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URS

UST AREA and GROUNDWATER VINYL CHLORIDE INVESTIGATIONS REPORT

Essex/Hope Site
Jamestown, New York

Prepared for:
Essex Specialty Products, Inc.
Auburn Hills, Michigan

URS Project No. 41566900.21

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Prepared for:
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TABLE OF CONTENTS

APPENDICES

List of Tables

List of Figures

1.0 Introduction

On behalf of Essex Specialty Products, Inc. (ESP), a subsidiary of the Dow Chemical Company (Dow), URS has prepared this report to describe the supplemental investigations performed for the UST Area and the "deep" groundwater zone at the former ESP facility in Jamestown, New York. The findings presented in this document specifically address the extent of TEX (toluene, ethylbenzene and xylene) in the UST Area and vinyl chloride, and other VOCs, within the Lower Water Bearing Zone (LWBZ). The proposed investigations were described in a Work Plan, dated October 10, 2003, which was submitted to NYDEC for review.

The objectives of the investigations were as follows:

- **Determine the extent of the residual VOC contamination in the UST Area shallow soils and groundwater.** The post-excavation soil samples taken after removal of the underground tanks and contaminated soils indicated the continued presence of VOCs in shallow soils and groundwater in this area, primarily toluene, ethylbenzene and xylene (TEX). These residual VOCs are concentrated primarily in the western UST Area near the area of former Tanks T1 and T2. The majority of the contaminated shallow soils around the tanks were removed during the UST removal. The shallow VOC plume was previously found to be isolated in the UST Area and to extend to the north beneath the Plant No. 5 building. Additional investigations were necessary to further delineate the extent of the TEX to enable evaluation and application of potential insitu treatment options.

- **Determine the extent of the vinyl chloride in groundwater in the area east of Plant No. 5**. The source of dissolved vinyl chloride concentrations in Monitoring Well MW-19D has not been fully defined. The previous investigations (March, 2001 report) supported the scenario of a separate vinyl chloride plume in the LWBZ, generally in the area on the east side of Plant No. 5. Additional investigations were necessary to further define the extent of the vinyl chloride hot spot, especially to the north of MW-19D, to enable evaluation and application of potential insitu treatment options.

This report is the third major submittal to NYDEC on supplemental site investigations conducted since start-up of the remedial action in 1997. These investigations have provided additional data on the site subsurface conditions, suspected remaining source areas and the characteristics and distribution of the site contaminants. Because of the numerous historic investigations and the complexity of the site conditions, the previous investigations have been summarized in this report to provide a background and context for the current investigation results. The previous major site investigation events are as follows, in chronological order:

1. *"Supplemental Investigations for Systematic Application of Advanced Remedial Technologies (SMAART) Evaluations", May 18, 2000.*

This report presented data on natural attenuation (NA) parameters throughout the site and groundwater conditions in the proposed area for the Permeable Reactive Barrier (PRB) Pilot Test. URS performed field investigations in November of 1999 and January and February of 2000 to collect data for design of the PRB pilot test. Groundwater analyses included general chemistry indicator and natural attenuation parameters that had not been evaluated to-date at the site.

URS Radian (URS) assessed the PRB technology as part of an alternative remedial action assessment for the Essex Jamestown Site under the URS SMAART Program (Systematic Application of Advanced Remedial Technologies). The SMAART assessment included the following recommendations:

- Upgrade of the UST area remedial system and operations to significantly improve its performance
- Installation of a permeable reactive barrier (PRB) containing zero-valent iron for long-term insitu treatment and passive containment of contaminated groundwater
- Establishment of natural attenuation (NA) conditions for groundwater contaminant attenuation
- Performance monitoring of the PRB to verify groundwater passive containment
- Negotiation with NYDEC for higher, more realistic site-wide remedial action objectives (cleanup criteria) for toluene and xylene in groundwater, from the current criteria of 5 ug/l, to MCLs, at 1 mg/l and 10 mg/l, resp.

The objective of the SMAART alternative action was the shutdown of the existing remedial system and it's replacement with the less costly alternative, a PRB, with the necessary additional measures in the UST Area. Shutdown of the existing operations in the UST and NPLS Areas would occur after successful demonstration of the PRB technology effectiveness. This would be accomplished by pilot testing and likely a limited full-scale performance test, expected to be 6-12 months.

The initial Phase I of the SMAART action, supplemental field investigations, was implemented in November, 1999. The purpose of these investigations was to obtain data for confirmation of NA conditions, design of the UST Area modifications, and design of the PRB. The work included the installation of temporary groundwater monitoring points (GPs) in the NPL Area and within Building No. 5, collection and laboratory analysis of subsurface soil samples, and groundwater

sampling and analysis of select existing groundwater monitoring wells as well as the new temporary monitoring points.

Notable findings were high levels of TCE in soils, at 31-160 mg/kg, beneath Plant #5, and the detection of vinyl chloride in the deep groundwater zone, at 1500 ug/l, directly east of Plant #5. The high TCE levels beneath Plant #5 were not previously found during the RI and suggested a source area beneath the building. Elevated (>10 ppm) levels of toluene and xylene were also found in the shallow groundwater zone and soils in the UST Area. These compounds were also found in the ongoing groundwater monitoring for the UST Area, indicating the likelihood of a persistent contamination source in the area.

NA data indicated that intrinsic biodegradation was occurring in shallow groundwater throughout the site, and is a potential remedial approach for the groundwater in the UST and AST/UST Areas. Preliminary NA modeling using BIOSCREEN indicated that the primary VOC constituents in these areas, TEX, would be attenuated prior to migrating from the site property.

URS met with NYDEC on June 13, 2000 to review the report findings and outline future site actions. Four major areas were discussed at the meeting:

- Additional investigations in the UST Area to determine if a continuing source of TEX was present,
- Additional investigations around the area of MW-19D to delineate the source and extent of the apparent isolated vinyl chloride "hot spot" in the deep groundwater zone,
- Shutdown of the existing SVE/Sparge and groundwater pump and treat systems in the AST/UST and UST Areas and implementation of NA with monitoring, once source control has been accomplished in the UST Area, and
- Installation of the PRB Pilot Test in the NPL Area.

The first two items were addressed in the 1999-2000 site investigations. The PRB Pilot Testing was initiated in July 2000, and was completed in December, 2002. The Zero-Valent Iron (ZVI) Permeable Reactive Barrier Pilot Test Report was submitted to NYDEC in July, 2003. The decision on further remedial actions for the AST/UST and UST Areas was postponed until after the UST Area source conditions were addressed.

In July, 2000, URS submitted a Work Plan to NYDEC for Plant #5 East Area and UST Area Investigations. The objectives of the UST Area and Plant #5 East Area investigations were as follows:

- UST Area Source Investigation – Groundwater analytical data in the area surrounding Recovery Well RW-4S indicated that shallow zone volatile organic compounds (TEX) have been declining over time, but less than what has been experienced in other areas of the site. The continued presence of elevated (>10 ppm) VOCs in shallow soils and groundwater in this area, primarily xylene and toluene, indicated that a source area may still exist. The investigation focused on evaluation of the "closed" USTs as potential VOCs source areas.
- Former Plant No. 5 East Area Groundwater Investigation – The source of elevated vinyl chloride concentrations in Monitoring Well MW-19D was not fully defined in previous studies. At the request of the NYSDEC, the LWBZ was evaluated in the UST Area and east of Plant No. 5 to determine if a potential source of the vinyl chloride is present in these or upgradient areas.

2. Plant #5 East Area and UST Area Investigations Report, March 2001.

This report contained the results of the first supplemental groundwater investigations to determine the extent of vinyl chloride in the LWBZ and the investigations of the suspected contaminant source and extent in the UST Area. The five USTs that were previously "closed" were the focus of the source investigation.

Test borings and groundwater piezometers were installed in the east and southeast area of Plant # 5 to evaluate the distribution of the vinyl chloride historically detected in the Remedial Investigation (RI) MW-19D. A total of seven (7) test borings and piezometers (PZ-5D through PZ-11D) were installed. Two additional shallow piezometers (PZ-5S and PZ-6S) were installed along the eastern side of Plant # 5 in the shallow water-bearing zone. Soil samples were taken from the shallow and deep zones, and groundwater samples were taken from the piezometers set in each zone.

Shallow Groundwater Zone (SWBZ)

Shallow zone groundwater samples were not taken from the UST Area as part of these investigations, however, UST Area recovery wells RW-4S and RW- 5S were sampled in November 2000 as part of the annual monitoring. Vinyl chloride was not detected in any of the shallow groundwater samples in these site areas. The primary VOCs detected above the RAOs (5 ppb) in the shallow zone were xylenes, toluene, and ethylbenzene. The shallow groundwater data was consistent with historical VOC data for the UST Area. Toluene, ethylbenzene, and xylene (TEX) have been present at elevated concentrations in and around the UST Area. Maximum TEX levels were found in recovery wells RW-4S and 5S, which had toluenes from 5400 to 6100 µg/l, ethylbenzenes from 11,000 to 16,000 µg/l and xylenes from 74,000 to 130,000 µg/l. The TEX plume had not migrated significantly to the northeast of the UST Area

based on the low TEX concentrations at PZ-5S and 6S. The toluene and xylene plumes had migrated primarily to the north towards MW-20, beneath Plant #5, approximately 50 feet north of the UST Area.

East of Plant #5, a total xylene level of 100 µg/l was found in vapor probe VP-6S groundwater. This probe is located in the center of the east parking lot, offsite and approximately 120-feet downgradient of the UST Area. The VP-6S xylene is suspected to be from a source not related to the site since PZ-5S and PZ-6S, between the UST Area and VP-6S, have lower xylene concentrations than VP-6S.

Deep Groundwater Zone (LWBZ)

Vinyl chloride (VC)- Vinyl chloride was detected above the groundwater RAO (5 µg/l) in both onsite and offsite samples in the Plant #5 East and UST Areas. The deep groundwater zone had elevated VC levels (above RAOs) primarily onsite, with the exception of PZ-7D, offsite to the northeast. The VC in deep groundwater did not exhibit any apparent pattern in its distribution. VC was found at the highest concentrations east of Plant #5. The highest VC concentration was at 1,300 (D) µg/l in MW-19D, directly east of Plant #5. PZ-6D, approximately 20 feet south of MW-19D, had the next highest VC concentration at 460 (D) µg/l. The MW-19D VC level was higher than the VC concentrations historically found in the NPL Area, the main source area for the chlorinated VOCs. In comparison, NPL Area deep groundwater vinyl chloride levels have historically ranged from 120 to 910 µg/l.

The UST Area had VC levels of 140 and 150 µg/l, in PZ-8D and PZ-9D, respectively. These concentrations are lower than the MW-19D value, and are generally lower than the deep zone VC levels in the NPL source area. Offsite sample locations VP-6D and PZ-7D, in the east parking lot, had VC concentrations of non-detect and 43 µg/l, respectively. VP-7D, on the southeast end of the site near Blackstone Avenue, had a VC concentration of 6 µg/l.

The VC migration east of Plant #5 and in the UST Area was postulated to be a result of historic VOC migration from the NPL source area towards the northeast, prior to current pumping of the remedial action recovery wells, RW-1D and RW-2D. The elevated VC levels in the Plant #5 East Area and in the UST Area, relative to the NPL source area, were considered an indication of source TCE biodegradation along the northeast groundwater migration pathway (under non-pumping conditions). TCE biodegradation in groundwater has been demonstrated to follow the following sequence of reactions under certain conditions:

PCE → TCE → DCE → VC → Ethene → Ethane

In this type of contaminant migration scenario, VC degrades more slowly than TCE and tends to accumulate in groundwater. This would account for low TCE and elevated VC levels in the historic downgradient areas in the Plant #5 East Area. Currently, groundwater pumping has changed the deep zone flow direction and has caused the downgradient plume to cease migrating to the northeast. VC migration has apparently not extended beyond Plant #5 based on the relatively low VC levels found at PZ-7D. Under current conditions, it was concluded that VC reduction in the historic downgradient flow area, beneath Plant #5 and in the UST Area, should continue and result in reduced VC concentrations and shrinkage of the VC plume, as a result of both ongoing biodegradation and the current pumping in the deep zone.

Acetone, Methylene Chloride, and 2-Butanone (A/M/2B) in the LWBZ southeast of Plant #5 - Groundwater analyses indicated that predominantly acetone was found in the deep groundwater zone at PZ-5D and PZ-6D, on the southeast side of Plant #5. Concentrations ranged from 1,600 at PZ-6D to 14,000 µg/l at PZ-5D. PZ-9D had an acetone level of 240 µg/l. These groundwater values generally correlate with the soil acetone values in this area, with the exception of PZ-9D, which had the highest soil acetone concentration at 240 mg/kg. Methylene chloride was not detected in groundwater in this area, and 2-butanone was detected at concentrations of 220 and 70 µg/kg in PZ-5D, and PZ-6D, respectively, relatively low compared to the acetone levels in groundwater and the previously reported A/M/2B levels in soils in this area.

The acetone and 2-butanone VOCs are concentrated near the southeast corner of the Plant #5 building, at the east side of the UST Area. These compounds present a unique VOC distribution that had not been observed at any other areas of the site, and was consistent with the distribution found in soils in this area, except for methylene chloride. The A/2B contamination appears to originate in the deep zone at the east end of UST Area near PZ-9D; however, these VOCs are not present in the shallow zone in the UST Area. This A/2B presence, only in the deep zone, suggests that either a historic upgradient source or a historic onsite release from the UST Area has migrated to the deep zone and is not present in its original shallow source area. The migration of A/2B was concluded to be limited by both the current deep zone pumping in the NPL Area and the bioattenuation of A/2B in groundwater.

UST Area

Test pits and borings were advanced in the UST Area to determine the underground tank conditions and potential VOC sources in and around the tanks. The USTs had been reported to be backfilled with concrete and closed by previous site owners around 1980. The USTs were not investigated during the site RI. Four of the five existing USTs were subsequently exposed by URS and small diameter holes were drilled into each of the tanks to assess their

general conditions. Tank T5, furthest east, was not excavated because it was part of the ongoing SVE remedial action.

The UST Area investigations conducted by URS had the following major findings:

1. The five UST's are similar in size and orientation. Each is a horizontal steel tank, approximately 30-ft long by 6-ft diameter. The tanks are approximately 4-ft below ground surface. The tops of the manways were about 12-18 inches below ground surface. The tanks were located end to end in an east-west orientation.
2. The USTs contained liquids and solids contaminated with VOCs. The liquid fraction appeared to be water and ranged from 6 to 18 inches thick, on the surface of a solid layer. Liquid analyses indicated that each tank contains total VOCs between 0.02 and 0.6% (mainly acetone, methylene chloride, 2-butanone, toluene and xylenes). The associated piping also contains VOC-waters, but these were not sampled.
3. The USTs were not "closed in place" consistent with current NYDEC regulations, Chemical Bulk Storage, 6 NYCRR Part 598. This was mainly because they contained VOC contaminants and they were not fully backfilled. The tank internal backfills appeared to be a solid based on probing with a steel rod, however, they were not sampled and the material type was not confirmed.
4. The USTs and associated piping were a potential source of VOC's (acetone, toluene, xylene) contamination in the shallow soils and groundwater. Soils adjacent to the tanks were contaminated with VOCs based on odor/headspace readings and test boring samples taken for VOC analyses .

3. UST Removal Report, February, 2003

Based on the findings of the UST Area investigation, URS prepared a Tank Closure Work Plan (September 12, 2001) that included a pilot test at Tank T2 for insitu treatment of the tank contents with BIOX, a chemical oxidant. The full-scale cleaning operation included removal of the Tank T1, T3 and T4 liquids, flooding of the tank headspace with BIOX solution for 55 days, removal of the BIOX solution, and final rinsing of the tanks with clean water. This work was conducted in December 2001 and February 2002. The objective of the cleaning was to allow in-situ closure of the USTs to achieve "clean closure" consistent with NYDEC Chemical Bulk Storage regulations, 6 NYCRR Part 598.

The rinsate analyses indicated that VOC levels were reduced on average, approximately 90%, and over 90% for some compounds, compared to the original tank liquids. *Although rinsate VOCs were reduced significantly by the cleaning operation, they were not lowered to below the "clean closure" standard of VOC analytical detection limits (5 ug/l) as required by NYDEC.*

Solids samples were taken from inside of Tanks T1, T3 and T4 after the removal of the rinsate water. VOCs were found in the backfill material of all three tanks. Compounds with the highest concentrations included acetone, 2-butanone (T3 and T4 only), toluene (T3 and T4 only) and xylenes (T3 and T4 only). VOC levels were highest in T3, averaging 3800 mg/kg, 95% of which was toluene. VOCs in T1 and T4 were, on average, below 500 mg/kg. The results of the UST BIOX cleaning activities are summarized in the report: *UST Cleaning Report, June, 2002*

Based on the results of the tank cleaning operation, it was determined that the BIOX treatment was not effective in treating the tank VOCs to achieve the clean closure standard, although significant VOC reductions in the tank internal VOC contents were achieved. Further in-situ cleaning was not considered a feasible method for closure of the tanks. It was jointly decided by Dow, URS and NYDEC to completely remove the tanks and dispose of the tank solids at an offsite disposal facility. From November, 2002 through January, 2003, URS removed the five USTs and approximately 1100 tons of soil and debris from the UST Area, including the tank solids materials.

Post-Excavation Soils – Soil samples were taken from the face of the excavations after removal of each tank. Three samples were taken from each tank location from the north slope, bottom and south slopes of the excavation. It is noted that the north and south slope samples were taken near or above the seepage elevation for the shallow groundwater. VOC compounds detected in the post-excavation soil samples included primarily toluene, xylenes, ethylbenzene and cumene. These compounds are consistent with the suite of VOCs historically found in UST Area groundwater and shallow soils, and the VOCs found within the tank fill material. The highest total VOC concentrations in soils were found in the area around Tanks T1 and T2. The soil average VOC level in this area is 192 mg/kg. All of the soil samples taken from the Tank T3, T4 and T5 areas have VOCs less 1.0 mg/kg, with the exception of the excavation bottom soil sample taken at T5, which had a VOC level of 24 mg/kg.

This VOC distribution in the shallow soils is consistent with previous investigations in the UST Area, namely the test borings conducted in August, 2000, which are summarized in the report: ***Plant #5 East Area and UST Area Investigations Report, March, 2001.*** This investigation also found the highest soil VOCs in the area of Tanks T1 and T2 (test borings TB1 and TB2). Individual VOC compounds with the highest concentrations included xylenes, ethylbenzene and toluene. Test borings samples taken from the areas of Tanks T3 and T4 had < 1 mg/kg of total VOCs kg.

4. *Zero-Valent Iron Permeable Reactive Barrier (PRB) Pilot Test Report, July, 2003*

This report described the results of the Pilot Test for the injected Permeable Reactive Barrier (PRB). The test period was July, 2000 through December, 2002. The groundwater recovery wells were in operation during this test period. The reactive material injected into the subsurface consisted of fine-grained iron particles, also referred to as zero-valent iron (ZVI). The pilot test was conducted at two (2) locations on site as follows:

- **NPL Area shallow and deep groundwater zones**, around active recovery well RW-2D,
- **Plant No. 5 deep groundwater zone,** approximately 50 ft. southeast of the RW-2D test area, beneath the western area of the Plant No. 5 building.

The objectives of the PRB Pilot Tests were as follows:

- Verify injected PRB effectiveness in treating VOCs in site groundwater over a range of expected concentrations and hydrogeologic conditions, and
- Provide data for full-scale PRB design and installation as an alternative or supplemental remedial action

The PRB Pilot Test affected groundwater primarily in the areas of the ZVI injections. Groundwaters in the UST Area and on the eastern side of Plant #5 were not directly affected by the ZVI injections. The ZVI injections affected both the groundwater water chemistry and the VOC contaminants. A general summary of the groundwater chemical conditions in the ZVI injection areas is described in the following sections:

General Water Quality - Water quality data indicated a significant change in deep groundwater chemistry after injection of the ZVI. Most notably the **ORP** levels in all of the monitoring points were lowered significantly (July, 2001) indicating that the deep groundwater was further chemically reduced. The average deep zone ORP was -44.8 mV prior to the ZVI injections, which indicated that the deep zone was already slightly reduced and was likely undergoing anaerobic biodegradation. ORP levels decreased rapidly after injection of the ZVI, and consistently stayed negative for at least one year, up to July, 2001. Average ORP levels in the deep zone were –184 mV for July, 2001.

Consistent with the change to reducing conditions was the reduction in the level of **sulfate** in all of the deep zone monitoring points, an indication of increased anaerobic activity. **Nitrate** levels were low prior to the start of the test and on average did not change. This increase in bioactivity, as also seen in the shallow zone, was likely a result of the reducing

conditions created by the ZVI, including the production of hydrogen gas. **Chloride** levels on average increased to 108.5 mg/l in the NPL Area relative to the pre-test mean levels of 33.8 mg/l. This increase was expected to be directly related to the dechlorination of the VOCs by both the ZVI reactions and the enhanced biological degradation. The chloride level of 108.5 mg/l has an equivalent TCE concentration of 134 mg/l based on stoichiometric equivalence, assuming complete TCE degradation to chloride ions.

Volatile Organics - VOC levels in the deep zone varied with time after injection of the ZVI. The three NPL Area monitoring points within and downgradient of the injection borings: PZ-1D, PZ-2D and RW-2D, all responded similarly. After ZVI injection, TCE levels increased initially (August, 2000) from 56 to 63% above baseline levels. TCE levels remained above baseline levels for up to 7 months after the start of the pilot test, similar to the same spike effect noted for the shallow zone. The TCE levels in these three monitoring points decreased significantly from the initial elevated levels, and were below the baseline levels, by July, 2001, one year after the start of the test. TCE reductions from the initial (Aug, 2000) high levels were 70% in PZ-1D, 94% in PZ-2D and 86% in RW-2D. The July, 2001 TCE levels in these monitoring points were 18 mg/l, 11 mg/l and 0.7 mg/l, respectively. RW-2D has been sampled quarterly as part of the ongoing monitoring program at the site, in addition to the pilot test monitoring. TCE level in RW-2D reduced to 110 ug/l in December, 2002. This was the lowest TCE concentration found at the time in RW-2D since the start of the historical monitoring in 1997.

VOC levels in the Plant #5 test area varied with time after injection of the ZVI. The two monitoring points within and downgradient of the injection borings: PZ-3D and PZ-4D, responded similarly. The average pre-pilot test TCE concentration at GP-1D (PZ-3D) was 210.5 mg/l, based on samples taken in February and July, 2000. All other VOCs were reported as below detection limits, which were 5 mg/l or less. This is the only historic and baseline data available for the Plant No. 5 Test area.

Initially after ZVI injection (August, 2000), TCE levels increased to 367 mg/l in PZ-4D, and decreased to 76 mg/l in PZ-3D. TCE levels dropped significantly in both points following the initial increase. The November, 2000 TCE levels were 5.3 mg/l in PZ-4D and 30 mg/l in PZ-3D, approximately 3 months after the start of the pilot test. These were TCE reductions of 97% and 86%, respectively, relative to the pre-test mean TCE level of 210.5 mg/l in the Plant No. 5 Area. After November, 2000, the TCE levels started to increase to levels approaching the pre-test mean levels as demonstrated in samples taken from February through July, 2001. This TCE increase represented a unique condition not found in the NPL Area pilot test, and was expected to be caused by the differing groundwater hydraulic conditions in the Plant #5 test area. Specifically, upgradient VOCs (to the east of the Plant #5 Test Area) have migrated into the test

area over time. In addition, NAPL desorption in the test area was expected to cause a further increase in the VOCs.

By-Product VOC Generation -Byproduct compounds cis- 1,2 DCE and vinyl chloride (VC) increased in concentration initially after ZVI injection, and continued to increase as TCE levels reduced in the injection zone. Prior to the pilot test, the ratio of TCE to total by-product compounds (DCE plus VC) were: 1.33 at RW-2D, 2.94 at PZ-1D and >10 at PZ-3D. The July, 2001 TCE/by-product ratios were 0.05 at RW-2D, 0.22 at PZ-1D and 1.25 at PZ-3D. These ratios are at least one order of magnitude decreases compared to the pre-pilot test ratios for these monitoring points.

RW-2D quarterly monitoring indicated that cis-1,2 DCE and VC levels continued on an increasing trend as TCE levels reduced. Trans 1,2 DCE was typically reported as below detection limits or it was found at levels less than 1 mg/l. The compound cis-1,2 DCE is reported in the literature to be the most common DCE isomer produced during anaerobic degradation of TCE. The VOC by-product data, with the water quality data, indicated that VOC dechlorination was continuing, although at a much lower rate than predicted for the ZVI reduction reaction alone. It was suspected that the ongoing VOC reduction was primarily biological dechlorination enhanced by the reducing conditions produced by the ZVI.

Meeting with NYDEC, July 31, 2003

URS and Dow Chemical met with NYDEC on July 31, 2003 to review the PRB Pilot Test results and discuss further actions at the site. NYDEC requested that the extent of vinyl chloride in the LWBZ and the residual TEX in the UST Area be further investigated prior to the assessment of potential remedial measures. URS prepared the supplemental investigation Work Plan for these investigations, October 10, 2003, and initiated the field work in November, 2003. This report presents the results of those investigations.

2.0 Site Investigation Methods

URS initiated the site investigations on November 3, 2003. Test borings and well construction were performed from November 3 through November 11, 2003. Drilling services were provided by Nothnagle Drilling, Scottsville, NY. A URS hydrogeologist observed all drilling work, logged the soil samples, and directed monitoring well construction. Monitoring well samples were taken from December 18-22, 2003, by URS field technicians. Laboratory analyses was performed by Pace Analytical, Export, PA.
Field surveying of the new wells has not been performed to-date.

2.1 UST Area Investigations

2.1.1 Test Boring Program

Eight (8) test borings were initially planned to assess soils in the area of the former USTs. A total of ten (10) test borings were actually completed. See Figure 2-1. The test borings were advanced using Geoprobe drilling and sampling techniques. Continuous soil samples were collected from ground surface to the top of the upper semi-confining layer, located at approximately 12 to 15-feet in depth. Soil samples were logged in accordance with the Unified Soils Classification System (USCS). Soil samples were analyzed in the field by PID headspace screening for general indication of VOCs. Soils exhibiting the highest PID screenings results were selected for laboratory analysis. Each boring had a minimum of one soil sample from the vadose zone, approximately 0-6 feet BGS, unless soil samples were unable to be recovered from that interval.
The "north" line of test borings (TBUST-1 through TBUST-5) and TBUST-6 was drilled initially. The line of test borings to the south (TBUST-7 through TBUST-10) was drilled next, based on the corresponding north boring's field screening results or other visual indicators. In addition, two borings (TBUST- 11 and TBUST-12) were placed to the east of the UST Area based on VOC detections in the easternmost UST Area test borings.
Test boring logs are contained in Appendix A.

2.1.2 Shallow Groundwater Monitoring Well Installation

Two shallow monitoring wells (MW-23S and MW-24S) were installed in the UST Area, to the top of the existing upper confining layer, approximately 12-15 feet below ground surface. See Figure 2-2 for the new well locations.
The shallow monitoring wells were installed using hollow-stem augers. Well construction consisted of flush-threaded 2-inch diameter Schedule 40 polyvinyl chloride (PVC) well screen (0.01-inch slot size) and riser. Each well was screened the entire thickness of the shallow water-

bearing zone, approximately 6 to 8 feet, to the top of the confining layer. The filter pack for the well screen consisted of appropriately-sized silica sand and extended from the base of the boring to a minimum 1-foot above the top of the screen. A minimum 2-feet thick bentonite seal was placed above the filter pack and the remainder of the borehole was sealed using a cement/bentonite grout to ground surface. Each well was finished at grade with a flush-mount protective cover, grouted into the existing concrete pavement, and it was fitted with a locking water-tight cap.
Well construction logs are contained in Appendix B.

2.1.3 Monitoring Well Development

The monitoring wells were developed by alternate mechanical surging of the water column and groundwater extraction by pumping or bailing. A minimum period of 24-hours was observed for grout curing before any well was developed. Each well was developed for a minimum period of 2-hours or until the following criteria were met:

- All drilling fluids used during well construction were removed from the aquifer during development.
- Extracted groundwater was sediment free and the groundwater turbidity measurements remained within 10 nephelometric turbidity unit range for at least a 30-minute period.
- The pH, conductivity and temperature stabilized over three consecutive sets of measurements during the development process.
- No sediment remained at the base of the monitoring wells.

Monitoring well purging logs are contained in Appendix B. All development equipment was decontaminated onsite prior to use and between each monitoring well developed.

2.1.4 Sampling and Chemical Analysis

Each well was purged and sampled in accordance with the procedures outlined in the revised Performance Monitoring Plan for the Essex/Hope Site, submitted to NYDEC on October 10, 2003. (Original PMP, Radian, 1997). Soil samples exhibiting the highest PID screening results were selected for laboratory analysis. A target quantity of 2 samples was collected from each test boring for analysis. Field headpsace results are indicated on the test boring logs. Groundwater was collected from existing wells in the UST Area and the two new monitoring wells: MW-23S and MW-24S. Sampling was performed from December 16-22, 2003. Existing UST Area wells sampled included the following:

-RW-5S
-MW-13

-MW-20
-PZ-5S
-GP-2S
-GP-3S
-HW-6
-HW-9

The groundwater samples were analyzed for VOCs by USEPA Method 8260B. Other groundwater analyses was performed for general chemistry and evaluation of natural attenuation and insitu treatment methods, and included:

-pH (field and lab)
-ORP (field cell)
-Alkalinity
-Major cations (Ca, Mg, K, Na)
-Chloride
-Nitrate
-Sulfate
-Iron (ferrous +2)
-Total Organic Carbon (TOC)

2.2 Vinyl Chloride Groundwater Investigation

The evaluation of the extent of vinyl chloride source in the LWBZ detected at Monitoring Well MW-19D was performed by the installation of new groundwater monitoring wells and sampling of selected existing groundwater monitoring points.

2.2.1 Groundwater Monitoring Well Installation

Three (3) new groundwater monitoring wells were installed to confirm the presence and delineate the lateral extent of vinyl chloride within the LWBZ in the north and southern areas of the former Plant No. 5. The new and existing monitoring well locations are shown on Figure 2-2. The new wells include one directly south of the UST Area (MW-23D), one (1) on the north side of Building No. 5 (MW-21D) and one (1) across Hopkins Avenue, north of monitoring well MW-19D (MW-22D).

2.2.1.1 Drilling Methodology

The monitoring wells were installed using a hollow-stem auger and a fluid rotary/driven casing drilling technique. Soil samples were continuously collected to confirm lithologic contacts at

locations where test borings were not previously installed. Permanent 6-inch diameter PVC casing were installed from ground surface to the upper semi-confining layer through the hollow-stem augers. The 6-inch casing was seated a minimum 1-foot into the top of the clay and tremie-grouted. Drilling advancement into the LWBZ was accomplished by simultaneously driving 4-inch diameter temporary casing and rotary drilling through the upper 6-inch diameter casing to the top of the lower confining layer.

2.2.1.2 Monitoring Well Construction

Monitoring well construction consisted of flush-threaded 2-inch diameter Schedule 40 polyvinyl chloride (PVC) well screen (0.01-inch slot size) and riser. Each well was screened the entire thickness of the LWBZ. The filter pack for the well screen consisted of appropriately sized silica sand and extended from the base of the boring to a minimum 2-feet above the top of the screen. A minimum 2-feet thick bentonite seal was placed above the filter pack and spanned the upper semi-confining layer. The remainder of the borehole was sealed using a cement/bentonite grout to ground surface. Each well was finished at grade with a flush-mount protective cover, an 18-inch diameter by 6-inch concrete pad, and fitted with a locking water-tight cap. See Appendix B for the well construction logs.

2.2.1.3 Monitoring Well Development

The monitoring wells were developed in the same manner as the shallow monitoring wells as described in Section 2.1.3.

2.2.2 Sampling and Chemical Analyses

Each well was purged and sampled in accordance with the procedures outlined in the revised Performance Monitoring Plan for the Essex/Hope Site, submitted to NYDEC on October 10, 2003. (Original PMP, Radian, 1997). The following existing "deep zone" groundwater monitoring points were sampled as part of this investigation:

-GP 2D
-GP 3D
-PZ-5D
-PZ-6D
-PZ-7D
-PZ-8D
-PZ-9D
-PZ-10D
-PZ-11D

-MW-15D
-MW-19D
-VP-6D

The new monitoring wells were sampled from December 18-22, 2003, after a minimum period of two weeks following well development to allow groundwater conditions to stabilize. The existing monitoring wells were sampled at the same time. The groundwater samples were submitted to Pace Analytical for VOC analyses by USEPA Method 8260B.

Other general groundwater analyses was performed for general water quality and evaluation of natural attenuation and insitu treatment methods, and included:

-pH (field and lab)
-ORP (field cell)
-Alkalinity
-Major cations
-Chloride
-Nitrate
-Sulfate
-Iron (ferrous +2)
-Total Organic Carbon (TOC)

Prior to sampling the monitoring wells, depth to groundwater and well total depth measurements was taken using a calibrated oil/water interface probe for detection of non-aqueous phase liquids. Each well was purged and sampled in accordance with the procedures outlined in the revised Performance Monitoring Plan for the Essex/Hope Site, submitted to NYDEC on October 10, 2003. (Original PMP, Radian, 1997).

3.0 Investigation Results

3.1 Soil Physical Conditions- UST Area

Shallow soil conditions in the south UST Area were determined as part of the test boring sampling. The "shallow soil" is defined as the interval above the upper confining layer, which is approximately 12-15 ft below the ground surface (BGS). The shallow zone was characterized from test borings (TBUST-1 through TBUST-12) advanced to the top of the upper confining clay and deeper borings advanced into the lower water-bearing zone (MW-23D).

In general, the shallow soil conditions in the south UST Area were found to be consistent with previous site investigations of soils in the general UST Area. The test borings indicate that the upper 5 ft of the shallow zone consists of fine-grained silty-clay soils, with silty fill and concrete present in the upper 2 ft in some borings. Below the upper zone is dominantly a sand and gravel, silty in some locations, and typically wet to saturated. The sand and gravel layer extends generally from about 6 feet BGS, to the top of the gray clayey-silt upper confining layer. This shallow zone has been historically referred to as the upper water-bearing zone, or "shallow zone", where it is saturated. The confining layer was found at a depth of 11.4 to 15.4 ft BGS. The elevation of the top of the confining layer is lowest towards the south and west of the former USTs. See Sections 3.3.1 and 3.3.2 for descriptions of analytical results in the UST Area.

3.2 Hydrogeologic Conditions - Plant #5 Northeast Area and UST Areas

This section provides an update of the site hydrogeologic conditions, with a focus on the Plant #5 Northeast and UST Areas. The site geologic profile of interest ranges from approximately 0-50 ft below ground surface. This interval, as defined by the previous Remedial Investigations (O'Brien & Gere, 1992 and 1993) and the Basis of Design Investigation (Radian 1995), consists of two separate water-bearing zones, a shallow unconfined water-bearing zone (SWBZ) and a lower semi-confined water-bearing zone (LWBZ). These have also been referred to as the "shallow" and "deep" water-bearing zones. An upper semi-confining layer, generally described as a clayey silt, separates the two water-bearing zones. A thick clayey confining layer occurs at the base of the lower water-bearing confined zone. The geology of the upper water-bearing zone is composed of silty, sandy gravel with occasional clayey fine sand and has been found to range in total thickness between 11 and 16 feet. The upper semi-confining layer ranges in thickness between less than 2 to 9.5 feet across the site. The lower semi-confined water-bearing zone occurs within a fine sandy silt to silty fine sand unit with a thickness between approximately 17 and 28.5 feet. Drilling for the deep zone monitoring wells stopped at the top of

the lower confining layer so additional data on this layer's thickness was not obtained during these investigations.

Test borings completed during the recent supplemental investigations provide additional geologic information on the lithology of both water-bearing zones. The geology of the upper zone beneath Plant #5 and the areas to the south and east are generally consistent with the materials encountered in other areas of the site from previous investigations. Medium to coarse sand and gravel intermixed with varying degrees of silt and clay was encountered from ground surface to depths between 11.4 to 15 feet BGS in the UST Area, and to a depth of 24 ft BGS north of Plant #5 at MW-22D.

The upper semi-confining layer, generally consisting of silt grading to clay, was encountered at all boring locations and ranged in thickness from 3 to 5 feet (as determined at the deep monitoring well borings). Historically, this layer has been found continuously across the site and is thickest beneath Plant #5 and the UST Area and thins towards the north, east and south of this area. The structure formed by the top of the upper clay consists of a trough and ridge across the site area.

The lower water-bearing zone is consistent across the site and is composed of fine sandy silt to silty fine sand with occasional clay laminations. The thickness of this unit ranged between approximately 17 feet in the UST Area (MW-23D) to 14.5-21.5 ft the area northeast of Plant #5.

3.2.1 Groundwater Flow Conditions

Groundwater contours representing normal pumping conditions are contained in the Annual Reports and have been depicted in other site investigation reports. *Updated data on groundwater elevations and flow directions have not been obtained for this investigation since the new monitoring wells have not yet been field surveyed.*

Historically, groundwater within the shallow zone generally is encountered at approximately 7 feet in depth below ground surface. Flow direction from the AST/UST and NPL Areas is toward the northeast under static conditions. A groundwater divide exists within the UST Area, with groundwater flowing toward the northeast, east and southeast directions from this area under static conditions. Static flow conditions occurred up to July 1997, when the remedial actions started and the recovery wells began operation. The site recovery wells have been operating continuously, with only intermittent short shutdowns, since their startup in 1997. The UST Area recovery wells (RW-4S and RW-5S) have been shutdown since removal of the USTs in November, 2002. Since that time period, the UST Area shallow groundwater flow has been under primarily static flow conditions with minor pumping effects on the area from the pumping wells in the NPL Area.

Groundwater flow direction within the deep water-bearing zone under static conditions is toward the northeast across the site area. The cone of depression under normal pumping conditions indicates that groundwater is captured throughout the NPL Area, extending beneath Plant #5 to the east and southeast to the UST Area. The limit of the calculated recovery well capture zone extends approximately to the east side of Plant #5 near MW-19D and to the UST Area south of MW-23D. The groundwater flow direction and the recovery well capture zone in the area of the new monitoring wells will be determined after the new wells are surveyed for location and elevation.

3.3 UST Area Sampling Results

Samples were taken of shallow soils in the UST Area and shallow and deep zone groundwater throughout the UST Area and the suspected area of the vinyl chloride "hot spot", north and east of Plant #5. The sampling methods and analytical parameters are described in Section 2.0.

3.3.1 Soil Field Screening – VOC Headspace Analyses

VOC headspace screening was done for all soil samples retrieved from the UST Area test borings. Continuous soil samples were taken at each boring. Headspace readings were not performed during drilling of the deep zone monitoring wells. The headspace readings were used to screen samples for offsite lab analyses. Generally, sample intervals in each boring with the highest readings were selected for confirmatory laboratory analyses. Results of VOC headspace readings are shown on the test borings logs and field logsheets contained in Appendix A.

Shallow soil headspace results indicates that a zone of high VOC's (>100 ppm, by PID) is present primarily in the area directly south of the former USTs T1 and T2, which were the westernmost tanks in the UST Area. In addition, high VOCs were found in test boring TBUST-5, directly south of the former UST T5, on the eastermost end of the UST Area. Soil VOC headspace distribution in the upper 7.5 ft of the shallow zone, which is generally unsaturated, is shown on Figure 3-1. This headspace mapping also includes data from previous site investigations conducted from 1998-2002. The historical data is consistent with the 2003 results and supports the conclusion that elevated VOCs in vadose zone soils are present primarily in the western UST Area.

3.3.2 Soil Chemical Analyses

VOC analyses was performed in an offsite laboratory on soil samples from all of the UST Area test borings, except TBUST-3. This test boring did not have sufficient sample recovery. The samples were taken in the interval of approximately 0-7 ft BGS. Samples below

this depth are expected to be influenced by dissolved VOCs in groundwater and are not representative of unsaturated conditions. Analytical results are summarized on Table 3-1.

Chemical analyses indicates that no chlorinated VOCs were detected in the UST Area soil samples. VOC's detected were primarily cumene, toluene, ethylbenzene and xylenes (CTEX). All of these compounds were found at levels above the Remedial Action Objectives (RAOs), set for individual and total VOCs in soil (1/10 ppm), respectively. These RAO exceedances are primarily in the western end of the UST Area, around former Tank T1. TB UST9, approximately 20 feet south of former UST-T1, had CTEX levels of approximately 547 ppm, which were the highest levels found in the "unsaturated" test boring samples. Figure 3-2 depicts the soil VOC distribution as total CTEX concentrations..

The soil VOC data is generally consistent with previous investigations which found that the shallow soils in the UST Area had elevated VOC levels (> RAOs) only near Tanks T1 and T2, on the west end of the UST Area. Detected VOCs included xylenes, ethylbenzene, toluene and cumene (isopropylbenzene). All other shallow soil VOCs taken from TB-T2 through TB-T4 in the eastern UST Area have been below the RAOs for VOCs.

The recent investigation revealed that elevated CTEX (>RAOs) was also found further south of the UST Area than had been previously known. TB UST8 and TB UST9, approximately 30 feet south of the former USTs, had CTEX levels of 226 and 547 ppm, respectively. It is noted that these samples were taken form a depth at or near the saturated zone and they may be affected by floating contaminants (LNAPL) and smear zone conditions associated with this interval. The southern and southwest extent of the CTEX in the UST Area has not been determined. The southwest direction from the UST Area is generally upgradient and includes the south plant CPM building which is currently leased to a small business.

3.4 Shallow Groundwater Analytical Results

Shallow zone groundwater samples were taken from the two new monitoring wells (MW-23S and MW-24S) and seven existing monitoring wells in the UST Area. The analytical results are summarized on Tables 3-2 and 3-3. In addition, the soil samples taken from UST Area test borings at depths greater than 7 ft BGS provide an indication of the shallow groundwater quality since these samples were taken from the saturated zone.

General chemical analyses was performed on groundwater samples to assess natural attenuation conditions and the feasibility of insitu treatment technologies for potential future applications. The analytical results are reported in Table 3-2 for reference purposes.

Consistent with the UST soils analyses, groundwater analyses indicates that the CTEX volatile organics (cumene, toluene, ethylbenzene and xylenes) were the dominant compounds detected in the UST Area. Chlorinated VOCs were found at relatively low levels compared to the NPL Area and the deep water-bearing zone.

3.4.1 CTEX

The CTEX plume (1 ppm isocontour) extends across the entire UST Area to the former tank farm on the east, north to MW-20 (beneath Plant #5), and to the southwest, at least to new monitoring well MW-24S. The extent of the plume to the southwest and eastern areas of the UST Area has not been delineated. The shallow groundwater CTEX distribution is presented on Figure 3-3. The CTEX distribution has been mapped using the shallow monitoring well data, the test boring soil samples taken from the shallow saturated zone, and the post-excavation soil samples taken from the bottom of the excavation, at a depth of approximately 12 ft BGS. The soil samples are expected to provide an indicator of the groundwater phase CTEX based on the approximately equal CTEX partitioning into the soil and water phases.

The recent data indicates that the CTEX is concentrated in the western area of the UST Area and beneath Plant No. 5 towards monitoring well MW-20. This data is consistent with historical VOC data for the UST Area. Toluene, ethylbenzene, and xylene (TEX) have been found at elevated concentrations (RAOs->5 ppb) at the site only in and around the UST Area. Maximum TEX levels were historically found in recovery wells RW-4S and RW-5S, which had toluenes from 5400 to 6100 μg/l, ethylbenzenes from 11,000 to 16,000 μg/l and xylenes from 74,000 to 130,000 μg/l.

The CTEX plume is migrating primarily to the north towards MW-20, beneath Plant #5, approximately 50 feet north of the UST Area. Total CTEX at MW-20 was 24,690 ppb, the highest level found in groundwater samples taken in these investigations. The CTEX plume has not migrated significantly to the northeast of the UST Area based on the low concentration of 8.3 ppb found at PZ-5S. The recent data does indicate that CTEX is present at elevated levels (>10 ppm) in saturated soil samples taken from test borings at the eastern UST Area, TBUST-6 and TBUST-7. Monitoring wells are not present in this area, and the extent of the CTEX directly east of the former tank farm has not been determined.

Elevated CTEX (>1 ppm) has also been found south and southwest of the UST Area. Monitoring wells MW-23S and MW-24S had total CTEX levels of 2507 ppb and 7674 ppb, respectively. These wells are approximately 30 feet south of the UST Area. The extent of the migration in this direction has also not been determined, although MW-13, near Blackstone Avenue on the south end of the site, had a CTEX level of 7.3 ppb. This results suggests that CTEX has not migrated to the south end of the site near Blackstone Avenue, and it is also not

migrating onto the site from the offsite area to the south. Southwest of the UST Area is generally upgradient and includes the CPM south plant building which is currently leased to a small business. Site investigations have not been conducted in the south plant building area.

3.4.2 Chlorinated VOCs

Chlorinated VOCs were found at relatively low levels in the UST Area shallow groundwater compared to the historic levels found in the NPL Area, where the primary source of the chlorinated VOCs was present. CVOCs above RAOs (5ppb) were found generally in the northwestern part of the UST Area (HW-6 and MW-20) and are expected to be associated with the historic NPL Area VOC source. TCE levels in the UST Area shallow groundwater were 110 ug/l or less. See Figure 3-4 for a depiction of TCE distribution in shallow groundwater. The TCE mapping includes shallow monitoring well results from the 2003 Q4 performance monitoring.

TCE by-products cis-1, 2 DCE and vinyl chloride were found at 2900 ug/l and 1400 ug/l, respectively, at HW-6, which is located in the southern end of the NPL Area, approximately 40 feet from the west end of former UST T1. The only other UST Area well that had vinyl chloride levels above RAOs was MW-20, which had a concentration of 170 ug/l.

Vinyl chloride was not detected in any of the previous site investigations in the UST Area. TCE was detected above the RAO level of 5 ppb in only one shallow groundwater sample taken in the Plant #5 East and UST Area Investigations of 2001: RW-4S. Recovery well RW-4S, near UST Tank T1, had a TCE level of 770 (D) µg/l, however, this result was considered questionable because of lab dilution and the non-detect TCE levels found in all of the surrounding monitoring wells. The primary VOCs detected above the RAOs in the shallow groundwater have been cumene, toluene, ethylbenzene and xylenes. This included vapor probe samples taken during the PRB Pilot Test monitoring and the annual groundwater sampling results.

3.5 Deep Zone Groundwater Analytical Results

Deep zone groundwater samples were taken from the three new monitoring wells (MW-21D, MW-22D and MW-23D) and 12 existing monitoring wells in the area around the northern and eastern sides of Plant #5. Deep zone groundwater analyses are summarized on Tables 3-4 and 3-5. The VOC distribution for TCE, vinyl chloride and acetone are summarized on Figures 3-5, 3-6 and 3-7, respectively. The VOC mapping includes deep zone monitoring well results from the 2003 Q4 performance monitoring.

Chlorinated VOCs were the dominant compounds found in the deep groundwater zone during the recent site investigations, and historically in previous site investigations. CTEX compounds were found above RAOs in only one deep well, 21 ug/l at MW-21D. Acetone and

benzene were found above RAOs in some of the deep wells, and the data indicates that these compounds are likely from separate sources not related to the NPL Area VOC source.

General chemical analyses was performed on deep groundwater samples to assess natural attenuation conditions and the feasibility of insitu treatment technologies for potential future applications. The analytical results are reported in Table 3-4 for reference purposes.

3.5.1 Trichloroethylene (TCE)

TCE was found at the highest levels in site groundwater in new monitoring wells MW-21D and MW-22D, at concentrations of 300 mg/l and 17 mg/l, respectively. These represented the highest TCE concentrations found onsite in recent investigations. These wells are northeast of Plant #5 along the groundwater flowline, directly downgradient (under static conditions) of the former NPL Area VOC source. The elevated TCE area (> 1ppm) is located generally from the center of Plant #5 towards the northeast to MW-22D. MW-22D is approximately 75 feet offsite on adjoining private property. URS obtained verbal approval for site access and well construction on the property. Confirmation of site access was provided in a notification letter sent to the property owner. The extent of the TCE further northeast of MW-22D has not been determined.

Other monitoring points with notable TCE levels were VP-6D, which is located approximately 70 feet offsite in the parking lot east of Plant #5, and MW-23D, south of the UST Area. VP-6D had a TCE concentration of 120 ug/l. This TCE contamination is suspected to be from a separate source based on TCE distributions in the parking lot area east of Plant #5. MW-23D had a TCE level of 69 ug/l. This TCE contamination also appears to be from a separate source based on TCE distributions. Figure 3-5 shows the new well locations and presents the mapping of the TCE in deep groundwater.

Prior investigations in 1999/2000 found high levels of TCE in deep zone soils, at 31-160 mg/kg, beneath Plant #5, at GP-2D and GP-3D. These high TCE levels beneath Plant #5 were not previously found and suggested a source area beneath the building.

In subsequent (2001) investigations, TCE was detected above the groundwater RAO (5 µg/l) in 2 samples from the Plant #5 East and UST Areas, VP-6D at 10 µg/l and PZ-7D at 7,000 (D) µg/l. Both of these samples were offsite to the east of Plant #5. No wells were installed in the area directly north or northeast of Plant #5 until the recent investigations. Vapor probe VP-6D is located in the center of the east parking lot, offsite. PZ-7D is located in the far northeast corner of the east parking lot at Hopkins Avenue. This point is approximately 100 feet offsite and is the furthest downgradient groundwater monitoring point at the site. All other onsite monitoring points located between Plant #5 and PZ-7D historically had TCE levels below

detectable limits. This groundwater TCE data was consistent with the TCE distribution found in deep soils in the area directly east of Plant #5. As previously indicated in prior investigations, the elevated TCE found at VP-6D and PZ-7D is suspected to be from a source not related to the site.

3.5.2 Vinyl chloride (VC)

VC was found at the highest levels in site groundwater in new monitoring well MW-21D and existing well MW-19D, at concentrations of 5800 ug/l and 1400 ug/l, respectively. These represented the highest VC concentrations found in recent investigations. MW-21D is offsite within the right-of-way of Hopkins Avenue. MW-19D has had the historically highest VC levels found at the site. The elevated VC area (>1 ppm) is generally consistent with the TCE deep zone distribution, however, the VC presence is predominately closer to the site. In the offsite area east of Plant #5, VC was found at 2.3 ug/l at VP-6D, and 340 ug/l at PZ-7D. The PZ-7D VC is expected to be at or near the forward edge of the VC plume centered beneath Plant #5. The extent of the VC further northeast and east of MW-22D and PZ-7D has not been determined.

Another monitoring well with notable VC levels was MW-23D which is south of the UST Area. This VC contamination is suspected to be from a separate source based on VC distributions in the UST Area. MW-23D is not in a downgradient location from the original VOC source area under either natural or pumping conditions. Figure 3-6 shows the new well locations and presents the mapping of the VC in deep groundwater.

In previous investigations (2001), VC was detected above the groundwater RAO (5 µg/l) in both onsite and offsite samples in the Plant #5 East and UST Areas. The deep groundwater zone had elevated VC levels (above RAOs) primarily onsite, at MW-19D, with the exception of PZ-7D, offsite to the northeast. The VC in deep groundwater did not exhibit any apparent pattern in its distribution, primarily because data was not available in the area northeast of Plant #5. Historically, the highest VC concentration was 1,300 (D) µg/l in MW-19D, directly east of Plant #5. PZ-6D, approximately 20 feet south of MW-19D, had the next highest VC concentration at 460 (D) µg/l. The MW-19D VC levels have been consistently higher than the VC concentrations found in the NPL Area, the original source area for chlorinated organic solvents. NPL Area deep groundwater vinyl chloride levels have ranged from 120 to 910 µg/l. The UST Area has had VC levels of 140 and 150 µg/l, in PZ-8D and PZ-9D, respectively. These concentrations are lower than the MW-19D value, and are generally lower than the deep zone VC levels in the NPL source area. Offsite sample locations VP-6D and PZ-7D, in the east parking lot, have had VC concentrations of non-detect and 43 µg/l, respectively. VP-7D, on the southeast end of the site near Blackstone Avenue, has had a VC concentration of 6 µg/l.

3.5.3 Acetone

Acetone was found at the highest levels in site groundwater in existing monitoring points PZ-5D and PZ-6D, at concentrations of 960 mg/l and 190 mg/l, respectively. These points are located directly east of Plant #5 and represent the highest acetone concentrations ever found onsite. In addition, these levels represent increases of more than one order of magnitude compared to levels found in the same monitoring points from previous (2001) investigations. Acetone distribution in deep groundwater is shown on Figure 3-7.

Acetone was previously reported (2001) to be present in deep soil samples taken in the area southeast of Plant #5. Groundwater analyses in this area indicated that acetone was found in the deep zone at PZ-5D and PZ-6D, on the east side of Plant #5. Concentrations ranged from 1,600 at PZ-6D to 14,000 µg/l at PZ-5D. PZ-9D in the UST Area had an acetone level of 240 µg/l. These groundwater values generally correlated with the soil acetone values found in this area, with the exception of PZ-9D, which had the highest soil acetone concentration at 240 mg/kg.

The deep zone acetone is concentrated near the southeast corner of the Plant #5 building, at the east side of the UST Area. The acetone source appears to originate in the deep zone at the east end of UST Area near PZ-9D, since acetone was not present in the shallow zone in the UST Area. Acetone in deep groundwater is limited to the area southeast of Plant #5 as evidenced by the non-detect levels in MW-19D and VP-6D. The acetone presence, only in the deep groundwater zone, suggests either a historic upgradient source, or a historic onsite release that has migrated to the deep zone, and is not currently present in its original shallow source area (UST Area). The migration of acetone is expected to be limited by both the current deep zone pumping in the NPL Area and the bioattenuation of acetone in groundwater.

3.5.4 VOC By-Products

Breakdown of TCE into it's by-product compounds provides an indication of natural biodegradation activity and also enhanced dechlorination caused by ZVI injections in the NPL Area. TCE biodegradation in groundwater is expected to follow the following sequence of reactions:

$$PCE \rightarrow TCE \rightarrow DCE \rightarrow VC \rightarrow Ethene \rightarrow Ethane$$

VC degrades more slowly than TCE and DCE and the VC tends to accumulate in groundwater. The ratios of TCE to it's by-products indicates the relative degree of TCE breakdown within the contaminant plume. Specifically, a high TCE/by-product ratio indicates relatively slow TCE degradation and suggests a high concentration source area or an area of low bioactivity. Table 3-6 summarizes deep zone groundwater TCE/by-product ratios over time

for selected monitoring wells, and the new monitoring wells recently installed. Figure 3-8 and 3-9 present the deep groundwater TCE/DCE and TCE/VC ratio distributions for the December, 2003 sampling event.

The VOC by-product mapping indicates that the deep zone plume has the highest TCE/by-product ratios in the area of monitoring wells MW-21D and MW-22D, in the northeast area of Plant #5. This corresponds to the location of the highest VOC levels found in the recent investigations. In this area the TCE/DCE ratios were above 5.0 and the TCE/VC ratios were above 50. In comparison, the TCE/DCE and TCE/VC ratios in the NPL Area were less than 1.0. These results indicate that the TCE plume beneath Plant #5, and offsite to at least MW-22D, has not degraded significantly relative to the rest of the site, especially in the NPL area, where the degradation has been accelerated by ZVI Injections. TCE/VC ratios above 10.0 are consistent with the historical TCE/VC ratios found in the NPL Area (MW-7D and RW-2D) and the Plant #5 "hot spot" area (PZ-3D and PZ-4D) prior to the ZVI injections in July, 2000. The pre-PRB Pilot Test TCE/VC ratios are consistently above 10 and over 100 in some locations. These high ratios are considered to be indicative of site groundwater that has undergone minimal natural attenuation and biodegradation.

It is noted that the perimeter area of the deep groundwater zone VOC plume, as depicted by monitoring points MW-14D, MW-19D, PZ-5D and PZ-7D, has TCE/VC ratios less than 1.0. This indicates that the "fringe" area of the plume is undergoing greater natural attenuation and biodegradation than is occurring in the center of the plume.

The east parking lot area at VP-6D, and the UST Area as represented by MW-23D, both of which are beyond the fringe area of the deep zone plume, have relatively high TCE/by-product ratios. For example, the TCE/cis-DCE ratios at these monitoring points are 17.65 and 9.72, respectively. These values are consistent, and actually higher, than the TCE/cis-DCE ratios found in the center area of the plume. This supports the contention, previously described in Section 3.5.1, that the VOC plume in these areas is from a source area other than the NPL Area. Potential sources in these areas are likely offsite and have not been investigated.

TABLES

Table 3-1
Soil Analytical Results- UST Area
Volatile Organics
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

SAMPLE ID:	TBUST 1	TBUST 1	TBUST 2	TBUST 4	TBUST 5	TBUST 6	TBUST 6 (4)	TBUST 7 (4)	TBUST 7 (4)	TBUST 8	TBUST 9 (4)	TBUST 9 (4)	TBUST 10	TBUST 11 (4)	TBUST 12 (4)
Depth Interval, ft BGS	4-5 ft	6.5-8 ft	4-4.5 ft	4-5 ft	4-6.2 ft	5.4-7.3 ft	8-10.1 ft	8-8.9 ft	8.9-10.5 ft	6-6.5 ft	6.7-8.9 ft	14-15 ft	5.3-7 ft	9.2-11.4 ft	8-10 ft
DATE SAMPLED:	03-Nov-03	03-Nov-03	03-Nov-03	03-Nov-03	03-Nov-03	03-Nov-03	04-Nov-03	11-Nov-03	11-Nov-03	05-Nov-03	05-Nov-03	05-Nov-03	05-Nov-03	11-Nov-03	11-Nov-03
COMPOUND															
Acetone	89		26	37	38	57				28		**1300**			
Benzene			7.9												
Bromodichloromethane															
Bromoform															
Bromomethane															
2-Butanone	11														
Carbon Disulfide			8.8		9.7	18									
Carbon Tetrachloride															
Chlorobenzene															
Chloroethane															
Chloroform															
Chloromethane															
Cumene		**1900**					**6100**		380	**2100**	**3700**	**6100**		**1200**	
Dibromochloromethane															
1,2-Dichlorobenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethene															
cis-1,2-Dichloroethene															
trans-1,2-Dichloroethene															
1,2-Dichloropropane															
cis-1,3-Dichloropropene															
trans-1,3-Dichloropropene															
Ethylbenzene	25	**14000**	28		63	6.6	**15000**		980	**18000**	**40000**	**160000**	**1100**	**8000**	
2-Hexanone															
4-Methyl-2-pentanone															
Methylene chloride															
Styrene															
1,1,2,2-Tetrachloroethane															
Tetrachloroethene															
Toluene	6.6	800	22	6.3	13					190	**3300**	**26000**			
1,1,1-Trichloroethane															
1,1,2-Trichloroethane															
Trichloroethene															
Trichlorofluoromethane															
Vinyl chloride															
m,p-Xylene	130	**330000**	95	9.3	260	26	**70000**	940	**2900**	**160000**	**350000**	**620000**	**6900**	**35000**	530
o-Xylene	33	**140000**	35		24		**2700**			**46000**	**150000**	**190000**	**1700**		
Total CTEX, mg/kg (note 3)	0.19	486.70	0.18	0.02	0.36	0.03	93.80	0.94	4.26	226.29	547.00	1002.10	9.70	44.20	0.53
Total VOCs, mg/kg	0.29	486.70	0.22	0.05	0.41	0.11	93.80	0.94	4.26	226.32	547.00	1003.40	9.70	44.20	0.53
CTEX/Total VOCs, %	66.1	100.0	80.8	29.7	88.3	30.3	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0

Note:
1. All units are ug/kg, unless noted otherwise
2. Blank entry indicates below analytical detection limits
3. C= cumene, T= toluene, E= ethylbenzene, X= total xylenes
4. Soil sample taken in shallow water-bearing zone capillary fringe or saturated zone
5. Shaded value indicates exceedance of NYDEC RAOs for VOCs- 10/1 ppm for total/each VOC.

Table 3-2
Groundwater Analytical Results- Shallow Zone
General Groundwater Chemistry
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

SAMPLE ID:		GP-2S	GP-3S	HW-6	HW-9	MW-13	MW-20	MW-23S	MW-24S	PZ-5S	RW-5S	Mean
DATE SAMPLED:		18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	17-Dec-03	17-Dec-03	22-Dec-03	18-Dec-03	
COMPOUND	units											
Alkalinity (Total)	mg/l	63	43	310	100	170	180	300	180	75	87	**150.80**
Chloride	mg/l	1.5	1 8	4 8	11	46	2.4	72	2.9	2.3	2.0	**14.67**
Ferrous Iron	mg/l	0.14	0 45	<0.10	1.9	0.88	1 5	<0.1	0.37	<0.10	0.22	**0.55**
Nitrate	mg/l	0 38	0.43	0.35	0 16	0.1	<0.1	<0.1	<0.10	<0.10	0.12	**0.15**
pH	S U.	6 81	6.12	6 82	6.41	6 42	6 51	6.89	6 58	6.93	6 5	**6.60**
Sulfate	mg/l	<10	22	11	<10	48	<10	11	11	<10	12	**11.50**
Total Organic Carbon (TOC)	mg/l	<1.0	1 8	4.0	2 9	9 4	11	9 9	4 6	3 0	2 3	**4.89**
Metals-Cations												
Calcium	mg/l	27	24	94	30	81	43	110	60	23	30	**52.20**
Magnesium	mg/l	2 8	3.9	12	3.2	21	4 0	9 2	12	2 3	2.5	**7.29**
Potassium	mg/l	1 4	3 1	1 9	1.8	5 8	0 97	3 4	6 6	2.4	1.2	**2.86**
Sodium	mg/l	1.3	1.9	6 2	9 0	30	2 5	35	3 9	5 8	3 7	**9.93**
Ca + Mg	mg/l	29 8	27.9	106	33.2	102	47	119.2	72	25.3	32.5	**59.49**

Table 3-3
Groundwater Analytical Results- Shallow Zone
Volatile Organics
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

SAMPLE ID:	GP-2S	GP-3S	HW-6	HW-9	MW-13	MW-20	MW-23S	MW-24S	PZ-5S	RW-5S
DATE SAMPLED:	18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	18-Dec-03	17-Dec-03	17-Dec-03	22-Dec-03	18-Dec-03
COMPOUND										
Acetone					12	31				
Benzene										
Bromodichloromethane										
Bromoform										
Bromomethane										
2-Butanone										
Carbon Disulfide										
Carbon Tetrachloride										
Chlorobenzene										
Chloroethane										
Chloroform										
Chloromethane										
Cumene			43			340	57	97		
Dibromochloromethane										
1,2-Dichlorobenzene										
1,3-Dichlorobenzene										
1,4-Dichlorobenzene										
1,1-Dichloroethane										
1,2-Dichloroethane										
1,1-Dichloroethene			9.6							
cis-1,2-Dichloroethene			2900		*5*	*5*		*5*		
trans-1,2-Dichloroethene			24							
1,2-Dichloropropane										
cis-1,3-Dichloropropene										
trans-1,3-Dichloropropene										
Ethylbenzene			12			2600	400	1000		
2-Hexanone										
4-Methyl-2-pentanone						14				
Methylene chloride										
Styrene										
1,1,2,2-Tetrachloroethane										
Tetrachloroethene										
Toluene						1700				
1,1,1-Trichloroethane										
1,1,2-Trichloroethane										
Trichloroethene			110		22	7.5		29		
Trichlorofluoromethane										
Vinyl chloride			1400			170				
m,p-Xylene			87	8.1	7.3	20000	1700	6500	8.3	
o-Xylene			13			50	350	77		
Total VOCs	*0*	*0*	*4599*	*8.1*	*46.3*	*24918*	*2507*	*7708*	*8.3*	*0.0*
Total CTEX (note 3)	*0*	*0*	*155*	*8.1*	*7.3*	*24690*	*2507*	*7674*	*8.3*	*0.0*
CTEX/Total VOCs, %	*#DIV/0!*	*#DIV/0!*	*3*	*100*	*16*	*99.1*	*100.00*	*99.6*	*100*	*#DIV/0!*

Note:
1. All units are ug/L
2. Blank entry indicates below analytical detection limits
3. C= cumene, T= toluene, E= ethylbenzene, X= total xylenes

Table 3-4
Groundwater Analytical Results- Deep Zone
General Groundwater Chemistry
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

SAMPLE ID:		GP-2D	GP-3D	MW-15D	MW-19D	MW-21D	MW-22D	MW-23D	PZ-5D	PZ-6D	PZ-7D	PZ-8D	PZ-9D	PZ-10D	PZ-11D	VP-6D	mean
DATE SAMPLED:		18-Dec-03	18-Dec-03	17-Dec-03	17-Dec-03	17-Dec-03	16-Dec-03	17-Dec-03	16-Dec-03	22-Dec-03	16-Dec-03	22-Dec-03	22-Dec-03	19-Dec-03	19-Dec-03	17-Dec-03	
COMPOUND	units																
General Chemistry																	
Alkalinity (Total)	mg/l	63	480	260	660	280	210	320	670	620	370	290	360	440	120	360	366.87
Chloride	mg/l	1.5	19	36	27	37	58	14	39	21	58	22	25	21	19	17	27.63
Ferrous Iron	mg/l	0.14	<0.10	0.31	0.10	0.74	<0.10	0.31	0.22	<0.10	0.17	0.18	<0.10	<0.10	<0.10	0.27	0.16
Nitrate	mg/l	0.38	<0.10	<0.10	0.10	<0.10	0.87	<0.10	<0.10	<0.10	<0.10	0.92	<0.10	<0.10	<0.10	<0.10	0.15
pH	S.U.	6.81	7.75	7.65	7.08	7.91	7.13	7.2	6.76	7.07	7.58	7.14	7.09	7.06	8.03	6.91	7.28
Sulfate	mg/l	<10	12	180	<10	27	44	33	<10	<10	18	15	<10	<10	43	<0.10	24.80
Total Organic Carbon (TOC)	mg/l	<1.0	4.0	2.7	4.1	4.1	1.4	1.1	270	43	3.1	6.9	5	6.5	1.4	3.8	23.81
Metals-Cations																	
Calcium	mg/l	27	220	100	260	49	89	100	770	420	1200	240	2000	210	56	94	389.00
Magnesium	mg/l	2.8	58	36	92	11	16	25	250	170	510	100	960	80	13	20	156.25
Potassium	mg/l	1.4	11	8.8	13	2.8	3.7	4.8	32	30	55	20	57	13	4.2	1.6	17.22
Sodium	mg/l	1.3	76	130	76	81	35	24	52	54	50	20	24	19	16	12	44.69
Ca + Mg	mg/l	29.8	278	136	352	60	105	125	1020	590	1710	340	2960	290	69	114	545.25

Table 3-5
Groundwater Analytical Results- Deep Zone
Volatile Organics
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

Table 3-5

SAMPLE ID:	GP-2D	GP-3D	MW-15D	MW-19D	MW-21D	MW-22D	MW-23D	PZ-5D	PZ-6D	PZ-7D	PZ-8D	PZ-9D	PZ-10D	PZ-11D	VP-6D
DATE SAMPLED:	18-Dec-03	18-Dec-03	17-Dec-03	17-Dec-03	17-Dec-03	16-Dec-03	17-Dec-03	16-Dec-03	22-Dec-03	16-Dec-03	22-Dec-03	22-Dec-03	19-Dec-03	19-Dec-03	17-Dec-03
COMPOUND															
Acetone								960000	190000		560		19000		
Benzene	240	1.3	1.2		760	10					3.3				
Bromodichloromethane															
Bromoform															
Bromomethane															
2-Butanone								3000	1400		100		150		
Carbon Disulfide															
Carbon Tetrachloride															
Chlorobenzene															
Chloroethane															
Chloroform															
Chloromethane															
Cumene															7.7
Dibromochloromethane															
1,2-Dichlorobenzene															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethene	28		57		630	48									
cis-1,2-Dichloroethene	2700	1300	6600	*5*	41000	3400	7.1	*5*	*5*	92	12	*5*			6.8
trans-1,2-Dichloroethene	240		78		370	15									
1,2-Dichloropropane															
cis-1,3-Dichloropropene															
trans-1,3-Dichloropropene															
Ethylbenzene															
2-Hexanone															
4-Methyl-2-pentanone								240			110				
Methylene chloride															
Styrene															
1,1,2,2-Tetrachloroethane															
Tetrachloroethene															
Toluene					21						6.7				
1,1,1-Trichloroethane															
1,1,2-Trichloroethane															
Trichloroethene	230	320	650	16	300000	17000	69	8.6	*5*	84	*5*	*5*			120
Trichlorofluoromethane															
Vinyl chloride	1700	720	380	1400	5800	170	220	120	360	340	160	8.5	7.2		2.3
m,p-Xylene															
o-Xylene															
TCE/cis- DCE+VC	0.05	0.16	0.09	0.01	6.41	4.76	0.30	0.07	0.01	0.19	0.03	0.37	0.00	#DIV/0!	13.19
TCE/cis- DCE	*0.09*	*0.25*	*0.10*	*3.20*	*7.32*	*5.00*	*9.72*	*1.72*	*1.00*	*0.91*	*0.42*	*1.00*	*#DIV/0!*		*17.65*
TCE/VC	*0.14*	*0.44*	*1.71*	*0.01*	*51.72*	*100.00*	*0.31*	*0.07*	*0.01*	*0.25*	*0.03*	*0.59*	*0.00*		*52.17*
cis-DCE/VC	*1.59*	*1.81*	*17.37*	*0.004*	*7.07*	*20.00*	*0.03*	*0.04*	*0.01*	*0.27*	*0.08*	*0.59*	*0.00*		*2.96*

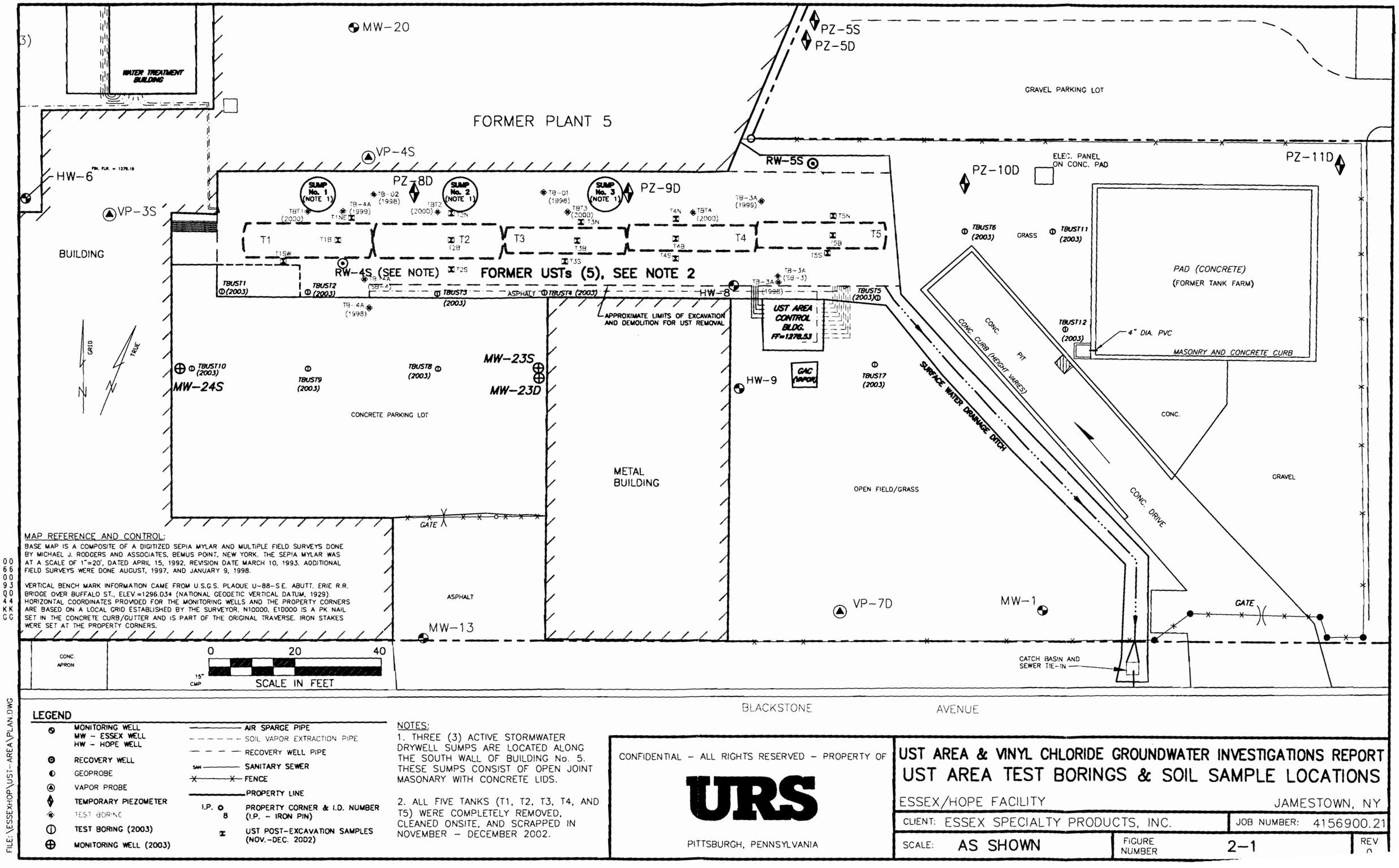
Note:
1. All units are ug/L
2. Blank results indicate below analytical detection limits

Table 3-6
Volatile Organic By-Products Historical Summary- Deep Groundwater Zone
UST Area and Vinyl Chloride Groundwater Investigations
Samples taken December 16-22, 2003

		Monitoring Point:								
VOCs and By-Product Ratios (1)	Date	MW-7D	MW-15D	MW-19D	MW-21D	MW-22D	PZ-3D	PZ-4D	RW-1D	RW-2D
		NPL Area			New monitoring wells		Plant #5 Hot Spot		NPL recovery wells	
	Nov., 1998									
TCE		26000			*ND*	*ND*				4700
cis- 1,2 DCE					*ND*	*ND*				
vinyl chloride (VC)		20			*ND*	*ND*				150
TCE/DCE+VC ratio		***1300.00***			*ND*	*ND*				***31.33***
TCE/VC ratio		***1300***			*ND*	*ND*				***31.33***
	Nov., 1999									
TCE		17000			*ND*	*ND*				18000
cis- 1,2 DCE					*ND*	*ND*				
vinyl chloride (VC)		51			*ND*	*ND*				*20*
TCE/DCE+VC ratio		***333.33***			*ND*	*ND*				***900.00***
TCE/VC ratio		***333.33***			*ND*	*ND*				***900.00***
	July, 2000	***Pre-PRB Pilot Test***								
TCE		1190			*ND*	*ND*	135,500			3210
cis- 1,2 DCE		775			*ND*	*ND*	*5000*			2120
vinyl chloride (VC)		50			*ND*	*ND*	*5000*			290
TCE/DCE+VC ratio		***1.44***			*ND*	*ND*	***13.55***			***1.33***
TCE/VC ratio		***23.8***			*ND*	*ND*	***27.10***			***11.07***
	August, 2000									
TCE		1480			*ND*	*ND*	76000	367000		5020
cis- 1,2 DCE		850			*ND*	*ND*	6300	24500		2060
vinyl chloride (VC)		390			*ND*	*ND*	*5000*	*2550*		350
TCE/DCE+VC ratio		***1.19***			*ND*	*ND*	***6.73***	***13.57***		***2.08***
TCE/VC ratio		***3.79***			*ND*	*ND*	***15.20***	***143.92***		***14.34***
	October,2000									
TCE		1800			*ND*	*ND*	104000	3200		6000
cis- 1,2 DCE		1030			*ND*	*ND*	28000	240		3100
vinyl chloride (VC)		295			*ND*	*ND*	2200	*200*		920
TCE/DCE+VC ratio		***1.38***			*ND*	*ND*	***3.44***	***7.27***		***1.49***
TCE/VC ratio		***6.10***			*ND*	*ND*	***47.27***	***16.00***		***6.52***
	Nov., 2000									
TCE		3450	100	5	*ND*	*ND*	30000	5300	150	4800
cis- 1,2 DCE		1600	*ND*	*ND*	*ND*	*ND*	11500	3500	*ND*	4300
vinyl chloride (VC)		1000	190	1300	*ND*	*ND*	*5000*	*500*	910	1000
TCE/DCE+VC ratio		***1.33***			*ND*	*ND*	***1.82***	***1.33***		***0.91***
TCE/VC ratio		***3.45***	***0.53***	***0.004***	*ND*	*ND*	***6.00***	***10.60***	***0.16***	***4.80***
	Feb., 2001									
TCE		1500			*ND*	*ND*	90000	26500		4000
cis- 1,2 DCE		23500			*ND*	*ND*	38000	10500		7750
vinyl chloride (VC)		3500			*ND*	*ND*	*2000*	*500*		600
TCE/DCE+VC ratio		***0.06***			*ND*	*ND*	***2.25***	***2.41***		***0.48***
TCE/VC ratio		***0.43***			*ND*	*ND*	***45.00***	***53.00***		***6.67***
	April, 2001									
TCE		4750			*ND*	*ND*	141500	214000	5	600
cis- 1,2 DCE		7500			*ND*	*ND*	95000	61500	1500	6750
vinyl chloride (VC)		8400			*ND*	*ND*	*10000*	*10000*	2	4750
TCE/DCE+VC ratio		***0.30***			*ND*	*ND*	***1.35***	***2.99***	***0.003***	***0.05***
TCE/VC ratio		***0.57***			*ND*	*ND*	***14.15***	***21.40***	***2.50***	***0.13***
	July, 2001		***Dec., 2001***	***Dec., 2001***						
TCE		250	39	5	*ND*	*ND*	110000	74500	14	700
cis- 1,2 DCE		4500	2000	5	*ND*	*ND*	74000	31000	1700	13250
vinyl chloride (VC)		590	190	1200	*ND*	*ND*	*10000*	*10000*	110	1300
TCE/DCE+VC ratio		***0.05***	***0.02***	***0.004***	*ND*	*ND*	***1.31***	***1.82***	***0.01***	***0.05***
TCE/VC ratio		***0.42***	***0.21***	***0.004***	*ND*	*ND*	***11.00***	***7.45***	***0.13***	***0.54***
	Dec., 2002									
TCE		38	870	5	*ND*	*ND*			14	110
cis- 1,2 DCE		2900	3700	5	*ND*	*ND*			1300	4300
vinyl chloride (VC)		1600	190	660	*ND*	*ND*			2	1600
TCE/DCE+VC ratio		***0.01***	***0.22***	***0.01***	*ND*	*ND*			***0.01***	***0.02***
TCE/VC ratio		***0.02***	***4.58***	***0.01***	*ND*	*ND*			***7.00***	***0.07***
	Nov./Dec., 2003									
TCE		5	650	16	300000	17000			39	400
cis- 1,2 DCE		2500	6600	5	41000	3400			40	3900
vinyl chloride (VC)		860	720	1400	5800	170			2	1300
TCE/DCE+VC ratio		***0.001***	***0.09***	***0.01***	***6.41***	***4.76***			***0.93***	***0.08***
TCE/VC ratio		***0.01***	***0.90***	***0.01***	***51.72***	***100.00***			***19.50***	***0.31***

Notes:
1 All VOC concentrations are ug/l Note that BDL values for VOCs are entered as the detction limit value for calculation purposes These values are shown in *italics*

FIGURES



MAP REFERENCE AND CONTROL:

BASE MAP IS A COMPOSITE OF A DIGITIZED SEPIA MYLAR AND MULTIPLE FIELD SURVEYS DONE BY MICHAEL J. RODGERS AND ASSOCIATES, BEMUS POINT, NEW YORK. THE SEPIA MYLAR WAS AT A SCALE OF 1"=20', DATED APRIL 15, 1992, REVISION DATE MARCH 10, 1993. ADDITIONAL FIELD SURVEYS WERE DONE AUGUST, 1997, AND JANUARY 9, 1998.

VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929). HORIZONTAL COORDINATES PROVIDED FOR THE MONITORING WELLS AND THE PROPERTY CORNERS ARE BASED ON A LOCAL GRID ESTABLISHED BY THE SURVEYOR. N10000, E10000 IS A PK NAIL SET IN THE CONCRETE CURB/GUTTER AND IS PART OF THE ORIGINAL TRAVERSE. IRON STAKES WERE SET AT THE PROPERTY CORNERS.

00 66 00 93 00 44 KK GG

LEGEND

- MONITORING WELL — MW – ESSEX WELL, HW – HOPE WELL
- RECOVERY WELL
- GEOPROBE
- VAPOR PROBE
- TEMPORARY PIEZOMETER
- TEST BORING
- TEST BORING (2003)
- MONITORING WELL (2003)
- AIR SPARGE PIPE
- SOIL VAPOR EXTRACTION PIPE
- RECOVERY WELL PIPE
- SANITARY SEWER
- FENCE
- PROPERTY LINE
- I.P. 8 — PROPERTY CORNER & I.D. NUMBER (I.P. – IRON PIN)
- UST POST-EXCAVATION SAMPLES (NOV.-DEC. 2002)

NOTES:

1. THREE (3) ACTIVE STORMWATER DRYWELL SUMPS ARE LOCATED ALONG THE SOUTH WALL OF BUILDING No. 5. THESE SUMPS CONSIST OF OPEN JOINT MASONARY WITH CONCRETE LIDS.

2. ALL FIVE TANKS (T1, T2, T3, T4, AND T5) WERE COMPLETELY REMOVED, CLEANED ONSITE, AND SCRAPPED IN NOVEMBER – DECEMBER 2002.

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT
UST AREA TEST BORINGS & SOIL SAMPLE LOCATIONS

ESSEX/HOPE FACILITY — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. | JOB NUMBER: 4156900.21

SCALE: AS SHOWN | FIGURE NUMBER 2-1 | REV 0

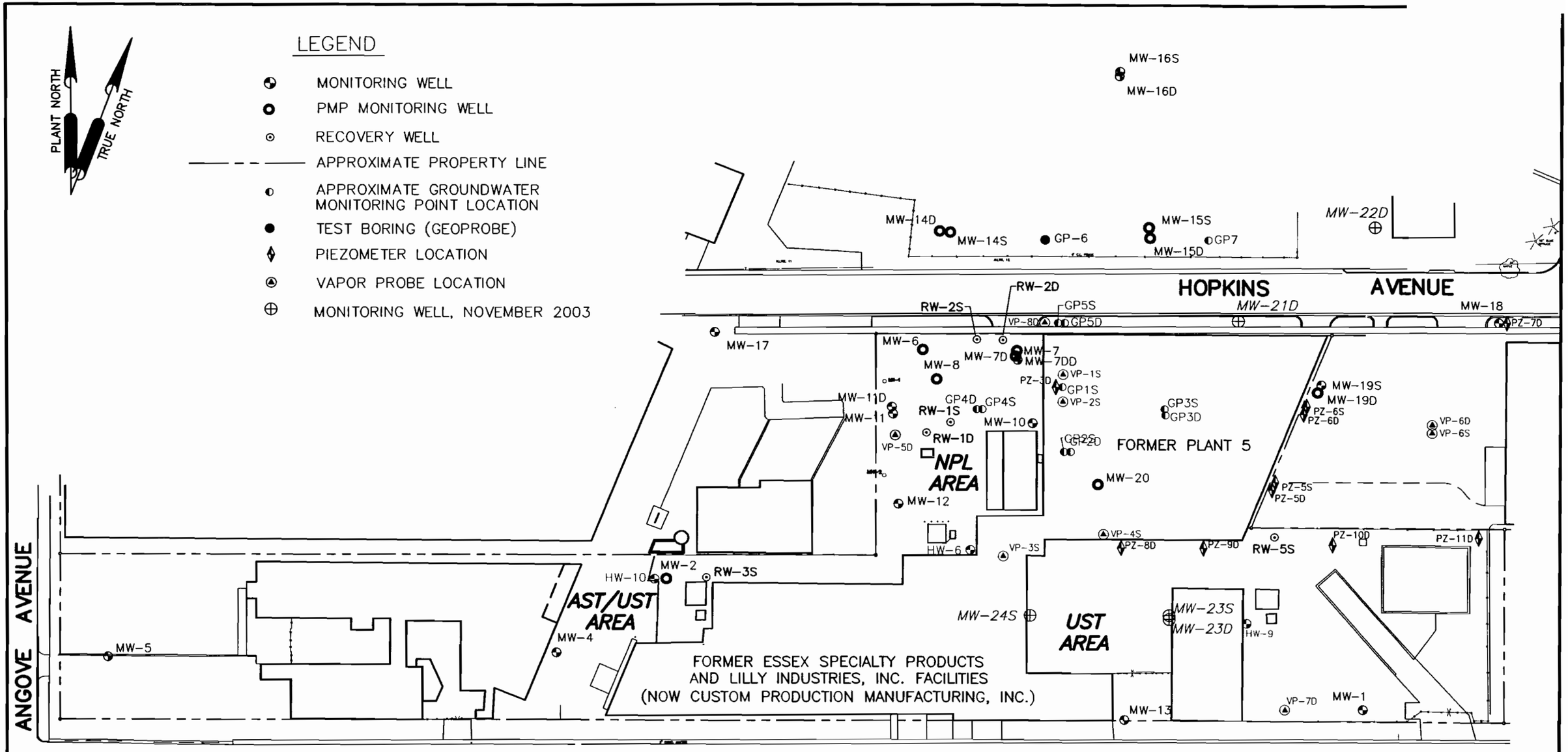
FILE: \ESSEXHOP\UST-AREA\PLAN.DWG

PLANT NORTH

TRUE NORTH

LEGEND

- MONITORING WELL
- PMP MONITORING WELL
- RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- TEST BORING (GEOPROBE)
- PIEZOMETER LOCATION
- VAPOR PROBE LOCATION
- MONITORING WELL, NOVEMBER 2003



0 60 120

SCALE IN FEET

MAP REFERENCE AND CONTROL:

BASE MAP IS A COMPOSITE OF A DIGITIZED SEPIA MYLAR AND MULTIPLE FIELD SURVEYS DONE BY MICHAEL J. RODGERS AND ASSOCIATES, BEMUS POINT, NEW YORK. THE SEPIA MYLAR WAS AT A SCALE OF 1"=20', DATED APRIL 15, 1992, REVISION DATE MARCH 10, 1993. ADDITIONAL FIELD SURVEYS WERE DONE AUGUST, 1997, AND JANUARY 9, 1998.

VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929).
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00660094004KKGG

URS

PITTSBURGH, PENNSYLVANIA

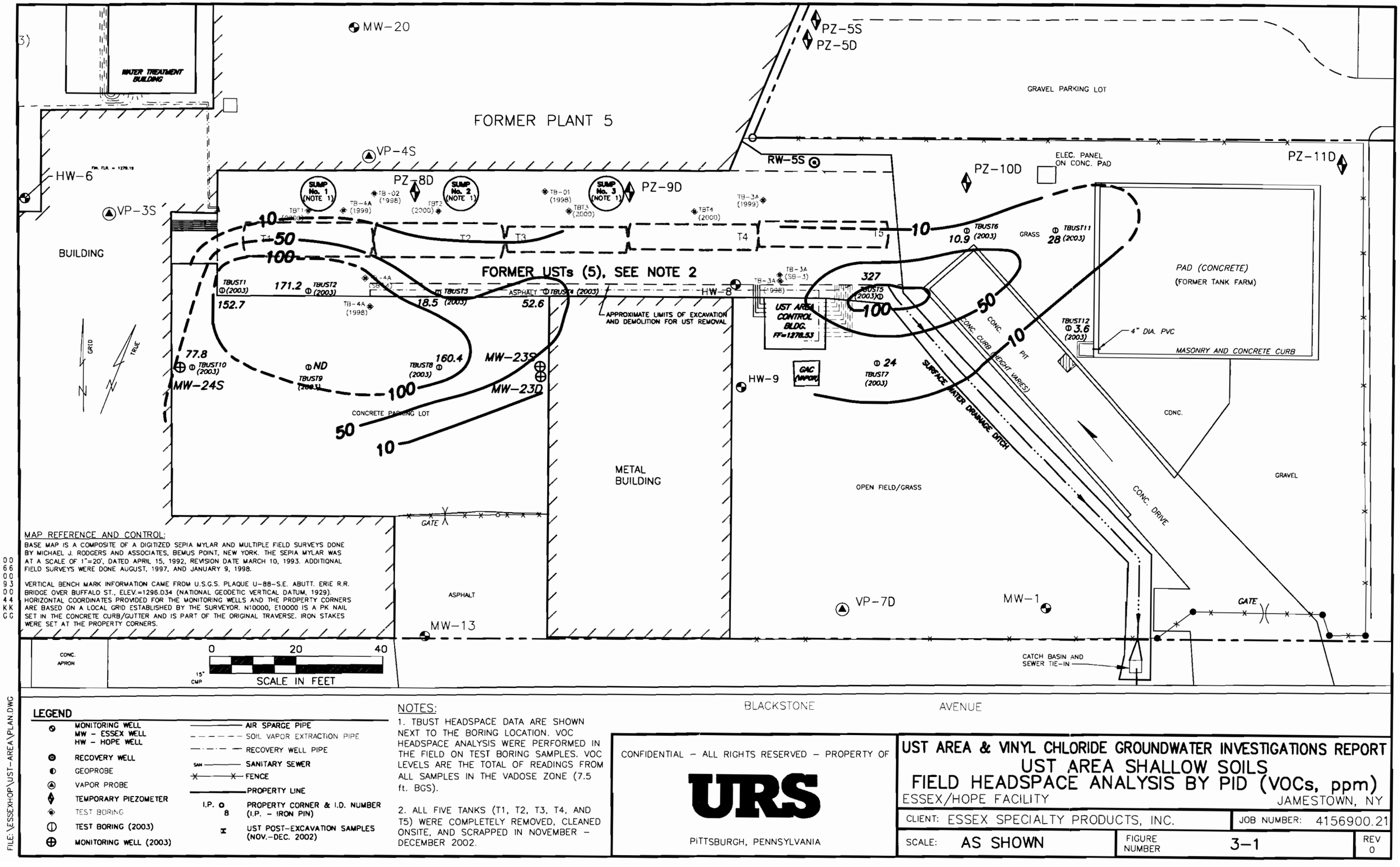
UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT GROUNDWATER MONITORING POINTS

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 4156900.21

SCALE: AS SHOWN — FIGURE NUMBER 2-2 — REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-60



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0066000930044KKCG

LEGEND

- MONITORING WELL
- MW - ESSEX WELL
- HW - HOPE WELL
- RECOVERY WELL
- GEOPROBE
- VAPOR PROBE
- TEMPORARY PIEZOMETER
- TEST BORING
- TEST BORING (2003)
- MONITORING WELL (2003)
- AIR SPARGE PIPE
- SOIL VAPOR EXTRACTION PIPE
- RECOVERY WELL PIPE
- SAN — SANITARY SEWER
- FENCE
- PROPERTY LINE
- I.P. 8 — PROPERTY CORNER & I.D. NUMBER (I.P. - IRON PIN)
- UST POST-EXCAVATION SAMPLES (NOV.-DEC. 2002)

NOTES:

1. TBUST HEADSPACE DATA ARE SHOWN NEXT TO THE BORING LOCATION. VOC HEADSPACE ANALYSIS WERE PERFORMED IN THE FIELD ON TEST BORING SAMPLES. VOC LEVELS ARE THE TOTAL OF READINGS FROM ALL SAMPLES IN THE VADOSE ZONE (7.5 ft. BGS).

2. ALL FIVE TANKS (T1, T2, T3, T4, AND T5) WERE COMPLETELY REMOVED, CLEANED ONSITE, AND SCRAPPED IN NOVEMBER - DECEMBER 2002.

URS

PITTSBURGH, PENNSYLVANIA

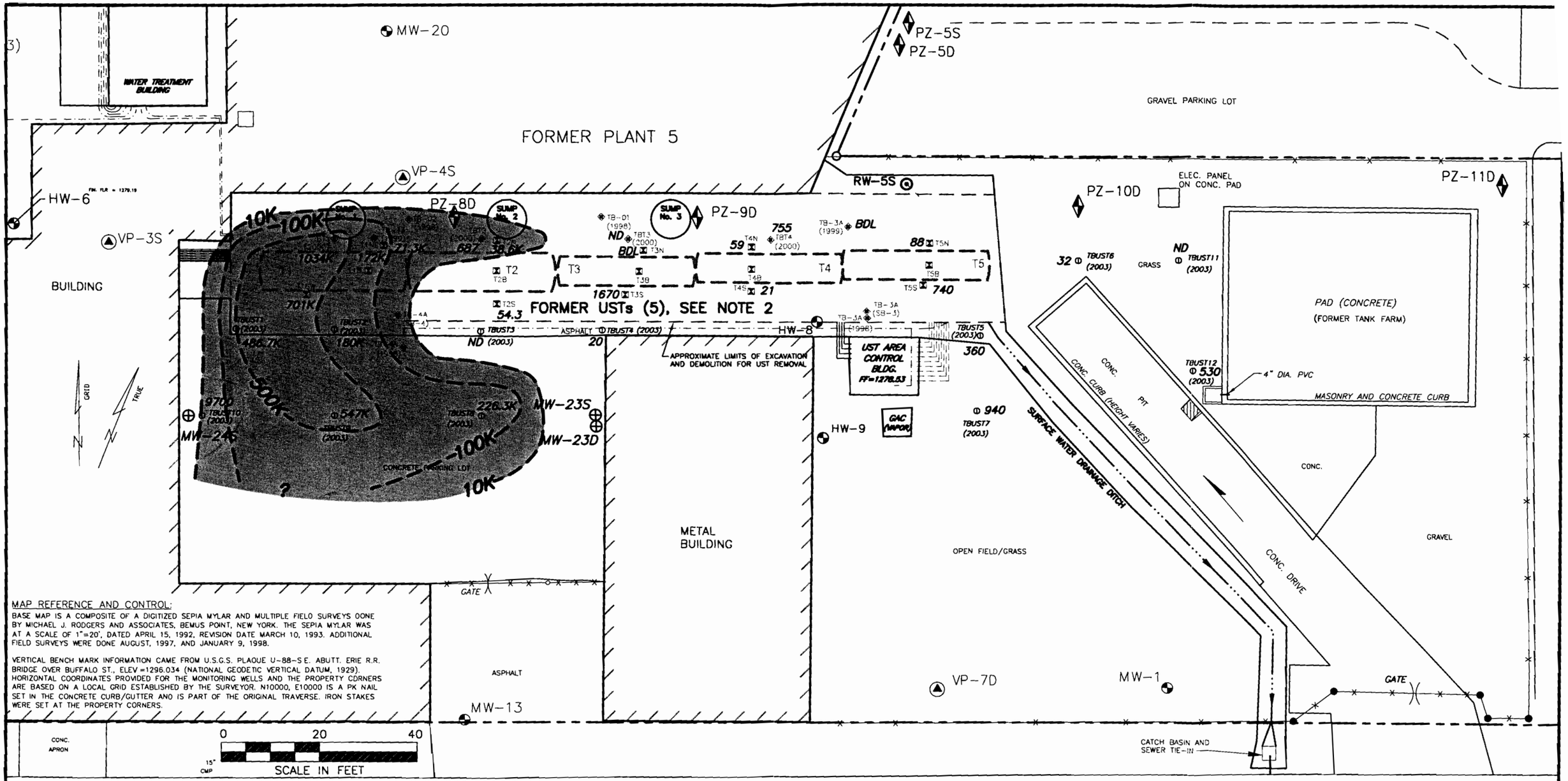
UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT

UST AREA SHALLOW SOILS FIELD HEADSPACE ANALYSIS BY PID (VOCs, ppm)

ESSEX/HOPE FACILITY — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER:	4156900.21
SCALE: AS SHOWN	FIGURE NUMBER	3-1	REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN.DWG



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00 66 00 93 00 44 KK GC

LEGEND

- MONITORING WELL
- MW - ESSEX WELL
- HW - HOPE WELL
- RECOVERY WELL
- GEOPROBE
- VAPOR PROBE
- TEMPORARY PIEZOMETER
- TEST BORING
- TEST BORING (2003)
- MONITORING WELL (2003)
- AIR SPARGE PIPE
- SOIL VAPOR EXTRACTION PIPE
- RECOVERY WELL PIPE
- SAN — SANITARY SEWER
- FENCE
- PROPERTY LINE
- I.P. 8 — PROPERTY CORNER & I.D. NUMBER (I.P. - IRON PIN)
- UST POST-EXCAVATION SAMPLES (NOV.-DEC. 2002)

NOTES:

1. TOTAL CTEX VALUES ARE SHOWN NEXT TO THE SOIL SAMPLE LOCATION. NYDEC RAO FOR TOTAL VOCs IS 10ppm (SHADED AREA). SOIL CTEX DATA IS REPORTED FOR THE VADOSE ZONE SAMPLES (7.5 ft. BGS). CTEX MAPPING INCLUDES THE 2003 TEST BORINGS AND HISTORICAL DATA FROM PREVIOUS INVESTIGATIONS.

2. ALL FIVE TANKS (T1, T2, T3, T4, AND T5) WERE COMPLETELY REMOVED, CLEANED ONSITE, AND SCRAPPED IN NOVEMBER - DECEMBER 2002.

BLACKSTONE AVENUE

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT

UST AREA SHALLOW SOILS CTEX ANALYSIS (ug/kg)

ESSEX/HOPE FACILITY — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. | JOB NUMBER: 4156900.21

SCALE: AS SHOWN | FIGURE NUMBER 3-2 | REV

FILE: \ESSEXHOP\UST-AREA\PLAN.DWG

LEGEND

- MONITORING WELL
- PMP MONITORING WELL
- RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- TEST BORING (GEOPROBE)
- PIEZOMETER LOCATION
- VAPOR PROBE LOCATION
- MONITORING WELL, NOVEMBER 2003
- TEST BORING (2003)
- UST AREA TEST BORING LOCATION

PLANT NORTH / TRUE NORTH

NOTES:

1. SHALLOW GROUNDWATER CTEX MAPPING INCLUDES CTEX DATA FROM SATURATED SOIL SAMPLES TAKEN FROM GREATER THAN 7.5 ft BGS.
2. TOTAL CTEX VALUES ARE SHOWN NEXT TO THE SAMPLE LOCATION.

0 40 80
SCALE IN FEET

MW-14S
GP-6
MW-15S
GP7
MW-22D
HOPKINS AVENUE
RW-2S
GP5S
MW-21D
MW-18
MW-6
MW-7
FORMER PLANT 5
VP-1S
PZ-3D
GP1S
VP-2S
MW-19S
PZ-6S
RW-1S
GP4S
GP3S
0
MW-1
MW-10
VP-6S
GP2S
0
100
1K
5K
10K
100K
MW-20
24690
8.3
PZ-5S
MW-12
VP-4S
RW-5S
HW-6
155
VP-3S
T2B
193K
TBUST6
93.8K
(2003)
TBUST11
(2003)
44.2K
?
HW-10
MW-2
RW-3S
TBUST1
(2003)
TBUST2
(2003)
TBUST3
(2003)
TBUST4
(2003)
TBUST5
(2003)
10K
5K
MW-24S
7674
TBUST10
(2003)
TBUST8
(2003)
TBUST9
(2003)
MW-23S
2507
MW-23D
TBUST12
(2003)
TBUST7
(2003)
4.26K
HW-9
8.1
MW-4
FORMER ESSEX SPECIALTY PRODUCTS AND LILLY INDUSTRIES, INC. FACILITIES (NOW CUSTOM PRODUCTION MANUFACTURING, INC.)
?
1K
100
MW-1
MW-13
7.3
BLACKSTONE AVENUE

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00 66 00 94 00 44 KK GG

URS

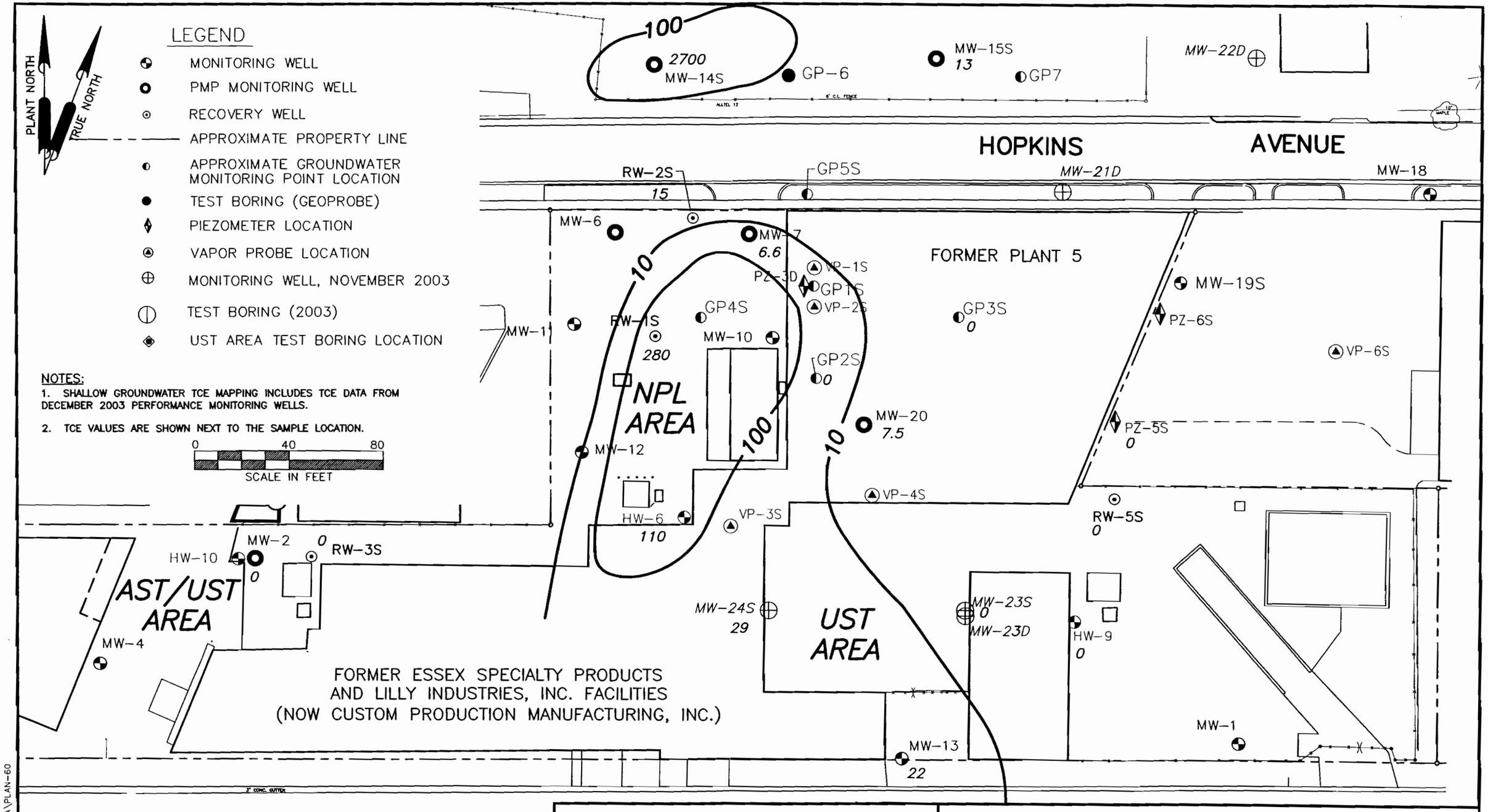
PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT SHALLOW GROUNDWATER – CTEX (ppb)

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER: 4156900.21	
SCALE: AS SHOWN	FIGURE NUMBER 3-3		REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-60



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00 66 00 94 00 44 KK GG

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT
SHALLOW GROUNDWATER - TCE (ppb)

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. | JOB NUMBER: 4156900.21

SCALE: AS SHOWN | FIGURE NUMBER 3-4 | REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-60

PLANT NORTH

TRUE NORTH

LEGEND

- MONITORING WELL
- PMP MONITORING WELL
- RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- TEST BORING (GEOPROBE)
- PIEZOMETER LOCATION
- VAPOR PROBE LOCATION
- MONITORING WELL, NOVEMBER 2003
- TEST BORING (2003)
- UST AREA TEST BORING LOCATION

NOTES:

1. **DEEP GROUNDWATER TCE MAPPING INCLUDES TCE DATA FROM NOVEMBER 2003 & DECEMBER 2003 PERFORMANCE MONITORING WELLS.**
2. **TCE VALUES ARE SHOWN NEXT TO THE SAMPLE LOCATION.**

0 50 100

SCALE IN FEET

MW-16D

10

100

500

MW-14D 1400

10K

GP-6

650 MW-15D

MW-22D 17000

50K

?

RW-2D 400

HOPKINS AVENUE

MW-21D 300K

VP-8D

GP5D

PZ-7D 84

MW-7D BDL

MW-8

PZ-3D

FORMER PLANT 5

500

MW-11D

GP4D

GP3D 320

100

MW-19D 16

PZ-6D BDL

VP-6D 120

100

RW-1D 39

VP-5D

NPL AREA

GP2D 230

10

PZ-5D 8.6

PZ-8D BDL

PZ-9D BDL

PZ-10D BDL

PZ-11D BDL

HW-10

AST/UST AREA

MW-24S

UST AREA

MW-23S

MW-23D 69

VP-7D

FORMER ESSEX SPECIALTY PRODUCTS AND LILLY INDUSTRIES, INC. FACILITIES (NOW CUSTOM PRODUCTION MANUFACTURING, INC.)

BLACKSTONE AVENUE

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00 66 10 14 00 44 KK GG

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT
DEEP GROUNDWATER – TCE (ppb)

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. | JOB NUMBER: 4156900.21

SCALE: AS SHOWN | FIGURE NUMBER 3-5 | REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-40

PLANT NORTH

TRUE NORTH

LEGEND

- MONITORING WELL
- PMP MONITORING WELL
- RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- TEST BORING (GEOPROBE)
- PIEZOMETER LOCATION
- VAPOR PROBE LOCATION
- MONITORING WELL, NOVEMBER 2003
- TEST BORING (2003)
- UST AREA TEST BORING LOCATION

NOTES:

1. DEEP GROUNDWATER VINYL CHLORIDE MAPPING INCLUDES DATA FROM NOVEMBER 2003 & DECEMBER 2003 PERFORMANCE MONITORING WELLS.
2. VINYL CHLORIDE VALUES ARE SHOWN NEXT TO THE SAMPLE LOCATION.

0 50 100

SCALE IN FEET

MW-16D

MW-14D 2.2

GP-6

380 MW-15D

MW-22D 170

100

1000

HOPKINS AVENUE

RW-2D 1300

VP-8D

GP5D

MW-21D 5800

PZ-7D 340

5000

FORMER PLANT 5

MW-8

MW-7D 860

PZ-3D

1400 MW-19D

360 PZ-6D

MW-11D

GP4D

GP3D 720

VP-6D 2.3

VP-5D

RW-1D <2

GP2D 1700

500

100

PZ-5D 120

PZ-8D 160

PZ-9D 8.5

PZ-10D 7.2

PZ-11D BDL

HW-10

MW-24S

MW-23S

MW-23D 220

VP-7D

FORMER ESSEX SPECIALTY PRODUCTS AND LILLY INDUSTRIES, INC. FACILITIES (NOW CUSTOM PRODUCTION MANUFACTURING, INC.)

BLACKSTONE AVENUE

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URS

PITTSBURGH, PENNSYLVANIA

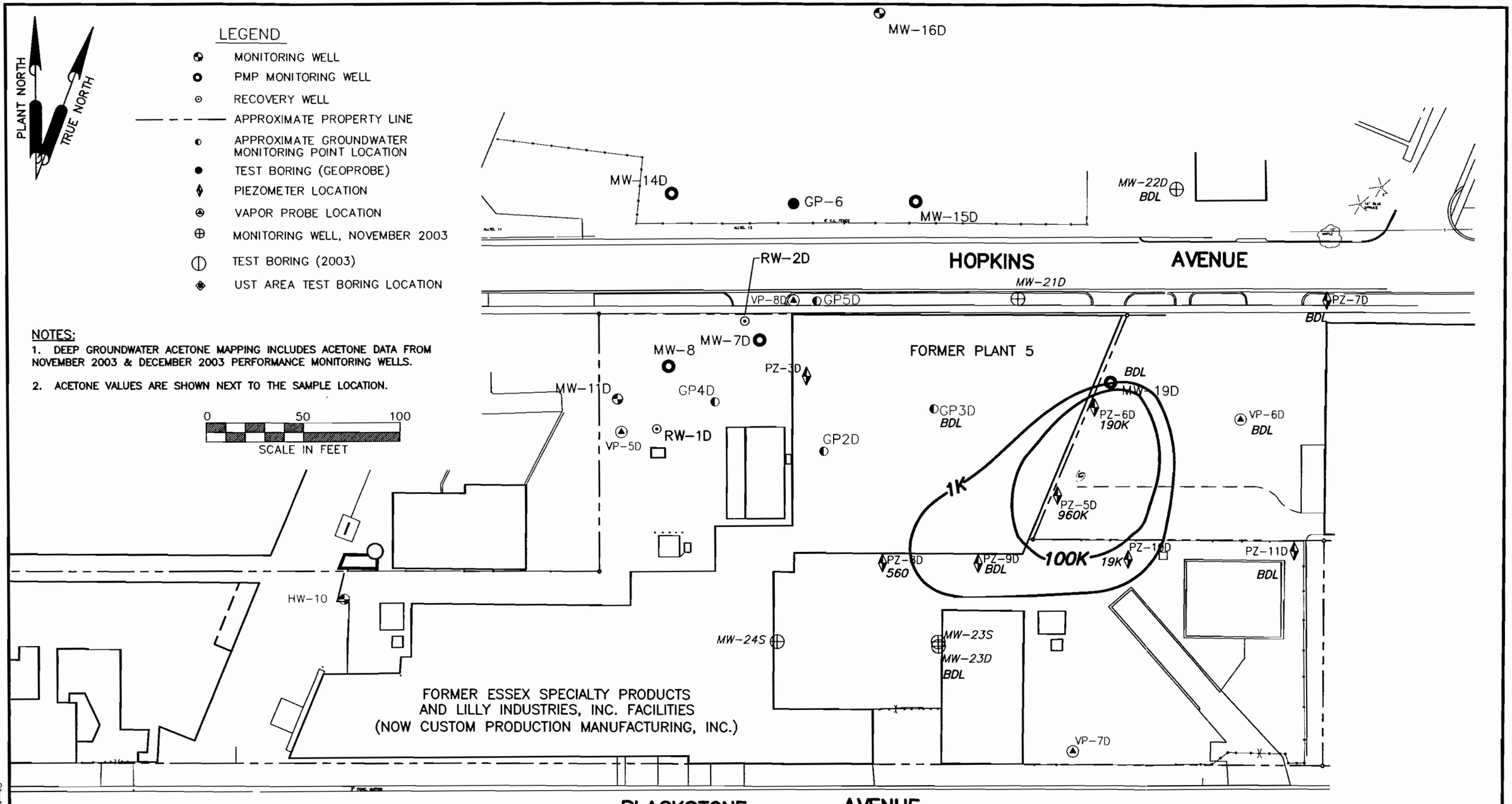
UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT DEEP GROUNDWATER – VINYL CHLORIDE (ppb)

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. | JOB NUMBER: 4156900.21

SCALE: AS SHOWN | FIGURE NUMBER 3-6 | REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-40



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00 66 10 04 00 44 KK GG

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT DEEP GROUNDWATER – ACETONE (ppb)

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC. — JOB NUMBER: 4156900.21

SCALE: AS SHOWN — FIGURE NUMBER 3-7 — REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-40

PLANT NORTH
TRUE NORTH

LEGEND

- MONITORING WELL
- PMP MONITORING WELL
- RECOVERY WELL
- APPROXIMATE PROPERTY LINE
- APPROXIMATE GROUNDWATER MONITORING POINT LOCATION
- TEST BORING (GEOPROBE)
- PIEZOMETER LOCATION
- VAPOR PROBE LOCATION
- MONITORING WELL, NOVEMBER 2003
- TEST BORING (2003)
- UST AREA TEST BORING LOCATION

NOTES:

1. GROUNDWATER DATA FROM SITE MONITORING WELL SAMPLES TAKEN NOVEMBER & DECEMBER 2003.

0 50 100
SCALE IN FEET

MW-16D
MW-14D BDL
GP-6
0.10 MW-15D
MW-22D 5.0
0.1
1.0
5
RW-2D 0.10
HOPKINS AVENUE
MW-21D 7.32
0.91 PZ-7D
MW-8D
GP5D
MW-8
MW-7D <0.002
PZ-3D
FORMER PLANT 5
MW-11D
GP4D
>3.2 MW-19D
PZ-6D >1.0
GP3D 0.25
VP-5D
RW-1D 0.98
GP2D 0.09
VP-6D 17.65
10
>1.72 PZ-5D
PZ-8D 0.42
PZ-9D >1.0
BDL PZ-10D
PZ-11D
HW-10
MW-24S
MW-23S
MW-23D 9.72
10
? ?
VP-7D
FORMER ESSEX SPECIALTY PRODUCTS AND LILLY INDUSTRIES, INC. FACILITIES (NOW CUSTOM PRODUCTION MANUFACTURING, INC.)
BLACKSTONE AVENUE

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URS

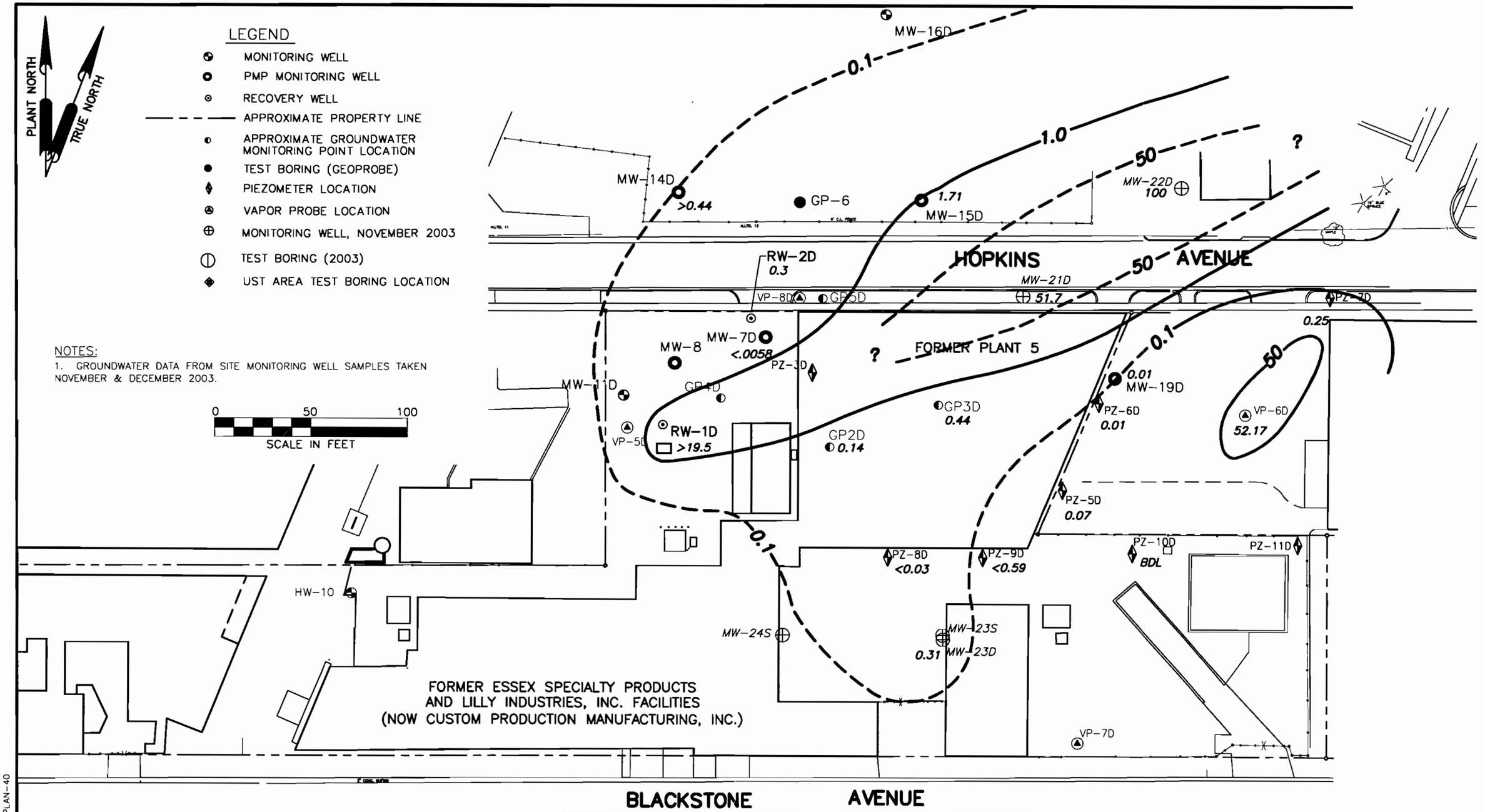
PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT
DEEP GROUNDWATER - TCE/cis-DCE RATIOS

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER: 4156900.21	
SCALE: AS SHOWN	FIGURE NUMBER 3-8		REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-40



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BASE MAP IS A COMPOSITE OF A DIGITIZED SEPIA MYLAR AND MULTIPLE FIELD SURVEYS DONE BY MICHAEL J. RODGERS AND ASSOCIATES, BEMUS POINT, NEW YORK. THE SEPIA MYLAR WAS AT A SCALE OF 1"=20', DATED APRIL 15, 1992, REVISION DATE MARCH 10, 1993. ADDITIONAL FIELD SURVEYS WERE DONE AUGUST, 1997, AND JANUARY 9, 1998. 00 66

VERTICAL BENCH MARK INFORMATION CAME FROM U.S.G.S. PLAQUE U-88-S.E. ABUTT. ERIE R.R. BRIDGE OVER BUFFALO ST., ELEV.=1296.034 (NATIONAL GEODETIC VERTICAL DATUM, 1929). 10 14

HORIZONTAL COORDINATES PROVIDED FOR THE MONITORING WELLS AND THE PROPERTY CORNERS ARE BASED ON A LOCAL GRID ESTABLISHED BY THE SURVEYOR. N10000, E10000 IS A PK NAIL SET IN THE CONCRETE CURB/GUTTER AND IS PART OF THE ORIGINAL TRAVERSE. IRON STAKES WERE SET AT THE PROPERTY CORNERS. 00 44 KK GG

URS

PITTSBURGH, PENNSYLVANIA

UST AREA & VINYL CHLORIDE GROUNDWATER INVESTIGATIONS REPORT
DEEP GROUNDWATER – TCE/VINYL CHLORIDE RATIOS

ESSEX/HOPE SITE — JAMESTOWN, NY

CLIENT: ESSEX SPECIALTY PRODUCTS, INC.		JOB NUMBER:	4156900.21
SCALE: AS SHOWN	FIGURE NUMBER	3-9	REV 0

FILE: \ESSEXHOP\UST-AREA\PLAN-40

APPENDIX A

TEST BORING LOGS

TEST BORING TB UST 1

PAGE 1 OF 2

PROJECT NAME ESSEX/HOPE — PROJECT NO 040411.21

LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DODGE, II

BY KD — DRILLING CONTRACTOR NORTHWALL — DRILLER STEVE LORENTZ

DATE 11-3-03 — DRILLING METHOD — RIG TYPE CME-85

CHK BY — DRILLING START DATE 11-3-03 — DRILLING COMPLETION DATE 11-3-03

DATE — SURFACE ELEVATION — STICK-UP ELEVATION

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				REDDISH BROWN F-C SAND AND GRAVEL (½"), SOME SILT - MOIST	SM/GM		20.1		
		3.1		1.9 OLIVE BROWN CLAYEY SILT - MOIST			17.6	1.9	
2				2.6 TAN SILT - MOIST	ML		15.4	2.6	
				3.1 NO RECOVERY			N/A	3.1	
4				4.0 TAN SILT - MOIST			42.2	4.0	LAB SAMPLE TBUST 1 (4-5 FT)
				5.0 OLIVE BROWN F-C SAND AND GRAVEL (½") SOME SILT - DAMP	SM/GM		57.1	5.0	
6		3.3		6.5 AS ABOVE, LT GRAY - WET - SLIGHT ODOR			550	6.5	LAB SAMPLE TBUST 1 (6.5-8)
				7.3 NO RECOVERY			N/A	7.3	
8				8.0 LT. GRAY F-C SAND AND GRAVEL (½") SOME SILT - LAMINATED - STRONG ODOR	SM/GM	SATURATED	2,700	8.0	
				9.6 NO RECOVERY			N/A	9.6	
10		1.6							
12				12.0 LT GRAY F-C SAND AND GRAVEL (½") SOME SILT - LAMINATED			11.5	12.0	
		4							
14								13.8	

ADDITIONAL REMARKS

TEST BORING TBUST1 PAGE 2 OF 2

PROJECT NAME EXXON/MOBIL PROJECT NO. 80-10-11.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODRILL

BY KD DRILLING CONTRACTOR NORTHWIND DRILLER STEVE LONGSTAFF

DATE 11-3-03 DRILLING METHOD GEOPROBE RIG TYPE CME 55

CHK BY _____ DRILLING START DATE 11-2-03 DRILLING COMPLETION DATE 11-3-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14				CT. GRAY F-C SAND AND GRAVEL (½") SOME SILT - SATURATED	SM/GM				
15.4								15.4	
				OLIVE BROWN SILTY CLAY - MOIST	CL		1.3		CONFINING LAYER
16				16.0 TOTAL DEPTH				16.0	

ADDITIONAL REMARKS

TEST BORING TBUST2 PAGE 1 OF 1

PROJECT NAME CUSC x/110DC PROJECT NO. 80410.11.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODGE, II

BY KD DRILLING CONTRACTOR GEOPROBE DRILLER STEVE CONRAD

DATE 11-3-03 DRILLING METHOD GEOPROBE RIG TYPE CME 85

CHK BY _____ DRILLING START DATE 11-3-03 DRILLING COMPLETION DATE 11-3-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN) FT	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				REDDISH BROWN F-C SAND AND GRAVEL (½") SOME SILT - DAMP	SM/GM		16.6		
		1.6		1.8				1.8	
2				OLIVE BROWN CLAYEY SILT DK BROWN TO BLACK @ 2.6 FT - MOIST	ML		46.6		
				2.6				2.6	
				NO RECOVERY			N/A		
4				4.0				4.0	
				4.5 AS ABOVE, OLIVE BROWN			5.9	4.5	CAB SAMPLE TBUST2 (4-4.5)
				OLIVE BROWN SILT, LITTLE CLAY - MOIST			32.1		
6		3.3		6.3				6.3	
				OLIVE BROWN F-C SAND AND GRAVEL (½") SOME SILT - SEWAGE ODOR - WET @ 7.0 FT	SM/GM		74.2		
				7.3			N/A	7.3	
				NO RECOVERY					
8				8.0			67.1	8.0	
				AS ABOVE, ODOR					
				8.5		APPROX		8.5	
				OLIVE BROWN F-C SAND AND GRAVEL (½") SOME SILT - SEWAGE ODOR - SATURATED	SM/GM		97.3		
10		1.9		10.5				10.5	
				10.9 TAN SILT - MOIST	ML		82.8	10.9	
				NO RECOVERY			N/A		
12				12.0					
				12.3 TAN SILT - MOIST				12.3	
		3.2		GRAY SILT - MOIST - SLIGHT ODOR	ML		24.8		CONFINING LAYER
14									

TOTAL DEPTH 15.2 FT

ADDITIONAL REMARKS

TEST BORING TBUST 3 PAGE 1 OF 2

PROJECT NAME ESSEX/HOPE PROJECT NO. 50404121.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODRILL

BY KD DRILLING CONTRACTOR NOTHNAGLE DRILLER STEVE LORENTZ

DATE 11-3-03 DRILLING METHOD GEOPROBE RIG TYPE CMT 85

CHK BY _____ DRILLING START DATE 11-3-03 DRILLING COMPLETION DATE 11-3-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN) FT	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				BROWN F-C SAND AND GRAVEL (½")	SM/GM		18.5		
		2		- DAMP					
2				2.0					
				NO RECOVERY					
4				4.0					
		0		NO RECOVERY (VOID)			N/A		
6				8.0					
6				OLIVE BROWN F-C SAND AND GRAVEL (½") - ODOR, SATURATED	SM/GM		11.4		
				9.0					
10		1		NO RECOVERY			N/A		
12				12.0					
		4		OLIVE BROWN FINE SAND SOME GRAVEL - SATURATED - LIMITED RECOVERY, WASHED OUT	SM/GM		4.6		
14									

ADDITIONAL REMARKS

TEST BORING TB UST 3 — PAGE 2 OF 2

PROJECT NAME ESSEX/HOPE — PROJECT NO. 5040-11.21

LOCATION JAMESTOWN, NJ — GEOLOGIST KEITH DODRILL

BY KD — DRILLING CONTRACTOR NORTH VALLEY — DRILLER STEVE LOWERY

DATE 11-3-03 — DRILLING METHOD GEOPROBE — RIG TYPE CME 65

CHK BY _____ — DRILLING START DATE 11-3-03 — DRILLING COMPLETION DATE 11-3-03

DATE _____ — SURFACE ELEVATION _____ — STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14				OLIVE BROWN FINE SAND SOME GRAVEL	SM/GM		4.6		
				15.3					
				OLIVE BROWN SILTY CLAY - MOIST	CL		11.4		CONFINING LAYER
16				16.0					

ADDITIONAL REMARKS

TEST BORING TBUST 4

PAGE 1 OF 1

PROJECT NAME ESSEX/HOPE PROJECT NO. 604041.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODRILL

BY KD DRILLING CONTRACTOR NOTHNAGLE DRILLER STEVE LORENTY

DATE 11-3-03 DRILLING METHOD GEOPROBE RIG TYPE CME 85

CHK BY ______ DRILLING START DATE 11-3-03 DRILLING COMPLETION DATE 11-3-03

DATE ______ SURFACE ELEVATION ______ STICK-UP ELEVATION ______

DEPTH FEET	SOIL SAMPLE NO.	REC. (~~IN.~~ FT)	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0		3		REDDISH BROWN F-C SAND AND GRAVEL (½") SOME SILT - DAMP (1.0)	SW/GP		76.2	1.0	
				GREENISH GRAY SILT AND CLAY, LITTLE F-C SAND - MOIST, SLIGHT SEWAGE ODOR (2.0)	ML		11.2	2.0	
2				BROWN FINE SANDY SILT = MOIST - WET @ 2.5 FT (3.0)			7.5	3.0	
				NO RECOVERY (4.0)			N/A	4.0	
4		0.9		INTERBEDDED SILT, F-C SAND & FINE SAND - WET (4.9)	ML SP		7.7	4.9	LAB SAMPLE TBUST 4 (4-5 FT)
6				NO RECOVERY (8.0)			N/A		
8		2.6		TAN TO OLIVE BROWN F-C SAND AND GRAVEL (½") LITTLE SILT, MOIST TO WET SOME BLACK STAINING @ BASE (8.9)			17.4	8.9	
10				OLIVE GRAY F-C SAND AND GRAVEL (½") LITTLE SILT - SATURATED (10.6)	SW/GP		11.1	10.6	
				NO RECOVERY (12.0)			N/A	12.0	
12		1		GRAY SILT, LITTLE CLAY - MOIST (13.0)	ML		13.8	13.0	CONFINING CLAY ?
				TOTAL DEPTH RECOVERED					
14									

ADDITIONAL REMARKS

TEST BORING TBUST 5

PAGE 1 OF 1

PROJECT NAME ESSEX / MOBIL — PROJECT NO. 6040411.21

LOCATION JAMESTOWN, NJ — GEOLOGIST KEITH DODRILL

BY KD — DRILLING CONTRACTOR GEOPROBE — DRILLER STEVE CORNETT

DATE 11-3-03 — DRILLING METHOD GEOPROBE — RIG TYPE GMC 85

CHK BY ____ — DRILLING START DATE 11-3-03 — DRILLING COMPLETION DATE 11-3-03

DATE ____ — SURFACE ELEVATION ____ — STICK-UP ELEVATION ____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				REDDISH BROWN AND BLACK F-C SAND AND GRAVEL (½") SOME SILT - DAMP			16.4		
		3.8		1.9 GRAY TO BLACK SILT			15.2		
2				2.4 - MOIST, ODOR					
				BROWN SILT - MOIST			21.6		
				3.8 NO RECOVERY 4.0					
4				BROWN F-C SAND AND GRAVEL, SOME SILT - MOIST - SLIGHT FUEL ODOR			27.4		LAB SAMPLE TBUST5(4-6.2)
		3.2		6.2					
6				AS ABOVE, OLIVE BROWN - WET - FUEL ODOR			42.9		
				7.2 NO RECOVERY			N/A		
8				8.0					
				OLIVE BROWN F-C SAND AND GRAVEL (½") SOME SILT - SATURATED - FUEL ODOR			1,176		
10		2.6		10.6					
				NO RECOVERY			N/A		
12				12.0					
				12.3 AS ABOVE					
				OLIVE GRAY SILT - MOIST			1.7		
		0.7		12.7 TO WET - FUEL ODOR					CONFINING LAYER ?
				TOTAL DEPTH 12.7 FT					
14									

ADDITIONAL REMARKS

TEST BORING TBUST6 PAGE 1 OF 1

PROJECT NAME ESSEX/HOPE PROJECT NO. 80410.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODRILL

BY MD DRILLING CONTRACTOR NOTHNAGLE DRILLER STEVE LORENTZ

DATE 11-4-03 DRILLING METHOD GEOPROBE RIG TYPE CME 85

CHK BY _____ DRILLING START DATE 11-4-03 DRILLING COMPLETION DATE 11-4-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				BROWN F-C SAND, LITTLE SILT - DAMP	SM/GM		1.7		
2				2.3					
				NO RECOVERY			N/A		
4				4.0					
				BROWN-TAN SILT, TRACE FINE SAND AND GRAVEL (1/2") - DAMP	ML		7.6		
6				5.4					
				BROWN F-C SAND AND GRAVEL (1/2") SOME SILT - MOIST TO WET W/DEPTH	SM/GM		6.6		LAB SAMPLE TBUST6 (5.4-7.3)
				7.3					
				NO RECOVERY			N/A		
8				8.0					
				AS ABOVE, - SATURATED - ODOR - BLACK STAINING			912		LAB SAMPLE TBUST6 (8-10.1)
10				10.1					
				NO RECOVERY			N/A		
12				12.0					
				AS ABOVE - SATURATED - ODOR			313		
				13.3					
14				GRAY SILT - MOIST	ML		105		CONFINING LAYER

ADDITIONAL REMARKS

15.0
TOTAL DEPTH

RADIAN INTERNATIONAL

TEST BORING TBUST 7 — PAGE 1 OF 2

PROJECT NAME CSSX/110PI' — PROJECT NO. 80410411.21

LOCATION JAMESTOWN, NY — GEOLOGIST KEVIN DOOLITTLE

BY KD — DRILLING CONTRACTOR GEOMANAGE — DRILLER STEVE LORENTZ

DATE 11-11-03 — DRILLING METHOD GEOPROBE — RIG TYPE CMT 85

CHK BY _____ — DRILLING START DATE 11-11-03 — DRILLING COMPLETION DATE 11-11-03

DATE _____ — SURFACE ELEVATION _____ — STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN)	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0		FT		BROWN SILT TO GRAVEL (1/2) - DAMP					
		3.7					11.7		
-3									
				3.2 NO RECOVERY 4.0			N/A		
-4				BROWN F-C SAND AND SILT, SOME GRAVEL (1/2") - DAMP					
		3.0		SILT PERCENTAGE DECREASE WITH DEPTH			12.7		
-7				7.0 NO RECOVERY 8.0			N/A		
-8				BROWN F-C SAND AND GRAVEL (1/2") SOME SILT 8.9 - MOIST, ODOR			2,117		LAB SAMPLE TBUST 7 (8-8.9)
		2.5		AS ABOVE, GREENISH GRAY - WET - STRONG ODOR, SOME DK GRAY-BLACK STAINING 10.5			6,157		LAB SAMPLE TBUST 7 (8.9-10.5)
-10				NO RECOVERY 12.0			N/A		
-12				AS ABOVE, - SATURATED - NO ODOR			207		
		2.1							
-14									

ADDITIONAL REMARKS

RADIAN INTERNATIONAL

TEST BORING TB-UST 7

PAGE 2 OF 2

PROJECT NAME ESSEX/HOPE

PROJECT NO. 30

LOCATION [illegible]

GEOLOGIST [illegible]

BY [illegible]

DRILLING CONTRACTOR [illegible]

DRILLER [illegible]

DATE 11-11-03

DRILLING METHOD GEOPROBE

RIG TYPE [illegible] 85

CHK BY

DRILLING START DATE 11-11-03

DRILLING COMPLETION DATE 11-11-03

DATE

SURFACE ELEVATION

STICK-UP ELEVATION

DEPTH FEET	SOIL SAMPLE NO.	REC. ~~(IN.)~~ FT	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14				14.4 NO RECOVERY			N/A		
16				16.0 GREENISH GRAY F-C SAND AND GRAVEL (1/2"), SOME SILT - SATURATED 17.2			559		
18		1.2		NO RECOVERY			N/A		
20				20 AS ABOVE			40.5		
22		2.8		21.8 GRAY CLAYEY SILT - MOIST TO WET 22.8 TOTAL DEPTH RECOVERED			11.7		
24									

ADDITIONAL REMARKS

TEST BORING TBUST 8 — PAGE 1 OF 2

PROJECT NAME ESSEX/HOPE — PROJECT NO. 804041.21

LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DODRILL

BY KD — DRILLING CONTRACTOR NOTHNAGLE — DRILLER STEVE LORANTY

DATE 11-5-03 — DRILLING METHOD GEOPROBE — RIG TYPE CME 85

CHK BY ____ — DRILLING START DATE 11-5-03 — DRILLING COMPLETION DATE 11-5-03

DATE ____ — SURFACE ELEVATION ____ — STICK-UP ELEVATION ____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN) FT	BL/ 6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				ORANGISH BROWN SILT, SOME GRAVEL (½-1") AND F-C SAND - MOIST	ML		5.3		
		1.6		1.6					
2				NO RECOVERY			N/A		
4				4.0					
		2.5		ORANGISH BROWN SILT SOME GRAVEL (½-1") AND F-C SAND - MOIST	ML		5.1		
6				6.0					
				GREENISH GRAY F-C SAND 6.5 AND GRAVEL (½")			150		LAB SAMPLE TBUST 8 (6-6.5)
				SOME SILT - WET - ODOR NO RECOVERY 6.5-8 FT			N/A		
8				8.0					
		2.3		GREENISH GRAY F-C SAND AND GRAVEL (½") SOME SILT - SATURATED - SLIGHT ODOR	SM/GM	APPROX	5.9		
10				10.3					
				NO RECOVERY			N/A		
12				12.0					
		3.6		GREENISH GRAY F-C SAND AND GRAVEL (½") SOME SILT - SATURATED			35		
14									

ADDITIONAL REMARKS

TEST BORING TB 4ST 8 PAGE 2 OF 2

PROJECT NAME ESSEX/NIOPIC PROJECT NO. 80410411.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DOBRIN

BY KD DRILLING CONTRACTOR NOTHNAGLE DRILLER STEVE LOWMAN

DATE 11-5-03 DRILLING METHOD GEOPROBE RIG TYPE CME 85

CHK BY _____ DRILLING START DATE 11-5-03 DRILLING COMPLETION DATE 11-5-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL/ 6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14		FT		GREENISH GRAY F-C SAND AND GRAVEL (1/2")			35		
		3.6		SOME SILT					
				15.0 -SATURATED					
				GRAY SILTY CLAY			4.9		CONFINING LAYER
				15.6 -MOIST					
16				TOTAL DEPTH RECORDED					

ADDITIONAL REMARKS

TEST BORING TBUST 9

PAGE 1 OF 1

PROJECT NAME ESSEX / HOPE — PROJECT NO. 80410.11.21

LOCATION JAMESTOWN NY — GEOLOGIST KEITH DODGE, II

BY KD — DRILLING CONTRACTOR NOTHNAGLE — DRILLER STEVE LORANTY

DATE 11-5-03 — DRILLING METHOD GEOPROBE — RIG TYPE CME 85

CHK BY _____ — DRILLING START DATE 11-5-03 — DRILLING COMPLETION DATE 11-5-03

DATE _____ — SURFACE ELEVATION _____ — STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.) FT	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				CONCRETE (CORED)					
6				6.0 BROWN M-C SAND -MOIST 6.7	FILL			6.7	LAB SAMPLE TBUST9 (6.7-8.2)
8		2.2		GREENISH GRAY F-C SAND AND GRAVEL (1/2-1") SOME SILT -WET, SATURATED AT 8.0 FT -ODOR 8.2	SM/GM	APPROX	583	8.2	
10				NO RECOVERY 10.0			N/A		
12		0		NO RECOVERY (GRAVEL IN SAMPLE-)					
14				14.0				14	
		1.9		OLIVE BROWN F-C SAND SOME SILT AND GRAVEL (1/4-1/2") -SATURATED 15.0	SM		679	15	LAB SAMPLE TBUST9 (14-15)
16				GRAY SILTY CLAY -MOIST 15.9	CL		67.3	15.9	CONFINING LAYER

TOTAL DEPTH RECOVERED

ADDITIONAL REMARKS

TEST BORING TB UST 10 — PAGE 1 OF 2

PROJECT NAME ESSEX / HOPE — PROJECT NO. 8040411.21

LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DODGE

BY KD — DRILLING CONTRACTOR NOTHNAGLE — DRILLER STEVE LORENTZ

DATE 11-5-03 — DRILLING METHOD GEOPROBE — RIG TYPE CME 85

CHK BY ____ — DRILLING START DATE 11-5-03 — DRILLING COMPLETION DATE 11-5-03

DATE ____ — SURFACE ELEVATION ____ — STICK-UP ELEVATION ____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	~~STATIC~~ WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0		FT		CONCRETE 0.5 FT DK BROWN TO BLACK SILT AND F-C SAND, SOME GRAVEL (½") - DAMP 1.0	FILL	▼ TPDROX	3.3	1.0	
		1.9		DK BROWN SILT, TRACE FINE SAND - MOIST 1.9	ML		4.0	1.9	
2				NO RECOVERY			N/A		
4				4.0					
				4.3 AS ABOVE (1 TO 1.9)	ML			4.3	
				TAN SILTY CLAY - WET 5.3	CL		6.5	5.3	
6		3		BROWN F-C SAND AND GRAVEL (½"), SOME SILT - MOIST 7.0	SM/SW		64	7.0	LAB SAMPLE TBUST 10 (5.3-7 FT)
				NO RECOVERY 8.0			N/A	8.0	
8				8.6 AS ABOVE (5.3 TO 7)			746	8.6	
				GREENISH GRAY F-C SAND AND GRAVEL (½"), SOME SILT - SATURATED - ODOR 10.4			1,590	10.4	
10		2.4		NO RECOVERY			N/A		
12				12.0				12.0	
		3.6		GREENISH GRAY F-C SAND AND GRAVEL (½"), SOME SILT - SATURATED - SLIGHT ODOR			394		
14									

ADDITIONAL REMARKS

TEST BORING TBUST10 PAGE 2 OF 2

PROJECT NAME ESSEX/HOPE PROJECT NO. 804041.21

LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODIL, II

BY KD DRILLING CONTRACTOR NORTHWIND DRILLER STEVE LORANTY

DATE 11-5-03 DRILLING METHOD GEOPROBE RIG TYPE CMT 85

CHK BY _____ DRILLING START DATE 11-5-03 DRILLING COMPLETION DATE 11-5-03

DATE _____ SURFACE ELEVATION _____ STICK-UP ELEVATION _____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./ 6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14				14.2				14.2	
				GRAY SILTY CLAY - MOIST	CL		167		CONFINING LAYER
				15.6				15.6	
16				TOTAL DEPTH RECOVERED					

ADDITIONAL REMARKS

RADIAN INTERNATIONAL

TEST BORING TB UST 11

PROJECT NAME ESSEX/HOPE

PROJECT NO. [illegible]

LOCATION JAMESTOWN, NY

GEOLOGIST KEITH DOBSON [illegible]

BY KD

DRILLING CONTRACTOR NOTHNAGLE

DRILLER STEVE [illegible]

DATE 11-11-03

DRILLING METHOD GEOPROBE

RIG TYPE [illegible]

CHK BY

DRILLING START DATE 11-11-03

DRILLING COMPLETION DATE 11-11-03

DATE

SURFACE ELEVATION

STICK-UP ELEVATION

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./ 6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0				BROWN SILT - FILL			13.2		
				0.9 TAN F-C SAND, TRACE SILT - DAMP			2.9		
2		2.6		2.4 TAN SILT - MOIST			3.5		
				2.6 NO RECOVERY			N/A		
4				4.0 BROWN SILT - MOIST			4.7		
				4.7 TAN SILT - MOIST			3.0		
6		4		6.0 OLIVE BROWN F-C SAND AND GRAVEL (½-in) SOME SILT - MOIST			1.7		
8							20.8		
10		3.4		9.2 AS ABOVE - GREENISH GRAY - WET - SATURATED @ 10.0FT AND ODOR			4,066		LAB SAMPLE TBUST11 (9.2-11.4)
				11.4 NO RECOVERY			N/A		
12		1.0		12.0 AS ABOVE - ODOR			1,031		
				13.0 NO RECOVERY			N/A		
14									

ADDITIONAL REMARKS

RADIAN INTERNATIONAL

TEST BORING TB UST 11 — PAGE 2 OF 2

PROJECT NAME ESSEX/HOPE — PROJECT NO. 80410.21

LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DOWNEY

BY KD — DRILLING CONTRACTOR ADIRONDACK — DRILLER STEVE LONGWORTH

DATE 11-11-03 — DRILLING METHOD GEOPROBE — RIG TYPE CME 85

CHK BY ____ — DRILLING START DATE 11-11-03 — DRILLING COMPLETION DATE 11-11-03

DATE ____ — SURFACE ELEVATION ____ — STICK-UP ELEVATION ____

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN) FT	BL/6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14		0		NO RECOVERY			N/A		
				16.0					
16				AS ABOVE - SLIGHT ODOR			260		
				17.5					
18		4		GRAY CLAYEY SILT - MOIST TO WET			80		
20				20.0 TOTAL DEPTH					

ADDITIONAL REMARKS

RADIAN INTERNATIONAL

TEST BORING TBUST 12

PAGE 1 OF 2

PROJECT NAME ESSEX/MOPE | PROJECT NO. 804041.21

LOCATION JAMESTOWN, NY | GEOLOGIST KEITH DODRILL

BY KD | DRILLING CONTRACTOR NOTHNAGLE | DRILLER STEVE LORANTY

DATE 11-11-03 | DRILLING METHOD GEOPROBE | RIG TYPE CME-85

CHK BY | DRILLING START DATE 11-11-03 | DRILLING COMPLETION DATE 11-11-03

DATE | SURFACE ELEVATION | STICK-UP ELEVATION

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
0		FT		TURF, BROWN SILT -DAMP (0.5)			0.9		
				TAN F-C SAND, TRACE SILT -DAMP (2.0)			0.8		
2		2.6		TAN SILT -MOIST (2.6)			0.9		
				NO RECOVERY (4.0)			N/A		
4				OLIVE BROWN F-C SAND AND GRAVEL (1/2"), SOME SILT -MOIST					
6		3.6		-WET @ 7.0 FT (7.6)			1.0		
				NO RECOVERY (8.0)			N/A		
8				AS ABOVE -MOIST			1,141		LAB SAMPLE TBUST 12 (8-10)
10		2.6		-SATURATED @ 10 FT (10.6)		▼ APPROX	78		
				NO RECOVERY			N/A		
12		2.7		AS ABOVE -SATURATED			734		
14									

ADDITIONAL REMARKS

RADIAN INTERNATIONAL

TEST BORING TBUST 12

PROJECT NAME ESSEX/HOPE

PROJECT NO. 804041.21

LOCATION JAMESTOWN, NY

GEOLOGIST KEITH DODRILL

BY KD

DRILLING CONTRACTOR NOTHNAGLE

DRILLER STEVE LORANTY

DATE 11-11-03

DRILLING METHOD GEOPROBE

RIG TYPE CME 85

CHK BY

DRILLING START DATE 11-11-03

DRILLING COMPLETION DATE 11-11-03

DATE

SURFACE ELEVATION

STICK-UP ELEVATION

DEPTH FEET	SOIL SAMPLE NO.	REC. (IN.)	BL./6"	VISUAL CLASSIFICATION AND REMARKS	PROFILE	STATIC WATER LEVEL (FT)	OVA READING	DEPTH (FEET)	REMARKS
14				14.0 GRAY CLAYEY SILT - MOIST			3/		
				14.7 TOTAL DEPTH RECOVERED					
16									

ADDITIONAL REMARKS

URS

Job Essex Jamestown | Project No. 804041.21 | Page 1 of ____
Description UST Area | Computed by M. Dowiak | Date 11/4/03 | Sheet ____ of ____
Checked by ____ | Date ____
Reference

Field Headspace (PID)

MINI RAE 2000 (ppm)

Test Boring	Depth Interval, Ft	PID ppm	
TB UST 1			
	0-1.9	20.4	
	1.9-2.6	17.6	
	2.6-4.0	15.4	
1330	4-5.0	42.2	*
	5-6.5	57.1	
1340	6.5-8.0	550.	*
	8-9.6	2700	
	12-13.8	115	
CONFINING LAYER	15.4-16.	263	
TB UST 2.			
	0.-1.8	16.6.	
	1.8-2.6	46.6	
1400	4-4.5	75.9	*
	4.5-6.3	32.1	
	6.3-7.3	74.2.	
	8-8.5	67.1	
	8.5-10.5	97.3	
	10.5-10.9	22.8	
	12.3-16	24.8	

* Lab Sample

URS

Job Essex Jamestown | Project No. | Page 2 of ____

Description UST Area - HS. | Computed by M. Dowiak | Date 11/4/03

Checked by | Date

Test Boring	Depth, Ft	PID, ppm	Reference
TB UST 3	0-2	18.5	
	8-9	11.4	
	12	4.6	
CONFINING LAYER	16	11.4	
TB UST 4	0-1	26.2	
	1-2	11.2	
	2-3	7.5	
1300	4-5	7.7	*
	8-8.9	17.4	
	8.9-10.6	11.1	
CONFINING LAYER	12-13	13.8	
TB UST 5	0-1.9	16.4	
	1.9-2.4	15.2	
	2.4-4.0	21.6	
1600	4.0-6.2	274	*
	6.2-7.2	42.9	
	8-10.6	1176	
	12.3-12.7	112	
TB UST 6	0-2.3	1.7	
	4-5.4	2.6	
0800	5.4-7.3	6.6	
0810	8-10.1	912	*
	12-13.3	313	
CONFINING LAYER	13.3-15	405	

* Lab Sample

URS

Page ____ of ____

Job ESSEX/HODGE Project No. ____ Sheet ____ of ____

Description ____ Computed by ____ Date ____

UST AREA ____ Checked by ____ Date ____

Reference

FIELD HEADSPACE (PID)

MINI RAE 2000 (PPM)

TEST BORING		DEPTH (FT)	PID (PPM)	
TB UST 8		0-1.6	5.3	
		4-6	5.1	
	1030	6-6.5	150	*
		8-10.3	5.9	
		12-15	35	
		15-15.6	4.9	
TB UST 9	0930	6.7-8.9	583	*
	0940	14-15	629	* ✓
		15-15.9	67.3	
TB UST 10		0-1	3.3	
		1-1.9	4.0	
		4.3-5.3	6.5	
	0800	5.3-7	64	* ✓
		8-8.6	74.6	
		8.6-10.4	1590	
		12-14.2	394	
		14.2-15.6	167	

APPENDIX B

MONITORING WELL CONSTRUCTION LOGS

WELL COMPLETION LOG

PAGE 1 OF 1

WELL NO. MW-21D

HOLE NO. _____

PROJECT NAME ESSEX/HOPE — PROJECT NO. 50.10.11.21

BY KD — LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DODGE

DATE 11-11-03 — DRILLING CONTRACTOR WORTHINGTON — DRILLER STEVE LORAMY

CHK BY _____ — DRILLING METHOD 10¼" HSA / 6" DRIVEN CASING — RIG TYPE CME-85

DATE _____ — DRILLING FLUID WATER

DRILLING START DATE 11-10-03 — DRILLING COMPLETION DATE 11-11-03

INSTALLATIONS

ELEVATION / DEPTH DATA

GROUND SURFACE ELEV. _____

SURFACE PAD ELEV. _____

HOLE DEPTH _____

WELL DEPTH _____

WELL RISER (TOP) _____

PROTECTIVE CASING (TOP) _____

BOREHOLE DIMENSIONS

DIAMETER	DEPTH INTERVAL
12-IN	0-17 FT
4-IN	17-41.5 FT

PROTECTIVE CASING

TYPE FLUSH MOUNT

MATERIAL STEEL

DIAMETER 8-IN

DEPTH INTERVAL 0-1 FT

SURFACE PAD DIMENSIONS 18-IN DIA x 6-IN

OUTER CASING

MATERIAL SCH 40 PVC

DIAMETER 6-IN

JOINT TYPE FLUSH THREAD

DEPTH INTERVAL 0-17 FT

WELL RISER

MATERIAL SCH 40 PVC

DIAMETER 2-IN

JOINT TYPE FLUSH THREAD

DEPTH INTERVAL 0.5-31.5 FT

SCREEN

MATERIAL SCH 40 PVC

DIAMETER 2-IN

JOINT TYPE FLUSH THREAD

OPENINGS 0.01-IN

DEPTH INTERVAL 31.5-41 FT

BLANK CASING N/A

MATERIAL _____

DIAMETER _____

JOINT TYPE _____

DEPTH INTERVAL _____

BOTTOM CAP

MATERIAL SCH 40 PVC

TYPE FLUSH THREAD

DEPTH INTERVAL 41-41.5 FT

ANNULAR GROUT

INSTALL. METHOD TREMIE

MATERIAL CEMENT/BENT

MIX PROPORTIONS 94 lb PORTLAND, 5% BENTONITE, 6 GAL H2O

QUANTITIES _____

DEPTH INTERVAL 0-17 FT, 0.5-26.5 FT

ANNULAR SEAL

INSTALL. METHOD TREMIE

MATERIAL BENTONITE PELLETS

QUANTITY _____

DEPTH INTERVAL 26.5-29.5 FT

FILTER PACK

INSTALL. METHOD TREMIE

MATERIAL RICCI #00

QUANTITY _____

DEPTH INTERVAL 29.5-41.5 FT

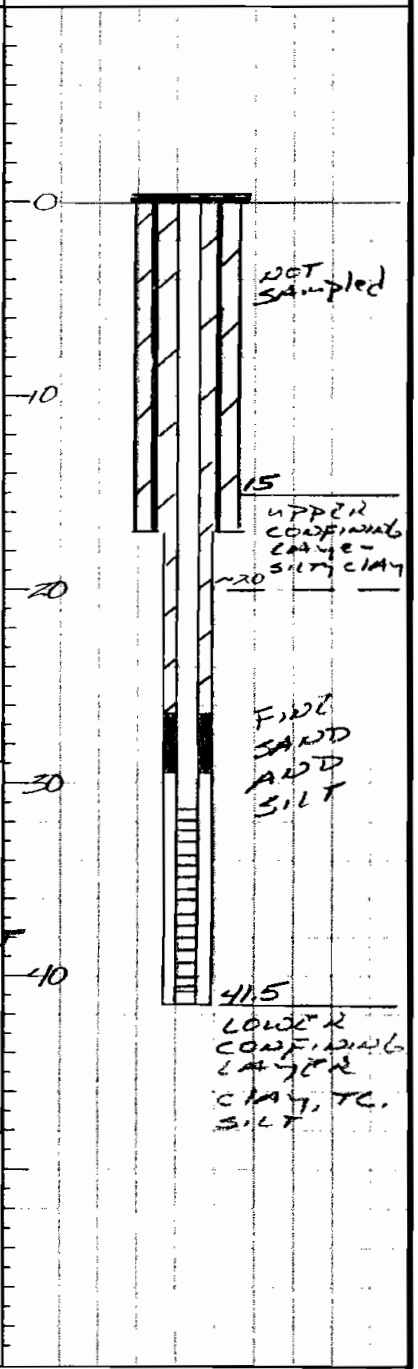
DEVELOPMENT

METHOD _____

TIME _____

PRODUCTION _____

WELL CONSTRUCTION SKETCH



ADDITIONAL INFORMATION:

CONFIRMATORY SAMPLES COLLECTED FROM 15-17 FT & 36-42 FT

FILE: \WELL-LOG

WELL COMPLETION LOG

PAGE 1 OF 1

WELL NO. MW-22D

HOLE NO. _____

PROJECT NAME ESSEX/HOPE PROJECT NO. 60-1041.21

BY KD LOCATION JAMESTOWN, NY GEOLOGIST KEITH DODRILL

DATE 11-6-03 DRILLING CONTRACTOR NORTHERN DRILLER STEVE CONKLIN

CHK BY _____ DRILLING METHOD 10 1/4" HSA/8" CASING RIG TYPE CME 75

DATE _____ DRILLING FLUID WATER

DRILLING START DATE 11-5-03 DRILLING COMPLETION DATE 11-6-03

INSTALLATIONS

ELEVATION / DEPTH DATA
GROUND SURFACE ELEV. _____
SURFACE PAD ELEV. _____
HOLE DEPTH 42.5
WELL DEPTH 42.5
WELL RISER (TOP) _____
PROTECTIVE CASING (TOP) _____

BOREHOLE DIMENSIONS

DIAMETER	DEPTH INTERVAL
12-IN	0 - 26 FT
4-IN	26 - 42.5 FT

PROTECTIVE CASING
TYPE FLUSH MOUNT
MATERIAL STEEL
DIAMETER 8-IN
DEPTH INTERVAL 0 - 1
SURFACE PAD DIMENSIONS 18-IN DIA x 6-IN

OUTER CASING
MATERIAL SCH 40 PVC
DIAMETER 6-IN
JOINT TYPE FLUSH THREAD
DEPTH INTERVAL 0.5 - 26 FT

WELL RISER
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
DEPTH INTERVAL 0.5 - 32.5 FT

SCREEN
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
OPENINGS 0.01-IN
DEPTH INTERVAL 32.5 - 42 FT

BLANK CASING N/A
MATERIAL _____
DIAMETER _____
JOINT TYPE _____
DEPTH INTERVAL _____

BOTTOM CAP
MATERIAL SCH 40 PVC
TYPE FLUSH THREAD
DEPTH INTERVAL 41.7 - 42.5 FT

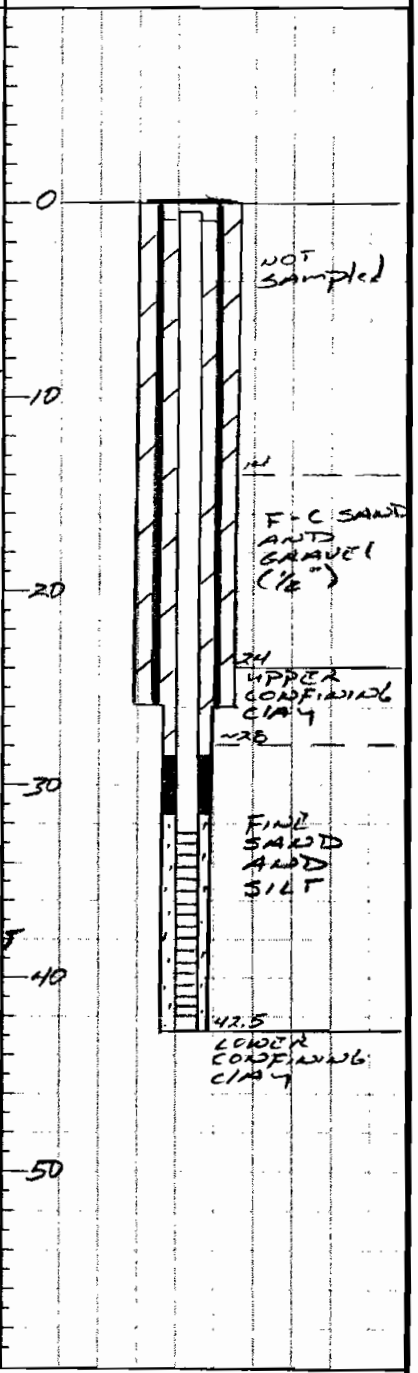
ANNULAR GROUT
INSTALL. METHOD TREMIE
MATERIAL CEMENT/BENT.
MIX PROPORTIONS 94 lb PORT LAND 5% BENT 6 GAL H_2O
QUANTITIES _____
DEPTH INTERVAL 0 - 26 FT
0 - 28.5 FT

ANNULAR SEAL
INSTALL. METHOD TREMIE
MATERIAL BENTONITE PELLETS
QUANTITY _____
DEPTH INTERVAL 28.5 - 31.5 FT

FILTER PACK
INSTALL. METHOD TREMIE
MATERIAL RICCI QDN
QUANTITY _____
DEPTH INTERVAL 31.5 - 42.5

DEVELOPMENT
METHOD _____
TIME _____
PRODUCTION _____

WELL CONSTRUCTION SKETCH



ADDITIONAL INFORMATION: CONFIRMATORY SPLIT SPOON SAMPLES COLLECTED FROM 14 TO 28 FT AND 36 TO 44 FT

FILE: \WELL-LOG

WELL COMPLETION LOG

PAGE 1 OF 1

WELL NO. MW-23 S

HOLE NO. ______

BY KD

DATE 11-7-03

CHK BY ______

DATE ______

PROJECT NAME ESSEX/HOPE

LOCATION JAMESTOWN, NY

DRILLING CONTRACTOR NOTHNAGLE

DRILLING METHOD 10 1/4 HSA / 4-in DRIVEN CASING

DRILLING FLUID WATER

DRILLING START DATE 11-7-03

PROJECT NO. 2041041.21

GEOLOGIST KEITH DODRILL

DRILLER STEVE LORENTY

RIG TYPE CME 85

DRILLING COMPLETION DATE 11-7-03

INSTALLATIONS

ELEVATION / DEPTH DATA

GROUND SURFACE ELEV. ______

SURFACE PAD ELEV. ______

HOLE DEPTH 15 FT

WELL DEPTH 15 FT

WELL RISER (TOP) ______

PROTECTIVE CASING (TOP) ______

BOREHOLE DIMENSIONS

DIAMETER	DEPTH INTERVAL
8-IN	0-15 FT

PROTECTIVE CASING

TYPE FLUSH MOUNT

MATERIAL STEEL

DIAMETER 8-IN

DEPTH INTERVAL 0-1

SURFACE PAD DIMENSIONS N/A (INSTALLED IN CONCRETE SLAB)

OUTER CASING N/A

MATERIAL ______

DIAMETER ______

JOINT TYPE ______

DEPTH INTERVAL ______

WELL RISER

MATERIAL SCH 40 PVC

DIAMETER 2-IN

JOINT TYPE FLUSH THREAD

DEPTH INTERVAL 0.5-5 FT

SCREEN

MATERIAL SCH 40 PVC

DIAMETER 2-IN

JOINT TYPE FLUSH THREAD

OPENINGS 0.01-IN

DEPTH INTERVAL 5-14.5 FT

BLANK CASING N/A

MATERIAL ______

DIAMETER ______

JOINT TYPE ______

DEPTH INTERVAL ______

BOTTOM CAP

MATERIAL SCH 40 PVC

TYPE FLUSH THREAD

DEPTH INTERVAL 14.5-15 FT

ANNULAR GROUT

INSTALL. METHOD BOREHOLE

MATERIAL CEMENT/BENT

MIX PROPORTIONS 94 lb PORTLAND, 5% BENT, 6 Gal H_2O

QUANTITIES ______

DEPTH INTERVAL 0-2 FT

ANNULAR SEAL

INSTALL. METHOD BOREHOLE

MATERIAL BENTONITE PELLETS

QUANTITY ______

DEPTH INTERVAL 2-4 FT

FILTER PACK

INSTALL. METHOD BOREHOLE

MATERIAL RICCI OON

QUANTITY ______

DEPTH INTERVAL 4 TO 15 FT

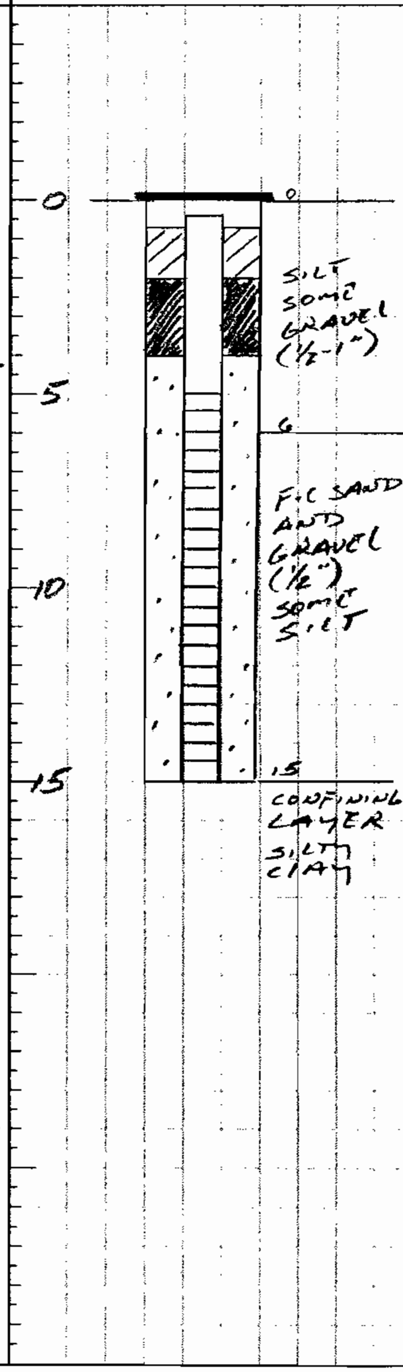
DEVELOPMENT

METHOD ______

TIME ______

PRODUCTION ______

WELL CONSTRUCTION SKETCH



ADDITIONAL INFORMATION:

FILE: \WELL-LOG

WELL COMPLETION LOG

WELL NO. MW-23D

HOLE NO. ____

BY KD

DATE 11-6-03

CHK BY ____

DATE ____

PROJECT NAME ESSEX/HOPE

PROJECT NO. 804011.21

LOCATION JAMESTOWN, NY

GEOLOGIST KEITH DODRILL

DRILLING CONTRACTOR NOTHNAGLE

DRILLER STEVE CORBETT

DRILLING METHOD 10 1/4 HSA/4" DRIVEN CASING

RIG TYPE CME 85

DRILLING FLUID WATER

DRILLING START DATE 11-4-03

DRILLING COMPLETION DATE 11-6-03

INSTALLATIONS

ELEVATION / DEPTH DATA
GROUND SURFACE ELEV. ____
SURFACE PAD ELEV. ____
HOLE DEPTH 38 - FT
WELL DEPTH 38 - FT
WELL RISER (TOP) ____
PROTECTIVE CASING (TOP) ____

BOREHOLE DIMENSIONS

DIAMETER	DEPTH INTERVAL
12-IN	0 - 19 FT
4-IN	19 - 38 FT

PROTECTIVE CASING
TYPE FLUSH MOUNT
MATERIAL STEEL
DIAMETER 8-IN
DEPTH INTERVAL 0 - 1 FT
SURFACE PAD DIMENSIONS 12-IN
(IN CONCRETE SLAB)

OUTER CASING
MATERIAL SCH 40 PVC
DIAMETER 6-IN
JOINT TYPE FLUSH THREAD
DEPTH INTERVAL 0.5 - 19 FT

WELL RISER
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
DEPTH INTERVAL 0.5 - 28 FT

SCREEN
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
OPENINGS 0.01-IN
DEPTH INTERVAL 28 - 37.5

BLANK CASING N/A
MATERIAL ____
DIAMETER ____
JOINT TYPE ____
DEPTH INTERVAL ____

BOTTOM CAP
MATERIAL SCH 40 PVC
TYPE FLUSH THREAD
DEPTH INTERVAL 37.5 - 38 FT

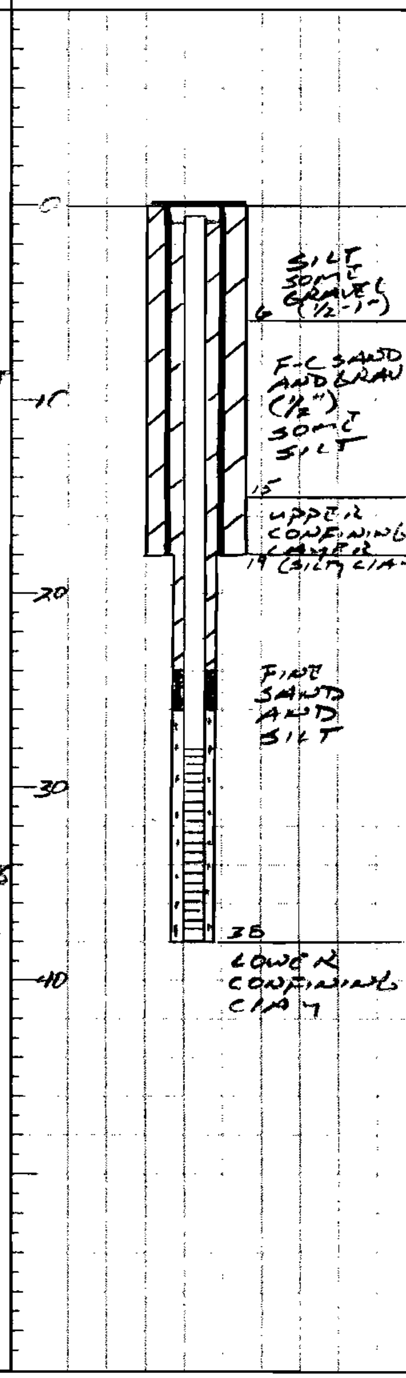
ANNULAR GROUT
INSTALL. METHOD TREMIE
MATERIAL CEMENT/BENT
MIX PROPORTIONS
94 lbs PORTLAND
5% BENT
6 Gal H_2O
QUANTITIES ____
DEPTH INTERVAL 0 - 19 FT
0 - 24 FT

ANNULAR SEAL
INSTALL. METHOD TREMIE
MATERIAL BENTONITE Pellets
QUANTITY ____
DEPTH INTERVAL 24 - 26 FT

FILTER PACK
INSTALL. METHOD TREMIE
MATERIAL RICCI 00N
QUANTITY ____
DEPTH INTERVAL 26 - 38 FT

DEVELOPMENT
METHOD ____
TIME ____
PRODUCTION ____

WELL CONSTRUCTION SKETCH



ADDITIONAL INFORMATION: CONFIRMATORY SPLIT SPOON SAMPLES collected FROM 15 TO 22 FT AND 36 TO 40 FT

WELL COMPLETION LOG

PAGE 1 OF 1

WELL NO. MW-24S
HOLE NO. TBUST 10

PROJECT NAME ESSEX/HOPE — PROJECT NO. 5040-11.21

BY KD — LOCATION JAMESTOWN, NY — GEOLOGIST KEITH DOOLITTLE

DATE 11-4-03 — DRILLING CONTRACTOR NOTHNAGLE — DRILLER STEVE LORENTY

CHK BY _____ — DRILLING METHOD 7¼ HSA — RIG TYPE CME 85

DATE _____ — DRILLING FLUID N/A

DRILLING START DATE 11-4-03 — DRILLING COMPLETION DATE 11-4-03

INSTALLATIONS

ELEVATION / DEPTH DATA
GROUND SURFACE ELEV. _____
SURFACE PAD ELEV. _____
HOLE DEPTH _____
WELL DEPTH _____
WELL RISER (TOP) _____
PROTECTIVE CASING (TOP) _____

BOREHOLE DIMENSIONS

DIAMETER	DEPTH INTERVAL
8-IN	0-15 FT

PROTECTIVE CASING
TYPE FLUSH MOUNT
MATERIAL STEEL
DIAMETER 8-IN
DEPTH INTERVAL 0-1 FT
SURFACE PAD DIMENSIONS N/A
IN CONCRETE SLAB

OUTER CASING N/A
MATERIAL _____
DIAMETER _____
JOINT TYPE _____
DEPTH INTERVAL _____

WELL RISER
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
DEPTH INTERVAL 0.5-5 FT

SCREEN
MATERIAL SCH 40 PVC
DIAMETER 2-IN
JOINT TYPE FLUSH THREAD
OPENINGS 0.01-IN
DEPTH INTERVAL 5-14.5 FT

BLANK CASING N/A
MATERIAL _____
DIAMETER _____
JOINT TYPE _____
DEPTH INTERVAL _____

BOTTOM CAP
MATERIAL SCH 40 PVC
TYPE FLUSH THREAD
DEPTH INTERVAL 14.5-15 FT

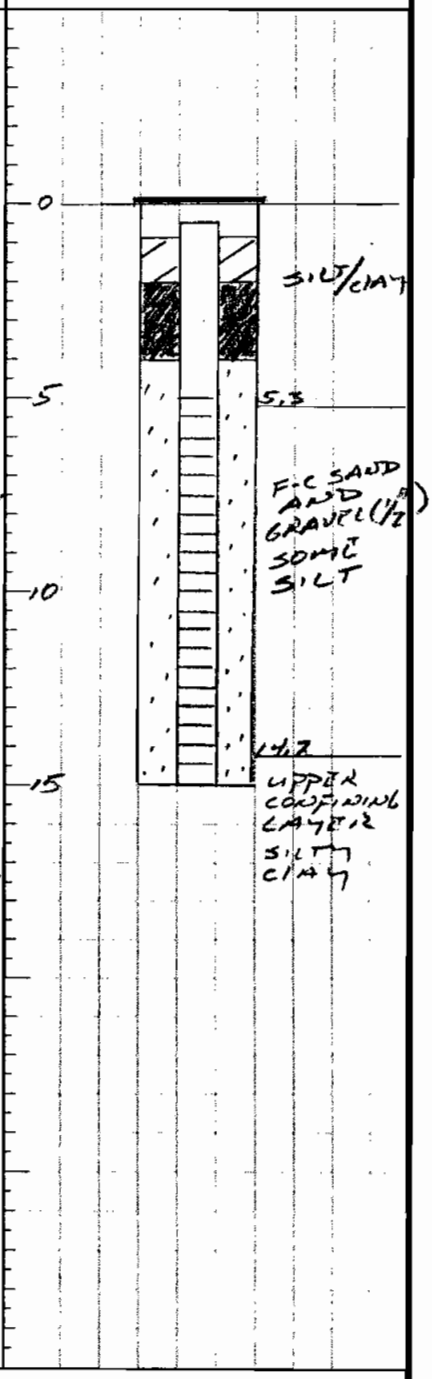
ANNULAR GROUT
INSTALL. METHOD BOREHOLE
MATERIAL CEMENT/BENTONITE
MIX PROPORTIONS 94 lbs PORTLAND
5% BENTONITE
6 Gal H₂O
QUANTITIES _____
DEPTH INTERVAL 0-2 FT

ANNULAR SEAL
INSTALL. METHOD BOREHOLE
MATERIAL BENTONITE PELLETS
QUANTITY _____
DEPTH INTERVAL 2-4 FT

FILTER PACK
INSTALL. METHOD BOREHOLE
MATERIAL RICCI #00
QUANTITY _____
DEPTH INTERVAL 4-15 FT

DEVELOPMENT
METHOD _____
TIME _____
PRODUCTION _____

WELL CONSTRUCTION SKETCH



ADDITIONAL INFORMATION:

FILE: \WELL-LOG

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX / HOPE	804041.21	MW-21D
Location:		**Date:**
JAMESTOWN, NY		11/12/03
Purging Method:	**Duration:**	**Personnel:**
SUBMERSIBLE PUMP		V. SIBETO
Depth of Well (TOC):	**Depth to Water (TOC):**	**Aquifer Yield (gpm):**

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(µS/cm)~~ mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1200	1210	PURGE / DEVELOP	~20	7.38	64	13.6	110	11.21	25	
1210	1220	"	~40	7.43	69	13.5	120	10.46	-12	
1220	1230	"	~60	7.52	71	13.7	180	10.64	-26	
1230	1240	"	~80	7.61	72	13.8	220	10.65	-36	
1240	1250	"	~100	7.66	72	13.7	290	10.71	-38	
1250	1305	"	~130	7.75	72	13.8	480	11.05	-41	
1305	1320	"	~160	7.73	71	13.9	990	10.88	-29	
1320	1335	"	~190	7.76	70	13.9	990	11.08	-39	
1335	1350	"	~220	7.77	69	14.2	990	11.59	-20	
1350	1400	↓	~240	7.77	70	14.1	990	11.63	-38	
	1400	COMPLETE DEVELOPMENT								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal)

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX/HOPE	804041.21	MW-22D
Location:		**Date:**
JAMESTOWN, NY		11/12/03
Purging Method:	**Duration:**	**Personnel:**
SUBMERSIBLE PUMP		USIBETO
Depth of Well (TOC):	**Depth to Water (TOC):**	**Aquifer Yield (gpm):**

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(µS/cm)~~ mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1000	1010	PURGE/ DEVELOP	~30	7.49	62	12.6	830	12.17	169	
1010	1020	↓	~60	7.46	62	12.2	120	10.67	177	
1020	1030	↓	~90	7.43	61	12.1	63	10.52	177	
1030	1040	↓	~120	7.42	61	12.2	36	10.38	180	
1040	1050	↓	~150	7.39	61	12.2	32	9.54	176	
1050	1055	↓	~165	7.30	61	12.2	27	9.63	174	
1055	1100	↓	~180	7.22	61	12.3	38	9.86	165	
	1100	COMPLETE DEVELOPMENT								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal)

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING RECORD

Project: ESSEX/HOPE	Project No: 8040411.21	Well No: MW-233
Location: JAMESTOWN, NY		Date: 11-11-03
Purging Method: PUMP	Duration:	Personnel: KEITH DODIL LL
Depth of Well (TOC): 15 FT	Depth to Water (TOC):	Aquifer Yield (gpm):

Time From	Time To	Gallons	pH	Cond ~~(µS/cm)~~ mS/m	Temp (°C)	Turbidity (NTU)	Remarks
1710	1730			~~mS/m~~ (V>)			PUMP
1730		20	7.15	92	14.4	78	DO = 14.59 mS/L ORP = 122 mV
1745 1730	1800 1740						RECHARGE
1800	1820						PUMP
1820		40	7.26	90	14.8	36	DO = 14.68 MS/L ORP = 2
1820	1835						RECHARGE
1835	1845						PUMP
1845		50	7.46	90	14.7	180	DO = 15.43 MS/L ORP = 100
1845	1710						PUMP
1710		75	7.53	90	14.8	34	DO = 14.68 MS/L ORP = -12

Notes:

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	Project No: 804041.21	Well No: MW-23D
Location: JAMESTOWN, NY		Date: 11/12/03
Purging Method: SUBMERSIBLE PUMP	Duration:	Personnel: V. SIBETO
Depth of Well (TOC):	Depth to Water (TOC):	Aquifer Yield (gpm):

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(µS/cm)~~ mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
0740	0754	PURGE/	~20	7.59	71	12.7	990	15.55	-79	
0754	0803	DEVELOP	~40	7.56	72	12.6	990	14.94	-96	
0803	0815	"	~60	7.55	73	12.5	450	14.76	-108	
0815	0829	"	~95	7.52	73	12.6	340	14.82	-101	
0829	0840	"	~125	7.45	74	12.7	250	15.02	-103	
0840	0900	"	~160	7.35	74	12.7	250	14.66	-100	
0900	0919	"	~185	7.26	74	12.9	220	15.48	-99	
0919	0930	"	~205	7.43	74	12.7	190	14.47	-108	
0930	0940	"	~220	7.45	73	12.7	170	14.83	-110	
	0940	COMPLETE DEVELOPMENT								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal)

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING RECORD

Project:	Project No:	Well No:
ESSEX/MOPC	804041.21	MW-245
Location:		**Date:**
JAMESTOWN NY		11-11-03
Purging Method:	**Duration:**	**Personnel:**
PUMP	2 HR	K. DODGE, II
Depth of Well (TOC):	**Depth to Water (TOC):**	**Aquifer Yield (gpm):**
15 FT		

Time							
From	To	Gallons	pH	Cond ~~(µS/cm)~~	Temp (°C)	Turbidity (NTU)	Remarks
1500	1550			MS/cm			PUMP
1550		50	6.94	41	14	150	DO = 13.53 mg/L ORP = (-) 62 mV
1610		60	6.98	42	14.2	110	DO = 14.45 mg/L ORP = (-) 96 mV
1620		65	6.92	42	14.1	140	1620-1630 RECHARGE DO = 14.10 mg/L ORP = (-) 73 mV
1640		70	6.92 ~~7.05~~ KD	41	14.2	280	DO = 14.78 mg/L ORP = (-) 66
1645		73	6.95	42	14.6	77	DO = 14.53 mg/L ORP = (-) 75 mV
1655		80	6.96	43	14.4	67	DO = 15.46 mg/L ORP = (-) 74 mV

Notes:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Page: [illegible] **of** [illegible]

Section A
Required Client Information.

Company	[illegible]
Address	[illegible]
	[illegible]
	[illegible]
Phone [illegible]	Fax [illegible]

Section B
Required Client Information:

Report To:	[illegible]
Copy To:	
Invoice To:	[illegible]
P.O.	
Project Name:	[illegible]
Project Number:	[illegible]

Client Information (Check quote/contract):

Requested Due Date: *TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

Section C
To Be Completed by Pace Analytical and Client

Quote Reference:	
Project Manager:	
Project #:	
Profile #:	
Requested Analysis:	[illegible]

Section D
Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis	Remarks / Lab ID
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									X	
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									X	
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									X	
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									X	
5															
6															
7															
8															
9															
10															
11															
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
[illegible]	[illegible]	[illegible]	[illegible]

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[illegible]	[illegible]	[illegible]			

SAMPLE CONDITION

Temp in °C	
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible]

DATE Signed: (MM / DD / YY) [illegible]

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX/HOPE	801419	MW-2
Location:		**Date:**
JAMESTOWN, NY		11/11/03
Purging Method:	**Duration:**	**Personnel:**
PROACTIVE PUMP	~30 MIN	V. SIBETO
Depth of Well (TOC):	**Depth to Water (TOC):**	**Aquifer Yield (gpm):**
14.90'	9.06'	~0.25 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (µS/cm) mS/in	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1144	1148	PURGE	~1.0	6.80	77	15.3	490	1.04	-57	
1148	1152	↓	~2.0	6.58	83	15.3	90	0.00	-62	
1152	1156	↓	~3.0	6.49	83	15.3	30	0.00	-63	
1156	1200	↓	~4.0	6.46	83	15.3	20	0.00	-64	
1200	1204	↓	~5.0	6.44	83	15.3	20	0.00	-65	
1204	1208	↓	~6.0	6.43	83	15.3	26	0.00	-66	
1210	-	SAMPLE								
		V. STRONG ODOR								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) = 0.95 x 1 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX / HOPE	Project No: 801419	Well No: MW-6
Location: JAMESTOWN, NY		Date: 11/11/03
Purging Method: PROACTIVE PUMP	Duration: ~35 MIN	Personnel: V. SIBETO
Depth of Well (TOC): 17.79'	Depth to Water (TOC): 8.62'	Aquifer Yield (gpm): ~0.25 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(µS/cm)~~ mS/M	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
0907	0913	PURGE	~1.5	6.86	43	15.1	120	1.87	207	
0913	0919	↓	~3.0	6.75	43	15.3	22	2.13	90	
0919	0925	↓	~4.5	6.72	43	15.3	11	2.18	86	
0925	0931	↓	~6.0	6.72	42	15.2	14	2.13	98	
0931	0937	↓	~7.5	6.72	42	15.2	13	2.19	102	
0940	-	SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) ≈1.5 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX / HOPE	Project No: 801419	Well No: MW-7S
Location: JAMESTOWN, NY		Date: 11/11/03
Purging Method: PROACTIVE PUMP	Duration:	Personnel: V. SIBETO
Depth of Well (TOC): 18.90'	Depth to Water (TOC): 8.36'	Aquifer Yield (gpm): ~0.5 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(mS/cm)~~ mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1301	1305	PURGE	~2.0	6.67	24	15.6	49	0.00	136	
1305	1309	"	~4.0	6.59	24	15.5	34	0.00	134	
1309	1324	RECOVER								
1324	1328	PURGE	~6.0	6.53	27	15.6	140	7.73	182	
1328	1332	"	~8.0	6.54	25	15.5	41	1.85	179	
1332	1347	RECOVER								
1347	1351	PURGE	~10.0	6.54	28	15.5	59	6.85	196	
1355	-	SAMPLE								
		WELL PURGED DRY AND ALLOWED TO								
		RECOVER AT ABOVE INTERVALS.								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) $\approx 1.7 \approx 2$ GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	**Project No:** 801419	**Well No:** MW-7D
Location: JAMESTOWN, NY		**Date:** 11/13/03
Purging Method: PROACTIVE PUMP	**Duration:**	**Personnel:** V. SIBETO
Depth of Well (TOC): 43.61'	**Depth to Water (TOC):** 9.94'	**Aquifer Yield (gpm):** ~1.0-1.25 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (µS/cm) mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
0838	0843	PURGE	~5.5	7.55	71	12.8	68	0.00	-118	
0843	0848	↓	~11.0	7.50	67	12.8	27	0.00	-116	
0848	0853	↓	~16.5	7.44	67	12.8	28	0.00	-115	
0853	0858	↓	~22.0	7.36	67	12.8	1	0.00	-113	
0858	0903	↓	~27.5	7.36	67	12.8	17	0.00	-114	
0903	0908	↓	~33.0	7.34	66	12.8	20	0.00	-115	
0910	—	SAMPLE								
		DUP-01 TAKEN								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) ≈ 5.5 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	**Project No:** 801419	**Well No:** MW-8
Location: JAMESTOWN, NY		**Date:** 11/11/03
Purging Method: PROACTIVE PUMP	**Duration:** ~30 MIN	**Personnel:** V. SIBETO
Depth of Well (TOC): 29.74'	**Depth to Water (TOC):** 10.10'	**Aquifer Yield (gpm):** ~0.75 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond ~~(µS/cm)~~ mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1009	1013	PURGE	~3.0	7.25	56	12.7	40	0.00	125	
1013	1017	↓	~6.0	7.28	56	12.7	31	0.00	5	
1017	1021		~9.0	7.36	56	12.6	16	0.00	-42	
1021	1025		~12.0	7.40	56	12.6	13	0.00	-54	
1025	1029		~15.0	7.43	56	12.6	12	0.00	-60	
1029	1033		~18.0	7.45	56	12.6	12	0.00	-65	
1035	—	SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) ≈ 3.2 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX/HOPE	801419	MN-145
Location:		**Date:**
JAMESTOWN, NY		11/12/03
Purging Method:	**Duration:**	**Personnel:**
PROACTIVE PUMP		V. SIBETO
Depth of Well (TOC): 22.90	**Depth to Water (TOC):** 12.70	**Aquifer Yield (gpm):** ~0.5 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (~~µS/cm~~ mS/m)	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1514	1518	PURGE	~2.0	7.25	0.09	13.9	23	2.80	99	
1518	1522	↓	~4.0	7.32	87	13.7	15	0.65	72	
1522	1526	↓	~6.0	7.37	86	13.6	13	0.00	63	
1526	1546	RECOVER								
1546	1550	PURGE	~8.0	7.52	88	13.6	18	1.43	123	
1550	1605	RECOVER								
1605	1609	PURGE	~10.0	7.47	90	13.5	8	2.95	152	
1610		SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) = 1.7 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	Project No: 801419	Well No: MW-14D
Location: JAMESTOWN, NY		Date: 11/10/03
Purging Method: PROACTIVE PUMP	Duration: 35 MIN	Personnel: V. SIBETO
Depth of Well (TOC): ~40'	Depth to Water (TOC): 12.54	Aquifer Yield (gpm): ~0.75-1.0 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (mS/cm) ~~(µS/cm)~~	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1402	1405	PURGE	~4.5	7.18	77	12.2	8	0.00	-97	
1405	1410	↓	~9.0	7.30	76	12.2	6	0.00	-106	
1410	1416	↓	~13.5	7.36	75	12.1	6	0.00	-110	
1416	1422	↓	~18.0	7.39	74	12.1	6	0.00	-113	
1422	1428	↓	~22.5	7.40	74	12.1	6	0.00	-115	
1428	1434	↓	~27.0	7.41	74	12.1	6	0.00	-116	
1435	—	SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48 = 1$ Casing Volume (gal) $\approx$ 4.5 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	**Project No:** 801419	**Well No:** MW-15S
Location: JAMESTOWN, NY		**Date:** 11/10/03
Purging Method: PROACTIVE PUMP	**Duration:** ~ 40 MIN	**Personnel:** V. SIBETO
Depth of Well (TOC): 21.60'	**Depth to Water (TOC):** 13.45'	**Aquifer Yield (gpm):** ~0.25 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (~~µS/cm~~ mS/m)	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1520	1526	PURGE	~1.5	6.93	83	13.8	18	1.60	49	
1526	1532	↓	~3.0	6.83	83	Ø 13.8	9	0.22	34	
1532	1538	↓	~4.5	6.77	83	13.8	7	0.43	22	
1538	1544	↓	~6.0	6.74	83	13.9	6	0.61	39	
1544	1550	↓	~7.5	6.73	83	13.9	5	1.46	48	
1550	1556	↓	~9.0	6.74	83	13.8	5	1.92	57	
1600	–	SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) ≈ 1.3 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project: ESSEX/HOPE	**Project No:** 801419	**Well No:** MW-15D
Location: JAMESTOWN, NY		**Date:** 11/12/03
Purging Method: PROACTIVE PUMP	**Duration:**	**Personnel:** V. SIBETO
Depth of Well (TOC): 46.30'	**Depth to Water (TOC):** 13.07'	**Aquifer Yield (gpm):** ~1.0 - 1.5 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (µS/cm) mS/m	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1637	1642	PURGE	~5.5	7.50	96	12.9	24	0.00	-113	
1642	1647	↓	~11.0	7.53	96	11.8	140	0.00	-110	
1647	1652	↓	~16.5	7.54	96	11.8	460	0.00	-109	
1652	1657	↓	~22.0	7.55	95	11.9	660	0.53	-102	
~~1657~~	1707	RECOVER								
1707	1712	PURGE	~27.5	7.55	95	11.9	400	0.85	-81	
1715	-	SAMPLE								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) = 5.5 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX/HOPE	801419	MW-19D
Location:		**Date:**
JAMESTOWN, NY		11/12/03
Purging Method:	**Duration:**	**Personnel:**
PROACTIVE PUMP		V. SIBETO
Depth of Well (TOC): 39.45'	**Depth to Water (TOC):** 11.50'	**Aquifer Yield (gpm):** ~0.75-1 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (mS/cm)	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1415	1420	PURGE	~5.0	7.26	0.12	12.6	-10	0.00	-92	
1420	1425	↓	~10.0	7.25	0.12	12.6	970	0.00	-87	
1425	1430	↓	~15.0	7.19	0.11	12.4	990	0.00	-78	
1430	1435	↓	~20.0	7.16	0.11	12.3	990	0.00	-74	
1435	1440	↓	~25.0	7.13	0.11	12.3	990	0.00	-74	
1440	1445	↓	~30.0	7.12	0.11	12.3	990	0.00	-73	
—	1445	SAMPLE								
		SOLID PPT IN WATER, ALSO STRONG ODOR				HEAVY	CLAY/SILT			

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) = 4.5 GAL

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

WELL PURGING/FIELD MEASUREMENT RECORD

Project:	Project No:	Well No:
ESSEX/HOPE	801419	MW-20
Location:		**Date:**
JAMESTOWN, NY		11/11/03
Purging Method:	**Duration:**	**Personnel:**
PROACTIVE PUMP		V. SIBETO
Depth of Well (TOC): 11.55	**Depth to Water (TOC):** 7.96'	**Aquifer Yield (gpm):** ~0.25 GPM

Time From	Time To	Action	Vol (gal)	pH	Cond (~~µS/cm~~ mS/m)	Temp (°C)	Turb (NTU)	DO (mg/L)	ORP (mV)	
1442	1445	PURGE	~0.75	6.46	34	15.6	32	0.00	-44	
1445	1458	RECOVER								
1458	1501	PURGE	~1.5	6.40	35	15.6	14	0.00	-47	
1501	1515	RECOVER								
1515	1518	PURGE	~2.25	6.43	35	15.5	17	0.00	-49	
1518	1535	RECOVER								
1535	-	SAMPLE								
		*EXTREMELY STRONG ODOR								
		WELL PURGED DRY AND ALLOWED TO RECOVER								
		@ ABOVE INTERVALS								

Notes:

Well Casing Volume Calculation: $[3.14*(r)^2*(H)]*7.48$ = 1 Casing Volume (gal) = 0.58

Where: r = Well Radius (ft) [2-in well = 0.083-ft; 4-in well = 0.166-ft; 6-in well = .025-ft]
H = Water Column Height (ft) = (Total Depth - Depth to Water)

APPENDIX C

LAB CHEMICAL ANALYSES REPORTS

Pace Analytical®
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5203 Triangle Lane
Export, PA 15632
Phone: 724.733.1161
Fax: 724.327.7793

January 6, 2004

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on December 19, 2003. Please reference Pace project number 03-5467 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0312-1986	MW-23D ✓
0312-1987	MW-23S ✓
0312-1988	MW-21D ✓
0312-1989	MW-19D ✓

Pace Sample Identification	Client Sample Identification
0312-1990	VP-6D ✓
0312-1991	MW-15D ✓
0312-1992	GP-3D ✓

General Comments: Cooler temperature 6 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E Sylvester

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1986**
Client Sample ID: MW-23D
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	320	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	14	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	0.31	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	7.20	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	33	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	100	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	25	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	4.8	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	24	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	1.1	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

(Continued)

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Lab Sample ID: **0312-1986**
Client Sample ID: MW-23D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	7.1	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	69	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	220	2.0	ug/l	MAK	12/29/2003	0026906-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1987**
Client Sample ID: MW-23S
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	300	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	72	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	6.89	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	11	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	110	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	9.2	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	3.4	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	35	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	9.9	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

(Continued)

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Lab Sample ID: **0312-1987**
Client Sample ID: MW-23S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	57	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	400	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/29/2003	0026906-1	<2.0
m,p-Xylene	8260B[2]	1700	20	ug/l	MAK	12/30/2003	0026945-1	<5.0
o-Xylene	8260B[2]	350	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1988**
Client Sample ID: MW-21D
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	280	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	37	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	0.74	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	7.91	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	27	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	49	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	11	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	2.8	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	81	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.1	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	760	100	ug/l	MAK	12/30/2003	0026945-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

(Continued)

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Lab Sample ID: 0312-1988
Client Sample ID: MW-21D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	630	100	ug/l	MAK	12/30/2003	0026945-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	41000	5000	ug/l	MAK	12/30/2003	0026945-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	370	100	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	21	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	300000	5000	ug/l	MAK	12/30/2003	0026945-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	5800	200	ug/l	MAK	12/30/2003	0026945-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1989**
Client Sample ID: MW-19D
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	660	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	27	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	0.31	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	7.08	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	260	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	92	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	13	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	76	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.1	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026945-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/30/2003	0026945-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026945-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0

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Lab Sample ID: **0312-1989**
Client Sample ID: MW-19D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026945-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026945-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Trichloroethene	8260B[2]	16	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
Vinyl chloride	8260B[2]	1400	20	ug/l	MAK	12/30/2003	0026945-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026945-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1990**
Client Sample ID: VP-6D
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	360	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	17	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	0.27	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	6.91	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	94	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	20	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	1.6	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	12	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	3.8	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

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Lab Sample ID: **0312-1990**
Client Sample ID: VP-6D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	7.7	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	6.8	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	120	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	2.3	2.0	ug/l	MAK	12/29/2003	0026906-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1991**
Client Sample ID: MW-15D
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	260	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2[1]	36	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	0.31	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2[2]	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1[1]	7.65	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4[1]	180	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	100	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B[2]	36	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B[2]	8.8	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B[2]	130	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	2.7	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B[2]	1.2	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0312-1991
Client Sample ID: MW-15D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	57	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	6600	50	ug/l	MAK	12/30/2003	0026945-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	78	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	650	50	ug/l	MAK	12/30/2003	0026945-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	380	100	ug/l	MAK	12/30/2003	0026945-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5467**
Lab Sample ID: **0312-1992**
Client Sample ID: GP-3D
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	480	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	19	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	7.75	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	12	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	220	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0
Magnesium	6010B(2)	58	0.20	mg/l	CS0	12/23/2003	0026731-1	<0.20
Potassium	6010B(2)	11	0.50	mg/l	CS0	12/23/2003	0026731-1	<0.50
Sodium	6010B(2)	76	1.0	mg/l	CS0	12/23/2003	0026731-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.0	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	1.3	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

(Continued)

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Lab Sample ID: **0312-1992**
Client Sample ID: GP-3D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	1300	10	ug/l	MAK	12/30/2003	0026945-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	320	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	720	20	ug/l	MAK	12/30/2003	0026945-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

729107

Page: 1 of 1

Section A — Required Client Information:

Company	URS Corp
Address	4955 Steubenville Pike
	St 350
	Pittsburgh PA 15205
Phone	
Fax	

Section B — Required Client Information:

Report To:	Mark Dowiak
Copy To:	N/A
Invoice To:	N/A
P.O.	
Project Name:	Essex / Hope
Project Number:	3404?.21

Client Information (Check quote/contract):

Requested Due Date: | *TAT: per quote

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:	
Project Manager:	
Project #:	03 5467
Profile #:	

Requested Analysis: Al-Alk; 8260B; Fe+2; Nitrate E353.2; Sulfate E300.1; Chloride E300.1; SW6010 major cations; SW9060 TOC

Section D — Required Client Information:

SAMPLE ID

One character per box. (A–Z, 0–9 / .-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	Sample ID	Matrix Code	Date Collected (mm/dd/yy)	Time Collected (hh:mm a/p)	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Al-Alk	8260B	Fe+2	Nitrate E353.2	Sulfate E300.1	Chloride E300.1	SW6010 major cations	SW9060 TOC	Remarks / Lab ID
1	MW-230	WT	12/17/03	1645	7	X	X	X	X					X	X	X	X	X	X	X	X	0312 1986
2	MW-235	WT	12/17/03	1600	7									X	X	X	X	X	X	X	X	1987
3	MW-210	WT	12/17/03	0900	7									X	X	X	X	X	X	X	X	1988
4	MW-190	WT	12/17/03	1145	7									X	X	X	X	X	X	X	X	1989
5	VP-60	WT	12/17/03	1325	7									X	X	X	X	X	X	X	X	1990
6	MW-150	WT	12/17/03	1515	7	X	X	X	X					X	X	X	X	X	X	X	X	1991
7	GP-30	WT	12/18/03	1715	7	X	X	X	X					X	X	X	X	X	X	X	X	1992
8																						
9																						
10																						
11																						
12																						

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed Ex	339669029066	12/13/03	3		[signature] URS	12/13/03	1920	James [signature]	12/19	3:00

SAMPLE CONDITION

Temp in °C	6
Received on Ice	Y/N (Y circled)
Sealed Cooler	Y/N (N circled)
Samples Intact	Y/N (Y circled)

SAMPLE NOTES

~~Cooler #175~~ TP

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: John Paul Daniel

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 12/13/03

Additional Comments:

2

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

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January 6, 2004

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on December 19, 2003. Please reference Pace project number 03-5462 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0312-1960	GP-2S
0312-1961	GP-2D
0312-1962	MW-20

Pace Sample Identification	Client Sample Identification
0312-1963	GP-3S
0312-1964	RW-5S
0312-1965	HW-6

General Comments: Cooler temperature 6 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1960**
Client Sample ID: GP-2S
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	63	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2[1]	1.5	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.14	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2[2]	0.38	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1[1]	6.81	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4[1]	<10	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	27	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B[2]	2.8	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B[2]	1.4	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B[2]	1.3	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	<1.0	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B[2]	<1.0	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

(Continued)

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Lab Sample ID: 0312-1960
Client Sample ID: GP-2S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/30/2003	0026950-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1961**
Client Sample ID: GP-2D
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	380	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	22	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	7.33	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	<10	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	1500	10	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	610	2.0	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	54	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	30	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	6.2	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B(2)	240	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

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Lab Sample ID: 0312-1961
Client Sample ID: GP-2D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	28	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	2700	50	ug/l	MAK	12/31/2003	0026970-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	240	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	230	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	1700	100	ug/l	MAK	12/31/2003	0026970-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1962**
Client Sample ID: MW-20
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	180	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	2.4	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	1.5	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.51	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	<10	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	43	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	4.0	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	0.97	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	2.5	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	11	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	31	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

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Lab Sample ID: **0312-1962**
Client Sample ID: MW-20

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	340	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	2600	50	ug/l	MAK	12/31/2003	0026970-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	14	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	1700	50	ug/l	MAK	12/31/2003	0026970-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	7.5	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/30/2003	0026950-1	<2.0
m,p-Xylene	8260B[2]	20000	100	ug/l	MAK	12/31/2003	0026970-1	<5.0
o-Xylene	8260B[2]	2000	50	ug/l	MAK	12/31/2003	0026970-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1963**
Client Sample ID: GP-3S
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	43	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	1.8	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.45	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	0.43	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.12	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	22	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	24	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	3.9	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	3.1	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	1.9	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	1.8	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

(Continued)

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Lab Sample ID: 0312-1963
Client Sample ID: GP-3S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/30/2003	0026950-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1964**
Client Sample ID: RW-5S
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	87	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2[1]	2.0	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.22	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2[2]	0.12	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1[1]	6.50	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4[1]	12	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	30	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B[2]	2.5	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B[2]	1.2	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B[2]	3.7	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	2.3	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B[2]	<1.0	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

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Lab Sample ID: 0312-1964
Client Sample ID: RW-5S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/30/2003	0026950-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5462**
Lab Sample ID: **0312-1965**
Client Sample ID: HW-6
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	310	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	4.8	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	0.35	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.82	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	11	10	mg/l	TES	01/05/2004	0027022-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	94	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	12	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	1.9	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	6.2	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.0	1.0	mg/l	CMS	12/29/2003	0026976-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/30/2003	0026950-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

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Client Sample ID: HW-6

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Cumene	8260B[2]	43	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1-Dichloroethene	8260B[2]	9.6	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	2900	50	ug/l	MAK	12/31/2003	0026970-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	24	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Ethylbenzene	8260B[2]	12	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/30/2003	0026950-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichloroethene	8260B[2]	110	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
Vinyl chloride	8260B[2]	1400	100	ug/l	MAK	12/31/2003	0026970-1	<2.0
m,p-Xylene	8260B[2]	87	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0
o-Xylene	8260B[2]	13	5.0	ug/l	MAK	12/30/2003	0026950-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Section A
Required Client Information:

Company: URS Corp
Address: 4955 Steubenville Pike, St 750, Pittsburgh PA 15205
Phone:
Fax:

Section B
Required Client Information:

Report To: MARK POWIAK
Copy To: A/A
Invoice To: A/A
P.O.:
Project Name: Essex/Hope
Project Number: 804041.21

Client Information (Check quote/contract):
Requested Due Date:
*TAT: Per quote

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Section C
To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #: 035462
Profile #:

Section D
Required Client Information:

SAMPLE ID
One character per box. (A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: pH-Alk; E300B; Fe+2; Nitrate E353.2; Sulfate E300.1; Chloride E300.1; SW6010 metals; SW9060 TOC

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis	Remarks / Lab ID
1	GP-25	WT	12/13/03	1400	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	0312 1960
2	GP-20	WT	12/13/03	1600	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1961
3	MW-20	WT	12/13/03	1245	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1962
4	GP-35	WT	12/13/03	1625	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1963
5	RW-55	WT	12/13/03	0930	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1964
6	HW-6	WT	12/13/03	1100	7	✓	✓	✓	✓					✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1965
7															
8															
9															
10															
11															
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FedEx	839669029077	12/13/03	3

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] / URS	12/13/03	1930	[signature]	12/9	3:00

SAMPLE CONDITION	
Temp in °C	6
Received on Ice	Y/N (Y circled)
Sealed Cooler	Y/N (N circled)
Samples Intact	Y/N

SAMPLE NOTES: ~~Cooler #136~~

Additional Comments:

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: John Paul Daniel
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 12/13/03

SEE REVERSE SIDE FOR INSTRUCTIONS

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January 7, 2004

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on December 22, 2003. Please reference Pace project number 03-5480 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0312-2053	PZ-10D
0312-2054	PZ-11D
0312-2055	EB-121903
0312-2056	Trip Blank

General Comments: Cooler temperature 7 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5480**
Lab Sample ID: **0312-2053**
Client Sample ID: PZ-10D
Sample Matrix: Aqueous

Date Sampled: 12/19/2003
Date Received: 12/22/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	440	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2[1]	21	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/22/2003	0026775-1	<0.10
Nitrate	353.2[2]	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1[1]	7.06	1.00	pH	ALR	12/22/2003	0026774-1	4.55
Sulfate	375.4[1]	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	210	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0
Magnesium	6010B[2]	80	0.20	mg/l	PMM	12/26/2003	0026813-1	<0.20
Potassium	6010B[2]	13	0.50	mg/l	PMM	12/26/2003	0026813-1	<0.50
Sodium	6010B[2]	19	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	6.5	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	19000	1000	ug/l	JEC	01/02/2004	0027000-1	<10
Benzene	8260B[2]	<1.0	1.0	ug/l	JEC	01/02/2004	0027000-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Butanone	8260B[2]	150	10	ug/l	JEC	01/02/2004	0027000-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: 0312-2053
Client Sample ID: PZ-10D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Vinyl chloride	8260B[2]	7.2	2.0	ug/l	JEC	01/02/2004	0027000-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5480**
Lab Sample ID: **0312-2054**
Client Sample ID: PZ-11D
Sample Matrix: Aqueous

Date Sampled: 12/19/2003
Date Received: 12/22/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	120	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	19	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/22/2003	0026775-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	8.03	1.00	pH	ALR	12/22/2003	0026774-1	4.55
Sulfate	375.4(1)	43	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	56	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0
Magnesium	6010B(2)	13	0.20	mg/l	PMM	12/26/2003	0026813-1	<0.20
Potassium	6010B(2)	4.2	0.50	mg/l	PMM	12/26/2003	0026813-1	<0.50
Sodium	6010B(2)	16	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	1.4	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	JEC	01/02/2004	0027000-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

(Continued)

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Lab Sample ID: 0312-2054
Client Sample ID: PZ-11D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	JEC	01/02/2004	0027000-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5480**
Lab Sample ID: **0312-2055**
Client Sample ID: EB-121903
Sample Matrix: Aqueous

Date Sampled: 12/19/2003
Date Received: 12/22/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	<2.0	2.0	mg/l	EAC	12/29/2003	0026915-1	<2.0
Chloride	325.2(1)	<1.0	1.0	mg/l	DAB	12/31/2003	0026941-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/22/2003	0026775-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026881-1	<0.10
pH	150.1(1)	5.45	1.00	pH	ALR	12/22/2003	0026774-1	4.55
Sulfate	375.4(1)	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	<1.0	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0
Magnesium	6010B(2)	<0.20	0.20	mg/l	PMM	12/26/2003	0026813-1	<0.20
Potassium	6010B(2)	<0.50	0.50	mg/l	PMM	12/26/2003	0026813-1	<0.50
Sodium	6010B(2)	<1.0	1.0	mg/l	PMM	12/26/2003	0026813-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	<1.0	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	JEC	01/02/2004	0027000-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

(Continued)

REPORT OF LABORATORY ANALYSIS

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Lab Sample ID: **0312-2055**
Client Sample ID: EB-121903

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	JEC	01/02/2004	0027000-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5480**
Lab Sample ID: **0312-2056**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 12/19/2003
Date Received: 12/22/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	JEC	01/02/2004	0027000-1	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	JEC	01/02/2004	0027000-1	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

(Continued)

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Lab Sample ID: **0312-2056**
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	JEC	01/02/2004	0027000-1	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	JEC	01/02/2004	0027000-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691215

Page: 1 of 1

Section A — **Required** Client Information:

Company	URS Corp
Address	4955 Steubenville Pike
	[illegible]
	Pittsburgh PA 15205
Phone	[illegible]
Fax	

Section B — **Required** Client Information:

Report To:	MARK DOWIAK
Copy To:	Kim Dowell
Invoice To:	Mark Dowiak
P.O.	
Project Name:	Essex / Hope
Project Number:	~~3D1419.~~ 3040H.21

Client Information (Check quote/contract):

Requested Due Date: | *TAT: private

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:	
Project Manager:	
Project #:	03 5480
Profile #:	
Requested Analysis:	PH+AK, 8260B, [illegible], Nitrate, TKN, [illegible], [illegible], [illegible]

Section D — **Required** Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis	Remarks / Lab ID
1	FZ-110D	WT	12/9/03	1050	7										[illegible]
2	FZ 110	WT	12/9/03	1045	7										[illegible]
3	EB 121903	WT	12/9/03	1145	7										[illegible]
4															[illegible]
5															
6															
7															
8															
9															
10															
11															
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed Ex	~~329469024022~~	12/9/03	1		[illegible]	12/9/03	1300	[illegible]	[illegible]	[illegible]

SAMPLE CONDITION

Temp in °C	7
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

[illegible] # ~~329601029044~~

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible]

DATE Signed: (MM / DD / YY) 12/9/03

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

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January 8, 2004

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on December 23, 2003. Please reference Pace project number 03-5510 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0312-2198	PZ-5S
0312-2199	PZ-9D
0312-2200	DUP

Pace Sample Identification	Client Sample Identification
0312-2201	PZ-8D
0312-2202	PZ-6D
0312-2203	Trip Blank

General Comments: Cooler temperature 8 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Fax: 724.327.7793

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: 03-5510
Lab Sample ID: 0312-2198
Client Sample ID: PZ-5S
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	75	2.0	mg/l	TES	12/30/2003	0026943-1	<2.0
Chloride	325.2(1)	2.3	1.0	mg/l	DAB	01/08/2004	0027080-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/23/2003	0026837-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026883-1	<0.10
pH	150.1(1)	6.93	1.00	pH	ALR	12/23/2003	0026833-1	5.47
Sulfate	375.4(1)	<10	10	mg/l	TES	01/06/2004	0027050-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	23	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0
Magnesium	6010B(2)	2.3	0.20	mg/l	CS0	12/30/2003	0026814-1	<0.20
Potassium	6010B(2)	2.4	0.50	mg/l	CS0	12/30/2003	0026814-1	<0.50
Sodium	6010B(2)	5.8	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	3.0	1.0	mg/l	CMS	01/06/2004	0027054-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

(Continued)

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Lab Sample ID: 0312-2198
Client Sample ID: PZ-5S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[2]	8.3	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5510**
Lab Sample ID: **0312-2199**
Client Sample ID: PZ-9D
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	360	2.0	mg/l	TES	12/30/2003	0026943-1	<2.0
Chloride	325.2(1)	25	1.0	mg/l	DAB	01/08/2004	0027080-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/23/2003	0026837-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026883-1	<0.10
pH	150.1(1)	7.09	1.00	pH	ALR	12/23/2003	0026833-1	5.47
Sulfate	375.4(1)	<10	10	mg/l	TES	01/06/2004	0027050-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	2000	10	mg/l	CS0	12/30/2003	0026814-1	<1.0
Magnesium	6010B(2)	960	2.0	mg/l	CS0	12/30/2003	0026814-1	<0.20
Potassium	6010B(2)	57	0.50	mg/l	CS0	12/30/2003	0026814-1	<0.50
Sodium	6010B(2)	24	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	5.0	1.0	mg/l	CMS	01/06/2004	0027054-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

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Lab Sample ID: 0312-2199
Client Sample ID: PZ-9D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[2]	8.5	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5510**
Lab Sample ID: **0312-2200**
Client Sample ID: DUP
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	310	2.0	mg/l	TES	12/30/2003	0026943-1	<2.0
Chloride	325.2(1)	24	1.0	mg/l	DAB	01/08/2004	0027080-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/23/2003	0026837-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026883-1	<0.10
pH	150.1(1)	7.12	1.00	pH	ALR	12/23/2003	0026833-1	5.47
Sulfate	375.4(1)	13	10	mg/l	TES	01/06/2004	0027050-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	1100	10	mg/l	CS0	12/30/2003	0026814-1	<1.0
Magnesium	6010B(2)	430	0.20	mg/l	CS0	12/30/2003	0026814-1	<0.20
Potassium	6010B(2)	45	0.50	mg/l	CS0	12/30/2003	0026814-1	<0.50
Sodium	6010B(2)	18	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.2	1.0	mg/l	CMS	01/06/2004	0027054-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

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Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[2]	9.4	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[2]	5.1	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: 03-5510
Lab Sample ID: 0312-2201
Client Sample ID: PZ-8D
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	290	2.0	mg/l	TES	12/30/2003	0026943-1	<2.0
Chloride	325.2(1)	22	1.0	mg/l	DAB	01/08/2004	0027080-1	<1.0
Ferrous Iron	HACH 8146	0.18	0.10	mg/l	ALR	12/23/2003	0026837-1	<0.10
Nitrate	353.2(2)	0.92	0.10	mg/l	DAB	12/29/2003	0026883-1	<0.10
pH	150.1(1)	7.14	1.00	pH	ALR	12/23/2003	0026833-1	5.47
Sulfate	375.4(1)	15	10	mg/l	TES	01/06/2004	0027050-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	240	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0
Magnesium	6010B(2)	100	0.20	mg/l	CS0	12/30/2003	0026814-1	<0.20
Potassium	6010B(2)	20	0.50	mg/l	CS0	12/30/2003	0026814-1	<0.50
Sodium	6010B(2)	20	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	6.9	1.0	mg/l	CMS	01/06/2004	0027054-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	560	100	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(2)	3.3	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(2)	100	10	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

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Lab Sample ID: 0312-2201
Client Sample ID: PZ-8D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	12	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B[2]	110	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[2]	6.7	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[2]	160	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Fax: 724.327.7793

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5510**
Lab Sample ID: **0312-2202**
Client Sample ID: PZ-6D
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	620	2.0	mg/l	TES	12/30/2003	0026943-1	<2.0
Chloride	325.2(1)	21	1.0	mg/l	DAB	01/08/2004	0027080-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/23/2003	0026837-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026883-1	<0.10
pH	150.1(1)	7.07	1.00	pH	ALR	12/23/2003	0026833-1	5.47
Sulfate	375.4(1)	<10	10	mg/l	TES	01/06/2004	0027050-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	420	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0
Magnesium	6010B(2)	170	0.20	mg/l	CS0	12/30/2003	0026814-1	<0.20
Potassium	6010B(2)	30	0.50	mg/l	CS0	12/30/2003	0026814-1	<0.50
Sodium	6010B(2)	54	1.0	mg/l	CS0	12/30/2003	0026814-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	43	10	mg/l	CMS	01/06/2004	0027054-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	190000	10000	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(2)	1400	500	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

(Continued)

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Lab Sample ID: **0312-2202**
Client Sample ID: PZ-6D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[2]	360	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Fax: 724.327.7793

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5510**
Lab Sample ID: **0312-2203**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 12/22/2003
Date Received: 12/23/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	MAK	01/05/2004	0027020-1	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	MAK	01/05/2004	0027020-1	<10
Methylene chloride	8260B(1)	17	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

(Continued)

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Lab Sample ID: **0312-2203**
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	MAK	01/05/2004	0027020-1	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	MAK	01/05/2004	0027020-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

729109

Page: 1 of 1

Section A — Required Client Information:

Company: URS Corp
Address: 4955 Steubenville Pike Ste 250
Pittsburgh PA 15205
Phone: 412-249-1209 Fax:

Section B — Required Client Information:

Report To: Mark Doniak
Copy To: N/A
Invoice To: N/A
P.O.:
Project Name: Essex / Hope
Project Number: 334041.21

Client Information (Check quote/contract):
Requested Due Date: *TAT: regular

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #: 033570
Profile #:
Requested Analysis:

Section D — Required Client Information:

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID (One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE)	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Remarks / Lab ID
1	PZ-5S	WT	12/22/03	1145	7	X	X	X	X					3512-2198
2	PZ-9D	WT	12/22/03	1130	7	X	X	X	X					2199
3	DUP	WT	12/22/03	—	7	X	X	X	X					2200
4	PZ-8D	WT	12/22/03	1020	7	X	X	X	X					2201
5	PZ-6D	WT	12/22/03	1135	7	X	X	X	X					2202
6														2203
7														
8														
9														
10														
11														
12														

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FedEx	8396 0090 2933 (12/22/03)		1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature] FedEx	12/22/03	1730	[signature]	12/23	2310

SAMPLE CONDITION

Temp in °C	8
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jason Paul Daniel
SIGNATURE of SAMPLER: [signature] DATE Signed: (MM / DD / YY) 12/22/03

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 04/03

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January 6, 2004

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on December 19, 2003. Please reference Pace project number 03-5459 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0312-1941	P2-7D ✓
0312-1942	P2-5D ✓
0312-1943	MW-22D ✓
0312-1944	MW-13 ✓

Pace Sample Identification	Client Sample Identification
0312-1945	HW-9 ✓
0312-1946	MW-24S ✓
0312-1947	Trip Blank

General Comments: Cooler temperature 8 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1941**
Client Sample ID: P2-7D
Sample Matrix: Aqueous

Date Sampled: 12/16/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	370	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2(1)	58	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.17	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	7.58	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	18	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	1200	10	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	510	2.0	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	55	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	50	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	3.1	1.0	mg/l	CMS	12/31/2003	0026979-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

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Lab Sample ID: 0312-1941
Client Sample ID: P2-7D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	92	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	84	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	340	2.0	ug/l	MAK	12/29/2003	0026906-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

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Mr. Mark Dowiak
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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1942**
Client Sample ID: P2-5D
Sample Matrix: Aqueous

Date Sampled: 12/16/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	670	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2[1]	39	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.22	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2[2]	<0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1[1]	6.76	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4[1]	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	770	10	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B[2]	250	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B[2]	32	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B[2]	52	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	270	10	mg/l	CMS	12/23/2003	0026817-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	960000	50000	ug/l	MAK	12/30/2003	0026945-1	<10
Benzene	8260B[2]	<1.0	1.0	ug/l	MAK	12/26/2003	0026882-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Butanone	8260B[2]	3000	1000	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

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Lab Sample ID: 0312-1942
Client Sample ID: P2-5D

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
4-Methyl-2-pentanone	8260B[2]	240	10	ug/l	MAK	12/26/2003	0026882-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichloroethene	8260B[2]	8.6	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Vinyl chloride	8260B[2]	120	2.0	ug/l	MAK	12/26/2003	0026882-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1943**
Client Sample ID: MW-22D
Sample Matrix: Aqueous

Date Sampled: 12/16/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1[1]	210	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2[1]	58	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	<0.10	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2[2]	0.87	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1[1]	7.13	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4[1]	44	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B[2]	89	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B[2]	16	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B[2]	3.7	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B[2]	35	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060[2]	1.4	1.0	mg/l	CMS	12/23/2003	0026817-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Benzene	8260B[2]	10	1.0	ug/l	MAK	12/26/2003	0026882-1	<1.0
Bromodichloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromoform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromomethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Butanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Carbon Disulfide	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

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Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethene	8260B[2]	48	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	3400	200	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	15	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichloroethene	8260B[2]	17000	200	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Vinyl chloride	8260B[2]	170	2.0	ug/l	MAK	12/26/2003	0026882-1	<2.0
m,p-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
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Sample Comments: Results reported on an as received basis. The sample was received past holding time for Ferrous Iron and Nitrite (used to calculate Nitrate) analysis.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1944**
Client Sample ID: MW-13
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	170	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2(1)	46	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.88	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.42	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	48	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	81	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	21	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	5.8	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	30	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	9.4	1.0	mg/l	CMS	12/23/2003	0026817-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	12	10	ug/l	MAK	12/26/2003	0026882-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/26/2003	0026882-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

(Continued)

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Lab Sample ID: **0312-1944**
Client Sample ID: MW-13

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichloroethene	8260B[2]	22	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/26/2003	0026882-1	<2.0
m,p-Xylene	8260B[2]	7.3	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1945**
Client Sample ID: HW-9
Sample Matrix: Aqueous

Date Sampled: 12/18/2003
Date Received: 12/19/2003

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	100	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2(1)	11	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	1.9	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	0.16	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.41	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	<10	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	30	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	3.2	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	1.8	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	9.0	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	2.9	1.0	mg/l	CMS	12/23/2003	0026817-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/29/2003	0026906-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

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Lab Sample ID: 0312-1945
Client Sample ID: HW-9

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Cumene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Ethylbenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/29/2003	0026906-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/29/2003	0026906-1	<2.0
m,p-Xylene	8260B[2]	8.1	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	<5.0	5.0	ug/l	MAK	12/29/2003	0026906-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1946**
Client Sample ID: MW-24S
Sample Matrix: Aqueous

Date Sampled: 12/17/2003
Date Received: 12/19/2003

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Alkalinity (Total)	310.1(1)	180	2.0	mg/l	EAC	12/23/2003	0026791-1	<2.0
Chloride	325.2(1)	2.9	1.0	mg/l	DAB	12/30/2003	0026910-1	<1.0
Ferrous Iron	HACH 8146	0.37	0.10	mg/l	ALR	12/19/2003	0026726-1	<0.10
Nitrate	353.2(2)	<0.10	0.10	mg/l	DAB	12/29/2003	0026870-1	<0.10
pH	150.1(1)	6.58	1.00	pH	TAT	12/19/2003	0026715-1	5.22
Sulfate	375.4(1)	11	10	mg/l	EAC	12/31/2003	0026951-1	<10

Metals

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Trace Metals, Total, ICP								
Calcium	6010B(2)	60	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0
Magnesium	6010B(2)	12	0.20	mg/l	CS0	12/29/2003	0026732-1	<0.20
Potassium	6010B(2)	6.6	0.50	mg/l	CS0	12/29/2003	0026732-1	<0.50
Sodium	6010B(2)	3.9	1.0	mg/l	CS0	12/29/2003	0026732-1	<1.0

Total Organic Carbons/Halogens

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Total Organic Carbon (TOC)	9060(2)	4.6	1.0	mg/l	CMS	12/23/2003	0026817-1	<1.0

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(2)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Benzene	8260B(2)	<1.0	1.0	ug/l	MAK	12/26/2003	0026882-1	<1.0
Bromodichloromethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromoform	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromomethane	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Butanone	8260B(2)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Carbon Disulfide	8260B(2)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

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Lab Sample ID: 0312-1946
Client Sample ID: MW-24S

Volatiles (Cont.)

Carbon Tetrachloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroform	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Cumene	8260B[2]	97	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Dibromochloromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,3-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,4-Dichlorobenzene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,2-Dichloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloropropane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,3-Dichloropropene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Ethylbenzene	8260B[2]	1000	50	ug/l	MAK	12/29/2003	0026906-1	<5.0
2-Hexanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
4-Methyl-2-pentanone	8260B[2]	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Methylene chloride	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Styrene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Tetrachloroethene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Toluene	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,1-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2-Trichloroethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichloroethene	8260B[2]	29	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichlorofluoromethane	8260B[2]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Vinyl chloride	8260B[2]	<2.0	2.0	ug/l	MAK	12/26/2003	0026882-1	<2.0
m,p-Xylene	8260B[2]	6500	100	ug/l	MAK	12/29/2003	0026906-1	<5.0
o-Xylene	8260B[2]	77	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
[2] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Fax: 724.327.7793

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-5459**
Lab Sample ID: **0312-1947**
Client Sample ID: Trip Blank
Sample Matrix: Aqueous

Date Sampled: 12/16/2003
Date Received: 12/19/2003

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Benzene	8260B(1)	<1.0	1.0	ug/l	MAK	12/26/2003	0026882-1	<1.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Ethylbenzene	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
2-Hexanone	8260B(1)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
4-Methyl-2-pentanone	8260B(1)	<10	10	ug/l	MAK	12/26/2003	0026882-1	<10
Methylene chloride	8260B(1)	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

(Continued)

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Lab Sample ID: **0312-1947**
Client Sample ID: Trip Blank

Volatiles (Cont.)

Styrene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
Vinyl chloride	8260B[1]	<2.0	2.0	ug/l	MAK	12/26/2003	0026882-1	<2.0
m,p-Xylene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/l	MAK	12/26/2003	0026882-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691613

Page: 1 of 1

Section A — **Required** Client Information:

- Company: URS Corp
- Address: 4955 Steubenville Pike, Ste 250, Pittsburgh PA 15205
- Phone:
- Fax:

Section B — **Required** Client Information:

- Report To: Mark Dowiak
- Copy To: A/A
- Invoice To: A/A
- P.O
- Project Name: Essex/Hope
- Project Number: 904041.21

Client Information (Check quote/contract):

- Requested Due Date:
- *TAT: per quote

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

Section C — To Be Completed by Pace Analytical and Client

- Quote Reference:
- Project Manager:
- Project #: 035459
- Profile #:

Section D — **Required** Client Information:

SAMPLE ID

One character per box. (A–Z, 0–9 / .–) Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

Requested Analysis: General Chem, Nitrate, Total Met, TOC, 8260B

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	General Chem	Nitrate	Total Met	TOC	8260B	Remarks / Lab ID
1	PZ-7D	WT	12/16/03	1500		X	X	X	X					1	1	1	1	3	0312 1941
2	PZ 5D	WT	12/16/03	1830										1	1	1	1	3	1942
3	MW-22D	WT	12/16/03	1730										1	1	1	1	3	1943
4	MW-13	WT	12/18/03	0900										1	1	1	1	3	1944
5	HW-9	WT	12/18/03	0345										1	1	1	1	3	1945
6	MW 245	WT	12/17/03	1745										1	1	1	1	3	1946
7																			1947
8																			
9																			
10																			
11																			
12																			

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed Ex - 339669029055	12/19/03		3		[signature] URS	12/19/03	1320	James Haas	12/19	3:00

SAMPLE CONDITION

Temp in °C	8
Received on Ice	Y/N (Y circled)
Sealed Cooler	Y/N (N circled)
Samples Intact	Y/N (Y circled)

SAMPLE NOTES

~~Cooler #194~~

Additional Comments:

SAMPLER NAME AND SIGNATURE

- PRINT Name of SAMPLER: Jonathan Danish
- SIGNATURE of SAMPLER: [signature]
- DATE Signed: (MM / DD / YY) 12/18/03

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

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November 21, 2003

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on November 11, 2003. Please reference Pace project number 03-4794 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0311-1150	TBUST1 (4-5 FT)
0311-1151	TBUST1 (6.5-8 FT)
0311-1152	TBUST2 (4-4.5 FT)
0311-1153	TBUST4 (4-5 FT)
0311-1154	TBUST5 (4-6.2 FT)
0311-1155	TBUST6 (5.4-7.3 FT)

Pace Sample Identification	Client Sample Identification
0311-1156	TBUST6 (8-10.1 FT)
0311-1157	TBUST10 (5.3-7 FT)
0311-1158	TBUST9 (6.7-8.9 FT)
0311-1159	TBUST9 (14-15 FT)
0311-1160	TBUST8 (6-6.5 FT)

General Comments: Cooler temperature 15 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1150**
Client Sample ID: TBUST1 (4-5 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	85	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	89	12	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B(1)	<12	12	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B(1)	11	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0

(Continued)

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Lab Sample ID: 0311-1150
Client Sample ID: TBUST1 (4-5 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	25	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<12	12	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<12	12	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	6.6	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<6.2	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	130	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	33	6.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1151**
Client Sample ID: TBUST1 (6.5-8 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<460	460	ug/kg	MAK	11/12/2003	0025757-1	<10
Benzene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromodichloromethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromoform	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromomethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
2-Butanone	8260B(1)	<460	460	ug/kg	MAK	11/12/2003	0025757-1	<10
Carbon Disulfide	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Carbon Tetrachloride	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroform	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloromethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Cumene	8260B(1)	1900	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Dibromochloromethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloroethane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloropropane	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0

(Continued)

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Lab Sample ID: **0311-1151**
Client Sample ID: TBUST1 (6.5-8 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	14000	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
2-Hexanone	8260B[1]	<460	460	ug/kg	MAK	11/12/2003	0025757-1	<10
4-Methyl-2-pentanone	8260B[1]	<460	460	ug/kg	MAK	11/12/2003	0025757-1	<10
Methylene chloride	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Styrene	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Tetrachloroethene	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Toluene	8260B[1]	800	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichloroethene	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichlorofluoromethane	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Vinyl chloride	8260B[1]	<230	230	ug/kg	MAK	11/12/2003	0025757-1	<5.0
m,p-Xylene	8260B[1]	330000	2300	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	140000	2300	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1152**
Client Sample ID: TBUST2 (4-4.5 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	92	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	26	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B(1)	7.9	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B(1)	8.8	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

(Continued)

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Lab Sample ID: **0311-1152**
Client Sample ID: TBUST2 (4-4.5 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	28	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	22	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	95	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	35	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1153**
Client Sample ID: TBUST4 (4-5 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[1]	37	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

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Lab Sample ID: 0311-1153
Client Sample ID: TBUST4 (4-5 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	6.3	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	9.3	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1154**
Client Sample ID: TBUST5 (4-6.2 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	81	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	38	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B(1)	9.7	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0

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Lab Sample ID: 0311-1154
Client Sample ID: TBUST5 (4-6.2 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	63	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	13	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<5.2	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	260	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	24	5.2	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1155**
Client Sample ID: TBUST6 (5.4-7.3 FT)
Sample Matrix: Solid

Date Sampled: 11/03/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	57	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B(1)	18	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

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Lab Sample ID: **0311-1155**
Client Sample ID: TBUST6 (5.4-7.3 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	6.6	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	26	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1156**
Client Sample ID: TBUST6 (8-10.1 FT)
Sample Matrix: Solid

Date Sampled: 11/04/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	85	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[1]	<430	430	ug/kg	MAK	11/12/2003	0025757-1	<10
Benzene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromodichloromethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromoform	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromomethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
2-Butanone	8260B[1]	<430	430	ug/kg	MAK	11/12/2003	0025757-1	<10
Carbon Disulfide	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Carbon Tetrachloride	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chlorobenzene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroform	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloromethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Cumene	8260B[1]	6100	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Dibromochloromethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichlorobenzene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,3-Dichlorobenzene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,4-Dichlorobenzene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,2-Dichloroethene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,2-Dichloroethene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloropropane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,3-Dichloropropene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,3-Dichloropropene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0

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Lab Sample ID: **0311-1156**
Client Sample ID: TBUST6 (8-10.1 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	15000	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
2-Hexanone	8260B[1]	<430	430	ug/kg	MAK	11/12/2003	0025757-1	<10
4-Methyl-2-pentanone	8260B[1]	<430	430	ug/kg	MAK	11/12/2003	0025757-1	<10
Methylene chloride	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Styrene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Tetrachloroethene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Toluene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichloroethene	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichlorofluoromethane	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Vinyl chloride	8260B[1]	<210	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0
m,p-Xylene	8260B[1]	70000	2100	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	2700	210	ug/kg	MAK	11/12/2003	0025757-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1157**
Client Sample ID: TBUST10 (5.3-7 FT)
Sample Matrix: Solid

Date Sampled: 11/05/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	91	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[1]	<400	400	ug/kg	MAK	11/13/2003	0025758-1	<10
Benzene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromodichloromethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromoform	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Bromomethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Butanone	8260B[1]	<400	400	ug/kg	MAK	11/13/2003	0025758-1	<10
Carbon Disulfide	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Carbon Tetrachloride	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chlorobenzene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloroform	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Chloromethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Cumene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Dibromochloromethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichlorobenzene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,3-Dichlorobenzene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,4-Dichlorobenzene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1-Dichloroethene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,2-Dichloroethene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,2-Dichloroethene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,2-Dichloropropane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
cis-1,3-Dichloropropene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
trans-1,3-Dichloropropene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0

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Lab Sample ID: 0311-1157
Client Sample ID: TBUST10 (5.3-7 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	1100	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
2-Hexanone	8260B[1]	<400	400	ug/kg	MAK	11/13/2003	0025758-1	<10
4-Methyl-2-pentanone	8260B[1]	<400	400	ug/kg	MAK	11/13/2003	0025758-1	<10
Methylene chloride	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Styrene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Tetrachloroethene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Toluene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichloroethene	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Trichlorofluoromethane	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
Vinyl chloride	8260B[1]	<200	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
m,p-Xylene	8260B[1]	6900	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	1700	200	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1158**
Client Sample ID: TBUST9 (6.7-8.9 FT)
Sample Matrix: Solid

Date Sampled: 11/05/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	90	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<480	480	ug/kg	MAK	11/12/2003	0025757-1	<10
Benzene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromodichloromethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromoform	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Bromomethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
2-Butanone	8260B(1)	<480	480	ug/kg	MAK	11/12/2003	0025757-1	<10
Carbon Disulfide	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Carbon Tetrachloride	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloroform	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Chloromethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Cumene	8260B(1)	3700	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Dibromochloromethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloroethane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,2-Dichloropropane	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0

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Lab Sample ID: **0311-1158**
Client Sample ID: TBUST9 (6.7-8.9 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	40000	2400	ug/kg	MAK	11/14/2003	0025838-1	<5.0
2-Hexanone	8260B[1]	<480	480	ug/kg	MAK	11/12/2003	0025757-1	<10
4-Methyl-2-pentanone	8260B[1]	<480	480	ug/kg	MAK	11/12/2003	0025757-1	<10
Methylene chloride	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Styrene	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Tetrachloroethene	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Toluene	8260B[1]	3300	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichloroethene	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Trichlorofluoromethane	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
Vinyl chloride	8260B[1]	<240	240	ug/kg	MAK	11/12/2003	0025757-1	<5.0
m,p-Xylene	8260B[1]	350000	2400	ug/kg	MAK	11/14/2003	0025838-1	<5.0
o-Xylene	8260B[1]	150000	2400	ug/kg	MAK	11/14/2003	0025838-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4794**
Lab Sample ID: **0311-1159**
Client Sample ID: TBUST9 (14-15 FT)
Sample Matrix: Solid

Date Sampled: 11/05/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	1300	510	ug/kg	MAK	11/11/2003	0025743-1	<10
Benzene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromodichloromethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromoform	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromomethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
2-Butanone	8260B(1)	<510	510	ug/kg	MAK	11/11/2003	0025743-1	<10
Carbon Disulfide	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Carbon Tetrachloride	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chlorobenzene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloroethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloroform	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloromethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Cumene	8260B(1)	6100	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Dibromochloromethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1-Dichloroethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichloroethane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1-Dichloroethene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichloropropane	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0

(Continued)

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Fax: 724.327.7793

Lab Sample ID: **0311-1159**
Client Sample ID: TBUST9 (14-15 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	160000	2600	ug/kg	MAK	11/11/2003	0025743-1	<5.0
2-Hexanone	8260B[1]	<510	510	ug/kg	MAK	11/11/2003	0025743-1	<10
4-Methyl-2-pentanone	8260B[1]	<510	510	ug/kg	MAK	11/11/2003	0025743-1	<10
Methylene chloride	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Styrene	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Tetrachloroethene	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Toluene	8260B[1]	26000	2600	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Trichloroethene	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Trichlorofluoromethane	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Vinyl chloride	8260B[1]	<260	260	ug/kg	MAK	11/11/2003	0025743-1	<5.0
m,p-Xylene	8260B[1]	620000	26000	ug/kg	MAK	11/13/2003	0025758-1	<5.0
o-Xylene	8260B[1]	190000	26000	ug/kg	MAK	11/13/2003	0025758-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: 03-4794
Lab Sample ID: 0311-1160
Client Sample ID: TBUST8 (6-6.5 FT)
Sample Matrix: Solid

Date Sampled: 11/05/2003
Date Received: 11/11/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	85	N/A	%	DSV	11/19/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	28	10	ug/kg	MAK	11/11/2003	0025743-1	<10
Benzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromodichloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromoform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Bromomethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
2-Butanone	8260B(1)	<10	10	ug/kg	MAK	11/11/2003	0025743-1	<10
Carbon Disulfide	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Carbon Tetrachloride	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloroform	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Chloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Cumene	8260B(1)	2100	170	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Dibromochloromethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichloroethane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,2-Dichloropropane	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0

(Continued)

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Lab Sample ID: **0311-1160**
Client Sample ID: TBUST8 (6-6.5 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	18000	1700	ug/kg	MAK	11/11/2003	0025743-1	<5.0
2-Hexanone	8260B[1]	<10	10	ug/kg	MAK	11/11/2003	0025743-1	<10
4-Methyl-2-pentanone	8260B[1]	<10	10	ug/kg	MAK	11/11/2003	0025743-1	<10
Methylene chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Styrene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Tetrachloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Toluene	8260B[1]	190	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Trichloroethene	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Trichlorofluoromethane	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
Vinyl chloride	8260B[1]	<5.0	5.0	ug/kg	MAK	11/11/2003	0025743-1	<5.0
m,p-Xylene	8260B[1]	160000	1700	ug/kg	MAK	11/11/2003	0025743-1	<5.0
o-Xylene	8260B[1]	46000	1700	ug/kg	MAK	11/11/2003	0025743-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

Chain-of-Custody / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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729024

Page: 1 of 1

To Be Completed by Pace Analytical and Client

Required Client Information: Section A	Required Client Information: Section B	Section C
Company: URS CORPORATION	Report To: MARK DOWIAK	Quote Reference:
Address: TWO TOWERS STE 250	Copy To:	Project Manager:
4955 STEUBENVILLE PIKE	Invoice To: MARK DOWIAK	Project #: 03-4794
PITTSBURGH, PA 15205	P.O.	Profile #:
Phone: (412) 788-3717	Project Name: ESSEX/110PC	Requested Analysis:
Fax: (412) 788-1316	Project Number: 60410211.21	

Client Information (Check quote/contract):
Requested Due Date: *TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

Section D Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED (mm / dd / yy)	TIME COLLECTED (hh:mm a/p)	# Containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis: 8260 BTEX	Remarks / Lab ID
1	TBUST1 (41-5 FT)	SL	11-3-03	1330										X	0311 1150
2	TBUST1 (6.5-8 FT)	SL	11-3-03	1340										X	1151
3	TBUST2 (4-4.5 FT)	SL	11-3-03	1400										X	1152
4	TBUST4 (4-5 FT)	SL	11-3-03	1500										X	1153
5	TBUST5 (4-6.2 FT)	SL	11-3-03	1600										X	1154
6	TBUST6 (5.4-7.3 FT)	SL	11-3-03	0800										X	1155
7	TBUST6 (8-10.1 FT)	SL	11-4-03	0810										X	1156
8	TBUST10 (5.3-7 FT)	SL	11-5-03	0800										X	1157
9	TBUST9 (6.7-8.9 FT)	SL	11-5-03	0930										X	1158
10	TBUST9 (14-15 FT)	SL	11-5-03	0910										X	1159
11	TBUST8 (6-6.5 FT)	SL	11-5-03	1030										X	0311 1160
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FedEx	817257869372	11-10-03	1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		11-10-03	1730	FEDEX	11-10-03	1730
	FED X			James Hall	11-11-03	9:30

SAMPLE CONDITION

Temp in °C	15
Received on Ice	(Y)/N
Sealed Cooler	Y/(N)
Samples Intact	(Y)/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH DODRILL

SIGNATURE of SAMPLER:

DATE Signed: (MM / DD / YY) 11-4-03

SEE REVERSE SIDE FOR INSTRUCTIONS

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December 1, 2003

Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Dear Mr. Dowiak:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on November 17, 2003. Please reference Pace project number 03-4951 when inquiring about this report.

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Pace Sample Identification	Client Sample Identification
0311-1652	TBUST7 (8-8.9 FT)
0311-1653	TBUST7 (8.9-10.5 FT)
0311-1654	TBUST11 (9.2-11.4 FT)
0311-1655	TBUST12 (8-10 FT)

General Comments: Cooler temperature 4 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4951**
Lab Sample ID: **0311-1652**
Client Sample ID: TBUST7 (8-8.9 FT)
Sample Matrix: Solid

Date Sampled: 11/11/2003
Date Received: 11/17/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DSV	11/25/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[1]	<440	440	ug/kg	MAK	11/24/2003	0026159-1	<10
Benzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Bromodichloromethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Bromoform	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Bromomethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
2-Butanone	8260B[1]	<440	440	ug/kg	MAK	11/24/2003	0026159-1	<10
Carbon Disulfide	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Carbon Tetrachloride	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Chlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Chloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Chloroform	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Chloromethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Cumene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Dibromochloromethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,2-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,3-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,4-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,1-Dichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,2-Dichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,1-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
cis-1,2-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
trans-1,2-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,2-Dichloropropane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
cis-1,3-Dichloropropene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
trans-1,3-Dichloropropene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0

(Continued)

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Phone: 724.733.1161
Fax: 724.327.7793

Lab Sample ID: 0311-1652
Client Sample ID: TBUST7 (8-8.9 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
2-Hexanone	8260B[1]	<440	440	ug/kg	MAK	11/24/2003	0026159-1	<10
4-Methyl-2-pentanone	8260B[1]	<440	440	ug/kg	MAK	11/24/2003	0026159-1	<10
Methylene chloride	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Styrene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Tetrachloroethene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Toluene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Trichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Trichlorofluoromethane	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
Vinyl chloride	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
m,p-Xylene	8260B[1]	940	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0
o-Xylene	8260B[1]	<220	220	ug/kg	MAK	11/24/2003	0026159-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: Detection limits have been elevated due to sample matrix.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: 03-4951
Lab Sample ID: 0311-1653
Client Sample ID: TBUST7 (8.9-10.5 FT)
Sample Matrix: Solid

Date Sampled: 11/11/2003
Date Received: 11/17/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DSV	11/25/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<470	470	ug/kg	MAK	11/25/2003	0026160-1	<10
Benzene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromodichloromethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromoform	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromomethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Butanone	8260B(1)	<470	470	ug/kg	MAK	11/25/2003	0026160-1	<10
Carbon Disulfide	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Carbon Tetrachloride	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroform	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloromethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Cumene	8260B(1)	380	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Dibromochloromethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloroethane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloropropane	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0

(Continued)

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Lab Sample ID: **0311-1653**
Client Sample ID: TBUST7 (8.9-10.5 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	980	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Hexanone	8260B[1]	<470	470	ug/kg	MAK	11/25/2003	0026160-1	<10
4-Methyl-2-pentanone	8260B[1]	<470	470	ug/kg	MAK	11/25/2003	0026160-1	<10
Methylene chloride	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Styrene	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Tetrachloroethene	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Toluene	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichloroethene	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichlorofluoromethane	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Vinyl chloride	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
m,p-Xylene	8260B[1]	2900	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0
o-Xylene	8260B[1]	<230	230	ug/kg	MAK	11/25/2003	0026160-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: Detection limits have been elevated due to high analyte concentrations.

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: 03-4951
Lab Sample ID: 0311-1654
Client Sample ID: TBUST11 (9.2-11.4 FT)
Sample Matrix: Solid

Date Sampled: 11/11/2003
Date Received: 11/17/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DSV	11/25/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B(1)	<480	480	ug/kg	MAK	11/25/2003	0026160-1	<10
Benzene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromodichloromethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromoform	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromomethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Butanone	8260B(1)	<480	480	ug/kg	MAK	11/25/2003	0026160-1	<10
Carbon Disulfide	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Carbon Tetrachloride	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroform	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloromethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Cumene	8260B(1)	1200	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Dibromochloromethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,3-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,4-Dichlorobenzene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloroethane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,2-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,2-Dichloroethene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloropropane	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,3-Dichloropropene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,3-Dichloropropene	8260B(1)	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0

(Continued)

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Lab Sample ID: **0311-1654**
Client Sample ID: TBUST11 (9.2-11.4 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	8000	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Hexanone	8260B[1]	<480	480	ug/kg	MAK	11/25/2003	0026160-1	<10
4-Methyl-2-pentanone	8260B[1]	<480	480	ug/kg	MAK	11/25/2003	0026160-1	<10
Methylene chloride	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Styrene	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Tetrachloroethene	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Toluene	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichloroethene	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichlorofluoromethane	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Vinyl chloride	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
m,p-Xylene	8260B[1]	35000	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0
o-Xylene	8260B[1]	<240	240	ug/kg	MAK	11/25/2003	0026160-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: Detection limits have been elevated due to high analyte concentrations.

REPORT OF LABORATORY ANALYSIS

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Mr. Mark Dowiak
URS Corporation
Construction Services Division
Twin Towers, Suite 250
4955 Steubenville Pike
Pittsburgh, PA 15205

Client Site: Essex-Hope, Jamestown, NY
Client Ref.: 804041.21

Lab Project ID: **03-4951**
Lab Sample ID: **0311-1655**
Client Sample ID: TBUST12 (8-10 FT)
Sample Matrix: Solid

Date Sampled: 11/11/2003
Date Received: 11/17/2003

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	92	N/A	%	DSV	11/25/2003	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Acetone	8260B[1]	<450	450	ug/kg	MAK	11/25/2003	0026160-1	<10
Benzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromodichloromethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromoform	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Bromomethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Butanone	8260B[1]	<450	450	ug/kg	MAK	11/25/2003	0026160-1	<10
Carbon Disulfide	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Carbon Tetrachloride	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloroform	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Chloromethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Cumene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Dibromochloromethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,3-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,4-Dichlorobenzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,2-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,2-Dichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,2-Dichloropropane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
cis-1,3-Dichloropropene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
trans-1,3-Dichloropropene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0

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Lab Sample ID: **0311-1655**
Client Sample ID: TBUST12 (8-10 FT)

Volatiles (Cont.)

Ethylbenzene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
2-Hexanone	8260B[1]	<450	450	ug/kg	MAK	11/25/2003	0026160-1	<10
4-Methyl-2-pentanone	8260B[1]	<450	450	ug/kg	MAK	11/25/2003	0026160-1	<10
Methylene chloride	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Styrene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2,2-Tetrachloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Tetrachloroethene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Toluene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,1-Trichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
1,1,2-Trichloroethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichloroethene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Trichlorofluoromethane	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
Vinyl chloride	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
m,p-Xylene	8260B[1]	530	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0
o-Xylene	8260B[1]	<220	220	ug/kg	MAK	11/25/2003	0026160-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: Detection limits have been elevated due to sample matrix.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

691621

Page: 1 of 1

Section A — **Required** Client Information:

Company: MRS CORPORATION
Address: TWIN TOWERS STE 250
4955 STEUBENVILLE PIKE
PITTSBURGH PA 15205
Phone: 412 788 2717
Fax: 412 788 1316

Section B — **Required** Client Information:

Report To: MARK DOWIAK
Copy To:
Invoice To: MARK DOWIAK
P.O.
Project Name: CSSCX/MOPC
Project Number: 6010011.21

Client Information (Check quote/contract):
Requested Due Date:
*TAT:

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days

Section C — To Be Completed by Pace Analytical and Client

Quote Reference:
Project Manager:
Project #: 03-4951
Profile #:
Requested Analysis: 8260B

Section D — **Required** Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	8260B	Remarks / Lab ID
1	TBUST7 (8-8.9 FT)	SL	11-11-03	2210	4									X	11-1652
2	TBUST7 (8.9-10.5 FT)	SL	11-11-03	2220	4									X	1653
3	TBUST11 (9.2-11.4 FT)	SL	11-11-03	2230	4									X	1654
4	TBUST12 (8-12 FT)	SL	11-11-03	2240	4									X	1655
5															
6															
7															
8															
9															
10															
11															
12															

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FedEx	8417304138?0	11-13-03	1

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	11-13-03	1230			
	Fed Ex		—	C Urbowsky	11 17 03	10:40

SAMPLE CONDITION

Temp in °C	4
Received on Ice	Y/N
Sealed Cooler	Y/N
Samples Intact	Y/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: KEITH DODRILL
SIGNATURE of SAMPLER: [signature]
DATE Signed: (MM / DD / YY) 11-11-03

SEE REVERSE SIDE FOR INSTRUCTIONS