Construction Certification Report for

Buffalo Lakeside Commerce Park Buffalo's Union Ship Canal Redevelopment - Phase I Buffalo, New York

prepared for:

Erie County Industrial Development Agency
Buffalo, New York

prepared by:

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October 2006

G4059

CONSTRUCTION CERTIFICATION REPORT

FOR

BUFFALO LAKESIDE COMMERCE PARK

BUFFALO'S UNION SHIP CANAL REDEVELOPMENT – PHASE 1

BUFFALO, NEW YORK

Prepared For:

ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

BUFFALO, NEW YORK

Prepared By:

URS CORPORATION

BUFFALO, NEW YORK

September 2006

ENGINEER CERTIFICATION

I certify that the Remedial Action Work Plans prepared for the Hanna Furnace Site Subparcel 1, by Malcolm Pirnie dated February 2002 and for Subparcel 2 by O'Brien & Gere Engineers Inc. dated November 2002, were implemented, that construction activities were completed substantially in accordance with these Department-approved Remedial Action Work Plans and that the activities were personally witnessed by persons under my supervision.

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1.0 INTRODUCTION

1.1 Purpose of Report

The purpose of this Construction Certification Report is to provide pertinent information necessary to document that site activities conducted during Phase 1 of the redevelopment of the former Hanna Furnace Corporation property were performed in conformance with the Soils Management Plan (SMP) developed for this site (see URS 2003). This document is not intended as a certification of the construction work associated with the installation of subsurface utilities and roadways.

Now identified as Buffalo Lakeside Commerce Park, this property is currently being redeveloped through the Erie County Industrial Development Agency (ECIDA). Acting on behalf of the ECIDA, URS Corporation (URS) provided project engineer oversight for all site activities performed from September 2003 through October 2004. Destro & Brothers Concrete Company, Inc. (Destro) was retained by ECIDA as the project's general contractor. Destro subcontracted the on-site environmental work to Nature's Way Environmental Consultants & Contractors, Inc. (Nature's Way). The New York State Department of Environmental Conservation (NSYDEC) provided regulatory agency oversight during this phase of the project.

1.2 Site Background

The former Hanna Furnace Corporation site is a vacant industrial property of approximately 113 acres which encircles the eastern portion of the Union Ship Canal. Situated along the eastern shore of Lake Erie at the southern edge of the City of Buffalo, New York, this property is bordered on the west by New York State Route 5, on the south by the Lackawanna Commerce Park, on the east by railroad tracks, and on the north by wetland areas and the former Shenango Steel property. For the purposes of redevelopment, the property has been divided into four parcels (Parcels 1 through 4). Phase 1 of redevelopment, which involved an approximate 24-acre portion of Parcels 1 and 2 (here referred to as the "Site"), has been completed (see Figure 1). This portion of the property was once part of the railroad yard and main manufacturing area for

the former Hanna Furnace Corporation facility. Structures formerly located on the Site included several production buildings, four blast furnaces, and various support structures.

The Buffalo Union Steel Corporation purchased the former railroad yard and manufacturing area in 1900. The Union Ship Canal was constructed in 1910 to service the facility. Pig iron manufacturing commenced between 1900 to 1915 with the construction of the blast furnaces. Following construction of the blast furnaces the property was acquired from the Buffalo Union Steel Corporation by the Hanna Furnace Company. In 1929, the National Steel Company purchased the property and the new corporate entity became known as the Hanna Furnace Corporation.

Iron ore, lime, coke, and other raw materials were delivered via the canal and stockpiled on concrete pads along the south side of the canal (i.e., Parcel 3), north of the Site. The pig iron manufactured on site was transported to customers via the railroad.

In 1982, all operations at the property ceased. The Jordan Foster Scrap Corporation purchased the property in 1983 and subsequently dismantled many of the on-site structures. After filing for bankruptcy in 1986, the Jordan Foster Scrap Corporation leased the property to the Equity Scrap Processing Company. In 1998, the City of Buffalo gained title to the property and on-site structure demolition continued up until the initiation of redevelopment activities.

Since 1982, various agencies and environmental consultants have conducted numerous investigations of the Site in an attempt to characterize the nature and extent of on-site contamination. Site-Specific Action Levels (SSALs) were established for individual compounds to help determine whether excavated soil/fill material could be reused on site. The SSALs, as presented in Table 1, were approved by both the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH), and were developed using the laboratory analytical results from previous investigations in conjunction with the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) No. 4046 guidelines plus a review of site conditions and anticipated future use. The site-specific SMP was developed to establish the procedures necessary to protect workers during redevelopment

activities as well as the protocols to be followed during the excavation and handling of soil and groundwater encountered during operations.

2.0 CONSTRUCTION ACTIVITIES AFFECTING SOIL MANAGEMENT

The primary purpose of Phase 1 of the former Hanna Furnace Corporation property redevelopment effort was construction of the infrastructure (i.e., roadways, utilities, etc.) for the Site. As part of the construction, it was necessary to excavate on-site soil/fill materials, which needed to be properly managed in accordance with the SMP.

Soil/fill was regularly field tested for pH by URS field personnel at the time of excavation. Any excavated soil/fill with a pH between 6.5 and 9.0 was reused on site as non-utility trench subgrade fill or in the berms. Per the SMP, if the pH was greater than 9.0, but less than 12.5, the excavated material could only be reused on site as non-utility trench subgrade fill, but this type of material was never encountered. If the pH was greater than 12.5, then the excavated soil/fill was to be classified as hazardous and stockpiled on site pending off-site disposal, but again, this circumstance never occurred. Any excavated soil suspected of being petroleum-impacted was temporarily staged on site on polyethylene sheeting and covered by polyethylene sheeting. These stockpiles were maintained pending sample collection and characterization to determine if the material could be reused on site or must be disposed of off-site at a licensed facility.

2.1 General Right-of-Way Excavation

A major part of the Phase 1 redevelopment involved the construction of a system of streets and sidewalks providing access onto, and throughout, the Site (see Figures 1 and 2). Excavation within the general right-of-way (ROW) for these streets was required in preparation for the backfill and installation of base materials necessary for proper roadway construction, as shown on Figures 3 and 4.

As part of the construction of the infrastructure for the first phase of development at the former Union Ship Canal Site, approximately 20,000 cubic yards of soil/fill materials were to be excavated for construction of utilities and roadways. In accordance with the NYSDEC-approved SMP for the project, soil samples were to be collected at a frequency of one per 2,000 cubic yards of soil to be excavated. This required that a minimum of 10 samples be collected and analyzed for the Target Compound List (TCL) of organics and the Target Analyte List (TAL) of metals. The results of the analyses we re to be compared to the Site Specific Action Levels (SSALs) contained in the SMP (Table 1) and, then managed accordingly.

As agreed, the NYSDEC allowed URS to utilize the results of soil samples collected during previous investigations from borings located within, or near, the proposed Right-of-Way for the utility/roadways to satisfy this requirement. As shown on Figures 5 and 6, a total of 8 surface soil sampling locations and 10 soil borings were identified within the proposed roadway alignment and/or within 50 feet of it. Whereas the overall number of samples was sufficient to satisfy the SMP requirements, most of the borings and/or sampling points were located within the northern portion of the proposed roadway. Consequently, it was determined that some additional borings should be installed and sampled to characterize soils in the southern portion of the proposed roadway. As a result, during March 2003, URS installed six additional soil borings (i.e. SB-05 to SB- 10) at the approximate locations shown on Figures 5 and 6. These borings were extended to the proposed excavation depth, through the fill materials into the underlying native soils, or to a depth of 10 feet, whichever was greater. A composite sample of the fill materials was collected from each boring and submitted to a NYSDOH certified laboratory for analysis.

The results of the analyses for the samples collected during the previous investigations are contained in Appendix A. The results for the samples collected during this project are contained in Appendix B. A summary of the analytical results for the surface and subsurface soil samples is presented in Tables 2 and 3, respectively. As indicated in these tables, the contaminant concentrations in all the previous samples were below the SSALs. Additionally, the same was true for all the recent samples with the exception of samples from TB-08 and TB-10 which exceeded the SSALS for barium (652 mg/kg vs 500 mg/kg) and total cyanide (101 mg/kg vs 50 mg/kg), respectively.

In order to investigate the extent of the barium and cyanide contamination, a series of soil borings was installed on a radial grid pattern at distances of 10, 20 and 30 feet around each of the two borings with a composite sample of the fill material being collected in each boring. These samples were analyzed for barium and/or cyanide, as applicable to that location. Maps showing the location of the supplemental soil borings relative to TB-08 and TB-10 are contained in Appendix C. The analytical data for these samples also is contained in Appendix C and, summarized in Table 4 for TB-08 and Table 5 for TB-10. As shown in the tables, none of the supplemental samples indicated barium or cyanide at concentrations that exceeded the SSALs. Consequently, it was agreed with the Department that only the soils around each of the two original borings (i.e. TB-08 and TB-10) needed to be excavated and disposed offsite in a permitted landfill.

The laboratory analytical results established that the contaminant concentrations detected in the native soil and fill to be excavated from within the general ROW did not exceed the Site SSALs , with the exception of the two areas around TB-08 and TB-10.. Therefore, in accordance with the SMP, the native soil/fill was assumed to be "clean" and reusable on site within Parcels 1 and 2 (but not within the utility trenches) as either subgrade fill or as part of the above grade berms, depending on the soil/fill's pH levels. During the period of September 2003 through October 2004, excavation within the general ROW for the construction of on-site roads "A", "B", "C", "D" and "E" (see Figure 1) and the accompanying sidewalks was completed. In addition to continuous visual and olfactory inspection, URS field personnel conducted periodic field checks for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). Soil samples were collected, placed in Ziploc bags, and allowed to warm inside a heated vehicle or directly in the sun (depending on the season). The PID was then used to measure VOC concentrations within the headspace of the bag. URS field personnel also used portable field instruments or pH paper strips to measure soil pH. All excavated soil/fill, other than the exceptions discussed in subsequent sections below, was determined to be reusable on site as either non-utility trench subgrade fill or as part of the berms. Destro reused this material to construct part of the above grade berms encircling the Site.

Section III of the SMP included provisions for managing *"significantly different" (i.e., visually, PID readings, olfactory, etc.)* material encountered during excavation. Although some

areas of petroleum-impacted soil/fill material were encountered during ROW excavation, it was not "significantly different" from material identified in previous Site investigations.

2.2 Utilities Excavation

In addition to the construction of streets and sidewalks, subsurface utilities were installed as part of the Site's infrastructure. Sanitary sewer, storm sewer, and water lines were installed beneath or alongside the streets throughout the Site and connected to existing off-site services. A "utility corridor" paralleling on-site roads was also constructed for the purpose of future utility installations (primarily natural gas, telephone, and electric).

Excavation of native soil/fill was required to pre-specified depths in preparation for the installation of piping and the backfill of base materials necessary for proper utility construction. Excavation depths reached 15-20 feet below existing grade for extensive sections of the sanitary sewer, particularly along "D" and "C" roads (it is not the intent of this report to provide as-built drawings of the subsurface utilities; however, they can be provided upon request). As previously stated, laboratory analytical results established that the contaminant concentrations detected in the native soil and fill to be excavated from these areas, with the exception of the fill materials immediately around TB-08 and TB-10, did not exceed the Site SSALs. Therefore, the native soil/fill was assumed to be "clean" and was reused on site, dependent on pH, as detailed above.

From September 2003 through October 2004, excavation and installation of the sanitary sewer, storm sewer, water line, and utility corridor was completed. URS field personnel conducted field checks of pH and for the presence of VOCs. With a few exceptions, which are discussed in subsequent sections, all soil/fill excavated during utility installation was determined to be reusable on site as either non-utility trench subgrade fill or in the berms. Destro reused this material to construct part of the above grade berms encircling the Site. As indicated above, previously undelineated petroleum-impacted soil/fill material was encountered in a few areas (i.e., sanitary sewer manhole No. 8 [MH-8], sanitary sewer manhole No. 11 [MH-11], and the "duct bank") and managed according to the SMP (i.e., temporarily staged on-site prior to off-site disposal).

2.3 NAPL Areas Excavations/Pipeline

Previous subsurface investigations had identified three areas north of "C" Road where petroleum-related non-aqueous phase liquid (NAPL) was present in the soil (see Figures 1 and 2). These areas were identified as NAPL Areas No. 1, No. 2, and No. 3. The SMP developed for the Site required that these areas be excavated and the material either treated on site or disposed of off site at a licensed facility.

Further investigation by previous consultants/contractors delineated the presumed extent of these NAPL areas. In total, it was estimated that approximately 1,388 cubic yards of material was impacted by the NAPL and would need to be excavated. The estimated NAPL areas' boundaries were subsequently surveyed and staked. However, the final extent of NAPL area excavation was, pursuant to Section II, Part 6.6 of the SMP, to "be established in the field based on visual evidence of NAPL" and a NYSDEC representative was "required to approve the extent of excavation."

On separate occasions in November and December 2003, Nature's Way advanced borings using a direct-push drill rig within the NAPL areas. Representative soil samples were collected for laboratory analysis for the purpose of pre-excavation characterization of the impacted soil for off-site disposal approval. The laboratory analytical results are included in Appendix D.

Between February 2003 and August 2004, excavation of the three NAPL areas was completed. Based on previous investigations, NAPL Area No. 1 was excavated to a depth of approximately 5 feet below grade. NAPL Areas No. 2 and No. 3 were excavated to a depth of approximately 8-12 feet below grade. Upon reaching the groundwater table (approximately 4-5 feet below grade), each excavation was continually dewatered throughout the soil removal process. At Nature's Way's discretion, excavated soil was either loaded directly into trucks for transportation and disposal off site or temporarily staged on site in a polyethylene-lined bermed area and covered by polyethylene sheeting. If the soil moisture content was deemed to be

excessive, then the trucks were lined with polyethylene sheeting for transport to the disposal facility.

The entire soil column delineated by previous investigations, from the existing ground surface to the final depth, was excavated and disposed of from NAPL Areas No. 1 and No. 2. While the top 4 feet of NAPL Area No. 3 was assumed to be "clean" and was stripped off and staged separately onsite, subsequent laboratory analysis of this "stripped soil" indicated exceedances of the Site SSALs (see Appendix E). As a result, this soil was also eventually disposed of offsite. Based primarily on visual and olfactory inspection, significantly more impacted soil was encountered than anticipated, particularly in NAPL Areas No. 2 and No. 3. The final extent of the NAPL areas' excavation exceeded the previously delineated boundaries. Inspection of NAPL area soil by URS field personnel using a PID was also regularly conducted, but because of the type (primarily semi-volatile organic compounds [SVOCs]) and the highly weathered nature of contaminants the PID exhibited low readings, not truly indicative of actual SVOC concentrations. URS field personnel consulted regularly with Mr. David Locey of the NYSDEC regarding each expansion of the NAPL areas. The final extent of each excavation was determined by Mr. Locey based on the physical evidence. Confirmation soil samples from the sidewalls and floors of each NAPL area were collected to further corroborate the final excavation limits. The laboratory analytical results for these samples are included in Appendix F.

In total, approximately 3,520 tons of NAPL-impacted soil were excavated and disposed of off site at the Waste Management disposal facility in Chaffee, New York. The total volume of NAPL-impacted soil was not transported off site for disposal at one time. In the interim, Nature's Way, under direction from ECIDA, switched disposal facilities in order to control costs. The remaining approximately 3,653 tons of NAPL-impacted soil were excavated and disposed of off site at the Ensol disposal facility in Tonawanda, New York. Disposal approvals and additional predisposal laboratory analytical results are included in Appendix G.

On May 27, 2004, during expansion of the NAPL Area No. 2 excavation to the south, a 24-inch-diameter iron pipe was uncovered approximately 4 feet below grade oriented in an east/west direction. A small hole was opened in the top of the pipe, and inspection revealed petroleum-impacted sludge and water within it. Pursuant to the NYSDEC's request, the lateral

extent of this pipe was traced by excavating test pits along its length to the east and west of NAPL Area No. 2. The pipe extended approximately 450 feet to the west of NAPL Area No. 2 and approximately 500 feet to the east. Once the limits were defined, the pipe was then opened at regular intervals and cleaned using a sewer jet/vacuum truck. The pipe sludge was staged on site in a polyethylene-lined bermed area and covered by polyethylene sheeting pending off-site disposal. Due to its proximity to the NAPL areas, this contaminated material was considered to be from the same source and, therefore, final NAPL area disposal volumes include this material. The pipe liquid, which included the petroleum-impacted sludge/water and the wash water, was transferred to on-site Baker tanks pending on-site treatment and discharge. Visual and olfactory inspection of the soil/fill material excavated from the test pits used for the pipeline delineation and cleaning did not indicate obvious contamination. Therefore, the NYSDEC approved the use of this material to backfill the test pits.

The NAPL Area pipeline extended eastward beyond the Phase 1 project boundary onto the Phase 2 project site (see Figure 2). Due to the initiation of Phase 2 Union Ship Canal Redevelopment construction, it was not possible to complete the pipe cleaning to its eastern limit. Cleaning of the pipe was halted by the ECIDA on August 5, 2004 at approximately 300 feet east of NAPL Area No. 2 and the pipe end was plugged with sandbags. ECIDA and the NYSDEC agreed that completion of the pipe cleaning to the east would be postponed until a later, unspecified date. Pursuant to a request from ECIDA and NYSDEC, a water sample was collected at the location where cleaning was halted for laboratory analysis (see Appendix H). The test pit located approximately 300 feet east of NAPL Area No. 2 was backfilled using existing material by the Phase 2 Contractor per the ECIDA's request and marked for future reference.

2.4 Previously Undelineated Petroleum-Impacted Soil/Fill Material

During excavation for the construction and installation of utilities, previously undelineated petroleum-impacted soil/fill material was encountered in the areas described below. All material was managed in accordance with the SMP.

2.4.1 Sanitary Sewer Manhole No. 8 (MH-8)

While approaching sanitary sewer manhole No. 8 (MH-8) from the west during excavation of the sanitary sewer, unanticipated petroleum-impacted soil was encountered on November 18, 2003 to an approximate depth of 16 feet below grade from roadway station C7+60 to C8+10 (see Figure 2). Based on visual and olfactory inspection results, URS directed Destro to temporarily stage this material on site. The material was underlain and covered by polyethylene sheeting. It was obvious, due to the extent of contamination, that this material could not be reused on site; therefore, characterization sampling for Site reuse was deemed unnecessary. Nature's Way collected soil samples for laboratory analysis for predisposal characterization. The disposal facility's approval and the predisposal characterization laboratory analytical results are included in Appendix I.

In total, approximately 124 tons of MH-8 soil were excavated and disposed of off site at the Waste Management disposal facility in Chaffee, New York.

2.4.2 Sanitary Sewer Manhole No. 11 (MH-11)

On December 1, 2003, during excavation for the sanitary sewer in the vicinity of manhole No. 11 (MH-11) previously undelineated petroleum-impacted soil was encountered to an approximate depth of 12 to 14 feet below grade from roadway station B13+40 to B11+35 (see Figure 2). Based on visual and olfactory inspection, URS initially directed Destro to temporarily stage this material on site in separate piles pending characterization for possible on-site reuse, the material was underlain and covered by polyethylene sheeting. Like the MH-8 material, it was obvious (due to the extent of contamination) that this material would not be able to be reused on site and, therefore, characterization sampling for Site reuse was unnecessary. Once it became apparent that there was a significant volume of material that had to be staged, Destro was directed to construct a large polyethylene-lined bermed area where all MH-11 petroleum-impacted soil could be staged in one pile. Nature's Way collected soil samples for laboratory analysis for predisposal characterization (see Appendix J).

In total, approximately 1,728 tons of MH-11 soil were excavated and disposed of off site at the Waste Management disposal facility in Chaffee, New York. Approximately 154 tons of MH-11 soil were excavated and disposed of off site at the Ensol disposal facility in Tonawanda, New York.

2.4.3 "Duct Bank"

Also on December 1, 2003, during excavation for the sanitary sewer in the vicinity of MH-11, an east/west oriented subsurface structure was encountered and unintentionally broken open during operations. Referred to as the "duct bank" (see Figure 2), this structure was located approximately 3 to 4 feet below grade. Constructed of a concrete floor and sides with steel plates across its top, this structure measured approximately 4 feet wide by 6 feet deep and resembled a utility duct tunnel. An unknown, but significant, volume of water with a heavy petroleum sheen was contained within the duct bank, which spilled into the sanitary sewer excavation when the duct bank was broken open. This water was managed in the same manner as all water encountered during excavation and pumped into on-site Baker tanks pending treatment and/or discharge. Sludge-type material was also present within the structure. Upon notification, the NYSDEC requested that the lateral extent of the duct bank be determined, that any petroleum-impacted contents, both liquid and solid, be disposed of or treated as appropriate, and that the duct bank be thoroughly cleaned and then backfilled with clean fill. Other remnants of the duct bank were discovered in a small, naturally-formed "sink hole" approximately 600 feet to the west where it appeared that the duct bank's roof had collapsed. The duct bank was also unearthed as far east as NAPL Area No. 2 (approximately 500 feet away) when NAPL Area No. 2 was being expanded to the south. Visual inspection indicated that the duct bank extended further west and east beyond these remnants noted above. Further inspection using test pits revealed that earthen barriers had formed in some locations to the west and east of MH-11 during the collapse of the duct bank's roof. These barriers had effectively restricted the petroleum-impacted area to a stretch of duct bank measuring from approximately 100 feet to the west of MH-11 to approximately 120 feet to the east.

Cleaning and backfilling of the impacted sections of the duct bank was completed on March 10-17 and 25, 2004. The water within the duct bank was managed pursuant to the

procedures established for all other water encountered during Site operations. Some soil/fill material initially excavated from the top of the duct bank was considered to be reusable on site and was added to the berms, but the majority of material, based on visual and olfactory inspection, was temporarily staged on site pending off-site transportation and disposal at a licensed facility. Similar to the MH-11 "hot spot", it was obvious, due to the extent of contamination, that this material would not be able to be reused on site; therefore, characterization sampling for Site reuse was unnecessary. Due to its proximity to the MH-11 "hot spot", the duct bank contamination was considered to be from the same source and this material was staged with the MH-11 soil within the polyethylene-lined bermed area. Predisposal sampling characterization for the duct bank material was conducted along with the MH-11 characterization. The total volume disposed of from MH-11 includes the duct bank material.

The eastern section of the duct bank, from MH-11 eastward approximately 120 feet, was the more contaminated section. Once this section was dewatered and the solids were removed, Nature's Way proceeded to pressure wash the walls and floor. During this process, a petroleum sheen and product was observed infiltrating through some cracks in the duct bank's south wall. The NYSDEC requested additional excavation along the south side of the south wall (i.e., outside the duct bank) to determine the source of the sheen and product. Petroleum-impacted soil was encountered during this excavation work and subsequently removed and staged in the polyethylene-lined bermed area pending off-site transportation and disposal. Confirmatory soil samples were collected from this excavation by Nature's Way, per NYSDEC request, and submitted for laboratory analysis (see Appendix K).

2.5 Metals-Impacted Soil/Fill Material

2.5.1 Barium "Hot Spot"

As discussed previously, the investigations had identified a localized area in the vicinity of TB-8 (survey station C7+37) with concentrations of barium in excess of Site SSALs (see Figure 2). Therefore, it was necessary to excavate this "hot spot" and dispose of the material off site at a licensed facility.

On November 17, 2003, Destro excavated the barium "hot spot". Measuring approximately 10 feet by 10 feet by 16 feet deep, this material was staged temporarily on site in one pile underlain and covered by polyethylene sheeting.

Nature's Way collected predisposal characterization samples for laboratory analysis. The disposal facility's approval and predisposal characterization laboratory analytical results are included in Appendix L.

In total, approximately 84 tons of barium-impacted soil were excavated and disposed of off site at the Waste Management disposal facility in Chaffee, New York.

2.5.2 Cyanide "Hot Spot"

Additionally, the investigations had identified a localized area in the vicinity of TB-10 (survey station B14+30) with concentrations of cyanide in excess of Site SSALs (see Figure 2). Therefore, it was necessary to excavate this "hot spot" and dispose of the material off site at a licensed facility.

On March 30, 2004, Destro excavated the cyanide "hot spot". Measuring approximately 10 feet by 10 feet by 13 feet deep, this material was staged temporarily on site in one pile underlain and covered by polyethylene sheeting.

Nature's Way collected predisposal characterization samples for laboratory analysis. Disposal facility approvals and predisposal characterization laboratory analytical results are included in Appendix M.

In total, approximately 107 tons of cyanide-impacted soil were excavated with approximately 20 tons being disposed off site at the Waste Management disposal facility in Chaffee, New York and, approximately 87 tons being disposed off site at the Ensol disposal facility in Tonawanda, New York.

2.6 Underground Storage Tanks

2.6.1 Underground Storage Tank No. 1

On March 24, 2004, during excavation of the ROW for "B" Road, a previously unknown underground storage tank (UST) was uncovered. URS subsequently notified Mr. David Locey of the NYSDEC. Located at survey station B11+60 (see Figure 2), the tank measured 48 inches in diameter by 120 inches long, which equates to a volume of approximately 1,000 gallons. An unknown liquid was in the tank and there was significant petroleum odor. Tank liquid was collected with a clear bailer, which appeared to be predominantly water with a heavy petroleum sheen or minimal product layer (~0.25-inches thick). A small diameter (~0.5-inch) leak evident along the bottom of one end was plugged. Nature's Way utilized their vacuum truck to remove the contents of the tank, which were transferred to an on-site Baker tank for future treatment. The tank was excavated and moved to the polyethylene-lined bermed area pending transportation and off-site disposal.

Once the tank was moved to the bermed area, Destro excavated petroleum-impacted soil at this location, presumably caused by the leaking UST. An area measuring approximately 10 feet by 18 feet by 5 feet deep was excavated and staged separately within the bermed area. Nature's Way continued to use the vacuum truck to transfer petroleum-impacted water from the excavation to an on-site Baker tank. At the NYSDEC's request, excavation confirmation soil samples and predisposal characterization soil samples were collected for laboratory analysis. The disposal facility's approval and the laboratory analytical results are included in Appendix N.

In total, approximately 34 tons of soil were excavated and disposed of off site at the Waste Management disposal facility in Chaffee, New York.

2.6.2 Underground Storage Tank No. 2

On June 10, 2004, during excavation of the utility corridor along the west side of "B" Road, an unknown UST was uncovered. Located at survey station B12+30 (see Figure 2), the

tank measured 48 inches in diameter by 72 inches long, which equates to a volume between 500 and 1,000 gallons. Approximately 30 gallons of unknown liquid was in the tank. One end of the UST had been damaged when it was uncovered, but no spillage was evident. This end of the tank was propped up to prevent any fluid leakage. Destro notified Nature's Way, who was not present on site, and URS attempted unsuccessfully to contact Mr. David Locey of the NYSDEC. The UST was then secured for the night.

On June 11, 2004, Nature's Way pumped the liquid contents of the UST to a 55-gallon drum. After checking the UST with a lower explosive limit (LEL) meter for explosivity, one end of the tank was cut open for easier access. Tank sludge was removed and placed in a second 55-gallon drum, and the tank's interior was wiped down. The drums were sealed and staged on site with the UST within the polyethylene-lined bermed area pending transportation and disposal off site. Since no contamination was evident in the soil encircling the UST, no confirmatory soil samples were requested by the NYSDEC.

On September 30, 2004, the two 55-gallon drums were transported off site by Nature's Way and delivered on October 1, 2004 to Industrial Oil Tank Services, Inc. in Oriskany, New York for processing/disposal (see Appendix O).

2.7 Other Soil Management Issues

2.7.1 South Buffalo Railway Berm

Beginning September 16, 2003, during excavation of the general ROW for "D" Road, it became necessary to excavate through the railroad berm of the former South Buffalo Railway, which is located within the City of Lackawanna (see Figure 1). This soil/fill material was not suspected of being contaminated but, because it originated from the City of Lackawanna area of the Site, laboratory analysis was conducted before it was reused in the berms, which were to be located on City of Buffalo property (see Appendix P). The results confirmed that this material could be reused on site as either non-utility trench subgrade fill or in the berms. Destro reused this material as part of the above grade berm located along the southern boundary of the Site.

2.7.2 Diesel Spill

On November 6, 2003, Destro was conducting normal sanitary sewer excavation and construction operations along "C" Road. The trench was being dewatered directly to the ground to the north of "C" Road because the water's pH was within acceptable limits in this area. Excavated soil/fill material was being transported by Destro's trucks to the above grade berm to the east of "D" Road, along the southern property boundary. The trucks' route along a dirt road was in close proximity to the water discharge area. Later in the day, URS field personnel noticed a heavy sheen on the pooled discharge water. Further inspection revealed that one of Destro's truck's fuel tanks had been punctured during transit between the excavation area and the berm, resulting in a release of diesel fuel.

URS instructed Destro to contact the NYSDEC and report the spill. This spill was assigned NYSDEC spill number 0375387. Nature's Way applied absorbent pads on the pooled water to control some of the sheen. The following day, Ms. Francine Gallego of the NYSDEC arrived on site to investigate the diesel spill. She instructed Destro to excavate the top few inches of dirt road in specific areas, determined by her, where petroleum sheen or product was present. This material was then staged on site and underlain and covered by polyethylene sheeting pending sampling, off-site transport, and disposal.

In total, approximately 20 tons of diesel-impacted soil were transported off site and disposed of at the Waste Management disposal facility in Chaffee, New York, but this volume is not included with the final Phase 1 totals. Costs associated with the handling, sampling, and disposal of this material were the responsibility of Destro only.

As indicated on the NSYDEC website, spill number 0375387 was closed by the NYSDEC on July 29, 2004.

2.7.3 Sanitary Sewer Manhole No. 8 (MH-8) Test Pit

On July 9, 2004, at the NYSDEC's request, Nature's Way excavated two test pits (see Figure 2) in the immediate vicinity of sanitary sewer manhole No. 8 (MH-8). The purpose of these test pits was to determine if the contamination encountered and excavated in November 2003 (see Section 2.4.1) had been effectively removed. Located northeast and southeast of MH-8, each test pit measured approximately 4 feet by 15 feet by 15-16 feet deep. Soil samples were collected from each pit in Ziploc bags and allowed to warm in the sun. PID measurements of each bag's headspace for VOCs indicated no contamination.

At the NYSDEC's request, soil samples were collected for laboratory analysis (see Appendix Q) as confirmation of the visual and olfactory evidence. The test pits were subsequently backfilled with the excavated material pursuant to NYSDEC approval.

2.8 Backfill

Virgin clean fill material was delivered on site from recognized commercial suppliers to backfill all excavations to final grade. No additional testing was necessary for this material, but a certificate authenticating the fill was virgin material was required from each supplier (see Appendix R).

2.9 Groundwater Management

According to Section III, page C-3 of the SMP, "(s)should it be necessary to dewater the excavations, the water can be discharged onto the ground unless staining or elevated PID readings are observed in the excavation, a sheen is present on the water surface or if the pH is less than 6.5 or greater than 8.5."

Elevated pH and/or sheen on the groundwater surface were prevalent conditions during the course of this project. As a result, a significant volume of groundwater was dewatered, virtually continuously during operations, from on-site excavations into Baker tanks for storage

and subsequent processing/treatment. There were very few locations where the groundwater's pH was within the originally established acceptable range for direct discharge onto the ground (e.g., the south end of "D" Road, a short middle section of "C" Road, and the west end of "A" Road).

If elevated pH was the only concern, then Nature's Way would mix muriatic acid with the groundwater stored in the Baker tank to neutralize the pH to within the originally established acceptable range. The groundwater was then discharged directly onto the ground while the effluent was monitored for pH by URS or Nature's Way field personnel. Initially, it was acceptable to discharge this treated groundwater to any on-site area away from the work zone. In an effort to control costs due to the significantly increased, and unanticipated, volume of on-site groundwater needing pH treatment, the ECIDA petitioned the NYSDEC for a more lenient pH limit. When the NYSDEC agreed and raised the acceptable pH limit to 11.0 on March 2, 2004 (see Appendix S), it then became necessary to discharge the groundwater, whether directly from the excavation or from Baker tanks, to specific pre-approved areas. Eventually, all groundwater was discharged to an infiltration trench located south of "C" Road designed and constructed in July 2004 explicitly for this purpose.

If a sheen was present on the groundwater surface during excavation then, regardless of pH, this water was pumped into Baker tanks pending treatment and/or disposal. Following pH neutralization (if necessary), the groundwater would be allowed to settle in the Baker tank so any sheen would concentrate on the water's surface. It was the accepted and approved practice to then decant the lower 90% (approximately) of the Baker tank groundwater volume directly onto the ground in approved on-site areas. The effluent was monitored for pH and sheen; discharge was halted if sheen was observed in the effluent. The remaining Baker tank groundwater volume (approximately 10%) was subsequently treated by two methods during this project: either through disposal directly to the Erie County Sewer District (ECSD) or through carbon filtration prior to on-site discharge.

A limit was established for the total volume of stored groundwater that could be discharged to the ECSD. This water was discharged directly by Nature's Way to an ECSD sewer manhole located east of "D" Road either through pumping/gravity drain directly from the Baker

tanks or via vacuum truck transfer. ECSD's disposal approvals and the predisposal characterization laboratory analytical results for this groundwater are included in Appendix T. When the approved volume of groundwater to be discharged to the ECSD was reached, then two 1,000-pound carbon filter vessels were used to treat this type of groundwater for the remainder of the project. Nature's Way would accumulate a sufficient volume of groundwater with sheen in Baker tanks before utilizing this method. Pilot tests were conducted before each use of the carbon filters where pre- and post-carbon filter water samples were collected and submitted for laboratory analysis (see Appendix U). During actual discharge operations, the effluent was monitored for sheen by URS or Nature's Way field personnel. This water was discharged to the same locations used for the decanted water mentioned previously.

3.0 LABORATORY ANALYTICAL DATA

As required by the SMP and/or requested by the NYSDEC, soil and groundwater samples were collected at various times during the course of this project and submitted for laboratory analysis. The purposes of these soil samples included characterization for possible Site reuse, predisposal characterization, and confirmation of excavation limits. Groundwater samples were collected for predisposal characterization, characterization to determine treatment options, determination of pre- and post-carbon filtration concentrations, and characterization of possible contaminants and their concentrations for future reference.

Nature's Way utilized two laboratories during the course of this project, Paradigm Environmental Services, Inc. of Rochester, New York (NYSDOH ELAP #10958) and PSC Analytical Services, Inc. of Burlington, Ontario, Canada (NYSDOH ELAP #10756). Both laboratories are accredited under the New York State Department of Health Environmental Laboratory Approval Program (NYSDOH ELAP).

3.1 NAPL Areas Excavations/Pipeline

Soil samples were collected for laboratory analysis from the NAPL areas on numerous occasions for a variety of reasons. On November 6, 2003 and again on December 12, 2003,

Nature's Way used a direct-push drill rig to collect representative soil samples from all three NAPL areas for predisposal characterization. Because the volume of material to be disposed of kept increasing during excavation, the disposal facilities required more laboratory analysis. In addition, Nature's Way switched disposal facilities during the NAPL areas' excavation, and the new disposal facility required their own laboratory analysis. As a result, additional predisposal characterization soil samples were collected from the NAPL areas on February 29, 2004, May 18, 2004, May 28, 2004, June 28, 2004, and July 16, 2004. The laboratory analytical results for predisposal characterization are included in Appendix G.

Based on the results from previous investigations, it had been assumed that the top 4 feet of NAPL Area No. 3 was "clean" and able to be reused on site. This material was stripped off during excavation operations and staged separately near the berm pending laboratory analysis. Soil samples were collected on March 3, 2004. However, the laboratory analytical results indicated exceedances of Site SSALs (see Appendix B). The NYSDEC requested additional samples and analysis as confirmation, which were collected on March 25, 2004. The laboratory analysis of these samples confirmed the Site SSAL exceedances. As a result, this stripped bermed material was included with the other NAPL areas' soil for off-site disposal.

Representative soil samples were collected from all three NAPL areas and submitted for laboratory analysis to confirm the excavation limits established by URS and NYSDEC field personnel through visual and olfactory observations. Samples were collected from all sidewalls and the floors of each NAPL area. Because NAPL Areas No. 2 and No. 3 were extended beyond their original presumed limits, additional confirmation samples were necessary. Confirmation soil samples were collected from NAPL Area No. 1 on February 16, 2004 (they were re-sampled on March 3, 2004 due to a laboratory mix-up). NAPL Area No. 2 was sampled on February 18, 2004 (and re-sampled on March 3, 2004 due to a laboratory mix-up) and July 30, 2004. Confirmation soil samples were collected from NAPL Area No. 3 on March 3, 2004, August 5, 2004, and August 9, 2004. The laboratory analytical results for excavation limits' confirmation sampling are included in Appendix F.

Samples were collected on several occasions for laboratory analysis to determine treatment options for containerized NAPL groundwater. On February 18, 23, and 24, 2004,

samples of containerized NAPL groundwater were collected from on-site Baker tanks to determine the feasibility of decanting the majority of this water directly to the ground without carbon filtration. On March 3, 2004, pursuant to a request from the NYSDEC, a groundwater sample was collected directly from NAPL Area No. 3 for the same purpose. The laboratory analytical results are included in Appendix V.

On August 5, 2004, prior to temporarily backfilling the NAPL Area pipeline test pit located approximately 300 feet east of NAPL Area No. 2, the ECIDA and NYSDEC requested a groundwater sample be collected to characterize possible contaminants and their respective concentrations. The laboratory analytical results are included in Appendix H.

3.2 Previously Undelineated Petroleum-Impacted Soil/Fill Material

3.2.1 Sanitary Sewer Manhole No. 8 (MH-8)

As stated previously, due to the extent of petroleum impact to the soil encountered during sanitary sewer excavation in the vicinity of MH-8, it was obvious that this material would not be able to be reused on site and, therefore, characterization sampling for Site reuse was unnecessary.

On December 3, 2003, representative soil samples were collected from the stockpiles excavated from the vicinity of MH-8 and submitted for laboratory analysis for predisposal characterization (see Appendix I).

3.2.2 Sanitary Sewer Manhole No. 11 (MH-11)

As previously stated, it was obvious (due to the extent of contamination encountered during sanitary sewer excavation in the vicinity of MH-11) that this material would not be able to be reused on site; therefore, characterization sampling for Site reuse was unnecessary.

On March 4, 2004, representative soil samples were collected from the stockpiles excavated from the vicinity of MH-11 and submitted for laboratory analysis for predisposal characterization. Additional predisposal characterization soil samples were collected on March 24, 2004 and April 5, 2004. The laboratory analytical results for predisposal characterization are included in Appendix J.

3.2.3 "Duct Bank"

Characterization sampling for Site reuse was also unnecessary for the excavated duct bank material. In addition, predisposal sampling characterization for the duct bank material was included with the MH-11 stockpiled material. However, the NYSDEC requested confirmation soil samples be collected from an additional excavation along the south side of the south wall (i.e., outside the duct bank). These samples were collected for laboratory analysis on March 16, 2004 and the results are included in Appendix K.

3.3 Metals-Impacted Soil/Fill Material

3.3.1 Barium "Hot Spot"

On March 22, 2004, soil samples were collected from the barium-impacted soil stockpile for laboratory analysis for predisposal characterization. The laboratory analytical results are included in Appendix L.

3.3.2 Cyanide "Hot Spot"

On March 31, 2004, soil samples were collected from the cyanide-impacted soil stockpile for laboratory analysis for predisposal characterization. The laboratory analytical results are included in Appendix M.

3.4 Underground Storage Tanks

3.4.1 Underground Storage Tank No. 1

As stated previously, once the UST was removed to the polyethylene-lined bermed area, Destro excavated petroleum-impacted soil from an area measuring approximately 10 feet by 18 feet by 5 feet deep. Pursuant to the NYSDEC's request, confirmation soil samples were collected from the excavation on March 25, 2004 for laboratory analysis. Also on March 25, 2004, soil samples were collected from the stockpiled excavated soil for laboratory analysis for predisposal characterization. The laboratory analytical results for both are included in Appendix N.

3.4.2 Underground Storage Tank No. 2

As stated previously, once the UST was removed to the polyethylene-lined bermed area, no contamination was evident in the soil encircling the tank. As a result, no confirmatory soil samples were requested by the NYSDEC.

3.5 Other Soil Management Issues

3.5.1 South Buffalo Railway Berm

As stated previously, characterization sampling of this stockpiled soil was necessary to determine possible Site reuse. Soil samples were collected for laboratory analysis on October 7, 2003 and the results are included in Appendix P.

3.5.2 Sanitary Sewer Manhole No. 8 (MH-8) Test Pit

During test pit excavation on July 9, 2004, the NYSDEC requested the collection of soil samples to confirm the visual and olfactory evidence indicating no contamination prior to backfilling. The laboratory analytical results are included in Appendix Q.

3.6 Miscellaneous Groundwater

At various times during the course of this project, it was necessary to treat groundwater stored in on-site Baker tanks which was impacted by a petroleum sheen. Two methods were used for this purpose: direct disposal to the ECSD and carbon filtration.

Predisposal characterization groundwater samples were collected on December 3, 2003 from on-site Baker tanks and submitted for laboratory analysis prior to discharge to the ECSD (see Appendix R).

Prior to utilizing carbon filtration, Nature's Way was required to collect groundwater samples from the influent and effluent of the carbon filters to verify that the effluent concentrations were within acceptable limits. Pre- and post-carbon filter groundwater samples were collected on November 10, 25, and 26, 2003, December 30, 2003, and February 26, 2004. The laboratory analytical results are included in Appendix U.

On several occasions, NAPL areas groundwater was collected for laboratory analysis to determine if it was feasible to decant it directly to the ground without prior treatment. These groundwater samples were collected on February 18, 23, and 24, 2004, and March 3, 2004. The laboratory analytical results are included in Appendix V.

4.0 REFERENCES

URS Corporation, 2003. Erie County Industrial Development Agency Buffalo's Union Ship Canal Phase 1 Soils Management Plan, Volume 3 of 3. May.

TABLES

TABLE 1

BUFFALO'S UNION SHIP CANAL REDEVELOPMENT – PHASE 1
SITE SPECIFIC ACTION LEVELS

Parameter	Highest Value At Parcel 2 Surface Soil	Highest Value At Parcel 2 Subsurf Soil	Soil Cleanup Guidelines	Eastern U.S. Background Range	Site Specific Action Levels
Total VOCs (ppm)					
Total VOCs	0.278 (3)	0.777 (5)	NA		**10**
SVOC (ppm)					
Total SVOCs	**2,772**	63.92	500		**500**
Pesticides/PCBs (ppm)					
Total Pesticides	No Data	No Data			**10**
Total PCBs (surface to 1 ft)	0.443		1		**1**
Total PCBs (greater than 1 ft)		0.031	10		**10**
Metals (ppm)					
Aluminum	33500	66500	SB	33000	
Antimony	51.5	48.2	SB	NA	
Arsenic	29.3	59.8	7.5 or SB		**50**
Barium	381	722	300 or SB		**500**
Beryllium	6.7	12.5	0.16 or SB	0-1.75	
Cadmium	10.8	7.5	(10)		**20**
Calcium	205000	266000	SB	130-35000	
Chromium	416	88.8	(50)		**200**
Cobalt	10.2	9.9	30 or SB	2.5-60	
Copper	4310	1530	25 or SB	1-50	
Iron	163000	189000	2000 or SB	2000-550000	
Lead	1480	1890	(1000)		**1000**
Magnesium	44100	37500	SB	100-5000	
Manganese	6670	4560	SB	50-5000	
Mercury	4.4	0.54	0.1		**1**
Nickel	56.6	21.5	13 or SB	0.5-25	
Potassium	3380	5280	SB	8500-43000	
Selenium	12.4	41.9	2 or SB		**50**
Silver	5.3	2.7	SB		**1000**
Sodium	1300	1400	SB	6000-8000	
Thallium	10.9	12.2	SB	NA	
Vanadium	67.5	98.5	150 or SB	1-300	
Zinc	1460	982	20 or SB	9-50	
Cyanide	1.5	32.3	NA	NA	**50**

NOTES:

Bold - Site-specific action levles (SSALs)

NC - No Criteria Established

NA - Not Available

NO - Naturally occurring compound.

SB - Site Background

Soil cleanup guidelines and Eastern U.S. background ranges were obtained from NYSDEC TAGM #4046 (1/24/94). Value in parentheses are NYSDEC revised values for non-residential sites but have not yet been incorporated into TAGM #4046.

TABLE 2
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SUMMARY OF SURFACE SOIL ANALYTICAL RESULTS

Location ID			MPI (1999)				MPI (2000) Debris Piles			
Sample ID			Comp SB-4	Comp SB-5	Comp SB-11	Comp SB-35	Grab SS-11	Grab SS-14	Grab SS-15	Grab SS-18
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			-	-	-	-	-	-	-	-
Date Sampled			1/25/99	1/25/99	1/28/99	1/28/99	2/23/00	2/24/00	2/24/00	2/24/00
Parameter	Units	SSAL								
Total VOCs	ppm	10	NA	NA	NA	NA	0.021	0.002	0.005	0.005
Total SVOCs	ppm	500	5.186	6.820	1.788	12.810	1.133	6.230	17.156	5.392
Total Pesticides		10	NA	NA	NA	NA	-	0.005	0.011	-
Total PCBs (surface to 1ft)		1	NA	NA	NA	NA	-	-	-	-
Total PCBs (>1ft)		10	NA	NA	NA	NA	-	-	-	-
Metals										
Aluminum	ppm		30,400	22,700	21,300	24,000	4,010	7,670	7,300	6,600
Antimony	ppm		-	-	7.65	9.02	-	-	-	-
Arsenic	ppm	50	-	-	-	-	6.3	-	3.7	3.0
Barium	ppm	500	350	247	222	204	40.2	71.3	80.3	87.8
Beryllium	ppm		7.45	5.21	5.29	4.12	-	-	0.73	0.92
Cadmium	ppm	20	-	6.7	-	0.707	-	1.4	1.9	1.5
Calcium	ppm		163,000	118,000	154,000	125,000	52,900	65,100	62,100	52,100
Chromium	ppm	200	12.2	127	24.5	20.7	8.2	13.2	13.3	17.6
Cobalt	ppm		1.89	5.55	5.88	5.15	-	6.7	4.5	5.2
Copper	ppm		27.7	40.9	49.7	51.2	11.0	14.7	39.0	49.1
Iron	ppm		13,700	79,300	80,800	77,000	7,910	14,300	13,700	13,300
Lead	ppm	1000	33.9	185	1,120	177	15.2	22.4	188	117
Magnesium	ppm		38,200	23,500	20,900	12,500	17,700	19,200	9,470	11,500
Manganese	ppm		2,320	3,530	2,670	2,690	230	422	510	610
Mercury	ppm	1	-	-	-	-	-	0.12	0.30	0.48
Nickel	ppm		14.2	34.1	24.8	25	7.7	15.6	13.5	18.1
Potassium	ppm		2,010	1,570	1,560	1,490	1,100	1,870	1,470	1,270
Selenium	ppm	50	-	-	-	-	33.1	33.2	21.4	24.0
Silver	ppm	1000	1,170	1,020	662	531	-	-	-	-
Sodium	ppm		6.26	30.1	14.8	19.6	-	230	-	-
Thallium	ppm		-	-	-	-	-	-	2.7	-
Vanadium	ppm		75.8	322	331	393	16.4	15.9	13.4	13.3
Zinc	ppm		76	320	330	390	63.8	66.5	192	108
Cyanide	ppm	50	2.17	11.4	21.2	10.1	-	-	-	-

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 2
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SUMMARY OF SURFACE SOIL ANALYTICAL RESULTS

Location ID			OB&G Samples					
Sample ID			SB-02	SB-05	SB-08	SB-09	SB-10	SB-11
Matrix			Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'	0-0.5'
Date Sampled			8/10/01	8/9/01	8/2/01	7/31/01	7/31/01	7/31/01
Parameter	Units	SSAL						
Total VOCs	ppm	10	NA	NA	NA	0.278	NA	NA
Total SVOCs	ppm	500	11.056	0.9	1.778	42.29	26.74	2.4
Total Pesticides		10	NA	NA	NA	NA	NA	NA
Total PCBs (surface to 1ft)		1	NA	NA	NA	NA	NA	NA
Total PCBs (>1ft)		10	NA	NA	NA	NA	NA	NA
Metals								
Aluminum	ppm		8,260	2,010	3,320	31,600	12,000	2,030
Antimony	ppm		1.11	10.6	12.5	6.2	30.2	10.8
Arsenic	ppm	50	9.0	1.8	1.3	18.3	14.7	1.8
Barium	ppm	500	87.9	26.1	28.9	284	145	20.9
Beryllium	ppm		1.1	0.077	0.20	6.7	1.9	0.16
Cadmium	ppm	20	0.46	0.14	0.35	2.1	6.6	0.38
Calcium	ppm		47,600	1,130	5,330	185,000	47,900	7,110
Chromium	ppm	200	20.8	6.8	10.6	18.2	27.1	9.5
Cobalt	ppm		2.4	0.52	1.9	4.2	6.9	1.1
Copper	ppm		64.5	5.1	23.1	96.6	150	16.4
Iron	ppm		28,800	1,800	12,000	28,700	94,600	10,500
Lead	ppm	1000	190	21.8	41.5	169	408	49.4
Magnesium	ppm		9,230	647	2,410	30,200	5,630	906
Manganese	ppm		1,180	33.5	189	2530	3860	148
Mercury	ppm	1	0.29	0.099	0.070	0.47	3.1	0.072
Nickel	ppm		13.1	2.1	8.6	8.2	19.0	2.2
Potassium	ppm		2,320	1,700	1,180	2,110	1,910	333
Selenium	ppm	50	1.1	0.89	1.0	2.4	0.98	0.90
Silver	ppm	1000	2.1	1.8	2.1	2.1	2.0	1.8
Sodium	ppm		543	134	161	914	432	359
Thallium	ppm		2.1	1.8	1.6	2.1	1.5	1.5
Vanadium	ppm		17.4	3.3	1.1	10.6	9.8	0.30
Zinc	ppm		304	96.8	88.0	196	1340	67.3
Cyanide	ppm	50	-	-	-	-	-	-

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 3
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SUMMARY OF SUBSURFACE SOIL ANALYTICAL RESULTS

Location ID			MPI				OB&G			
Sample ID			Comp SB-4	Comp SB-5	Comp SB-11	Comp SB-35	SB-02	SB-05	SB-08	SB-09
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			-	-	-	-	6-8'	4-6'	4-6'	6-8'
Date Sampled			1/25/99	1/25/99	1/28/99	1/28/99	10/10/01	8/9/01	8/2/01	7/31/01
Parameter	Units	SSAL								
Total VOCs	ppm	10	NA	NA	NA	NA	NA	NA	NA	0.084
Total SVOCs	ppm	500	1.639	0.199	-	-	NA	NA	1.936	1.59
Total Pesticides		10	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs (surface to 1ft)		1	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs (>1ft)		10	NA	NA	NA	NA	NA	NA	NA	NA
Metals										
Aluminum	ppm		28,800	27,600	43,200	43,100	13,500	5,120	10,200	38,200
Antimony	ppm		-	-	10.3	-	23.0	0.96	24.7	20.2
Arsenic	ppm	50	-	-	-	-	11.0	3.8	7.5	15.4
Barium	ppm	500	289	274	389	264	97.3	64.1	133	348
Beryllium	ppm		4.91	4.63	7.6	6.17	2.5	0.75	1.1	7.4
Cadmium	ppm	20	-	-	-	-	1.9	0.53	3.2	0.56
Calcium	ppm		154,000	156,000	255,000	193,000	83,700	22,700	53,100	220,000
Chromium	ppm	200	4.36	14.4	20.2	4.7	11.1	8.0	32.2	10.2
Cobalt	ppm		3.08	3.34	4.93	4.56	5.1	0.80	9.0	3.0
Copper	ppm		10.7	26.5	13.8	8.49	26.2	31.2	73.4	8.4
Iron	ppm		20,600	32,800	25,400	29,900	16,500	9,580	80,500	11,600
Lead	ppm	1000	9.78	62.7	24.4	15.3	25.1	102	200	12.8
Magnesium	ppm		12,600	13,400	26,800	14,000	7,620	3,690	12,000	15,900
Manganese	ppm		2,030	2,440	5,150	2,480	670	428	2,350	3,600
Mercury	ppm	1	-	-	-	-	0.083	0.19	0.072	0.19
Nickel	ppm		8.71	17.8	23.8	13.7	12.9	4.5	15.1	13.4
Potassium	ppm		1,140	1,830	2,970	1,420	1,390	1,260	1,340	3,090
Selenium	ppm	50	-	-	-	-	41.9	1.1	1.0	3.0
Silver	ppm	1000	-	-	-	-	3.8	2.2	1.1	2.3
Sodium	ppm		521	562	746	443	206	196	376	897
Thallium	ppm		-	-	-	-	3.8	2.2	3.8	3.4
Vanadium	ppm		11.2	17	24.8	19.3	18.1	8.7	10.5	6.4
Zinc	ppm		40.2	182	37	475	87.5	559	415	33.6
Cyanide	ppm	50	17.4	20.1	32.7	20.9	7.7	7.8	14.0	1.5

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 3
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SUMMARY OF SUBSURFACE SOIL ANALYTICAL RESULTS

Location ID			OB&G		URS					
Sample ID			SB-10	SB-11	TB-5	TB-6	TB-7	TB-8	TB-9	TB-10
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0.5-2'	4-6'	2-4'	2-4'	8-10'	6-8'	4-6'	6-8'
Date Sampled			7/31/01	7/31/01	2/20/03	2/21/03	2/24/03	2/24/03	2/25/03	2/25/03
Parameter	Units	SSAL								
Total VOCs	ppm	10	NA	NA	-	0.002	0.006	0.006	-	-
Total SVOCs	ppm	500	5.546	NA	2.236	2.500	0.110	0.110	-	-
Total Pesticides		10	NA	NA	-	-	-	-	-	-
Total PCBs (surface to 1ft)		1	NA	NA	-	-	-	-	-	-
Total PCBs (>1ft)		10	NA	NA	-	-	-	-	-	-
Metals										
Aluminum	ppm		10,300	13,400	5,690	27,400	34,700	43,000	24,000	45,500
Antimony	ppm		40.4	16.1	0.62	0.62	0.86	0.68	0.89	1.1
Arsenic	ppm	50	10.3	6.6	0.55	0.54	0.76	0.59	0.79	0.94
Barium	ppm	500	200	77.6	64.3	207	291	652	233	467
Beryllium	ppm		1.7	2.2	0.60	4.1	6.3	7.5	3.9	7.2
Cadmium	ppm	20	4.5	0.40	0.050	0.049	0.069	0.054	0.071	0.085
Calcium	ppm		36,900	55,600	8,980	119,000	229,000	259,000	172,000	309,000
Chromium	ppm	200	24.2	6.3	12.0	21.7	5.1	11.7	2.7	6.3
Cobalt	ppm		7.4	2.9	5.2	5.3	2.3	3.0	1.4	2.7
Copper	ppm		88.7	8.7	9.7	18.9	0.48	0.38	0.50	0.60
Iron	ppm		129,000	21,800	24,600	102,000	2,230	8,310	2,300	3,310
Lead	ppm	1000	146	10.5	0.32	9.4	0.45	0.35	0.46	0.55
Magnesium	ppm		3,320	6,060	636	7,960	13,500	19,900	9,360	16,100
Manganese	ppm		2,900	809	222	2,790	2,390	4,370	1,250	3,230
Mercury	ppm	1	0.44	0.13	0.08	0.18	0.11	0.09	0.12	0.14
Nickel	ppm		10.0	10.7	0.25	0.25	0.34	0.27	0.36	0.43
Potassium	ppm		1,160	1,080	412	2,440	1,860	3,510	1,170	2,260
Selenium	ppm	50	0.97	1.3	0.62	0.62	0.86	0.68	0.89	1.1
Silver	ppm	1000	1.9	2.7	0.45	0.44	5.4	4.5	3.1	5.7
Sodium	ppm		273	203	437	570	972	585	507	1,880
Thallium	ppm		9.0	2.7	0.80	0.79	1.1	0.86	1.1	1.4
Vanadium	ppm		9.7	13.4	19.1	28.3	8.4	26.1	6.1	9.4
Zinc	ppm		982	90.1	25.9	300	0.17	0.14	0.18	0.21
Cyanide	ppm	50	0.90	0.96	0.20	2.72	0.95	1.27	11.6	101

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 4
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SB-8 SUPPLEMENTAL SAMPLING
SUMMARY OF BARIUM RESULTS

Location ID			SB-8							
Sample ID			30N	10N	20SE	40SE	30W	10W	10E	30E
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0-4'	0-4'	0-4'	0-4'	0-16'	0-16'	0-16'	0-16'
Date Sampled			8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03
Parameter	Units	SSAL								
Metals										
Barium	ppm	500	102	63.6	175	233	252	317	174	217

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 4
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SB-8 SUPPLEMENTAL SAMPLING
SUMMARY OF BARIUM RESULTS

Location ID			SB-8							
Sample ID			40SW	30S	20SW	10S	20NE	40NE	40NW	20NW
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0-10'	0-4'	0-4'	0-4'	0-4'	0-4'	0-4'	
Date Sampled			8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03	8/14/03
Parameter	Units	SSAL								
Metals										
Barium	ppm	500	317	164	186	113	115	158	112	51.9

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 5
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SB-10 SUPPLEMENTAL SAMPLING
SUMMARY OF CYANIDE RESULTS

Location ID			SB-10							
Sample ID			30N	10N	10S	30S	30W	10W	40NW	20NW
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0-4'	0-4'	0-10'	0-6'	0-10'	0-10'	0-12'	0-4'
Date Sampled			8/12/03	8/12/03	8/12/03	8/12/03	8/12/03	8/12/03	8/13/03	8/13/03
Parameter	Units	SSAL								
Metals										
Cyanide	ppm	50	2.81	0.526	6.74	22.8	6.77	2.62	8.79	1.08

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

TABLE 5
BUFFALO'S UNION SHIP CANAL REDEVELOPMENT - PHASE1
SB-10 SUPPLEMENTAL SAMPLING
SUMMARY OF CYANIDE RESULTS

Location ID			SB-10							
Sample ID			20SE	40SE	10E	30E	40SW	20SW	20NE	40NE
Matrix			Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Depth Interval (ft)			0-4'	0-6'	0-4'	0-4'	0-6'	0-4'	0-4'	0-4'
Date Sampled			8/13/03	8/13/03	8/13/03	8/13/03	8/13/03	8/13/03	8/13/03	8/13/03
Parameter	Units	SSAL								
Metals										
Cyanide	ppm	50	6.60	0.683	0.840	2.90	20.5	14.5	1.01	2.71

: Value exceeds SSAL criteria

NA : NOT ANALYZED

- : NOT DETECTED

FIGURES

PARCEL 4
NORTHERN PARCEL 13.885 ACRES

EXCEPTION TO CITY OF BUFFALO FOR PUBLIC USE AS PARKS AND PARKWAY PURPOSES

PARCEL 3

N 1032800 E 1075500

N 1033500 E 1077200

UNION SHIP CANAL
MEAN WATER SURFACE ELEV. 571

UNION SHIP CANAL
CITY OF BUFFALO
(REPUTED OWNER)

EXCEPTION TO CITY OF BUFFALO FOR PUBLIC USE AS PARKS AND PARKWAY PURPOSES

PARCEL 3

FUHRMANN BLVD.

EAST HWY. BDY.

GM8-100

GM11-100

COMMERCE STREET
EAST HWY. BDY.

ROUTE 5 EASTBOUND

ROUTE 5 WESTBOUND

HAMBURG TURNPIKE

A0 A1 A2 A3 A4 A5 A6 A7

LIMITS OF PHASE I AREA

AREA=13,001.25 S.F.
=0.153 Ac.

AREA=100,771.02 S.F.
=2.313 Ac.

AREA=139,239.56 S.F.
=3.198 Ac.

AREA=97,685.65 S.F.
=2.011 Ac.

AREA=96,628.51 S.F.
=2.218 Ac.

AREA=96,623.06 S.F.
=2.218 Ac.

SOUTHERN PARCEL 71.497 ACRES

B11 B12 B13 B14

C1 C2 C3 C4 C5 C6 C7 C8

NAPL AREA NO. 3
(APPROXIMATE)

NAPL AREA NO. 1

NAPL AREA NO. 2
(APPROXIMATE)

PARCEL 2

BETHLEHEM STEEL COMPANY
(REPUTED OWNER)

CITY OF BUFFALO
CITY OF LACKAWANNA
LOT 16
LOT 17

AREA=177,618.72 S.F.
=4.078 Ac.

LIMITS OF PHASE I AREA

CITY OF BUFFALO
CITY OF LACKAWANNA
LOT 25
SOUTH BUFFALO RAILWAY
(REPUTED OWNER)

LIMITS OF PHASE I AREA

PARCEL 1

AREA=218,067.91 S.F.
=5.006 Ac.

CITY OF LACKAWANNA
(REPUTED OWNER)

SOUTH BUFFALO RAILWAY BERM

N 1031400 E 1078100

N 1032000 E 1078700

CITY OF LACKAWANNA &
E.C.S.D. #6 SEWER EASEMENT

E0 E1 E2 E3

COMMERCE STREET

EXISTING 20' SANITARY EASEMENT

10.00'
4
1
4
1
4.00'–8.00'
PROPERTY LINE
60.00'–76.00'
5.00'

EXCAVATED MATERIAL BERM DETAIL

10' 0 10'
SCALE: 1"= 10'

100' 0 100'
SCALE: 1"= 100'

LEGEND

- NAPL AREA
- UTILITY CORRIDOR
- EXISTING PARCEL LIMIT
- FUTURE PARCEL LIMIT
- EXCAVATED MATERIAL EARTHEN BERM (APPROXIMATE)
- A5 ROADWAY STATION POINT

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CHECKED BY: BJS
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Group Consultants
640 Ellicott Street, Buffalo, New York 14203
(716)856-5636 - (716)856-2545 fax

JOB No. 11172803.00000

ECIDA

ERIE COUNTY
UNION SHIP CANAL
PHASE 1
BUFFALO NEW YORK

SITE PLAN

Scale: AS SHOWN | Date: APRIL 2005 | FIGURE 1

N:\11173066.00000\CAD\RECORD\APRIL05\ FIGURE-1.DWG 1=1 5/23/05-4 kwk

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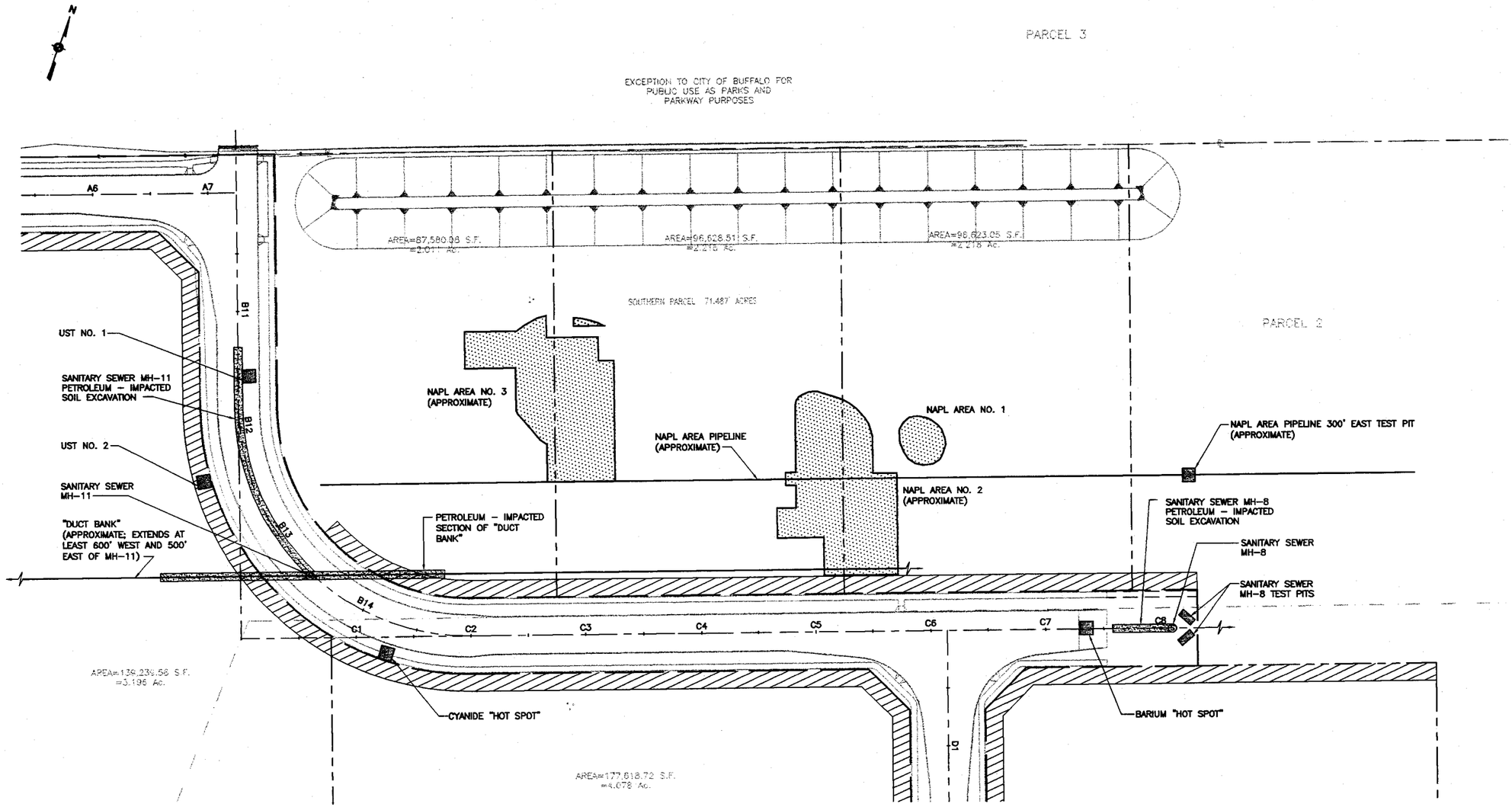

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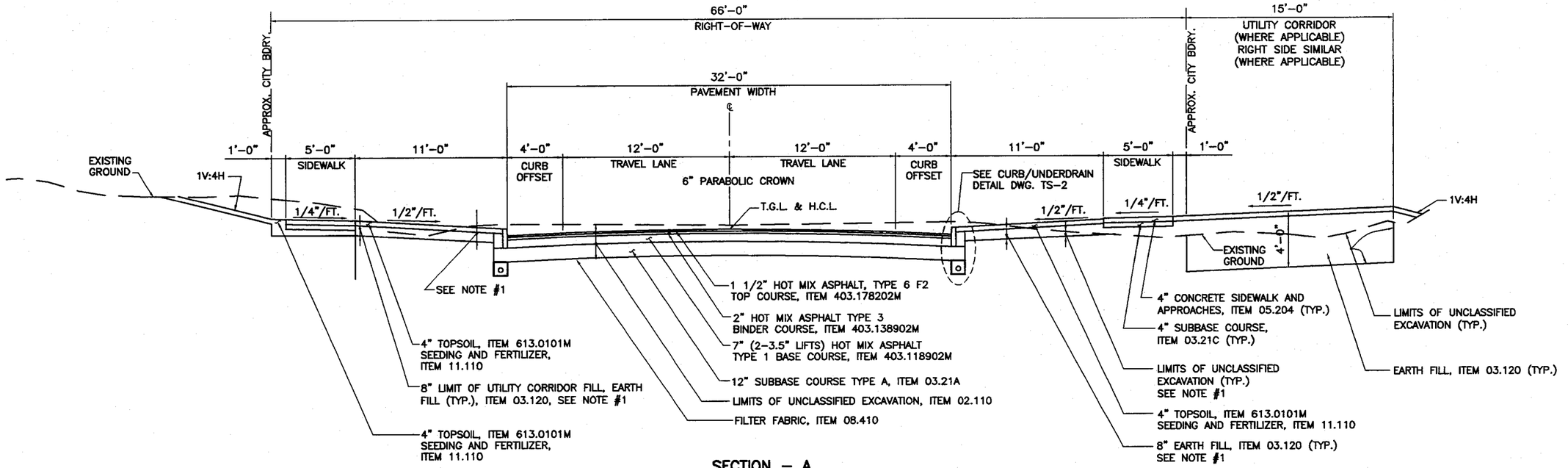
ERIE COUNTY
UNION SHIP CANAL PHASE 1
BUFFALO NEW YORK

UNIQUE SOILS MANAGEMENT AREAS

Scale: AS SHOWN | Date: APRIL 2005 | FIGURE 2

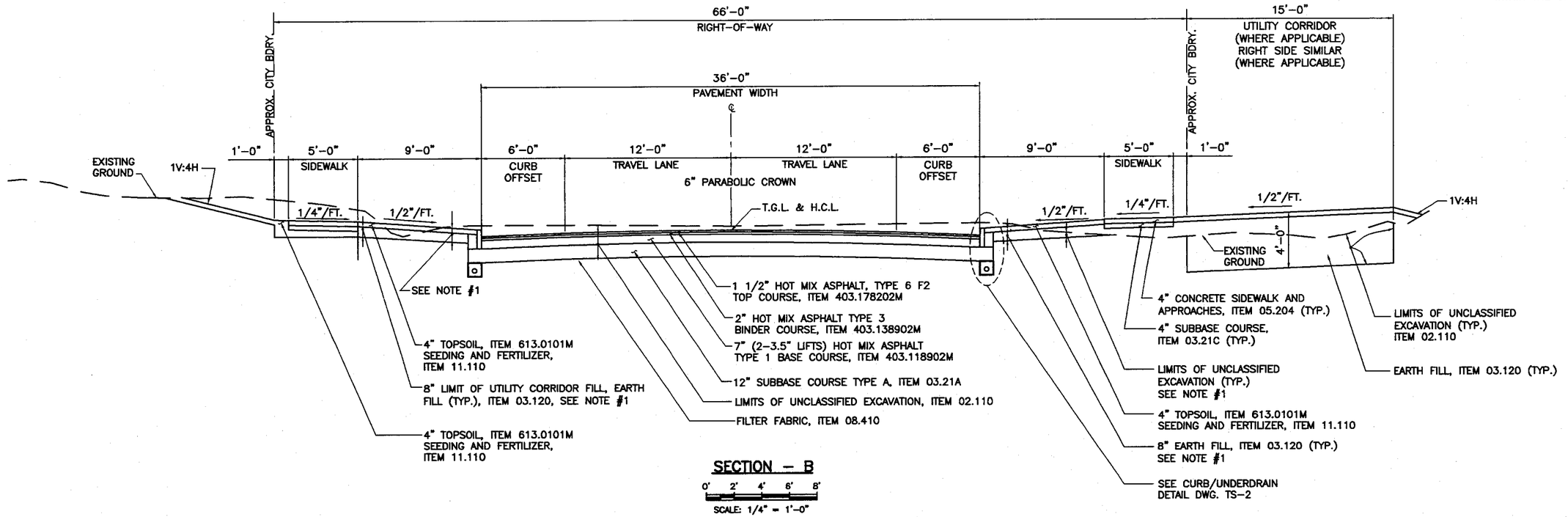
N:\11172803.00000\CAD\RECORD\APRIL05\ FIGURE-2.DWG 1=1 5/23/05-5 KWK



SECTION – A

0' 2' 4' 6' 8'

SCALE: 1/4" = 1'-0"



SECTION – B

0' 2' 4' 6' 8'

SCALE: 1/4" = 1'-0"

NOTES:

1. REQUIREMENTS FOR 8 INCHES OF EARTH FILL APPLY TO UNION SHIP CANAL SITE ONLY AND DO NOT APPLY TO ROADWAY CONSTRUCTED WITHIN THE CITY OF LACKAWANNA.

NO.	MADE BY	APPROVED BY	DATE	DESCRIPTION

REVISIONS

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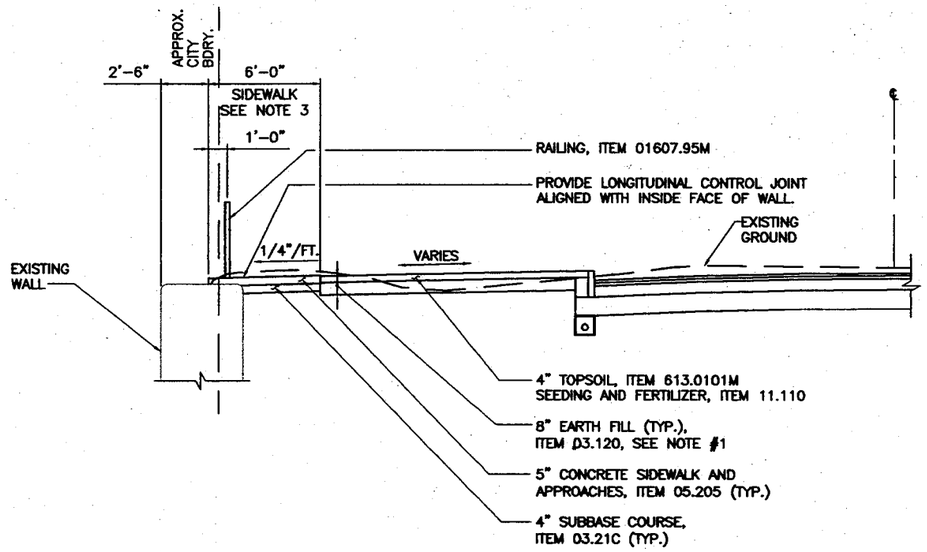
ERIE COUNTY
UNION SHIP CANAL
PHASE 1
BUFFALO NEW YORK

TYPICAL SECTIONS
(1 OF 2)

Scale: AS SHOWN | Date: APRIL 2005 | FIGURE 3

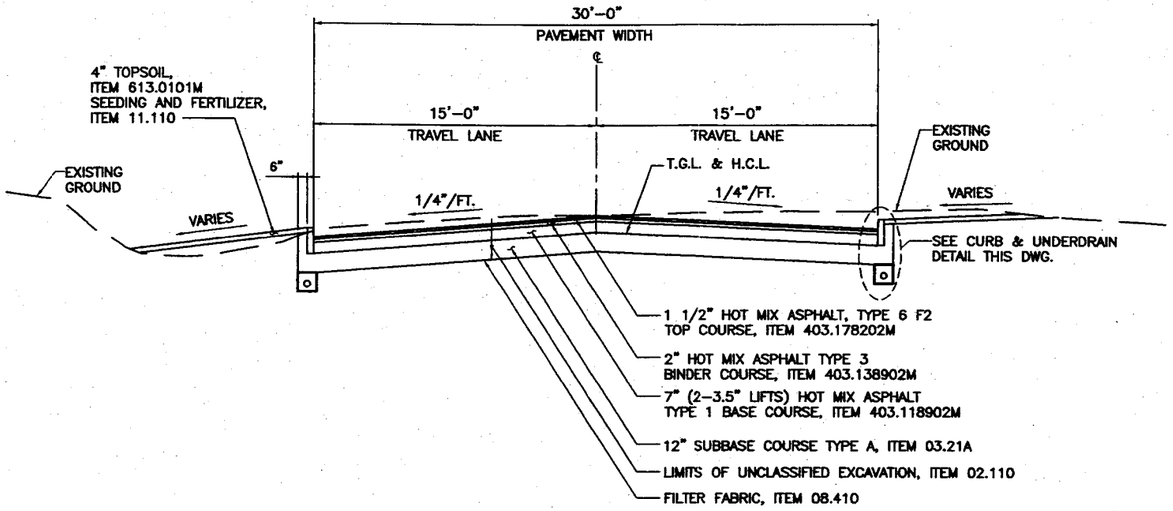
N:\11172803.00000\CAD\RECORD\APRIL05\ FIGURE-3.DWG 1=1 4/23/05-2 KWK



SECTION – C

0' 2' 4' 6' 8'

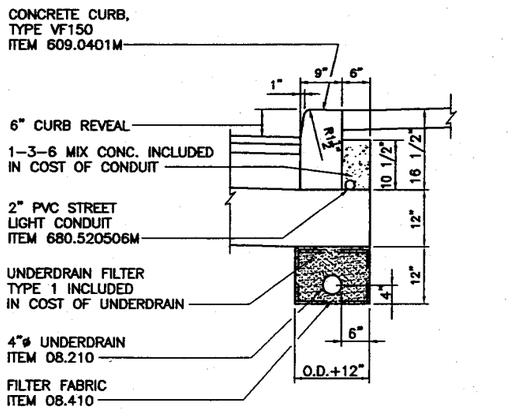
SCALE: 1/4" = 1'-0"



SECTION – D

0' 2' 4' 6' 8'

SCALE: 1/4" = 1'-0"



CURB & UNDERDRAIN DETAIL

0' 1' 2'

SCALE: 3/4"=1'-0"

TABLE OF SECTIONS			
BEGIN ℄ STATION	END ℄ STATION	APPLICABLE SECTION	REMARKS
A0+14	A7+24.74	A	SECTION C APPLIES TO LEFT SIDEWALK
B9+60	B9+97	A	
B9+97	B14+97.67	B	
C2+00	C7+53.44	A	
D0+00	D7+11.68	A	SIDEWALKS ARE NOT APPLICABLE SOUTH OF STA. D 4+85, LEFT AND RIGHT SIDE
E0+70	E2+91	D	
F1+00	F1+60	D	

NOTES:

1. REQUIREMENTS FOR 8 INCHES OF EARTH FILL APPLY TO UNION SHIP CANAL SITE ONLY AND DO NOT APPLY TO ROADWAY CONSTRUCTED WITHIN THE CITY OF LACKAWANNA.

NO.	MADE BY	APPROVED BY	DATE	DESCRIPTION

REVISIONS

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DRAWN BY: ELB
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ECIDA

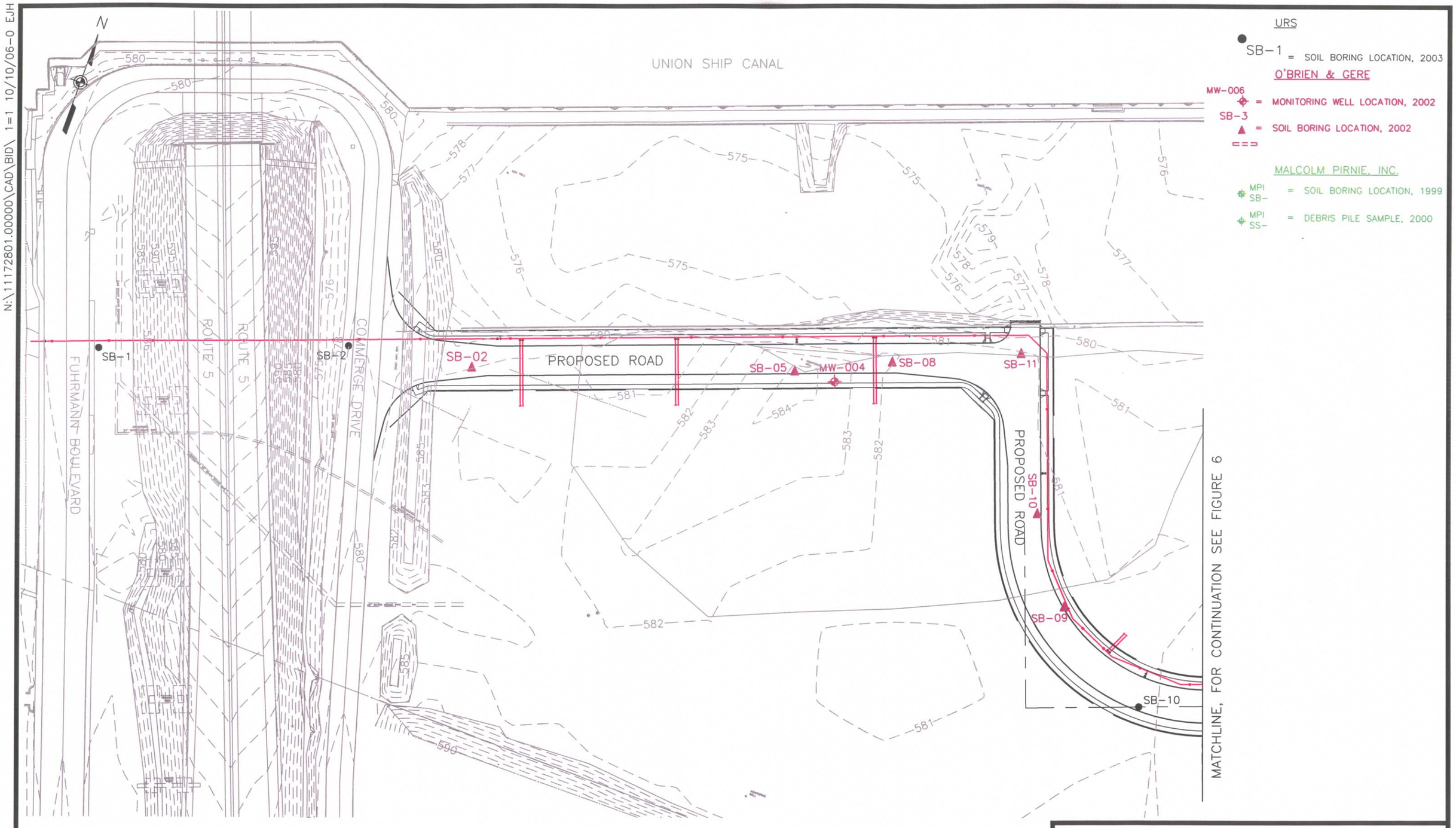
ERIE COUNTY
UNION SHIP CANAL PHASE 1
BUFFALO NEW YORK

TYPICAL SECTIONS (2 OF 2)

Scale: AS SHOWN | Date: MAY 2003 | FIGURE 4

N:\11172806.00000\CAD\RECORD\APRIL05\ FIGURE-4.DWG 1=1 4/5/05-1 RAL

N:\1117280l.00000\CAD\BID\ 1=1 10/10/06-0 EJH



URS

● SB-1 = SOIL BORING LOCATION, 2003

O'BRIEN & GERE

MW-006 ⊕ = MONITORING WELL LOCATION, 2002

SB-3 ▲ = SOIL BORING LOCATION, 2002

MALCOLM PIRNIE, INC.

MPI SB- ⊕ = SOIL BORING LOCATION, 1999

MPI SS- ⊕ = DEBRIS PILE SAMPLE, 2000

100' 0 100'

SCALE: 1"= 100'

UNION SHIP CANAL
SOIL CHARACTERIZATION SAMPLING LOCATION PLAN

URS

FIGURE 5

CC-7469B

N:\11172801.00000\CAD\BID\ 1=1 10/10/06-0 EJH

URS

SB-1 = SOIL BORING LOCATION, 2003

O'BRIEN & GERE

MW-006 = MONITORING WELL LOCATION, 2002

SB-3 = SOIL BORING LOCATION, 2002

MALCOLM PIRNIE, INC.

MPI SB- = SOIL BORING LOCATION, 1999

MPI SS- = DEBRIS PILE SAMPLE, 2000

N

PUMP STATION

SB-3

SB-4

SB-5

SB-6

SB-7

SB-8

SB-9

MPI SS-18

MPI SB-11

MPI SS-15

MPI SB-3

MCB SS-17

MPI SS-14

MPI SB-35

MPI SB-4

PROPOSED ROAD

PREVIOUSLY PROPOSED ROAD

PROPOSED ROAD

CITY OF BUFFALO

CITY OF LACKAWANNA

COMMERCE DRIVE

577 580 581 582 583 584 585 586

MATCHLINE, FOR CONTINUATION SEE FIGURE 5

100' 0 100'

SCALE: 1"= 100'

UNION SHIP CANAL
SOIL CHARACTERIZATION SAMPLING LOCATION PLAN

URS

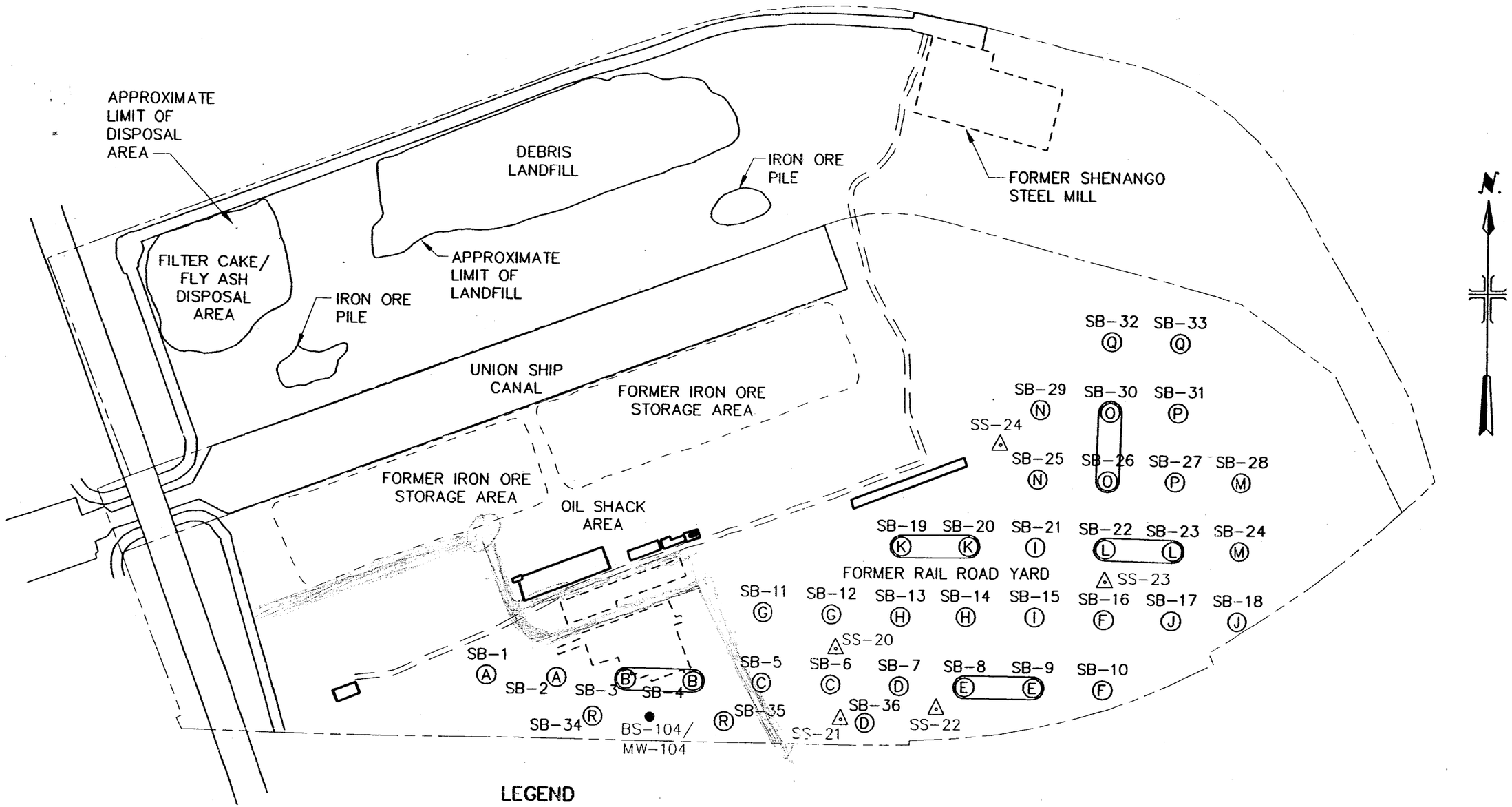
FIGURE 6

CC-7469B

APPENDIX A

DATA FROM PREVIOUS INVESTIGATIONS

FIGURE-2



LEGEND

- PROPERTY LINE
- FORMER BUILDING LOCATION
- EXISTING BUILDING
- (A) BORING LOCATION (LETTER INDICATES COMPOSITE IDENTIFICATION)
- △ 1988 SOIL SAMPLE LOCATION
- ● 1995 SAMPLE LOCATION
- (K) (K) COMPOSITE SUBSURFACE SOIL SAMPLES ANALYZED FOR TCLP

8108 3587001200 I:\ACAD\PROJ\35870012\3587GFG1 Scale: 1:1i Date: 09/07/1999 Time: 13:23

MALCOLM PIRNIE

3587GFG1

HANNA FURNACE SITE
FORMER RAIL YARD CHARACTERIZATION

BORING LOCATION MAP

BUFFALO ECONOMIC RENAISSANCE CORPORATION

FEBRUARY 1999

MALCOLM PIRNIE

Table 1
Buffalo Economic Renaissance Corporation
Hanna Furnace Site
Summary of Composite Sample Locations

Sample Numbers	Borings in Composite
A1, A2	SB-1 and SB-2
B1, B2	SB-3 and SB-4
C1, C2	SB-5 and SB-6
D1, D2	SB-7 and SB-36
E1, E2	SB-8 and SB-9
F1, F2	SB-10 and SB-16
G1, G2	SB-11 and SB-12
H1, H2	SB-13 and SB-14
I1, I2	SB-15 and SB-21
J1, J2	SB-17 and SB-18
K1, K2	SB-19 and SB-20
L1, L2	SB-22 and SB-23
M1, M2	SB-24 and SB-28
N1, N2	SB-25 and SB-29
O1, O2	SB-26 and SB-30
P1, P2	SB-27 and SB-31
Q1, Q2	SB-32 and SB-33
R1, R2	SB-34 and SB-35

Note: Sample numbers A1 through R1 are surface soil samples collected from the 0 to 2 feet depth interval. Samples A2 through R2 are subsurface soil samples collected from the 2-feet to base of fill interval.

SEE MALCOLM PIRNIE BORING LOCATION MAP FOR BORING AND COMPOSITE LOCATIONS

Table 3
Buffalo Economic Renaissance Corporation
Hanna Furnace Site
Summary of Analytical Results
Composite Samples - Surface Soil

Sample Location	A-1	B-1	C-1	D-1	E-1	F-1	G-1	H-1	I-1	J-1	K-1	L-1	M-1	N-1	O-1	P-1	Q-1	R-1	TAGM	Background
Collection Date	1/25/99	1/25/99	1/25/99	1/27/99	1/27/99	1/27/99	1/28/99	1/28/99	1/28/99	1/26/99	1/26/99	1/28/99	1/27/99	1/29/99	1/29/99	1/29/99	1/29/99	1/28/99	4046	Concentrations[1]
PAHs/Phenolic Compounds (ug/kg)																				
Naphthalene	120 J	100 J	130 J							89 J	76 J						65 J		13000	NA
2-Methylnaphthalene	91 J	96 J	210 J	65 J						94 J	80 J								36400	NA
Acenaphthylene	200 J																	130 J	41000	NA
Acenaphthene	400	140 J								74 J	100 J						130 J		50000	NA
Phenanthrene	1500	560	460 J	160 J	730		78 J		99 J	240 J	1100	310 J			160 J		1200	310	50000	NA
Anthracene	530	170 J			180 J					79 J	330	78 J					340	110 J	50000	NA
Fluoranthene	200 J	470	630	290 J	680		220 J	83 J	110 J	660	1600	590	120 J	110 J	280 J	120 J	1700	2000	50000	NA
Pyrene	5200	680	820	350	590		270 J	120 J	110 J	710	1500	460	130 J		310		1600	2200	50000	NA
Benzo(a)anthracene	3700	250 J	390 J	230 J	320 J		180 J	75 J		520	880	270 J	95 J	93 J	170 J	78 J	980	1400	224	NA
Chrysene	3300	410	530 J	290 J	280 J		240 J	84 J	88 J	700	880	290 J	100 J	120 J	190 J	82 J	990	1400	400	NA
Benzo(b)fluoranthene	6400	700	930 J	510	340 J		410	150 J	120 J	1300	1300	400	170 J	260 J	260 J	150 J	1400	1800	1100	NA
Benzo(k)fluoranthene	1900	250 J	560 J	260 J						450	350						520	660	1100	NA
Benzo(a)pyrene	5100	430	480 J	470	260 J		210 J	100 J	73 J	810	920	280 J	100 J	150 J	220 J	110 J	990	1200	61	NA
Indeno(1,2,3-cd)pyrene	3700	430	560 J	430						650	550						460	750	3200	NA
Dibenzo(a,h)anthracene	960		560 J															170 J	14	NA
Benzo(g,h,i)perylene	4100	500	560 J	480	120 J		180 J			700		200 J		99 J	150 J	95 J	480	680	50000	NA
Metals (mg/kg)		5186	6820				1788											12810		
Aluminum	24800	30400	22700	25300	20800	37400	21300	16600	20400	20900	17600	21100	23900	45700	29100	26600	16300	24000	SB	33000
Antimony				6.99		8.48	7.65	15.1	12.8	7.78		9.26	11.2		7.4	10.1	7.42	9.02	SB	NA
Arsenic				15.4					21.9						61.7				7.5 or SB	3 - 12
Barium	193	350	247	220	194	338	222	174	127	160	192	220	252	238	365	272	80.7	204	300 or SB	15 - 600
Beryllium	4.19	7.45	5.21	4.78	3.05	5.39	5.29	2.88	2.18	3.43	3.04	5.64	3.68	6.86	6.62	4.92	1.44	4.12	.016 or SB	0 - 1.75
Cadmium			6.7					7.3		8		1.19						0.707	1 or SB	0.1-1
Calcium	119000	163000	118000	137000	102000	191000	154000	77100	48000	123000	88700	158000	82500	212000	194000	139000	73400	125000	SB	130-35000
Chromium	24.5	12.2	127	42.8	51.2	23.2	24.5	54.7	86.3	38.4	65.7	18.2	48.5	6.89	20.3	23.4	78.2	20.7	10 or SB	1.5 - 40
Cobalt	3.79	1.89	5.55	6.26	12.7	5.64	5.88	13.4	15.7	5.9	7.5	5.79	9.56	4.75	4.12	7.24	7.03	5.15	30 or SB	2.5 - 60
Copper	31.7	27.7	40.9	42.8	44.6	39.1	49.7	48.2	108	120	181	39.1	48.6	20.1	168	96.4	98.9	51.2	25 or SB	1 - 50
Cyanide, Total	6.67	2.17	11.4	16.5	3.35	10.4	21.2	5.58	3.52	8.18	7.64	10.2	4.34	28.8	3.54	3.76	11.3	10.1	1600[2]	NA
Iron	57200	13700	79300	82500	60100	59900	80800	202000	236000	65100	70400	137000	193000	23800	56200	114000	103000	77000	2000 or SB	2000 - 550000
Lead	170	33.9	185	97.2	203	115	1120	220	285	274	611	116	208	22.1	245	218	618	177	400[2]	4 - 500
Magnesium	9270	38200	23500	20400	16400	18800	20900	11400	5890	18100	16400	10900	10700	15400	23900	16100	14100	12500	SB	100 - 5000
Manganese	2590	2320	3530	2860	2110	3920	2670	5750	4590	2950	3030	3340	5250	1900	10400	2020	1950	2690	SB	50 - 5000
Mercury	0.21								0.047					0.026			0.025		0.1	0.001 - 0.2
Nickel	20.5	14.2	34.1	30.2	35.8	28.9	24.8	53.5	96.9	33.3	40.6	24.8	52.7	11.9	52.1	23.7	42.8	25	13 or SB	0.5 - 25
Potassium	1290	2010	1570	1730	1710	2310	1560	1420	1110	1050	1250	969	1880	1100	2090	1530	715	1490	SB	8500 - 43000
Silver	429	1170	1020	579	370	796	662	456	264	557	512	396	702	454	944	434	191	531	SB	NA
Sodium	19.7	6.26	30.1	27.3	37.5	26.6	14.8	66.3	48.9	26.4	37.3	18.3	54.9	14.9	17.2	27.8	44.4	19.6	SB	6000 - 8000
Vanadium	343	75.8	322	266	251	412	331	1050	1100	1150	1020	233	582	63.7	128	446	472	393	150 or SB	1 - 300
Zinc	340	76	320	270	250	410	330	1100	1100	1200	1000	230	580	64	130	450	470	390	20 or SB	9 - 50

Notes:
PAHS - Polycyclic Aromatic Hydrocarbons.
Blank space denotes analyte was not detected.
Only compounds detected in at least one sample included in table.
NA - No NYSDEC TAGM 4046 Soil Background Concentration.
SB - Site Background.
J - Estimated concentrations.
1 - Background concentrations from NYSDEC TAGM 4046.
2 - USEPA Region 3 Soil Screening Levels (SSLs).
Shading indicates that concentration exceeds Guidance Value, and the background range is used when there is no Guidance Value.

Table 4
Buffalo Economic Renaissance Corporation
Hanna Furnace Site
Summary of Analytical Results
Composite Samples - Subsurface Soil

Sample Location	A-2	B-2	C-2	D-2	E-2	F-2	G-2	H-2	I-2	J-2	K-2	L-2	M-2	N-2	O-2	P-2	Q-2	R-2	TAGM	Background
Collection Date	1/25/99	1/25/99	1/25/99	1/27/99	1/27/99	1/27/99	1/28/99	1/28/99	1/28/99	1/26/99	1/26/99	1/28/99	1/27/99	1/29/99	1/29/99	1/29/99	1/29/99	1/28/99	4046	Concentrations[1]
PAHs/Phenolic Compounds (ug/kg)																				
Naphthalene		140 J	79 J		150 J														13000	NA
2-Methylnaphthalene		230 J	120 J		96 J														36400	NA
Acenaphthene					170 J														50000	NA
Phenanthrene	450 J	180 J			1400						380 J						470		50000	NA
Anthracene					360						110 J						150 J		50000	NA
Fluoranthene	710	170 J			980	96 J					630						530		50000	NA
Pyrene	900	170 J			1100						570						380		50000	NA
Benzo(a)anthracene	410 J	110 J			450						320 J						240 J		224	NA
Chrysene	500 J	160 J			460						320 J						210 J		400	NA
Benzo(b)fluoranthene	650	220 J			390						400 J						250 J		1100	NA
Benzo(k)fluoranthene					150 J														1100	NA
Benzo(a)pyrene	470 J	160 J			330						310 J						180 J		61	NA
Indeno(1,2,3-cd)pyrene	330 J										220 J								3200	NA
Benzo(g,h,i)perylene	410 J	99 J			210 J						220 J						89 J		50000	
Metals (mg/kg)		1639																		
Aluminum	40800	28800	27600	38900	28500	38000	43200	27400	31200	33300	50300	54000	17700	46200	40900	23900	12200	43100	SB	33000
Antimony				11	11.4	10.6	10.3	13.5	13.2				16.6	11.2		11.9			SB	NA
Arsenic								20.4					35.6						7.5 or SB	3 - 12
Barium	226	289	274	286	260	215	389	226	305	356	408	240	202	416	310	344	89.3	264	300 or SB	15 - 600
Beryllium	6.4	4.91	4.63	6.73	5.05	4.19	7.6	4.52	5.09	5.82	8.57	8.38	3.42	9.61	7.65	6.6	0.73	6.17	.016 or SB	0 - 1.75
Cadmium				8.1						4.7	1.05		7.8						1 or SB	0.1-1
Calcium	196000	154000	156000	233000	166000	169000	255000	102000	162000	148000	201000	221000	85000	296000	236000	188000	37400	193000	SB	130-35000
Chromium	5.89	4.36	14.4	12	30.5	27.4	20.2	27.7	28.6	23	20.4	5.18	35.2	9.05	13.2	12.5	25.9	4.7	10 or SB	1.5 - 40
Cobalt		3.08	3.34		7.61	7.85	4.93	10.6	11.3	4.26	5.03	4.4	11.2	4.97	3.69	9.91	14	4.56	30 or SB	2.5 - 60
Copper	9.58	10.7	26.5	21.9	20.2	20.1	13.8	9.18	21.4	13.4	42.2	12.7	5.53	12.3	11.6	14.9	30.7	8.49	25 or SB	1 - 50
Cyanide, Total	8.04	17.4	20.1	33.2	5.79	5.02	32.7	7.65	11.9	6.35	3.23	4.23	18.5	3.25	0.99	26	1.05	20.9	1600[2]	NA
Iron	4250	20600	32800	37100	115000	137000	25400	177000	200000	78200	209000	19500	200000	18000	8610	105000	34700	29900	2000 or SB	2000 - 550000
Lead		9.78	62.7	56.2	85.1	175	24.4	66.5	77.1	50	166	16.2	65.4			34.1	35.9	15.3	400[2]	4 - 500
Magnesium	13100	12600	13400	19000	11700	7960	26800	9080	7950	16600	25000	14100	5320	16900	15700	8200	14900	14000	SB	100 - 5000
Manganese	2630	2030	2440		2010	2950	5150	2540	2670	3210	3690	2460	2660	2730	3670	2100	671	2480	SB	50 - 5000
Mercury					0.057	0.034			0.028				0.022				0.097		0.1	0.001 - 0.2
Nickel	9.92	8.71	17.8	11.5	16.7	32	23.8	27.8	25.6	20.9	23.4	11.8	27.2	11.4	16.6	16.1	33.5	13.7	13 or SB	0.5 - 25
Potassium	1200	1140	1830	1590	1460	2210	2970	2410	1080	1960	2510	1440	1490	2240	1700	1280	1940	1420	SB	8500 - 43000
Sodium	467	521	562	713	328	420	746	356	279	680	610	458	201	568	558	391	189	443	SB	6000 - 8000
Vanadium	8.4	11.2	17	17.8	57.8	46.5	24.8	78	68.7	42.8	25.1	17.3	104	17.2	21.2	34.5	25.7	19.3	150 or SB	1 - 300
Zinc	9.05	40.2	182	107	197	1040	37	1670	1030	331	445	90.3	683		11.1	263	101	475	20 or SB	9 - 50

Notes:
PAHS - Polycyclic Aromatic Hydrocarbons.
Blank space denotes analyte was not detected.
Only compounds detected in at least one sample included in table.
NA - No NYSDEC TAGM 4046 Soil Background Concentration.
SB - Site Background.
J - Estimated concentrations.
1 - Background concentrations from NYSDEC TAGM 4046.
2 - USEPA Region 3 Soil Screening Levels (SSLs).
Shading indicates that concentration exceeds Guidance Value, and the background range is used when there is no Guidance Value.

LEGEND

US GEOLOGICAL SURVEY

- USGS TB– = SOIL BORING, 1982

RECRA ENVIRONMENTAL, INC.

- RECRA SS– = SURFACE SOIL SAMPLE, 1988
- RECRA SW/SD– = SURFACE WATER/SEDEMENT SAMPLE PAIR, 1988
- RECRA P– = POND WATER/SEDEMENT SAMPLE PAIR, 1988
- RECRA MW– = MONITORING WELL (DESTROYED), 1988

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- DEC SS– = SURFACE SOIL SAMPLE, 1990
- DEC SS– = SURFACE SOIL SAMPLE, 1994

ABB ENVIRONMENTAL SERVICES, INC.

- ABB MW– = MONITORING WELL LOCATION, 1995
- ABB SS– = SURFACE SOIL SAMPLE LOCATION, 1995
- ABB SW/SD– = SURFACE WATER/SEDEMENT SAMPLE LOCATION, 1995
- ABB TP– = TEST PIT LOCATION, 1995
- ABB WT– = DRUM SAMPLE LOCATION, 1995
- ABB CD/CL = STRUCTURE SEDEMENT/ LIQUID SAMPLE, 1995

MALCOLM PIRNIE, INC.

- MPI SB– = SOIL BORING LOCATION, 1999
- MPI SB– = SHALLOW BORING, 2000
- MPI MW– = MONITORING WELL 2000
- MPI SS– = DEBRIS PILE SAMPLE, 2000
- = PROPOSED BORING
- = SOIL/FILL PILE

NOTE:
ALL SAMPLING LOCATIONS ARE ESTIMATED EXCEPT FOR MALCOLM PIRNIE, 2000 INVESTIGATION LOCATIONS.

MALCOLM PIRNIE

11/00

HANNA FURNACE SITE

BUFFALO, NEW YORK

SOUTH BUFFALO REDEVELOPMENT PLAN

DOWNTOWN DEVELOPMENT, INC.

FIGURE 2-1

SITE SAMPLING

LOCATIONS BY INVESTIGATION

MALCOLM PIRNIE

TABLE 3-2

SUMMARY OF ANALYTICAL RESULTS - FILL PILES

SUPPLEMENTAL INVESTIGATION
HANNA FURNACE - FORMER RAILROAD YARD AREA

PARAMETER[1]	SAMPLE LOCATION																					NYSDEC TAGM VALUES[2]	EASTERN U.S. BACKGROUND RANGE[2]
	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	Duplicate	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18	SS-19	SS-20	TRIP BLANK		
	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/24/00	(SS-12)	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/25/00		
VOLATILE ORGANIC COMPOUNDS (ug/kg)																								
Chloromethane				16																			-	-
Carbon Disulfide			2 J																				2,700	-
cis-1,2-Dichloroethene				5 J																			-	-
Chloroform	2 J	2 J		2 J					7 J	2 J	2 J					2 J		4 J	4 J	2 J	6 J	-	300	-
2-Butanone				19 J								12											300	-
Trichloroethene				220 J																			700	-
Benzene									11 J														-	-
4-Methyl-2-pentanone	4 J			4 J	2 J																		1000	-
Tetrachloroethene	1 J			2 J																			1400	-
1,1,2,2-Tetrachloroethane									59 J														600	-
Toluene	3	8 J	3 J	13 J	5 J	2 J	4 J	4 J	60 J	6 J	19 J	2 J	1 J	2 J	2 J	5 J	3 J	14 J	5 J		6 J		1,500	-
Ethylbenzene									33 J														5,500	-
Styrene									20 J														-	-
m-Xylene and p-Xylene	2 J								28 J														1,200	-
SEMI-VOLATILE ORGANIC COMPOUNDS (ug/kg)																								
4-Methylphenol						120 J																NA	900	-
Naphthalene			170 J	71 J	240 J	720										54 J		320 J	42 J		67 J	NA	13000	-
2-Methylnaphthalene			92 J	83 J	170 J	430												210 J				NA	36400	-
Acenaphthylene			130 J		95 J	210 J		66 J										150 J			170 J	NA	41000	-
2,6-Dinitrotoluene																		120 J				NA	1000	-
Acenaphthene			220 J	140 J	320 J	690	91 J								74 J	260 J		260 J	120 J		47 J	NA	50000	-
Dibenzofuran			210 J	69 J	340 J	670	47 J									87 J		200 J	48 J		57 J	NA	6,200	-
Fluorene			310 J	120 J	430	900	74 J								69 J	150 J		210 J	83 J			NA	50000	-
Phenanthrene	290 J	74 J	2,300	1,400 J	4,200	6,000	1,200	43 J		230 J	150 J	61 J	230 J	670	740	1,700	230 J	2,000	720	98 J	1,100	NA	50,000	-
Anthracene	74 J	62 J	640	320 J	1,000	2,500	200 J						57 J	190 J	220 J	420	64 J	510	190 J		340 J	NA	50,000	-
Carbazole			160 J	90 J	290 J	570	210 J							40 J		99 J		170 J	52 J		47 J	NA	-	-
Di-n-butylphthalate				120 J	56 J													47 J	64 J			NA	8100	-
Fluoranthene	470	120 J	1,700	1,600 J	2,400	8,500	4,100 J	53 J		520 J	280 J	120 J	450 J	1,900	1,000	1,800	750	1,800	730	260 J	2,300	NA	50,000	-
Pyrene	460	140 J	6,700	1,700 J	9,700 J	8,500 J	3,400 J	78 J		530 J	250 J	110 J	600 J	2,100 J	1,100 J	4,300 J	920 J	4,100 J	810	410 J	3,200 J	NA	50,000	-
Butylbenzylphthalate				540 J										790 J		130 J						NA	50000	-
Benzo(a)anthracene	340 J	86 J	2,000 J	900 J	3,300 J	3,700 J	1,100 J	51 J		310 J	86 J	64 J	460 J	1,000 J	540 J	1,400 J	390 J	2,000 J	440		1,400 J	NA	225	-
Chrysene	340 J	110 J	2,000 J	940 J	3,200 J	3,800 J	1,300 J	68 J		350 J	97 J	66 J	510 J	1,200 J	520 J	1,600 J	370 J	2,200 J	410	150 J	1,400 J	NA	400	-
Bis(2-Ethylhexyl)phthalate	56 J	52 J	150 J	440 J	650 J	320 J	220 J	50 J	51 J	200 J	57 J	41 J		210 J	47 J	200 J	190 J	350 J	73 J	84 J	64 J	NA	50,000	-
Benzo(b)fluoranthene	410	220 J	1,900 J	1,500 J	5,400 J	5,300 J	2,300 J	160 J		510 J	110 J	89 J	920 J	1,200 J	570 J	1,600 J	620 J	2,200 J	510		2,000 J	NA	1,100	-
Benzo(k)fluoranthene	170 J	55 J	700 J	480 J	1,600 J	1,500 J	750 J	52 J		150 J	39 J		350 J	490 J	260 J	700 J	240 J	860 J	210 J		780 J	NA	1,100	-
Benzo(a)pyrene	280 J	130 J	1,400 J	980 J	4,200 J	4,000 J	1,600 J	120 J		370 J	64 J	57 J	800 J	820 J	490 J	1,500 J	460 J	1,500 J	410	200 J	1,500 J	NA	61	-
Ideno(1,2,3-cd)pyrene		250 J	1,000 J	630 J	2,700 J	2,300 J	1,000 J	170 J		210 J			520 J	410 J	280 J	1,300 J	290 J	1,200 J	240 J		790 J	NA	3,200	-
Dibenzo(a,h)anthracene					780 J	950 J										110 J					270 J	NA	14	-
Benzo(ghi)perylene	89 J	600 J	1,000 J	670 J	3,000 J	2,700 J	1,200 J	250 J		230 J			640 J	540 J	320 J		390 J	1,300 J	240 J		950 J	NA	50,000	-

Notes:

(1) Only those parameters having a value above the laboratory detection limit, and found at a minimum of one location are shown.

(2) Soil Cleanup Guidelines and Easter U.S. Background Range from NYSDEC TAGM 4046 (1/24/94). Value in parentheses are NYSDEC revised values for nonresidential sites but have not yet been incorporated into TAGM 4046.

- Soil cleanup guideline or background range not available.

1,133

J - Indicates an estimate value. Result is below quantitation limit but above zero.

NA - Not Analyzed 6,230 17,186 4,914 Total 5,392

Blank space indicates analyte was not detected. 5,000

Shaded/bold text indicates guidance criteria or background range was exceeded.

MALCOLM PIRNIE

TABLE 3-2

SUMMARY OF ANALYTICAL RESULTS - FILL PILES

SUPPLEMENTAL INVESTIGATION
HANNA FURNACE - FORMER RAILROAD YARD AREA

PARAMETER[1]	SAMPLE LOCATION																					NYSDEC TAGM VALUES[2]	EASTERN U.S. BACKGROUND RANGE[2]
	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	Duplicate	SS-13	SS-14	SS-15	SS-16	SS-17	SS-18	SS-19	SS-20	TRIP BLANK	
	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/23/00	2/24/00	(SS-12)	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/24/00	2/25/00	
PESTICIDES/PCBs (ug/kg)																							
Aldrin				500 J		2.9 J										2.6 J						NA	41	-
4,4'-DDE										7.9 J				3.9 J		10.9 J	3.9 J				13.8 J	NA	2100	-
4,4'-DDT			8.0 J							10.9 J					4.7 J	10.8 J		32 J			15 J	NA	2100	-
alpha-Chlordane				500		29.3																NA	540	-
gamma-Chlordane																	2.1 J					NA	540	-
Heptachlor				3.2 J																		NA	20	-
Aroclor 1254						1200																NA	1000	-
Aroclor 1260				3820																		NA	1000	-
METALS (mg/kg)																							
Aluminum	5,810	28,600	21,000	10,500	11,600	2,950	7,350	25,500	8,140	4,950	4,010	5,230	7,250	7,700	7,670	7,300	4,830	4,680	6,600	5,460	6,480	NA	SB	33,000
Antimony																		7.2 J				NA	SB	-
Arsenic	6.31	4.8		5.5	6.3	10.6	5.3		17.9	4.6	6.3			5.4		3.7	3.6	22.9	3.0		11.7	NA	7.5 or SB	3 - 12
Barium	75.4 J	316 J	248 J	327 J	175 J	53.1 J	55.5 J	150 J	83.7 J	65.7 J	40.2 J	49.5 J	83.5 J	96.1 J	71.3	80.3 J	60.4 J	298 J	87.8 J	55.0 J	86.6 J	NA	300 or SB	15 - 600
Beryllium		1.5	1.3	0.74 B				1.5	1.4				1.5 B			0.73 B			0.92			NA	.016 or SB	0 - 1.75
Cadmium	4.6 J	2.3 J	4.5 J	5.3 J	4.6 J	19.9 J	1.7 J	2.6 J	2.0 J	2.5 J		2.2 J	1.4 J	3.3 J	1.4 J	1.9 J	3.1 J	19.9 J	1.5 J	1.4 J	3.7 J	NA	(10)	0.1 - 1
Calcium	27,500	209,000 J	124,000 J	22,600	29,400	14,200	65,700 J	157,000 J	24,500	23,800	52,900 J	64,100 J	67,000 J	55,600 J	65,100 J	62,100 J	56,300 J	32,900	52,100 J	52,700 J	36,200 J	NA	SB	130 - 35,000
Chromium	11.7 J	17.3 J	45.4 J	28.9 J	81.1 J	193 J	11.5 J	10.2 J	20.7 J	10.1 J	8.2	31.3 J	32.8 J	22.0 J	13.2 J	13.3 J	13.0 J	38.4 J	17.6 J	9.53	42.9 J	NA	(50)	1.5 - 40
Cobalt	9.6 B		5.0 B	13.5	11.2 B	15.9	8.6		7.7 B	5.6				6.4 B	6.7 B	4.5 B	6.5 B	13.1	5.2 B	5.0 B	6.7 B	NA	30 or SB	2.5 - 60
Copper	46.1 J	13.2	20.9 J	504 J	40.2 J	583 J	19.5 J	9.4	15.3	22.9 J	11.0	19.9 J	11.5	70.2 J	14.7	39.0 J	62.5 J	501 J	49.1 J	21.6 J	69.4 J	NA	25 or SB	1 - 50
Iron	56,900	18,500	58,000	27,400	47,800	244,000	17,200	25,400	20,100	16,700	7,910	21,000	10,900	20,300	4,300	13,700	20,200	108,000	13,300	13,100	27,800	NA	2,000 or SB	2,000 - 550,000
Lead	80.2 J	38.1 J	93.4 J	89.0 J	571 J	89.4 J	20.5 J	29.3 J	46.8 J	85.6 J	15.2 J	49.0 J	61.8 J	121 J	22.4 J	188 J	136 J	766 J	117 J	46.1 J	208 J	NA	(1000)	4 - 500
Manganese	1,240	3,320	1,770	426	777	2,410	413	1,300	194	303	230	741	1,470	419	422	510	395	1,310	610	304	384	NA	SB	50 - 5,000
Mercury	0.49 J		0.32 J	0.54 J	0.15 J									0.18 J	0.12 J	0.30 J		0.67 J	0.48 J	0.17 J	0.19 J	NA	0.1	0.001 - 0.2
Nickel	29.0 J		13.9 J	41.7 J	29.9 J	84.8 J	21.4 J		17.8 J	15.4 J	7.7 J	9.2 J	6.9 J	24.7 J	5.6 J	16.5 J	14.3 J	38.9 J	18.5 J	12.1 J	19.0 J	NA	13 or SB	0.5 - 25
Potassium	1,110 B	4,970	3,270	2,170	2,510	657 B	1,050 B	3,120	2,100	696 B	1,100 B	872 B	1,430	1,910	1,870	1,470	1,410	1,360	1,270	1,500	1,450	NA	SB	8,500 - 43,000
Selenium	2.3	35.2 J	35.9 J	11.5 J	12.3 J		23.7 J	28.0 J	10.9 J	15.3 J	33.1 J	25.6 J	29.2 J	23.5 J	33.2 J	21.4 J	25.2 J		24.0 J	29.7 J	22.6 J	NA	2 or SB	0.1 - 3.9
Sodium		675 B	532 B							291 B			301 B		230 B							NA	SB	6,000 - 8,000
Thallium							2.4 J	4.8 J								2.7 J						NA	SB	-
Vanadium	27.0		8.7 B	22.6	25.3	9.0 B	14.9	9.9 B	44.2	12.7	16.4	15.9	15.0	17.2	15.9	13.4	18.6	17.6	13.3	14.6	22.9	NA	150 or SB	1 - 300
Zinc	164 J	133 J	261 J	264 J	299 J	86.4 J	64.8 J	101 J	73.5 J	462 J	63.8 J	113 J	140 J	239 J	68.5 J	192 J	315 J	2,380 J	108 J	77.5 J	254 J	NA	20 or SB	9 - 50
Cyanide		3.5	12.0			3.6		12.7					1.7	3.0								NA	-	-

Notes:

(1) Only those parameters having a value above the laboratory detection limit, and found at a minimum of one location are shown.

(2) Soil Cleanup Guidelines and Easter U.S. Background Range from NYSDEC TAGM 4046 (1/24/94). Value in parentheses are NYSDEC revised values for nonresidential sites but have not yet been incorporated into TAGM 4046.

- Soil cleanup guideline or background range not available.

B - Result is between Instrument Detection Limit and Contact Required Detection Limit.

J - Indicates an estimate value. Result is below quantitation limit but above zero.

NA - Not Analyzed

Blank space indicates analyte was not detected.

Shaded/bold text indicates guidance criteria or background range was exceeded.

SAMPLE LOC 2-3.MXD

FIGURE 2-3

PARCEL 4

UNION SHIP CANAL

PARCEL 3

PARCEL 2

PARCEL 1

CONCRETE FOUNDATION WALL

1 STORY STEEL BUILDING

1 STORY BRICK BUILDING (OIL SHACK)

2 STORY BRICK BUILDING

SB-01 SB-02 SB-03 SB-04 SB-05 SB-06 SB-07 SB-08 SB-09 SB-10 SB-11 SB-12 SB-13 SB-14 SB-15 SB-16 SB-17 SB-18 SB-19 SB-20 SB-21 SB-22 SB-23 SB-24 SB-25 SB-26 SB-27 SB-28 SB-29 SB-30 SB-31 SB-32 SB-33 SB-35 SB-36 SB-37 SB-38 SB-39 SB-40 SB-41 SB-42 SB-43 SB-44 SB-45 SB-46 SB-47 SB-48 SB-49 SB-50 SB-51 SB-52 SB-53 SB-54 SB-55 SB-56 SB-57 SB-58 SB-59 SB-60 SB-61 SB-62 SB-63 SB-64 SB-65 SB-66 SB-67 SB-68 SB-69 SB-70 SB-71

MW-003 MW-004 MW-005 MW-006 MW-007 MW-104 MW-105 MW-106 MW-107

TP-1 TP-2 TP-3 TP-4 TP-5 TP-6 TP-7 TP-8 TP-9 TP-10 TP-11 TP-12 TP-13 TP-14

Area A

Area B

Feet

0 25 50 100 150

Legend

- TEST PIT
- ELEVATED pH IN GROUNDWATER
- APPROXIMATE LOCATION OF NAPL

SAMPLE TYPE

- MONITORING WELL
- SOIL BORING

HANNA FURNACE - SUB PARCEL 2
REBUILD NOW - N.Y.
EMPIRE STATE DEVELOPMENT

0 100 200 400 600 800 1,000
Feet

N W E S

AREAS OF CONCERN
EXTENT OF NAPL AND ELEVATED pH IN GROUND WATER

AUGUST 2002
10569.25466.001

O'BRIEN & GERE ENGINEERS, INC.

TABLE 2-4

SUMMARY OF DEBRIS PILE CHARACTERISTICS

SUPPLEMENTAL INVESTIGATION

HANNA FURNACE - FORMER RAILROAD YARD AREA

Depris Pile ID No.	Sample ID	Debris Pile Contents	PID Screening Results	Sampled Depth (ft bgs)	Estimated Area (ft^2)	Estimated Depth	Estimated Volume (yd^3)
DP-1	SS-12	C & D debris, concrete rubble, rebar,	0.2	3-5	20,394	2	1,510
	SS-13	sand and gravel	0.2	2-4			
DP-2		C & D debris, sand and gravel			154	2	11+
DP-3	SS-8 (2)	C & D debris, concrete, sand and gravel	0.2	3-5	28,680	3.5	3,717
	SS-10		0.2	3-5			
	SS-11		0.2	3-5			
DP-4	SS-9	Stone, gravel	0.2	4-6	6,790	2	503
DP-5		C & D debris, concrete, sand and gravel, silt			3,416	3	316
DP-6	SS-3	C & D debris, sand, gravel, silt,	0.2	3-5	56,502	3	6,278
	SS-4		0.2	2-4			
	SS-5		0.2	2-4			
	SS-6		0.2	3-5			
	SS-7		0.2	2-4			
DP-7		Lime flux, slag			2,575	2.5	238
DP-8		Trash, tires			400	2	30

TABLE 2-4

SUMMARY OF DEBRIS PILE CHARACTERISTICS

SUPPLEMENTAL INVESTIGATION
HANNA FURNACE - FORMER RAILROAD YARD AREA

Depris Pile ID No.	Sample ID	Debris Pile Contents	PID Screening Results	Sampled Depth (ft bgs)	Estimated Area (ft^2)	Estimated Depth	Estimated Volume (yd^3)
DP-9		C & D debris, wood, concrete, sand,			1,295	2	96
		misc. metal					
DP-10	SS-2	C & D debris, concrete, rebar, brick,	0.5	2-4	2,311	2	171
		asphalt					
DP-11		C & D debris, concrete, sand and gravel			862	2	64
DP-12		C & D debris, concrete, sand and gravel			646	2	48
DP-13		C & D debris, concrete, sand and gravel			1,233	2	91
DP-15		Slag, railroad ties			2,194	3	244
DP-16		Wood, metal, debris,			433	2	32
DP-17		Sand			909	4.5	9
DP-18		Sinter,			884	5	164
X DP-23	SS-15	C & D debris, concrete, sand and gravel	0.4	3-5	81,100	3	9,011
	SS-16		0.2	2-4			
	SS-17		1.6 / 0.2 (3)	3-5			
X	SS-18		0.2	4-6			
	SS-19		0.2	3-5			
	SS-20		0.2	3-5			

TABLE 2-4

SUMMARY OF DEBRIS PILE CHARACTERISTICS

SUPPLEMENTAL INVESTIGATION

HANNA FURNACE - FORMER RAILROAD YARD AREA

Depris Pile ID No.	Sample ID	Debris Pile Contents	PID Screening Results	Sampled Depth (ft bgs)	Estimated Area (ft^2)	Estimated Depth	Estimated Volume (yd^3)
DP- A	SS-1	Fill as slag, gravel, RR ties, tires, metal	0.2	2-4	7,500	4.5	1,250
DP - B	SS-14	Fill as sand, gravel, brick, misc. metal	0.2	0-3	150	2	11

NOTES:

Sampled debris piles indicated by shaded / stipple pattern.

(1) All debris piles sampled above grade unless noted.

(2) White fill material sampled below grade surface at SS-8 per NYSDEC request.

(3) Elevated PID reading measured in proximity to RR tie within excavation.

O'BRIEN & GERE ENGINEERS, INC.

Table 4
Hanna Furnace Subparcel 2
Surface Soil Samples
Volatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level mg/Kg	NYS TAGM 4046 Recommended Soil Cleanup mg/Kg	SB-09 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-13 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID	SB-18 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID
1,1,1-Trichloroethane		1	0.8	0.014 U	0.011 U	0.013 U
1,1,2,2-Tetrachloroethane		1	0.6	0.014 U	0.011 U	0.013 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1	6	0.014 U	0.011 U	0.013 U
1,1,2-Trichloroethane		1	NC	0.014 U	0.011 U	0.013 U
1,1-Dichloroethane		1	0.2	0.014 U	0.011 U	0.013 U
1,1-Dichloroethene		1	0.4	0.014 U	0.011 U	0.013 U
1,2,4-Trichlorobenzene		1	3.4	0.014 U	0.011 U	0.013 U
1,2-Dibromo-3-chloropropane		1	NC	0.014 U	0.011 U	0.013 U
1,2-Dibromoethane (EDB)		1	NC	0.014 U	0.011 U	0.013 U
1,2-Dichlorobenzene		1	7.9	0.014 U	0.011 U	0.013 U
1,2-Dichloroethane		1	0.1	0.014 U	0.011 U	0.013 U
1,2-Dichloropropane		1	NC	0.014 U	0.011 U	0.013 U
1,3-Dichlorobenzene		1	1.6	0.014 U	0.011 U	0.013 U
1,4-Dichlorobenzene		1	8.5	0.014 U	0.011 U	0.013 U
2-Butanone (MEK)		1	0.3	0.04	0.011 U	0.027
2-Hexanone		1	NC	0.014 U	0.011 U	0.013 U
4-Methyl-2-pentanone (MIBK)		1	1	0.014 U	0.011 U	0.013 U
Acetone		1	0.2	0.14	0.04	0.12
Benzene		1	0.06	0.014 U	0.011 U	0.013 U
Bromodichloromethane		1	NC	0.014 U	0.011 U	0.013 U
Bromoform		1	NC	0.014 U	0.011 U	0.013 U
Bromomethane		1	NC	0.014 U	0.011 U	0.013 U
Carbon disulfide		1	2.7	0.016	0.002 J	0.005 J
Carbon tetrachloride		1	0.6	0.014 U	0.011 U	0.013 U
Chlorobenzene		1	1.7	0.014 U	0.011 U	0.013 U
Chloroethane		1	1.9	0.014 U	0.011 U	0.013 U
Chloroform		1	0.3	0.014 U	0.011 U	0.013 U
Chloromethane		1	NC	0.014 U	0.011 U	0.013 U
Cyclohexane		1	NC	0.014 U	0.011 U	0.013 U
Dibromochloromethane		1	NC	0.014 U	0.011 U	0.013 U
Dichlorodifluoromethane		1	NC	0.014 U	0.011 U	0.013 U
Ethylbenzene		1	5.5	0.009 J	0.011 U	0.013 U
Isopropylbenzene		1	5	0.014 U	0.011 U	0.013 U
Methyl acetate		1	NC	0.014 UJ	0.011 UJ	0.013 UJ
Methyl tert butyl ether		1	0.12	0.014 U	0.011 U	0.013 U

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.

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O'BRIEN & GERE ENGINEERS, INC.

Table 4
Hanna Furnace Subparcel 2
Surface Soil Samples
Volatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-13 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID	SB-18 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID
		mg/Kg	mg/Kg			
Methylcyclohexane		1	NC	0.014 U	0.011 U	0.013 U
Methylene chloride		1	0.1	0.014 U	0.011 U	0.013 U
Styrene		1	NC	0.014 U	0.011 U	0.013 U
Tetrachloroethene		1	1.4	0.014 U	0.011 U	0.013 U
Toluene		1	1.5	0.024	0.011 U	0.001 J
Trichloroethene		1	0.7	0.014 U	0.011 U	0.013 U
Trichlorofluoromethane		1	NC	0.014 U	0.011 U	0.013 U
Vinyl chloride		1	0.2	0.014 U	0.011 U	0.013 U
Xylene (total)		1	1.2	0.049	0.011 U	0.013 U
cis-1,2-Dichloroethene		1	0.25	0.014 U	0.011 U	0.013 U
cis-1,3-Dichloropropylene		1	NC	0.014 U	0.011 U	0.013 U
trans-1,2-Dichloroethene		1	0.3	0.014 U	0.011 U	0.013 U
trans-1,3-Dichloropropene		1	NC	0.014 U	0.011 U	0.013 U
Total VOCs		10	NC	0.278	0.042	0.151

NOTES: U - Not detected, J - Estimated value, --- - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.

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O'BRIEN & GERE ENGINEERS, INC.

Table 5
Hanna Furnace Subparcel 2
Surface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-01	SB-02	SB-03	SB-04	SB-05	SB-06	SB-07	SB-08
	Sample Depth			0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft
	Sample Date			07/31/2001	08/10/2001	08/01/2001	08/09/2001	08/09/2001	08/01/2001	08/09/2001	08/02/2001
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	Matrix			SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
1,1'-Biphenyl		NC	NC	1.1 J	0.34 U	0.39 U	0.14 J	0.33 U	0.37 U	0.38 U	0.33 U
2,2'-oxybis(1-Chloropropane)		NC	NC	10 U	0.34 U	0.39 UJ	0.34 U	0.33 U	0.37 UJ	0.38 U	0.33 UJ
2,4,5-Trichlorophenol		NC	0.1	26 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
2,4,6-Trichlorophenol		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2,4-Dichlorophenol		NC	0.4	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2,4-Dimethylphenol		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2,4-Dinitrophenol		NC	0.2	26 UJ	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
2,4-Dinitrotoluene		NC	NC	10 UJ	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2,6-Dinitrotoluene		NC	1	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2-Chloronaphthalene		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2-Chlorophenol		NC	0.8	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2-Methylnaphthalene		NC	36.4	5 J	0.087 J	0.13 J	0.97	0.33 U	0.19 J	0.11 J	0.33 U
2-Methylphenol		NC	0.1	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
2-Nitroaniline		NC	0.43	10 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
2-Nitrophenol		NC	0.33	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
3,3-Dichlorobenzidine		NC	NC	10 U	0.34 U	0.39 U	0.34 UJ	0.33 U	0.37 U	0.38 UJ	0.33 U
3-Nitroaniline		NC	0.5	26 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
4,6-Dinitro-2-methylphenol		NC	NC	26 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
4-Bromophenyl phenyl ether		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
4-Chloro-3-methylphenol		NC	0.24	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
4-Chloroaniline		NC	0.22	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
4-Chlorophenyl phenyl ether		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
4-Methylphenol		NC	0.9	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
4-Nitroaniline		NC	NC	26 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 U
4-Nitrophenol		NC	0.1	26 U	0.84 U	0.98 U	0.86 U	0.83 U	0.92 U	0.95 U	0.83 UJ
Acenaphthene		NC	50	7.5 J	0.062 J	0.39 U	0.21 J	0.33 U	0.37 U	0.18 J	0.33 U
Acenaphthylene		NC	41	17 J	0.11 J	0.45	0.43	0.33 U	0.59	0.96	0.33 U
Acetophenone		NC	NC	1.5 J	0.34 U	0.068 J	0.34 U	0.33 U	0.079 J	0.38 U	0.33 U
Anthracene		NC	50	34 J	0.19 J	0.46	1.4	0.33 U	0.66	0.99	0.33 U
Atrazine		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Benzo(a)anthracene		NC**	0.224**	(270 J)	(0.89)	(0.68)	(1.2 J)	0.33 U	(0.64)	(5.7 J)	0.086 J
Benzaldehyde		NC	NC	10 U	0.34 U	0.39 U	0.34 UJ	0.33 U	0.37 U	0.38 UJ	0.33 U
Benzo(a)pyrene		NC**	0.061**	(240 J)	(0.91 J)	(0.6 J)	(1.4 J)	0.034 J	(0.56 J)	(5.6 J)	(0.077 J)
Benzo(b)fluoranthene		NC**	0.224**	(270 J)	(1.2 J)	(0.62 J)	(2.2 J)	0.065 J	(0.66 J)	(5.9 J)	0.11 J
Benzo(ghi)perylene		NC	50	(75 J)	0.27 J	0.47 J	0.7 J	0.33 U	0.35 J	1.7 J	0.045 J

NOTES: U - Not detected, J - Estimated value, --- - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
** - Carcinogenic PAH

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O'BRIEN & GERE ENGINEERS, INC.

Table 5
Hanna Furnace Subparcel 2
Surface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-01 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-02 0.0 - 0.5 ft 08/10/2001 mg/Kg SOLID	SB-03 0.0 - 0.5 ft 08/01/2001 mg/Kg SOLID	SB-04 0.0 - 0.5 ft 08/09/2001 mg/Kg SOLID	SB-05 0.0 - 0.5 ft 08/09/2001 mg/Kg SOLID	SB-06 0.0 - 0.5 ft 08/01/2001 mg/Kg SOLID	SB-07 0.0 - 0.5 ft 08/09/2001 mg/Kg SOLID	SB-08 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID
Benzo(k)fluoranthene		NC**	0.224**	(330 J)	(1 J)	(0.57 J)	(1.2 J)	0.049 J	(0.56 J)	(7.6 J)	0.13 J
Bis (2-chloroethoxy) methane		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Bis (2-chloroethyl) ether		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Bis(2-ethylhexyl)phthalate		NC	50	2.9 J	0.61	0.048 J	0.13 J	0.48	0.26 J	1.1 J	0.25 J
Butyl benzyl phthalate		NC	50	10 U	0.34 U	0.39 U	0.34 UJ	0.33 U	0.37 U	0.38 U	0.33 U
Caprolactam		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Carbazole		NC	NC	6.6 J	0.074 J	0.081 J	0.16 J	0.33 U	0.19 J	0.42	0.33 U
Chrysene		NC**	0.4**	(270 J)	(1)	(0.78)	(1.1 J)	0.053 J	(0.68)	(6.1 J)	0.11 J
Di-n-butyl phthalate		NC	8.1	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Di-n-octyl phthalate		NC	50	10 U	0.34 UJ	0.39 UJ	0.34 UJ	0.33 U	0.37 UJ	0.38 UJ	0.33 U
Dibenzo(a,h)anthracene		NC**	0.014**	(37 J)	0.34 UJ	(0.25 J)	0.34 UJ	0.33 U	(0.18 J)	(1.1 J)	0.33 U
Dibenzofuran		NC	6.2	(9.2 J)	0.058 J	0.081 J	0.85	0.33 U	0.074 J	0.15 J	0.068 J
Diethyl phthalate		NC	7.1	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Dimethyl phthalate		NC	2	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Fluoranthene		NC	50	(460 J)	1.6	1.2	1.5	0.084 J	0.7	8.8	0.19 J
Fluorene		NC	50	7.9 J	0.061 J	0.39 U	0.18 J	0.33 U	0.37 U	0.17 J	0.054 J
Hexachlorobenzene		NC	0.41	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Hexachlorobutadiene		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Hexachlorocyclopentadiene		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Hexachloroethane		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Indeno(1,2,3-cd)pyrene		NC**	3.2**	(110 J)	0.48 J	0.64 J	0.94 J	0.036 J	0.47 J	2.9 J	0.068 J
Isophorone		NC	4.4	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
N-Nitrosodipropylamine		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
N-Nitrosodiphenylamine		NC	NC	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Naphthalene		NC	13	8.1 J	0.084 J	0.11 J	1.1	0.33 U	0.17 J	0.11 J	0.33 U
Nitrobenzene		NC	0.2	10 U	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	0.33 U
Pentachlorophenol		NC	1	26 U	0.84 U	0.98 UJ	0.86 U	0.83 U	0.92 UJ	0.95 U	0.83 U
Phenanthrene		NC	50	(170 J)	0.77	0.48	1.8	0.034 J	0.36 J	4.6	0.2 J
Phenol		NC	0.03	(1.2 J)	0.34 U	0.39 U	0.34 U	0.33 U	0.37 U	0.38 U	(0.097 J)
Pyrene		NC	50	(460 J)	1.6 J	0.92	2.2 J	0.065 J	0.71	11 J	0.29 J
Total carcinogenic PAHs		NC	10	(1527)	5.48	4.14	8.04	0.237	3.75	(34.9)	0.581
Total PAHs		NC	500	(2771.5)	10.314	8.36	18.53	0.42	7.48	63.52	1.36
Total SVOCs		500	NC	[2794]	11.056	8.638	19.81	0.9	8.083	65.19	1.775

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
** - Carcinogenic PAH

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O'BRIEN & GERE ENGINEERS, INC.

Table 5
Hanna Furnace Subparcel 2
Surface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-10 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-11 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-12 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-13 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID	SB-14 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-15 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-17 0.0 - 0.5 ft 08/01/2001 mg/Kg SOLID
1,1'-Biphenyl		NC	NC	1.1 U	0.36 U	0.33 U	0.15 J	0.35 U	0.04 J	0.33 U	0.061 J
2,2'-oxybis(1-Chloropropane)		NC	NC	1.1 UJ	0.36 UJ	0.33 UJ	0.35 UJ	0.35 UJ	0.35 UJ	0.33 UJ	0.38 UJ
2,4,5-Trichlorophenol		NC	0.1	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
2,4,6-Trichlorophenol		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2,4-Dichlorophenol		NC	0.4	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2,4-Dimethylphenol		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2,4-Dinitrophenol		NC	0.2	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
2,4-Dinitrotoluene		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2,6-Dinitrotoluene		NC	1	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2-Chloronaphthalene		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2-Chlorophenol		NC	0.8	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2-Methylnaphthalene		NC	36.4	0.12 J	0.12 J	0.33 U	1.2	0.094 J	0.21 J	0.07 J	0.37 J
2-Methylphenol		NC	0.1	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
2-Nitroaniline		NC	0.43	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
2-Nitrophenol		NC	0.33	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
3,3-Dichlorobenzidine		NC	NC	1.1 U	0.36 UJ	0.33 U	0.35 UJ	0.35 U	0.35 UJ	0.33 U	0.38 UJ
3-Nitroaniline		NC	0.5	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
4,6-Dinitro-2-methylphenol		NC	NC	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
4-Bromophenyl phenyl ether		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
4-Chloro-3-methylphenol		NC	0.24	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
4-Chloroaniline		NC	0.22	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
4-Chlorophenyl phenyl ether		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
4-Methylphenol		NC	0.9	1.1 U	0.36 U	0.33 U	0.045 J	0.35 U	0.35 U	0.33 U	0.38 U
4-Nitroaniline		NC	NC	2.7 U	0.92 U	0.83 U	0.89 U	0.89 U	0.89 U	0.83 U	0.95 U
4-Nitrophenol		NC	0.1	2.7 U	0.92 U	0.83 UJ	0.89 UJ	0.89 U	0.89 U	0.83 UJ	0.95 U
Acenaphthene		NC	50	0.2 J	0.065 J	0.034 J	0.082 J	0.071 J	0.11 J	0.33 U	0.09 J
Acenaphthylene		NC	41	1.5	1.8	0.33 U	0.1 J	0.15 J	1.2	0.33 U	1.3
Acetophenone		NC	NC	1.1 U	0.063 J	0.034 J	0.35 U	0.043 J	0.077 J	0.043 J	0.079 J
Anthracene		NC	50	1.4	2.1	0.33 U	0.26 J	0.22 J	1.3	0.052 J	1.4
Atrazine		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Benzo(a)anthracene		NC**	0.224**	(3.3)	(2.9 J)	0.099 J	(1.3 J)	(0.64)	(1.3 J)	0.19 J	(1.3 J)
Benzaldehyde		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Benzo(a)pyrene		NC**	0.061**	(3.2)	(2.3 J)	(0.16 J)	(1.6 J)	(0.55 J)	(1.5 J)	(0.19 J)	(1.4 J)
Benzo(b)fluoranthene		NC**	0.224**	(3)	(2.4 J)	0.14 J	(2.2 J)	(0.54 J)	(2.2 J)	(0.27 J)	(2.2 J)
Benzo(ghi)perylene		NC	50	3.8	0.65 J	0.066 J	1.9 J	0.6 J	0.43 J	0.088 J	0.56 J

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
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Table 5
Hanna Furnace Subparcel 2
Surface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-10 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-11 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-12 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-13 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID	SB-14 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-15 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-17 0.0 - 0.5 ft 08/01/2001 mg/Kg SOLID
		mg/Kg	mg/Kg								
Benzo(k)fluoranthene		NC**	0.224**	(2.9)	(2.3 J)	0.16 J	(2.1 J)	(0.48 J)	(1.9 J)	0.21 J	(1.3 J)
Bis (2-chloroethoxy) methane		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Bis (2-chloroethyl) ether		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Bis(2-ethylhexyl)phthalate		NC	50	0.3 J	0.36 UJ	1.2	0.35 UJ	0.073 J	0.076 J	0.66	0.27 J
Butyl benzyl phthalate		NC	50	1.1 U	0.36 UJ	0.33 U	0.35 UJ	0.35 U	0.35 UJ	0.33 U	0.38 UJ
Caprolactam		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Carbazole		NC	NC	0.36 J	0.16 J	0.33 U	0.12 J	0.093 J	0.23 J	0.33 U	0.25 J
Chrysene		NC**	0.4**	(3.5)	(3.1)	0.11 J	(1.5 J)	(0.72)	(1.6 J)	0.23 J	(1.5 J)
Di-n-butyl phthalate		NC	8.1	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.2 J	0.33 U	0.38 U
Di-n-octyl phthalate		NC	50	1.1 U	0.36 UJ	0.33 U	0.35 UJ	0.35 UJ	0.35 UJ	0.33 U	0.38 UJ
Dibenzo(a,h)anthracene		NC**	0.014**	(1.6)	(0.48 J)	0.33 U	0.35 UJ	(0.26 J)	(0.32 J)	(0.059 J)	(0.33 J)
Dibenzofuran		NC	6.2	0.13 J	0.064 J	0.33 U	0.23 J	0.062 J	0.11 J	0.033 J	0.14 J
Diethyl phthalate		NC	7.1	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Dimethyl phthalate		NC	2	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Fluoranthene		NC	50	5.5	4.1	0.11 J	0.63	1.2	1.9	0.33 J	1.8
Fluorene		NC	50	0.17 J	0.048 J	0.33 U	0.11 J	0.06 J	0.095 J	0.33 U	0.38 U
Hexachlorobenzene		NC	0.41	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Hexachlorobutadiene		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Hexachlorocyclopentadiene		NC	NC	1.1 UJ	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Hexachloroethane		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Indeno(1,2,3-cd)pyrene		NC**	3.2**	(4.3)	1.1 J	0.12 J	2 J	0.68 J	0.8 J	0.14 J	0.81 J
Isophorone		NC	4.4	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
N-Nitrosodipropylamine		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
N-Nitrosodiphenylamine		NC	NC	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Naphthalene		NC	13	0.11 J	0.094 J	0.33 U	0.65	0.082 J	0.22 J	0.056 J	0.33 J
Nitrobenzene		NC	0.2	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Pentachlorophenol		NC	1	2.7 U	0.92 U	0.83 U	0.89 U	0.89 UJ	0.89 U	0.83 U	0.95 UJ
Phenanthrene		NC	50	2.2	1.1	0.057 J	1.1	0.75	1.2	0.27 J	0.77
Phenol		NC	0.03	1.1 U	0.36 U	0.33 U	0.35 U	0.35 U	0.35 U	0.33 U	0.38 U
Pyrene		NC	50	4.7	1.8 J	0.11 J	1.8 J	0.93	0.97 J	0.31 J	0.76 J
Total carcinogenic PAHs		NC	10	(21.8)	(14.58)	0.789	(10.7)	3.87	9.62	1.289	8.84
Total PAHs		NC	500	41.5	26.457	1.166	18.532	8.027	17.255	2.465	16.22
Total SVOCs		500	NC	42.29	26.744	2.4	19.077	8.298	17.988	3.201	17.02

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
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Table 7
Hanna Furnace Subparcel 2
Surface Soil Samples
Inorganic Data

Compound	Sample ID	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-01	SB-02	SB-03	SB-04	SB-05	SB-06	SB-07	SB-08
	Sample Depth			0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft	0.0 - 0.5 ft
	Sample Date			07/31/2001	08/10/2001	08/01/2001	08/09/2001	08/09/2001	08/01/2001	08/09/2001	08/02/2001
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	Matrix			SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Aluminum		NC	SB	26500	8260	30800	19800	2010	28500	25200	3320
Antimony		NC	SB	8.0 J	1.1 J	11.2 J	12.6 UJ	10.6 UJ	19.7 J	13.4 UJ	12.5 UJ
Arsenic		50	7.5	(13.8 J)	(9.0)	(12.0 J)	(17.6)	1.8 U	(12.8 J)	5.3	1.3
Barium		500	300	225	87.9	272	150	26.1	265	238	28.9
Beryllium		NC	0.16	(5.1)	(1.1)	(5.8)	(3.6)	0.077	(5.5)	(4.7)	(0.20)
Cadmium		20	10*	2.0	0.46	2.1	1.0 U	0.14	2.7	1.1 U	0.35
Calcium		NC	SB	161000 J	47600 J	169000 J	82700 J	1130 J	159000 J	149000 J	5330
Chromium		200	50*	17.0	20.8 J	17.0	20.9 J	5.8 J	19.6	27.4 J	10.6
Cobalt		NC	30	3.7	2.4	5.1	5.2	0.52	5.4	2.9	1.9
Copper		NC	25	(61.0 J)	(64.5 J)	(32.1 J)	(90.0 J)	5.1 J	(60.2 J)	(69.9 J)	23.1 J
Cyanide		50	NC	—	—	—	—	—	—	—	—
Iron		NC	2000	(30100 J)	(28800)	(41200 J)	(78600)	1800	(59400 J)	(41800)	(12000)
Lead		1000	1000*	152 J	190	68.9 J	119	21.8	109 J	117	41.5 J
Magnesium		NC	SB	17200 J	9230 J	15400 J	5920 J	647 J	19900 J	16100 J	2410
Manganese		NC	SB	2450 J	1180	1810 J	2610	33.5	2680 J	4240	189
Mercury		1	0.1	(0.14)	(0.29)	0.089	0.093	0.099 U	0.094 U	(0.17)	0.070
Nickel		NC	13	8.1	(13.1)	7.1	(41.4)	2.1	7.2	(47.2)	8.6
Potassium		NC	SB	1570	2320 J	1410	870 J	1700 J	2160	1910 J	1180
Selenium		50	2	0.83 UJ	1.1 UJ	0.96 UJ	1.0 UJ	0.89 UJ	(10.5 J)	1.1 UJ	1.0 UJ
Silver		1000	SB	1.5	2.1 U	1.4	2.1 U	1.8 U	1.6	2.2 U	2.1 U
Sodium		NC	SB	827	543	601	242	134	916	601	161
Thallium		NC	SB	1.7 UJ	2.1 UJ	1.9 UJ	2.1 UJ	1.8 UJ	2.0 UJ	2.2 UJ	1.6 J
Vanadium		NC	150	8.3 U	17.4	9.6 U	41.3	3.3	10.0 U	25.9	1.1
Zinc		NC	20	(230 J)	(304 J)	(170 J)	(483 J)	(96.8 J)	(289 J)	(296 J)	(88.0 J)

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
* - indicates NYSDEC revised values for nonresidential sites which have not yet been incorporated into TAGM 4046.
SB - Site Background.

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O'BRIEN & GERE ENGINEERS, INC.

Table 7
Hanna Furnace Subparcel 2
Surface Soil Samples
Inorganic Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-10 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-11 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-12 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-13 0.0 - 0.5 ft 07/30/2001 mg/Kg SOLID	SB-14 0.0 - 0.5 ft 07/31/2001 mg/Kg SOLID	SB-15 0.0 - 0.5 ft 08/02/2001 mg/Kg SOLID	SB-16 0.0 - 0.5 ft 08/01/2001 mg/Kg SOLID
Aluminum		NC	SB	31600	12000	2030	9100	8540	8650	2390	23000
Antimony		NC	SB	6.2 J	30.2 J	10.8 UJ	51.5 J	25.8 J	31.1 J	33.8 J	21.3 J
Arsenic		50	7.5	(18.3 J)	(14.7 J)	1.8 U	(22.4)	1.9 U	2.9 J	3.3	(17.2 J)
Barium		500	300	284	145	20.9	299	82.4	177	35.9	247
Beryllium		NC	0.16	(6.7)	(1.9)	0.16	(1.3)	(1.6)	(1.5)	(0.48)	(4.2)
Cadmium		20	10*	2.1	6.6	0.38	9.1	2.0	6.0	3.1	5.7
Calcium		NC	SB	185000 J	47900 J	7110	66000	58900 J	35600 J	30000	145000 J
Chromium		200	50*	18.2	27.1	9.5	([416 J])	11.7	41.6	32.0	32.8
Cobalt		NC	30	4.2	6.9	1.1	10.2	6.2	7.1	4.2	5.5
Copper		NC	25	(96.6 J)	(150 J)	16.4 J	(4310 J)	(158 J)	(1130 J)	(69.1 J)	(664 J)
Cyanide		50	NC	—	—	—	—	—	—	—	1.5 J
Iron		NC	2000	(28700 J)	(94600 J)	(10500)	(125000)	(84100 J)	(87600 J)	(110000)	(66700 J)
Lead		1000	1000*	169 J	408 J	49.4 J	([1120 J])	51.1 J	463 J	353 J	326 J
Magnesium		NC	SB	30200 J	5630 J	906	13900	3430 J	4490 J	6980	30900 J
Manganese		NC	SB	2530 J	3860 J	148	3000	1610 J	2700 J	1730	3170 J
Mercury		1	0.1	(0.47)	([3.1])	0.072	(0.67)	(0.30)	([1.8])	0.090 U	([4.4])
Nickel		NC	13	8.2	(19.0)	2.2	(33.6)	1.3	(31.5)	(17.4)	(14.6)
Potassium		NC	SB	2110	1910	333	679	886	1050	281	2580
Selenium		50	2	(2.4 J)	0.98 UJ	0.90 UJ	1.1 UJ	0.96 UJ	0.90 UJ	0.95 UJ	1.9 J
Silver		1000	SB	2.1	2.0	1.8 U	5.3	1.9 U	1.1	1.9 U	2.3
Sodium		NC	SB	914	432	359	326	215	247	113	956
Thallium		NC	SB	2.1 UJ	1.5 J	1.5 J	9.4 J	7.5 J	4.1 J	10.9 J	2.1 UJ
Vanadium		NC	150	10.6 U	9.8 U	0.30	11.1 U	9.6 U	9.0 U	9.5 U	10.6 U
Zinc		NC	20	(196 J)	(1340 J)	(67.3 J)	(1150 J)	(342 J)	(1140 J)	(99.1 J)	(892 J)

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
* - indicates NYSDEC revised values for nonresidential sites which have not yet been incorporated into TAGM 4046.
SB - Site Background.

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O'BRIEN & GERE ENGINEERS, INC.

Table 8
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Volatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-13 0.5 - 2.0 ft 07/30/2001 mg/Kg SOLID	SB-14 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-16 2.0 - 4.0 ft 08/01/2001 mg/Kg SOLID	SB-18 2.0 - 4.0 ft 07/30/2001 mg/Kg SOLID
		mg/Kg	mg/Kg					
1,1,1-Trichloroethane		1	0.8	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,1,2,2-Tetrachloroethane		1	0.6	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1	6	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,1,2-Trichloroethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.002 J
1,1-Dichloroethane		1	0.2	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,1-Dichloroethene		1	0.4	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2,4-Trichlorobenzene		1	3.4	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2-Dibromo-3-chloropropane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2-Dibromoethane (EDB)		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2-Dichlorobenzene		1	7.9	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2-Dichloroethane		1	0.1	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,2-Dichloropropane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,3-Dichlorobenzene		1	1.6	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
1,4-Dichlorobenzene		1	8.5	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
2-Butanone (MEK)		1	0.3	0.025 U	0.018 U	0.028 U	0.015 U	0.013 UJ
2-Hexanone		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
4-Methyl-2-pentanone (MIBK)		1	1	0.025 U	0.018 U	0.028 U	0.015 U	0.004 J
Acetone		1	0.2	0.06	0.033	0.07 J	0.035	0.079
Benzene		1	0.06	0.025 U	0.018 U	0.028 U	0.002 J	0.013 U
Bromodichloromethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Bromoform		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.001 J
Bromomethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Carbon disulfide		1	2.7	0.024 J	0.003 J	0.028 U	0.015 U	0.031
Carbon tetrachloride		1	0.6	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Chlorobenzene		1	1.7	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Chloroethane		1	1.9	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Chloroform		1	0.3	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Chloromethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Cyclohexane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Dibromochloromethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Dichlorodifluoromethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Ethylbenzene		1	5.5	0.025 U	0.018 U	0.017 J	0.015 U	0.013 U
Isopropylbenzene		1	5	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Methyl acetate		1	NC	0.025 UJ	0.018 UJ	0.028 UJ	0.015 UJ	0.013 UJ
Methyl tert butyl ether		1	0.12	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U

NOTES: U - Not detected, J - Estimated value, --- - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.

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O'BRIEN & GERE ENGINEERS, INC.

Table 8
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Volatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level mg/Kg	NYS TAGM 4046 Recommended Soil Cleanup mg/Kg	SB-09 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-13 0.5 - 2.0 ft 07/30/2001 mg/Kg SOLID	SB-14 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-16 2.0 - 4.0 ft 08/01/2001 mg/Kg SOLID	SB-18 2.0 - 4.0 ft 07/30/2001 mg/Kg SOLID
Methylcyclohexane		1	NC	0.025 U	0.018 U	0.18 J	0.006 J	0.013 U
Methylene chloride		1	0.1	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Styrene		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Tetrachloroethene		1	1.4	0.025 U	0.018 U	0.42 J	0.015 U	0.013 U
Toluene		1	1.5	0.025 U	0.018 U	0.005 J	0.004 J	0.002 J
Trichloroethene		1	0.7	0.025 U	0.018 U	0.004 J	0.015 U	0.013 U
Trichlorofluoromethane		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Vinyl chloride		1	0.2	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Xylene (total)		1	1.2	0.025 U	0.018 U	0.081 J	0.003 J	0.013 U
cis-1,2-Dichloroethene		1	0.25	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
cis-1,3-Dichloropropylene		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
trans-1,2-Dichloroethene		1	0.3	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
trans-1,3-Dichloropropene		1	NC	0.025 U	0.018 U	0.028 U	0.015 U	0.013 U
Total VOCs		10	NC	0.084	0.036	0.777	0.05	0.119

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.

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O'BRIEN & GERE ENGINEERS, INC.

Table 9
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	COMP-38-39 1.0 - 1.5 ft 03/26/2002 mg/kg SOLID	COMP-40-41 1.5 - 2.0 ft 03/26/2002 mg/kg SOLID	SB-06 4.0 - 6.0 ft 08/01/2001 mg/Kg SOLID	SB-08 4.0 - 6.0 ft 08/02/2001 mg/Kg SOLID	SB-09 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-10 0.5 - 2.0 ft 07/31/2001 mg/Kg SOLID	SB-13 0.5 - 2.0 ft 07/30/2001 mg/Kg SOLID	SB-14 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID
	Units	mg/Kg	mg/Kg								
1,1'-Biphenyl		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
2,2'-oxybis(1-Chloropropane)		NC	NC	0.39 UJ	0.45 UJ	0.55 UJ	0.36 UJ	0.63 UJ	0.37 UJ	0.48 UJ	0.66 UJ
2,4,5-Trichlorophenol		NC	0.1	0.39 U	0.45 U	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
2,4,6-Trichlorophenol		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
2,4-Dichlorophenol		NC	0.4	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
2,4-Dimethylphenol		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
2,4-Dinitrophenol		NC	0.2	0.95 UJ	1.1 UJ	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
2,4-Dinitrotoluene		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
2,6-Dinitrotoluene		NC	1	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
2-Chloronaphthalene		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
2-Chlorophenol		NC	0.8	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
2-Methylnaphthalene		NC	36.4	0.04 J	0.071 J	0.55 U	0.36 U	0.63 U	0.063 J	0.48 U	2.3
2-Methylphenol		NC	0.1	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
2-Nitroaniline		NC	0.43	0.95 U	1.1 U	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
2-Nitrophenol		NC	0.33	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
3,3-Dichlorobenzidine		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
3-Nitroaniline		NC	0.5	0.95 U	1.1 U	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
4,6-Dinitro-2-methylphenol		NC	NC	0.95 U	1.1 U	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
4-Bromophenyl phenyl ether		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
4-Chloro-3-methylphenol		NC	0.24	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
4-Chloroaniline		NC	0.22	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
4-Chlorophenyl phenyl ether		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
4-Methylphenol		NC	0.9	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
4-Nitroaniline		NC	NC	0.95 U	1.1 U	1.4 U	0.91 U	1.6 U	0.94 U	1.2 U	1.7 UJ
4-Nitrophenol		NC	0.1	0.95 UJ	1.1 UJ	1.4 U	0.91 UJ	1.6 U	0.94 U	1.2 U	1.7 UJ
Acenaphthene		NC	50	0.39 U	0.015 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Acenaphthylene		NC	41	0.39 U	0.45 U	0.067 J	0.36 U	0.63 U	0.28 J	0.48 U	0.66 UJ
Acetophenone		NC	NC	0.39 U	0.45 U	0.056 J	0.045 J	0.12 J	0.37 U	0.055 J	0.66 U
Anthracene		NC	50	0.39 U	0.04 J	0.55 U	0.36 U	0.63 U	0.21 J	0.48 U	0.66 UJ
Atrazine		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Benzo(a)anthracene		NC**	0.224**	0.025 J	0.11 J	0.11 J	0.064 J	0.14 J	(0.45)	0.48 U	0.66 UJ
Benzaldehyde		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Benzo(a)pyrene		NC**	0.061**	0.015 J	0.052 J	(0.14 J)	(0.076 J)	(0.1 J)	(0.43)	0.48 U	0.66 UJ
Benzo(b)fluoranthene		NC**	0.224**	0.015 J	0.053 J	0.17 J	0.1 J	0.1 J	(0.44)	0.48 U	0.66 UJ
Benzo(ghi)perylene		NC	50	0.01 J	0.037 J	0.12 J	0.038 J	0.63 U	0.52	0.48 U	0.66 UJ

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
** - Carcinogenic PAH

Date Printed: 11/06/2002 11:54:24
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File Number: 5509.28602

O'BRIEN & GERE ENGINEERS, INC.

Table 9
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Semivolatile Organic Compound Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	COMP-38-39 1.0 - 1.5 ft 03/26/2002 mg/kg SOLID	COMP-40-41 1.5 - 2.0 ft 03/26/2002 mg/kg SOLID	SB-06 4.0 - 6.0 ft 08/01/2001 mg/Kg SOLID	SB-08 4.0 - 6.0 ft 08/02/2001 mg/Kg SOLID	SB-09 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID	SB-10 0.5 - 2.0 ft 07/31/2001 mg/Kg SOLID	SB-13 0.5 - 2.0 ft 07/30/2001 mg/Kg SOLID	SB-14 6.0 - 8.0 ft 07/31/2001 mg/Kg SOLID
Benzo(k)fluoranthene		NC**	0.224**	0.015 J	0.058 J	0.15 J	0.095 J	0.11 J	(0.44)	0.48 U	0.66 UJ
Bis (2-chloroethoxy) methane		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Bis (2-chloroethyl) ether		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Bis(2-ethylhexyl)phthalate		NC	50	0.017 J	0.15 J	0.35 J	1	0.33 J	0.12 J	0.48 U	0.66 UJ
Butyl benzyl phthalate		NC	50	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Caprolactam		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Carbazole		NC	NC	0.39 U	0.014 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Chrysene		NC**	0.4**	0.036 J	0.12 J	0.14 J	0.1 J	0.14 J	(0.52)	0.48 U	0.66 UJ
Di-n-butyl phthalate		NC	8.1	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Di-n-octyl phthalate		NC	50	0.017 J	0.02 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Dibenzo(a,h)anthracene		NC**	0.014**	0.39 U	(0.026 J)	0.55 U	0.36 U	0.63 U	(0.28 J)	0.48 U	0.66 UJ
Dibenzofuran		NC	6.2	0.016 J	0.068 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Diethyl phthalate		NC	7.1	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Dimethyl phthalate		NC	2	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Fluoranthene		NC	50	0.037 J	0.31 J	0.14 J	0.12 J	0.21 J	0.47	0.058 J	0.66 UJ
Fluorene		NC	50	0.39 U	0.019 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Hexachlorobenzene		NC	0.41	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Hexachlorobutadiene		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Hexachlorocyclopentadiene		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Hexachloroethane		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Indeno(1,2,3-cd)pyrene		NC**	3.2**	0.39 U	0.031 J	0.13 J	0.042 J	0.63 U	0.67	0.48 U	0.66 UJ
Isophorone		NC	4.4	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
N-Nitrosodipropylamine		NC	NC	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
N-Nitrosodiphenylamine		NC	NC	0.39 U	0.026 J	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 UJ
Naphthalene		NC	13	0.02 J	0.043 J	0.55 U	0.36 U	0.63 U	0.043 J	0.48 U	0.66 U
Nitrobenzene		NC	0.2	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Pentachlorophenol		NC	1	0.95 UJ	1.1 UJ	1.4 UJ	0.91 U	1.6 UJ	0.94 UJ	1.2 UJ	1.7 UJ
Phenanthrene		NC	50	0.086 J	0.56	0.55 U	0.096 J	0.16 J	0.18 J	0.055 J	0.66 UJ
Phenol		NC	0.03	0.39 U	0.45 U	0.55 U	0.36 U	0.63 U	0.37 U	0.48 U	0.66 U
Pyrene		NC	50	0.031 J	0.24 J	0.13 J	0.16 J	0.18 J	0.43	0.06 J	0.66 UJ
Total carcinogenic PAHs		NC	10	0.106	0.45	0.84	0.477	0.59	3.23	—	—
Total PAHs		NC	500	0.33	1.785	1.297	0.891	1.14	5.426	0.173	2.3
Total SVOCs		500	NC	0.38	2.063	1.703	1.936	1.59	5.546	0.228	2.3

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
** - Carcinogenic PAH

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O'BRIEN & GERE ENGINEERS, INC.

Table 11
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Inorganic Data

Compound	Sample ID	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-01	SB-02	SB-03	SB-04	SB-05	SB-06	SB-07	SB-08
	Sample Depth			4.0 - 6.0 ft	6.0 - 8.0 ft	4.0 - 6.0 ft	2.0 - 4.0 ft	4.0 - 6.0 ft	4.0 - 6.0 ft	4.0 - 6.0 ft	4.0 - 6.0 ft
	Sample Date			07/31/2001	08/10/2001	08/01/2001	08/09/2001	08/09/2001	08/01/2001	08/09/2001	08/02/2001
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	Matrix			SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Aluminum		NC	SB	56000	13500 J	47900	40300	5120	36900	39000	10200
Antimony		NC	SB	24.2 UJ	23.0 UJ	24.5 UJ	16.3 UJ	0.96 J	19.6 UJ	18.1 UJ	24.7 J
Arsenic		50	7.5	(17.2 J)	(11.0 J)	(16.4 J)	2.5	3.8 J	(19.6 J)	3.0 U	7.5
Barium		500	300	(500)	97.3 J	([658 J])	291	64.1	([722 J])	214	133
Beryllium		NC	0.16	(10.1)	(2.5 J)	(11.4)	(7.5)	(0.75)	(8.0)	(6.8)	(1.1)
Cadmium		20	10*	0.90	1.9 UJ	0.42	1.4 U	0.53	0.27	1.5 U	3.2
Calcium		NC	SB	266000 J	83700 J	263000 J	236000 J	22700 J	184000 J	197000 J	53100
Chromium		200	50*	10.6	11.1 J	6.9	2.6 J	8.0 J	5.2	3.9 J	32.2
Cobalt		NC	30	4.3	5.1 J	3.5	1.4	0.80	2.2	1.8	9.0
Copper		NC	25	10.1 UJ	(26.2 J)	10.2 UJ	14.0 J	(31.2 J)	8.2 UJ	4.0 J	(73.4 J)
Cyanide		50	NC	13.2 J	7.7 J	30.5 J	32.3	7.8 J	18.1 J	0.28	14.0 J
Iron		NC	2000	(24500 J)	(16500 J)	(4260 J)	(11900)	(9580)	(5690 J)	(13500)	(80500)
Lead		1000	1000*	27.3 J	25.1 J	7.9 J	18.9	102	5.1 J	552	200 J
Magnesium		NC	SB	16800 J	7620 J	16900 J	20800 J	3690 J	14600 J	13300 J	12000
Manganese		NC	SB	1650 J	670 J	1940 J	2120	428	1410 J	2520	2350
Mercury		1	0.1	0.20 U	0.083 UJ	0.20 U	0.13 U	(0.19)	0.15 U	0.16 U	0.072
Nickel		NC	13	2.1	12.9 J	0.52	2.4	4.5	4.3	1.0	(15.1)
Potassium		NC	SB	975	1390 J	748	2090 J	1260 J	1110	1600 J	1340
Selenium		50	2	(6.8 J)	(41.9 J)	2.0 UJ	(32.1 J)	1.1 UJ	1.6 UJ	(24.2 J)	1.0 UJ
Silver		1000	SB	2.7	3.8 UJ	4.1 U	2.7 U	2.2 U	3.3 U	3.0 U	1.1
Sodium		NC	SB	468	206 J	293	601	196	416	622	376
Thallium		NC	SB	4.0 UJ	3.8 UJ	4.1 UJ	2.7 UJ	2.2 UJ	3.3 UJ	3.0 UJ	3.8 J
Vanadium		NC	150	20.2 U	18.1 J	9.8	11.4	8.7	4.1	14.0	10.5 U
Zinc		NC	20	40.3 UJ	(87.5 J)	40.8 UJ	(53.1 J)	(559 J)	32.7 UJ	(32.1 J)	(415 J)

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
* - Indicates NYSDEC revised values for nonresidential sites which have not yet been incorporated into TAGM 4046.
SB - Site Background.

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O'BRIEN & GERE ENGINEERS, INC.

Table 11
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Inorganic Data

Compound	Sample ID	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-09	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16
	Sample Depth			6.0 - 8.0 ft	0.5 - 2.0 ft	4.0 - 6.0 ft	2.0 - 4.0 ft	0.5 - 2.0 ft	6.0 - 8.0 ft	4.0 - 6.0 ft	2.0 - 4.0 ft
	Sample Date			07/31/2001	07/31/2001	08/02/2001	08/02/2001	07/30/2001	07/31/2001	08/02/2001	08/01/2001
	Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
	Matrix			SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Aluminum		NC	SB	38200	10300	13400 J	14100	29500	47800	25900	24700
Antimony		NC	SB	20.2 UJ	40.4 J	16.1 UJ	48.2 J	17.5 J	24.1 UJ	24.5 J	5.2 J
Arsenic		50	7.5	(15.4 J)	(10.3 J)	6.6 J	(16.6)	(8.4 J)	(20.7 J)	([59.8])	(16.2 J)
Barium		500	300	(348)	200	77.6 J	226	256	(324)	144	156
Beryllium		NC	0.16	(7.4)	(1.7)	(2.2 J)	(2.3)	(5.5)	(8.4)	(4.4)	(4.1)
Cadmium		20	10*	0.56	4.5	0.40 J	7.5	1.7	0.47	3.2	0.77
Calcium		NC	SB	220000 J	36900 J	55600 J	57500	182000 J	211000 J	160000	153000 J
Chromium		200	50*	10.2	24.2	6.3 J	(88.8)	9.3	7.1	39.3	7.5
Cobalt		NC	30	3.0	7.4	2.9 J	8.4	5.7	3.5	9.9	5.1
Copper		NC	25	8.4 UJ	(88.7 J)	8.7 UJ	(1530 J)	(165 J)	17.2 J	(72.2 J)	(62.7 J)
Cyanide		50	NC	1.5 J	0.90 J	0.96 J	5.0 J	12.3 J	8.6 J	3.3 J	2.2 J
Iron		NC	2000	(11600 J)	(129000 J)	(21800 J)	(133000)	(57200 J)	(7120 J)	(79600)	(23300 J)
Lead		1000	1000*	12.8 J	146 J	10.5 J	([1890 J])	37.6 J	15.9 J	92.0 J	56.7 J
Magnesium		NC	SB	15900 J	3320 J	6060 J	9820	10500 J	16600 J	11000	37500 J
Manganese		NC	SB	3600 J	2900 J	809 J	2480	1790 J	2070 J	3660	1080 J
Mercury		1	0.1	0.19 U	(0.44)	0.13 UJ	(0.54)	(0.11)	0.17 U	0.12 U	(0.23)
Nickel		NC	13	13.4 U	10.0	10.7 UJ	(15.4)	10.6 U	1.8	(18.6)	6.0
Potassium		NC	SB	3090	1160	1080 J	1010	703	1700	2030	2230
Selenium		50	2	(3.0 J)	0.97 UJ	1.3 UJ	1.1 UJ	(2.1 J)	(6.8 J)	1.3 UJ	1.5 UJ
Silver		1000	SB	2.3	1.9 UJ	2.7 UJ	2.6	2.6 U	4.0 UJ	2.7 U	3.0 U
Sodium		NC	SB	897	273	203 J	295	284	1200	500	370
Thallium		NC	SB	3.4 UJ	9.0 J	2.7 UJ	12.2 J	2.6 UJ	4.0 UJ	2.7 UJ	3.0 UJ
Vanadium		NC	150	6.4	9.7 U	13.4 UJ	10.6 U	13.2 U	15.0	13.3 U	14.9 U
Zinc		NC	20	33.6 UJ	(982 J)	(90.1 J)	(849 J)	(53.9 J)	40.2 UJ	(242 J)	(259 J)

NOTES: U - Not detected, J - Estimated value, — - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.
* - Indicates NYSDEC revised values for nonresidential sites which have not yet been incorporated into TAGM 4046.
SB - Site Background.

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O'BRIEN & GERE ENGINEERS, INC.

Table 12
Hanna Furnace Subparcel 2
Subsurface Soil Samples
Other Data

Compound	Sample ID / Sample Depth / Sample Date / Units / Matrix	Site-Specific Action Level	NYS TAGM 4046 Recommended Soil Cleanup	SB-07 4.0 - 6.0 ft 08/09/2001 SOLID	SB-08 4.0 - 6.0 ft 08/02/2001 SOLID	SB-09 6.0 - 8.0 ft 07/31/2001 SOLID	SB-10 0.5 - 2.0 ft 07/31/2001 SOLID	SB-11 4.0 - 6.0 ft 08/02/2001 SOLID	SB-12 2.0 - 4.0 ft 08/02/2001 SOLID	SB-13 0.5 - 2.0 ft 07/30/2001 SOLID	SB-14 6.0 - 8.0 ft 07/31/2001 SOLID
Percent moisture (%)		NC	NC	45.6	12.4	50.0	11.7	35.0	13.4	30.6	51.2
pH (su)		NC	NC	—	10	11	8.2	—	—	11	10

NOTES: U - Not detected, J - Estimated value, --- - Not analyzed.
NC - No screening value available, [ ] - Exceeds Site-Specific Action Level, ( ) - Exceeds NYS TAGM 4046 - Recommended Soil Cleanup.

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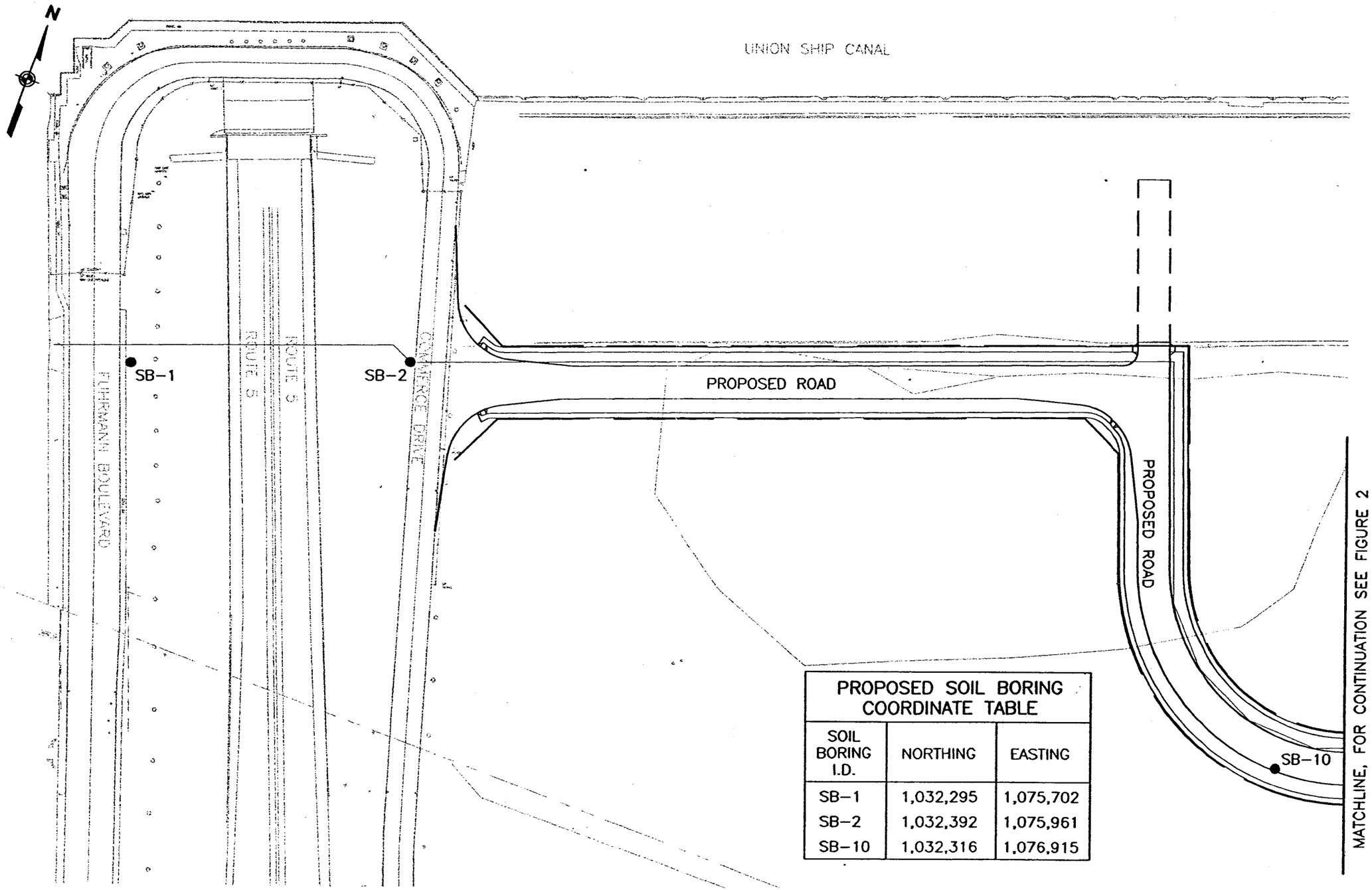
APPENDIX B

GENERAL EXCAVATION – SOIL CHARACTERIZATION INFORMATION

APPENDIX B-1

SOIL BORING LOGS URS (FEBRUARY 2003)

N:\11172801.00000\CAD\50%\ 1=1 2/11/03-2 ELB



PROPOSED SOIL BORING COORDINATE TABLE		
SOIL BORING I.D.	NORTHING	EASTING
SB-1	1,032,295	1,075,702
SB-2	1,032,392	1,075,961
SB-10	1,032,316	1,076,915

100' 0 100'

SCALE: 1"= 100'

UNION SHIP CANAL
PROPOSED SOIL BORING LOCATION PLAN

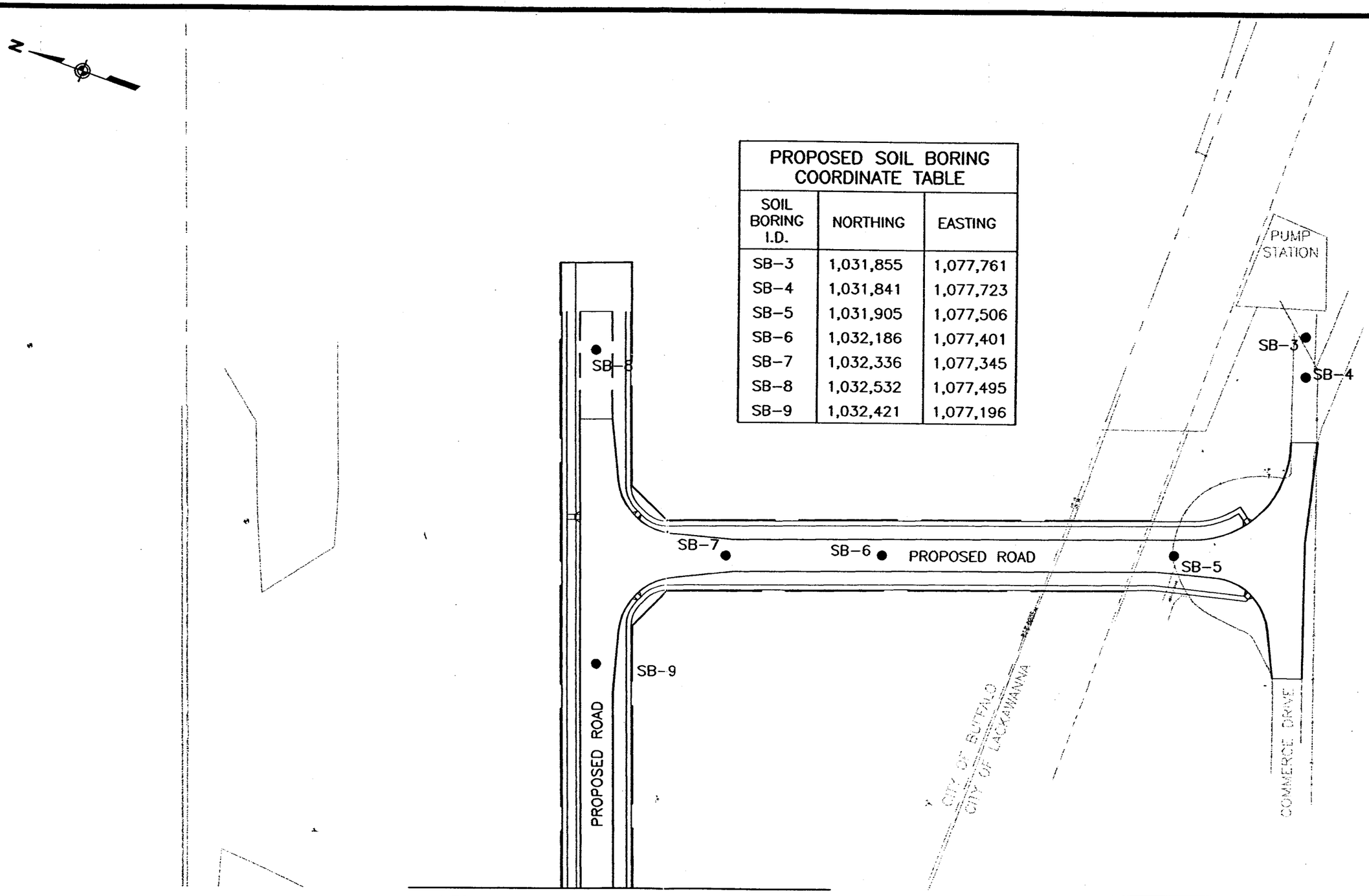
URS

FIGURE 1

CC-7435

N:\11172801.00000\CAD\50%\ 1=1 2/11/03-2 ELB

PROPOSED SOIL BORING COORDINATE TABLE		
SOIL BORING I.D.	NORTHING	EASTING
SB-3	1,031,855	1,077,761
SB-4	1,031,841	1,077,723
SB-5	1,031,905	1,077,506
SB-6	1,032,186	1,077,401
SB-7	1,032,336	1,077,345
SB-8	1,032,532	1,077,495
SB-9	1,032,421	1,077,196



MATCHLINE, FOR CONTINUATION SEE FIGURE 1

100' 0 100'

SCALE: 1"= 100'

CC-7435

UNION SHIP CANAL
PROPOSED SOIL BORING LOCATION PLAN

URS

FIGURE 2

FIELD BOREHOLE LOG

MALCOLM PIRNIE

Project Name: Hanna Furnace
Project No.: 3587-001
Client: BERC
Location: 2,4 Fuhrman Blvd.

Surface Elev.: _____
Reference Elev.: _____
Contractor: Maxim
Logged By: KKZ

Borehole No.: 38-[illegible]4
Date Started: 1-25-99
Date Finished: 1-25-99
Method of Boring: HSA 2" SS

Depth (BGS)	Sample No.	Blows (6")	Recovery	Soil Classification	Description and Remarks Density/Consistency, Color, Plasticity, Soil Types, Texture, Fabric, Bedding, Moisture, Other Characteristics	Samples	Moisture (%)	HNu (ppm) Scan	HNu (ppm) Headspace
1		8	12		0-12 med Brown Silty Sand with Slag + Gravel		Wet		0.3
		12							
2		14							
		14							
3		12	12		0-8 med / Dark Brown Silty Sand with Slag + Gravel		Wet		2.5
		14							
4		10			8-12 Med to coarse Sand with Slag Gravel				
		30							
5		20	20		0-3 Med Brown Silty Sand with some Slag + Gravel		Wet		6.3
		22							
6		22			3-19 Med to Coarse Sand with Slag + Gravel				
		15			19-20 Gray Blue Coarse Sand				
7		16	20		0-20 Gray Blue coarse Sand with some Slag and gravel		W		0.3
		15							
8		11							
		11							
9		4	12		0-12 Clay Blue Coarse Sand, Some gravel and Slag		Wet		0.3
		4							
10		8							
		10							
11		3	10		0-2 Clay Blue Coarse Sand		Wet		0.0
		4			2-5 med / Dark Brown Silty Loam (FILL)				
12		4			5-10 Grey and Brown Clay (NATIVE)				
		4							
					SITE 1022				

URS Corporation

TEST BORING LOG

BORING NO:	TB-1
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	W. of Rte 5
GROUND ELEVATION:	
DATE STARTED:	02/17/03
DATE FINISHED:	02/17/03
DRILLER:	J. Tajdowski
GEOLOGIST:	J. Doerr
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services

GROUNDWATER:				CAS.	SAMPLER	CORE	TUBE
DATE	TIME	LEVEL	TYPE	TYPE	Split spoon		
				DIA.	2"		
				WT.	140#		
				FALL	30"		
				* POCKET PENETROMETER READING			

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	44	50/4	100%	Black/	Very	0.0-9.6: FILL; 0.0-2.0; Fine to coarse gravel		0.0	Moist
						N=>50	Gray	Dense	asphalt and concrete			
		2	SS	10	11	80%	Dark	Medium	2.0-4.0: Silty fine sand, some medium sand,		0.0	
				13	14	N=24	Brown	Dense	trace fine rounded gravel			
5		3	SS	4	5	60%	Yellow/		4.0-8.0; Coarse sand, trace fine to medium		0.0	
				5	2	N=10	Black		sand and fine gravel			
		4	SS	6	7	75%	Brown				0.0	
				10	15	N=17						
		5	SS	3	10	70%			8.0-9.6:;Silt, some fine sand, trace fine angular		0.0	
10				13	2	N=23			gravel			
		6	SS	1	2	50%		Soft	9.6-17.5: PEAT, Trace thin partings fine sand	PT	0.0	Wet
				2	2	N=4			and/or clay			@ 9.6
		7	SS	1	2	60%					0.0	
				3	1	N=5						
15		8	SS	WoH	WoH	20%		Very			0.0	
				WoH	3	N=WoH		Soft				
		9	SS	2	2	50%		Soft		SP	0.0	
				1	2	N=3						
									17.5-17.7: Medium to coarse sand			
		10	SS	2	5	10%	Gray	Stiff		CL	0.0	*1.0 TSF
20				4	5	N=9			17.7-2.0: Silty CLAY			Moist
									End boring at scheduled depth of 20'			
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO. 11172800.00
BORING NO. TB-1

URS Corporation

TEST BORING LOG

BORING NO:	TB-2
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	E. of Rte 5
GROUND ELEVATION:	
DATE STARTED:	02/17/03
DATE FINISHED:	02/17/03
DRILLER:	J. Tajdowski
GEOLOGIST:	J. Doerr
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	16	50	80%	Brown	Very	0.0-8.0: FILL; 0.0-4.0; Fine to coarse gravel		0.0	Moist
				38	18	N=88		Dense	some silt			
		2	SS	13	14	60%					0.0	
				30	25	N=44						
5		3	SS	13	15	50%	Black/	Medium	4.0-8.0; Fine to coarse sand and fine gravel		0.0	
				14	6	N=29	Gray	Dense				
		4	SS	3	2	30%	Blue	Loose			0.0	
				2	3	N=4						
		5	SS	1	1	40%	Brown	Very	8.0-13.4 PEAT, some wood fragments	PT	0.0	Wet
10				1	1	N=2		Soft				@ 8'
		6	SS	1/12		0%			10.0-12.0: No Recovery		0.0	
				1	1	N=<1						
		7	SS	WoH	2	80%					0.0	
				2	3	N=4						
15		8	SS	16	6	90%	Gray	Stiff	13.4-16.5: Silty Clay, some fine sand, fine angular gravel, trace decayed roots, twigs	CL	0.0	Moist
				6	14	N=12						
		9	SS	10	50/4	100%	Brown	Hard	16.5-20.0: Silty, sandy CLAY, somefine to coarse angular gravel and rock fragments, TILL	ML	0.0	Dry
						N=>50						
		10	SS	40	50/4	N=>50					0.0	
20												
									End boring at scheduled depth of 20'			
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO.	11172800.00
BORING NO.	TB-2

URS Corporation

TEST BORING LOG

BORING NO:	TB-3
SHEET:	1 of 1
JOB NO.:	11172797
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/18/03
DATE FINISHED:	02/18/03
DRILLER:	J. Tajdowski
GEOLOGIST:	J. Doerr/T. Burmeier
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	10	10	70%	Dark	Medium	0.0-6.0: FILL; 0.0-4.0; Silty loam, some fine sand		0.0	Moist
				8	5	N=18	Brown	Dense	0.4-6.0 Cinder and ash, some clinker			
		2	SS	6	6	50%	Black				0.0	
				6	5	N=12						
5		3	SS	2	3	60%		Loose			0.0	Wet @ 6'
				4	3	N=7	Brown					
		4	SS	3	1	50%	Gray	Very	6.0-10.7: CLAY, some silt, plastic, some staining	CL	0.0	*1.0TSF
				1	2	N=2		Soft				
		5	SS	1	1	50%					0.0	*1.25TSF
10				2	2	N=3						
		6	SS	WoH	2	70%	Gray/				0.0	*3.0TSF
				3	4	N=5	Yellow	Loose	10.7-12.9: SILT, some fine clay, grading down-	ML		*1.0TSF
		7	SS	7	10	100%			ward to silty fine sand		0.0	*1.0TSF
				6	16	N=16		Stiff	12.9-25.0: silty CLAY, fining donward to CLAY	CL		Moist
15		8	SS	2	4	100%		Very			0.0	*<0.5TSF
				5	7	N=9		Soft				
		9	SS	6	5	85%	Gray				0.0	*<0.5TSF
				4	4	N=9						
		10	SS	WoH	WoH	100%		Very			0.0	*<0.5TSF
20				WoH	WoH	N=WoH		Soft				
		11	SS	WoH	WoH	100%					0.0	*<0.5TSF
				WoH	WoH	N=WoH						
		12	SS	WoH	WoH	100%	Red-				0.0	*<0.5TSF
				WoH	3	N=WoH	Brown					Very
25		13	SS	1	1	70%	Brown				0.0	Moist
				23	3	N=24		Very	25.0-34.5; silty sandy CLAY some fine to coarse	ML		Moist
		14	SS	5	6	70%		Stiff	angular gravel and rock fragments		0.0	Dry
				10	37	N=16		to				Moist
		15	SS	18	19	60%	Gray	Hard			0.0	
30				31	3	N=50						
		16	SS	32	26	100%					0.0	Dry
				50/4		N=>50						
		17	SS	20	27	40%					0.0	
				26	23	N=53						
35		18	SS	18	50/4	80%	Dark				0.0	
						N=>50	Gray		34.5-40.0: Levanna Shale member	VBr		

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO. 11172797
BORING NO. TB-3

URS Corporation	TEST BORING LOG
	BORING NO: TB-3
PROJECT:	SHEET: 2 of 2
CLIENT:	JOB NO.: 11172797.00

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	MOISTURE
		SS	19	23	50/4	100% N=>50	Dark Gray	Moderately Hard	Skaneateles Formation, weathered, with clay seams	VBr	0.0	Dry
40		SS	20	49 50/2	50	80% N=>50					0.0	
									End boring at scheduled depth of 40' 2" monitoring well installed.			
45												
50												
55												
60												
65												
70												
75												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis	PROJECT NO. 1117797.00
	BORING NO. TB-3

URS Corporation

TEST BORING LOG

BORING NO:	TB-4
SHEET:	1 of 1
JOB NO.:	11172797
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/18/03
DATE FINISHED:	02/18/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	20	25	65%	Medium Brown	Dense	0.0-6.5: FILL; Silty clay soil over fine granular angular gravel with silty clay matrix.		0.0	Moist
				20	15	45						
		2	SS	8	3	45%	Dark Brown	Loose			0.0	
				2	1	5						
5		3	SS	1	1	35%		Very Loose			0.0	
				1	WoH	2						
		4	SS	1	2	40%					0.0	Wet
				2	2	4	Gray	Soft	6.5-11.0: CLAY, plastic, trace silt, mottled yellow	CL		@6.5'
		5	SS	1	2	75%					0.0	*0.5TSF
10				2	2	4	Yellow Brown					*2.0TSF
		6	SS	2	2	85%					0.0	Moist
				2	4	4			11.0-13.0: CLAY, with interbedded silty fine sand layers (1"-3" thick)			
		7	SS	2	6	100%		Stiff			0.0	Wet
				9	7	15			13.0-15.5: Silty CLAY			Very
15		8	SS	2	3	100%		Medium			0.0	Moist
				2	3	5	Stiff Brown					
		9	SS	2	3	100%			15.5-23.0: CLAY, plastic, sticky		0.0	
				2	4	5						
		10	SS	2	1	100%		Soft to Very Soft			0.0	*0.75TSF
20				2	1	3						
		11	SS	WoH	WoH	100%					0.0	*<0.5TSF
				1	1	1						
		12	SS	WoH	WoH	100%					0.0	
				WoH	WoH	WoH			23.0-28.0: Silty CLAY, with fine to coarse sand and fine gravel. Gravel content increases with depth	ML		Moist
25		13	SS	6	5	100%		Stiff to Very Stiff			0.0	
				5	5	10						
		14	SS	5	8	100%					0.0	
				12	26	20						
		15	SS	27	27	35%	Medium to Very Dense	Dense	28.0-34.0; GRAVEL, coarse with silty fine sand matrix	GM	0.0	
30				31	48	58						
		16	SS	9	17	50%					0.0	
				25	26	42						
		17	SS	22	29	45%					0.0	
				34	50/4	63						
35		18	SS	31	20	65%	Gray Brown		34.0-36.0: Weathered SHALE, in a silty clay matrix	VBr	0.0	Dry
				26	28	46						

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO.	11172797
BORING NO.	TB-4

URS Corporation

TEST BORING LOG

PROJECT:	Union Ship Canal
CLIENT:	City of Buffalo, DPW
BORING CONTRACTOR:	SJB Services
GROUNDWATER:	

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

BORING NO:	TB-5
SHEET:	1 of 1
JOB NO.:	11172797
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/20/03
DATE FINISHED:	02/20/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	DESCRIPTION COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	50/4		50% >50	Black	Dense	0.0-1.0: ASPHALT Pavement 1.0-6.0:Fine granular FILL, coal, in part		0.0	Moist
		2	SS	15	10	60%		Medium Dense			0.0	
				9	7	19						
5		3	SS	4	3	50%		Very Loose			0.0	
				3	2	6						
		4	SS	1	1	25%	Light Gray	Medium Stiff	6.0-8.0: Fine silty SAND	SM	0.0	Wet @6.'
				1	3	2						
		5	SS	3	3	60%		to	8.0-11.5: Silty CLAY	CL	0.0	*03.0TSF
10				4	6	7	Yellow Brown	Stiff				Moist
		6	SS	4	8	50%			trace fine gravel		0.0	
				9	7	17			11.5-12.0: Fine silty SAND			
		7	SS	6	6	70%	Medium Brown		12.0-18.0: CLAY	CL	0.0	*2.75TSF
				11	10	17						Very
15		8	SS	2	2	85%	Gray	Medium	clay becomes sticky		0.0	Moist
				3	2	5	Brown	Stiff				*1.0TSF
		9	SS	4	3	100%			several 1/4" thick silty sand layers		0.0	
				4	3	7						*<0.5TSF
		10	SS	1	2	100%		Soft	18.0-23.0: Silty CLAY, trace sand and fine		0.0	
20				1	2	3		to	gravel			
		11	SS	WoH	1	100%		Very			0.0	
				1	1	2		Soft				
		12	SS	WoH	WoH	100%					0.0	
				WoH	1	WoH			23.0-32.0: Silty CLAY with fine to coarse sand	ML/		
25		13	SS	1	1	50%		STIFF	and fine gravel. Gravel content increases with	CL	0.0	
				10	4	11			depth.			
		14	SS	6	6	60%					0.0	
				33	50/4	39		Hard				
		15	SS	10	15	55%		to			0.0	moist
30				21	32	36		Dense				
		16	SS	7	17	40%		and			0.0	
				24	30	41		Very				Wet
		17	SS	15	20	50%	Medium	Dense	32.0-36.0: Silty CLAY and angular coarse		0.0	@32'
				20	24	40	Brown		gravel			
35		18	SS	34	50/3	35%					0.0	
						50						

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO.	11172797
BORING NO.	TB-5

URS Corporation

TEST BORING LOG

PROJECT:	Union Ship Canal
CLIENT:	City of Buffalo, DPW
BORING CONTRACTOR:	SJB Services
GROUNDWATER:	

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

BORING NO:	TB-6
SHEET:	1 of 1
JOB NO.:	11172797
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/20/03
DATE FINISHED:	02/21/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

DEPTH FEET	STRATA	SAMPLE NO.	SAMPLE TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	33	20	13	85%	Rusty Brown	Dense	0.0-4.0: FILL; Iron oxide silt to sand size particles		0.0	Moist
				20	34							
		2	38	15	21	85%					0.0	
				17	10							
5		3	20	4	10	65%	Tan/ Gray	Medium Dense	4.0-10.0: FILL; Coarse sand to fine gravel size particles of noncohesive slag or limestone		0.0	
				10	6							
		4	12	8	4	85%	Blue Green				0.0	
				8	5							
		5	9	3	4	70%		Loose			0.0	
10				5	2							
		6	3	1	1	55%	Dark Brown	Soft	10.0-12.0: PEAT; Woody fibers mixed with silt and clay at 12'	PT	0.0	
				2	2							
		7	4	3	2	35%	Gray Brown		12.0-18.0: Silty CLAY	CL	0.0	*1.75TSF Very Moist
15		8	7	WoH	2	60%		Medium Stiff	fine silty sand seams @ 14'		0.0	*1.0TSF
				5	5		Yellow Brown					
		9	30	10	12	55%		Very Stiff			0.0	*<0.5TSF
				18	18		Gray Brown					
		10	14	3	6	10%		Medium Stiff to Stiff	18.0-20.0: Clayey SILT, trace organics	ML	0.0	
20				8	7							
		11	6	2	2	90%			20.0-22.0: CLAY	CL	0.0	*1.25TSF
				4	5							
		12	7	4	3	100%			22.0-32.0: Silty CLAY, with fine sand and trace fine gravel	ML	0.0	
				4	2							
25		13	3	1	1	0%		Soft			0.0	
				2	1							
		14	3	WoH	1	100%					0.0	
				2	1							
		15	2	WoH	1	100%					0.0	moist
30				1	2							
		16	3	WoH	WoH	100%					0.0	Wet @32'
				3	3							
		17	8	4	4	100%		Stiff	32.0-34.00: Silty CLAY, with fine sand and fine gravel		0.0	
				4	5							
35		18	100	35	100	50%		Very Dense	34.0-35.0: CLAY and Dolostone GRAVEL		0.0	
									End boring at 35'			

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples submitted for laboratory analysis

PROJECT NO.	11172797
BORING NO.	TB-6

URS Corporation

TEST BORING LOG

PROJECT:	Union Ship Canal
CLIENT:	City of Buffalo, DPW
BORING CONTRACTOR:	SJB Services
GROUNDWATER:	

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		
* POCKET PENETROMETER READING				

DATE	TIME	LEVEL	TYPE

BORING NO:	TB-7
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/21/03
DATE FINISHED:	02/21/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	26	47	90%	Brown	Very	0.0-10.0: FILL; 0.0-1.0: Silt and gravel		0.0	Moist
				60	104	N=107	Blue/	Dense	1.0-2.0 Sand, clay and fine to coarse slag gravel			
		2	SS	26	14	50%	Gray/	Medium	2.0-4.0: Silt to coarse gravel size slag		0.0	
				9	6	N=23	Yellow	Dense				
5		3	SS	13	12	65%	Brown		4.0-4.7: Iron oxide silty sand		0.0	
				5	3	N=17	Tan		4.7-8.0: Coarse sand (slag)			
		4	SS	6	5	0%					0.0	
				5	8	N=10						
		5	SS	4	4	100%	Blue-	Loose	8.0-10.0 Coarse Sand and vesicular slag		0.0	
10				5	7	N=9	Gray					
									Boring completed at scheduled 10' depth			
15												
20												
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving, no samples collected for laboratory analysis.

PROJECT NO.	11172800.00
BORING NO.	TB-7

URS Corporation

TEST BORING LOG

BORING NO:	TB-8
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/21/03
DATE FINISHED:	02/21/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	12	15	85%	Brown	Very	0.0-10.0: FILL: 0.0-1.0; Silt to fine gravel		0.0	Moist
				50/2		N=>50	Gray	Dense	1.0-2.0: Slag gravel and silt, trace coal			
		2	SS	50/4		100%	Brown	↓	2.0-4.0: Coarse slag gravel		0.0	
						N=>50						
5		3	SS	8	12	0%		Medium	4.0-6.0: No Recovery		0.0	
				16	13	N=28		Dense				
		4	SS	22	12	60%		↓	6.0-8.0Coarse sand to fine gravel size slag		0.0	Wet @ 6'
				11	11	N=23		↓				
		5	SS	6	12	60%	Red-	Dense	8.0-10.0: Iron oxide silt to fine sand, trace slag,		0.0	
10				22	15	N=34	Brown		sheen			
									Boring completed at scheduled 10' depth			
15												
20												
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving. Samples collected from 6'-8' fro analysis for VOCs, SVOCs, Metals, CN, and PCB/Pesticide.

PROJECT NO.	11172800.00
BORING NO.	TB-8

URS Corporation

TEST BORING LOG

BORING NO:	TB-9
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/24/03
DATE FINISHED:	02/24/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services
GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	25	36	85%	Brown	Very	0.0-10.0: FILL;0.0 0.0-2.0; Silt and fine to coarse		0.0	
				29	16	N=65		Dense	gravel			
		2	SS	6	8	60%		Medium	2.0-4.0: Silty sandy slag, trace vesicular slag		0.0	
				11	12	N=17		Dense				
5		3	SS	5	5	100%	Gray		4.0-6.0: coarse sand to fine slag gravel		0.0	Wet @ 6'
				5	4	N=10						
		4	SS	5	4	100%	Blue-Green		6.0-9.0: Coarse sand to fine gravel		0.0	
				7	5	N=11						
		5	SS	6	9	85%					0.0	
10				12	8	N=21	Black		9.0-10.0: Silt and coarse sand size granular fill			
									Boring completed at scheduled 10' depth			
15												
20												
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving. Samples collected from 4'-6' fro analysis for VOCs, SVOCs, Metals, CN, and PCB/Pesticide.

PROJECT NO.	11172800.00
BORING NO.	TB-9

URS Corporation

TEST BORING LOG

BORING NO:	TB-10
SHEET:	1 of 1
JOB NO.:	11172800.00
BORING LOCATION:	
GROUND ELEVATION:	
DATE STARTED:	02/24/03
DATE FINISHED:	02/24/03
DRILLER:	J. Tajdowski
GEOLOGIST:	T. Burmeier
REVIEWED BY:	D. Lenhardt

PROJECT: Union Ship Canal
CLIENT: City of Buffalo, DPW
BORING CONTRACTOR: SJB Services

GROUNDWATER:

DATE	TIME	LEVEL	TYPE

	CAS.	SAMPLER	CORE	TUBE
TYPE		Split spoon		
DIA.		2"		
WT.		140#		
FALL		30"		

* POCKET PENETROMETER READING

DEPTH FEET	SAMPLE STRATA	NO.	TYPE	BLOWS PER 6"		RECOVERY RQD	COLOR	CONSISTENCY HARDNESS	DESCRIPTION MATERIAL DESCRIPTION	USCS	REMARKS PID	REMARKS MOISTURE
		1	SS	29	50	100%	Gray	Very	0.0-10.0: FILL; 0.0-2.0;: Silt and fine to coarse		0.0	Moist
				65		N=115		Dense	slag gravel			
		2	SS	47	50/4	90%			2.0-5.5: Fine to coarse slag gravel and coal		0.0	
						N=>50						
5		3	SS	9	6	60%		Medium			0.0	
				12	9	N=18	Brown	Dense	5.5-6.0: Fine sand, some silty slag			Wet
		4	SS	13	10	65%	Blue-		6.0-9.0: Coarse sand to fine gravel		0.0	@ 5.5
				12	12	N=22	Green					
		5	SS	5	10	85%					0.0	
10				8	6	N=18			9.0-10.0: Silt, trace fine to coarse granular fill			
									Boring completed at scheduled 10' depth			
15												
20												
25												
30												
35												

Comments :Boring advanced utilizing a truck mounted CME 75 drill rig and 4-1/4 ID HSA. Samples collected for geotechnical archiving. Samples collected from 6'-8' fro analysis for VOCs, SVOCs, Metals, CN, and PCB/Pesticide.

PROJECT NO.	11172800.00
BORING NO.	TB-10

APPENDIX B-2

ANALYTICAL RESULTS – BORINGS TB-05 THROUGH TB-10

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-5 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-5 (2-4)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0636
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: not dec. 20. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
156-60-5	1,2-Dichloroethene-trans	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
156-59-2	1,2-Dichloroethene-cis	6.	U
106-42-3	m,p-Xylenes	6.	U
95-47-6	o-Xylene	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-5 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL
Sample wt/vol: 5.000 (g/mL) G
Level: (low/med) LOW
% Moisture: not dec. 20.
GC Column: RTX502.2 ID: .32 (mm)
Soil Extract Volume: _____ (uL)

Lab Sample ID: TB-5 (2-4)
Lab File ID: C0636
Date Received: 02/20/03
Date Analyzed: 02/28/03
Dilution Factor: 1.0
Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-6 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-6 (2-4)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0639
Level: (low/med) LOW Date Received: 02/21/03
% Moisture: not dec. 19. Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
156-60-5	1,2-Dichloroethene-trans	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	2.	J
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
156-59-2	1,2-Dichloroethene-cis	6.	U
106-42-3	m,p-Xylenes	6.	U
95-47-6	o-Xylene	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-6 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-6 (2-4)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0639
Level: (low/med) LOW Date Received: 02/21/03
% Moisture: not dec. 19. Date Analyzed: 03/03/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-7 (8-10)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-7 (8-10)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0631
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec. 42. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17.	U
74-83-9	Bromomethane	17.	U
75-01-4	Vinyl Chloride	17.	U
75-00-3	Chloroethane	17.	U
75-09-2	Methylene Chloride	6.	J
67-64-1	Acetone	17.	U
75-15-0	Carbon Disulfide	9.	U
75-35-4	1,1-Dichloroethene	9.	U
75-34-3	1,1-Dichloroethane	9.	U
156-60-5	1,2-Dichloroethene-trans	9.	U
67-66-3	Chloroform	9.	U
107-06-2	1,2-Dichloroethane	9.	U
78-93-3	2-Butanone	17.	U
71-55-6	1,1,1-Trichloroethane	9.	U
56-23-5	Carbon Tetrachloride	9.	U
75-27-4	Bromodichloromethane	9.	U
78-87-5	1,2-Dichloropropane	9.	U
10061-01-5	cis-1,3-Dichloropropene	9.	U
79-01-6	Trichloroethene	9.	U
124-48-1	Dibromochloromethane	9.	U
79-00-5	1,1,2-Trichloroethane	9.	U
71-43-2	Benzene	9.	U
10061-02-6	trans-1,3-Dichloropropene	9.	U
75-25-2	Bromoform	9.	U
108-10-1	4-Methyl-2-Pentanone	17.	U
591-78-6	2-Hexanone	17.	U
127-18-4	Tetrachloroethene	9.	U
79-34-5	1,1,2,2-Tetrachloroethane	9.	U
108-88-3	Toluene	9.	U
108-90-7	Chlorobenzene	9.	U
100-41-4	Ethylbenzene	9.	U
100-42-5	Styrene	9.	U
156-59-2	1,2-Dichloroethene-cis	9.	U
106-42-3	m,p-Xylenes	9.	U
95-47-6	o-Xylene	9.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-7 (8-10)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-7 (8-10)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0631
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec. 42. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-8 (6-8)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0632
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: not dec. 26. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	6.	J
67-64-1	Acetone	14.	U
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
156-60-5	1,2-Dichloroethene-trans	7.	U
67-66-3	Chloroform	7.	U
107-06-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
156-59-2	1,2-Dichloroethene-cis	7.	U
106-42-3	m,p-Xylenes	7.	U
95-47-6	o-Xylene	7.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL
Sample wt/vol: 5.000 (g/mL) G
Level: (low/med) LOW
% Moisture: not dec. 26.
GC Column: RTX502.2 ID: .32 (mm)
Soil Extract Volume: _____ (uL)

Lab Sample ID: TB-8 (6-8)
Lab File ID: C0632
Date Received: 02/24/03
Date Analyzed: 02/28/03
Dilution Factor: 1.0
Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-9 (4-6)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0633
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: not dec. 44. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	18.	U
74-83-9	Bromomethane	18.	U
75-01-4	Vinyl Chloride	18.	U
75-00-3	Chloroethane	18.	U
75-09-2	Methylene Chloride	9.	U
67-64-1	Acetone	18.	U
75-15-0	Carbon Disulfide	9.	U
75-35-4	1,1-Dichloroethene	9.	U
75-34-3	1,1-Dichloroethane	9.	U
156-60-5	1,2-Dichloroethene-trans	9.	U
67-66-3	Chloroform	9.	U
107-06-2	1,2-Dichloroethane	9.	U
78-93-3	2-Butanone	18.	U
71-55-6	1,1,1-Trichloroethane	9.	U
56-23-5	Carbon Tetrachloride	9.	U
75-27-4	Bromodichloromethane	9.	U
78-87-5	1,2-Dichloropropane	9.	U
10061-01-5	cis-1,3-Dichloropropene	9.	U
79-01-6	Trichloroethene	9.	U
124-48-1	Dibromochloromethane	9.	U
79-00-5	1,1,2-Trichloroethane	9.	U
71-43-2	Benzene	9.	U
10061-02-6	trans-1,3-Dichloropropene	9.	U
75-25-2	Bromoform	9.	U
108-10-1	4-Methyl-2-Pentanone	18.	U
591-78-6	2-Hexanone	18.	U
127-18-4	Tetrachloroethene	9.	U
79-34-5	1,1,2,2-Tetrachloroethane	9.	U
108-88-3	Toluene	9.	U
108-90-7	Chlorobenzene	9.	U
100-41-4	Ethylbenzene	9.	U
100-42-5	Styrene	9.	U
156-59-2	1,2-Dichloroethene-cis	9.	U
106-42-3	m,p-Xylenes	9.	U
95-47-6	o-Xylene	9.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-9 (4-6)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0633
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: not dec. 44. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-10 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-10 (6-8)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0634
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: not dec. 53. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	21.	U
74-83-9	Bromomethane	21.	U
75-01-4	Vinyl Chloride	21.	U
75-00-3	Chloroethane	21.	U
75-09-2	Methylene Chloride	11.	U
67-64-1	Acetone	21.	U
75-15-0	Carbon Disulfide	11.	U
75-35-4	1,1-Dichloroethene	11.	U
75-34-3	1,1-Dichloroethane	11.	U
156-60-5	1,2-Dichloroethene-trans	11.	U
67-66-3	Chloroform	11.	U
107-06-2	1,2-Dichloroethane	11.	U
78-93-3	2-Butanone	21.	U
71-55-6	1,1,1-Trichloroethane	11.	U
56-23-5	Carbon Tetrachloride	11.	U
75-27-4	Bromodichloromethane	11.	U
78-87-5	1,2-Dichloropropane	11.	U
10061-01-5	cis-1,3-Dichloropropene	11.	U
79-01-6	Trichloroethene	11.	U
124-48-1	Dibromochloromethane	11.	U
79-00-5	1,1,2-Trichloroethane	11.	U
71-43-2	Benzene	11.	U
10061-02-6	trans-1,3-Dichloropropene	11.	U
75-25-2	Bromoform	11.	U
108-10-1	4-Methyl-2-Pentanone	21.	U
591-78-6	2-Hexanone	21.	U
127-18-4	Tetrachloroethene	11.	U
79-34-5	1,1,2,2-Tetrachloroethane	11.	U
108-88-3	Toluene	11.	U
108-90-7	Chlorobenzene	11.	U
100-41-4	Ethylbenzene	11.	U
100-42-5	Styrene	11.	U
156-59-2	1,2-Dichloroethene-cis	11.	U
106-42-3	m,p-Xylenes	11.	U
95-47-6	o-Xylene	11.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-10 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-10 (6-8)
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C0634
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: not dec. 53. Date Analyzed: 02/28/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-5 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-5 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: 20. decanted: (Y/N) N Date Extracted: 02/21/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420.	U
111-44-4	bis(2-Chloroethyl)ether	420.	U
95-57-8	2-Chlorophenol	420.	U
541-73-1	1,3-Dichlorobenzene	420.	U
106-46-7	1,4-Dichlorobenzene	420.	U
95-50-1	1,2-Dichlorobenzene	420.	U
95-48-7	2-Methylphenol	420.	U
108-60-1	bis(2-chloroisopropyl)ether	420.	U
106-44-5	4-Methylphenol	420.	U
621-64-7	n-Nitroso-di-n-propylamine	420.	U
67-72-1	Hexachloroethane	420.	U
98-95-3	Nitrobenzene	420.	U
78-59-1	Isophorone	420.	U
88-75-5	2-Nitrophenol	420.	U
105-67-9	2,4-Dimethylphenol	420.	U
111-91-1	bis(2-Chloroethoxy)methane	420.	U
120-83-2	2,4-Dichlorophenol	420.	U
120-82-1	1,2,4-Trichlorobenzene	420.	U
91-20-3	Naphthalene	150.	J
106-47-8	4-Chloroaniline	420.	U
87-68-3	Hexachlorobutadiene	420.	U
59-50-7	4-Chloro-3-methylphenol	420.	U
91-57-6	2-Methylnaphthalene	260.	J
77-47-4	Hexachlorocyclopentadiene	420.	U
88-06-2	2,4,6-Trichlorophenol	420.	U
95-95-4	2,4,5-Trichlorophenol	420.	U
91-58-7	2-Chloronaphthalene	420.	U
88-74-4	2-Nitroaniline	2100.	U
131-11-3	Dimethylphthalate	420.	U
208-96-8	Acenaphthylene	420.	U
606-20-2	2,6-Dinitrotoluene	420.	U
99-09-2	3-Nitroaniline	2100.	U
83-32-9	Acenaphthene	420.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-5 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-5 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: 20. decanted: (Y/N) N Date Extracted: 02/21/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2100.	U
100-02-7	4-Nitrophenol	2100.	U
132-64-9	Dibenzofuran	69.	J
121-14-2	2,4-Dinitrotoluene	420.	U
84-66-2	Diethylphthalate	420.	U
7005-72-3	4-Chlorophenyl-phenylether	420.	U
86-73-7	Fluorene	420.	U
100-01-6	4-Nitroaniline	2100.	U
534-52-1	4,6-Dinitro-2-methylphenol	2100.	U
86-30-6	n-Nitrosodiphenylamine	420.	U
101-55-3	4-Bromophenyl-phenylether	420.	U
118-74-1	Hexachlorobenzene	420.	U
87-86-5	Pentachlorophenol	2100.	U
85-01-8	Phenanthrene	270.	J
120-12-7	Anthracene	97.	J
86-74-8	Carbazole	420.	U
84-74-2	Di-n-butylphthalate	420.	U
206-44-0	Fluoranthene	140.	J
129-00-0	Pyrene	150.	J
85-68-7	Butylbenzylphthalate	420.	U
91-94-1	3,3'-Dichlorobenzidine	830.	U
56-55-3	Benzo(a)anthracene	170.	J
218-01-9	Chrysene	220.	J
117-81-7	bis(2-Ethylhexyl)phthalate	420.	U
117-84-0	Di-n-octylphthalate	420.	U
205-99-2	Benzo(b)fluoranthene	140.	J
207-08-9	Benzo(k)fluoranthene	130.	J
50-32-8	Benzo(a)pyrene	140.	J
193-39-5	Indeno(1,2,3-cd)pyrene	140.	J
53-70-3	Dibenzo(a,h)anthracene	420.	U
191-24-2	Benzo(g,h,i)perylene	160.	J

(1) - Cannot be separated from diphenylamine

2,236 ppm
TOTAL

1F

EPA SAMPLE NO.

TB-5 (2-4)

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-5 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0580
Level: (low/med) LOW Date Received: 02/20/03
% Moisture: 20. decanted: (Y/N) N Date Extracted: 02/21/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 9.2

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	5.19	5000.	ABJ
2.	90-12-0	Naphthalene, 1-methyl-	16.10	200.	J N
3.	- -	DIMETHYLNAPHTHALENE	18.05	200.	J
4.	- -	TRIMETHYLNAPHTHALENE	20.78	200.	J
5.	1921-70-6	Pentadecane, 2,6,10,14-tetra	22.29	200.	J N
6.	- -	UNKNOWN	22.89	200.	J
7.	- -	UNKNOWN PAH	25.13	200.	J
8.	10544-50-0	Cyclic octaatomic sulfur	26.88	2000.	J N
9.	- -	UNKNOWN	30.25	200.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-6 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-6 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0583
Level: (low/med) LOW Date Received: 02/21/03
% Moisture: 19. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410.	U
111-44-4	bis(2-Chloroethyl)ether	410.	U
95-57-8	2-Chlorophenol	410.	U
541-73-1	1,3-Dichlorobenzene	410.	U
106-46-7	1,4-Dichlorobenzene	410.	U
95-50-1	1,2-Dichlorobenzene	410.	U
95-48-7	2-Methylphenol	410.	U
108-60-1	bis(2-chloroisopropyl)ether	410.	U
106-44-5	4-Methylphenol	410.	U
621-64-7	n-Nitroso-di-n-propylamine	410.	U
67-72-1	Hexachloroethane	410.	U
98-95-3	Nitrobenzene	410.	U
78-59-1	Isophorone	410.	U
88-75-5	2-Nitrophenol	410.	U
105-67-9	2,4-Dimethylphenol	410.	U
111-91-1	bis(2-Chloroethoxy)methane	410.	U
120-83-2	2,4-Dichlorophenol	410.	U
120-82-1	1,2,4-Trichlorobenzene	410.	U
91-20-3	Naphthalene	260.	J
106-47-8	4-Chloroaniline	410.	U
87-68-3	Hexachlorobutadiene	410.	U
59-50-7	4-Chloro-3-methylphenol	410.	U
91-57-6	2-Methylnaphthalene	470.	
77-47-4	Hexachlorocyclopentadiene	410.	U
88-06-2	2,4,6-Trichlorophenol	410.	U
95-95-4	2,4,5-Trichlorophenol	410.	U
91-58-7	2-Chloronaphthalene	410.	U
88-74-4	2-Nitroaniline	2100.	U
131-11-3	Dimethylphthalate	410.	U
208-96-8	Acenaphthylene	410.	U
606-20-2	2,6-Dinitrotoluene	410.	U
99-09-2	3-Nitroaniline	2100.	U
83-32-9	Acenaphthene	410.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-6 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-6 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0583
Level: (low/med) LOW Date Received: 02/21/03
% Moisture: 19. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2100.	U
100-02-7	4-Nitrophenol	2100.	U
132-64-9	Dibenzofuran	110.	J
121-14-2	2,4-Dinitrotoluene	410.	U
84-66-2	Diethylphthalate	410.	U
7005-72-3	4-Chlorophenyl-phenylether	410.	U
86-73-7	Fluorene	410.	U
100-01-6	4-Nitroaniline	2100.	U
534-52-1	4,6-Dinitro-2-methylphenol	2100.	U
86-30-6	n-Nitrosodiphenylamine	410.	U
101-55-3	4-Bromophenyl-phenylether	410.	U
118-74-1	Hexachlorobenzene	410.	U
87-86-5	Pentachlorophenol	2100.	U
85-01-8	Phenanthrene	340.	J
120-12-7	Anthracene	410.	U
86-74-8	Carbazole	410.	U
84-74-2	Di-n-butylphthalate	410.	U
206-44-0	Fluoranthene	170.	J
129-00-0	Pyrene	140.	J
85-68-7	Butylbenzylphthalate	410.	U
91-94-1	3,3'-Dichlorobenzidine	820.	U
56-55-3	Benzo(a)anthracene	170.	J
218-01-9	Chrysene	190.	J
117-81-7	bis(2-Ethylhexyl)phthalate	410.	U
117-84-0	Di-n-octylphthalate	410.	U
205-99-2	Benzo(b)fluoranthene	150.	J
207-08-9	Benzo(k)fluoranthene	120.	J
50-32-8	Benzo(a)pyrene	150.	J
193-39-5	Indeno(1,2,3-cd)pyrene	120.	J
53-70-3	Dibenzo(a,h)anthracene	410.	U
191-24-2	Benzo(g,h,i)perylene	110.	J

(1) - Cannot be separated from diphenylamine

2,500 ppm TOTAL

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-6 (2-4)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-6 (2-4)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0583
Level: (low/med) LOW Date Received: 02/21/03
% Moisture: 19. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.6

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	5.21	5000.	ABJ
2.	10544-50-0	Cyclic octaatomic sulfur	27.00	20000.	J N
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EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TB-7 (8-10)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-7 (8-10)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0581
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	600.	U
111-44-4	bis(2-Chloroethyl)ether	600.	U
95-57-8	2-Chlorophenol	600.	U
541-73-1	1,3-Dichlorobenzene	600.	U
106-46-7	1,4-Dichlorobenzene	600.	U
95-50-1	1,2-Dichlorobenzene	600.	U
95-48-7	2-Methylphenol	600.	U
108-60-1	bis(2-chloroisopropyl)ether	600.	U
106-44-5	4-Methylphenol	600.	U
621-64-7	n-Nitroso-di-n-propylamine	600.	U
67-72-1	Hexachloroethane	600.	U
98-95-3	Nitrobenzene	600.	U
78-59-1	Isophorone	600.	U
88-75-5	2-Nitrophenol	600.	U
105-67-9	2,4-Dimethylphenol	600.	U
111-91-1	bis(2-Chloroethoxy)methane	600.	U
120-83-2	2,4-Dichlorophenol	600.	U
120-82-1	1,2,4-Trichlorobenzene	600.	U
91-20-3	Naphthalene	600.	U
106-47-8	4-Chloroaniline	600.	U
87-68-3	Hexachlorobutadiene	600.	U
59-50-7	4-Chloro-3-methylphenol	600.	U
91-57-6	2-Methylnaphthalene	600.	U
77-47-4	Hexachlorocyclopentadiene	600.	U
88-06-2	2,4,6-Trichlorophenol	600.	U
95-95-4	2,4,5-Trichlorophenol	600.	U
91-58-7	2-Chloronaphthalene	600.	U
88-74-4	2-Nitroaniline	3000.	U
131-11-3	Dimethylphthalate	600.	U
208-96-8	Acenaphthylene	600.	U
606-20-2	2,6-Dinitrotoluene	600.	U
99-09-2	3-Nitroaniline	3000.	U
83-32-9	Acenaphthene	600.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-7 (8-10)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URSC301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-7 (8-10)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0581
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3000.	U
100-02-7	4-Nitrophenol	3000.	U
132-64-9	Dibenzofuran	600.	U
121-14-2	2,4-Dinitrotoluene	600.	U
84-66-2	Diethylphthalate	600.	U
7005-72-3	4-Chlorophenyl-phenylether	600.	U
86-73-7	Fluorene	600.	U
100-01-6	4-Nitroaniline	3000.	U
534-52-1	4,6-Dinitro-2-methylphenol	3000.	U
86-30-6	n-Nitrosodiphenylamine	600.	U
101-55-3	4-Bromophenyl-phenylether	600.	U
118-74-1	Hexachlorobenzene	600.	U
87-86-5	Pentachlorophenol	3000.	U
85-01-8	Phenanthrene	600.	U
120-12-7	Anthracene	600.	U
86-74-8	Carbazole	600.	U
84-74-2	Di-n-butylphthalate	600.	U
206-44-0	Fluoranthene	600.	U
129-00-0	Pyrene	600.	U
85-68-7	Butylbenzylphthalate	600.	U
91-94-1	3,3'-Dichlorobenzidine	1200.	U
56-55-3	Benzo(a)anthracene	600.	U
218-01-9	Chrysene	600.	U
117-81-7	bis(2-Ethylhexyl)phthalate	110.	J
117-84-0	Di-n-octylphthalate	600.	U
205-99-2	Benzo(b)fluoranthene	600.	U
207-08-9	Benzo(k)fluoranthene	600.	U
50-32-8	Benzo(a)pyrene	600.	U
193-39-5	Indeno(1,2,3-cd)pyrene	600.	U
53-70-3	Dibenzo(a,h)anthracene	600.	U
191-24-2	Benzo(g,h,i)perylene	600.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-7 (8-10)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-7 (8-10)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0581
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	5.17	8000.	ABJ
2.	10544-50-0	Cyclic octaatomic sulfur	26.87	2000.	J N
3.	- -	UNKNOWN	30.25	300.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-8 (6-8)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0582
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: 25. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 10.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440.	U
111-44-4	bis(2-Chloroethyl)ether	440.	U
95-57-8	2-Chlorophenol	440.	U
541-73-1	1,3-Dichlorobenzene	440.	U
106-46-7	1,4-Dichlorobenzene	440.	U
95-50-1	1,2-Dichlorobenzene	440.	U
95-48-7	2-Methylphenol	440.	U
108-60-1	bis(2-chloroisopropyl)ether	440.	U
106-44-5	4-Methylphenol	440.	U
621-64-7	n-Nitroso-di n-propylamine	440.	U
67-72-1	Hexachloroethane	440.	U
98-95-3	Nitrobenzene	440.	U
78-59-1	Isophorone	440.	U
88-75-5	2-Nitrophenol	440.	U
105-67-9	2,4-Dimethylphenol	440.	U
111-91-1	bis(2-Chloroethoxy)methane	440.	U
120-83-2	2,4-Dichlorophenol	440.	U
120-82-1	1,2,4-Trichlorobenzene	440.	U
91-20-3	Naphthalene	440.	U
106-47-8	4-Chloroaniline	440.	U
87-68-3	Hexachlorobutadiene	440.	U
59-50-7	4-Chloro-3-methylphenol	440.	U
91-57-6	2-Methylnaphthalene	440.	U
77-47-4	Hexachlorocyclopentadiene	440.	U
88-06-2	2,4,6-Trichlorophenol	440.	U
95-95-4	2,4,5-Trichlorophenol	440.	U
91-58-7	2-Chloronaphthalene	440.	U
88-74-4	2-Nitroaniline	2200.	U
131-11-3	Dimethylphthalate	440.	U
208-96-8	Acenaphthylene	440.	U
606-20-2	2,6-Dinitrotoluene	440.	U
99-09-2	3-Nitroaniline	2200.	U
83-32-9	Acenaphthene	440.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0302 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL
Sample wt/vol: 30.0 (g/mL) G
Level: (low/med) LOW
% Moisture: 25. decanted: (Y/N) N
Concentrated Extract Volume: 2000.0 (uL)
Injection Volume: 2.0 (uL)
GPC Cleanup: (Y/N) N pH: 10.1

Lab Sample ID: TB-8 (6-8)
Lab File ID: B0582
Date Received: 02/24/03
Date Extracted: 02/25/03
Date Analyzed: 03/19/03
Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2200.	U
100-02-7	4-Nitrophenol	2200.	U
132-64-9	Dibenzofuran	440.	U
121-14-2	2,4-Dinitrotoluene	440.	U
84-66-2	Diethylphthalate	440.	U
7005-72-3	4-Chlorophenyl-phenylether	440.	U
86-73-7	Fluorene	440.	U
100-01-6	4-Nitroaniline	2200.	U
534-52-1	4,6-Dinitro-2-methylphenol	2200.	U
86-30-6	n-Nitrosodiphenylamine	440.	U
101-55-3	4-Bromophenyl-phenylether	440.	U
118-74-1	Hexachlorobenzene	440.	U
87-86-5	Pentachlorophenol	2200.	U
85-01-8	Phenanthrene	440.	U
120-12-7	Anthracene	440.	U
86-74-8	Carbazole	440.	U
84-74-2	Di-n-butylphthalate	440.	U
206-44-0	Fluoranthene	440.	U
129-00-0	Pyrene	440.	U
85-68-7	Butylbenzylphthalate	440.	U
91-94-1	3,3'-Dichlorobenzidine	890.	U
56-55-3	Benzo(a)anthracene	440.	U
218-01-9	Chrysene	440.	U
117-81-7	bis(2-Ethylhexyl)phthalate	110.	J
117-84-0	Di-n-octylphthalate	440.	U
205-99-2	Benzo(b)fluoranthene	440.	U
207-08-9	Benzo(k)fluoranthene	440.	U
50-32-8	Benzo(a)pyrene	440.	U
193-39-5	Indeno(1,2,3-cd)pyrene	440.	U
53-70-3	Dibenzo(a,h)anthracene	440.	U
191-24-2	Benzo(g,h,i)perylene	440.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-8 (6-8)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0582
Level: (low/med) LOW Date Received: 02/24/03
% Moisture: 25. decanted: (Y/N) N Date Extracted: 02/25/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/19/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 10.1

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	5.18	6000.	ABJ
2.	10544-50-0	Cyclic octaatomic sulfur	26.90	5000.	J N
3.	- -	UNKNOWN	30.25	300.	J
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-9 (4-6)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0596
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	600.	U
111-44-4	bis(2-Chloroethyl)ether	600.	U
95-57-8	2-Chlorophenol	600.	U
541-73-1	1,3-Dichlorobenzene	600.	U
106-46-7	1,4-Dichlorobenzene	600.	U
95-50-1	1,2-Dichlorobenzene	600.	U
95-48-7	2-Methylphenol	600.	U
108-60-1	bis(2-chloroisopropyl)ether	600.	U
106-44-5	4-Methylphenol	600.	U
621-64-7	n-Nitroso-di-n-propylamine	600.	U
67-72-1	Hexachloroethane	600.	U
98-95-3	Nitrobenzene	600.	U
78-59-1	Isophorone	600.	U
88-75-5	2-Nitrophenol	600.	U
105-67-9	2,4-Dimethylphenol	600.	U
111-91-1	bis(2-Chloroethoxy)methane	600.	U
120-83-2	2,4-Dichlorophenol	600.	U
120-82-1	1,2,4-Trichlorobenzene	600.	U
91-20-3	Naphthalene	600.	U
106-47-8	4-Chloroaniline	600.	U
87-68-3	Hexachlorobutadiene	600.	U
59-50-7	4-Chloro-3-methylphenol	600.	U
91-57-6	2-Methylnaphthalene	600.	U
77-47-4	Hexachlorocyclopentadiene	600.	U
88-06-2	2,4,6-Trichlorophenol	600.	U
95-95-4	2,4,5-Trichlorophenol	600.	U
91-58-7	2-Chloronaphthalene	600.	U
88-74-4	2-Nitroaniline	3000.	U
131-11-3	Dimethylphthalate	600.	U
208-96-8	Acenaphthylene	600.	U
606-20-2	2,6-Dinitrotoluene	600.	U
99-09-2	3-Nitroaniline	3000.	U
83-32-9	Acenaphthene	600.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-9 (4-6)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0596
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3000.	U
100-02-7	4-Nitrophenol	3000.	U
132-64-9	Dibenzofuran	600.	U
121-14-2	2,4-Dinitrotoluene	600.	U
84-66-2	Diethylphthalate	600.	U
7005-72-3	4-Chlorophenyl-phenylether	600.	U
86-73-7	Fluorene	600.	U
100-01-6	4-Nitroaniline	3000.	U
534-52-1	4,6-Dinitro-2-methylphenol	3000.	U
86-30-6	n-Nitrosodiphenylamine	600.	U
101-55-3	4-Bromophenyl-phenylether	600.	U
118-74-1	Hexachlorobenzene	600.	U
87-86-5	Pentachlorophenol	3000.	U
85-01-8	Phenanthrene	600.	U
120-12-7	Anthracene	600.	U
86-74-8	Carbazole	600.	U
84-74-2	Di-n-butylphthalate	600.	U
206-44-0	Fluoranthene	600.	U
129-00-0	Pyrene	600.	U
85-68-7	Butylbenzylphthalate	600.	U
91-94-1	3,3'-Dichlorobenzidine	1200.	U
56-55-3	Benzo(a)anthracene	600.	U
218-01-9	Chrysene	600.	U
117-81-7	bis(2-Ethylhexyl)phthalate	600.	U
117-84-0	Di-n-octylphthalate	600.	U
205-99-2	Benzo(b)fluoranthene	600.	U
207-08-9	Benzo(k)fluoranthene	600.	U
50-32-8	Benzo(a)pyrene	600.	U
193-39-5	Indeno(1,2,3-cd)pyrene	600.	U
53-70-3	Dibenzo(a,h)anthracene	600.	U
191-24-2	Benzo(g,h,i)perylene	600.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-9 (4-6)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0596
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 44. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 11.1

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	4.81	8000.	ABJ
2.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-10 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-10 (6-8)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0597
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 53. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 10.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	710.	U
111-44-4	bis(2-Chloroethyl)ether	710.	U
95-57-8	2-Chlorophenol	710.	U
541-73-1	1,3-Dichlorobenzene	710.	U
106-46-7	1,4-Dichlorobenzene	710.	U
95-50-1	1,2-Dichlorobenzene	710.	U
95-48-7	2-Methylphenol	710.	U
108-60-1	bis(2-chloroisopropyl)ether	710.	U
106-44-5	4-Methylphenol	710.	U
621-64-7	n-Nitroso-di-n-propylamine	710.	U
67-72-1	Hexachloroethane	710.	U
98-95-3	Nitrobenzene	710.	U
78-59-1	Isophorone	710.	U
88-75-5	2-Nitrophenol	710.	U
105-67-9	2,4-Dimethylphenol	710.	U
111-91-1	bis(2-Chloroethoxy)methane	710.	U
120-83-2	2,4-Dichlorophenol	710.	U
120-82-1	1,2,4-Trichlorobenzene	710.	U
91-20-3	Naphthalene	710.	U
106-47-8	4-Chloroaniline	710.	U
87-68-3	Hexachlorobutadiene	710.	U
59-50-7	4-Chloro-3-methylphenol	710.	U
91-57-6	2-Methylnaphthalene	710.	U
77-47-4	Hexachlorocyclopentadiene	710.	U
88-06-2	2,4,6-Trichlorophenol	710.	U
95-95-4	2,4,5-Trichlorophenol	710.	U
91-58-7	2-Chloronaphthalene	710.	U
88-74-4	2-Nitroaniline	3500.	U
131-11-3	Dimethylphthalate	710.	U
208-96-8	Acenaphthylene	710.	U
606-20-2	2,6-Dinitrotoluene	710.	U
99-09-2	3-Nitroaniline	3500.	U
83-32-9	Acenaphthene	710.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-10 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-10 (6-8)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0597
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 53. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 10.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	3500.	U
100-02-7	4-Nitrophenol	3500.	U
132-64-9	Dibenzofuran	710.	U
121-14-2	2,4-Dinitrotoluene	710.	U
84-66-2	Diethylphthalate	710.	U
7005-72-3	4-Chlorophenyl-phenylether	710.	U
86-73-7	Fluorene	710.	U
100-01-6	4-Nitroaniline	3500.	U
534-52-1	4,6-Dinitro-2-methylphenol	3500.	U
86-30-6	n-Nitrosodiphenylamine	710.	U
101-55-3	4-Bromophenyl-phenylether	710.	U
118-74-1	Hexachlorobenzene	710.	U
87-86-5	Pentachlorophenol	3500.	U
85-01-8	Phenanthrene	710.	U
120-12-7	Anthracene	710.	U
86-74-8	Carbazole	710.	U
84-74-2	Di-n-butylphthalate	710.	U
206-44-0	Fluoranthene	710.	U
129-00-0	Pyrene	710.	U
85-68-7	Butylbenzylphthalate	710.	U
91-94-1	3,3'-Dichlorobenzidine	1400.	U
56-55-3	Benzo(a)anthracene	710.	U
218-01-9	Chrysene	710.	U
117-81-7	bis(2-Ethylhexyl)phthalate	710.	U
117-84-0	Di-n-octylphthalate	710.	U
205-99-2	Benzo(b)fluoranthene	710.	U
207-08-9	Benzo(k)fluoranthene	710.	U
50-32-8	Benzo(a)pyrene	710.	U
193-39-5	Indeno(1,2,3-cd)pyrene	710.	U
53-70-3	Dibenzo(a,h)anthracene	710.	U
191-24-2	Benzo(g,h,i)perylene	710.	U

(1) - Cannot be separated from diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

TB-10 (6-8)

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.:URS0301 SAS No.: SDG No.: TB-5 (2-4)
Matrix: (soil/water) SOIL Lab Sample ID: TB-10 (6-8)
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B0597
Level: (low/med) LOW Date Received: 02/25/03
% Moisture: 53. decanted: (Y/N) N Date Extracted: 02/27/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 03/24/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 10.9

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	ALDOL CONDENSATE	4.82	10000.	ABJ
2.	10544-50-0	Cyclic octaatomic sulfur	26.23	400.	J N
3.	- -	UNKNOWN HYDROCARBON	34.04	500.	J
4.	- -	UNKNOWN COLUMN BLLED	36.23	600.	J
5.	- -	UNKNOWN COLUMN BLEED	37.23	1000.	J
6.					
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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-5 (2-4)

Lab Name:	AES, INC.			Contract:			
Lab Code:	AES	Case No.	URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)	
Matrix: (soil/water)	Soil				Lab Sample ID:	TB-5 (2-4)	
Sample wt/vol:	30.0	G			Lab File ID:	B339	
% Moisture:	20				Date Received:	02/20/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	02/20/03	
Concentrated Extract Volu	10000	uL			Date Analyzed:	03/01/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	8.2		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC(Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	4.2	U
1031-07-8	Endosulfan Sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin Ketone	4.2	U
7421-36-3	Endrin Aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor 1016	42	U
11104-28-2	Aroclor 1221	42	U
11141-16-5	Aroclor 1232	42	U
53469-21-9	Aroclor 1242	42	U
12672-29-6	Aroclor 1248	42	U
11097-69-1	Aroclor 1254	42	U
11096-82-5	Aroclor 1260	42	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-6 (2-4)

Lab Name:	AES, INC.			Contract:			
Lab Code:	AES	Case No.	URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)	
Matrix: (soil/water)	Soil				Lab Sample ID:	TB-6 (2-4)	
Sample wt/vol:	30.0	G			Lab File ID:	B362	
% Moisture:	19				Date Received:	02/2?/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	02/25/03	
Concentrated Extract Volur	10000	uL			Date Analyzed:	03/03/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	8.6		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC(Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan Sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin Ketone	4.1	U
7421-36-3	Endrin Aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor 1016	41	U
11104-28-2	Aroclor 1221	41	U
11141-16-5	Aroclor 1232	41	U
53469-21-9	Aroclor 1242	41	U
12672-29-6	Aroclor 1248	41	U
11097-69-1	Aroclor 1254	41	U
11096-82-5	Aroclor 1260	41	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-7 (8-10)

Lab Name:	AES, INC.		Contract:		
Lab Code:	AES	Case No. URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)
Matrix: (soil/water)	Soil			Lab Sample ID:	TB-7 (8-10)
Sample wt/vol:	30.0 G			Lab File ID:	B363
% Moisture:	42			Date Received:	02/24/03
Extraction: (SepF/Cont/So	Sonc			Date Extracted:	02/25/03
Concentrated Extract Volu	10000 uL			Date Analyzed:	03/03/03
Injection Volume:	1.5 uL			Dilution Factor:	1.0
GPC Cleanup: (Y/N)	N	pH: 11.2		Sulfur Cleanup: (Y/N)	Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.9	U
319-85-7	beta-BHC	2.9	U
319-86-8	delta-BHC	2.9	U
58-89-9	gamma-BHC(Lindane)	2.9	U
76-44-8	Heptachlor	2.9	U
309-00-2	Aldrin	2.9	U
1024-57-3	Heptachlor epoxide	2.9	U
959-98-8	Endosulfan I	2.9	U
60-57-1	Dieldrin	5.8	U
72-55-9	4,4'-DDE	5.8	U
72-20-8	Endrin	5.8	U
33213-65-9	Endosulfan II	5.8	U
72-54-8	4,4'-DDD	5.8	U
1031-07-8	Endosulfan Sulfate	5.8	U
50-29-3	4,4'-DDT	5.8	U
72-43-5	Methoxychlor	29	U
53494-70-5	Endrin Ketone	5.8	U
7421-36-3	Endrin Aldehyde	5.8	U
5103-71-9	alpha-Chlordane	2.9	U
5103-74-2	gamma-Chlordane	2.9	U
8001-35-2	Toxaphene	290	U
12674-11-2	Aroclor 1016	58	U
11104-28-2	Aroclor 1221	58	U
11141-16-5	Aroclor 1232	58	U
53469-21-9	Aroclor 1242	58	U
12672-29-6	Aroclor 1248	58	U
11097-69-1	Aroclor 1254	58	U
11096-82-5	Aroclor 1260	58	U

ID

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-8 (6-8)

Lab Name:	AES, INC.		Contract:			
Lab Code:	AES	Case No. URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)	
Matrix: (soil/water)	Soil			Lab Sample ID:	TB-8 (6-8)	
Sample wt/vol:	30.0	G		Lab File ID:	B364	
% Moisture:	26			Date Received:	02/24/03	
Extraction: (SepF/Cont/So	Sonc			Date Extracted:	02/25/03	
Concentrated Extract Volur	10000	uL		Date Analyzed:	03/03/03	
Injection Volume:	1.5	uL		Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	10.:	Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC(Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.5	U
72-55-9	4,4'-DDE	4.5	U
72-20-8	Endrin	4.5	U
33213-65-9	Endosulfan II	4.5	U
72-54-8	4,4'-DDD	4.5	U
1031-07-8	Endosulfan Sulfate	4.5	U
50-29-3	4,4'-DDT	4.5	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin Ketone	4.5	U
7421-36-3	Endrin Aldehyde	4.5	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor 1016	45	U
11104-28-2	Aroclor 1221	45	U
11141-16-5	Aroclor 1232	45	U
53469-21-9	Aroclor 1242	45	U
12672-29-6	Aroclor 1248	45	U
11097-69-1	Aroclor 1254	45	U
11096-82-5	Aroclor 1260	45	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-9 (4-6)

Lab Name:	AES, INC.			Contract:			
Lab Code:	AES	Case No.	URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)	
Matrix: (soil/water)	Soil				Lab Sample ID:	TB-9 (4-6)	
Sample wt/vol:	30.0	G			Lab File ID:	B365	
% Moisture:	44				Date Received:	02/25/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	02/25/03	
Concentrated Extract Volu	10000	uL			Date Analyzed:	03/03/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	11.1		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.0	U
319-85-7	beta-BHC	3.0	U
319-86-8	delta-BHC	3.0	U
58-89-9	gamma-BHC(Lindane)	3.0	U
76-44-8	Heptachlor	3.0	U
309-00-2	Aldrin	3.0	U
1024-57-3	Heptachlor epoxide	3.0	U
959-98-8	Endosulfan I	3.0	U
60-57-1	Dieldrin	6.0	U
72-55-9	4,4'-DDE	6.0	U
72-20-8	Endrin	6.0	U
33213-65-9	Endosulfan II	6.0	U
72-54-8	4,4'-DDD	6.0	U
1031-07-8	Endosulfan Sulfate	6.0	U
50-29-3	4,4'-DDT	6.0	U
72-43-5	Methoxychlor	30	U
53494-70-5	Endrin Ketone	6.0	U
7421-36-3	Endrin Aldehyde	6.0	U
5103-71-9	alpha-Chlordane	3.0	U
5103-74-2	gamma-Chlordane	3.0	U
8001-35-2	Toxaphene	300	U
12674-11-2	Aroclor 1016	60	U
11104-28-2	Aroclor 1221	60	U
11141-16-5	Aroclor 1232	60	U
53469-21-9	Aroclor 1242	60	U
12672-29-6	Aroclor 1248	60	U
11097-69-1	Aroclor 1254	60	U
11096-82-5	Aroclor 1260	60	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-10 (6-8)

Lab Name:	AES, INC.			Contract:			
Lab Code:	AES	Case No.	URS 0301	SAS No.:	SDG No.:	TB-5 (2-4)	
Matrix: (soil/water)	Soil				Lab Sample ID:	TB-10 (6-8)	
Sample wt/vol:	30.0	G			Lab File ID:	B366	
% Moisture:	53				Date Received:	02/25/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	02/25/03	
Concentrated Extract Volu	10000	uL			Date Analyzed:	03/03/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	10.9		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.6	U
319-85-7	beta-BHC	3.6	U
319-86-8	delta-BHC	3.6	U
58-89-9	gamma-BHC(Lindane)	3.6	U
76-44-8	Heptachlor	3.6	U
309-00-2	Aldrin	3.6	U
1024-57-3	Heptachlor epoxide	3.6	U
959-98-8	Endosulfan I	3.6	U
60-57-1	Dieldrin	7.1	U
72-55-9	4,4'-DDE	7.1	U
72-20-8	Endrin	7.1	U
33213-65-9	Endosulfan II	7.1	U
72-54-8	4,4'-DDD	7.1	U
1031-07-8	Endosulfan Sulfate	7.1	U
50-29-3	4,4'-DDT	7.1	U
72-43-5	Methoxychlor	36	U
53494-70-5	Endrin Ketone	7.1	U
7421-36-3	Endrin Aldehyde	7.1	U
5103-71-9	alpha-Chlordane	3.6	U
5103-74-2	gamma-Chlordane	3.6	U
8001-35-2	Toxaphene	360	U
12674-11-2	Aroclor 1016	71	U
11104-28-2	Aroclor 1221	71	U
11141-16-5	Aroclor 1232	71	U
53469-21-9	Aroclor 1242	71	U
12672-29-6	Aroclor 1248	71	U
11097-69-1	Aroclor 1254	71	U
11096-82-5	Aroclor 1260	71	U

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-5(2-4)

Lab Name: ADIRONDACK ENVIRONMENTAL Contract: _____

Lab Code: AES Case No.: URS_0301 SAS No.: _____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL

Lab Sample ID: TB-5(2-4)

Level (low/med): LOW

Date Received: 02/20/03

% Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5690			P
7440-36-0	Antimony	0.62	U	N	P
7440-38-2	Arsenic	0.55	U	N	P
7440-39-3	Barium	64.3			P
7440-41-7	Beryllium	0.60	B		P
7440-43-9	Cadmium	0.050	U	N	P
7440-70-2	Calcium	8980		E	P
7440-47-3	Chromium	12.0			P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	9.7			P
7439-89-6	Iron	24600		E*	P
7439-92-1	Lead	0.32	U	N	P
7439-95-4	Magnesium	636	B		P
7439-96-5	Manganese	222			P
7439-97-6	Mercury	0.08	U	N	AV
7440-02-0	Nickel	0.25	U	N	P
7440-09-7	Potassium	412	B	E	P
7782-49-2	Selenium	0.62	U	N	P
7440-22-4	Silver	0.45	U		P
7440-23-5	Sodium	437	B	E	P
7440-28-0	Thallium	0.80	U	N	P
7440-62-2	Vanadium	19.1			P
7440-66-6	Zinc	25.9			P
7440-42-8	Boron				NR

olor Before: _____ Clarity Before: _____ Texture: _____

olor After: _____ Clarity After: _____ Artifacts: _____

omments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
TB-6(2-4)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0301 SAS No.: ____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL__ Lab Sample ID: TB-6(2-4)__

Level (low/med): LOW___ Date Received: 02/21/03

% Solids: 81.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	27400			P
7440-36-0	Antimony	0.62	U	N	P
7440-38-2	Arsenic	0.54	U	N	P
7440-39-3	Barium	207			P
7440-41-7	Beryllium	4.1			P
7440-43-9	Cadmium	0.049	U	N	P
7440-70-2	Calcium	119000		E	P
7440-47-3	Chromium	21.7			P
7440-48-4	Cobalt	5.3	B		P
7440-50-8	Copper	18.9			P
7439-89-6	Iron	102000		E*	P
7439-92-1	Lead	9.4		N	P
7439-95-4	Magnesium	7960			P
7439-96-5	Manganese	2790			P
7439-97-6	Mercury	0.18		N	AV
7440-02-0	Nickel	0.25	U	N	P
7440-09-7	Potassium	2440		E	P
7782-49-2	Selenium	0.62	U	N	P
7440-22-4	Silver	0.44	U		P
7440-23-5	Sodium	570	B	E	P
7440-28-0	Thallium	0.79	U	N	P
7440-62-2	Vanadium	28.3			P
7440-66-6	Zinc	300			P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-7(8-10)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0301 SAS No.: ____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL__ Lab Sample ID: TB-7(8-10)_

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: 58.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34700			P
7440-36-0	Antimony	0.86	U	N	P
7440-38-2	Arsenic	0.76	U	N	P
7440-39-3	Barium	291			P
7440-41-7	Beryllium	6.3			P
7440-43-9	Cadmium	0.069	U	N	P
7440-70-2	Calcium	229000		E	P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	0.48	U		P
7439-89-6	Iron	2230		E*	P
7439-92-1	Lead	0.45	U	N	P
7439-95-4	Magnesium	13500			P
7439-96-5	Manganese	2390			P
7439-97-6	Mercury	0.11	U	N	AV
7440-02-0	Nickel	0.34	U	N	P
7440-09-7	Potassium	1860		E	P
7782-49-2	Selenium	0.86	U	N	P
7440-22-4	Silver	5.4			P
7440-23-5	Sodium	972	B	E	P
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	8.4	B		P
7440-66-6	Zinc	0.17	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-8(6-8)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0301 SAS No.: ____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL__ Lab Sample ID: TB-8(6-8)__

Level (low/med): LOW___ Date Received: 02/24/03

% Solids: 74.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	43000			P
7440-36-0	Antimony	0.68	U	N	P
7440-38-2	Arsenic	0.59	U	N	P
7440-39-3	Barium	652			P
7440-41-7	Beryllium	7.5			P
7440-43-9	Cadmium	0.054	U	N	P
7440-70-2	Calcium	259000		E	P
7440-47-3	Chromium	11.7			P
7440-48-4	Cobalt	3.0	B		P
7440-50-8	Copper	0.38	U		P
7439-89-6	Iron	8310		E*	P
7439-92-1	Lead	0.35	U	N	P
7439-95-4	Magnesium	19900			P
7439-96-5	Manganese	4370			P
7439-97-6	Mercury	0.09	U	N	AV
7440-02-0	Nickel	0.27	U	N	P
7440-09-7	Potassium	3510		E	P
7782-49-2	Selenium	0.68	U	N	P
7440-22-4	Silver	4.5			P
7440-23-5	Sodium	585	B	E	P
7440-28-0	Thallium	0.86	U	N	P
7440-62-2	Vanadium	26.1			P
7440-66-6	Zinc	0.14	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
TB-9(4-6)

Lab Name: ADIRONDACK ENVIRONMENTAL Contract: _____

Lab Code: AES Case No.: URS_0301 SAS No.: _____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL Lab Sample ID: TB-9(4-6)

Level (low/med): LOW Date Received: 02/25/03

% Solids: 56.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24000			P
7440-36-0	Antimony	0.89	U	N	P
7440-38-2	Arsenic	0.79	U	N	P
7440-39-3	Barium	233			P
7440-41-7	Beryllium	3.9			P
7440-43-9	Cadmium	0.071	U	N	P
7440-70-2	Calcium	172000		E	P
7440-47-3	Chromium	2.7	B		P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	0.50	U		P
7439-89-6	Iron	2300		E*	P
7439-92-1	Lead	0.46	U	N	P
7439-95-4	Magnesium	9360			P
7439-96-5	Manganese	1250			P
7439-97-6	Mercury	0.12	U	N	AV
7440-02-0	Nickel	0.36	U	N	P
7440-09-7	Potassium	1170	B	E	P
7782-49-2	Selenium	0.89	U	N	P
7440-22-4	Silver	3.1	B		P
7440-23-5	Sodium	507	B	E	P
7440-28-0	Thallium	1.1	U	N	P
7440-62-2	Vanadium	6.1	B		P
7440-66-6	Zinc	0.18	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
TB-10(6-8)

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: URS_0301 SAS No.: ____ SDG No.: TB-5(2-4)

Matrix (soil/water): SOIL__ Lab Sample ID: TB-10(6-8)_

Level (low/med): LOW___ Date Received: 02/25/03

% Solids: 47.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	45500			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	0.94	U	N	P
7440-39-3	Barium	467			P
7440-41-7	Beryllium	7.2			P
7440-43-9	Cadmium	0.085	U	N	P
7440-70-2	Calcium	309000		E	P
7440-47-3	Chromium	6.3			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	0.60	U		P
7439-89-6	Iron	3310		E*	P
7439-92-1	Lead	0.55	U	N	P
7439-95-4	Magnesium	16100			P
7439-96-5	Manganese	3230			P
7439-97-6	Mercury	0.14	U	N	AV
7440-02-0	Nickel	0.43	U	N	P
7440-09-7	Potassium	2260		E	P
7782-49-2	Selenium	1.1	U	N	P
7440-22-4	Silver	5.7			P
7440-23-5	Sodium	1880	B	E	P
7440-28-0	Thallium	1.4	U	N	P
7440-62-2	Vanadium	9.4	B		P
7440-66-6	Zinc	0.21	U		P
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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CONVENTIONALS ANALYSIS DATA SHEET

TB-5 (2-4)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: 030220B-01

Level (Low/Med): Low Date Received: 2/20/03

% Solids: 79.7

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.1
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	0.20			EPA 9012
Amenable Cyanide	0.20	U		EPA 9012

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

TB-6 (2-4)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: 030221A-01

Level (Low/Med): Low Date Received: 2/21/03

% Solids: 80.8

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.2
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	2.72			EPA 9012
Amenable Cyanide	0.19	U		EPA 9012

Comments _____

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CONVENTIONALS ANALYSIS DATA SHEET

TB-7 (8-10)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: C30224B-01

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 57.7

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.1
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	0.95			EPA 9012
Amenable Cyanide	0.95	U		EPA 9012

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

TB-8 (6-8)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: 030224B-02

Level (Low/Med): Low Date Received: 2/24/03

% Solids: 73.6

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.1
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	1.27			EPA 9012
Amenable Cyanide	0.21	U		EPA 9012

Comments

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

TB-9 (4-6)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: 030225B-01

Level (Low/Med): Low Date Received: 2/25/03

% Solids: 55.8

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.1
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	11.6			EPA 9012
Amenable Cyanide	2.0			EPA 9012

Comments

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

TB-10 (6-8)

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: URS 0301 SAS No.: SDG No.: TB-5 (2-4)

Matrix (soil/water): Soil Lab Sample ID: 030225B-02

Level (Low/Med): Low Date Received: 2/25/03

% Solids: 46.8

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Solids (TS)				ASTM D3987
% Ash				ASTM D482
Heating Value				ASTM D240
Chlorine				EPA 9075
Bromine				EPA 9075
Iodine				EPA 9075
Ignitability				EPA 1010
Corrosivity				EPA 9045
pH				EPA 9045
Total Phenols				EPA 9065
Reactive Cyanide				SW-846 7.3.2.1
Reactive Sulfide				SW-846 7.3.2.1
Fluoride				EPA 9214
Total Cyanide	101			EPA 9012
Amenable Cyanide	0.36	U		EPA 9012

Comments _____

Ecology and Environment, Inc.

Laboratory Results

Analytical Services Center
4493 Walden Avenue
Lancaster, New York 1408

NYS ELAP **10486**
Phone: **(716)**

Client: URS Corporation
Lab **0308153**
Project: Union Ship Canal

Client Sample **SB-8, 30N 0-4**
Alt. Client ID:
Collection 8/14/2003 4:05:00 **%** 12.60

Lab **0308153-17A** **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** **SW6010B** **Prep Method:** **SW3050B**

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	102	B	2.20	mg/Kg-dry	1	8/18/2003 6:59:45 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 10N 0-4
Alt. Client ID:
Collection 8/13/2003 4:30:00 % 11.70

Lab 0308153-18A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	63.6	B	2.27	mg/Kg-dry	1	8/18/2003 7:27:40 PM	OPTIMA_030818B	CMO

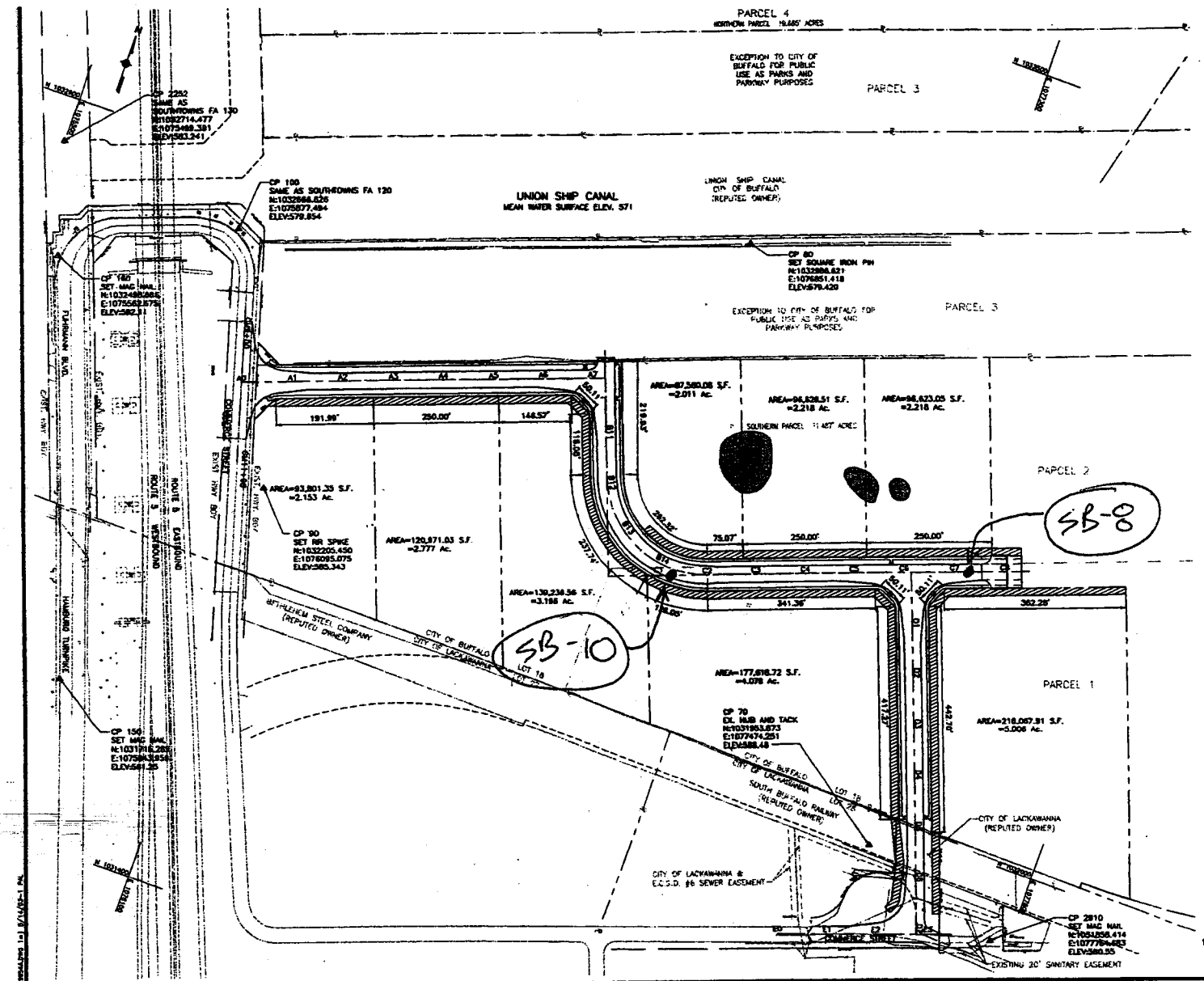
Definitions:

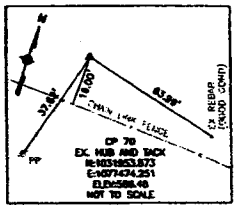
* - Recovery outside QC limits
B - Analyte found in Method blank
D - Diluted due to maxtrix or extended target compounds
DF - Dilution Factor
DNI - Did not Ignite
E - Result exceeds Highest Calibration Standard
H - Value Exceeds Maximum Contaminant Level
J - Estimated value, value may not be accurate
Limit - Reporting Limit
M - Matrix Spike Recovery outside limits
N - Single Column Analysis
NC - Not Calculated for values < RL
ND - Not Detected at the Reporting Limit
P - Post Spike Recovery outside limits
R - RPD outside recovery limits

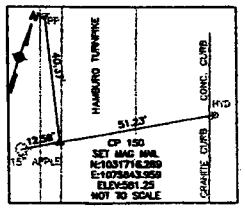
APPENDIX C

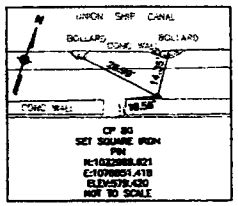
ANALYTICAL RESULTS – SUPPLEMENTAL BARIUM AND CYANIDE SAMPLING

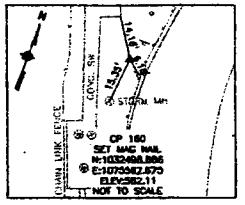
BORINGS TB-08 AND TB-10

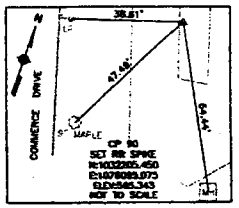


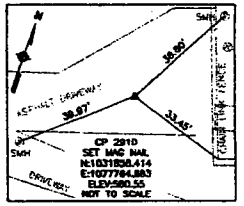


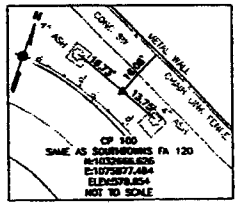












LEGEND

- LIMITS OF NON-HAZARDOUS MATERIALS TO BE DISPOSED OFF-SITE – ITEM 02.801
- UTILITY CORRIDOR
- SURVEY HORIZONTAL AND VERTICAL CONTROL POINT
- EXISTING PARCEL LIMIT
- FUTURE PARCEL LIMIT

NO.	MADE BY	APPROVED BY	DATE	DESCRIPTION

REVISIONS

DESIGNED BY: ELB
DRAWN BY: PAL
CHECKED BY: BJS
PROJ. ENGR. MJA

URS Corporation
Group Companies
[illegible] Buffalo, New York 14203
(716)854-5600 · (716)854-2545 fax

JOB No. 11172803.00000

ECIDA

ERIE COUNTY
UNION SHIP CANAL
PHASE 1
BUFFALO NEW YORK

GENERAL SITE/
SURVEY CONTROL PLAN

Scale: AS SHOWN | Date: MAY 2003 | DWG NO.: GP-2

Soil Boring Depth Information:

SB-8 - Sta C7+20+/-

Reference	Proposed Loc.	Depth (ft)
10N	Roadway	4
10E	Sanitary Trench	16
10S	Roadway	4
10W	Sanitary Trench	16
20NE	Roadway	4
20SE	Roadway	4
20SW	Roadway	4
20NW	Roadway	4
30N	Sidewalk	4
30E	Sanitary Trench	16
30S	Sidewalk	4
30W	Sanitary Trench	16
40NE	Roadway	4
40SE	Sidewalk	4
40SW	Storm Trench	10
40NW	Sidewalk	4
	subtotal	**118**

SB-10 - Sta C1+25+/-

Reference	Proposed Loc.	Depth (ft)
10N	Roadway	4
10E	Roadway	4
10S	Storm Trench	10
10W	Storm Trench	10
20NE	Roadway	4
20SE	Greenspace	4
20SW	Sidewalk	4
20NW	Roadway	4
30N	Roadway	4
30E	Roadway	4
30S	Utility Corridor	6
30W	Drainage Inlet	10
40NE	Roadway	4
40SE	Utility Corridor	6
40SW	Utility Corridor	6
40NW	Sanitary Trench	12
	subtotal	**96**

total	**214**

Aug 12, 2003
13

ROPOSED 12"x6" TEE
TA. C5+00.00,
4.44' LT

PROPOSED 6" DI CEMENT LINED SERVICE CONNECTION, BLIND FLANGE END OF PIPE STA. C6+65.00, 50.00' RT

583.23

PROPOSED SANITARY SEWER SERVICE CONNECTION, 50.00' LT

PROPOSED 12"x6" TEE AND 6" VALVE STA. C7+17.00, 24.44' LT

PROPOSED 12" DI CEMENT LINED WATERMAIN

PROPOSED
STA. C8+2
24.44' LT

PROPOSED
2" BLOW O
STA. C8+2
24.44' LT

PROPOSED
BLIND FLAN
STA. C8+2
24.44' LT

'ROPOSED 12" DI
'EMENT LINED
VATERMAIN

PROPOSED 4" DI WATERMAIN SERVICE CONNECTION, CAP END OF PIPE STA. C6+62.00, 50.00' RT

NORTH

HWY. BDY.

CONCRETE SIDEWALK

W W W

585

℄ OF IMPROVEMENT

PROPOSED 12"x4" TEE, 4" VALVE STA. C6+62.00, 24.44' LT

PROPOSED 12"x4" TEE, 4" VALVE STA. C7+14.00, 24.44' LT

C6+00 SAN C7+00 C8+00

50' 30' 10' 10' 30' 50'

PI STA. C6+14.45=
STA. D0+00.00
N 1,032,487.46
E 1,077,374.41

SAN-7

SAN-8

TB-08

584 583

PROPOSED 12"x6" TEE AND 6" VALVE STA. C6+65.00, 24.44' LT

20' 10' 20' 10' 20'

ST ST ST

FUTURE ROAD

40' 40' 40'

"D" ℄ OF IMPROVEMENT

30'

HWY. BDY.

HWY. BDY.

PROPOSED 6" DI CEMENT LINED SERVICE CONNECTION, BLIND FLANGE END OF PIPE STA. C7+17.00, 50.00' RT

:ONCRETE
:IDEWALK

CONCRETE SIDEWALK

PROPOSED 4" DI WATERMAIN SERVICE CONNECTION, CAP END OF PIPE STA. C7+14.00, 50.00' RT

PROPOSED 12" PVC SANITARY SEWER

582

PROPOSED SANITARY SEWER SERVICE CONNECTION STA. C6+90.00, O/L

LIMIT OF UTILITY CORRIDOR

D1+00

582

MATCHLINE STA. D1+00.00, FOR CONTINUATION SEE DWG. NO. U-6

PLAN

N 1032480 E 1077600

SUPPLEMENTAL SAMPLING LOCATIONS FOR TB-08 (BARIUM)

ER
ONNECTION
D
MH
D 12"x4"
VALVE
D 12"x6"
6" VALVE
D
SEWER
ION
D 12"x4"
VALVE
D 12"x6"
6" VALVE
D
EWER
ON
D
MH
ED
VALVE
ED
OFF
ED
D FLANGE
590

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 10N 0-4
Alt. Client ID:
Collection 8/13/2003 4:30:00 **%** 11.70

Lab 0308153-18A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	63.6	B	2.27	mg/Kg-dry	1	8/18/2003 7:27:40 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
B - Analyte found in Method blank
D - Diluted due to maxtrix or extended target compounds
DF - Dilution Factor
DNI - Did not Ignite
E - Result exceeds Highest Calibration Standard
H - Value Exceeds Maximum Contaminant Level
J - Estimated value, value may not be accurate
Limit - Reporting Limit
M - Matrix Spike Recovery outside limits
N - Single Column Analysis
NC - Not Calculated for values < RL
ND - Not Detected at the Reporting Limit
P - Post Spike Recovery outside limits
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 30N 0-4
Alt. Client ID:
Collection 8/14/2003 4:05:00 **%** 12.60

Lab 0308153-17A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	102	B	2.20	mg/Kg-dry	1	8/18/2003 6:59:45 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
B - Analyte found in Method blank
D - Diluted due to maxtrix or extended target compounds
DF - Dilution Factor
DNI - Did not Ignite
E - Result exceeds Highest Calibration Standard
H - Value Exceeds Maximum Contaminant Level
J - Estimated value, value may not be accurate
Limit - Reporting Limit
M - Matrix Spike Recovery outside limits
N - Single Column Analysis
NC - Not Calculated for values < RL
ND - Not Detected at the Reporting Limit
P - Post Spike Recovery outside limits
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 20SE 0-4
Alt. Client ID:
Collection 8/14/2003 7:40:00 % 14.60

Lab 0308153-19A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	175	B	2.17	mg/Kg-dry	1	8/18/2003 7:32:19 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 40SE 0-4
Alt. Client ID:
Collection 8/14/2003 8:00:00 % 21.10

Lab 0308153-20A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	233	B	2.49	mg/Kg-dry	1	8/18/2003 7:37:09 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 30W 0-16
Alt. Client ID:
Collection 8/14/2003 9:00:00 **%** 37.90

Lab 0308153-21A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	252	B	3.22	mg/Kg-dry	1	8/18/2003 7:42:00 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
B - Analyte found in Method blank
D - Diluted due to maxtrix or extended target compounds
DF - Dilution Factor
DNI - Did not Ignite
E - Result exceeds Highest Calibration Standard
H - Value Exceeds Maximum Contaminant Level
J - Estimated value, value may not be accurate
Limit - Reporting Limit
M - Matrix Spike Recovery outside limits
N - Single Column Analysis
NC - Not Calculated for values < RL
ND - Not Detected at the Reporting Limit
P - Post Spike Recovery outside limits
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 10W 0-16
Alt. Client ID:
Collection 8/14/2003 10:20:00 % 37.10

Lab 0308153-22A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	317	B	3.06	mg/Kg-dry	1	8/18/2003 7:46:36 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

NYS ELAP **10486**
Phone: **(716)**

Laboratory Results

Client: URS Corporation
Lab **0308153**
Project: Union Ship Canal

Client Sample **SB-8, 10E 0-16**
Alt. Client ID:
Collection 8/14/2003 11:25:00 **%** 28.00

Lab **0308153-23A** **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** **SW6010B** **Prep Method:** **SW3050B**

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	174	B	2.62	mg/Kg-dry	1	8/18/2003 7:51:22 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 30E 0-16
Alt. Client ID:
Collection 8/14/2003 12:30:00 % 33.40

Lab 0308153-24A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	217	B	2.89	mg/Kg-dry	1	8/18/2003 7:56:08 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 40SW 0-10
Alt. Client ID:
Collection 8/14/2003 2:08:00 % 32.60

Lab 0308153-25A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	317	B	2.91	mg/Kg-dry	1	8/18/2003 8:00:55 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 30S 0-4
Alt. Client ID:
Collection 8/14/2003 1:30:00 **%** 12.70

Lab 0308153-26A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	164	B	2.16	mg/Kg-dry	1	8/18/2003 8:14:50 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 20SW 0-4
Alt. Client ID:
Collection 8/14/2003 2:20:00 % 17.00

Lab 0308153-27A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	186	B	2.41	mg/Kg-dry	1	8/18/2003 8:19:38 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 10S 0-4
Alt. Client ID:
Collection 8/14/2003 2:30:00 **%** 15.00

Lab 0308153-28A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	113	B	2.31	mg/Kg-dry	1	8/18/2003 8:24:31 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 20NE 0-4
Alt. Client ID:
Collection 8/14/2003 3:00:00 % 13.70

Lab 0308153-29A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	115	B	2.23	mg/Kg-dry	1	8/18/2003 8:29:17 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 40NE 0-4
Alt. Client ID:
Collection 8/14/2003 3:10:00 % 17.20

Lab 0308153-30A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	158	B	2.32	mg/Kg-dry	1	8/18/2003 8:33:59 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Laboratory Results

Analytical Services Center
4493 Walden Avenue
Lancaster, New York 1408

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 40NW 0-4
Alt. Client ID:
Collection 8/14/2003 3:25:00 **%** 16.00

Lab 0308153-31A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	112	B	2.25	mg/Kg-dry	1	8/18/2003 8:38:46 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Laboratory Results

Analytical Services Center
4493 Walden Avenue
Lancaster, New York 1408

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-8, 20NW 0-4
Alt. Client ID:
Collection 8/14/2003 3:30:00 **%** 10.80

Lab 0308153-32A **Sample** SAMP **Matrix** Soil **Test** 1_6010B_TAL_S

ICP METALS ANALYSIS BY METHOD 6010B **Method:** SW6010B **Prep Method:** SW3050B

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Barium	51.9	B	2.12	mg/Kg-dry	1	8/18/2003 8:43:28 PM	OPTIMA_030818B	CMO

Definitions:

* - Recovery outside QC limits
B - Analyte found in Method blank
D - Diluted due to maxtrix or extended target compounds
DF - Dilution Factor
DNI - Did not Ignite
E - Result exceeds Highest Calibration Standard
H - Value Exceeds Maximum Contaminant Level
J - Estimated value, value may not be accurate
Limit - Reporting Limit
M - Matrix Spike Recovery outside limits
N - Single Column Analysis
NC - Not Calculated for values < RL
ND - Not Detected at the Reporting Limit
P - Post Spike Recovery outside limits
R - RPD outside recovery limits

PROPOSED 4" DI WATERMAIN SERVICE CONNECTION, CAP END OF PIPE
STA. B13+66.23, 50.00' LT

PROPOSED 6" DI CEMENT LINED SERVICE CONNECTION, BLIND FLANGE END OF PIPE
STA. B13+70.22, 50.00' LT

PROPOSED 12"x16" TEE AND 6" VALVE
STA. C2+33.00, 24.44' LT

PROPOSED 12"x4" TEE, 4" VALVE
STA. C2+30.00, 24.44' LT

PROPOSED 12"x6" TEE
STA. B14+19.13, 26.44' LT

PROPOSED 12" 22.5° ELBOW
STA. B14+64.16, 21.94' LT

PROPOSED 6" DI CEMENT LINED SERVICE CONNECTION, BLIND FLANGE END OF PIPE
STA. C4+13.00, 50.00' LT

LIMIT OF UTILITY CORRIDOR

PROPOSED 4" DI WATERMAIN SERVICE CONNECTION, CAP END OF PIPE
STA. C4+10.00, 50.00' LT

PROPOSED 12" GATE VA
STA. C3+40.00, 24.44'

PROPOSED 12" DI CEMENT LINED WATERMAIN

PROPOSED 8" PVC SANITARY SEWER

"C" ℄ OF IMPROVEMENT SAN-9

PROPOSED SANITARY SEWER SERVICE CONNECTION STA. C3+31.00, O/L

"B" ℄ OF IMPROVEMENT

PROPOSED 8" PVC SANITARY SEWER

PT
STA. B14+97.67 (BK)=
STA. C2+00.00 (AHD)
N 1,032,342.81
E 1,076,986.02

PROPOSED 4" DI WATERMAIN SERVICE CONNECTION, CAP END OF PIPE
STA. C2+30.00, 50.00' LT

PROPOSED 6" DI CEMENT LINED SERVICE CONNECTION, BLIND FLANGE END OF PIPE
STA. C2+33.00, 50.00' LT

PROPOSED SANITARY SEWER SERVICE CONNECTION, 50.00' RT

PROPOSED 12"x4" TEE, 4" VALVE
STA. C4+10.00, 24.44' LT

PROPOSED 12"x6" TEE AND 6" VALVE
STA. C4+13.00, 24.44' LT

MONITORING WELL POST

HWY. BDY.

CONCRETE SIDWALK

SEE DWG. NO. U-3

B14+00

TB-10

C2+00

C3+00

SAN

SAN-10

ST

W

NORTH

N 1032360

N 1032340

583.10

583.00

583.99

584.06

581.98

581.62

583

582

ABB mw-10S

2" PIPE INSULATION AND CONCRETE ENCASEMENT

"x4" TEE,

"x6" TEE

PLAN

SUPPLEMENTAL SAMPLING LOCATION FOR TB-10 (CYANIDE)

≈ 1" = 20'

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 30N 0-4
Alt. Client ID:
Collection 8/12/2003 12:08:00 **%** 11.20

Lab 0308153-01A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	2.81		0.552	mg/Kg-dry	1	8/19/2003 4:17:28 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP **10486**
Phone: **(716)**

Client: URS Corporation
Lab **0308153**
Project: Union Ship Canal

Client Sample **SB-10, 10N 0-4**
Alt. Client ID:
Collection 8/12/2003 12:20:00 **%** 15.10

Lab **0308153-02A** **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** **SW9012A** **Prep Method:** **NA**

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	0.526	J	0.566	mg/Kg-dry	1	8/19/2003 4:18:25 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

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Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 10S 0-10
Alt. Client ID:
Collection 8/12/2003 3:30:00 % 27.00

Lab 0308153-03A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	6.74		0.640	mg/Kg-dry	1	8/19/2003 4:19:22 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

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Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 30S 0-6
Alt. Client ID:
Collection 8/12/2003 4:00:00 % 23.20

Lab 0308153-04A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	22.8		0.626	mg/Kg-dry	1	8/19/2003 4:20:19 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 30W 0-10
Alt. Client ID:
Collection 8/12/2003 5:30:00 **%** 32.00

Lab 0308153-05A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	6.77		0.694	mg/Kg-dry	1	8/19/2003 4:21:16 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 10W 0-10
Alt. Client ID:
Collection 8/13/2003 8:20:00 % 35.90

Lab 0308153-06A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	2.62		0.736	mg/Kg-dry	1	8/19/2003 4:24:10 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 40NW 0-12
Alt. Client ID:
Collection 8/13/2003 9:00:00 % 57.50

Lab 0308153-07A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	8.79		1.14	mg/Kg-dry	1	8/19/2003 4:27:05 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 20NW 0-4
Alt. Client ID:
Collection 8/13/2003 9:20:00 % 14.70

Lab 0308153-08A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	1.08		0.564	mg/Kg-dry	1	8/19/2003 4:28:03 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Laboratory Results

Analytical Services Center
4493 Walden Avenue
Lancaster, New York 1408

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 20SE 0-4
Alt. Client ID:
Collection 8/13/2003 9:40:00 % 9.01

Lab 0308153-09A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	6.60		0.544	mg/Kg-dry	1	8/19/2003 4:29:02 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408
NYS ELAP 10486
Phone: (716)

Laboratory Results

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 40SE 0-6
Alt. Client ID:
Collection 8/13/2003 10:15:00 **%** 8.80

Lab 0308153-10A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	0.683		0.532	mg/Kg-dry	1	8/19/2003 4:30:00 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP **10486**
Phone: **(716)**

Client: URS Corporation
Lab **0308153**
Project: Union Ship Canal

Client Sample **SB-10, 10E 0-4**
Alt. Client ID:
Collection 8/13/2003 12:50:00 **%** 9.74

Lab **0308153-11A** **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method: SW9012A** **Prep Method: NA**

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	0.840		0.548	mg/Kg-dry	1	8/19/2003 4:30:58 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 30E 0-4
Alt. Client ID:
Collection 8/13/2003 1:10:00 **%** 8.33

Lab 0308153-12A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	2.90		0.515	mg/Kg-dry	1	8/19/2003 4:31:56 PM	LACHAT_CN_030819C	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 40SW 0-6
Alt. Client ID:
Collection 8/13/2003 1:55:00 **%** 25.90

Lab 0308153-13A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	20.5	B	0.675	mg/Kg-dry	1	8/21/2003 8:14:33 AM	LACHAT_CN_030820A	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 20SW 0-4
Alt. Client ID:
Collection 8/13/2003 2:30:00 % 18.50

Lab 0308153-14A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	14.5	B	0.590	mg/Kg-dry	1	8/21/2003 8:17:25 AM	LACHAT_CN_030820A	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 20NE 0-4
Alt. Client ID:
Collection 8/13/2003 3:00:00 % 18.70

Lab 0308153-15A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	1.01	B	0.603	mg/Kg-dry	1	8/21/2003 8:18:22 AM	LACHAT_CN_030820A	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

Ecology and Environment, Inc.

Analytical Services Center

4493 Walden Avenue
Lancaster, New York 1408

Laboratory Results

NYS ELAP 10486
Phone: (716)

Client: URS Corporation
Lab 0308153
Project: Union Ship Canal

Client Sample SB-10, 40NE 0-4
Alt. Client ID:
Collection 8/13/2003 3:10:00 **%** 17.10

Lab 0308153-16A **Sample** SAMP **Matrix** Soil **Test** 1_9012A_CN_S

CYANIDE, TOTAL BY METHOD 9012A **Method:** SW9012A **Prep Method:** NA

Analyte	Result	Q	Limit	Units	DF	Date	Run Batch	Analyst
Cyanide	2.71	B	0.569	mg/Kg-dry	1	8/21/2003 8:19:19 AM	LACHAT_CN_030820A	LMW

Definitions:

* - Recovery outside QC limits
DF - Dilution Factor
H - Value Exceeds Maximum Contaminant Level
M - Matrix Spike Recovery outside limits
ND - Not Detected at the Reporting Limit
B - Analyte found in Method blank
DNI - Did not Ignite
J - Estimated value, value may not be accurate
N - Single Column Analysis
P - Post Spike Recovery outside limits
D - Diluted due to maxtrix or extended target compounds
E - Result exceeds Highest Calibration Standard
Limit - Reporting Limit
NC - Not Calculated for values < RL
R - RPD outside recovery limits

CHAIN OF CUSTODY RECORD

URS

PROJECT NO. 11172802.00000

SITE NAME Union Ship Canal

SAMPLERS (PRINT/SIGNATURE) JOHN BOYD

LAB S+E

COOLER 1 of 1

PAGE 2 of 3

DELIVERY SERVICE: _____ AIRBILL NO.: _____

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	TESTS: T. CYANIDE	TESTS: BARIUM	BOTTLE TYPE AND PRESERVATIVE: 3039 GLASS	BOTTLE TYPE AND PRESERVATIVE: 3039 GLASS	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (ERPIMS)
SB-10, 20SW	8/13/03	1430	COMP	SB-10, 20SW 0-4'	SOIL	1			✓						
SB-10, 20NE		1500		SB-10, 20NE 0-4'		1			✓						
SB-10, 40NE		1510		SB-10, 40NE 0-4'		1			✓						
SB-8, 30N		1605		SB-8, 30N 0-4'		1				✓					
SB-8, 10N	↓	1630		SB-8, 10N 0-4'		1				✓					
SB-8, 20SE	8/14/03	0740		SB-8, 20SE 0-4'		1				✓					
SB-8, 40SE		0800		SB-8, 40SE 0-4'		1				✓					
SB-8, 30W		0900		SB-8, 30W 0-16'		1				✓					
SB-8, 10W		1020		SB-8, 10W 0-16'		1				✓					
SB-8, 10E		1125		SB-8, 10E 0-16'		1				✓					
SB-8, 30E		1230		SB-8, 30E 0-16'		1				✓					
SB-8, 40SW		1408		SB-8, 40SW 0-10'		1				✓					
SB-8, 30S	↓	1330	↓	SB-8, 30S 0-4'	↓	1				✓					

MATRIX CODES

AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WQ - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES

TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE

(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
	8/14/03	1820	Denise Giglia	8/14/03	1820
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

SPECIAL INSTRUCTIONS

IF TOTAL CYANIDE DETECTED, ANALYZE FOR FREE CYANIDE

Distribution: Original accompanies shipment, copy to coordinator field files

CHAIN OF CUSTODY RECORD

URS

PROJECT NO. 11172802.00000

SITE NAME Union Slip Canal

SAMPLERS (PRINT/SIGNATURE) JOHN BOYD

LAB S+E

COOLER 1 of 1

PAGE 1 of 3

DELIVERY SERVICE: _____ AIRBILL NO.: _____

TESTS: TOTAL CYANIDE

BOTTLE TYPE AND PRESERVATIVE: 303 9/ASS

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. # OF CONTAINERS	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (ERPIMS)
SB-10, 30N	8/12/03	1208	Comp	SB-10, 30N 0-4'	SO1	1	✓				
SB-10, 10N		1220		SB-10, 10N 0-4'		1	✓				
SB-10, 10S		1530		SB-10, 10S 0-10'		1	✓				
SB-10, 30S		1600		SB-10, 30S 0-6'		1	✓				
SB-10, 30W	↓	1730		SB-10, 30W 0-10'		1	✓				
SB-10, 10W	8/13/03	0820		SB-10, 10W 0-10'		1	✓				
SB-10, 40NW		0900		SB-10, 40NW 0-12'		1	✓				
SB-10, 20NW		0920		SB-10, 20NW 0-4'		1	✓				
SB-10, 20SE		0940		SB-10, 20SE 0-4'		1	✓				
SB-10, 40SE		1015		SB-10, 40SE 0-6'		1	✓				
SB-10, 10E		1250		SB-10, 10E 0-4'		1	✓				
SB-10, 30E		1310		SB-10, 30E 0-4'		1	✓				
SB-10, 40SW		1355	↓	SB-10, 40SW 0-6'	↓	1	✓				

MATRIX CODES
AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WQ - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE; (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
John Boyd	8/14/03	1820	Denise Sigler	8/14/03	1820
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

SPECIAL INSTRUCTIONS: IF TOTAL CYANIDE DETECTED, ANALYZE FOR FREE CYANIDE

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GCM

CHAIN OF CUSTODY RECORD

URS

PROJECT NO. 11172802.00000 | SITE NAME Union Slough Canal

SAMPLERS (PRINT/SIGNATURE) John Boyd

LAB S+E

COOLER 1 of 1

PAGE 3 of 3

DELIVERY SERVICE: _____ AIRBILL NO.: _____

TESTS: BARIUM

BOTTLE TYPE AND PRESERVATIVE: 3039 JARS

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO. OF CONTAINERS	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO. # (ERPIMS)
SB-8, 20SW	8/14/03	1420	comp	SB-8, 20SW 0-4'	Soil	1	✓				
SB-8, 10S		1430		SB-8, 10S 0-4'		1	✓				
SB-8, 20NE		1500		SB-8, 20NE 0-4'		1	✓				
SB-8, 40NE		1510		SB-8, 40NE 0-4'		1	✓				
SB-8, 40NW		1525		SB-8, 40NW 0-4'		1	✓				
SB-8, 20NW	↓	1530	↓	SB-8, 20NW 0-4'	↓	1	✓				

MATRIX CODES

AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WQ - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES

TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE; (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
John Boyd	8/14/03	1820	Denise Giglia	8/14/03	1820
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

SPECIAL INSTRUCTIONS

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GCM

APPENDIX D

NAPL AREAS PRE-EXCAVATION DISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 585-647-2530 FAX 585-647-3311

LABORATORY REPORT OF ANALYSIS

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job No.: N/A

Field Location: Area To Be Excavated

Lab Project No.: 03-3115
Lab Sample No.: 10237

Sample Type: Soil

Date Sampled: 11/09/2003
Date Received: 11/14/2003

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	11/20/2003	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	11/20/2003	SW846, 7.3	12 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reac03-3115

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

TCLP Herbicides

Client:	Nature's Way Environmental	**Lab Project No:**	03-3115
		Lab Sample No:	10237
Client Job Site:	Union Ship Canal	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	11/09/2003
Field Location:	Area To Be Excavated	**Date Received:**	11/14/2003
Field ID No:	N/A	**Date Analyzed:**	11/19/2003

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB03-3115

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3115
		Lab Sample Number:	10237
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	11/09/2003
Field ID Number:	N/A	**Date Received:**	11/14/2003
Sample Type:	Soil	**Date Analyzed:**	11/19/2003

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.622
Aroclor 1221	ND< 0.622
Aroclor 1232	ND< 0.622
Aroclor 1242	ND< 0.622
Aroclor 1248	ND< 0.622
Aroclor 1254	ND< 0.622
Aroclor 1260	ND< 0.622

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033115P2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3115
		Lab Sample Number:	10237
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	11/09/2003
Field ID Number:	N/A	**Date Received:**	11/14/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	11/19/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 13884.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033115S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3115
		Lab Sample Number:	10237
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	11/09/2003
Field ID Number:	N/A	**Date Received:**	11/14/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	11/20/2003

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033115P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3115
		Lab Sample Number:	10237
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	11/09/2003
Field ID Number:	N/A	**Date Received:**	11/14/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	11/21/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 17600.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033115V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Area to be excavated
Field ID No.: N/A

Lab Project No.: 03-3115
Lab Sample No.: 10237
Sample Type: TCLP Extract
Date Sampled: 11/09/2003
Date Received: 11/14/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	11/18/2003	EPA 6010	<0.100	5.0
Barium	11/18/2003	EPA 6010	0.600	100.0
Cadmium	11/18/2003	EPA 6010	<0.025	1.0
Chromium	11/18/2003	EPA 6010	<0.050	5.0
Lead	11/18/2003	EPA 6010	<0.100	5.0
Mercury	11/19/2003	EPA 7470	<0.0020	0.2
Selenium	11/18/2003	EPA 6010	<0.100	1.0
Silver	11/18/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033115.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 03-3115

Sample Type: Solid
Method: SW846 1010

Date(s) Sampled: 11/09/2003
Date Received: 11/14/2003
Date Analyzed: 11/19/2003

Laboratory Report for Flashpoint Analysis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
10237	N/A	Area to be excavated	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033115.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 03-3115

Sample Type: Solid
Method: SW846 9045C

Date(s) Sampled: 11/09/2003
Date Received: 11/14/2003
Date Analyzed: 11/19/2003

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
10237	N/A	Area to be excavated	10.03

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033115.xls

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: Nature's Way Environmental
ADDRESS: 3553 Crittenden Rd.
CITY: Crittenden STATE: New York ZIP: 14038
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: R. Savage / G. Weber
COMMENTS: Please fax results

INVOICE TO:
COMPANY: same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-3115
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
1 [ ] 2 [ ] 3 [ ] STD [X] 5 OTHER [ ]

PROJECT NAME/SITE NAME: Union Ship Canal

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TCLP	plus pesticides	PCB's	Reactivity	Ignitability	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 11/9/03	3:00	X		Area To Be Excavated (Boring Comp)	S	1	X	X	X	X	X		10237
2													
3													
4													
5													
6													
7													
8													
9													
10													

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: split off reactivity
CONTAINER TYPE: √ PRESERVATIONS: √ HOLDING TIME: √ TEMPERATURE: √ 13°C

Sampled By: Jon Neubauer Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time: 11/03/03
Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Pamela M. Blake Date/Time: 11/4/03 @ 15:50

Total Cost:
P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

03-3363

pH Analysis Report

Client: NWEC&C

Client Job Site: Union Ship Canal
Client Job Number: N/A
Sample Type: Soil

Lab Project Number: 03-3363
Date Sampled: 12/12/2003
Date Received: 12/16/2003
Date Analyzed: 12/16/2003

Lab Sample Number	Field Number	Field Location	Result (pH)
10992	Cap #2	Area to be Excavated	9.79
10993	Cap #3	Area to be Excavated	10.30

ELAP Number 10958

Method: EPA 9045C

Comments:

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Flashpoint by Pensky-Martin Analysis Report

Client: NWEC&C

Client Job Site: Union Ship Canal
Client Job Number: N/A
Sample Type: Soil

Lab Project Number: 03-3363
Date Sampled: 12/12/2003
Date Received: 12/16/2003
Date Analyzed: 12/18/2003

Lab Sample Number	Field Number	Field Location	Result (°C)
10992	Cap #2	Area to be Excavated	>70
10993	Cap #3	Area to be Excavated	>70

ELAP Number 10958

Method: SW846 1010

Comments: °C = degrees Centigrade

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363F1.XLS

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: NWEC&C

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 03-3363

Sample Type: Soil
Analytical Method: SW846, 7.3
Date Sampled: 12/12/2003
Date Received: 12/16/2003
Date Analyzed: 12/19/2003

Lab Sample ID.	Client Sample ID.	Cyanide (mg/kg)	Sulfide (mg/kg)
10992	Area to be Excavated#2	ND<1 Non Reactive	368 Non Reactive
10993	Area to be Excavated#3	ND<1 Non Reactive	ND<10 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows: 500 mg/kg Sulfide and 250 mg/kg Cyanide.

Approved By: _____
Laboratory Director

File ID: ReacVar03-3363

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Area to be Excavated Cap
Field ID No.: #2

Lab Project No.: 03-3363
Lab Sample No.: 10992
Sample Type: TCLP Extract
Date Sampled: 12/12/2003
Date Received: 12/16/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	12/18/2003	EPA 6010	<0.100	5.0
Barium	12/18/2003	EPA 6010	0.260	100.0
Cadmium	12/18/2003	EPA 6010	<0.025	1.0
Chromium	12/18/2003	EPA 6010	<0.050	5.0
Lead	12/18/2003	EPA 6010	<0.100	5.0
Mercury	12/18/2003	EPA 7470	<0.0020	0.2
Selenium	12/18/2003	EPA 6010	<0.100	1.0
Silver	12/18/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033363.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Area to be Excavated Cap
Field ID No.: #3

Lab Project No.: 03-3363
Lab Sample No.: 10993
Sample Type: TCLP Extract
Date Sampled: 12/12/2003
Date Received: 12/16/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	12/18/2003	EPA 6010	<0.100	5.0
Barium	12/18/2003	EPA 6010	1.18	100.0
Cadmium	12/18/2003	EPA 6010	<0.025	1.0
Chromium	12/18/2003	EPA 6010	<0.050	5.0
Lead	12/18/2003	EPA 6010	<0.100	5.0
Mercury	12/18/2003	EPA 7470	<0.0020	0.2
Selenium	12/18/2003	EPA 6010	<0.100	1.0
Silver	12/18/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033363.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

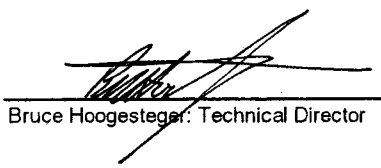
Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10992
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #2	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/19/2003

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363P5.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10993
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #3	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/19/2003

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363p6.xls

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 585-647-2530 FAX 585- 647-3311

TCLP Herbicides

Client:	NWEC&C	**Lab Project No:**	03-3363
		Lab Sample No:	10992
Client Job Site:	Union Ship Canal	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	12/12/2003
Field Location:	Area to be Excavated Cap	**Date Received:**	12/16/2003
Field ID No:	#2	**Date Analyzed:**	12/18/2003

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB03-3363-1

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 585-647-2530 FAX 585- 647-3311

TCLP Herbicides

Client:	NWEC&C	**Lab Project No:**	03-3363
		Lab Sample No:	10993
Client Job Site:	Union Ship Canal	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	12/12/2003
Field Location:	Area to be Excavated Cap	**Date Received:**	12/16/2003
Field ID No:	#3	**Date Analyzed:**	12/18/2003

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB03-3363-1

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10992
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #2	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/18/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 14229.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10993
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #3	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/18/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 14230.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10992
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #2	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/17/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 18157.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033363V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10993
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #3	**Date Received:**	12/16/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/17/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 18158.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 033363V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10992
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #2	**Date Received:**	12/16/2003
Sample Type:	Soil	**Date Analyzed:**	12/18/2003

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.590
Aroclor 1221	ND< 0.590
Aroclor 1232	ND< 0.590
Aroclor 1242	ND< 0.590
Aroclor 1248	ND< 0.590
Aroclor 1254	ND< 0.590
Aroclor 1260	ND< 0.590

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 033363P2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3363
		Lab Sample Number:	10993
Client Job Number:	N/A		
Field Location:	Area to be Excavated	**Date Sampled:**	12/12/2003
Field ID Number:	Cap #3	**Date Received:**	12/16/2003
Sample Type:	Soil	**Date Analyzed:**	12/18/2003

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.589
Aroclor 1221	ND< 0.589
Aroclor 1232	ND< 0.589
Aroclor 1242	ND< 0.589
Aroclor 1248	ND< 0.589
Aroclor 1254	ND< 0.589
Aroclor 1260	ND< 0.589

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 033363P3.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: NWEC&C
ADDRESS: 3553 Griffendon Rd.
CITY: Griffendon STATE: New York ZIP: 14038
PHONE: (716)937-6527 FAX: 937-9360
ATTN: R. Savage/G. Weber
COMMENTS: please fax report

INVOICE TO:
COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-3363
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS) 6-8 5 day CPC GW
STD 1 2 3 5 OTHER
12/10/03

PROJECT NAME/SITE NAME: Union Ship Canal

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Full TCLP	Ignitability	Corrosivity	Reactivity	PCB's	Pest & Herbs (TCLP)	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	12/12/03		X		Area To Be Excavated Cap #2	S	4	X	X	X	X	X	X		10992
2	12/12/03		X		" #3	S	3	X	X	X	X	X	X		10993
3															
4															
5															
6															
7															
8															
9															
10															

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ 10°C

Sampled By: Corey Hoaf Date/Time:
Relinquished By: Date/Time:
Received By: Date/Time: 12/15/03
Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Pamela M. Blake Date/Time: 12/16/03 @9:55

Total Cost:
P.I.F.

10/13/2004 10:25 15856473311 PAGE 03/03

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

December 30, 2003

Mr. Russ Savage
Nature's Way Environmental
3553 Crittenden Rd.
Crittenden, NY 14038

RE: Approved Profile #CX1578
Development Downtown, Inc.

Dear Mr. Savage,

Please be advised that the above referenced application has been approved for disposal at Waste Management's Chaffee Landfill. Enclosed please find a copy of the approved application.

In the event that significant changes in the information provided on the application occur, please notify us immediately. Such changes shall include, but are not limited to, change in process, change in waste composition and change in hauler.

Please contact us 24 hours in advance of any disposal you wish to schedule.

Should you have any questions at all, please contact me directly @ (716) 754-0365.

Sincerely,

James L. Callahan

James L. Callahan
Inside Sales Representative

Enc.
cc: File

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO

Profile Number: WMI 1X1578.

☐Hazardous ☒Non-Hazardous ☐TSCA

Renewal Date: 6/1/04

A. Waste Generator Information

1. Generator Name: Development Downtown, Inc.
2. SIC Code:
3. Facility Street Address: Commerce Drive
4. Phone: (716)
5. Facility City: Buffalo
6. State/Province: New York
7. Zip/Postal Code: 14203
8. Generator USEPA/Federal ID #: NA
9. County: Erie
10. State/Province ID #: NA
11. Customer Name: Nature's Way Environmental
12. Customer Phone: (716)937-6527
13. Customer Contact: R. Savage / G. Weber
14. Customer Fax: 937-9360
15. Billing Address 3553 Crittenden Rd. Crittenden, New York 14038 ☐Same as above

B. Waste Stream Information

1. Description

a. Name of Waste: Soil Contaminated with Non Aqueous Phase Liquid (Petroleum)

b. Process Generating Waste: Historic Industrial operations. Material to be excavated was identified through previous site investigation.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Variable	Mild Petroleum type odor (variable)	☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☒Single Layer ☐Multi-layer	NA to % No Free Liquid
Brown/Gray				h. pH: Range 10.03 to %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☒≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil + Stone	99.0 - 99.5		
Petroleum (NAPL)	0.1 - 0.5		
Debris	0.5 - 1.0		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos? ☐YES ☒NO

If yes ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene? ☐YES ☒NO

If yes, concentration _____ ppm

Is the waste subject to the benzene waste operations NESHAP? ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls? ☐YES ☒NO

If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j) ☒YES ☐NO

2. **Quantity of Waste**

Estimated Annual Volume 2400 ~~500~~ ☒Tons ☐Yards ☐Drums ☐Other specify)

3. **Shipping Information**

a. Packaging:

☒Bulk Solid; Type/Size: Dump Truck/Trailer ☐Bulk Liquid; Type/Size:

☐Drum; Type; Size: ☐Other:

b. Shipping Frequency: Units 500 Tons Per: ☐Month ☐Quarter ☐Year ☒One time ☐ Other

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) ☐YES ☒NO

d. Reportable Quantity (lbs.; kgs.): e. Hazard Class/ID #:

f. USDOT Shipping Name:

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

g. Personal Protective Equipment Requirements: NA - Tarp Loads For Transport

h. Transporter & Transporter Number Waste Management to provide transportation LCA 9A-480

C. Generator's Certification (Please check appropriate responses, sign and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2. ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U) _____
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j). ☐YES ☐NO
   c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.). ☐YES ☐NO

2. Is this a state hazardous waste? ☐YES ☒NO
   Identify ALL state hazardous/non hazardous waste codes

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j). ☐YES ☒NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: _____ Title: INTERIM PRESIDENT

Name (Type or Print): DAVID STEBBINS Company Name: Development Dimensions Int'l Date: 12/2/03

☐Check if additional information is attached. Indicate the number of attached pages _____

D. WMI Management's Decision — FOR WMI USE ONLY

1. Management Method ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify) _____
2. Proposed Ultimate Management Facility: Chaffee Landfill
3. Precautions, Special Handling Procedures, or Limitation on Approval: Material may be used as daily cover - Pending NYSDEC Approval
   2 Additional Samples required PRIOR to shipment of material.
4. Waste Form _____ 5. Source _____ 6. System Type AD3

Special Waste Decision ☒Approved ☐Disapproved

Salesperson's Signature: _____ Date: _____

NYSDEC Region 9 Approval: _____ Date: _____

Special Waste Approvals Person Signature: _____ Date: 12/17/03

OK per Chad Staniszewski 12/29/03

APPENDIX E

NAPL AREA NO. 3 “BERMED STRIPPED SOIL”
LABORATORY ANALYTICAL RESULTS

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	04-Mar-2004
Date Reported:	10-Mar-2004
Submission No.:	4C0186
Sample No.:	010287-010303

NOTES: ***'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by:

PASC - Certificate of Analysis

			NAPL EXC AREA3 SOUTH	NAPL EXC AREA 3 EAST	NAPL EXC AREA 3 WEST	NAPL EXC AREA3BOTTOM	Bermed Stripped Soil	Method Blank	Blank Spike
Client ID:									
Lab No.:			010299 04	010300 04	010301 04	010302 04	010303 04	010287 04	010287 04
Date Sampled:			03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Benzene	1.0	ug/kg	<2.0	<2.0	<2.0	<	1.0	<	59
Ethylbenzene	1.0	"	<2.0	<2.0	<2.0	<	<	<	63
Toluene	1.0	"	<2.0	2.0	2.0	1.0	2.0	<	61
m&p-Xylene	1.0	"	<2.0	<2.0	2.0	<	1.0	<	130
o-Xylene	1.0	"	<2.0	<2.0	3.0	<	<	<	64
Xylenes(Total)	1.0	"	<2.0	<2.0	5.0	<	1.0	<	190
Isopropylbenzene	1.0	"	<2.0	<3.0	2.0	<	<2.0	<	57
n-Propylbenzene	1.0	"	<2.0	<3.0	5.0	<	<2.0	<	62
p-Isopropyltoluene	1.0	"	<2.0	<3.0	10	<	<2.0	<	64
1,2,4-Trimethylbenzene	1.0	"	<2.0	<3.0	4.0	1.0	<2.0	<	63
1,3,5-Trimethylbenzene	1.0	"	<2.0	<3.0	6.0	<	<2.0	<	63
n-Butylbenzene	1.0	"	<2.0	<3.0	16	<	<2.0	<	65
sec-Butylbenzene	1.0	"	<2.0	<3.0	4.0	<	<2.0	<	64
tert-Butylbenzene	1.0	"	<2.0	<3.0	<2.0	<	<2.0	<	61
Naphthalene	1.0	"	6.0	<3.0	4.0	<	45	<	49
Methyl-t-butylether	1.0	"	<2.0	<3.0	<2.0	<	<2.0	<	NS
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			69	75	81	68	65	73	75
d8-Toluene			87	95	99	87	93	87	85
Bromofluorobenzene			84	71	87	76	65	87	88
d10-Ethylbenzene			55	31	27	54	30	91	87

PASC - Certificate of Analysis

	Client ID:		NAPL EXC AREA3BOTTOM	Bermed Stripped Soil	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		010302 04	010303 04	010287 04	010287 04	010287 04	010287 04	010287 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Naphthalene	90	ug/kg	<360	6400	<180	3200	80	3400	84
Acenaphthene	70	"	<280	11000	<140	3200	80	3400	85
Fluorene	40	"	<160	13000	<80	3100	79	3400	86
Phenanthrene	30	"	<120	110000	<60	3300	81	3400	85
Anthracene	60	"	<240	30000	<120	3300	83	3500	88
Fluoranthene	60	"	<240	120000	<120	3200	81	3400	85
Pyrene	40	"	<160	90000	<80	3400	86	3700	92
Benz(a)anthracene	50	"	<200	50000	<100	3200	81	3400	86
Chrysene	40	"	<160	48000	<80	3300	83	3600	90
Benzo(b)fluoranthene	40	"	<160	38000	<80	3300	83	3600	89
Benzo(k)fluoranthene	40	"	<160	34000	<80	3400	84	3600	90
Benzo(a)pyrene	50	"	<200	40000	<100	3200	80	3500	87
Indeno(1,2,3-cd)pyrene	60	"	<240	27000	<120	3200	80	3500	86
Dibenzo(ah)anthracene	50	"	<200	7100	<100	3200	81	3500	88
Benzo(ghi)perylene	60	"	<240	18000	<120	3100	78	3200	79
Surrogate Recoveries		%							
d5-Nitrobenzene			59	75	74	80	80	85	85
2-Fluorobiphenyl			64	82	74	82	82	87	87
d14-p-Terphenyl			78	85	93	87	87	93	93

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5556 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NIAGARA INC
Project Manager: RUSS SAVAGE
Address: 3553 Cr. Henden Rd
Cr. Henden, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Jon Neubauer

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
10298	NAPL EXC AREA 3 NORTH	1	S	3/3/04		✓	✓	2 TOTAL
29	NAPL EXC. AREA 3 SOUTH	1	S	3/3/04		✓	✓	
30	NAPL EXC AREA 3 EAST	1	S	3/3/04		✓	✓	
31	NAPL EXC. AREA 3 WEST	1	S	3/3/04		✓	✓	
32	NAPL EXC AREA 3 BOTTOM	1	S	3/3/04		✓	✓	
ABW-10304								
05	NAPL AREA 3 EXCAVATION WATER IN EXCAVATION	3	L	3/3/04		✓	✓	LAG, 4 OF 6 X 2
G70303	Bermed Stripped Soil from NAPL EXC Area 3	1	S	3/3/04		✓	✓	2 TO AG

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B · DELIVERABLES
NORMAL TAT

REMARKS

ASP

Client Signature: [signature] Blaskewicz
Affiliation: NIAGARA INC
Date/Time: 3/3/04, 3:30 pm

Received By: [signature] Zielinski
Affiliation: PSC
Date/Time: 3/3/04, 3:30 pm

Rec'd By: ____
Date/Time: ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	26-Mar-2004
Date Reported:	06-Apr-2004
Submission No.:	4C1019
Sample No.:	015218-015219

NOTES: *"-" = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: _____

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 6788 F 905 332 9169 W www.pscanalytical.com

	Client ID:		BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	Method Blank	Blank Spike	% Recovery
	Lab No.:		015219 04	015219 04	015219 04	015219 04	015218 04	015218 04	015218 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**		Duplicate	M. Spike	MS % Rec.			
Cyanide total	100	ug/kg	6000	-	-	-	<MDL	26000	100
Mercury	40	ug/kg	1200	-	-	-	<MDL	1100	110
Arsenic	1000	ug/kg	22000	22000	45000	95	<MDL	25000	100
Barium	500	"	230000	220000	260000	72	<MDL	51000	100
Cadmium	500	"	5800	6100	27000	84	<MDL	25000	100
Chromium	500	"	40000	42000	93000	110	<MDL	50000	100
Lead	1000	"	310000	270000	330000	72	<MDL	50000	100
Selenium	1000	"	<MDL	<MDL	21000	87	<MDL	25000	98
Silver	500	"	<MDL	850	24000	95	<MDL	25000	100

Metals via 6010
Mercury via 7471
Cyanide via 9010

	Client ID:		BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	Method Blank	Blank Spike	% Recovery
	Lab No.:		015219 04	015219 04	015219 04	015219 04	015218 04	015218 04	015218 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**		Duplicate	M. Spike	MS % Rec.			
Benzene	1.0	ug/kg	<MDL	<MDL	61	81	<MDL	56	89
Ethylbenzene	1.0	"	<MDL	<MDL	62	82	<MDL	61	97
Toluene	1.0	"	2.0	2.0	66	88	<MDL	57	92
m&p-Xylene	1.0	"	1.0	1.0	120	81	<MDL	120	99
o-Xylene	1.0	"	<MDL	<MDL	64	85	<MDL	60	96
Xylenes(Total)	1.0	"	1.0	1.0	190	83	<MDL	180	97
Isopropylbenzene	1.0	"	<MDL	<MDL	74	98	<MDL	57	92
n-Propylbenzene	1.0	"	<MDL	<MDL	65	87	<MDL	61	98
p-Isopropyltoluene	1.0	"	<MDL	<MDL	60	80	<MDL	63	100
1,2,4-Trimethylbenzene	1.0	"	<MDL	<MDL	70	92	<MDL	61	98
1,3,5-Trimethylbenzene	1.0	"	<MDL	<MDL	73	97	<MDL	62	98
n-Butylbenzene	1.0	"	<MDL	<MDL	47	62	<MDL	65	100
sec-Butylbenzene	1.0	"	<MDL	<MDL	64	84	<MDL	64	100
tert-Butylbenzene	1.0	"	<MDL	<MDL	72	95	<MDL	61	97
Naphthalene	1.0	"	4.0	2.0	32	40	<MDL	62	99
Methyl-t-butylether	1.0	"	<MDL	<MDL	NS	-	<MDL	NS	-
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			64	64	69	69	62	65	65
d8-Toluene			91	91	90	90	79	75	75
Bromofluorobenzene			71	70	76	76	79	80	80
d10-Ethylbenzene			49	55	40	40	96	82	82

8021 STARS via 8260

	Client ID:		BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL	BERMED STRIPPED SOIL
	Lab No.:		015219 04	015219 04	015219 04	015219 04	015219 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**		M. Spike	MS % Rec.	MS Dup	MSD % Rec.
Naphthalene	9.0	ug/kg	1300	4100	51	5300	84
Acenaphthene	7.0	"	1500	4900	62	5700	87
Fluorene	4.0	"	1800	5300	65	6400	97
Phenanthrene	3.0	"	16000	16000	9.0	22000	110
Anthracene	6.0	"	3100	6200	58	7400	91
Fluoranthene	6.0	"	20000	20000	NA	24000	71
Pyrene	4.0	"	16000	13000	NA	19000	67
Benz(a)anthracene	5.0	"	7900	11000	110	13000	100
Chrysene	4.0	"	8500	10000	35	13000	91
Benzo(b)fluoranthene	4.0	"	8600	12000	64	12000	78
Benzo(k)fluoranthene	4.0	"	5700	6900	24	7800	46
Benzo(a)pyrene	5.0	"	6100	9900	70	11000	110
Indeno(1,2,3-cd)pyrene	6.0	"	6300	9100	53	10000	81
Dibenzo(ah)anthracene	5.0	"	2100	5900	73	6400	92
Benzo(ghi)perylene	6.0	"	5800	7900	39	8700	62
Surrogate Recoveries		%					
d5-Nitrobenzene			70	48	48	54	54
2-Fluorobiphenyl			75	71	71	82	82
d14-p-Terphenyl			80	79	79	92	92

PASC - Certificate of Analysis

			Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Client ID:						
	Lab No.:		015218 04	015218 04	015218 04	015218 04	015218 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**					
Naphthalene	9.0	ug/kg	<180	3100	78	3000	76
Acenaphthene	7.0	"	<140	3400	84	3200	80
Fluorene	4.0	"	<80	3500	88	3300	82
Phenanthrene	3.0	"	<60	3300	82	3200	80
Anthracene	6.0	"	<120	3200	79	3100	78
Fluoranthene	6.0	"	<120	3800	95	3600	90
Pyrene	4.0	"	<80	3200	80	3100	78
Benz(a)anthracene	5.0	"	<100	3800	94	3700	92
Chrysene	4.0	"	<80	3800	94	3600	90
Benzo(b)fluoranthene	4.0	"	<80	4000	99	3600	90
Benzo(k)fluoranthene	4.0	"	<80	3600	90	3800	95
Benzo(a)pyrene	5.0	"	<100	3500	88	3500	87
Indeno(1,2,3-cd)pyrene	6.0	"	<120	3600	89	3400	85
Dibenzo(ah)anthracene	5.0	"	<100	3600	90	3500	87
Benzo(ghi)perylene	6.0	"	<120	3700	92	3500	88
Surrogate Recoveries		%					
d5-Nitrobenzene			50	62	62	58	58
2-Fluorobiphenyl			72	90	90	86	86
d14-p-Terphenyl			87	96	96	93	93

Batch Code:	**0401VPC1**	**0401VPC1**
Cyanide total	015218 04	015219 04
	015219 04	
Date Analysed:	04/04/05	04/04/02
Date Prepared:	04/04/01	04/04/01

Batch Code:	**0331MBS1**
Mercury	015218 04
	015219 04
Date Analysed:	04/04/01
Date Prepared:	04/03/31

Batch Code:	**0402VPX1**
Arsenic	015218 04
	015219 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02

Batch Code:	**0329MC01**	**0330MC01**
Benzene	015218 04	015219 04
	015219 04	
Date Analysed:	04/03/29	04/03/30
Date Prepared:	04/03/29	04/03/30

Batch Code:	**0330SPX1**
Naphthalene	015218 04
	015219 04
	015219 04
Date Analysed:	04/04/01
Date Prepared:	04/03/30

CHAIN OF CUSTODY

PSC ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of ___

CLIENT INFORMATION

Company Name: AECOM
Project Manager: RUSS SAVAGE
Address: 3553 CRITTENDEN RD
CRITTENDEN, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by:

MB 15218

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	METALS (RCRA) + Cr, Ni, Total	Level of contamination (low, high, unknown)
15219	BERMED STRIPPED SOIL	1	S	3/25/04		✓	✓	✓	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ___

PROJECT INFORMATION

Project #: UNION SHIP
Site:
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP Category B

REMARKS

Client Signature: [signature]
Affiliation: Natures Way
Date/Time: 3/26/04 11:35 AM

Received By: Kevin Kielmister
Affiliation: PSC
Date/Time: 3/26/04 11:35 AM

Rec'd By:
Date/Time

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

APPENDIX F

NAPL AREAS EXCAVATIONS CONFIRMATION SOIL SAMPLES LABORATORY ANALYTICAL RESULTS

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2034
Client Job Number:	N/A		
Field Location:	Area #1 East	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / Kg
Benzene	ND< 9.06
n-Butylbenzene	ND< 9.06
sec-Butylbenzene	ND< 9.06
tert-Butylbenzene	ND< 9.06
Ethylbenzene	ND< 9.06
n-Propylbenzene	ND< 9.06
Isopropylbenzene	ND< 9.06
p-Isopropyltoluene	ND< 9.06
Naphthalene	ND< 22.6
Toluene	ND< 9.06
1,2,4-Trimethylbenzene	ND< 9.06
1,3,5-Trimethylbenzene	ND< 9.06
m,p-Xylene	ND< 9.06
o-Xylene	ND< 9.06
Miscellaneous	
Methyl tert-butyl Ether	ND< 9.06

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19117.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040441V1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2035
Client Job Number:	N/A		
Field Location:	Area #1 West	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / Kg
Benzene	ND< 8.60
n-Butylbenzene	ND< 8.60
sec-Butylbenzene	ND< 8.60
tert-Butylbenzene	ND< 8.60
Ethylbenzene	ND< 8.60
n-Propylbenzene	ND< 8.60
Isopropylbenzene	ND< 8.60
p-Isopropyltoluene	ND< 8.60
Naphthalene	ND< 21.5
Toluene	ND< 8.60
1,2,4-Trimethylbenzene	ND< 8.60
1,3,5-Trimethylbenzene	ND< 8.60
m,p-Xylene	ND< 8.60
o-Xylene	ND< 8.60
Miscellaneous	
Methyl tert-butyl Ether	ND< 8.60

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19116.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040441V2.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2036
Client Job Number:	N/A		
Field Location:	Area #1 South	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / Kg
Benzene	ND< 10.2
n-Butylbenzene	ND< 10.2
sec-Butylbenzene	ND< 10.2
tert-Butylbenzene	ND< 10.2
Ethylbenzene	ND< 10.2
n-Propylbenzene	12.9
Isopropylbenzene	ND< 10.2
p-Isopropyltoluene	64.6
Naphthalene	100
Toluene	ND< 10.2
1,2,4-Trimethylbenzene	212
1,3,5-Trimethylbenzene	50.7
m,p-Xylene	ND< 10.2
o-Xylene	ND< 10.2
Miscellaneous	
Methyl tert-butyl Ether	ND< 10.2

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19119.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040441V3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2037
Client Job Number:	N/A		
Field Location:	Area #1 North	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / Kg
Benzene	ND< 9.29
n-Butylbenzene	ND< 9.29
sec-Butylbenzene	ND< 9.29
tert-Butylbenzene	ND< 9.29
Ethylbenzene	ND< 9.29
n-Propylbenzene	ND< 9.29
Isopropylbenzene	ND< 9.29
p-Isopropyltoluene	ND< 9.29
Naphthalene	ND< 23.2
Toluene	ND< 9.29
1,2,4-Trimethylbenzene	ND< 9.29
1,3,5-Trimethylbenzene	ND< 9.29
m,p-Xylene	ND< 9.29
o-Xylene	ND< 9.29
Miscellaneous	
Methyl tert-butyl Ether	ND< 9.29

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19120.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040441V4.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2038
Client Job Number:	N/A		
Field Location:	Area #1 Bottom	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / Kg
Benzene	ND< 20.9
n-Butylbenzene	ND< 20.9
sec-Butylbenzene	ND< 20.9
tert-Butylbenzene	ND< 20.9
Ethylbenzene	ND< 20.9
n-Propylbenzene	ND< 20.9
Isopropylbenzene	ND< 20.9
p-Isopropyltoluene	ND< 20.9
Naphthalene	ND< 52.3
Toluene	ND< 20.9
1,2,4-Trimethylbenzene	ND< 20.9
1,3,5-Trimethylbenzene	ND< 20.9
m,p-Xylene	ND< 20.9
o-Xylene	ND< 20.9
Miscellaneous	
Methyl tert-butyl Ether	ND< 20.9

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19120.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
Detection limits elevated due to non-target hydrocarbons.

Signature:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040441V5.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2034
Client Job Number:	N/A		
Field Location:	Area #1 East	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 334
Anthracene	1,180
Benzo (a) anthracene	1,730
Benzo (a) pyrene	1,430
Benzo (b) fluoranthene	1,460
Benzo (g,h,i) perylene	887
Benzo (k) fluoranthene	886
Chrysene	2,350
Dibenz (a,h) anthracene	ND< 334
Fluoranthene	4,470
Fluorene	ND< 334
Indeno (1,2,3-cd) pyrene	1,080
Naphthalene	ND< 334
Phenanthrene	2,750
Pyrene	4,050

ELAP Number 10958 Method: EPA 8270C Data File: 15041.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040441s1.xls

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2035
Client Job Number:	N/A		
Field Location:	Area #1 West	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 348
Anthracene	ND< 348
Benzo (a) anthracene	ND< 348
Benzo (a) pyrene	ND< 348
Benzo (b) fluoranthene	ND< 348
Benzo (g,h,i) perylene	ND< 348
Benzo (k) fluoranthene	ND< 348
Chrysene	ND< 348
Dibenz (a,h) anthracene	ND< 348
Fluoranthene	ND< 348
Fluorene	ND< 348
Indeno (1,2,3-cd) pyrene	ND< 348
Naphthalene	ND< 348
Phenanthrene	ND< 348
Pyrene	ND< 348

ELAP Number 10958 Method: EPA 8270C Data File: 15040.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 04044152.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2036
Client Job Number:	N/A		
Field Location:	Area #1 South	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	376
Anthracene	560
Benzo (a) anthracene	739
Benzo (a) pyrene	764
Benzo (b) fluoranthene	800
Benzo (g,h,i) perylene	658
Benzo (k) fluoranthene	497
Chrysene	821
Dibenz (a,h) anthracene	ND< 375
Fluoranthene	1,300
Fluorene	599
Indeno (1,2,3-cd) pyrene	713
Naphthalene	ND< 375
Phenanthrene	1,810
Pyrene	1,830

ELAP Number 10958 Method: EPA 8270C Data File: 15039.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040441S3.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job Number: N/A
Field Location: Area #1 North
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 04-0441
Lab Sample Number: 2037
Date Sampled: 02/16/2004
Date Received: 02/18/2004
Date Analyzed: 02/20/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 327
Anthracene	ND< 327
Benzo (a) anthracene	ND< 327
Benzo (a) pyrene	ND< 327
Benzo (b) fluoranthene	ND< 327
Benzo (g,h,i) perylene	ND< 327
Benzo (k) fluoranthene	ND< 327
Chrysene	ND< 327
Dibenz (a,h) anthracene	ND< 327
Fluoranthene	ND< 327
Fluorene	ND< 327
Indeno (1,2,3-cd) pyrene	ND< 327
Naphthalene	ND< 327
Phenanthrene	ND< 327
Pyrene	ND< 327

ELAP Number 10958 Method: EPA 8270C Data File: 15038.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 04044154.XLS

PARADIGM
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Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0441
		Lab Sample Number:	2038
Client Job Number:	N/A		
Field Location:	Area #1 Bottom	**Date Sampled:**	02/16/2004
Field ID Number:	N/A	**Date Received:**	02/18/2004
Sample Type:	Soil	**Date Analyzed:**	02/20/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 459
Anthracene	ND< 459
Benzo (a) anthracene	ND< 459
Benzo (a) pyrene	ND< 459
Benzo (b) fluoranthene	ND< 459
Benzo (g,h,i) perylene	ND< 459
Benzo (k) fluoranthene	ND< 459
Chrysene	ND< 459
Dibenz (a,h) anthracene	ND< 459
Fluoranthene	ND< 459
Fluorene	ND< 459
Indeno (1,2,3-cd) pyrene	ND< 459
Naphthalene	ND< 459
Phenanthrene	618
Pyrene	ND< 459

ELAP Number 10958 Method: EPA 8270C Data File: 15011.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040441S5.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: Nature's Way Environmental
ADDRESS: 3553 Cattaraugus Rd
CITY: Cattaraugus STATE: NY ZIP: 14030
PHONE: 937-6527 FAX: 937-9360
ATTN: Russ Savage / Greg Weber
COMMENTS: Please fax a copy of result to above number

INVOICE TO:
COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-0441
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) STD 1 2 3 5 OTHER 4-5 (Lab)
2/18/04

PROJECT NAME/SITE NAME: Union Ship Canal

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	20 l Stero Containers	250 ml Stero Containers	Labware	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	12/16/04			X	Area #1 East	Soil	1	X	X			20034
2				X	Area #1 West		1	X	X			20035
3				X	Area #1 South		1	X	X			20036
4				X	Area #1 North		1	X	X			20037
5				X	Area #1 Bottom		1	X	X			20038
6												
7												
8												
9												
10												

LAB USE ONLY

SAMPLE CONDITION: Check box If acceptable or note deviation: 8oz amber
CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: 7C on ice

Sampled By: [signature] Date/Time: 2/16/04
Relinquished By: [signature] Date/Time: 2/17/04 4:45
Received By: [signature] Date/Time: 2/17/04 4:45

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: [signature] 2/18/04 0948

Total Cost:
P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2197
Client Job Number:	N/A		
Field Location:	Area #2 North	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	03/03/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 490
Anthracene	ND< 490
Benzo (a) anthracene	ND< 490
Benzo (a) pyrene	ND< 490
Benzo (b) fluoranthene	ND< 490
Benzo (g,h,i) perylene	ND< 490
Benzo (k) fluoranthene	ND< 490
Chrysene	ND< 490
Dibenz (a,h) anthracene	ND< 490
Fluoranthene	ND< 490
Fluorene	ND< 490
Indeno (1,2,3-cd) pyrene	ND< 490
Naphthalene	ND< 490
Phenanthrene	ND< 490
Pyrene	ND< 490

ELAP Number 10958 Method: EPA 8270C Data File: 18263.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2198
Client Job Number:	N/A		
Field Location:	Area #2 South	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	03/03/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 537
Anthracene	ND< 537
Benzo (a) anthracene	ND< 537
Benzo (a) pyrene	ND< 537
Benzo (b) fluoranthene	ND< 537
Benzo (g,h,i) perylene	ND< 537
Benzo (k) fluoranthene	ND< 537
Chrysene	ND< 537
Dibenz (a,h) anthracene	ND< 537
Fluoranthene	ND< 537
Fluorene	ND< 537
Indeno (1,2,3-cd) pyrene	ND< 537
Naphthalene	ND< 537
Phenanthrene	ND< 537
Pyrene	ND< 537

ELAP Number 10958 Method: EPA 8270C Data File: 18264.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040493S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2199
Client Job Number:	N/A		
Field Location:	Area #2 East	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	03/03/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 384
Anthracene	ND< 384
Benzo (a) anthracene	ND< 384
Benzo (a) pyrene	ND< 384
Benzo (b) fluoranthene	ND< 384
Benzo (g,h,i) perylene	ND< 384
Benzo (k) fluoranthene	ND< 384
Chrysene	ND< 384
Dibenz (a,h) anthracene	ND< 384
Fluoranthene	ND< 384
Fluorene	ND< 384
Indeno (1,2,3-cd) pyrene	ND< 384
Naphthalene	ND< 384
Phenanthrene	ND< 384
Pyrene	ND< 384

ELAP Number 10958 Method: EPA 8270C Data File: 18265.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493S3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2200
Client Job Number:	N/A		
Field Location:	Area #2 West	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	03/03/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 374
Anthracene	ND< 374
Benzo (a) anthracene	ND< 374
Benzo (a) pyrene	ND< 374
Benzo (b) fluoranthene	ND< 374
Benzo (g,h,i) perylene	ND< 374
Benzo (k) fluoranthene	ND< 374
Chrysene	ND< 374
Dibenz (a,h) anthracene	ND< 374
Fluoranthene	ND< 374
Fluorene	ND< 374
Indeno (1,2,3-cd) pyrene	ND< 374
Naphthalene	ND< 374
Phenanthrene	ND< 374
Pyrene	ND< 374

ELAP Number 10958 Method: EPA 8270C Data File: 18266.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493S4.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2201
Client Job Number:	N/A		
Field Location:	Area #2 Bottom	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	03/03/2004

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 597
Anthracene	ND< 597
Benzo (a) anthracene	ND< 597
Benzo (a) pyrene	ND< 597
Benzo (b) fluoranthene	ND< 597
Benzo (g,h,i) perylene	ND< 597
Benzo (k) fluoranthene	ND< 597
Chrysene	ND< 597
Dibenz (a,h) anthracene	ND< 597
Fluoranthene	ND< 597
Fluorene	ND< 597
Indeno (1,2,3-cd) pyrene	ND< 597
Naphthalene	ND< 597
Phenanthrene	ND< 597
Pyrene	ND< 597

ELAP Number 10958 Method: EPA 8270C Data File: 18267.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493S5.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2197
Client Job Number:	N/A		
Field Location:	Area #2 North	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	02/25/2004

Aromatics	Results in ug / Kg
Benzene	30.6
n-Butylbenzene	ND< 13.5
sec-Butylbenzene	ND< 13.5
tert-Butylbenzene	ND< 13.5
Ethylbenzene	ND< 13.5
n-Propylbenzene	ND< 13.5
Isopropylbenzene	ND< 13.5
p-Isopropyltoluene	ND< 13.5
Naphthalene	ND< 33.9
Toluene	30.7
1,2,4-Trimethylbenzene	ND< 13.5
1,3,5-Trimethylbenzene	ND< 13.5
m,p-Xylene	19.3
o-Xylene	ND< 13.5
Miscellaneous	
Methyl tert-butyl Ether	ND< 13.5

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19235.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2198
Client Job Number:	N/A		
Field Location:	Area #2 South	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	02/25/2004

Aromatics	Results in ug / Kg
Benzene	ND< 16.0
n-Butylbenzene	ND< 16.0
sec-Butylbenzene	ND< 16.0
tert-Butylbenzene	ND< 16.0
Ethylbenzene	ND< 16.0
n-Propylbenzene	ND< 16.0
Isopropylbenzene	ND< 16.0
p-Isopropyltoluene	ND< 16.0
Naphthalene	ND< 40.0
Toluene	ND< 16.0
1,2,4-Trimethylbenzene	ND< 16.0
1,3,5-Trimethylbenzene	ND< 16.0
m,p-Xylene	ND< 16.0
o-Xylene	ND< 16.0
Miscellaneous	
Methyl tert-butyl Ether	ND< 16.0

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19236.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040493V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2199
Client Job Number:	N/A		
Field Location:	Area #2 East	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	02/25/2004

Aromatics	Results in ug / Kg
Benzene	ND< 9.17
n-Butylbenzene	ND< 9.17
sec-Butylbenzene	27.6
tert-Butylbenzene	ND< 9.17
Ethylbenzene	ND< 9.17
n-Propylbenzene	11.3
Isopropylbenzene	ND< 9.17
p-Isopropyltoluene	ND< 9.17
Naphthalene	52.6
Toluene	ND< 9.17
1,2,4-Trimethylbenzene	ND< 9.17
1,3,5-Trimethylbenzene	ND< 9.17
m,p-Xylene	ND< 9.17
o-Xylene	ND< 9.17
Miscellaneous	
Methyl tert-butyl Ether	ND< 9.17

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19237.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493V3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

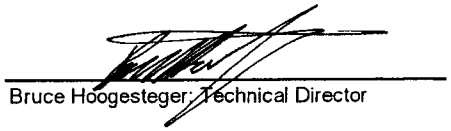
Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2200
Client Job Number:	N/A		
Field Location:	Area #2 West	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	02/25/2004

Aromatics	Results in ug / Kg
Benzene	ND< 10.5
n-Butylbenzene	ND< 10.5
sec-Butylbenzene	ND< 10.5
tert-Butylbenzene	ND< 10.5
Ethylbenzene	ND< 10.5
n-Propylbenzene	ND< 10.5
Isopropylbenzene	ND< 10.5
p-Isopropyltoluene	ND< 10.5
Naphthalene	ND< 26.4
Toluene	ND< 10.5
1,2,4-Trimethylbenzene	ND< 10.5
1,3,5-Trimethylbenzene	ND< 10.5
m,p-Xylene	ND< 10.5
o-Xylene	ND< 10.5
Miscellaneous	
Methyl tert-butyl Ether	ND< 10.5

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19238.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: 

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040493V4.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0493
		Lab Sample Number:	2201
Client Job Number:	N/A		
Field Location:	Area #2 Bottom	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/24/2004
Sample Type:	Soil	**Date Analyzed:**	02/25/2004

Aromatics	Results in ug / Kg
Benzene	ND< 17.0
n-Butylbenzene	ND< 17.0
sec-Butylbenzene	ND< 17.0
tert-Butylbenzene	ND< 17.0
Ethylbenzene	ND< 17.0
n-Propylbenzene	ND< 17.0
Isopropylbenzene	ND< 17.0
p-Isopropyltoluene	ND< 17.0
Naphthalene	ND< 42.6
Toluene	ND< 17.0
1,2,4-Trimethylbenzene	ND< 17.0
1,3,5-Trimethylbenzene	ND< 17.0
m,p-Xylene	ND< 17.0
o-Xylene	ND< 17.0
Miscellaneous	
Methyl tert-butyl Ether	ND< 17.0

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19239.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040493V5.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: NWEC+C, Inc.
ADDRESS: 3553 Crittenden Road
CITY: Crittenden STATE: NY ZIP: 14038
PHONE: 937-6527 FAX: 937-9360
ATTN: Russ Savage / Greg Weber
COMMENTS:

INVOICE TO:
COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-0493
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) 6-8
☐ 1 ☐ 2 ☐ 3 ☐ STD 5 ☐ OTHER

PROJECT NAME/SITE NAME: Union Ship Canal

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8021 Stars	8270 Stars	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 2/18/04			X	Area #2 North	Soil	1	S	S		21977
2			X	Area #2 South		1	X	X		21978
3			X	Area #2 East		1	X	X		21979
4			X	Area #2 West		1	X	X		22000
5 ↓			X	Area #2 Both	↓	1	X	X		22001
6										
7										
8										
9										
10										

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ 6°C

Sampled By: Date/Time: 2/17/04
Relinquished By: Date/Time: 2/23/04
Received By: Date/Time: 2/23/04 4:20pm

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Pamela M. Blake Date/Time: 2/24/04 @ 9:55

Total Cost:
P.I.F.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	04-Mar-2004
Date Reported:	10-Mar-2004
Submission No.:	4C0186
Sample No.:	010287-010303

NOTES: ***'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by:

PASC - Certificate of Analysis

	Client ID:		NAPL EXC AREA1 NORTH	NAPL EXC AREA1 SOUTH	NAPL EXC AREA 1 EAST	NAPL EXC AREA 1 WEST	NAPL EXC AREA1BOTTOM	NAPL EXC AREA2 NORTH	NAPL EXC AREA2 SOUTH
	Lab No.:		010288 04	010289 04	010290 04	010291 04	010292 04	010293 04	010294 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Benzene	1.0	ug/kg	<	<	<	<	<	<	<2.0
Ethylbenzene	1.0	"	<	2.0	<	<	<	<	<2.0
Toluene	1.0	"	<	2.0	1.0	<	<	<	<2.0
m&p-Xylene	1.0	"	<	4.0	<	<	<	<	<2.0
o-Xylene	1.0	"	<	6.0	<	<	<	<	<2.0
Xylenes(Total)	1.0	"	<	10	<	<	<	<	<2.0
Isopropylbenzene	1.0	"	<	2.0	<	<	<	<	<2.0
n-Propylbenzene	1.0	"	<	4.0	<	<	<	<	<2.0
p-Isopropyltoluene	1.0	"	<	28	<	<	<	<	<2.0
1,2,4-Trimethylbenzene	1.0	"	<	92	<	<	<	<	<2.0
1,3,5-Trimethylbenzene	1.0	"	<	26	<	<	<	<	<2.0
n-Butylbenzene	1.0	"	<	<	<	<	<	<	<2.0
sec-Butylbenzene	1.0	"	<	11	<	<	<	<	<2.0
tert-Butylbenzene	1.0	"	<	<	<	<	<	<	<2.0
Naphthalene	1.0	"	<	25	1.0	<	1.0	<	<2.0
Methyl-t-butylether	1.0	"	<	<	<	<	<	<	<2.0
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			71	67	64	69	71	71	70
d8-Toluene			82	87	83	82	84	88	90
Bromofluorobenzene			84	73	73	83	85	82	79
d10-Ethylbenzene			64	63	47	44	47	43	48

PASC - Certificate of Analysis

	Client ID:		NAPL EXC AREA 2 EAST	NAPL EXC AREA 2 WEST	NAPL EXC AREA2BOTTOM	NAPL EXC AREA3 NORTH	NAPL EXC AREA3 NORTH	NAPL EXC AREA3 NORTH	NAPL EXC AREA3 NORTH
	Lab No.:		010295 04	010296 04	010297 04	010298 04	010298 04	010298 04	010298 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**					Duplicate	M. Spike	MS % Rec.
Benzene	1.0	ug/kg	<	<2.0	<4.0	<2.0	<2.0	96	75
Ethylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	95	74
Toluene	1.0	"	1.0	<2.0	<4.0	<2.0	<2.0	98	76
m&p-Xylene	1.0	"	1.0	<2.0	<4.0	<2.0	<2.0	190	74
o-Xylene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	95	74
Xylenes(Total)	1.0	"	1.0	<2.0	<4.0	<2.0	<2.0	290	74
Isopropylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	83	65
n-Propylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	83	64
p-Isopropyltoluene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	77	60
1,2,4-Trimethylbenzene	1.0	"	1.0	<2.0	<4.0	<2.0	<2.0	81	63
1,3,5-Trimethylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	83	65
n-Butylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	70	55
sec-Butylbenzene	1.0	"	1.0	<2.0	<4.0	<2.0	<2.0	83	64
tert-Butylbenzene	1.0	"	<	<2.0	<4.0	<2.0	<2.0	84	65
Naphthalene	1.0	"	4.0	<2.0	<4.0	<2.0	<2.0	49	38
Methyl-t-butylether	1.0	"	<	<2.0	<4.0	<2.0	<2.0	NS	-
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			70	64	64	70	71	72	72
d8-Toluene			91	87	83	86	83	85	85
Bromofluorobenzene			79	84	83	86	85	87	87
d10-Ethylbenzene			31	61	51	47	28	46	46

PASC - Certificate of Analysis

	Client ID:		NAPL EXC AREA3 SOUTH	NAPL EXC AREA 3 EAST	NAPL EXC AREA 3 WEST	NAPL EXC AREA3BOTTOM	Bermed Stripped Soil	Method Blank	Blank Spike
	Lab No.:		010299 04	010300 04	010301 04	010302 04	010303 04	010287 04	010287 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Benzene	1.0	ug/kg	<2.0	<2.0	<2.0	<	1.0	<	59
Ethylbenzene	1.0	"	<2.0	<2.0	<2.0	<	<	<	63
Toluene	1.0	"	<2.0	2.0	2.0	1.0	2.0	<	61
m&p-Xylene	1.0	"	<2.0	<2.0	2.0	<	1.0	<	130
o-Xylene	1.0	"	<2.0	<2.0	3.0	<	<	<	64
Xylenes(Total)	1.0	"	<2.0	<2.0	5.0	<	1.0	<	190
Isopropylbenzene	1.0	"	<2.0	<3.0	2.0	<	<2.0	<	57
n-Propylbenzene	1.0	"	<2.0	<3.0	5.0	<	<2.0	<	62
p-Isopropyltoluene	1.0	"	<2.0	<3.0	10	<	<2.0	<	64
1,2,4-Trimethylbenzene	1.0	"	<2.0	<3.0	4.0	1.0	<2.0	<	63
1,3,5-Trimethylbenzene	1.0	"	<2.0	<3.0	6.0	<	<2.0	<	63
n-Butylbenzene	1.0	"	<2.0	<3.0	16	<	<2.0	<	65
sec-Butylbenzene	1.0	"	<2.0	<3.0	4.0	<	<2.0	<	64
tert-Butylbenzene	1.0	"	<2.0	<3.0	<2.0	<	<2.0	<	61
Naphthalene	1.0	"	6.0	<3.0	4.0	<	45	<	49
Methyl-t-butylether	1.0	"	<2.0	<3.0	<2.0	<	<2.0	<	NS
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			69	75	81	68	65	73	75
d8-Toluene			87	95	99	87	93	87	85
Bromofluorobenzene			84	71	87	76	65	87	88
d10-Ethylbenzene			55	31	27	54	30	91	87

			%
	Client ID:		Recovery
	Lab No.:		010287 04
	Date Sampled:		03-Mar-2004
Component	**MDL**	**Units**	
Benzene	1.0	ug/kg	95
Ethylbenzene	1.0	"	100
Toluene	1.0	"	97
m&p-Xylene	1.0	"	100
o-Xylene	1.0	"	100
Xylenes(Total)	1.0	"	100
Isopropylbenzene	1.0	"	92
n-Propylbenzene	1.0	"	99
p-Isopropyltoluene	1.0	"	100
1,2,4-Trimethylbenzene	1.0	"	100
1,3,5-Trimethylbenzene	1.0	"	100
n-Butylbenzene	1.0	"	100
sec-Butylbenzene	1.0	"	100
tert-Butylbenzene	1.0	"	98
Naphthalene	1.0	"	79
Methyl-t-butylether	1.0	"	-
Surrogate Recoveries		%	
d4-1,2-Dichloroethane			75
d8-Toluene			85
Bromofluorobenzene			88
d10-Ethylbenzene			87

PASC - Certificate of Analysis

			NAPL EXC AREA1 NORTH	NAPL EXC AREA1 SOUTH	NAPL EXC AREA 1 EAST	NAPL EXC AREA 1 WEST	NAPL EXC AREA1BOTTOM	NAPL EXC AREA2 NORTH	NAPL EXC AREA2 SOUTH
	Client ID:								
	Lab No.:		010288 04	010289 04	010290 04	010291 04	010292 04	010293 04	010294 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Naphthalene	90	ug/kg	<180	400	140	<180	<360	<180	<360
Acenaphthene	70	"	<140	190	100	<140	<280	<140	<280
Fluorene	40	"	<80	280	210	<80	<160	<80	<160
Phenanthrene	30	"	70	1300	4200	220	510	70	<120
Anthracene	60	"	<120	440	1600	<120	210	<120	<240
Fluoranthene	60	"	<120	2100	12000	210	1600	<120	<240
Pyrene	40	"	<80	2100	10000	170	1400	<80	<160
Benz(a)anthracene	50	"	<100	1200	6300	<100	780	<100	<200
Chrysene	40	"	<80	1400	5800	90	760	<80	<160
Benzo(b)fluoranthene	40	"	<80	1500	5000	90	590	<80	<160
Benzo(k)fluoranthene	40	"	<80	1300	5000	90	570	<80	<160
Benzo(a)pyrene	50	"	<100	1400	5200	<100	590	<100	<200
Indeno(1,2,3-cd)pyrene	60	"	<120	1300	3700	<120	410	<120	<240
Dibenzo(ah)anthracene	50	"	<100	300	1000	<100	<200	<100	<200
Benzo(ghi)perylene	60	"	280	1000	2500	<120	<240	<120	<240
Surrogate Recoveries		%							
d5-Nitrobenzene			72	71	73	73	72	70	66
2-Fluorobiphenyl			73	77	77	75	73	74	70
d14-p-Terphenyl			81	83	80	82	82	81	81

PASC - Certificate of Analysis

			NAPL EXC AREA 2 EAST	NAPL EXC AREA 2 WEST	NAPL EXC AREA2BOTTOM	NAPL EXC AREA3 NORTH	NAPL EXC AREA3 SOUTH	NAPL EXC AREA 3 EAST	NAPL EXC AREA 3 WEST
	Client ID:								
	Lab No.:		010295 04	010296 04	010297 04	010298 04	010299 04	010300 04	010301 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Naphthalene	90	ug/kg	620	<360	<900	<540	<540	<360	<360
Acenaphthene	70	"	<140	<280	<700	<420	<420	<280	<280
Fluorene	40	"	130	<160	<400	<240	<240	<160	<160
Phenanthrene	30	"	440	<120	<300	<180	1900	1300	260
Anthracene	60	"	<120	<240	<600	<360	440	310	<240
Fluoranthene	60	"	220	<240	<600	<360	2700	1600	<240
Pyrene	40	"	290	<160	<400	<240	2600	1500	280
Benz(a)anthracene	50	"	160	<200	<500	<300	1200	810	<200
Chrysene	40	"	210	<160	<400	<240	1300	1000	360
Benzo(b)fluoranthene	40	"	260	<160	<400	<240	1100	1100	<160
Benzo(k)fluoranthene	40	"	190	<160	<400	<240	950	820	<160
Benzo(a)pyrene	50	"	220	<200	<500	<300	940	820	<200
Indeno(1,2,3-cd)pyrene	60	"	350	<240	<600	<360	740	890	<240
Dibenzo(ah)anthracene	50	"	<100	<200	<500	<300	<300	220	<200
Benzo(ghi)perylene	60	"	200	<240	<600	<360	510	560	<240
Surrogate Recoveries		%							
d5-Nitrobenzene			63	59	64	58	60	60	27
2-Fluorobiphenyl			69	65	72	59	64	70	30
d14-p-Terphenyl			76	82	83	72	77	76	36

PASC - Certificate of Analysis

			NAPL EXC	Bermed	Method	Blank	%	Blank Spike	%
	Client ID:		AREA3BOTTOM	Stripped Soil	Blank	Spike	Recovery	Duplicate	Recovery
	Lab No.:		010302 04	010303 04	010287 04	010287 04	010287 04	010287 04	010287 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**							
Naphthalene	90	ug/kg	<360	6400	<180	3200	80	3400	84
Acenaphthene	70	"	<280	11000	<140	3200	80	3400	85
Fluorene	40	"	<160	13000	<80	3100	79	3400	86
Phenanthrene	30	"	<120	110000	<60	3300	81	3400	85
Anthracene	60	"	<240	30000	<120	3300	83	3500	88
Fluoranthene	60	"	<240	120000	<120	3200	81	3400	85
Pyrene	40	"	<160	90000	<80	3400	86	3700	92
Benz(a)anthracene	50	"	<200	50000	<100	3200	81	3400	86
Chrysene	40	"	<160	48000	<80	3300	83	3600	90
Benzo(b)fluoranthene	40	"	<160	38000	<80	3300	83	3600	89
Benzo(k)fluoranthene	40	"	<160	34000	<80	3400	84	3600	90
Benzo(a)pyrene	50	"	<200	40000	<100	3200	80	3500	87
Indeno(1,2,3-cd)pyrene	60	"	<240	27000	<120	3200	80	3500	86
Dibenzo(ah)anthracene	50	"	<200	7100	<100	3200	81	3500	88
Benzo(ghi)perylene	60	"	<240	18000	<120	3100	78	3200	79
Surrogate Recoveries		%							
d5-Nitrobenzene			59	75	74	80	80	85	85
2-Fluorobiphenyl			64	82	74	82	82	87	87
d14-p-Terphenyl			78	85	93	87	87	93	93

PASC - Certificate of Analysis

			NAPL EXC	NAPL EXC	NAPL EXC	NAPL EXC
	Client ID:		AREA1 NORTH	AREA1 NORTH	AREA1 NORTH	AREA1 NORTH
	Lab No.:		010288 04	010288 04	010288 04	010288 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**	M. Spike	MS % Rec.	MS Dup	MSD % Rec.
Naphthalene	90	ug/kg	4600	75	5000	76
Acenaphthene	70	"	4600	76	5000	76
Fluorene	40	"	4600	75	5000	77
Phenanthrene	30	"	4700	78	5100	78
Anthracene	60	"	4600	75	4800	74
Fluoranthene	60	"	4700	77	5000	76
Pyrene	40	"	5000	82	5400	83
Benz(a)anthracene	50	"	4700	78	5100	78
Chrysene	40	"	4900	81	5300	81
Benzo(b)fluoranthene	40	"	4900	81	5300	82
Benzo(k)fluoranthene	40	"	4900	80	5200	80
Benzo(a)pyrene	50	"	4600	76	4800	73
Indeno(1,2,3-cd)pyrene	60	"	5000	83	5400	83
Dibenzo(ah)anthracene	50	"	5000	83	5500	84
Benzo(ghi)perylene	60	"	4500	75	4800	74
Surrogate Recoveries		%				
d5-Nitrobenzene			73	73	74	74
2-Fluorobiphenyl			75	75	76	76
d14-p-Terphenyl			81	81	82	82

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0308MC01**	**0308MC02**
Benzene	010287 04	010292 04
	010288 04	010293 04
	010289 04	010294 04
	010290 04	010295 04
	010291 04	010296 04
		010297 04
		010298 04
		010299 04
		010300 04
		010301 04
		010302 04
		010303 04
Date Analysed:	04/03/08	04/03/08
Date Prepared:	04/03/08	04/03/08

Batch Code:	**0309SPA1**	**0309SPA1**
Naphthalene	010287 04	010288 04
	010294 04	010289 04
	010303 04	010290 04
		010291 04
		010292 04
		010293 04
		010295 04
		010296 04
		010297 04
		010298 04
		010299 04
		010300 04
		010301 04
		010302 04
Date Analysed:	04/03/10	04/03/11
Date Prepared:	04/03/09	04/03/09

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

ANALYSIS REQUESTED

CLIENT INFORMATION

Company Name: NIAGARA INC
Project Manager: RUSS SAVAGE
Address: 3553 Cr. Henden Rd
Cr. Henden, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Jon Neubauer

MAS-070287

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
10258	NAPL EXC AREA 1 NORTH	1	S	3/3/04		✓	✓	2.5mL
59	NAPL EXC AREA 1 SOUTH	1	S	3/3/04		✓	✓	
60	NAPL EXC AREA 1 EAST	1	S	3/3/04		✓	✓	
61	NAPL EXC AREA 1 WEST	1	S	3/3/04		✓	✓	
62	NAPL EXC AREA 1 BOTTOM	1	S	3/3/04		✓	✓	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B DELIVERABLES
NORMAL TIA

REMARKS

ASP

Client Signature: [signature]
Affiliation: Niagara Inc
Date/Time: 3/3/04, 3:30 pm

Received By: [signature]
Affiliation: PSC
Date/Time: 3/3/04, 3:30 pm

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NIAGECH Inc
Project Manager: Russ SAVAGE
Address: 3553 Crittenden Rd
Crittenden, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Jon Neubauer

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8081 STARS	8270 STARS					Level of contamination (low, high, unknown)
10293	NAPL EXC AREA 2 NORTH	1	S	3/3/04		✓	✓				2 bottles	
94	NAPL EXC AREA 2 SOUTH	1	S	3/3/04		✓	✓				↓	
95	NAPL EXC AREA 2 EAST	1	S	3/3/04		✓	✓					
96	NAPL EXC AREA 2 WEST	1	S	3/3/04		✓	✓					
97	NAPL EXC AREA 2 BOTTOM	1	S	3/3/04		✓	✓					

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SMP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B DELIVERABLES
NORMAL TAT

REMARKS

ASP

4.7

Client Signature: [signature]
Affiliation: NIAGECH Inc
Date/Time: 3/3/04, 3:30 pm

Received By: [signature]
Affiliation: PSC
Date/Time: 3/3/04, 3:30 pm

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

CHAIN OF CUSTODY

ANALYTICAL SERVICES
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Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 3 of 3

CLIENT INFORMATION

Company Name: NIAGARA INC
Project Manager: RUSS SAVAGE
Address: 3553 Cr. Henden Rd
Cr. Henden, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Jon Neubauer

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
10298	NAPL EXC AREA 3 NORTH	1	S	3/3/04		✓	✓	2 JUAC
99	NAPL EXC AREA 3 SOUTH	1	S	3/3/04		✓	✓	
300	NAPL EXC AREA 3 EAST	1	S	3/3/04		✓	✓	
301	NAPL EXC AREA 3 WEST	1	S	3/3/04		✓	✓	
302	NAPL EXC AREA 3 BOTTOM	1	S	3/3/04		✓	✓	
MW-10304								
03	NAPL AREA 3 EXCAVATION WATER IN EXCAVATION	3	L	3/3/04		✓	✓	1 AG, 4 x 6 x 2
10303	Bermed Stripped Soil from NAPL Exc Area 3	1	S	3/3/04		✓	✓	2 SOIL AG

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B.
DELIVERABLES
NORMAL TAT

REMARKS

ASP

Client Signature: Jason Blaskowski
Affiliation: NIAGARA INC
Date/Time: 3/3/04, 3:30 pm

Received By: Kevin Zuehlsdorf
Affiliation: PSC
Date/Time: 3/3/04, 3:30 pm

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	05-Aug-2004
Date Reported:	20-Aug-2004
Submission No.:	4H0115
Sample No.:	049080-049085

NOTES: *"-" = not analysed "<" = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

(1) 2 internal standards did not meet 50% area response criteria. Re-injected with similar results
(2) 1 internal standards did not meet 50% area response criteria. Re-injected with similar results

Certified by: MC

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.psconalytical.com

PASC - Certificate of Analysis

	Client ID:		Method Blank	Blank Spike	Blank Spike	NAPL Area2-NorthWall
	Lab No.:		049080 04	049080 04	049080 04	049081 04
	Date Sampled:		-	-	-	30-Jul-2004
Component	MDL	Units			% Recoverics	
Acetone	0.020	mg/kg	<	0.072	120	0.027
Benzene	0.001	"	<	0.065	100	0.002
Bromoform	0.001	"	<	0.062	99	<
Bromomethane	0.006	"	<	0.061	98	<
2-Butanone	0.005	"	<	0.078	130	<
Carbon Disulfide	0.001	"	<	0.072	110	0.009
Carbon Tetrachloride	0.001	"	<	0.068	110	<
Chlorobenzene	0.001	"	<	0.065	100	<
Chlorodibromomethane	0.001	"	<	0.064	100	<
Chloroethane	0.001	"	<	0.058	92	<
Chloroform	0.001	"	<	0.067	110	<
Chloromethane	0.001	"	<	0.066	110	<
1,2-Dichlorobenzene	0.001	"	<	0.061	98	<
1,3-Dichlorobenzene	0.001	"	<	0.063	100	<
1,4-Dichlorobenzene	0.001	"	<	0.063	100	<
Dichlorobromomethane	0.001	"	<	0.068	110	<
1,1-Dichloroethane	0.001	"	<	0.065	100	<
1,2-Dichloroethane	0.001	"	<	0.066	110	<
1,1-Dichloroethene	0.001	"	<	0.064	100	<
cis-1,2-Dichloroethene	0.001	"	<	0.067	110	<
trans-1,2-Dichloroethene	0.001	"	<	0.065	100	<
1,2-Dichloropropane	0.001	"	<	0.067	110	<
cis-1,3-Dichloropropene	0.001	"	<	0.066	110	<
trans-1,3-Dichloropropene	0.001	"	<	0.061	98	<
Ethylbenzene	0.001	"	<	0.068	110	<
2-Hexanone	0.005	"	<	0.074	120	<
Dichloromethane	0.020	"	<	0.064	100	<
4-Methyl-2-Pentanone	0.005	"	<	0.075	120	<
Methyl-t-butylether	0.001	"	<	NS	-	<
Styrene	0.001	"	<	0.069	110	<
1,1,2,2-Tetrachloroethane	0.001	"	<	0.061	97	<
Tetrachloroethene	0.001	"	<	0.066	110	<
Toluene	0.001	"	<	0.064	100	0.002
1,1,1-Trichloroethane	0.001	"	<	0.069	110	<
1,1,2-Trichloroethane	0.001	"	<	0.065	100	<
Trichloroethene	0.001	"	<	0.069	110	<
Trichlorofluoromethane	0.001	"	<	0.066	110	<
Vinyl Acetate	0.005	"	<	NS	-	<
Vinyl Chloride	0.001	"	<	0.057	91	<
m&p-Xylene	0.001	"	<	0.13	110	0.001
o-Xylene	0.001	"	<	0.064	100	<
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			80	85	85	76
d8-Toluene			85	93	93	87
Bromofluorobenzene			92	101	101	82
d10-Ethylbenzene			102	102	102	75

8/26/04

PASC - Certificate of Analysis

			NAPL Area2-SouthWall	NAPL Area 2-EastWall	NAPL Area 2-WestWall	NAPL Area 2-Bottom
	Client ID:		NAPL	NAPL Area	NAPL Area	NAPL Area
	Lab No.:		049082 04	049083 04	049084 04	049085 04
	Date Sampled:		30-Jul-2004	30-Jul-2004	30-Jul-2004	30-Jul-2004
Component	**MDL**	**Units**				
Acetone	0.020	mg/kg	<	0.021	<	0.042
Benzene	0.001	"	<	<	0.001	<
Bromoform	0.001	"	<	<	<	<
Bromomethane	0.006	"	<	<	<	<
2-Butanone	0.005	"	<	<	<	<0.007
Carbon Disulfide	0.001	"	<	0.006	0.001	0.022
Carbon Tetrachloride	0.001	"	<	<	<	<
Chlorobenzene	0.001	"	<	<	<	<
Chlorodibromomethane	0.001	"	<	<	<	<
Chloroethane	0.001	"	<	<	<	<
Chloroform	0.001	"	<	<	<	<
Chloromethane	0.001	"	<	<	<	<
1,2-Dichlorobenzene	0.001	"	<	<	<	<
1,3-Dichlorobenzene	0.001	"	<	<	<	<
1,4-Dichlorobenzene	0.001	"	<	<	<	<
Dichlorobromomethane	0.001	"	<	<	<	<
1,1-Dichloroethane	0.001	"	<	<	<	<
1,2-Dichloroethane	0.001	"	<	<	<	<
1,1-Dichloroethene	0.001	"	<	<	<	<
cis-1,2-Dichloroethene	0.001	"	<	<	<	<
trans-1,2-Dichloroethene	0.001	"	<	<	<	<
1,2-Dichloropropane	0.001	"	<	<	<	<
cis-1,3-Dichloropropene	0.001	"	<	<	<	<
trans-1,3-Dichloropropene	0.001	"	<	<	<	<
Ethylbenzene	0.001	"	<	<	0.001	<
2-Hexanone	0.005	"	<	<	<	<
Dichloromethane	0.020	"	<	<	<	<
4-Methyl-2-Pentanone	0.005	"	<	<	<	<
Methyl-t-butylether	0.001	"	<	<	<	<
Styrene	0.001	"	<	<	<	<
1,1,2,2-Tetrachloroethane	0.001	"	<	<	<	<
Tetrachloroethene	0.001	"	<	<	<	<
Toluene	0.001	"	<	0.002	0.004	0.002
1,1,1-Trichloroethane	0.001	"	<	<	<	<
1,1,2-Trichloroethane	0.001	"	<	<	<	<
Trichloroethene	0.001	"	<	<	<	<
Trichlorofluoromethane	0.001	"	<	<	<	<
Vinyl Acetate	0.005	"	<	<	<	<
Vinyl Chloride	0.001	"	<	<	<	<
m&p-Xylene	0.001	"	0.002	0.003	0.006	0.002
o-Xylene	0.001	"	0.001	0.001	0.003	0.001
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			75	76	67	79
d8-Toluene			85	85	87	91
Bromofluorobenzene			85	83	77	97
d10-Ethylbenzene			78	66	83	81

8/26/04

PASC - Certificate of Analysis

Component	*Client ID:* / *Lab No.:* / *Date Sampled:* MDL	Units	Method Blank 049080 04 -	Blank Spike #1 049080 04 - % Recoveries	Blank Spike #1 049080 04 -	Blank Spike #2 049080 04 -	Blank Spike #2 049080 04 - % Recoveries	NAPL Area2-NorthWall 049081 04 30-Jul-2004
								(1)
Naphthalene	0.09	mg/kg	<0.18	3.1	77	3.1	78	<0.18
Acenaphthene	0.07	"	<0.14	3.2	80	3.2	79	<0.14
Fluorene	0.04	"	<0.08	3.1	77	3.0	74	<0.08
Phenanthrene	0.03	"	<0.06	3.3	84	3.3	83	0.11
Anthracene	0.06	"	<0.12	3.3	83	3.4	84	<0.12
Fluoranthene	0.06	"	<0.12	3.4	86	3.4	86	0.17
Pyrene	0.04	"	<0.08	3.3	81	3.4	86	0.31
Benz(a)anthracene	0.05	"	<0.10	3.5	89	3.6	89	0.13
Chrysene	0.04	"	<0.08	3.6	89	3.6	90	0.15
Benzo(b)fluoranthene	0.04	"	<0.08	3.5	88	3.6	89	0.18
Benzo(k)fluoranthene	0.04	"	<0.08	3.3	81	3.3	83	0.13
Benzo(a)pyrene	0.05	"	<0.10	3.4	84	3.4	85	<0.10
Indeno(1,2,3-cd)pyrene	0.06	"	<0.12	3.1	78	3.2	79	<0.12
Dibenzo(ah)anthracene	0.05	"	<0.10	2.9	73	2.9	72	<0.10
Benzo(ghi)perylene	0.06	"	<0.12	3.1	78	3.1	78	<0.12
Surrogate Recoveries		%						
d5-Nitrobenzene			65	76	76	75	75	57
2-Fluorobiphenyl			67	80	80	79	79	65
d14-p-Terphenyl			79	81	81	83	83	92

PSC Submission No: 4H0115

Client: NWEC+C Inc. Project: Union Ship Canal

PASC - Certificate of Analysis

Component	Client ID: / Lab No.: / Date Sampled: MDL	Units	NAPL Area2-NorthWall 049081 04 30-Jul-2004 M. Spike	NAPL Area2-NorthWall 049081 04 30-Jul-2004 MS % Rec.	NAPL Area2-NorthWall 049081 04 30-Jul-2004 MS Dup	NAPL Area2-NorthWall 049081 04 30-Jul-2004 MSD % Rec.	NAPL Area2-SouthWall 049082 04 30-Jul-2004	NAPL Area 2-EastWall 049083 04 30-Jul-2004	NAPL Area 2-WestWall 049084 04 30-Jul-2004
								(2)	(1)
Naphthalene	0.09	mg/kg	3.7	73	3.8	76	<0.18	<0.18	<0.18
Acenaphthene	0.07	"	3.8	76	4.1	82	<0.14	<0.14	<0.14
Fluorene	0.04	"	3.5	70	4.0	79	<0.08	<0.08	<0.08
Phenanthrene	0.03	"	4.0	78	4.6	89	0.49	0.41	0.28
Anthracene	0.06	"	3.7	73	4.4	87	<0.12	<0.12	<0.12
Fluoranthene	0.06	"	4.0	76	4.2	80	0.68	0.67	0.46
Pyrene	0.04	"	4.8	89	6.1	120	0.82	0.85	0.66
Benz(a)anthracene	0.05	"	4.2	80	4.7	91	0.44	0.50	0.30
Chrysene	0.04	"	4.5	85	4.9	95	0.57	0.67	0.34
Benzo(b)fluoranthene	0.04	"	4.6	86	4.5	86	0.49	0.57	<0.37
Benzo(k)fluoranthene	0.04	"	4.7	92	5.2	100	0.57	0.45	<0.13
Benzo(a)pyrene	0.05	"	4.2	82	4.6	91	0.48	<0.18	<0.18
Indeno(1,2,3-cd)pyrene	0.06	"	4.8	95	4.5	90	0.36	<0.19	<0.19
Dibenzo(ah)anthracene	0.05	"	5.2	100	5.0	99	<0.10	<0.10	<0.10
Benzo(ghi)perylene	0.06	"	4.4	86	4.5	89	0.33	<0.26	<0.24
Surrogate Recoveries		%							
d5-Nitrobenzene			72	72	71	71	65	63	65
2-Fluorobiphenyl			74	74	80	80	72	69	77
d14-p-Terphenyl			94	94	119	119	104	100	118

PSC Submission No: 4H0115

Client: NWEC+C Inc. Project: Union Ship Canal

PASC - Certificate of Analysis

	Client ID:		NAPL Area 2-Bottom
	Lab No.:		049085 04
	Date Sampled:		30-Jul-2004
Component	**MDL**	**Units**	
			(2)
Naphthalene	0.09	mg/kg	<0.18
Acenaphthene	0.07	"	<0.14
Fluorene	0.04	"	<0.08
Phenanthrene	0.03	"	<0.06
Anthracene	0.06	"	<0.12
Fluoranthene	0.06	"	<0.12
Pyrene	0.04	"	<0.08
Benz(a)anthracene	0.05	"	<0.10
Chrysene	0.04	"	<0.08
Benzo(b)fluoranthene	0.04	"	<0.08
Benzo(k)fluoranthene	0.04	"	<0.08
Benzo(a)pyrene	0.05	"	<0.10
Indeno(1,2,3-cd)pyrene	0.06	"	<0.12
Dibenzo(ah)anthracene	0.05	"	<0.10
Benzo(ghi)perylene	0.06	"	<0.12
Surrogate Recoveries		%	
d5-Nitrobenzene			51
2-Fluorobiphenyl			53
d14-p-Terphenyl			95

PSC Submission No: 4H0115

Client: NWEC+C Inc. Project: Union Ship Canal

8/26/04

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0807MC01**			
STARS - Volatiles	049080 04			
	049081 04			
	049082 04			
	049083 04			
	049084 04			
	049085 04			
Date Analysed:	04/08/07			
Date Prepared:	04/08/07			
Batch Code:	**0812SPA2**	**0809SPA2**	**0812SPA2**	**0809SPA2**
STARS - SVOC	049080 04	049081 04	049081 04	049082 04
	049082 04			049083 04
	049083 04			049084 04
	049084 04			049085 04
	049085 04			
Date Analysed:	04/08/16	04/08/12	04/08/17	04/08/11
Date Prepared:	04/08/12	04/08/09	04/08/12	04/08/09

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NWEC-C, Inc
Project Manager: RUSS SAVAGE
Address: 3553 CRITTENDEN RD
CRITTENDEN, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Tom Wolfe Tom Wolfe

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
	NAPL AREA 2 EXCAVATION EXTENSION NORTH WALL	2	Soil	7/30/04		✓	✓	
	NAPL AREA 2 EXCAVATION EXTENSION SOUTH WALL	2	Soil	7/30/04		✓	✓	
	NAPL AREA 2 EXCAVATION EXTENSION EAST WALL	2	Soil	7/30/04		✓	✓	
	NAPL AREA 2 EXCAVATION EXTENSION WEST WALL	2	Soil	7/30/04		✓	✓	
	NAPL AREA 2 EXCAVATION EXTENSION BOTTOM	2	Soil	7/30/04		✓	✓	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ❑
- RUSH 5 Business Days ❑
- RUSH 2 Business Days ❑
- RUSH 1 Business Days ❑
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ❑

SPECIAL REQUIREMENTS / REGULATIONS

ASP Cat B deliverables
"Level 4"

REMARKS

Client Signature: Tammy L Burgess
Affiliation: NWEC-C
Date/Time: 8/5/04 8:00

Received By: [signature]
Affiliation: ____
Date/Time: 8-5-4 8:00

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention: Russ Savage
Client Name: NWEC+C Inc.
Project: Union Ship Canal
Project Desc: Union Ship Canal

Address: 3553 Crittenden Rd.
Crittenden, NY
14038
Fax Number: 716-937-9360
Phone Number: 716-937-6527

LABORATORY INFORMATION

Contact: Mike Challis, B.Sc. C.Chem.
Project: AN040300
Date Received: 09-Aug-2004
Date Reported: 23-Aug-2004

Submission No.: 4H0240
Sample No.: 049872-049874

NOTES: *'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: _____

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

PASC - Certificate of Analysis

	Client ID:		NAPL Area3-NW Bottom	NAPL Area3-NW Bottom	NAPL Area3-NW S.Wall
	Lab No.:		049873 04	049873 04	049874 04
	Date Sampled:		05-Aug-2004	05-Aug-2004	05-Aug-2004
Component	MDL	Units		Duplicate	
Acetone	0.020	mg/kg	0.34	0.35	<0.040
Benzene	0.001	"	<0.002	<0.002	<0.002
Bromoform	0.001	"	<0.004	<0.004	<0.002
Bromomethane	0.006	"	<0.012	<0.012	<0.012
2-Butanone	0.005	"	0.045	0.051	<0.010
Carbon Disulfide	0.001	"	0.015	0.014	0.003
Carbon Tetrachloride	0.001	"	<0.002	<0.002	<0.002
Chlorobenzene	0.001	"	<0.002	<0.002	<0.002
Chlorodibromomethane	0.001	"	<0.002	<0.002	<0.002
Chloroethane	0.001	"	<0.002	<0.002	<0.002
Chloroform	0.001	"	<0.002	<0.002	<0.002
Chloromethane	0.001	"	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.001	"	<0.004	<0.004	<0.002
1,3-Dichlorobenzene	0.001	"	<0.004	<0.004	<0.002
1,4-Dichlorobenzene	0.001	"	<0.004	<0.004	<0.002
Dichlorobromomethane	0.001	"	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.001	"	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.001	"	<0.002	<0.002	<0.002
1,1-Dichloroethene	0.001	"	<0.002	<0.002	<0.002
cis-1,2-Dichloroethene	0.001	"	<0.002	<0.002	<0.002
trans-1,2-Dichloroethene	0.001	"	<0.002	<0.002	<0.002
1,2-Dichloropropane	0.001	"	<0.002	<0.002	<0.002
cis-1,3-Dichloropropene	0.001	"	<0.002	<0.002	<0.002
trans-1,3-Dichloropropene	0.001	"	<0.002	<0.002	<0.002
Ethylbenzene	0.001	"	<0.002	<0.002	<0.002
2-Hexanone	0.005	"	<0.010	<0.010	<0.010
Dichloromethane	0.020	"	<0.040	<0.040	<0.040
4-Methyl-2-Pentanone	0.005	"	<0.010	<0.010	<0.010
Methyl-t-butylether	0.001	"	<0.002	<0.002	<0.002
Styrene	0.001	"	<0.002	<0.002	<0.002
1,1,2,2-Tetrachloroethane	0.001	"	<0.004	<0.004	<0.002
Tetrachloroethene	0.001	"	<0.002	<0.002	<0.002
Toluene	0.001	"	0.003	0.003	<0.002
1,1,1-Trichloroethane	0.001	"	<0.002	<0.002	<0.002
1,1,2-Trichloroethane	0.001	"	<0.002	<0.002	<0.002
Trichloroethene	0.001	"	<0.002	<0.002	<0.002
Trichlorofluoromethane	0.001	"	<0.002	<0.002	<0.002
Vinyl Acetate	0.005	"	<0.010	<0.010	<0.010
Vinyl Chloride	0.001	"	<0.002	<0.002	<0.002
m&p-Xylene	0.001	"	0.003	<0.002	<0.002
o-Xylene	0.001	"	<0.002	<0.002	<0.002
Surrogate Recoveries		%			
d4-1,2-Dichloroethane			74	72	78
d8-Toluene			93	98	91
Bromofluorobenzene			65	66	94
d10-Ethylbenzene			95	82	82

PASC - Certificate of Analysis

	Client ID:		Method Blank	Blank Spike	% Recovery
	Lab No.:		049872 04	049872 04	049872 04
	Date Sampled:		05-Aug-2004	05-Aug-2004	05-Aug-2004
Component	MDL	Units			
Acetone	0.020	mg/kg	<	0.057	91
Benzene	0.001	"	<	0.056	90
Bromoform	0.001	"	<	0.058	92
Bromomethane	0.006	"	<	0.062	99
2-Butanone	0.005	"	<	0.060	96
Carbon Disulfide	0.001	"	<	0.068	110
Carbon Tetrachloride	0.001	"	<	0.060	97
Chlorobenzene	0.001	"	<	0.061	98
Chlorodibromomethane	0.001	"	<	0.060	96
Chloroethane	0.001	"	<	0.060	96
Chloroform	0.001	"	<	0.059	94
Chloromethane	0.001	"	<	0.075	120
1,2-Dichlorobenzene	0.001	"	<	0.059	95
1,3-Dichlorobenzene	0.001	"	<	0.060	97
1,4-Dichlorobenzene	0.001	"	<	0.061	98
Dichlorobromomethane	0.001	"	<	0.059	94
1,1-Dichloroethane	0.001	"	<	0.056	90
1,2-Dichloroethane	0.001	"	<	0.058	93
1,1-Dichloroethene	0.001	"	<	0.055	88
cis-1,2-Dichloroethene	0.001	"	<	0.059	94
trans-1,2-Dichloroethene	0.001	"	<	0.057	92
1,2-Dichloropropane	0.001	"	<	0.058	93
cis-1,3-Dichloropropene	0.001	"	<	0.058	93
trans-1,3-Dichloropropene	0.001	"	<	0.057	92
Ethylbenzene	0.001	"	<	0.063	100
2-Hexanone	0.005	"	<	0.059	95
Dichloromethane	0.020	"	<	0.056	89
4-Methyl-2-Pentanone	0.005	"	<	0.058	93
Methyl-t-butylether	0.001	"	<	NS	-
Styrene	0.001	"	<	0.066	110
1,1,2,2-Tetrachloroethane	0.001	"	<	0.053	85
Tetrachloroethene	0.001	"	<	0.062	99
Toluene	0.001	"	<	0.059	95
1,1,1-Trichloroethane	0.001	"	<	0.060	97
1,1,2-Trichloroethane	0.001	"	<	0.059	95
Trichloroethene	0.001	"	<	0.061	97
Trichlorofluoromethane	0.001	"	<	0.064	100
Vinyl Acetate	0.005	"	<	NS	-
Vinyl Chloride	0.001	"	<	0.065	100
m&p-Xylene	0.001	"	<	0.13	100
o-Xylene	0.001	"	<	0.061	98
Surrogate Recoveries		%			
d4-1,2-Dichloroethane			74	78	78
d8-Toluene			85	87	87
Bromofluorobenzene			90	94	94
d10-Ethylbenzene			96	92	92

PASC - Certificate of Analysis

	Client ID:		NAPL Area3-NW Bottom	NAPL Area3-NW S.Wall	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		049873 04	049874 04	049872 04	049872 04	049872 04	049872 04	049872 04
	Date Sampled:		05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004
Component	**MDL**	**Units**							
Naphthalene	0.09	mg/kg	<0.36	1.1	<0.18	3.1	77	3.1	78
Acenaphthene	0.07	"	<0.28	1.3	<0.14	3.2	80	3.2	79
Fluorene	0.04	"	<0.16	1.6	<0.08	3.1	77	3.0	74
Phenanthrene	0.03	"	<0.12	15	<0.06	3.3	84	3.3	83
Anthracene	0.06	"	<0.24	2.7	<0.12	3.3	83	3.4	84
Fluoranthene	0.06	"	<0.24	18	<0.12	3.4	86	3.4	86
Pyrene	0.04	"	<0.16	19	<0.08	3.3	81	3.4	86
Benz(a)anthracene	0.05	"	<0.20	6.4	<0.10	3.5	89	3.6	89
Chrysene	0.04	"	<0.16	6.9	<0.08	3.6	89	3.6	90
Benzo(b)fluoranthene	0.04	"	<0.16	7.5	<0.08	3.5	88	3.6	89
Benzo(k)fluoranthene	0.04	"	<0.16	6.6	<0.08	3.3	81	3.3	83
Benzo(a)pyrene	0.05	"	<0.20	5.6	<0.10	3.4	84	3.4	85
Indeno(1,2,3-cd)pyrene	0.06	"	<0.24	5.4	<0.12	3.1	78	3.2	79
Dibenzo(ah)anthracene	0.05	"	<0.20	0.93	<0.10	2.9	73	2.9	72
Benzo(ghi)perylene	0.06	"	<0.24	4.7	<0.12	3.1	78	3.1	78
Surrogate Recoveries		%							
d5-Nitrobenzene			52	55	65	76	76	75	75
2-Fluorobiphenyl			62	65	67	80	80	79	79
d14-p-Terphenyl			116	103	79	81	81	83	83

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0810MC01**		
Acetone	049872 04		
	049873 04		
	049874 04		
Date Analysed:	04/08/10		
Date Prepared:	04/08/10		
Batch Code:	**0810MC01**		
Ethylbenzene	049872 04		
	049873 04		
	049874 04		
Date Analysed:	04/08/10		
Date Prepared:	04/08/10		
Batch Code:	**0812SPA2**	**0809SPA2**	**0812SPA2**
Naphthalene	049872 04	049873 04	049874 04
	049873 04	049874 04	
Date Analysed:	04/08/16	04/08/12	04/08/17
Date Prepared:	04/08/12	04/08/09	04/08/12

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

CLIENT INFORMATION

Company Name: Nature's Way Environmental
Project Manager: Russ Savage
Address: 3553 Crittenden Rd
Cr. Henden, NY 14038
Phone #: (716) 937-6527 Fax #: (716) 937-9360
Sampled by: Jon Newbaur

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
	Pipe Trench Water East End	3	Aqu	8/5/04		+	+	
	NAPL Area 3 Northwest corner Bottom	1	~~Aq~~ soil	8/5/04		X	X	
	NAPL Area 3 Northwest Corner Sidewalls	1	soil	8/5/04		X	X	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ❑
- RUSH 5 Business Days ❑
- RUSH 2 Business Days ❑
- RUSH 1 Business Days ❑
- Other Business Days ❑ RUSH 3 DAY

PROJECT INFORMATION

Project #: Union Ship Canal
Site:
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS

MISA ❑

SPECIAL REQUIREMENTS / REGULATIONS

ISP Category B

REMARKS

Client Signature:
Affiliation: NWEH, Inc.
Date/Time: 8/6/04

Received By:
Affiliation: PSC
Date/Time: 8-9-4 9:30

Rec'd By:
Date/Time

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	11-Aug-2004
Date Reported:	23-Aug-2004
Submission No.:	4H0369
Sample No.:	050641-050643

NOTES: *"-" = not analysed "<" = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: M. C

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.psconalytical.com

	Client ID:		Method Blank	Blank Spike	Blank Spike	NAPL Area#3 SE-Comp	NAPL Area#3 SE-Comp	NAPL Area#3 SE-Bottm
	Lab No.:		050641 04	050641 04	050641 04	050642 04	050642 04	050643 04
	Date Sampled:		-	-	-	09-Aug-2004	09-Aug-2004	09-Aug-2004
Component	MDL	Units			% Recoveries		Duplicate	
Acetone	0.020	mg/kg	<	0.060	95	<	<	<
Benzene	0.001	"	<	0.058	93	<	0.002	0.002
Bromoform	0.001	"	<	0.056	90	<	<	<
Bromomethane	0.006	"	<	0.066	100	<	<	<
2-Butanone	0.005	"	<	0.062	100	0.008	0.009	0.009
Carbon Disulfide	0.001	"	<	0.068	110	0.001	0.002	<
Carbon Tetrachloride	0.001	"	<	0.063	100	<	<	<
Chlorobenzene	0.001	"	<	0.060	97	<	<	<
Chlorodibromomethane	0.001	"	<	0.060	96	<	<	<
Chloroethane	0.001	"	<	0.058	92	<	<	<
Chloroform	0.001	"	<	0.061	97	<	<	<
Chloromethane	0.001	"	<	0.074	120	<	<	<
1,2-Dichlorobenzene	0.001	"	<	0.058	92	<	<	<
1,3-Dichlorobenzene	0.001	"	<	0.059	94	<	<	<
1,4-Dichlorobenzene	0.001	"	<	0.059	95	<	<	<
Dichlorobromomethane	0.001	"	<	0.060	97	<	<	<
1,1-Dichloroethane	0.001	"	<	0.059	95	<	<	<
1,2-Dichloroethane	0.001	"	<	0.060	97	<	<	<
1,1-Dichloroethene	0.001	"	<	0.061	98	<	<	<
cis-1,2-Dichloroethene	0.001	"	<	0.061	98	<	<	<
trans-1,2-Dichloroethene	0.001	"	<	0.061	98	<	<	<
1,2-Dichloropropane	0.001	"	<	0.059	94	<	<	<
cis-1,3-Dichloropropene	0.001	"	<	0.058	93	<	<	<
trans-1,3-Dichloropropene	0.001	"	<	0.055	89	<	<	<
Ethylbenzene	0.001	"	<	0.063	100	<	<	<
2-Hexanone	0.005	"	<	0.061	97	<	<	<
Dichloromethane	0.020	"	<	0.058	93	<	<	<
4-Methyl-2-Pentanone	0.005	"	<	0.061	97	<	<	<
Methyl-t-butylether	0.001	"	<	NS	-	<	<	<
Styrene	0.001	"	<	0.065	100	<	<	<
1,1,2,2-Tetrachloroethane	0.001	"	<	0.054	87	<	<	<
Tetrachloroethene	0.001	"	<	0.063	100	<	<	<
Toluene	0.001	"	<	0.059	95	0.002	0.003	0.004
1,1,1-Trichloroethane	0.001	"	<	0.063	100	<	<	<
1,1,2-Trichloroethane	0.001	"	<	0.058	93	<	<	<
Trichloroethene	0.001	"	<	0.061	98	<	<	<
Trichlorofluoromethane	0.001	"	<	0.060	95	<	<	<
Vinyl Acetate	0.005	"	<	NS	-	<	<	<
Vinyl Chloride	0.001	"	<	0.060	96	<	<	<
m&p-Xylene	0.001	"	<	0.13	100	0.003	0.003	0.004
o-Xylene	0.001	"	<	0.061	97	0.002	0.002	0.002
Surrogate Recoveries		%						
d4-1,2-Dichloroethane			80	87	87	79	77	83
d8-Toluene			88	94	94	96	95	84
Bromofluorobenzene			94	102	102	72	72	94
d10-Ethylbenzene			98	104	104	59	65	40

PASC - Certificate of Analysis

	Client ID:		Method Blank	Blank Spike #1	Blank Spike #1	Blank Spike #2	Blank Spike #2
	Lab No.:		050641 04	050641 04	050641 04	050641 04	050641 04
	Date Sampled:		-	-	-	-	-
Component	**MDL**	**Units**			% Recoveries		% Recoveries
Naphthalene	0.09	mg/kg	<0.18	3.4	85	3.6	90
Acenaphthene	0.07	"	<0.14	3.4	84	3.6	89
Fluorene	0.04	"	<0.08	3.4	84	3.5	89
Phenanthrene	0.03	"	<0.06	3.6	89	3.7	92
Anthracene	0.06	"	<0.12	3.5	86	3.5	88
Fluoranthene	0.06	"	<0.12	3.6	89	3.7	92
Pyrene	0.04	"	<0.08	3.8	96	4.0	99
Benz(a)anthracene	0.05	"	<0.10	3.5	87	3.6	91
Chrysene	0.04	"	<0.08	3.7	93	3.8	94
Benzo(b)fluoranthene	0.04	"	<0.08	3.5	88	3.5	89
Benzo(k)fluoranthene	0.04	"	<0.08	3.8	95	3.9	98
Benzo(a)pyrene	0.05	"	<0.10	3.4	86	3.5	88
Indeno(1,2,3-cd)pyrene	0.06	"	<0.12	3.2	80	3.3	83
Dibenzo(ah)anthracene	0.05	"	<0.10	3.1	77	3.3	82
Benzo(ghi)perylene	0.06	"	<0.12	3.2	80	2.6	65
Surrogate Recoveries		%					
d5-Nitrobenzene			79	79	79	83	83
2-Fluorobiphenyl			86	84	84	87	87
d14-p-Terphenyl			87	90	90	92	92

PASC - Certificate of Analysis

Component	*Client ID:* / *Lab No.:* / *Date Sampled:* MDL	Units	NAPL Area#3 SE-Comp 050642 04 09-Aug-2004	NAPL Area#3 SE-Comp 050642 04 09-Aug-2004 M. Spike	NAPL Area#3 SE-Comp 050642 04 09-Aug-2004 MS % Rec.	NAPL Area#3 SE-Comp 050642 04 09-Aug-2004 MS Dup	NAPL Area#3 SE-Comp 050642 04 09-Aug-2004 MSD % Rec.	NAPL Area#3 SE-Bottm 050643 04 09-Aug-2004
Naphthalene	0.09	mg/kg	0.53	3.9	76	3.5	64	2.2
Acenaphthene	0.07	"	0.27	4.2	89	3.8	76	0.14
Fluorene	0.04	"	0.28	4.3	93	3.9	78	0.22
Phenanthrene	0.03	"	3.1	7.9	110	6.4	72	0.17
Anthracene	0.06	"	0.84	4.8	91	4.2	73	<
Fluoranthene	0.06	"	5.7	11	120	8.6	63	0.15
Pyrene	0.04	"	5.1	11	120	8.7	75	0.15
Benz(a)anthracene	0.05	"	3.3	8.2	110	7.0	80	0.08
Chrysene	0.04	"	3.5	7.9	100	7.0	75	0.10
Benzo(b)fluoranthene	0.04	"	3.6	9.1	130	8.0	96	0.09
Benzo(k)fluoranthene	0.04	"	3.1	6.3	73	6.2	67	0.09
Benzo(a)pyrene	0.05	"	3.4	7.7	98	6.9	76	0.10
Indeno(1,2,3-cd)pyrene	0.06	"	2.8	7.7	110	7.1	94	0.08
Dibenzo(ah)anthracene	0.05	"	0.46	5.9	120	5.6	110	<
Benzo(ghi)perylene	0.06	"	2.0	5.1	71	6.7	100	0.16
Surrogate Recoveries		%						
d5-Nitrobenzene			61	67	67	61	61	55
2-Fluorobiphenyl			71	79	79	74	74	66
d14-p-Terphenyl			83	89	89	81	81	78

Batch Code:	**0813MC03**
STARS - VOC	050641 04
	050642 04
	050643 04
Date Analysed:	04/08/13
Date Prepared:	04/08/13
Batch Code:	**0816SPA2**
STARS - SVOC	050641 04
	050642 04
	050643 04
Date Analysed:	04/08/17
Date Prepared:	04/08/16

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

CLIENT INFORMATION

Company Name: NWEC+C, Inc
Project Manager: Ross Savage
Address: 3553 Cattendon Road
Cattendon, NY 14038
Phone #: (716) 937-6527 Fax #: 937-9380
Sampled by: Corry Haaf

MB 50641

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
50642	NAPL Area #3 Southeast Corner Sidewall Comp	2	Soil	8/9/04		X	X	
43	NAPL Area #3 Southeast Corner Bottom	2	Soil	8/9/04		X	X	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☐
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days

PROJECT INFORMATION

Project #: Union Ship Canal
Site: Union Ship Canal
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

Client Signature:
Affiliation:
Date/Time: 8/10/04

Received By:
Affiliation: PSC
Date/Time: 8-16-4 7:25

Rec'd By:
Date/Time

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

TOTAL P.06

APPENDIX G

NAPL AREAS ADDITIONAL PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS AND DISPOSAL FACILITY APPROVAL

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No.: N/A

Lab Project No.: 04-0577
Sample Type: Solid
Method: SW846 9045C
Date(s) Sampled: 02/27/2004
Date Received: 03/02/2004
Date Analyzed: 03/02/2004

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
2519	N/A	Additional NAPL Area	9.72

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:040577.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 04-0577

Sample Type: Solid
Method: SW846 1010

Date(s) Sampled: 02/27/2004
Date Received: 03/02/2004
Date Analyzed: 03/09/2004

Laboratory Report for Flashpoint Analysis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
2519	N/A	Additional NAPL Area	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:040577.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: NWEC&C, Inc.

Client Job Site: Union Ship Canal
Client Job No.: N/A

Field Location: Additional NAPL Area

Lab Project No.: 04-0577
Lab Sample No.: 2519

Sample Type: Soil

Date Sampled: 02/29/2004
Date Received: 03/02/2004

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	03/04/2004	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	03/10/2004	SW846, 7.3	20 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reactivity04-0577.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0577
		Lab Sample Number:	2519
Client Job Number:	N/A		
Field Location:	Additional NAPL Area	**Date Sampled:**	02/27/2004
Field ID Number:	N/A	**Date Received:**	03/02/2004
Sample Type:	Soil	**Date Analyzed:**	03/11/2004

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.668
Aroclor 1221	ND< 0.668
Aroclor 1232	ND< 0.668
Aroclor 1242	ND< 0.668
Aroclor 1248	ND< 0.668
Aroclor 1254	ND< 0.668
Aroclor 1260	ND< 0.668

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040577P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Additional NAPL Area
Field ID No.: N/A

Lab Project No.: 04-0577
Lab Sample No.: 2519
Sample Type: TCLP Extract
Date Sampled: 02/27/2004
Date Received: 03/02/2004

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	03/04/2004	EPA 6010	<0.100	5.0
Barium	03/04/2004	EPA 6010	0.840	100.0
Cadmium	03/04/2004	EPA 6010	<0.025	1.0
Chromium	03/04/2004	EPA 6010	<0.050	5.0
Lead	03/04/2004	EPA 6010	<0.100	5.0
Mercury	03/09/2004	EPA 7470	<0.0020	0.2
Selenium	03/04/2004	EPA 6010	<0.100	1.0
Silver	03/04/2004	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0577
		Lab Sample Number:	2519
Client Job Number:	N/A		
Field Location:	Additional NAPL Area	**Date Sampled:**	02/27/2004
Field ID Number:	N/A	**Date Received:**	03/02/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	03/04/2004

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 18326.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040577S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0577
		Lab Sample Number:	2519
Client Job Number:	N/A		
Field Location:	Additional NAPL Area	**Date Sampled:**	02/27/2004
Field ID Number:	N/A	**Date Received:**	03/02/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	03/05/2004

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040577p2.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT FOR HERBICIDE ANALYSIS

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No: N/A
Field Location: Additional NAPL Area

Lab Project No: 04-0577
Lab Sample No: 2519
Sample Type: TCLP Extract
Date Sampled: 02/29/2004
Date Received: 03/02/2004
Date Analyzed: 03/10/2004

Parameter	Result (mg/l)	Regulatory Limit (mg/l)
2,4,5-TP (Silvex)	ND<0.2	1.0
2,4-D	ND<2.0	10.0

Analytical Method: SW1311/8151 *ELAP ID: 10709*

Comments: ND denotes Non Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Herbicides04-0577.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C, Inc.

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0577
		Lab Sample Number:	2519
Client Job Number:	N/A		
Field Location:	Additional NAPL Area	**Date Sampled:**	02/27/2004
Field ID Number:	N/A	**Date Received:**	03/02/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	03/10/2004

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: 19652.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040577V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:		
COMPANY:	COMPANY:	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	ADDRESS:		
CITY: STATE: ZIP:	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:	PHONE: FAX:	STD	OTHER
PROJECT NAME/SITE NAME:	ATTN:	1 2 3 5	
	COMMENTS:		

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS										REMARKS	PARADIGM LAB SAMPLE NUMBER				
1					Additional NAPL Area	Soil	2	✓														
2					Soil to be Excavated																	
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:	CONTAINER TYPE:	PRESERVATIONS:	HOLDING TIME:	TEMPERATURE:
	✓	✓	✓	10C

Sampled By:	Date/Time:	Relinquished By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Received By:	Date/Time:	Received @ Lab By:	Date/Time:

Total Cost:

P.I.F.

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	19-May-2004
Date Reported:	03-Jun-2004
Submission No.:	4E0777
Sample No.:	028385-028387

NOTES: ***'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

(1) MDL's Raised due to matrix interference
(2) Insufficient sample
(3) Outside Statistical Control - Data Within Acceptance Limits (g-BHC)
(4) Surrogate Recovery Outside Acceptable Limits (Decachlorobiphenyl)

Certified by: M.C

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

Component	MDL	Units	Additional NAPL Area 028387 04 18-May-2004	Additional NAPL Area 028387 04 18-May-2004 Duplicate	Additional NAPL Area 028387 04 18-May-2004 M. Spike	Additional NAPL Area 028387 04 18-May-2004 MS % Rec.	Additional NAPL Area 028387 04 18-May-2004 MS Dup	Additional NAPL Area 028387 04 18-May-2004 MSD % Rec.
Client ID:								
Lab No.:								
Date Sampled:								
pH after 3.5 ml of 1N HCl addition			4.18	-	-	-	-	-
pH after extraction (semi-vols/metals)			6.35	-	-	-	-	-
pH initial (5g + 96.5ml water)			9.22	-	-	-	-	-
pH of extraction fluid (semi-vols/metals)			4.92	-	-	-	-	-
pH after extraction (volatiles)			6.27	-	-	-	-	-
pH of extraction fluid (volatiles)			4.92	-	-	-	-	-
Soil pH measured in water			8.15	8.13	-	-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	-	-	-	-	-
Sulphide (Reactive)	20000	"	80000	-	-	-	-	-
			(2)					
Flash Point	0.1	°C	**Pending**	-	-	-	-	-
			(1)					
Aroclor-1016	38	ug/kg	<130	-	360	95	340	84
Aroclor-1221	41	"	<88	-	<	<	<	<
Aroclor-1232	38	"	<88	-	<	<	<	<
Aroclor-1242	50	"	<130	-	<	<	<	<
Aroclor-1248	31	"	<180	-	<	<	<	<
Aroclor-1254	59	"	<260	-	<	<	<	<
Aroclor-1260	31	"	<350	-	490	130	470	110
Aroclor-1262	31	"	<350	-	<	<	<	<
Aroclor-1268	49	"	<180	-	<	<	<	<
Total PCB	59	"	<350	-	850	110	810	100
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			78	-	99	99	86	86
Decachlorobiphenyl			75	-	97	97	79	79

Component	MDL	Units	Method Blank	Blank Spike	% Recovery
Client ID:			Blank	Spike	Recovery
Lab No.:			028385 04	028385 04	028385 04
Date Sampled:			18-May-2004	18-May-2004	18-May-2004
pH after 3.5 ml of 1N HCl addition			-	-	-
pH after extraction (semi-vols/metals)			-	-	-
pH initial (5g + 96.5ml water)			-	-	-
pH of extraction fluid (semi-vols/metals)			-	-	-
pH after extraction (volatiles)			-	-	-
pH of extraction fluid (volatiles)			-	-	-
Soil pH measured in water			-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	25000	100
Sulphide (Reactive)	20000	"	<	-	-
Flash Point	0.1	°C	-	-	-
Aroclor-1016	38	ug/kg	<	390	97
Aroclor-1221	41	"	<	<	<
Aroclor-1232	38	"	<	<	<
Aroclor-1242	50	"	<	<	<
Aroclor-1248	31	"	<	<	<
Aroclor-1254	59	"	<	<	<
Aroclor-1260	31	"	<	400	100
Aroclor-1262	31	"	<	<	<
Aroclor-1268	49	"	<	<	<
Total PCB	59	"	<	790	98
Surrogate Recoveries		%			
4,4'-Dibromooctaflourobiphenyl			95	103	103
Decachlorobiphenyl			74	79	79

PASC - Certificate of Analysis

	Client ID:		Additional NAPL utnv	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		028388 04	028386 04	028386 04	028386 04	028386 04	028386 04
	Date Sampled:		27-May-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**						
Mercury	0.50	ug/L	<	<	11	110	-	-
Arsenic	0.250	mg/L	<	<	1.3	100	-	-
Barium	0.100	"	0.35	<	2.5	100	-	-
Cadmium	0.050	"	<	<	1.2	96	-	-
Chromium	0.500	"	<	<	2.4	97	-	-
Lead	0.500	"	<	<	2.4	97	-	-
Selenium	0.100	"	<	<	1.3	110	-	-
Silver	0.500	"	<	<	1.3	100	-	-
				(3)(4)				
a-Chlordane	0.005	ug/L	<0.026	<	0.11	92	0.12	100
g-Chlordane	0.009	"	<0.039	<	0.12	100	0.12	99
Endrin	0.011	"	<0.048	<	0.14	120	0.15	130
Heptachlor	0.005	"	<0.026	<	0.12	100	0.095	79
Heptachlor Epoxide	0.012	"	<0.061	<	0.13	110	0.16	130
Lindane	0.007	"	<0.039	<	0.14	110	0.13	110
Methoxychlor	0.018	"	<0.14	<	0.51	110	0.64	130
Toxaphene	0.116	"	<0.18	<	NS	-	NS	-
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			94	67	78	78	83	83
Decachlorobiphenyl			103	93	92	92	37	37
2,4-D (via 8150)	0.39	ug/L	<1.4	<	2.1	110	2.1	100
2,4,5-TP	0.04	"	<0.15	<	0.21	110	0.15	76
Surrogate Recoveries		%						
2,3-D			107	72	76	76	95	95

	Client ID:		Additional NAPL utv	Method Blank	Blank Spike	% Recovery
	Lab No.:		028389 04	028386 04	028386 04	028386 04
	Date Sampled:		27-May-2004	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**				
Benzene	0.5	ug/L	<100	<100	9800	98
2-Butanone	5.0	"	<1000	<1000	9900	99
Carbon Tetrachloride	0.7	"	<140	<140	11000	110
Chlorobenzene	0.6	"	<120	<120	9900	99
Chloroform	0.3	"	<60	<60	11000	110
1,2-Dichloroethane	0.3	"	<60	<60	11000	110
1,1-Dichloroethene	0.7	"	<140	<140	9600	96
Tetrachloroethene	0.5	"	<100	<100	10000	100
Trichloroethene	0.3	"	<60	<60	9800	98
Vinyl Chloride	0.9	"	<180	<180	13000	130
1,4-Dichlorobenzene	1.6	"	<320	<320	9800	98
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			106	104	105	105
d8-Toluene			100	102	101	101
1,4-Bromofluorobenzene			102	103	105	105

	Client ID:		Additional NAPL utnv	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		028388 04	028386 04	028386 04	028386 04	028386 04	028386 04
	Date Sampled:		27-May-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**						
Pyridine	5.0	ug/L	<	<	NS	-	NS	-
o-Cresol	1.7	"	<	<	19	75	19	74
m&p-Cresol	3.5	"	<	<	19	74	18	72
1,4-Dichlorobenzene	2.0	"	<	<	7.9	32	9.0	36
2,4-Dinitrotoluene	0.5	"	<	<	23	93	24	97
Nitrobenzene	2.0	"	<	<	21	84	22	88
Pentachlorophenol	1.1	"	<	<	22	87	22	86
2,4,5-Trichlorophenol	0.6	"	<	<	21	83	22	87
2,4,6-Trichlorophenol	1.2	"	<	<	22	87	22	89
Hexachloroethane	2.0	"	<	<	3.9	16	4.8	19
Hexachlorobutadiene	2.0	"	<	<	3.3	13	4.0	16
Hexachlorobenzene	2.0	"	<	<	23	90	23	91
Surrogate Recoveries		%						
d5-Phenol			33	34	32	32	32	32
d5-Nitrobenzene			90	90	83	83	84	84
2-Fluorobiphenyl			75	72	64	64	61	61
2,4,6-Tribromophenol			85	83	80	80	85	85
d-14-p-Terphenyl			92	99	85	85	88	88

Batch Code:	**0526RGA1**
pH after 3.5 ml of 1N HCl addition	028387 04
Date Analysed:	04/05/27
Date Prepared:	04/05/26
Batch Code:	**0526RGV1**
pH after extraction (volatiles)	028387 04
Date Analysed:	04/05/27
Date Prepared:	04/05/26
Batch Code:	**0525VPH1**
Soil pH measured in water	028387 04
Date Analysed:	04/05/27
Date Prepared:	04/05/25
Batch Code:	**0521FSA1**
Cyanide (Reactive)	028385 04
	028387 04
Date Analysed:	04/05/25
Date Prepared:	04/05/21
Batch Code:	**0521BAA1**
Sulphide (Reactive)	028385 04
	028387 04
Date Analysed:	04/05/21
Date Prepared:	04/05/21
Batch Code:	
Date Analysed:	
Date Prepared:	
Batch Code:	**0526NDU1**
Aroclor-1016	028385 04
	028387 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26

Batch Code:	**0527MBL1**
Mercury	028386 04
	028388 04
Date Analysed:	04/05/27
Date Prepared:	04/05/27
Batch Code:	**0527STL1**
Arsenic	028386 04
	028388 04
Date Analysed:	04/05/27
Date Prepared:	04/05/27
Batch Code:	**0531NDS1**
a-Chlordane	028386 04
	028388 04
Date Analysed:	04/06/01
Date Prepared:	04/05/31
Batch Code:	**0531NDS1**
2,4-D (via 8150)	028386 04
	028388 04
Date Analysed:	04/06/01
Date Prepared:	04/05/31
Batch Code:	**0531DJ01**
Benzene	028386 04
	028389 04
Date Analysed:	04/05/31
Date Prepared:	04/05/31
Batch Code:	**0528NCS1**
Pyridine	028386 04
	028388 04
Date Analysed:	04/05/31
Date Prepared:	04/05/28
Batch Code:	**0528NCS1**
Hexachloroethane	028386 04
	028388 04
Date Analysed:	04/05/31
Date Prepared:	04/05/28

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NWEC+C
Project Manager: Russ Savage
Address: 3553 Crittenden Rd.
Crittenden, NY 14038
Phone #(716)937-6527 Fax #: 937-9360
Sampled by: Tom

MSS - 028385
MBW - 028386

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	Full TCLP Series + Pests, Herbs.	Ignitability (Flashpoint)	Corrosivity (pH)	Reactivity	8082 PCB						Level of contamination (low, high, unknown)
028387-89	Additional NAPL Area Soil	1	Soil	5/18/04		X	X	X	X	X			250ml			

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: Union Ship Canal
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

Client Signature: Greg Weber
Affiliation: ____
Date/Time: ____

Received By: [signature]
Affiliation: PSC
Date/Time: 5-19-4 8:20

Rec'd By: ____
Date/Time ____

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

WHITE - LAB / YELLOW - CLIENT

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	29-May-2004
Date Reported:	12-Jul-2004
Submission No.:	4E1225
Sample No.:	030880-030883

NOTES: ***"-" = not analysed "<" = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

(1) Surrogate Recovery Outside Acceptable Limits

Certified by: M. Challis

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

	Client ID:		Method Blank TCLP	Blank Spike TCLP	% Recovery TCLP	Blank Spike Dup. TCLP	% Recovery TCLP	NAPL Area S. #2 TCLP	NAPL Area S. #2 TCLP
	Lab No.:		030880 04	030880 04	030880 04	030880 04	030880 04	030882 04	030882 04
	Date Sampled:		01/40/01	01/40/01	01/40/01	01/40/01	01/40/01	01-Jun-2004	01-Jun-2004
Component	**MDL**	**Units**							Duplicate
Mercury	0.50	ug/L	<	-	-	-	-	<	-
Arsenic	0.250	mg/L	<	1.3	100	-	-	<	<
Barium	0.100	"	<	2.6	100	-	-	0.37	0.37
Cadmium	0.050	"	<	1.3	100	-	-	<	<
Chromium	0.500	"	<	2.6	100	-	-	<	<
Lead	0.500	"	<	2.6	100	-	-	<	<
Selenium	0.100	"	<	1.3	100	-	-	<	<
Silver	0.500	"	<	1.3	100	-	-	<	<
a-Chlordane	0.005	ug/L	<	0.13	110	0.13	110	<0.025	-
g-Chlordane	0.009	"	<	0.12	100	0.13	110	<0.038	-
Endrin	0.011	"	<	0.12	100	0.14	120	<0.046	-
Heptachlor	0.005	"	<	0.10	85	0.11	93	<0.025	-
Heptachlor Epoxide	0.012	"	<	0.13	110	0.12	97	<0.058	-
Lindane	0.007	"	<	0.13	110	0.14	110	<0.038	-
Methoxychlor	0.018	"	<	0.44	92	0.53	110	<0.14	-
Toxaphene	0.116	"	<	NS	-	NS	-	<0.17	-
Surrogate Recoveries		%							
4,4'-Dibromooctaflourobiphenyl			79	50	50	47	47	69	-
Decachlorobiphenyl			90	84	84	89	89	100	-
			(1)						
2,4-D (via 8150)	0.39	ug/L	<	2.7	96	2.8	100	<2.7	-
2,4,5-TP	0.04	"	<	0.23	97	0.24	100	<0.28	-
Surrogate Recoveries		%							
2,3-D			44	77	77	89	89	93	-

	Client ID:		NAPL Area S. #2 TCLP	NAPL Area S. #2 TCLP
	Lab No.:		030882 04	030882 04
	Date Sampled:		01-Jun-2004	01-Jun-2004
Component	**MDL**	**Units**	M. Spike	MS % Rec.
Mercury	0.50	ug/L	-	-
Arsenic	0.250	mg/L	1.2	99
Barium	0.100	"	2.9	99
Cadmium	0.050	"	1.2	96
Chromium	0.500	"	2.4	95
Lead	0.500	"	2.4	95
Selenium	0.100	"	1.3	100
Silver	0.500	"	1.2	99
a-Chlordane	0.005	ug/L	-	-
g-Chlordane	0.009	"	-	-
Endrin	0.011	"	-	-
Heptachlor	0.005	"	-	-
Heptachlor Epoxide	0.012	"	-	-
Lindane	0.007	"	-	-
Methoxychlor	0.018	"	-	-
Toxaphene	0.116	"	-	-
Surrogate Recoveries		%		
4,4'-Dibromooctaflourobiphenyl			-	-
Decachlorobiphenyl			-	-
2,4-D (via 8150)	0.39	ug/L	-	-
2,4,5-TP	0.04	"	-	-
Surrogate Recoveries		%		
2,3-D			-	-

	Client ID:		NAPL Area S. #2 TCLP	NAPL Area S. #2 TCLP	Method Blank TCLP	Blank Spike TCLP	% Recovery TCLP	Blank Spike Dup. TCLP	% Recovery TCLP
	Lab No.:		030882 04	030883 04	030880 04	030880 04	030880 04	030880 04	030880 04
	Date Sampled:		01-Jun-2004	01-Jun-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**							
Benzene	0.5	ug/L	-	<100	<100	9900	99	-	-
2-Butanone	5.0	"	-	<1000	<1000	10000	100	-	-
Carbon Tetrachloride	0.7	"	-	<140	<140	11000	110	-	-
Chlorobenzene	0.6	"	-	<120	<120	9900	99	-	-
Chloroform	0.3	"	-	<60	<60	11000	110	-	-
1,2-Dichloroethane	0.3	"	-	<60	<60	11000	110	-	-
1,1-Dichloroethene	0.7	"	-	<140	<140	9700	97	-	-
Tetrachloroethene	0.5	"	-	<100	<100	10000	100	-	-
Trichloroethene	0.3	"	-	<60	<60	10000	100	-	-
Vinyl Chloride	0.9	"	-	<180	<180	14000	140	-	-
1,4-Dichlorobenzene	1.6	"	-	<320	<320	9800	98	-	-
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			-	110	105	103	103	-	-
d8-Toluene			-	99	100	101	101	-	-
1,4-Bromofluorobenzene			-	102	101	109	109	-	-
Pyridine	5.0	ug/L	<	-	<	NS	-	NS	-
o-Cresol	1.7	"	<	-	<	11	43	14	55
m&p-Cresol	3.5	"	<	-	<	9.2	37	12	48
1,4-Dichlorobenzene	2.0	"	<	-	<	11	44	12	46
2,4-Dinitrotoluene	0.5	"	<	-	<	23	93	23	92
Nitrobenzene	2.0	"	<	-	<	19	76	22	89
Pentachlorophenol	1.1	"	<	-	<	28	110	29	120
2,4,5-Trichlorophenol	0.6	"	<	-	<	20	78	21	82
2,4,6-Trichlorophenol	1.2	"	<	-	<	21	82	22	86
Hexachloroethane	2.0	"	<	-	<	7.1	28	7.8	31
Hexachlorobutadiene	2.0	"	<	-	<	5.5	22	7.3	29
Hexachlorobenzene	2.0	"	<	-	<	24	94	24	95
Surrogate Recoveries		%							
d5-Phenol			12	-	11	15	15	21	21
d5-Nitrobenzene			63	-	64	75	75	87	87
2-Fluorobiphenyl			65	-	61	72	72	70	70
2,4,6-Tribromophenol			81	-	75	92	92	91	91
d-14-p-Terphenyl			60	-	74	94	94	94	94

	Client ID:		NAPL Area S. #2	NAPL Area S. #2	NAPL Area S. #2	NAPL Area S. #2	NAPL Area S. #2	NAPL Area S. #2
	Lab No.:		030881 04	030881 04	030881 04	030881 04	030881 04	030881 04
	Date Sampled:		28-May-2004	28-May-2004	28-May-2004	28-May-2004	28-May-2004	28-May-2004
Component	**MDL**	**Units**		Duplicate	M. Spike	MS % Rec.	MS Dup	MSD % Rec.
pH after 3.5 ml of 1N HCl addition			3.22	-	-	-	-	-
pH after extraction (semi-vols/metals)			6.37	-	-	-	-	-
pH initial (5g + 96.5ml water)			9.40	-	-	-	-	-
pH of extraction fluid (semi-vols/metals)			4.92	-	-	-	-	-
pH after extraction (volatiles)			6.27	-	-	-	-	-
pH of extraction fluid (volatiles)			4.92	-	-	-	-	-
Soil pH measured in water			8.49	8.54	-	-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	<1000	-	-	-	-
Sulphide (Reactive)	10000	"	34	-	-	-	-	-
Flash Point	0.1	C	did not flash <90	-	-	-	-	-
			(1)					
Aroclor-1016	38	ug/kg	<	-	200	55	220	56
Aroclor-1221	41	"	<	-	<	<	<	<
Aroclor-1232	38	"	<	-	<	<	<	<
Aroclor-1242	50	"	<	-	<	<	<	<
Aroclor-1248	31	"	<	-	<	<	<	<
Aroclor-1254	59	"	0.080	-	<	<	<	<
Aroclor-1260	31	"	<	-	290	80	310	81
Aroclor-1262	31	"	<	-	<	<	<	<
Aroclor-1268	49	"	<	-	<	<	<	<
Total PCB	59	"	0.080	-	500	67	530	69
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			60	-	50	50	58	58
Decachlorobiphenyl			56	-	49	49	56	56

PASC - Certificate of Analysis

			Method	Blank	%
	Client ID:		Blank	Spike	Recovery
	Lab No.:		030879 04	030879 04	030879 04
	Date Sampled:		28-May-2004	28-May-2004	28-May-2004
Component	**MDL**	**Units**			
pH after 3.5 ml of 1N HCl addition			-	-	-
pH after extraction (semi-vols/metals)			-	-	-
pH initial (5g + 96.5ml water)			-	-	-
pH of extraction fluid (semi-vols/metals)			-	-	-
pH after extraction (volatiles)			-	-	-
pH of extraction fluid (volatiles)			-	-	-
Soil pH measured in water			-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	26000	100
Sulphide (Reactive)	10000	"	<	<	80
Flash Point	0.1	C	-	-	-
Aroclor-1016	38	ug/kg	<	320	80
Aroclor-1221	41	"	<	<	<
Aroclor-1232	38	"	<	<	<
Aroclor-1242	50	"	<	<	<
Aroclor-1248	31	"	<	<	<
Aroclor-1254	59	"	<	<	<
Aroclor-1260	31	"	<	340	85
Aroclor-1262	31	"	<	<	<
Aroclor-1268	49	"	<	<	<
Total PCB	59	"	<	660	82
Surrogate Recoveries		%			
4,4'-Dibromooctaflourobiphenyl			99	89	89
Decachlorobiphenyl			71	65	65

Batch Code:	**0602MBL1**
Mercury	030880 04
	030882 04
Date Analysed:	04/06/03
Date Prepared:	04/06/02
Batch Code:	**0601STL1**
Arsenic	030880 04
	030882 04
Date Analysed:	04/06/01
Date Prepared:	04/06/01
Batch Code:	**0601MGS1**
a-Chlordane	030880 04
	030882 04
Date Analysed:	04/06/01
Date Prepared:	04/06/01
Batch Code:	**0603NDS1**
2,4-D (via 8150)	030880 04
	030882 04
Date Analysed:	04/06/03
Date Prepared:	04/06/03
Batch Code:	**0601DJ01**
Benzene	030880 04
	030883 04
Date Analysed:	04/06/01
Date Prepared:	04/06/01
Batch Code:	**0601NCS1**
Pyridine	030880 04
	030882 04
Date Analysed:	04/06/03
Date Prepared:	04/06/01
Batch Code:	**0601NCS1**
Hexachloroethane	030880 04
	030882 04
Date Analysed:	04/06/03
Date Prepared:	04/06/01

Batch Code:	**0531RGA1**
pH after 3.5 ml of 1N HCl addition	030881 04
Date Analysed:	04/06/01
Date Prepared:	04/05/31
Batch Code:	**0531RGV1**
pH after extraction (volatiles)	030881 04
Date Analysed:	04/06/01
Date Prepared:	04/05/31
Batch Code:	**0531VPH1**
Soil pH measured in water	030881 04
Date Analysed:	04/06/01
Date Prepared:	04/05/31
Batch Code:	**0531FSA1**
Cyanide (Reactive)	030879 04
	030881 04
Date Analysed:	04/05/31
Date Prepared:	04/05/31
Batch Code:	**0531FSA1**
Sulphide (Reactive)	030879 04
	030881 04
Date Analysed:	04/05/31
Date Prepared:	04/05/31
Batch Code:	**0601RGA1**
Flash Point	030881 04
Date Analysed:	04/06/01
Date Prepared:	04/06/01
Batch Code:	**0603NDU1**
Aroclor-1016	030879 04
	030881 04
Date Analysed:	04/06/03
Date Prepared:	04/06/03

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

CLIENT INFORMATION

Company Name: NWEC+C, Inc
Project Manager: Ross Swaya / Greg Weber
Address: 3553 Crittenden Rd
Crittenden, NY 14038
Phone #: (716) 937-6527 Fax #: (716) 937-9360
Sampled by: Tom Wall

MSC - 030879
MBW - 030880

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	full TCLP including Rests + Herbs	Characteristics	Ignitability	Reactability (Both) + C + S	Corrosivity	PCB's					Level of contamination (low, high, unknown)
030881-83	Additional NAPL Area Soil #2	2	Soil	5/28/04		X		X	X	X	X				250 mL x2	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- ~~RUSH 5 Business Days~~ ☒ NO
- RUSH 2 Business Days ☒
- ~~RUSH 1 Business Days~~ ☐
- Other Business Days ____

Client Signature: [signature]
Affiliation: NW
Date/Time: 5/28/04 10:30 AM

PROJECT INFORMATION

Project #: ____
Site: Union Ship Canal
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: Kevin Z / Mike C

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

"RUSH - 2 Days"

Received By: Kevin Z
Affiliation: PSC
Date/Time: 5/28/04 10:30AM

REMARKS RUSH - 2 Days

Rec'd By: [signature]
Date/Time 04/05/29 1200

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

WHITE - LAB / YELLOW - CLIENT

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6192
Client Job Number:	N/A		
Field Location:	NAPL Area East Stockpile	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	Soil	**Date Analyzed:**	06/30/2004

PHC Classification	Results in ug / Kg
Petroleum Hydrocarbon	ND< 8,080

ELAP Number 10958 Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6193
Client Job Number:	N/A		
Field Location:	NAPL Area West Stockpile	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	Soil	**Date Analyzed:**	06/30/2004

PHC Classification	Results in ug / Kg
Medium Weight PHC as: Diesel Fuel	295,000
Heavy Weight PHC as: Lube Oil	250,000

ELAP Number 10958 Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger, Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6194
Client Job Number:	N/A		
Field Location:	Additional NAPL Stockpile (E&W)	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	Soil	**Date Analyzed:**	06/30/2004

PHC Classification	Results in ug / Kg
Medium Weight PHC as: Diesel Fuel	17,600
Heavy Weight PHC as: Lube Oil	16,600

ELAP Number 10958 Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6194
Client Job Number:	N/A		
Field Location:	Additional NAPL Stockpile (E&W)	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/01/2004

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L*
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	300
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	200
Pyridine	ND< 40.0	500

Acids	Results in ug / L	Regulatory Limits in ug / L*
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2000

ELAP Number 10958 Method: EPA 8270C Data File: 20082.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger; Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6194
Client Job Number:	N/A		
Field Location:	Additional NAPL Stockpile (E&W)	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	06/30/2004

Pesticide Identification	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC	ND< 1.00	400
Chlordane	ND< 1.00	30.0
Endrin	ND< 1.00	20.0
Heptachlor	ND< 1.00	8.00
Heptachlor Epoxide	ND< 1.00	8.00
Methoxychlor	ND< 1.00	10000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

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041775P1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	N/A	**Lab Project Number:**	04-1775
		Lab Sample Number:	6194
Client Job Number:	N/A		
Field Location:	Additional NAPL Stockpile (E&W)	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/01/2004

Halocarbons	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 22346.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C

Client Job Site: N/A

Client Job No.: N/A

Lab Project No.: 04-1775

Sample Type: Soil
Method: SW846 1010

Date(s) Sampled: 06/28/2004
Date Received: 06/28/2004
Date Analyzed: 06/29/2004

Laboratory Report for Flashpoint Analysis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
6194	N/A	Additional NAPL Stockpile (E&W)	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

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File ID:041775.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client:	NWEC&C	**Lab Project No.:**	04-1775
		Lab Sample No.:	6194
Client Job Site:	N/A		
		Sample Type:	TCLP Extract
Client Job No.:	N/A		
		Date Sampled:	06/28/2004
Field Location:	Additional NAPL Stockpile (E&W)	**Date Received:**	06/28/2004
Field ID No.:	N/A		

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	06/30/2004	EPA 6010	<0.100	5.0
Barium	06/30/2004	EPA 6010	0.395	100.0
Cadmium	06/30/2004	EPA 6010	<0.025	1.0
Chromium	06/30/2004	EPA 6010	<0.050	5.0
Lead	06/30/2004	EPA 6010	<0.100	5.0
Mercury	06/29/2004	EPA 7470	<0.0020	0.2
Selenium	06/30/2004	EPA 6010	<0.100	1.0
Silver	06/30/2004	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

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File ID:041775.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C

Client Job Site: N/A

Client Job No.: N/A

Lab Project No.: 04-1775

Sample Type: Soil
Method: SW846 9045C

Date(s) Sampled: 06/28/2004
Date Received: 06/28/2004
Date Analyzed: 06/29/2004

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
6194	N/A	Additional NAPL Stockpile (E&W)	7.85

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

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File ID:041775.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: NWEC&C

Client Job Site: N/A
Client Job No.: N/A

Field Location: Additional NAPL Stockpile (E&W)

Lab Project No.: 04-1775
Lab Sample No.: 6194

Sample Type: Soil

Date Sampled: 6/28/2004
Date Received: 6/28/2004

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	6/30/2004	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	7/1/2004	SW846, 7.3	ND<10 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reactivity04-1775.xls

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 585-647-2530 FAX 585- 647-3311

TCLP Herbicides

Client:	NWEC&C	**Lab Project No:**	04-1775
		Lab Sample No:	6192
Client Job Site:	N/A	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	06/28/2004
Field Location:	NAPL Area East Stockpile	**Date Received:**	06/28/2004
Field ID No:	N/A	**Date Analyzed:**	07/01/2004

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB04-1775-1

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO

COMPANY: NWEC+C
ADDRESS: 3553 Cattenden Rd.
CITY: Cattenden STATE: New York ZIP:
PHONE: (716) 937-6527 FAX: 937-9360
ATTN:
COMMENTS:

INVOICE TO

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-1775
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) Need Results 7/1 PM
STD ☐ 1 ☐ 2 ☐ 3 ☐ 5 OTHER ☐

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TPH	Full TCLP	Ignitability	Corrosivity	Reactivity	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 6/28/04				NAPL Area East Stockpile	Soil	1	X						06192
2 6/28/04				NAPL Area West Stockpile	Soil	1	X						06193
3													06194
4 6/28/04				Additional NAPL	Soil	3	X	X	X	X	X		
5				Stockpile (E+W)									
6													
7													
8													
9													
10													

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ☐ 10°

Sampled By: James Davey Date/Time: 6/28/04 5:00
Relinquished By: Date/Time:
Received By: Date/Time:

Relinquished By: Date/Time:
Received By: Date/Time:

Received By: Date/Time: 6/28/04 11:30
Received @ Lab By: Kelly Crandall Date/Time: 6/28/04 1605

Total Cost:
P.I.F.

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C

Client Job Site: Destro
Union Ship Canal

Client Job No.: N/A

Lab Project No.: 04-1985

Sample Type: Soil
Method: SW846 9045C

Date(s) Sampled: 07/16/2004
Date Received: 07/16/2004
Date Analyzed: 07/21/2004

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
6848	N/A	Additional NAPL Area North	8.59
6849	N/A	Additional NAPL Area South	8.67

ELAP ID No.: 10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:041985.xls

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Flashpoint by Pensky-Martin Analysis Report

Client: NWEC&C, Inc.

Client Job Site:	Destro-Union Ship Canal	**Lab Project Number:**	04-1985
Client Job Number:	N/A	**Date Sampled:**	07/16/2004
		Date Received:	07/16/2004
Sample Type:	Soil	**Date Analyzed:**	07/21/2004

Lab Sample Number	Field Number	Field Location	Result (°C)
6848	N/A	Additional NAPL Area North	>70
6849	N/A	Additional NAPL Area South	>70

ELAP Number 10958

Method: SW846 1010

Comments: °C = degrees Centigrade

Signature: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 041985F1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC. 9 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C

Client Job Site: Destro-Union Ship Canal

Client Job No.: N/A

Lab Project No.: 04-1985

Sample Type: Soil
Analytical Method: SW846, 7.3.3
Date Sampled: 7/16/2004
Date Received: 7/16/2004
Date Analyzed: 7/22/2004

Lab Sample ID.	Client Sample ID.	Cyanide Reactivity (mg/kg)	Sulfide Reactivity (mg/kg)
6848	Additional NAPL Area North	ND<1 Non-Reactive	ND<10 Non-Reactive
6849	Additional NAPL Area South	ND<1 Non-Reactive	ND<10 Non-Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reactivity04-1985.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro - Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6848
Client Job Number:	N/A		
Field Location:	Additional NAPL Area North	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/20/2004

Compounds	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 22787.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
For: Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro - Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6849
Client Job Number:	N/A		
Field Location:	Additional NAPL Area South	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/20/2004

Compounds	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 22788.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
For: Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6848
Client Job Number:	N/A		
Field Location:	Additional NAPL Area North	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/23/2004

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	300
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	200
Pyridine	ND< 40.0	500

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2000

ELAP Number 10958 Method: EPA 8270C Data File: 20539.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6849
Client Job Number:	N/A		
Field Location:	Additional NAPL Area South	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/23/2004

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	300
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	200
Pyridine	ND< 40.0	500

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2000

ELAP Number 10958 Method: EPA 8270C Date File: 20540.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C
Client Job Site: Destro
Union Ship Canal
Client Job No.: N/A
Field Location: Additional NAPL Area North
Field ID No.: N/A

Lab Project No.: 04-1985
Lab Sample No.: 6848
Sample Type: TCLP Extract
Date Sampled: 07/16/2004
Date Received: 07/16/2004

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	07/21/2004	EPA 6010	<0.100	5.0
Barium	07/21/2004	EPA 6010	0.442	100.0
Cadmium	07/21/2004	EPA 6010	<0.025	1.0
Chromium	07/21/2004	EPA 6010	<0.050	5.0
Lead	07/21/2004	EPA 6010	<0.100	5.0
Mercury	07/21/2004	EPA 7470	<0.0020	0.2
Selenium	07/21/2004	EPA 6010	<0.100	1.0
Silver	07/21/2004	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: For: Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client:	NWEC&C	**Lab Project No.:**	04-1985
		Lab Sample No.:	6849
Client Job Site:	Destro Union Ship Canal	**Sample Type:**	TCLP Extract
Client Job No.:	N/A		
		Date Sampled:	07/16/2004
Field Location:	Additional NAPL Area South	**Date Received:**	07/16/2004
Field ID No.:	N/A		

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	07/21/2004	EPA 6010	<0.100	5.0
Barium	07/21/2004	EPA 6010	0.458	100.0
Cadmium	07/21/2004	EPA 6010	<0.025	1.0
Chromium	07/21/2004	EPA 6010	<0.050	5.0
Lead	07/21/2004	EPA 6010	<0.100	5.0
Mercury	07/21/2004	EPA 7470	<0.0020	0.2
Selenium	07/21/2004	EPA 6010	<0.100	1.0
Silver	07/21/2004	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____

For Bruce Hoogesteger, Technical Director

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File ID:041985.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT FOR HERBICIDE ANALYSIS

Client: NWEC&C, Inc.
Client Job Site: Destro-Union Ship Canal
Client Job No: N/A
Field Location: Additional NAPL Area North

Lab Project No: 04-1985
Lab Sample No: 6848
Sample Type: TCLP Extract
Date Sampled: 7/16/2004
Date Received: 7/16/2004
Date Analyzed: 7/20/2004

Parameter	Result (mg/l)	Regulatory Limit (mg/l)
2,4,5-TP (Silvex)	ND<0.2	1.0
2,4-D	ND<2.0	10.0

Analytical Method: SW1311/8151 *ELAP ID: 10709*

Comments: ND denotes Non Detected.

Approved By Technical Director: Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Herbicides04-1985.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT FOR HERBICIDE ANALYSIS

Client: NWEC&C, Inc.
Client Job Site: Destro-Union Ship Canal
Client Job No: N/A
Field Location: Additional NAPL Area South

Lab Project No: 04-1985
Lab Sample No: 6849
Sample Type: TCLP Extract
Date Sampled: 7/16/2004
Date Received: 7/16/2004
Date Analyzed: 7/20/2004

Parameter	Result (mg/l)	Regulatory Limit (mg/l)
2,4,5-TP (Silvex)	ND<0.2	1.0
2,4-D	ND<2.0	10.0

Analytical Method: SW1311/8151 *ELAP ID: 10709*

Comments: ND denotes Non Detected.

Approved By Technical Director: Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Herbicides04-1985.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro Union Ship CAnal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6848
Client Job Number:	N/A		
Field Location:	Additional NAPL Area North	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/22/2004

Pesticide Identification	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC	ND< 1.00	400
Chlordane	ND< 1.00	30.0
Endrin	ND< 1.00	20.0
Heptachlor	ND< 1.00	8.00
Heptachlor Epoxide	ND< 1.00	8.00
Methoxychlor	ND< 1.00	10000
Toxaphene	ND< 50.0	500

ELAP Number 10958

Method: EPA 8081

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: BH/preliminary
Bruce Hoogesteger; Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extract

Client: NWEC&C

Client Job Site:	Destro Union Ship CAnal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6849
Client Job Number:	N/A		
Field Location:	Additional NAPL Area South	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	07/22/2004

Pesticide Identification	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC	ND< 1.00	400
Chlordane	ND< 1.00	30.0
Endrin	ND< 1.00	20.0
Heptachlor	ND< 1.00	8.00
Heptachlor Epoxide	ND< 1.00	8.00
Methoxychlor	ND< 1.00	10000
Toxaphene	ND< 50.0	500

ELAP Number 10958

Method: EPA 8081

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: BH / preliminary

Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro-Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6848
Client Job Number:	N/A		
Field Location:	Additonal NAPL Area North	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	Soil	**Date Analyzed:**	07/21/2004

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.474
Aroclor 1221	ND< 0.474
Aroclor 1232	ND< 0.474
Aroclor 1242*	ND< 0.474
Aroclor 1248	ND< 0.474
Aroclor 1254	ND< 0.474
Aroclor 1260	ND< 0.474

ELAP Number 10958,*10249 Method: EPA 8082

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro-Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6849
Client Job Number:	N/A		
Field Location:	Additonal NAPL Area South	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	Soil	**Date Analyzed:**	07/21/2004

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.458
Aroclor 1221	ND< 0.458
Aroclor 1232	ND< 0.458
Aroclor 1242*	ND< 0.458
Aroclor 1248	ND< 0.458
Aroclor 1254	ND< 0.458
Aroclor 1260	ND< 0.458

ELAP Number 10958,*10249 Method: EPA 8082

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro-Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6848
Client Job Number:	N/A		
Field Location:	Additonal NAPL Area North	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	Soil	**Date Analyzed:**	07/22/2004

PHC Classification	Results in ug / Kg
Heavy Weight PHC as: Lube Oil	346,000

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

041985H1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro-Union Ship Canal	**Lab Project Number:**	04-1985
		Lab Sample Number:	6849
Client Job Number:	N/A		
Field Location:	Additonal NAPL Area South	**Date Sampled:**	07/16/2004
Field ID Number:	N/A	**Date Received:**	07/16/2004
Sample Type:	Soil	**Date Analyzed:**	07/22/2004

PHC Classification	Results in ug / Kg
Heavy Weight PHC as: Lube Oil	245,000

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger, Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO

COMPANY: NWECK
ADDRESS: 3553 Crittenden Rd.
CITY: Crittenden STATE: New York ZIP: 14038
PHONE: (716)937-6527 FAX: 937-9360
ATTN: R. Savage / G. Weber
COMMENTS: Please fax report

INVOICE TO

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-1985
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
STD OTHER
1 2 3 5

PROJECT NAME/SITE NAME: Destro - Union Ship Canal

+ peat Herb on Client's Criteria

2pm 7/23

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Full TCL	Ignitability	Corrosivity	Reactivity	PCB's	TPH	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	7/16/04		X		Additional NAPL Area North	Soil	2	X	X	X	X	X	X		6848
2	7/16/04		X		Additional NAPL Area South	Soil	2	X	X	X	X	X	X		6849
3															
4															
5															
6															
7															
8															
9															
10															

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviations ✓ CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ 15°C

Sampled By: Gary Hamm Date/Time: 7-16-04
Relinquished By: Date/Time:
Received By: Date/Time: 7/16/04 17:00PM
Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Bill Burr Date/Time: 7/16/04 20

Total Cost:
P.I.F.

WASTE MANAGEMENT, INC.

CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

December 30, 2003

Mr. Russ Savage
Nature's Way Environmental
3553 Crittenden Rd.
Crittenden, NY 14038

RE: Approved Profile #CX1578
Development Downtown, Inc.

Dear Mr. Savage,

Please be advised that the above referenced application has been approved for disposal at Waste Management's Chaffee Landfill. Enclosed please find a copy of the approved application.

In the event that significant changes in the information provided on the application occur, please notify us immediately. Such changes shall include, but are not limited to, change in process, change in waste composition and change in hauler.

Please contact us 24 hours in advance of any disposal you wish to schedule.

Should you have any questions at all, please contact me directly @ (716) 754-0365.

Sincerely,

James L. Callahan

James L. Callahan
Inside Sales Representative

Enc.
cc: File

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO

☐Hazardous ☒Non-Hazardous ☐TSCA

Profile Number: WMI 1X1578.

Renewal Date: 6/1/04

A. Waste Generator Information

1. Generator Name: Development Downtown, Inc.
2. SIC Code:
3. Facility Street Address: Commerce Drive
4. Phone: (716)
5. Facility City: Buffalo
6. State/Province: New York
7. Zip/Postal Code: 14203
8. Generator USEPA/Federal ID #: NA
9. County: Erie
10. State/Province ID #: NA
11. Customer Name: Nature's Way Environmental
12. Customer Phone: (716)937-6527
13. Customer Contact: R. Savage / G. Webes
14. Customer Fax: 937-9360
15. Billing Address: 3553 Crittenden Rd. Crittenden, New York 14038 ☐Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Soil Contaminated with Non Aqueous Phase Liquid (Petroleum)
   b. Process Generating Waste: Historic Industrial operations. Material to be excavated was identified through previous site investigation.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Variable	Mild Petroleum type odor (variable)	☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☒Single Layer ☐Multi-layer	NA to % No Free Liquid
Brown/Gray				h. pH: Range 10.03 to %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☒≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil + Stone	99.0 - 99.5		
Petroleum (NAPL)	0.1 - 0.5		
Debris	0.5 - 1.0		

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos? ☐YES ☒NO
   If yes ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene? ☐YES ☒NO
   If yes, concentration _____ ppm
   Is the waste subject to the benzene waste operations NESHAP? ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls? ☐YES ☒NO
   If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j) ☒YES ☐NO

2. **Quantity of Waste**
   Estimated Annual Volume 2400 ~~500~~ ☒Tons ☐Yards ☐Drums ☐Other specify)

3. **Shipping Information**
   a. Packaging:
   ☒Bulk Solid; Type/Size: Dump Truck/Trailer ☐Bulk Liquid; Type/Size:
   ☐Drum; Type; Size: ☐Other:
   b. Shipping Frequency: Units Per: ☐Month ☐Quarter ☐Year ☒One time ☐
   500 Tons Other
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) ☐YES ☒NO
   d. Reportable Quantity (lbs.; kgs.): e. Hazard Class/ID #:
   f. USDOT Shipping Name:

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

g. Personal Protective Equipment Requirements: NA - Tarp Loads For Transport

h. Transporter & Transporter Number Waste Management to provide transportation LCA 9A-480

C. Generator's Certification (Please check appropriate responses, sign and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2 ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U) _____
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j) ☐YES ☐NO
   c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.) ☐YES ☐NO

2. Is this a state hazardous waste? ☐YES ☒NO
   Identify ALL state hazardous/non hazardous waste codes

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j) ☐YES ☒NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: _____ Title: INTERIM PRESIDENT

Name (Type or Print): DAVID STEBBINS Company Name: Development Downtown Date: 12/2/03 For

☐Check if additional information is attached. Indicate the number of attached pages _____

D. WMI Management's Decision — FOR WMI USE ONLY

1. Management Method ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify) _____
2. Proposed Ultimate Management Facility: Chaffee Landfill
3. Precautions, Special Handling Procedures, or Limitation on Approval: Material may be used as daily cover - Pending NYSDEC Approval
   2 Additional samples required PRIOR to shipment of material.
4. Waste Form _____ 5. Source _____ 6. System Type AD3

Special Waste Decision ☒Approved ☐Disapproved

Salesperson's Signature: _____ Date: _____

NYSDEC Region 9 Approval: _____ Date: _____

Special Waste Approvals Person Signature: _____ Date: 12/17/03

OK per Chad Staniszewski 12/29/03

APPENDIX H

NAPL AREA PIPELINE LABORATORY ANALYTICAL RESULTS

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention: Russ Savage
Client Name: NWEC+C Inc.
Project: Union Ship Canal
Project Desc: Union Ship Canal

Address: 3553 Crittenden Rd.
Crittenden, NY
14038
Fax Number: 716-937-9360
Phone Number: 716-937-6527

LABORATORY INFORMATION

Contact: Mike Challis, B.Sc, C.Chem.
Project: AN040300
Date Received: 09-Aug-2004
Date Reported: 23-Aug-2004

Submission No.: 4110240
Sample No.: 049870-049871

NOTES: *'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods. (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: M. Challis

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

	Client ID:		Pipe Trench-East End	Method Blank	Blank Spike	% Recovery
	Lab No.:		049871 04	049870 04	049870 04	049870 04
	Date Sampled:		05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004
Component	MDL	Units				
Acetone	12.7	ug/L	<	<	65	130
Benzene	0.5	"	<	<	47	94
Bromoform	0.7	"	<	<	56	110
Bromomethane	1.0	"	<	<	59	120
2-Butanone	3.2	"	<	<	59	120
Carbon Disulfide	0.9	"	<	<	46	91
Carbon Tetrachloride	0.7	"	<	<	48	96
Chlorobenzene	0.6	"	<	<	47	95
Chlorodibromomethane	0.4	"	<	<	49	97
Chloroethane	0.9	"	<	<	52	100
2-Chloroethylvinylether	2.8	"	<	<	NS	-
Chloroform	0.4	"	<	<	49	98
Chloromethane	1.4	"	<	<	53	110
1,2-Dichlorobenzene	0.8	"	<	<	47	93
1,3-Dichlorobenzene	1.8	"	<	<	46	92
1,4-Dichlorobenzene	1.6	"	<	<	47	94
Dichlorobromomethane	0.4	"	<	<	48	97
1,1-Dichloroethane	0.5	"	<	<	46	92
1,2-Dichloroethane	0.4	"	<	<	47	94
1,1-Dichloroethene	0.7	"	<	<	44	88
cis-1,2-Dichloroethene	0.6	"	<	<	49	98
trans-1,2-Dichloroethene	0.5	"	<	<	45	90
1,2-Dichloropropane	0.7	"	<	<	48	96
cis-1,3-Dichloropropene	0.3	"	<	<	47	94
trans-1,3-Dichloropropene	0.6	"	<	<	43	87
Ethylbenzene	0.5	"	<	<	46	92
2-Hexanone	1.3	"	<	<	57	110
Dichloromethane	2.3	"	<	<	46	92
4-Methyl-2-Pentanone	1.5	"	<	<	55	110
Methyl-t-butylether	0.5	"	<	<	NS	-
Styrene	0.6	"	<	<	47	93
1,1,2,2-Tetrachloroethane	0.8	"	<	<	54	110
Tetrachloroethene	0.5	"	<	<	46	92
Toluene	1.0	"	<	<	48	95
1,1,1-Trichloroethane	0.8	"	<	<	48	95
1,1,2-Trichloroethane	0.6	"	<	<	50	99
Trichloroethene	1.0	"	<	<	48	95
Trichlorofluoromethane	1.8	"	<	<	49	98
Vinyl Acetate	2.4	"	<	<	NS	-
Vinyl Chloride	0.9	"	<	<	50	100
m&p-Xylene	1.1	"	<	<	91	91
o-Xylene	0.5	"	<	<	44	88
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			80	82	88	88
d8-Toluene			92	89	88	88
Bromofluorobenzene			81	82	85	85

PASC - Certificate of Analysis

	Client ID:		Pipe Trench-East End	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		049871 04	049870 04	049870 04	049870 04	049870 04	049870 04
	Date Sampled:		05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004	05-Aug-2004
Component	**MDL**	**Units**						
Naphthalene	0.3	ug/L	<1.5	<	16	81	16	81
Acenaphthene	0.7	"	<3.5	<	17	86	18	88
Fluorene	0.3	"	<1.5	<	19	95	19	95
Phenanthrene	0.3	"	<1.5	<	19	94	19	95
Anthracene	0.3	"	<1.5	<	19	93	19	96
Fluoranthene	0.2	"	1.9	<	19	95	20	97
Pyrene	0.3	"	7.0	<	18	92	19	95
Benz(a)anthracene	0.2	"	6.6	<	18	88	18	91
Chrysene	0.3	"	9.3	<	18	91	19	93
Benzo(b)fluoranthene	0.4	"	<2.0	<	19	97	18	92
Benzo(k)fluoranthene	0.4	"	<2.0	<	20	99	21	100
Benzo(a)pyrene	0.5	"	<8.0	<	19	97	19	96
Indeno(1,2,3-cd)pyrene	0.6	"	<3.0	<	18	90	18	92
Dibenzo(ah)anthracene	0.4	"	<2.0	<	19	93	19	95
Benzo(ghi)perylene	0.4	"	<2.0	<	18	92	19	92
Surrogate Recoveries		%						
d5-Nitrobenzene			84	86	83	83	84	84
2-Fluorobiphenyl			91	75	68	68	68	68
d14-p-Terphenyl			95	69	80	80	76	76

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0811MC01**
Acetone	049870 04
	049871 04
Date Analysed:	04/08/11
Date Prepared:	04/08/11
Batch Code:	**0811MC01**
Ethylbenzene	049870 04
	049871 04
Date Analysed:	04/08/11
Date Prepared:	04/08/11
Batch Code:	**0811NCS1**
Naphthalene	049870 04
	049871 04
Date Analysed:	04/08/11
Date Prepared:	04/08/11

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

CLIENT INFORMATION

Company Name: Nature's Way Environmental
Project Manager: Russ Savage
Address: 3553 Cr. Hendon Rd
Cr. Hendon, NY 14038
Phone #: (716) 937-6527 Fax #: (716) 937-9360
Sampled by: Jon Neubauer

ANALYSIS REQUESTED

Philip Sample ID	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
	Pipe Trench Water East End	3	Aqu	8/5/04		X	X	
	NAPL Area 3 Northwest corner Bottom	1	Soil	8/5/04		X	X	
	NAPL Area 3 Northwest Corner Sidewalls	1	Soil	8/5/04		X	X	

TAT (Turnaround Time)
RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab
STD 10 Business Days ☐
RUSH 5 Business Days ☐
RUSH 2 Business Days ☐
RUSH 1 Business Days ☐
Other Business Days ☐
RUSH 5 DAY

PROJECT INFORMATION
Project #: Union Ship Canal
Site:
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS
MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS
NSP Category B

REMARKS

Client Signature:
Affiliation: NWA, Inc.
Date/Time: 8/6/04

Received By:
Affiliation: PSC
Date/Time: 8-9-4 9:30

Relq'd By:
Date/Time:

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

APPENDIX I

SANITARY SEWER MANHOLE NO. 8 PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS AND DISPOSAL FACILITY APPROVAL

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job No.: N/A

Field Location: Stockpile Composite from Manhole 8

Lab Project No.: 03-3265
Lab Sample No.: 10690

Sample Type: Soil

Date Sampled: 12/03/2003
Date Received: 12/05/2003

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	12/10/2003	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	12/10/2003	SW846, 7.3	50 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reactivity03-3265.xls

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

Client: Nature's Way

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3265
		Lab Sample Number:	10690
Client Job Number:	N/A		
Field Location:	Stockpile Composite from Manhole 8	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/05/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/12/2003

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033265P2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3265
		Lab Sample Number:	10890
Client Job Number:	N/A		
Field Location:	Stockpile Composite from Manhole 8	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/05/2003
Sample Type:	Soil	**Date Analyzed:**	12/11/2003

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.577
Aroclor 1221	ND< 0.577
Aroclor 1232	ND< 0.577
Aroclor 1242	ND< 0.577
Aroclor 1248	ND< 0.577
Aroclor 1254	ND< 0.577
Aroclor 1260	ND< 0.577

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033265P1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3265
		Lab Sample Number:	10690
Client Job Number:	N/A		
Field Location:	Stockpile Comp. from Manhole 8	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/05/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/11/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 14092.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033265S1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3265
		Lab Sample Number:	10690
Client Job Number:	N/A		
Field Location:	Stockpile Comp. from Manhole 8	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/05/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	12/09/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: 18063.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033265V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental
Client Job Site: Union Ship Canal
Client Job No.: N/A

Lab Project No.: 03-3265
Sample Type: Solid
Method: SW846 1010
Date(s) Sampled: 12/03/2003
Date Received: 12/05/2003
Date Analyzed: 12/09/2003

Laboratory Report for Flashpoint Analysis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
10690	N/A	Stockpile Composite from manhole 8	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033265.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Stockpile Composite from manhole 8
Field ID No.: N/A

Lab Project No.: 03-3265
Lab Sample No.: 10690
Sample Type: TCLP Extract
Date Sampled: 12/03/2003
Date Received: 12/05/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	12/09/2003	EPA 6010	<0.100	5.0
Barium	12/09/2003	EPA 6010	0.650	100.0
Cadmium	12/09/2003	EPA 6010	<0.025	1.0
Chromium	12/09/2003	EPA 6010	0.125	5.0
Lead	12/09/2003	EPA 6010	<0.100	5.0
Mercury	12/09/2003	EPA 7470	<0.0020	0.2
Selenium	12/09/2003	EPA 6010	<0.100	1.0
Silver	12/09/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033265.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 03-3265

Sample Type: Solid
Method: SW846 9045C

Date(s) Sampled: 12/03/2003
Date Received: 12/05/2003
Date Analyzed: 12/05/2003

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
10690	N/A	Stockpile Composite from manhole 8	8.60

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033265.xls

PARADIGM
Environmental Services, Inc. 179 Lake Avenue Roche[illegible] New York 14608 585-647-2530 FAX 585- 647-3311

TCLP Herbicides

Client:	Nature's Way Environmental	**Lab Project No:**	03-3265
		Lab Sample No:	10890
Client Job Site:	Union Ship Canal	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	12/03/2003
Field Location:	Stockpile Composite Manhole 8	**Date Received:**	12/05/2003
Field ID No:	N/A	**Date Analyzed:**	12/10/2003

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB03-3265

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: Natures Way Environmental
ADDRESS: 8553 Cattaraugus Road
CITY: Cattaraugus STATE: NY ZIP: 14098
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: Russ Savage / Greg Weber

INVOICE TO:
COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-32165
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) CAC 6-8 Days
1 2 3 STD OTHER

PROJECT NAME/SITE NAME: Union Ship Canal

COMMENTS: Please FAX a copy of results ASAP to NWEC+G Inc @ above # 12/5/03

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Full TCLP	PCB + chem TCL	Pesticides	Remainder Grab	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	12/3/03	2:00	X		Stockpile Composite from Man hole 8	soil	3					10690
2												
3												
4												
5												
6												
7												
8												
9												
10												

Dash/Herb +

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ 8°C

Sampled By: Date/Time: 12/3/03
Relinquished By: Date/Time: 12/4/03
Received By: Date/Time: 12/4/03

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Pamela M. Blake Date/Time: 12/5/03 @ 10:00

Total Cost:
P.I.F.

12/16/2003 15:30 15856473311 PARADIGM ENV PAGE 03/03

WASTE MANAGEMENT, INC.

CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

March 12, 2004

Mr. Greg Weber
Nature's Way Environmental
3553 Crittenden Rd.
Crittenden, NY 14038

RE: Approved Profile #VA7211
Development Downtown

Dear Mr. Weber,

Please be advised that the above referenced application has been approved for disposal at Waste Management's Chaffee Landfill. Enclosed please find a copy of the approved application.

In the event that significant changes in the information provided on the application occur, please notify us immediately. Such changes shall include, but are not limited to, change in process, change in waste composition and change in hauler.

Please contact us 24 hours in advance of any disposal you wish to schedule.

Should you have any questions at all, please contact me directly @ (716) 754-0365.

Sincerely,

James L. Callahan
Inside Sales Representative

Enc.
cc: File

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? [X] YES [ ] NO

[ ] Hazardous [X] Non-Hazardous [ ] TSCA

Profile Number: WMI VA7211

Renewal Date: 12/1/04

A. Waste Generator Information

1. Generator Name: Development Downtown, Inc.
2. SIC Code:
3. Facility Street Address: Commerce Drive
4. Phone: (716) 856-8625
5. Facility City: Buffalo
6. State/Province: New York
7. Zip/Postal Code: 14203
8. Generator USEPA/Federal ID #: NA
9. County: Erie
10. State/Province ID #: NA
11. Customer Name: Nature's Way Environmental
12. Customer Phone: (716) 937-6527
13. Customer Contact: R. Savage / G. Weber
14. Customer Fax: 937-9360
15. Billing Address 3553 Griffenden Rd. Griffenden, New York 14038 [ ] Same as above

B. Waste Stream Information

1. **Description**
   a. Name of Waste: Soil Contaminated with Petroleum (Manhole 8 Area)
   b. Process Generating Waste: Historic industrial use of property. Impacted soil was excavated from the area of during construction/installation of utilities.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Variable Brown/Gray/Black	NA	[X] Solid [ ] Liquid [ ] Gas [ ] Sludge [ ] Other	[X] Single Layer [ ] Multi-layer	NA to % No Free Liquid
				h. pH: Range 8.6 to %

i. Liquid Flash Point: [ ] <73°F [ ] 73-99°F [ ] 100-139°F [ ] 140-199°F [ ] ≥ 200°F [X] Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil + Stone			
Slag + Ash			
Petroleum Products			

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. [ ] Oxidizer [ ] Pyrophoric [ ] Explosive [ ] Radioactive [ ] Carcinogen [ ] Infectious [ ] Shock Sensitive [ ] Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) [ ] YES [X] NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) [ ] YES [X] NO

n. Does the waste represented by this profile contain asbestos? [ ] YES [X] NO
   If yes [ ] friable [ ] non-friable

o. Does the waste represented by this profile contain benzene? [ ] YES [X] NO
   If yes, concentration _____ ppm
   Is the waste subject to the benzene waste operations NESHAP? [ ] YES [X] NO

p. Is the waste subject to RCRA Subpart CC controls? [ ] YES [X] NO
   If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? [ ] YES [X] NO

r. Does the waste contain debris? (list in Section B.1.j) [ ] YES [X] NO

2. **Quantity of Waste**
   Estimated Annual Volume < 200 [X] Tons [ ] Yards [ ] Drums [ ] Other specify) _____

3. **Shipping Information**
   a. Packaging:
   [X] Bulk Solid; Type/Size: Dump Truck/Trailer [ ] Bulk Liquid; Type/Size: _____
   [ ] Drum; Type; Size: _____ [ ] Other: _____
   b. Shipping Frequency: Units < 200 Tons Per: [ ] Month [ ] Quarter [ ] Year [X] One time [ ] Other
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) [ ] YES [X] NO
   d. Reportable Quantity (lbs.; kgs.): _____ e. Hazard Class/ID #: _____

WM
WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Zoladz 9-4-99

g. Personal Protective Equipment Requirements: NA
h. Transporter & Transporter Number (Waste Management to provide) Zoladz

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2. ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)
   b. If a characteristic hazardous waste, do underlying hazardous constituents (URCs) apply? (If yes, list in Section B.1.j). ☐YES ☐NO
   c. Does this waste contain debris? (If yes, list also and type in Chemical Composition - B.1.). ☐YES ☐NO
2. Is this a state hazardous waste? ☐YES ☒NO
   Identify ALL state hazardous/non hazardous waste codes
3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.
4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO
5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j). ☐YES ☒NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO
6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO
7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☒Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of reclassification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as I have determined to be reasonably necessary. If approved for management, Generator has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: [signature] Title: Director of Waste Management
Name (Type or Print): Peter M. Cannavino Company Name: DDI Date: 3/5/04
☒Check if additional information is attached. Indicate the number of attached pages 11

1. Management Method: ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility: Chaffee Landfill
3. Precautions, Special Handling Procedures, or Limitation on Approval:
4. Waste Form 5. Source 6. System Type AD3
Special Waste Decision: ☐Approved ☐Disapproved
Salesperson's Signature: Date:
NYSDEC Region 9 Approval: Date:
Special Waste Approvals Person Signature: Jan K. Callahan Date: 3/9/04

Pending NYSDEC Region 8 approval
Material may be used as daily cover. JK
OK per Chad Staniszewski 3/12/04 JK

APPENDIX J

SANITARY SEWER MANHOLE NO. 11 PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 04-0646

Sample Type: Soil
Method: SW846 9045C

Date(s) Sampled: 03/04/2004
Date Received: 03/08/2004
Date Analyzed: 03/09/2004

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
2767	N/A	Manhole 11 Stockpile	8.61

ELAP ID No.: 10958

Comments:

Approved By: For: Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:040646.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job No.: N/A

Field Location: Manhole II Stockpile

Lab Project No.: 04-0646
Lab Sample No.: 2767

Sample Type: Soil

Date Sampled: 03/04/2004
Date Received: 03/08/2004

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	03/11/2004	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	03/16/2004	SW846, 7.3	157 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reactivity04-0646.xls

PARADIGM ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Manhole 11 Stockpile
Field ID No.: N/A

Lab Project No.: 04-0646
Lab Sample No.: 2767
Sample Type: TCLP Extract
Date Sampled: 03/04/2004
Date Received: 03/08/2004

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	03/11/2004	EPA 6010	<0.100	5.0
Barium	03/11/2004	EPA 6010	0.514	100.0
Cadmium	03/11/2004	EPA 6010	0.025	1.0
Chromium	03/11/2004	EPA 6010	<0.050	5.0
Lead	03/11/2004	EPA 6010	<0.100	5.0
Mercury	03/11/2004	EPA 7470	<0.0020	0.2
Selenium	03/11/2004	EPA 6010	<0.100	1.0
Silver	03/11/2004	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: FSL, Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional sample information, including compliance with sample condition requirements upon receipt.

File ID:040646.xls

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0646
		Lab Sample Number:	2787
Client Job Number:	N/A		
Field Location:	Manhole II Stockpile	**Date Sampled:**	03/04/2004
Field ID Number:	N/A	**Date Received:**	03/08/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	03/15/2004

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 18542.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogestegar: Technical Director

Chain of Custody provides additional sample information

File ID: 040648S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0646
		Lab Sample Number:	2767
Client Job Number:	N/A		
Field Location:	Manhole II Stockpile	**Date Sampled:**	03/04/2004
Field ID Number:	N/A	**Date Received:**	03/08/2004
Sample Type:	Soil	**Date Analyzed:**	03/11/2004

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.491
Aroclor 1221	ND< 0.491
Aroclor 1232	ND< 0.491
Aroclor 1242	ND< 0.491
Aroclor 1248	ND< 0.491
Aroclor 1254	ND< 0.491
Aroclor 1260	ND< 0.491

ELAP Number 10958 Method: EPA 8082A

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature:
Fax: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040646P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Flashpoint by Pensky-Martin Analysis Report

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job Number: N/A
Sample Type: Soil

Lab Project Number: 04-0646
Date Sampled: 03/04/2004
Date Received: 03/08/2004
Date Analyzed: 03/12/2004

Lab Sample Number	Field Number	Field Location	Result (°C)
2767	N/A	Manhole 11 Stockpile	>70

ELAP Number 10958

Method: SW846 1010

Comments: °C = degrees Centigrade

Signature: Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040646F1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0646
		Lab Sample Number:	2767
Client Job Number:	N/A		
Field Location:	Manhole 11 Stockpile	**Date Sampled:**	03/04/2004
Field ID Number:	N/A	**Date Received:**	03/08/2004
Sample Type:	TCLP Extract	**Date Analyzed:**	03/10/2004

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon Tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 19673.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040646V1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: NATURE'S WAY Environmental
ADDRESS: 3553 Crittenden Rd
CITY: Crittenden STATE: NY ZIP: 14058
PHONE: (716) 937-6527 FAX: 932-9360
ATTN: Ross Savage / Greg Weber

INVOICE TO:
COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-0646
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) 6-8
STD OTHER
1 2 3 5

PROJECT NAME/SITE NAME: Union Ship Canal

COMMENTS: Please fax a copy of results to NWEC&C Inc @ above number

REQUEST ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	Full TCLP	Ignitability	Corrosivity	Reactivity	PCBs	* No pests.	* No herbs.				REMARKS	PARADIGM LAB SAMPLE NUMBER
1	3/4/04	(RW)	X		Berm Stockpile	soil	1											TCLP 3260 TCLP 8270 TCLP Rerun old	2767
2	3/4/04		X		Manhole 11 Stockpile	soil	1	X											
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: 13°C iced

Sampled By: [signature] Date/Time: 3/4/04

Relinquished By: Greg Weber 3/4/04 Date/Time:

Received By: [signature] Date/Time: 3/4/04 1055AM

Relinquished By: Date/Time:

Received By: Date/Time:

Received @ Lab By: Jane J. Mora Date/Time: 3/8/04 1130

Total Cost:

P.J.F.

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	26-Mar-2004
Date Reported:	05-Apr-2004
Submission No.:	4C1015
Sample No.:	015197-015199

NOTES: *'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: MC

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PASC - Certificate of Analysis

Component	*Client ID:* / *Lab No.:* / *Date Sampled:* MDL	Units	Manhole 11 015199 04 24-Mar-2004	Manhole 11 015199 04 24-Mar-2004 Duplicate	Method Blank 015197 04 24-Mar-2004	Blank Spike 015197 04 24-Mar-2004	% Recovery 015197 04 24-Mar-2004
pH after 3.5 ml of 1N HCl addition			2.17	-	-	-	-
pH after extraction (semi-vols/metals)			7.78	-	-	-	-
pH initial (5g + 96.5ml water)			8.90	-	-	-	-
pH of extraction fluid (semi-vols/metals)			4.93	-	-	-	-
pH after extraction (volatiles)			7.13	-	-	-	-
pH of extraction fluid (volatiles)			4.93	-	-	-	-
Soil pH measured in water			9.37	8.77	-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	-	<1000	26000	110
Sulphide (Reactive)	2000	"	160000	-	-	-	-
Aroclor-1016	38	ug/kg	<MDL	-	<MDL	400	100
Aroclor-1221	41	"	<MDL	-	<MDL	-	-
Aroclor-1232	38	"	<MDL	-	<MDL	-	-
Aroclor-1242	50	"	<MDL	-	<MDL	-	-
Aroclor-1248	31	"	<MDL	-	<MDL	-	-
Aroclor-1254	59	"	<MDL	-	<MDL	-	-
Aroclor-1260	31	"	<MDL	-	<MDL	440	110
Aroclor-1262	31	"	<MDL	-	<MDL	-	-
Aroclor-1268	49	"	<MDL	-	<MDL	-	-
Total PCB	59	"	<MDL	-	<MDL	840	100
Surrogate Recoveries		%					
4,4'-Dibromooctaflourobiphenyl			84	-	97	96	96
Decachlorobiphenyl			98	-	97	107	107

PASC - Certificate of Analysis

Component	Client ID: / Lab No.: / Date Sampled: MDL	Units	Manhole 11 utnv 015200 04 29-Mar-2004	Method Blank 015198 04 24-Mar-2004	Blank Spike 015198 04 24-Mar-2004	% Recovery 015198 04 24-Mar-2004	Blank Spike Duplicate 015198 04 24-Mar-2004	% Recovery 015198 04 24-Mar-2004
Mercury	0.50	ug/L	<MDL	<MDL	10	100	-	-
Arsenic	0.250	mg/L	<MDL	<MDL	1.3	110	-	-
Barium	0.100	"	0.92	0.27	2.9	110	-	-
Cadmium	0.050	"	<MDL	<MDL	1.3	100	-	-
Chromium	0.500	"	<MDL	<MDL	2.6	100	-	-
Lead	0.500	"	<MDL	<MDL	2.6	100	-	-
Selenium	0.100	"	<MDL	<MDL	1.4	110	-	-
Silver	0.500	"	<MDL	<MDL	1.3	100	-	-
a-Chlordane	0.005	ug/L	<0.033	<MDL	0.12	97	0.11	90
g-Chlordane	0.009	"	<0.050	<MDL	0.11	91	0.11	92
Endrin	0.011	"	<0.061	<MDL	0.11	95	0.12	96
Heptachlor	0.005	"	<0.033	<MDL	0.076	63	0.082	68
Heptachlor Epoxide	0.012	"	<0.078	<MDL	0.12	99	0.12	100
Lindane	0.007	"	<0.050	<MDL	0.11	92	0.11	91
Methoxychlor	0.018	"	<0.18	<MDL	0.58	120	0.61	130
Toxaphene	0.116	"	<0.23	<MDL	NS	-	NS	-
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			80	63	39	39	40	40
Decachlorobiphenyl			90	88	90	90	89	89
2,4-D (via 8150)	0.39	ug/L	<1.8	<MDL	6.7	90	7.5	100
2,4,5-TP	0.04	"	<0.18	<MDL	0.37	50	0.42	56
Surrogate Recoveries		%						
2,3-D			47	62	30	30	38	38

Mercury via 7471
Metals via 6010
Pesticides via 8081
Herbicides via 8151

PASC - Certificate of Analysis

	Client ID:		Manhole 11 TV	Manhole 11 TV	Method Blank	Blank Spike	% Recovery
	Lab No.:		015201 04	015201 04	015198 04	015198 04	015198 04
	Date Sampled:		29-Mar-2004	29-Mar-2004	24-Mar-2004	24-Mar-2004	24-Mar-2004
Component	MDL	Units		Duplicate			
Benzene	0.5	ug/L	<5.0	<5.0	<5.0	480	97
2-Butanone	5.0	"	<50	<50	<50	500	100
Carbon Tetrachloride	0.7	"	<7.0	<7.0	<7.0	520	100
Chlorobenzene	0.6	"	<6.0	<6.0	<6.0	500	100
Chloroform	0.3	"	12	13	<3.0	510	100
1,2-Dichloroethane	0.3	"	<3.0	<3.0	<3.0	500	100
1,1-Dichloroethene	0.7	"	<7.0	<7.0	<7.0	440	88
Tetrachloroethene	0.5	"	<5.0	<5.0	<5.0	500	99
Trichloroethene	0.3	"	<3.0	<3.0	<3.0	490	99
Vinyl Chloride	0.9	"	<9.0	<9.0	<9.0	560	110
1,4-Dichlorobenzene	1.6	"	<16	<16	<16	510	100
Surrogate Recoveries		%					
d4-1,2-Dichloroethane			99	100	100	106	106
d8-Toluene			99	100	101	104	104
1,4-Bromofluorobenzene			101	100	101	106	106

VOC via 8260B

Component	*Client ID:* / *Lab No.:* / *Date Sampled:* MDL	Units	Manhole 11 uinv 015200 04 29-Mar-2004	Method Blank 015198 04 24-Mar-2004	Blank Spike 015198 04 24-Mar-2004	% Recovery 015198 04 24-Mar-2004	Blank Spike Duplicate 015198 04 24-Mar-2004	% Recovery 015198 04 24-Mar-2004
Pyridine	5.0	ug/L	<MDL	<MDL	NS	-	NS	-
o-Cresol	1.7	"	<MDL	<MDL	16	63	17	66
m&p-Cresol	3.5	"	<MDL	<MDL	16	63	16	65
1,4-Dichlorobenzene	2.0	"	<MDL	<MDL	15	60	16	63
2,4-Dinitrotoluene	0.5	"	<MDL	<MDL	25	99	24	98
Nitrobenzene	2.0	"	<MDL	<MDL	21	85	22	86
Pentachlorophenol	1.1	"	<MDL	<MDL	24	96	23	93
2,4,5-Trichlorophenol	0.6	"	<MDL	<MDL	23	91	23	91
2,4,6-Trichlorophenol	1.2	"	<MDL	<MDL	23	92	23	91
Hexachloroethane	2.0	"	<MDL	<MDL	13	53	14	55
Hexachlorobutadiene	2.0	"	<MDL	<MDL	14	55	14	56
Hexachlorobenzene	2.0	"	<MDL	<MDL	23	92	22	89
Surrogate Recoveries		%						
d5-Phenol			50	30	27	27	28	28
d5-Nitrobenzene			86	87	85	85	87	87
2-Fluorobiphenyl			66	73	73	73	82	82
2,4,6-Tribromophenol			77	86	88	88	89	89
d-14-p-Terphenyl			99	107	99	99	107	107

SVOC via 8270C

Batch Code:	**0328MSN3**
pH after 3.5 ml of 1N HCl addition	015199 04
Date Analysed:	04/03/29
Date Prepared:	04/03/28
Batch Code:	**0328MSV3**
pH after extraction (volatiles)	015199 04
Date Analysed:	04/03/29
Date Prepared:	04/03/28
Batch Code:	**0330VOH1**
Soil pH measured in water	015199 04
Date Analysed:	04/04/02
Date Prepared:	04/03/30
Batch Code:	**0330FSA1**
Cyanide (Reactive)	015197 04
	015199 04
Date Analysed:	04/03/31
Date Prepared:	04/03/30
Batch Code:	**0331XX01**
Sulphide (Reactive)	015199 04
Date Analysed:	04/03/31
Date Prepared:	04/03/31
Batch Code:	
Date Analysed:	
Date Prepared:	
Batch Code:	**0331NDU1**
Aroclor-1016	015197 04
	015199 04
Date Analysed:	04/03/31
Date Prepared:	04/03/31

Batch Code:	**0330MBL1**
Mercury	015198 04
	015200 04
Date Analysed:	04/03/30
Date Prepared:	04/03/30
Batch Code:	**0329STL2**
Arsenic	015198 04
	015200 04
Date Analysed:	04/03/29
Date Prepared:	04/03/29
Batch Code:	**0330MGS1**
a-Chlordane	015198 04
	015200 04
Date Analysed:	04/03/31
Date Prepared:	04/03/30
Batch Code:	**0330MGS1**
2,4-D (via 8150)	015198 04
	015200 04
Date Analysed:	04/03/31
Date Prepared:	04/03/30
Batch Code:	**0330DJ02**
Benzene	015198 04
	015201 04
Date Analysed:	04/03/30
Date Prepared:	04/03/30
Batch Code:	**0329TKR1**
Pyridine	015198 04
	015200 04
Date Analysed:	04/03/30
Date Prepared:	04/03/29
Batch Code:	**0329TKR1**
Hexachloroethane	015198 04
	015200 04
Date Analysed:	04/03/30
Date Prepared:	04/03/29

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-6788
Fax: (905) 332-9169

Page ____ of ____

CLIENT INFORMATION

Company Name: NIAGARA, Inc.
Project Manager: Russ Savage
Address: 3553 Cattenden Rd.
Cattenden, NY 14038
Phone #: 716 937 6527 Fax #: 716 937 9360
Sampled by: Jon Neubauer

MB 15197 Soil
MB 15198 Water

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	Full TCLP	+ Resis + Herbs	PCB's	Corrosivity	Reactivity	Ignitability/Flashpoint	Level of contamination (low, high, unknown)
15197	MANHOLE 11	1	S	3/24/04		✓	✓	✓	✓	✓	✓	
15200	TNV											
201	TV											

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☐
- RUSH 2 Business Days ☒
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

RUSH 3 DAY TURN ★
RUSH

REMARKS

4C1015

Client Signature: [signature]
Affiliation: Niagara Inc
Date/Time: 3/26/04 11:35 AM

Received By: Kevin Zielinski
Affiliation: PSC
Date/Time: 3/26/04, 11:35 AM

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

Date: 10/12/2004
Time: 15:11:20

NATURE'S WAY ENVIRONMENTAL CONSULTANTS
Flash Point
WET CHEMISTRY ANALYSIS

Rept: AN0326

Client ID		Manhole11Stockpile#2							
Job No	Lab ID	A04-2897	A4289701						
Sample Date		04/05/2004							
Analyte	Units	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit	Sample Value	Reporting Limit
Flashpoint	°F	>200	0	NA		NA		NA	

NA = Not Applicable ND = Not Detected

STL Buffalo

Chain of Custody Record

SEVERN TRENT SERVICES — **Severn Trent Laboratories, Inc.**

STL-4124 (1200)

Client: Natures Way Environmental Consultants + Contractors Inc.	Project Manager: Russ Savage	Date:	Chain of Custody Number: 099205
Address: 3553 Cutteredon Rd	Telephone Number (Area Code)/Fax Number: (716) 937-6527 / 937-9360 FAX	Lab Number:	Page ____ of ____
City: Cutteredon / State: NY / Zip Code: 14038	Site Contact:	Lab Contact:	Analysis (Attach list if more space is needed)
Project Name and Location (State): Union Ship Canal	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: Sample Hazard	Special Instructions/ Conditions of Receipt
Manhole 11 Stockpile #2	4/5/04	10^00 A.M.				✓							✓	Please fax results A.S.A.P Rush

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

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other A.S.A.P Rush

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Eric Lang	4/5/04	1050 Am	1. Received By: AM Wya STL-Buffalo	4/05/04	10:50
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: Ambient

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

19/25

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	19-May-2004
Date Reported:	31-May-2004
Submission No.:	4E0776
Sample No.:	028380-028382

NOTES: ***'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

(1) Insufficient sample for Flashpoint
(2) MDL Raised due to matrix interference

Certified by: MC

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			Manhole	Manhole	Method	Blank	%
	Client ID:		#11 Comp	#11 Comp	Blank	Spike	Recovery
	Lab No.:		028382 04	028382 04	028380 04	028380 04	028380 04
	Date Sampled:		18-May-2004	18-May-2004	18-May-2004	18-May-2004	18-May-2004
Component	**MDL**	**Units**		Duplicate			
pH after 3.5 ml of 1N HCl addition			3.40	-	-	-	-
pH after extraction (semi-vols/metals)			6.69	-	-	-	-
pH initial (5g + 96.5ml water)			10.04	-	-	-	-
pH of extraction fluid (semi-vols/metals)			4.96	-	-	-	-
pH after extraction (volatiles)			6.48	-	-	-	-
pH of extraction fluid (volatiles)			4.96	-	-	-	-
Soil pH measured in water			9.35	-	-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	<1000	<1000	25000	100
Sulphide (Reactive)	20000	"	130000	-	<	<	95
			(1)				
Flash Point	0.1	C	**Pending**	-	-	-	-
			(2)				
Aroclor-1016	38	ug/kg	<150	-	<	390	97
Aroclor-1221	41	"	<99	-	<	<	<
Aroclor-1232	38	"	<99	-	<	<	<
Aroclor-1242	50	"	<150	-	<	<	<
Aroclor-1248	31	"	<200	-	<	<	<
Aroclor-1254	59	"	<300	-	<	<	<
Aroclor-1260	31	"	<390	-	<	400	100
Aroclor-1262	31	"	<390	-	<	<	<
Aroclor-1268	49	"	<200	-	<	<	<
Total PCB	59	"	<390	-	<	790	98
Surrogate Recoveries		%					
4,4'-Dibromooctaflourobiphenyl			94	-	95	103	103
Decachlorobiphenyl			103	-	74	79	79

PASC - Certificate of Analysis

			Manhole #11	Manhole #11	Method	Blank	%	Blank Spike	%
Client ID:			C. utnv	Comp utv	Blank	Spike	Recovery	Duplicate	Recovery
Lab No.:			028383 04	028384 04	028381 04	028381 04	028381 04	028381 04	028381 04
Date Sampled:			26-May-2004	26-May-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**							
Mercury	0.50	ug/L	<	-	<	<	100	-	-
Arsenic	0.250	mg/L	<	-	<	1.2	99	-	-
Barium	0.100	"	0.39	-	<	2.5	100	-	-
Cadmium	0.050	"	<	-	<	1.2	98	-	-
Chromium	0.500	"	<	-	<	2.4	98	-	-
Lead	0.500	"	<	-	<	2.5	98	-	-
Selenium	0.100	"	<	-	<	1.3	100	-	-
Silver	0.500	"	<	-	<	1.2	98	-	-
a-Chlordane	0.005	ug/L	<0.021	-	<	0.13	110	0.13	100
g-Chlordane	0.009	"	<0.032	-	<	0.12	100	0.12	98
Endrin	0.011	"	<0.039	-	<	0.14	110	0.095	80
Heptachlor	0.005	"	<0.021	-	<	0.11	95	0.13	100
Heptachlor Epoxide	0.012	"	<0.050	-	<	0.14	120	0.13	110
Lindane	0.007	"	<0.032	-	<	0.13	110	0.13	110
Methoxychlor	0.018	"	<0.12	-	<	0.61	130	0.47	98
Toxaphene	0.116	"	<0.15	-	<	NS	-	NS	-
Surrogate Recoveries		%							
4,4'-Dibromooctaflourobiphenyl			67	-	85	61	61	59	59
Decachlorobiphenyl			83	-	74	75	75	67	67
2,4-D (via 8150)	0.39	ug/L	<3.0	-	<	1.9	93	2.1	100
2,4,5-TP	0.04	"	<0.31	-	<	0.19	94	0.22	110
Surrogate Recoveries		%							
2,3-D			83	-	78	80	80	93	93

PASC - Certificate of Analysis

			Manhole #11	Manhole #11	Method	Blank	%	Blank Spike	%
	Client ID:		C. utnv	Comp utv	Blank	Spike	Recovery	Duplicate	Recovery
	Lab No.:		028383 04	028384 04	028381 04	028381 04	028381 04	028381 04	028381 04
	Date Sampled:		26-May-2004	26-May-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**							
Benzene	0.5	ug/L	-	<100	<100	11000	110	-	-
2-Butanone	5.0	"	-	<1000	<1000	10000	100	-	-
Carbon Tetrachloride	0.7	"	-	<140	<140	10000	100	-	-
Chlorobenzene	0.6	"	-	<120	<120	10000	100	-	-
Chloroform	0.3	"	-	<60	<60	10000	100	-	-
1,2-Dichloroethane	0.3	"	-	<60	<60	9800	98	-	-
1,1-Dichloroethene	0.7	"	-	<140	<140	10000	110	-	-
Tetrachloroethene	0.5	"	-	<100	<100	10000	100	-	-
Trichloroethene	0.3	"	-	<60	<60	10000	100	-	-
Vinyl Chloride	0.9	"	-	<180	<180	10000	100	-	-
1,4-Dichlorobenzene	1.6	"	-	<320	<320	9500	95	-	-
Surrogate Recoveries		%							
d4-1,2-Dichloroethane			-	103	102	107	107	-	-
d8-Toluene			-	101	101	102	102	-	-
1,4-Bromofluorobenzene			-	101	102	106	106	-	-

PASC - Certificate of Analysis

			Manhole #11	Method	Blank	%	Blank Spike	%
	Client ID:		C. utnv	Blank	Spike	Recovery	Duplicate	Recovery
	Lab No.:		028383 04	028381 04	028381 04	028381 04	028381 04	028381 04
	Date Sampled:		26-May-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**						
Pyridine	5.0	ug/L	<	<	NS	-	NS	-
o-Cresol	1.7	"	<	<	9.8	39	9.4	38
m&p-Cresol	3.5	"	<	<	8.9	36	8.6	34
1,4-Dichlorobenzene	2.0	"	<	<	16	63	15	59
2,4-Dinitrotoluene	0.5	"	<	<	22	87	21	85
Nitrobenzene	2.0	"	<	<	20	78	18	73
Pentachlorophenol	1.1	"	<	<	20	79	19	74
2,4,5-Trichlorophenol	0.6	"	<	<	18	73	19	75
2,4,6-Trichlorophenol	1.2	"	<	<	19	76	19	77
Hexachloroethane	2.0	"	<	<	14	56	12	49
Hexachlorobutadiene	2.0	"	<	<	16	63	14	57
Hexachlorobenzene	2.0	"	<	<	21	82	21	85
Surrogate Recoveries		%						
d5-Phenol			26	14	16	16	15	15
d5-Nitrobenzene			75	78	81	81	72	72
2-Fluorobiphenyl			73	77	82	82	80	80
2,4,6-Tribromophenol			79	86	86	86	88	88
d-14-p-Terphenyl			54	73	81	81	86	86

Batch Code:	**0525RGA1**
pH after 3.5 ml of 1N HCl addition	028382 04
Date Analysed:	04/05/26
Date Prepared:	04/05/25
Batch Code:	**0525RGV1**
pH after extraction (volatiles)	028382 04
Date Analysed:	04/05/26
Date Prepared:	04/05/25
Batch Code:	**0518VPH1**
Soil pH measured in water	028382 04
Date Analysed:	04/05/21
Date Prepared:	04/05/18
Batch Code:	**0521FSA1**
Cyanide (Reactive)	028380 04
	028382 04
Date Analysed:	04/05/25
Date Prepared:	04/05/21
Batch Code:	**0521BAA1**
Sulphide (Reactive)	028380 04
	028382 04
Date Analysed:	04/05/21
Date Prepared:	04/05/21
Batch Code:	
Date Analysed:	
Date Prepared:	
Batch Code:	**0526NDU1**
Aroclor-1016	028380 04
	028382 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26

Batch Code:	**0526MBL1**
Mercury	028381 04
	028383 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26
Batch Code:	**0526STL1**
Arsenic	028381 04
	028383 04
Date Analysed:	04/05/27
Date Prepared:	04/05/26
Batch Code:	**0526MGS1**
a-Chlordane	028381 04
	028383 04
Date Analysed:	04/05/28
Date Prepared:	04/05/26
Batch Code:	**0526NDS1**
2,4-D (via 8150)	028381 04
	028383 04
Date Analysed:	04/05/25
Date Prepared:	04/05/26
Batch Code:	**0526MC01**
Benzene	028381 04
	028384 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26
Batch Code:	**0526TKS1**
Pyridine	028381 04
	028383 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26
Batch Code:	**0526TKS1**
Hexachloroethane	028381 04
	028383 04
Date Analysed:	04/05/26
Date Prepared:	04/05/26

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NWEC+C
Project Manager: Russ Savage
Address: 3553 Crittenden Rd.
Crittenden, NY 14038
Phone #: (716) 937-6527 Fax #: 937-9360
Sampled by: Tom Woelfle

MHS - 028380
MSW - 028381

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	Full TCLP Series + Tests. + Herbs. ✓	Ignitability/Flashpoint ✓	Corrosivity (pH) ✓	Reactivity ✓						Level of contamination (low, high, unknown)
						ANALYSIS REQUESTED									
028382-84	Manhole # 11 Comp	1	Soil	5/18/04		X	X	X	X				2 Week		

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- ~~RUSH~~ 5 Business Days ☒ (Std.)
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ID Union Ship Canal
Site:
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

Client Signature: Greg Weber
Affiliation:
Date/Time:

Received By:
Affiliation:
Date/Time: 5-19-4 5:30

Rec'd By:
Date/Time 04/05/19 1230

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

WHITE - LAB / YELLOW - CLIENT

PARADIGM ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro / Union Ship	**Lab Project Number:**	04-1777
		Lab Sample Number:	6196
Client Job Number:	N/A		
Field Location:	Manhole #11 Stockpile	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	Soil	**Date Analyzed:**	06/30/2004

PHC Classification	Results in ug / Kg
Medium Weight PHC as: Diesel Fuel	783,000
Heavy Weight PHC as: Lube Oil	286,000

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature:

Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

COMPANY: NWEC+C
ADDRESS: 3553 Crittenden Rd.
CITY: Crittenden STATE: New York ZIP: 14038
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: R. Savage

INVOICE TO:

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-1777
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS) Need results 7/1 PM
STD OTHER
☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐

PROJECT NAME/SITE NAME: Destro/Union Ship

COMMENTS: please fax report

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TPH	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 6/28/04		X		Manhole #11 Stockpile	Soil		X		6196
2									
3									
4									
5									
6									
7									
8									
9									
10									

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 10°

Sampled By: James Davey Date/Time: 6/28/04 9:00
James D. Davey
Relinquished By: Date/Time:

Relinquished By: Date/Time:
Received By: Date/Time:

Total Cost:

Received By: Date/Time: 6/28/04

Received @ Lab By: Kelly Crandall 6/28/04 1642 Date/Time:

P.I.F.

APPENDIX K

"DUCT BANK" EXCAVATION CONFIRMATION SOIL SAMPLES LABORATORY ANALYTICAL RESULTS

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	18-Mar-2004
Date Reported:	01-Apr-2004
Submission No.:	4C0698
Sample No.:	013069-013072

NOTES: *'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: M. Challis

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

	Client ID:		D.B. Sidewall West	D.B. Sidewall Middle	D.B. Bottom Middle	Method Blank	Blank Spike	% Recovery
	Lab No.:		013070 04	013071 04	013072 04	013069 04	013069 04	013069 04
	Date Sampled:		16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004
Component	**MDL**	**Units**						
Benzene	1.0	ug/kg	<2.0	<2.0	<4.0	<	56	89
Ethylbenzene	1.0	"	<2.0	<2.0	<8.0	<	61	97
Toluene	1.0	"	<2.0	<2.0	55	<	57	92
m&p-Xylene	1.0	"	<2.0	<2.0	12	<	120	99
o-Xylene	1.0	"	<2.0	<2.0	<8.0	<	60	96
Xylenes(Total)	1.0	"	<2.0	<2.0	12	<	180	97
Isopropylbenzene	1.0	"	<2.0	<2.0	<20	<	57	92
n-Propylbenzene	1.0	"	<2.0	<2.0	<20	<	61	98
p-Isopropyltoluene	1.0	"	<2.0	<2.0	<20	<	63	100
1,2,4-Trimethylbenzene	1.0	"	<2.0	7.0	22	<	61	98
1,3,5-Trimethylbenzene	1.0	"	<2.0	2.0	<20	<	62	98
n-Butylbenzene	1.0	"	<2.0	<2.0	<20	<	65	100
sec-Butylbenzene	1.0	"	<2.0	<2.0	<20	<	64	100
tert-Butylbenzene	1.0	"	<2.0	<2.0	<20	<	61	97
Naphthalene	1.0	"	<2.0	7.0	<20	<	62	99
Methyl-t-butylether	1.0	"	<2.0	<2.0	<4.0	<	NS	-
Surrogate Recoveries		%						
d4-1,2-Dichloroethane			61	68	65	62	65	65
d8-Toluene			80	80	108	79	75	75
Bromofluorobenzene			77	80	49	79	80	80
d10-Ethylbenzene			77	57	80	96	82	82

PASC - Certificate of Analysis

	Client ID:		D.B. Sidewall West	D.B. Sidewall Middle	D.B. Bottom Middle	D.B. Bottom Middle	D.B. Bottom Middle	D.B. Bottom Middle	D.B. Bottom Middle
	Lab No.:		013070 04	013071 04	013072 04	013072 04	013072 04	013072 04	013072 04
	Date Sampled:		16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004
Component	**MDL**	**Units**				M. Spike	MS % Rec.	MS Dup	MSD % Rec.
Naphthalene	90	ng/kg	<360	<360	<900	2000	69	2200	73
Acenaphthene	70	"	<280	<280	<700	2200	74	2400	80
Fluorene	40	"	<160	370	<400	2300	79	2400	81
Phenanthrene	30	"	<120	1500	<300	2500	85	2500	83
Anthracene	60	"	<240	<240	<600	2400	83	2500	83
Fluoranthene	60	"	<240	<240	<600	2200	74	2200	73
Pyrene	40	"	<160	300	<400	3400	120	3100	100
Benz(a)anthracene	50	"	<200	<200	<500	2500	87	2500	83
Chrysene	40	"	<160	<160	<400	2600	90	2500	86
Benzo(b)fluoranthene	40	"	<160	<160	<400	2700	91	2500	83
Benzo(k)fluoranthene	40	"	<160	<160	<400	2600	87	2400	81
Benzo(a)pyrene	50	"	<200	<200	<500	2600	89	2500	83
Indeno(1,2,3-cd)pyrene	60	"	<240	<240	<600	2600	88	2600	89
Dibenzo(ah)anthracene	50	"	<200	<200	<500	2600	89	2800	95
Benzo(ghi)perylene	60	"	<240	<240	<600	2200	77	2300	77
Surrogate Recoveries		%							
d5-Nitrobenzene			57	63	64	70	70	69	69
2-Fluorobiphenyl			65	74	76	78	78	77	77
d14-p-Terphenyl			105	93	112	128	128	107	107

	Client ID:		Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		013069 04	013069 04	013069 04	013069 04	013069 04
	Date Sampled:		16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004	16-Mar-2004
Component	**MDL**	**Units**					
Naphthalene	90	ug/kg	<180	3300	82	3300	83
Acenaphthene	70	"	<140	3300	83	3300	83
Fluorene	40	"	<80	3300	83	3300	83
Phenanthrene	30	"	<60	3400	84	3300	84
Anthracene	60	"	<120	3400	85	3400	85
Fluoranthene	60	"	<120	3500	87	3300	83
Pyrene	40	"	<80	3900	98	3600	89
Benz(a)anthracene	50	"	<100	3500	87	3400	86
Chrysene	40	"	<80	3400	85	3400	86
Benzo(b)fluoranthene	40	"	<80	3900	96	3500	88
Benzo(k)fluoranthene	40	"	<80	3600	89	3200	79
Benzo(a)pyrene	50	"	<100	3500	86	3400	86
Indeno(1,2,3-cd)pyrene	60	"	<120	3000	74	3800	94
Dibenzo(ah)anthracene	50	"	<100	2900	73	3800	95
Benzo(ghi)perylene	60	"	<120	2800	70	3500	87
Surrogate Recoveries		%					
d5-Nitrobenzene			70	82	82	81	81
2-Fluorobiphenyl			72	83	83	82	82
d14-p-Terphenyl			87	99	99	88	88

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0329MC01**	
Benzene	013069 04	
	013070 04	
	013071 04	
	013072 04	
Date Analysed:	04/03/29	
Date Prepared:	04/03/29	
Batch Code:	**0324SPA1**	**0324SPA1**
Naphthalene	013069 04	013070 04
		013071 04
		013072 04
Date Analysed:	04/03/25	04/03/26
Date Prepared:	04/03/24	04/03/24

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page _____ of _____

CLIENT INFORMATION

Company Name: NWEC+C Inc
Project Manager: R. Savage
Address: 3553 Cattenden Rd
Cattenden NY 14038
Phone #: 716 937 6527 Fax #: 716 937 9360
Sampled by: Tom Woelfle

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS									Level of contamination (low, high, unknown)
	Duct Bank Excav. Sidewall West	1	Soil	3/16/04	12:00 pm	X	X									
	Duct Bank Excav. Sidewall Middle	1	Soil	3/16/04	12:00 pm	X	X									
	Duct Bank Excav. Bottom Middle	1	Soil	3/16/04	12:00 pm	X	X									

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☒
- RUSH 5 Business Days ☐
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days _____

PROJECT INFORMATION

Project #: Union Ship Canal
Site: Duct Bank Excavation
PO#: _____
Philip Quote #: _____
Philip Project #: _____
Philip Contact: _____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP Cat B

REMARKS

Client Signature: Greg Weber
Affiliation: NWEC+C
Date/Time: 3/16/04 3/18/04 8:00 hr

Received By: _____
Affiliation: PSC
Date/Time: 3-18-4 8:00

Rec'd By: _____
Date/Time _____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

APPENDIX L

BARIUM "HOT SPOT" PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS AND DISPOSAL FACILITY APPROVAL

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	24-Mar-2004
Date Reported:	07-Apr-2004
Submission No.:	4C0910
Sample No.:	014428-014430

NOTES: *''-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: M. Challis

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

PASC - Certificate of Analysis

	Client ID:		Method Blank	Method Blank	Method Blank	Soil Stockpile	Soil Stockpile
	Lab No.:		014428 04	014428 04	014428 04	014430 04	014430 04
	Date Sampled:		22-Mar-2004	22-Mar-2004	22-Mar-2004	22-Mar-2004	22-Mar-2004
Component	**MDL**	**Units**					Duplicate
pH after 3.5 ml of 1N HCl addition			-	-	-	2.35	-
pH after extraction (semi-vols/metals)			-	-	-	7.50	-
pH initial (5g + 96.5ml water)			-	-	-	9.65	-
pH of extraction fluid (semi-vols/metals)			-	-	-	4.93	-
pH after extraction (volatiles)			-	-	-	7.11	-
pH of extraction fluid (volatiles)			-	-	-	4.93	-
Soil pH measured in water			-	-	-	8.41	9.02
Cyanide (Reactive)	500	ug/kg	-	-	-	<1000	<1000
Sulphide (Reactive)	2000	"	-	-	-	62000	-
Flash Point	0.1	C	-	-	-	Did Not Flash	-
Aroclor-1016	38	ug/kg	<MDL	400	100	<52	-
Aroclor-1221	41	"	<MDL	-	-	<56	-
Aroclor-1232	38	"	<MDL	-	-	<52	-
Aroclor-1242	50	"	<MDL	-	-	<68	-
Aroclor-1248	31	"	<MDL	-	-	170	-
Aroclor-1254	59	"	<MDL	-	-	<80	-
Aroclor-1260	31	"	<MDL	440	110	<42	-
Aroclor-1262	31	"	<MDL	-	-	<42	-
Aroclor-1268	49	"	<MDL	-	-	<67	-
Total PCB	59	"	<MDL	840	100	170	-
Surrogate Recoveries		%					
4,4'-Dibromooctaflourobiphenyl			97	96	96	100	-
Decachlorobiphenyl			97	107	107	91	-

pH via SW846 9045
Cyanide via 7.3.4.1
Sulphide via 7.3.3.2
PCB via SW846 8082

PASC - Certificate of Analysis

			Method	Blank	%	Blank Spike	%	Soil Stockpile
	Client ID:		Blank	Spike	Recovery	Duplicate	Recovery	utnv
	Lab No.:		014429 04	014429 04	014429 04	014429 04	014429 04	014431 04
	Date Sampled:		01/40/01	01/40/01	01/40/01	01/40/01	01/40/01	29-Mar-2004
Component	**MDL**	**Units**						
Mercury	0.50	ug/L	<MDL	10	100	-	-	<MDL
Arsenic	0.250	mg/L	<MDL	1.3	110	-	-	<MDL
Barium	0.100	"	0.27	2.9	110	-	-	0.87
Cadmium	0.050	"	<MDL	1.3	100	-	-	<MDL
Chromium	0.500	"	<MDL	2.6	100	-	-	<MDL
Lead	0.500	"	<MDL	2.6	100	-	-	<MDL
Selenium	0.100	"	<MDL	1.4	110	-	-	<MDL
Silver	0.500	"	<MDL	1.3	100	-	-	<MDL
a-Chlordane	0.005	ug/L	<MDL	0.12	97	0.11	90	<0.040
g-Chlordane	0.009	"	<MDL	0.11	91	0.11	92	<0.060
Endrin	0.011	"	<MDL	0.11	95	0.12	96	<0.073
Heptachlor	0.005	"	<MDL	0.076	63	0.082	68	<0.040
Heptachlor Epoxide	0.012	"	<MDL	0.12	99	0.12	100	<0.093
Lindane	0.007	"	<MDL	0.11	92	0.11	91	<0.060
Methoxychlor	0.018	"	<MDL	0.58	120	0.61	130	<0.22
Toxaphene	0.116	"	<MDL	NS	-	NS	-	<0.27
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			63	39	39	40	40	82
Decachlorobiphenyl			88	90	90	89	89	91
2,4-D (via 8150)	0.39	ug/L	<MDL	6.7	90	7.5	100	<2.8
2,4,5-TP	0.04	"	<MDL	0.37	50	0.42	56	<0.29
Surrogate Recoveries		%						
2,3-D			62	30	30	38	38	80

Mercury via SW846 7471
Metals via SW846 6010
Pesticides via SW846 8081
Herbicides via SW846 8151

PASC - Certificate of Analysis

			Method Blank	Blank Spike	% Recovery	Soil Stockpile utv
	Client ID:					
	Lab No.:		014429 04	014429 04	014429 04	. 014432 04
	Date Sampled:		01/40/01	01/40/01	01/40/01	29-Mar-2004
Component	**MDL**	**Units**				
Benzene	0.5	ug/L	<5.0	500	100	<5.0
2-Butanone	5.0	"	<50	450	90	<50
Carbon Tetrachloride	0.7	"	<7.0	520	100	<7.0
Chlorobenzene	0.6	"	<6.0	500	100	<6.0
Chloroform	0.3	"	<3.0	510	100	12
1,2-Dichloroethane	0.3	"	<3.0	490	99	<3.0
1,1-Dichloroethene	0.7	"	<7.0	500	100	<7.0
Tetrachloroethene	0.5	"	<5.0	500	100	<5.0
Trichloroethene	0.3	"	<3.0	510	100	<3.0
Vinyl Chloride	0.9	"	<9.0	590	120	<9.0
1,4-Dichlorobenzene	1.6	"	<16	510	100	<16
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			102	106	106	101
d8-Toluene			102	104	104	102
1,4-Bromofluorobenzene			102	105	105	101

VOC via SW846 8260

PASC - Certificate of Analysis

			Method	Blank	%	Blank Spike	%	Soil Stockpile
	Client ID:		Blank	Spike	Recovery	Duplicate	Recovery	utnv
	Lab No.:		014429 04	014429 04	014429 04	014429 04	014429 04	014431 04
	Date Sampled:		01/40/01	01/40/01	01/40/01	01/40/01	01/40/01	29-Mar-2004
Component	**MDL**	**Units**						
Pyridine	5.0	ug/L	<MDL	NS	-	NS	-	<MDL
o-Cresol	1.7	"	<MDL	16	63	17	66	<MDL
m&p-Cresol	3.5	"	<MDL	16	63	16	65	<MDL
1,4-Dichlorobenzene	2.0	"	<MDL	15	60	16	63	<MDL
2,4-Dinitrotoluene	0.5	"	<MDL	25	99	24	98	<MDL
Nitrobenzene	2.0	"	<MDL	21	85	22	86	<MDL
Pentachlorophenol	1.1	"	<MDL	24	96	23	93	<MDL
2,4,5-Trichlorophenol	0.6	"	<MDL	23	91	23	91	<MDL
2,4,6-Trichlorophenol	1.2	"	<MDL	23	92	23	91	<MDL
Hexachloroethane	2.0	"	<MDL	13	53	14	55	<MDL
Hexachlorobutadiene	2.0	"	<MDL	14	55	14	56	<MDL
Hexachlorobenzene	2.0	"	<MDL	23	92	22	89	<MDL
Surrogate Recoveries		%						
d5-Phenol			30	27	27	28	28	42
d5-Nitrobenzene			87	85	85	87	87	73
2-Fluorobiphenyl			73	73	73	82	82	57
2,4,6-Tribromophenol			86	88	88	89	89	78
d-14-p-Terphenyl			107	99	99	107	107	93

SVOC via SW846 8270

Batch Code:	**0328MSN1**
pH after 3.5 ml of 1N HCl addition	014430 04
Date Analysed:	04/03/29
Date Prepared:	04/03/28
Batch Code:	**0328MSV1**
pH after extraction (volatiles)	014430 04
Date Analysed:	04/03/29
Date Prepared:	04/03/28
Batch Code:	**0324VPH1**
Soil pH measured in water	014430 04
Date Analysed:	04/03/29
Date Prepared:	04/03/24
Batch Code:	**0325FSA2**
Cyanide (Reactive)	014430 04
Date Analysed:	04/03/25
Date Prepared:	04/03/25
Batch Code:	**0402XX01**
Sulphide (Reactive)	014430 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02
Batch Code:	**0402RGA1**
Flash Point	014430 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02
Batch Code:	**0331NDU1**
Aroclor-1016	014428 04
	014430 04
Date Analysed:	04/03/31
Date Prepared:	04/03/31

Batch Code:	**0330MBL1**
Mercury	014429 04
	014431 04
Date Analysed:	04/03/30
Date Prepared:	04/03/30
Batch Code:	**0329STL2**
Arsenic	014429 04
	014431 04
Date Analysed:	04/03/29
Date Prepared:	04/03/29
Batch Code:	**0330MGS1**
a-Chlordane	014429 04
	014431 04
Date Analysed:	04/03/31
Date Prepared:	04/03/30
Batch Code:	**0330MGS1**
2,4-D (via 8150)	014429 04
	014431 04
Date Analysed:	04/03/31
Date Prepared:	04/03/30
Batch Code:	**0405DJ01**
Benzene	014429 04
	014432 04
Date Analysed:	04/04/05
Date Prepared:	04/04/05
Batch Code:	**0329TKR1**
Pyridine	014429 04
	014431 04
Date Analysed:	04/03/30
Date Prepared:	04/03/29
Batch Code:	**0329TKR1**
Hexachloroethane	014429 04
	014431 04
Date Analysed:	04/03/30
Date Prepared:	04/03/29

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

CLIENT INFORMATION

Company Name: NIAGARA ENVIRONMENTAL & ENGINEERING
Project Manager: RUSS SAVAGE
Address: 3553 CRITTENDEN RD
CRITTENDEN NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: JON NEUBAUER

MBS - 014428
MBW - 014429

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	FULL TCLP	incl. PESTS. + HERBS.	+ PCB'S	CORROSIVITY	IGNITABILITY/FLASH PT	REACTIVITY				Level of contamination (low, high, unknown)
014430 - 32	BARIUM CONTAMINATED SOIL STOCKPILE	1	S	3/22/04		✓	✓	✓	✓	✓	✓			2500ppm	

TAT (Turnaround Time)
RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☒
- RUSH 5 Business Days ☐
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

Client Signature: James J. Blackburn
Affiliation: NIAGARA ENVIRONMENTAL & ENGINEERING, INC.
Date/Time: ____

Received By: ____
Affiliation: ____
Date/Time: 3-24-4 9:45

Rec'd By: ____
Date/Time ____

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

WHITE - LAB / YELLOW - CLIENT

04/13/2004 14:27 FAX 003/003

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? [X] YES [ ] NO
[ ] Hazardous [X] Non-Hazardous [ ] TSCA

Profile Number: WMI VA 7284
Renewal Date: 12 / 1 / 04

1. Generator Name: Development Downtown, Inc.
2. SIC Code:
3. Facility Street Address: Commerce Drive
4. Phone: (716) 856-8625
5. Facility City: Buffalo,
6. State/Province: New York
7. Zip/Postal Code: 14203
8. Generator USEPA/Federal ID #: NJ
9. County: Erie
10. State/Province ID #: NA
11. Customer Name: Nature's Way Environmental
12. Customer Phone: (716) 937-5521
13. Customer Contact: R. Savage/G. Weber
14. Customer Fax: 937-7360
15. Billing Address: 3553 Griffenden Rd. Griffendon, New York 14228 [ ] Same as above

1. Description
   a. Name of Waste: Soil Contaminated with Barium
   b. Process Generating Waste: Excavation of Barium impacted soil identified during previous site investigation.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range	h. pH Range
Brown/Gray	NA	[X] Solid [ ] Liquid [ ] Gas [ ] Sludge [ ] Other	[X] Single Layer [ ] Multi-layer	NA to % No Free Liquid	5.5 to %

i. Liquid Flash Point: [ ] <73°F [ ] 73-99°F [ ] 100-139°F [ ] 140-199°F [ ] ≥ 200°F [X] Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHCs] present in any concentration and as exact representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil & Stone	> 99.9 %		
Barium	< 0.0001 %		

k. [ ] Oxidizer [ ] Pyrophoric [ ] Explosive [ ] Radioactive
[ ] Carcinogen [ ] Infectious [ ] Shock Sensitive [ ] Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) [ ] YES [X] NO
m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) [ ] YES [X] NO
n. Does the waste represented by this profile contain asbestos? [ ] YES [X] NO
If yes, [ ] friable [ ] non-friable
o. Does the waste represented by this profile contain benzene? [ ] YES [X] NO
If yes, concentration _____ ppm
Is the waste subject to the benzene waste operations NESHAP? [ ] YES [X] NO
p. Is the waste subject to RCRA Subpart CC controls? [ ] YES [X] NO
If yes, volatile organic concentration _____ ppmw
q. Does the waste contain any Class I or Class II ozone-depleting substances? [ ] YES [X] NO
r. Does the waste contain debris? (list in Section B.1.j) [ ] YES [X] NO

2. Quantity of Waste
Estimated Annual Volume < 100 [X] Tons [ ] Yards [ ] Drums [ ] Other specify)

3. Shipping Information
   a. Packaging:
   [X] Bulk Solid; Type/Size: Dump Truck/Trailer [ ] Bulk Liquid; Type/Size:
   [ ] Drum; Type/ Size: [ ] Other:
   b. Shipping Frequency: Units < 100 Tons Per: [ ] Month [ ] Quarter [ ] Year [X] One time [ ] Other
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) [ ] YES [X] NO
   d. Reportable Quantity (lbs.; kgs.): _____ e. Hazard Class/ID #: _____
   f. USDOT Shipping Name:

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004

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

g. Personal Protective Equipment Requirements: NA - Tarp Load for Transport

h. Transporter & Transporter Number Zoladz Construction Co. - 9A-499

1.	Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2	☐YES ☒NO
	a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)	
	b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j.)	
	c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.)	☐YES ☐NO
2.	Is this a state hazardous waste?	☐YES ☐NO
	Identify ALL state hazardous/non hazardous waste codes	☐YES ☒NO
3.	Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.	☐YES ☒NO
4.	Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission?	☐YES ☒NO
5.	Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j)	☐YES ☒NO
	a. If yes, were the PCBs imported into the U.S.?	☐YES ☐NO
6.	Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?	☒YES ☐NO
7.	Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?	☒YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: [signature] Title: Director of Urban Development

Name (Type or Print): [illegible] Company Name: Ecology & Env. Date: 4/19/04

☒Check if additional information is attached. Indicate the number of attached pages ___

1.	Management Method: ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)			
2.	Proposed Ultimate Management Facility: Chaffee Landfill			
3.	Precautions, Special Handling Procedures, or Limitation on Approval: Material may be used as daily cover			
4.	Waste Form	5. Source	6. System Type	AD3
	Special Waste Decision		☒Approved	☐Disapproved
	Salesperson's Signature:		Date:	
	NYSDEC Region 9 Approval:		Date:	
	Special Waste Approvals Person Signature: [signature]		Date:	4/19/04

APPENDIX M

CYANIDE "HOT SPOT" PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS AND DISPOSAL FACILITY APPROVAL

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	06-Apr-2004
Date Reported:	15-Apr-2004
Submission No.:	4D0197
Sample No.:	017592-017594

NOTES:

'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: _____

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

PASC - Certificate of Analysis

Component	MDL	Units	Cyanide Area 017594 04 31-Mar-2004	Cyanide Area 017594 04 31-Mar-2004 Duplicate	Cyanide Area 017594 04 31-Mar-2004 M. Spike	Cyanide Area 017594 04 31-Mar-2004 MS % Rec.	Cyanide Area 017594 04 31-Mar-2004 MS Dup	Cyanide Area 017594 04 31-Mar-2004 MSD % Rec.
Client ID:			Cyanide Area	Cyanide Area	Cyanide Area	Cyanide Area	Cyanide Area	Cyanide Area
Lab No.:			017594 04	017594 04	017594 04	017594 04	017594 04	017594 04
Date Sampled:			31-Mar-2004	31-Mar-2004	31-Mar-2004	31-Mar-2004	31-Mar-2004	31-Mar-2004
pH after 3.5 ml of 1N HCl addition			1.97	-	-	-	-	-
pH after extraction (semi-vols/metals)			5.88	-	-	-	-	-
pH initial (5g + 96.5ml water)			8.86	-	-	-	-	-
pH of extraction fluid (semi-vols/metals)			4.90	-	-	-	-	-
pH after extraction (volatiles)			6.31	-	-	-	-	-
pH of extraction fluid (volatiles)			4.90	-	-	-	-	-
Soil pH measured in water			8.71	8.79	-	-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	-	-	-	-	-
Sulphide (Reactive)	2000	"	< MDL	-	-	-	-	-
Flash Point	0.1	°C	>90	-	-	-	-	-
Aroclor-1016	38	ug/kg	< MDL	NA	1200	110	1100	110
Aroclor-1221	41	"	< MDL	NA	NS	-	NS	-
Aroclor-1232	38	"	< MDL	NA	NS	-	NS	-
Aroclor-1242	50	"	< MDL	NA	NS	-	NS	-
Aroclor-1248	31	"	< MDL	NA	NS	-	NS	-
Aroclor-1254	59	"	< MDL	NA	NS	-	NS	-
Aroclor-1260	31	"	< MDL	NA	1200	110	1100	110
Aroclor-1262	31	"	< MDL	NA	NS	-	NS	-
Aroclor-1268	49	"	< MDL	NA	NS	-	NS	-
Total PCB	59	"	< MDL	NA	2300	110	2200	110
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			62	NA	70	70	62	62
Decachlorobiphenyl			72	NA	91	91	79	79

Reactive Sulphide via 7.3.3.2
PCB via SW846 8082
Flash Point via Pensky-Martin
Reactive Cyanide via 7.3.4.1
pH via SW846 9045

PASC - Certificate of Analysis

Component	MDL	Units	Method Blank	Blank Spike	Method Blank
Client ID:			Method Blank	Blank Spike	Method Blank
Lab No.:			017592 04	017592 04	017592 04
Date Sampled:			31-Mar-2004	31-Mar-2004	31-Mar-2004
pH after 3.5 ml of 1N HCl addition			-	-	-
pH after extraction (semi-vols/metals)			-	-	-
pH initial (5g + 96.5ml water)			-	-	-
pH of extraction fluid (semi-vols/metals)			-	-	-
pH after extraction (volatiles)			-	-	-
pH of extraction fluid (volatiles)			-	-	-
Soil pH measured in water			-	-	-
Cyanide (Reactive)	500	ug/kg	<1000	26000	100
Sulphide (Reactive)	2000	"	-	-	-
Flash Point	0.1	°C	-	-	-
Aroclor-1016	38	ug/kg	< MDL	460	120
Aroclor-1221	41	"	< MDL	NS	-
Aroclor-1232	38	"	< MDL	NS	-
Aroclor-1242	50	"	< MDL	NS	-
Aroclor-1248	31	"	< MDL	NS	-
Aroclor-1254	59	"	< MDL	NS	-
Aroclor-1260	31	"	< MDL	480	120
Aroclor-1262	31	"	< MDL	NS	-
Aroclor-1268	49	"	< MDL	NS	-
Total PCB	59	"	< MDL	950	120
Surrogate Recoveries		%			
4,4'-Dibromooctaflourobiphenyl			64	70	70
Decachlorobiphenyl			82	89	89

Reactive Sulphide via 7.3.3.2
PCB via SW846 8082
Flash Point via Pensky-Martin
Reactive Cyanide via 7.3.4.1
pH via SW846 9045

PASC - Certificate of Analysis

	Client ID:		Cyanide Area utnv	Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		017595 04	017593 04	017593 04	017593 04	017593 04	017593 04
	Date Sampled:		08-Apr-2004	01/40/01	01/40/01	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**						
Mercury	0.50	ug/L	< MDL	< MDL	10	100	-	-
Arsenic	0.250	mg/L	< MDL	< MDL	1.3	100	-	-
Barium	0.100	"	0.49	< MDL	2.5	100	-	-
Cadmium	0.050	"	< MDL	< MDL	1.2	98	-	-
Chromium	0.500	"	< MDL	< MDL	2.4	98	-	-
Lead	0.500	"	< MDL	< MDL	2.4	98	-	-
Selenium	0.100	"	< MDL	< MDL	1.3	100	-	-
Silver	0.500	"	< MDL	< MDL	1.2	100	-	-
a-Chlordane	0.005	ug/L	<0.023	< MDL	0.10	86	0.11	95
g-Chlordane	0.009	"	<0.035	< MDL	0.11	91	0.11	90
Endrin	0.011	"	<0.042	< MDL	0.10	86	0.012	10
Heptachlor	0.005	"	<0.023	< MDL	0.079	66	0.080	67
Heptachlor Epoxide	0.012	"	<0.054	< MDL	0.12	96	0.11	89
Lindane	0.007	"	<0.035	< MDL	0.11	87	0.10	84
Methoxychlor	0.018	"	<0.13	< MDL	0.45	94	0.41	85
Toxaphene	0.116	"	<0.16	< MDL	NS	-	NS	-
Surrogate Recoveries		%						
4,4'-Dibromooctaflourobiphenyl			49	33	30	30	32	32
Decachlorobiphenyl			75	77	77	77	73	73
2,4-D (via 8150)	0.39	ug/L	<1.4	< MDL	5.5	74	6.3	84
2,4,5-TP	0.04	"	<0.15	< MDL	0.29	39	0.31	41
Surrogate Recoveries		%						
2,3-D			86	93	136	136	143	143

Mercury via SW846 7470
Metals via SW846 6010
Pesticides via SW846 8081
Herbicides via SW846 8151

			Cyanide Area	Method	Blank	%
	Client ID:		utv	Blank	Spike	Recovery
	Lab No.:		017596 04	017593 04	017593 04	017593 04
	Date Sampled:		08-Apr-2004	01/40/01	01/40/01	01/40/01
Component	**MDL**	**Units**				
Benzene	0.5	ug/L	<100	<100	10000	100
2-Butanone	5.0	"	<1000	<1000	9000	90
Carbon Tetrachloride	0.7	"	<140	<140	10000	100
Chlorobenzene	0.6	"	<120	<120	10000	100
Chloroform	0.3	"	<60	<60	9800	98
1,2-Dichloroethane	0.3	"	<60	<60	9800	98
1,1-Dichloroethene	0.7	"	<140	<140	9900	99
Tetrachloroethene	0.5	"	<100	<100	11000	110
Trichloroethene	0.3	"	<60	<60	9900	99
Vinyl Chloride	0.9	"	<180	<180	12000	120
1,4-Dichlorobenzene	1.6	"	<320	<320	11000	110
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			98	100	109	109
d8-Toluene			99	100	97	97
1,4-Bromofluorobenzene			100	100	107	107

VOC via SW846 8260

PASC - Certificate of Analysis

Component	MDL	Units	Cyanide Area utnv 017595 04 08-Apr-2004	Method Blank 017593 04 01/40/01	Blank Spike 017593 04 01/40/01	% Recovery 017593 04 01/40/01	Blank Spike Duplicate 017593 04 01/40/01	% Recovery 017593 04 01/40/01
Client ID:								
Lab No.:								
Date Sampled:								
Pyridine	5.0	ug/L	<10	< MDL	NS	-	NS	-
o-Cresol	1.7	"	<3.4	< MDL	18	70	12	48
m&p-Cresol	3.5	"	<7.0	< MDL	16	63	11	44
1,4-Dichlorobenzene	2.0	"	<4.0	< MDL	17	67	12	48
2,4-Dinitrotoluene	0.5	"	<1.0	< MDL	26	100	25	100
Nitrobenzene	2.0	"	<4.0	< MDL	23	93	18	73
Pentachlorophenol	1.1	"	<2.2	< MDL	26	100	24	98
2,4,5-Trichlorophenol	0.6	"	<1.2	< MDL	24	96	22	86
2,4,6-Trichlorophenol	1.2	"	<2.4	< MDL	24	97	21	84
Hexachloroethane	2.0	"	<4.0	< MDL	16	63	10	42
Hexachlorobutadiene	2.0	"	<4.0	< MDL	19	76	14	55
Hexachlorobenzene	2.0	"	<4.0	< MDL	26	100	24	96
Surrogate Recoveries		%						
d5-Phenol			44	43	30	30	21	21
d5-Nitrobenzene			94	93	94	94	73	73
2-Fluorobiphenyl			82	82	94	94	74	74
2,4,6-Tribromophenol			95	94	99	99	91	91
d-14-p-Terphenyl			86	95	98	98	92	92

SVOC via SW846 8270

PSC Analytical Services

CERTIFICATE OF ANALYSIS - SECTION 2

ANALYTICAL RESULTS

Client:(1353) PSC Analytical Services(BURLINGTON), BURLINGTON Reported:15-Apr-2004 Page: 1 of 1

Attention:	MS. ELAINE COUSINS	Purchase Order:	33847MC
Client Reference:		Date Received:	12-Apr-2004
Work Order:	115874	Sample Type:	Liquid

Sample #	Test	Result	Units	EQL	Comment
04-B009197	Sample Description: CYANIDE AREA (17594)		Date & Time Sampled: 31-Mar-2004		
	Sulphide as S	0.19	mg/L	0.02	

EQL Estimated Quantitation Limit
Refer to the cover page for a list of report contents.

PSC ANALYTICAL SERVICES

Client: PSC Analytical Services(BURLINGTON)
Client Reference:
Work Order: 115874

Sample Description			**CYANIDE AREA (17594)**
Date Sampled			**31-Mar-04**
Time Sampled			
Parameter	Units	EQL	04-B009197
Sulphide as S	mg/L	0.02	0.19

Batch Code:	**0407RGA1**
pH after 3.5 ml of 1N HCl addition	017594 04
Date Analysed:	04/04/08
Date Prepared:	04/04/07
Batch Code:	**0407RGV1**
pH after extraction (volatiles)	017594 04
Date Analysed:	04/04/08
Date Prepared:	04/04/07
Batch Code:	**0408VPH1**
Soil pH measured in water	017594 04
Date Analysed:	04/04/12
Date Prepared:	04/04/08
Batch Code:	**0408FSA1**
Cyanide (Reactive)	017592 04
	017594 04
Date Analysed:	04/04/08
Date Prepared:	04/04/08
Batch Code:	
Date Analysed:	
Date Prepared:	
Batch Code:	**0408RGA1**
Flash Point	017594 04
Date Analysed:	04/04/08
Date Prepared:	04/04/08
Batch Code:	**0412NDU1**
Aroclor-1016	017592 04
	017594 04
Date Analysed:	04/04/12
Date Prepared:	04/04/12

Batch Code:	**0408MBL1**
Mercury	017593 04
	017595 04
Date Analysed:	04/04/08
Date Prepared:	04/04/08
Batch Code:	**0408STL1**
Arsenic	017593 04
	017595 04
Date Analysed:	04/04/08
Date Prepared:	04/04/08
Batch Code:	**0408MGS1**
a-Chlordane	017593 04
	017595 04
Date Analysed:	04/04/12
Date Prepared:	04/04/08
Batch Code:	**0408NDR1**
2,4-D (via 8150)	017593 04
	017595 04
Date Analysed:	04/04/13
Date Prepared:	04/04/08
Batch Code:	**0408MC01**
Benzene	017593 04
	017596 04
Date Analysed:	04/04/08
Date Prepared:	04/04/08
Batch Code:	**0408TKR1**
Pyridine	017593 04
	017595 04
Date Analysed:	04/04/13
Date Prepared:	04/04/08
Batch Code:	**0408TKR1**
Hexachloroethane	017593 04
	017595 04
Date Analysed:	04/04/13
Date Prepared:	04/04/08

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 1 of 1

CLIENT INFORMATION

Company Name: NIAGARA
Project Manager: RUSS SAVAGE
Address: 3553 Cattenden Rd
Cattenden NY 14038
Phone #: 716 937 6527 Fax #: 716 932 9360
Sampled by: JON NEUBAUER

MBS - 017592
MBW - 017593

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	FULL TCLP	+ FLASHPOINT	+ REACTIVITY	+ CORROSIVITY	+ PESTS	+ HERBS	PCB'S				Level of contamination (low, high, unknown)
017594-96	Cyanide Area Stockpiled Soil Comp	2	S	3/31/04		✓	✓	✓	✓	✓	✓	✓			2 (24hr)	x2

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- ~~RUSH~~ 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

Please fax Results to NIAGARA

REMARKS

Client Signature: ____
Affiliation: NIAGARA
Date/Time: 4/6/04 8:38 AM

Received By: ____
Affiliation: PSC
Date/Time: 4-6-04 8:40

Rec'd By: ____
Date/Time ____

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIC

WHITE - LAB / YELLOW - CLIENT

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Soils/Solids/Sludges

Client: NWEC&C

Client Job Site:	Destro / Union Ship	**Lab Project Number:**	04-1779
		Lab Sample Number:	6198
Client Job Number:	N/A		
Field Location:	Cyanide Area Stockpile	**Date Sampled:**	06/28/2004
Field ID Number:	N/A	**Date Received:**	06/28/2004
Sample Type:	Soil	**Date Analyzed:**	06/28/2004

PHC Classification	Results in ug / Kg
Heavy Weight PHC as: Lube Oil	59,500

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger, Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

COMPANY: NWEC+C
ADDRESS: 3553 Cittenden Rd.
CITY: Cittenden, STATE: New York ZIP: 14038
PHONE: (716)937-6527 FAX: 937-9360
ATTN: R. Savage
COMMENTS: Please fax report

INVOICE TO:

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-1779
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) Need Results 7/1 PM
STD OTHER
1 2 3 5

PROJECT NAME/SITE NAME: Destro/Union Ship

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	# CONTAINERS	TPH	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 6/28/04		X		Cyanide Area Stockpile	Soil		X		6198
2									
3									
4									
5									
6									
7									
8									
9									
10									

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ☐ 10°

Sampled By: James Davey
James A. Dewey Jr. 6/28/04 9:00
Date/Time:

Relinquished By:
Date/Time:

Received By:
Date/Time:

Relinquished By:
Date/Time:

Received By:
Date/Time:

Received @ Lab By: Kelly Crandall 6/28/04 1705
Date/Time:

Total Cost:

P.I.F.

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☒YES ☐NO Profile Number: WMI CW8122

☐Hazardous ☒Non-Hazardous ☐TSCA Renewal Date: 12/1/04

A. Waste Generator Information

1. Generator Name: Development Downtown, Inc. 2. SIC Code:
3. Facility Street Address: Commerce Drive 4. Phone: (716)
5. Facility City: Buffalo, 6. State/Province: New York
7. Zip/Postal Code: 14203 8. Generator USEPA/Federal ID #: NA
9. County: Erie 10. State/Province ID #: NA
11. Customer Name: Natures Way Environmental 12. Customer Phone: (716) 937-6527
13. Customer Contact: R. Savage/M. Isleber 14. Customer Fax: 937-9360
15. Billing Address 3553 Crittenden Rd, Crittenden, New York 14038 ☐Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Soil Contaminated with Cyanide (ND (< 1 ppm)
   b. Process Generating Waste: Historic industrial operations. Investigation of site identified elevated levels of Cyanide in a discrete area. The area was excavated and stockpiled pending disposal.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Brown/Grey	NA	☒Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☒Single Layer ☐Multi-layer	NA % No Free Liquid
				h. pH: Range %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☐≥ 200°F ☒Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil & Stone	>99 %		
Cyanide (see analysis) ND at 1ppm	<0.001 %		

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j)..... ☐YES ☒NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j)..... ☐YES ☒NO

n. Does the waste represented by this profile contain asbestos?..... ☐YES ☒NO
If yes..... ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene?..... ☐YES ☒NO
If yes, concentration _____ ppm
Is the waste subject to the benzene waste operations NESHAP?..... ☐YES ☒NO

p. Is the waste subject to RCRA Subpart CC controls?..... ☐YES ☒NO
If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances?..... ☐YES ☒NO

r. Does the waste contain debris? (list in Section B.1.j)..... ☐YES ☒NO

2. Quantity of Waste
Estimated Annual Volume < 100 80 Tons ☒Tons ☐Yards ☐Drums ☐Other specify)

3. Shipping Information
a. Packaging:
☒Bulk Solid; Type/Size: Dump Truck ☐Bulk Liquid; Type/Size:
☐Crum; Type; Size: ☐Other:
b. Shipping Frequency: Unit 80 Tons Per: ☐Month ☐Quarter ☐Year ☒One time ☐Other
c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f)..... ☐YES ☒NO
d. Reportable Quantity (lbs.; kgs.): _____ e. Hazard Class/ID #:
f. USDOT Shipping Name:

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

CW8122

PLEASE PRINT IN INK OR TYPE

g. Personal Protective Equipment Requirements: NA - Tarp Load For Transport

h. Transporter & Transporter Number Zolack Construction Co. Inc #9A-497

C. Generator's Certification

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2 ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHC's) apply? (If yes, list in Section B.1.j) ☐YES ☐NO
   c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.) ☐YES ☐NO
2. Is this a state hazardous waste? ☐YES ☒NO
   Identify ALL state hazardous/non hazardous waste codes
3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.
4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO
5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j) ☐YES ☒NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO
6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO
7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: David A. Stebbins Title: Treasurer / President

Name (Type or Print): DAVID A. STEBBINS Company Name: Development Technologies, Inc. Date: 5/19/04

☒Check if additional information is attached. Indicate the number of attached pages 10

D. WMI Waste Profile Decision FOR OFFICE USE ONLY

1. Management Method: ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility: Chaffee Landfill
3. Precautions, Special Handling Procedures, or Limitation on Approval: Material may be used as daily cover

4. Waste Form 5. Source 6. System Type ADS

Special Waste Decision: ☒Approved ☐Disapproved

Salesperson's Signature: Date:

NYSDEC Region 9 Approval: Date:

Special Waste Approvals Person Signature: Jim L. Callahan Date: 5/20/04

APPENDIX N

UNDERGROUND STORAGE TANK NO. 1 PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS, DISPOSAL FACILITY APPROVAL, AND EXCAVATION CONFIRMATION SOIL SAMPLES LABORATORY ANALYTICAL RESULTS

Certificate of Analysis

CLIENT INFORMATION		LABORATORY INFORMATION	
Attention:	Russ Savage	**Contact:**	Mike Challis, B.Sc, C.Chem.
Client Name:	NWEC+C Inc.	**Project:**	AN040300
Project:	Union Ship Canal	**Date Received:**	26-Mar-2004
Project Desc:	Union Ship Canal	**Date Reported:**	06-Apr-2004
		Revision Date:	15-Apr-2004
Address:	3553 Crittenden Rd. Crittenden, NY 14038	**Submission No.:**	4C1023
		Sample No.:	015243-015244
Fax Number:	716-937-9360		
Phone Number:	716-937-6527		

NOTES: *"-" = not analysed "<" = less than Method Detection Limit (MDL) "NA" = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analytes)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS: **Revised to include Flashpoint**

Certified by: _____

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

PASC - Certificate of Analysis

	Client ID:		1000 GTE Soil tnv	1000 GTE Soil tv	1000 GTE Soil tv	Method Blank	Blank Spike	% Recovery
	Lab No.:		016116 04	016117 04	016117 04	015243 04	015243 04	015243 04
	Date Sampled:		02-Apr-2004	02-Apr-2004	02-Apr-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**			Duplicate			
Lead	0.020	mg/L	0.028	-	-	<MDL	-	-
Benzene	0.5	ug/L	-	43	44	<5.0	500	100
Surrogate Recoveries		%						
d4-1,2-Dichloroethane			-	102	101	102	106	106
d8-Toluene			-	99	99	99	102	102
1,4-Bromofluorobenzene			-	101	101	100	107	107

Benzene via 8260
Lead via 6010

Batch Code:	**0401RGA1**
pH after 3.5 ml of 1N HCl addition	015244 04
Date Analysed:	04/04/02
Date Prepared:	04/04/01
Batch Code:	**0401RGV1**
pH after extraction (volatiles)	015244 04
Date Analysed:	04/04/02
Date Prepared:	04/04/01
Batch Code:	**0402STA1**
Lead	015243 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02
Batch Code:	**0402RGA2**
Flash Point	015244 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02
Batch Code:	**0402DJ01**
Benzene	015243 04
Date Analysed:	04/04/02
Date Prepared:	04/04/02

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page

CLIENT INFORMATION

Company Name: NWEGC, Inc.
Project Manager: RUSS SAVAGE
Address: 3553 CRITTENDEN RD
CRITTENDEN, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: JON NEUBAUER

MB 15243

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	TCLP Benzene 04/03/31	TCLP Lead MCL	Flash point	ph per cent	Water from Guy 04/03/31
15244	1,000 GALLON TANK EXCAVATION STOCKPILED SOIL	1	S	3/25/04						

TAT (Turnaround Time)
RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION
Project #:
Site: UNION SHIP
PO#:
Philip Quote #:
Philip Project #:
Philip Contact:

SPECIAL DETECTION LIMITS
MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

Client Signature: Jennifer Blackwell
Affiliation: Nathan's Way
Date/Time: 3/26/04 11:35 AM

Received By: Kevin Zielinski
Affiliation: PSC
Date/Time: 3/26/04 11:35 AM

Rec'd By:
Date/Time

SEE OVER FOR COMPLETION & SAMPLING INS

WHITE - LAB / YELLOW - CLIENT

04/14/2004 06:41 FAX 003
04/07/2004 11:58 FAX 014

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

VA 7286

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? [X] YES [ ] NO Profile Number: WMI

[ ] Hazardous [X] Non-Hazardous [ ] TSCA Renewal Date: 12/1/04

A. Waste Generation Information

1. Generator Name: Development Downtown, Inc.
2. SIC Code:
3. Facility Street Address: Commerce Drive
4. Phone: (716) 856-8625
5. Facility City: Buffalo
6. State/Province: New York
7. Zip/Postal Code: 14203
8. Generator USEPA/Federal ID #: NA
9. County: Erie
10. State/Province ID #: NA
11. Customer Name: Natures Way Environmental
12. Customer Phone: (716) 937-5527
13. Customer Contact: R. Savage / G. Weber
14. Customer Fax: 937-5360
15. Billing Address: 3553 Crittenden Rd. Crittenden, New York 14038 [ ] Same as above

B. Waste Stream Information

1. Description
   a. Name of Waste: Soil Contaminated with Virgin Fuel Oil
   b. Process Generating Waste: Leaking Fuel Oil UST. An approximately 1,000 Gallon former Fuel Oil Storage tank was encountered during construction Activities. The tank was removed and surrounding impacted soil was excavated.

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range
Brown/Gray	Moderate Petroleum Odor	[X] Solid [ ] Liquid [ ] Gas [ ] Sludge [ ] Other	[X] Single Layer [ ] Multi-layer	NA to % No Free Liquid

h. pH: Range 5.0 to 9.0 %

i. Liquid Flash Point: [ ] <73°F [ ] 73-99°F [ ] 100-139°F [ ] 140-199°F [ ] ≥ 200°F [ ] Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and state limit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range
Soil + Stone	99.9 - 99.99%		
Virgin Fuel Oil	0.01 - 0.1 %		

k. [ ] Oxidizer [ ] Pyrophoric [ ] Explosive [ ] Radioactive [ ] Carcinogen [ ] Infectious [ ] Shock Sensitive [ ] Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j) [ ] YES [X] NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j) [ ] YES [X] NO

n. Does the waste represented by this profile contain asbestos? [ ] YES [X] NO
   If yes: [ ] friable [ ] non-friable

o. Does the waste represented by this profile contain benzene? [X] YES [ ] NO
   If yes, concentration 0.043 ppm
   Is the waste subject to the benzene wastes operations NESHAP? [ ] YES [X] NO

p. Is the waste subject to RCRA Subpart CC controls? [ ] YES [X] NO
   If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances? [ ] YES [X] NO

r. Does the waste contain debris? (list in Section B.1.j) [ ] YES [X] NO

2. Quantity of Waste
   Estimated Annual Volume: <100 [X] Tons [ ] Yards [ ] Drums [ ] Other specify)

3. Shipping Information
   a. Packaging:
   [X] Bulk Solid; Type/Size: Dump Truck/Trailer [ ] Bulk Liquid; Type/Size:
   [ ] Drum; Type; Size: [ ] Other:
   b. Shipping Frequency: Units <100 Tons Per: [ ] Month [ ] Quarter [ ] Year [X] One time [ ] Other
   c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f) [ ] YES [X] NO
   d. Reportable Quantity (lbs.; kgs.): e. Hazard Class/ID #:
   f. USDOT Shipping Name:

04/14/2004 06:43 FAX
04/07/2004 11:58 FAX

☑004
☑015

WASTE MANAGEMENT

GENERATOR'S WASTE PROFILE SHEET
CHAFFEE LANDFILL

PLEASE PRINT IN INK OR TYPE

g. Personal Protective Equipment Requirements: NA - Tarp Loads for Transport

h. Transporter & Transporter Number Zoladz Construction Co #9A-499

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2. ☐YES ☒NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U)
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (If yes, list in Section B.1.j.) ☐YES ☐NO
   c. Does this waste contain debris? (If yes, list size and type in Chemical Composition - B.1.) ☐YES ☐NO

2. Is this a state hazardous waste? ☐YES ☒NO
   Identify ALL state hazardous/non hazardous waste codes:

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up? ☐YES ☒NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission? ☐YES ☒NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (If yes, list in Chemical Composition - B.1.j.) ☐YES ☒NO
   a. If yes, were the PCBs imported into the U.S.? ☐YES ☐NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor? ☒YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor? ☒YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WMI to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: [signature] Title: Director of Waste Management

Name (Type or Print): Peter M. Carpenter Company Name: Evergy / DDS Date: 4/12/04

☒Check if additional information is attached. Indicate the number of attached pages

FOR WMI USE ONLY

1. Management Method ☒Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration ☐Hazardous Stabilization ☐Other (Specify)
2. Proposed Ultimate Management Facility: Chaffee Landfill
3. Precautions, Special Handling Procedures, or Limitation on Approval: Material may be used as daily cover
4. Waste Form 5. Source 6. System Type ADC
Special Waste Decision: ☒Approved ☐Disapproved
Salesperson's Signature: Date:
NYSDEC Region 9 Approval: Date:
Special Waste Approvals Person Signature: Jim L. Callahan Date: 4/15/04

ANALYTICAL SERVICES

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	26-Mar-2004
Date Reported:	06-Apr-2004
Submission No.:	4C1017
Sample No.:	015214-015215

NOTES: *'-' = not analysed '<' = less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: _____

6555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 6788 F 905 332 9169 W www.pscanalytical.com

PASC - Certificate of Analysis

			1000 G.T.E	Method	Blank	%
	Client ID:		Sidewall	Blank	Spike	Recovery
	Lab No.:		015215 04	015214 04	015214 04	015214 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**				
Benzene	1.0	ug/kg	39	<MDL	56	89
Ethylbenzene	1.0	"	33	<MDL	61	97
Toluene	1.0	"	230	<MDL	57	92
m&p-Xylene	1.0	"	2100	<MDL	120	99
o-Xylene	1.0	"	1500	<MDL	60	96
Xylenes(Total)	1.0	"	3500	<MDL	180	97
Isopropylbenzene	1.0	"	15	<MDL	57	92
n-Propylbenzene	1.0	"	11	<MDL	61	98
p-Isopropyltoluene	1.0	"	20	<MDL	63	100
1,2,4-Trimethylbenzene	1.0	"	3600	<MDL	61	98
1,3,5-Trimethylbenzene	1.0	"	1300	<MDL	62	98
n-Butylbenzene	1.0	"	13	<MDL	65	100
sec-Butylbenzene	1.0	"	10	<MDL	64	100
tert-Butylbenzene	1.0	"	<MDL	<MDL	61	97
Naphthalene	1.0	"	45	<MDL	62	99
Methyl-t-butylether	1.0	"	<MDL	<MDL	NS	-
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			62	62	65	65
d8-Toluene			87	79	75	75
Bromofluorobenzene			70	79	80	80
d10-Ethylbenzene			73	96	82	82

TOTAL VOC's = 12,416 ppb

SSAL for VOC's = 10,000 ppb

PASC - Certificate of Analysis

			1000 G.T.E	Method	Blank	%	Blank Spike	%
	Client ID:		Sidewall	Blank	Spike	Recovery	Duplicate	Recovery
	Lab No.:		015215 04	015214 04	015214 04	015214 04	015214 04	015214 04
	Date Sampled:		25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004	25-Mar-2004
Component	**MDL**	**Units**						
Naphthalene	9.0	ug/kg	680	<180	3100	78	3000	76
Acenaphthene	7.0	"	810	<140	3400	84	3200	80
Fluorene	4.0	"	920	<80	3500	88	3300	82
Phenanthrene	3.0	"	8400	<60	3300	82	3200	80
Anthracene	6.0	"	1800	<120	3200	79	3100	78
Fluoranthene	6.0	"	15000	<120	3800	95	3600	90
Pyrene	4.0	"	10000	<80	3200	80	3100	78
Benz(a)anthracene	5.0	"	6900	<100	3800	94	3700	92
Chrysene	4.0	"	6900	<80	3800	94	3600	90
Benzo(b)fluoranthene	4.0	"	7400	<80	4000	99	3600	90
Benzo(k)fluoranthene	4.0	"	6000	<80	3600	90	3800	95
Benzo(a)pyrene	5.0	"	6300	<100	3500	88	3500	87
Indeno(1,2,3-cd)pyrene	6.0	"	5100	<120	3600	89	3400	85
Dibenzo(ah)anthracene	5.0	"	1100	<100	3600	90	3500	87
Benzo(ghi)perylene	6.0	"	4900	<120	3700	92	3500	88
Surrogate Recoveries		%						
d5-Nitrobenzene			62	50	62	62	58	58
2-Fluorobiphenyl			89	72	90	90	86	86
d14-p-Terphenyl			99	87	96	96	93	93

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0329MC01**
Benzene	015214 04
	015215 04
Date Analysed:	04/03/29
Date Prepared:	04/03/29
Batch Code:	**0330SPX1**
Naphthalene	015214 04
	015215 04
	015215 04
Date Analysed:	04/04/01
Date Prepared:	04/03/30

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page ____ of ____

CLIENT INFORMATION

Company Name: NWEGTC
Project Manager: RUSS SAVAGE
Address: 3553 CRITTENDEN RD
CRITTENDEN, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: JON NEUBAUER

MB 15214

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
15215	1,000 GALLON TANK EXCAVATION SIDEWALLS COMPOSITE	1	S	3/25/04		✓	✓	

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B

REMARKS

Client Signature: Jennifer J Blackwood
Affiliation: Natures Way
Date/Time: 3/26/04 11:35 AM

Received By: Kevin Zielinski
Affiliation: PSC
Date/Time: 3/26/04, 11:35 AM

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIO

TOTAL P.05

APPENDIX O

UNDERGROUND STORAGE TANK NO. 2 DRUM DISPOSAL BILLS OF LADING

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

Straight Bill of Lading

ORIGINAL - NOT NEGOTIABLE

Shipper's No. _____

CARRIER: Nature's Way Environmental Consultants & Contractors, Inc.
3553 Crittenden Road, Crittenden, NY 14038

Carrier's No. 9A-516

Date

TO:
Consignee Industrial Oil Tank Service, Inc.
Street 120 Dry Road
Destination Oriskany, NY 13424

FROM:
Shipper Development Downtown Inc
Street Commerce Dr. Formerly Ellicott Creek Rd
Origin Buffalo N.Y.

Route: I-90 east to Exit 33 to 365 east to Rt.69/233 to Sutcliff Road to Dry Road

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (If Hazardous Materials - Proper Shipping Name)	Hazard Class	I.D. Number	Subsidiary Classification	Rate	Labels Required (If required)
1		55gallon drum - Flammable Liquid NOS (Naphtha Heptane)	3 PG II	1993	30-6	16	Flammable
		Gail Converse 10704					
		2 pails					

RECEIVED BY:

DATED:

RECEIVED subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contrat as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per

PLACARDS REQUIRED

SHIPPER: Development Downtown Inc
PER:
DATE: 9/30/04

CARRIER: Nature's Way Environmental (N.W.E.&C.)
PER:
DATE: 9/30/04 10-1-04

EMERGENCY RESPONSE TELEPHONE NUMBER: (716) 937-6527 N.W.E.C.& C.

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response informatin or who has access to a person with that knowledge.

FOR HELP IN CHEMICAL EMERCENCIES INVOLVING SPILL, LEAK,
FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR Night

STRAIGHT BILL OF LADING
ORIGINAL - NOT NEGOTIABLE

Shipper's No. _____

Nature's Way Environmental Consultants & Contractors, Inc.

CARRIER: 3553 Crittenden Road, Crittenden, NY 14038 SCAC Carrier's No. 9A-576

Date

TO:
Consignee Industrial Oil Tank Service, Inc.
Street 120 Dry Road
Destination Oriskany, NY Zip 13424

FROM: Developmental Education, Inc
Shipper
Street Genesee Community College
Origin Batavia NY Zip

Route: I-90 - X33 - 365E - RT69/233 - Sutliff Road to Dry Road

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS, PROPER SHIPPING NAME)	HAZARD CLASS	I.D. Number	WEIGHT (Subject to Correction)	RATE	Charges (For Carrier Use Only)
1		Waste 55 gallon drum	Non Haz	N.A.	300 lb		
		Non Spill Non DOT					
		Regulated medical NOS					
		(Contains Bathroom Assembly)	Glass Container				
		43F	10-104	DOT			

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. Prepaid Collect

FREIGHT ☐ PREPAID

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding ¢ Per

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is agreed, as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. (See section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement. The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Signature of Consignor.

PLACARDS REQUIRED None PLACARDS SUPPLIED ☐ YES ☐ NO — QUANTITY RECEIVED AND DELIVERED BY DRIVER SIGNATURE

SHIPPER Developmental Education, Inc
PER:
DATE: 9/30/04

CARRIER: NWEC, INC.
PER:
DATE: 9/30/04 10-1-04

EMERGENCY RESPONSE TELEPHONE NUMBER: 716 937-6527

Manned 24 hours/day by a person with knowledge of the hazards of the m... emergency response information or who has access to a person with that ...

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

APPENDIX P

SOUTH BUFFALO RAILWAY BERM CHARACTERIZATION LABORATORY ANALYTICAL RESULTS

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

GRAB 1

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: GRAB 1
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C3332
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: not dec. 15. Date Analyzed: 10/15/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	18.	B
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
156-60-5	trans-1,2-Dichloroethene	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	1.	J
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	12.	
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
156-59-2	cis-1,2-Dichloroethene	6.	U
106-42-3	m,p-Xylene	5.	J
95-47-6	o-Xylene	7.	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GRAB 1 DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: GRAB 1 DUP
Sample wt/vol: 5.000 (g/mL) G Lab File ID: C3333
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: not dec. 16. Date Analyzed: 10/15/03
GC Column: RTX502.2 ID: .32 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	16.	B
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
156-60-5	trans-1,2-Dichloroethene	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	J
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
156-59-2	cis-1,2-Dichloroethene	6.	U
106-42-3	m,p-Xylene	4.	J
95-47-6	o-Xylene	5.	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

COMP 1

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: COMP 1
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B2447
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: 15. decanted: (Y/N) N Date Extracted: 10/14/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 10/28/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390.	U
111-44-4	bis(2-Chloroethyl)ether	390.	U
95-57-8	2-Chlorophenol	390.	U
541-73-1	1,3-Dichlorobenzene	390.	U
106-46-7	1,4-Dichlorobenzene	390.	U
95-50-1	1,2-Dichlorobenzene	390.	U
95-48-7	2-Methylphenol	390.	U
108-60-1	bis(2-chloroisopropyl)ether	390.	U
106-44-5	4-Methylphenol	390.	U
621-64-7	n-Nitroso-di-n-propylamine	390.	U
67-72-1	Hexachloroethane	390.	U
98-95-3	Nitrobenzene	390.	U
78-59-1	Isophorone	390.	U
88-75-5	2-Nitrophenol	390.	U
105-67-9	2,4-Dimethylphenol	390.	U
111-91-1	bis(2-Chloroethoxy)methane	390.	U
120-83-2	2,4-Dichlorophenol	390.	U
120-82-1	1,2,4-Trichlorobenzene	390.	U
91-20-3	Naphthalene	130.	J
106-47-8	4-Chloroaniline	390.	U
87-68-3	Hexachlorobutadiene	390.	U
59-50-7	4-Chloro-3-methylphenol	390.	U
91-57-6	2-Methylnaphthalene	130.	J
77-47-4	Hexachlorocyclopentadiene	390.	U
88-06-2	2,4,6-Trichlorophenol	390.	U
95-95-4	2,4,5-Trichlorophenol	390.	U
91-58-7	2-Chloronaphthalene	390.	U
88-74-4	2-Nitroaniline	2000.	U
131-11-3	Dimethylphthalate	390.	U
208-96-8	Acenaphthylene	210.	J
606-20-2	2,6-Dinitrotoluene	390.	U
99-09-2	3-Nitroaniline	2000.	U
83-32-9	Acenaphthene	68.	J

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

COMP 1

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: COMP 1
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B2447
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: 15. decanted: (Y/N) N Date Extracted: 10/14/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 10/28/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2000.	U
100-02-7	4-Nitrophenol	2000.	U
132-64-9	Dibenzofuran	130.	J
121-14-2	2,4-Dinitrotoluene	390.	U
84-66-2	Diethylphthalate	390.	U
7005-72-3	4-Chlorophenyl-phenylether	390.	U
86-73-7	Fluorene	81.	J
100-01-6	4-Nitroaniline	2000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2000.	U
86-30-6	n-Nitrosodiphenylamine	390.	U
101-55-3	4-Bromophenyl-phenylether	390.	U
118-74-1	Hexachlorobenzene	390.	U
87-86-5	Pentachlorophenol	2000.	U
85-01-8	Phenanthrene	1000.	
120-12-7	Anthracene	280.	J
86-74-8	Carbazole	92.	J
84-74-2	Di-n-butylphthalate	390.	U
206-44-0	Fluoranthene	1900.	
129-00-0	Pyrene	1500.	
85-68-7	Butylbenzylphthalate	390.	U
91-94-1	3,3'-Dichlorobenzidine	780.	U
56-55-3	Benzo(a)anthracene	1100.	
218-01-9	Chrysene	1100.	
117-81-7	bis(2-Ethylhexyl)phthalate	390.	U
117-84-0	Di-n-octylphthalate	390.	U
205-99-2	Benzo(b)fluoranthene	1100.	
207-08-9	Benzo(k)fluoranthene	1200.	
50-32-8	Benzo(a)pyrene	1200.	
193-39-5	Indeno(1,2,3-cd)pyrene	790.	
53-70-3	Dibenzo(a,h)anthracene	170.	J
191-24-2	Benzo(g,h,i)perylene	820.	

(1) - Cannot be separated from diphenylamine

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

COMP 1 DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: COMP 1 DUP
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B2448
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: 17. decanted: (Y/N) N Date Extracted: 10/14/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 10/28/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400.	U
111-44-4	bis(2-Chloroethyl)ether	400.	U
95-57-8	2-Chlorophenol	400.	U
541-73-1	1,3-Dichlorobenzene	400.	U
106-46-7	1,4-Dichlorobenzene	400.	U
95-50-1	1,2-Dichlorobenzene	400.	U
95-48-7	2-Methylphenol	400.	U
108-60-1	bis(2-chloroisopropyl)ether	400.	U
106-44-5	4-Methylphenol	400.	U
621-64-7	n-Nitroso-di-n-propylamine	400.	U
67-72-1	Hexachloroethane	400.	U
98-95-3	Nitrobenzene	400.	U
78-59-1	Isophorone	400.	U
88-75-5	2-Nitrophenol	400.	U
105-67-9	2,4-Dimethylphenol	400.	U
111-91-1	bis(2-Chloroethoxy)methane	400.	U
120-83-2	2,4-Dichlorophenol	400.	U
120-82-1	1,2,4-Trichlorobenzene	130.	J
91-20-3	Naphthalene	400.	U
106-47-8	4-Chloroaniline	400.	U
87-68-3	Hexachlorobutadiene	400.	U
59-50-7	4-Chloro-3-methylphenol	130.	J
91-57-6	2-Methylnaphthalene	400.	U
77-47-4	Hexachlorocyclopentadiene	400.	U
88-06-2	2,4,6-Trichlorophenol	400.	U
95-95-4	2,4,5-Trichlorophenol	400.	U
91-58-7	2-Chloronaphthalene	2000.	U
88-74-4	2-Nitroaniline	400.	U
131-11-3	Dimethylphthalate	250.	J
208-96-8	Acenaphthylene	400.	U
606-20-2	2,6-Dinitrotoluene	2000.	U
99-09-2	3-Nitroaniline	400.	U
83-32-9	Acenaphthene		

1C

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

COMP 1 DUP

Lab Name: AES, Inc. Contract:
Lab Code: AES Case No.: NW0303 SAS No.: SDG No.: COMP 1
Matrix: (soil/water) SOIL Lab Sample ID: COMP 1 DUP
Sample wt/vol: 30.0 (g/mL) G Lab File ID: B2448
Level: (low/med) LOW Date Received: 10/09/03
% Moisture: 17. decanted: (Y/N) N Date Extracted: 10/14/03
Concentrated Extract Volume: 2000.0 (uL) Date Analyzed: 10/28/03
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2000.	U
100-02-7	4-Nitrophenol	2000.	U
132-64-9	Dibenzofuran	84.	J
121-14-2	2,4-Dinitrotoluene	400.	U
84-66-2	Diethylphthalate	400.	U
7005-72-3	4-Chlorophenyl-phenylether	400.	U
86-73-7	Fluorene	400.	U
100-01-6	4-Nitroaniline	2000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2000.	U
86-30-6	n-Nitrosodiphenylamine	400.	U
101-55-3	4-Bromophenyl-phenylether	400.	U
118-74-1	Hexachlorobenzene	400.	U
87-86-5	Pentachlorophenol	2000.	U
85-01-8	Phenanthrene	480.	
120-12-7	Anthracene	280.	J
86-74-8	Carbazole	56.	J
84-74-2	Di-n-butylphthalate	400.	U
206-44-0	Fluoranthene	1200.	
129-00-0	Pyrene	1000.	
85-68-7	Butylbenzylphthalate	400.	U
91-94-1	3,3'-Dichlorobenzidine	800.	U
56-55-3	Benzo(a)anthracene	850.	
218-01-9	Chrysene	870.	
117-81-7	bis(2-Ethylhexyl)phthalate	400.	U
117-84-0	Di-n-octylphthalate	400.	U
205-99-2	Benzo(b)fluoranthene	880.	
207-08-9	Benzo(k)fluoranthene	890.	
50-32-8	Benzo(a)pyrene	920.	
193-39-5	Indeno(1,2,3-cd)pyrene	680.	
53-70-3	Dibenzo(a,h)anthracene	160.	J
191-24-2	Benzo(g,h,i)perylene	630.	

(1) - Cannot be separated from diphenylamine

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP 1

Lab Name:	AES, INC.				Contract:		
Lab Code:	AES	Case No.	NW0303	SAS No.:	SDG No.:	COMP 1	
Matrix: (soil/water)	Soil				Lab Sample ID:	COMP 1	
Sample wt/vol:	30.0	G			Lab File ID:	BC1983	
% Moisture:	15				Date Received:	10/09/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	10/14/03	
Concentrated Extract Volur	10000	uL			Date Analyzed:	10/18/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	8.6		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2	U
319-85-7	beta-BHC	2	U
319-86-8	delta-BHC	2	U
58-89-9	gamma-BHC(Lindane)	2	U
76-44-8	Heptachlor	2	U
309-00-2	Aldrin	2	U
1024-57-3	Heptachlor epoxide	2	U
959-98-8	Endosulfan I	2	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4'-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4'-DDD	3.9	U
1031-07-8	Endosulfan Sulfate	3.9	U
50-29-3	4,4'-DDT	3.8	JP
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin Ketone	3.9	U
7421-36-3	Endrin Aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2	U
5103-74-2	gamma-Chlordane	2	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor 1016	39	U
11104-28-2	Aroclor 1221	39	U
11141-16-5	Aroclor 1232	39	U
53469-21-9	Aroclor 1242	39	U
12672-29-6	Aroclor 1248	39	U
11097-69-1	Aroclor 1254	39	U
11096-82-5	Aroclor 1260	39	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

COMP 1 DUP

Lab Name:	AES, INC.				Contract:		
Lab Code:	AES	Case No.	NW0303	SAS No.:	SDG No.:	COMP 1	
Matrix: (soil/water)	Soil				Lab Sample ID:	COMP 1 DU	
Sample wt/vol:	30.0	G			Lab File ID:	BC1986	
% Moisture:	17				Date Received:	10/09/03	
Extraction: (SepF/Cont/So	Sonc				Date Extracted:	10/14/03	
Concentrated Extract Volur	10000	uL			Date Analyzed:	10/18/03	
Injection Volume:	1.5	uL			Dilution Factor:	1.0	
GPC Cleanup: (Y/N)	N	pH:	8.2		Sulfur Cleanup: (Y/N)	Y	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC(Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	4.0	U
72-55-9	4,4'-DDE	4.0	U
72-20-8	Endrin	4.0	U
33213-65-9	Endosulfan II	4.0	U
72-54-8	4,4'-DDD	4.0	U
1031-07-8	Endosulfan Sulfate	4.0	U
50-29-3	4,4'-DDT	4.4	
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin Ketone	4.0	U
7421-36-3	Endrin Aldehyde	4.0	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U
12674-11-2	Aroclor 1016	40	U
11104-28-2	Aroclor 1221	40	U
11141-16-5	Aroclor 1232	40	U
53469-21-9	Aroclor 1242	40	U
12672-29-6	Aroclor 1248	40	U
11097-69-1	Aroclor 1254	40	U
11096-82-5	Aroclor 1260	40	U

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1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
COMP 1

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: NW_0301 SAS No.: ____ SDG No.: COMP 1

Matrix (soil/water): SOIL__ Lab Sample ID: COMP_1_____

Level (low/med): LOW___ Date Received: 10/09/03

% Solids: 85.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	0.49	U	N	P
7440-39-3	Barium	188		N	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	2.2		N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	65.2		N	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	351		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.33			AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.75	U	N	P
7440-22-4	Silver	0.24	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
COMP 1 DUP

Lab Name: ADIRONDACK_ENVIRONMENTAL Contract: _____

Lab Code: AES__ Case No.: NW_0301 SAS No.: ____ SDG No.: COMP 1

Matrix (soil/water): SOIL__ Lab Sample ID: COMP_1_DUP

Level (low/med): LOW___ Date Received: 10/09/03

% Solids: 83.0__

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic	0.51	U	N	P
7440-39-3	Barium	84.2		N	P
7440-41-7	Beryllium				NR
7440-43-9	Cadmium	0.38	B	N	P
7440-70-2	Calcium				NR
7440-47-3	Chromium	17.9		N	P
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead	208		E	P
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	0.34			AV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium	0.77	U	N	P
7440-22-4	Silver	0.24	U	N	P
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
7440-42-8	Boron				NR

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

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1

CONVENTIONALS ANALYSIS DATA SHEET

Stockpile Comp

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: NW 0303 SAS No.: SDG No.: Stockpile Comp

Matrix (soil/water): Soil Lab Sample ID: 031009033-020

Level (Low/Med): Low Date Received: 10/9/03

% Solids: 85.0

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	4.36			EPA 9012
pH				EPA 150.1
Turbidity				EPA 180.0
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

FORM I - CONV

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

Stockpile Comp Dup

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: NW 0303 SAS No.: SDG No.: Stockpile Comp

Matrix (soil/water): Soil Lab Sample ID: 031009033-021

Level (Low/Med): Low Date Received: 10/9/03

% Solids: 83.3

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	Concentration	C	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				EPA 415.2
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	3.44			EPA 9012
pH				EPA 150.1
Turbidity				EPA 180.0
Color				EPA 110.1
Hexavalent Chromium				SW 7196

Comments _____

_____

_____

FORM I - CONV

Adirondack Environmental Services Inc.
314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

A full service analytical research laboratory offering solutions to environmental concerns

Client Name:	Address:	
NWEC+C, Inc.	3553 Crittenden Rd. Crittenden, New York 14038	
Send Report To:	Project Name (Location)	Samplers: (Names)
Russ Savage	Union Ship Canal	Jon Neubauer
Client Phone No: (716) 937-6527	PO Number:	Samplers: (Signature)
Client Fax No: (716) 937-9360		

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	Soil Stockpile - Comp #1	10/7/03	1:30	A	Soil	X		2	TCL-SVOC's 95-2, TCL Pesticides 95-3
002	Soil Stockpile - Comp #1 Dup.	10/7/03	1:30	A	Soil	X		2	PCB's 95-3, RCRA Metals + Cyanide
003	Soil Stockpile - Grab #1	10/7/03	1:15	A	Soil		X	1	TCL-VOC's, 95-1
004	Soil Stockpile - Grab #1 Dup.	10/7/03	1:15	A	Soil		X	1	TCL-VOC's, 95-1
				A/P					
031009033				A/P					
				A/P					
				A/P					
	EACH Comp should be analyzed for: pH, ~~95-1~~, 95-2, 95-3, RCRA metals, CN-			A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					
				A/P					

pH - 9045

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☑ Normal
☐ 2 Day ☐ 5 Day

Special Instructions/Remarks
ASP, Category B Deliverables
NO MS/MSD per client

CC Report To:

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
[signature]	[signature]	10/8/03 10:10
Relinquished by: (Signature)	Received for Laboratory by: [signature]	Date/Time 10/9/3 9:00

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled)	(Y) N	(Y) N
Notes: 5°C	Notes:	Notes:

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

APPENDIX Q

SANITARY SEWER MANHOLE NO. 8 TEST PITS CONFIRMATION SOIL SAMPLES LABORATORY ANALYTICAL RESULTS

PSC ANALYTICAL SERVICES Inc.

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	13-Jul-2004
Date Reported:	23-Jul-2004
Submission No.:	4G0474
Sample No.:	043072-043073

NOTES: *'-' = not analyzed '<' = Less than Method Detection Limit (MDL) 'NA' = no data available*
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: M. Challis

5555 NORTH SERVICE ROAD, BURLINGTON, ONTARIO, CANADA L7L 5H7 T 905 332 8788 F 905 332 9169 W www.pscanalytical.com

7/23/04

PASC - Certificate of Analysis

			Manhole 8	Method	Blank	%
	Client ID:		Test Pit	Blank	Spike	Recovery
	Lab No.:		043073 04	043072 04	043072 04	043072 04
	Date Sampled:		09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004
Component	**MDL**	**Units**				
Acetone	0.020	mg/kg	0.34	<	0.060	96
Acrolein	0.010	"	<0.030	<	0.079	130
Acrylonitrile	0.010	"	<0.030	<	0.062	99
Benzene	0.001	"	0.003	<	0.063	100
Bromoform	0.001	"	<0.009	<	0.056	90
Bromomethane	0.006	"	<0.018	<	0.050	79
2-Butanone	0.005	"	0.070	<	0.061	98
Carbon Disulfide	0.001	"	0.070	<	0.068	110
Carbon Tetrachloride	0.001	"	<0.003	<	0.062	99
Chlorobenzene	0.001	"	<0.003	<	0.064	100
Chlorodibromomethane	0.001	"	<0.003	<	0.060	96
Chloroethane	0.001	"	<0.003	<	0.057	91
Chloroform	0.001	"	<0.003	<	0.062	99
Chloromethane	0.001	"	<0.030	<0.010	0.049	78
1,2-Dichlorobenzene	0.001	"	<0.009	<	0.059	94
1,3-Dichlorobenzene	0.001	"	<0.009	<	0.061	97
1,4-Dichlorobenzene	0.001	"	<0.009	<	0.062	99
Dichlorobromomethane	0.001	"	<0.003	<	0.062	100
1,1-Dichloroethane	0.001	"	<0.003	<	0.062	99
1,2-Dichloroethane	0.001	"	<0.003	<	0.061	97
1,1-Dichloroethene	0.001	"	<0.003	<	0.065	100
Dichloromethane	0.020	"	<0.060	<	0.065	100
Methyl-t-butylether	0.001	"	<0.003	<	NS	-
Ethylene Dibromide	0.001	"	<0.003	<	0.060	96
1,2-Dibromo-3-Chloropropane	0.005	"	<0.045	<	0.056	89
cis-1,2-Dichloroethene	0.001	"	<0.003	<	0.063	100
trans-1,2-Dichloroethene	0.001	"	<0.003	<	0.063	100
1,2-Dichloropropane	0.001	"	<0.003	<	0.063	100
cis-1,3-Dichloropropene	0.001	"	<0.003	<	0.063	100
trans-1,3-Dichloropropene	0.001	"	<0.003	<	0.058	92
Ethylbenzene	0.001	"	<0.003	<	0.066	110
2-Hexanone	0.005	"	<0.015	<	0.057	92
4-Methyl-2-Pentanone	0.005	"	<0.015	<	0.057	92
Styrene	0.001	"	<0.003	<	0.068	110
1,1,1,2-Tetrachloroethane	0.001	"	<0.003	<	0.062	99
1,1,2,2-Tetrachloroethane	0.001	"	<0.009	<	0.056	89
Tetrachloroethene	0.001	"	0.006	<	0.064	100
Toluene	0.001	"	0.009	<	0.063	100
1,1,1-Trichloroethane	0.001	"	<0.003	<	0.063	100
1,1,2-Trichloroethane	0.001	"	<0.003	<	0.061	98
Trichloroethene	0.001	"	<0.003	<	0.065	100
Trichlorfluoromethane	0.001	"	<0.003	<	0.059	94
Vinyl Chloride	0.001	"	<0.003	<	0.062	99
m&p-Xylene	0.001	"	0.005	<	0.13	100
o-Xylene	0.001	"	<0.003	<	0.064	100
Isopropylbenzene	0.001	"	<0.009	<	0.058	93
Surrogate Recoveries		%				
d4-1,2-Dichloroethane			73	79	83	83
d8-Toluene			89	88	93	93
Bromofluorobenzene			56	87	94	94
d10-Ethylbenzene			81	104	103	103

PSC Submission No: 4G0474

Client: NWEC+C Inc. Project: Union Ship Canal

7/23/04

PASC - Certificate of Analysis

	Client ID:		Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit
	Lab No.:		043073 04	043073 04	043073 04	043073 04	043073 04
	Date Sampled:		09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004
Component	**MDL**	**Units**		M. Spike	MS % Rec.	MS Dup	MSD % Rec.
Phenol	0.27	mg/kg	<1.6	22	63	24	72
Bis(2-chloroethyl)ether	0.18	"	<1.1	NS	-	NS	-
2-Chlorophenol	0.48	"	<2.9	21	61	24	71
1,3-Dichlorobenzene	0.20	"	<1.2	NS	-	NS	-
1,4-Dichlorobenzene	0.20	"	<1.2	10	59	12	71
1,2-Dichlorobenzene	0.20	"	<1.2	NS	-	NS	-
Bis(2-chloroisopropyl)ether	0.15	"	<0.90	NS	-	NS	-
Hexachloroethane	0.20	"	<1.2	NS	-	NS	-
N-Nitroso-di-N-Propylamine	0.21	"	<1.3	12	70	13	78
Nitrobenzene	0.20	"	<1.2	NS	-	NS	-
Isophorone	0.40	"	<2.4	NS	-	NS	-
2-Nitrophenol	0.14	"	<0.84	NS	-	NS	-
2,4-Dimethylphenol	0.17	"	<1.0	NS	-	NS	-
Bis(2-chloroethoxy)methane	0.13	"	<0.78	NS	-	NS	-
2,4-Dichlorophenol	0.15	"	<0.90	NS	-	NS	-
1,2,4-Trichlorobenzene	0.20	"	<1.2	11	63	12	74
Naphthalene	0.09	"	<0.54	NS	-	NS	-
Hexachlorobutadiene	0.20	"	<1.2	NS	-	NS	-
4-Chloro-3-Methylphenol	0.15	"	<0.90	25	73	27	79
Hexachlorocyclopentadiene	0.20	"	<1.2	NS	-	NS	-
2,4,6-Trichlorophenol	0.12	"	<0.72	NS	-	NS	-
2-Chloronaphthalene	0.34	"	<2.0	NS	-	NS	-
Acenaphthylene	0.04	"	<0.24	NS	-	NS	-
Dimethyl phthalate	0.11	"	<0.66	NS	-	NS	-
2,6-Dinitrotoluene	0.06	"	<0.36	NS	-	NS	-
Acenaphthene	0.07	"	<0.42	13	76	14	86
2,4-Dinitrophenol	0.48	"	<2.9	NS	-	NS	-
2,4-Dinitrotoluene	0.22	"	<1.3	12	73	14	85
4-Nitrophenol	0.17	"	<1.0	23	68	26	79
Fluorene	0.06	"	<0.36	NS	-	NS	-
4-Chlorophenylphenylether	0.09	"	<0.54	NS	-	NS	-
Diethyl phthalate	0.11	"	7.8	NS	-	NS	-
4,6-Dinitro-2-methylphenol	0.16	"	<0.96	NS	-	NS	-
N-Nitrosodiphenylamine	0.19	"	<1.1	NS	-	NS	-
4-Bromophenylphenylether	0.04	"	<0.24	NS	-	NS	-
Hexachlorobenzene	0.20	"	<1.2	NS	-	NS	-
Pentachlorophenol	0.31	"	<1.9	21	61	22	67
Phenanthrene	0.03	"	<0.18	NS	-	NS	-
Anthracene	0.06	"	<0.36	NS	-	NS	-
Di-n-butyl phthalate	0.11	"	<0.66	NS	-	NS	-
Fluoranthene	0.05	"	<0.30	NS	-	NS	-
Pyrene	0.06	"	<0.36	15	89	16	98
Benzyl butyl phthalate	0.10	"	<0.60	NS	-	NS	-
3,3-Dichlorobenzidine	0.34	"	<2.0	NS	-	NS	-
Benzo(a)anthracene	0.05	"	0.30	NS	-	NS	-
Chrysene	0.06	"	<0.36	NS	-	NS	-
Bis(2-ethylhexyl)phthalate	0.75	"	<4.5	NS	-	NS	-
Di-n-octyl phthalate	0.11	"	<0.66	NS	-	NS	-
Benzo(b)fluoranthene	0.04	"	<0.24	NS	-	NS	-
Benzo(k)fluoranthene	0.04	"	<0.24	NS	-	NS	-

PASC - Certificate of Analysis

	Client ID:		Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit	Manhole 8 Test Pit
	Lab No.:		043073 04	043073 04	043073 04	043073 04	043073 04
	Date Sampled:		09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004
Component	**MDL**	**Units**		M. Spike	MS % Rec.	MS Dup	MSD % Rec.
Benzo(a)pyrene	0.05	mg/kg	<0.30	NS	-	NS	-
Indeno(1,2,3-cd)pyrene	0.06	"	<0.36	NS	-	NS	-
Dibenzo(a,h)anthracene	0.06	"	<0.36	NS	-	NS	-
Benzo(ghi)perylene	0.05	"	<0.30	NS	-	NS	-
N-Nitrosodimethylamine	1.0	"	<6.0	NS	-	NS	-
Aniline	0.50	"	<3.0	NS	-	NS	-
Benzyl alcohol	0.50	"	<3.0	NS	-	NS	-
Carbazole	0.50	"	<3.0	NS	-	NS	-
2-Methylphenol	0.50	"	<3.0	NS	-	NS	-
3&4-Methylphenol	0.50	"	<3.0	NS	-	NS	-
Benzoic acid	0.50	"	<3.0	NS	-	NS	-
4-Chloroaniline	0.50	"	<3.0	NS	-	NS	-
2-Methylnaphthalene	0.34	"	<2.0	NS	-	NS	-
2,4,5-Trichlorophenol	0.10	"	<0.60	NS	-	NS	-
2-Nitroaniline	0.50	"	<3.0	NS	-	NS	-
3-Nitroaniline	0.50	"	<3.0	NS	-	NS	-
Dibenzofuran	0.50	"	<3.0	NS	-	NS	-
Benzidine	0.50	"	<3.0	NS	-	NS	-
4-Nitroaniline	0.50	"	<3.0	NS	-	NS	-
Surrogate Recoveries		%					
2-Fluorophenol			78	62	62	73	73
d5-Phenol			85	71	71	79	79
d5-Nitrobenzene			81	66	66	75	75
2-Fluorobiphenyl			84	75	75	85	85
2,4,6-Tribromophenol			83	80	80	87	87
d14-p-Terphenyl			105	91	91	100	100

7/23/04

PASC - Certificate of Analysis

			Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Client ID:		043072 04	043072 04	043072 04	043072 04	043072 04
	Lab No.:		09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004
	Date Sampled:						
Component	**MDL**	**Units**					
Phenol	0.27	mg/kg	<0.54	6.2	78	6.4	79
Bis(2-chloroethyl)ether	0.18	"	<0.36	NS	-	NS	-
2-Chlorophenol	0.48	"	<0.96	6.2	77	6.2	77
1,3-Dichlorobenzene	0.20	"	<0.40	NS	-	NS	-
1,4-Dichlorobenzene	0.20	"	<0.40	2.9	73	3.0	75
1,2-Dichlorobenzene	0.20	"	<0.40	NS	-	NS	-
Bis(2-chloroisopropyl)ether	0.15	"	<0.30	NS	-	NS	-
Hexachloroethane	0.20	"	<0.40	NS	-	NS	-
N-Nitroso-di-N-Propylamine	0.21	"	<0.42	3.2	81	3.3	81
Nitrobenzene	0.20	"	<0.40	NS	-	NS	-
Isophorone	0.40	"	<0.80	NS	-	NS	-
2-Nitrophenol	0.14	"	<0.28	NS	-	NS	-
2,4-Dimethylphenol	0.17	"	<0.34	NS	-	NS	-
Bis(2-chloroethoxy)methane	0.13	"	<0.26	NS	-	NS	-
2,4-Dichlorophenol	0.15	"	<0.30	NS	-	NS	-
1,2,4-Trichlorobenzene	0.20	"	<0.40	2.9	74	3.0	75
Naphthalene	0.09	"	<0.18	NS	-	NS	-
Hexachlorobutadiene	0.20	"	<0.40	NS	-	NS	-
4-Chloro-3-Methylphenol	0.15	"	<0.30	6.4	80	6.4	80
Hexachlorocyclopentadiene	0.20	"	<0.40	NS	-	NS	-
2,4,6-Trichlorophenol	0.12	"	<0.24	NS	-	NS	-
2-Chloronaphthalene	0.34	"	<0.68	NS	-	NS	-
Acenaphthylene	0.04	"	<0.08	NS	-	NS	-
Dimethyl phthalate	0.11	"	<0.22	NS	-	NS	-
2,6-Dinitrotoluene	0.06	"	<0.12	NS	-	NS	-
Acenaphthene	0.07	"	<0.14	3.1	78	3.2	79
2,4-Dinitrophenol	0.48	"	<0.96	NS	-	NS	-
2,4-Dinitrotoluene	0.22	"	<0.44	3.3	81	3.3	82
4-Nitrophenol	0.17	"	<0.34	7.0	87	6.9	86
Fluorene	0.06	"	<0.12	NS	-	NS	-
4-Chlorophenylphenylether	0.09	"	<0.18	NS	-	NS	-
Diethyl phthalate	0.11	"	<0.22	NS	-	NS	-
4,6-Dinitro-2-methylphenol	0.16	"	<0.32	NS	-	NS	-
N-Nitrosodiphenylamine	0.19	"	<0.38	NS	-	NS	-
4-Bromophenylphenylether	0.04	"	<0.08	NS	-	NS	-
Hexachlorobenzene	0.20	"	<0.40	NS	-	NS	-
Pentachlorophenol	0.31	"	<0.62	6.7	83	6.5	82
Phenanthrene	0.03	"	<0.06	NS	-	NS	-
Anthracene	0.06	"	<0.12	NS	-	NS	-
Di-n-butyl phthalate	0.11	"	<0.22	NS	-	NS	-
Fluoranthene	0.05	"	<0.10	NS	-	NS	-
Pyrene	0.06	"	<0.12	3.6	90	3.5	88
Benzyl butyl phthalate	0.10	"	<0.20	NS	-	NS	-
3,3-Dichlorobenzidine	0.34	"	<0.68	NS	-	NS	-
Benzo(a)anthracene	0.05	"	<0.10	NS	-	NS	-
Chrysene	0.06	"	<0.12	NS	-	NS	-
Bis(2-ethylhexyl)phthalate	0.75	"	<1.5	NS	-	NS	-
Di-n-octyl phthalate	0.11	"	<0.22	NS	-	NS	-
Benzo(b)fluoranthene	0.04	"	<0.08	NS	-	NS	-
Benzo(k)fluoranthene	0.04	"	<0.08	NS	-	NS	-

7/23/04

PASC - Certificate of Analysis

	Client ID:		Method Blank	Blank Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		043072 04	043072 04	043072 04	043072 04	043072 04
	Date Sampled:		09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004	09-Jul-2004
Component	**MDL**	**Units**					
Benzo(a)pyrene	0.05	mg/kg	<0.10	NS	-	NS	-
Indeno(1,2,3-cd)pyrene	0.06	"	<0.12	NS	-	NS	-
Dibenzo(a,h)anthracene	0.06	"	<0.12	NS	-	NS	-
Benzo(ghi)perylene	0.05	"	<0.10	NS	-	NS	-
N-Nitrosodimethylamine	1.0	"	<2.0	NS	-	NS	-
Aniline	0.50	"	<1.0	NS	-	NS	-
Benzyl alcohol	0.50	"	<1.0	NS	-	NS	-
Carbazole	0.50	"	<1.0	NS	-	NS	-
2-Methylphenol	0.50	"	<1.0	NS	-	NS	-
3&4-Methylphenol	0.50	"	<1.0	NS	-	NS	-
Benzoic acid	0.50	"	<1.0	NS	-	NS	-
4-Chloroaniline	0.50	"	<1.0	NS	-	NS	-
2-Methylnaphthalene	0.34	"	<0.68	NS	-	NS	-
2,4,5-Trichlorophenol	0.10	"	<0.20	NS	-	NS	-
2-Nitroaniline	0.50	"	<1.0	NS	-	NS	-
3-Nitroaniline	0.50	"	<1.0	NS	-	NS	-
Dibenzofuran	0.50	"	<1.0	NS	-	NS	-
Benzidine	0.50	"	<1.0	NS	-	NS	-
4-Nitroaniline	0.50	"	<1.0	NS	-	NS	-
Surrogate Recoveries		%					
2-Fluorophenol			89	81	81	82	82
d5-Phenol			96	87	87	87	87
d5-Nitrobenzene			87	80	80	81	81
2-Fluorobiphenyl			88	81	81	83	83
2,4,6-Tribromophenol			92	90	90	88	88
d14-p-Terphenyl			103	97	97	94	94

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0721MC01**
Acetone	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/21
Batch Code:	**0721MC01**
cis-1,2-Dichloroethene	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/21
Batch Code:	**0719SPA1**
Phenol	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/19
Batch Code:	**0719SPA1**
2-Chloronaphthalene	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/19
Batch Code:	**0719SPA1**
Di-n-butyl phthalate	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/19
Batch Code:	**0719SPA1**
N-Nitrosodimethylamine	043072 04
	043073 04
Date Analysed:	04/07/21
Date Prepared:	04/07/19

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page _____ of _____

CLIENT INFORMATION

Company Name: NWEC+C, Inc
Project Manager: Russ Savage
Address: 3553 Cattaraugus Road
Cattaraugus, NY 14038
Phone #: (716) 937-6527 Fax #: (716) 937-9360
Sampled by: Russ Savage

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8270 TCL & TAL list	8260 TCL list	Level of contamination (low, high, unknown)
	Manhole 8 Test Pit	2	Soil	7/9/2004	10:20 am			

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact Lab

- STD 10 Business Days ❑
- RUSH 5 Business Days ❑
- RUSH 2 Business Days ❑
- RUSH 1 Business Days ❑
- Other Business Days ____

PROJECT INFORMATION

Project #: _____
Site: Union Ship Canal
PO#: _____
Philip Quote #: _____
Philip Project #: _____
Philip Contact: _____

SPECIAL DETECTION LIMITS

MISA ❑

SPECIAL REQUIREMENTS / REGULATIONS

REMARKS

ASP/ Category B
Level 4 report

Client Signature: _____
Affiliation: NWEC+C Inc
Date/Time: 7/9/04 / 10:20

Received By: David Kirk
Affiliation: P.S.C.
Date/Time: 13 JUL 2004 09:15

Rec'd By: _____
Date/Time: _____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS

APPENDIX R

CLEAN FILL VERIFICATION LETTERS

May 13, 2004

Destro Bros. Concrete Co., Inc
411 Ludington Street
Buffalo, N.Y. 14206

Attn: Carmen Zagarrio, President

RE: Buffalo's Union Ship Canal – Phase I
Imported Earth Fill Work Plan

Dear Mr. Zagarrio:

This is to certify that the soil/fill materials that we will be supplying for this project will come from the former Pine Hill site on Genesee Street in Lancaster New York. According to the Soil Management Plan Clarifications, page C-3, " Soil materials obtained from a recognized commercial supplier of soil/fill materials (e.g. Lancaster Stone, Buffalo Crushed Stone, Pine Hill etc.) will be considered "clean" for the purposes of use on site.

If there is anything further that you require, please call me at 998-8404.

Richard K. Hegmann

Quality Control Manager

Certified Clean Virgin Soil

SHOP DRAWING REVIEW

Review is for general compliance with contract documents. Sole responsibility for correctness of dimensions, details, quantities, and compliance with performance specifications, and safety during fabrication and construction shall remain with the Contractor.

- [x] No Exceptions Taken
- [ ] Revise as Noted
- [ ] Amend and Resubmit
- [ ] Rejected - See Remarks

By _____ Date 5/13/04

URS Corporation
BUFFALO, NEW YORK 14202

Buffalo Tournament Club
Golf Course

6432 Genesee Street Lancaster, NY 14086 (716)684-6675

June 9, 2004

Carmen Zagarrio, President
Destro & Brothers Concrete Co, Inc.
411 Ludington Street
Buffalo, NY 14206

Re: Buffalo's Union Ship Canal
Material Certification

Dear Mr. Zagarrio,

This letter is to certify that the topsoil Destro & Brothers has been provided, at the above location, is virgin soil and native soil material.

Should you require any additional information, please feel free to contact me.

Cordially,

Tim Davis

BUFFALO CRUSHED STONE, INC.
Subsidiary of New Enterprise Stone & Lime Co., Inc.
2544 Clinton St. · P.O. Box 710 · Buffalo, NY 14224 · (716) 826-7310 · FAX (716) 826-1342

February 25, 2005

Mr. Carmen Zagarrio
Destro Brothers Concrete Co., Inc.
411 Ludington Street
Buffalo, New York 1 4206

Re: Union Ship Canal

Dear Carmen:

This is to certify that the Aggregate and Blacktop supplied to the above referenced project was produced without contaminants. The following is the NYSDOT approval source numbers for the appropriate plants.

Woodlawn Slag	Plant 81	5-17G
Franklinville Sand & Gravel	Plant 36	5-3G
Wehrle & Barton Quarry	Plant 23	5-3R
Como Park Quarry	Plant 21	5-1R

We trust this meets with your approval.

Sincerely,

Curt Resetarits
Account Representative

CR:afa

LAFARGE

2/28/2005

Destro Bros. Concrete Co., Inc.
411 Ludington Street
Buffalo, N.Y. 14206

Attn: Carmen Zagarrio, President

Re: Union Ship Canal

Dear Mr. Zagarrio,

This is to certify that the materials that were shipped to this project from our Lockport Plant were considered "clean" for the purposes of use on site.

If there is anything further that you require, please contact me at 998-8404.

Yours,

Richard K. Hegmann
Quality Assurance Manager

DESTRO & BROTHERS CONCRETE CO., INC.

411 LUDINGTON STREET
BUFFALO, NEW YORK 14206

(716) 893-6043 • FAX: (716) 893-0538

March 11, 2005

DAVE COULTER
URS CORPORATION
77 Goodell Street
Buffalo, NY 14203

RE: BUFFALO'S UNION SHIP CANAL
PHASE 1

Dear Mr. Coulter,

This is to certify that the material used on the above project which was stored at Destro & Brothers Concrete Co., Inc, located at 411 Ludington Street, Buffalo, came from the Buffalo Tournament Club property and it is virgin and native soil. (A copy of the Certification letter from Buffalo Tournament Club is attached for your review).

If you need any further clarification, please do not hesitate to contact me.

Sincerely,

Carmen Zagarrio
President

APPENDIX S

MARCH 2, 2004 NYSDEC LETTER APPROVING GROUNDWATER MANAGEMENT PH INCREASE

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 • **FAX:** (716) 851-7226
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

March 2, 2004

Mr. Mark Smith
Erie County Industrial Development Agency
275 Oak Street
Buffalo, New York 14203

Dear Mr. Smith:

Hanna Furnace-Subparcels 1 and 2
Site #V-00319-9 and V-00435-9
City of Buffalo, Erie County

Yesterday afternoon we discussed the proposed procedures for handling elevated pH groundwater that were outlined in the Malcolm Pirnie letter of February 26,2004. The NYSDEC will allow ECIDA to implement the procedures as proposed on a short term basis only, beginning immediately and ending May 1, 2004. This approval extends only to the current sewer construction project.

If the pH of the water is greater than 11.0, or if there are oily sheens observed on the surface of the water or elevated PID readings or stains found in the excavation, then the water will be contained and properly treated as required in the remedial action work plans.

Sincerely,

David P. Locey
Environmental Engineer I

DPL/tml

APPENDIX T

ERIE COUNTY SEWER DISTRICT PREDISPOSAL CHARACTERIZATION LABORATORY ANALYTICAL RESULTS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3288
		Lab Sample Number:	10743
Client Job Number:	N/A		
Field Location:	Manhole 3 Cont. Water	**Date Sampled:**	12/03/2003
Field ID Number:	0	**Date Received:**	12/08/2003
Sample Type:	Water	**Date Analyzed:**	12/09/2003

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	37.6
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	12.6
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	2.45
o-Xylene	2.89
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 18043.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033288V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile Analysis Report for Non-potable Water

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3288
		Lab Sample Number:	10743
Client Job Number:	N/A		
Field Location:	Manhole 3 Cont. Water	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/08/2003
Sample Type:	Water	**Date Analyzed:**	12/11/2003

Base / Neutrals	Results in ug / L	Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0	Dibenz (a,h) anthracene	ND< 10.0
Anthracene	ND< 10.0	Fluoranthene	ND< 10.0
Benzo (a) anthracene	ND< 10.0	Fluorene	ND< 10.0
Benzo (a) pyrene	ND< 10.0	Indeno (1,2,3-cd) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0	Naphthalene	29.5
Benzo (g,h,i) perylene	ND< 10.0	Phenanthrene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0	Pyrene	ND< 10.0
Chrysene	ND< 10.0	Acenapthylene	ND< 10.0
Diethyl phthalate	ND< 10.0	1,2-Dichlorobenzene	ND< 10.0
Dimethyl phthalate	ND< 25.0	1,3-Dichlorobenzene	ND< 10.0
Butylbenzylphthalate	ND< 10.0	1,4-Dichlorobenzene	ND< 10.0
Di-n-butyl phthalate	ND< 10.0	1,2,4-Trichlorobenzene	ND< 10.0
Di-n-octylphthalate	ND< 10.0	Nitrobenzene	ND< 10.0
Bis (2-ethylhexyl) phthalate	46.4	2,4-Dinitrotoluene	ND< 10.0
2-Chloronaphthalene	ND< 10.0	2,6-Dinitrotoluene	ND< 10.0
Hexachlorobenzene	ND< 10.0	Bis (2-chloroethyl) ether	ND< 10.0
Hexachloroethane	ND< 10.0	Bis (2-chloroisopropyl) ether	ND< 10.0
Hexachlorocyclopentadiene	ND< 10.0	Bis (2-chloroethoxy) methane	ND< 10.0
Hexachlorobutadiene	ND< 10.0	4-Bromophenyl phenyl ether	ND< 10.0
N-Nitroso-di-n-propylamine	ND< 10.0	4-Chlorophenyl phenyl ether	ND< 10.0
N-Nitrosodiphenylamine	ND< 10.0	Benzidine	ND< 25.0
N-Nitrosodimethylamine	ND< 10.0	3,3'-Dichlorobenzidine	ND< 10.0
Isophorone	ND< 10.0		

Acids	Results in ug / L	Acids	Results in ug / L
Phenol	ND< 10.0	2,4-Dimethylphenol	ND< 10.0
2-Chlorophenol	ND< 10.0	2-Nitrophenol	ND< 10.0
2,4-Dichlorophenol	ND< 10.0	4-Nitrophenol	ND< 25.0
2,4,6-Trichlorophenol	ND< 10.0	2,4-Dinitrophenol	ND< 10.0
Pentachlorophenol	ND< 25.0	4,6-Dinitro-2-methylphenol	ND< 25.0
4-Chloro-3-methylphenol	ND< 10.0		

ELAP Number 10958 Method: EPA 625 Data File: 14077.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033288S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: NWEC&C, Inc

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3288
		Lab Sample Number:	10743
Client Job Number:	N/A		
Field Location:	Manhole 3 Cont. Water	**Date Sampled:**	12/03/2003
Field ID Number:	N/A	**Date Received:**	12/08/2003
Sample Type:	Water	**Date Analyzed:**	12/09/2003

Halocarbons	Results in ug / L	Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00	trans-1,2-Dichloroethene	ND< 2.00
Bromomethane	ND< 2.00	1,2-Dichloropropane	ND< 2.00
Bromoform	ND< 2.00	cis-1,3-Dichloropropene	ND< 2.00
Carbon Tetrachloride	ND< 2.00	trans-1,3-Dichloropropene	ND< 2.00
Chloroethane	ND< 2.00	Methylene chloride	ND< 5.00
Chloromethane	ND< 2.00	1,1,2,2-Tetrachloroethane	ND< 2.00
2-Chloroethyl vinyl Ether	ND< 2.00	Tetrachloroethene	ND< 2.00
Chloroform	ND< 2.00	1,1,1-Trichloroethane	ND< 2.00
Dibromochloromethane	ND< 2.00	1,1,2-Trichloroethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00	Trichloroethene	ND< 2.00
1,2-Dichloroethane	ND< 2.00	Trichlorofluoromethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00	Vinyl chloride	ND< 2.00

Aromatics	Results in ug / L	Aromatics	Results in ug / L
Benzene	ND< 0.700	1,2-Dichlorobenzene	ND< 2.00
Chlorobenzene	ND< 2.00	1,3-Dichlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00	1,4-Dichlorobenzene	ND< 2.00
Toluene	ND< 2.00		

ELAP Number 10958 Method: EPA 624 Data File: 18043.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033288V2.XLS

03-230

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.

Client Job Site: Union Ship Canal

Client Job No.: N/A

Lab Project No.: 03-3288

Sample Type: Solid
Method: SW846 9045C

Date(s) Sampled: 12/03/2003
Date Received: 12/08/2003
Date Analyzed: 12/08/2003

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
10743	N/A	Manhole 3 Cont. Water	8.84

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033288.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No.: N/A

Lab Project No.: 03-3288
Sample Type: Solid
Method: SW846 1010
Date(s) Sampled: 12/03/2003
Date Received: 12/08/2003
Date Analyzed: 12/08/2003

Laboratory Report for Flashpoint Analysis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
10743	N/A	Manhole Cont. Water	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033288.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: NWEC&C, Inc.
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Manhole 3 Cont. Water
Field ID No.: N/A

Lab Project No.: 03-3288
Lab Sample No.: 10743
Sample Type: Water
Date Sampled: 12/03/2003
Date Received: 12/08/2003

Laboratory Report for Metals Analysis in Water

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Arsenic	12/09/2003	EPA 200.7	<0.005
Barium	12/09/2003	EPA 200.7	0.06
Cadmium	12/09/2003	EPA 200.7	<0.005
Chromium	12/09/2003	EPA 200.7	<0.010
Copper	12/09/2003	EPA 200.7	0.017
Lead	12/09/2003	EPA 200.7	0.074
Mercury	12/09/2003	EPA 200.7	0.0024
Nickel	12/09/2003	EPA 200.7	<0.040
Selenium	12/09/2003	EPA 200.7	0.008
Silver	12/09/2003	EPA 200.7	<0.010
Zinc	12/09/2003	EPA 200.7	0.113

ELAP ID No.:10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033288.xls

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: NUECH, Inc
ADDRESS: 553 Cattlender Rd
CITY: Cattlender STATE: NY ZIP: 14018
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: Ross Savage / Greg Weber

INVOICE TO:
COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-32888
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) Need results 12/9 PM
STD: 1 2 3 5 OTHER

PROJECT NAME/SITE NAME: Union Ship Canal

COMMENTS: Please fax a copy of results to NUECH, Inc

#	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8021 STARS	Ignitability	pH	624	625	Metals Arsenic list					REMARKS	PARADIGM LAB SAMPLE NUMBER
																		Metals-Arsenic, Barium	
1	12/3/03			X	Manhole 3 east water	Aq	5	X	X	X	X	X	X					Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Nickel, Copper, Zinc.	10743
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ✓
PRESERVATIONS: ✓ VOAs2
HOLDING TIME:
TEMPERATURE: ✓ 12°C
VOA at lab, meter

Sampled By:	Date/Time: 12/3/03	Relinquished By:	Date/Time:
Relinquished By:	Date/Time: 12/5/03	Received By:	Date/Time:
Received By:	Date/Time: 12/5/03	Received @ Lab By:	Date/Time: 12/8/03 1130

Total Cost:
P.I.F.

County of Erie

JOEL A. GIAMBRA
COUNTY EXECUTIVE

DEPARTMENT OF ENVIRONMENT & PLANNING

LAURENCE K. RUBIN
COMMISSIONER

CHARLES J. ALESSI, P.E.
DEPUTY COMMISSIONER
Sewerage Management

December 8, 2003

Mr. Gregory Weber
Sr. Project Manager
Nature's Way
3553 Crittenden Road
Crittendon, New York 14038

Re: Erie County Sewer District No
Discharge Request – Former Union Ship Canal Site

Dear Mr. Weber:

The Division of Sewerage Management (DSM) has reviewed the discharge request submitted to this office on December 5, 2003. De-watering operations associated with construction activities have resulted in the accumulation of 63,000 gallons of water in three storage tanks. There is also an additional 105,000 gallons of water for which analytical data is not yet available. Upon review of that information, a determination will be made as to whether or not similar approval will be given.

Based on the information provided in the December 5th request has been approved assuming that following conditions are met:

1. The discharge flow rate shall not exceed 25 gallons per minute.

2. The flow enters the sanitary sewer system at the discharge point designated by Erie County Sewer District No. 6 (ECSD No.6).

3. Notification to the ECSD No. 6 treatment plant must be made at least twenty- four hours prior to discharge (tel. 823-5800).

4. The Erie County Sewer District No.6 treatment plant shall be provided with the name and number of a person to contact if necessary during the discharge.

5. A District representative shall be present upon initiation of discharge.

6. If at any time a problem arises in the collection system, as a result of the discharge, the District may require that operations cease.

As per our conversations, the discharge is scheduled to begin December 9, 2003. If you should have any questions or concerns, please contact me at 858-8756.

Very truly yours,

Nicole J. Elliott
Industrial Wastewater Specialist

NJE:dd
Cc: G. Devlin/T. Whetham/6.2.4.3
G. Absolom/L. Surdej
J. Balcaczyk/J. Kaz

ne/3078

County of Erie

JOEL A. GIAMBRA
COUNTY EXECUTIVE

DEPARTMENT OF ENVIRONMENT & PLANNING

LAURENCE K. RUBIN
COMMISSIONER

CHARLES J. ALESSI, P.E.
DEPUTY COMMISSIONER
Sewerage Management

December 12, 2003

Mr. Gregory Weber
Sr. Project Manager
Nature's Way
3553 Crittenden Road
Crittenden, New York 14038

Re: Erie County Sewer District No. 6
Discharge Request – Former Union Ship Canal Site

Dear Mr. Weber:

The Division of Sewerage Management (DSM) has reviewed the discharge request submitted to this office on December 10, 2003. De-watering operations associated with construction activities have resulted in the accumulation of approximately 105,000 gallons of water in five storage tanks.

Based on the information provided, the December 10th request has been approved assuming that following conditions are met:

1. The discharge flow rate shall not exceed 25 gallons per minute.

2. The flow shall enter the sanitary sewer system at the discharge point designated by Erie County Sewer District No. 6 (ECSD No.6).

3. Notification to the ECSD No. 6 treatment plant must be made at least twenty- four hours prior to discharge (tel. 823-5800).

4. The Erie County Sewer District No.6 treatment plant shall be provided with the name and number of a person to contact if necessary during the discharge.

5. There shall be no discharge during the weekend. Discharge shall cease by midnight on Friday.

6. A District representative shall be present upon initiation of discharge.

7. If at any time a problem arises in the collection system, as a result of the discharge, the District may require that operations cease.

If you should have any questions or concerns, please contact me at 858-8756.

Very truly yours,

Nicole J. Elliott
Industrial Wastewater Specialist

NJE:dd
Cc: G. Devlin/T. Whetham/6.2.4.3
G. Absolom/L. Surdej
J. Balcarczyk/J. Kaszubowski

ne/3078

APPENDIX U

CARBON FILTER INFLUENT AND EFFLUENT LABORATORY ANALYTICAL RESULTS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3073
		Lab Sample Number:	10126
Client Job Number:	N/A		
Field Location:	Pre-Carbon	**Date Sampled:**	11/10/2003
Field ID Number:	N/A	**Date Received:**	11/12/2003
Sample Type:	Water	**Date Analyzed:**	11/13/2003

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 13812.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: For. Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033073S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3073
		Lab Sample Number:	10127
Client Job Number:	N/A		
Field Location:	Post-Carbon	**Date Sampled:**	11/10/2003
Field ID Number:	N/A	**Date Received:**	11/12/2003
Sample Type:	Water	**Date Analyzed:**	11/13/2003

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 13813.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033073S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3073
		Lab Sample Number:	10126
Client Job Number:	N/A		
Field Location:	Pre-Carbon	**Date Sampled:**	11/10/2003
Field ID Number:	N/A	**Date Received:**	11/12/2003
Sample Type:	Water	**Date Analyzed:**	11/13/2003

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 17419.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: For, Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033073V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

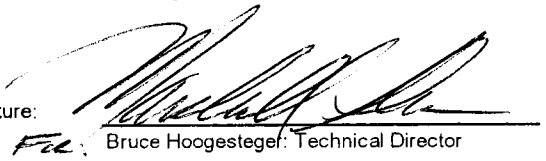
Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3073
		Lab Sample Number:	10127
Client Job Number:	N/A		
Field Location:	Post-Carbon	**Date Sampled:**	11/10/2003
Field ID Number:	N/A	**Date Received:**	11/12/2003
Sample Type:	Water	**Date Analyzed:**	11/13/2003

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 17420.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 

Bruce Hoogestegef: Technical Director

Chain of Custody provides additional sample information

File ID: 033073V2.XLS

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 - (800) 724-1997
FAX: (585) 647-3311

COMPANY: Nature's Way Environmental	COMPANY: SAME	LAB PROJECT #: 03-3073	CLIENT PROJECT #:
ADDRESS: 3553 Cortlender Road	ADDRESS:	TURNAROUND TIME: (WORKING DAYS) ASAP 3 days	
CITY: Cortlender STATE: NY ZIP: 14037	CITY: STATE: ZIP:	STD OTHER	
PHONE: (716) 932-6527 FAX: 716-937-9360	PHONE: FAX:	1 2 3 5	
PROJECT NAME/SITE NAME: Union Ship Vessel	ATTN: Lois Savage / Greg Weber	Wants 11/14	
	COMMENTS: Please fax a copy of results		

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	802 SOCS	8270 SOCS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/6/03	3:09		X	Pre Carbon	Aqu	3	X	X		10126
2	11/6/03	3315		X	Post-Carbon	Aqu	3	X	X		10127
3											
4											
5											
6											
7											
8											
9											
10											

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable, or explain below:	CONTAINER TYPE: ✓	PRESERVATIONS: ✓ N/A	HOLDING TIME: ✓	TEMPERATURE: ✓	13°C		

Sampled By:	Date/Time: 11/5/03 3:15 pm	Relinquished By:	Date/Time:	Total Cost:
Relinquished By:	Date/Time: 11/6/03 4:30 pm	Received By:	Date/Time:	
Received By:	Date/Time: 11/6/03 4:30 pm	Received @ Lab By: Pamela M. Blake	Date/Time: 11/12/03 @ 9:15	P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3238
		Lab Sample Number:	10637
Client Job Number:	N/A		
Field Location:	Staged Water Before Filtration	**Date Sampled:**	11/26/2003
Field ID Number:	N/A	**Date Received:**	12/01/2003
Sample Type:	Water	**Date Analyzed:**	12/02/2003

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 17953.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033238V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Natures Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3238
		Lab Sample Number:	10637
Client Job Number:	N/A		
Field Location:	Staged Water Before Filtratic	**Date Sampled:**	11/26/2003
Field ID Number:	N/A	**Date Received:**	12/01/2003
Sample Type:	Water	**Date Analyzed:**	12/02/2003

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 14001.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033238S2.XLS

03-230

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

pH Analysis Report

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal
Client Job Number: N/A
Sample Type: Water

Lab Project Number: 03-3238
Date Sampled: 11/26/2003
Date Received: 12/01/2003
Date Analyzed: 12/01/2003

Lab Sample Number	Field Number	Field Location	Result (pH)
10637	N/A	Staged Water Before Filtration	8.75

ELAP Number 10958

Method: EPA 9040

Comments:

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033238P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: Nature's Way Environmental
Client Job Site: Union Ship Canal
Client Job No.: N/A
Analytical Method: EPA 410.4

Lab Project No.: 03-3238
Sample Type: Water
Date Sampled: 11/26/2003
Date Received: 12/01/2003
Date Analyzed: 12/03/2003

Lab Sample ID	Sample Location/Field ID	Chemical Oxygen Demand (mg/L)
10637	Staged Water Before Filtration	13

ELAP ID.No.: 10709

Comments: ND denotes Non Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: COD03-3238.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: Nature's Way Environmental

Client Job Site: Union Ship Canal

Client Job No.: N/A

Field Location: Staged Water Before Filtration

Lab Project No.: 03-3238
Lab Sample No.: 10637

Sample Type: Water

Date Sampled: 11/26/2003
Date Received: 12/01/2003

Parameter	Date Analyzed	Analytical Method	Result (mg/l)
Oil & Grease	12/02/2003	SW-846, 1664	ND<6
TSS	12/01/2003	SM-18, 2540D	ND<9

ELAP ID.No.: 10249

Comments: ND denotes Non Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: O&G&TSS03-3238.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Nature's Way Environmental
Client Job Site: Union Ship Canal
Client Job No.: N/A
Field Location: Staged Water Before Filtration
Field ID No.: N/A

Lab Project No.: 03-3238
Lab Sample No.: 10637
Sample Type: Water
Date Sampled: 11/26/2003
Date Received: 12/01/2003

Laboratory Report for Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Lead	12/03/2003	EPA 200.7	<0.005

ELAP ID No.:10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:033238.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3238
		Lab Sample Number:	10636
Client Job Number:	N/A		
Field Location:	Staged Water After Filtration	**Date Sampled:**	11/25/2003
Field ID Number:	N/A	**Date Received:**	12/01/2003
Sample Type:	Water	**Date Analyzed:**	12/02/2003

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 17952.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 033238V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Natures Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3238
		Lab Sample Number:	10636
Client Job Number:	N/A		
Field Location:	Staged Water After Filtration	**Date Sampled:**	11/25/2003
Field ID Number:	N/A	**Date Received:**	12/01/2003
Sample Type:	Water	**Date Analyzed:**	12/02/2003

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 14000.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033238S1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 • (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

COMPANY: Nature's Way Environ	COMPANY: Same	LAB PROJECT #: 03-3238	CLIENT PROJECT #:
ADDRESS: 3553 Clifton Rd	ADDRESS:		
CITY: Clifton STATE: NY ZIP: 14038	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: 716 937 6527 FAX: 716 937 9360	PHONE: FAX:	STD 5	OTHER
ATTN: Russ Savage / Greg Weber	ATTN:	1 2 3	
PROJECT NAME/SITE NAME: Union Ship Canal	COMMENTS:	12/3/03	

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBER	8021 STMES	8270 STMES	PH	Lead	Total Ammonia Soln	COD	Total Extractable Hydrocarbons / Total Oil & Grease		REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/25			*	Staged Water After Filtration	water	4	*	*	*	*	*	*	*		only VOA/SVOA Stars	10636
2	11/26			*	STAGED water before Filtration	water	8	*	*	*	*	*	*	*			10637
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:	CONTAINER TYPE: ✓	PRESERVATIONS: ✓	HOLDING TIME: ✓	TEMPERATURE: ✓ 14°C
		VOAs <2 · COD, Pb, O+G <2 @ lab		10636 HT up 12/2 10637 HT up 12/3

Sampled By:	Date/Time: 11/26/03	Relinquished By:	Date/Time:	Total Cost:
Relinquished By:	Date/Time: 11/26/03	Received By:	Date/Time:	
Received By: M. Lloyd + M. Mulder	Date/Time: 11/26/03 3:45	Received @ Lab By: Pamela M. Blake	Date/Time: 12/1/03 @ 10:50	P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

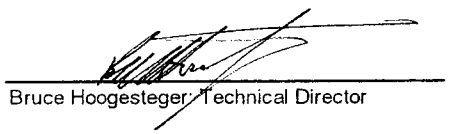
Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3461
		Lab Sample Number:	11308
Client Job Number:	N/A		
Field Location:	Pre-Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-Butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 67699.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 033461V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

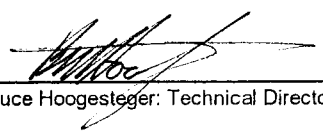
Client: Nature's Way Environmental

Client Job Site:	Union Ship Yard	**Lab Project Number:**	03-3461
		Lab Sample Number:	11308
Client Job Number:	N/A		
Field Location:	Pre-Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 14376.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033461S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Non-potable Water

Client: Nautre's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3461
		Lab Sample Number:	11308
Client Job Number:	N/A		
Field Location:	Pre-Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

PHC Classification	Results in ug / L
Petroleum Hydrocarbon	ND< 250

ELAP Number 10958 Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / L = microgram per Liter
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033461P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

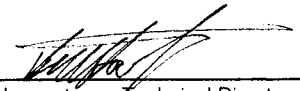
Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3461
		Lab Sample Number:	11309
Client Job Number:	N/A		
Field Location:	Post Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-Butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 67700.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033461V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Yard	**Lab Project Number:**	03-3461
		Lab Sample Number:	11309
Client Job Number:	N/A		
Field Location:	Post-Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 14377.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033461S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PHC Analysis Report for Non-potable Water

Client: Nautre's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	03-3461
		Lab Sample Number:	11309
Client Job Number:	N/A		
Field Location:	Post-Carbon	**Date Sampled:**	12/30/2003
Field ID Number:	N/A	**Date Received:**	12/31/2003
Sample Type:	Water	**Date Analyzed:**	01/02/2004

PHC Classification	Results in ug / L
Petroleum Hydrocarbon	ND< 250

ELAP Number 10958 Method: NYSDOH 310.13

Comments: ND denotes Non Detect
ug / L = microgram per Liter
PHC = Petroleum Hydrocarbon

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 033461P2.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 - (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

COMPANY: Nature's Way Environmental	COMPANY: same	LAB PROJECT #: 03-3461
ADDRESS: 3353 Cattenden Rd.	ADDRESS:	CLIENT PROJECT #:
CITY: Cattenden STATE: New York ZIP: 14038	CITY: STATE: ZIP:	TURNAROUND TIME (WORKING DAYS)
PHONE: (716) 937-6527 FAX: 937-9360	PHONE: FAX:	need results 1/5/03 PM
ATTN: R. Savage / G. Weber	ATTN:	1 2 3 5 OTHER
COMMENTS: Please fax report		
PROJECT NAME/SITE NAME: Union Ship Canal		

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8021 STARS	8270 STARS	310.13							REMARKS	PARADIGM LAB SAMPLE NUMBER
1	12/30/03			✓	Containerized Petroleum Contam. Water Pre-Carbon	Aqu.	5	X	X	X								1 1 3 0 8
2	12/30/03			✓	Containerized Petroleum Contam. Water Post Carbon	Aqu.	5	X	X	X								1 1 3 0 9
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:	CONTAINER TYPE: ✓	PRESERVATIONS: ✓	HOLDING TIME: ✓ 12/30/03 3 PM	TEMPERATURE: ✓ 13°C

Sampled By: Henry Austin	Date/Time: 12/30/03 3 P.M.	Relinquished By: Henry Austin	Date/Time:	Total Cost:	
Relinquished By: [illegible]	Date/Time: 12/31/03 1:40PM	Received By:	Date/Time:		
Received By: Michael M. Mahar	Date/Time: 12/31/03 1:40 PM	Received @ Lab By: Bill Baer	Date/Time: 12/31/03 17:40	P.I.F.	

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: NWEC&C, Inc

Client Job Site:	Union Ship Yard	**Lab Project Number:**	04-0553
		Lab Sample Number:	2406
Client Job Number:	N/A		
Field Location:	Area #3B Carbon Pilot	**Date Sampled:**	02/26/2004
Field ID Number:	N/A	**Date Received:**	03/01/2004
Sample Type:	Water	**Date Analyzed:**	03/02/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 18238.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

For: Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040553S3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: NWEC&C, Inc

Client Job Site:	Union Ship Yard	**Lab Project Number:**	04-0553
		Lab Sample Number:	2407
Client Job Number:	N/A		
Field Location:	Area #3B	**Date Sampled:**	02/26/2004
Field ID Number:	N/A	**Date Received:**	03/01/2004
Sample Type:	Water	**Date Analyzed:**	03/02/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 18239.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040553S4.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

COMPANY: NWEC & C, Inc.	COMPANY: SAME	LAB PROJECT #: 04-0553	CLIENT PROJECT #:
ADDRESS: 3553 Cutthenden Rd	ADDRESS:		
CITY: Cutthenden STATE: NY ZIP: 14038	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS) 4	
PHONE: (716) 937-6527 FAX: 937-9360	PHONE: FAX:	STD 5	OTHER 1 2 3
PROJECT NAME/SITE NAME: Union Ship Canal	ATTN: Russ Savage / Bob Weber	ATTN:	
	COMMENTS: Please fax a copy of results to NWEC & C, Inc @ above number		

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8021 BTEX	8270 SVOCs	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	2/26/04			X	Area #2A Carbon Pilot	Gw	4	✓	✓		24047
2	2/26/04			X	Area #3A Carbon Pilot		4	✓	✓		24056
3	2/26/04			X	Area #3B Carbon Pilot		4	✓	✓		24066
4	2/26/04			V	Area #3B		4	✓	✓		24067
5											
6											
7											
8											
9											
10											

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: 8° iced

Sampled By: JON NEUBAUER	Date/Time: 2/26/04	Relinquished By:	Date/Time:
Relinquished By:	Date/Time: 2/27/04	Received By:	Date/Time:
Received By:	Date/Time: 2/27/04 3:00PM	Received @ Lab By:	Date/Time: 3/1/04 0930

Total Cost:

P.I.F.

APPENDIX V

NAPL AREAS GROUNDWATER LABORATORY ANALYTICAL RESULTS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0453
		Lab Sample Number:	2074
Client Job Number:	N/A		
Field Location:	Containerized Water	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/19/2004
Sample Type:	Water	**Date Analyzed:**	02/23/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 15062.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040453S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: NWEC&C

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0453
		Lab Sample Number:	2074
Client Job Number:	N/A		
Field Location:	Containerized Water	**Date Sampled:**	02/18/2004
Field ID Number:	N/A	**Date Received:**	02/19/2004
Sample Type:	Water	**Date Analyzed:**	02/20/2004

Aromatics	Results in ug / L
Benzene	6.32
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	2.09
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	8.18
Toluene	10.1
1,2,4-Trimethylbenzene	8.11
1,3,5-Trimethylbenzene	2.07
m,p-Xylene	10.5
o-Xylene	4.22
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19101.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040453V1.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

COMPANY: NUSEC + C
ADDRESS: 3553 Crittenden Rd
CITY: Crittenden STATE: New York ZIP: 14038
PHONE: (716) 937-6527 FAX: 937-9360
ATTN: R. Savage / G. Weber
COMMENTS: Please fax report

INVOICE TO:

COMPANY: Same
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 04-0433
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
3 Day
STD ☐ 1 ☐ 2 ☐ 3 ☐ 5 OTHER ☐

PROJECT NAME/SITE NAME: Union Ship Canal

2/23/04

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8021 STARS	8270 STARS								REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	2/18/04			X	Containerized water from NAPL Area	Aqu	3	X	X										3			
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓

VOA < 2 4°C cont

Sampled By: Josh Neubauer Date/Time: 2/18/04

Relinquished By: Date/Time: 2/18/04

Received By: Date/Time: 2/18/04 3:50 pm

Relinquished By: Date/Time:

Received By: Date/Time:

Received @ Lab By: Date/Time:

Total Cost:

P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0529
		Lab Sample Number:	2313
Client Job Number:	N/A		
Field Location:	Tank #3	**Date Sampled:**	02/23/2004
Field ID Number:	N/A	**Date Received:**	02/26/2004
Sample Type:	Water	**Date Analyzed:**	03/02/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	11.1
Pyrene	10.3

ELAP Number 10958 Method: EPA 8270C Data File: 18233.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040529S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

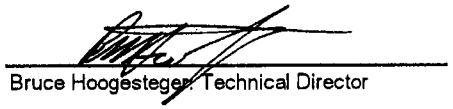
Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0529
		Lab Sample Number:	2313
Client Job Number:	N/A		
Field Location:	Tank #3	**Date Sampled:**	02/23/2004
Field ID Number:	N/A	**Date Received:**	02/26/2004
Sample Type:	Water	**Date Analyzed:**	02/27/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19326.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040529V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:		
COMPANY:	COMPANY:	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	ADDRESS:		
CITY: STATE: ZIP:	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: FAX:	PHONE: FAX:		STD / OTHER
PROJECT NAME/SITE NAME:	ATTN:	ATTN:	☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐
	COMMENTS:		

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS										REMARKS	PARADIGM LAB SAMPLE NUMBER				
1																						
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:	CONTAINER TYPE: ☐	PRESERVATIONS: ☐	HOLDING TIME: ☐	TEMPERATURE: ☐
		N/A		

Sampled By:	Date/Time:	Relinquished By:	Date/Time:	Total Cost:
Relinquished By:	Date/Time:	Received By:	Date/Time:	
Received By:	Date/Time:	Received @ Lab By:	Date/Time:	P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2377
Client Job Number:	N/A		
Field Location:	Tank #1	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	03/01/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 18192.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 0405431.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2378
Client Job Number:	N/A		
Field Location:	Tank #2	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	03/01/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 18193.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040543S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2379
Client Job Number:	N/A		
Field Location:	Tank #3	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	03/01/2004

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 18194.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040543S3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2377
Client Job Number:	N/A		
Field Location:	Tank #1	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	02/27/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	7.52
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	7.85
1,3,5-Trimethylbenzene	2.27
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19321.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 040543V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2378
Client Job Number:	N/A		
Field Location:	Tank #2	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	02/27/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	4.29
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19324.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040543V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile STARS Analysis Report for Non-potable Water

Client: Nature's Way Environmental

Client Job Site:	Union Ship Canal	**Lab Project Number:**	04-0543
		Lab Sample Number:	2379
Client Job Number:	N/A		
Field Location:	Tank #3	**Date Sampled:**	02/24/2004
Field ID Number:	N/A	**Date Received:**	02/27/2004
Sample Type:	Water	**Date Analyzed:**	02/27/2004

Aromatics	Results in ug / L
Benzene	ND< 0.700
n-Butylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
Ethylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
Isopropylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
Naphthalene	ND< 5.00
Toluene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00
Miscellaneous	
Methyl tert-butyl Ether	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 19325.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 040543V3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:

COMPANY:

ADDRESS:

CITY: STATE: ZIP:

PHONE: FAX:

ATTN:

INVOICE TO:

COMPANY: Same

ADDRESS:

CITY: STATE: ZIP:

PHONE: FAX:

ATTN:

LAB PROJECT #: 04-0593

CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
24 HR on 1 & 2
48 HR on 3
STD OTHER
☐ 1 ☐ 2 ☐ 3 ☐ 5 ☐

PROJECT NAME/SITE NAME:

COMMENTS:

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	40ml VIALS	250ml STARS									REMARKS	PARADIGM LAB SAMPLE NUMBER				
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☐

Sampled By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Received @ Lab By: Date/Time:

Total Cost:

Certificate of Analysis

CLIENT INFORMATION

Attention:	Russ Savage
Client Name:	NWEC+C Inc.
Project:	Union Ship Canal
Project Desc:	Union Ship Canal
Address:	3553 Crittenden Rd. Crittenden, NY 14038
Fax Number:	716-937-9360
Phone Number:	716-937-6527

LABORATORY INFORMATION

Contact:	Mike Challis, B.Sc, C.Chem.
Project:	AN040300
Date Received:	04-Mar-2004
Date Reported:	12-Mar-2004
Submission No.:	4C0186
Sample No.:	010304-010305

NOTES: ***"-" = not analysed "<" = less than Method Detection Limit (MDL) 'NA' = no data available***
LOQ can by determined for all analytes by multiplying the appropriate MDL X 3.33
Solids data is based on dry weight except for biota analyses.
Organic analyses are not corrected for extraction recovery standards except for isotope dilution methods, (i.e. CARB 429 PAH, all PCDD/F and DBD/DBF analyses)
The enclosed copy of the Chain of Custody Record may contain information necessary for the interpretation of the data.

Methods used by PSC Analytical Services are based upon those found in 'Standard Methods for the Examination of Water and Wastewater', Twentieth Edition. Other methods are based on the principles of MISA or EPA methodologies. New York State: ELAP Identification Number 10756.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies, quality assurance and quality control procedures except where otherwise agreed to by the client and testing company in writing. Any and all use of these test results shall be limited to the actual cost of the pertinent analysis done. There is no other warranty expressed or implied. Your samples will be retained at PSC Analytical Services for a period of three weeks from receipt of data or as per contract.

COMMENTS:

Certified by: _____

PASC - Certificate of Analysis

	Client ID:		NAPL AREA 3 EXCAVAT.	Method Blank Water	Blank Water Spike	% Recovery	Blank Spike Duplicate	% Recovery
	Lab No.:		010305 04	010304 04	010304 04	010304 04	010304 04	010304 04
	Date Sampled:		03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004	03-Mar-2004
Component	**MDL**	**Units**						
pH of VOC vials			1.50	7.00	-	-	-	-
Benzene	0.5	ug/L	<	<	48	95	-	-
Ethylbenzene	0.5	"	<	<	51	100	-	-
Toluene	0.5	"	<	<	50	100	-	-
m&p-Xylene	1.0	"	<	<	100	100	-	-
o-Xylene	0.5	"	<	<	50	100	-	-
Xylenes(Total)	1.0	"	<	<	150	100	-	-
Isopropylbenzene	0.5	"	<	<	45	91	-	-
n-Propylbenzene	0.5	"	<	<	46	92	-	-
p-Isopropyltoluene	0.5	"	<	<	43	85	-	-
1,2,4-Trimethylbenzene	0.5	"	<	<	45	90	-	-
1,3,5-Trimethylbenzene	0.5	"	<	<	48	96	-	-
n-Butylbenzene	0.5	"	<	<	41	82	-	-
sec-Butylbenzene	0.5	"	<	<	45	90	-	-
tert-Butylbenzene	0.5	"	<	<	45	90	-	-
Naphthalene	0.5	"	0.6	<	50	100	-	-
Methyl-t-butylether	0.5	"	<	<	NS	-	-	-
Surrogate Recoveries		%						
d4-1,2-Dichloroethane			75	75	83	83	-	-
d8-Toluene			89	89	89	89	-	-
Bromofluorobenzene			84	87	91	91	-	-
Naphthalene	0.3	ug/L	0.60	<	16	82	16	82
Acenaphthene	0.7	"	<	<	19	96	19	96
Fluorene	0.3	"	<	<	19	95	19	95
Phenanthrene	0.3	"	0.6	<	18	91	18	92
Anthracene	0.3	"	<	<	20	98	19	96
Fluoranthene	0.2	"	0.4	<	18	92	18	91
Pyrene	0.3	"	<	<	17	82	17	85
Benz(a)anthracene	0.2	"	0.4	<	20	97	20	98
Chrysene	0.3	"	0.4	<	19	97	19	97
Benzo(b)fluoranthene	0.4	"	<	<	19	94	19	94
Benzo(k)fluoranthene	0.4	"	<	<	19	95	19	95
Benzo(a)pyrene	0.5	"	<	<	19	95	19	96
Indeno(1,2,3-cd)pyrene	0.6	"	<	<	20	100	20	99
Dibenzo(ah)anthracene	0.4	"	<	<	20	100	20	97
Benzo(ghi)perylene	0.4	"	<	<	20	100	20	100
Surrogate Recoveries		%						
d5-Nitrobenzene			62	66	67	67	67	67
2-Fluorobiphenyl			67	85	85	85	84	84
d14-p-Terphenyl			59	65	73	73	60	60

PASC - Summary of Analysis Pre. Dates

Batch Code:	**0310DJ01**
pH of VOC vials	010304 04
	010305 04
Date Analysed:	04/03/10
Date Prepared:	04/03/10

Batch Code:	**0310DJ01**
Benzene	010304 04
	010305 04
Date Analysed:	04/03/10
Date Prepared:	04/03/10

Batch Code:	**0309TKR2**
Naphthalene	010304 04
	010305 04
Date Analysed:	04/03/10
Date Prepared:	04/03/09

CHAIN OF CUSTODY

ANALYTICAL SERVICES
5555 North Service Road
Burlington, Ontario L7L 5H7

Toll Free: 1-800-668-0639
Tel: (905) 332-8788
Fax: (905) 332-9169

Page 3 of 3

CLIENT INFORMATION

Company Name: NIAGARA INC
Project Manager: RUSS SAVAGE
Address: 3553 Cr. Henden Rd
Cr. Henden, NY 14038
Phone #: 716-937-6527 Fax #: 716-937-9360
Sampled by: Jon Neubauer

ANALYSIS REQUESTED

Philip Use Only	Field Sample ID	# Bottles	Matrix	Date	Time	8021 STARS	8270 STARS	Level of contamination (low, high, unknown)
10298	NAPL EXC AREA 3 NORTH	1	S	3/3/04		✓	✓	2 JAR
99	NAPL EXC. AREA 3 SOUTH	1	S	3/3/04		✓	✓	
300	NAPL EXC AREA 3 EAST	1	S	3/3/04		✓	✓	
301	NAPL EXC. AREA 3 WEST	1	S	3/3/04		✓	✓	
302	NAPL EXC AREA 3 BOTTOM	1	S	3/3/04		✓	✓	
ADW-10304								
05	NAPL AREA 3 EXCAVATION WATER IN EXCAVATION	3	L	3/3/04		✓	✓	1 AG, 4 VOA x 3
10303	Bermed Stripped Soil from NAPL Exc Area 3	1	S	3/3/04		✓	✓	2 SOAG

TAT (Turnaround Time)

RUSH TAT MUST HAVE PRIOR APPROVAL
*some exceptions apply please contact Lab

- STD 10 Business Days ☐
- RUSH 5 Business Days ☒
- RUSH 2 Business Days ☐
- RUSH 1 Business Days ☐
- Other Business Days ____

PROJECT INFORMATION

Project #: ____
Site: UNION SHIP CANAL
PO#: ____
Philip Quote #: ____
Philip Project #: ____
Philip Contact: ____

SPECIAL DETECTION LIMITS

MISA ☐

SPECIAL REQUIREMENTS / REGULATIONS

ASP CATEGORY B.
DELIVERABLES
NORMAL TAT

REMARKS

ASP

Client Signature: Jaime Blaskowski
Affiliation: NIAGARA INC
Date/Time: 3/3/04, 3:30 pm

Received By: Kevin Zielinski
Affiliation: PSC
Date/Time: 3/3/04, 3:30 pm

Rec'd By: ____
Date/Time ____

WHITE - LAB / YELLOW - CLIENT

SEE OVER FOR COMPLETION & SAMPLING INSTRUCTIONS