8	1	<0.12	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	1,000	11	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	340	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	500	8.2	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	84	1	0.049	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	1	1	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	270	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	1.4	0.33	<0.12	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	200	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	1,000	110	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	1,000	110	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	1,000	2.8	<0.18	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	140	1.65	<0.39	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	140	1	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	68	1	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	1,000	14	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	1,000	2	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl) phthalate	44	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1,000	5.6	0.11	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1,000	5.6	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	1	1	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	7.9	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	470	1	<0.39	NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	44	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1	1	0.035	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	640	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	474	0.98	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	1,000	7	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol	--	--	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	340	1	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	1,000	5.6	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	4.1	1.65	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	200	1.65	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	200	1	<0.24	NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	34	1	<0.12	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	540	1.1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	130	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodi-n-propylamine	1	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	5.1	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1,000	4	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	1,000	80	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,000	4	0.1	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	1,000	14	<0.18	NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	56	1	<0.18	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

mg/kg = milligrams per kilogram
J = Estimated; Exact concentration could not be determined
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS010406	DPS020408	DPS020810	DPS030002	DPS040810	DPD040810	DPS050002	DPS060406	DPS070002	DPS080002	DPS090002
Sample Depth (ft.):	RDEC	GA PMC	4 - 6	4 - 8	8 - 10	0 - 2	8 - 10	8 - 10	0 - 2	4 - 6	0 - 2	0 - 2	0 - 2
Sample Date.			*7/23/2004*	*7/23/2004*	*7/23/2004*	*7/23/2004*	*7/21/2004*	*7/21/2004*	*7/23/2004*	*7/23/2004*	*7/21/2004*	*7/23/2004*	7/21/2004
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg													
Extractable Total Petroleum Hydrocarbons	500,000	500,000	<16,000	NA	<15,000	<15,000	<14,000	<17,000	NA	NA	NA	NA	<14,000
Metals - SW846 6010B (Total), mg/kg													
Antimony	27	--	<1.2	NA	<1.2	<1.2	<1.1	<1.2	NA	NA	NA	NA	<1.1
Barium	4,700	--	134	NA	113	130	138 J	108 J	NA	NA	NA	NA	83.4
Cadmium	34	--	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
Chromium	see notes	--	24.4	NA	19.2	23.5	17.5	20.6	NA	NA	NA	NA	13.4
Lead	500	--	10.8	NA	8.3	10.9	7.2 J	9.7 J	NA	NA	NA	NA	6.9
Zinc	20,000	--	66.7	NA	54.3	62.9	53.2	47.4	NA	NA	NA	NA	39.7
Metals - SW846 6010B, SPLP, mg/L													
Barium	--	1	<1	NA	<1	<1	<1	<1	NA	NA	NA	NA	<1
Cadmium	--	0.005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	0.05	<0.005	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	0.0056
Lead	--	0.015	<0.01	NA	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01
Zinc	--	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide, Total - SW846 9012A, mg/kg													
Cyanide, Total	1,400	--	<0.62	NA	<0.6	<0.61	<0.55	<0.58	NA	NA	NA	NA	<0.54
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg													
PCB-1016	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1221	*1,000**	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1232	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1242	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1248	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/kg = mircograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated: Exact concentration could not be determined
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Positive result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds. criteria is for total PCBs.
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg/kg and the RDEC for trivalent chromium is 3,900 mg/kg.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS100002	DPS110002	DPS120002	DPS130002	DPS140103	DPD140103	HAS150001	HAS160001	HAS170001	DPS180608	DPS190204
Sample Depth (ft):	RDEC	GA PMC	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	1 - 3	0 - 1	0 - 1	0 - 1	6 - 8	2 - 4
Sample Date:			7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg													
Extractable Total Petroleum Hydrocarbons	500,000	500,000	<14,000	<15,000	<14,000	<14,000	<14,000	<13,000	140,000	97,000	1,200,000	<15,000	<14,000
Metals - SW846 6010B (Total), mg/kg													
Antimony	27	--	<1.1	<1.2	<1 2	<1.2	<1.1	<1.2	<1.2	<1.3	<1.4	<1.2	<1.1
Barium	4,700	--	105	91.2	208	136	155 J	89 6 J	46.7	63 3	65	198	54.8
Cadmium	34	--	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	0.7	2.3	3	<0.24	<0.22
Chromium	see notes	--	13.3	16	36.3	27.3	24.9 J	18 J	23.7	22.6	34.6	30.8	9.7
Lead	500	--	7.9	9	15.7	13.2	11.3 J	8.4 J	59.6	26.4	116	13.9	7
Zinc	20,000	--	41.6	43.9	77.7	59	57.6 J	42.5 J	191	148	4690	71.9	30.6
Metals - SW846 6010B, SPLP, mg/L													
Barium	--	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	--	0.005	NA	NA	NA	NA	NA	NA	<0.002	<0.002	<0.002	NA	NA
Chromium	--	0.05	<0.005	<0.005	0.0075	0.0073	0.02	0.029	0.0089	<0.005	0.0093	0.025	<0.005
Lead	--	0.015	<0.01	<0 01	<0.01	<0.01	<0.01	<0 01	<0.01	<0.01	0.021	0.01	<0.01
Zinc	--	5	NA	NA	NA	NA	NA	NA	<1	<1	<1	NA	NA
Cyanide, Total - SW846 9012A, mg/kg													
Cyanide, Total	1,400	--	<0.56	<0.62	<0.58	<0.59	<0.57	<0.58	<0.62	<0.63	1.3	<0.61	<0.55
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg													
PCB-1016	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1221	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1232	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1242	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1248	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1254	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/kg = mircograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated; Exact concentration could not be determined
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Positive result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds, criteria is for total PCBs.
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg kg and the RDEC for trivalent chromium is 3,900 mg kg

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 2
SOIL DATA SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Connecticut RSR Criteria		DPS200204	DPD200204	DPS210002	DPS220002	DPS230002	HAS240001	HAS250001	HAS260001	HAD260001
Sample Depth (ft):	RDEC	GA PMC	2 - 4	2 - 4	0 - 2	0 - 2	0 - 2	0 - 1	0 - 1	0 - 1	0 - 1
Sample Date:			7/21/2004	7/21/2004	7/23/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/22/2004
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg											
Extractable Total Petroleum Hydrocarbons	500,000	500,000	59,000	NA	NA	NA	NA	NA	NA	70,000	45,000
Metals - SW846 6010B (Total), mg/kg											
Antimony	27	--	<1 2	NA	NA	<1.2	<1.2	1.2	<1.1	NA	NA
Barium	4,700	--	111	NA	NA	82.3	217	94	99.2	NA	NA
Cadmium	34	--	<0.24	NA	NA	<0 24	<0.25	<0.23	<0.23	NA	NA
Chromium	see notes	--	24.3	NA	NA	17.7	44	19 2	17.4	NA	NA
Lead	500	--	12.3	NA	NA	8.4	17.6	14.7	9.8	NA	NA
Zinc	20,000	--	51.6	NA	NA	772	89.4	106 J	69.6	NA	NA
Metals - SW846 6010B, SPLP, mg/L											
Barium	--	1	<1	NA	NA	<1	<1	<1	<1	NA	NA
Cadmium	--	0 005	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	--	0.05	0.0064	NA	NA	<0.005	0.012	<0.005	<0.005	NA	NA
Lead	--	0.015	<0.01	NA	NA	<0.01	<0.01	<0.01	<0.01	NA	NA
Zinc	--	5	NA	NA	NA	<1	NA	<1	NA	NA	NA
Cyanide, Total - SW846 9012A, mg/kg											
Cyanide, Total	1,400	--	<0.59	NA	NA	<0.61	<0.61	<0.58	<0.57	NA	NA
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg											
PCB-1016	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1221	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1232	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1242	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1248	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1254	1,000*	--	NA	NA	NA	NA	NA	NA	NA	<37	<37
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	48	<37

Notes:

ug/kg = mircograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated; Exact concentration could not be determined
NA = Not analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Moblity Criteria for "GA" classified areas
[ ] Positive result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds, criteria is for total PCBs.
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg/kg and the RDEC for trivalent chromium is 3,900 mg/kg.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 3
POSITIVE SOIL RESULT SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS010406	DPS020408	DPS020810	DPS030002	DPS040810	DPD040810	DPS050002	DPS060406	DPS070002	DPS080002	DPS090002
Sample Depth (ft.):	RDEC	GA PMC	4 - 6	4 - 8	8 - 10	0 - 2	8 - 10	8 - 10	0 - 2	4 - 6	0 - 2	0 - 2	0 - 2
Sample Date:			7/23/2004	7/23/2004	7/23/2004	7/23/2004	7/21/2004	7/21/2004	7/23/2004	7/23/2004	7/21/2004	7/23/2004	7/21/2004
Volatile Organic Compounds - SW846 8260B, mg/kg													
Acetone	500	14	<0.031 R	0.67 R	NA	0.15 R	0.037 J	0.057 J	0.12 R	<2.6 UJ	0.037	0.1 R	0.49
Benzene	21	0.02	0.01	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	<0.0061	<0.0067	0.0078
1,1-Dichloroethane	500	1.4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	<0.64	0.025	<0.0067	<0.0063
1,1-Dichloroethene	1	0.14	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	1.1	0.065	<0.0067	<0.0063
Methylene chloride	82	0.1	0.013	0.018	NA	0.019	0.014	0.013	0.023	<0.64	0.0086	0.011	0.0085
1,1,1-Trichloroethane	500	4	<0.0076	<0.0086	NA	<0.0093	<0.0082	<0.0075	<0.0093	1.7	0.012	<0.0067	<0.0063
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg													
Acenaphthene	1,000	8.4	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Acenaphthylene	1,000	8.4	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Anthracene	1,000	40	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Benzo(a)anthracene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.018	NA	NA	NA	NA	<0.0072
Benzo(b)fluoranthene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.041 J	NA	NA	NA	NA	<0.0072
Benzo(k)fluoranthene	8.4	1	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.049 J	NA	NA	NA	NA	<0.0072
Benzo(g,h,i)perylene	1,000	4.2	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.016	NA	NA	NA	NA	<0.0072
Benzo(a)pyrene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.019	NA	NA	NA	NA	<0.0072
Butyl benzyl phthalate	1,000	20	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Carbazole	31	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Chrysene	84	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.025	NA	NA	NA	NA	<0.0072
Dibenz(a,h)anthracene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
bis(2-Ethylhexyl) phthalate	44	1	<0.062	NA	<0.06	<0.061	<0.055	<0.058	NA	NA	NA	NA	<0.054
Fluoranthene	1,000	5.6	<0.0083	NA	<0.0081	<0.0082	<0.0073 UJ	0.048 J	NA	NA	NA	NA	<0.0072
Fluorene	1,000	5.6	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Indeno(1,2,3-cd)pyrene	1	1	<0.0083	NA	<0.0081	<0.0082	<0.0073	<0.0077	NA	NA	NA	NA	<0.0072
Phenanthrene	1,000	4	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.021	NA	NA	NA	NA	<0.0072
Pyrene	1,000	4	<0.0083	NA	<0.0081	<0.0082	<0.0073	0.036	NA	NA	NA	NA	<0.0072
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg													
Extractable Total Petroleum Hydrocarbons	500,000	500,000	<16,000	NA	<15,000	<15,000	<14,000	<17,000	NA	NA	NA	NA	<14,000
Metals - SW846 6010B (Total), mg/kg													
Antimony	27	--	<1.2	NA	<1.2	<1.2	<1.1	<1.2	NA	NA	NA	NA	<1.1
Barium	4,700	--	134	NA	113	130	138 J	108 J	NA	NA	NA	NA	83.4
Cadmium	34	--	<0.25	NA	<0.24	<0.25	<0.22	<0.23	NA	NA	NA	NA	<0.22
Chromium	100+	--	24.4	NA	19.2	23.5	17.5	20.6	NA	NA	NA	NA	13.4
Lead	500	--	10.8	NA	8.3	10.9	7.2 J	9.7 J	NA	NA	NA	NA	6.9
Zinc	20,000	--	66.7	NA	54.3	62.9	53.2	47.4	NA	NA	NA	NA	39.7
Metals - SW846 6010B, SPLP, mg/L													
Chromium	--	0.05	<0.005	NA	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	0.0056
Lead	--	0.015	<0.01	NA	<0.01	<0.01	<0.01	<0.01	NA	NA	NA	NA	<0.01
Cyanide, Total - SW846 9012A, mg/kg													
Cyanide, Total	1,400	--	<0.62	NA	<0.6	<0.61	<0.55	<0.58	NA	NA	NA	NA	<0.54
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg													
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not Analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Mobility Criteria of "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds, criteria is for Total PCBs
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg/kg and the RDEC for trivalent chromium is 3,900 mg/kg.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 3
POSITIVE SOIL RESULT SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS100002	DPS110002	DPS120002	DPS130002	DPS140103	DPD140103	HAS150001	HAS160001	HAS170001	DPS180608	DPS190204
Sample Depth (ft.):	RDEC	GA PMC	0 - 2	0 - 2	0 - 2	0 - 2	1 - 3	1 - 3	0 - 1	0 - 1	0 - 1	6 - 8	2 - 4
Sample Date:			7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/21/2004	7/21/2004
Volatile Organic Compounds - SW846 8260B, mg/kg													
Acetone	500	14	0.036	0.12	0.31	<0.019	<0.022	0.048	0.081	0.22	0.34	0.034	0.022
Benzene	21	0 02	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1-Dichloroethane	500	1.4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
1,1-Dichloroethene	1	0.14	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Methylene chloride	82	0.1	0.0086	0.0091	0.012	0.0083	0.011 J	0.0067 J	0.02	0.014	0.014	0.011	0.0087
1,1,1-Trichloroethane	500	4	<0.0061	<0.0054	<0.0056	<0.0048	<0.0054	<0.004	<0.01	<0.0088	<0.0085	<0.0055	<0.0052
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg													
Acenaphthene	1,000	8.4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	0 55	<0.0082	<0.0074
Acenaphthylene	1,000	8.4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	<0.093	<0.0082	0.022
Anthracene	1,000	40	<0 0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.027	<0.0084	1.4	<0.0082	0.017
Benzo(a)anthracene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.18	<0.0084	7.6	<0.0082	0.072
Benzo(b)fluoranthene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.36	<0.0084	9.9	0.02	0.1
Benzo(k)fluoranthene	8.4	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.2	<0.0084	4.9	<0.0082	0.06
Benzo(g,h,i)perylene	1,000	4 2	<0.0075	<0.0082	<0 0078	<0 0079	<0 0076	<0.0077	0 19	<0.0084	5.4	<0.0082	0.056
Benzo(a)pyrene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.26	<0.0084	8.6	<0.0082	0.075
Butyl benzyl phthalate	1,000	20	<0.056	<0.062	<0 058	<0 059	<0.057	<0.058	0.082	<0.063	<0.7	<0.061	0.065
Carbazole	31	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	<0.062	<0.063	0.87	<0.061	<0.055
Chrysene	84	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.3	<0.0084	7.6	<0.0082	0.062
Dibenz(a,h)anthracene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.039	<0.0084	1.5	<0.0082	<0 0074
bis(2-Ethylhexyl) phthalate	44	1	<0.056	<0.062	<0.058	<0.059	<0.057	<0.058	0.076	0.89	1.2	<0.061	0.065
Fluoranthene	1,000	5.6	<0.0075	<0.0082	<0 0078	<0 0079	<0.0076	<0.0077	0.49	0.036	15	0.017	0.16
Fluorene	1,000	5.6	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	<0.0082	<0.0084	0.65	<0 0082	<0.0074
Indeno(1,2,3-cd)pyrene	1	1	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.17	<0.0084	4 9	<0.0082	0.046
Phenanthrene	1,000	4	<0.0075	<0 0082	<0.0078	<0.0079	<0.0076	<0 0077	0.2	<0.0084	7.6	<0.0082	0.019
Pyrene	1,000	4	<0.0075	<0.0082	<0.0078	<0.0079	<0.0076	<0.0077	0.4	0.039	12	<0.0082	0.18
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg													
Extractable Total Petroleum Hydrocarbons	500,000	500,000	<14,000	<15,000	<14,000	<14,000	<14,000	<13,000	140,000	97,000	1,200,000	<15,000	<14,000
Metals - SW846 6010B (Total), mg/kg													
Antimony	27	--	<1.1	<1.2	<1.2	<1.2	<1.1	<1.2	<1.2	<1.3	<1.4	<1.2	<1.1
Barium	4,700	--	105	91.2	208	136	155 J	89.6 J	46.7	63.3	65	198	54.8
Cadmium	34	--	<0.22	<0.25	<0.23	<0.24	<0.23	<0.23	0.7	2.3	3	<0.24	<0 22
Chromium	100+	--	13.3	16	36.3	27.3	24.9 J	18 J	23.7	22.6	34.6	30.8	9.7
Lead	500	--	7.9	9	15.7	13.2	11.3 J	8.4 J	59 6	26.4	116	13.9	7
Zinc	20,000	--	41.6	43.9	77.7	59	57.6 J	42.5 J	191	148	4690	71.9	30.6
Metals - SW846 6010B, SPLP, mg/L													
Chromium	--	0.05	<0.005	<0.005	0.0075	0.0073	0.02	0.029	0.0089	<0.005	0.0093	0.025	<0.005
Lead	--	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.021	0.01	<0.01
Cyanide, Total - SW846 9012A, mg/kg													
Cyanide, Total	1,400	--	<0.56	<0.62	<0.58	<0 59	<0 57	<0.58	<0.62	<0.63	1.3	<0.61	<0.55
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg													
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

ug/kg = mircograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not Analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Mobility Criteria of "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds, criteria is for Total PCBs
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg/kg and the RDEC for trivalent chromium is 3,900 mg/kg.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 3
POSITIVE SOIL RESULT SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Identification:	Connecticut RSR Criteria		DPS200204	DPD200204	DPS210002	DPS220002	DPS230002	HAS240001	HAS250001	HAS260001	HAD260001
Sample Depth (ft.):	RDEC	GA PMC	2 - 4	2 - 4	0 - 2	0 - 2	0 - 2	0 - 1	0 - 1	0 - 1	0 - 1
Sample Date:			7/21/2004	7/21/2004	7/23/2004	7/21/2004	7/21/2004	7/22/2004	7/22/2004	7/22/2004	7/22/2004
Volatile Organic Compounds - SW846 8260B, mg/kg											
Acetone	500	14	0.038	0.034	0.32 R	0.52	<0.026	0.14	0.14	NA	NA
Benzene	21	0.02	<0.008	<0.0062	<0.01	<0.0082	<0.0066	<0.0082	<0.0067	NA	NA
1,1-Dichloroethane	500	1.4	<0.008	<0.0062	<0.01	<0.0082	0.0085	<0.0082	<0.0067	NA	NA
1,1-Dichloroethene	1	0.14	<0.008	<0.0062	<0.01	<0.0082	0.01	<0.0082	<0.0067	NA	NA
Methylene chloride	82	0.1	0.018	0.013	0.012	0.011	0.015	0.012	0.012	NA	NA
1,1,1-Trichloroethane	500	4	<0.008	<0.0062	<0.01	<0.0082	0.025	<0.0082	<0.0067	NA	NA
Semi-Volatile Organic Compounds - SW846 8270C, mg/kg											
Acenaphthene	1,000	8.4	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	1,000	8.4	0.019	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	1,000	40	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	1	1	0.05	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	1	1	0.072	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	8.4	1	0.057	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	1,000	4.2	0.046	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	1	1	0.045	NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	1,000	20	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	31	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	84	1	0.049	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	1	1	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl) phthalate	44	1	<0.059	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	1,000	5.6	0.11	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	1,000	5.6	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	1	1	0.035	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	1,000	4	<0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	1,000	4	0.1	NA	NA	NA	NA	NA	NA	NA	NA
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/kg											
Extractable Total Petroleum Hydrocarbons	500,000	500,000	59,000	NA	NA	NA	NA	NA	NA	70,000	45,000
Metals - SW846 6010B (Total), mg/kg											
Antimony	27	--	<1.2	NA	NA	<1.2	<1.2	1.2	<1.1	NA	NA
Barium	4,700	--	111	NA	NA	82.3	217	94	99.2	NA	NA
Cadmium	34	--	<0.24	NA	NA	<0.24	<0.25	<0.23	<0.23	NA	NA
Chromium	100+	--	24.3	NA	NA	17.7	44	19.2	17.4	NA	NA
Lead	500	--	12.3	NA	NA	8.4	17.6	14.7	9.8	NA	NA
Zinc	20,000	--	51.6	NA	NA	772	89.4	106 J	69.6	NA	NA
Metals - SW846 6010B, SPLP, mg/L											
Chromium	--	0.05	0.0064	NA	NA	<0.005	0.012	<0.005	<0.005	NA	NA
Lead	--	0.015	<0.01	NA	NA	<0.01	<0.01	<0.01	<0.01	NA	NA
Cyanide, Total - SW846 9012A, mg/kg											
Cyanide, Total	1,400	--	<0.59	NA	NA	<0.61	<0.61	<0.58	<0.57	NA	NA
Polychlorinated Biphenyls (PCBs) - SW846 8082, ug/kg											
PCB-1260	1,000*	--	NA	NA	NA	NA	NA	NA	NA	48	<37

Notes:

ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
J = Estimated; Exact concentration could not be determined
R = Data rejected following data validation review
UJ = Undetected; Reported Detection Limit is imprecise
NA = Not Analyzed
-- = No applicable criteria for this constituent
RSR = Connecticut Department of Environmental Protection Remediation Standard Regulations
RDEC = Residential Direct Exposure Criteria
GA PMC = Pollutant Mobility Criteria of "GA" classified areas
[ ] Result exceeds the RDEC or the GA PMC.
* = Criteria have not been established for individual PCB compounds, criteria is for Total PCBs
Total chromium consists of multiple chromium compounds. The RDEC for hexavalent chromium is 100 mg/kg and the RDEC for trivalent chromium is 3,900 mg/kg.

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 4
QA/QC GROUNDWATER SAMPLE SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

		A4G270219-025	A4G270219-026	A4G270130-009
Sample Location:	Equip Blank	Trip Blank	Trip Blank	Trip Blank
Sample Date:	7/22/2004	7/21/2004	7/21/2004	7/23/2004
Volatile Organic Compounds - SW846 8260B, ug/L				
Acetone	<10	<10	<10	<10
Acrylonitrile	<20	<20	<20	<20
Benzene	<1.0	<1.0	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0
n-Butylbenzene	<1.0	<1.0	<1.0	<1.0
sec-Butylbenzene	<1.0	<1.0	<1.0	<1.0
tert-Butylbenzene	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0
2-Chlorotoluene	<1.0	<1.0	<1.0	<1.0
4-Chlorotoluene	<1.0	<1.0	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<2.0	<2.0	<2.0	<2.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0
trans-1,4-Dichloro-2-butene	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0
1,3-Dichloropropene (total)	<2.0	<2.0	<2.0	<2.0
Ethylbenzene	<1.0	<1.0	<1.0	<1.0
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0
p-Isopropyltoluene	<1.0	<1.0	<1.0	<1.0
Methylene chloride	<1.0	2.7	2.7	1.9
Methyl ethyl ketone	<10	<10	<10	<10
Methyl tert-butyl ether	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<10
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0
Styrene	<1.0	<1.0	<1.0	<1.0
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	<2.0	<2.0	<2.0	<2.0

Notes:

ug/L - micrograms per liter

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 4
QA/QC GROUNDWATER SAMPLE SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Equip Blank
Sample Date:	7/22/2004
Semi-Volatile Organic Compounds - SW846 8270C, ug/L	
Acenaphthene	<0.20
Acenaphthylene	<0.20
Anthracene	<0 20
Benzo(a)anthracene	<0.20
Benzo(b)fluoranthene	<0.20
Benzo(k)fluoranthene	<0.20
Benzo(g,h,i)perylene	<0.20
Benzo(a)pyrene	<0.20
Benzoic acid	<10
4-Bromophenyl phenyl ether	<2.0
Butyl benzyl phthalate	<1.0
Carbazole	<1.0
4-Chloroaniline	<2 0
bis(2-Chloroethyl) ether	<1.0
bis(2-Chloroisopropyl) ether	<1.0
2-Chloronaphthalene	<1.0
2-Chlorophenol	<1.0
4-Chlorophenyl phenyl ether	<2.0
Chrysene	<0 20
Dibenz(a,h)anthracene	<0.20
Dibenzofuran	<1.0
3,3'-Dichlorobenzidine	<5.0
2,4-Dichlorophenol	<2.0
Diethyl phthalate	<1.0
Dimethyl phthalate	<1.0
2,4-Dimethylphenol	<2.0
2,4-Dinitrophenol	<5.0
2,4-Dinitrotoluene	<5.0
2,6-Dinitrotoluene	<5.0
Di-n-butyl phthalate	<1.0
Di-n-octyl phthalate	<1.0
bis(2-Ethylhexyl) phthalate	3 9
Fluoranthene	<0.20
Fluorene	<0.20
Hexachlorobenzene	<0.20
Hexachlorobutadiene	<1.0
Hexachlorocyclopentadiene	<10
Hexachloroethane	<1.0
Indeno(1,2,3-cd)pyrene	<0.20
Isophorone	<1.0
2-Methylnaphthalene	<0.20
2-Methylphenol	<1.0
3-Methylphenol	<1.0
4-Methylphenol	<1 0
Naphthalene	<0.20
2-Nitroaniline	<2.0
3-Nitroaniline	<2.0
4-Nitroaniline	<2.0
Nitrobenzene	<1.0
2-Nitrophenol	<2 0
N-Nitrosodiphenylamine	<1.0
N-Nitrosodi-n-propylamine	<1.0
Pentachlorophenol	<5.0
Phenanthrene	<0.20
Phenol	2.6 B
Pyrene	<0.20
2,4,5-Trichlorophenol	<5.0
2,4,6-Trichlorophenol	<5.0

Notes:

mg/kg = milligrams per kilogram
B - compound also detected in the associated method blank

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 4
QA/QC GROUNDWATER SAMPLE SUMMARY TABLE
Phase II Soil Investigation
Olin - Middletown

Sample Location:	Equip Blank
Sample Date:	7/22/2004
Connecticut Total Petroleum Hydrocarbons - CT ETPH, ug/L	
Extractable Total Petroleum Hydrocarbons	<100
Metals - SW846 6010B (Total), mg/L	
Antimony	<0.010
Barium	<0.20
Cadmium	*<0.0020*
Chromium	<0.0050
Lead	<0.0030
Zinc	<0.020

Notes:

ug/L = micrograms per liter
mg/L = milligrams per liter

1/4/2005

Prepared by: MB
Checked by: JRY

TABLE 5
WELL SEARCH SUMMARY

PHASE II INVESTIGATION AND WORK PLAN
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

Property Address	Approx. Distance and Direction from Site	Connected to Public Water
171 Smith Street, Middletown, CT	2,520 feet East	No
181 Smith Street, Middletown, CT	2,400 feet East	Yes
190 Smith Street, Middletown, CT	2,320 feet East	Yes
Smith Street, Middletown, CT	2.160 feet East	Yes
217 Smith Street, Middletown, CT	1,560 feet East	Yes
218 Smith Street, Middletown, CT	1,920 feet East	Yes
244 Smith Street, Middletown, CT	1,760 feet East	Yes
300 Smith Street, Middletown, CT	760 feet East	Yes
440-476 Smith Street, Middletown, CT	80 feet North	Yes
475 Smith Street, Middletown, CT	Subject Parcel	Yes
138 Middle Street, Middletown, CT	2,080 feet South	No
152 Middle Street, Middletown, CT	2,040 feet South	No
193 Middle Street, Middletown, CT	1,080 feet South	No
234 Middle Street, Middletown, CT	1,320 feet South	Yes
266 Middle Street, Middletown, CT	1,400 feet South	Yes
275 Middle Street, Middletown, CT	880 feet Southwest	No
280 Middle Street, Middletown, CT	1,040 feet South	Yes
330 Middle Street, Middletown, CT	560 feet South	Yes
400 Middle Street, Middletown, CT	Neighboring Parcel to South	Yes
437 Middle Street, Middletown, CT	80 feet Southwest	Yes
475 Middle Street, Middletown, CT	80 feet Southwest	No
612 Middle Street, Middletown, CT	600 feet North	Yes
688 Middle Street, Middletown, CT	1,280 feet North	No
695-699 Middle Street, Middletown, CT	1,240 feet North	Yes
701-705 Middle Street, Middletown, CT	1,680 feet North	No
724 Middle Street, Middletown, CT	1,920 feet North	Yes
754 Middle Street, Middletown, CT	2,120 feet North	Yes

Property Address	Approx. Distance and Direction from Site	Connected to Public Water
25 Industrial Park Road, Middletown, CT	200 feet Northeast	Yes
61 Industrial Park Road, Middletown, CT	680 feet Northeast	Yes
80-90 Industrial Park Road, Middletown, CT	1,120 feet Northeast	Yes
87 Industrial Park Road, Middletown, CT	840 feet Northeast	Yes
111 Industrial Park Road, Middletown, CT	1,160 feet Northeast	Yes
129 Industrial Park Road, Middletown, CT	1,360 feet Northeast	Yes
150 Industrial Park Road, Middletown, CT	1,400 feet Northeast	Yes
155 Industrial Park Road, Middletown, CT	1,600 feet Northeast	Yes
175 Industrial Park Road, Middletown, CT	1,880 feet Northeast	Yes
245 Miner Street, Middletown, CT	1,880 feet Southeast	No
247 Miner Street, Middletown, CT	1,920 feet Southeast	No
373 Miner Street, Middletown, CT	1,360 feet Southeast	No
389 Miner Street, Middletown, CT	1,320 feet Southeast	No
413 Miner Street, Middletown, CT	1,320 feet Southeast	No
447 Miner Street, Middletown, CT	1,320 feet Southeast	No
519 Miner Street, Middletown, CT	1,640 feet Southeast	No
51 Boardman Lane, Middletown, CT	1,000 feet Southwest	No
63 Boardman Lane, Middletown, CT	1,200 feet Southwest	No
77 Boardman Lane, Middletown, CT	1,320 feet Southwest	No
129 Boardman Lane, Middletown, CT	1,600 feet Southwest	No
132 Boardman Lane, Middletown, CT	1,600 feet Southwest	No
169 Boardman Lane, Middletown, CT	1,960 feet Southwest	No
218 Boardman Lane, Middletown, CT	1,000 feet West	No

Property locations and addresses were confirmed by in field observation. These addresses were compared to water connection records maintained by the City of Middletown Water Department.

TABLE 6
PROPOSED SOIL ANALYTICAL PROGRAM SUMMARY

ADDITIONAL INVESTIGATION WORK PLAN
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

EXPLORATION TYPE	MEDIA	LOCATION ID	No. of SAMPLES	VOCs	SVOCs	CT ETPH	Total Sb	Total Ba	Total Cd	Total Cr	Total Pb	Total Zn	SPLP Cr	SPLP Pb	SPLP Zn	Total Cyanide	SPLP Cyanide	QA/QC
AOC #6: Former Raw Chemical Storage Area																		
DIRECT PUSH	SOIL	DP-27	2	X														
DIRECT PUSH	SOIL	DP-28	2	X														
DIRECT PUSH	SOIL	DP-29	2	X														
DIRECT PUSH	SOIL	DP-30	2	X														
DIRECT PUSH	SOIL	DP-31	2	X														
DIRECT PUSH	SOIL	DP-32	2	X														
AOC #12: Discharge Point for Roof Drain Leaders																		
DIRECT PUSH	SOIL	DP-35	3		X	X				X	X	X	X	X	X	X	X	X
DIRECT PUSH	SOIL	DP-36	2		X	X				X	X	X	X	X	X	X	X	
DIRECT PUSH	SOIL	HA-37	1		X	X				X	X	X	X	X	X	X	X	
DIRECT PUSH	SOIL	HA-38	1		X	X				X	X	X	X	X	X	X	X	
DIRECT PUSH	SOIL	HA-39	1		X	X				X	X	X	X	X	X	X	X	
DIRECT PUSH	SOIL	HA-40	1		X	X				X	X	X	X	X	X	X	X	
AOC #13: Former Non-contact Cooling Water Recovery System																		
GRAB SAMPLE	SOIL	GS-41	2	X	X	X	X	X	X	X	X	X				X		X
GRAB SAMPLE	SOIL	GS-42	1	X	X	X	X	X	X	X	X	X				X		
GRAB SAMPLE	SOIL	GS-43	1	X	X	X	X	X	X	X	X	X				X		
GRAB SAMPLE	SOIL	GS-44	1	X	X	X	X	X	X	X	X	X				X		

Notes:

ID - Identification
VOCs = Volatile Organic Compounds
SVOCS = Semi-Volatile Organic Compounds
CT ETPH = Connecticut Extractable Total Petroleum Hydrocarbons
Sb = Antimony, Ba = Barium, Cd = Cadmium, Cr = Chromum, Pb = Lead, Zn = Zinc
SPLP = Synthetic Precipitation Leaching Procedure
AOC = Area of Concern
Note for AOC #13. Where levels of total metals when using the 20X dilution factor exceed the PMC, SPLP analysis will be conducted on that particular metal for direct comparison.

TABLE 7
PROPOSED GROUNDWATER ANALYTICAL PROGRAM SUMMARY

ADDITIONAL INVESTIGATION WORK PLAN
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

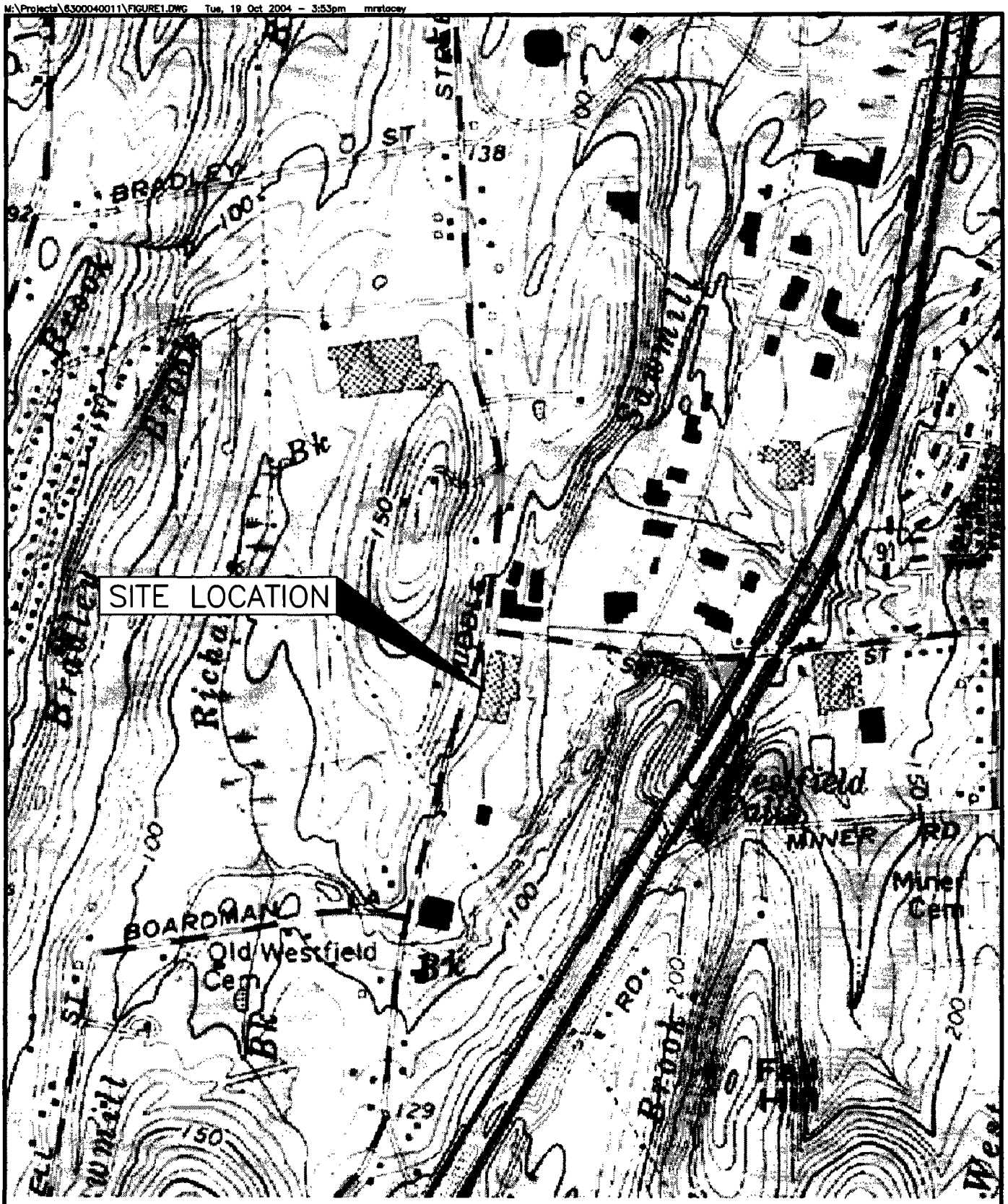
Well ID	Location	Status	Well Depth	VOCs	SVOCs	CT ETPH	Total Cr	Total Pb	Total Zn	Total Cyanide	QA/QC
MW-1	Background	Existing	Shallow Aquifer	X	X	X	X	X	X	X	
MW-2	Downgrade of Former Raw Chemical Storage Area	Existing	Shallow Aquifer	X							
MW-4	Interior by Former Paint Pit	Existing	Shallow Aquifer	X							
MW-6	Downgrade of Former Non-contact Cooling Water Recovery System	To Be Installed	Shallow Aquifer	Dependent upon results of subsurface vault evaluation							
MW-7	Downgrade of Former Raw Chemical Storage Area	To Be Installed	Shallow Aquifer	X							
MW-8	Downgrade of Loading Docks and Flammable Chemical Storage Area	To Be Installed	Shallow Aquifer	X							
MW-9	Adjacent to Roof Drain Leader Discharge Location	To Be Installed	Shallow Aquifer	X	X	X	X	X	X	X	X

Notes:

ID - Identification
VOCs = Volatile Organic Compounds
SVOCS = Semi-Volatile Organic Compounds
CT ETPH = Connecticut Extractable Total Petroleum Hydrocarbons
Cr = Chromium, Pb = Lead, Zn = Zinc
AOC = Area of Concern

FIGURES

M:\Projects\6300040011\FIGURE1.DWG Tue, 19 Oct 2004 - 3:53pm mrstacey



Quadrangle Source: MAPTEC USGS
Topographic Series Connecticut, Edition 2.0

0 500 1000 2000
SCALE IN FEET

Prepared by: MRS | Checked by: JRY

FIGURE 1
SITE LOCATION MAP
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT
MACTEC Engineering and Consulting

P:\Projects\CADD\Projects\6300040011\FIGURE2.DWG Mon, 08 Nov 2004 - 11:43am rwpollock

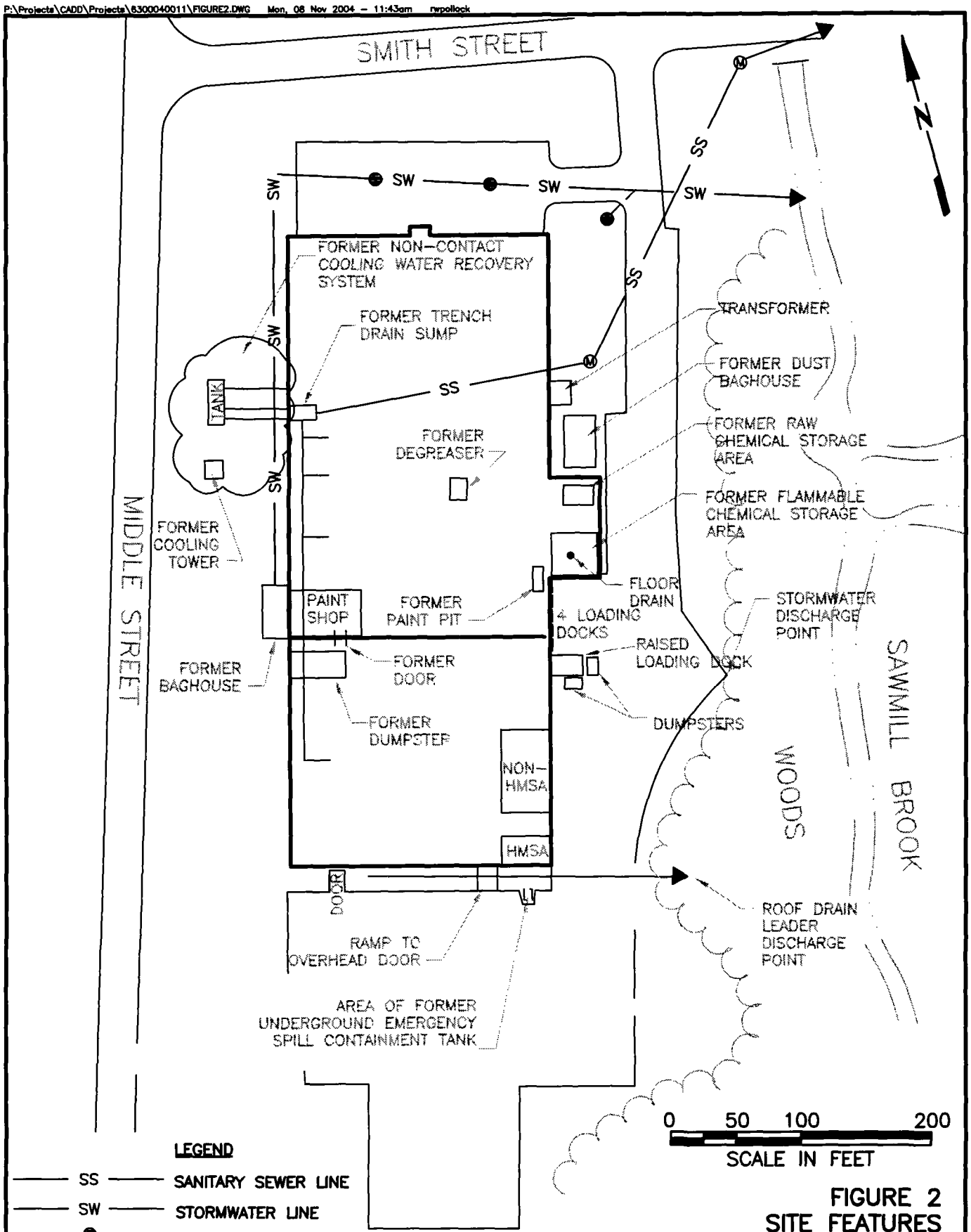
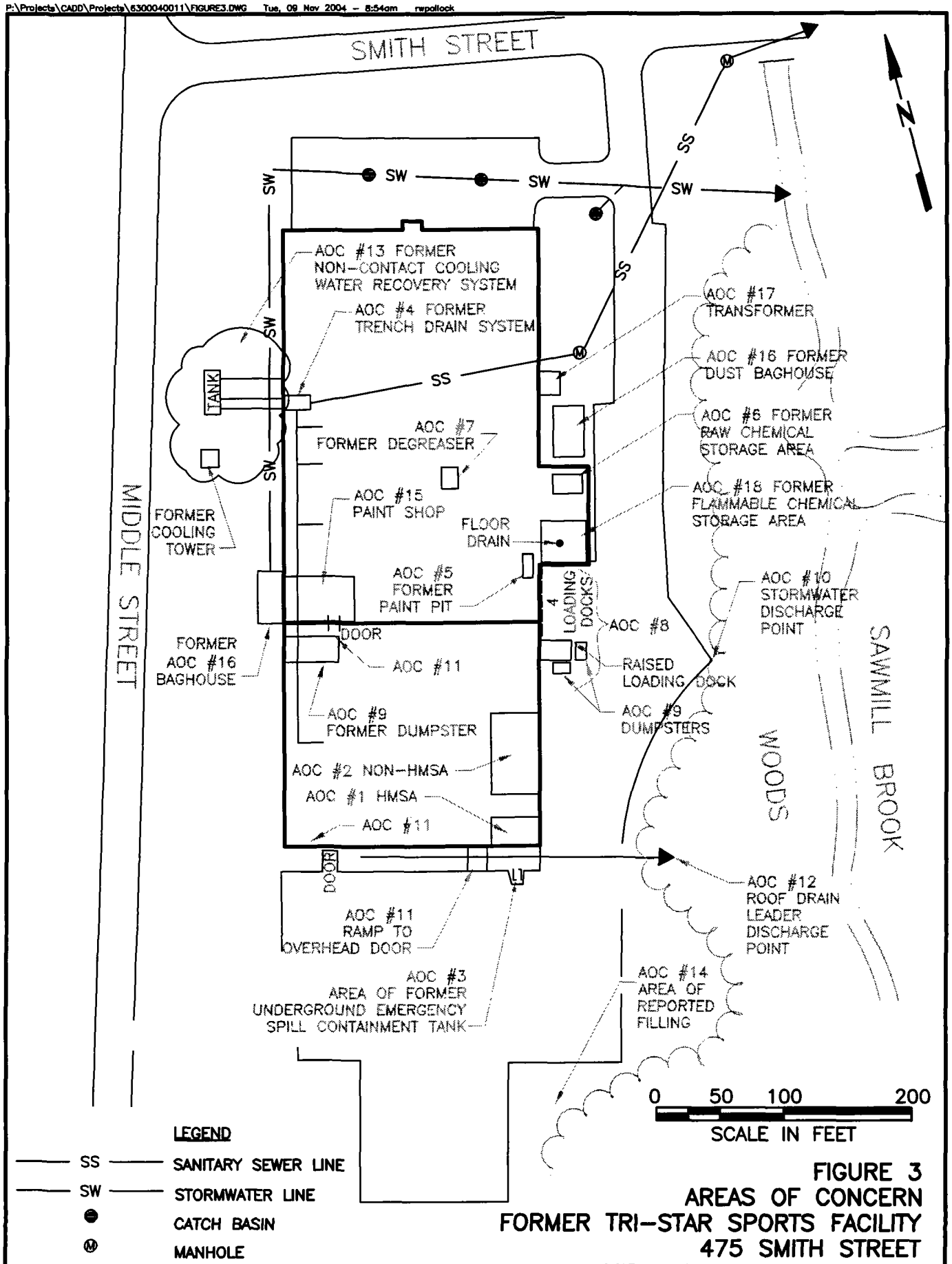


FIGURE 2
SITE FEATURES
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

Prepared by: MRS | Checked by: JRY

MACTEC Engineering and Consulting

P:\Projects\CADD\Projects\6300040011\FIGURE3.DWG Tue, 09 Nov 2004 - 8:54am rwpollock



Prepared by: MRS | Checked by: JRY

FIGURE 3
AREAS OF CONCERN
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

MACTEC Engineering and Consulting

P:\Projects\CADD\Projects\6300040011\FIGURE4.DWG Tue, 09 Nov 2004 - 8:53am rspollock

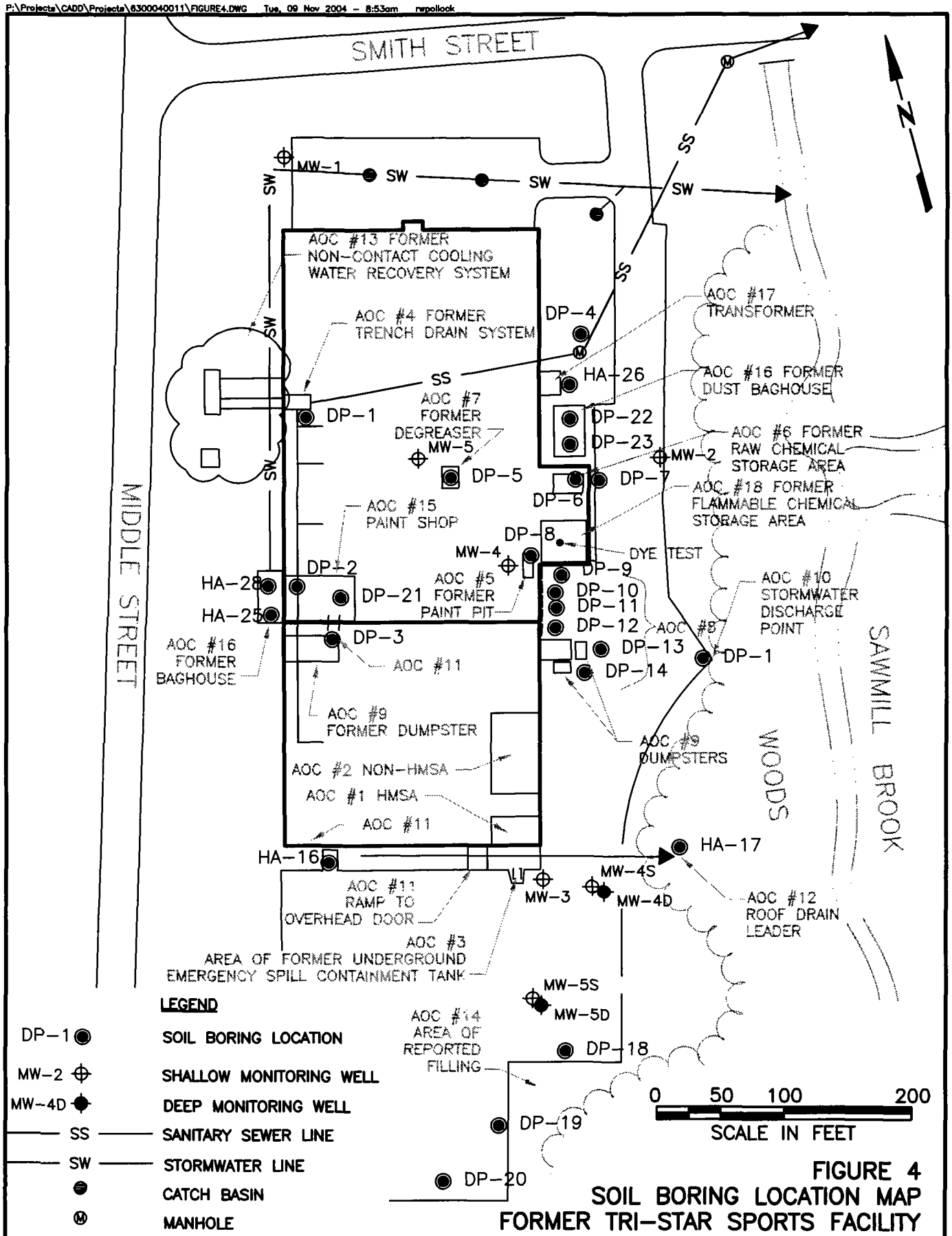
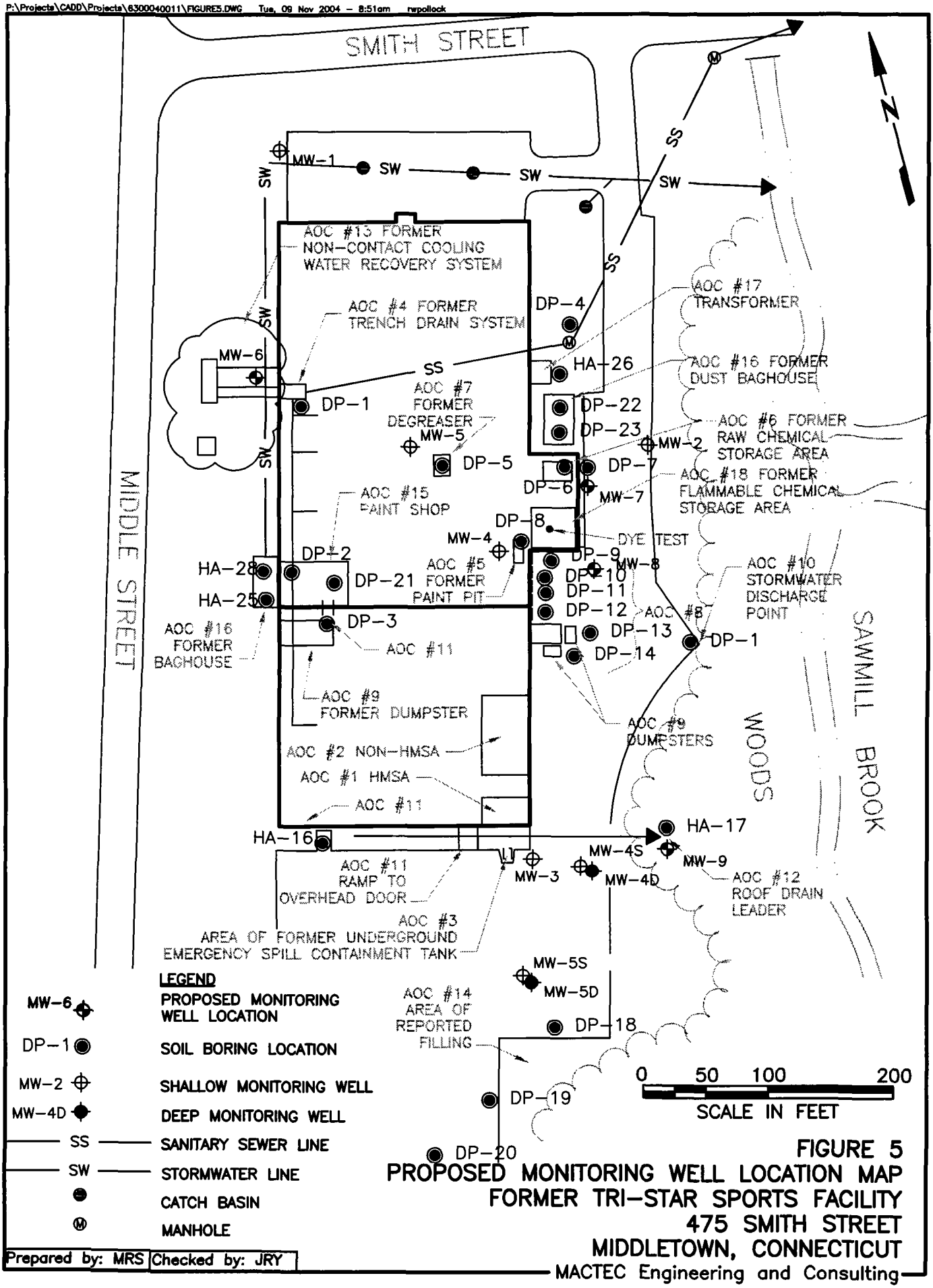


FIGURE 4
SOIL BORING LOCATION MAP
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

Prepared by: MRS | Checked by: JRY

MACTEC Engineering and Consulting

P:\Projects\CADD\Projects\6300040011\FIGURE5.DWG Tue, 09 Nov 2004 - 8:51am rwpollock



Prepared by: MRS Checked by: JRY

FIGURE 5
PROPOSED MONITORING WELL LOCATION MAP
FORMER TRI-STAR SPORTS FACILITY
475 SMITH STREET
MIDDLETOWN, CONNECTICUT

MACTEC Engineering and Consulting

APPENDIX A

FIELD DATA RECORDS

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-1
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~8'	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12	Casing Size:
			Core Size:
Logged By: J. Welch	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			6"	Macro	Brown, dense, dry, fine sand, silt and concrete	SM	7.4		
	4-8			48	Macro	Brown, dense, moist to wet, fine SAND and silt, some clay	SM	7.4		VOCs SVOCs ETPH Metals
	8-12			48	Macro	Brown, dense, wet, fine sand, silt, some clay	SM	7.4		

Notes

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 475 Saxton St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-2
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~10'	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size:
Logged By:	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			6	Macro	Brown, medium dense, dry, fine sand, silt and concrete	SM	111		
	4-8			10	Macro	Brown, dense, dry, fine sand and silt	SM	88.8		VOCs
	8-12			48	Macro	Brown, dense, moist ~~to~~ wet, fine SAND and silt	SM	14.8		SVOCs ETPH Metals

Notes

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MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-3
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~12'	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16	Casing Size:
			Core Size:
Logged By: J. Yelch	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			42	Macro	Brown, medium dense, moist, fine SAND and silt, little gravel	SM	12.3		VOCs SVOCs ETPH Metals
	4-8			42	Macro	Brown, dense, dry, fine to medium SAND	SP	12.3		
	8-12			ND	Macro	Brown, moist, fine to medium SAND	SP	19.7		
	12-16			ND	Macro	Brown, dense, wet, fine to medium SAND, little silt	SP	15.3		

Notes

ND - Not Determined

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MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-4
Page No.: 1

Contractor:	Zebra	Driller:	N. Plank	Date Started:	07/21/04	Refusal Depth:	
Method:	Geoprobe	Water Depth:	~12	Date Finished:	07/21/04	Rock Cored (FT):	
Elevation:		Soil Drilled:		Total Depth:	16	Casing Size:	
						Core Size:	
Logged By:	J. Reich	Checked By:		Screened Interval:			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			24	Macro	Brown, medium dense, dry, fine SAND and silt	SM	0.0		
	4-8			22	Macro	Brown, medium dense, moist, fine SAND and silt	SM	0.0		
	8-12			27	Macro	Brown, medium dense, moist, fine SAND and silt	SM	0.0		VOC SVOC ETPH Metals
	12-16			39	Macro	Brown, dense, wet, fine sand and silt	SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-5
Page No.:

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~12	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16	Casing Size:
			Core Size:
Logged By: J. Veich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			48	Macro	Brown, medium dense, dry, fine sand and silt	SM	85.7		VOCs
	4-8			48	Macro	Brown, medium dense, dry, fine SAND	SP	41.7		
	8-12			48	Macro	Brown, medium dense, dry to moist, fine SAND	SP	32.9		
	12-16			48	Macro	Brown, medium dense, wet fine sand	SP	28.5		

Notes

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-6
Page No.:

Contractor: Zebra	Driller: N. Plante	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~12'	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16	Casing Size:
			Core Size:
Logged By: J. Reich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			37	Macro	Brown, medium dense, moist, fine SAND and silt		4.7		
	4-8			42	Macro	Brown, dense, moist, fine SAND and silt		112		VOCs
	8-12			48	Macro	Brown, dense, moist, fine sand, silt, little clay		24.1		
	12-16			48	Macro	Brown, dense, wet, fine sand, silt, little clay		15.3		

Notes

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-7
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~12'	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16	Casing Size:
			Core Size:
Logged By: J. Welch	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			48	Macro	Brown, medium dense, dry, fine SAND and silt	SM	4.7		VOCs
	4-8			48	Macro	Brown, medium dense, dry, fine SAND and silt	SM	4.7		
	8-12			48	Macro	Brown, dense, moist, fine sand and silt	SM	0.0		
	12-16			48	Macro	Brown, dense, wet, fine SAND and silt	SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: OP-8
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~10'	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12	Casing Size:
			Core Size:
Logged By: J. Veich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			40	Macro	Brown, medium dense, dry, fine SAND, SILT, little gravel		4.7		VOCs
	4-8			48	Macro	Brown, dense, moist, fine SAND and SILT		19.7		
	8-12			48	Macro	Brown, dense, moist to wet, fine SAND, SILT, little clay		15.3		

Notes

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MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-9
Page No.: 1

Contractor:	Zebra	Driller:	N. Plank	Date Started:	07/21/04	Refusal Depth:	
Method:	Geoprobe	Water Depth:	~10'	Date Finished:	07/21/04	Rock Cored (FT):	
Elevation:		Soil Drilled:		Total Depth:	12'	Casing Size:	
						Core Size:	
Logged By:	J. Reich	Checked By:		Screened Interval:			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			24	Macro	Brown, medium dense, moist, fine SAND and SILT	SM	1.6		VOCs SVOCs ETPH Metals
	4-8			48	Macro	Brown, dense, moist, fine SAND and silt	SM	0.0		
	8-12			48	Macro	Brown, dense, moist to wet, fine SAND and silt, some clay	SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin – Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-10
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: NA	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 2	Casing Size:
			Core Size:
Logged By: J. Veith	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-2			20	Macro	Brown, medium dense, dry, fine SAND and silt, little gravel	SM	0.0		VOCs SVOCs ETPH Metals

Notes

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MACTEC, Inc.

PROJECT NAME: Olin – Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-11
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: NA	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 2	Casing Size:
			Core Size:
Logged By: J. Reich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-2			21	Macro	Brown, medium dense, moist, fine SAND and silt	SM	78		VOCs SVOCs ETPH Metals

Notes

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MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-11 cont'd
Page No.: 1

Contractor:	Zebra	Driller:	N. Plank	Date Started:	07/23/04	Refusal Depth:	
Method:	Geoprobe	Water Depth:	~8	Date Finished:	07/23/04	Rock Cored (FT):	
Elevation:		Soil Drilled:		Total Depth:	12	Casing Size:	
						Core Size:	
Logged By:	J. Yeich	Checked By:		Screened Interval:			

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			28	Macro	Brown, medium dense, wet, fine SAND and silt		28.5		
	4-8			48	Macro	Brown, dense, moist to wet, fine SAND and silt		10.9		
	8-12			48	Macro	Brown, dense, wet, fine SAND and silt		6.5		

Notes

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-12
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: NA	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 2'	Casing Size:
			Core Size:
Logged By: J. Veich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-2			24	Macro	Brown, medium dense, dry, fine SAND and silt	SM	0.0		VOCs SVOCs ETPH Metals

Notes

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MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-13
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~10'	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size:
Logged By: J. Veich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			48	Macro	Brown, medium dense, dry, fine SAND and SILT	SM	0.0		VOCs SVOCs ETPH Metals
	4-8			38	Macro	Brown, dense, moist, fine SAND and SILT	SM	1.6		
	8-12			24	Macro	Brown, dense, moist to wet, fine SAND and SILT	SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 475 Smith St, Middletown CT
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-14
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: NA	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 3'	Casing Size:
			Core Size:
Logged By: J. Reich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-3			36"	Macro	Brown, medium dense, dry, fine SAND and silt	SM	0.0		VOCs SVOCs ETPH Metals

Notes

MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin- Middletown

JOB NUMBER: 6300040011

DATE: 07/22/04

FIELD SAMPLE NUMBER: HA-15

ACTIVITY TIME: START 14:10 END 14:30

BOTTLE TIME: 14:20

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-1'

TYPE OF SAMPLE: [X] DISCRETE [ ] COMPOSITE

SAMPLE OBSERVATIONS

ODOR: _____

COLOR: Brown

TYPE OF SOIL: [ ] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 0.0 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
	VOCs by 8260	5035	1-40mL vial	
			2-40mL vial	
			1-2oz plastic	
	SVOCs by 8270	Cool	1-4oz glass	
	CT ETPH	Cool	1-4oz glass	
	Total Metals (Sb, Pb, Cr, Cd, Ba, Zn)	Cool	1-2oz glass	
	Total Cyanide			

NOTES/SKETCH:

SAMPLED BY: Jon Reich

RECEIVED BY: _____

MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin - Middletown

JOB NUMBER: 6300040011

DATE: 07/23/04

FIELD SAMPLE NUMBER: HA-16

ACTIVITY TIME: START 12:55 END 13:15

BOTTLE TIME: 13:10

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-1

TYPE OF SAMPLE: [X] DISCRETE [ ] COMPOSITE

SAMPLE OBSERVATIONS

ODOR: _____

COLOR: Brown

TYPE OF SOIL: [ ] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 5.6 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
[X]	VOCs by 8260	5035	2-40 mL vials	[ ] 1-2 oz Plastic
[ ]			1-40 mL vials	[ ]
[X]	SVOCs by 8270	Cool	1-4 oz Glass	[ ]
[X]	CT ETPH	Cool	1-4 oz Glass	[ ]
[X]	Total Metals (Pb, Ni, Ba, Cr, Cd, Zn)	Cool	1-2 oz Glass	[ ]
[X]	Total Cyanide	Cool	1-2 oz Glass	[ ]
[ ]				[ ]

NOTES/SKETCH:

SAMPLED BY: Jan Reich

RECEIVED BY: _____

MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin- Middletown

JOB NUMBER: 6300040011

DATE: 07/22/04

FIELD SAMPLE NUMBER: HA-17

ACTIVITY TIME: START 13:20 END 14:10

BOTTLE TIME: 14:00

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-1

TYPE OF SAMPLE: [X] DISCRETE [ ] COMPOSITE

SAMPLE OBSERVATIONS

ODOR: _____

COLOR: Dark Brown

TYPE OF SOIL: [X] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 0.0 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
[ ]	VOCs by 8260	5035	2-40mL vials	[ ]
[ ]			1-40mL vials	[ ]
[ ]			1-2oz plastic	[ ]
[ ]	SVOCs by 8270	Cool	1-4oz glass	[ ]
[ ]	CT BTPH	Cool	1-4oz glass	[ ]
[ ]	Total Metals (Pb, Sb, Cr, Cd, Ba, Zn)	Cool	1-4oz glass	[ ]
[ ]	Total Cyanide			

NOTES/SKETCH:

SAMPLED BY: Jon Reich

RECEIVED BY: _____

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-18
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~ 8'	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size:
Logged By: J. Reich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			48	Macro	Brown, medium dense, dry, fine SAND and silt	SM	1.6		
	4-8			48	Macro	Brown, dense, moist, fine SAND and silt	SM	1.6		VOCs SVOCs ETPH Metals
	8-12			48	Macro	Brown, dense, wet, fine SAND and silt	SM	0.0		

Notes

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MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown, CT
CLIENT: Olin

FIELD BORING LOG

Boring No.: OP-19
Page No.: 1

Contractor: Zebra	Driller: N. Plante	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~8'	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size:
Logged By: J. Veith	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			30	Macro	Brown, medium dense, moist, medium sand	SP	11.0		VOCs SVOCs ETPH Metals
	4-8			39	Macro	Brown, dense, moist, fine SAND and silt	SM	1.6		
	8-12			48"	Macro	Brown, dense, wet, fine SAND and silt	SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-20
Page No.: 1

Contractor: Zebra	Driller: E. Plantz	Date Started: 7/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~8	Date Finished: 7/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 11'	Casing Size:
			Core Size:
Logged By: J. Veich	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			38	Macro	Brown, dense, fine SAND and silt, moist	SM	8.0		VOCs SVOCs ETPH Metals
	4-8			48	Macro	0-16" Brown, medium dense, moist, medium sand 16-48" Brown, dense, moist, fine sand and silt	SP SM	4.7		
	8-11			36	Macro	0-24" Brown, medium dense, wet, medium SAND 24-36" Brown, dense, moist, fine SAND and silt	SP SM	0.0		

Notes

MACTEC, Inc.

PROJECT NAME: Olin- Middletown
LOCATION: 475 Smith St, Middletown CT
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-21
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/23/04	Refusal Depth:
Method: Geoprobe	Water Depth: N12	Date Finished: 07/23/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 16'	Casing Size:
			Core Size:
Logged By: J. Kern	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			48	Macro	Brown, medium dense, moist, fine SAND and SILT	SM	24.6		VOCs
	4-8			33	Macro	Brown, dense, dry, fine to medium SAND, little SILT	SM	14.8		
	8-12			41	Macro	Brown, dense, dry, fine to medium SAND, little SILT	SM	14.8		
	12-16			48	Macro	Brown, dense, wet, fine to medium SAND, little SILT	SM	12.8		

Notes

MACTEC, Inc.

PROJECT NAME: Olin - Middletown
LOCATION: 475 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG

Boring No.: DP-22
Page No.: 1

Contractor: Zebra	Driller: N. Pianta	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: NA	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 2	Casing Size:
			Core Size:
Logged By: J. Yersh	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-2			20	Macro	Brown, fine SAND and silt, medium dense, dry	SM	11.1		VOCs Metals

Notes

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MACTEC, Inc.

PROJECT NAME: Olin – Middletown
LOCATION: 425 Smith St, Middletown
CLIENT: Olin

FIELD BORING LOG
Boring No.: DP-23
Page No.: 1

Contractor: Zebra	Driller: N. Plank	Date Started: 07/21/04	Refusal Depth:
Method: Geoprobe	Water Depth: ~8'	Date Finished: 07/21/04	Rock Cored (FT):
Elevation:	Soil Drilled:	Total Depth: 12'	Casing Size:
			Core Size:
Logged By: J. Keith	Checked By:	Screened Interval:	

Elevation	Sample Information: Depth (feet)	Casing Blows/Foot	Sample Designation	Recovery (inches)	Sample Type	Sample Description and Classification	Group Designation	PID Reading	Well/Piezometer Details	Lab Tests Performed
	0-4			32"	Micro	Brown, medium dense, dry, fine sand and silt	SM	0.0		VOCs metals
	4-8			48"	Micro	Brown, dense, moist, fine SAND and silt	SM	0.0		
	8-12			42	Micro	Brown, dense, wet, fine SAND and silt, little clay	SM	0.0		

Notes

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MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin - Middletown

JOB NUMBER: 6300040011

DATE: 07/22/04

FIELD SAMPLE NUMBER: HA-24

ACTIVITY TIME: START 11:55 END 12:15

BOTTLE TIME: 12:05

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-1'

TYPE OF SAMPLE: [X] DISCRETE [ ] COMPOSITE

SAMPLE OBSERVATIONS

ODOR: _____

COLOR: Brown

TYPE OF SOIL: [ ] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 0.0 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
[X]	VOC by 8260	5035	2-40 mL	[ ]
[ ]			1-40 mL	[ ]
[ ]			1-2oz Plastic	[ ]
[X]	total metals by 6010B	Cool	1-2oz Glass	[ ]
[ ]				[ ]
[ ]				[ ]
[ ]				[ ]

NOTES/SKETCH:

SAMPLED BY: Jon Reich

RECEIVED BY: _____

MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin - Middletown

JOB NUMBER: 6300040011

DATE: 07/22/04

FIELD SAMPLE NUMBER: HA-25

ACTIVITY TIME: START 12:15 END 12:35

BOTTLE TIME: 12:25

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-1

TYPE OF SAMPLE: [X] DISCRETE [ ] COMPOSITE

SAMPLE OBSERVATIONS

ODOR _____

COLOR Brown

TYPE OF SOIL: [ ] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 0.0 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
[X]	VOCs by 8260	5035	2-40 mL 1-40 mL 1-2oz plastic	[ ]
[ ]				[ ]
[ ]				[ ]
[X]	total metals by 6010B	Cool	1-2oz glass	[ ]
[ ]				[ ]
[ ]				[ ]
[ ]				[ ]

NOTES/SKETCH:

SAMPLED BY: Jon Reich

RECEIVED BY: _____

MACTEC, Inc.

FIELD DATA RECORD - SURFACE SOIL SAMPLING / TEST PITS

PROJECT: Olin- Middletown

JOB NUMBER: 6300040011

DATE: 07/22/04

FIELD SAMPLE NUMBER: HA-26

ACTIVITY TIME: START 14:40 END 15:00

BOTTLE TIME: 14:50

QC SAMPLES COLLECTED:

SURFACE SOIL DATA

ASSOCIATED TRIP BLANK:

RINSATE BLANK:

DEPTH OF SOIL: 0-2

TYPE OF SAMPLE: [ ] DISCRETE [X] COMPOSITE

SAMPLE OBSERVATIONS

ODOR: _____

COLOR: Brown

TYPE OF SOIL: [ ] ORGANIC [X] SAND [ ] GRAVEL [ ] CLAY [ ] OTHER _____

EQUIPMENT FOR COLLECTION: [X] HAND CORER [ ] S.S. SPOON [ ] ALUMINIUM PAN [ ] S.S. SPATULA [ ] OTHER _____

DECON FLUIDS USED: [ ] DI WATER N2 PURGE [X] POTABLE WATER [X] LIQUINOX [ ] OTHER _____

PID = 0.0 ppm

ANALYTICAL PARAMETERS

SOIL	METHOD NUMBER	PRESERVATION METHOD	BOTTLE TYPE VOLUME REQUIRED	SAMPLE COLLECTED
	VOCs by 8260	5035	1-40mL vial 2-40mL vials 1-2oz plastic	
	PCBs by 8082	Cool	1-4oz glass	

NOTES/SKETCH:

SAMPLED BY: Jan Kroh

RECEIVED BY: _____

APPENDIX B

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

OLIN-MIDDLETOWN, CT

Lot #: A4G270130

Dave Clymer

Mactec Engineering & Consultin
1080 Elm Street
Rocky Hill, CT 06067

SEVERN TRENT LABORATORIES, INC.

Roger K. Toth
Project Manager

August 19, 2004

CASE NARRATIVE

A4G270130

The following report contains the analytical results for eight solid samples and one quality control sample submitted to STL North Canton by Mactec Engineering & Consulting Inc. from the Olin-Middletown, CT Site. The samples were received July 24, 2004, according to documented sample acceptance procedures.

The STL Connecticut data is reported under a separate lot, A4G270219, for samples 1, 2, and 3.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Clymer and Emmet Curtis on August 11, 2004. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Roger K. Toth, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 5.7°C.

See STL's Cooler Receipt Form for additional information.

GC/MS VOLATILES

The matrix spike/matrix spike duplicate(s) for batch(es) 4217361 and 4219273 had RPD's outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GC/MS SEMIVOLATILES

The matrix spike/matrix spike duplicate(s) for batch(es) 4209650 had RPD's outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

METALS

The matrix spike/matrix spike duplicate(s) for batch(es) 4210033 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

No ICP Trace Form IX provided for batch(es) 4210033. The serial dilution was performed on a different sample from the same QC batch(es).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

Alabama (#41170), California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#100439), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

Y:\Barb\STL headers\Qc846-Narrative_012804.doc, Revised: 01/28/04 DJL

ANALYTICAL METHODS SUMMARY

M4G270130

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Volatile Organics by GC/MS	SW846 8260B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A4G270130

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GLWQK	001	DPS010406	07/23/04	09:20
GLWQ4	002	DPS020408	07/23/04	09:55
GLWRC	003	DPS020810	07/23/04	09:55
GLWRQ	004	DPS030002	07/23/04	10:50
GLWRT	005	DPS050002	07/23/04	11:20
GLWRW	006	DPS060406	07/23/04	11:45
GLWRX	007	DPS080002	07/23/04	12:10
GLWR1	008	DPS210002	07/23/04	10:15
GLWR4	009	TRIP BLANK	07/23/04	

NOTE(S):

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

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: MACTEC	Project Manager: David Clymer	Date: 07/23/04	Chain of Custody Number: 124410
Address: 1088 Elm Street, Suite 202	Telephone Number (Area Code)/Fax Number: (860) 529-7191/(860) 529-7448	Lab Number:	Page 1 of
City: Rocky Hill; State: CT; Zip Code: 06067	Site Contact:	Lab Contact:	
Project Name and Location (State): Olin - Middletown, CT	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 59652			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Methanol	VOC by 8260	(SW35 prep)	SVOC by 8270	CT ETPH	Total Sb, Ba,	Cd, Cr, Pb, Zn	Total Cyanide		SPLP Sb Ba,	Cd, Cr, Pb, Zn	SPLP Cn	Special Instruc Conditions of F
DPS010406	07/23/04	09:20				X	5				2		1	X		X		X		X		H_2O		H_2O	
DPS020408		09:55					1				2		1												
DPS020810		09:55					4									X		X		X		HF		HF	
DPS030002		10:50					5				2		1	X								H_2O		H_2O	
DPS050002		11:20					1				2		1												
DPS060406		11:45					1				2		1												
DPS080002		12:10					1				2		1												
DPS210002		10:15					1				2		1												

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

1. Relinquished By: [signature]	Date: 07/23/04	Time: 14:30	1. Received By: Shipping Cooler / FedEx	Date: 07/23/04	Time: 1:
2. Relinquished By	Date	Time	2. Received By: Natalie J Buhler	Date: 7-24-04	Time: 10
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

GC/MS Volatiles

Lot-Sample #...:	A4G270130-001	Work Order #...:	GLWQK1AM	Matrix.....:	SO
Date Sampled...:	07/23/04 09:20	Date Received..:	07/24/04		
Prep Date.....:	08/03/04	Analysis Date..:	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.23	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	19	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0076	mg/kg
Acetone	ND	0.031	mg/kg
Acrylonitrile	ND	0.15	mg/kg
Benzene	**0.010**	**0.0076**	**mg/kg**
Bromodichloromethane	ND	0.0076	mg/kg
Bromoform	ND	0.0076	mg/kg
Methyl ethyl ketone	ND	0.031	mg/kg
n-Butylbenzene	ND	0.0076	mg/kg
sec-Butylbenzene	ND	0.0076	mg/kg
tert-Butylbenzene	ND	0.0076	mg/kg
Carbon disulfide	ND	0.0076	mg/kg
Carbon tetrachloride	ND	0.0076	mg/kg
Chlorobenzene	ND	0.0076	mg/kg
Dibromochloromethane	ND	0.0076	mg/kg
Chloroethane	ND	0.0076	mg/kg
Chloroform	ND	0.0076	mg/kg
Chloromethane	ND	0.0076	mg/kg
2-Chlorotoluene	ND	0.0076	mg/kg
4-Chlorotoluene	ND	0.0076	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.015	mg/kg
1,2-Dibromoethane	ND	0.0076	mg/kg
1,2-Dichlorobenzene	ND	0.0076	mg/kg
1,3-Dichlorobenzene	ND	0.0076	mg/kg
1,4-Dichlorobenzene	ND	0.0076	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0076	mg/kg
Dichlorodifluoromethane	ND	0.0076	mg/kg
1,1-Dichloroethane	ND	0.0076	mg/kg
1,2-Dichloroethane	ND	0.0076	mg/kg
cis-1,2-Dichloroethene	ND	0.0076	mg/kg
trans-1,2-Dichloroethene	ND	0.0076	mg/kg
1,1-Dichloroethene	ND	0.0076	mg/kg
1,2-Dichloropropane	ND	0.0076	mg/kg
1,3-Dichloropropene (total)	ND	0.015	mg/kg
Ethylbenzene	ND	0.0076	mg/kg
Isopropylbenzene	ND	0.0076	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

GC/MS Volatiles

Lot-Sample #...: A4G270130-001 **Work Order #...:** GLWQK1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0076	mg/kg
Methylene chloride	**0.013**	**0.0076**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.031	mg/kg
Methyl tert-butyl ether	ND	0.031	mg/kg
n-Propylbenzene	ND	0.0076	mg/kg
Styrene	ND	0.0076	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0076	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0076	mg/kg
Tetrachloroethene	ND	0.0076	mg/kg
Toluene	ND	0.0076	mg/kg
1,2,4-Trichloro-benzene	ND	0.0076	mg/kg
1,1,1-Trichloroethane	ND	0.0076	mg/kg
1,1,2-Trichloroethane	ND	0.0076	mg/kg
Trichloroethene	ND	0.0076	mg/kg
Trichlorofluoromethane	ND	0.0076	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0076	mg/kg
1,2,4-Trimethylbenzene	ND	0.0076	mg/kg
1,3,5-Trimethylbenzene	ND	0.0076	mg/kg
Vinyl chloride	ND	0.0076	mg/kg
Xylenes (total)	ND	0.015	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(59 - 138)
1,2-Dichloroethane-d4	106	(61 - 130)
Toluene-d8	112	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020408

GC/MS Volatiles

Lot-Sample #...: A4G270130-002 Work Order #...: GLWQ41AC Matrix.....: SO
Date Sampled...: 07/23/04 09:55 Date Received..: 07/24/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.43 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 17 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0086	mg/kg
Acetone	**0.67**	**0.034**	**mg/kg**
Acrylonitrile	ND	0.17	mg/kg
Benzene	ND	0.0086	mg/kg
Bromodichloromethane	ND	0.0086	mg/kg
Bromoform	ND	0.0086	mg/kg
Methyl ethyl ketone	ND	0.034	mg/kg
n-Butylbenzene	ND	0.0086	mg/kg
sec-Butylbenzene	ND	0.0086	mg/kg
tert-Butylbenzene	ND	0.0086	mg/kg
Carbon disulfide	ND	0.0086	mg/kg
Carbon tetrachloride	ND	0.0086	mg/kg
Chlorobenzene	ND	0.0086	mg/kg
Dibromochloromethane	ND	0.0086	mg/kg
Chloroethane	ND	0.0086	mg/kg
Chloroform	ND	0.0086	mg/kg
Chloromethane	ND	0.0086	mg/kg
2-Chlorotoluene	ND	0.0086	mg/kg
4-Chlorotoluene	ND	0.0086	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.017	mg/kg
1,2-Dibromoethane	ND	0.0086	mg/kg
1,2-Dichlorobenzene	ND	0.0086	mg/kg
1,3-Dichlorobenzene	ND	0.0086	mg/kg
1,4-Dichlorobenzene	ND	0.0086	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0086	mg/kg
Dichlorodifluoromethane	ND	0.0086	mg/kg
1,1-Dichloroethane	ND	0.0086	mg/kg
1,2-Dichloroethane	ND	0.0086	mg/kg
cis-1,2-Dichloroethene	ND	0.0086	mg/kg
trans-1,2-Dichloroethene	ND	0.0086	mg/kg
1,1-Dichloroethene	ND	0.0086	mg/kg
1,2-Dichloropropane	ND	0.0086	mg/kg
1,3-Dichloropropene (total)	ND	0.017	mg/kg
Ethylbenzene	ND	0.0086	mg/kg
Isopropylbenzene	ND	0.0086	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020408

GC/MS Volatiles

Lot-Sample #...: A4G270130-002 **Work Order #...:** GLWQ41AC **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0086	mg/kg
Methylene chloride	**0.018**	**0.0086**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.034	mg/kg
Methyl tert-butyl ether	ND	0.034	mg/kg
n-Propylbenzene	ND	0.0086	mg/kg
Styrene	ND	0.0086	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0086	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0086	mg/kg
Tetrachloroethene	ND	0.0086	mg/kg
Toluene	ND	0.0086	mg/kg
1,2,4-Trichloro-benzene	ND	0.0086	mg/kg
1,1,1-Trichloroethane	ND	0.0086	mg/kg
1,1,2-Trichloroethane	ND	0.0086	mg/kg
Trichloroethene	ND	0.0086	mg/kg
Trichlorofluoromethane	ND	0.0086	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0086	mg/kg
1,2,4-Trimethylbenzene	ND	0.0086	mg/kg
1,3,5-Trimethylbenzene	ND	0.0086	mg/kg
Vinyl chloride	ND	0.0086	mg/kg
Xylenes (total)	ND	0.017	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	112	(59 - 138)
1,2-Dichloroethane-d4	110	(61 - 130)
Toluene-d8	114	(60 - 143)
4-Bromofluorobenzene	118	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

GC/MS Volatiles

Lot-Sample #...: A4G270130-004 **Work Order #...:** GLWRQ1AM **Matrix.....:** SO
Date Sampled...: 07/23/04 10:50 **Date Received..:** 07/24/04
Prep Date.....: 08/03/04 **Analysis Date..:** 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.52 **Initial Wgt/Vol:** 5 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 18 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0093	mg/kg
Acetone	**0.15**	**0.037**	**mg/kg**
Acrylonitrile	ND	0.19	mg/kg
Benzene	ND	0.0093	mg/kg
Bromodichloromethane	ND	0.0093	mg/kg
Bromoform	ND	0.0093	mg/kg
Methyl ethyl ketone	ND	0.037	mg/kg
n-Butylbenzene	ND	0.0093	mg/kg
sec-Butylbenzene	ND	0.0093	mg/kg
tert-Butylbenzene	ND	0.0093	mg/kg
Carbon disulfide	ND	0.0093	mg/kg
Carbon tetrachloride	ND	0.0093	mg/kg
Chlorobenzene	ND	0.0093	mg/kg
Dibromochloromethane	ND	0.0093	mg/kg
Chloroethane	ND	0.0093	mg/kg
Chloroform	ND	0.0093	mg/kg
Chloromethane	ND	0.0093	mg/kg
2-Chlorotoluene	ND	0.0093	mg/kg
4-Chlorotoluene	ND	0.0093	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.019	mg/kg
1,2-Dibromoethane	ND	0.0093	mg/kg
1,2-Dichlorobenzene	ND	0.0093	mg/kg
1,3-Dichlorobenzene	ND	0.0093	mg/kg
1,4-Dichlorobenzene	ND	0.0093	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0093	mg/kg
Dichlorodifluoromethane	ND	0.0093	mg/kg
1,1-Dichloroethane	ND	0.0093	mg/kg
1,2-Dichloroethane	ND	0.0093	mg/kg
cis-1,2-Dichloroethene	ND	0.0093	mg/kg
trans-1,2-Dichloroethene	ND	0.0093	mg/kg
1,1-Dichloroethene	ND	0.0093	mg/kg
1,2-Dichloropropane	ND	0.0093	mg/kg
1,3-Dichloropropene (total)	ND	0.019	mg/kg
Ethylbenzene	ND	0.0093	mg/kg
Isopropylbenzene	ND	0.0093	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

GC/MS Volatiles

Lot-Sample #...: A4G270130-004 Work Order #...: GLWRQ1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0093	mg/kg
Methylene chloride	**0.019**	**0.0093**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.037	mg/kg
Methyl tert-butyl ether	ND	0.037	mg/kg
n-Propylbenzene	ND	0.0093	mg/kg
Styrene	ND	0.0093	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0093	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0093	mg/kg
Tetrachloroethene	ND	0.0093	mg/kg
Toluene	ND	0.0093	mg/kg
1,2,4-Trichloro-benzene	ND	0.0093	mg/kg
1,1,1-Trichloroethane	ND	0.0093	mg/kg
1,1,2-Trichloroethane	ND	0.0093	mg/kg
Trichloroethene	ND	0.0093	mg/kg
Trichlorofluoromethane	ND	0.0093	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0093	mg/kg
1,2,4-Trimethylbenzene	ND	0.0093	mg/kg
1,3,5-Trimethylbenzene	ND	0.0093	mg/kg
Vinyl chloride	ND	0.0093	mg/kg
Xylenes (total)	ND	0.019	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	108	(59 - 138)
1,2-Dichloroethane-d4	104	(61 - 130)
Toluene-d8	111	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS050002

GC/MS Volatiles

Lot-Sample #...: A4G270130-005 Work Order #...: GLWRT1AC Matrix.....: SO
Date Sampled...: 07/23/04 11:20 Date Received..: 07/24/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.52 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 19 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0093	mg/kg
Acetone	**0.12**	**0.037**	**mg/kg**
Acrylonitrile	ND	0.19	mg/kg
Benzene	ND	0.0093	mg/kg
Bromodichloromethane	ND	0.0093	mg/kg
Bromoform	ND	0.0093	mg/kg
Methyl ethyl ketone	ND	0.037	mg/kg
n-Butylbenzene	ND	0.0093	mg/kg
sec-Butylbenzene	ND	0.0093	mg/kg
tert-Butylbenzene	ND	0.0093	mg/kg
Carbon disulfide	ND	0.0093	mg/kg
Carbon tetrachloride	ND	0.0093	mg/kg
Chlorobenzene	ND	0.0093	mg/kg
Dibromochloromethane	ND	0.0093	mg/kg
Chloroethane	ND	0.0093	mg/kg
Chloroform	ND	0.0093	mg/kg
Chloromethane	ND	0.0093	mg/kg
2-Chlorotoluene	ND	0.0093	mg/kg
4-Chlorotoluene	ND	0.0093	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.019	mg/kg
1,2-Dibromoethane	ND	0.0093	mg/kg
1,2-Dichlorobenzene	ND	0.0093	mg/kg
1,3-Dichlorobenzene	ND	0.0093	mg/kg
1,4-Dichlorobenzene	ND	0.0093	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0093	mg/kg
Dichlorodifluoromethane	ND	0.0093	mg/kg
1,1-Dichloroethane	ND	0.0093	mg/kg
1,2-Dichloroethane	ND	0.0093	mg/kg
cis-1,2-Dichloroethene	ND	0.0093	mg/kg
trans-1,2-Dichloroethene	ND	0.0093	mg/kg
1,1-Dichloroethene	ND	0.0093	mg/kg
1,2-Dichloropropane	ND	0.0093	mg/kg
1,3-Dichloropropene (total)	ND	0.019	mg/kg
Ethylbenzene	ND	0.0093	mg/kg
Isopropylbenzene	ND	0.0093	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS050002

GC/MS Volatiles

Lot-Sample #...: A4G270130-005 Work Order #...: GLWRT1AC Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0093	mg/kg
Methylene chloride	**0.023**	**0.0093**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.037	mg/kg
Methyl tert-butyl ether	ND	0.037	mg/kg
n-Propylbenzene	ND	0.0093	mg/kg
Styrene	ND	0.0093	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0093	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0093	mg/kg
Tetrachloroethene	ND	0.0093	mg/kg
Toluene	ND	0.0093	mg/kg
1,2,4-Trichloro-benzene	ND	0.0093	mg/kg
1,1,1-Trichloroethane	ND	0.0093	mg/kg
1,1,2-Trichloroethane	ND	0.0093	mg/kg
Trichloroethene	ND	0.0093	mg/kg
Trichlorofluoromethane	ND	0.0093	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0093	mg/kg
1,2,4-Trimethylbenzene	ND	0.0093	mg/kg
1,3,5-Trimethylbenzene	ND	0.0093	mg/kg
Vinyl chloride	ND	0.0093	mg/kg
Xylenes (total)	ND	0.019	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(59 - 138)
1,2-Dichloroethane-d4	106	(61 - 130)
Toluene-d8	110	(60 - 143)
4-Bromofluorobenzene	115	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS060406

GC/MS Volatiles

Lot-Sample #...: A4G270130-006 Work Order #...: GLWRW1AC Matrix.....: SO
Date Sampled...: 07/23/04 11:45 Date Received..: 07/24/04
Prep Date.....: 07/28/04 Analysis Date..: 08/05/04
Prep Batch #...: 4211290
Dilution Factor: 1.95 Initial Wgt/Vol: 2.56 g Final Wgt/Vol..: 5 mL
% Moisture.....: 24 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	2.6	mg/kg
Acrylonitrile	ND	13	mg/kg
Benzene	ND	0.64	mg/kg
Bromodichloromethane	ND	0.64	mg/kg
Bromoform	ND	0.64	mg/kg
Bromomethane	ND	0.64	mg/kg
Methyl ethyl ketone	ND	2.6	mg/kg
n-Butylbenzene	ND	0.64	mg/kg
sec-Butylbenzene	ND	0.64	mg/kg
tert-Butylbenzene	ND	0.64	mg/kg
Carbon disulfide	ND	0.64	mg/kg
Carbon tetrachloride	ND	0.64	mg/kg
Chlorobenzene	ND	0.64	mg/kg
Dibromochloromethane	ND	0.64	mg/kg
1,2-Dibromo-3-chloro-propane	ND	1.3	mg/kg
Chloroethane	ND	0.64	mg/kg
Chloroform	ND	0.64	mg/kg
Chloromethane	ND	0.64	mg/kg
2-Chlorotoluene	ND	0.64	mg/kg
4-Chlorotoluene	ND	0.64	mg/kg
1,2-Dibromoethane	ND	0.64	mg/kg
1,2-Dichlorobenzene	ND	0.64	mg/kg
1,3-Dichlorobenzene	ND	0.64	mg/kg
1,4-Dichlorobenzene	ND	0.64	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.64	mg/kg
Dichlorodifluoromethane	ND	0.64	mg/kg
1,1-Dichloroethane	ND	0.64	mg/kg
1,2-Dichloroethane	ND	0.64	mg/kg
1,1-Dichloroethene	**1.1**	**0.64**	**mg/kg**
cis-1,2-Dichloroethene	ND	0.64	mg/kg
trans-1,2-Dichloroethene	ND	0.64	mg/kg
1,2-Dichloropropane	ND	0.64	mg/kg
1,3-Dichloropropene (total)	ND	1.3	mg/kg
Ethylbenzene	ND	0.64	mg/kg
Trichlorofluoromethane	ND	0.64	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS060406

GC/MS Volatiles

Lot-Sample #...: A4G270130-006 **Work Order #...:** GLWRW1AC **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Isopropylbenzene	ND	0.64	mg/kg
p-Isopropyltoluene	ND	0.64	mg/kg
Methylene chloride	ND	0.64	mg/kg
n-Propylbenzene	ND	0.64	mg/kg
Styrene	ND	0.64	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.64	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.64	mg/kg
Tetrachloroethene	ND	0.64	mg/kg
Toluene	ND	0.64	mg/kg
1,2,4-Trichloro-benzene	ND	0.64	mg/kg
1,1,1-Trichloroethane	**1.7**	**0.64**	**mg/kg**
1,1,2-Trichloroethane	ND	0.64	mg/kg
Trichloroethene	ND	0.64	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.64	mg/kg
1,2,4-Trimethylbenzene	ND	0.64	mg/kg
1,3,5-Trimethylbenzene	ND	0.64	mg/kg
Vinyl chloride	ND	0.64	mg/kg
Xylenes (total)	ND	1.3	mg/kg
Methyl tert-butyl ether	ND	2.6	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	2.6	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	82	(59 - 138)
1,2-Dichloroethane-d4	84	(61 - 130)
Toluene-d8	77	(60 - 143)
4-Bromofluorobenzene	87	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS080002

GC/MS Volatiles

Lot-Sample #...:	A4G270130-007	Work Order #...:	GLWRX1AC	Matrix.....:	SO
Date Sampled...:	07/23/04 12:10	Date Received..:	07/24/04		
Prep Date.....:	08/03/04	Analysis Date..:	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.27	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	5.4	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0067	mg/kg
Acetone	**0.10**	**0.027**	**mg/kg**
Acrylonitrile	ND	0.13	mg/kg
Benzene	ND	0.0067	mg/kg
Bromodichloromethane	ND	0.0067	mg/kg
Bromoform	ND	0.0067	mg/kg
Methyl ethyl ketone	ND	0.027	mg/kg
n-Butylbenzene	ND	0.0067	mg/kg
sec-Butylbenzene	ND	0.0067	mg/kg
tert-Butylbenzene	ND	0.0067	mg/kg
Carbon disulfide	ND	0.0067	mg/kg
Carbon tetrachloride	ND	0.0067	mg/kg
Chlorobenzene	ND	0.0067	mg/kg
Dibromochloromethane	ND	0.0067	mg/kg
Chloroethane	ND	0.0067	mg/kg
Chloroform	ND	0.0067	mg/kg
Chloromethane	ND	0.0067	mg/kg
2-Chlorotoluene	ND	0.0067	mg/kg
4-Chlorotoluene	ND	0.0067	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.013	mg/kg
1,2-Dibromoethane	ND	0.0067	mg/kg
1,2-Dichlorobenzene	ND	0.0067	mg/kg
1,3-Dichlorobenzene	ND	0.0067	mg/kg
1,4-Dichlorobenzene	ND	0.0067	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0067	mg/kg
Dichlorodifluoromethane	ND	0.0067	mg/kg
1,1-Dichloroethane	ND	0.0067	mg/kg
1,2-Dichloroethane	ND	0.0067	mg/kg
cis-1,2-Dichloroethene	ND	0.0067	mg/kg
trans-1,2-Dichloroethene	ND	0.0067	mg/kg
1,1-Dichloroethene	ND	0.0067	mg/kg
1,2-Dichloropropane	ND	0.0067	mg/kg
1,3-Dichloropropene (total)	ND	0.013	mg/kg
Ethylbenzene	ND	0.0067	mg/kg
Isopropylbenzene	ND	0.0067	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS080002

GC/MS Volatiles

Lot-Sample #...: A4G270130-007 Work Order #...: GLWRX1AC Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0067	mg/kg
Methylene chloride	**0.011**	**0.0067**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.027	mg/kg
Methyl tert-butyl ether	ND	0.027	mg/kg
n-Propylbenzene	ND	0.0067	mg/kg
Styrene	ND	0.0067	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0067	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0067	mg/kg
Tetrachloroethene	ND	0.0067	mg/kg
Toluene	ND	0.0067	mg/kg
1,2,4-Trichloro-benzene	ND	0.0067	mg/kg
1,1,1-Trichloroethane	ND	0.0067	mg/kg
1,1,2-Trichloroethane	ND	0.0067	mg/kg
Trichloroethene	ND	0.0067	mg/kg
Trichlorofluoromethane	ND	0.0067	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0067	mg/kg
1,2,4-Trimethylbenzene	ND	0.0067	mg/kg
1,3,5-Trimethylbenzene	ND	0.0067	mg/kg
Vinyl chloride	ND	0.0067	mg/kg
Xylenes (total)	ND	0.013	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	112	(59 - 138)
1,2-Dichloroethane-d4	113	(61 - 130)
Toluene-d8	114	(60 - 143)
4-Bromofluorobenzene	116	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS210002

GC/MS Volatiles

Lot-Sample #...: A4G270130-008 **Work Order #...:** GLWR11AC **Matrix.....:** SO
Date Sampled...: 07/23/04 10:15 **Date Received..:** 07/24/04
Prep Date.....: 08/05/04 **Analysis Date..:** 08/05/04
Prep Batch #...: 4219273
Dilution Factor: 1.67 **Initial Wgt/Vol:** 5 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 19 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.010	mg/kg
Acetone	**0.32**	**0.041**	**mg/kg**
Acrylonitrile	ND	0.21	mg/kg
Benzene	ND	0.010	mg/kg
Bromodichloromethane	ND	0.010	mg/kg
Bromoform	ND	0.010	mg/kg
Methyl ethyl ketone	ND	0.041	mg/kg
n-Butylbenzene	ND	0.010	mg/kg
sec-Butylbenzene	ND	0.010	mg/kg
tert-Butylbenzene	ND	0.010	mg/kg
Carbon disulfide	ND	0.010	mg/kg
Carbon tetrachloride	ND	0.010	mg/kg
Chlorobenzene	ND	0.010	mg/kg
Dibromochloromethane	ND	0.010	mg/kg
Chloroethane	ND	0.010	mg/kg
Chloroform	ND	0.010	mg/kg
Chloromethane	ND	0.010	mg/kg
2-Chlorotoluene	ND	0.010	mg/kg
4-Chlorotoluene	ND	0.010	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.021	mg/kg
1,2-Dibromoethane	ND	0.010	mg/kg
1,2-Dichlorobenzene	ND	0.010	mg/kg
1,3-Dichlorobenzene	ND	0.010	mg/kg
1,4-Dichlorobenzene	ND	0.010	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.010	mg/kg
Dichlorodifluoromethane	ND	0.010	mg/kg
1,1-Dichloroethane	ND	0.010	mg/kg
1,2-Dichloroethane	ND	0.010	mg/kg
cis-1,2-Dichloroethene	ND	0.010	mg/kg
trans-1,2-Dichloroethene	ND	0.010	mg/kg
1,1-Dichloroethene	ND	0.010	mg/kg
1,2-Dichloropropane	ND	0.010	mg/kg
1,3-Dichloropropene (total)	ND	0.021	mg/kg
Ethylbenzene	ND	0.010	mg/kg
Isopropylbenzene	ND	0.010	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS210002

GC/MS Volatiles

Lot-Sample #...: A4G270130-008 **Work Order #...:** GLWR11AC **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.010	mg/kg
Methylene chloride	**0.012**	**0.010**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.041	mg/kg
Methyl tert-butyl ether	ND	0.041	mg/kg
n-Propylbenzene	ND	0.010	mg/kg
Styrene	ND	0.010	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.010	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.010	mg/kg
Tetrachloroethene	ND	0.010	mg/kg
Toluene	ND	0.010	mg/kg
1,2,4-Trichloro-benzene	ND	0.010	mg/kg
1,1,1-Trichloroethane	ND	0.010	mg/kg
1,1,2-Trichloroethane	ND	0.010	mg/kg
Trichloroethene	ND	0.010	mg/kg
Trichlorofluoromethane	ND	0.010	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.010	mg/kg
1,2,4-Trimethylbenzene	ND	0.010	mg/kg
1,3,5-Trimethylbenzene	ND	0.010	mg/kg
Vinyl chloride	ND	0.010	mg/kg
Xylenes (total)	ND	0.021	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	115	(59 - 138)
1,2-Dichloroethane-d4	117	(61 - 130)
Toluene-d8	113	(60 - 143)
4-Bromofluorobenzene	121	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: A4G270130-009 Work Order #...: GLWR41AA Matrix.....: WQ
Date Sampled...: 07/23/04 Date Received..: 07/24/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4216559
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Acetonitrile	ND	20	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Methyl ethyl ketone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropene (total)	ND	2.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

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Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: A4G270130-009 Work Order #...: GLWR41AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Methylene chloride	**1.9**	**1.0**	**ug/L**
4-Methyl-2-pentanone	ND	10	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Bromomethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	84	(73 - 122)
1,2-Dichloroethane-d4	85	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	92	(74 - 116)

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-001 Work Order #...: GLWQK1AD Matrix.....: SO
Date Sampled...: 07/23/04 09:20 Date Received..: 07/24/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.19 g Final Wgt/Vol..: 2 mL
% Moisture.....: 19 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0083	mg/kg
Acenaphthylene	ND	0.0083	mg/kg
Anthracene	ND	0.0083	mg/kg
Benzo(a)anthracene	ND	0.0083	mg/kg
Benzo(b)fluoranthene	ND	0.0083	mg/kg
Benzo(k)fluoranthene	ND	0.0083	mg/kg
Benzoic acid	ND	0.82	mg/kg
Benzo(ghi)perylene	ND	0.0083	mg/kg
Benzo(a)pyrene	ND	0.0083	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.062	mg/kg
4-Bromophenyl phenyl ether	ND	0.062	mg/kg
Butyl benzyl phthalate	ND	0.062	mg/kg
Carbazole	ND	0.062	mg/kg
4-Chloroaniline	ND	0.19	mg/kg
2-Chloronaphthalene	ND	0.062	mg/kg
2-Chlorophenol	ND	0.062	mg/kg
4-Chlorophenyl phenyl ether	ND	0.062	mg/kg
Chrysene	ND	0.0083	mg/kg
Dibenz(a,h)anthracene	ND	0.0083	mg/kg
Dibenzofuran	ND	0.062	mg/kg
Di-n-butyl phthalate	ND	0.062	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.19	mg/kg
Diethyl phthalate	ND	0.062	mg/kg
2,4-Dimethylphenol	ND	0.19	mg/kg
Dimethyl phthalate	ND	0.062	mg/kg
2,4-Dinitrophenol	ND	0.41	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
Di-n-octyl phthalate	ND	0.062	mg/kg
Fluoranthene	ND	0.0083	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-001 Work Order #...: GLWQK1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0083	mg/kg
Hexachlorobenzene	ND	0.0083	mg/kg
Hexachlorobutadiene	ND	0.062	mg/kg
Hexachlorocyclopenta-diene	ND	0.41	mg/kg
Hexachloroethane	ND	0.062	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0083	mg/kg
Isophorone	ND	0.062	mg/kg
2-Methylnaphthalene	ND	0.0083	mg/kg
2-Methylphenol	ND	0.25	mg/kg
3-Methylphenol	ND	0.25	mg/kg
4-Methylphenol	ND	0.25	mg/kg
Naphthalene	ND	0.0083	mg/kg
2-Nitroaniline	ND	0.25	mg/kg
3-Nitroaniline	ND	0.25	mg/kg
4-Nitroaniline	ND	0.25	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.062	mg/kg
N-Nitrosodiphenylamine	ND	0.062	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.062	mg/kg
Pentachlorophenol	ND	0.19	mg/kg
Phenanthrene	ND	0.0083	mg/kg
Phenol	ND	0.062	mg/kg
Pyrene	ND	0.0083	mg/kg
2,4,5-Trichloro-phenol	ND	0.19	mg/kg
2,4,6-Trichloro-phenol	ND	0.19	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	63	(42 - 110)
2-Fluorobiphenyl	61	(43 - 110)
Terphenyl-d14	81	(37 - 137)
Phenol-d5	66	(25 - 115)
2-Fluorophenol	74	(11 - 116)
2,4,6-Tribromophenol	52	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020810

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-003 Work Order #...: GLWRC1AD Matrix.....: SO
Date Sampled...: 07/23/04 09:55 Date Received..: 07/24/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30 g Final Wgt/Vol..: 2 mL
% Moisture.....: 17 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0081	mg/kg
Acenaphthylene	ND	0.0081	mg/kg
Anthracene	ND	0.0081	mg/kg
Benzo(a)anthracene	ND	0.0081	mg/kg
Benzo(b)fluoranthene	ND	0.0081	mg/kg
Benzo(k)fluoranthene	ND	0.0081	mg/kg
Benzoic acid	ND	0.80	mg/kg
Benzo(ghi)perylene	ND	0.0081	mg/kg
Benzo(a)pyrene	ND	0.0081	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.060	mg/kg
4-Bromophenyl phenyl ether	ND	0.060	mg/kg
Butyl benzyl phthalate	ND	0.060	mg/kg
Carbazole	ND	0.060	mg/kg
4-Chloroaniline	ND	0.18	mg/kg
2-Chloronaphthalene	ND	0.060	mg/kg
2-Chlorophenol	ND	0.060	mg/kg
4-Chlorophenyl phenyl ether	ND	0.060	mg/kg
Chrysene	ND	0.0081	mg/kg
Dibenz(a,h)anthracene	ND	0.0081	mg/kg
Dibenzofuran	ND	0.060	mg/kg
Di-n-butyl phthalate	ND	0.060	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.18	mg/kg
Diethyl phthalate	ND	0.060	mg/kg
2,4-Dimethylphenol	ND	0.18	mg/kg
Dimethyl phthalate	ND	0.060	mg/kg
2,4-Dinitrophenol	ND	0.40	mg/kg
2,4-Dinitrotoluene	ND	0.24	mg/kg
2,6-Dinitrotoluene	ND	0.24	mg/kg
Di-n-octyl phthalate	ND	0.060	mg/kg
Fluoranthene	ND	0.0081	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020810

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-003 Work Order #...: GLWRC1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0081	mg/kg
Hexachlorobenzene	ND	0.0081	mg/kg
Hexachlorobutadiene	ND	0.060	mg/kg
Hexachlorocyclopenta-diene	ND	0.40	mg/kg
Hexachloroethane	ND	0.060	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0081	mg/kg
Isophorone	ND	0.060	mg/kg
2-Methylnaphthalene	ND	0.0081	mg/kg
2-Methylphenol	ND	0.24	mg/kg
3-Methylphenol	ND	0.24	mg/kg
4-Methylphenol	ND	0.24	mg/kg
Naphthalene	ND	0.0081	mg/kg
2-Nitroaniline	ND	0.24	mg/kg
3-Nitroaniline	ND	0.24	mg/kg
4-Nitroaniline	ND	0.24	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.060	mg/kg
N-Nitrosodiphenylamine	ND	0.060	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.060	mg/kg
Pentachlorophenol	ND	0.18	mg/kg
Phenanthrene	ND	0.0081	mg/kg
Phenol	ND	0.060	mg/kg
Pyrene	ND	0.0081	mg/kg
2,4,5-Trichloro-phenol	ND	0.18	mg/kg
2,4,6-Trichloro-phenol	ND	0.18	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(42 - 110)
2-Fluorobiphenyl	54	(43 - 110)
Terphenyl-d14	81	(37 - 137)
Phenol-d5	69	(25 - 115)
2-Fluorophenol	74	(11 - 116)
2,4,6-Tribromophenol	53	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-004 Work Order #...: GLWRQ1AD Matrix.....: SO
Date Sampled...: 07/23/04 10:50 Date Received..: 07/24/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.1 g Final Wgt/Vol..: 2 mL
% Moisture.....: 18 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0082	mg/kg
Acenaphthylene	ND	0.0082	mg/kg
Anthracene	ND	0.0082	mg/kg
Benzo(a)anthracene	ND	0.0082	mg/kg
Benzo(b)fluoranthene	ND	0.0082	mg/kg
Benzo(k)fluoranthene	ND	0.0082	mg/kg
Benzoic acid	ND	0.81	mg/kg
Benzo(ghi)perylene	ND	0.0082	mg/kg
Benzo(a)pyrene	ND	0.0082	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.061	mg/kg
4-Bromophenyl phenyl ether	ND	0.061	mg/kg
Butyl benzyl phthalate	ND	0.061	mg/kg
Carbazole	ND	0.061	mg/kg
4-Chloroaniline	ND	0.18	mg/kg
2-Chloronaphthalene	ND	0.061	mg/kg
2-Chlorophenol	ND	0.061	mg/kg
4-Chlorophenyl phenyl ether	ND	0.061	mg/kg
Chrysene	ND	0.0082	mg/kg
Dibenz(a,h)anthracene	ND	0.0082	mg/kg
Dibenzofuran	ND	0.061	mg/kg
Di-n-butyl phthalate	ND	0.061	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.18	mg/kg
Diethyl phthalate	ND	0.061	mg/kg
2,4-Dimethylphenol	ND	0.18	mg/kg
Dimethyl phthalate	ND	0.061	mg/kg
2,4-Dinitrophenol	ND	0.40	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
Di-n-octyl phthalate	ND	0.061	mg/kg
Fluoranthene	ND	0.0082	mg/kg

(Continued on next page)

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

GC/MS Semivolatiles

Lot-Sample #...: A4G270130-004 Work Order #...: GLWRQ1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0082	mg/kg
Hexachlorobenzene	ND	0.0082	mg/kg
Hexachlorobutadiene	ND	0.061	mg/kg
Hexachlorocyclopentadiene	ND	0.40	mg/kg
Hexachloroethane	ND	0.061	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0082	mg/kg
Isophorone	ND	0.061	mg/kg
2-Methylnaphthalene	ND	0.0082	mg/kg
2-Methylphenol	ND	0.25	mg/kg
3-Methylphenol	ND	0.25	mg/kg
4-Methylphenol	ND	0.25	mg/kg
Naphthalene	ND	0.0082	mg/kg
2-Nitroaniline	ND	0.25	mg/kg
3-Nitroaniline	ND	0.25	mg/kg
4-Nitroaniline	ND	0.25	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.061	mg/kg
N-Nitrosodiphenylamine	ND	0.061	mg/kg
N-Nitrosodi-n-propylamine	ND	0.061	mg/kg
Pentachlorophenol	ND	0.18	mg/kg
Phenanthrene	ND	0.0082	mg/kg
Phenol	ND	0.061	mg/kg
Pyrene	ND	0.0082	mg/kg
2,4,5-Trichlorophenol	ND	0.18	mg/kg
2,4,6-Trichlorophenol	ND	0.18	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	55	(42 - 110)
2-Fluorobiphenyl	56	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	66	(25 - 115)
2-Fluorophenol	74	(11 - 116)
2,4,6-Tribromophenol	56	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

TOTAL Metals

Lot-Sample #...: A4G270130-001 **Matrix.....:** SO
Date Sampled...: 07/23/04 09:20 **Date Received..:** 07/24/04
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210033						
Cadmium	ND	0.25	mg/kg	SW846 6010B	07/28/04	GLWQK1AF
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**24.4**	**0.62**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWQK1AG**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**10.8**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWQK1AH**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28/04	GLWQK1AJ
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				
Barium	**134**	**24.8**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWQK1AK**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	**66.7**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWQK1AL**
		Dilution Factor: 1		Analysis Time..: 19:13	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020810

TOTAL Metals

Lot-Sample #...: A4G270130-003 Matrix.....: SO
Date Sampled...: 07/23/04 09:55 Date Received..: 07/24/04
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210033						
Cadmium	ND	0.24	mg/kg	SW846 6010B	07/28/04	GLWRC1AF
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**19.2**	**0.60**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRC1AG**
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**8.3**	**0.36**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRC1AH**
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28/04	GLWRC1AJ
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				
Barium	**113**	**24.2**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRC1AK**
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	**54.3**	**2.4**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRC1AL**
		Dilution Factor: 1		Analysis Time..: 19:18	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

TOTAL Metals

Lot-Sample #...: A4G270130-004 Matrix.....: SO
Date Sampled...: 07/23/04 10:50 Date Received..: 07/24/04
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210033						
Cadmium	ND	0.25	mg/kg	SW846 6010B	07/28/04	GLWRQ1AF
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**23.5**	**0.61**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRQ1AG**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**10.9**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRQ1AH**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28/04	GLWRQ1AJ
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				
Barium	**130**	**24.5**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRQ1AK**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	**62.9**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28/04**	**GLWRQ1AL**
		Dilution Factor: 1		Analysis Time..: 19:23	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

General Chemistry

Lot-Sample #...: A4G270130-001 **Work Order #...:** GLWQK **Matrix.....:** SO
Date Sampled...: 07/23/04 09:20 **Date Received..:** 07/24/04
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.62	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**80.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210080**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020810

General Chemistry

Lot-Sample #...: A4G270130-003 **Work Order #...:** GLWRC **Matrix.....:** SO
Date Sampled...: 07/23/04 09:55 **Date Received..:** 07/24/04
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.60	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**82.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210080**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

General Chemistry

Lot-Sample #...: A4G270130-004 **Work Order #...:** GLWRQ **Matrix.....:** SO
Date Sampled...: 07/23/04 10:50 **Date Received..:** 07/24/04
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.61	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**81.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210080**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

SEVERN TRENT STL

STL North Canton
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ANALYTICAL REPORT

OLIN-MIDDLETOWN, CT

Lot #: A4G270219

Dave Clymer

Mactec Engineering & Consultin
1080 Elm Street
Rocky Hill, CT 06067

SEVERN TRENT LABORATORIES, INC.

Roger K. Toth
Project Manager

August 19, 2004

CASE NARRATIVE
A4G270219

The following report contains the analytical results for twenty-three solid samples and three quality control samples submitted to STL North Canton by Mactec Engineering & Consulting Inc. from the Olin-Middletown, CT Site. The samples were received July 23, 2004, according to documented sample acceptance procedures.

The CT ETPH analysis was performed at STL Connecticut. The data package contains CT ETPH results for all samples received on July 23, 2004. The laboratory lots are A4G270219 and A4G270130.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Clymer and Emmet Curtis on August 10, 2004. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Roger K. Toth, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperatures of the coolers upon sample receipt were 5.7, 3.7, and 5.2°C.

GC/MS VOLATILES

The matrix spike/matrix spike duplicate(s) for DPS040810 had RPD's outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The pH of the sample EQUIP BLANK was greater than 2. The sample(s) was analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if samples are not preserved to a pH of 2.

GC/MS SEMIVOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The matrix spike/matrix spike duplicate(s) for DPS040810 had RPD's outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

POLYCHLORINATED BIPHENYLS-8082

The analytical results met the requirements of the laboratory's QA/QC program.

METALS

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

CASE NARRATIVE (continued)

METALS (continued)

The matrix spike/matrix spike duplicate(s) for HAS240001, DPS040810 and DPS140103 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

No ICP Trace Form IX provided for batch(es) 4210024 and 4218097. The serial dilution was performed on a different sample from the same QC batch(es).

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

Alabama (#41170), California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#100439), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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ANALYTICAL METHODS SUMMARY

A4G270219

PARAMETER	ANALYTICAL METHOD
Cyanide, Total	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
PCBs by SW-846 8082	SW846 8082
Semivolatile Organic Compounds by GC/MS	SW846 8270C
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Volatile Organics by GC/MS	SW846 8260B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A4G270219

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GLXJN	001	HAS150001	07/22/04	14:20
GLXLE	002	HAS160001	07/22/04	13:10
GLXLN	003	HAS170001	07/22/04	14:00
GLXL6	004	HAS240001	07/22/04	12:05
GLXM8	005	HAS250001	07/22/04	12:25
GLXNW	006	HAS260001	07/22/04	14:50
GLXPA	007	HAD260001	07/22/04	14:50
GLXPR	008	EQUIP BLANK	07/22/04	15:00
GLXV4	009	DPS040810	07/21/04	14:40
GLXWP	010	DPD040810	07/21/04	14:40
GLXW1	011	DPS090002	07/21/04	12:15
GLXXC	012	DPS100002	07/21/04	11:50
GLXXG	013	DPS110002	07/21/04	11:35
GLXXQ	014	DPS120002	07/21/04	11:20
GLXXV	015	DPS130002	07/21/04	11:10
GLXXX	016	DPS140103	07/21/04	10:35
GLXX7	017	DPD140103	07/21/04	10:35
GLX0D	018	DPS180608	07/21/04	10:10
GLX0H	019	DPS190204	07/21/04	09:45
GLX0K	020	DPS200204	07/21/04	09:15
GLX0V	021	DPS220002	07/21/04	13:50
GLX08	022	DPS230002	07/21/04	14:10
GLX1D	023	DPS070002	07/21/04	13:35
GLX1W	024	DPD200204	07/21/04	09:15
GLX2G	025	TRIP BLANK(COOLER# K817)	07/21/04	
GLX2X	026	TRIP BLANK(COOLER# J730)	07/21/04	

NOTE(S):

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

Chain of Custody Record

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: MACTEC	Project Manager: David Clymer	Date: 07/22/04	Chain of Custody Number: 124409
Address: 1080 Elm Street, Suite 202	Telephone Number (Area Code)/Fax Number: (860) 529-7191 / (860) 529-7448	Lab Number:	Page 1 of 1
City: Rocky Hill; State: CT; Zip Code: 06067	Site Contact:	Lab Contact:	
Project Name and Location (State): Olin - Middletown, CT	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 59652			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Meth	VOC by 8260	(5035 pres)	SVOC by 8270	CT ETPH	Total Sb, Ba, Cu	Cr, Pb, Zn	Total Cyanide	Total PCBs	SPLP Sb, Ba, Cu	Cr, Pb, Zn	SPLP Cyanide	SPLP PCBs	Special Instructions/ Conditions of Receipt
HAS150001	07/22/04	14:20				X		5				2		1	X		X	X	X		X		H		H		
HAS160001	↓	13:10				↓		5				2		1	↓		↓	↓	↓		↓		O		O		
HAS170001	↓	14:00				↓		5				2		1	↓		↓	↓	↓		↓		L		L		
HAS240001	↓	12:05				↓		3				2		1	↓								D		D		
HAS250001	↓	12:25				↓		3				2		1	↓								↓		↓		
HAS260001	↓	14:50				↓		3										X				X				H	MS/MSD for PCBs
HAD260001	↓	14:50				↓		3										↓				↓				L	
Equip Blank	↓	15:00		X					2	1	2				X		X	X	X							O	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	07/22/04	16:45	1. Received By: Shipping Cooler / FedEx	7/22/04	16:45
2. Relinquished By:			2. Received By: [signature]	7/23/04	0940
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

SEVERN TRENT **STL**
Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: MACTEC	Project Manager: David Clymer	Date: 07/21/04	Chain of Custody Number: 124412
Address: 1080 Elm St, Suite 202	Telephone Number (Area Code)/Fax Number: (860) 529-7191 / (860) 529-7448	Lab Number:	Page 1 of 2
City: Rocky Hill; State: CT; Zip Code: 06067	Site Contact:	Lab Contact:	
Project Name and Location (State): Olin – Middletown CT	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 59652			

Matrix: Air, Aqueous, Sed., Soil

Containers & Preservatives: Unpres., H2SO4, HNO3, HCl, NaOH, ZnAc/NaOH, Meth

Analysis (Attach list if more space is needed): VOC by 8210 (8035 pres), SVOC by 8270, CT ETPH, Total Sb, Ba, Cd, Cr, Pb, Zn, Total Cyanide, SPLP Sb, Ba, Cd, Cr, Pb, Zn, SPLP Cyanide

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Meth	VOC by 8210	(8035 pres)	SVOC by 8270	CT ETPH	Total Sb, Ba, Cd, Cr, Pb, Zn	Total Cyanide	SPLP Sb, Ba, Cd, Cr, Pb, Zn	SPLP Cyanide	Special Instructions/ Conditions of Receipt
DPS040810	07/21/04	14:40				X	5				4		2	X		X	X	X		X	H	H	MS/MSD - VOC, SVOC, CT ETPH; MS - Metals
DPD040810	↓	14:40				↓	4				2		1	↓		↓	↓	↓		↓	O	O	
DPS090002	↓	12:15				↓	5				2		1	↓		↓	↓	↓		↓	L	L	
DPS100002	↓	11:50				↓	5				2		1	↓		↓	↓	↓		↓	D	D	
DPS110002	↓	11:35				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS120002	↓	11:20				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS130002	↓	11:10				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS140103	↓	10:35				↓	5				4		2	↓		↓	↓	↓		↓	↓	↓	MS/MSD - VOC, SVOC, CT ETPH; MS - Metals
DPD140103	↓	10:35				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS180608	↓	10:10				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS190204	↓	09:45				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	
DPS200204	↓	09:25				↓	5				2		1	↓		↓	↓	↓		↓	↓	↓	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/22/04	08:30	1. Received By: Shipping Cooler / Fedex	7/22/04	
2. Relinquished By:			2. Received By: [signature]	7/23/04	0940
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample; PINK - Field Copy

STL North Canton

[redacted]

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client: MACTEC	Project Manager: David Clymer	Date: 07/21/04	Chain of Custody Number: 124413
Address: 1080 Elm St, Suite 202	Telephone Number (Area Code)/Fax Number: (860) 529-7191 / (860) 529-7498	Lab Number:	Page 2 of 2
City: Rocky Hill; State: CT; Zip Code: 06067	Site Contact:	Lab Contact:	
Project Name and Location (State): Olin – Middletown CT	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 59652			

Analysis (Attach list if more space is needed)

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Meth	VOC by 8260	(5035 prep)	Total Sb, Ba,	Cd, Cr, Pb, Zn	Total Cyanide	SPLP Sb, Ba,	Cd, Cr, Pb, Zn	SPLP Cyanide	Special Instructions/ Conditions of Receipt
DPS220002	07/21/04	13:50				X	3				2		1	X		X		X				
DPS230002	↓	14:10				↓	3				2		1	↓		↓		↓				
DPS070002	↓	13:35				↓	1				2		1	↓								
DPD200204	↓	09:15				↓					2		1	↓								

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☒ 21 Days ☐ Other_____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	7/22/04	08:30	1. Received By: Shipping Cooler/Fed Ex	7/22/04	
2. Relinquished By:			2. Received By: [signature]	7/23/04	0940
3. Relinquished By:			3. Received By:		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

STL North Canton

23

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

GC/MS Volatiles

Lot-Sample #...: A4G270219-001 Work Order #...: GLXJN1AL Matrix.....: SO
Date Sampled...: 07/22/04 14:20 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.63 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 19 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.010	mg/kg
Acetone	0.081	0.040	mg/kg
Acrylonitrile	ND	0.20	mg/kg
Benzene	ND	0.010	mg/kg
Bromodichloromethane	ND	0.010	mg/kg
Bromoform	ND	0.010	mg/kg
Methyl ethyl ketone	ND	0.040	mg/kg
n-Butylbenzene	ND	0.010	mg/kg
sec-Butylbenzene	ND	0.010	mg/kg
tert-Butylbenzene	ND	0.010	mg/kg
Carbon disulfide	ND	0.010	mg/kg
Carbon tetrachloride	ND	0.010	mg/kg
Chlorobenzene	ND	0.010	mg/kg
Dibromochloromethane	ND	0.010	mg/kg
Chloroethane	ND	0.010	mg/kg
Chloroform	ND	0.010	mg/kg
Chloromethane	ND	0.010	mg/kg
2-Chlorotoluene	ND	0.010	mg/kg
4-Chlorotoluene	ND	0.010	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.020	mg/kg
1,2-Dibromoethane	ND	0.010	mg/kg
1,2-Dichlorobenzene	ND	0.010	mg/kg
1,3-Dichlorobenzene	ND	0.010	mg/kg
1,4-Dichlorobenzene	ND	0.010	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.010	mg/kg
Dichlorodifluoromethane	ND	0.010	mg/kg
1,1-Dichloroethane	ND	0.010	mg/kg
1,2-Dichloroethane	ND	0.010	mg/kg
cis-1,2-Dichloroethene	ND	0.010	mg/kg
trans-1,2-Dichloroethene	ND	0.010	mg/kg
1,1-Dichloroethene	ND	0.010	mg/kg
1,2-Dichloropropane	ND	0.010	mg/kg
1,3-Dichloropropene (total)	ND	0.020	mg/kg
Ethylbenzene	ND	0.010	mg/kg
Isopropylbenzene	ND	0.010	mg/kg

(Continued on next page)

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

GC/MS Volatiles

Lot-Sample #...: A4G270219-001 **Work Order #...:** GLXJN1AL **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.010	mg/kg
Methylene chloride	**0.020**	**0.010**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.040	mg/kg
Methyl tert-butyl ether	ND	0.040	mg/kg
n-Propylbenzene	ND	0.010	mg/kg
Styrene	ND	0.010	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.010	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.010	mg/kg
Tetrachloroethene	ND	0.010	mg/kg
Toluene	ND	0.010	mg/kg
1,2,4-Trichloro-benzene	ND	0.010	mg/kg
1,1,1-Trichloroethane	ND	0.010	mg/kg
1,1,2-Trichloroethane	ND	0.010	mg/kg
Trichloroethene	ND	0.010	mg/kg
Trichlorofluoromethane	ND	0.010	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.010	mg/kg
1,2,4-Trimethylbenzene	ND	0.010	mg/kg
1,3,5-Trimethylbenzene	ND	0.010	mg/kg
Vinyl chloride	ND	0.010	mg/kg
Xylenes (total)	ND	0.020	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	104	(61 - 130)
Toluene-d8	109	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

GC/MS Volatiles

Lot-Sample #...:	A4G270219-002	**Work Order #...:**	GLXLE1AL	**Matrix.....:**	SO
Date Sampled...:	07/22/04 13:10	**Date Received..:**	07/23/04		
Prep Date.....:	08/03/04	**Analysis Date..:**	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.4	**Initial Wgt/Vol:**	5 g	**Final Wgt/Vol..:**	5 mL
% Moisture.....:	20	**Method.....:**	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0088	mg/kg
Acetone	**0.22**	**0.035**	**mg/kg**
Acrylonitrile	ND	0.18	mg/kg
Benzene	ND	0.0088	mg/kg
Bromodichloromethane	ND	0.0088	mg/kg
Bromoform	ND	0.0088	mg/kg
Methyl ethyl ketone	ND	0.035	mg/kg
n-Butylbenzene	ND	0.0088	mg/kg
sec-Butylbenzene	ND	0.0088	mg/kg
tert-Butylbenzene	ND	0.0088	mg/kg
Carbon disulfide	ND	0.0088	mg/kg
Carbon tetrachloride	ND	0.0088	mg/kg
Chlorobenzene	ND	0.0088	mg/kg
Dibromochloromethane	ND	0.0088	mg/kg
Chloroethane	ND	0.0088	mg/kg
Chloroform	ND	0.0088	mg/kg
Chloromethane	ND	0.0088	mg/kg
2-Chlorotoluene	ND	0.0088	mg/kg
4-Chlorotoluene	ND	0.0088	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.018	mg/kg
1,2-Dibromoethane	ND	0.0088	mg/kg
1,2-Dichlorobenzene	ND	0.0088	mg/kg
1,3-Dichlorobenzene	ND	0.0088	mg/kg
1,4-Dichlorobenzene	ND	0.0088	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0088	mg/kg
Dichlorodifluoromethane	ND	0.0088	mg/kg
1,1-Dichloroethane	ND	0.0088	mg/kg
1,2-Dichloroethane	ND	0.0088	mg/kg
cis-1,2-Dichloroethene	ND	0.0088	mg/kg
trans-1,2-Dichloroethene	ND	0.0088	mg/kg
1,1-Dichloroethene	ND	0.0088	mg/kg
1,2-Dichloropropane	ND	0.0088	mg/kg
1,3-Dichloropropene (total)	ND	0.018	mg/kg
Ethylbenzene	ND	0.0088	mg/kg
Isopropylbenzene	ND	0.0088	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

GC/MS Volatiles

Lot-Sample #...: A4G270219-002 Work Order #...: GLXLE1AL Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0088	mg/kg
Methylene chloride	**0.014**	**0.0088**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.035	mg/kg
Methyl tert-butyl ether	ND	0.035	mg/kg
n-Propylbenzene	ND	0.0088	mg/kg
Styrene	ND	0.0088	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0088	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0088	mg/kg
Tetrachloroethene	ND	0.0088	mg/kg
Toluene	ND	0.0088	mg/kg
1,2,4-Trichloro-benzene	ND	0.0088	mg/kg
1,1,1-Trichloroethane	ND	0.0088	mg/kg
1,1,2-Trichloroethane	ND	0.0088	mg/kg
Trichloroethene	ND	0.0088	mg/kg
Trichlorofluoromethane	ND	0.0088	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0088	mg/kg
1,2,4-Trimethylbenzene	ND	0.0088	mg/kg
1,3,5-Trimethylbenzene	ND	0.0088	mg/kg
Vinyl chloride	ND	0.0088	mg/kg
Xylenes (total)	ND	0.018	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(59 - 138)
1,2-Dichloroethane-d4	101	(61 - 130)
Toluene-d8	113	(60 - 143)
4-Bromofluorobenzene	100	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

GC/MS Volatiles

Lot-Sample #...:	A4G270219-003	Work Order #...:	GLXLN1AL	Matrix.....:	SO
Date Sampled...:	07/22/04 14:00	Date Received..:	07/23/04		
Prep Date.....:	08/03/04	Analysis Date..:	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.21	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	29	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0085	mg/kg
Acetone	**0.34**	**0.034**	**mg/kg**
Acrylonitrile	ND	0.17	mg/kg
Benzene	ND	0.0085	mg/kg
Bromodichloromethane	ND	0.0085	mg/kg
Bromoform	ND	0.0085	mg/kg
Methyl ethyl ketone	ND	0.034	mg/kg
n-Butylbenzene	ND	0.0085	mg/kg
sec-Butylbenzene	ND	0.0085	mg/kg
tert-Butylbenzene	ND	0.0085	mg/kg
Carbon disulfide	ND	0.0085	mg/kg
Carbon tetrachloride	ND	0.0085	mg/kg
Chlorobenzene	ND	0.0085	mg/kg
Dibromochloromethane	ND	0.0085	mg/kg
Chloroethane	ND	0.0085	mg/kg
Chloroform	ND	0.0085	mg/kg
Chloromethane	ND	0.0085	mg/kg
2-Chlorotoluene	ND	0.0085	mg/kg
4-Chlorotoluene	ND	0.0085	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.017	mg/kg
1,2-Dibromoethane	ND	0.0085	mg/kg
1,2-Dichlorobenzene	ND	0.0085	mg/kg
1,3-Dichlorobenzene	ND	0.0085	mg/kg
1,4-Dichlorobenzene	ND	0.0085	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0085	mg/kg
Dichlorodifluoromethane	ND	0.0085	mg/kg
1,1-Dichloroethane	ND	0.0085	mg/kg
1,2-Dichloroethane	ND	0.0085	mg/kg
cis-1,2-Dichloroethene	ND	0.0085	mg/kg
trans-1,2-Dichloroethene	ND	0.0085	mg/kg
1,1-Dichloroethene	ND	0.0085	mg/kg
1,2-Dichloropropane	ND	0.0085	mg/kg
1,3-Dichloropropene (total)	ND	0.017	mg/kg
Ethylbenzene	ND	0.0085	mg/kg
Isopropylbenzene	ND	0.0085	mg/kg

(Continued on next page)

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

GC/MS Volatiles

Lot-Sample #...: A4G270219-003 **Work Order #...:** GLXLN1AL **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0085	mg/kg
Methylene chloride	**0.014**	**0.0085**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.034	mg/kg
Methyl tert-butyl ether	ND	0.034	mg/kg
n-Propylbenzene	ND	0.0085	mg/kg
Styrene	ND	0.0085	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0085	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0085	mg/kg
Tetrachloroethene	ND	0.0085	mg/kg
Toluene	ND	0.0085	mg/kg
1,2,4-Trichloro-benzene	ND	0.0085	mg/kg
1,1,1-Trichloroethane	ND	0.0085	mg/kg
1,1,2-Trichloroethane	ND	0.0085	mg/kg
Trichloroethene	ND	0.0085	mg/kg
Trichlorofluoromethane	ND	0.0085	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0085	mg/kg
1,2,4-Trimethylbenzene	ND	0.0085	mg/kg
1,3,5-Trimethylbenzene	ND	0.0085	mg/kg
Vinyl chloride	ND	0.0085	mg/kg
Xylenes (total)	ND	0.017	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(59 - 138)
1,2-Dichloroethane-d4	98	(61 - 130)
Toluene-d8	115	(60 - 143)
4-Bromofluorobenzene	101	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS240001

GC/MS Volatiles

Lot-Sample #...: A4G270219-004 **Work Order #...:** GLXL61AL **Matrix.....:** SO
Date Sampled...: 07/22/04 12:05 **Date Received..:** 07/23/04
Prep Date.....: 08/03/04 **Analysis Date..:** 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.4 **Initial Wgt/Vol:** 5 g **Final Wgt/Vol..:** 5 mL
% Moisture.....: 14 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0082	mg/kg
Acetone	**0.14**	**0.033**	**mg/kg**
Acrylonitrile	ND	0.16	mg/kg
Benzene	ND	0.0082	mg/kg
Bromodichloromethane	ND	0.0082	mg/kg
Bromoform	ND	0.0082	mg/kg
Methyl ethyl ketone	ND	0.033	mg/kg
n-Butylbenzene	ND	0.0082	mg/kg
sec-Butylbenzene	ND	0.0082	mg/kg
tert-Butylbenzene	ND	0.0082	mg/kg
Carbon disulfide	ND	0.0082	mg/kg
Carbon tetrachloride	ND	0.0082	mg/kg
Chlorobenzene	ND	0.0082	mg/kg
Dibromochloromethane	ND	0.0082	mg/kg
Chloroethane	ND	0.0082	mg/kg
Chloroform	ND	0.0082	mg/kg
Chloromethane	ND	0.0082	mg/kg
2-Chlorotoluene	ND	0.0082	mg/kg
4-Chlorotoluene	ND	0.0082	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.016	mg/kg
1,2-Dibromoethane	ND	0.0082	mg/kg
1,2-Dichlorobenzene	ND	0.0082	mg/kg
1,3-Dichlorobenzene	ND	0.0082	mg/kg
1,4-Dichlorobenzene	ND	0.0082	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0082	mg/kg
Dichlorodifluoromethane	ND	0.0082	mg/kg
1,1-Dichloroethane	ND	0.0082	mg/kg
1,2-Dichloroethane	ND	0.0082	mg/kg
cis-1,2-Dichloroethene	ND	0.0082	mg/kg
trans-1,2-Dichloroethene	ND	0.0082	mg/kg
1,1-Dichloroethene	ND	0.0082	mg/kg
1,2-Dichloropropane	ND	0.0082	mg/kg
1,3-Dichloropropene (total)	ND	0.016	mg/kg
Ethylbenzene	ND	0.0082	mg/kg
Isopropylbenzene	ND	0.0082	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS240001

GC/MS Volatiles

Lot-Sample #...: A4G270219-004 Work Order #...: GLXL61AL Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0082	mg/kg
Methylene chloride	0.012	0.0082	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	0.033	mg/kg
Methyl tert-butyl ether	ND	0.033	mg/kg
n-Propylbenzene	ND	0.0082	mg/kg
Styrene	ND	0.0082	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0082	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0082	mg/kg
Tetrachloroethene	ND	0.0082	mg/kg
Toluene	ND	0.0082	mg/kg
1,2,4-Trichloro-benzene	ND	0.0082	mg/kg
1,1,1-Trichloroethane	ND	0.0082	mg/kg
1,1,2-Trichloroethane	ND	0.0082	mg/kg
Trichloroethene	ND	0.0082	mg/kg
Trichlorofluoromethane	ND	0.0082	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0082	mg/kg
1,2,4-Trimethylbenzene	ND	0.0082	mg/kg
1,3,5-Trimethylbenzene	ND	0.0082	mg/kg
Vinyl chloride	ND	0.0082	mg/kg
Xylenes (total)	ND	0.016	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	107	(60 - 143)
4-Bromofluorobenzene	110	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS250001

GC/MS Volatiles

Lot-Sample #...: A4G270219-005 Work Order #...: GLXM81AL Matrix.....: SO
Date Sampled...: 07/22/04 12:25 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.17 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 12 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0067	mg/kg
Acetone	0.14	0.027	mg/kg
Acrylonitrile	ND	0.13	mg/kg
Benzene	ND	0.0067	mg/kg
Bromodichloromethane	ND	0.0067	mg/kg
Bromoform	ND	0.0067	mg/kg
Methyl ethyl ketone	ND	0.027	mg/kg
n-Butylbenzene	ND	0.0067	mg/kg
sec-Butylbenzene	ND	0.0067	mg/kg
tert-Butylbenzene	ND	0.0067	mg/kg
Carbon disulfide	ND	0.0067	mg/kg
Carbon tetrachloride	ND	0.0067	mg/kg
Chlorobenzene	ND	0.0067	mg/kg
Dibromochloromethane	ND	0.0067	mg/kg
Chloroethane	ND	0.0067	mg/kg
Chloroform	ND	0.0067	mg/kg
Chloromethane	ND	0.0067	mg/kg
2-Chlorotoluene	ND	0.0067	mg/kg
4-Chlorotoluene	ND	0.0067	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.013	mg/kg
1,2-Dibromoethane	ND	0.0067	mg/kg
1,2-Dichlorobenzene	ND	0.0067	mg/kg
1,3-Dichlorobenzene	ND	0.0067	mg/kg
1,4-Dichlorobenzene	ND	0.0067	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0067	mg/kg
Dichlorodifluoromethane	ND	0.0067	mg/kg
1,1-Dichloroethane	ND	0.0067	mg/kg
1,2-Dichloroethane	ND	0.0067	mg/kg
cis-1,2-Dichloroethene	ND	0.0067	mg/kg
trans-1,2-Dichloroethene	ND	0.0067	mg/kg
1,1-Dichloroethene	ND	0.0067	mg/kg
1,2-Dichloropropane	ND	0.0067	mg/kg
1,3-Dichloropropene (total)	ND	0.013	mg/kg
Ethylbenzene	ND	0.0067	mg/kg
Isopropylbenzene	ND	0.0067	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS250001

GC/MS Volatiles

Lot-Sample #...: A4G270219-005 Work Order #...: GLXM81AL Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0067	mg/kg
Methylene chloride	**0.012**	**0.0067**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.027	mg/kg
Methyl tert-butyl ether	ND	0.027	mg/kg
n-Propylbenzene	ND	0.0067	mg/kg
Styrene	ND	0.0067	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0067	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0067	mg/kg
Tetrachloroethene	ND	0.0067	mg/kg
Toluene	ND	0.0067	mg/kg
1,2,4-Trichloro-benzene	ND	0.0067	mg/kg
1,1,1-Trichloroethane	ND	0.0067	mg/kg
1,1,2-Trichloroethane	ND	0.0067	mg/kg
Trichloroethene	ND	0.0067	mg/kg
Trichlorofluoromethane	ND	0.0067	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0067	mg/kg
1,2,4-Trimethylbenzene	ND	0.0067	mg/kg
1,3,5-Trimethylbenzene	ND	0.0067	mg/kg
Vinyl chloride	ND	0.0067	mg/kg
Xylenes (total)	ND	0.013	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	108	(60 - 143)
4-Bromofluorobenzene	110	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: EQUIP BLANK

GC/MS Volatiles

Lot-Sample #...: A4G270219-008 Work Order #...: GLXPR1AH Matrix.....: WQ
Date Sampled...: 07/22/04 15:00 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 07/28/04
Prep Batch #...: 4210204
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Acetonitrile	ND	20	ug/L
Chloroform	ND	1.0	ug/L
Benzene	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Methyl ethyl ketone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropene (total)	ND	2.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

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Mactec Engineering & Consulting Inc.

Client Sample ID: EQUIP BLANK

GC/MS Volatiles

Lot-Sample #...: A4G270219-008 Work Order #...: GLXPR1AH Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Methylene chloride	ND	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Bromomethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	100	(76 - 110)
4-Bromofluorobenzene	99	(74 - 116)

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

GC/MS Volatiles

Lot-Sample #...: A4G270219-009 Work Order #...: GLXV41AM Matrix.....: SO
Date Sampled...: 07/21/04 14:40 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.49 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 9.0 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0082	mg/kg
Acetone	0.037	0.033	mg/kg
Acrylonitrile	ND	0.16	mg/kg
Benzene	ND	0.0082	mg/kg
Bromodichloromethane	ND	0.0082	mg/kg
Bromoform	ND	0.0082	mg/kg
Methyl ethyl ketone	ND	0.033	mg/kg
n-Butylbenzene	ND	0.0082	mg/kg
sec-Butylbenzene	ND	0.0082	mg/kg
tert-Butylbenzene	ND	0.0082	mg/kg
Carbon disulfide	ND	0.0082	mg/kg
Carbon tetrachloride	ND	0.0082	mg/kg
Chlorobenzene	ND	0.0082	mg/kg
Dibromochloromethane	ND	0.0082	mg/kg
Chloroethane	ND	0.0082	mg/kg
Chloroform	ND	0.0082	mg/kg
Chloromethane	ND	0.0082	mg/kg
2-Chlorotoluene	ND	0.0082	mg/kg
4-Chlorotoluene	ND	0.0082	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.016	mg/kg
1,2-Dibromoethane	ND	0.0082	mg/kg
1,2-Dichlorobenzene	ND	0.0082	mg/kg
1,3-Dichlorobenzene	ND	0.0082	mg/kg
1,4-Dichlorobenzene	ND	0.0082	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0082	mg/kg
Dichlorodifluoromethane	ND	0.0082	mg/kg
1,1-Dichloroethane	ND	0.0082	mg/kg
1,2-Dichloroethane	ND	0.0082	mg/kg
cis-1,2-Dichloroethene	ND	0.0082	mg/kg
trans-1,2-Dichloroethene	ND	0.0082	mg/kg
1,1-Dichloroethene	ND	0.0082	mg/kg
1,2-Dichloropropane	ND	0.0082	mg/kg
1,3-Dichloropropene (total)	ND	0.016	mg/kg
Ethylbenzene	ND	0.0082	mg/kg
Isopropylbenzene	ND	0.0082	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

GC/MS Volatiles

Lot-Sample #...: A4G270219-009 **Work Order #...:** GLXV41AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0082	mg/kg
Methylene chloride	**0.014**	**0.0082**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.033	mg/kg
Methyl tert-butyl ether	ND	0.033	mg/kg
n-Propylbenzene	ND	0.0082	mg/kg
Styrene	ND	0.0082	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0082	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0082	mg/kg
Tetrachloroethene	ND	0.0082	mg/kg
Toluene	ND	0.0082	mg/kg
1,2,4-Trichloro-benzene	ND	0.0082	mg/kg
1,1,1-Trichloroethane	ND	0.0082	mg/kg
1,1,2-Trichloroethane	ND	0.0082	mg/kg
Trichloroethene	ND	0.0082	mg/kg
Trichlorofluoromethane	ND	0.0082	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0082	mg/kg
1,2,4-Trimethylbenzene	ND	0.0082	mg/kg
1,3,5-Trimethylbenzene	ND	0.0082	mg/kg
Vinyl chloride	ND	0.0082	mg/kg
Xylenes (total)	ND	0.016	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	108	(59 - 138)
1,2-Dichloroethane-d4	105	(61 - 130)
Toluene-d8	111	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

GC/MS Volatiles

Lot-Sample #...: A4G270219-010 Work Order #...: GLXWP1AM Matrix.....: SO
Date Sampled...: 07/21/04 14:40 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215361
Dilution Factor: 1.29 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 14 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0075	mg/kg
Acetone	0.057	0.030	mg/kg
Acrylonitrile	ND	0.15	mg/kg
Benzene	ND	0.0075	mg/kg
Bromodichloromethane	ND	0.0075	mg/kg
Bromoform	ND	0.0075	mg/kg
Methyl ethyl ketone	ND	0.030	mg/kg
n-Butylbenzene	ND	0.0075	mg/kg
sec-Butylbenzene	ND	0.0075	mg/kg
tert-Butylbenzene	ND	0.0075	mg/kg
Carbon disulfide	ND	0.0075	mg/kg
Carbon tetrachloride	ND	0.0075	mg/kg
Chlorobenzene	ND	0.0075	mg/kg
Dibromochloromethane	ND	0.0075	mg/kg
Chloroethane	ND	0.0075	mg/kg
Chloroform	ND	0.0075	mg/kg
Chloromethane	ND	0.0075	mg/kg
2-Chlorotoluene	ND	0.0075	mg/kg
4-Chlorotoluene	ND	0.0075	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.015	mg/kg
1,2-Dibromoethane	ND	0.0075	mg/kg
1,2-Dichlorobenzene	ND	0.0075	mg/kg
1,3-Dichlorobenzene	ND	0.0075	mg/kg
1,4-Dichlorobenzene	ND	0.0075	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0075	mg/kg
Dichlorodifluoromethane	ND	0.0075	mg/kg
1,1-Dichloroethane	ND	0.0075	mg/kg
1,2-Dichloroethane	ND	0.0075	mg/kg
cis-1,2-Dichloroethene	ND	0.0075	mg/kg
trans-1,2-Dichloroethene	ND	0.0075	mg/kg
1,1-Dichloroethene	ND	0.0075	mg/kg
1,2-Dichloropropane	ND	0.0075	mg/kg
1,3-Dichloropropene (total)	ND	0.015	mg/kg
Ethylbenzene	ND	0.0075	mg/kg
Isopropylbenzene	ND	0.0075	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

GC/MS Volatiles

Lot-Sample #...: A4G270219-010 **Work Order #...:** GLXWP1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0075	mg/kg
Methylene chloride	**0.013**	**0.0075**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.030	mg/kg
Methyl tert-butyl ether	ND	0.030	mg/kg
n-Propylbenzene	ND	0.0075	mg/kg
Styrene	ND	0.0075	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0075	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0075	mg/kg
Tetrachloroethene	ND	0.0075	mg/kg
Toluene	ND	0.0075	mg/kg
1,2,4-Trichloro-benzene	ND	0.0075	mg/kg
1,1,1-Trichloroethane	ND	0.0075	mg/kg
1,1,2-Trichloroethane	ND	0.0075	mg/kg
Trichloroethene	ND	0.0075	mg/kg
Trichlorofluoromethane	ND	0.0075	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0075	mg/kg
1,2,4-Trimethylbenzene	ND	0.0075	mg/kg
1,3,5-Trimethylbenzene	ND	0.0075	mg/kg
Vinyl chloride	ND	0.0075	mg/kg
Xylenes (total)	ND	0.015	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	112	(60 - 143)
4-Bromofluorobenzene	113	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

GC/MS Volatiles

Lot-Sample #...:	A4G270219-011	**Work Order #...:**	GLXW11AM	**Matrix.....:**	SO
Date Sampled...:	07/21/04 12:15	**Date Received..:**	07/23/04		
Prep Date.....:	07/30/04	**Analysis Date..:**	07/30/04		
Prep Batch #...:	4215361				
Dilution Factor:	1.16	**Initial Wgt/Vol:**	5 g	**Final Wgt/Vol..:**	5 mL
% Moisture.....:	7.9	**Method.....:**	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0063	mg/kg
Acetone	**0.49**	**0.025**	**mg/kg**
Acrylonitrile	ND	0.13	mg/kg
Benzene	**0.0078**	**0.0063**	**mg/kg**
Bromodichloromethane	ND	0.0063	mg/kg
Bromoform	ND	0.0063	mg/kg
Methyl ethyl ketone	ND	0.025	mg/kg
n-Butylbenzene	ND	0.0063	mg/kg
sec-Butylbenzene	ND	0.0063	mg/kg
tert-Butylbenzene	ND	0.0063	mg/kg
Carbon disulfide	ND	0.0063	mg/kg
Carbon tetrachloride	ND	0.0063	mg/kg
Chlorobenzene	ND	0.0063	mg/kg
Dibromochloromethane	ND	0.0063	mg/kg
Chloroethane	ND	0.0063	mg/kg
Chloroform	ND	0.0063	mg/kg
Chloromethane	ND	0.0063	mg/kg
2-Chlorotoluene	ND	0.0063	mg/kg
4-Chlorotoluene	ND	0.0063	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.013	mg/kg
1,2-Dibromoethane	ND	0.0063	mg/kg
1,2-Dichlorobenzene	ND	0.0063	mg/kg
1,3-Dichlorobenzene	ND	0.0063	mg/kg
1,4-Dichlorobenzene	ND	0.0063	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0063	mg/kg
Dichlorodifluoromethane	ND	0.0063	mg/kg
1,1-Dichloroethane	ND	0.0063	mg/kg
1,2-Dichloroethane	ND	0.0063	mg/kg
cis-1,2-Dichloroethene	ND	0.0063	mg/kg
trans-1,2-Dichloroethene	ND	0.0063	mg/kg
1,1-Dichloroethene	ND	0.0063	mg/kg
1,2-Dichloropropane	ND	0.0063	mg/kg
1,3-Dichloropropene (total)	ND	0.013	mg/kg
Ethylbenzene	ND	0.0063	mg/kg
Isopropylbenzene	ND	0.0063	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

GC/MS Volatiles

Lot-Sample #...: A4G270219-011 Work Order #...: GLXW11AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0063	mg/kg
Methylene chloride	**0.0085**	**0.0063**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/kg
Methyl tert-butyl ether	ND	0.025	mg/kg
n-Propylbenzene	ND	0.0063	mg/kg
Styrene	ND	0.0063	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0063	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0063	mg/kg
Tetrachloroethene	ND	0.0063	mg/kg
Toluene	ND	0.0063	mg/kg
1,2,4-Trichloro-benzene	ND	0.0063	mg/kg
1,1,1-Trichloroethane	ND	0.0063	mg/kg
1,1,2-Trichloroethane	ND	0.0063	mg/kg
Trichloroethene	ND	0.0063	mg/kg
Trichlorofluoromethane	ND	0.0063	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0063	mg/kg
1,2,4-Trimethylbenzene	ND	0.0063	mg/kg
1,3,5-Trimethylbenzene	ND	0.0063	mg/kg
Vinyl chloride	ND	0.0063	mg/kg
Xylenes (total)	ND	0.013	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(59 - 138)
1,2-Dichloroethane-d4	106	(61 - 130)
Toluene-d8	113	(60 - 143)
4-Bromofluorobenzene	115	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

GC/MS Volatiles

Lot-Sample #...: A4G270219-012 Work Order #...: GLXXC1AM Matrix.....: SO
Date Sampled...: 07/21/04 11:50 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215361
Dilution Factor: 1.1 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 10 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0061	mg/kg
Acetone	0.036	0.025	mg/kg
Acrylonitrile	ND	0.12	mg/kg
Benzene	ND	0.0061	mg/kg
Bromodichloromethane	ND	0.0061	mg/kg
Bromoform	ND	0.0061	mg/kg
Methyl ethyl ketone	ND	0.025	mg/kg
n-Butylbenzene	ND	0.0061	mg/kg
sec-Butylbenzene	ND	0.0061	mg/kg
tert-Butylbenzene	ND	0.0061	mg/kg
Carbon disulfide	ND	0.0061	mg/kg
Carbon tetrachloride	ND	0.0061	mg/kg
Chlorobenzene	ND	0.0061	mg/kg
Dibromochloromethane	ND	0.0061	mg/kg
Chloroethane	ND	0.0061	mg/kg
Chloroform	ND	0.0061	mg/kg
Chloromethane	ND	0.0061	mg/kg
2-Chlorotoluene	ND	0.0061	mg/kg
4-Chlorotoluene	ND	0.0061	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.012	mg/kg
1,2-Dibromoethane	ND	0.0061	mg/kg
1,2-Dichlorobenzene	ND	0.0061	mg/kg
1,3-Dichlorobenzene	ND	0.0061	mg/kg
1,4-Dichlorobenzene	ND	0.0061	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0061	mg/kg
Dichlorodifluoromethane	ND	0.0061	mg/kg
1,1-Dichloroethane	ND	0.0061	mg/kg
1,2-Dichloroethane	ND	0.0061	mg/kg
cis-1,2-Dichloroethene	ND	0.0061	mg/kg
trans-1,2-Dichloroethene	ND	0.0061	mg/kg
1,1-Dichloroethene	ND	0.0061	mg/kg
1,2-Dichloropropane	ND	0.0061	mg/kg
1,3-Dichloropropene (total)	ND	0.012	mg/kg
Ethylbenzene	ND	0.0061	mg/kg
Isopropylbenzene	ND	0.0061	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

GC/MS Volatiles

Lot-Sample #...: A4G270219-012 **Work Order #...:** GLXXC1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0061	mg/kg
Methylene chloride	**0.0086**	**0.0061**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/kg
Methyl tert-butyl ether	ND	0.025	mg/kg
n-Propylbenzene	ND	0.0061	mg/kg
Styrene	ND	0.0061	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0061	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0061	mg/kg
Tetrachloroethene	ND	0.0061	mg/kg
Toluene	ND	0.0061	mg/kg
1,2,4-Trichloro-benzene	ND	0.0061	mg/kg
1,1,1-Trichloroethane	ND	0.0061	mg/kg
1,1,2-Trichloroethane	ND	0.0061	mg/kg
Trichloroethene	ND	0.0061	mg/kg
Trichlorofluoromethane	ND	0.0061	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0061	mg/kg
1,2,4-Trimethylbenzene	ND	0.0061	mg/kg
1,3,5-Trimethylbenzene	ND	0.0061	mg/kg
Vinyl chloride	ND	0.0061	mg/kg
Xylenes (total)	ND	0.012	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	105	(61 - 130)
Toluene-d8	112	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

GC/MS Volatiles

Lot-Sample #...:	A4G270219-013	Work Order #...:	GLXXG1AM	Matrix.....:	SO
Date Sampled...:	07/21/04 11:35	Date Received..:	07/23/04		
Prep Date.....:	07/30/04	Analysis Date..:	07/30/04		
Prep Batch #...:	4215361				
Dilution Factor:	0.88	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	19	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0054	mg/kg
Acetone	0.12	0.022	mg/kg
Acrylonitrile	ND	0.11	mg/kg
Benzene	ND	0.0054	mg/kg
Bromodichloromethane	ND	0.0054	mg/kg
Bromoform	ND	0.0054	mg/kg
Methyl ethyl ketone	ND	0.022	mg/kg
n-Butylbenzene	ND	0.0054	mg/kg
sec-Butylbenzene	ND	0.0054	mg/kg
tert-Butylbenzene	ND	0.0054	mg/kg
Carbon disulfide	ND	0.0054	mg/kg
Carbon tetrachloride	ND	0.0054	mg/kg
Chlorobenzene	ND	0.0054	mg/kg
Dibromochloromethane	ND	0.0054	mg/kg
Chloroethane	ND	0.0054	mg/kg
Chloroform	ND	0.0054	mg/kg
Chloromethane	ND	0.0054	mg/kg
2-Chlorotoluene	ND	0.0054	mg/kg
4-Chlorotoluene	ND	0.0054	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.011	mg/kg
1,2-Dibromoethane	ND	0.0054	mg/kg
1,2-Dichlorobenzene	ND	0.0054	mg/kg
1,3-Dichlorobenzene	ND	0.0054	mg/kg
1,4-Dichlorobenzene	ND	0.0054	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0054	mg/kg
Dichlorodifluoromethane	ND	0.0054	mg/kg
1,1-Dichloroethane	ND	0.0054	mg/kg
1,2-Dichloroethane	ND	0.0054	mg/kg
cis-1,2-Dichloroethene	ND	0.0054	mg/kg
trans-1,2-Dichloroethene	ND	0.0054	mg/kg
1,1-Dichloroethene	ND	0.0054	mg/kg
1,2-Dichloropropane	ND	0.0054	mg/kg
1,3-Dichloropropene (total)	ND	0.011	mg/kg
Ethylbenzene	ND	0.0054	mg/kg
Isopropylbenzene	ND	0.0054	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

GC/MS Volatiles

Lot-Sample #...: A4G270219-013 Work Order #...: GLXXG1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0054	mg/kg
Methylene chloride	**0.0091**	**0.0054**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/kg
Methyl tert-butyl ether	ND	0.022	mg/kg
n-Propylbenzene	ND	0.0054	mg/kg
Styrene	ND	0.0054	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0054	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0054	mg/kg
Tetrachloroethene	ND	0.0054	mg/kg
Toluene	ND	0.0054	mg/kg
1,2,4-Trichloro-benzene	ND	0.0054	mg/kg
1,1,1-Trichloroethane	ND	0.0054	mg/kg
1,1,2-Trichloroethane	ND	0.0054	mg/kg
Trichloroethene	ND	0.0054	mg/kg
Trichlorofluoromethane	ND	0.0054	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0054	mg/kg
1,2,4-Trimethylbenzene	ND	0.0054	mg/kg
1,3,5-Trimethylbenzene	ND	0.0054	mg/kg
Vinyl chloride	ND	0.0054	mg/kg
Xylenes (total)	ND	0.011	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(59 - 138)
1,2-Dichloroethane-d4	104	(61 - 130)
Toluene-d8	113	(60 - 143)
4-Bromofluorobenzene	114	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

GC/MS Volatiles

Lot-Sample #...: A4G270219-014 Work Order #...: GLXXQ1AM Matrix.....: SO
Date Sampled...: 07/21/04 11:20 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215361
Dilution Factor: 0.96 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 14 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0056	mg/kg
Acetone	0.31	0.022	mg/kg
Acrylonitrile	ND	0.11	mg/kg
Benzene	ND	0.0056	mg/kg
Bromodichloromethane	ND	0.0056	mg/kg
Bromoform	ND	0.0056	mg/kg
Methyl ethyl ketone	ND	0.022	mg/kg
n-Butylbenzene	ND	0.0056	mg/kg
sec-Butylbenzene	ND	0.0056	mg/kg
tert-Butylbenzene	ND	0.0056	mg/kg
Carbon disulfide	ND	0.0056	mg/kg
Carbon tetrachloride	ND	0.0056	mg/kg
Chlorobenzene	ND	0.0056	mg/kg
Dibromochloromethane	ND	0.0056	mg/kg
Chloroethane	ND	0.0056	mg/kg
Chloroform	ND	0.0056	mg/kg
Chloromethane	ND	0.0056	mg/kg
2-Chlorotoluene	ND	0.0056	mg/kg
4-Chlorotoluene	ND	0.0056	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.011	mg/kg
1,2-Dibromoethane	ND	0.0056	mg/kg
1,2-Dichlorobenzene	ND	0.0056	mg/kg
1,3-Dichlorobenzene	ND	0.0056	mg/kg
1,4-Dichlorobenzene	ND	0.0056	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0056	mg/kg
Dichlorodifluoromethane	ND	0.0056	mg/kg
1,1-Dichloroethane	ND	0.0056	mg/kg
1,2-Dichloroethane	ND	0.0056	mg/kg
cis-1,2-Dichloroethene	ND	0.0056	mg/kg
trans-1,2-Dichloroethene	ND	0.0056	mg/kg
1,1-Dichloroethene	ND	0.0056	mg/kg
1,2-Dichloropropane	ND	0.0056	mg/kg
1,3-Dichloropropene (total)	ND	0.011	mg/kg
Ethylbenzene	ND	0.0056	mg/kg
Isopropylbenzene	ND	0.0056	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

GC/MS Volatiles

Lot-Sample #...: A4G270219-014 **Work Order #...:** GLXXQ1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0056	mg/kg
Methylene chloride	**0.012**	**0.0056**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/kg
Methyl tert-butyl ether	ND	0.022	mg/kg
n-Propylbenzene	ND	0.0056	mg/kg
Styrene	ND	0.0056	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0056	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0056	mg/kg
Tetrachloroethene	ND	0.0056	mg/kg
Toluene	ND	0.0056	mg/kg
1,2,4-Trichloro-benzene	ND	0.0056	mg/kg
1,1,1-Trichloroethane	ND	0.0056	mg/kg
1,1,2-Trichloroethane	ND	0.0056	mg/kg
Trichloroethene	ND	0.0056	mg/kg
Trichlorofluoromethane	ND	0.0056	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0056	mg/kg
1,2,4-Trimethylbenzene	ND	0.0056	mg/kg
1,3,5-Trimethylbenzene	ND	0.0056	mg/kg
Vinyl chloride	ND	0.0056	mg/kg
Xylenes (total)	ND	0.011	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	104	(61 - 130)
Toluene-d8	111	(60 - 143)
4-Bromofluorobenzene	113	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

GC/MS Volatiles

Lot-Sample #...:	A4G270219-015	Work Order #...:	GLXXV1AM	Matrix.....:	SO
Date Sampled...:	07/21/04 11:10	Date Received..:	07/23/04		
Prep Date.....:	07/30/04	Analysis Date..:	07/30/04		
Prep Batch #...:	4215361				
Dilution Factor:	0.82	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	15	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0048	mg/kg
Acetone	ND	0.019	mg/kg
Acrylonitrile	ND	0.097	mg/kg
Benzene	ND	0.0048	mg/kg
Bromodichloromethane	ND	0.0048	mg/kg
Bromoform	ND	0.0048	mg/kg
Methyl ethyl ketone	ND	0.019	mg/kg
n-Butylbenzene	ND	0.0048	mg/kg
sec-Butylbenzene	ND	0.0048	mg/kg
tert-Butylbenzene	ND	0.0048	mg/kg
Carbon disulfide	ND	0.0048	mg/kg
Carbon tetrachloride	ND	0.0048	mg/kg
Chlorobenzene	ND	0.0048	mg/kg
Dibromochloromethane	ND	0.0048	mg/kg
Chloroethane	ND	0.0048	mg/kg
Chloroform	ND	0.0048	mg/kg
Chloromethane	ND	0.0048	mg/kg
2-Chlorotoluene	ND	0.0048	mg/kg
4-Chlorotoluene	ND	0.0048	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.0097	mg/kg
1,2-Dibromoethane	ND	0.0048	mg/kg
1,2-Dichlorobenzene	ND	0.0048	mg/kg
1,3-Dichlorobenzene	ND	0.0048	mg/kg
1,4-Dichlorobenzene	ND	0.0048	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0048	mg/kg
Dichlorodifluoromethane	ND	0.0048	mg/kg
1,1-Dichloroethane	ND	0.0048	mg/kg
1,2-Dichloroethane	ND	0.0048	mg/kg
cis-1,2-Dichloroethene	ND	0.0048	mg/kg
trans-1,2-Dichloroethene	ND	0.0048	mg/kg
1,1-Dichloroethene	ND	0.0048	mg/kg
1,2-Dichloropropane	ND	0.0048	mg/kg
1,3-Dichloropropene (total)	ND	0.0097	mg/kg
Ethylbenzene	ND	0.0048	mg/kg
Isopropylbenzene	ND	0.0048	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

GC/MS Volatiles

Lot-Sample #...: A4G270219-015 Work Order #...: GLXXV1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0048	mg/kg
Methylene chloride	0.0083	0.0048	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	0.019	mg/kg
Methyl tert-butyl ether	ND	0.019	mg/kg
n-Propylbenzene	ND	0.0048	mg/kg
Styrene	ND	0.0048	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0048	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0048	mg/kg
Tetrachloroethene	ND	0.0048	mg/kg
Toluene	ND	0.0048	mg/kg
1,2,4-Trichloro-benzene	ND	0.0048	mg/kg
1,1,1-Trichloroethane	ND	0.0048	mg/kg
1,1,2-Trichloroethane	ND	0.0048	mg/kg
Trichloroethene	ND	0.0048	mg/kg
Trichlorofluoromethane	ND	0.0048	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0048	mg/kg
1,2,4-Trimethylbenzene	ND	0.0048	mg/kg
1,3,5-Trimethylbenzene	ND	0.0048	mg/kg
Vinyl chloride	ND	0.0048	mg/kg
Xylenes (total)	ND	0.0097	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	113	(60 - 143)
4-Bromofluorobenzene	113	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

GC/MS Volatiles

Lot-Sample #...: A4G270219-016 Work Order #...: GLXXX1AM Matrix.....: SO
Date Sampled...: 07/21/04 10:35 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 0.95 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 13 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0054	mg/kg
Acetone	ND	0.022	mg/kg
Acrylonitrile	ND	0.11	mg/kg
Benzene	ND	0.0054	mg/kg
Bromodichloromethane	ND	0.0054	mg/kg
Bromoform	ND	0.0054	mg/kg
Methyl ethyl ketone	ND	0.022	mg/kg
n-Butylbenzene	ND	0.0054	mg/kg
sec-Butylbenzene	ND	0.0054	mg/kg
tert-Butylbenzene	ND	0.0054	mg/kg
Carbon disulfide	ND	0.0054	mg/kg
Carbon tetrachloride	ND	0.0054	mg/kg
Chlorobenzene	ND	0.0054	mg/kg
Dibromochloromethane	ND	0.0054	mg/kg
Chloroethane	ND	0.0054	mg/kg
Chloroform	ND	0.0054	mg/kg
Chloromethane	ND	0.0054	mg/kg
2-Chlorotoluene	ND	0.0054	mg/kg
4-Chlorotoluene	ND	0.0054	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.011	mg/kg
1,2-Dibromoethane	ND	0.0054	mg/kg
1,2-Dichlorobenzene	ND	0.0054	mg/kg
1,3-Dichlorobenzene	ND	0.0054	mg/kg
1,4-Dichlorobenzene	ND	0.0054	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0054	mg/kg
Dichlorodifluoromethane	ND	0.0054	mg/kg
1,1-Dichloroethane	ND	0.0054	mg/kg
1,2-Dichloroethane	ND	0.0054	mg/kg
cis-1,2-Dichloroethene	ND	0.0054	mg/kg
trans-1,2-Dichloroethene	ND	0.0054	mg/kg
1,1-Dichloroethene	ND	0.0054	mg/kg
1,2-Dichloropropane	ND	0.0054	mg/kg
1,3-Dichloropropene (total)	ND	0.011	mg/kg
Ethylbenzene	ND	0.0054	mg/kg
Isopropylbenzene	ND	0.0054	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

GC/MS Volatiles

Lot-Sample #...: A4G270219-016 **Work Order #...:** GLXXX1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0054	mg/kg
Methylene chloride	**0.011**	**0.0054**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/kg
Methyl tert-butyl ether	ND	0.022	mg/kg
n-Propylbenzene	ND	0.0054	mg/kg
Styrene	ND	0.0054	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0054	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0054	mg/kg
Tetrachloroethene	ND	0.0054	mg/kg
Toluene	ND	0.0054	mg/kg
1,2,4-Trichloro-benzene	ND	0.0054	mg/kg
1,1,1-Trichloroethane	ND	0.0054	mg/kg
1,1,2-Trichloroethane	ND	0.0054	mg/kg
Trichloroethene	ND	0.0054	mg/kg
Trichlorofluoromethane	ND	0.0054	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0054	mg/kg
1,2,4-Trimethylbenzene	ND	0.0054	mg/kg
1,3,5-Trimethylbenzene	ND	0.0054	mg/kg
Vinyl chloride	ND	0.0054	mg/kg
Xylenes (total)	ND	0.011	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	110	(60 - 143)
4-Bromofluorobenzene	108	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

GC/MS Volatiles

Lot-Sample #...: A4G270219-017 Work Order #...: GLXX71AM Matrix.....: SO
Date Sampled...: 07/21/04 10:35 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215361
Dilution Factor: 0.69 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 14 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0040	mg/kg
Acetone	**0.048**	**0.016**	**mg/kg**
Acrylonitrile	ND	0.080	mg/kg
Benzene	ND	0.0040	mg/kg
Bromodichloromethane	ND	0.0040	mg/kg
Bromoform	ND	0.0040	mg/kg
Methyl ethyl ketone	ND	0.016	mg/kg
n-Butylbenzene	ND	0.0040	mg/kg
sec-Butylbenzene	ND	0.0040	mg/kg
tert-Butylbenzene	ND	0.0040	mg/kg
Carbon disulfide	ND	0.0040	mg/kg
Carbon tetrachloride	ND	0.0040	mg/kg
Chlorobenzene	ND	0.0040	mg/kg
Dibromochloromethane	ND	0.0040	mg/kg
Chloroethane	ND	0.0040	mg/kg
Chloroform	ND	0.0040	mg/kg
Chloromethane	ND	0.0040	mg/kg
2-Chlorotoluene	ND	0.0040	mg/kg
4-Chlorotoluene	ND	0.0040	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.0080	mg/kg
1,2-Dibromoethane	ND	0.0040	mg/kg
1,2-Dichlorobenzene	ND	0.0040	mg/kg
1,3-Dichlorobenzene	ND	0.0040	mg/kg
1,4-Dichlorobenzene	ND	0.0040	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/kg
Dichlorodifluoromethane	ND	0.0040	mg/kg
1,1-Dichloroethane	ND	0.0040	mg/kg
1,2-Dichloroethane	ND	0.0040	mg/kg
cis-1,2-Dichloroethene	ND	0.0040	mg/kg
trans-1,2-Dichloroethene	ND	0.0040	mg/kg
1,1-Dichloroethene	ND	0.0040	mg/kg
1,2-Dichloropropane	ND	0.0040	mg/kg
1,3-Dichloropropene (total)	ND	0.0080	mg/kg
Ethylbenzene	ND	0.0040	mg/kg
Isopropylbenzene	ND	0.0040	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

GC/MS Volatiles

Lot-Sample #...: A4G270219-017 **Work Order #...:** GLXX71AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0040	mg/kg
Methylene chloride	**0.0067**	**0.0040**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.016	mg/kg
Methyl tert-butyl ether	ND	0.016	mg/kg
n-Propylbenzene	ND	0.0040	mg/kg
Styrene	ND	0.0040	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0040	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0040	mg/kg
Tetrachloroethene	ND	0.0040	mg/kg
Toluene	ND	0.0040	mg/kg
1,2,4-Trichloro-benzene	ND	0.0040	mg/kg
1,1,1-Trichloroethane	ND	0.0040	mg/kg
1,1,2-Trichloroethane	ND	0.0040	mg/kg
Trichloroethene	ND	0.0040	mg/kg
Trichlorofluoromethane	ND	0.0040	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0040	mg/kg
1,2,4-Trimethylbenzene	ND	0.0040	mg/kg
1,3,5-Trimethylbenzene	ND	0.0040	mg/kg
Vinyl chloride	ND	0.0040	mg/kg
Xylenes (total)	ND	0.0080	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(59 - 138)
1,2-Dichloroethane-d4	98	(61 - 130)
Toluene-d8	109	(60 - 143)
4-Bromofluorobenzene	106	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

GC/MS Volatiles

Lot-Sample #...: A4G270219-018 Work Order #...: GLX0D1AM Matrix.....: SO
Date Sampled...: 07/21/04 10:10 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215361
Dilution Factor: 0.9 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 18 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0055	mg/kg
Acetone	0.034	0.022	mg/kg
Acrylonitrile	ND	0.11	mg/kg
Benzene	ND	0.0055	mg/kg
Bromodichloromethane	ND	0.0055	mg/kg
Bromoform	ND	0.0055	mg/kg
Methyl ethyl ketone	ND	0.022	mg/kg
n-Butylbenzene	ND	0.0055	mg/kg
sec-Butylbenzene	ND	0.0055	mg/kg
tert-Butylbenzene	ND	0.0055	mg/kg
Carbon disulfide	ND	0.0055	mg/kg
Carbon tetrachloride	ND	0.0055	mg/kg
Chlorobenzene	ND	0.0055	mg/kg
Dibromochloromethane	ND	0.0055	mg/kg
Chloroethane	ND	0.0055	mg/kg
Chloroform	ND	0.0055	mg/kg
Chloromethane	ND	0.0055	mg/kg
2-Chlorotoluene	ND	0.0055	mg/kg
4-Chlorotoluene	ND	0.0055	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.011	mg/kg
1,2-Dibromoethane	ND	0.0055	mg/kg
1,2-Dichlorobenzene	ND	0.0055	mg/kg
1,3-Dichlorobenzene	ND	0.0055	mg/kg
1,4-Dichlorobenzene	ND	0.0055	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0055	mg/kg
Dichlorodifluoromethane	ND	0.0055	mg/kg
1,1-Dichloroethane	ND	0.0055	mg/kg
1,2-Dichloroethane	ND	0.0055	mg/kg
cis-1,2-Dichloroethene	ND	0.0055	mg/kg
trans-1,2-Dichloroethene	ND	0.0055	mg/kg
1,1-Dichloroethene	ND	0.0055	mg/kg
1,2-Dichloropropane	ND	0.0055	mg/kg
1,3-Dichloropropene (total)	ND	0.011	mg/kg
Ethylbenzene	ND	0.0055	mg/kg
Isopropylbenzene	ND	0.0055	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

GC/MS Volatiles

Lot-Sample #...: A4G270219-018 Work Order #...: GLX0D1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0055	mg/kg
Methylene chloride	**0.011**	**0.0055**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/kg
Methyl tert-butyl ether	ND	0.022	mg/kg
n-Propylbenzene	ND	0.0055	mg/kg
Styrene	ND	0.0055	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0055	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0055	mg/kg
Tetrachloroethene	ND	0.0055	mg/kg
Toluene	ND	0.0055	mg/kg
1,2,4-Trichloro-benzene	ND	0.0055	mg/kg
1,1,1-Trichloroethane	ND	0.0055	mg/kg
1,1,2-Trichloroethane	ND	0.0055	mg/kg
Trichloroethene	ND	0.0055	mg/kg
Trichlorofluoromethane	ND	0.0055	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0055	mg/kg
1,2,4-Trimethylbenzene	ND	0.0055	mg/kg
1,3,5-Trimethylbenzene	ND	0.0055	mg/kg
Vinyl chloride	ND	0.0055	mg/kg
Xylenes (total)	ND	0.011	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	112	(60 - 143)
4-Bromofluorobenzene	111	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

GC/MS Volatiles

Lot-Sample #...: A4G270219-019 Work Order #...: GLX0H1AM Matrix.....: SO
Date Sampled...: 07/21/04 09:45 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 0.94 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 9.7 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0052	mg/kg
Acetone	**0.022**	**0.021**	**mg/kg**
Acrylonitrile	ND	0.10	mg/kg
Benzene	ND	0.0052	mg/kg
Bromodichloromethane	ND	0.0052	mg/kg
Bromoform	ND	0.0052	mg/kg
Methyl ethyl ketone	ND	0.021	mg/kg
n-Butylbenzene	ND	0.0052	mg/kg
sec-Butylbenzene	ND	0.0052	mg/kg
tert-Butylbenzene	ND	0.0052	mg/kg
Carbon disulfide	ND	0.0052	mg/kg
Carbon tetrachloride	ND	0.0052	mg/kg
Chlorobenzene	ND	0.0052	mg/kg
Dibromochloromethane	ND	0.0052	mg/kg
Chloroethane	ND	0.0052	mg/kg
Chloroform	ND	0.0052	mg/kg
Chloromethane	ND	0.0052	mg/kg
2-Chlorotoluene	ND	0.0052	mg/kg
4-Chlorotoluene	ND	0.0052	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.010	mg/kg
1,2-Dibromoethane	ND	0.0052	mg/kg
1,2-Dichlorobenzene	ND	0.0052	mg/kg
1,3-Dichlorobenzene	ND	0.0052	mg/kg
1,4-Dichlorobenzene	ND	0.0052	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0052	mg/kg
Dichlorodifluoromethane	ND	0.0052	mg/kg
1,1-Dichloroethane	ND	0.0052	mg/kg
1,2-Dichloroethane	ND	0.0052	mg/kg
cis-1,2-Dichloroethene	ND	0.0052	mg/kg
trans-1,2-Dichloroethene	ND	0.0052	mg/kg
1,1-Dichloroethene	ND	0.0052	mg/kg
1,2-Dichloropropane	ND	0.0052	mg/kg
1,3-Dichloropropene (total)	ND	0.010	mg/kg
Ethylbenzene	ND	0.0052	mg/kg
Isopropylbenzene	ND	0.0052	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

GC/MS Volatiles

Lot-Sample #...: A4G270219-019 Work Order #...: GLX0H1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0052	mg/kg
Methylene chloride	**0.0087**	**0.0052**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.021	mg/kg
Methyl tert-butyl ether	ND	0.021	mg/kg
n-Propylbenzene	ND	0.0052	mg/kg
Styrene	ND	0.0052	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0052	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0052	mg/kg
Tetrachloroethene	ND	0.0052	mg/kg
Toluene	ND	0.0052	mg/kg
1,2,4-Trichloro-benzene	ND	0.0052	mg/kg
1,1,1-Trichloroethane	ND	0.0052	mg/kg
1,1,2-Trichloroethane	ND	0.0052	mg/kg
Trichloroethene	ND	0.0052	mg/kg
Trichlorofluoromethane	ND	0.0052	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0052	mg/kg
1,2,4-Trimethylbenzene	ND	0.0052	mg/kg
1,3,5-Trimethylbenzene	ND	0.0052	mg/kg
Vinyl chloride	ND	0.0052	mg/kg
Xylenes (total)	ND	0.010	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(59 - 138)
1,2-Dichloroethane-d4	104	(61 - 130)
Toluene-d8	111	(60 - 143)
4-Bromofluorobenzene	110	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

GC/MS Volatiles

Lot-Sample #...: A4G270219-020 Work Order #...: GLX0K1AM Matrix.....: SO
Date Sampled...: 07/21/04 09:15 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.36 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 15 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0080	mg/kg
Acetone	0.038	0.032	mg/kg
Acrylonitrile	ND	0.16	mg/kg
Benzene	ND	0.0080	mg/kg
Bromodichloromethane	ND	0.0080	mg/kg
Bromoform	ND	0.0080	mg/kg
Methyl ethyl ketone	ND	0.032	mg/kg
n-Butylbenzene	ND	0.0080	mg/kg
sec-Butylbenzene	ND	0.0080	mg/kg
tert-Butylbenzene	ND	0.0080	mg/kg
Carbon disulfide	ND	0.0080	mg/kg
Carbon tetrachloride	ND	0.0080	mg/kg
Chlorobenzene	ND	0.0080	mg/kg
Dibromochloromethane	ND	0.0080	mg/kg
Chloroethane	ND	0.0080	mg/kg
Chloroform	ND	0.0080	mg/kg
Chloromethane	ND	0.0080	mg/kg
2-Chlorotoluene	ND	0.0080	mg/kg
4-Chlorotoluene	ND	0.0080	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.016	mg/kg
1,2-Dibromoethane	ND	0.0080	mg/kg
1,2-Dichlorobenzene	ND	0.0080	mg/kg
1,3-Dichlorobenzene	ND	0.0080	mg/kg
1,4-Dichlorobenzene	ND	0.0080	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0080	mg/kg
Dichlorodifluoromethane	ND	0.0080	mg/kg
1,1-Dichloroethane	ND	0.0080	mg/kg
1,2-Dichloroethane	ND	0.0080	mg/kg
cis-1,2-Dichloroethene	ND	0.0080	mg/kg
trans-1,2-Dichloroethene	ND	0.0080	mg/kg
1,1-Dichloroethene	ND	0.0080	mg/kg
1,2-Dichloropropane	ND	0.0080	mg/kg
1,3-Dichloropropene (total)	ND	0.016	mg/kg
Ethylbenzene	ND	0.0080	mg/kg
Isopropylbenzene	ND	0.0080	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

GC/MS Volatiles

Lot-Sample #...: A4G270219-020 **Work Order #...:** GLX0K1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0080	mg/kg
Methylene chloride	**0.018**	**0.0080**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.032	mg/kg
Methyl tert-butyl ether	ND	0.032	mg/kg
n-Propylbenzene	ND	0.0080	mg/kg
Styrene	ND	0.0080	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0080	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0080	mg/kg
Tetrachloroethene	ND	0.0080	mg/kg
Toluene	ND	0.0080	mg/kg
1,2,4-Trichloro-benzene	ND	0.0080	mg/kg
1,1,1-Trichloroethane	ND	0.0080	mg/kg
1,1,2-Trichloroethane	ND	0.0080	mg/kg
Trichloroethene	ND	0.0080	mg/kg
Trichlorofluoromethane	ND	0.0080	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0080	mg/kg
1,2,4-Trimethylbenzene	ND	0.0080	mg/kg
1,3,5-Trimethylbenzene	ND	0.0080	mg/kg
Vinyl chloride	ND	0.0080	mg/kg
Xylenes (total)	ND	0.016	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	102	(61 - 130)
Toluene-d8	110	(60 - 143)
4-Bromofluorobenzene	109	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS220002

GC/MS Volatiles

Lot-Sample #...:	A4G270219-021	Work Order #...:	GLX0V1AK	Matrix.....:	SO
Date Sampled...:	07/21/04 13:50	Date Received..:	07/23/04		
Prep Date.....:	08/03/04	Analysis Date..:	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.34	Initial Wgt/Vol:	5 g	Final Wgt/Vol..:	5 mL
% Moisture.....:	18	Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0082	mg/kg
Acetone	0.52	0.033	mg/kg
Acrylonitrile	ND	0.16	mg/kg
Benzene	ND	0.0082	mg/kg
Bromodichloromethane	ND	0.0082	mg/kg
Bromoform	ND	0.0082	mg/kg
Methyl ethyl ketone	ND	0.033	mg/kg
n-Butylbenzene	ND	0.0082	mg/kg
sec-Butylbenzene	ND	0.0082	mg/kg
tert-Butylbenzene	ND	0.0082	mg/kg
Carbon disulfide	ND	0.0082	mg/kg
Carbon tetrachloride	ND	0.0082	mg/kg
Chlorobenzene	ND	0.0082	mg/kg
Dibromochloromethane	ND	0.0082	mg/kg
Chloroethane	ND	0.0082	mg/kg
Chloroform	ND	0.0082	mg/kg
Chloromethane	ND	0.0082	mg/kg
2-Chlorotoluene	ND	0.0082	mg/kg
4-Chlorotoluene	ND	0.0082	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.016	mg/kg
1,2-Dibromoethane	ND	0.0082	mg/kg
1,2-Dichlorobenzene	ND	0.0082	mg/kg
1,3-Dichlorobenzene	ND	0.0082	mg/kg
1,4-Dichlorobenzene	ND	0.0082	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0082	mg/kg
Dichlorodifluoromethane	ND	0.0082	mg/kg
1,1-Dichloroethane	ND	0.0082	mg/kg
1,2-Dichloroethane	ND	0.0082	mg/kg
cis-1,2-Dichloroethene	ND	0.0082	mg/kg
trans-1,2-Dichloroethene	ND	0.0082	mg/kg
1,1-Dichloroethene	ND	0.0082	mg/kg
1,2-Dichloropropane	ND	0.0082	mg/kg
1,3-Dichloropropene (total)	ND	0.016	mg/kg
Ethylbenzene	ND	0.0082	mg/kg
Isopropylbenzene	ND	0.0082	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS220002

GC/MS Volatiles

Lot-Sample #...: A4G270219-021 Work Order #...: GLX0V1AK Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0082	mg/kg
Methylene chloride	**0.011**	**0.0082**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.033	mg/kg
Methyl tert-butyl ether	ND	0.033	mg/kg
n-Propylbenzene	ND	0.0082	mg/kg
Styrene	ND	0.0082	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0082	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0082	mg/kg
Tetrachloroethene	ND	0.0082	mg/kg
Toluene	ND	0.0082	mg/kg
1,2,4-Trichloro-benzene	ND	0.0082	mg/kg
1,1,1-Trichloroethane	ND	0.0082	mg/kg
1,1,2-Trichloroethane	ND	0.0082	mg/kg
Trichloroethene	ND	0.0082	mg/kg
Trichlorofluoromethane	ND	0.0082	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0082	mg/kg
1,2,4-Trimethylbenzene	ND	0.0082	mg/kg
1,3,5-Trimethylbenzene	ND	0.0082	mg/kg
Vinyl chloride	ND	0.0082	mg/kg
Xylenes (total)	ND	0.016	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	111	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS230002

GC/MS Volatiles

Lot-Sample #...: A4G270219-022 Work Order #...: GLX081AK Matrix.....: SO
Date Sampled...: 07/21/04 14:10 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.08 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: 18 Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0066	mg/kg
Acetone	ND	0.026	mg/kg
Acrylonitrile	ND	0.13	mg/kg
Benzene	ND	0.0066	mg/kg
Bromodichloromethane	ND	0.0066	mg/kg
Bromoform	ND	0.0066	mg/kg
Methyl ethyl ketone	ND	0.026	mg/kg
n-Butylbenzene	ND	0.0066	mg/kg
sec-Butylbenzene	ND	0.0066	mg/kg
tert-Butylbenzene	ND	0.0066	mg/kg
Carbon disulfide	ND	0.0066	mg/kg
Carbon tetrachloride	ND	0.0066	mg/kg
Chlorobenzene	ND	0.0066	mg/kg
Dibromochloromethane	ND	0.0066	mg/kg
Chloroethane	ND	0.0066	mg/kg
Chloroform	ND	0.0066	mg/kg
Chloromethane	ND	0.0066	mg/kg
2-Chlorotoluene	ND	0.0066	mg/kg
4-Chlorotoluene	ND	0.0066	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.013	mg/kg
1,2-Dibromoethane	ND	0.0066	mg/kg
1,2-Dichlorobenzene	ND	0.0066	mg/kg
1,3-Dichlorobenzene	ND	0.0066	mg/kg
1,4-Dichlorobenzene	ND	0.0066	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0066	mg/kg
Dichlorodifluoromethane	ND	0.0066	mg/kg
1,1-Dichloroethane	**0.0085**	**0.0066**	**mg/kg**
1,2-Dichloroethane	ND	0.0066	mg/kg
cis-1,2-Dichloroethene	ND	0.0066	mg/kg
trans-1,2-Dichloroethene	ND	0.0066	mg/kg
1,1-Dichloroethene	**0.010**	**0.0066**	**mg/kg**
1,2-Dichloropropane	ND	0.0066	mg/kg
1,3-Dichloropropene (total)	ND	0.013	mg/kg
Ethylbenzene	ND	0.0066	mg/kg
Isopropylbenzene	ND	0.0066	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS230002

GC/MS Volatiles

Lot-Sample #...: A4G270219-022 **Work Order #...:** GLX081AK **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0066	mg/kg
Methylene chloride	**0.015**	**0.0066**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.026	mg/kg
Methyl tert-butyl ether	ND	0.026	mg/kg
n-Propylbenzene	ND	0.0066	mg/kg
Styrene	ND	0.0066	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0066	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0066	mg/kg
Tetrachloroethene	ND	0.0066	mg/kg
Toluene	ND	0.0066	mg/kg
1,2,4-Trichloro-benzene	ND	0.0066	mg/kg
1,1,1-Trichloroethane	**0.025**	**0.0066**	**mg/kg**
1,1,2-Trichloroethane	ND	0.0066	mg/kg
Trichloroethene	ND	0.0066	mg/kg
Trichlorofluoromethane	ND	0.0066	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0066	mg/kg
1,2,4-Trimethylbenzene	ND	0.0066	mg/kg
1,3,5-Trimethylbenzene	ND	0.0066	mg/kg
Vinyl chloride	ND	0.0066	mg/kg
Xylenes (total)	ND	0.013	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(59 - 138)
1,2-Dichloroethane-d4	103	(61 - 130)
Toluene-d8	109	(60 - 143)
4-Bromofluorobenzene	111	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS070002

GC/MS Volatiles

Lot-Sample #...:	A4G270219-023	**Work Order #...:**	GLX1D1AC	**Matrix.....:**	SO
Date Sampled...:	07/21/04 13:35	**Date Received..:**	07/23/04		
Prep Date.....:	08/03/04	**Analysis Date..:**	08/03/04		
Prep Batch #...:	4217361				
Dilution Factor:	1.05	**Initial Wgt/Vol:**	5 g	**Final Wgt/Vol..:**	5 mL
% Moisture.....:	14	**Method.....:**	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0061	mg/kg
Acetone	**0.037**	**0.024**	**mg/kg**
Acrylonitrile	ND	0.12	mg/kg
Benzene	ND	0.0061	mg/kg
Bromodichloromethane	ND	0.0061	mg/kg
Bromoform	ND	0.0061	mg/kg
Methyl ethyl ketone	ND	0.024	mg/kg
n-Butylbenzene	ND	0.0061	mg/kg
sec-Butylbenzene	ND	0.0061	mg/kg
tert-Butylbenzene	ND	0.0061	mg/kg
Carbon disulfide	ND	0.0061	mg/kg
Carbon tetrachloride	ND	0.0061	mg/kg
Chlorobenzene	ND	0.0061	mg/kg
Dibromochloromethane	ND	0.0061	mg/kg
Chloroethane	ND	0.0061	mg/kg
Chloroform	ND	0.0061	mg/kg
Chloromethane	ND	0.0061	mg/kg
2-Chlorotoluene	ND	0.0061	mg/kg
4-Chlorotoluene	ND	0.0061	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.012	mg/kg
1,2-Dibromoethane	ND	0.0061	mg/kg
1,2-Dichlorobenzene	ND	0.0061	mg/kg
1,3-Dichlorobenzene	ND	0.0061	mg/kg
1,4-Dichlorobenzene	ND	0.0061	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0061	mg/kg
Dichlorodifluoromethane	ND	0.0061	mg/kg
1,1-Dichloroethane	**0.025**	**0.0061**	**mg/kg**
1,2-Dichloroethane	ND	0.0061	mg/kg
cis-1,2-Dichloroethene	ND	0.0061	mg/kg
trans-1,2-Dichloroethene	ND	0.0061	mg/kg
1,1-Dichloroethene	**0.065**	**0.0061**	**mg/kg**
1,2-Dichloropropane	ND	0.0061	mg/kg
1,3-Dichloropropene (total)	ND	0.012	mg/kg
Ethylbenzene	ND	0.0061	mg/kg
Isopropylbenzene	ND	0.0061	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS070002

GC/MS Volatiles

Lot-Sample #...: A4G270219-023 **Work Order #...:** GLX1D1AC **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0061	mg/kg
Methylene chloride	**0.0086**	**0.0061**	**mg/kg**
4-Methyl-2-pentanone (MIBK)	ND	0.024	mg/kg
Methyl tert-butyl ether	ND	0.024	mg/kg
n-Propylbenzene	ND	0.0061	mg/kg
Styrene	ND	0.0061	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0061	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0061	mg/kg
Tetrachloroethene	ND	0.0061	mg/kg
Toluene	ND	0.0061	mg/kg
1,2,4-Trichloro-benzene	ND	0.0061	mg/kg
1,1,1-Trichloroethane	**0.012**	**0.0061**	**mg/kg**
1,1,2-Trichloroethane	ND	0.0061	mg/kg
Trichloroethene	ND	0.0061	mg/kg
Trichlorofluoromethane	ND	0.0061	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0061	mg/kg
1,2,4-Trimethylbenzene	ND	0.0061	mg/kg
1,3,5-Trimethylbenzene	ND	0.0061	mg/kg
Vinyl chloride	ND	0.0061	mg/kg
Xylenes (total)	ND	0.012	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(59 - 138)
1,2-Dichloroethane-d4	105	(61 - 130)
Toluene-d8	110	(60 - 143)
4-Bromofluorobenzene	113	(47 - 158)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD200204

GC/MS Volatiles

Lot-Sample #...: A4G270219-024 Work Order #...: GLX1W1AA Matrix.....: SO
Date Sampled...: 07/21/04 09:15 Date Received..: 07/23/04
Prep Date.....: 08/03/04 Analysis Date..: 08/03/04
Prep Batch #...: 4217361
Dilution Factor: 1.25 Initial Wgt/Vol: 5 g Final Wgt/Vol..: 5 mL
% Moisture.....: Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Bromomethane	ND	0.0062	mg/kg
Acetone	0.034	0.025	mg/kg
Acrylonitrile	ND	0.12	mg/kg
Benzene	ND	0.0062	mg/kg
Bromodichloromethane	ND	0.0062	mg/kg
Bromoform	ND	0.0062	mg/kg
Methyl ethyl ketone	ND	0.025	mg/kg
n-Butylbenzene	ND	0.0062	mg/kg
sec-Butylbenzene	ND	0.0062	mg/kg
tert-Butylbenzene	ND	0.0062	mg/kg
Carbon disulfide	ND	0.0062	mg/kg
Carbon tetrachloride	ND	0.0062	mg/kg
Chlorobenzene	ND	0.0062	mg/kg
Dibromochloromethane	ND	0.0062	mg/kg
Chloroethane	ND	0.0062	mg/kg
Chloroform	ND	0.0062	mg/kg
Chloromethane	ND	0.0062	mg/kg
2-Chlorotoluene	ND	0.0062	mg/kg
4-Chlorotoluene	ND	0.0062	mg/kg
1,2-Dibromo-3-chloro-propane	ND	0.012	mg/kg
1,2-Dibromoethane	ND	0.0062	mg/kg
1,2-Dichlorobenzene	ND	0.0062	mg/kg
1,3-Dichlorobenzene	ND	0.0062	mg/kg
1,4-Dichlorobenzene	ND	0.0062	mg/kg
trans-1,4-Dichloro-2-butene	ND	0.0062	mg/kg
Dichlorodifluoromethane	ND	0.0062	mg/kg
1,1-Dichloroethane	ND	0.0062	mg/kg
1,2-Dichloroethane	ND	0.0062	mg/kg
cis-1,2-Dichloroethene	ND	0.0062	mg/kg
trans-1,2-Dichloroethene	ND	0.0062	mg/kg
1,1-Dichloroethene	ND	0.0062	mg/kg
1,2-Dichloropropane	ND	0.0062	mg/kg
1,3-Dichloropropene (total)	ND	0.012	mg/kg
Ethylbenzene	ND	0.0062	mg/kg
Isopropylbenzene	ND	0.0062	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPD200204

GC/MS Volatiles

Lot-Sample #...: A4G270219-024 Work Order #...: GLX1W1AA Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
p-Isopropyltoluene	ND	0.0062	mg/kg
Methylene chloride	0.013	0.0062	mg/kg
4-Methyl-2-pentanone (MIBK)	ND	0.025	mg/kg
Methyl tert-butyl ether	ND	0.025	mg/kg
n-Propylbenzene	ND	0.0062	mg/kg
Styrene	ND	0.0062	mg/kg
1,1,1,2-Tetrachloroethane	ND	0.0062	mg/kg
1,1,2,2-Tetrachloroethane	ND	0.0062	mg/kg
Tetrachloroethene	ND	0.0062	mg/kg
Toluene	ND	0.0062	mg/kg
1,2,4-Trichloro-benzene	ND	0.0062	mg/kg
1,1,1-Trichloroethane	ND	0.0062	mg/kg
1,1,2-Trichloroethane	ND	0.0062	mg/kg
Trichloroethene	ND	0.0062	mg/kg
Trichlorofluoromethane	ND	0.0062	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.0062	mg/kg
1,2,4-Trimethylbenzene	ND	0.0062	mg/kg
1,3,5-Trimethylbenzene	ND	0.0062	mg/kg
Vinyl chloride	ND	0.0062	mg/kg
Xylenes (total)	ND	0.012	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(59 - 138)
1,2-Dichloroethane-d4	105	(61 - 130)
Toluene-d8	109	(60 - 143)
4-Bromofluorobenzene	112	(47 - 158)

Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK(COOLER# KB17)

GC/MS Volatiles

Lot-Sample #...: A4G270219-025 Work Order #...: GLX2G1AA Matrix.....: WQ
Date Sampled...: 07/21/04 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215204
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Acetonitrile	ND	20	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Methyl ethyl ketone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropene (total)	ND	2.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

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Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK(COOLER# K817)

GC/MS Volatiles

Lot-Sample #...: A4G270219-025 Work Order #...: GLX2G1AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Methylene chloride	2.7	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Bromomethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(73 - 122)
1,2-Dichloroethane-d4	99	(61 - 128)
Toluene-d8	83	(76 - 110)
4-Bromofluorobenzene	75	(74 - 116)

Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK(COOLER# J730)

GC/MS Volatiles

Lot-Sample #...: A4G270219-026 Work Order #...: GLX2X1AA Matrix.....: WQ
Date Sampled...: 07/21/04 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 07/30/04
Prep Batch #...: 4215204
Dilution Factor: 1 Initial Wgt/Vol: 5 mL Final Wgt/Vol..: 5 mL
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acetone	ND	10	ug/L
Acetonitrile	ND	20	ug/L
Benzene	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
Methyl ethyl ketone	ND	10	ug/L
n-Butylbenzene	ND	1.0	ug/L
sec-Butylbenzene	ND	1.0	ug/L
tert-Butylbenzene	ND	1.0	ug/L
Carbon disulfide	ND	1.0	ug/L
Carbon tetrachloride	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
Chloromethane	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
4-Chlorotoluene	ND	1.0	ug/L
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L
1,2-Dibromoethane	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L
trans-1,4-Dichloro-2-butene	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,3-Dichloropropene (total)	ND	2.0	ug/L
Ethylbenzene	ND	1.0	ug/L
Isopropylbenzene	ND	1.0	ug/L
p-Isopropyltoluene	ND	1.0	ug/L

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Mactec Engineering & Consulting Inc.

Client Sample ID: TRIP BLANK(COOLER# J730)

GC/MS Volatiles

Lot-Sample #...: A4G270219-026 Work Order #...: GLX2X1AA Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L
Xylenes (total)	ND	2.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
Vinyl chloride	ND	1.0	ug/L
Trichloroethene	ND	1.0	ug/L
Methylene chloride	2.7	1.0	ug/L
4-Methyl-2-pentanone	ND	10	ug/L
n-Propylbenzene	ND	1.0	ug/L
Styrene	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene	ND	1.0	ug/L
Toluene	ND	1.0	ug/L
1,2,4-Trichloro-benzene	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2,4-Trimethylbenzene	ND	1.0	ug/L
1,3,5-Trimethylbenzene	ND	1.0	ug/L
Methyl tert-butyl ether	ND	5.0	ug/L
Bromomethane	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	98	(73 - 122)
1,2-Dichloroethane-d4	95	(61 - 128)
Toluene-d8	86	(76 - 110)
4-Bromofluorobenzene	74	(74 - 116)

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-001 Work Order #...: GLXJN1AM Matrix.....: SO
Date Sampled...: 07/22/04 14:20 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 08/03/04
Prep Batch #...: 4211556
Dilution Factor: 1 Initial Wgt/Vol: 30.07 g Final Wgt/Vol..: 2 mL
% Moisture.....: 19 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0082	mg/kg
Acenaphthylene	ND	0.0082	mg/kg
Anthracene	0.027	0.0082	mg/kg
Benzo(a)anthracene	0.18	0.0082	mg/kg
Benzo(b)fluoranthene	0.36	0.0082	mg/kg
Benzo(k)fluoranthene	0.20	0.0082	mg/kg
Benzoic acid	ND	0.82	mg/kg
Benzo(ghi)perylene	0.19	0.0082	mg/kg
Benzo(a)pyrene	0.26	0.0082	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	0.076	0.062	mg/kg
4-Bromophenyl phenyl ether	ND	0.062	mg/kg
Butyl benzyl phthalate	0.082	0.062	mg/kg
Carbazole	ND	0.062	mg/kg
4-Chloroaniline	ND	0.19	mg/kg
2-Chloronaphthalene	ND	0.062	mg/kg
2-Chlorophenol	ND	0.062	mg/kg
4-Chlorophenyl phenyl ether	ND	0.062	mg/kg
Chrysene	0.30	0.0082	mg/kg
Dibenz(a,h)anthracene	0.039	0.0082	mg/kg
Dibenzofuran	ND	0.062	mg/kg
Di-n-butyl phthalate	ND	0.062	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.19	mg/kg
Diethyl phthalate	ND	0.062	mg/kg
2,4-Dimethylphenol	ND	0.19	mg/kg
Dimethyl phthalate	ND	0.062	mg/kg
2,4-Dinitrophenol	ND	0.41	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
Di-n-octyl phthalate	ND	0.062	mg/kg
Fluoranthene	0.49	0.0082	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-001 Work Order #...: GLXJN1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0082	mg/kg
Hexachlorobenzene	ND	0.0082	mg/kg
Hexachlorobutadiene	ND	0.062	mg/kg
Hexachlorocyclopenta-diene	ND	0.41	mg/kg
Hexachloroethane	ND	0.062	mg/kg
Indeno(1,2,3-cd)pyrene	0.17	0.0082	mg/kg
Isophorone	ND	0.062	mg/kg
2-Methylnaphthalene	ND	0.0082	mg/kg
2-Methylphenol	ND	0.25	mg/kg
3-Methylphenol	ND	0.25	mg/kg
4-Methylphenol	ND	0.25	mg/kg
Naphthalene	ND	0.0082	mg/kg
2-Nitroaniline	ND	0.25	mg/kg
3-Nitroaniline	ND	0.25	mg/kg
4-Nitroaniline	ND	0.25	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.062	mg/kg
N-Nitrosodiphenylamine	ND	0.062	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.062	mg/kg
Pentachlorophenol	ND	0.19	mg/kg
Phenanthrene	0.20	0.0082	mg/kg
Phenol	ND	0.062	mg/kg
Pyrene	0.40	0.0082	mg/kg
2,4,5-Trichloro-phenol	ND	0.19	mg/kg
2,4,6-Trichloro-phenol	ND	0.19	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	70	(42 - 110)
2-Fluorobiphenyl	69	(43 - 110)
Terphenyl-d14	74	(37 - 137)
Phenol-d5	75	(25 - 115)
2-Fluorophenol	71	(11 - 116)
2,4,6-Tribromophenol	56	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

GC/MS Semivolatiles

Lot-Sample #...:	A4G270219-002	Work Order #...:	GLXLE1AM	Matrix.....:	SO
Date Sampled...:	07/22/04 13:10	Date Received..:	07/23/04		
Prep Date.....:	07/30/04	Analysis Date..:	08/03/04		
Prep Batch #...:	4211556				
Dilution Factor:	1	Initial Wgt/Vol:	30.09 g	Final Wgt/Vol..:	2 mL
% Moisture.....:	20	Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0084	mg/kg
Acenaphthylene	ND	0.0084	mg/kg
Anthracene	ND	0.0084	mg/kg
Benzo(a)anthracene	ND	0.0084	mg/kg
Benzo(b)fluoranthene	ND	0.0084	mg/kg
Benzo(k)fluoranthene	ND	0.0084	mg/kg
Benzoic acid	ND	0.83	mg/kg
Benzo(ghi)perylene	ND	0.0084	mg/kg
Benzo(a)pyrene	ND	0.0084	mg/kg
bis(2-Chloroethyl)-ether	ND	0.13	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.13	mg/kg
bis(2-Ethylhexyl) phthalate	0.89	0.063	mg/kg
4-Bromophenyl phenyl ether	ND	0.063	mg/kg
Butyl benzyl phthalate	ND	0.063	mg/kg
Carbazole	ND	0.063	mg/kg
4-Chloroaniline	ND	0.19	mg/kg
2-Chloronaphthalene	ND	0.063	mg/kg
2-Chlorophenol	ND	0.063	mg/kg
4-Chlorophenyl phenyl ether	ND	0.063	mg/kg
Chrysene	ND	0.0084	mg/kg
Dibenz(a,h)anthracene	ND	0.0084	mg/kg
Dibenzofuran	ND	0.063	mg/kg
Di-n-butyl phthalate	ND	0.063	mg/kg
3,3'-Dichlorobenzidine	ND	0.13	mg/kg
2,4-Dichlorophenol	ND	0.19	mg/kg
Diethyl phthalate	ND	0.063	mg/kg
2,4-Dimethylphenol	ND	0.19	mg/kg
Dimethyl phthalate	ND	0.063	mg/kg
2,4-Dinitrophenol	ND	0.41	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
Di-n-octyl phthalate	ND	0.063	mg/kg
Fluoranthene	0.036	0.0084	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-002 **Work Order #...:** GLXLE1AM **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0084	mg/kg
Hexachlorobenzene	ND	0.0084	mg/kg
Hexachlorobutadiene	ND	0.063	mg/kg
Hexachlorocyclopenta-diene	ND	0.41	mg/kg
Hexachloroethane	ND	0.063	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0084	mg/kg
Isophorone	ND	0.063	mg/kg
2-Methylnaphthalene	ND	0.0084	mg/kg
2-Methylphenol	ND	0.25	mg/kg
3-Methylphenol	ND	0.25	mg/kg
4-Methylphenol	ND	0.25	mg/kg
Naphthalene	ND	0.0084	mg/kg
2-Nitroaniline	ND	0.25	mg/kg
3-Nitroaniline	ND	0.25	mg/kg
4-Nitroaniline	ND	0.25	mg/kg
Nitrobenzene	ND	0.13	mg/kg
2-Nitrophenol	ND	0.063	mg/kg
N-Nitrosodiphenylamine	ND	0.063	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.063	mg/kg
Pentachlorophenol	ND	0.19	mg/kg
Phenanthrene	ND	0.0084	mg/kg
Phenol	ND	0.063	mg/kg
Pyrene	0.039	0.0084	mg/kg
2,4,5-Trichloro-phenol	ND	0.19	mg/kg
2,4,6-Trichloro-phenol	ND	0.19	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	73	(42 - 110)
2-Fluorobiphenyl	74	(43 - 110)
Terphenyl-d14	83	(37 - 137)
Phenol-d5	79	(25 - 115)
2-Fluorophenol	74	(11 - 116)
2,4,6-Tribromophenol	75	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-003 Work Order #...: GLXLN1AM Matrix.....: SO
Date Sampled...: 07/22/04 14:00 Date Received..: 07/23/04
Prep Date.....: 07/30/04 Analysis Date..: 08/03/04
Prep Batch #...: 4211556
Dilution Factor: 10 Initial Wgt/Vol: 30.01 g Final Wgt/Vol..: 2 mL
% Moisture.....: 29 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	0.55	0.093	mg/kg
Acenaphthylene	ND	0.093	mg/kg
Anthracene	1.4	0.093	mg/kg
Benzo(a)anthracene	7.6	0.093	mg/kg
Benzo(b)fluoranthene	9.9	0.093	mg/kg
Benzo(k)fluoranthene	4.9	0.093	mg/kg
Benzoic acid	ND	9.2	mg/kg
Benzo(ghi)perylene	5.4	0.093	mg/kg
Benzo(a)pyrene	8.6	0.093	mg/kg
bis(2-Chloroethyl)-ether	ND	1.4	mg/kg
bis(2-Chloroisopropyl) ether	ND	1.4	mg/kg
bis(2-Ethylhexyl) phthalate	1.2	0.70	mg/kg
4-Bromophenyl phenyl ether	ND	0.70	mg/kg
Butyl benzyl phthalate	ND	0.70	mg/kg
Carbazole	0.87	0.70	mg/kg
4-Chloroaniline	ND	2.1	mg/kg
2-Chloronaphthalene	ND	0.70	mg/kg
2-Chlorophenol	ND	0.70	mg/kg
4-Chlorophenyl phenyl ether	ND	0.70	mg/kg
Chrysene	7.6	0.093	mg/kg
Dibenz(a,h)anthracene	1.5	0.093	mg/kg
Dibenzofuran	ND	0.70	mg/kg
Di-n-butyl phthalate	ND	0.70	mg/kg
3,3'-Dichlorobenzidine	ND	1.4	mg/kg
2,4-Dichlorophenol	ND	2.1	mg/kg
Diethyl phthalate	ND	0.70	mg/kg
2,4-Dimethylphenol	ND	2.1	mg/kg
Dimethyl phthalate	ND	0.70	mg/kg
2,4-Dinitrophenol	ND	4.6	mg/kg
2,4-Dinitrotoluene	ND	2.8	mg/kg
2,6-Dinitrotoluene	ND	2.8	mg/kg
Di-n-octyl phthalate	ND	0.70	mg/kg
Fluoranthene	15	0.093	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-003 Work Order #...: GLXLN1AM Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	**0.65**	**0.093**	**mg/kg**
Hexachlorobenzene	ND	0.093	mg/kg
Hexachlorobutadiene	ND	0.70	mg/kg
Hexachlorocyclopenta-diene	ND	4.6	mg/kg
Hexachloroethane	ND	0.70	mg/kg
Indeno(1,2,3-cd)pyrene	**4.9**	**0.093**	**mg/kg**
Isophorone	ND	0.70	mg/kg
2-Methylnaphthalene	ND	0.093	mg/kg
2-Methylphenol	ND	2.8	mg/kg
3-Methylphenol	ND	2.8	mg/kg
4-Methylphenol	ND	2.8	mg/kg
Naphthalene	ND	0.093	mg/kg
2-Nitroaniline	ND	2.8	mg/kg
3-Nitroaniline	ND	2.8	mg/kg
4-Nitroaniline	ND	2.8	mg/kg
Nitrobenzene	ND	1.4	mg/kg
2-Nitrophenol	ND	0.70	mg/kg
N-Nitrosodiphenylamine	ND	0.70	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.70	mg/kg
Pentachlorophenol	ND	2.1	mg/kg
Phenanthrene	**7.6**	**0.093**	**mg/kg**
Phenol	ND	0.70	mg/kg
Pyrene	**12**	**0.093**	**mg/kg**
2,4,5-Trichloro-phenol	ND	2.1	mg/kg
2,4,6-Trichloro-phenol	ND	2.1	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	84 DIL	(42 - 110)
2-Fluorobiphenyl	79 DIL	(43 - 110)
Terphenyl-d14	89 DIL	(37 - 137)
Phenol-d5	80 DIL	(25 - 115)
2-Fluorophenol	65 DIL	(11 - 116)
2,4,6-Tribromophenol	67 DIL	(35 - 116)

NOTE(S):

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: EQUIP BLANK

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-008 Work Order #...: GLXPR1AK Matrix.....: WQ
Date Sampled...: 07/22/04 15:00 Date Received..: 07/23/04
Prep Date.....: 07/27/04 Analysis Date..: 07/30/04
Prep Batch #...: 4209446
Dilution Factor: 1 Initial Wgt/Vol: 1030 mL Final Wgt/Vol..: 2 mL
Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
3-Methylphenol	ND	1.0	ug/L
Benzoic acid	ND	10	ug/L
bis(2-Chloroisopropyl) ether	ND	1.0	ug/L
Acenaphthene	ND	0.20	ug/L
Acenaphthylene	ND	0.20	ug/L
Anthracene	ND	0.20	ug/L
Benzo(a)anthracene	ND	0.20	ug/L
Benzo(b)fluoranthene	ND	0.20	ug/L
Benzo(k)fluoranthene	ND	0.20	ug/L
Benzo(ghi)perylene	ND	0.20	ug/L
Benzo(a)pyrene	ND	0.20	ug/L
bis(2-Chloroethyl)-ether	ND	1.0	ug/L
bis(2-Ethylhexyl) phthalate	3.9	1.0	ug/L
4-Bromophenyl phenyl ether	ND	2.0	ug/L
Butyl benzyl phthalate	ND	1.0	ug/L
Carbazole	ND	1.0	ug/L
4-Chloroaniline	ND	2.0	ug/L
2-Chloronaphthalene	ND	1.0	ug/L
2-Chlorophenol	ND	1.0	ug/L
4-Chlorophenyl phenyl ether	ND	2.0	ug/L
Chrysene	ND	0.20	ug/L
Dibenz(a,h)anthracene	ND	0.20	ug/L
Dibenzofuran	ND	1.0	ug/L
Di-n-butyl phthalate	ND	1.0	ug/L
3,3'-Dichlorobenzidine	ND	5.0	ug/L
2,4-Dichlorophenol	ND	2.0	ug/L
Diethyl phthalate	ND	1.0	ug/L
2,4-Dimethylphenol	ND	2.0	ug/L
Dimethyl phthalate	ND	1.0	ug/L
2,4-Dinitrophenol	ND	5.0	ug/L
2,4-Dinitrotoluene	ND	5.0	ug/L
2,6-Dinitrotoluene	ND	5.0	ug/L
Di-n-octyl phthalate	ND	1.0	ug/L

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Mactec Engineering & Consulting Inc.

Client Sample ID: EQUIP BLANK

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-008 Work Order #...: GLXPR1AK Matrix.....: WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluoranthene	ND	0.20	ug/L
Fluorene	ND	0.20	ug/L
Hexachlorobenzene	ND	0.20	ug/L
Hexachlorobutadiene	ND	1.0	ug/L
Hexachlorocyclopenta-diene	ND	10	ug/L
Hexachloroethane	ND	1.0	ug/L
Indeno(1,2,3-cd)pyrene	ND	0.20	ug/L
Isophorone	ND	1.0	ug/L
2-Methylnaphthalene	ND	0.20	ug/L
2-Methylphenol	ND	1.0	ug/L
4-Methylphenol	ND	1.0	ug/L
Naphthalene	ND	0.20	ug/L
2-Nitroaniline	ND	2.0	ug/L
3-Nitroaniline	ND	2.0	ug/L
4-Nitroaniline	ND	2.0	ug/L
Nitrobenzene	ND	1.0	ug/L
2-Nitrophenol	ND	2.0	ug/L
N-Nitrosodiphenylamine	ND	1.0	ug/L
N-Nitrosodi-n-propyl-amine	ND	1.0	ug/L
Pentachlorophenol	ND	5.0	ug/L
Phenanthrene	ND	0.20	ug/L
Phenol	2.6 B	1.0	ug/L
Pyrene	ND	0.20	ug/L
2,4,5-Trichloro-phenol	ND	5.0	ug/L
2,4,6-Trichloro-phenol	ND	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	71	(32 - 112)
2-Fluorobiphenyl	65	(30 - 110)
Terphenyl-d14	82	(10 - 144)
Phenol-d5	64	(10 - 113)
2-Fluorophenol	65	(13 - 110)
2,4,6-Tribromophenol	74	(21 - 122)

NOTE(S):

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

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-009 Work Order #...: GLXV41AD Matrix.....: SO
Date Sampled...: 07/21/04 14:40 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.14 g Final Wgt/Vol..: 2 mL
% Moisture.....: 9.0 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0073	mg/kg
Acenaphthylene	ND	0.0073	mg/kg
Anthracene	ND	0.0073	mg/kg
Benzo(a)anthracene	ND	0.0073	mg/kg
Benzo(b)fluoranthene	ND	0.0073	mg/kg
Benzo(k)fluoranthene	ND	0.0073	mg/kg
Benzoic acid	ND	0.72	mg/kg
Benzo(ghi)perylene	ND	0.0073	mg/kg
Benzo(a)pyrene	ND	0.0073	mg/kg
bis(2-Chloroethyl)-ether	ND	0.11	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.11	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.055	mg/kg
4-Bromophenyl phenyl ether	ND	0.055	mg/kg
Butyl benzyl phthalate	ND	0.055	mg/kg
Carbazole	ND	0.055	mg/kg
4-Chloroaniline	ND	0.16	mg/kg
2-Chloronaphthalene	ND	0.055	mg/kg
2-Chlorophenol	ND	0.055	mg/kg
4-Chlorophenyl phenyl ether	ND	0.055	mg/kg
Chrysene	ND	0.0073	mg/kg
Dibenz(a,h)anthracene	ND	0.0073	mg/kg
Dibenzofuran	ND	0.055	mg/kg
Di-n-butyl phthalate	ND	0.055	mg/kg
3,3'-Dichlorobenzidine	ND	0.11	mg/kg
2,4-Dichlorophenol	ND	0.16	mg/kg
Diethyl phthalate	ND	0.055	mg/kg
2,4-Dimethylphenol	ND	0.16	mg/kg
Dimethyl phthalate	ND	0.055	mg/kg
2,4-Dinitrophenol	ND	0.36	mg/kg
2,4-Dinitrotoluene	ND	0.22	mg/kg
2,6-Dinitrotoluene	ND	0.22	mg/kg
Di-n-octyl phthalate	ND	0.055	mg/kg
Fluoranthene	ND	0.0073	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-009 Work Order #...: GLXV41AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0073	mg/kg
Hexachlorobenzene	ND	0.0073	mg/kg
Hexachlorobutadiene	ND	0.055	mg/kg
Hexachlorocyclopenta-diene	ND	0.36	mg/kg
Hexachloroethane	ND	0.055	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0073	mg/kg
Isophorone	ND	0.055	mg/kg
2-Methylnaphthalene	ND	0.0073	mg/kg
2-Methylphenol	ND	0.22	mg/kg
3-Methylphenol	ND	0.22	mg/kg
4-Methylphenol	ND	0.22	mg/kg
Naphthalene	ND	0.0073	mg/kg
2-Nitroaniline	ND	0.22	mg/kg
3-Nitroaniline	ND	0.22	mg/kg
4-Nitroaniline	ND	0.22	mg/kg
Nitrobenzene	ND	0.11	mg/kg
2-Nitrophenol	ND	0.055	mg/kg
N-Nitrosodiphenylamine	ND	0.055	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.055	mg/kg
Pentachlorophenol	ND	0.16	mg/kg
Phenanthrene	ND	0.0073	mg/kg
Phenol	ND	0.055	mg/kg
Pyrene	ND	0.0073	mg/kg
2,4,5-Trichloro-phenol	ND	0.16	mg/kg
2,4,6-Trichloro-phenol	ND	0.16	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(42 - 110)
2-Fluorobiphenyl	44	(43 - 110)
Terphenyl-d14	74	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	51	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-010 Work Order #...: GLXWP1AD Matrix.....: SO
Date Sampled...: 07/21/04 14:40 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30 g Final Wgt/Vol..: 2 mL
% Moisture.....: 14 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0077	mg/kg
Acenaphthylene	ND	0.0077	mg/kg
Anthracene	ND	0.0077	mg/kg
Benzo(a)anthracene	**0.018**	**0.0077**	**mg/kg**
Benzo(b)fluoranthene	**0.041**	**0.0077**	**mg/kg**
Benzo(k)fluoranthene	**0.049**	**0.0077**	**mg/kg**
Benzoic acid	ND	0.76	mg/kg
Benzo(ghi)perylene	**0.016**	**0.0077**	**mg/kg**
Benzo(a)pyrene	**0.019**	**0.0077**	**mg/kg**
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.058	mg/kg
4-Bromophenyl phenyl ether	ND	0.058	mg/kg
Butyl benzyl phthalate	ND	0.058	mg/kg
Carbazole	ND	0.058	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.058	mg/kg
2-Chlorophenol	ND	0.058	mg/kg
4-Chlorophenyl phenyl ether	ND	0.058	mg/kg
Chrysene	**0.025**	**0.0077**	**mg/kg**
Dibenz(a,h)anthracene	ND	0.0077	mg/kg
Dibenzofuran	ND	0.058	mg/kg
Di-n-butyl phthalate	ND	0.058	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.058	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.058	mg/kg
2,4-Dinitrophenol	ND	0.38	mg/kg
2,4-Dinitrotoluene	ND	0.23	mg/kg
2,6-Dinitrotoluene	ND	0.23	mg/kg
Di-n-octyl phthalate	ND	0.058	mg/kg
Fluoranthene	**0.048**	**0.0077**	**mg/kg**

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-010 **Work Order #...:** GLXWP1AD **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0077	mg/kg
Hexachlorobenzene	ND	0.0077	mg/kg
Hexachlorobutadiene	ND	0.058	mg/kg
Hexachlorocyclopenta-diene	ND	0.38	mg/kg
Hexachloroethane	ND	0.058	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0077	mg/kg
Isophorone	ND	0.058	mg/kg
2-Methylnaphthalene	ND	0.0077	mg/kg
2-Methylphenol	ND	0.23	mg/kg
3-Methylphenol	ND	0.23	mg/kg
4-Methylphenol	ND	0.23	mg/kg
Naphthalene	ND	0.0077	mg/kg
2-Nitroaniline	ND	0.23	mg/kg
3-Nitroaniline	ND	0.23	mg/kg
4-Nitroaniline	ND	0.23	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.058	mg/kg
N-Nitrosodiphenylamine	ND	0.058	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.058	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	**0.021**	**0.0077**	**mg/kg**
Phenol	ND	0.058	mg/kg
Pyrene	**0.036**	**0.0077**	**mg/kg**
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	53	(43 - 110)
Terphenyl-d14	82	(37 - 137)
Phenol-d5	61	(25 - 115)
2-Fluorophenol	74	(11 - 116)
2,4,6-Tribromophenol	64	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-011 Work Order #...: GLXW11AD Matrix.....: SO
Date Sampled...: 07/21/04 12:15 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30 g Final Wgt/Vol..: 2 mL
% Moisture.....: 7.9 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0072	mg/kg
Acenaphthylene	ND	0.0072	mg/kg
Anthracene	ND	0.0072	mg/kg
Benzo(a)anthracene	ND	0.0072	mg/kg
Benzo(b)fluoranthene	ND	0.0072	mg/kg
Benzo(k)fluoranthene	ND	0.0072	mg/kg
Benzoic acid	ND	0.72	mg/kg
Benzo(ghi)perylene	ND	0.0072	mg/kg
Benzo(a)pyrene	ND	0.0072	mg/kg
bis(2-Chloroethyl)-ether	ND	0.11	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.11	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.054	mg/kg
4-Bromophenyl phenyl ether	ND	0.054	mg/kg
Butyl benzyl phthalate	ND	0.054	mg/kg
Carbazole	ND	0.054	mg/kg
4-Chloroaniline	ND	0.16	mg/kg
2-Chloronaphthalene	ND	0.054	mg/kg
2-Chlorophenol	ND	0.054	mg/kg
4-Chlorophenyl phenyl ether	ND	0.054	mg/kg
Chrysene	ND	0.0072	mg/kg
Dibenz(a,h)anthracene	ND	0.0072	mg/kg
Dibenzofuran	ND	0.054	mg/kg
Di-n-butyl phthalate	ND	0.054	mg/kg
3,3'-Dichlorobenzidine	ND	0.11	mg/kg
2,4-Dichlorophenol	ND	0.16	mg/kg
Diethyl phthalate	ND	0.054	mg/kg
2,4-Dimethylphenol	ND	0.16	mg/kg
Dimethyl phthalate	ND	0.054	mg/kg
2,4-Dinitrophenol	ND	0.36	mg/kg
2,4-Dinitrotoluene	ND	0.22	mg/kg
2,6-Dinitrotoluene	ND	0.22	mg/kg
Di-n-octyl phthalate	ND	0.054	mg/kg
Fluoranthene	ND	0.0072	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-011 Work Order #...: GLXW11AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0072	mg/kg
Hexachlorobenzene	ND	0.0072	mg/kg
Hexachlorobutadiene	ND	0.054	mg/kg
Hexachlorocyclopentadiene	ND	0.36	mg/kg
Hexachloroethane	ND	0.054	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0072	mg/kg
Isophorone	ND	0.054	mg/kg
2-Methylnaphthalene	ND	0.0072	mg/kg
2-Methylphenol	ND	0.22	mg/kg
3-Methylphenol	ND	0.22	mg/kg
4-Methylphenol	ND	0.22	mg/kg
Naphthalene	ND	0.0072	mg/kg
2-Nitroaniline	ND	0.22	mg/kg
3-Nitroaniline	ND	0.22	mg/kg
4-Nitroaniline	ND	0.22	mg/kg
Nitrobenzene	ND	0.11	mg/kg
2-Nitrophenol	ND	0.054	mg/kg
N-Nitrosodiphenylamine	ND	0.054	mg/kg
N-Nitrosodi-n-propylamine	ND	0.054	mg/kg
Pentachlorophenol	ND	0.16	mg/kg
Phenanthrene	ND	0.0072	mg/kg
Phenol	ND	0.054	mg/kg
Pyrene	ND	0.0072	mg/kg
2,4,5-Trichlorophenol	ND	0.16	mg/kg
2,4,6-Trichlorophenol	ND	0.16	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	56	(42 - 110)
2-Fluorobiphenyl	55	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	56	(25 - 115)
2-Fluorophenol	69	(11 - 116)
2,4,6-Tribromophenol	55	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-012 Work Order #...: GLXXC1AD Matrix.....: SO
Date Sampled...: 07/21/04 11:50 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.12 g Final Wgt/Vol..: 2 mL
% Moisture.....: 10 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0075	mg/kg
Acenaphthylene	ND	0.0075	mg/kg
Anthracene	ND	0.0075	mg/kg
Benzo(a)anthracene	ND	0.0075	mg/kg
Benzo(b)fluoranthene	ND	0.0075	mg/kg
Benzo(k)fluoranthene	ND	0.0075	mg/kg
Benzoic acid	ND	0.74	mg/kg
Benzo(ghi)perylene	ND	0.0075	mg/kg
Benzo(a)pyrene	ND	0.0075	mg/kg
bis(2-Chloroethyl)-ether	ND	0.11	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.11	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.056	mg/kg
4-Bromophenyl phenyl ether	ND	0.056	mg/kg
Butyl benzyl phthalate	ND	0.056	mg/kg
Carbazole	ND	0.056	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.056	mg/kg
2-Chlorophenol	ND	0.056	mg/kg
4-Chlorophenyl phenyl ether	ND	0.056	mg/kg
Chrysene	ND	0.0075	mg/kg
Dibenz(a,h)anthracene	ND	0.0075	mg/kg
Dibenzofuran	ND	0.056	mg/kg
Di-n-butyl phthalate	ND	0.056	mg/kg
3,3'-Dichlorobenzidine	ND	0.11	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.056	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.056	mg/kg
2,4-Dinitrophenol	ND	0.37	mg/kg
2,4-Dinitrotoluene	ND	0.22	mg/kg
2,6-Dinitrotoluene	ND	0.22	mg/kg
Di-n-octyl phthalate	ND	0.056	mg/kg
Fluoranthene	ND	0.0075	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-012 **Work Order #...:** GLXXC1AD **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0075	mg/kg
Hexachlorobenzene	ND	0.0075	mg/kg
Hexachlorobutadiene	ND	0.056	mg/kg
Hexachlorocyclopenta-diene	ND	0.37	mg/kg
Hexachloroethane	ND	0.056	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0075	mg/kg
Isophorone	ND	0.056	mg/kg
2-Methylnaphthalene	ND	0.0075	mg/kg
2-Methylphenol	ND	0.22	mg/kg
3-Methylphenol	ND	0.22	mg/kg
4-Methylphenol	ND	0.22	mg/kg
Naphthalene	ND	0.0075	mg/kg
2-Nitroaniline	ND	0.22	mg/kg
3-Nitroaniline	ND	0.22	mg/kg
4-Nitroaniline	ND	0.22	mg/kg
Nitrobenzene	ND	0.11	mg/kg
2-Nitrophenol	ND	0.056	mg/kg
N-Nitrosodiphenylamine	ND	0.056	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.056	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	ND	0.0075	mg/kg
Phenol	ND	0.056	mg/kg
Pyrene	ND	0.0075	mg/kg
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	57	(42 - 110)
2-Fluorobiphenyl	54	(43 - 110)
Terphenyl-d14	74	(37 - 137)
Phenol-d5	62	(25 - 115)
2-Fluorophenol	73	(11 - 116)
2,4,6-Tribromophenol	62	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-013 Work Order #...: GLXXG1AD Matrix.....: SO
Date Sampled...: 07/21/04 11:35 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.06 g Final Wgt/Vol..: 2 mL
% Moisture.....: 19 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0082	mg/kg
Acenaphthylene	ND	0.0082	mg/kg
Anthracene	ND	0.0082	mg/kg
Benzo(a)anthracene	ND	0.0082	mg/kg
Benzo(b)fluoranthene	ND	0.0082	mg/kg
Benzo(k)fluoranthene	ND	0.0082	mg/kg
Benzoic acid	ND	0.82	mg/kg
Benzo(ghi)perylene	ND	0.0082	mg/kg
Benzo(a)pyrene	ND	0.0082	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.062	mg/kg
4-Bromophenyl phenyl ether	ND	0.062	mg/kg
Butyl benzyl phthalate	ND	0.062	mg/kg
Carbazole	ND	0.062	mg/kg
4-Chloroaniline	ND	0.19	mg/kg
2-Chloronaphthalene	ND	0.062	mg/kg
2-Chlorophenol	ND	0.062	mg/kg
4-Chlorophenyl phenyl ether	ND	0.062	mg/kg
Chrysene	ND	0.0082	mg/kg
Dibenz(a,h)anthracene	ND	0.0082	mg/kg
Dibenzofuran	ND	0.062	mg/kg
Di-n-butyl phthalate	ND	0.062	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.19	mg/kg
Diethyl phthalate	ND	0.062	mg/kg
2,4-Dimethylphenol	ND	0.19	mg/kg
Dimethyl phthalate	ND	0.062	mg/kg
2,4-Dinitrophenol	ND	0.41	mg/kg
2,4-Dinitrotoluene	ND	0.25	mg/kg
2,6-Dinitrotoluene	ND	0.25	mg/kg
Di-n-octyl phthalate	ND	0.062	mg/kg
Fluoranthene	ND	0.0082	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-013 Work Order #...: GLXXG1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0082	mg/kg
Hexachlorobenzene	ND	0.0082	mg/kg
Hexachlorobutadiene	ND	0.062	mg/kg
Hexachlorocyclopenta-diene	ND	0.41	mg/kg
Hexachloroethane	ND	0.062	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0082	mg/kg
Isophorone	ND	0.062	mg/kg
2-Methylnaphthalene	ND	0.0082	mg/kg
2-Methylphenol	ND	0.25	mg/kg
3-Methylphenol	ND	0.25	mg/kg
4-Methylphenol	ND	0.25	mg/kg
Naphthalene	ND	0.0082	mg/kg
2-Nitroaniline	ND	0.25	mg/kg
3-Nitroaniline	ND	0.25	mg/kg
4-Nitroaniline	ND	0.25	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.062	mg/kg
N-Nitrosodiphenylamine	ND	0.062	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.062	mg/kg
Pentachlorophenol	ND	0.19	mg/kg
Phenanthrene	ND	0.0082	mg/kg
Phenol	ND	0.062	mg/kg
Pyrene	ND	0.0082	mg/kg
2,4,5-Trichloro-phenol	ND	0.19	mg/kg
2,4,6-Trichloro-phenol	ND	0.19	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	66	(42 - 110)
2-Fluorobiphenyl	59	(43 - 110)
Terphenyl-d14	87	(37 - 137)
Phenol-d5	72	(25 - 115)
2-Fluorophenol	72	(11 - 116)
2,4,6-Tribromophenol	46	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-014 Work Order #...: GLXXQ1AD Matrix.....: SO
Date Sampled...: 07/21/04 11:20 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.08 g Final Wgt/Vol..: 2 mL
% Moisture.....: 14 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0078	mg/kg
Acenaphthylene	ND	0.0078	mg/kg
Anthracene	ND	0.0078	mg/kg
Benzo(a)anthracene	ND	0.0078	mg/kg
Benzo(b)fluoranthene	ND	0.0078	mg/kg
Benzo(k)fluoranthene	ND	0.0078	mg/kg
Benzoic acid	ND	0.77	mg/kg
Benzo(ghi)perylene	ND	0.0078	mg/kg
Benzo(a)pyrene	ND	0.0078	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.058	mg/kg
4-Bromophenyl phenyl ether	ND	0.058	mg/kg
Butyl benzyl phthalate	ND	0.058	mg/kg
Carbazole	ND	0.058	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.058	mg/kg
2-Chlorophenol	ND	0.058	mg/kg
4-Chlorophenyl phenyl ether	ND	0.058	mg/kg
Chrysene	ND	0.0078	mg/kg
Dibenz(a,h)anthracene	ND	0.0078	mg/kg
Dibenzofuran	ND	0.058	mg/kg
Di-n-butyl phthalate	ND	0.058	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.058	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.058	mg/kg
2,4-Dinitrophenol	ND	0.38	mg/kg
2,4-Dinitrotoluene	ND	0.23	mg/kg
2,6-Dinitrotoluene	ND	0.23	mg/kg
Di-n-octyl phthalate	ND	0.058	mg/kg
Fluoranthene	ND	0.0078	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-014 Work Order #...: GLXXQ1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0078	mg/kg
Hexachlorobenzene	ND	0.0078	mg/kg
Hexachlorobutadiene	ND	0.058	mg/kg
Hexachlorocyclopenta-diene	ND	0.38	mg/kg
Hexachloroethane	ND	0.058	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0078	mg/kg
Isophorone	ND	0.058	mg/kg
2-Methylnaphthalene	ND	0.0078	mg/kg
2-Methylphenol	ND	0.23	mg/kg
3-Methylphenol	ND	0.23	mg/kg
4-Methylphenol	ND	0.23	mg/kg
Naphthalene	ND	0.0078	mg/kg
2-Nitroaniline	ND	0.23	mg/kg
3-Nitroaniline	ND	0.23	mg/kg
4-Nitroaniline	ND	0.23	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.058	mg/kg
N-Nitrosodiphenylamine	ND	0.058	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.058	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	ND	0.0078	mg/kg
Phenol	ND	0.058	mg/kg
Pyrene	ND	0.0078	mg/kg
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(42 - 110)
2-Fluorobiphenyl	55	(43 - 110)
Terphenyl-d14	77	(37 - 137)
Phenol-d5	66	(25 - 115)
2-Fluorophenol	75	(11 - 116)
2,4,6-Tribromophenol	52	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-015 Work Order #...: GLXXV1AD Matrix.....: SO
Date Sampled...: 07/21/04 11:10 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.14 g Final Wgt/Vol..: 2 mL
% Moisture.....: 15 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0079	mg/kg
Acenaphthylene	ND	0.0079	mg/kg
Anthracene	ND	0.0079	mg/kg
Benzo(a)anthracene	ND	0.0079	mg/kg
Benzo(b)fluoranthene	ND	0.0079	mg/kg
Benzo(k)fluoranthene	ND	0.0079	mg/kg
Benzoic acid	ND	0.78	mg/kg
Benzo(ghi)perylene	ND	0.0079	mg/kg
Benzo(a)pyrene	ND	0.0079	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.059	mg/kg
4-Bromophenyl phenyl ether	ND	0.059	mg/kg
Butyl benzyl phthalate	ND	0.059	mg/kg
Carbazole	ND	0.059	mg/kg
4-Chloroaniline	ND	0.18	mg/kg
2-Chloronaphthalene	ND	0.059	mg/kg
2-Chlorophenol	ND	0.059	mg/kg
4-Chlorophenyl phenyl ether	ND	0.059	mg/kg
Chrysene	ND	0.0079	mg/kg
Dibenz(a,h)anthracene	ND	0.0079	mg/kg
Dibenzofuran	ND	0.059	mg/kg
Di-n-butyl phthalate	ND	0.059	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.18	mg/kg
Diethyl phthalate	ND	0.059	mg/kg
2,4-Dimethylphenol	ND	0.18	mg/kg
Dimethyl phthalate	ND	0.059	mg/kg
2,4-Dinitrophenol	ND	0.39	mg/kg
2,4-Dinitrotoluene	ND	0.24	mg/kg
2,6-Dinitrotoluene	ND	0.24	mg/kg
Di-n-octyl phthalate	ND	0.059	mg/kg
Fluoranthene	ND	0.0079	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-015 Work Order #...: GLXXV1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0079	mg/kg
Hexachlorobenzene	ND	0.0079	mg/kg
Hexachlorobutadiene	ND	0.059	mg/kg
Hexachlorocyclopenta-diene	ND	0.39	mg/kg
Hexachloroethane	ND	0.059	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0079	mg/kg
Isophorone	ND	0.059	mg/kg
2-Methylnaphthalene	ND	0.0079	mg/kg
2-Methylphenol	ND	0.24	mg/kg
3-Methylphenol	ND	0.24	mg/kg
4-Methylphenol	ND	0.24	mg/kg
Naphthalene	ND	0.0079	mg/kg
2-Nitroaniline	ND	0.24	mg/kg
3-Nitroaniline	ND	0.24	mg/kg
4-Nitroaniline	ND	0.24	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.059	mg/kg
N-Nitrosodiphenylamine	ND	0.059	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.059	mg/kg
Pentachlorophenol	ND	0.18	mg/kg
Phenanthrene	ND	0.0079	mg/kg
Phenol	ND	0.059	mg/kg
Pyrene	ND	0.0079	mg/kg
2,4,5-Trichloro-phenol	ND	0.18	mg/kg
2,4,6-Trichloro-phenol	ND	0.18	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	53	(42 - 110)
2-Fluorobiphenyl	49	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	52	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	57	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

GC/MS Semivolatiles

Lot-Sample #...:	A4G270219-016	**Work Order #...:**	GLXXX1AD	**Matrix.....:**	SO
Date Sampled...:	07/21/04 10:35	**Date Received..:**	07/23/04		
Prep Date.....:	07/28/04	**Analysis Date..:**	08/02/04		
Prep Batch #...:	4209650				
Dilution Factor:	1	**Initial Wgt/Vol:**	30.05 g	**Final Wgt/Vol..:**	2 mL
% Moisture.....:	13	**Method.....:**	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0076	mg/kg
Acenaphthylene	ND	0.0076	mg/kg
Anthracene	ND	0.0076	mg/kg
Benzo(a)anthracene	ND	0.0076	mg/kg
Benzo(b)fluoranthene	ND	0.0076	mg/kg
Benzo(k)fluoranthene	ND	0.0076	mg/kg
Benzoic acid	ND	0.75	mg/kg
Benzo(ghi)perylene	ND	0.0076	mg/kg
Benzo(a)pyrene	ND	0.0076	mg/kg
bis(2-Chloroethyl)-ether	ND	0.11	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.11	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.057	mg/kg
4-Bromophenyl phenyl ether	ND	0.057	mg/kg
Butyl benzyl phthalate	ND	0.057	mg/kg
Carbazole	ND	0.057	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.057	mg/kg
2-Chlorophenol	ND	0.057	mg/kg
4-Chlorophenyl phenyl ether	ND	0.057	mg/kg
Chrysene	ND	0.0076	mg/kg
Dibenz(a,h)anthracene	ND	0.0076	mg/kg
Dibenzofuran	ND	0.057	mg/kg
Di-n-butyl phthalate	ND	0.057	mg/kg
3,3'-Dichlorobenzidine	ND	0.11	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.057	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.057	mg/kg
2,4-Dinitrophenol	ND	0.38	mg/kg
2,4-Dinitrotoluene	ND	0.23	mg/kg
2,6-Dinitrotoluene	ND	0.23	mg/kg
Di-n-octyl phthalate	ND	0.057	mg/kg
Fluoranthene	ND	0.0076	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-016 Work Order #...: GLXXX1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0076	mg/kg
Hexachlorobenzene	ND	0.0076	mg/kg
Hexachlorobutadiene	ND	0.057	mg/kg
Hexachlorocyclopenta-diene	ND	0.38	mg/kg
Hexachloroethane	ND	0.057	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0076	mg/kg
Isophorone	ND	0.057	mg/kg
2-Methylnaphthalene	ND	0.0076	mg/kg
2-Methylphenol	ND	0.23	mg/kg
3-Methylphenol	ND	0.23	mg/kg
4-Methylphenol	ND	0.23	mg/kg
Naphthalene	ND	0.0076	mg/kg
2-Nitroaniline	ND	0.23	mg/kg
3-Nitroaniline	ND	0.23	mg/kg
4-Nitroaniline	ND	0.23	mg/kg
Nitrobenzene	ND	0.11	mg/kg
2-Nitrophenol	ND	0.057	mg/kg
N-Nitrosodiphenylamine	ND	0.057	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.057	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	ND	0.0076	mg/kg
Phenol	ND	0.057	mg/kg
Pyrene	ND	0.0076	mg/kg
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	52	(42 - 110)
2-Fluorobiphenyl	52	(43 - 110)
Terphenyl-d14	70	(37 - 137)
Phenol-d5	53	(25 - 115)
2-Fluorophenol	65	(11 - 116)
2,4,6-Tribromophenol	54	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-017 Work Order #...: GLXX71AD Matrix.....: SO
Date Sampled...: 07/21/04 10:35 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.07 g Final Wgt/Vol..: 2 mL
% Moisture.....: 14 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0077	mg/kg
Acenaphthylene	ND	0.0077	mg/kg
Anthracene	ND	0.0077	mg/kg
Benzo(a)anthracene	ND	0.0077	mg/kg
Benzo(b)fluoranthene	ND	0.0077	mg/kg
Benzo(k)fluoranthene	ND	0.0077	mg/kg
Benzoic acid	ND	0.76	mg/kg
Benzo(ghi)perylene	ND	0.0077	mg/kg
Benzo(a)pyrene	ND	0.0077	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.058	mg/kg
4-Bromophenyl phenyl ether	ND	0.058	mg/kg
Butyl benzyl phthalate	ND	0.058	mg/kg
Carbazole	ND	0.058	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.058	mg/kg
2-Chlorophenol	ND	0.058	mg/kg
4-Chlorophenyl phenyl ether	ND	0.058	mg/kg
Chrysene	ND	0.0077	mg/kg
Dibenz(a,h)anthracene	ND	0.0077	mg/kg
Dibenzofuran	ND	0.058	mg/kg
Di-n-butyl phthalate	ND	0.058	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.058	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.058	mg/kg
2,4-Dinitrophenol	ND	0.38	mg/kg
2,4-Dinitrotoluene	ND	0.23	mg/kg
2,6-Dinitrotoluene	ND	0.23	mg/kg
Di-n-octyl phthalate	ND	0.058	mg/kg
Fluoranthene	ND	0.0077	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-017 Work Order #...: GLXX71AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0077	mg/kg
Hexachlorobenzene	ND	0.0077	mg/kg
Hexachlorobutadiene	ND	0.058	mg/kg
Hexachlorocyclopenta-diene	ND	0.38	mg/kg
Hexachloroethane	ND	0.058	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0077	mg/kg
Isophorone	ND	0.058	mg/kg
2-Methylnaphthalene	ND	0.0077	mg/kg
2-Methylphenol	ND	0.23	mg/kg
3-Methylphenol	ND	0.23	mg/kg
4-Methylphenol	ND	0.23	mg/kg
Naphthalene	ND	0.0077	mg/kg
2-Nitroaniline	ND	0.23	mg/kg
3-Nitroaniline	ND	0.23	mg/kg
4-Nitroaniline	ND	0.23	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.058	mg/kg
N-Nitrosodiphenylamine	ND	0.058	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.058	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	ND	0.0077	mg/kg
Phenol	ND	0.058	mg/kg
Pyrene	ND	0.0077	mg/kg
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	49	(42 - 110)
2-Fluorobiphenyl	52	(43 - 110)
Terphenyl-d14	75	(37 - 137)
Phenol-d5	58	(25 - 115)
2-Fluorophenol	66	(11 - 116)
2,4,6-Tribromophenol	62	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

GC/MS Semivolatiles

Lot-Sample #...:	A4G270219-018	Work Order #...:	GLX0D1AD	Matrix.....:	SO
Date Sampled...:	07/21/04 10:10	Date Received..:	07/23/04		
Prep Date.....:	07/28/04	Analysis Date..:	08/02/04		
Prep Batch #...:	4209650				
Dilution Factor:	1	Initial Wgt/Vol:	30.14 g	Final Wgt/Vol..:	2 mL
% Moisture.....:	18	Method.....:	SW846 8270C		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0082	mg/kg
Acenaphthylene	ND	0.0082	mg/kg
Anthracene	ND	0.0082	mg/kg
Benzo(a)anthracene	ND	0.0082	mg/kg
Benzo(b)fluoranthene	**0.020**	**0.0082**	**mg/kg**
Benzo(k)fluoranthene	ND	0.0082	mg/kg
Benzoic acid	ND	0.81	mg/kg
Benzo(ghi)perylene	ND	0.0082	mg/kg
Benzo(a)pyrene	ND	0.0082	mg/kg
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.061	mg/kg
4-Bromophenyl phenyl ether	ND	0.061	mg/kg
Butyl benzyl phthalate	ND	0.061	mg/kg
Carbazole	ND	0.061	mg/kg
4-Chloroaniline	ND	0.18	mg/kg
2-Chloronaphthalene	ND	0.061	mg/kg
2-Chlorophenol	ND	0.061	mg/kg
4-Chlorophenyl phenyl ether	ND	0.061	mg/kg
Chrysene	ND	0.0082	mg/kg
Dibenz(a,h)anthracene	ND	0.0082	mg/kg
Dibenzofuran	ND	0.061	mg/kg
Di-n-butyl phthalate	ND	0.061	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.18	mg/kg
Diethyl phthalate	ND	0.061	mg/kg
2,4-Dimethylphenol	ND	0.18	mg/kg
Dimethyl phthalate	ND	0.061	mg/kg
2,4-Dinitrophenol	ND	0.40	mg/kg
2,4-Dinitrotoluene	ND	0.24	mg/kg
2,6-Dinitrotoluene	ND	0.24	mg/kg
Di-n-octyl phthalate	ND	0.061	mg/kg
Fluoranthene	**0.017**	**0.0082**	**mg/kg**

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-018 Work Order #...: GLX0D1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0082	mg/kg
Hexachlorobenzene	ND	0.0082	mg/kg
Hexachlorobutadiene	ND	0.061	mg/kg
Hexachlorocyclopenta-diene	ND	0.40	mg/kg
Hexachloroethane	ND	0.061	mg/kg
Indeno(1,2,3-cd)pyrene	ND	0.0082	mg/kg
Isophorone	ND	0.061	mg/kg
2-Methylnaphthalene	ND	0.0082	mg/kg
2-Methylphenol	ND	0.24	mg/kg
3-Methylphenol	ND	0.24	mg/kg
4-Methylphenol	ND	0.24	mg/kg
Naphthalene	ND	0.0082	mg/kg
2-Nitroaniline	ND	0.24	mg/kg
3-Nitroaniline	ND	0.24	mg/kg
4-Nitroaniline	ND	0.24	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.061	mg/kg
N-Nitrosodiphenylamine	ND	0.061	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.061	mg/kg
Pentachlorophenol	ND	0.18	mg/kg
Phenanthrene	ND	0.0082	mg/kg
Phenol	ND	0.061	mg/kg
Pyrene	ND	0.0082	mg/kg
2,4,5-Trichloro-phenol	ND	0.18	mg/kg
2,4,6-Trichloro-phenol	ND	0.18	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	62	(42 - 110)
2-Fluorobiphenyl	61	(43 - 110)
Terphenyl-d14	80	(37 - 137)
Phenol-d5	66	(25 - 115)
2-Fluorophenol	77	(11 - 116)
2,4,6-Tribromophenol	56	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-019 Work Order #...: GLX0H1AD Matrix.....: SO
Date Sampled...: 07/21/04 09:45 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.03 g Final Wgt/Vol..: 2 mL
% Moisture.....: 9.7 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0074	mg/kg
Acenaphthylene	0.022	0.0074	mg/kg
Anthracene	0.017	0.0074	mg/kg
Benzo(a)anthracene	0.072	0.0074	mg/kg
Benzo(b)fluoranthene	0.10	0.0074	mg/kg
Benzo(k)fluoranthene	0.060	0.0074	mg/kg
Benzoic acid	ND	0.73	mg/kg
Benzo(ghi)perylene	0.056	0.0074	mg/kg
Benzo(a)pyrene	0.075	0.0074	mg/kg
bis(2-Chloroethyl)-ether	ND	0.11	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.11	mg/kg
bis(2-Ethylhexyl) phthalate	0.065	0.055	mg/kg
4-Bromophenyl phenyl ether	ND	0.055	mg/kg
Butyl benzyl phthalate	0.065	0.055	mg/kg
Carbazole	ND	0.055	mg/kg
4-Chloroaniline	ND	0.17	mg/kg
2-Chloronaphthalene	ND	0.055	mg/kg
2-Chlorophenol	ND	0.055	mg/kg
4-Chlorophenyl phenyl ether	ND	0.055	mg/kg
Chrysene	0.062	0.0074	mg/kg
Dibenz(a,h)anthracene	ND	0.0074	mg/kg
Dibenzofuran	ND	0.055	mg/kg
Di-n-butyl phthalate	ND	0.055	mg/kg
3,3'-Dichlorobenzidine	ND	0.11	mg/kg
2,4-Dichlorophenol	ND	0.17	mg/kg
Diethyl phthalate	ND	0.055	mg/kg
2,4-Dimethylphenol	ND	0.17	mg/kg
Dimethyl phthalate	ND	0.055	mg/kg
2,4-Dinitrophenol	ND	0.37	mg/kg
2,4-Dinitrotoluene	ND	0.22	mg/kg
2,6-Dinitrotoluene	ND	0.22	mg/kg
Di-n-octyl phthalate	ND	0.055	mg/kg
Fluoranthene	0.16	0.0074	mg/kg

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-019 Work Order #...: GLX0H1AD Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0074	mg/kg
Hexachlorobenzene	ND	0.0074	mg/kg
Hexachlorobutadiene	ND	0.055	mg/kg
Hexachlorocyclopenta-diene	ND	0.37	mg/kg
Hexachloroethane	ND	0.055	mg/kg
Indeno(1,2,3-cd)pyrene	**0.046**	**0.0074**	**mg/kg**
Isophorone	ND	0.055	mg/kg
2-Methylnaphthalene	ND	0.0074	mg/kg
2-Methylphenol	ND	0.22	mg/kg
3-Methylphenol	ND	0.22	mg/kg
4-Methylphenol	ND	0.22	mg/kg
Naphthalene	ND	0.0074	mg/kg
2-Nitroaniline	ND	0.22	mg/kg
3-Nitroaniline	ND	0.22	mg/kg
4-Nitroaniline	ND	0.22	mg/kg
Nitrobenzene	ND	0.11	mg/kg
2-Nitrophenol	ND	0.055	mg/kg
N-Nitrosodiphenylamine	ND	0.055	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.055	mg/kg
Pentachlorophenol	ND	0.17	mg/kg
Phenanthrene	**0.019**	**0.0074**	**mg/kg**
Phenol	ND	0.055	mg/kg
Pyrene	**0.18**	**0.0074**	**mg/kg**
2,4,5-Trichloro-phenol	ND	0.17	mg/kg
2,4,6-Trichloro-phenol	ND	0.17	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	59	(42 - 110)
2-Fluorobiphenyl	66	(43 - 110)
Terphenyl-d14	83	(37 - 137)
Phenol-d5	74	(25 - 115)
2-Fluorophenol	79	(11 - 116)
2,4,6-Tribromophenol	44	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-020 Work Order #...: GLX0K1AD Matrix.....: SO
Date Sampled...: 07/21/04 09:15 Date Received..: 07/23/04
Prep Date.....: 07/28/04 Analysis Date..: 08/02/04
Prep Batch #...: 4209650
Dilution Factor: 1 Initial Wgt/Vol: 30.04 g Final Wgt/Vol..: 2 mL
% Moisture.....: 15 Method.....: SW846 8270C

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Acenaphthene	ND	0.0079	mg/kg
Acenaphthylene	**0.019**	**0.0079**	**mg/kg**
Anthracene	ND	0.0079	mg/kg
Benzo(a)anthracene	**0.050**	**0.0079**	**mg/kg**
Benzo(b)fluoranthene	**0.072**	**0.0079**	**mg/kg**
Benzo(k)fluoranthene	**0.057**	**0.0079**	**mg/kg**
Benzoic acid	ND	0.78	mg/kg
Benzo(ghi)perylene	**0.046**	**0.0079**	**mg/kg**
Benzo(a)pyrene	**0.045**	**0.0079**	**mg/kg**
bis(2-Chloroethyl)-ether	ND	0.12	mg/kg
bis(2-Chloroisopropyl) ether	ND	0.12	mg/kg
bis(2-Ethylhexyl) phthalate	ND	0.059	mg/kg
4-Bromophenyl phenyl ether	ND	0.059	mg/kg
Butyl benzyl phthalate	ND	0.059	mg/kg
Carbazole	ND	0.059	mg/kg
4-Chloroaniline	ND	0.18	mg/kg
2-Chloronaphthalene	ND	0.059	mg/kg
2-Chlorophenol	ND	0.059	mg/kg
4-Chlorophenyl phenyl ether	ND	0.059	mg/kg
Chrysene	**0.049**	**0.0079**	**mg/kg**
Dibenz(a,h)anthracene	ND	0.0079	mg/kg
Dibenzofuran	ND	0.059	mg/kg
Di-n-butyl phthalate	ND	0.059	mg/kg
3,3'-Dichlorobenzidine	ND	0.12	mg/kg
2,4-Dichlorophenol	ND	0.18	mg/kg
Diethyl phthalate	ND	0.059	mg/kg
2,4-Dimethylphenol	ND	0.18	mg/kg
Dimethyl phthalate	ND	0.059	mg/kg
2,4-Dinitrophenol	ND	0.39	mg/kg
2,4-Dinitrotoluene	ND	0.24	mg/kg
2,6-Dinitrotoluene	ND	0.24	mg/kg
Di-n-octyl phthalate	ND	0.059	mg/kg
Fluoranthene	**0.11**	**0.0079**	**mg/kg**

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Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

GC/MS Semivolatiles

Lot-Sample #...: A4G270219-020 **Work Order #...:** GLX0K1AD **Matrix.....:** SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Fluorene	ND	0.0079	mg/kg
Hexachlorobenzene	ND	0.0079	mg/kg
Hexachlorobutadiene	ND	0.059	mg/kg
Hexachlorocyclopenta-diene	ND	0.39	mg/kg
Hexachloroethane	ND	0.059	mg/kg
Indeno(1,2,3-cd)pyrene	**0.035**	**0.0079**	**mg/kg**
Isophorone	ND	0.059	mg/kg
2-Methylnaphthalene	ND	0.0079	mg/kg
2-Methylphenol	ND	0.24	mg/kg
3-Methylphenol	ND	0.24	mg/kg
4-Methylphenol	ND	0.24	mg/kg
Naphthalene	ND	0.0079	mg/kg
2-Nitroaniline	ND	0.24	mg/kg
3-Nitroaniline	ND	0.24	mg/kg
4-Nitroaniline	ND	0.24	mg/kg
Nitrobenzene	ND	0.12	mg/kg
2-Nitrophenol	ND	0.059	mg/kg
N-Nitrosodiphenylamine	ND	0.059	mg/kg
N-Nitrosodi-n-propyl-amine	ND	0.059	mg/kg
Pentachlorophenol	ND	0.18	mg/kg
Phenanthrene	ND	0.0079	mg/kg
Phenol	ND	0.059	mg/kg
Pyrene	**0.10**	**0.0079**	**mg/kg**
2,4,5-Trichloro-phenol	ND	0.18	mg/kg
2,4,6-Trichloro-phenol	ND	0.18	mg/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Nitrobenzene-d5	60	(42 - 110)
2-Fluorobiphenyl	66	(43 - 110)
Terphenyl-d14	74	(37 - 137)
Phenol-d5	69	(25 - 115)
2-Fluorophenol	73	(11 - 116)
2,4,6-Tribromophenol	52	(35 - 116)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS260001

GC Semivolatiles

Lot-Sample #...:	A4G270219-006	**Work Order #...:**	GLXNW1AD	**Matrix.....:**	SO
Date Sampled...:	07/22/04 14:50	**Date Received..:**	07/23/04		
Prep Date.....:	07/28/04	**Analysis Date..:**	08/07/04		
Prep Batch #...:	4209647				
Dilution Factor:	1	**Initial Wgt/Vol:**	30 g	**Final Wgt/Vol..:**	10 mL
% Moisture.....:	10	**Method.....:**	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
PCB-1016	ND	37	ug/kg
PCB-1221	ND	37	ug/kg
PCB-1232	ND	37	ug/kg
PCB-1242	ND	37	ug/kg
PCB-1248	ND	37	ug/kg
PCB-1254	ND	37	ug/kg
PCB-1260	**48**	**37**	**ug/kg**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	76	(31 - 127)
Decachlorobiphenyl	61	(23 - 141)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAD260001

GC Semivolatiles

Lot-Sample #...:	A4G270219-007	Work Order #...:	GLXPA1AD	Matrix.....:	SO
Date Sampled...:	07/22/04 14:50	Date Received..:	07/23/04		
Prep Date.....:	07/28/04	Analysis Date..:	08/07/04		
Prep Batch #...:	4209647				
Dilution Factor:	1	Initial Wgt/Vol:	30 g	Final Wgt/Vol..:	10 mL
% Moisture.....:	11	Method.....:	SW846 8082		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
PCB-1016	ND	37	ug/kg
PCB-1221	ND	37	ug/kg
PCB-1232	ND	37	ug/kg
PCB-1242	ND	37	ug/kg
PCB-1248	ND	37	ug/kg
PCB-1254	ND	37	ug/kg
PCB-1260	ND	37	ug/kg

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Tetrachloro-m-xylene	66	(31 - 127)
Decachlorobiphenyl	31	(23 - 141)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

TOTAL Metals

Lot-Sample #...: A4G270219-001 **Matrix.....:** SO
Date Sampled...: 07/22/04 14:20 **Date Received..:** 07/23/04
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	**0.70**	**0.25**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXJN1AE**
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**23.7**	**0.62**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXJN1AF**
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**59.6**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXJN1AG**
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXJN1AH
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**46.7**	**24.7**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXJN1AJ**
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**191**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXJN1AK**
		Dilution Factor: 1		Analysis Time..: 03:55	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

TOTAL Metals

Lot-Sample #...: A4G270219-002 **Matrix.....:** SO
Date Sampled...: 07/22/04 13:10 **Date Received..:** 07/23/04
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	**2.3**	**0.25**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLE1AE**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**22.6**	**0.63**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLE1AF**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**26.4**	**0.38**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLE1AG**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.3	mg/kg	SW846 6010B	07/28-07/30/04	GLXLE1AH
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**63.3**	**25.1**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLE1AJ**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**148**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLE1AK**
		Dilution Factor: 1		Analysis Time..: 03:59	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

TOTAL Metals

Lot-Sample #...: A4G270219-003 **Matrix.....:** SO
Date Sampled...: 07/22/04 14:00 **Date Received..:** 07/23/04
% Moisture.....: 29

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	**3.0**	**0.28**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLN1AE**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**34.6**	**0.70**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLN1AF**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**116**	**0.42**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLN1AG**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.4	mg/kg	SW846 6010B	07/28-07/30/04	GLXLN1AH
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**65.0**	**28.0**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLN1AJ**
		Dilution Factor: 1		Analysis Time..: 04:04	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**4690**	**14.0**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXLN1AK**
		Dilution Factor: 5		Analysis Time..: 14:32	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS240001

TOTAL Metals

Lot-Sample #...: A4G270219-004 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:05 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4218097						
Cadmium	ND	0.23	mg/kg	SW846 6010B	08/05/04	GLXL61AN
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**19.2**	**0.58**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXL61AP**
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**14.7**	**0.35**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXL61AQ**
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	**1.2**	**1.2**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXL61AR**
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				
Barium	**94.0**	**23.3**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXL61AT**
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	**106**	**2.3**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXL61AU**
		Dilution Factor: 1		Analysis Time..: 16:20	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS250001

TOTAL Metals

Lot-Sample #...: A4G270219-005 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:25 **Date Received..:** 07/23/04
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4218097						
Cadmium	ND	0.23	mg/kg	SW846 6010B	08/05/04	GLXM81AN
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**17.4**	**0.57**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXM81AP**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**9.8**	**0.34**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXM81AQ**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	08/05/04	GLXM81AR
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				
Barium	**99.2**	**22.8**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXM81AT**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	**69.6**	**2.3**	**mg/kg**	**SW846 6010B**	**08/05/04**	**GLXM81AU**
		Dilution Factor: 1		Analysis Time..: 16:34	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: EQUIP BLANK

TOTAL Metals

Lot-Sample #...: A4G270219-008 **Matrix.....:** WQ
Date Sampled...: 07/22/04 15:00 **Date Received..:** 07/23/04

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210024						
Barium	ND	0.20	mg/L	SW846 6010B	07/28/04	GLXPR1AF
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				
Cadmium	ND	0.0020	mg/L	SW846 6010B	07/28/04	GLXPR1AA
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	07/28/04	GLXPR1AC
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.0030	mg/L	SW846 6010B	07/28/04	GLXPR1AD
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				
Antimony	ND	0.010	mg/L	SW846 6010B	07/28/04	GLXPR1AE
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	0.020	mg/L	SW846 6010B	07/28/04	GLXPR1AG
		Dilution Factor: 1		Analysis Time..: 15:39	Analyst ID.....: 002260	
		Instrument ID..: I5				

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

TOTAL Metals

Lot-Sample #...: A4G270219-009 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
% Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.22	mg/kg	SW846 6010B	07/28-07/30/04	GLXV41AF
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**17.5**	**0.55**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXV41AG**
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**7.2**	**0.33**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXV41AH**
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	07/28-07/30/04	GLXV41AJ
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**138**	**22.0**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXV41AK**
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**53.2**	**2.2**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXV41AL**
		Dilution Factor: 1		Analysis Time..: 04:22	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

TOTAL Metals

Lot-Sample #...: A4G270219-010 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.23	mg/kg	SW846 6010B	07/28-07/30/04	GLXWP1AF
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**20.6**	**0.58**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXWP1AG**
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**9.7**	**0.35**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXWP1AH**
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXWP1AJ
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**108**	**23.2**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXWP1AK**
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**47.4**	**2.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXWP1AL**
		Dilution Factor: 1		Analysis Time..: 04:31	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

TOTAL Metals

Lot-Sample #...: A4G270219-011 **Matrix.....:** SO
Date Sampled...: 07/21/04 12:15 **Date Received..:** 07/23/04
% Moisture.....: 7.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.22	mg/kg	SW846 6010B	07/28-07/30/04	GLXW11AF
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**13.4**	**0.54**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXW11AG**
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**6.9**	**0.33**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXW11AH**
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	07/28-07/30/04	GLXW11AJ
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**83.4**	**21.7**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXW11AK**
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**39.7**	**2.2**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXW11AL**
		Dilution Factor: 1		Analysis Time..: 04:36	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

TOTAL Metals

Lot-Sample #...: A4G270219-012 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:50 **Date Received..:** 07/23/04
% Moisture.....: 10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.22	mg/kg	SW846 6010B	07/28-07/30/04	GLXXC1AF
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**13.3**	**0.56**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXC1AG**
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**7.9**	**0.34**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXC1AH**
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	07/28-07/30/04	GLXXC1AJ
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**105**	**22.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXC1AK**
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**41.6**	**2.2**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXC1AL**
		Dilution Factor: 1		Analysis Time..: 04:41	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

TOTAL Metals

Lot-Sample #...: A4G270219-013 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:35 **Date Received..:** 07/23/04
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.25	mg/kg	SW846 6010B	07/28-07/30/04	GLXXG1AF
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**16.0**	**0.62**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXG1AG**
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**9.0**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXG1AH**
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXXG1AJ
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**91.2**	**24.7**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXG1AK**
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**43.9**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXG1AL**
		Dilution Factor: 1		Analysis Time..: 04:45	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

TOTAL Metals

Lot-Sample #...: A4G270219-014 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:20 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.23	mg/kg	SW846 6010B	07/28-07/30/04	GLXXQ1AF
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**36.3**	**0.58**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXQ1AG**
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**15.7**	**0.35**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXQ1AH**
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXXQ1AJ
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**208**	**23.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXQ1AK**
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**77.7**	**2.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXQ1AL**
		Dilution Factor: 1		Analysis Time..: 04:50	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

TOTAL Metals

Lot-Sample #...: A4G270219-015 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:10 **Date Received..:** 07/23/04
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.24	mg/kg	SW846 6010B	07/28-07/30/04	GLXXV1AF
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**27.3**	**0.59**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXV1AG**
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**13.2**	**0.35**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXV1AH**
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXXV1AJ
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**136**	**23.6**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXV1AK**
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**59.0**	**2.4**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXV1AL**
		Dilution Factor: 1		Analysis Time..: 04:54	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

TOTAL Metals

Lot-Sample #...: A4G270219-016 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.23	mg/kg	SW846 6010B	07/28-07/30/04	GLXXX1AF
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**24.9**	**0.57**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXX1AG**
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**11.3**	**0.34**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXX1AH**
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	07/28-07/30/04	GLXXX1AJ
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**155**	**22.9**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXX1AK**
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**57.6**	**2.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXXX1AL**
		Dilution Factor: 1		Analysis Time..: 04:59	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

TOTAL Metals

Lot-Sample #...: A4G270219-017 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.23	mg/kg	SW846 6010B	07/28-07/30/04	GLXX71AF
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**18.0**	**0.58**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXX71AG**
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**8.4**	**0.35**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXX71AH**
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLXX71AJ
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**89.6**	**23.1**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXX71AK**
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**42.5**	**2.3**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLXX71AL**
		Dilution Factor: 1		Analysis Time..: 05:21	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

TOTAL Metals

Lot-Sample #...: A4G270219-018 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:10 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.24	mg/kg	SW846 6010B	07/28-07/30/04	GLX0D1AF
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**30.8**	**0.61**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0D1AG**
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**13.9**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0D1AH**
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLX0D1AJ
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**198**	**24.4**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0D1AK**
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**71.9**	**2.4**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0D1AL**
		Dilution Factor: 1		Analysis Time..: 05:26	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

TOTAL Metals

Lot-Sample #...: A4G270219-019 **Matrix.....:** SO
Date Sampled...: 07/21/04 09:45 **Date Received..:** 07/23/04
% Moisture.....: 9.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.22	mg/kg	SW846 6010B	07/28-07/30/04	GLX0H1AF
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**9.7**	**0.55**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0H1AG**
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**7.0**	**0.33**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0H1AH**
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.1	mg/kg	SW846 6010B	07/28-07/30/04	GLX0H1AJ
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**54.8**	**22.1**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0H1AK**
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**30.6**	**2.2**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0H1AL**
		Dilution Factor: 1		Analysis Time..: 05:30	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

TOTAL Metals

Lot-Sample #...: A4G270219-020 **Matrix.....:** SO
Date Sampled...: 07/21/04 09:15 **Date Received..:** 07/23/04
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.24	mg/kg	SW846 6010B	07/28-07/30/04	GLX0K1AF
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**24.3**	**0.59**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0K1AG**
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**12.3**	**0.35**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0K1AH**
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLX0K1AJ
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**111**	**23.6**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0K1AK**
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**51.6**	**2.4**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0K1AL**
		Dilution Factor: 1		Analysis Time..: 05:35	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS220002

TOTAL Metals

Lot-Sample #...: A4G270219-021 **Matrix.....:** SO
Date Sampled...: 07/21/04 13:50 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.24	mg/kg	SW846 6010B	07/28-07/30/04	GLX0V1AD
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**17.7**	**0.61**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0V1AE**
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**8.4**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0V1AF**
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLX0V1AG
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**82.3**	**24.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0V1AH**
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**772**	**2.4**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX0V1AJ**
		Dilution Factor: 1		Analysis Time..: 05:40	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS230002

TOTAL Metals

Lot-Sample #...: A4G270219-022 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:10 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4210027						
Cadmium	ND	0.25	mg/kg	SW846 6010B	07/28-07/30/04	GLX081AD
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				
Chromium	**44.0 E**	**0.61**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX081AE**
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				
Lead	**17.6 E**	**0.37**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX081AF**
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				
Antimony	ND	1.2	mg/kg	SW846 6010B	07/28-07/30/04	GLX081AG
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				
Barium	**217 E**	**24.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX081AH**
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				
Zinc	**89.4 E**	**2.5**	**mg/kg**	**SW846 6010B**	**07/28-07/30/04**	**GLX081AJ**
		Dilution Factor: 1		Analysis Time..: 05:44	Analyst ID.....: 001619	
		Instrument ID..: I5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

E Matrix interference.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

General Chemistry

Lot-Sample #...: A4G270219-001 **Work Order #...:** GLXJN **Matrix.....:** SO
Date Sampled...: 07/22/04 14:20 **Date Received..:** 07/23/04
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.62	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**81.0**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

General Chemistry

Lot-Sample #...: A4G270219-002 **Work Order #...:** GLXLE **Matrix.....:** SO
Date Sampled...: 07/22/04 13:10 **Date Received..:** 07/23/04
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.63	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**79.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

General Chemistry

Lot-Sample #...: A4G270219-003 **Work Order #...:** GLXLN **Matrix.....:** SO
Date Sampled...: 07/22/04 14:00 **Date Received..:** 07/23/04
% Moisture.....: 29

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	1.3	0.70	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	71.4	10.0	%	MCAWW 160.3 MOD	07/28-07/29/04	4210054
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS240001

General Chemistry

Lot-Sample #...: A4G270219-004 **Work Order #...:** GLXL6 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:05 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.58	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**85.7**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS250001

General Chemistry

Lot-Sample #...: A4G270219-005 **Work Order #...:** GLXM8 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:25 **Date Received..:** 07/23/04
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.57	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**87.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

General Chemistry

Lot-Sample #...: A4G270219-009 **Work Order #...:** GLXV4 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
% Moisture.....: 9.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.55	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**91.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

General Chemistry

Lot-Sample #...: A4G270219-010 **Work Order #...:** GLXWP **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.58	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**86.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

General Chemistry

Lot-Sample #...: A4G270219-011 **Work Order #...:** GLXW1 **Matrix.....:** SO
Date Sampled...: 07/21/04 12:15 **Date Received..:** 07/23/04
% Moisture.....: 7.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.54	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**92.1**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

General Chemistry

Lot-Sample #...: A4G270219-012 **Work Order #...:** GLXXC **Matrix.....:** SO
Date Sampled...: 07/21/04 11:50 **Date Received..:** 07/23/04
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.56	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**89.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

General Chemistry

Lot-Sample #...: A4G270219-013 **Work Order #...:** GLXXG **Matrix.....:** SO
Date Sampled...: 07/21/04 11:35 **Date Received..:** 07/23/04
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.62	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**80.9**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

General Chemistry

Lot-Sample #...: A4G270219-014 **Work Order #...:** GLXXQ **Matrix.....:** SO
Date Sampled...: 07/21/04 11:20 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.58	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**85.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

General Chemistry

Lot-Sample #...: A4G270219-015 **Work Order #...:** GLXXV **Matrix.....:** SO
Date Sampled...: 07/21/04 11:10 **Date Received..:** 07/23/04
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.59	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**84.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

General Chemistry

Lot-Sample #...: A4G270219-016 **Work Order #...:** GLXXX **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.57	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**87.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

General Chemistry

Lot-Sample #...: A4G270219-017 **Work Order #...:** GLXX7 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.58	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**86.5**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

General Chemistry

Lot-Sample #...: A4G270219-018 **Work Order #...:** GLX0D **Matrix.....:** SO
Date Sampled...: 07/21/04 10:10 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.61	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**81.8**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

General Chemistry

Lot-Sample #...: A4G270219-019 **Work Order #...:** GLX0H **Matrix.....:** SO
Date Sampled...: 07/21/04 09:45 **Date Received..:** 07/23/04
% Moisture.....: 9.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.55	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**90.3**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

General Chemistry

Lot-Sample #...: A4G270219-020 **Work Order #...:** GLX0K **Matrix.....:** SO
Date Sampled...: 07/21/04 09:15 **Date Received..:** 07/23/04
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.59	mg/kg	SW846 9012A	07/30/04	4212215
		Dilution Factor: 1				
Percent Solids	**84.7**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210054**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS220002

General Chemistry

Lot-Sample #...: A4G270219-021 **Work Order #...:** GLX0V **Matrix.....:** SO
Date Sampled...: 07/21/04 13:50 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.61	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**81.7**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210056**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS230002

General Chemistry

Lot-Sample #...: A4G270219-022 **Work Order #...:** GLX08 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:10 **Date Received..:** 07/23/04
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	0.61	mg/kg	SW846 9012A	08/03/04	4216305
		Dilution Factor: 1				
Percent Solids	**81.6**	**10.0**	**%**	**MCAWW 160.3 MOD**	**07/28-07/29/04**	**4210056**
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

ANALYTICAL REPORT

JOB NUMBER: 207227

Prepared For:

SEVERN TRENT LABORATORIES-NORTH CANTON
4101 Shuffel Drive, NW
North Canton, OH 44720

Project: OLIN-MIDDLETOWN,CT

Attention: Roger Toth

Date: 08/13/2004

Signature

08/16/04
Date

Name: Jill M. Pfister

Title: Project Manager

E-Mail: jpfister@stl-inc.com

STL Connecticut
128 Long Hill Cross Road
Shelton, CT 06484

This Report Contains (200) Pages

SEVERN TRENT STL

STL Report : 207227
STL NORTH CANTON – OLIN

Case Narrative

Sample Receipt – All samples were received in good condition and at the proper temperature.

Organic Extraction - Samples were extracted according to method 3550B/3510C. The following samples went to an elevated final volume for CT-ETPH analysis:

A4G270219-01	2mL
A4G270219-02	2mL
A4G270219-03	2mL
A4G270219-06	2mL

Sample "Equip Blank" was extracted out of hold. No other problems were encountered.

Extractable Total Petroleum Hydrocarbons (ETPH)- ETPH samples were analyzed using guidance provided in the State of Connecticut ETPH method. The instrumentation used was a Hewlett-Packard Gas Chromatograph equipped with a Flame Ionization Detector. Integration was performed from Carbon range C9 to C36. The surrogate and any integrated peaks not included in this range were subtracted from the total area. All unresolved hydrocarbons were included in the integration.

An alkane (C9-C36) solution was used as the calibration standard.

Although some forms show the MDL for Total Petroleum Hydrocarbons, results are not reported below the reporting limit. This is due to problems with low level background contamination inherent from the method.

The % RPD was outside of QC limits in DPS180608 MS/MSD.

Sample HAS170001 required a 1:10 dilution for target compounds.

Manual integrations were performed if required, and any affected peaks were designated with an "M" on the quantitation report. Manual integrations were initialed by the analyst that performed the integration.

Sample Calculation:

Sample ID - HAS260001
Compound - CT Total Petroleum Hydrocarbons

$$\frac{(87373461 \text{ area})(2000 \text{ ul})}{(97763.9299 \text{ area/ng})(30.1\text{g})(.809)(1 \text{ ul})} = 73{,}403 \text{ ug/Kg}$$

SEVERN TRENT STL

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

SAMPLE INFORMATION
Date: 08/13/2004

Job Number.: 207227
Customer...: SEVERN TRENT LABORATORIES-NORTH CANTON
Attn.....: Roger Toth

Project Number.....: 20001200
Customer Project ID....: OLIN-MIDDLETOWN,CT
Project Description....: OLIN-MIDDLETOWN, CT

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
207227-1	MAS150001	Soil	07/22/2004	14:20	07/28/2004	11:44
207227-2	MAS160001	Soil	07/22/2004	13:10	07/28/2004	11:44
207227-3	MAS170001	Soil	07/22/2004	14:00	07/28/2004	11:44
207227-4	MAS260001	Soil	07/22/2004	14:50	07/28/2004	11:44
207227-5	MAD260001	Soil	07/22/2004	14:50	07/28/2004	11:44
207227-6	EQUIP BLANK	Water	07/22/2004	15:00	07/28/2004	11:44
207227-7	DPS040810	Soil	07/21/2004	14:40	07/28/2004	11:44
207227-8	DPD040810	Soil	07/21/2004	14:40	07/28/2004	11:44
207227-9	DPS090002	Soil	07/21/2004	12:15	07/28/2004	11:44
207227-10	DPS100002	Soil	07/21/2004	11:50	07/28/2004	11:44
207227-11	DPS110002	Soil	07/21/2004	11:35	07/28/2004	11:44
207227-12	DPS120002	Soil	07/21/2004	11:20	07/28/2004	11:44
207227-13	DPS130002	Soil	07/21/2004	11:10	07/28/2004	11:44
207227-14	DPS140103	Soil	07/21/2004	10:35	07/28/2004	11:44
207227-15	DPD140103	Soil	07/21/2004	10:35	07/28/2004	11:44
207227-16	DPS180608	Soil	07/21/2004	10:10	07/28/2004	11:44
207227-17	DPS190204	Soil	07/21/2004	09:45	07/28/2004	11:44
207227-18	DPS200204	Soil	07/21/2004	09:15	07/28/2004	11:44
207227-19	DSP010406	Soil	07/23/2004	09:20	07/28/2004	11:44
207227-20	DSP020810	Soil	07/23/2004	09:55	07/28/2004	11:44
207227-21	DSP030002	Soil	07/23/2004	10:50	07/28/2004	11:44

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: HAS150001
Date Sampled.....: 07/22/2004
Time Sampled.....: 14:20
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-1
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	WT	DATE/TIME	TEC
ASTM D-2216												
	% Solids, Solid	80.9			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	19.1			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	140000		M	2800	30000	1.00000	ug/Kg	36515		08/10/04 0449	kmm

0000004

* In Description = Dry Wgt.

2172

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: GLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: HAS160001
Date Sampled.....: 07/22/2004
Time Sampled.....: 13:10
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-2
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	79.4			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	20.6			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	97000			2800	30000	1.00000	ug/Kg	36515		08/09/04 1602	kam

0000005

* In Description = Dry Wgt.

2173

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON | PROJECT: OLIN-MIDDLETOWN,CT | ATTN: Roger Toth

Customer Sample ID: HAS170001
Date Sampled.....: 07/22/2004
Time Sampled.....: 14:00
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-3
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DF	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	69.7			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	30.3			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	1200000		M	32000	340000	10.0000	ug/Kg	36515		08/09/04 1629	kam

* In Description = Dry Wgt.

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: MAS260001
Date Sampled.....: 07/22/2004
Time Sampled.....: 14:50
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-4
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	84.7			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	15.3			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	70000			2700	28000	1.00000	ug/Kg	36515		08/09/04 1702	kmm

00000007

* In Description = Dry Wgt.

2175

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: HAD260001
Date Sampled.....: 07/22/2004
Time Sampled.....: 14:50
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-5
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	75.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	25.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	45000		H	1500	16000	1.00000	ug/Kg	36515		08/09/04 1731	kam

0000008

* In Description = Dry Wgt.

2176

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: EQUIP BLANK
Date Sampled.....: 07/22/2004
Time Sampled.....: 15:00
Sample Matrix.....: Water

Laboratory Sample ID: 207227-6
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
CTETPH	Connecticut Total Petroleum Hydrocarbons CT Ext. Petroleum Hydrocarbons	ND	U		42	100	1.00000	ug/L	36515		08/10/04 0035	kam

* In Description = Dry Wgt.

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS040810
Date Sampled.....: 07/21/2004
Time Sampled.....: 14:40
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-7
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	83.3			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	16.7			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND		U	1300	14000	1.00000	ug/Kg	36515		08/09/04 1758	kam

0000010

* In Description = Dry Wgt.

2178

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPD040810
Date Sampled.....: 07/21/2004
Time Sampled.....: 14:40
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-8
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DI	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	69.4			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	30.6			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1600	17000	1.00000	ug/Kg	36515		08/09/04 1826	kam

* In Description = Dry Wgt.

0000011

2179

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS090002
Date Sampled.....: 07/21/2004
Time Sampled.....: 12:15
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-9
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	84.4			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	15.6			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/09/04 1854	kam

* In Description = Dry Wgt.

0000012

2180

STL North Canton

Job Number: 207227

LABORATORY TEST RESULTS

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS100002
Date Sampled.....: 07/21/2004
Time Sampled.....: 11:50
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-10
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	88.6			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	11.4			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/09/04 1921	kem

0000013

* In Description = Dry Wgt.

2181

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS110002
Date Sampled.....: 07/21/2004
Time Sampled.....: 11:35
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-11
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	81.8			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	18.2			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1400	15000	1.00000	ug/Kg	36515		08/09/04 1949	kam

0000014

* In Description = Dry Wgt.

2182

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS120002
Date Sampled.....: 07/21/2004
Time Sampled.....: 11:20
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-12
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	QT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	84.7			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	15.3			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/09/04 2018	kam

* In Description = Dry Wgt.

0000015

2183

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: BPS130002
Date Sampled.....: 07/21/2004
Time Sampled.....: 11:10
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-13
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	84.1			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	15.9			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/09/04 2048	kam

* In Description = Dry Wgt.

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS140103
Date Sampled.....: 07/21/2004
Time Sampled.....: 10:35
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-14
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	RDL	RL	DILUTION	UNITS	BATCH	DI	DATE/TIME	TEC
ASTM D-2216												
	% Solids, Solid	82.9			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	17.1			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/10/04 0103	kam

* In Description = Dry Wgt.

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON | PROJECT: OLIN-MIDDLETOWN,CT | ATTN: Roger Toth

Customer Sample ID: DPD140103
Date Sampled.....: 07/21/2004
Time Sampled.....: 10:35
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-15
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	88.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	12.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	13000	1.00000	ug/Kg	36515		08/10/04 0131	kam

* In Description = Dry Wgt.

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS180608
Date Sampled.....: 07/21/2004
Time Sampled.....: 10:10
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-16
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	80.9			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	19.1			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1400	15000	1.00000	ug/Kg	36515		08/10/04 0159	kam

* In Description = Dry Wgt.

0000019

2187

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DPS190204
Date Sampled.....: 07/21/2004
Time Sampled.....: 09:45
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-17
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	BT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	88.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	12.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1300	14000	1.00000	ug/Kg	36515		08/10/04 0227	kam

0000020

* In Description = Dry Wgt.

2188

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON

PROJECT: OLIN-MIDDLETOWN,CT

ATTN: Roger Toth

Customer Sample ID: DPS200204
Date Sampled.....: 07/21/2004
Time Sampled.....: 09:15
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-18
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	82.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	18.0			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	59000			2700	29000	1.00000	ug/Kg	36515		08/10/04 0255	kam

* In Description = Dry Wgt.

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DSP010406
Date Sampled.....: 07/23/2004
Time Sampled.....: 09:20
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-19
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	RT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	76.5			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	23.5			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1500	16000	1.00000	ug/Kg	36515		08/10/04 0325	kam

* In Description = Dry Wgt.

0000022

2190

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DSP020810
Date Sampled.....: 07/23/2004
Time Sampled.....: 09:55
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-20
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	BY	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	81.3			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	18.7			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1400	15000	1.00000	ug/Kg	36515		08/10/04 0353	kam

* In Description = Dry Wgt.

00000023

2191

STL North Canton

LABORATORY TEST RESULTS

Job Number: 207227

Date:08/11/2004

CUSTOMER: SEVERN TRENT LABORATORIES-NORTH CANTON PROJECT: OLIN-MIDDLETOWN,CT ATTN: Roger Toth

Customer Sample ID: DSP030002
Date Sampled.....: 07/23/2004
Time Sampled.....: 10:50
Sample Matrix.....: Soil

Laboratory Sample ID: 207227-21
Date Received.....: 07/28/2004
Time Received.....: 11:44

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT	DATE/TIME	TECH
ASTM D-2216												
	% Solids, Solid	81.1			0.10	0.10	1	%	36570		08/10/04 0000	rlm
	% Moisture, Solid	18.9			0.10	0.10	1	%	36570		08/10/04 0000	rlm
CTETPH	Connecticut Total Petroleum Hydrocarbons											
	CT Ext. Petroleum Hydrocarbons, Solid*	ND	U		1400	15000	1.00000	ug/Kg	36515		08/10/04 0422	kam

00000024

* In Description = Dry Wgt.

2192

SEVERN TRENT STL

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ANALYTICAL REPORT

OLIN-MIDDLETOWN, CT

Lot #: A4H200106

Dave Clymer

Mactec Engineering & Consultin
1080 Elm Street
Rocky Hill, CT 06067

SEVERN TRENT LABORATORIES, INC.

Roger K. Toth
Project Manager

September 13, 2004

CASE NARRATIVE
A4H200106

The following report contains the analytical results for twenty-two solid samples submitted to STL North Canton by Mactec Engineering & Consulting Inc. from the Olin-Middletown, CT Site. The samples were originally received July 23, 2004 and July 24, 2004, according to documented sample acceptance procedures and were archived. The client requested analysis on August 18, 2004.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Clymer and Emmet Curtis on September 01, 2004. A summary of QC data for these analyses is included at the back of the report.

STL North Canton attests to the validity of the laboratory data generated by STL facilities reported herein. All analyses performed by STL facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. STL's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Roger K. Toth, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

METALS

Some elements in the leachate blank may exceed requested reporting limits. Since process cleanliness at trace levels cannot be guaranteed for samples undergoing metals leachate procedures, corrective action for leachate blank contamination is limited to element concentrations exceeding routine (non-trace) reporting limits.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#100439), Kansas (#E10336), Louisiana (#04112), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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ANALYTICAL METHODS SUMMARY

MH200106

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A4H200106

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
GNJT5	001	DPS010406	07/23/04	09:20
GNJT6	002	DPS020810	07/23/04	09:55
GNJT7	003	DPS030002	07/23/04	10:50
GNJT8	004	DPS040810	07/21/04	14:40
GNJT9	005	DPD040810	07/21/04	14:40
GNJVA	006	DPS090002	07/21/04	12:15
GNJVC	007	DPS100002	07/21/04	11:50
GNJVD	008	DPS110002	07/21/04	11:35
GNJVE	009	DPS120002	07/21/04	11:20
GNJVF	010	DPS130002	07/21/04	11:10
GNJVG	011	DPS140103	07/21/04	10:35
GNJVH	012	DPD140103	07/21/04	10:35
GNJVJ	013	HAS150001	07/22/04	14:20
GNJVK	014	HAS160001	07/22/04	13:10
GNJVL	015	HAS170001	07/22/04	14:00
GNJVM	016	DPS180608	07/21/04	10:10
GNJVN	017	DPS190204	07/21/04	09:45
GNJVP	018	DPS200204	07/21/04	09:15
GNJVQ	019	DPS220002	07/21/04	13:50
GNJVR	020	DPS230002	07/21/04	14:10
GNJVT	021	HAS240001	07/22/04	12:05
GNJVV	022	HAS250001	07/22/04	12:25

NOTE(S):

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

Samples which were placed on hold, that will also need SPLP analysis
Project: Olin-Middletown, CT

Sample #	Sample ID	Additional Analysis						
		SPLP Antimony	SPLP Barium	SPLP Cadmium	SPLP Chromium	SPLP Lead	SPLP Zinc	SPLP PCBs
A4G270130-001	DPS010406		X		X	X		
A4G270130-003	DPS020810		X		X	X		
A4G270130-004	DPS030002		X		X	X		
A4G270219-009	DPS040810		X		X	X		
A4G270219-010	DPD040810		X		X	X		
A4G270219-011	DPS090002		X		X	X		
A4G270219-012	DPS100002		X		X	X		
A4G270219-013	DPS110002		X		X	X		
A4G270219-014	DPS120002		X		X	X		
A4G270219-015	DPS130002		X		X	X		
A4G270219-016	DPS140103		X		X	X		
A4G270219-017	DPD140103		X		X	X		
A4G270219-001	HAS150001		X	X	X	X	X	
A4G270219-002	HAS160001		X	X	X	X	X	
A4G270219-003	HAS170001		X	X	X	X	X	
A4G270219-018	DPS180606		X		X	X		
A4G270219-019	DPS190204		X		X	X		
A4G270219-020	DPS200204		X		X	X		
A4G270219-021	DPS220002		X		X	X	X	
A4G270219-022	DPS230002		X		X	X		
A4G270219-004	HAS240001		X		X	X	X	
A4G270219-005	HAS250001		X		X	X		
~~A4G270219-006~~	~~HAS260001~~							~~X~~
~~A4G270219-007~~	~~HAD260001~~							~~X~~

10 pu RKT

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS010406

SPLP Metals

Lot-Sample #...: A4H200106-001 **Matrix.....:** SO
Date Sampled...: 07/23/04 09:20 **Date Received..:** 07/24/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJT51AA
		Dilution Factor: 1		Analysis Time..: 21:12	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJT51AD
		Dilution Factor: 1		Analysis Time..: 21:12	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJT51AC
		Dilution Factor: 1		Analysis Time..: 21:12	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS020810

SPLP Metals

Lot-Sample #...: A4H200106-002 **Matrix.....:** SO
Date Sampled...: 07/23/04 09:55 **Date Received..:** 07/24/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJT61AA
		Dilution Factor: 1		Analysis Time..: 21:16	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJT61AD
		Dilution Factor: 1		Analysis Time..: 21:16	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJT61AC
		Dilution Factor: 1		Analysis Time..: 21:16	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS030002

SPLP Metals

Lot-Sample #...: A4H200106-003 **Matrix.....:** SO
Date Sampled...: 07/23/04 10:50 **Date Received..:** 07/24/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJT71AA
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJT71AD
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJT71AC
		Dilution Factor: 1		Analysis Time..: 21:33	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS040810

SPLP Metals

Lot-Sample #...: A4H200106-004 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJT81AA
		Dilution Factor: 1		Analysis Time..: 21:38	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJT81AH
		Dilution Factor: 1		Analysis Time..: 21:38	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJT81AE
		Dilution Factor: 1		Analysis Time..: 21:38	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD040810

SPLP Metals

Lot-Sample #...: A4H200106-005 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:40 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJT91AA
		Dilution Factor: 1		Analysis Time..: 21:56	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJT91AD
		Dilution Factor: 1		Analysis Time..: 21:56	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJT91AC
		Dilution Factor: 1		Analysis Time..: 21:56	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS090002

SPLP Metals

Lot-Sample #...: A4H200106-006 **Matrix.....:** SO
Date Sampled...: 07/21/04 12:15 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVA1AA
		Dilution Factor: 1		Analysis Time..: 22:01	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0056**	**0.0050**	**mg/L**	**SW846 6010B**	**08/27-08/30/04**	**GNJVA1AD**
		Dilution Factor: 1		Analysis Time..: 22:01	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVA1AC
		Dilution Factor: 1		Analysis Time..: 22:01	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS100002

SPLP Metals

Lot-Sample #...: A4H200106-007 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:50 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVC1AA
		Dilution Factor: 1		Analysis Time..: 22:05	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJVC1AD
		Dilution Factor: 1		Analysis Time..: 22:05	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVC1AC
		Dilution Factor: 1		Analysis Time..: 22:05	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS110002

SPLP Metals

Lot-Sample #...: A4H200106-008 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:35 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVD1AA
		Dilution Factor: 1		Analysis Time..: 22:10	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/27-08/30/04	GNJVD1AD
		Dilution Factor: 1		Analysis Time..: 22:10	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVD1AC
		Dilution Factor: 1		Analysis Time..: 22:10	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS120002

SPLP Metals

Lot-Sample #...: A4H200106-009 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:20 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVE1AA
		Dilution Factor: 1		Analysis Time..: 22:14	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0075**	**0.0050**	**mg/L**	**SW846 6010B**	**08/27-08/30/04**	**GNJVE1AD**
		Dilution Factor: 1		Analysis Time..: 22:14	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVE1AC
		Dilution Factor: 1		Analysis Time..: 22:14	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS130002

SPLP Metals

Lot-Sample #...: A4H200106-010 **Matrix.....:** SO
Date Sampled...: 07/21/04 11:10 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVF1AA
		Dilution Factor: 1		Analysis Time..: 22:31	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0073**	**0.0050**	**mg/L**	**SW846 6010B**	**08/27-08/30/04**	**GNJVF1AD**
		Dilution Factor: 1		Analysis Time..: 22:31	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVF1AC
		Dilution Factor: 1		Analysis Time..: 22:31	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS140103

SPLP Metals

Lot-Sample #...: A4H200106-011 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
Leach Date.....: 08/25/04 **Leach Batch #..:** P423815

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4240052						
Barium	ND	1.0	mg/L	SW846 6010B	08/27-08/30/04	GNJVG1AA
		Dilution Factor: 1		Analysis Time..: 22:36	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.020**	**0.0050**	**mg/L**	**SW846 6010B**	**08/27-08/30/04**	**GNJVG1AD**
		Dilution Factor: 1		Analysis Time..: 22:36	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/27-08/30/04	GNJVG1AC
		Dilution Factor: 1		Analysis Time..: 22:36	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPD140103

SPLP Metals

Lot-Sample #...: A4H200106-012 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:35 **Date Received..:** 07/23/04
Leach Date.....: 08/26/04 **Leach Batch #..:** P423909

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4243051						
Barium	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVH1AA
		Dilution Factor: 1		Analysis Time..: 23:06	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.029**	**0.0050**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVH1AD**
		Dilution Factor: 1		Analysis Time..: 23:06	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/30/04	GNJVH1AC
		Dilution Factor: 1		Analysis Time..: 23:06	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS150001

SPLP Metals

Lot-Sample #...: A4H200106-013 **Matrix.....:** SO
Date Sampled...: 07/22/04 14:20 **Date Received..:** 07/23/04
Leach Date.....: 08/26/04 **Leach Batch #..:** P423909

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4243051						
Barium	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVJ1AA
		Dilution Factor: 1		Analysis Time..: 23:11	Analyst ID.....: 002260	
		Instrument ID..: I5				
Cadmium	ND	0.0020	mg/L	SW846 6010B	08/30/04	GNJVJ1AE
		Dilution Factor: 1		Analysis Time..: 23:11	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0089**	**0.0050**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVJ1AD**
		Dilution Factor: 1		Analysis Time..: 23:11	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/30/04	GNJVJ1AC
		Dilution Factor: 1		Analysis Time..: 23:11	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVJ1AF
		Dilution Factor: 1		Analysis Time..: 23:11	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS160001

SPLP Metals

Lot-Sample #...: A4H200106-014 **Matrix.....:** SO
Date Sampled...: 07/22/04 13:10 **Date Received..:** 07/23/04
Leach Date.....: 08/26/04 **Leach Batch #..:** P423909

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4243051						
Barium	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVK1AA
		Dilution Factor: 1		Analysis Time..: 23:15	Analyst ID.....: 002260	
		Instrument ID..: I5				
Cadmium	ND	0.0020	mg/L	SW846 6010B	08/30/04	GNJVK1AE
		Dilution Factor: 1		Analysis Time..: 23:15	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/30/04	GNJVK1AD
		Dilution Factor: 1		Analysis Time..: 23:15	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/30/04	GNJVK1AC
		Dilution Factor: 1		Analysis Time..: 23:15	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVK1AF
		Dilution Factor: 1		Analysis Time..: 23:15	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS170001

SPLP Metals

Lot-Sample #...: A4H200106-015 **Matrix.....:** SO
Date Sampled...: 07/22/04 14:00 **Date Received..:** 07/23/04
Leach Date.....: 08/26/04 **Leach Batch #..:** P423909

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4243051						
Barium	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVL1AA
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 002260	
		Instrument ID..: I5				
Cadmium	ND	0.0020	mg/L	SW846 6010B	08/30/04	GNJVL1AE
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0093**	**0.0050**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVL1AD**
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**0.021**	**0.010**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVL1AC**
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVL1AF
		Dilution Factor: 1		Analysis Time..: 23:32	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS180608

SPLP Metals

Lot-Sample #...: A4H200106-016 **Matrix.....:** SO
Date Sampled...: 07/21/04 10:10 **Date Received..:** 07/23/04
Leach Date.....: 08/26/04 **Leach Batch #..:** P423909

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4243051						
Barium	ND	1.0	mg/L	SW846 6010B	08/30/04	GNJVM1AA
		Dilution Factor: 1		Analysis Time..: 23:50	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.025**	**0.0050**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVM1AD**
		Dilution Factor: 1		Analysis Time..: 23:50	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	**0.010**	**0.010**	**mg/L**	**SW846 6010B**	**08/30/04**	**GNJVM1AC**
		Dilution Factor: 1		Analysis Time..: 23:50	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS190204

SPLP Metals

Lot-Sample #...: A4H200106-017 **Matrix.....:** SO
Date Sampled...: 07/21/04 09:45 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVN1AA
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/31/04	GNJVN1AD
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVN1AC
		Dilution Factor: 1		Analysis Time..: 18:07	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS200204

SPLP Metals

Lot-Sample #...: A4H200106-018 **Matrix.....:** SO
Date Sampled...: 07/21/04 09:15 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVP1AA
		Dilution Factor: 1		Analysis Time..: 18:37	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.0064**	**0.0050**	**mg/L**	**SW846 6010B**	**08/31/04**	**GNJVP1AD**
		Dilution Factor: 1		Analysis Time..: 18:37	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVP1AC
		Dilution Factor: 1		Analysis Time..: 18:37	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS220002

SPLP Metals

Lot-Sample #...: A4H200106-019 **Matrix.....:** SO
Date Sampled...: 07/21/04 13:50 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVQ1AA
		Dilution Factor: 1		Analysis Time..: 18:42	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/31/04	GNJVQ1AD
		Dilution Factor: 1		Analysis Time..: 18:42	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVQ1AC
		Dilution Factor: 1		Analysis Time..: 18:42	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVQ1AE
		Dilution Factor: 1		Analysis Time..: 18:42	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: DPS230002

SPLP Metals

Lot-Sample #...: A4H200106-020 **Matrix.....:** SO
Date Sampled...: 07/21/04 14:10 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVR1AA
		Dilution Factor: 1		Analysis Time..: 18:46	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	**0.012**	**0.0050**	**mg/L**	**SW846 6010B**	**08/31/04**	**GNJVR1AD**
		Dilution Factor: 1		Analysis Time..: 18:46	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVR1AC
		Dilution Factor: 1		Analysis Time..: 18:46	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS240001

SPLP Metals

Lot-Sample #...: A4H200106-021 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:05 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVT1AA
		Dilution Factor: 1		Analysis Time..: 18:51	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/31/04	GNJVT1AD
		Dilution Factor: 1		Analysis Time..: 18:51	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVT1AC
		Dilution Factor: 1		Analysis Time..: 18:51	Analyst ID.....: 002260	
		Instrument ID..: I5				
Zinc	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVT1AE
		Dilution Factor: 1		Analysis Time..: 18:51	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312

Mactec Engineering & Consulting Inc.

Client Sample ID: HAS250001

SPLP Metals

Lot-Sample #...: A4H200106-022 **Matrix.....:** SO
Date Sampled...: 07/22/04 12:25 **Date Received..:** 07/23/04
Leach Date.....: 08/30/04 **Leach Batch #..:** P424308

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 4244017						
Barium	ND	1.0	mg/L	SW846 6010B	08/31/04	GNJVV1AA
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 002260	
		Instrument ID..: I5				
Chromium	ND	0.0050	mg/L	SW846 6010B	08/31/04	GNJVV1AD
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 002260	
		Instrument ID..: I5				
Lead	ND	0.010	mg/L	SW846 6010B	08/31/04	GNJVV1AC
		Dilution Factor: 1		Analysis Time..: 18:55	Analyst ID.....: 002260	
		Instrument ID..: I5				

NOTE(S):

Analysis performed in accordance with USEPA Synthetic Precipitation Leaching Procedure Method 1312