

INVESTIGATION REPORT FOR A TARGETED BROWNFIELDS ASSESSMENT AT THE C&L INDUSTRIAL CLEANERS SITE KENOSHA, WISCONSIN

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY Region 5 Emergency Response Branch 77 West Jackson Boulevard Chicago, IL 60604

TDD No.: Date Prepared: Contract No.: Prepared by: TN&A START Project Manager: Telephone No.: U.S. EPA Brownfields Coordinator: Telephone No.: S05-0209-009 August 26, 2004 68-W-00-129 T N & Associates, Inc. David Voight (414) 607-6772 Deborah Orr (312) 886-7576



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NR 700 CERTIFICATION

"I, David S. Voight, certify that I am a hydrogeologist as that term is defined in s.NR712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in Chs. NR700 to 726, Wis. Adm. Code."

8/27/04

David S. Voight, PG, CPG Senior Hydrogeologist

Date





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T N & Associates, Inc. &A Engineering and Science

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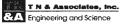
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GLOSSARY OF TERMS AND ABBREVIATIONS

ogsDelow ground surfaceC&LC&LC&LCALC&LCAL Industrial CleanersCOCschemicals of concernCPRCode of Federal RegulationsDCEdichloroethyleneDQOsData Quality ObjectivesESChapter NR 140 Wis. Admin. Code Enforcement StandardESAEnvironmental Site AssessmentFSPField Sampling PlanFRTRFederal Remediation Technologies RoundtableIDWinvestigation-derived wasteHSAhollow-stem augermlmilliliterORPoxidation reduction potentialPAHpolynuclear aromatic hydrocarbonsPALChapter NR 140 Wis. Admin. Code Preventative Action LimitPCEtetrachloroethylenePIDphotoionization detectorPNApolynuclear aromatic compoundppbparts per billion, milligrams per kilogram (ug/kg) for soil, or micrograms per liter (ug/L) for groundwaterppmparts per billion, milligrams per kilogram (ug/kg) for soil, or milligrams per liter (ug/L) for groundwaterPRBpermeable reactive barrierPVCpolyvinyl chlorideQAPPQuality Assurance Project PlanRECrecognized environmental concernSTARTSuperfund Technical Assistance and Response TeamSTSSTS Consultants, Ltd.SVEsoil vapor extractionTDAtrachnorethyleneTCLPtoxicity characteristic leaching procedureTDBTechnical Direction DocumentTN&ATN &	1	halow around aufor
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T N & Associates, Inc. (TN&A), a subcontractor to Tetra Tech's Superfund Technical Assessment and Response Team (START), was tasked by United States Environmental Protection Agency - Region 5 (U.S. EPA) to provide the technical assistance needed to further evaluate the redevelopment potential of the C & L Industrial Cleaners (C&L) Site in Kenosha, Wisconsin. This work consisted of performing a targeted Brownfields assessment (TBA) in response to a request for assistance received from the City of Kenosha.

Industrial cleaning operations (involving the use of solvents) were formerly conducted at the C&L Site. A previous investigation found areas of soil and groundwater contamination within and adjacent to the building, and at a second location east of the building. Several chlorinated solvents were identified including tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2 dichloroethylene (DCE), trans-1,2-DCE, and vinyl chloride (VC).

The present study was performed to: (1) determine the extent of soil and groundwater contamination, (2) estimate likely contaminant volumes, (3) preliminarily assess site risk, (4) identify possible remedial alternatives, and (5) estimate the cost for further investigation and site cleanup. These objectives were accomplished by reviewing the available background investigation data, identifying data gaps and project data quality objectives, performing site investigation activities, and compiling the data obtained into this report. Recommendations for additional site investigation and cleanup are also provided.

Thirteen direct push soil borings were installed to an average depth of about 13 feet in and around the building area to further determine the extent of contamination. All borings were abandoned in accordance with regulatory requirements following the collection of soil and groundwater samples. In addition, three soil borings advanced by using hollow-stem auger (HSA) methods were installed during the TBA. (Each boring was completed as groundwater monitoring well to obtain additional information regarding the extent of groundwater contamination at the C&L Site). Seventeen soil samples were submitted to a state-certified laboratory for the following analyses: volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and



metals. Thirteen groundwater samples collected from the pre-existing and new monitoring wells underwent analysis for VOCs and nickel.

The soils underlying the C&L Site consist predominantly of interbedded sand, silt, and clay overlying a continuous gray silty clay layer. The lowermost clay unit is believed to be part of the Oak Creek Till sequence, a regional aquitard. Depth to water was observed to range from about 5 to 12 feet below the ground surface (bgs). Based on prior groundwater elevation data, the inferred direction of groundwater flow at the C&L Site is towards the east and southeast.

The information obtained from the most recent investigation further confirms that significant groundwater contamination exists at the C&L Site. Based on the TBA results, it appears that up to three groundwater contaminant plumes are present, and that none are confined to the C&L Site. The first originates near Pit # 7 and extends for some distance southward. The second groundwater contaminant plume originates near the northern boundary of the C&L Site (loading dock area) and extends to the southeast. The third contaminant plume originates east of the loading dock area, and appears to extend to the south (and east) property boundaries. The easternmost contaminant plumes are likely due to indiscriminate spills at the property and possible unknown source area(s) located hydraulically upgradient (north) of the C&L property. The land area immediately north of the C&L Site is occupied by a stone building materials supply business (Stonewerks, LLC) located along Sheridan Road, and a fenced equipment storage area located behind the Stonewerks LLC building where construction equipment, campers and vehicles (some in poor condition) are located. A previous investigation noted that solvents and other chemicals were used on property immediately adjacent to the C&L Site. An unregistered, above-ground storage tank (contents unknown) was also reportedly located on the adjacent property, north of the C&L Site.

The C&L Site poses unacceptable environmental risk due to the nature and extent of contamination present in site media. Soils contaminated by organics or metals at the C&L Site pose a threat to site trespassers and workers, and the fact that the unknown sources exist further increases site risk. Based on the results of this investigation, it appears that more than 3,500 cubic yards of impacted soil are located at the C&L Site. Cleanup of the soil source area could possibly

be accomplished by the excavation of the contaminated soil with off-site disposal or treatment. Of note, the possibility exists that about half of the impacted soil (when excavated) could be considered a hazardous waste requiring special handling and disposal measures. In-situ treatment methods shown to be effective in remediating soil contaminated with chlorinated solvents at other sites should be considered for the C&L Site.

Groundwater quality exceeds established groundwater quality standards at several locations requiring follow-up investigation and cleanup. The risk associated with the groundwater pathway is unknown; but since the C&L Site is located in the City of Kenosha, it appears unlikely that private wells and local groundwater receptors are located in the immediate site vicinity (the City of Kenosha receives its water from Lake Michigan). The risk associated with the potential migration of contaminated groundwater into the sump at a residence located immediately south of the C&L Site should be investigated, however (local land use is mixed residential and commercial/industrial). Based on available data, it appears that the groundwater quality could be expected following source removal, the distribution of the contamination indicates that active remediation of the groundwater contamination may be necessary to restore groundwater quality to acceptable limits.

Additional investigation is required to further delineate the nature and extent of known or suspected contaminant sources. It is recommended that additional soil borings be completed at several locations to further define the extent of contamination. Additionally, supplemental monitoring wells are recommended to further define the site extent of the groundwater contamination. The cost to complete the supplemental investigation is estimated to total about \$50,000.

1.1 Overview

T N & Associates, Inc. (TN&A), a subcontractor to Tetra Tech's START, was tasked by U.S. EPA to provide the technical assistance needed to further evaluate the redevelopment potential of the C & L Industrial Cleaners (C&L) Site in Kenosha, Wisconsin. This work is being performed under Technical Direction Document (TDD) No. S05-0209-009 in response to a request for assistance received from the City of Kenosha (see Exhibit 1).

Under the Small Business Liability Relief and Brownfields Revitalization Act of 2002, the U.S. EPA continues to provide technical and financial support to municipalities, states, tribes, and other quasi-governmental agencies involved with the remediation, redevelopment, and reuse of real property, the expansion and redevelopment of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant (so called "brownfields" sites). One type of support provided by the U.S. EPA consists of performing Phase I and II environmental site assessments (ESAs) or targeted brownfields assessments (TBAs) that focus on determining who may have caused contamination at a brownfields site and the likely health and environmental risk associated with the property. This information can be used by the local governmental agency or eligible entity to make decisions regarding property acquisition, cleanup, and redevelopment.

The work performed under this TDD has consisted of START (TN&A) reviewing background information regarding the nature of historical operations conducted at the C&L Site as discussed in a Phase I ESA Report prepared by STS Consultants, Ltd. (STS, 2000) for the City of Kenosha, Department of City Development (report excerpts are provided in Appendix A). This information, along with the findings from subsequent subsurface investigation performed by STS (2001) has been used to identify key data gaps and develop the scope for this TBA. The project scope and objectives associated with the TBA at the C&L Site were presented in a work plan, which was submitted to the City of Kenosha and Wisconsin Department of Natural Resources (WDNR) on November 21, 2003. The work conducted was also performed in accordance with a Multi-Site TBA Work Plan prepared by START (TN&A, 2003).



1.2 Project Objectives and Approach

As identified in the TBA work plan, the overall objective of the U.S. EPA investigation was to further characterize the presence, nature, and extent of contaminant releases at the C&L Site. To meet these goals, START:

- Reviewed available data to identify remaining investigation data gaps
- Further delineated and characterized on-site waste materials
- Collected additional data to help define site geology and hydrogeology
- Further assessed the horizontal and vertical extent of contaminants of concern (COCs) in soil by collecting and analyzing soil samples within (or adjacent to) known or suspected contaminant source areas
- Further evaluated the horizontal and vertical extent of COCs in groundwater by sampling existing wells and new wells installed during the U.S. EPA investigation
- Completed a qualitative evaluation to generally assess the environmental risk posed by the C&L Site

Information obtained from the TBA investigation has also been used to preliminarily identify and assess remedial action objectives and potential remedial alternatives that will allow for site redevelopment.

1.3 Report Organization

Site background information is presented in the following section of this report (Section 2.0). Study considerations, work scope, and findings from the TBA are contained in Sections 3.0 through 5.0. Also contained in Section 5.0 is summary information regarding the fate and transport (and health risks) associated with the identified COCs at the C&L Site. Recommended supplemental investigation activities and potential remedial technologies that may be appropriate to address site impacts are discussed in Sections 6.0 and 7.0, respectively.



The C&L Site is located at 8927 Sheridan Road in the City of Kenosha, Wisconsin (see Figure 1). According to information provided in the STS Phase I ESA Report (STS, 2000), the C&L Site encompasses approximately 2.9 acres. At the time of the site reconnaissance, STS noted a main building (with attached garage) occupying the west side of the property, with piles of concrete rubble occurring on the eastern half of the site (the on-site buildings have subsequently been removed from the property by the City of Kenosha).

Reportedly, the main building was occupied by C&L Industrial Cleaners from 1967 to 1995 and BBL Barrel Company in 1998. According to the STS report, C&L Industrial Cleaners was involved with carpet cleaning, while BBL Barrel Company sold industrial supplies. The C&L Site is currently owned by the City of Kenosha. Kenosha County took the property by Tax Deed (obtained from Bruce J. Chwala) on October 27, 1999. The County subsequently transferred the property to the City of Kenosha between January 13 and February 21, 2000.

In the Phase I ESA Report, STS noted the following recognized environmental conditions (RECs): (1) several pits in the floor of the main building and garage that contained sludge of unknown composition, a rust-like substance, or water; and (2) the presence of several 55-gallon drums located along the south and east sides of the shed. Potential RECs included: (1) solvents and other chemicals that were used on property immediately adjacent to the C&L Site; (2) an unregistered, above-ground storage tank (contents unknown) located on the adjacent property north of the C&L Site; and (3) mounds of concrete rubble east of the buildings ("fill materials"). (Excerpts from the STS report are contained in Appendix A). Based on these findings, STS recommended that a Phase II ESA be conducted at the C&L Site. The scope of the Phase II ESA included performing soil and groundwater investigation activities, laboratory analysis of sludge samples from pits located within the building, and completing an inventory of drummed wastes.

Fieldwork associated with the Phase II ESA was completed by STS between March-May, 2001. Drum inventory and sludge sampling activities were conducted concurrently with advancing



five test pits on the undeveloped portion of the C&L Site. Subsequent work performed by STS included advancing soil borings using Geoprobe[™] methods within the main building (with groundwater sampling). In total, 13 soil borings were complete, with six of the borings being completed as groundwater monitoring wells (B-3, B-5, B-6, B-7, B-12, B-16). All were constructed in accordance with Chap. NR 141 Wisconsin Administrative Code (Wis. Adm. Code) requirements. In general, the wells included a slotted screen installed approximately 5-15 feet bgs. STS's well construction information is contained in Appendix C.

The following summarizes key findings from the STS investigations:

- The C&L Site is underlain by up to 8 feet of fill materials (silty fine to coarse sand, wood, concrete, asphalt, and at some locations, tires, hubcaps, and other miscellaneous car parts). Reportedly, layers of organic silt, silty fine sand, silty fine to coarse sand, silt and silty clay are present below the fill.
- Groundwater occurs approximately 5 to 8.5 feet bgs. Groundwater flow across the C&L Site is primarily to the east (Figure 2).
- Low levels of petroleum-related volatile organic compounds (VOCs) were present in soil at four boring locations. The concentrations detected do not exceed regulatory screening criteria.
- Chlorinated VOCs are present in sludge and soil at concentrations exceeding regulatory criteria at several locations. Those identified include PCE, which is typically associated with dry cleaners from that period, as well as chemicals that result from the natural degradation of PCE: TCE; cis-1,2 DCE; trans-1,2-DCE; and VC.
- Two potential sources of PCE are located inside building: (1) pit #7 and (2) near the floor drain in the main garage area. Spillage of PCE appears to have also occurred outside the building at the following locations:
 - < In the drum storage areas near the shed
 - < At boring B-2, near the northern property line
 - < At test pit TP-5 and near boring B-11
- Several chlorinated VOCs are present in groundwater at concentrations exceeding regulatory screening criteria established by the Wisconsin Department of Natural Resources (WDNR) in Chapter NR 140, Wis. Adm. Code. Those identified include PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and VC.

A summary of the soil contamination identified by STS from direct push and test pits samples completed at the C&L Site is presented in Table 1. Laboratory results obtained from soil

T N & Associates, inc. & A Engineering and Science borings completed by STS are provided in Table 2, and those from sampling test pits at the site are contained in Table 3. A summary of compounds detected in groundwater at the C&L Site during the STS investigation is provided in Table 4. The estimated extent of soil and groundwater contamination as determined by STS is shown on Figures 3 and 4, respectively.



3.0 INVESTIGATION CONSIDERATIONS

3.1 Regulatory Objectives and Requirements

Chapters NR 140 and NR 700 Wis. Admin. Code states that all facilities, practices, and activities adversely affecting groundwater or soil quality are required to investigate, monitor, and remediate contamination when necessary. Such activities are required to meet one or more of the following regulatory objectives or requirements:

- Define the nature and extent of contaminated environmental media
- Comply with Chapters NR 140 and NR 700 Wis. Adm. Code
- Protect public health, welfare, and the environment
- Define and sample potable wells at risk from groundwater contamination
- Evaluate the need for changes or revisions to a facility's or site's monitoring, design, construction, operation, waste treatment, or disposal practices
- Evaluate the need for prohibition or closure and abandonment of a facility or site
- Meet Wisconsin Pollution Discharge Elimination System permits
- Evaluate the degree, extent, and environmental fate of groundwater contamination
- Evaluate and verify the remediation of soil and/or groundwater contamination

The Chapter NR 700 Wis. Adm. Code rules require that soil samples be collected to allow for representative site and contaminant characterization. Chapter NR 140 Wis. Adm. Code requires that groundwater samples be collected using the procedures described in the WDNR's *Groundwater Desk Reference* and accompanying *Field Manual*.

As required by the WDNR, environmental samples were analyzed by a laboratory certified and registered under Chapter NR 149 Wis. Adm. Code, which establishes minimum requirements for laboratories. The laboratory used during this TBA was U.S. Filter/Enviroscan, located in Rothschild, Wisconsin. To be consistent with U.S. EPA procedures, supplemental validation of the analytical data was performed to ensure that the data obtained met the data quality objectives (DQOs) established in the project work plan (TN&A, 2003a), Quality Assurance Project Plan (QAPP) addendum, and Field Sampling Plan (FSP)(TN&A, 2003c).



The information contained in Chapters NR 140 and NR 700 Wis. Adm. Code already includes many of the important aspects of the DQO decision process including identifying what data are needed, the study boundaries and investigation requirements, the response alternatives evaluation, decision process, and action levels for soil. Chapter NR 140 Wis. Admin. Code specifies groundwater quality standards for substances detected in groundwater (action or cleanup levels). NR 700 Wis. Admin. Code rule series includes a discussion of the process that responsible parties must follow to report, investigate and clean up soil and groundwater contamination.



4.1 Sampling Considerations

This TBA was performed in accordance with a FSP, which was developed in substantial accordance with Chapter NR 716 Wis. Adm. Code. Information contained in this plan included: (1) the TBA site investigation approach, (2) the scope of the field investigation, (3) planned sampling and analysis requirements, and (4) health and safety protocols to be used by field personnel during performance of the TBA. Standard operating procedures (SOPs) to be followed during the TBA field investigation are included.

Based on the information contained in the STS reports, the scope of the additional investigation performed at the C&L Site focused on further characterization of local soil types, site hydrogeology, the extent of soil and groundwater contamination, applicable waste disposal criteria and requirements, and other information needed to assist the City of Kenosha develop plans for the assessment, cleanup, and redevelopment of this site. The specific data gaps targeted during TBA activities consisted of:

- Further identifying known and suspected contaminant sources to identify affected media and extent of contamination
- Further characterizing known or suspected contaminant source areas to identify applicable waste disposal criteria and requirements
- Conducting further contaminant characterization studies to assess the extent of soil and groundwater contamination at this site
- Collecting additional information regarding local soil types to assess subsurface controls on contaminant occurrence and contaminant movement
- Further characterizing site hydrogeology for the purpose of assessing background groundwater quality, local groundwater flow direction, and groundwater contaminant migration pathways
- Collecting other information as needed to identify and evaluate potentially applicable approaches for remediating the site to a level that allows for subsequent redevelopment

Further discussion regarding the work completed during this TBA is provided as follows.

T N & Associates, Inc. & A Engineering and Science

4.2 Additional Soil Characterization

Soil boring and soil sampling were performed by START (TN&A) at the C&L Site between December 11-13, 2003. In general, this work consisted of installing direct push borings (typically to a 15-foot depth) at locations inside and outside of the main building area where soil contamination was known (or suspected) to occur. The objective of this work was to provide additional information needed to assess the nature and extent of soil contamination beneath the building footprint (the building was removed during 2003; a concrete slab remains in this area). In addition to this work, the TBA included the completion of three soil borings by using standard HSA drilling methods. The primary purpose of installing the HSA borings was to obtain additional soil characterization data and allow for the subsequent installation of groundwater monitoring wells.

Approximate boring locations are shown on Figure 5. Direct push borings completed using Geoprobe[™] methods are identified as GP- and conventional HSA borings are designated as SB-.

Soil samples were collected from each boring at 2-foot increments, from the ground surface to the total depth of the boring. Each soil sample was field screened for the presence/absence of select ionizable VOCs by using headspace methods employing a photoionization detector (PID). Completed soil boring logs are contained in Appendix B. Specific observations made during the additional soil characterization effort are summarized below.

4.2.1 Geoprobe Borings

The TBA performed at the C&L Site included the installation of 13 Geoprobe borings as discussed below:

- <u>GP-1</u>: Installed near the source location inside the building footprint. The boring was drilled to 12 feet bgs. The soils were mostly silty sand and sandy silt, with a sand seam about 2.5 feet thick at a depth of 8.5 feet bgs.
- <u>GP-2</u>: Installed east of GP-1. The driller encountered a concrete slab about 4-inches under the surface slab, with the boring reaching a total depth of 12 feet bgs. The soils encountered at this location ranged from sand to clay. At this location, the same sand seam as noted for GP-1, measured about 3.5-feet thick (present between 6 and 9.5 feet bgs).

- <u>GP-3</u>: Completed south of GP-2 near the building floor pit areas. This boring, which reached a depth of 15-feet bgs, encountered primarily sand and clay. A sand seam was noted between 9 feet and 13 feet bgs.
- <u>GP-4</u>: Installed east of GP-2 and was drilled to 12 feet bgs. A 1-foot sand seam was encountered about 4 feet bgs. The saturated section penetrated at this location consisted of silty sand material.
- <u>GP-5</u>: Completed off the south edge of the concrete slab, south of GP-3. The saturated soil material encountered consisted of silty sand overlying silty clay.
- <u>GP-6</u>: Completed near the southeast corner of the building slab. Problems were encountered when the driller pulled the drill string from the borehole and the hole collapsed and could not be advanced beyond 16 feet bgs. No sand seam was encountered. The saturated sediments encountered at this location consisted of silty clay.
- <u>GP-7</u>: Installed on the north edge of the slab and was drilled to 12 feet bgs. The saturated material at this location consisted of silty sand (to 10 feet bgs) underlain by clay.
- <u>GP-8</u>: Completed east of GP-7 along the north edge of the building slab (12 feet deep). Silty sand was encountered between 4.5 feet bgs and 10 feet bgs overlying gray clay.
- <u>GP-9</u>: Located near the north property line in the vicinity of a "hot spot" noted in the previous investigation. This 12 foot deep boring encountered fine sand layered between 6 feet bgs and 9 feet bgs. The lowermost foot of the sand layer was saturated.
- <u>GP-10</u>: Located north and east of GP-9, was completed at a depth of 12 feet bgs. A fine sand layer was encountered between 7.5 feet bgs and 11 feet bgs.
- <u>GP-11</u>: Completed south of GP-10, east of the building slab. The boring, which was completed to a depth of 12 feet, encountered fine sand between 8 feet and the bottom of the boring.
- <u>GP-12</u>: Installed south and east of GP-11 and was completed at 12 feet bgs. A 6-inch sand layer was encountered at 9 feet bgs. The remaining soils typically consisted of clay or silty clay.
- <u>GP-13</u>: Completed south of GP-11 near the southern property line (depth of 12 feet bgs). A fine sand layer encountered between 7 feet and 11 feet bgs was underlain by silty clay at the bottom of the boring.

Following sampling, each boring was abandoned in accordance with NR 141 Wis. Admin.

Code requirements. Copies of the completed boring abandonment forms are contained in

Appendix G.

4.2.2 Groundwater Monitoring Wells

Three monitoring wells were drilled to augment the existing monitoring well network:



- <u>Well MW-1</u> was completed to determine whether soil impacts in the area of boring B-2 (near north property boundary) affected groundwater quality and assess groundwater flow direction.
- <u>Well MW-2</u> was completed to assess groundwater flow and groundwater quality south of the main building, between boring locations B-3 and B-4 (within an apparent groundwater contaminant plume).
- <u>Well MW-3</u> was completed to better define groundwater flow direction at the presumed downgradient extent of the groundwater contaminant plume and/or to determine whether off-site contaminant movement was indicated.

Two work plan modifications were made while in the field due to logistical issues. MW-3 was moved from the southeast corner of the property to a location further west (the original location proved inaccessible to the drill rig). MW-2 was proposed to be completed at the south property line but numerous utilities (underground and overhead) prevented well installation at this location. MW-2 was installed at the south east corner of the building slab, about 10-feet north of the original location.

Each well boring was advanced to a depth of about 15.5 feet bgs using HSA methods. The soil encountered in each boring was similar to that encountered in the Geoprobe borings, consisting of a sandy layer near at (or near) the water table that is underlain by a gray clay near the bottom of the boring.

Completed well construction diagrams are contained in Appendix C. As shown, each new monitoring well was constructed of 2-inch polyvinyl chloride (PVC) with a 10-foot long section of slotted PVC screen. Each was completed at the ground surface with an approximate 3-foot stick-up and protective casing.

4.2.3 Soil and Groundwater Sampling

Soil and groundwater sampling was performed in accordance with the project work plan, except for the following:

The Geoprobe soil samples were preserved in methanol and analyzed for VOCs using U.S. EPA Method 8021 (as planned). Additionally, the soil samples collected from the monitoring well



borings were analyzed for VOCs by using U.S. EPA Method 8260. To verify that the project DQO's were met, the soil analytical results were compared to one another and established regulatory evaluation criteria (i.e., values provided in NR 720 Wis. Admin Code, or default U.S. EPA Region 9 preliminary remediation goals [PRGs]). Based on this data, the soil analytical results were determined to meet the project DQOs. Similarly, the groundwater samples obtained during the TBA underwent VOC analysis by using U.S. EPA Method 8260 followed by testing using EPA Method 8021. Comparison of the results to one another and the established regulatory evaluation criteria (Chap. NR140, Wis. Admin. Code) has shown that the groundwater analytical results also met the project DQOs.

All samples collected for laboratory analysis were placed on ice and transported to the selected analytical laboratory (U.S. Filter/Enviroscan) under chain-of-custody procedures. Well development and sampling forms are contained in Appendix D, and chain-of-custody forms are presented in Appendix E. The soil and groundwater analytical test results obtained from the TBA are contained in Appendix F and summarized in Tables 7-8. The inferred aerial extent of soil and groundwater impacts is shown on Figures 6-8, and such occurrences are further described in Sections 5.4 and 5.5, respectively.

Geoprobe Sampling

Soil and water samples were collected from the Geoprobe borings prior to their abandonment. A peristaltic pump was used to collect water samples from temporary casing installed in each Geoprobe borehole (samples were collected after the water had cleared). Select soil samples showing evidence of contamination or from the greatest depth above the water table were submitted to the lab for VOC analysis (U.S. EPA Method 8021). The investigation included laboratory analysis of select soil samples for polynuclear aromatic compounds (PNAs) (U.S. EPA Method 8310) and total nickel (U.S. EPA Method 6010).

Monitoring Well Sampling

Soil samples were collected from the three hollow-stem auger borings that were completed prior to well installation. Select soil samples showing evidence of contamination or from the greatest



depth above the water table were submitted to the lab for VOC analysis (U.S. EPA Methods 8021 and 8260). The investigation included laboratory analysis of select soil samples for polynuclear aromatic compounds (PNAs) (U.S. EPA Method 8310) and total nickel (U.S. EPA Method 6010).

Groundwater samples were collected from all site-monitoring wells by using low flow sampling techniques (sampling of the new wells occurred after each had been developed). As with the Geoprobe borings, groundwater was purged from each well by using low flow sampling methods. Groundwater was pumped at an approximate rate of 100 milliliters per minute through a flow through cell and the stabilization of various field parameters documented prior to sampling (measured field parameters consisted of dissolved oxygen, temperature, pH, oxidation-reduction potential, conductivity and turbidity). The groundwater sample obtained from each well was subsequently submitted to the lab for VOC analysis (U.S. EPA Methods 8021 and 8260), and selectively, for PNAs (U.S. EPA Method 8310) and dissolved nickel (U.S. EPA Method 6010).

Groundwater elevation measurements were obtained following well development activities. Depth to water and water elevation measurements from the STS and START investigations are provided in Table 5 and discussed further in Section 5.0.

4.3 Additional Waste Characterization

The pit sludge sampling results obtained by STS are provided in Table 3. The wastewater contained in Pit #3 underwent laboratory testing using toxicity characteristic leaching procedure (TCLP) methods to determine whether this waste exhibited potentially hazardous characteristics. STS's comparison of the lab results obtained to Title 40 of the *Code of Federal Regulations* (CFR), Part 261.24, Table 1, "Maximum Concentration of Contaminants for the Toxicity Characteristics" showed that the wastewater did not contain detected constituents at concentrations exceeding TCLP regulatory levels. The analysis performed by STS included an evaluation of the solid samples from Pits #1, #4, #5, #6 and #7. This evaluation consisted of



STS comparing the total analyte concentrations to the TCLP threshold values which incorporated a twenty-fold dilution into the analytical method¹. In their report, STS concluded that solid samples from all five test pits would theoretically exceed their respective limit for cadmium, chromium, and lead (e.g., the samples contain potentially hazardous levels of these constituents). In addition, the sample from Pit #1 contained barium and selenium concentrations that would theoretically exceed TCLP limits. The sample from Pit #7 contained selenium and PCE concentrations that would theoretically exceed TCLP limits.

The U.S. EPA performed a removal action at the C&L Site during April 2003. This work consisted of waste disposal activities and limited inspection to assess the general condition (and possible interconnection) of the waste pits located within the former building area.

A composite sample of the investigation-derived waste (IDW) generated during the STS was collected during the TBA to assess waste characteristics and disposal options. The waste characterization results obtained by START appear in Appendix H and are discussed further in Section 5.6.



¹ STS reported that only those solid samples containing constituent concentrations more than twenty times the TCLP limit would theoretically exceed their respective TCLP limit; using the methodology described in EPA Pub. 540-R-94-005a, entitled "Use of Total Waste Analysis in Toxicity Characteristic Determinations".

5.1 General Approach and Assumptions

Information obtained during the STS investigations has shown that elevated concentrations of various chlorinated compounds (i.e., PCE; TCE; 1,2-cis DCE; 1,2- trans-DCE; and VC) occur in the soil and groundwater at the C&L Site. Maximum contaminant levels establishing the amount of PCE, TCE, DCE and VC that can be present in drinking water before unacceptable risk is posed to human health and the environment have been developed by the Wisconsin DNR and/or the U.S. EPA.

The evaluation criteria that have been used during this TBA to assess site impacts consist of risk-based standards that consider protection of human health and the environment. Specific exposure scenarios considered consist of: (1) the exposure to human health resulting from directly contacting the contaminated soil, (2) the potential for soil contaminants to leach to groundwater and adversely affect groundwater quality, and (3) the risk associated with the groundwater ingestion. Due to adjacent residences, the future land use scenario considered in this evaluation was residential.

5.2 State and Federal Risk Based Evaluation Criteria

Rules and guidance addressing the specific process used in Wisconsin to evaluate data in making determinations regarding whether cleanup will be necessary. During this TBA, the following evaluation methodology was used:

<u>Soil</u>: Contaminant concentrations present in soil are compared to direct contract pathway values established for residential sites, given in NR 720, Wis. Adm. Code. When absent, U.S. EPA Region 9 PRGs were used as preliminary remediation goals. This evaluation included an assessment of the groundwater pathway by using the soil leaching evaluation criteria that consider the protection of groundwater quality (see NR 720 Wis. Adm. Code or default U.S.



EPA Region 9 PRG screening criteria)¹.

<u>Groundwater</u>: Contaminant concentrations present in groundwater are compared to established NR 140 Wis. Admin. Code preventative action limits (PALs) and enforcement standards (ESs). The ES is a numerical value that considers the risk chemicals pose to human receptors due to groundwater ingestion. The PAL is an action level that indicates potential risk.

These aforementioned risk-based criteria have been used in this report to assess the likely significance of the contamination at the C&L Site. This information has also been used to identify future actions that may be considered appropriate to restore contaminated soil and groundwater to levels that meet regulatory health criteria and will allow for subsequent site redevelopment.

5.3 General Information Regarding COCs

During this TBA, the physical and chemical properties of the COCs identified at the C&L Site were evaluated. Provided in this section is general summary of the nature of these chemicals, as well as information regarding their chemical fate and transport in the natural environment. Possible health risks associated with these compounds is provided, along with a preliminary evaluation of the apparent risk to human health and the environment posed by site contaminants

• Tetrachloroethylene (PCE)

PCE is a manufactured chemical used for dry cleaning and metal degreasing. Much of the tetrachloroethylene that gets into water or soil evaporates into the air. Microorganisms can break down some of the PCE in soil or groundwater. Under anaerobic conditions, reductive dehalogenation of PCE occurs, producing (in order) the following degradation products: TCE; cis- or trans-1,2-DCE; and VC. In the air, PCE is broken down by sunlight into other chemicals



¹ It should be noted that the data evaluation criteria used during this investigation were selected to provide consistency with the evaluation methods previously used by STS. The methodology that needs to be followed to obtain closure for contaminated sites in Wisconsin is outlined in PUB RR-682, *Determining Residual Contaminant Levels Using the EPA Soil Screening Level Web Site*. This approach allows for the calculation of site-specific residual contaminant levels that are protective to human health and the environment.

or brought back to the soil and water by rain. It does not appear to collect in fish or other animals that live in water.

Human exposure to very high concentrations of tetrachloroethylene can cause dizziness, headaches, sleepiness, confusion, nausea, difficulty in speaking and walking, and unconsciousness. The U.S. EPA lists PCE as a toxic chemical because it causes nerve and organ damage and possibly causes cancer in humans. The National Institute for Occupational Safety and Health (NIOSH) recommends that PCE be handled as a potential carcinogen and that levels in workplace air should be as low as possible.

The maximum concentration of PCE present in the soil at the C&L Site is 322 mg/kg, identified at location CL-G1-S04 during the STS investigation. This concentration greatly exceeds the U.S. EPA Region 9 PRG of 1.5 mg/kg (direct contact, residential land use). A maximum concentration of 1,130 μ g/L PCE was detected in a groundwater sample obtained during the TBA (GP-1). This concentration greatly exceeds the NR 140 ES for PCE (5 μ g/L).

• Trichloroethylene (TCE)

TCE is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers. Drinking or breathing high levels of TCE may cause nervous system effects, liver and lung damage, abnormal heartbeat, coma, and possibly death.

TCE easily dissolves in water, and it remains there for a long time. TCE quickly evaporates from surface water, so it is commonly found as a vapor in the air. TCE evaporates less easily from the soil, where it may stick to particles and remain for a long time.

Some studies with mice and rats have suggested that high levels of TCE may cause liver or lung cancer. Some studies of people exposed over long periods to high levels of TCE in drinking water or in workplace air have found evidence of increased cancer. However, because these are inconclusive, the International Agency for Research on Cancer has determined that TCE is not a human carcinogen.

The maximum concentration of TCE present in the soil at the C&L Site is 0.271 mg/kg,



identified at location CL-B06-S01 during the STS investigation. This concentration greatly exceeds the U.S. EPA Region 9 PRG of 0.053 mg/kg (direct contact, residential land use). The maximum concentration of TCE detected in groundwater during the TBA was 2.48 μ g/L at location GP-1. This concentration exceeds the NR 140 PAL for TCE (0.5 μ g/L), but not the NR140 ES for TCE (5 μ g/L).

• Cis- and Trans-1,2-Dichloroethylene

1,2-Dichloroethylene, also called 1,2-dichloroethene, is a highly flammable, colorless liquid with a sharp, harsh odor. There are two forms of 1,2-DCE: cis-1,2-DCE, and trans-1,2-DCE and sometimes both forms are present as a mixture. Commercial use is not extensive, but trans-1,2-DCE and mixtures of cis- and trans-1,2-DCE have been used as intermediates in the production of other chlorinated solvents and compounds, as well as low temperature extraction solvents for dyes, perfumes, and lacquers. Additionally, cis- and trans-1,2-DCE react violently with potassium hydroxide, sodium, and sodium hydroxide and can form shock-sensitive explosives. Breathing high levels of cis-1,2-DCE can cause nauseous, drowsiness, and tiredness in humans; very high levels can cause death. Breathing high levels of trans-1,2-DCE has caused liver, lung and heart damage in animals.

No cancer bioassays or epidemiological studies were available to assess the carcinogenicity of 1,2-DCE. The U.S. EPA has categorized cis-1,2-DCE as a non-carcinogen to humans, based on the lack of or negative human or animal cancer data. Trans-1,2-dichloroethylene has not been completely evaluated yet to assess human carcinogenic potential.

The maximum concentration of cis-1,2-DCE present in the soil at the C&L Site is 10.8 mg/kg, identified at location CL-B06-S02 during the STS investigation. This concentration is below the U.S. EPA Region 9 PRG of 43 mg/kg (direct contact, residential land use). The maximum concentration of cis-1,2-DCE detected in groundwater during the TBA was 224 μ g/L at location MW-3. This concentration exceeds the NR 140 ES for cis-1,2-DCE (70 μ g/L).

The maximum concentration of trans-1,2-DCE present in the soil at the C&L Site is 0.399 mg/kg, identified at location CL-B06-S02 during the STS investigation. This concentration is



below the U.S. EPA Region 9 PRG of 69 mg/kg (direct contact, residential land use). The maximum concentration of trans-1,2-DCE detected in groundwater during the TBA was 26.4 μ g/L at location MW-1. This concentration is below the NR 140 ES for trans-1,2-DCE (100 μ g/L), but exceeds the NR 140 PAL of 20 μ g/L.

• Vinyl Chloride (VC)

Vinyl chloride (also known as chloroethene, chloroethylene, and ethylene monochloride) is a colorless, flammable gas at normal temperatures with a mild, sweet odor. It is a manufactured substance that is used to make PVC plastic products (including pipes, wire and cable coatings, and furniture upholstery). VC also results from the breakdown of other substances, such as trichloroethane, TCE and PCE.

Breathing high levels of vinyl chloride for short periods of time can cause dizziness, sleepiness, unconsciousness, and at extremely high levels can cause death. Breathing VC for long periods of time can result in permanent liver damage, immune reactions, nerve damage, and liver cancer. The U.S. EPA has listed VC as a known human carcinogen.

The maximum concentration of VC present in the soil at the C&L Site is 0.221 mg/kg, identified at location CL-B06-S02 during the STS investigation. This concentration greatly exceeds the U.S. EPA Region 9 PRG of 0.079 mg/kg (direct contact, residential land use). The maximum concentration of VC detected in groundwater during the TBA was 8.76 μ g/L at location MW-3. This concentration exceeds the NR 140 ES for vinyl chloride (0.2 μ g/L).

5.4 Soil Contamination Assessment

5.4.1 STS Consultants

The soil contamination assessment performed by STS at the C&L Site showed that low levels of petroleum-related VOCs occur in the soil at four boring locations. The observed concentrations did not exceed regulatory screening criteria, however. In addition, STS noted that chlorinated VOCs are present in sludge and soil at concentrations exceeding regulatory criteria at several locations. Those identified include PCE, as well as TCE, cis-1,2-DCE, trans-1,2-DCE and VC. Contaminant distributions observed at Pit #7 and the area near the floor drain in the main garage



area suggest both are likely PCE source areas. The data collected by STS also indicates that PCE spills occurred outside the building in the drum storage areas (near shed), at boring B-2, near the northern property line and at test pit TP-5 (near boring B-11). The estimated extent of chlorinated VOCs in soil as determined by STS is shown on Figure 3.

5.4.2 START (TN&A)

During the TBA, one soil boring (GP-1) was completed in the vicinity of the waste pits. This boring contained 50 mg/kg PCE, confirming high levels of soil contamination in this area (see Figure 6). Field screening performed in this area with a photoionization detector (PID) did not identify the presence of select ionizable volatile organics in soil (these results were consistent with STS's field data; during the TBA, elevated PID measurements were limited to those identified during the field screening of the boring for well MW-3). No other stain, odor, or other potential indications of soil contamination were identified while in the field.

Soil samples collected further east (near the loading dock area) contained cis-1,2-DCE at levels below regulatory limits at borings GP-9, GP-10, and GP-11. The soil from boring GP-11 was also found to contain 0.504 mg/kg TCE, exceeding the direct contact (residential) screening level of 0.05 mg/kg established for TCE. Several soil samples taken at locations between the waste pit area and the loading dock did not contain elevated chlorinated VOC levels, indicating the likely presence of two (or more) source areas.

While the nature and extent of soil contamination has not been fully evaluated, the information obtained during this investigation has helped to define the areas of impact at the C&L Site (i.e., it is estimated that 3,400 to 4,000 cubic yards of contaminated soil may be present). The release of spent chlorinated solvent from one or more underground pit areas at the plant site indicates that the affected soil in this area is likely a listed hazardous waste. The source of the contamination near the loading dock area is not known but is likely due to indiscriminant spills.



5.5 Assessment of Groundwater Contamination

5.5.1 STS Consultants

A summary of compounds detected in groundwater at the C&L Site during the STS investigation is provided in Table 4, and STS's estimate of the extent of groundwater contamination is shown on Figure 4. The earlier data collected by STS is shown together with the data collected during the TBA on Figure 7.

Based on the STS investigation, chlorinated VOCs (PCE; TCE; cis-1,2-DCE; trans-1,2-DCE; and VC), PNAs (benzo(a) and benzo(b)fluoranthene), and metals (nickel) exist in site groundwater at concentrations above WDNR NR 140 groundwater quality standards. Groundwater monitoring well measurements and elevations obtained during the STS investigation indicate a potential for the existing groundwater contamination to extend beyond the C&L Site, necessitating further investigation to assess the nature and extent of the contamination.

5.5.2 START (TN&A)

The three monitoring wells installed during the TBA (MW-1, MW-2, MW-3) were completed to further define groundwater flow direction and groundwater quality. The information obtained during the TBA confirms that significant groundwater contamination exists at the C&L Site. While groundwater elevation data for the newly-installed wells have not yet been obtained, the possibility of off-site groundwater impacts is supported by the groundwater quality data obtained during this TBA.

The inferred extent of chlorinated VOC contamination in groundwater is shown on Figure 7. Based on the information obtained at the C&L Site, it appears that up to three groundwater contaminant plumes are present, and that none are confined to the C&L Site. The first groundwater contaminant plume (designated Plume A) originates near Pit # 7 and extends for some distance southward. This plume is characterized by the presence of high concentrations of PCE (to 1,130 ug/L) greatly exceeding the NR140 ES of 5 ug/L. Cis-1, 2-DCE is present within Plume A at levels exceeding the NR140 PAL. The second groundwater contaminant plume



(Plume B) originates near the northern boundary of the C&L Site and extends southeast. This plume is defined by the presence of cis-1,2-DCE, trans-1,2-DCE, and VC at locations near the loading dock area (B-2, B-5, B-6 and MW-1). Wells B-12 and MW-3, located hydraulically downgradient of the loading dock also encountered contamination. The chlorinated VOCs present in Plume C are similar to those observed for Plume B (VC concentrations are higher, however). The presence of nearly uniform cis-1,2-DCE concentrations within Plume B and C may suggest a continued source of contamination from one (or more) sources. Based on contaminant distributions, it appears likely that the origin of Plume B is an unknown source area located hydraulically upgradient (north) of the C&L property (as noted previously, a equipment storage yard is located on the adjacent property, north of the C&L Site). An unknown on-site (or off-site) source is indicated for Plume C. Based on present information, it is estimated that the area impacted by contaminated groundwater exceeds three acres.

5.6 Investigative-Derived Waste Characterization

5.6.1 STS Consultants

Thirteen drums containing IDW generated during the STS investigation were located at the C&L Site prior to the TBA. To allow for the disposal of this material, START collected a sample from each drum, which was then homogenized in a stainless steel bowl, and then placed in the appropriate sample containers (and in coolers on ice) for shipment to the laboratory. The coolers were submitted under chain-of custody protocols for waste characterization analysis (Waste Management Protocol B parameters).

Initially, the composite waste sample underwent testing for ignitability, corrosivity and reactivity characteristics. This was accomplished by measuring flash point, total solids, specific gravity, pH, free liquids, and chloride content. TCLP test methods were then used to determine whether the waste exhibited toxicity characteristics due to its leaching potential. The following tests were performed: TCLP VOCs, TCLP metals, TCLP semi-volatile organics, and TCLP pesticides/herbicides. In addition, the sample underwent testing for polychlorinated biphenyls, reactive cyanide, and reactive sulfide.



The waste characterization results obtained are presented in Appendix H. This testing has shown that the STS waste does not exhibit ignitability, corrosivity, or reactivity characteristics. While the waste contained PCB-1246, the concentration detected (7.2 ppm) did not exceed the hazardous threshold of 50 ppm. Leachable levels of VOCs, SVOCs, pesticides and herbicides were not detected, and the concentrations of all metals were below leaching potential hazardous threshold criteria given in 40 CFR Part 261.24. Based on this information, the IDW is not hazardous, and can be transported to a permitted, off-site landfill facility for disposal.

5.6.2 START (TN&A)

Eight drums of IDW were generated during the TBA field investigation. Five of the drums contain soil IDW generated during soil boring activities. The remaining drums contain well development and purge water. Based on the analytical data obtained during the TBA, the IDW generated during the TBA is nonhazardous. Plans are to transport the containerized soil and water to Advanced Waste's ChemWorks Treatment Facility in Milwaukee, Wisconsin (or to another suitable, permitted facility).

5.7 Preliminary Evaluation of Site Risk

5.7.1 Risks Due to Soil Impacts

The soils at the C&L Site that are contaminated by organics or metals pose a threat to site trespassers and workers. The likelihood that other unknown sources may be present at the C&L Site further increases site risk. At a minimum, the existing concrete slab present over the main building area should remain in place until the nature and extent of soil contamination is better understood and a remedial strategy for addressing the contaminated soil in this area can be developed and implemented.

5.7.2 Risks Due to Groundwater Impacts

The risk associated with the groundwater pathway is unknown. Because the C&L Site is located in the City of Kenosha, it is unlikely that private wells are located in the immediate site vicinity (water supplies for the City of Kenosha are obtained from Lake Michigan). An exception is the



possibility that contaminated groundwater may be migrating to a sump located in an adjacent residence, approximately 25-50 feet south of the C&L Site. Given that the surrounding area is developed, further investigation of this and other potential groundwater contamination migration pathways should be performed.

The WDNR requires that a number of response actions be taken when a NR 140 ES is exceeded. This is especially true when the groundwater contamination is not limited to the property. Typically, the presence of a NR 140 ES requires the owner or operator of the facility to: (1) notify the WDNR in writing, and (2) take the action necessary to prevent any new releases and restore the contaminated groundwater within a reasonable period of time. Response actions may include administrative/institutional controls, active treatment, and in some instances, the collection of data to determine whether natural attenuation can be effective in restoring groundwater quality within a reasonable time period.



6.1 Study Area Recommendations

Additional investigation is required to further delineate the nature and extent of known or suspected contaminant sources. Based on existing data, it is recommended that additional Geoprobe borings be completed at several locations to further define the extent of soil contamination. The installation of additional groundwater monitoring wells is also recommended to further define the site extent of groundwater contamination. The proposed supplemental investigation locations are shown on Figure 8. The scope of these activities is further described below.

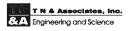
6.1.1 Plume Area A (Test Pit Source Area)

Direct Push Borings

- Complete Geoprobe borings at four locations to further define the extent of the volatile organic groundwater plume (spatially arrange the borings north, west, southwest, and south of the mapped plume area).
- Complete additional Geoprobe borings at three locations within the contaminant source area (near Pit #7) to help evaluate potential hazardous characteristics and assess potential remedial options.
- Advance each borehole until the underlying clay layer is encountered (about 15 feet bgs).
- Continuously obtain and log soil samples (perform headspace VOC screening).
- Collect and analyze two soil samples per boring (14 samples). Analyze each for VOCs (U.S. EPA Method 8021). In addition, send two of the samples from the source area to the lab for TCLP testing.
- Collect a groundwater sample from each groundwater plume delineation location (four samples). Analyze each for VOCs (U.S. EPA Method 8021).

Monitoring Wells

- Install a water table well near the southwest corner of the property to determine off-site contamination migration potential (total depth of 15 feet bgs).
- Install a water table well near the northwestern corner of the property to establish on-site background water quality (total depth of 15 feet bgs).
- Install a deeper well (piezometer) adjacent to an appropriate water table well to assess soil conditions at depth as well as the vertical component of groundwater (contaminant) movement (total depth of 25 feet bgs). Two possible locations are recommended for further



evaluation: (1) near B-3 to evaluate water quality at depth (the potential exists however to drag the contamination identified at this location to a greater depth during boring installation); or (2) near MW-2, where there is a reduced potential of encountering contamination.

- Perform VOC headspace screening on the collected soil samples.
- Collect and analyze two soil samples from each boring. Analyze each for VOCs (U.S. EPA Method 8021).
- Collect a groundwater sample from each well, and analyze for VOCs (U.S. EPA Method 8021).

6.1.2 Plume Area B (Loading Dock Area)

Direct Push Borings

- Complete Geoprobe borings at three locations east of the former building area to further define the nature and extent of the on-site volatile organic groundwater plume.
- Complete Geoprobe borings at three locations north of the former loading dock area (north of boring B-2) to evaluate off-site groundwater quality (potential off-site contaminant source).
- Complete Geoprobe borings at three off-site locations to help determine the nature and extent of groundwater quality impacts southeast (hydraulically downgradient) of the apparent source area.
- Complete an additional Geoprobe boring within the contaminant source area (near boring B-2) to help evaluate potential hazardous waste characteristics and assess remedial options.
- Advance each boring until the underlying clay layer is encountered (about 15 feet bgs).
- Continuously obtain and log soil samples (perform headspace VOC screening).
- Collect and analyze two soil samples per boring (20 samples). Analyze each for VOCs (U.S. EPA Method 8021). In addition, send the source area sample to the lab for TCLP testing.
- Collect a groundwater sample from each groundwater plume delineation location (14 samples). Analyze each for VOCs (U.S. EPA Method 8021).

Monitoring Wells

- Install a water table well approximately 20 feet north of the property boundary (southwest corner of fence on the adjacent property) to assess the potential for off-site contamination migration.
- Install a water table well approximately 100 feet north of the property boundary (behind adjacent Rockwall building) to establish background water quality.
- Install a water table well to assess the downgradient extent of the contaminant plume.



- Continuously sample the new borings to total depth (about 15 feet), and perform headspace VOC screening.
- Collect and analyze two soil samples from each boring. Analyze each for VOCs (U.S. EPA Method 8021).
- Collect a groundwater sample from each newly installed well, and analyze for VOCs (U.S. EPA Method 8021).

6.1.3 Plume Area C (Other Areas)

- Complete Geoprobe borings at two locations north of boring B-12 to define the northern edge of Plume Area C.
- Complete Geoprobe borings at two locations, one east and west of the suspected plume to define the eastern and western edges of the impacted area.
- Complete Geoprobe borings at two off-site locations to help determine the nature and extent of groundwater quality impacts southeast (hydraulically downgradient) of the apparent source area.
- Advance each boring until the underlying clay layer is encountered (about 15 feet bgs).
- Continuously obtain and log soil samples (perform headspace VOC screening).
- Collect and analyze two soil samples per boring (12 samples). Analyze each for VOCs (U.S. EPA Method 8021). In addition, send the source area sample to the lab for TCLP testing.
- Collect a groundwater sample from each groundwater plume delineation location (six samples). Analyze each for VOCs (U.S. EPA Method 8021).

Off-site access restrictions will need to be evaluated prior to finalizing field conditions.

6.2 Estimate of Supplemental Investigation Costs

In summary, results of the TBA show that additional investigation is needed at the C&L Site. Based on the evaluation of all site data, START recommends that Geoprobe borings be completed at 22 locations. The installation of six groundwater monitoring wells is also recommended. As shown in the following table, the cost to complete the recommended supplemental investigation is estimated to total about \$50,000.



Estimated Supplemental	Investigation	n Costs for the C&L Industrial Cleaners Sit
Description	Est. Cost	General Comments / Cost Basis
Labor	\$13,000	approx. 30% total cost
Travel & Misc. Expenses	\$2,200	approx 5% total cost
Laboratory	\$11,400	based on unit costs from previous bid
Drilling/Well Install	\$10,800	based on unit costs from previous bid
Equipment	\$1,200	previous investigation allowance
IDW Management	\$2,300	assumes investigation waste is not hazardous
Survey	\$1,400	engineering estimate
Shipping	\$500	previous investigation allowance
Subtotal	\$42,800	
Contingency (10%)	\$4,300	Allowance for additional site characterization
Estimated. Total	\$47,100	

General assumptions inherent with preparation of the above cost estimate include:

- As identified prior to performing the TBA, additional investigation beyond the TBA will be needed to (1) complete the hydrogeological characterization, (2) determine background water quality, and (3) identify the nature and extent of groundwater contamination at the C&L Site.
- The estimate is based on prior investigation costs incurred during the U.S. EPA investigation, and should be considered a preliminary engineering estimate. Actual costs will likely change due to a number of factors such as actual subcontractor costs, project data quality objectives/regulatory requirements, and the actual site conditions encountered.
- The estimate does not include cost for resurveying all wells and performing a site-wide groundwater-sampling event. Such activity is recommended to establish overall site conditions. The estimated (additional) cost to complete this work likely falls within the range from \$2,500-\$3,000.

In addition to these activities, it may be appropriate to obtain additional information regarding operations that occurred on and adjacent to the C&L Site. A review of historical aerial photographs may provide additional information regarding potential unknown sources requiring further investigation.



7.1 Preliminary Identification of Alternatives

One of the objectives of the U.S. EPA investigation was to use information obtained from the TBA to preliminarily identify and assess remedial action objectives and potential remedial alternatives that will allow for site redevelopment. Remedial technologies available for this site could include excavation of the contaminated soils with a number of disposal options. The disposal could include a landfill that would accept possible hazardous waste and incineration. In-situ treatment could also be utilized that would reduce chlorinated solvent in soil.

7.2 Administrative / Institutional Controls

The WDNR has prepared guidance and policy regarding environmental assessment, cleanup, and "flexible closure" requirements. At certain contaminated sites, engineering controls (e.g., containment, cap, etc) and/or institutional controls (e.g., deed restriction, etc.) can be used in combination with natural attenuation (allowing the residual contamination to remain on-site). In such instances, various types of written assurances are available from the WDNR's Remediation and Redevelopment Program to help address technical, administrative or liability issues.

7.3 Source Removal and Active Treatment Methods

Potential treatment options consist of source removal, followed by an active treatment system (in-situ or ex-situ treatment). Some of the different methods used to treat PCE and other chlorinated ethenes have been evaluated by U.S. EPA's SITE Program. A few potentially applicable methods for addressing the contamination at the C&L Site are presented below.

ABB ENVIRONMENTAL SERVICES, INC. (In-Situ Anaerobic-Aerobic Sequential Bioremediation of PCE) TECHNOLOGY DESCRIPTION:

ABB Environmental Services, Inc. (ABB-ES) has demonstrated that sequential anaerobicaerobic biodegradation of PCE is feasible under the proper conditions. The anaerobic process



can dechlorinate PCE completely; however, dechlorination of the least-chlorinated ethenes

(1,2-DCE and VC) can take some time. Of the chlorinated ethenes, VC is the most amenable to treatment by aerobic co-metabolic processes. Therefore, a two-step process has been employed as the most efficient treatment methodology to address highly chlorinated solvents.

Work performed by others using patented *Pseudomonas* species has shown that these organisms have the ability to reduce chlorinated organic contaminates (i.e., PCE and TCE) under aerobic conditions, without generating harmful byproducts. Applications of other in-situ bioremediation technology for treating VOCs have also been proposed and may have applicability at the C&L Site. This includes the use of oxygen release compounds, molasses, CL-Solutions' CL-Out[™] (or others).

LAWRENCE LIVERMORE LABORATORY (Soil Vapor Extraction with Groundwater Pump-and-Treat with Air Sparging) TECHNOLOGY DESCRIPTION:

Soil vapor extraction (SVE) by itself or in combination with a groundwater pump-and-treat system can be effective in reducing further downgradient and off-site migration of VOCs to levels below acceptable regulatory standards. SVE can be used to address locations where significant VOC contamination occurs in the unsaturated zone. Additionally, removal and treatment of contaminated groundwater pumped from a number of extraction wells can assist in reducing contaminant concentrations and contaminant migration. Air stripping is the primary method used to remove VOCs from groundwater, although granular activated carbon is also used. Often portable treatment units are used to reduce cleanup costs and allow for more flexibility in deploying the units at different locations as the plume configuration changes. One note, the effectiveness of a groundwater pump-and-treat system is dictated by site conditions. The presence of a number of contaminant sources, relatively fine-grained soils, and other factors may lead to the conclusion that a pump-and-treat system is technically impracticable (i.e., the technology would take many years to achieve cleanup standards).

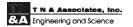


IN-SITU OXIDATIVE TECHNOLOGIES, INC. (ISOTECH) (Oxidation using Modified Fenton's Reagent) TECHNOLOGY DESCRIPTION:

A modified Fenton's reagent consisting of chelated iron catalyst and stabilized peroxide has been used to address chlorinated volatile organic contamination. The ISOTECH process has proven capability to function in the neutral pH range and has been used to address the instability of oxidizing and catalytic reagents when introduced into the subsurface, allowing the oxidizing agent to thoroughly disperse in the subsurface. Timed injections of the modified Fenton's reagent into the groundwater contaminant plume have been shown to be effective in reducing contamination to within acceptable regulatory limits.

INTERSTATE TECHNOLOGY AND REGULATORY COUNCIL (ITRC) (Permeable Reactive Barrier with Iron Filings) TECHNOLOGY DESCRIPTION:

For some time, permeable reactive barriers (PRBs) have been used as a passive *in-situ* treatment technology that uses natural site groundwater flow conditions for remediation. The installation method consists of constructing a trench across the contaminated groundwater flow path by using one of several construction methods such as trenching, caisson deployment, mandrels, clamshell digging, soil mixing, or high pressure jetting. PRBs are typically installed using a variety of funnel-and-gate PRB configurations or a continuous reactive barrier which is typically filled with zero-valent granular iron that is derived from treated scrap metal to remove its valence electrons. The iron filings react with the target contaminants in a strong reducing reaction to form non-toxic, easily biodegradable by-products such as ferrous iron, chloride, hydroxide ions, and light hydrocarbon C2-C5 compounds (ethanes, ethenes, etc.). The PRB design process typically begins with collecting contaminated groundwater from the site and then performing a bench scale treatability study to determine the reaction characteristics. The treatability results, along with the aquifer properties (flow velocities, etc.) and computer modeling are then used to determine the required residence time and reactive cell dimensions. The PRB has been approved and endorsed by the U.S. EPA and other federal agencies.



OREGON GRADUATE INSTITUTE (OGI) (Permeable Reactive Barrier with Zeolite)

TECHNOLOGY DESCRIPTION:

Work performed more recently by OGI has focused on the use of surfactant-modified zeolite PRBs. This technology includes treating the zeolite (a microporous crystalline solid with high surface areas and cation exchange capacity) with a surfactant, which sorbs to the negatively charged zeolite surface and forms a layer that has an affinity for anions or organics. The surfactant-modified zeolite is an excellent reactive media for environmental remediation because it can simultaneously remove cations, anions, and nonpolar organics from solution (including PCE). The effectiveness of this treatment has been showed to be affected by the hydraulic conductivity of the barrier relative to the natural soil materials.

7.4 Assessment of Likely Cleanup Costs

The cost associated with the subsequent cleanup of the C&L Site is difficult to estimate because of the undetermined extent of soil and groundwater contamination. A comparative analysis of the relative cost for cleanup has been prepared however using cost data containing in the Federal Remediation Technologies Roundtable (FRTR) database, which can be found at http://www.frtr.gov/.

Excavation and Off-Site Disposal

Based on present information, it appears that up to 3,400 to 4,000 cubic yards (5,000 to 6,000 tons) of contaminated soil are present at the C&L Site (additional, unidentified source areas may also be present). Since the on-site impacts appear to be due to the release of organic solvent waste, it seems likely that at least half of this material (if excavated) would be considered a listed hazardous waste, requiring special handling and disposed requirements. Based on these assumptions, the anticipated cost for the excavation, transportation, and disposal of the contaminated soil would be on the order of about \$850,000 to \$1.2 million (estimate does not include the cost associated with subcontractor bidding, confirmational sampling, or water treatment and disposal).



Soil Vapor Extraction

SVE may also be used to address the soil source areas at the C&L Site. Based on a review of this technology, a cost of \$20 to \$30 per ton can be assumed for application of this technology. Assuming that 5,000 to 6,000 tons of contaminated soil will require treatment, the cost for insitu SVE would be expected to fall within the range from about \$100,000 to \$180,000 (estimate does not include the cost associated with design, permitting, treatment of off-gas, continued monitoring, system operation and maintenance, or reporting).

• In-Situ Anaerobic-Aerobic Bioremediation of PCE

A variety of different enhanced in-situ bioremediation technologies have been used to cleanup chlorinated solvents from dry-cleaning operations with TCE and PCE as the primary contaminants in groundwater. These methods involve the subsurface injection of substances to promote bioremediation. Based on the data in the FRTR database (2001), the cost for reported design and implementation (five sites) ranged from approximately \$51,000 to \$150,000 (or more), depending on the size of the area and the amount of design required. O&M costs were provided for one site (\$150,000 estimated for 12 months). Due to site uncertainties, the cost for implementing this treatment technology at the C&L Site cannot be estimated at this time.

Groundwater Pump-and-Treat with Air Sparging

Five drycleaners sites were evaluated by the FRTR (various locations, 2001-2002) to evaluate the use of multi-phase extraction or pump and treat to cleanup soil and groundwater contaminated with chlorinated solvents from dry-cleaning operations. In some of the cases, several groundwater extraction wells were installed to remove groundwater and soil vapor. Extracted vapors were treated using granular-activated carbon. Extracted groundwater was treated using a low-profile air stripper. The cost for implementation of this remedy ranged from about \$60,000 to more than \$245,000. As noted previously, the likely cost for implementing this treatment technology at the C&L Site cannot be estimated at this time.



Oxidation Using Modified Fenton's Reagent

The costs associated with the application of a variety of in-situ chemical oxidation to address chlorinated solvent contamination (such as PCE) were evaluated by FRTR during 2000-2001. This study included the evaluation of two sites which used Fenton's Reagent (pressurized injection of concentrated hydrogen peroxide and ferrous iron catalyst). The cost for design and implementation of the Fenton's Reagent systems ranged from \$110,000 to \$170,000 (only one of the two sites reported achieving the remediation goals). A different study showed that the cost for a phased application of Fenton's Reagent reduced the concentration of total VOCs below the required cleanup objectives. The reported cost for this multi-phase project was nearly \$1 million, which was still substantially below the projected implementation of the Fenton's Reagent systems ranged groundwater pump-and-treat cost of \$12 million. Due to site uncertainties, the likely cost for implementing this treatment technology at the C&L Site cannot be estimated at this time.

Permeable Reactive Barriers

The costs associated with installing PRBs at six sites were determined by FRTR in 2002 (iron or iron and sand mixtures). According to this database, total project installation costs ranged from less than \$50,000 (pilot study evaluation) up to \$1.3 million for a full-scale, 130-foot long PRB. Design costs ranging from \$30,000 to \$200,000 for the PRB were identified. The cost for installing a PRB with a modified zeolite component is more expensive. Due to site uncertainties, the likely cost for implementing this treatment technology at the C&L Site cannot be estimated at this time.

While the design of the appropriate remedy for the C&L Site cannot be determined until investigation efforts are complete, it is reasonable to assume that the cleanup strategy will include a combination of source control and treatment methods (with possible institutional controls).



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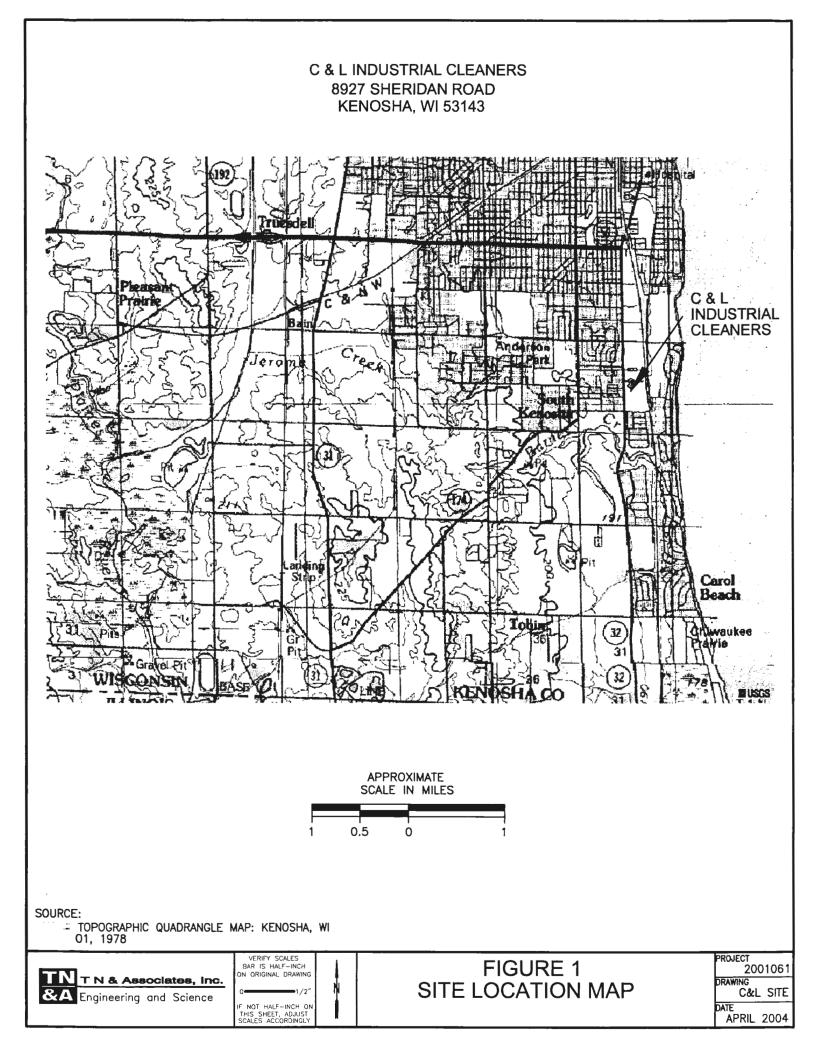
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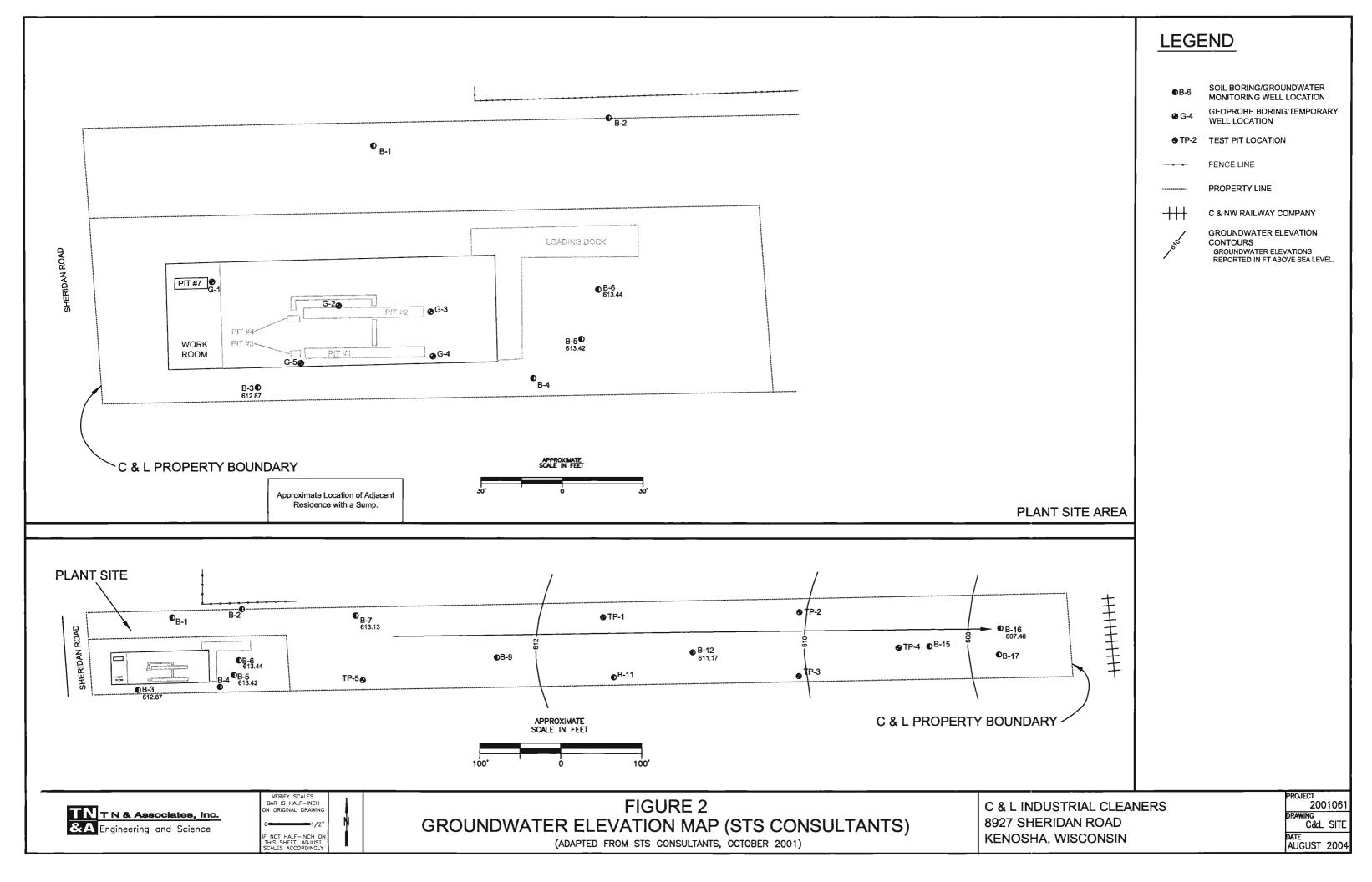
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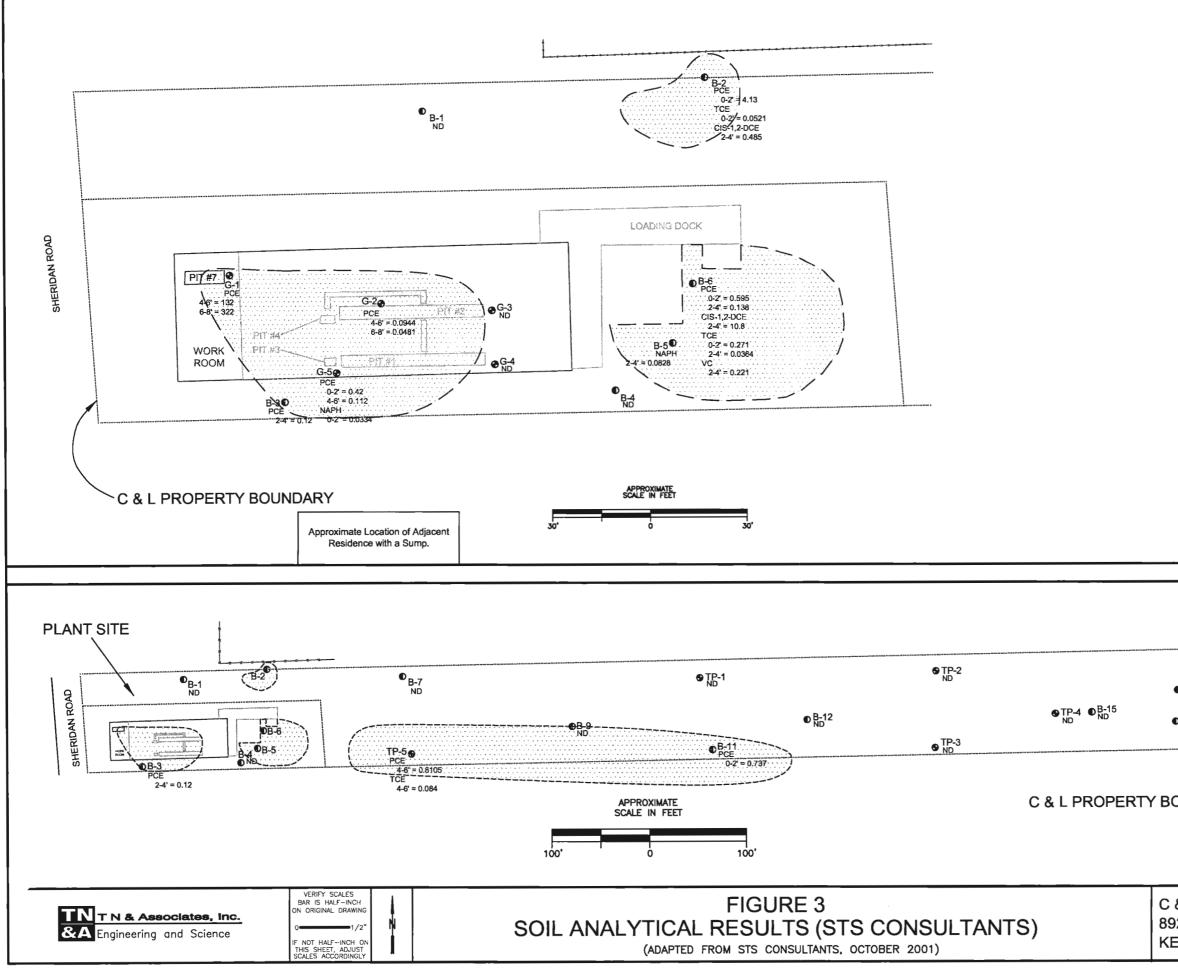
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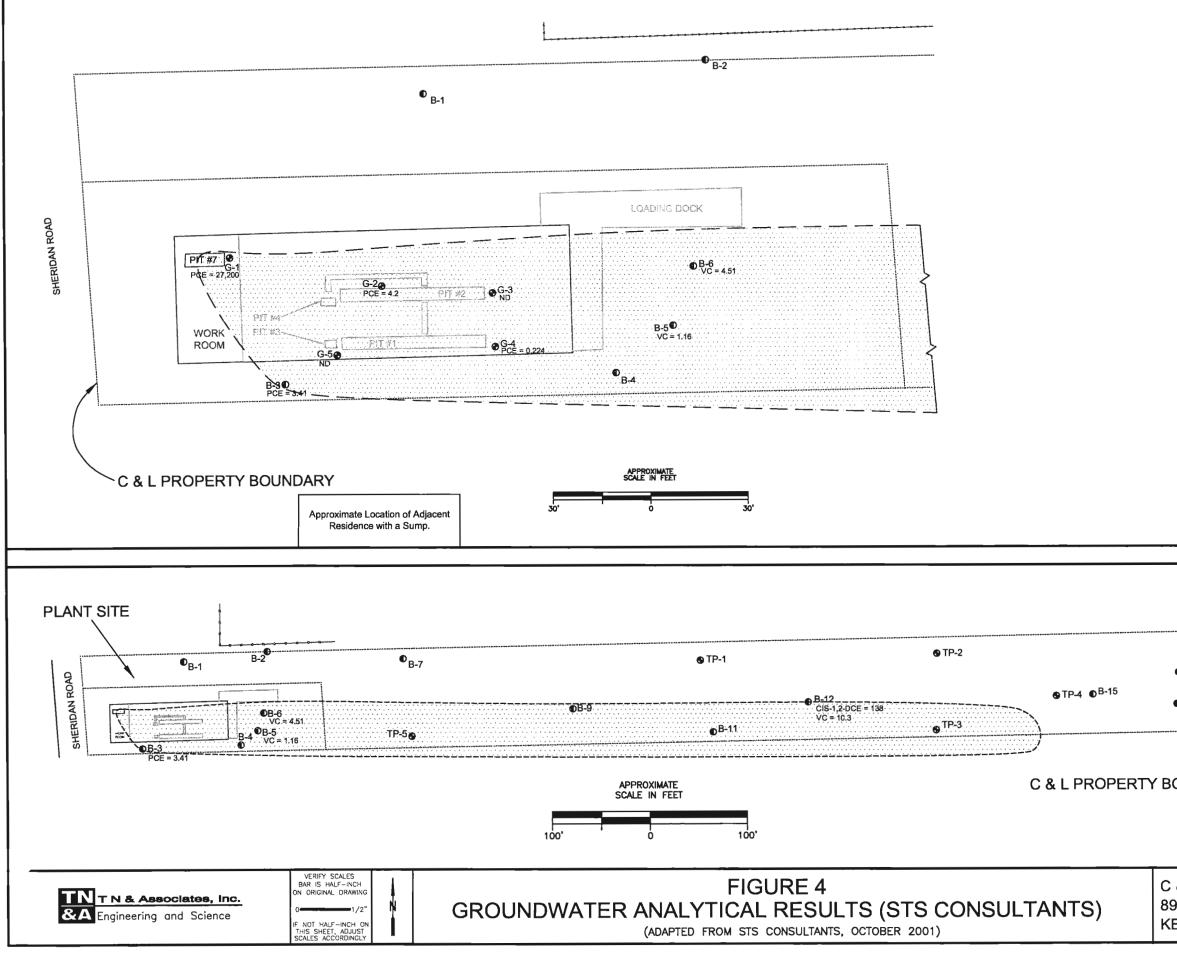
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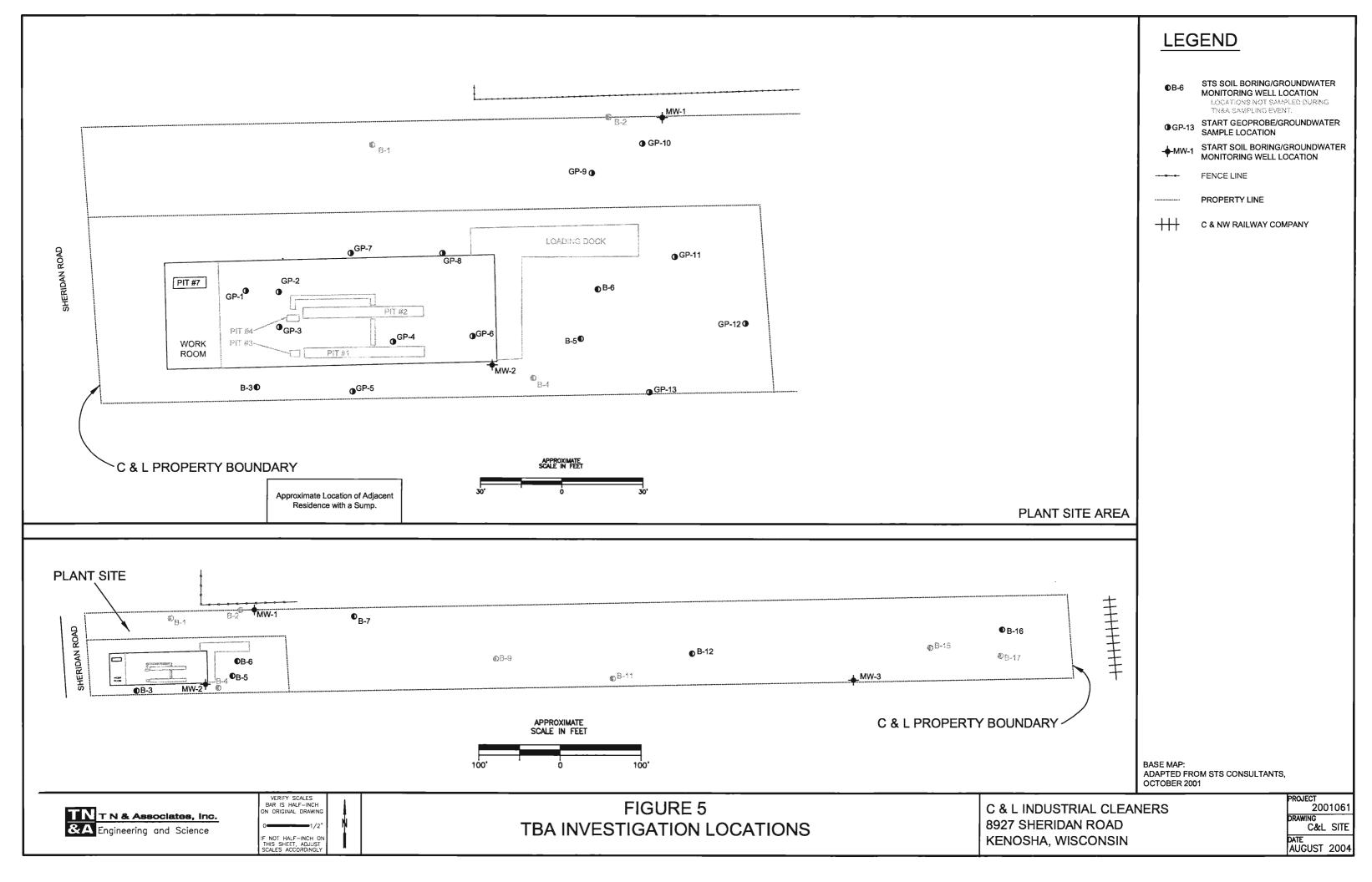


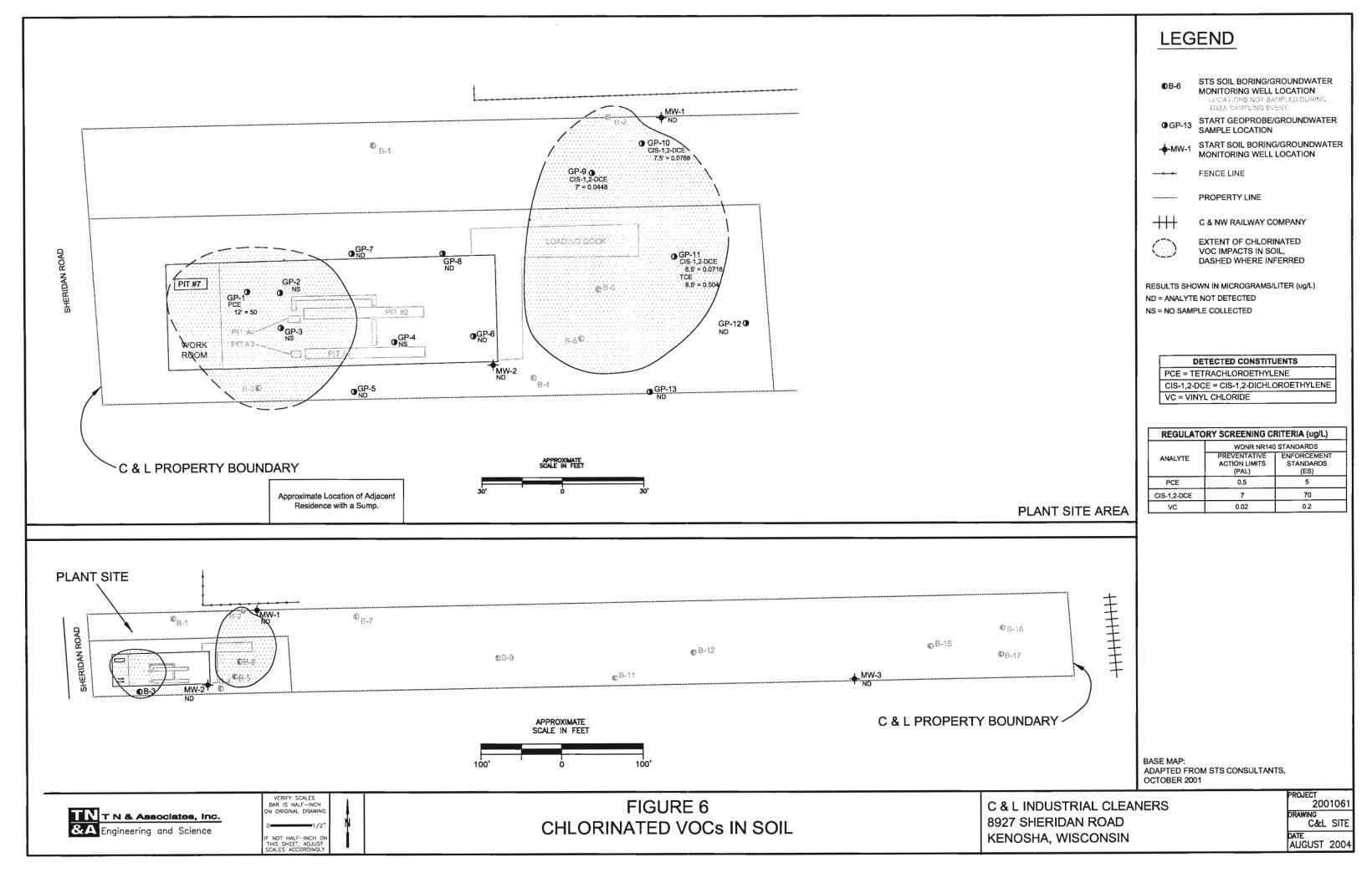


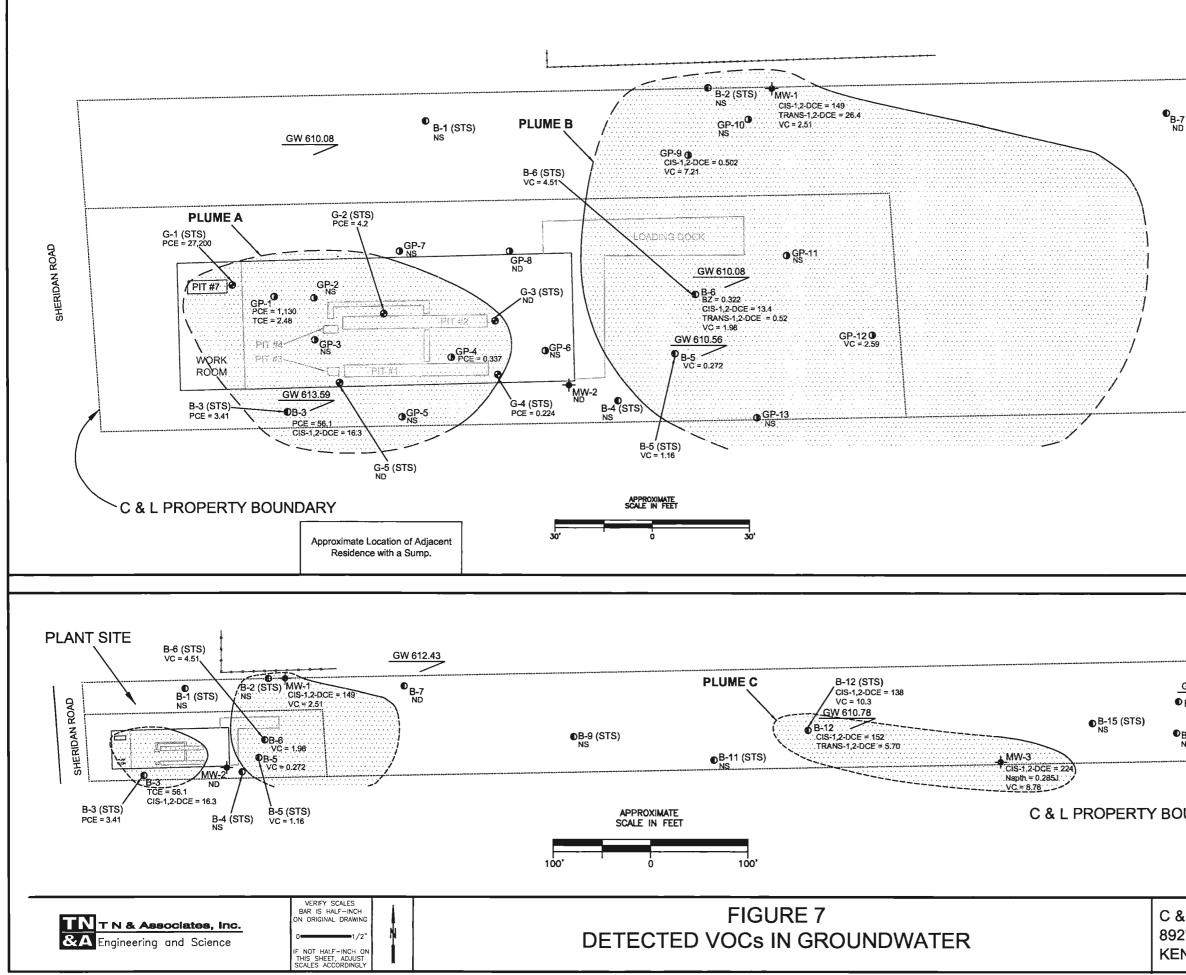
	LEG	END		
		MONITOR GEOPRO WELL LO TEST PIT FENCE LI PROPER C & NW R INFERRE CHLORIN IN SOIL	Cation Location NE Ty Line Cailway Co! D Extent o Ated Voc II DW GROUND GRAMS/KILO	OCATION TEMPORARY MPANY F MPACTS SURFACE (ft bgs)
	PCE = TETE TCE = TRIC CIS-1,2-DCI VC = VINYL NAPH = NA	CHLORIDE	THYLENE YLENE NCHLOROET	THYLENE
	ANALYTE		NING CRITE	GROUNDWATER
	PCE	RESIDENTIAL 1.5	INDUSTRIAL 3.4	PATHWAY ^a 0.06
PLANT SITE AREA	TCE	0.05	0.11	0.006
	CIS-1,2-DCE VC	43 0.08	150 0.75	0.4
	NAPH			
	A = WDNR NR	720 GENERIC	RCL OR EPA R	EGION 9 PRG
		ON 9 RISK BAS ROM SOIL TO V		RATION FOR
•B-16 •B-17 ND OUNDARY				
				PROJECT
& L INDUSTRIAL CLEAR	NERS			2001061 DRAWING
927 SHERIDAN ROAD				C&L SITE
ENOSHA, WISCONSIN				date AUGUST 2004
				2001



	LEGE	ND	
	●B-6 ● G-4	Soil Boring/Gro Monitoring Wei Geoprobe Bori Well Location	LL LOCATION
	• TP-2	TEST PIT LOCATIO	ON
	·······@······@···	FENCE LINE	
		PROPERTY LINE	
	-+++	C & NW RAILWAY	COMPANY
		INFERRED EXTEN CHLORINATED VO GROUNDWATER	C
	RESULTS SHOW ND = ANALYTE N	N IN MICROGRAMS/L IOT DETECTED	LITER (ug/L)
		TECTED CONSTITU	IENTS
	PCE = TET	RACHLOROETHYLE	ENE
		L CHLORIDE	KOETHTLENE
	REGULATO		STANDARDS
	ANALYTE	PREVENTATIVE ACTION LIMITS (PAL)	ENFORCEMENT STANDARDS (ES)
	PCE CIS-1,2-DCE	0.5	5 70
PLANT SITE AREA	VC	0.02	0.2
•B-16			
•B-16 •B-17			
× +			
)			
BOUNDARY			
& L INDUSTRIAL CLEA	NERS		PROJECT 2001061
927 SHERIDAN ROAD			DRAWING C&L SITE
ENOSHA, WISCONSIN			DATE AUGUST 2004







_					
	LEG	BEND			
	● B-6		ORING/GROU		
	€ G-4	STS GEOPR	OBE BORING	3/TEMPORA	١RY
7	● GP-13	START GEO SAMPLE LO	PROBE/GRO	UNDWATE	२
)	- +- MW-1		. BORING/GR G WELL LOC		ER
		FENCE LINE	Ē		
	*****	PROPERTY	LINE		
	-+++	C & NW RAI	LWAY COMP	ANY	
		GROUNDW	CHLORINAT	MINATION,	
	RESULTS SH ND = ANALYT NS = NO SAM	TH IN FT BELO OWN IN MILLI TE NOT DETEC IPLE COLLEC GAMPLE RESU	grams/kiloo Cted Ted	•	
	DE		ISTITUENTS		
	PCE = TET	RACHLOROE	THYLENE		
	TCE = TRIC	CHLOROETH	YLENE		
		E = CIS-1,2-D	ICHLOROET	HYLENE	
]	
	REGULAT	ORY SCREE		RIA (mg/kg)	
	ANALYTE	DIRECT	CONTACT [^]	GROUNDWAT	
		RESIDENTIAL	INDUSTRIAL	PATHWAY	
	PCE	1.5	3.4 0.11	0.06	_
PLANT SITE AREA	TCE CIS-1,2-DCE	0.05 43	150	0.000	_
	VC	0.08	0.75	0.01	
	NAPH			-	
	A = WDNR NF	R 720 GENERIC	RCL OR EPA R	EGION 9 PRG	
		ION 9 RISK BAS ROM SOIL TO V		ATION FOR	
GW 607.48 PB-16 ND B-17 (STS) NS DUNDARY					

BASE MAP: ADAPTED FROM STS CONSULTANTS, OCTOBER 2001

C & L INDUSTRIAL CLEANERS 8927 SHERIDAN ROAD KENOSHA, WISCONSIN



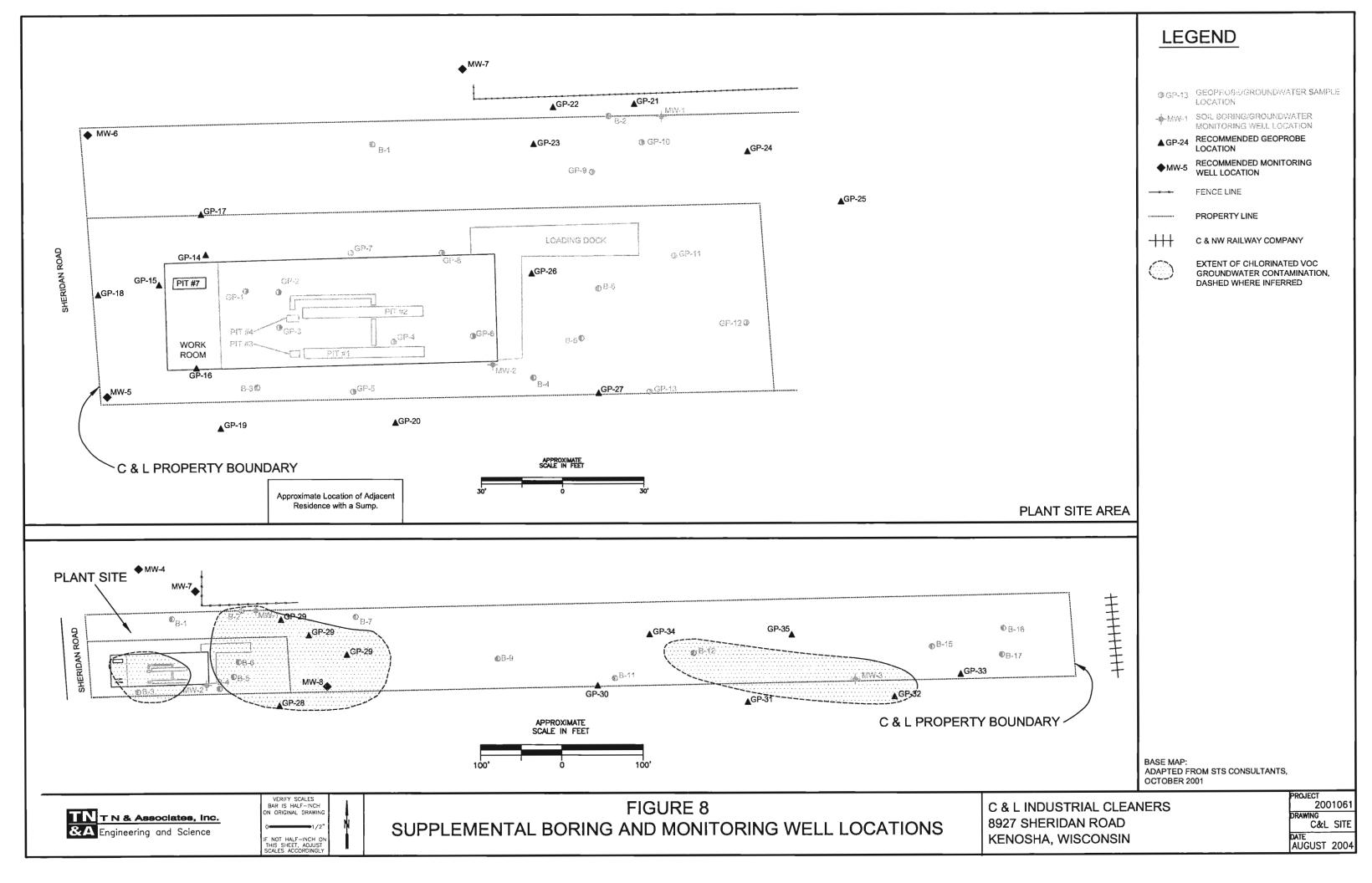


Table 1 Summary of Soil Analytical Results – Geoprobe and Test Pit Samples Kenosha Brownfield Investigation – C L Industrial Cleaners STS Project No. 86415XB Task 2000

								Geop	robes							Test Pits		
	NR	720 Generic R	CLS	CL-01-503	CL-01-SO4	CL-G2-SO3	CL-G2-504	CL-03-503	CL-03-504	CL-G4-S03	CL-G4-SO4	CL-05-S01	CL-G5-S03	CL-TP1-503	CL-TP2-S03	CL-TP3-602	CL-TP4-S04	CL-TPS-
	Direct Cont	act Pathway	Second Sec	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/23/01	4/23/01	4/23/01	4/23/01	4/23/0
	Non-		Groundwater	4-6'	6-8'	4-6'	6-8'	4-6'	6-8'	4-6'	6-8'	0-2'	4-6'	5-6'	5-6'	8-10'	5-7	4-6
arameters	Industrial	Industrial	Pathway	0.8	1.8	0.6	0.4	0.0	0.0	0.0	0.0	0.6	2.3	1.2	0.0	0.0	0.0	0.0
etals (mg/kg)			も激売								1							
Total Antimony				<2.07	<2.05	<2.11	<2.04	<1.99	<1.88	<2.00	<2.08	<1.87	<2.04	0.118	0.0486	< 0.0476	0.153	0.33
Total Arsenic	0.039	1.6	-	1.24	8.70 48	9.00**	2.93	5.92	5.0748	8.67	1.3948	3.98 **	4.07	1.86 48	1,82	3.04**	3.44	6.08
Total Barium				6.91	15.7	49.0	5.91	101	14.4	197	7.47	31.5	32.7	9.43	18.7	31.9	32.5	26.
Total Cadmium	8	510		0.219	0.112	0.249	0.103	0.4.9	0.0632	1.11	0.159	0.507	0.886	< 0.0407	0.0608	0.0733	0.112	0.1
Total Chromium	16,000	NA	1	9.81	14.5	16.2	4.21	15.8	12,1	19.4	4.85	13.3	12.3	11.7	7.85	7.01	11.3	11.
Total Copper	A MARCH AND		1.76 4-37	21.1	25.0	26.4	8.38	23.7	12.7	36.4	10.4	113	90.7	2.79	4.40	12.3	8.05	16.
Total Lead	50	500	11111	5.88	7.60	13.6	4.34	11.4	5.80	11.5	4.38	38.2	38.1	2.95	3.77	5.10	6.07	8.1
Total Mercury	· · · · · · · · · · · · · · · · · · ·		N 200-101	< 0.0487	< 0.0483	< 0.0498	< 0.0481	<0.0437	< 0.0443	< 0.0471	< 0.0488	0.0771	0.079	< 0.0493	< 0.0486	<0.0488	< 0.0499	0.06
Total Nickel				11.7	16.6	33.5	6.79	28.7	14.0	114	9.46	20.8	19.8	5.91	4.26	9.85	8.22	18
Total Selenium	1.000	1240		<0.402	< 0.398	1.02	< 0.397	0.491	< 0.366	1.08	< 0.403	< 0.363	< 0.395	<0.407	< 0.401	< 0.403	< 0.411	<0.3
Total Silver		24.00	1.1.1	<0.122	<0.121	<0.124	<0.12	<0.117	<0.111	<0.118	<0.122	0.363	<0.12	0.136	<0.122	<0.122	<0.125	<0.1
Total Silver		1200 月11日												0.100				
	NR	720 Generic F	CLS							1	1						1	
		act Pathway		1														
	Non-	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Groundwater															
	Industrial	Industrial	Pathway													1		
AHs (mg/kg)																		
1-Methyl Naphthalene	1,100	70,000	23	<0.0353	< 0.0035	<0.00361	<0.00349	< 0.00339	< 0.00322	< 0.00342	< 0.00354	< 0.0319	<0.0347	< 0.0358	< 0.0352	< 0.0354	< 0.0362	<0.0
2-Methyl Naphthalene	600	40,000	20	<0.028	< 0.00277	<0.00285	<0.00276	<0.00269	<0.00255	<0.00271	<0.00281	<0.0253	<0.0275	<0.0284	<0.0279	<0.0281	<0.0287	<0.0
Acenaphthene	900	60,000	38	<0.0755	<0.00748	<0.00771	<0.00745	< 0.00724	<0.00687	< 0.0073	< 0.00757	<0.0583	<0.0743	< 0.0764	<0.0753	<0.0757	<0.0773	<0.0
Acenaphthylene	.18	360	0.7	<0.0512	<0.00507	<0.00522	<0.00505	<0.0C491	< 0.00466	< 0.00495	< 0.00513	<0.0463	< 0.0503	<0.0518	< 0.051	<0.0513	<0.0524	<0.0
Anthracene	5.000	300.000	3,000	<0.0353	< 0.0035	<0.00361	<0.00349	<0.00339	<0.00322	< 0.00342	< 0.00354	0.0628	<0.0347	<0.0358	< 0.0352	< 0.0354	<0.0362	<0.0
	0.088	3.9	17	< 0.0305	< 0.00302	<0.00311	<0.003	<0.00292	<0.00277	<0.00294	<0.00305	0.464	0.1084	< 0.0308	< 0.0304	< 0.0305	<0.0312	<0.0
Benzo(a)Anthracene	0.0088	0.39	48	<0.0303	<0.00277	<0.00286	<0.00276	<0.00252	<0.00255	<0.00271	<0.00281	0.677	0.172	<0.0284	< 0.0279	<0.0281	<0.0287	<0.0
Benzo(a)Pyrene									<0.00233	<0.00271	<0.00281	1.08	0.325					
Benzo(b)Fluoranthene	10.088	,3.9	360	< 0.0134	< 0.00133	< 0.00137	< 0.00132	<0.00129						< 0.0136	< 0.0134	< 0.0134	<0.0137	<0.0
Benzo(ghi)Perylene	1.8	39	6,800	<0.0122	<0.00121	<0.00124	<0.0012	<0.00117	<0.00111	<0.00118	<0.00122	0.805	0.326	<0.0123	<0.0122	<0.0122	<0.0125	< 0.0
Benzo(k)Fluoranthene	0.88	39	870	< 0.0146	< 0.00145	< 0.00149	< 0.00144	<0.0014	< 0.00133			0.322	0.0965	< 0.0148	< 0.0146	< 0.0147	< 0.015	< 0.0
Chrysene	8.8	390	37	< 0.0244	<0.00241	< 0.00249	<0.0024	<0.00.234	<0.00222	<0.00235	<0.00244	0.446	0.11 0.402 ^{AB}	<0.0247	<0.0243	<0.0244	< 0.0249	<0.02
Dibenzo(a,h)Anthracene	0.0088	0.39	_38	<0.0171	< 0.00169	< 0.00174	<0.00168	< 0.00154	< 0.00155	< 0.00165	<0.00171	0.0441A		< 0.0173	< 0.017	<0.0171	<0.0175	< 0.0
Fluoranthene	600	40,000	500	< 0.0317	< 0.00314	< 0.00323	<0.00313	< 0.00::04	<0.00288	< 0.00306	<0.00317	0.568	0.125	< 0.0321	< 0.0316	< 0.0317	<0.0324	< 0.03
Fluorene	600	40,000	100	<0.0426	<0.00422	<0.00435	<0.00421	<0.00-,03	<0.00388	<0.00412	<0.00427	<0.0382	<0.0419	< 0.0432	<0.0425	<0.0427	<0.0436	<0.0
Indeno(1,2,3-cd)Pyrene	0.088	- 3.9	680	<0.0207	<0.00205	< 0.00211	<0.00204	<0.00199	<0.00189	<0.002	<0.00208	0.848	0.327	<0.021	<0.0207	<0.0208	<0.0212	<0.01
Naphthalene		110	0.4	< 0.0475	< 0.0047	< 0.00485	< 0.00469	<0.00156	< 0.00432	<0.00459	<0.00476	< 0.043	< 0.0457	< 0.0481	<0.0474	<0.0476	< 0.0486	<0.04
Phenanthrene	18	390	1.8	0.0667	0.00456 ^J	< 0.00199	< 0.00192	<0.00187	<0.00177	<0.00188	< 0.00195	0.194	0.0423	<0.0197	< 0.0194	< 0.0195	< 0.02	<0.01
Pyrene	500	30,000	8,700	<0.0378	<0.00374	<0.00386	<0.00373	<0.00.52	<0.00344	< 0.00365	< 0.00379	0.637	0.157	< 0.0382	<0.0377	< 0.0379	<0.0387	<0.03
		1.1.1	1.1.1							!	I							
		neric RCLs or inary Remedia		1														
		tact Pathway																
	Sec. Barton	1.00	Groundwater	1														
	Residential	Industrial	Pathway															
OCs (mg/kg)		1.22 N. 478 A.																
1,2,4-Trimethylbenzene	52	170		<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0
cis-1,2-Dichloroethylene	- 43	150	0.4 ^a	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0
Ethylbenzene	北部 位于1988年		2.9 ⁰	<1.00	<2.00	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.0
Isopropyl Ether	1. A. S. A.	2 - Par	5. 7. 2. 3	<1.22	<2.41	<0.025	<0.24	<0.0%3	<0.022	<0.024	<0.024	<0.022	<0.024	<0.025	<0.024	<0.024	<0.025	<0.0
m- & p-Xylene	我们主义 德	100 A - 200	4.1 ^D	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0
Naphthalene	ي المنه 🛥 الجلي ال	1.1.1	1 - A.C.	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	0.0334	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.0
n-Butylbenzene	140	240		<1.00	<2.00	< 0.025	<0.025	<0.025	< 0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.0
o-Xylene	5.2 m 2 m		4.1°	<1.00	<2.00	< 0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.025	<0.025	< 0.025	<0.025	×0.0
sec-Butylbenzene	110	220		<1.00	<2.00	< 0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.0701	< 0.025	< 0.025	< 0.025	< 0.025	<0.0
Tetrachloroethylene	5.7	19	0.06	132EF.0	322EF.0	0.0944 ^G	0.04810	< 0.025	<0.025	< 0.025	< 0.025	0.420	0.112	< 0.025	<0.025	< 0.025	< 0.025	0.81
		300 - Salah	1.5 ⁰	<1.00	<2.00	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0
Toluene	· · · · · · · · · · · · · · · · · · ·	010	0.79	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.0
trans-1,2-Dichloroethylene	63	210																
Trichloroethytene	2.8	6.1	0.006	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.08
Vinyl Chloride	0.15	0.83	0.01 ^a	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.0

Table 1 Summary of Soil Analytical Results – Geoprobe and Test Pit Samples Kenosha Brownfield Investigation – C L Industrial Cleaners STS Project No. 86415XB Task 2000

				·		······		Geon	robes	Sample Numbe	er, Date, Depth	and PID Readin	ig	r		Test Pits		······
	I NR	720 Generic R	CLS	CL-01-503	CL-01-504	CL-02-SO3	CL-02-SO4	CL-03-503	CL-G3-SO4	CL-G4-SO3	CL-04-504	CL-05-501	CL-G5-SO3	CL-TP1-S03	CL-TP2-S03	CL-TP3-S02	CL-TP4-S04	CL-TP5-S04
		act Pathway	Section of the	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/23/01	4/23/01	4/23/01	4/23/01	4/23/01
	Non-	and the second	Groundwater	4-6'	6-8'	4-6'	6-8	4-6	6-8	4-6'	6-8'	0-2	4-6	5-6'	5-6'	8-10'	5-7	4-6'
Parameters	Industrial	Industrial	Pathway	0.8	1.8	0.6	0.4	0.0	0.0	0.0	0.0	0.6	2.3	1.2	0.0	0.0	0.0	0.0
			以同题的目															
Metals (mg/kg)				<2.07	<2.05	<2.11	<2.04	<1.99	<1.88	<2.00	<2.08	<1.87	<2.04	0.118	0.0486	< 0.0476	0.153	0.335
Total Antimony	111111111111111111111111111111111111111	ALC: NOT SHELL		1.24	8.70	9.00 ^{AB}	2.93	5.92	5.07**	8.6748	1.3948	3.98	4.07	1.86 ^{AB}	1.82 ^{AB}	3.04*8	3.44^5	6.08 ^{AB}
Total Arsenic	0.039	1.6		6.91	15.7	49.0	5.91	101	14.4	197	7.47	31.5	32.7	9.43	1.82	 All and a second se Second second seco	32.5	26.0
Total Barium	8	510	112.184.6月	0.219	0.112	0.249	0.103	0.409	0.0632	1.11	0.159	0.507	0.886	<0.0407	0.0608	31.9 0.0733	0.112	0.141
Total Cadmium	16,000	NA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9.81	14.5	16.2	4.21	15.9	12.1	19.4	4.85	13.3	12.3	11.7	7.85	7.01	11.3	11.7
Total Chromium	10,000	18 - 18 - 18 - 18 - 18 - 18 - 18 - 18 -		21.1	25.0	26.4	8.38	23.7	12.7	36.4	10.4	113	90.7	2.79	4.40	12.3	8.05	16.3
Total Copper	50	500		5.88	7.60	13.6	4.34	11.4	5.80	11.5	4.38	38.2	38.1	2.95	3.77	5.10	6.07	8.16
Total Lead	30	500	and the second	<0.0487	<0.0483	<0.0498	<0.0481	<0.0-107	<0.0443	<0.0471	<0.0488	0.0771	0.079	<0.0493	<0.0486	<0.0488	<0.0499	0.0621
Total Mercury Total Nickel	1.186	184 - 263	- The second second	11.7	16.6	33.5	6.79	28.7	14.0	114	9.46	20.8	19.8	5.91	4.26	9.85	8.22	18.3
Total Selenium				<0.402	<0.398	1.02	< 0.397	0.491	<0.366	1.08	<0.403	<0.363	<0.395	<0.407	<0.401	<0.403	<0.411	<0.387
Total Silver		1000 - 100 - 100		<0.122	<0.121	<0.124	<0.12	<0.117	< 0.111	<0.118	<0.122	0.363	<0.12	0.136	<0.122	<0.122	< 0.125	<0.117
Total Silver	行动的行为					1					10.12	0.000		0.100		(0.1 <u>2</u>		
		720 Generic R	CLs															
	Direct Cont	lact Pathway	Groundwater															
	Industrial	Industriat	Pathway															
	1124503.337		1.44.48.45.564	and the state of t		Ι				I		T T	1					
PAHs (mg/kg)		信任的社	1000															
1-Methyl Naphthalene	1,100	70,000	. 23	<0.0353	<0.0035	< 0.00361	<0.00349	< 0.00339	< 0.00322	< 0.00342	< 0.00354	< 0.0319	< 0.0347	< 0.0358	< 0.0352	<0.0354	< 0.0362	< 0.034
2-Methyl Naphthalene	600	40,000	- 20	<0.028	<0.00277	<0.00286	<0.00276	<0.00269	<0.00255	<0.00271	<0.00281	< 0.0253	< 0.0275	< 0.0284	<0.0279	<0.0281	<0.0287	<0.027
Acenaphthene	900	60,000	38	<0.0755	<0.00748	<0.00771	<0.00745	<0.00724	<0.00687	<0.0073	<0.00757	<0.0683	<0.0743	<0.0764	<0.0753	<0.0757	<0.0773	<0.0727
Acenaphthylene	18	360	0.7	< 0.0512	<0.00507	<0.00522	<0.00505	< 0.00491				0.0628	<0.0503		< 0.051	<0.0513	<0.0524	
Anthracene	5,000	-300,000	3,000	< 0.0353	< 0.0035	< 0.00361	<0.00349	<0.00339	< 0.00322	<0.00342	<0.00354	0.0628	0.108	< 0.0358	<0.0352	< 0.0354	< 0.0362	< 0.034
Benzo(a)Anthracene	0.088	3.9	17	< 0.0305	<0.00302	<0.00311	<0.003	<0.00292	<0.00277	<0.00294	<0.00305			< 0.0308	< 0.0304	< 0.0305	<0.0312	< 0.0293
Benzo(a)Pyrene	0.0088	0.39	48	<0.028	<0.00277	<0.00286	<0.00276	<0.00??69	<0.00255	<0.00271	<0.00281	0.677	0.172	<0.0284	<0.0279	<0.0281	<0.0287	<0.027
Benzo(b)Fluoranthene	0.088	3.9	360	< 0.0134	<0.00133	< 0.00137	<0.00132	<0.00129	<0.00122	<0.0013	< 0.00134	1.08	0.325	< 0.0136	< 0.0134	<0.0134	< 0.0137	<0.0129
Benzo(ghi)Perylene	-1.8	- 39	6,800	<0.0122	<0.00121	< 0.00124	<0.0012	<0.00117	<0.00111	<0.00118	<0.00122	0.805	0.326	< 0.0123	<0.0122	<0.0122	<0.0125	<0.0117
Benzo(k)Fluoranthene	0.88	39	870	< 0.0146	<0.00145	<0.00149	< 0.00144	<0.0(14	< 0.00133	< 0.00141	<0.00147	0.322	0.0965	< 0.0148	<0.0146	<0.0147	<0.015	< 0.0141
Chrysene		390	37	<0.0244	<0.00241	<0.00249	<0.0024	<0.00.234	<0.00222	< 0.00236	<0.00244		0.11 0.402 ^{AB}	< 0.0247	<0.0243	<0.0244	< 0.0249	< 0.0234
Dibenzo(a,h)Anthracene	0.0088	0.39	- 38	<0.0171	<0.00169	<0.00174	<0.00168	<0.00154	<0.00155	<0.00165 <0.00306	<0.00171 <0.00317	0.0441A 0.568		<0.0173	<0.017	<0.0171	<0.0175	< 0.0164
Fluoranthene	600	40,000	,500	< 0.0317	<0.00314 <0.00422	<0.00323 <0.00435	<0.00313 <0.00421	<0.00:04	<0.00288	<0.00306	<0.00317	<0.0382	0.125 <0.0419	<0.0321	<0.0316 <0.0425	<0.0317 <0.0427	<0.0324 <0.0436	<0.0305 <0.041
Fluorene	600	40,000	100	< 0.0426				<0.00199	<0.00388	<0.002	<0.00208	0.848	0.327					<0.0199
Indeno(1,2,3-cd)Pyrene	0.088	3.9	680	<0.0207	<0.00205	<0.00211	<0.00204		<0.00188	<0.002	<0.00208	<0.043	<0.0467	<0.021	<0.0207	<0.0208	<0.0212 <0.0485	<0.0199
Naphthalene	20	. 110	0.4	<0.0475	< 0.0047	<0.00485	< 0.00469	<0.00156							<0.0474	<0.0476		
Phenanthrene	,718	390	1.8	0.0667	0.00456	<0.00199	< 0.00192	<0.00187	<0.00177	<0.00188	<0.00195	0.194	0.0423	< 0.0197	< 0.0194	< 0.0195	<0.02	< 0.0188
Pyrene	500	30,000	8,700	<0.0378	<0.00374	<0.00386	<0.00373	<0.00062	<0.00344	<0.00365	<0.00379	0.637	0.157	<0.0382	<0.0377	<0.0379	<0.0387	<0.0363
		eneric RCLs or								.						·		
		ninary Remedia	tion Goals															
	Direct Con	tact Pathway	Groundwater	1														
	Residential	Industrial"	Pathway															
VOCs (mg/kg)	Carlos Carlos	Cherry L. 275 (10													1			and the sprogram that there
1,2,4-Trimethylbenzene	52	170	11981年6月3日	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethylene	-43	150	0.4 ⁹	<1.00	<2.00	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025
Ethylbenzene		이 같은 것을 같은 것이 같이 많이	2.9 ⁰	<1.00	<2.00	< 0.025	<0.025	<0.0;:5	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
Isopropyl Ether	The states	1		<1.22	<2.41	<0.025	<0.24	< 0.0*3	<0.022	<0.024	<0.024	<0.022	<0.024	<0.025	<0.024	<0.024	<0.025	<0.023
m- & p-Xylene			4.1 ^D	<1.00	<2.00	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025
Naphthalene	sal] , 17 ² 0.8			<1.00	<2.00	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	0.0334	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
n-Butylbenzene	140	240	A THE PARTY OF	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025
o-Xylene		1-31- GOV	4.1 ⁰	<1.00	<2.00	< 0.025	< 0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
sec-Butylbenzene	110	220	1036-028	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0701	<0.025	< 0.025	<0.025	<0.025	<0.025
Tetrachloroethylene	5.7	19	0.06 ^G	132 ^{E,F,0}	322 ^{E,F,G}	0.0944 ^d	0.0481 ^G	<0.025	< 0.025	<0.025	<0.025	0.42 ^G	0.112 ^a	<0.025	< 0.025	<0.025	< 0.025	0.8105
Toluene			1.5 ⁰	<1.00	<2.00	<0.025	<0.025	< 0.025	< 0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	<0.025
trans-1,2-Dichloroethylene	63	210	0.7 [°]	<1.00	<2.00	< 0.025	< 0.025	< 0.025	<0.025	< 0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Trichloroethylene	2.8	6.1	0.006 ^G	<1.00	<2.00	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.084 ^G
	0.15	0.83	0.000	<1.00	<2.00	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
Vinyl Chloride	0.15	U.03	1.5.70.01.5.3	1.00	~2.00	10.025	10.025	\$0.02.5	20.020	20.020	0.020	10.020	0.020	10.025	0.023	10.025	10.020	10.020

 Notes:
 PAHs = Polynuclear Aromatic Hydrocarbons

 VOCs = Volatile Organic Compounds

 Image: Strength and Strengt and Strengt and Strength and Strength and Strength and

Table 2 Summary of Soil Analytical Results – Soil Boring Samples Kenosha Brownfield Investigation – C L Industrial Cleaners STS Project No. 86415XB Task 2000

												Sample	Number, Date,	Depth and PIC Borings	Reading								
	N	720 Generic I	RCLs	CL-B01-SO2	CL-B01-SO3	CL-B02-SO1	CL-802-SO2	CL-B03-SO2	CL-803-SO3	CL-804-S02	CL-804-SO4	CL-805-SQ1	CL-805-SO2	CL-B06-S01	CL-806-502	CL-807-502	CL-B09-S03	CL-811-S01	CL-B12-S03	CL-815-S03	CL-816-S03	CL-817-502	CL-B17-S03
		tact Pathway	1.	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	4/30/01	5/1/01	5/1/01	5/2/01	5/2/01	5/2/01	5/1/01	5/2/01	5/1/01	5/1/01	5/1/01
	Non-		Groundwater	2.5-4.5	5-7	0-2'	2-4'	2-4'	5-7	2.5-4.5	7.5-9.5	0-2'	2.5-4.5'	0-2'	2.5-4.5	2.5-4.5	5-7'	0-2	5-7	5-7	5-7	2.5-4.5	5-7
Parameters	Industrial	" Industrial"	Pathway	1.6	0.8	0.8	1.2	0.4	0.0	0.2	0.0	3.1	1.0	6.3	9.4	7.7	3.1	0.0	0.0	0.0	0.0	NA	NA
Metals (mg/kg)																			ĺ				
Total Antimony		14202-222.		<1.97	<2.01	<2.00	<2.12	<1.93	<2.03	<2.06	<2.05	<1.88	<1.98	<1.94	<1.94	<1.97	<2.05	<1.89	<1.91	<2.32	<2.14	<2.48	<2.25
Total Arsenic	0.039	1,6	2 X 2 - 2 - 2 - 2 - 2 - 2 - 2 -	2.60 48	3.85	3.40 ^{AB}	6.1049	2.51	3.56	3.3349	1.40	4.58 ^{AB}	7.30 ^{AB}	3.28	3.66 ^{AB}	5.06 ^{AB}	3.27 ^{AB}	4.11	9.89 ^{AB}	2.02	1.14	2.22	1.67**
Total Barium	1 Starter			38.9	12.8	49.4	86.9	34.9	22.0	64.5	3.98	37.4	66.7	25.9	31.1	50.8	41.3	20.4	79.7	69.7	31.8	57.5	67.4
Total Cadmium	8	510		0.151	0.272	0.141	0.96	0.204	0.0752	0.339	0.277	0.255	0.256	0.137	0.308	0.22	0.104	0.211	0.248	0.559	0.0754	0.321	0.265
Total Chromium	16,000	NA		12.6	7.62	13.6	14.8	11.8	18.3	14.5	3.89	9.05	12.3	9.01	22.3 66.5	6.96 6.79	14.5	15.1 34.3	14.1	12.1 19.1	6.77 3.73	9.39 10.4	9.38 8.20
Total Copper				7.25	7.27	22.7 6.92	18.6 461 ⁴	20.4 32.1	7.63	14.8 20.5	13.0 4.24	45.5	18.0 9.91	38.6 8.13	26.2	7.77	15.5	20.9	10.1	8.09	3.35	10.4	5.58
Total Lead	50	500	n an tha an t	0.0742	<0.0473	<0.0469	0.0561	0.059	<0.0477	0.0582	<0.0481	<0.0443	<0.0466	<0.0456	0.125	< 0.0463	<0.0482	<0.0444	0.0529	0.0832	<0.0503	0.0584	0.0796
Total Mercury	a second			8.42	11.6	16.5	15.3	8.75	9.83	11.9	6.14	9.99	17.8	9.17	23.8	10.2	12.7	17.2	22.3	9.75	4.54	6.15	5.40
Total Nickel Total Selenium		1.00		<0.382	< 0.391	<0.387	1.03	0.522	< 0.394	<0.4	<0.397	< 0.366	< 0.384	0.433	0.764	0.544	<0.398	< 0.367	< 0.372	0.982	0.427	1.2	0.57
Total Silver	MAN STATE			<0.116	<0.118	<0.117	<0.125	< 0.113	< 0.119	<0.121	< 0.12	< 0.111	< 0.116	<0.114	<0.114	<0.116	< 0.12	<0.111	< 0.113	<0.136	< 0.126	<0.146	< 0.133
Total Silver		目的全部的																					
	N	720 Generic I	RCLS																				
	Direct Con	tact Pathway		1																			
	Non-	1 the hadden	Groundwater																				
	industrial"	Industrial [®] -	Pathway		T	1	1			1	T	1	1				1	1	1		1		
PAHs (mg/kg)		1.00								f		1							τ.				
1-Methyl Naphthalene	1,100	70,000	23	<0.00336	< 0.00343	< 0.0034	< 0.0362	0.00687	< 0.00346	0.0632	< 0.0349	< 0.00322	<0.00358	0.00539	< 0.0331	< 0.00336	< 0.0349	< 0.0322	< 0.00327	< 0.00396	< 0.00364	0.00426 ^J	< 0.00385
2-Methyl Naphthalene	600	40.000	20	< 0.00267	<0.00272	<0.0027	<0.0287	0.00937	< 0.00274	0.0314	< 0.0277	< 0.00255	0.00303	0.00321	0.1	<0.00266	<0.0277	<0.0256	< 0.00259	< 0.00314	< 0.00289	0.00667 ^J	< 0.00305
Acenaphthene	900	60,000	38	<0.00718	<0.00734	< 0.00728	<0.0773	0.0136 ^J	<0.0074	< 0.0752	<0.0746	< 0.00687	<0.00722	<0.00706	<0.0707	<0.00718	<0.0747	<0.0689	< 0.00698	< 0.00846	< 0.00779	<0.00905	< 0.00822
Acenaphthylene	18	360	0.7	< 0.00487	< 0.00497	< 0.00493	<0.0524	<0.00476	<0.00501	< 0.0509	< 0.0505	<0.00466	< 0.00489	<0.00478	< 0.0479	<0.00486	<0.0506	<0.0467	< 0.00473	< 0.00573	< 0.00528	< 0.00613	<0.00557
Anthracene	5,000	300,000	3,000	< 0.00336	< 0.00343	< 0.0034	< 0.0362	0.00632 ^J	<0.00346	0.13	< 0.0349	< 0.00322	0.0111	<0.0033	<0.0331	< 0.00336	0.173	< 0.0322	<0.00327	< 0.00396	< 0.00364	<0.00423	<0.00385
Benzo(a)Anthracene	880.0		17	0.00502 ^J	<0.00246	<0.00293	< 0.0312	0.147	<0.00298	0.762	< 0.0301	0.0122	0.0115	0.0178	< 0.0285	0.00389	0.242	<0.0278	<0.00282	< 0.00341	< 0.00314	< 0.00365	< 0.00332
Benzo(a)Pyrene	0.0088	0.39	48	0.0046	<0.00272	<0.0027	<0.0287	0.265	<0.00274	0.65	<0.0277	0.0142 ^A	0.00808	0.0371	0.027	0.00363	0.249	0.0439	<0.00259	< 0.00314	< 0.00289	0.00413	< 0.00305
Benzo(b)Fluoranthene	0.088	3.9	360	0.0262	<0.0013	0.0129	0.0584	0.362	<0.00131	0.629	<0.0132	0.0312	0.0136	0.0429	<0.0125	0.00704	0.292	0.0753	<0.00124	< 0.0015	0.00461	0.00778	< 0.00146
Benzo(ghi)Perylene	1.8	39	6,800	0.00505	<0.00118	0.0604	0.0192	0.26	< 0.00119	0.253	< 0.012	0.00831	0.012	0.0228	<0.0114	0.00242	0.181	0.0294	<0.00113	< 0.00136	<0.00126	0.00323	< 0.00133
Benzo(k)Fluoranthene	0.88	39	870	< 0.00139	< 0.00142	0.0194	0.0207	0.138	<0.00143	0.379	<0.0144	0.00965	0.0126	0.0253	<0.0137	<0.00139	0.131	0.0356	< 0.00135	<0.00164	0.0029	0.0027	<0.00159
Chrysene	8.8	390	: 37	0.00684	<0.00237	<0.00235	0.0423	0.141	< 0.00239	0.857	<0.0241	0.0106	0.0105	0.0191	0.0335	0.00469	0.2	0.0333	. <0.00225	<0.00273	0.00307	<0.00292	< 0.00265
Dibenzo(a,h)Anthracene	0.0088	0.39	38	0.00783	<0.00166	< 0.00164	0.0279	< 0.00159	<0.00167	0.0305	<0.0168	0.0367	0.0253	0.0708	<0.016	<0.00162	0.128	<0.0156	<0.00158	<0.00191	<0.00176	<0.00204	< 0.00186
Fluoranthene	600	40,000	500	0.0221	<0.00308	0.0553	0.0374	0.164	0.00348	1.52	< 0.0313	0.0366	0.032	0.0281	0.0425	0.0177	0.801	0.0587	< 0.00293	0.0057	0.0079	0.0171	< 0.00345
Fluorene	600	40,000	100	<0.00406	<0.00414	<0.00411	<0.0436	<0.00397	<0.00418	<0.0424	<0.0421	<0.00388	<0.00407	<0.00399	< 0.0399	< 0.00405	<0.0422	< 0.0389	< 0.00394	< 0.00477	< 0.0044	<0.00511	< 0.00464
Indeno(1,2,3-cd)Pyrene	0.088	3.9	680	0.00592	<0.00201	0.011	0.0276	0.278	<0.00203	0.285	< 0.0205	0.0171	0.00853	0.0296	0.029	0.00731	0.198	0.0429	<0.00191	<0.00232	0.00489	0.0122	< 0.00225
Naphthalene	20	110	0.4	0.00461	<0.00462	< 0.00458	<0.0486	0.00747	< 0.00465	< 0.0473	< 0.0469	<0.00432	<0.00454	< 0.00444	<0.0445	< 0.00451	<0.047	<0.0433	< 0.00439	<0.00532	< 0.0049	<0.00569	< 0.00517
Phenanthrene	18	390	1.8	0.0129	<0.00189	0.0158	0.0608	0.00533	< 0.00191	0.469	< 0.0193	0.0162	0.035	0.0179	0.0566	0.0116	0.665	0.0531	<0.0018	0.0117	0.00882 0.00745 ^J	0.0165 0.0147	< 0.00212
Pyrene	500	30,000	8,700	0.0166	<0.00367	0.00798	0.063	0.209	<0.0037	2.29	<0.0373	0.0314	0.0315	0.0413	0.0675	0.0105	0.199	0.0637	<0.00349	0.00714	0.00745	0.0147	<0.00411
	91.56 (200	eneric RCLs of	EPA Pagion	<u> </u>		1			L		1		L	L			I	1		<u> </u>			
		ninary Remedi																					
	Direct Cor	tact Pathway		1																			
	Residential	Industrial	Groundwater Pathway																				
VOCs (mg/kg)	nesiderituat	muusuiai	Painway		1	1	1	1		1	1	1	1	1			1	1	1		[
1,2,4-Trimethylbenzene	.52	170	2	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025	0.0452	0.064	<0.025	<0.025	<0.025	0.0342	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
cis-1,2-Dichloroethylene	43	150	0.4 ^G	<0.025	<0.025	<0.025	0.485 ⁶	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.361	10.8°	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Ethylbenzene		0.754 250	2.9 ^D	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.025	0.065	<0.025	<0.025	< 0.025	< 0.025	<0.025	< 0.025	<0.025	< 0.025
Isopropyl Ether	N.S. 7. 4	1.000-000	5 7 3 - Date	<0.023	<0.024	<0.024	<0.025	<0.023	<0.024	<0.024	<0.024	<0.022	<0.023	0.255	<0.023	<0.023	<0.024	<0.022	<0.024	<0.027	<0.025	<0.025	<0.025
m- & p-Xylene			4.1 ^D	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0341	<0.025	<0.025	0.0415	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
Naphthalene				<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0828	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.025	< 0.025	< 0.025	<0.025
n-Butylbenzene	140	(240		<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.174	0.319	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025
o-Xyiene	13 Same 1 15	计学校生成	-4.1 ⁹	<0.025	< 0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025	0.0341	<0.025	<0.025	<0.025	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025
sec-Butylbenzene	110	220		<0.025	<0.025	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	0.121	0.166	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025		<0.025	<0.025	<0.025
Tetrachloroethylene	5.7	19	70.06°	<0.025	<0.025	4.13	< 0.025	0.12 ⁶	0.0594	<0.025	< 0.025	0.3274	<0.025	0.595	0.138 [°]	<0.025	<0.025	0.737 ⁶	<0.025	<0.025	<0.025		<0.025
Toluene	And		1.5°	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0683	<0.025	<0.025	<0.025	<0.025	<0.025		<0.025	
trans-1,2-Dichloroethylene	63		0.7	<0.025	<0.025	<0.025	0.032	<0.025	<0.025	<0.025	< 0.025	<0.025	<0.025	0.031	0.399	<0.025	< 0.025	< 0.025	<0.025	<0.025	< 0.025	<0.025	<0.025
Trichloroethylene	2.8	6.1	0.006°	<0.025	< 0.025	0.0521	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025	< 0.025	0.2710	0.0364	< 0.025	<0.025	< 0.025	<0.025	<0.025	<0.025 <0.025	<0.025	<0.025
Vinyi Chloride	0.15	0.83	0.01°	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.221 ^{E.G}	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
											1												

 Notes:
 PAHs = Polynuclear Aromatic Hydrocarbons

 VOCs = Volatile Organic Compounds
 Exceedance of Generic RCL for protection of human health due to direct contact for non-industrial sites.

 Image: Store and Sto

Table 3 Summary of Pit Sludge Results Kenosha Brownfield Investigation - C L Industrial Cleaners STS Project No. 86415XB Task 2000

	CL-P1-SL010423	CL-P4-SL010423	CL-PS-SL010423	CL-P8-SL010423	CL-P7-SL010423	CL-P3W010423	TCLP
Parameters (in mg/kg except as noted)	04/23/2001	04/23/2001	04/23/2001	04/23/2001	04/23/2001	04/23/2001 (liquid sample) results in mg/L	Regulatory Leve (mg/L)
Metals							
Antimony	178	20.9	36.9	35.8	17.9	<0.080	
Arsenic	12.1	7.08	9.86	11.4	7.94	0.029	5.0
Barium	2400 ^A	882	253	217	118	3,810	100
Cadmium	193 ^A	1064	45.5 ^A	35.0 ^A	55.3 ^A	0.182	1.0
	805^	966^	1240^	1140^	620 ^A	3.640	5.0
Chromium	15000	13500	29600	33700	39500	7,450	5.0
Copper							
Lead	3540 ⁴	1790 ^A	1860 ^A	1520 ^A	1270 ^A	3.910	5.0
Mercury	2.34	0.709	0.504	0.358	0.25	0.00110	0.2
Nickel	280	2010	4680	4980	979	1.300	1
Selenium	43.3 ^A	16.0	7,83	4,86	43.8 ^A	0.033	1.0
Silver	12.7	7.46	33.8	27.3	9.27	0.034	5.0
PAHs							
1-Methyl Naphthalene	19.3	<1.03	0.346	<0.0346	17.6	0.00172	
2-Methyl Naphthalens	21.9	2.68	0.283	<0.0274	<2.50	0.00717	
Acenzohthene	<2.36	<2.20	<0.713	<0.074	<6.73	<0.00100	
Acenaphthylene	<1.60	<1.49	<0.483	<0.0501	<4.56	<0.00150	
Anthracene	<1.10	<1.03	<0.334	0.163	11.3	<0.0009	
Benzo(a)Anthracene	11.7	2.18	1.45	<0.0298	5.65	< 0.0003	
Benzo(a)Pyrene	<0.532	2.85	0.824	0.625	2.91	<0.0002	
Benzo(b)Fluoranthene	1.64	3.59	1.14	0.809	5.42	<0.0002	
Benzo(ghi)Perylene	2.29	3.19	1.19	0.454	9.77	<0.0009	
Benzo(k)Fluoranthene	1.38	1.69	0.567	0.354	2.26	<0.0003	
Chrysene	5.29	1.16	0.644	<0.0239	6.13	<0.0002	
Dibenzo(a,h)Anthracene	0.957	<0.496	<0.161	0.249	<1.52	<0.0006	
Fluoranthene	2.77	8.50	2.59	0.893	54,1	< 0.0003	
Fluorene	3.47	<1.24	<0.403	0.0943	4.43	0.000753	
Indeno(1,2,3-cd)Pyrene	2.42	0.63	0.705	0.376	1.90	<0.0006	
Naphthalene	7.90	2.52	<0.449	<0.0465	<4.23	0.0126	
Phenanthrene	17.0	2.26	0.716	0.47	63.3	<0.00110	
Pyrene	8.80	8.21	3.29	1.65	29.4	<0.00100	
VOCs							
1,2,4-Trimethylbenzene	19.2	24.6	4.17	0.905	<0.4	0.315	
1,3,5-Trimethylbenzene	16.0	22.0	2.21	0.0	<0.4	0.131	
Ethylbenzene	4.47	<2.00	<0.4	0.0394	<0.4	0.060	
Isopropyibenzene	<2.00	<2.00	<0.4	<0.025	<0.4	0.0139	
m- & p-Xylene	19.9	4.88	0.6	0.138	<0.4	0.589	
Naphthalene	<2.00	3.95	1.01	0.132	<0.4	0.0213	
n-Butytenzene	6.68	<2.00	5.01	1.09	<0.4	0.0131	
n-Propyibenzene	2.00	5.40	1.09	<0.025	<0.4	0.0269	
o-Xylene	4.08	<2.00	<0.4	0.0752	<0.4	0.193	
p-isopropyitoluene	<2.00	<2.00	6.28	0.693	<0.4	<0.004	
sec-Butybenzene	2.00	2.00	<0.4	1.24	<0.4	0.00840	
Styrene	2.00	<2.00	<0.4	0.0451	<0.4	<0.003	
tert-Butytbenzene	200	2.00	<0.4	0.529	<0.4	<0.003	
Tetrachloroethylene	<200	3.38	<0.4	0.122	67.5	<0.003	0.7
Toluene	<2.00	<2.00	0.984	0.795	<0.4	0.0188	•
CBS	<98.8	<0.032	<0.75	<7.7E	<7.06	<0.0054	
1016				<7.76		<0.0054	
1221	<198	<0.184	<1.5	<15.5	<14.1		
1232	<342	<0.319	<2.59	<26.8	<24.4	<0.0058 <0.0034	
1242	<76	<0.071	<0.58	<5.97	<5.43		
1248	<236	<0.220	<1.78	<18.5	<16.8	<0.006	
1254	<380	<0.355	<2.88	<29.8	47.1	<0.0054	
1260	<106	<0.099	<0.81	<8.35	<7.6	<0.006	

Notes:

S: PAHs = Polynuclear Aromatic Hydrocarbons PCBs = Polychlorinated Biphenyls VOCs = Volatile Organic Compounds Bold indicates value above detection limit. Note: Only detected VOCs are presented above.

A - Exceeds the theoretical TCLP regulatory limit. For solid samples, a twenty-fold dilution is incorporated into the TCLP limit. Therefore solid samples having in excess of 20 times the TCLP regulatory limit could exceed their respective TCLP limit. These materials need to be re-tested using the TCLP method to confirm or deny whether they should be classified as TCLP hazardous.

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Table 4 Summary of Groundwater Analytical Results Kenosha Brownfield Investigation – C L Industrial Cleaners STS Project No. 86415XB Task 2000

	1								Sam	ple Number and	Date						
					Tem	porary Well San	nples						NR 141 W	ell Samples			
	B	CLs	CL-G1-W010501	CL-G2-D010501	CL-G2-W010501	CL-G3-B010501	CL-G3-W010501	CL-G4-W010501	CL-G5-W010501	CL-SB03W010514	CL-SB05W10514	CL-SB06W010514	CL-SB07D010514	CL-SB07W010514	CL-SB12B010514	CL-SB12W010514	CL-SB16W01051
Parameter	ES	PAL	5/01/01	5/01/01 (Duplicate)	5/01/01	5/01/01 (Blank)	5/01/01	5/01/01	5/01/01	5/14/01	5/14/01	5/14/01	5/14/01 (Duplicate)	5/14/01	5/14/01 (Blank)	5/14/01	5/14/01
Antimony	6	1.2	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21	<1.21
	50	5	4.90	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	3.01 ^J	<2.40	<2.40	<2.40	<2.40	<2.40
Arsenic Barium	2000	400	11	22	22	72	39	17	7	69	157	189	53	56	<2	134	199
Cadmium	5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	0.37	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium	100	10	<1	1.6	13	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	1300	130	<4	<4	<4	<4	<4	10 ³	<4	<4	<4	<4	<4	<4	<4	<4	<4
Lead	15	1.5	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Mercury	2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nickel	100	And a state of the	4 ^J	4 ^J	6,1	<3	74	120	<3	<3	8,	23	4 ^J	4 ^J	<3	<3	4 ^J
Selenium	50	20 10	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Silver	50	10	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
PAHs (µg/l)																	
Acenaphthene			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene		· · · · · · · · · · · · · · · · · · ·	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
Anthracene	3000	600	< 0.09	<0.09	< 0.09	<0.09	< 0.09	< 0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	< 0.09	<0.09	<0.09
Benzo(a)Anthracene		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	< 0.03	< 0.03	< 0.03	< 0.03	0.07	< 0.03	0.084	< 0.03	<0.03	<0.03	< 0.03	< 0.03	< 0.03	<0.03	< 0.03
Benzo(a)Pyrene	0.2	0.02	< 0.02	< 0.02	<0.02	<0.02	0.175	< 0.02	0.17	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(b)Fluoranthene	0.2	0.02	< 0.02	<0.02	<0.02	<0.02	0.213	< 0.02	0.233	<0.02	< 0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo(k)Fluoranthene		17. 手行將	< 0.03	<0.03	< 0.03	< 0.03	0.105	< 0.03	0.104	<0.03	<0.03	<0.03	< 0.03	<0.03	<0.03	< 0.03	< 0.03
Benzo(ghi)Perylene	-		< 0.09	<0.09	<0.09	<0.09	0.159	< 0.09	0.151 ^J	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Chrysene	0.2	0.02	<0.02	<0.02	< 0.02	<0.02	0.071	< 0.02	0.085	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	< 0.02
Dibenzo(a,h)Anthracene		-	<0.06	<0.06	< 0.06	<0.06	<0.06	< 0.06	< 0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Fluoranthene	400	80	< 0.03	<0.03	< 0.03	< 0.03	0.16	< 0.03	0.087 ^J	<0.03	< 0.03	<0.03	< 0.03	< 0.03	< 0.03	<0.03	< 0.03
Fluorene	400	80	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Indeno(1,2,3-cd)Pyrene			<0.06	<0.06	<0.06	<0.06	0.206	<0.06	0.196	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
1-Methyl Naphthalene			<0.13	<0.13	<0.13	<0.13	0.162	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13
2-Methyl Naphthalene		1	<0.12	<0.12	<0.12	<0.12	0.284	<0.12	0.151 ^J	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Naphthalene	40	8	< 0.06	<0.06	<0.06	< 0.06	0.128	< 0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Phenanthrene		A Contractor	<0.11	<0.11	<0.11	<0.11	0.197	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Pyrene	250	50	<0.1	<0.1	<0.1	<0.1	0.115 ^J	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
VOCs (µg/l)																	
Benzene	5	0.5	<150	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.375 ^J	<0.15	0.216 ^J	<0.15	<0.15	<0.15
cis-1,2-Dichloroethene	70	7-3	<150	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.524	1.28	6.65	<0.15	<0.15	<0.15	138	<0.15
Tetrachloroethene	5	0.5	27,200	4.18	4.20	<0.15	<0.15	0.224 ^J	<0.15	3.41	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
trans-1.2-Dichloroethene	100	20	<150	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.415 ^J	<0.15	<0.15	<0.15	6.10	<0.15
Trichloroethene	5	0.5	<100	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.486	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	0.2	0.02	<120	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	1.16	4.51	<0.12	<0.12	<0.12	10.3	<0.12

 Notes:

 VOCs = Volatile Organic Compounds

 PAHs = Polynuclear Aromatic Hydrocarbons

 12
 - NR140, WAC Preventive Action Limit exceedance

 200
 - NR140 Enforcement Standard exceedance

 Bold indicates value above detection limit.

-- No NR140 ES or PAL established

NA = Not analyzed.

J = Estimated concentration below laboratory quantitation limit.

Table 5 **Groundwater Measurements and Elevations** C & L Industrial Cleaners; Kenosha, Wisconsin

Wall	Total Well Depth	Top of Casing	^	to Water 'eet)		er Elevations MSL)
Well ID	(Feet)	Elevation (Ft AMSL) ¹	May 2001 (STS)	December 2003 (START)	May 2001 (STS)	December 2003 (START)
Monitor	ing Wells					
B3	17.57	620.84	7.97	7.25	612.87	613.59
B5	17.55	621.2	7.78	10.64	613.42	610.56
B6	17.68	621.82	8.38	11.74	613.44	610.08
B7	17.84	618.02	4.89	5.59	613.13	612.43
B12	16.69	617.11	5.94	6.33	611.17	610.78
B16	17.97	615.17	7.69	7.69	607.48 ²	607.48
MW-1	17.49			9.71		
MW-2	17.77			10.76		
MW-3	17.52			7.06		

Notes: 1. Elevation measurements obtained by STS.2. Corrected value (originally reported as 609.42 feet, see Table 1 in STS report)

Table 6 Analytical Constituents in Soil Targeted Brownfields Assessment C & L Industrial Cleaners; Kenosha, Wisconsin

		Sample	Volat	ile Organic Compoun Method EPA 802		Method EPA 6010
Well No.	Sample ID	Depth (ft bgs)	Cis-1,2- Dichloroethyle ne (DCE)	Trichloroethylene (TCE)	Tetrachloroethylene (PCE)	Total Nickel
Monitoring	g Wells					
MW-1	2003TN01S16	4-6	<0.025	<0.025	<0.025	6.93
	2003TN01S17	12-14	<0.025	<0.025	<0.025	8.08
MW-2	2003TN01S18	6-8	<0.025	<0.025	<0.025	15.1
	2003TN01S19	12-14	<0.025	<0.025	<0.025	17.9
MW-3	2003TN01S14	6-8	<0.025	<0.025	<0.025	6.39
	2003TN01S15	12-14	<0.025	<0.025	<0.025	23.5
Geoprobe I	Locations					
GP-1	2003TN01S13	12	<0.025	<0.025	50	
GP-2	2003TN01S12					
GP-3	2003TN01S11					
GP-4	2003TN01S09					
GP-5	2003TN01S08	9	<0.025	<0.025	<0.025	
GP-6	2003TN01S06	12	<0.025	<0.025	<0.025	
GP-7	2003TN01S10	10.5	<0.025	<0.025	<0.025	
GP-8	2003TN01S07	8	<0.025	<0.025	<0.025	
GP-9	2003TN01S04	7	0.0448	<0.025	<0.025	
GP-10	2003TN01S03	7.5	0.0768	<0.025	<0.025	
GP-11	2003TN01S02	8.5	0.0718	0.504	<0.025	
GP-12	2003TN01S01	9	<0.025	<0.025	<0.025	
GP-13	2003TN01S05	8	<0.025	<0.025	<0.025	

-- = no sample taken

Table 7Organics Constituents in GroundwaterTargeted Brownfields AssessmentC & L Industrial Cleaners; Kenosha, Wisconsin

Well	Field Sample	Sampling				atile Organic Method EPA					romatics (ug/l) EPA 8310
or Boring	ID	Interval ¹ (ft bgs)	Benzene	Cis 1,2- DCE	Trans 1,2- DCE	PCE	тсе	Vinyl Chloride	Naphthalene	1-Methyl Naphthalene	2-Methyl Naphthalene
Monitor	ing Wells	The second second									
MW-1	2003TN01S52	5-15	<0.31	149	26.4	<0.32	<0.36	2.51	<0.8	<0.0872	<0.12
MW-2	2003TN01S56	5-15	<0.31	<0.23	<0.39	<0.32	<0.36	<0.2	<0.8		
MW-3	2003TN01S53	5-15	<0.62	224	<7.8	<6.4	<7.2	8.76	0.125J	0.125J	0.309J
B-3	2003TN01S55	7.57-17.50	<1.55	16.3	<1.95	56.1	<1.8	<1	<4.00		40-40-
B-5	2003TN01S57	7.71-17.55	<0.31	<0.23	<0.39	<0.32	<0.36	0.272	<0.8		
B-6	2003TN01S58	7.98-17.68	0.322	13.4	0.52	<0.32	<0.36	1.98	<0.8	<1.68	<2.31
B-7	2003TN01S51	7.95-17.84	<0.31	<0.23	<0.39	<0.32	<0.36	<0.2	<0.8		
B-12	2003TN01S54	6.94-16.69	<0.31	152	5.70	<0.32	<0.36	<0.2	<0.8		
B-16	2003TN01S50	8-17.97	<0.31	<0.23	<0.39	<0.32	<0.36	<0.2	<0.8	<0.0872	<0.12
Geoprob	e Locations						·		•		
GP-1	2003TN01S13	8	<0.31	<0.23	<0.39	1,130	2.48	<0.2	<0.8	<0.114	<0.157
GP-4	2003TN01S09	9	<0.31	<0.23	<0.39	0.337	<0.36	<0.2	<0.8		
GP-5*	2003TN01S08	9									
GP-8	2003TN01S07	8	<0.31	<0.23	<0.39	<0.32	<0.36	<0.2	<0.8		
GP-9	2003TN01S04	7	<0.31	0.502	<0.39	<0.32	<0.36	7.21	<0.8		
GP-12	2003TN01S01	9	< 0.31	<0.23	<0.39	< 0.32	<0.36	2.59	<0.8	<0.44	<0.605
GP-13	2003TN01S05	8	<0.31	<0.23	<0.39	< 0.32	<0.36	<0.2	<0.8		
Regulato	ory Criteria						.				
NR 140 I	Preventative Action	Limit	0.5	7	20	0.5	0.5	0.02	8		
NR 140 I	Enforcement Standa	ard	5	70	100	5	5	0.2	40		

Notes: ¹ Sampling Interval: top of screen equals depth originally reported be STS. Bottom of well measurement adjusted based on information collected by START.

ft bgs – feet below ground surface * Not sampled for VOCs

J – Estimated value

-- = No sample taken

Table 8 Nickel in Groundwater Targeted Brownfields Assessment C & L Industrial Cleaners; Kenosha, Wisconsin

Well or Boring	Field Sample ID	Sampling Interval (ft bgs)	Method EPA 6010			Method EPA 6010		
			Nickel (Total)	LOD	LOQ	Nickel (Dissolved)	LOD	LOQ
Monitoring Wells								
MW-1	2003TN01S52	5-15				0.0481	0.003	0.01
MW-2	2003TN01S56	5-15						
MW-3	2003TN01S53	5-15				0.0129	0.003	0.01
B-3	2003TN01S55	7.57-17.50						
B-5	2003TN01S57	7.71-17.55						
B-6	2003TN01S58	7.98-17.68				0.0062J	0.003	0.01
B-7	2003TN01S51	7.95-17.84						
B-12	2003TN01S54	6.94-16.69						
B-16	2003TN01S50	8-17.97				0.0201	0.003	0.01
Geoprobe Locatio	ons							
GP-1	2003TN01S13	8						
GP-4	2003TN01S09	9	0.0833	0.003	0.01			
GP-5*	2003TN01S08	9	0.0039J	0.003	0.01			
GP-8	2003TN01S07	8						
GP-9	2003TN01S04	7	0.008J	0.003	0.01			
GP-12	2003TN01S01	9	0.015	0.003	0.01			
GP-13	2003TN01S05	8	0.009J	0.003	0.01		~~	
Regulatory Criter	ria							
NR 140 Preventative Action Limit		NE			20			
NR 140 Enforcement Standard		NE			100			

-- = No sample taken NE – Not Established

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Exhibit 1

City of Kenosha Request for Targeted Brownfields Assessment Assistance

JOHN M. ANTARAMIAN MAYOR

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CITY OF KENOSHA 625 - 52nd Street Kenosha. Wisconsin 53140 (262) 653-4000 Fax (262) 653-4010

November 6, 2002

US Environmental Protection Agency ATTN: Mr. Joe Dufficy Region 5 Brownfield and Early Action Section 77 West Jackson Boulevard Chicago, IL 60604-3590

Dear Mr. Dufficy:

The City of Kenosha is requesting Targeted Brownfield Assessment (TBA) assistance for a brownfield site owned by the city.

C & L Industrial Cleaners, 8927 Sheridan Road, Kenosha, Kenosha County, Wisconsin is a former industrial cleaner. After C & L, the site was then owned by BBL Barrel Company, who sold industrial supplies. Phase I and II assessments have been performed at the site that display sludge, soil and groundwater contamination with elevated concentrations of chlorinated volatile organic constituents, including PCE, TCE, DCE and vinyl chloride. The site is next to a residential area and sits west of a wetlands area.

We are seeking funds to perform supplemental assessments (Phase III) to determine what areas of the site are contaminated, the nature of the contamination, if the concentrations are significant with respect to human health and the environment and if remediation is required for redevelopment of the site. The site is an active participant in Wisconsin Department of Natural Resources clean up program and is currently involved in emergency clean up measures conducted by EPA.

It is our intention to clean up the C & L Industrial Cleaners site, and sell it with high expectations of gaining interested buyers for commercial use due to its prime location on a main highway. If you have any questions regarding this, please contact me or my staff member, Sharon Krewson, at 262-653-4028.

Sincerely,

John M. Antaramian Mayor City of Kenosha

JMA:jds

cc: Laura Ripley, EPA, Region V

Appendix A

Excerpts from STS Reports



STS CONSULTANTS, LTD.

Phase II Environmental Site Assessment C&L Industrial Cleaners

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City of Kenosha Department of City Development

STS Project No. 586415XB-2000



October 4, 2001

Ms. Sharon Krewson City of Kenosha – Department of City Development 625 – 52nd Street, Room 308 Kenosha, WI 53140

Re: Phase II Environmental Assessment for the Former C&L Industrial Cleaners, 8927 Sheridan Road, Kenosha, Wisconsin – STS Project No. 86415XB-T-2000

Dear Ms. Krewson:

STS Consultants, Ltd. (STS) has completed the Phase II Environmental Site Assessment authorized for the above-referenced property in general conformance with Sampling and Analysis Plan dated March 14, 2001 and the Quality Assurance Project Plan dated March 1, 2001. The purpose of this report is to present the results of the Phase II ESA.

We appreciate the opportunity to be of service to you. If there are any questions concerning the information contained in this report, please contact us.

Respectfully,

STS CONSULTANTS LTD.

Senhard

Lanette Altenbach, P.G. Senior Project Engineer

Thomas W. Krocegy (m)

Thomas W. Kroeger, P.H. Principal Hydrologist

Attachments

©STS Consultants, Ltd., October 2001



NR 700 CERTIFICATIONS

"I, Lanette L. Altenbach, certify that I am a hydrogeologist as that term is defined in s.NR712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR700 to 726, Wis. Adm. Code."

allenbar

Lanette L. Altenbach, P.G., C.P.G. Senior Project Hydrogeologist

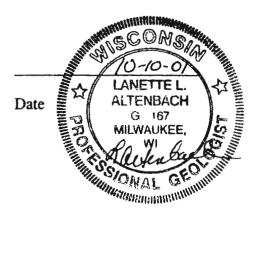


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- Appendix B Geoprobe Boring Logs and Abandonment Forms
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- Appendix F Soil and Sludge Laboratory Analytical Results

Appendix G - Groundwater Laboratory Analytical Results

EXECUTIVE SUMMARY

On behalf of the City of Kenosha Department of City Development, STS Consultants, Ltd. (STS) has completed a Phase II Environmental Site Assessment (ESA) for the property located at 8927 Sheridan Road in the City of Kenosha, Wisconsin. The City of Kenosha, under a grant from the United States Environmental Protection Agency (USEPA) Brownfields Economic Redevelopment Initiative, authorized this ESA to facilitate potential acquisition and redevelopment of the subject site. This Phase II ESA was performed for the purpose of determining the presence and nature of contamination due to the recognized environmental conditions (RECs), identified in the Phase I ESA.

The site buildings were previously occupied by C&L Industrial Cleaners and more recently by BBL Barrel Company. Reportedly, C&L Industrial Cleaners cleaned carpets for building entrances. It was not known if C&L Industrial Cleaners was involved in cleaning other types of materials or what type(s) of cleaning processes were used. Based on the results of the Phase II, it appears that a dry cleaning process involving tetrachloroethylene was used on the site. The BBL Barrel Company reportedly sold industrial supplies.

The following summarizes STS' findings regarding environmental conditions discovered as a result of completing the Phase II ESA for the site:

- It appears that C&L Industrial Cleaner used the dry cleaning solvent, tetrachloroethylene (PCE) in their cleaning process. Very high concentrations of PCE were observed in the sludge from Pit #7, located in the western portion of the building, as well as in the soil and groundwater samples collected from geoprobe G-1 located adjacent to this pit. It appears that Pit #7e, or activity that may have occurred very close to Pit #7, present a source of PCE on the site. A secondary source of PCE is likely near G-5e, which is located adjacent to a floor drain in the main garage area.
- Based on concentrations of PCE on other areas of the site (particularly in the drum storage areas near the shed; at B-2, near the northern property line; and, at TP-5, B-11 and B-12, in the undeveloped portion of the site), spillage of PCE appears to have occurred outside the building.
- Sludge samples collected from the various pits located within the building indicate that all or at least some of the sludge material is hazardous waste as defined under NR605.09. The sludges containing PCE (Pit #4, 6 and 7) may be classified as U210 or F002 listed hazardous waste. The sludge with no detectable PCE (Pit #1, 3, and 5) may also be classified as hazardous waste due to elevated levels of cadmium, chromium, lead, barium and selenium.
- An inventory of drummed wastes indicates that there are at least 15 sealed drums whose contents is either unknown or unconfirmed.

- Low levels of petroleum-related volatile organic constituents (VOCs) were detected in some of the soil samples collected from the site. These are likely a result of spills of small quantities of petroleum products but do not pose a significant risk to human health or the environment.
- The fill materials located on the eastern two-thirds of the site do not appear to be significantly affecting the underlying soil or groundwater quality of the site. The fill piles contained primarily concrete rubble and asphalt, as was observed on the surface. However, at TP-1 and TP-2, wood, a tire and hubcaps were observed and at TP-3, old car parts, a motor and electrical conduit were also observed. The materials may require removal prior to redevelopment for geotechnical and site grading purposes.
- It does not appear that the off-site underground storage tank (UST) located to the north of the site and identified in the Phase I ESA has impacted the site, since petroleum products were not detected in either of the borings (B-1 or B-2) located near the northern property limits.
- The potential impact of the off-site sources of solvents, identified in the Phase I ESA, is not apparent from the existing soil and groundwater information. If site sources may or may not be contributing to the impacts observed on the subject site.

Based on the above summary of findings and in consideration of the data quality objectives (DQOs) outlined in the Quality Assurance Project Plan (QAPP) and discussed further in the Sampling and Analysis Plan, STS has reached the following conclusions. Elevated concentrations of chlorinated volatile organic constituents, including PCE, trichloroethylene (TCE), dichloroethylene (DCE) and vinyl chloride were detected in the sludges, soil and groundwater of the subject property. The horizontal and vertical extent of the impacts has not been determined. It appears that the source of the contamination is within or near to Pit #7 located in the northern portion of the building and is a result of the use of PCE as a dry cleaning solvent on the subject property. The contaminant concentrations are significant with respect to human health and the environment and will require additional investigation and likely some element of remedial action prior to redevelopment of the site. However, it does not appear at this time that the level of impacts would preclude redevelopment of the site.

Based on the Phase II summary of findings and conclusions STS recommends the following:

- Additional groundwater monitoring wells should be installed and sampled in conjunction with re-sampling existing wells to evaluate the horizontal and vertical extent of chlorinated VOC impacts. We anticipate that an additional 6-8 monitoring wells will be necessary to determine the extent of the impacts.
- The sludge materials should be further tested to determine the appropriate management for disposal of the wastes.

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City of Kenosha – Dept. of City Development STS Project No. 86415XB October 4, 2001

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• Drummed waste stored onsite should be evaluated by a hazardous waste contractor to determine their contents and for the management of their disposal.

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PHASE II ENVIRONMENTAL SITE ASSESSMENT C & L INDUSTRIAL CLEANERS 8927 SHERIDAN ROAD KENOSHA, WISCONSIN

1.0 PROJECT OVERVIEW

1.1 Project Description

STS Consultants, Ltd. (STS) completed a Phase II Environmental Site Assessment (ESA) of the C & L Industrial Cleaners property located at 8927 Sheridan Road in Kenosha, Wisconsin. The property is owned by the City of Kenosha and encompasses approximately 2.9 acres. The City of Kenosha, under a grant from the United States Environmental Protection Agency (USEPA) Brownfields Economic Redevelopment Initiative, authorized this Phase II ESA to facilitate potential acquisition and redevelopment of the subject site. This Phase II ESA was performed for the purpose of determining the presence and nature of contamination due to the recognized environmental conditions (RECs), identified in the Phase I ESA.

The site is located in the Northwest ¼ of the Southeast ¼ of Section 18, Township 1 North, Range 23 East, in the City of Kenosha, Kenosha County Wisconsin. The location of the subject site is depicted in Figure 1. The site boundaries are depicted in Figure 2.

The following parties are involved in this project:

Site Owner:	City of Kenosha 625 52 nd Street, Room 308 Kenosha, WI 53140	Ms. Sharon Krewson Development Director (262) 653-4028
Environmental		
Consultant:	STS Consultants, Ltd.	Ms. Lanette Altenbach
	11425 W. Lake Park Dr.	Project Hydrogeologist
	Milwaukee, WI 53224	(414) 359-3030
Drilling		
Subcontractor:	North Shore Drilling	Mr. Russ Lein
	P.O. Box 255	President
	Grafton, WI 53024	(262) 375-8121

Analytical

Laboratory:

U.S. Filter – Enviroscan 301 W. Military Road Rothschild, WI 54474 Mr. Eric Martin Quality Assurance Manager (715) 359-7226

1.2 Project History.

On behalf of the City of Kenosha Department of City Development, STS completed a Phase I ESA report dated August 30, 2000 for the C&L Cleaners Site. As a result, the following site history/background was developed. The approximately 2.9 acre site is occupied by a main building (approximately 1,250 square feet) with attached garage (approximately 5,150 square feet) and a storage shed (approximately 625 square feet). The buildings are located within the western one-quarter of the property. East of the buildings the property is vacant. Piles of concrete rubble and miscellaneous debris are present on the eastern portion of the property. The building was occupied by C&L Industrial Cleaners from 1967 to 1995 and by BBL Barrel Company in 1998. It is not known how the property was used prior to 1967. According to Ms. Sharon Krewson of the City of Kenosha, C&L Industrial Cleaners cleaned carpets for building entrances. It is not known is C&L Industrial Cleaners was involved in cleaning other types of materials or what type(s) of cleaning processes were used. The BBL Barrel Company sold industrial supplies.

The Phase I ESA identified the following recognized environmental conditions in connection with the property:

- Several pits in the floor of the main building and garage contained either sludge of unknown composition, a rust-like substance, or water.
- The south and east sides of the shed were lined with 55-gallon drums. Some of the drums had covers. Drums with covers were not opened. Drums without covers contained used one-gallon paint cans, concrete rubble, and miscellaneous refuse.

Potential recognized environmental conditions associated with the property include the following:

- Solvents and other chemicals were used on one property to the north and one property to the south of the subject property. WDNR files for both of these sites indicate potential dumping and improper handling of wastes.
- The adjacent property to the north was observed to have an aboveground storage tank (AST). This AST was not registered with the State and its contents are not known.
- Mounds of concrete rubble were present east of the buildings.

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2.0 METHODS OF INVESTIGATION

The investigative procedures used in this site investigation were consistent with the procedures described in the Sampling and Analysis Plan (SAP), dated March 14, 2001 and the Quality Assurance Project Plan (QAPP), dated March 1, 2001, except where noted below. A brief summary of the work is provided below:

- A drum inventory was conducted to obtain general information on the numbers, locations, condition and apparent contents of drums present on-site.
- Samples collected from the six accessible pits located within the building were analyzed for PCBs, metals, VOCs and PAHs.
- Five test pits were conducted on the undeveloped portion of the site.
- Five geoprobes were conducted within the building.
- Thirteen soil borings were advanced using conventional drilling techniques, adjacent to the building and in the undeveloped portion of the site.
- Six of the above soil borings were completed as water table monitoring wells. The wells were constructed, developed, purged, sampled and surveyed in accordance with WDNR guidelines and NR141 code requirements.

2.1 Drum Inventory

An inventory of drums present on the site on April 23, 2001 was conducted as part of this investigation. The inventory includes the collection of information on drum location, general condition, whether the drum is open or closed and, if open, the apparent contents of the drum. Sealed drums were not opened by STS personnel. Sampling of the drums is anticipated in a later phase of the site work and will be conducted by a drum disposal contractor.

2.2 Sludge Sampling

STS collected one sample of the material observed in each of the accessible pits located in the building. The sludge samples were collected on April 23, 2001. Pits #1, 4, 5, 6 and 7 contained a relatively solid sludge and were therefore sampled using a stainless steel scoop. Pit #3 contained liquid with a thin immiscible floating layer and was sampled using a disposable bailer. Pit #2 was not accessible for sampling. Samples from the pits were analyzed for polychlorinated biphenyls (PCBs), metals, volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs).

2.3 Test Pits

Five test pits were conducted on April 23, 2001 on the undeveloped portion of the site. A.W. Oakes and Son conducted the test pits as a subcontract backhoe operator to STS. The locations of the test pits are shown on Figure 3. TP-1, TP-2, TP-3 and TP-5 replaced proposed borings B-10, B-13, B-14 and B-8, respectively. The test pits extended approximately 8 to 10 feet below the ground surface. The test pits were visually evaluated by an STS Field Hydrogeologist. Samples of representative soil/fill material were collected from the backhoe bucket and were screened in the field with a photo-ionization detector (PID). One soil sample from each test pit was selected for laboratory analysis for metals, PAHs and VOCs. Test pit logs were completed for each test pit and are provided in Appendix A. The test pits were backfilled with the material that was removed and replaced in approximately the same order as removed.

2.4 Geoprobe Sampling

Five geoprobes were conducted within the building on April 30, 2001 to evaluate subsurface conditions in connection with the RECs identified in the building. Soil probes were advanced to approximately 16 feet below the ground surface. Soil samples were collected continuously at two-foot intervals and screened in the field using a PID with a 10.6 eV lamp for the presence of volatile organic compounds (VOCs). Duplicate soil samples were collected from each interval for soil classification purposes. The soil information was documented on boring logs. Soil samples with the highest PID reading, soil with obvious visual or olfactory indications of contamination, and/or soil samples from just above the groundwater table at each soil probe were submitted for laboratory testing. Two soil samples from each metals.

One groundwater sample was collected from each of the probe locations on May 1, 2001. A temporary PVC well screen was inserted into the probehole. The groundwater samples were collected from the temporary well using a peristaltic pump with low flow sampling technique. The water samples were analyzed for metals, VOCs and PAHs. The soil probes/temporary wells were abandoned by pulling the PVC riser/screen and then filling with chipped bentonite after use. Geoprobe boring logs and abandonment forms are provided in Appendix B.

2.5 Soil Borings

A total of 13 soil borings were completed on the site between April 20 and May 2, 2001 to evaluate 1) a release outside of the building, particularly in the vicinity of the outside drum storage areas; 2) the characteristics of the on-site fill material; and 3) the potential for contamination due to off-site RECs. The final boring locations are shown on Figure 3.

Proposed borings B-8, B-10, B-13 and B-14 were replaced with test pits TP-5, TP-1, TP-2 and TP-3, respectively, as allowed for in the Sampling and Analysis Plan.

Soil borings were advanced using a truck mounted drilling rig equipped with 4-1/4 inch ID hollow-stemmed augers to a depth of approximately 15 feet below the ground surface. Soil samples were collected from the ground surface and at 2.5-foot intervals through the maximum depth of each boring using conventional split-spoon methods. Soil boring logs are provided in Appendix C. In general, two soil samples per boring location were submitted for analytical testing. Soil sample handling and presentation methods as described in Section 5.3 of the QAPP were followed. Soil samples were analyzed for metals, VOCs and PAHs by U.S. Filter-Enviroscan. Soil borings not completed as monitoring wells were abandoned in general conformance with Wisconsin Administrative Code NR141 and documented on form 3300-5B (see Appendix C).

2.6 Groundwater Monitoring Wells

Six groundwater monitoring wells were installed and sampled at boring locations B-3, B-5, B-6, B-7, B-12 and B-16. The monitoring well locations are shown on Figure 3. The wells were installed to evaluate groundwater quality, particularly with respect to the overall industrial cleaning operations, the drum storage areas, the fill area and the off-site RECs.

Groundwater monitoring wells were installed and developed in general accordance with NR141 of the Wisconsin Administrative Code (WAC). The wells were placed so that the well screen would intersect the water table. Each of the monitoring wells was completed to an approximate depth of 15 feet. The actual well construction details are provided in Appendix D. The monitoring wells were completed with a 10-foot long factory slotted (0.10 inch) PVC well screen with solid PVC riser. The monitoring wells were completed above grade and protector pipes were placed around the wells as necessary. The typical well installation procedures and well development procedures as provided in Appendix 2 of the QAPP were followed.

On May 14, 2001, one round of groundwater samples was collected from the six monitoring wells. The groundwater samples were analyzed for dissolved metals, PAHs and VOCs. The procedures that used for sample collection are documented in Appendix 2 of the QAPP.

2.7 Surveying

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STS completed a site survey to determine the locations and elevations of all soil borings and monitoring wells under the direction of a registered land surveyor. GeoprobeTM locations were determined by an Environmental Technician relative to existing building features as shown on Figure 3. Locations were determined relative to existing landmarks and elevations relative to mean sea level.

2.8 Investigative Waste Handling

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Soil and groundwater generated during the drilling, well development, and sampling of the proposed borings/wells was to be drummed if elevated PID readings or visual or olfactory observations indicated contamination is present. Soil from borings B-5 and B-6 was drummed due to elevated PID readings and noticeable odor in the upper 4 feet of the borings. Drummed soil generated during this investigation was labeled and stored onsite.

2.9 Quality Assurance/Quality Control Sample Collection

In order to assess the representativeness and quality of field collected samples, it is necessary to incorporate a method of comparison into the sampling program. This is accomplished by the use of field blank, trip blank, equipment blank and duplicate samples. A discussion concerning the type, frequency, and method of preparation for QA samples is presented in Section 3.6 of the QAPP. Two blank and two duplicate samples were collected for this project.

3.0 SITE GEOLOGIC AND HYDROGEOLOGIC SETTING

Published geologic and hydrogeologic information was reviewed to assess soil and bedrock types in the area, regional groundwater flow direction, and groundwater sources. The United States Geological Survey 7.5-minute quadrangle map was used to determine general land features in the area of the subject site, to evaluate the local topography and to estimate shallow groundwater flow direction. The sources reviewed for geologic and hydrogeologic information are referenced in the text and are listed in Section 8.0 (References).

3.1 Topographic Setting

The 7.5-Minute topographic map of the Kenosha, Wisconsin Quadrangle (dated 1958, photo revised 1971) shows the parcel and vicinity features including the area topography and surface water features. Lake Michigan is located approximately 0.5 miles east of the subject site. The closest river to the site is Barnes Creek. Barnes Creek is located approximately 0.5 miles southwest of the subject site.

3.2 Geologic Setting

The native surficial soils in the vicinity of the subject site consist of the Boyer-Granby Association. The Boyer-Granby Association consists of well drained to very poorly drained soils that have a loarn to sand subsoil. The Boyer-Granby Association is underlain by sandy glacial outwash on ridges and knobs and in drainageways and depressions (USDA Soil Conservation Service, 1970). Specifically, the western portion of the subject site is mapped as loarny sand and the eastern portion of the site is mapped as fine sandy loarn.

Glacial till deposits found below the surficial soils in the subject vicinity are mapped as the Pleistocene Age Oak Creek Formation (Mickelson, 1984). The glacial ice of the Lake Michigan lobe deposited the till of the Oak Creek Formation. The Oak Creek Formation consists of fine-grained glacial till, lacustrine clay, silt, sand, and some glaciofluvial sand and gravel. The underlying bedrock is the Silurian Niagara Dolomite. Bedrock is anticipated to be between 50 and 100 feet below ground surface (Trotta and Cotter, 1973).

Based on the soil samples collected from the test pits, geoprobes and soil borings conducted as part of this Phase II, the site is underlain by up to eight feet of fill materials (see TP-3 in Appendix A). The fill includes silty fine to coarse sand, wood, concrete, asphalt and in three locations was observed to contain tires, hubcaps and/or other miscellaneous car parts. Below the fill, layers of organic silt, silty fine sand, silty fine to coarse sand, silt and silty clay were observed. No distinct soil type appeared to be contiguous across the site.

3.3 Hydrogeologic Setting

Based on the six NR141 groundwater monitoring wells installed and monitored on the site, groundwater is approximately 5 to 8.5 feet below ground surface on the subject site. Groundwater flow is primarily to the east, as shown on Figure 5. It is difficult to determine, due to the site configuration, whether there is a northerly or southerly component of flow on the site. Likewise there is no information as to vertical flow. A summary of groundwater elevations is provided on Table 1.

The subject site is serviced by the City of Kenosha municipal water supply and sanitary sewer. The City of Kenosha uses Lake Michigan for its potable water supply.

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4.0 DATA QUALITY ASSESSMENT

4.1 QA Evaluation of Field Data

Three brownfield sites in Kenosha were included under the Quality Assurance Project Plan (QAPP) prepared for this project. The field investigative work was performed consecutively at the three sites. In conformance with the QAPP an internal field audit was performed on the third day of field sampling for the C& L Industrial Cleaners site. The results of the field audit are provided in Appendix E. The corrective actions undertaken as a result of the internal audit were continued throughout the remainder of the field activities.

Other activities to evaluate the field data took place on a daily basis and included the following actions by the project manager or her designee.

- Reviewing the field logs and field notes;
- Checking and comparing the sample jar labels to the chain of custody before delivery of the samples to the laboratory; and
- Reviewing the acknowledgment of receipt of the samples by the laboratory.

Additionally, the project manager (or her designee) were in daily contact with the field staff to discuss field conditions and the selected sample locations. Minor adjustments to soil boring locations were made to accommodate field conditions.

Upon review of the field data, all of the field data is considered useable.

4.2 QA Evaluation of Laboratory Data

Samples from the Kenosha Brownfields C&L Cleaners site were collected from April 23 to May 14, 2001 and were submitted to U.S. Filter on STS or U.S. Filter Chain of Custody forms. U.S. Filter issued five analytical reports, grouping the sample submittals as follows:

U.S. Filter Report No.	Chain of Custody Nos.	Sample Dates					
069106	U.S. Filter COC	April 23, 2001					
069832	33252, 33253, 33247	April 30, 2001					
070021 (revised 6/20/01)	33270, 29095	May 1, 2001					
070153	33272	May 2, 2001					
071182	26875	May 14, 2001					

Samples consisted of sludges soil and groundwater tested for some or all of the following: PCBs, PAH, VOCs, and metals (antimony, arsenic, barium, cadmium, chromium, copper, lead, nickel, selenium, silver, mercury).

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The U.S. Filter analytical reports and supporting data were evaluated in accordance with Sections 9.2, 9.3, 9.4, 9.5 and 12.3 of the Final Approved Quality Assurance Project Plan. This technical memorandum discusses the results of that evaluation, and is organized by QAPP section reference.

4.2.1 Data Reporting

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The QAPP specified that the U.S. Filter laboratory data will not be issued until it has been reviewed by U.S. Filter. The STS QA Manager then reviewed the U.S. Filter reports to determine whether they met the reporting requirements specified in the QAPP. Each of the five reports was signed by one of the U.S. Filter analysts involved in the specified analyses and was also approved by the Laboratory Manager, Mr. James Salkowski.

The reports included the elements specified in the QAPP, with the exception of stating in the report the name and company of the person or persons who performed the in-field sampling. This information is provided on the Chain-of-Custody forms that are attached at the back of each of the three reports. This deviation from the QAPP does not adversely affect data quality.

4.2.2 Data Review, Validation, and Verification Requirements

Sample Handling - The U.S. Filter reports included a "Sample Receipt Report" which provides information such as whether the samples were received warm, after the holding time had elapsed, broken, or open; and whether soil samples for VOCs were within sample weight tolerances or required additional methanol. Additional methanol was added to some of the soil-VOC samples, but none of the samples arrived in a state that required the samples be discarded or the analytical results flagged.

Additional comments on samples were made in the Case Narratives that accompanied each report. None of the information in the Sample Receipt Reports or Case Narratives adversely affect the data usability.

A "Sample Narrative" was provided for samples CL-P1-SL010423, CL-P4-SL010423, CL-P5-SL010423, and CL-P7-SL010423 submitted for PCBs. The sample narrative stated that the physical characteristics and/or high levels of interfering compounds required that cleanup techniques be applied to the sample extract and that the sample extract was diluted for analysis. Cleanup techniques may result in some loss of analyte (depending upon the interfering compound and physical nature of the sample), and diluting the extract results in higher detection limits. The results for these samples may be biased low, or analytes may have been masked or diluted out.

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<u>Analytical Procedures</u> – Analyses of soil samples were performed using the methods specified in the QAPP: VOCs were analyzed according to method 8021; PAHs according to method 8310; metals according to method 6010 (with the exception of 7471 for mercury, and 7041 for antimony); and polychlorinated biphenyls according to method 8082.

Water samples were analyzed using the same methods, except the analyses for VOCs and the following metals: antimony, arsenic, cadmium, lead, and selenium. Analysis for VOCs was performed according to Method 8260 rather than 8021 because the gas chromatograph for the 8021 analysis was inoperable due to contamination. In order to meet the sample holding times, the VOCs were analyzed by method 8260. The laboratory SOP for 8260 was reviewed and approved by EPA prior to the analyses being completed. The five metals were performed using graphite furnace atomic absorption methods (which were not included in the QAPP) so that detection limits near the Wisconsin groundwater quality standards could be met. A copy of the SOPs for these methods is provided in Appendix E.

<u>Quality Control</u> - The laboratory analyses were performed using the quality control procedures specified in the QAPP. In general, the quality control measurements fell within the control limits. For some analyses and some samples, one or more quality control measurements either fell outside control limits or exhibited a high or low bias, and the sample data were flagged appropriately.

Measurements exhibiting a high or low bias included matrix spike recoveries, relative percent difference (RPD) for duplicate analyses, and check standards. Because the soil samples are non-homogeneous, high RPD is common. Non-homogeneity of soil samples cannot be overcome entirely because samples to be analyzed for VOCs and SVOCs should not be handled or mixed excessively. Excessive handling can result in loss of analytes. High RPD in analysis of soils for metals is partly due to the fact that only a very small sub-sample (a few grams) is analyzed for the metals.

The surrogate recovery was low for several of the PAH and VOC samples. Since the surrogate is a measure of the extraction or purging efficiency of each specific sample, the surrogate recovery may be the best indicator of any bias in the sample data. The data for affected samples were flagged accordingly to indicate that the results may exhibit a low bias. The following samples had low PAH surrogate recovery: P3-W010423 and P6-SL010423. The following samples had low VOC surrogate recovery: CL-B05-S01, CL-B05-S02, P3-W010423. A low bias in analyte recovery may mask some analytes that are actually present above regulatory thresholds.

In a few cases, measurement for check standards or laboratory control samples exhibited a low or high bias. The QAPP (see SOPs) allows for reporting of associated data, provided the data are flagged and the potential effects on data quality are noted.

In general, for the parameters and quality control measurements of concern, either the sample results were sufficiently above or below regulatory thresholds that an undetermined high or low bias in the data would not impact interpretation of data and soil quality. In other cases, no regulatory threshold exists for the parameter in question. Specific parameters and samples are identified in the analytical reports.

<u>Calibration</u> – The calibration data were not provided in any of the analytical reports. The QAPP allows either the U.S. Filter QA Manager or the STS QA Officer to evaluate the adequacy of the calibration data. The laboratory manager's signature on the analytical reports constitutes approval of the calibration data.

The laboratory quality assurance manual and the SOPs (except SOPs for graphite furnace analyses for selected metals) were reviewed by STS to determine what quality assurance procedures are required with respect to instrument calibration. According to the SOPs provided by U.S. Filter and included in the QAPP, the calibration standards used appropriately bracketed the range of analyte concentrations observed in the samples, or the samples were diluted to bring the concentrations within the range of the calibration curve. The SOPS require the U.S. Filter analyst to review the calibration data and verify that the calibration curves are acceptable, and that results of the calibration checks fell within the acceptable range.

4.2.3 Data Validation and Verification and Reconciliation with Data Quality Objectives

Samples were shipped, preserved, and received in accordance with the procedures outlined in the QAPP. Extractions and analyses were completed within the holding times and according to the methods specified in the QAPP. Where QC measurements fell outside control limits or indicated a potential bias in the sample results, sample data reports were flagged accordingly. For some of the PAH and VOC analyses, low bias in sample results (indicated by low surrogate recoveries) may be masking exceedances of regulatory thresholds for additional PAHs or VOCs.

Some of the samples were diluted to bring the target analytes within the range of the calibration curve, or to control interference from non-target analytes present in the samples at high concentrations. As a result, the detection limits of some parameters were elevated. For some of the samples tested for PCBs, detection limits on the order of 20 mg/kg (CL-P7-SL010423) to 400 mg/kg (CL-P1-SL010423) pose difficulties in determining the best disposal options for the samples. The PCB detection limits for CL-P1-SL010423 make this data point unusable. The PCB detection limits for these samples were discussed with the U.S. Filter laboratory QA Manager, Eric Martin. Mr. Martin indicated that the elevated detection limits using EPA-approved methods. A copy of a memo from Mr. Martin in response to this issue is provided in Appendix E. It was decided that resampling would be preferred over using non-approved or non-validated techniques.

With the exception of the PCB data, detection limits were not elevated to a point where the usability of the data was adversely affected. Data qualifiers have been used to guide the project manager in interpreting data. The data qualifiers do not render the data unusable. Sufficient high quality data are available for each matrix and parameter to allow the project manager to make appropriate decisions for the project.

4.2.4 Completeness

All analyses were completed as requested and in accordance with the QAPP. All data was considered usable except for one PCB analysis, as discussed above. Completeness = 99.4% for the C&L Cleaners site.

4.3 Data Quality Objectives

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The data quality objectives for this project were to evaluate the identified recognized environmental conditions and to collect samples to evaluate if contamination of the subsurface had occurred at the site of the recognized environmental condition. The field and laboratory data sets have been validated as useable with the exception of one PCB analysis as described above. The data has met the data quality objective because an evaluation of each recognized environmental condition with respect to potential subsurface contamination is possible and is discussed in the Section 5. Conclusions obtained from the data analysis are provided in Section 6.

5.0 INVESTIGATION RESULTS

5.1 Drum Inventory

A total of 44 drums were observed and documented on the site on April 23, 2001. A drum inventory summary is provided as Table 2. The designated drum locations and numbers, as referenced in Table 2, are shown on Figure 3. Nineteen of these drums were observed to be empty. Of the remaining 25 drums, 15 were closed and therefore the contents are unknown. Five of these were labeled "A1 mag Oil", but it is unknown whether this represents a new or waste material, or whether the contents actually reflect the labeling at all. The remaining 10 drums were open and contained various wastes including paint cans, concrete rubble, wood, glass, oil containers, rags, spray cans, plastic sheeting, brake fluid containers, plastic, buckets, rope, paper, and carpet. The majority of these materials can likely be disposed as solid waste, or even recycled. A few of the items, such as paint cans, spray cans and used oil and brake fluid containers, may require special handling.

All closed drums will need to be tested by a hazardous waste contractor to determine their contents and disposal requirements. Open and empty drums should be evaluated for disposal by a solid waste contractor.

5.2 Sludge Sampling Results

The results of the Pit Sludge Testing are summarized on Table 3. Six of the seven pits were sampled. Pit #2 appears to have been filled with concrete and therefore could not be sampled. Pits #1, #4, #5, #6, and #7 contained relatively solid sludges and were thus analyzed as solids. Pit #3 contained liquid and thus was analyzed as a wastewater. The pit locations and respective pit numbers are shown on Figure 2. Copies of the laboratory reports are provided in Appendix F.

The sample results from Pit #3 were compared directly to the TCLP regulatory levels. None of the constituents detected from this sample exceeded any of the TCLP regulatory levels for the parameters tested.

The solid samples collected from Pits #1, #4, #5, #6 and #7 were compared to a theoretical TCLP limit. For solid samples, a twenty-fold dilution is incorporated into the TCLP analytical method. Therefore, only solid samples having in excess of 20 times the TCLP regulatory limit could theoretically exceed their respective TCLP limit. All five of these pit samples contained concentrations of cadmium, chromium and lead which could theoretically exceed their respective TCLP limits. In addition the sample from Pit #1 contained barium and selenium concentrations that could theoretically exceed the TCLP limits. The sample from Pit #7 contained selenium and tetrachloroethylene (PCE) that could also theoretically exceed the TCLP limits.

The reported concentration of PCE (67.5 mg/kg) in Pit #7 is significant more so because it is indicative of the use of PCE as a cleaning solvent on the site. As such, waste on this site containing PCE, may be classified as a listed hazardous waste (U210 or F002) under NR605.09, including spill residues and contaminated soil (as per NR605.09(3)(a)4), depending on the nature of the spill.

5.3 Soil Analytical Results

Soil samples were collected from the five test pits, located within the eastern two thirds of the property, the five geoprobes located within the building and the other 13 soil borings located across the whole site. Sample locations are shown on Figure 4. Samples were analyzed for select metals, VOCs and PAHs. The analytical testing results are summarized on Table 4 and are discussed further below. Copies of the analytical laboratory reports are provided in Appendix F.

5.3.1 Metals Results

The concentrations of metals detected in the soil samples were compared to the NR720 Residual Contaminant Levels (RCLs) which are based on protection of human health due to direct contact in both industrial and non-industrial settings. In general the metals concentrations on the subject site are low. Arsenic and lead were the only metals to exceed RCLs.

Arsenic was detected in each of the samples tested. Concentrations were detected from 1.14 to 9.89 mg/kg. The arsenic concentrations exceeded the direct contact RCL for non-industrial sites in every sample analyzed and for industrial sites in all but three of the samples collected. These concentrations are within the range generally accepted as representative of background conditions in this area of Wisconsin. The arsenic concentrations do not represent contamination, or a release on the subject site.

Two soil samples exceeded the non-industrial RCL for lead. The industrial RCL was not exceeded for any of the samples tested. The elevated lead results were reported in samples B02-S02 (461 mg/kg) at 2 to 4 feet below ground surface and B09-S03 (71.7 mg/kg) at 5 to 7 feet below ground surface. These concentrations are greater than the non-industrial direct contact RCL, but less than the industrial direct contact RCL. Proper material management will be necessary during remediation or redevelopment. If significant grading were to occur and the site were proposed to be used for non-industrial purposes, additional investigation of these lead concentrations would be recommended. Although elevated levels of lead were also reported in the pit sludge samples, as discussed above, there appears to be no distinct pattern of lead occurrence in the soil which would indicate a major release or disposal of lead wastes on the site.

5.3.2 PAH Results

The concentrations of PAHs detected in the soil samples were compared to the Suggested Generic Residual Contaminant Levels (RCLs) for protection of groundwater quality and protection of human health due to direct contact on both industrial sites and non-industrial sites. In general the concentrations of PAHs were low. Several PAHs were detected in roughly one-half of the samples collected from the site. Direct contact RCLs for non-industrial sites were exceeded for benzo(a)anthracene, benzo(b)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and ideno(1,2,3-cd)pyrene. Direct contact RCLs for industrial sites were exceeded in only two samples: benzo(a)pyrene at B-4 and dibenzo(a,h)anthracene at G-5. No apparent pattern was observed in the soils relative to sample depth, soil type or apparent source area. No Groundwater Pathway RCLs were exceeded in any of the samples.

5.3.3 VOC Results

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The concentrations of VOCs in the soil samples were compared to NR720 RCLs, which were developed for the protection of groundwater quality, where available, and were compared to EPA's Region IX Preliminary Remediation Goals (PRGs) for direct contact and migration to groundwater. The PRGs are risk-based values that consider ingestion, inhalation and dermal contact as potential exposure pathways and are thus relatively conservative and consistent with the intent of Wisconsin's NR720. The samples were also screened in the field using a PID equipped with a 10.6 eV lamp; however, no elevated readings (>10 PID units) were measured. The VOCs detected in the soil samples consisted of both petroleum-related VOCs and chlorinated VOCs.

The petroleum-related volatile organic constituents (PVOCs) detected in the soil samples include ethylbenzene, toluene, xylene, 1,2,4-trimethylbenzene, naphthalene, n-butylbenzene, and sec-butylbenzene. The majority of these detects were observed in the drum storage areas (at B-5 and B-6), located near the shed, adjacent to a floor drain within the building (G-5) and one isolated PVOC detection located at B-9 in the undeveloped portion of the site. These detections are likely a result of small quantities of petroleum-related products. The concentrations had no distinct pattern relative to sample depth. The distribution of the PVOC concentrations is shown on Figure 6. None of the PVOC concentrations detected exceeded NR720 RCLs or EPA Region IX PRGs.

The chlorinated VOCs detected in the soil samples include tetrachloroethylene (PCE) and its breakdown products, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, trichloroethylene and vinyl chloride. The highest concentrations of PCE in the soil (132 and 322 mg/kg) were observed in the two soil samples collected from G-1, located adjacent to Pit #7 in the main building. It is likely that Pit #7 or activities that occurred very close to Pit #7 represent a source of PCE. Within the building concentrations of PCE generally decreased to non-detectable with distance from Pit #7. It appears that other sources of PCE may have been present within the building based on the PCE concentration at G5-S01. G5-S01 is a surficial

soil sample. With no possible transport mechanism between Pit #7 and G5, a second release in this area is apparent. Outside the building concentrations of PCE were detected at B-2, northeast of the building; B-5 and B-6, located in observed drum storage areas; and at TP-5 and B-11, located a considerable distance away from the building. With the exception of TP-5 S04, which was collected below the fill material, soil samples collected from these other locations were from at or just below the ground surface. This suggests that there may have been spillage or leakage of PCE outside the building. Chlorinated VOCs were not detected near the eastern property boundary as was suspected due to potential off-site sources. The distribution of the chlorinated VOCs in the soil is shown on Figure 7.

Because NR720 does not specify generic RCLs for the chlorinated VOCs, STS compared the results to the EPA Region IX Preliminary Remediation Goals (PRGs) for these parameters. Exceedances of the PRGs for migration from soil to groundwater occurred for cis-1,2-dichloroethylene in three soil samples; for PCE in 14 soil samples; for trichloroethylene in four soil sample; and for vinyl chloride in one soil sample. The two soil samples collected from G-1, near Pit #7, also contained PCE concentrations that exceeded the PRG for direct contact at residential and industrial sites. One sample, from B-6, also contained vinyl chloride that exceeded the PRG for direct contact at residential sites.

It should also be noted that the very high concentrations of PCE at G-1 (132 and 322 mg/kg) could potentially represent TCLP hazardous waste. If these soils were excavated or moved during development or remediation, they could be subject to the solid and hazardous waste regulations. As discussed in Section 5.2, solid wastes having total concentrations in excess of 20 times the TCLP regulatory limit could theoretically exceed their respective TCLP limit. For PCE the TCLP limit is 0.7 mg/l and the corresponding theoretical limit for total concentration would be 14 mg/kg, considerably lower than the reported concentrations at G-1. This is significant, as it likely will affect any remedial action plans and their respective implementation costs. Also discussed in Section 5.2, contaminated soil could potentially be considered "listed" hazardous waste (U210 or F002) depending on the nature of the spill.

5.4 Groundwater Analytical Results

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The groundwater samples were analyzed for VOCs, PAHs and select metals. The laboratory analytical results and groundwater quality standards (NR 140.10) for the groundwater samples collected from the monitoring wells are summarized in Table 5. Copies of the analytical laboratory reports are provided Appendix G.

The groundwater sample laboratory results are compared to Wisconsin's groundwater quality standards established in Wisconsin Administrative Code NR 140, Table 1. Wisconsin has two levels of groundwater quality standard. The first level, the preventive action limit, is a concentration that is 10% (for carcinogenic, mutagenic or teratogenic compounds) or 20% of the enforcement standard. The PAL has been established as the concentration at which notification to the WDNR is required. Remedial action is not always required if a preventive

action limit is exceeded. The enforcement standard is a health-risk based concentration and exceedance of enforcement standards usually results in further subsurface investigation, remedial action requirements, or monitoring.

The metals concentrations in the groundwater samples were generally low. There were no ES or PAL exceedances for any of the metals except for nickel. The PAL was exceeded at temporary well G-3 and at well B-6. The ES was exceeded at temporary well G-4. Typically metals and PAHs that easily bind to soil particles have slightly higher apparent groundwater concentrations when sampled from a temporary well or open borehole, due to silt particles that may be present in the samples. Additional sampling for nickel in permanently constructed wells may show that nickel is not a contaminant of concern for the site.

The PAH concentrations in the groundwater samples were also low. All of the NR141 groundwater monitoring wells, as well as temporary wells G-1, G-2 and G-4, had no detectable PAHs. Temporary wells G-3 and G-5 had detectable levels of several PAHs, including PAL exceedances for benzo(a)pyrene and chrysene and ES exceedances for benzo(b)fluoranthene. At G-5, the soil samples also contained most of these same PAHs, none of them at levels exceeding the RCL for protection of groundwater. This would suggest, similar to the metals discussed above, that these PAHs were actually bound to the sediment suspended in the groundwater sample and not a true reflection of groundwater at the subject site.

The VOCs detected in the groundwater at the subject site are primarily the chlorinated VOCs, including PCE, TCE, DCE and vinyl chloride. Benzene was also detected in two groundwater samples (B-6 and B-7); however, it was 1) detected below the laboratory quantitation limit, 2) not confirmed in the duplicate sample for B-7, and 3) below the PAL in both samples. Benzene is not, therefore, considered a contaminant of concern in the groundwater of the subject site.

The distribution of chlorinated VOCs is shown on Figure 8. The highest concentration of PCE (27,200 ug/l) was reported in temporary well G-1, located adjacent to Pit #7, on the west end of the building. This is consistent with the pit sludge results (see section 5.2) and the soil sample results (see section 5.3.3) at this location. The PCE concentrations drop off dramatically to the east with primarily the breakdown products (DCE, TCE and vinyl chloride) being detected in the down-gradient wells. Elevated levels of chlorinated VOCs were detected in the groundwater at B-12, far down-gradient of the apparent primary source area, suggesting that there may have been spillage or leakage of PCE or its breakdown products outside the building.

Concentrations of PCE exceed the ES at G-1, and the PAL at G-2 and B-3. The concentration of cis-1,2-dichloroethylene exceeds the ES at B-12. The concentrations of

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vinyl chloride exceed the ES at B-5, B-6 and B-12. Based on these exceedances, the chlorinated VOCs are considered contaminants of concern for the subject site.

The extent of the chlorinated VOC impacts in the groundwater on the subject site has not been defined. Additional work is recommended to define the horizontal and vertical extent of the chlorinated VOC impacts.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The Phase II study was performed to evaluate recognized environmental conditions associated with the C&L Industrial Cleaners property located at 8927 Sheridan Road in Kenosha, Wisconsin. The following subsections present first a summary of the investigative findings for the subject site and secondly, the more generalized conclusions that answer the questions posed under the "Data Quality Objectives" section of the Sampling and Analysis Plan. These questions were:

- What areas of the site are contaminated?
- What is the nature of the contamination?
- Are the contaminant concentrations significant with respect to human health and the environment?
- Is the site developable and if so, what type of redevelopment would be allowed?
- Is remediation required for redevelopment?

The final subsection presented below will provide recommendations resulting from the summary of findings and conclusions.

6.1 Summary of Findings

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The site buildings were previously occupied by C&L Industrial Cleaners and more recently by BBL Barrel Company. Reportedly, C&L Industrial Cleaners cleaned carpets for building entrances. It was not known if C&L Industrial Cleaners was involved in cleaning other types of materials or what type(s) of cleaning processes were used. Based on the results of the Phase II, it appears that a dry cleaning process using tetrachloroethylene was used on the site. The BBL Barrel Company reportedly sold industrial supplies.

The following summarizes STS' findings regarding environmental conditions discovered as a result of completing the Phase II ESA for the site:

- It appears that C&L Industrial Cleaner used the dry cleaning solvent, tetrachloroethylene (PCE) in their cleaning process. Very high concentrations of PCE were observed in the sludge from Pit #7, located in the western portion of the building, as well as in the soil and groundwater samples collected from geoprobe G-1 located adjacent to this pit. It appears that this pit, or activity conducted very close to this pit present a source of PCE on the site. A secondary source of PCE is likely near G-5, which is located adjacent to a floor drain in the main garage area.
- Based on concentrations of PCE on other areas of the site (particularly in the drum storage areas near the shed; at B-2, near the northern property line; and, at TP-5, B-11 and B-12, in the undeveloped portion of the site), spillage of PCE appears to have occurred outside the building.

- Sludge samples collected from the various pits located within the building indicate that all or at least some of the sludge material is hazardous waste as defined under NR605.09. The sludges containing PCE (Pit #4, 6 and 7) may be classified as D039, U210 or F002 listed hazardous waste. The sludge with no detectable PCE (Pit #1, 3, and 5) may also be classified as hazardous waste due to elevated levels of cadmium, chromium, lead, barium and selenium.
- An inventory of drummed wastes indicates that there are at least 15 sealed drums whose contents is either unknown or unconfirmed.
- Low levels of petroleum-related VOCs were detected in some of the soil samples collected from the site. These are likely a result of spills of small quantities of petroleum products but do not pose a significant risk to human health or the environment.
- The fill materials located on the eastern two-thirds of the site do not appear to be significantly affecting the underlying soil or groundwater quality of the site. The fill piles contained primarily concrete rubble and asphalt, as was observed on the surface. However, at TP-1 and TP-2, wood, a tire and hubcaps were observed and at TP-3, old car parts, a motor and electrical conduit were also observed. The fill material does not appear to have affected the soil or groundwater quality of the site. The materials may require removal prior to redevelopment for geotechnical or site grading purposes.
- It does not appear that the off-site UST located to the north of the site and identified in the Phase I ESA, has impacted the site, since petroleum products were not detected in either of the borings (B-1 or B-2) located near the northern property limits.
- The potential impact of the off-site sources of solvents, identified in the Phase I ESA, is not apparent from the existing soil and groundwater information. Off-site sources may or may not be contributing to the impacts observed on the subject site.

6.2 Conclusions

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Based on the above summary of findings and in consideration of the DQOs outlined above and discussed further in the Sampling and Analysis Plan, STS has reached the following conclusions. Elevated concentrations of chlorinated volatile organic constituents, including PCE, TCE, DCE and vinyl chloride were detected in the sludges, soil and groundwater of the subject property. The horizontal and vertical extent of the impacts has not been determined. It appears that the source of the contamination is within or near to Pit #7 located in the northern portion of the building and is a result of the use of PCE as a dry cleaning solvent on the subject property. The contaminant concentrations are significant with respect to human health and the environment and will require additional investigation and likely some element of remedial action prior to redevelopment of the site. However, it does not appear at this time that the level of impacts would preclude redevelopment of the site.

6.3 Recommendations

Based on the Phase II summary of findings and conclusions STS recommends the following:

- Attitional soft sampling should be conducted to define the extent of chlorinated VOC impacts, particularly in the vicinity of G-1, B-2, B-11 and TP-5.
- Additional groundwater monitoring wells should be installed and sampled in conjunction with re-sampling existing wells to evaluate the horizontal and vertical extent of chlorinated VOC impacts. We anticipate that an additional 6-8 monitoring wells will be necessary to determine the extent of the impacts.
- The sludge materials should be further tested to determine the appropriate management for disposal of the wastes.
- Drummed waste stored onsite should be evaluated by a hazardous waste contractor to determine their contents and for the management of their disposal.

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7.0 GENERAL QUALIFICATIONS

The purpose of this Phase II Environmental Assessment is to evaluate the RECs identified in the Phase I ESA to determine whether they have impacted the soil and/or groundwater of the site. STS assumes no responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with the recommendations and/or suggestions contained in this report in no way assures elimination of hazards or the fulfillment of a property owner's obligation under any local, state or federal laws or any modifications or changes thereto. It is the responsibility of the property owner to notify authorities of any conditions that are in violation of the current legal standards.

Factual information regarding operations, conditions, and test data were obtained, in part, from the client, outside agents and third parties and have been assumed by STS to be correct and complete. Because the facts stated in this report are subject to professional interpretation, they could result in differing conclusions. In addition, the findings and conclusions contained in this report are based on various quantitative factors as they existed on or near the date of the survey.

STS has prepared this report at the request of its client, the City of Kenosha Department of City Development. STS assumes responsibility for the accuracy of the report's contents, subject to what is stated elsewhere in this section, but recommends the report be used only for the purpose intended by the client and STS when the report was prepared. The report may be unsuitable for other uses, and reliance on its contents by anyone other than the client is done at the sole risk of the user. STS accepts no responsibility for application or interpretation of the results by anyone other than the client.

This report reflects conditions, operations, and practices as observed on the date of the site visit. Changes or modifications to procedures and/or facilities made after the site visit are not included.

23

8.0 REFERENCES

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24

FIGURES

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Figure 1 -	Site Location Map
Figure 2 -	Site and Building Layout
Figure 3 -	Drum Inventory Diagram
Figure 4 -	Test Pit, Boring and Well Location Diagram
Figure 5 -	Groundwater Table Elevation Diagram
Figure 6 -	PVOC Concentration in Soil
Figure 7 -	Chlorinated VOC Concentrations in Soil
Figure 8 -	Chlorinated VOC Concentrations in Water

. - Appendix B

Soil Boring Logs

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗋

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Form	4400-122
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Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗌

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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm TN & Associates, Inc.	Tel:
Margarel Zainest	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗌

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Signature Firm T N & Associates, Inc. Tel: alaar carnes 1033 N. Mayfair Road Milwaukee, WI 53226 Fax:

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Fax:

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

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Firm T N & Associates, Inc. 1033 N. Mayfair Road Milwaukee, WI 53226

Form	4400-1	22
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management Other 🗖

1 of 1 Page Facility/Project Name License/Permit/Monitoring Number Boring Number GP-5 C & L Industrial Cleaners Boring Drilled By (Firm name and name of crew chief) Date Drilling Started Date Drilling Completed Drilling Method 12/10/2003 Direct Push Dan Bendorf 12/10/2003 Final Static Water Level DNR Well ID No. Surface Elevation Borehole Diameter WI Unique Well No. Common Well Name Feet MSL Inches Feet MSL (Check if estimated:) Local Grid Location (If applicable) Boring Location or Local Grid Origin , ,, 0 Lat. S/C/N State Plane ΠE D N ., 0 Feet 🛛 W Feet 🛛 S N, R 23 E 1/4 of 1/4 of Section 18, т I Long Civil Town/City/ or Village Facility ID County Code County Kenosha 30 Kenosha Soil Properties Sample Soil/Rock Description Recovered (in) ઝ Compressive Strength Depth In Feet Blow Counts Length Att. And Geologic Origin For Comments Number and Type Moisture Plasticity Index PID/FID SCS Well Diagram Content Graphic Each Major Unit Liquid Limit ROD/ 200 Log 48 0 PID Topsoil 30 conditions poor, wet and 1 rainy ·2 Silty Sand, red-brown, damp SM -3 •4 Silty Clay, red-brown 0 48 CL 34 Silty Sand, red-brown, moist . 5 -6 SM 7 -8 0 48 Grading to gray, saturated 39 - 9 Silty Clay, gray -10 CL -11 Water and 8 Soil sample GS EOB @ 12' collected 12

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm TN & Associates, Inc.	Tel:
Margaret Envort	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste	Management	
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Other 🗌

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Signature	^{rirm} T N & Associates, Inc.	Tel:
Margaret Carnost	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

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Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗌

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Firm TN & Associates, Inc. Signature Tel: ner 1033 N. Mayfair Road Milwaukee, WI 53226 Fax:

rm 4400-122	
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Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

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Facility/Project Name	License/Permit/Monitoring Number Boring Number GP-8												
C & L Industrial Cleaners Boring Drilled By (Firm name and r	ame of crew c	hief	Date Dr	Drilling Started Date Drilling Completed					Drilling Method				
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Dan Bendorf					0/2003				12/9/	2003			irect Push
WI Unique Well No. DNR V	Well ID No.	Common Well Name	Final Sta			vel	Surfa	ice Eleva			E		e Diameter
Boring Location or Local Grid Origi	in (Check	if estimated: 🔲)	<u> </u>	Feet	MSL				et MS	ocation	(If an		Inches
State Plane		S/C/N	Lat.		°	•	н					pricuon	-, П Е
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	County		County Co	ode			City/ o	r Villag	e				
	Kenosha		30		Ken	osha	1		C . 1	1.D			
Sample	Soil/P	ock Description								l Prop		s T	4
Number and Type Length Att. & Recovered (in) Blow Counts Depth In Feet		ologic Origin For						Compressive Strength					s
ype Cou		h Major Unit		cs	ji	la ma	l B	gth	ture	P	city		ment
Number and Type Length Att. & Recovered (in Blow Counts Depth In Feet		ļ		u s c	Graphic Log	Well Diagram	PID/FID	oml	Moisture Content	Liquid	Plasticity Index	P 200	RQD/ Comments
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-10 -10	, gray											l	
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EOB	@ 12'				ļ				1				10-12'
I hereby certify that the information	on this form is	true and correct to the	best of m	y knov	vledge.	1				I			

Signature Firm T N & Associates, Inc. Tel: ames 1033 N. Mayfair Road Milwaukee, WI 53226 Fax: ALMAN 0

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management 🗋

Other 🗌

_													Pa	ge 1	of	1
	y/Proje					License	Permi	/Monit	oring l	Numb	er	Boring	g Numt		P-9	
			al Clea	me and name of crew ch	nief)	Date Dr	illing S	started		IT	Date Drill	ling Co	mplete			ling Method
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	n Beno				<u> </u>			/2003				12/9/	2003			irect Push
WI Ur	nique W	/ell No).	DNR Well ID No.	Common Well Name	Final St			vel	Surfa	ace Eleva		T	В		e Diameter
Boring	z Locat	ion or	Local G	rid Origin (Check	if estimated: 🔲)	<u> </u>	Feet				Local	et MS Grid Lo		(If ap)	plicable	nches
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	1/4	of	1/		t 1 N, R 23 E	Long		<u> </u>	<u>'</u>		-		t 🗖 S			Feet 🗍 W
Facili	y ID			County		County Co	ode			City/ c	or Village	e				
-Sar	nple		гт	Kenosha	[·	30		Ken	osna	<u> </u>		Soil	Prop	ortio		<u> </u>
Sal				Soil/B	ock Description							301			, 	
	tt. & d (in)	unts	Feet		ologic Origin For						sive					s1
ber	th A vere	Co	l l		h Major Unit		cs	hic	ram	ED	gth	ent	P 1	icity		/ men
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet				U S (Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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			E I													
			E^6	Fine Sand, brown												
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4	48		-8	Saturated												Water and
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			E										'			
- 1				Clay, gray												
				EOB @ 12'			CL									
	1		-12						1							<u> </u>

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm TN & Associates, Inc.	Tel:
Margaret Eurost	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗖

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Facilit C &	-		ne al Clea	aners				I	license	/Permi	t/Monit	toring l	Numbe	r	Boring	g Numb		- 10	
					name of crew	chief)		I	Date Dr	illing S	Started		Da	te Drill	ing Co	mplete	d	Dril	ling Method
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Facilit				Co	unty C				City/ or	Village									
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San				anintian								Soil	Prop	erties	I				
ad (f) g b Soil/Rock Description ad (f) g b And Geologic Origin For														ive					s
And Geologic Origin For Type And Geologic Origin For Each Major Unit Each Major Unit										s	lic	am	E E	sth	ure	-	city		nent
umb T br	Number and Type Length Att. & Number Aud Geologic Origin For Each Major Unit Each Major Unit									SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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			-12									<u> </u>							l
I herel	oy certi	fy that	the info	ormatio	n on this form	is true and	d correct to th	ie be	est of m	y knov	vledge.								

Signature Firm T N & Associates, Inc. Tel: 1033 N. Mayfair Road Milwaukee, WI 53226 orace Fax: nla

Form 4400-122

Route To:

Watershed/Wastewater Remediation/Redevelopmen Waste Management

Other 🗖

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Facility	-								L	license	Permi	t/Moni	toring 1	Vumbe	r	Borin	g Numl			
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Facility		01	1,		County	,	1 1	N, K 25 E		unty C		Civil [®]	Town/C	City/ or	r Villag			,		
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Sam	nle								102					1		Soi	l Prop	erties		
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I hereb	y certi	fy that	the info	ormatior	n on this fo	rm is	true an	d correct to th	ie be	st of m	y knov	vledge.								
Signat	ure			0 /	?			Firm T	N 8	z Ass	ociate	s. Inc								Tel:
1 M	asi	én a	ier	4 7	Zain	la	1						waukee	e, WI S	53226					Fax:

Form 4400-122	
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management Other 🛛

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	ty/Proje							License	/Permi	t/Monit	toring 1	Numbe	r	Boring	g Numł		-12	
	L Inc			me and name	of crew c	hief)		Date Dr	illing S	Started		IDa	te Drill	ing Co	mplete			ing Method
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	n Bend									9/2003				12/9/	2003			irect Push
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Facil	ty ID			Count				County C 30	ode		Town/C	City/ or	Village	e				
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Sa	mple				0.10									Soil	Prop	erties		
	(in)	nts	eet			lock Descri eologic Orig						s					~	
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Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		La	in Major O			sc	Graphic Log	Well Diagram	PID/FID	omp	Moisture Content	Liquid Limit	Plasticity Index	200	RQD/ Comments
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l	4		-12	EOB @ 1	2				<u> </u>									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm T N & Associates, Inc.	Tel:
Margaret Carnest	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

Form	4400-122	
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management Other 🗌

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	y/Proje							L I	License	/Permi	t/Moni	toring l	Numbe	r	Boring	g Numb		> 12	
			al Clea		d name of crew	chief)			Date Dr	illing S	Started		Da	te Drill	ing Co	mplete		P-13	ling Method
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San	onla		<u> </u>		Kenosha			3	0		Ken	osna	T	<u> </u>	Soil	Prop	erties		
Sample Soil/Rock Description																			
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ber Type	th A vere	Co	h In		ajor Unit			CS	hic	ram	FID	pres	ture	id t	icity	0	o/ men		
Vum Ind J	And Geologic Origin For Balance Soll/Rock Description And Geologic Origin For Each Major Unit Each Major Unit									U S (Graphic Log	Well Diagram	PID/FID	Com	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
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I here	by certi	fy that	<u> </u>	ormatio	on on this form	is true	and correct to	the be	est of m	y knov	vledge.		·						<u> </u>
- Hele	-			A			Eirm -			· · · · ·								<u> </u>	

Signature ırm T N & Associates, Inc. Tel: Carne Gare 1033 N. Mayfair Road Milwaukee, WI 53226 Fax:

rm 4400-122	
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management Other 🗌

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Borin	g Drille	d By (Firm na	me and nam	e of crew	chief)		Date Dr	illing S	started		Da	ate Drill	ing Co	mplete	d		rilling Metho	
	chael I)/2003				12/9/	2003			Hollow St Auger	
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Sai	mple												Γ	Soil	l Prop	oertie	s		
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Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet			,			USC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity	P 200	RQD/ Comments	
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Sand, fine to medium coarse, gray, saturated, grades to dense gray silty clay

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24 24

Signature		^{Firm} T N & Associates, Inc.	Tel:
" haraciel	Carnest	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:
//			

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completions of this form is mandatory. Failure to file this form may result in forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

0

Boring Number	MW	Use only as an attachment to Form 440	0-122.						Pa	ge 2	of	2
Sample								Soil	Prop	erties		
s in) s	et	Soil/Rock Description					e					
Number and Type Length Att. & Recovered (in) Blow Counts	Depth In Feet	And Geologic Origin For			_		Compressive Strength	e		ک ا		RQD/ Comments
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Form 4400-122	
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management 🗌 Other 🗋

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Facility/Project Name C & L Industrial Cleaners					License	Permi	t/Moni	loring l	Numbe	r	Boring	g Numb				
														W-2		
Boring	g Drille	d By (Firm na	ame and name of crew ch	nief)	Date Dr	illing S	started		Da	te Drill	ing Co	mplete	a	ł	ling Method
Mic	ael M	[c Ard	اا			12/9/2003						12/9/2		hollow stem		
	nique W			DNR Well ID No.	Common Well Name	Final St				Surfac	e Eleva		2005	Bo	orehole	Diameter
	-	523					Feet	MSL			Fe	et MS	L		I	nches
Boring	g Locati	ion or	Local (Grid Origin (Check	if estimated: 📋)	1.		0	,	н	Local	Grid Lo	ocation	(If app	licable)
State	Plane				S/C/N	Lat.										🗆 E
				T 1 N, R 23 E	Long					V ² II.		t 🗆 S			Feet 🗌 W	
Facility ID County Kenosha						County C 30	ode	Ken		Jity/ or	Village	e				
	nnla		T	Kenosna		50		Ken		1		Soil	Prop	ortios		
Sal	nple			Soil/P	ock Description									erties		
	t. & (in)	nts	eet		ologic Origin For						ive i					6
pe 'pe	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	1	h Major Unit		S	.2	E E	9	Compressive Strength	ut e		ity		RQD/ Comments
Number and Type	angt!	Ň	epth	Laci			sc	raph og	Well Diagram	PID/FID	omp	Moisture Content	Liquid Limit	Plasticity Index	P 200	DD/
<u>ź</u>			ă	T '11 O a b O a '1			2	0 1	l≥ ū		ŬĂ	ΣŬ	22	PI ul	Ъ	<u> </u>
	24 24	3	E	loose, dry	some clay, dark br	own,										
		4							1							
L			F ₂													
	24 24	3	Ę 1		brown to black gra	ading,				0						slight odor
		2	E-3													
			È.													
ŀ	24	4	F ⁴							0						
	18	4	E													
		6	5	Silty fine sand, re	d-vellow, moist				1							
			F		<u>j</u>											
18	24	5	E-6							0						
18 GS	24 24	5 5 5 5	ŧ						ļ							
		5	F-7													
			E													
			<u>⊢</u> 8				SM									
	24 24	12 16	8 -	}						0						
		19 21	E_9										ļ			
			Ę	saturated, gray												
			F 10													
Г	24 18	8	- 10 -							0						
	10	11 8	F													
		7	E 11	Hard dense silt to	very fine sand				1						l	
			Ē												1	
	1		-12													

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm TN & Associates, Inc.	Tel:
Margarel Jamest	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

Boring Number	MW	V-2 Use only as an attachment to Form 4400)-122.						Pa	ge 2	of	2
Sample								Soil	Prop	erties		
tts (in)	eet	Soil/Rock Description					ve					
er Pe Coun	In Fe	And Geologic Origin For Each Major Unit	s		8	A	essiv th	it it		ity		lents
Number and Type Length Att. & Recovered (in) Blow Counts	Depth In Feet	Each Major Unit	SC	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			⊃	53	≯ <u>∩</u>	[] O	S S	Σΰ			4	C R
GS 24 17	Ē											
14 15	-13		SM									
	Ē,			ł								
18	- 14											
	E 15											
Ц	F	EOB @ 15.5'			4							
							ĺ					
· ·												

Form	4400-1	22
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Route To:

Watershed/Wastewater Remediation/Redevelopmen

Waste Management

Other 🗌

													Pa		of	2	
Facility/Project Name C & L Industrial Cleaners						License	/Permi	/Monit	toring 1	Numbe	r	Boring	g Numt				
															W-3		
Borin	g Drille	d By (Firm na	me and name of crew cl	nief)	Date Dr	illing S	started		Da	te Drill	ing Co	mplete	d	Drilling Method		
															hollow stem		
	chael I					12/9/2003 Final Static Water Level					12/9/2003				auger Borehole Diameter		
WIU	nique W) .	DNR Well ID No.	Common Well Name	1			vel	Surfac	e Eleva		-	BC			
PL521							Feet	MSL				et MS				nches	
Boring Location or Local Grid Origin (Check if estimated:)						Lat.		o	1	н	Local	Grid Lo	ocation		licable		
State	Plane			10	S/C/N			。		11							
<u> </u>	1/4	of	1/	4 of Section 18,	T 1 N, R 23 E	Long					17/11		t 🗆 S			Feet 🗌 W	
Facili	ty ID			County		County C	ode	1		Jity/ or	Village	e					
				Kenosha		30		Ken	osna		<u> </u>	<u> </u>	-				
Sa	mple										ļ	Soil	Prop	erties			
	in &	s	5	Soil/R	ock Description						0						
ø	ed (nut	Fe	And Ge	ologic Origin For						Siv			~		ıts	
, V Ber	ver th	Ŭ	H H	Eac	h Major Unit		CS	hic	ram	l 🗄	gth	ent tur		icit.		// mei	
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet				S	Graphic Log	Well Diagram	PID/FID	Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments	
	24			Eine Sandri Cilter	Loam, dark brown,	danı	D			0	10 s	20		P I	4		
	18	2 4	El	rine Sandy Sinty	Loam, dark brown,	, ury											
	Ì	4	E, I														
ŀ	24	3	2	Very Fine Silty S	and, red-brown, me	oist 2"	<u> </u>			0							
10 6 Γ soil plug and a piece of concrete plu				g at													
- 1		8	上3	bottom	1	0											
			F.														
T	24	5		Silty Sand Fill, da	ark brown, with bro	own			1	0]					
	10	5 2 3 3	F	rusty fragments, p	bebbles, Piece of R						Í						
		3	F5	at 4'							ļ						
			F														
	Ì		F,													1	
14	24	2	E^{6}		Soil, red-brown, v	with				0							
GS	18	2 3 5 6	ΕI	black organics an	d glass, saturated						Ĺ						
		6	F7				SM									1	
		ļ															
	24	9	E l	Very Fine Sand, g	gray, saturated					0							
	1 10	10 12															
	1	12	- 9														
	1		F														
ļ	4		-10		1		SM										
$\begin{bmatrix} 24 \\ 18 \\ 13 \end{bmatrix} \begin{bmatrix} 10 \\ 10 \end{bmatrix}$ Siltier grading back to fine sand				ck to tine sand		_			0								
									1								
		10	-11														
			FI														
L			-12														

I hereby certify that the information on this form is true and correct to the best of my knowledge.

۹

Signature / Firm	T N & Associates, Inc.	Tel:
Malgaret Earnest	1033 N. Mayfair Road Milwaukee, WI 53226	Fax:

SampleSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionadAL pressAnd Geologic Origin For Each Major UnitSoil/Rock DescriptionSoil/Rock DescriptionadAL pressSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionadAL pressSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionadAL pressSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionadAL pressSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionIs additionSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionIs additionSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionIs additionSoil/Rock DescriptionSoil/Rock DescriptionSoil/Rock DescriptionIs additionIs additionSoil/Rock DescriptionSoil/Rock DescriptionIs additionIs additionSoil/Rock DescriptionSoil/Rock DescriptionIs additionIs additionSoil/Rock DescriptionSoil/Rock DescriptionIs additionIs addition<	RQD/ Comments
And Geologic Origin For And Geologic Origin For add Type Fach Major Unit add Type Blow Construction add Type Construction add Type C add Type C <td>RQD/ Comments</td>	RQD/ Comments
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	RQD/ Comment
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Com
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
18 -13 23 -13 -14 CH	
EOB @ 15.5'	

Appendix C

Well Construction Diagrams

State of Wisconsin Department of Natural Resources Route To:		Wastewater 🗌		nagement 🗌	MONITORING WELL			TION
		n/Redevelopment	Other 🗌		Form 4400-113A	Rev. 6-9	<u></u>	
Facility/Project Name		Location of Well	0005 4	ØE.	Well Name			
C&L Industrial Cleaners - STS # 86415XB	9900.1	<u></u>	9905.4 ft.	⊠ E. □ W.	B-3			
Encility License, Permit or Monitoring No.	Grid Origin				Wis. Unique Well No DN	NR Well f	Numt	ber
	Lat	'" Lo	ong	or	PC283			
cility ID	St. Plane	ft. N, _		ft. ES/C/N	Date Well Installed			
	Section Loca	ation of Waste/Sourc	e		04/30/20			
Type of Well	NW 1/4 of	<u>SE</u> 1/4 of Sec.	18 т 1	NP 23 DW	Well Installed By: (Perso	on's Name	e and	l Firm)
Well Code 11/mw	Location of	Well Relative to Was	ste/Source		Gary Bra	un		
Distance Well Is From Waste/Source	u 🗆 Upgi	radient s \square S	Sidegradient					
Boundary ft.	d 🗆 Dow	ngradient n 🗆 N			STS Consultar			
A. Protective pipe, top elevation	ft. MS	L		1. Cap and lock?	_!	🛛 Yes		No
B. Well casing, top elevation	ft. MS	L	18 2	 Protective cover a. Inside diamete 	••		4.0	0_ in.
C. Land surface elevation6	18.3_ ft. MS			b. Length:		_	5.0	0 ft.
D. Surface seal, bottom617.3 ft. MSL			1-21-21	c. Material:		Steel		
	. 01			d. Additional pro	tastian2	Other		
12. USC classification of soil near screen:								140
				IT yes, describe			- ,	•
Bedrock			8 \ `3	3. Surface seal:		entonite	_	
13. Sieve analysis attached? □ Yes	🖾 No					Concrete		
14. Drilling method used: Rotar		ft .		Material between	well casing and protective		ш <u>-</u>	
Hollow Stem Auge			▩ ゙	. Material between	* -	entonite		3.0
	$r \Box \underline{\Box}$		8	Coarse sa	and over bentonite			
Oute			8					
15. Drilling fluid used: Water □02 Ai	r 🗆 0 1		» *	-	al: a. Granular Bo			
Drilling Mud 0 3 None			i t		ud weight . Bentonite-san			
			8 (ud weight Bentonit			
■. Drilling additives used? □ Yes	🖾 No				ite Bentonite-ceme volume added for any of th		ц э	50
C C				f. How installed	•	Tremie		0.1
Describe				I. HOW INStalled		pumped		
17. Source of water (attach analysis):			8		-	Gravity		
				Design in 1				
NA			× ∕°	. Bentonite seal:	a. Bentonite g 8 in. □1/2 in. Bentonite/			
	1.0	. 🐰	6			•	N 1	
E. Bentonite seal, top617.3 ft. MSL	or <u>1.0</u>			C	l: Manufacturer, product r	one and		
5145 C MOL	3.9		ቘ / _′`		Red flint #40-60	lanc and	्र	ग अटल गुण्ड
F. Fine sand, top ft. MSL of	or	ft.	7	a				
G ETH 1 1 614 1 6 MOV	12			b. Volume added	al: Manufacturer, product		d ma	ch size
G. Filter pack, top614.1 ft. MSL of	or		/ /°		Red flint #30		1 mes	311 3120
H. Screen joint, top613.6 ft. MSL of	4.7			a b. Volume added_	fred 11111 #30		- 11	
H. Screen joint, top613.6 ft. MSL of	JI				Flush threaded PVC sche	dula 40	N 7	
I. Well bottom <u>603.6</u> ft. MSL of	14.7		9.	. Well casing:	Flush threaded PVC sche			
I. Well bottom <u>603.6</u> ft. MSL of	or				Fiush infeaded PVC sche	Other	N N	, 4 271
J. Filter pack, bottom603.1 ft. MSL of	15.2		10	Canada matarial	PVC schedule 40	Other		- <u>-</u>
J. Filter pack, bottom603.1 ft. MSL c	or		<u> </u>	Screen material: _			<u></u> 1071	
K. Borehole, bottom601.3 ft. MSL of	17.0	. /////		a. Screen Type:		tory cut 1 ous slot 1		
K. Borenole, bottom II. MSL C)r	п. 🔪 🦷			Continue	Other (
L Develote discontant 8"			<u>k</u>	b. Manufacturer	Env. Manufacturing, Inc			
L. Borehole, diameter8" in.				c. Slot size:	B,		.010	in
2.28			\backslash				10.0	_Ш. fr
M. O.D. well casing 2.38 in.			\backslash	d. Slotted length:	halow filter posts):	None		
0.07			11.	Backfill material (below filter pack):	Other [2/1	
N. I.D. well casing 2.07 in.						Ouler L		<u> </u>
	in +	1	£ 1 1					
reby certify that the information on this fo		S'	· · · · · · · · · · · · · · · · · · ·	age				
smanute KA AMO MAN	the A	Firm STS Consul				el: 414-35		
Please complete both Forms 4400=113A and 4400-1	13B and satur			Milwaukee, WI 532		$\frac{x: 414-35}{160, 281}$		
289, 291, 292, 293, 295, and 299, Wis. Stats., and cl	h. NR 141, Wis	Adm. Code. In accor	dance with chs.	281, 289, 291, 292, 2	93, 295, and 299, Wis. Stats.,	failure to f	file th	iese

259, 291, 292, 293, 295, and 299, wis. Stats., and cn. NK 141, wis. Adm. Code. In accordance with cns. 281, 289, 291, 292, 293, 295, and 299, wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources Route To:	Watershed/Wastewater 🗌 Remediation/Redevelopment 🗌		nagement 🗌	MONITORING WELL CONS Form 4400-113A Rev. 6	
Facility/Project Name	Local Grid Location of Well			Well Name	
C&L Industrial Cleaners - STS # 86415XB	9919.5ft. □ S	10027.1ft.	⊠ E. □ W.	B-5	
cility License, Permit or Monitoring No.	Grid Origin Location	(Check	(if estimated: 📋)	Wis. Unique Well No DNR Wel	l Number
	Lat	Long	or	PC282	
cility ID	St. Plane ft. N,		ft. E. S/C/N	Date Well Installed	
				04/30/2001	
Type of Well	NW 1/4 of SE 1/4 of Sec.	18 T. 1	N.R. $23 \square W$	Well Installed By: (Person's Na Gary Braun	me and Firm)
Well Code 11/mw Distance Well Is From Waste/Source Boundary ft.	u 🗆 Upgradient s 🗆	Sidegradient		Gary Braun STS Consultants, Ltd	
A. Protective pipe, top elevation	d Downgradient n		. Cap and lock?		es 🗆 No
	ft. MSL		2. Protective cover p a. Inside diameter	pipe:	<u>4.0</u> in.
C. Land surface elevation6	18.3 ft. MSL		b. Length:		<u>5.0</u> ft.
		1. 1. 1. 1.	c. Material:		el 🛛 04
D. Surface seal, bottom ft. MSL	or <u>5.0</u> ft.	1 Starter		Othe	r 🗆 🛄
12. USC classification of soil near screen:	and the second s	A CALL AND A CALL			es 🛛 No
	V SP D		If yes, describe	·	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_ СНО		. Surface seal:		e 🖾 30
13. Sieve analysis attached? □ Yes	⊠ No	3		& native soil (top) Othe	
· ·	1 888			well casing and protective pipe:	
14. Drilling method used: Rotary Hollow Stem Auge	y □ 50		. Material Detween		e 🗆 30
Other			Coarse sand	over bentonite chips Othe	r 🛛 👋
		5	. Annular space sea		
15. Drilling fluid used: Water □02 Ain	r 🗆 0 1	ж К	-	ud weight . Bentonite-sand slurry	
Drilling Mud 03 None	:⊠99 👹	MM3	-	ud weight Bentonite slurry	
		d 🐰 d		ite Bentonite-cement grout	
Drilling additives used? 🗆 Yes	⊠ No	e e		olume added for any of the above	e
Describe		d e f 6.	f. How installed:		
17. Source of water (attach analysis):		8		Tremie pumped	
		8			08 🖾 🗸
NA	📓	× 6.	Bentonite seal:	a. Bentonite granules	
E. Bentonite seal, top618.3 ft. MSL of	or <u>0.0</u> ft.		c	 /8 in. 1/2 in. Bentonite pellets Other Manufacturer, product name ar 	
F. Fine sand, top614.7 ft. MSL c	or 3.6 ft.	7. 8.	a b. Volume added_	Red flint #40-60	
G. Filter pack, top614.2 ft. MSL c	vr 4.1 ft.			d: Manufacturer, product name a	and mesh size
	· `` \ \		a	Red flint #30	
H. Screen joint, top613.7 ft. MSL of			b. Volume added_	ft ³	
		· / 0		Flush threaded PVC schedule 40	⊠ 23
I. Well bottom ft. MSL o	or <u>14.6</u> ft. or <u>15.1</u> ft.		•	Flush threaded PVC schedule 80	
J. Filter pack, bottom603.2 ft. MSL o	r <u>15.1</u> ft.	10.	Screen material:	PVC schedule 40	582
			a. Screen Type:	Factory cut	⊠ 11
K. Borehole, bottom601.3 ft. MSL o	r <u>17.0</u> ft.			Continuous slot	Sec. 1. 10. 10
L. Borehole, diameter8" in.			b. Manufacturer _		0.010
		\ \	c. Slot size:	-	0.010 in.
M. O.D. well casing 2.38 in.			d. Slotted length:	-	<u>10.0</u> ft.
N. I.D. well casing <u>2.07</u> in.		`11.	Backfill material (t		
	1				
=reby certify that the information on this for	Firm STS Const		ige	Tel: 414-	359-3030

 Interference
 Interference<

State of Wisconsin Department of Natural Resources Route To:	Watershed/	Wastewater	- 🗆	Waste Ma	inagemen	t 🗖	MONITORING WE			CTION
	Remediatio		•	Other 🗖			Form 4400-113A	Rev. 6-	.97	
Facility/Project Name	Local Grid I		f Well N.	10022 4	⊠E.		Well Name			
C&L Industrial Cleaners - STS # 86415XB	9938	ft.	S	10033.4ft.	<u> </u>		B	-6	N	
lity License, Permit or Monitoring No.	Grid Origin		" •	ong	' ir esum	or	Wis. Unique Well No	DNR Well	Nur	nber
ility ID	1						PC281 Date Well Installed			
anty ID			10				05/01	(2001		
Type of Well	Section Loca	ation of W	aste/Sour	rce		K E	Well Installed By: (Po Gary	/2001 erson's Nan		d Firm)
Well Code 11/mw	<u>NW</u> 1/4 of	<u>SE</u> 1/4	of Sec.	<u>18</u> , T. <u>1</u>	<u>N, R.</u>	<u>23 D W</u>		Dana	ic ai	
Distance Well Is From Waste/Source	Location of Upgr	WEII KEIAL		aste/Source Sidegradient			Gary	Braun		
Boundary ft.	• -			Not Known			STS Consu	iltants, Ltd.		
A. Protective pipe, top elevation					. Cap ar	nd lock?		🛛 Ye		No
					-	tive cover	pipe:	-		
B. Well casing, top elevation	ft. MSI		- '		a. Insie	de diameter	r:	-	4	.0_ in.
C. Land surface elevation6	18.5 ft. MSI			IE	b. Len	gth:		-	5	.0 ft.
				15.515.51	c. Mat	erial:		Steel	\boxtimes	04
D. Surface seal, bottom ft. MSL	or	it.		1 Starter	<u></u>			Other		<u> 282</u>
12. USC classification of soil near screen:		ANKA/L		A SECURIC		•	tection?	🗆 Ye	s 🛛	No
	V SP D			$ \Lambda \rangle$	If ye	es, describe				
SM SC SC ML MH CI Bedrock					. Surface	e seal:		Bentonite		
13. Sieve analysis attached? □ Yes	🖾 No			3			& native soil (ton)	Concrete		
							& native soil (top)		⊠	<u></u>
	y □50				. Materi	al between	well casing and protec	• •	_	• •
Hollow Stem Auge				8	C	oarse sand	over bentonite chips	Bentonite		30
Othe	r 🗆			×						
15. Drilling fluid used: Water 0 2 Ai						r space sea				
Drilling Mud 0 3 None							ud weight . Bentonite-			
		1					ud weight Bento			
Drilling additives used?	🖾 No						ite Bentonite-ce volume added for any o			50
				1004		v installed:		Tremie		0.1
Describe				8	. 1100	v mstancu.		nie pumped		
17. Source of water (attach analysis):							Tion	Gravity		
NA				6	Benton	ite seal:	a. Bentoni			
		_}		× /			$/8$ in. \Box 1/2 in. Benton	*		
E. Bentonite seal, top618.5 ft. MSL of	or 0.0	ft .			c			Other		
· · · · · · · · · · · · · · · · ·				,8.	Fine sa	nd material	: Manufacturer, produ			
F. Fine sand, top615.0 ft. MSL of	or3.5	ft.	、 👹 🗌		a		Red flint #40-60			194 T
				፼/ /	b. Volu	me added_	ft ³			
G. Filter pack, top614.5 ft. MSL of	or4.0	ft.		8.	Filter p	ack materia	al: Manufacturer, produ	uct name ar	ıd m	esh size
					a		Red flint #30		_	<u> 287-</u> 2
H. Screen joint, top613.9 ft. MSL of	or <u>4.6</u>	ft. —			b. Volu	me added_	ft ³			
				9.	Well ca		Flush threaded PVC so			
I. Well bottom603.9 ft. MSL c	or <u>14.6</u>	ft.					Flush threaded PVC so			
,								Other		
J. Filter pack, bottom603.4 ft. MSL c	or <u>15.1</u>	ft. —				material:				
(D) (17.0				a. Scree	en Type:		Factory cut		11
K. Borehole, bottom601.5 ft. MSL c	or <u>17.0</u>	ft.					Conti	nuous slot		
• • • • • • • • • • • • • • • • • • •							Env Manufacturing	Other		
L. Borehole, diameter8" in.						ufacturer _	Env. Manufacturing,		010)in.
2.28				\backslash	c. Slot:					<u>)</u> in.
M. O.D. well casing 2.38 in.				\backslash		ed length:	below filter pack):	None		
N. I.D. well casing 2.07 in.				11.	Dackiill		-	Other	**	the Million
N. I.D. well casing in.									ڈ ل	
eby certify that the information on this for	rm is true and	correct to	the best	of my knowled	100	<u> </u>				
hature	77	4.			ige.			<u></u>		
/ Mane He Olden b	tall	010		ltants, Ltd. ake Park Drive I	Milwauk	ee, WI 5322		Tel: 414-3 Fax: 414-3		

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources Route To:	Watershed/Wastewater		nagement 🗋	MONITORING WELL Form 4400-113A	CONST Rev. 6-		CTION
Facility/Project Name	Remediation/Redevelopment			Well Name	ICV. 0-		
C&L Industrial Cleaners - STS # 86415XB	<u>9994.6ft. □ S.</u>	<u>10178.5</u> ft.	⊠E.	B-7			
cility License, Permit or Monitoring No.	Grid Origin Location	(Check	if estimated: [)	Wis. Unique Well No DI	NR Well	Nui	mber
	Lat	Long	or	PC284			
cility ID	St. Plane ft. N	J.	ft. E. S/C/N	Date Well Installed			
	Section Location of Waste/Sc	ource		05/02/20	01		
Type of Well	<u>NW 1/4 of SE 1/4 of Sec</u>	- 18 т. 1	NR 23 DW	Well Installed By: (Perso	on's Narr	ie ar	nd Firm)
Well Code 11/mw	Location of Well Relative to	Waste/Source		Gary Вга	un		
Distance Well Is From Waste/Source Boundary ft.		 Sidegradient Not Known 		STS Consultar			
A. Protective pipe, top elevation	ft. MSL		. Cap and lock?		🛛 Ye	s 🗆	No
B. Well casing, top elevation	ft. MSL		. Protective cover p	•	6×(6 (01	<u>q.)</u> in.
8. 1			a. Inside diameter		01		$\frac{4.7}{5.0}$ ft.
C. Land surface elevation6	15.3 ft. MSL	1	b. Length:c. Material:				
D. Surface seal, bottom611.8 ft. MSL	or <u>3.5</u> ft.	An Alteral		dized aluminum	Other		
12. USC classification of soil near screen:	A CALLER AND A CAL	216-216-21	d. Additional prot	ection?			
GP GM GC GW SV	V 🛛 SP 🗆 🛛 🕅		If yes, describe				
SM SC ML MH CI			-		entonite	\boxtimes	30
Bedrock 🗆			Surface seal:		Concrete		
13. Sieve analysis attached? □ Yes	🖾 No		Bentonite	& native soil (top)	Other	\boxtimes	
14. Drilling method used: Rotary	/ 🗆 5 0	3.	Material between	well casing and protective			
Hollow Stem Auge	: ⊠ 4 1		Coores cond	Be aver her to rite abing	entonite		30
Othe			Coarse sand	over bentonite chips	Other	\boxtimes	16-11
		5.	Annular space sea				
15. Drilling fluid used: Water □02 Ai Drilling Mud □03 None		b 🗱 b		ud weight . Bentonite-san			
		c 🕺 c		ud weight Bentonit ite Bentonite-ceme			
. Drilling additives used?	⊠ No 🛛			volume added for any of th			50
		f f	How installed:	•	Tremie		01
Describe	📓			Tremie	pumped		02
17. Source of water (attach analysis):					Gravity	\boxtimes	08
	👹	6.	Bentonite seal:	a. Bentonite g	ranules		33
La ·	⊠ No 7 □ 5 0 7 ⊠ 4 1 7 □ 0 1 9 9 9 ⊠ No		b. □1/4 in. ⊠3/	/8 in. 🗆 1/2 in. Bentonite	-		
E. Bentonite seal, top615.3 ft. MSL of			c				
(11.0	or 3.5 ft.	7.	Fine sand material	: Manufacturer, product r Red flint #40-60	iame and	1 me	sh size
F. Fine sand, top 611.8 ft. MSL of	or <u>3.5</u> ft.	````	a			-	
G. Filter pack, top611.3 ft. MSL of	or <u>4.0</u> ft.		b. Volume added_	d: Manufacturer, product	nome or	.d .m	ach ciza
G. Filter pack, top ft. MSL of	т <u></u> п)°.	riter pack materia	Red flint #30	name an		
H. Screen joint, top610.5 ft. MSL of	or <u>4.8</u> ft.		b. Volume added_			_	
				Flush threaded PVC sche	dule 40		23
I. Well bottom600.5 ft. MSL of	nr <u>14.8</u> ft.		U	Flush threaded PVC schee			
					Other		
J. Filter pack, bottom600.0 ft. MSL of	r <u>15.3</u> ft.	10.	Screen material:	PVC schedule 40			
			a. Screen Type:	Fact	ory cut	\boxtimes	11
K. Borehole, bottom598.3 ft. MSL of	or <u>17.0</u> ft.			Continuo			
0.1				Env. Manufacturing, Inc	Other		
L. Borehole, diameter8" in.		```	b. Manufacturer	Env. Manufacturing, inc		010	<u>0</u> in.
MOD III 220		\ \	c. Slot size:d. Slotted length:				$\frac{0}{1}$ in.
M. O.D. well casing 2.38 in.		\	Backfill material (b	elow filter nack).	None		
N. I.D. well casing 2.07 in.		11.			Other		
N. I.D. well casing 2.07 in.							
reby certify that the information on this for	m is true and correct to the be	est of my knowled	lge.				
Tatarox A 10 A		sultants, Ltd.	~	Te	1: 414-3	59-1	3030
() and the Alfal	11425 Wes	t Lake Park Drive N	Milwaukee, WI 5322	4 Fax	x: 414-3	59-0	0822
Please complete both Forms 4400-113A and 4400-1	13B and return to the appropriate I	DNR office and bure	au. Completion of th	ese reports is required by chs.	160, 281	, 283	}, these

289, 291, 292, 293, 295, and 299, Wis. Stats., and the ANR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources Route To:	Watershed/\	Wastewater 🔲	Waste Ma	Inagement 🗆	MONITORING WELL	CONST	RU	CTION
	Remediation	VRedevelopment			Form 4400-113A	Rev. 6-9	97	
Facility/Project Name	Local Grid L	ocation of Well		ਸ	Well Name			
C&L Industrial Cleaners - STS # 86415XB	9951.2	ft. 🖸 S	<u>10602.2</u> ft.	ΞΨ.	B-12	<u>)</u>	N.T.	
Lcility License, Permit or Monitoring No.	Grid Origin I	Location	(Check	(if estimated: [])	Wis. Unique Well NoD	NR Well	Nur	nber
cility ID	1				PC285 Date Well Installed			
				ft. ES/C/N	05/01/20			
Type of Well	Section Loca	tion of Waste/Sou	irce	⊠E	05/01/20 Well Installed By: (Perso Gary Bra	on's Nam	e ar	id Firm
Well Code 11/mw	<u>NW</u> 1/4 of.	<u>SE</u> 1/4 of Sec.	<u>18</u> , T. <u>1</u>	<u>N, R. 23 0 W</u>	Gary Bra			
Distance Well Is From Waste/Source	Location of V u 🛛 Upgra	V CII INCIALIVE IO V	Vaste/Source Sidegradient			.un		
Boundary ft.		igradient n	•		STS Consulta	nts, Ltd.		
A. Protective pipe, top elevation	ft. MSL			I. Cap and lock?		Yes Yes	3 🛛	No
B. Well casing, top elevation	ft. MSL		$\exists \mathbb{R}^2$	 Protective cover a. Inside diameter 			4	.0_ in.
•••	16.0 ft. MSL			b. Length:		_	5	<u>.0</u> ft.
				c. Material:		Steel		
D. Surface seal, bottom ft. MSL	or f	t. Ayrayra	/16-2/16-2/ /5-7/5-7/5					1. C.
12. USC classification of soil near screen:		AND ANY AND	A ANE YE THE	d. Additional prot	tection?	🗆 Yes		No
GP GM GC GW SW				If yes, describe	:		_	
SM SC ML MH CI Bedrock				S. Surface seal:	В	entonite	\boxtimes	30
	57 Ma					Concrete		
13. Sieve analysis attached? Yes					& native soil (top)		⊠	
14. Drilling method used: Rotary				. Material between	well casing and protective	e pipe: entonite		2.0
Hollow Stem Auge				Coarse sand	over bentonite chips			
Othe								
15. Drilling fluid used: Water □02 Ai	r 🗆 0 1		DOI	Annular space sea	d: a. Granular Bo ud weight . Bentonite-san			
Drilling Mud 03 None					ud weight Bentonit			
					ite Bentonite-ceme			
₩. Drilling additives used? □ Yes	🖾 No			eFt ³ v	olume added for any of th	ne above		
Describe			1	f. How installed:		Tremie		
1.17. Source of water (attach analysis):						pumped		
The source of water (attach analysis).						Gravity		
<u>NA</u>			6		a. Bentonite g			
5 B	0.0	. 📓		b. ∐ 1/4 in. ⊠ 3/	/8 in. □ 1/2 in. Bentonite			
E. Bentonite seal, top616.0 ft. MSL of	or <u>0.0</u>	ft. ft. ft.	7.	Eine sand material	: Manufacturer, product r			
F. Fine sand, top612.0 ft. MSL of	4.0	e		a	Red flint #40-60	iunio uno		
	<u> </u>			b. Volume added_			-	
G. Filter pack, top611.5 ft. MSL of	or <u>4.5</u>	ft	8 .8.		d: Manufacturer, product	name an	d m	esh size
				a	Red flint #30		_	
H. Screen joint, top ft. MSL of	or 5.0	ft.		b. Volume added_	ft ³			
			9.	•	Flush threaded PVC sche			
I. Well bottom $\underline{601.0}$ ft. MSL of	or <u>15.0</u>	ft. 🔪 🔣			Flush threaded PVC sche			* 7. 2. 7
(01.0 · ·	15.0				DVC set state 40	Other		
J. Filter pack, bottom601.0 ft. MSL of)r <u>15.0</u>	ft	10.	Screen material: _				
K David J J J J J J J J J J J J J J J J J J J	17.0	. W/		a. Screen Type:		ory cut		
K. Borehole, bottom599.0 ft. MSL of	r				Continuo	Other		
L. Borehole, diameter8" in.				b. Manufacturer _	Env. Manufacturing, Inc		ц.	<u> </u>
			\backslash	c. Slot size:			.010	0_in.
M. O.D. well casing 2.38 in.				d. Slotted length:				<u>0</u> ft.
			×11.	Backfill material (pelow filter pack):	None		
N. I.D. well casing <u>2.07</u> in.						Other		
reby certify that the information on this for			t of my knowled	lge.				
Tature A A. R. MANA.	I AF		ultants, Ltd.			l: 414-3		
Manet althe	Jack	11425 West	Lake Park Drive	Milwaukee, WI 5322		<u>x: 414-3:</u>		
Please complete both Forms 4400-113A and 4400-1 289 291 292 293 295 and 299 Wis Stats and d	13B and return (NR 141 Wie	to the appropriate D	NK office and bure ordance with che	eau. Completion of th 281 289 291 292 29	ese reports is required by chs. 93, 295, and 299. Wis, State	100, 281, failure to	, 283 file (, these

289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources Route To:	Watershed/W	/astewater 🗆		nagement 🗌		MONITORING WELL			TION
		Redevelopment	Other 🗌			Form 4400-113A	Rev. 6-9	97	
Facility/Project Name	Local Grid Lo	ocation of Well		MF		Well Name			
C&L Industrial Cleaners - STS # 86415XB	9985.1		<u>0988.5</u> ft.	<u> </u>		<u>B-10</u>	6		
ility License, Permit or Monitoring No.	Grid Origin L	ocation				Wis. Unique Well NoD	NR Well	Nurr	iber
	Lat	Lo	ng		or [PC286			
ility ID	St. Plane	ft. N,		ft. ES	/C/N	Date Well Installed			
						05/01/20	001		
Type of Well	NW 14 of	SE 1/4 of Sec 1	18 m 1	N. P. 23	⊠ E [Well Installed By: (Pers Gary Bra	on's Nam	e and	d Firm)
Well Code 11/mw	Location of W	Vell Relative to Was	te/Source	N, K		Gary Bra	aun		
Distance Well Is From Waste/Source Boundary ft.	u 🗆 Upgra		idegradient			STS Consulta	ints, Ltd.		
A. Protective pipe, top elevation				. Cap and lo	ock?		🛛 Yes	5 🗆	No
				. Protective	-	•		. ,	
	ft. MSL			a. Inside di		:	oxo		<u>)</u> in.
C. Land surface elevation6	12.2 ft. MSL			b. Length:					0_ ft.
D. Surface seal, bottom <u>608.4</u> ft. MSL	or 3.8 ft	STE IN	15-215-21	c. Material		lized atominum	Steel		
(<u> </u>					lized aluminum			
12. USC classification of soil near screen:						ection?	🗆 Yes		NO
			$[\land \land \land]$	If yes, d	lescribe:				• •
SM SC SC ML MH CI Bedrock			\$ \ `3	. Surface sea	al:	_	Bentonite	_	
13. Sieve analysis attached? □ Yes	□ No					& native soil (top)	Concrete		
			8.					×	<u></u>
	y □50		8 4	. Material be	etween v	well casing and protectiv		_	2.0
Hollow Stem Auge				Coars	se sand o	over bentonite chips	Bentonite _ Other		
			85	. Annular sp	ace seal	: a. Granular B	entonite		33
15. Drilling fluid used: Water $\Box 02$ Ai		1 🗱 🛙	8 b	Lbs	s/gal mu	id weight . Bentonite-sar	nd slurry		35
Drilling Mud 🗆 0 3 None	: ⊠99					d weight Bentoni			
↓ Drilling additives used? □ Yes	🖾 No		XI			te Bentonite-ceme	-		50
10 Drilling additives used?	M NO		~			olume added for any of t			
Describe			§ f	f. How ins	stalled:		Tremie		
1.1. Source of water (attach analysis):			8				pumped		
17. Source of water (attach analysis).			8				Gravity		
<u>NA</u>			6 .	Bentonite s		a. Bentonite	÷.		
				b. $\Box 1/4$ in	n. 🖾 3/1	8 in. 🗆 1/2 in. Bentonite	-		
E. Bentonite seal, top612.2 ft. MSL of	or <u>0.0</u>		8 / _	C					
(00.4	2.0	ft.	§ / / ^{1.}	Fine sand n	naterial:	Manufacturer, product Red flint #40-60	name and	1 mes	in size
F. Fine sand, top608.4 ft. MSL of	or <u>3.8</u>	ft. 🔨 🔪 📓	3//	a		ft ³			
	4.2		∛ ∕ .	b. Volume					h -i
G. Filter pack, top608.0_ ft. MSL of	or <u>4.2</u>	n [× / ^{8.}	Filter pack	таtепа	I: Manufacturer, product Red flint #30	i name an	ame	SI SIZE
607.5 6 2 607	17			a					
H. Screen joint, top607.5 ft. MSL of	or 1	n					dula 40	5 7 /	
597.5 6 MOL	14.7		9.	Well casing		Flush threaded PVC sche Flush threaded PVC sche			
I. Well bottom 597.5 ft. MSL of	or I				1	riush inreaded PVC sche	Other		24 201
597.0 G MOL	15.2		-			PVC schedule 40		,	
J. Filter pack, bottom ft. MSL of	or <u>15.2</u> I		, 1 0.	Screen mate				-	<u>89 0</u> 1 1
K D 1 1 1 1 1 1 507 2 6 MO	15.0			a. Screen T	ype:		tory cut ous slot		
K. Borehole, bottom ft. MSL of	or <u>15.0</u> I						Other		
· · · · · · · · · · · · · · · · · · ·						Env. Manufacturing, Inc			
L. Borehole, diameter8" in.				b. Manufacc. Slot size:		Entri Intandi de Canada Santa		.010	_ in.
2.28			\backslash	d. Slotted le					ft.
M. O.D. well casing 2.38 in.			\backslash		-	elow filter pack):	None		
N. I.D. well casing in.			11.				Other		
her and the day in the second in the	in t i	compation the bast	f my lencest-	100					
=by certify that the information on this fo	distance in the second se			ige.			1. 414.5	50.2	020
Man OSID I allon h		rm STS Consult		M(1	10 5200		el: 414-3 x: 414-3		
/ when the will	ne	11425 West La	ke Park Drive	willwaukee, V	WI 33224	+ Fa	A. 414-3	707	022

Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources <u>Route To</u> :	Watershed/Wastewater	Waste Management	MONITORING WEL	L CONSTRUCTION Rev. 6-97
Englist / Decident Name	Remediation/Redevelopmen	Other 🗌	Form 4400-113A	Kev. 0-97
Facility/Project Name	Local Grid Location of Well \square N.	_ □ E.	Well Name	7 1
C & L Industrial Cleaners	ft. Sft.	ft. DW.	IVI W	/ - 1
Facility License, Permit or Monitoring No.	Grid Origin Location		wis.Unique weilino.	DNR wen number
	Lat Long	g or	PL522	
I licility ID	St. Plane ft. N,	ft. E. S/C/N	Date Well Installed	
	Section Location of Weste/Source			
Type of Well	1/4 of1/4 of Sec18	TINR 23 TW	Well Installed By:	
Well Code 11/mw	Location of Well Relative to Waste		-	
Distance Well Is From Waste/Source	$u \square Upgradient s \square Sid$			
Boundary ft.	d 🗆 Downgradient 🛛 🖾 No	t Known		
A. Protective pipe, top elevation	ft. MSL	1. Cap and lock?		🛛 Yes 🗆 No
		2. Protective cover	pipe:	
B. Well casing, top elevation	ft. MSL	a. Inside diamete	er:	<u>4.0</u> in.
C. Land surface elevation	ft. MSL 🔪 🛛 🗍	b. Length:		<u>5.0</u> ft.
		c. Material:		Steel 🗆 04
D. Surface seal, bottom ft. MSI	or <u>0.0</u> ft.		Steel	Other 🛛
12. USC classification of soil near screen:		d. Additional pro	otection?	🛛 Yes 🗆 No
		If ves. describ	ne:no	
				Bentonite 🛛 3 0
Bedrock□		3. Surface seal:		Concrete \boxtimes 0 1
13. Sieve analysis attached? □ Yes	🖾 No 🛛 🗱 🗱			$_$ Other \Box $_$
,	y □ 5 0	4 Material betwee	n well casing and protec	
Hollow Stem Aug		4. Material betwee	in went casing and protect	Bentonite \Box 30
-			None	
Othe				
	$W \square SP \square \\ CH \square \\ Or CH \square \\ Or SP $	5. Annular space so	eal: a. Granula	
15. Drilling fluid used: Water $\Box 02$ A		bLbs/gal 1	mud wt Bentonite-	
Drilling Mud 0 3 Nor		cLbs/gal 1		onite slurry 🗆 3 1
16. Drilling additives used? 🛛 Yes		d% Bento		ement grout 🛛 5 0
		e. <u>0.9</u> Ft ³	volume added for any o	
Describe No		f. How installe		Tremie 🗖 0 l
17. Source of water (attach analysis):			Trem	nie pumped 🛛 02
17. Source of water (attach analysis).				Gravity 🛛 08
City of Sheboygan	🛛 🗱 🗱	6. Bentonite seal:	a. Bentoni	ite granules 🗖 33
		/ b. □1/4in. ⊠	3/8in. 🗆 1/2in. Bento	nite pellets 🛛 32
E. Bentonite seal, top ft. MSL	or <u>1.0</u> ft. 🛛 🗱	c		Other 🛛
	or 1.0 ft. or $ft.$ ft.	,7. Fine sand mater	ial: Manufacturer, prod	uct name and mesh size
F. Fine sand, top ft. MSL	or ft.	a	#30 Red Flint Sand	
		b. Volume addee	d = 3.1 ft ³	
G. Filter pack, top ft. MSL		8. Filter pack mate	rial: Manufacturer, pro	duct name and mesh si:
H. Screen joint, top ft. MSL	or 5.0 ft -		d ft ³	
		9. Well casing:	Flush threaded PVC s	
I. Well bottom ft. MSL		9. Well casing.	Flush threaded PVC	
I. Well bottom ft. MSL		Io		
	155 6			
J. Filter pack, bottom ft. MSL	or n.	10. Screen material:		
	15.5 0	a. Screen Type:		Factory cut 🛛 11
K. Borehole, bottom ft. MSL	or tt			tinuous slot 🗆 0 l
			* 1	Other 🗆
L. Borehole, diameter in.	<u> </u>	b. Manufacturer	Johnson Screen	
		c. Slot size:		$-\frac{0.010}{10.0}$ in.
M. O.D. well casing 2.38 in.		d. Slotted lengtl		<u> 10.0 ft.</u>
		`11. Backfill materia	l (below filter pack):	None \Box 14
N. I.D. well casing in.			None	Other 🛛
mereby certify that the information on this	form is true and correct to the best	of my knowledge.		

Firm TN & Associates, Inc.

Tel:

gnature

 Magnet
 Cannot
 Io33 N. Mayfair Road Milwaukee, WI 53226
 Fax:

 Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file thes forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin Department of Natural Resources Route To:	Watershed/Wastewater] Waste Man	agement	MONITORING WEL	L CONSTRUCTION
	Remediation/Redevelopm			Form 4400-113A	Rev. 6-97
Facility/Project Name	Local Grid Location of W	Vell	ΠE	Well Name	
C & L Industrial Cleaners	Grid Origin Location	ft.		MW	/-2
cility License, Permit or Monitoring No.	Grid Origin Location		if estimated: ()	Wis.UniqueWellNo.	JNR Well Number
Acility ID	Lat '			PL523 Date Well Installed	<u> </u>
racinty ID	St. Plane		<u>ft. E.</u> S/C/N	Date wen installed	
Type of Well	Section Location of Wast	te/Source	⊠ E	Well Installed By:	
Well Code 11/mw	1/4 of 1/4 of	f Sec. <u>18</u> , T. <u>1</u> 1	<u>N, R. 23</u> 🖬 W		
Distance Well Is From Waste/Source		e to Waste/Source s □ Sidegradient			
Doundary	d Downgradient	0			
A. Protective pipe, top elevation			Cap and lock?		Yes 🗆 No
			Protective cover	pipe:	
B. Well casing, top elevation	ft. MSL		a. Inside diamete	er:	<u>4.0</u> in.
C. Land surface elevation	ft. MSL 🔨		b. Length:		<u>5.0</u> ft.
D. Surface seal, bottom ft. MSI	or 0.0 ft		c. Material:	Steel	Steel 🗆 04
· · · · · · · · · · · · · · · · · · ·	<u> </u>	3.	d Additional ma	Steel	Other ⊠ ⊠ Yes □ No
12. USC classification of soil near screen:			d. Additional pro	e: no	X res I no
	WO SPO		•	с <u></u>	Bentonite 🗆 30
Bedrock		3.	Surface seal:		Concrete \boxtimes 01
13. Sieve analysis attached? □ Yes	🖾 No	3. 4. 5. b c d e f			
14. Drilling method used: Rotan	ry □ 5 0		Material between	n well casing and protect	
Hollow Stem Aug	-				Bentonite 🗆 3 0
Oth				None	Other 🛛
		5.	Annular space se	al: a Granula	r Bentonite 🗖 33
15. Drilling fluid used: Water □02 A	ir □01	b b		nud wt Bentonite-	
Drilling Mud 0 3 Nor	ne ⊠99	🐹 🗱 с	Lbs/gal r		onite slurry 🛛 3 1
		d 🐰 👹 d	% Bento:	nite Bentonite-ce	
6. Drilling additives used? ⊠ Yes	□ No	е 😸 😸 е		volume added for any o	of the above
Describe No		f 🕅 🕅 🕅 f	. How installed		Tremie 🗆 01
17. Source of water (attach analysis):				Tren	nie pumped 🗆 0 2
					Gravity 🛛 08
City of Sheboygan		6.	Bentonite seal:		ite granules 🗆 3 3
	10		b. □1/4in. ⊠	3/8in. □1/2in. Bento	
E. Bentonite seal, top ft. MSL	or $\underline{1.0}$ ft.		C		Other \Box uct name and mesh size
E Eine and the A MCI		7.		#30 Red Flint Sand	uct fiame and mesh size
F. Fine sand, top ft. MSL	, or ft. \		a b. Volume added		
G. Filter pack, top ft. MSL	or <u>4.0</u> ft.				duct name and mesh si:
G. Filler pack, lop II. MSL			-	· •	
H. Screen joint, top ft. MSL	or <u>5.0</u> ft.			ft ³	
1. Sereen joint, top It. Mol			Well casing:	Flush threaded PVC	
I. Well bottom ft. MSL	or ft. <		ti en eubing.	Flush threaded PVC	
			Jol		Other 🛛
J. Filter pack, bottom ft. MSL	or <u>15.5</u> ft.	10.	Screen material:		
		11111	a. Screen Type:		Factory cut 🛛 1 1
K. Borehole, bottom ft. MSL	or <u>15.5</u> ft.		51		inuous slot 🗖 0 1
	\sim				Other 🛛
L. Borehole, diameter in.		VIIIX	b. Manufacturer	Johnson Screen	
		\backslash	c. Slot size:		0.010 in.
M. O.D. well casing 2.38 in.		\backslash	d. Slotted length		<u>10.0</u> ft.
		`11.	Backfill material	(below filter pack): None	None 🗆 14
N. I.D. well casing in.			·	110110	Other 🛛
	£ 1	4			
□ereby certify that the information on this					
gnature	$ \Gamma$ TN	& Associates, Inc.			Tel:

Manual Cancer 1033 N. Mayfair Road Milwaukee, WI 53226 Fax: Please complete both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be

State of Wisconsin Department of Natural Resources <u>Route To:</u>	Watershed/Wastewater	Waste Management	MONITORING WELL	CONSTRUCTION Rev. 6-97
Facility/Project Name	Remediation/Redevelopmen	Other 🗌	Form 4400-113A Well Name	Kev. 0-97
C & L Industrial Cleaners			MW-3	ξ
C & L Industrial Cleaners	Grid Origin Location	(Check if estimated:	Wis.UniqueWellNo. DN PL521	R Well Number
racility ID	St. Plane ft. N,	ft. E. S/C/N	Data W/-11 Installad	
Type of Well	Section Location of Waste/Source		Well Installed By:	
Well Code 11/mw	1/4 of 1/4 of Sec18	<u>, T. 1 N, R. 23 0 V</u>	<u>И</u>	
Distance Well Is From Waste/Source		legradient		
A. Protective pipe, top elevation		1. Cap and lock?		Yes 🗆 No
B. Well casing, top elevation	ft. MSL	2. Protective cove a. Inside diamet		$\frac{4.0}{5.0}$ in.
C. Land surface elevation	ft. MSL	b. Length:		<u>5.0</u> ft.
D. Surface seal, bottom ft. MSI	L or <u>0.0</u> ft.	c. Material:	Steel	Steel □ 04 Other ⊠
12. USC classification of soil near screen:		••••	· · · · · · · · · · · · · · · · · · ·	\boxtimes Yes \square No
	W SP C	If yes, descri	be: no	
SM⊠ SC □ ML □ MH□ C Bedrock□	$W \square SP \square L \square CH \square$ $\boxtimes No$ $ry \square 50$ $ger \boxtimes 41$ $er \square$ $iir \square 01$ $ine \boxtimes 99$ $\square No$	3. Surface seal:	Be	entonite □ 30 Concrete ⊠ 01
13. Sieve analysis attached?	⊠No	\		
Ũ	ry 🗆 5 0	⁴ . Material betwee	en well casing and protectiv	
Hollow Stem Aug	er 🖾 4 1		NB0	entonite 🗆 3 0
Oth		<u> </u>		
15. Drilling fluid used: Water □02 A	.ir 🗆 0 1	5. Annular space s	mud wt Bentonite-san	entonite \Box 3 3
Drilling Mud 03 Nor	ne ⊠99	cLbs/gal		te slurry \Box 3 1
16 D III and History and 10 ST Var		d% Bento	onite Bentonite-ceme	ent grout 🛛 50
16. Drilling additives used? ⊠Yes	□No		³ volume added for any of t	
DescribeNo		f. How installe		Tremie 0 1
17. Source of water (attach analysis):				pumped □ 02 Gravity ⊠ 08
City of Sheboygan		6. Bentonite seal:		granules \square 3 3
			$3/8$ in. $\Box 1/2$ in. Bentonite	
E. Bentonite seal, top ft. MSL		c 7. Fine sand mater	rial: Manufacturer, product	Other \Box name and mesh size
F. Fine sand, top ft. MSL	$rac{1}{2}$ or $rac{1}{2}$ ft.	a b. Volume adde	$\frac{\text{#30 Red Flint Sand}}{2.6 \text{ ft}^3}$	
G. Filter pack, top ft. MSL	. or <u>4.0</u> ft.	8. Filter pack mate	erial: Manufacturer, produc	t name and mesh si:
H. Screen joint, top ft. MSL	or <u>5.0</u> ft.	a b. Volume adde	ed ft ³	
		9. Well casing:	Flush threaded PVC sch	edule 40 🛛 2 3
I. Well bottom ft. MSL	. or ft	Jo	Flush threaded PVC sch ohnson Screen	edule 80 □ 2 4 Other ⊠
J. Filter pack, bottom ft. MSL	or <u>15.5</u> ft.	10. Screen material		
K. Borehole, bottom ft. MSL	or <u>15.5</u> ft.	a. Screen Type	Continu	tory cut \boxtimes 1 1 nous slot \square 0 1
L. Borehole, diameter in.		b. Manufacture		Other \Box
M. O.D. well casing <u>2.38</u> in.		c. Slot size: d. Slotted lengt	h:	10.0 ft.
M. O.D. well casing 2.38 in.		\ 	al (below filter pack):	None \Box 14
N. I.D. well casing in.			None	Other 🛛 🔔
nereby certify that the information on this	form is true and correct to the best	of my knowledge.		
gnature	Firm TN & Asso			Tel:
Please complete both Forms 4400-113A and 440 289 291 292 293 295 and 299 Wis Stats and	0-113B and return to the appropriate DN	ir Road Milwaukee, WI 53226 NR office and bureau. Completio rdance with chs. 281, 289, 291, 2	n of these reports is required by	Fax: y chs. 160, 281, 283, ats., failure to file these

289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and condut involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

Appendix D

Well Development/Sampling Forms

State of Wisconsin Department of Natural Resources MONITORING WELL DEVELOPMENT Rev. 6-97

Form 4400-113B

Facility/Project Name			County	Well Name							
C & L Industrial Cleaners				Kenosha MW-1							
Facility License, Permit or Monitoring Number			County Code				nber DNR Well Number				
			30	PL52		22					
1. Can this well be purged dry?		Yes	🛛 No	11	Depth to Water	Be	efore Deve	elopment	After I	Develo	opment
 Well development method: surged with bailer and bailed surged with bailer and pumped 		41			(from top of well casing)	a.		9.71 ft.		9	9.70 ft.
surged with block and bailed surged with block and pumped surged with block, bailed, and pumped		4 2 6 2 7 0			Date	b.	12/11/	/2003	12	2/11/2	2003
compressed air bailed only		2 0 1 0) 		Time	c.		00 am 0 inches		09:30) am
pumped only pumped slowly other		5 1 5 0	1		Sediment in wel bottom Water clarity	С	lear 🛛 1	0	Clear 2	20	inches
3. Time spent developing well			min.			-	urbid 🗆 1 Describe)	-	Turbid [(Describe]		
4. Depth of well (from top of well casing)			90 ft.			_					
5. Inside diameter of well		17	.5 in.			_					_
6. Volume of water in filter pack and well casing		1	3 gal.	Fill	in if drilling fluid	de we	re used and	well is at so	lid waste	facility	
7. Volume of water removed from well		40).0 gal.	14.	Total suspended		ie used und	mg/l		luointy	mg/l
8. Volume of water added (if any)		0	0.0 gal.		solids						
9. Source of water added				15.	COD			mg/l			mg/l
10. Analysis performed on water added? (If yes, attach results)	0	Yes	🛛 No	16. V	Vell developed b Michae	el M					

Facility Address or Owner/Responsible Party Address I hereby certify that the above information is true and correct to the best of my knowledge. Name: Firm: Signature: Street: Print Name: 0 T N & Associates, Inc. Firm: City/State/Zip:

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin Department of Natural Resources MONITORING WELL DEVELOPMENT Rev. 6-97

Form 4400-113B

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Route To: Watershed	/Wastewater	Waste Management]	
Remediatio	on/Redevelopmen🛛	Other 🗌		
Facility/Project Name	County		Well Name	· · · · · · · · · · · · · · · · · · ·
C & L Industrial Cleaners		Kenosha	M	[W-2
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Nu	umber DNR We	ll Number
	30	PL52	23	
1. Can this well be purged dry?	🛛 Yes 🗀 No		Before Developmen	t After Development
		11. Depth to Water		
2. Well development method:		(from top of	a. 10.76 ft.	10.80 ft.
surged with bailer and bailed	□ 41	well casing)		
surged with bailer and pumped	□ 61			
surged with block and bailed	□ 42	Date	b. 12/11/2003	12/11/2003
surged with block and pumped	⊠ 62			
surged with block, bailed, and pumped				
compressed air		Time	c. 09:45 am	11:15 am
bailed only				
pumped only	□ 51	12. Sediment in well	0.0 inches	0.0 inches
pumped slowly	□ 50	bottom		
other	. 🗆	13. Water clarity	Clear ⊠ 10 Turbid □ 15	Clear 🛛 20 Turbid 🗖 25
3. Time spent developing well	min.		(Describe)	(Describe)
4. Depth of well (from top of well casing)	90 ft.			
5. Inside diameter of well	17.8 in.			
6. Volume of water in filter pack and well casing	1.2 gal.			· · · · · · · · · · · · · · · · · · ·
-		Fill in if drilling fluid	ds were used and well is at a	solid waste facility:
7. Volume of water removed from well	40.0 gal.	14. Total suspended		
8. Volume of water added (if any)	0.0 gal.	solids		
9. Source of water added		15. COD	mg/l	mg/l
		16. Well developed b	y: Person's Name and Firm	1
10. Analysis performed on water added?	🗋 Yes 🖾 No	-	el McArdle	
(If yes, attach results)			Environmental Soils	

17. Additional comments on development:

Facility Address or Owner/Responsible Party Address	I hereby certify that the above information is true and correct to the best of my knowledge.
	Signature: Margaret Earnest Print Name: Margaret Earnest
Street:	Print Name: <u>Margaret Earnest</u>
City/State/Zip:	Firm: T N & Associates, Inc.

NOTE: See instructions for more information including a list of county codes and well type codes.

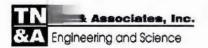
State of Wisconsin Department of Natural Resources MONITORING WELLDEVELOPMENTForm 4400-113BRev. 6-97

Route To: Watershed					te Management	נ			
Remediatio	on/Red			Othe	r 🗌				
Facility/Project Name		C	ounty	Kend		1	Vell Name		
C & L Industrial Cleaners									W-3
Facility License, Permit or Monitoring Number		C	County Code Wis. Unique Well Num				r	DNR Well	l Number
			30		PL52	1			
1. Can this well be purged dry?		Yes	🖾 No	11	Depth to Water	Be	efore Dev	elopment	After Development
2. Well development method:	_				(from top of well casing)	a.		7.06 ft.	7.00 ft.
surged with bailer and bailed		41			(in the tabling)				
surged with bailer and pumped		61					12/11	12002	12/11/2003
surged with block and bailed		42			Date	b.	12/11	/2003	12/11/2005
surged with block and pumped		62							
surged with block, bailed, and pumped		70					11.4	10	12.20
compressed air		20			Time	c.	11:3	30 am	12:30 pm
bailed only		10			a		0	A · 1	0.0 1 1
pumped only		51			Sediment in well bottom		0.	0 inches	0.0 inches
pumped slowly		50		1		~	. .	0	
other				13.	Water clarity		Clear 🛛 1 Turbid 🗖 1		Clear 🛛 20 Turbid 🗆 25
3. Time spent developing well			min.				Describe)		(Describe)
4. Depth of well (from top of well casing)		6	0 ft.			-			
5. Inside diameter of well		17.	5 in.			-			
6. Volume of water in filter pack and well casing		1.	8 gal.			_			
				Fill	in if drilling fluid	ls we	ere used and	well is at so	olid waste facility:
7. Volume of water removed from well		40.	0 gal.	14.	Total suspended			mg/l	mg/l
8. Volume of water added (if any)		0.	0 gal.		solids				
9. Source of water added				15.	COD			mg/l	mg/l
				16. \	Well developed by	y: Po	erson's Nam	e and Firm	
 Analysis performed on water added? (If yes, attach results) 		Yes	🛛 No		Michae	l M	cArdle		
17 Additional comments on development:					M&K I	Envi	ironmenta	l Soils	

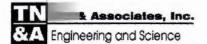
17. Additional comments on development:

ct to the best of my

NOTE: See instructions for more information including a list of county codes and well type codes.



Project Name	e: <u>C&LI</u> r	ndustrial Clea	ners				Project N	lo. <u>2001061</u>	Phase	Task		Page of
SITE ID:		ATION ID:	B-3	(Well N	lumber)			Target Pu	urge Volume	ə:	gal	
Purging Meth	nod/Equipmer	nt:				Samp	oling Equi	oment/ID No:				
Well Casing	Diameter (a)	in :		_ Unit Casir	ng Volume (b):						
Sounding (D	Depth to Well	Bottom from 1	FOC) (c):	17.50	Sta	tic Water L	evel (Dep	oth to Water	from TOC)	(d):	7.25	6" Diameter = ~1.5 gal/ft
_ength of Sta	atic Water Col	umn in Casin	g (e) = (c) - ((d) =			=					4" Diameter = ~0.67 gal/
Casing Wate	er Volume (f) =	= (b) x (e) =		x				_				3" Diameter = ~0.37 gal/
Casing Volur	mes = three	x (f)		_ =								2" Diameter = ~0.17 gal/
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (us/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/11/03	1520					9.50	7.12	0.610	6.8	115.0	349	
	1525					11.54	7.0	0.676	2.84	108.2	33.7	
	1530					11.9	7.0	0.69	4.2	101.6	72.8	Can't sustain water level in the well, will shut down the pump and use a bailer tomorrow.
	:											
	:											
	:											
	;											
	;					_						
	:					_						
	;											
	;											
	;											



Project Name: C & L Industrial Cleaners				Project No. 2001061 Phase Task								Page of
SITE ID:	LOC	ATION ID:	B - 5	(Well N	lumber)			Target Pu	urge Volume	e:	gal	
Purging Met	hod/Equipmen	t:				Samp	oling Equip	oment/ID No:	:			
Well Casing	Diameter (a)	in :		Unit Casing	y Volume (b):							
Sounding ([Depth to Well I	Bottom from	TOC) (c):	17.55	Stati	c Water Le	evel (Dept	h to Water fr	om TOC) (c	l):	10.64	6" Diameter = ~1.5 gal/ft
Length of Sta	atic Water Col	umn in Casin	g (e) = (c) - (d) =			=					4" Diameter = ~0.67 gal/f
Casing Wate	er Volume (f) =	: (b) x (e) =		x		=		_				3" Diameter = ~0.37 gal/f
Casing Volu	mes = three	x (f)		=								2" Diameter = ~0.17 gal/f
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/12/03	0946					9.8	6.53	1.305	0.32	12.0	201	
	0949					10.58	6.45	1.300	0.12	3.4	150	
	0952					11.08	6.37	1.322	0.06	-5.0	39.9	
	0958					11.24	6.34	1.325	0.05	-12.6	11.4	
	1001					11.30	6.31	1.329	0.04	-15.1	6.71	
	1005	-				11.24	6.29	1.3	0.05	-16.4	5.65	
	1009					11.27	6.30	1.343	0.04	-18.0	4.68	
	1014					11.33	6.28	1.345	0.04	-20.2	4.82	
	1017				5	11.39	6.29	1.346	0.03	-21.3	4.55	Sampled 3 VOCs
	;											
	;											
	;											

Recovery Depth* (ft from TOC) : _____ Final Recovery Time* (min) : _____ * Taken As Final Water Level Reading and Time after sampling is complete and well has recovered.

Prepared By: _____ Checked By: _____



Project Name			Project N	No. 2001061		Page of						
		CATION ID: _	B-6	(Well N	lumber)			Target Pu	urge Volume	e:	gal	
Purging Meth	od/Equipmer	nt:				Sam	oling Equi	pment/ID No	:			
Well Casing I	Diameter (a)	in :		Unit Casir	ng Volume (b):						
Sounding (D	epth to Well	Bottom from 1	TOC) (c):	17.68	Stati	c Water Le	evel (Dept	h to Water fr	om TOC) (c	I):	11.74	6" Diameter = ~1.5 gal/f
_ength of Sta	tic Water Col	lumn in Casin	g (e) = (c) - (d) =			_=					4" Diameter = ~0.67 gal
Casing Wate	r Volume (f) =	= (b) x (e) =		x		=		_				3" Diameter = ~0.37 gal
Casing Volun	nes = three	x (f)		_ =								2" Diameter = ~0.17 gal
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/12/03	1045		1			10.43	6.57	1.088	0.07	-71.4	51.2	
	1050					10.58	6.50	1.069	0.04	-76.8	91.6	
	1055					10.51	6.49	1.057	0.04	-77.9	39.1	
	1101					10.59	6.46	1.047	0.08	-76.0	18.0	Very slow pumping, had to lower the pump 1 ft.
	1104					10.6	6.46	1.042	0.08	-74.4	25.5	
	1109					10.74	6.44	1.036	0.06	-73.6	15.9	
	1115					10.68	6.46	1.027	0.06	-74.7	31.1	
	1118					10.58	6.45	1.026	0.06	-73.2	19.2	
	1123				7	10.77	6.44	1.02	0.06	-73.0	12.6	Regular and DUP Samples taken for VOCs, PAHs, Nickel. MS/D for nickel was also taken.
	;											
	i											
	;											

S:\2001 PROJECTS\2001061 BROWNFIELDS (START)\TBAS_WISCONSIN\C&L INDUSTRIAL CLEANERS\REPORT\FIELD FORMS\B6-PURGE LOG.DOC



Project Name	e:C&Lli	ndustrial Clea	aners			Project No. 2001061 Phase Task						Page of	
SITE ID:		ATION ID: _	B-7	(Well N	Number)			Target Pu	urge Volume	ə:	gal		
Purging Meth	nod/Equipmer	nt:				Sam	ling Equi	oment/ID No	:				
Well Casing	Diameter (a)	in :		Unit Casir	ng Volume (b):							
Sounding (D	Depth to Well	Bottom from 1	TOC) (c):	17.84	Sta	tic Water L	evel (Dep	oth to Water	from TOC) ((d):	5.59	6" Diameter = ~1.5 gal/ft	
Length of Sta	atic Water Col	umn in Casin	g (e) = (c) - ((d) =			=					4" Diameter = ~0.67 gal/	
Casing Wate	er Volume (f) =	= (b) x (e) =		x		=		-				3" Diameter = ~0.37 gal/f	
Casing Volur	mes = three	x (f)		_ =								2" Diameter = ~0.17 gal/	
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gi)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description	
12/11/03	1030					9.31	6.77	0.749	0.8	107.2	9.21		
	1035			1		9.31	6.62	0.725	0.77	86	3.26		
	1038					9.34	6.59	0.725	0.74	75.4	1.71		
	:1041				3	9.28	6.56	0.725	0.73	73.5	1.41	Sampled 3 VOCs	
	:												
	:												
	;												
	;												
	;												
	;												
	1												
	;												



Project Name: C & L Industrial Cleaners							Project N	lo. <u>2001061</u>	Phase	Task		Page of
ITE ID:	LOC	ATION ID:	B - 12	(Well I	Number)			Target Pu	urge Volume	e:	gal	
urging Meth	od/Equipmer	ıt:				Samp	ling Equi	oment/ID No	:			
Vell Casing	Diameter (a)	in :		_ Unit Casir	ng Volume (b):						
ounding (D	epth to Well	Bottom from T	OC) (c):	16.69	Sta	tic Water L	evel (Dep	oth to Water	from TOC)	(d):	6.33	6" Diameter = ~1.5 gal/
ength of Sta	tic Water Col	umn in Casin	g (e) = (c) - (d) =								4" Diameter = ~0.67 ga
asing Wate	r Volume (f) =	= (b) x (e) =		x				_				3" Diameter = ~0.37 ga
asing Volun	nes = three	x (f)		_ =								2" Diameter = ~0.17 ga
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/11/03	1318					9.4	6.59	1.416	0.41	115.1	31	
	1321					10.07	6.53	1.286	0.19	96.8	22	
	1328					10.64	6.50	0.98	0.07	32.5	11.4	
	1331					10.57	6.48	0.960	0.07	24.1	8.51	
	1334					10.7	6.48	0.944	0.06	19.0	6.23	
	1337					10.69	6.47	0.936	0.06	14.5	5.48	
	1340					10.67	6.45	0.927	0.06	12.8	4.5	
	1343					10.7	6.43	0.924	0.06	11.3	3.98	Sampled 3 VOCs
	;											
	;											
	i											
	;											



Project Name	e:C&LI	ndustrial Clea	aners				Project N	No. 2001061	Phase	Task		Page of
SITE ID:	LOC	CATION ID: _	_B - 16	(Well	Number)			Target Pu	urge Volume	e:	gal	
Purging Meth	nod/Equipmer	nt:				Samp	ling Equi	pment/ID No:				
Well Casing	Diameter (a)	in :		Unit Casir	ng Volume (b):						
Sounding (D	Depth to Well	Bottom from T	TOC) (c):	17.97	Stat	tic Water L	evel (De	oth to Water	from TOC)	(d):	7.69	6" Diameter = ~1.5 gal/ft
Length of Sta	atic Water Co	lumn in Casin	g (e) = (c) - ((d) =			=					4" Diameter = ~0.67 gal/
Casing Wate	er Volume (f) =	= (b) x (e) =		×		:		_				3" Diameter = ~0.37 gal/
Casing Volur	mes = three	x (f)		_ =								2" Diameter = ~0.17 gal/
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	pН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/11/03	0920					9.67	6.09	1.037	0.43	116.6	6.23	
	0923					9.03	6.04	1.10	0.23	126.0	6.41	
	0926					9.10	6.03	1.130	0.21		5.53	
	0929					9.11	6.02	1.133	0.22	133.5	3.71	
	0932					9.04	6.01	1.131	0.21	136.2	2.96	
	0935				5	8.92	6.0	1.125	0.20	138.7	2.56	
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1	;											
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	;											
	;	1										



Project Name	e:C&LIr	ndustrial Clea	aners				Project N	lo. <u>2001061</u>	Phase	Task		Page of
SITE ID:		ATION ID:	MW - 1	(Wel	Number)			Target Pu	irge Volume	:	gal	
Purging Meth	nod/Equipmen	ıt:				Samp	oling Equi	pment/ID No:	:			
Well Casing	Diameter (a)	in :		_ Unit Casir	ng Volume (b):	- 4					
Sounding (D	Depth to Well	Bottom from	TOC) (c):	17.49	Stat	tic Water L	evel (Dep	oth to Water	from TOC) ((d):	9.71	6" Diameter = ~1.5 gal/ft
Length of Sta	atic Water Col	umn in Casin	g (e) = (c) - (d) =			=					4" Diameter = ~0.67 gal/f
Casing Wate	er Volume (f) =	= (b) x (e) =		x	a			-				3" Diameter = ~0.37 gal/f
Casing Volu	mes = three	x (f)		=		_						2" Diameter = ~0.17 gal/f
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gi)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/11/03	1412					9.0	6.31	1.070	2.57	80.1	67.2	
	1415					10.49	6.55	1.077	1.98	75.8	23.3	
	1418					10.79	6.59	1.082	1.66	75.8	12.0	
	1421					10.84	6.59	1.086	1.48	76.3	7.40	
	1424					10.82	6.58	1.087	1.33	76	5.55	
	1427					10.79	6.58	1.083	1.27	74.7	3.77	
	1430					10.88	6.58	1.079	1.15	70.9	5.04	
	1433					10.93	6.57	1.077	1.04	68.1	5.0	
	1436					10.98	6.57	1.076	1.01	66.9	4.04	Sampled, and collected the MS/D and DUP
	3											
	;											
	;											

Recovery Depth* (ft from TOC) : _____ Final Recovery Time* (min) : _____

* Taken As Final Water Level Reading and Time after sampling is complete and well has recovered.

Prepared By: ME

Checked By:



Project Name	e:C&Llr	ndustrial Clea	aners				Project N	lo. 2001061	_ Phase _	Task		Page of
SITE ID:		ATION ID: _	MW - 2	(Well	Number)			Target Pu	irge Volume	:	gal	
Purging Meth	nod/Equipmen	nt:				Samp	ling Equi	oment/ID No:	:	_		
Well Casing	Diameter (a)	in :		Unit Casir	ng Volume (b):						
Sounding (D	Depth to Well	Bottom from 1	TOC) (c):	17.77	Stati	c Water Le	evel (Dept	h to Water fr	om TOC) (d):	10.76	6" Diameter = ~1.5 gal/ft
Length of Sta	atic Water Col	umn in Casin	ig (e) = (c) - (d) =			=					4" Diameter = ~0.67 gal/
Casing Wate	er Volume (f) =	= (b) x (e) =		x	=			-				3" Diameter = ~0.37 gal/
Casing Volur	mes = three	x (f)		_ =								2" Diameter = ~0.17 gal/
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/12/03	0845					9.97	6.56	0.987	1.87	124.2	45	
	0850					10.92	6.34	0.990	2.4	103.0	26.7	
	0853					11.09	6.38	0.993	1.50	90.8	17.5	
	0856					11.14	6.27	0.992	1.19	87.3	13.7	
	0900					11.20	6.37	0.994	1.0	90.8	12	
	0903					11.19	6.34	0.994	0.85	77.3	10.7	
	0909					11.19	6.33	0.996	0.77	73.3	9.3	
•	0915					11.22	6.32	0.996	0.74	71.6	8.59	
	0918				5	11.25	6.29	0.997	0.69	70.0	8.5	Sampled 3 VOCs
	;											
	;					5						
	;											

Recovery Depth* (ft from TOC) : _____ Final Recovery Time* (min) : _____

* Taken As Final Water Level Reading and Time after sampling is complete and well has recovered.

Prepared By: ME

Checked By:



TE ID:	LOC	CATION ID:	MW - 3	(Wel	Number)			Target Pu	irge Volume	e:	gal	
		nt:				Samp	oling Equi	pment/ID No:				
		in :										
ounding (D	epth to Well	Bottom from 1	⁻ OC) (c):	17.52	Stat	tic Water L	.evel (Dep	oth to Water	from TOC) ((d):	7.06	6" Diameter = ~1.5 gal/f
ength of Sta	tic Water Co	lumn in Casin	g (e) = (c) - (d) =			=					4" Diameter = ~0.67 gal
asing Wate	r Volume (f) =	= (b) x (e) =		x	=			_				3" Diameter = ~0.37 gal
asing Volun	nes = three	x (f)		_ =	-							2" Diameter = ~0.17 gal
Date	Time 24hr	Recovery Time (min)	Purge Rate (gal/min)	Dynamic H2O Level (ft)	Volume Purged (gl)	Temp (C°)	рН	Specific Conductivity (ms/cm)	Dissolved oxygen (mg/L)	Redox (mV)	Turbidity (NTU)	Water Description
12/11/03	1130					8.99	6.26	1.102	6.18	125.3	13.2	
	1133					9.23	6.23	1.103	5.86	130.2	4.7	
	1136					9.31	6.19	1.107	5.45	133.0	3.6	
	1139				3	9.36	6.17	1.109	5.27	132.2	2.8	Sampled
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	;		11.11						C			

Appendix E

Chain of Custody Records

REQUEST			CES D1 W. MILIT		ROTH						1-800-338-SCAN
REPORT TO: Name: Day Company: TN Address: 1233 At. 10	(Vo, 1) F Assoc N. Alay	Tair Rd	Sa. 1. 2 53226	200	BILL TO Name: Compan Address:	: (if d y:	ifferer	nt fror	n Re	port 1	Fo info)
Phone: (<u>414</u>) P.O.# Project # <u>20040</u> Location <u>kar</u>	61-623	<u>0.</u> 7Quote			Phone:	(
Sample T (Check all that Check all that Groundw Wastewa Soil/Solid Drinking Oil Vapor Other	at apply) ater ter	Date Ne	und Time mal sh (Pre-approv eded d By			/	43	10 T	12		sheet if necessary)
LAB USE ONLY	DATE	TIME	No. of Containers	SAMPL		1)	1	1	\langle		REMARKS
	12-10-15	1115	1	2003 2003 NO	508			1			
		1200	3	2-003TN	V			1			lemply vint-
		1300	4	200 51N							
		1200	2	20037N					-	-	Icmply vial
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	12 19-03		6	20037N		3	1	2			-
	12-9-03		5	1 5				Z			-

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CHAIN OF CUSIC	JD1 KECO	KD	Rec'd on ice?
SAMPLERS: (Signature) (4.1)	at		Comments:
RELINQUISHED BY (Signature)	DATE/TIME 12-10-03 1400	REGEIVED BY: (Signature)	
AELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY. (Signature)	DATE/TIME

12-9-03 1400

OTTA

TAT

1445

OF CUSTODY BECODD

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Ship. (Hand Comm. Cont. OK Y N N/A es leaking? Y N N/A
Seals	OK? Y N N/A on ice? Y N N/A`(
Comr	nents:

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REPORT TO: Name: DAU Company: TO Address: DAU	. 7		RED		BILL TO Name: _ Compan Address	iy:							
Phone: (<u>1</u> <u>44</u> P.O.# Project # <u>2001</u> Location (<u>11</u>	4061	Quote	7)#		Phone:	(AN	ALY	TIC			STS
Sample T (Check all tha Groundw Wastewa Soil/Solid Drinking Oil Vapor Other	at apply) vater ter	Date Net	sh (Pre-appro eeded ed By	oved by Lab)			N. S.	1	7				
LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMP	E ID	12	13	1	1		/	REM	ARK
	1-14/ 2	1:45	6	1 Billie	13.18	3	·	1		1,		- 2-	
		13:08	6	J. 19	01519	3	3	1		-		, et	
		1.1.2	5	40.03 Th			1	1	2	-	1	C & Fre	FIE
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	4	0.930	2	2003TN 2003TA			6	1	-	-			
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CHAIN O		ΓΟDΥ	RECO					Ship. Samp Seals	Cont. les le OK?	OK)? Y Y	N N N N N N N N	/A /A /A
SAMPLERS: (Signa	iture)	lite					0	Com	ment	s:			
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The second secon	oignature)	DAT											
RELINQUISHED BY:			E/TIME	RECEIVED FC					TIME				

REQUI				ICES 01 W. MIL	LITARY	rd.	ROTH	ISCH		WI	5447	4	1-800)-338-	SCAN
REPORT TO: Name: Company: Address: Phone: (P.O.# Project # <u>20</u> Location	Dav 1N 1000 1100 100	» Лусан . N N . N N . N К Ер . U C 7 - U . I - OZ - 31	10 4 6 10 4 6 10 1 17.2 707Quote	<u>53 2</u>	2.6		BILL TO Name: _ Compar Address Phone:	iy:)		•			
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LAB USE O	NLY	DATE	TIME	No. of Container		SAMPL	E ID	1	NI	1/1)/	_		REM	ARKS
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		12-10-03					<u>,1508</u> 01514	3	2	4			11	11	"
		17-10-02	205			<u>)) // / (</u>	-1217								
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CHAIN Samplers:				RECO	ORD					Ship. Samp Seals Rec'd	Cont. les le OK? on lc	OK aking e?		N N	A
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RELINQUISHE	v	(Signature)	1	e/time 13 <i>1800</i>	>		: (Signatur								
RELINQUISHE	DBY: ((Signature)	DAT	E/TIME	RECE	IVED BY	: (Signatur	e)				-			
RELINQUISHE	DBY: ((Signature)	DAT	E/TIME	RECE BY: (ElVED FO Signature)	A LABOR	ATORY		DATE	time :				

Phone: () P.O.# Project # Location	Verg Nerg N' 19 2512	h+ - ivi - ivi - ivi - ivi - ivi	53 Z Z (1. 200	Company	: (if d y:	ifferer	ANAL	Report	To info)	0-338-S 7. SQUES necessary	22 6 TS
Sample T (Check all that Groundw Wastewa Soil/Solid Drinking Oil Vapor Other	at apply) aten ter	Date Ne	und Time mal sh (Pre-appro eded d By			4	- AND	11				
LAB USE ONLY	DATE	TIME	Containers COMP GRAE	SAMPLI	EID	/	e priv				REMA	RKS
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	'	1140	3	26. CINNT		3						
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		1225	4	2003110015		3						
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RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
11 anni Carnos	12-203165	51
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
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RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATO
		BY (Signature)

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REPORT TO: Name: <u>David</u> Company: <u>SM</u> Address: <u>Ju</u> <u>Au</u> Phone: (<u>u</u>)	2 11 2 2 11 2 2 11 2	agt i	<u>i 1</u>	1 200	Compan Address	y:				Fo info)
P.O.# Project # <u>Sample Transform</u> (Check all that (Check all that (Ch	ype t apply) ater ter	Turnaro SI Nor BI Rus Date Ne	#	oved by Lab)			(1			AL REQUESTS sheet if necessary)
LAB USE ONLY	DATE	TIME	No. of Containers		PLE IĎ	15	X/	2		REMARKS
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	12-11-03		2	1	D52V		11			
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·····										
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RELINQUISHED BY:	Cimpeters	/ DATE								

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REQUEST		67		LITARY RD.	ROTH	ISCH		WI 54	4474	1-800-338-SCAN
REPORT TO: Name: Dav Company: <u>1 N</u> Address: <u>10 1</u>	1 11550	uricity.	NA DO		Compan	y:				To info)
Phone: () P.O.# Project # <u></u> Location	257. 1-02-376	1/2 C C			Phone:	(ANA	LYTIC	AL REQUESTS e sheet if necessary)
Sample Ty (Check all tha Groundw Wastewa Soil/Solid Drinking Oil Vapor Other	<i>it apply)</i> ater ter	Date Net		roved by Lab)			1.5	(age 3)		
LAB USE ONLY	DATE	TIME	No. of Container		LEID	12	N. N.			REMARKS
	12-12-03	1115	5	3 ZUOSTN	01558	5	3			Z EXINA FAHS
·	12-12 03	1115	2		D58	1	1			

CHAIN OF CUST	ODY RECC	ORD	Del'v: Hand Comm. Ship. Cont. OK Y N Samples leaking? Y N Seals OK? Y N Rec'd on ice? Y N
SAMPLERS: (Signature)	est		Rec'd on ice? Y N Comments:
RELINQUISHED BY (Signature) Maganel Tanst	DATE/TIME 17-12-13 1600	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY	

Ship. Cont. Of Samples leaki	(YNN/A ng?YNN/A
Seals OK?	Y N N/A
lec'd on ice?	Y N N/A C
Comments:	

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REQUEST FOR SERVICES **ENVIROSCAN SERVICES** 301 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN **REPORT TO:** BILL TO: (if different from Report To info) Name: Day d Voulat Name: Company: TN & Associates Company: Address: 11/33 N Maylow Kl 5.4.200 Address: MI Wanker WI 53226 Phone: (414) 257 4260 Phone: (P.O.# éř Project # Zeon Chel 62 3207 Quote # ANALYTICAL REQUESTS Location / sester with (use separate sheet if necessary) Sample Type **Turnaround Time** (Check all that apply) Normal Groundwater Rush (Pre-approved by Lab) Wastewater Soil/Solid Date Needed Drinking Water Approved By Oil Vapor O Other No. of SAMPLE ID LAB USE ONLY DATE TIME REMARKS Containers 2463TN41552 4 12-11-03 1445 .3 ... 3 SK 12-11 2 2 2002 TNIDIE SI 12-11-1.2 0925

	LOOK	AT	End		heet		>	Mor	C		
	12-11-03	1830		3	2063TN	1554.J	3				-
	12-11-03	1145		З		553	3			 	/
	12-12-03	0830		3	<u>9</u> 1	555	3				-
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	12-12-03	0900		3	8.,	356	3				/
	12-11-03	1445		3	1.1	P.52	3				/
· ····································	16-11-00	0135		2	200311	V01520	10				

CHAIN OF CUSTO SAMPLERS: (Signature)		RD	Del'v: Hand Comm. Ship. Cont. OK Y N N/A Samples leaking? Y N N/A Seals OK? Y N N/A Rec'd on ice? Y N N/A C Comments:
RELINQUISHED BY: (Signature)	DATE/TIME 12-12-03 1600	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE/TIME

ENVIROSCAN S REPORT TO: Name: Davi Company: TN Address: 1(33 Miliu Phone: (4)14 Project # 2 00106 Location Kence	d Vera H Asson M. A. 2.67- 1.02-37	12 - China - C	<u>6</u> <u>8</u>	Smite 200	BILL TO Name: _): (if diff) AN.	en Re				
Sample Ty (Check all that Check all that Wastewar Soil/Solid Drinking Oil Vapor Other	at apply) ater ter	Date Ne	ound Time rmal sh (Pre-appro eeded ed By			1	K	e sep	X	sneet ii	necessary)	
LAB USE ONLY	DATE	TIME	Containers COMP GRAB	SAMP	LE ID	134		1	/		REMAR	KS
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	12-12 03				D 58	3						
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RELINQUISHED BY: ((Signature)	DAT	E/TIME	RECEIVED FO	or Labori V	TORY	DATE	TIME				

Appendix F

Laboratory Analytical Reports

Detected Volatile Organics in Groundwater U.S. EPA Targeted Brownfields Assessment C&L Industrial Cleaners Site; Kenosha, Wisconsin

Contaminant	Comula ID	Well/	Met	hod 8021 (u	ıg/L)	Dilution	NR 140	NR 140
Contaminant	Sample ID	Geoprobe	Result	LOD	LOQ	Factor	PAL	ES
Benzene	2003TN01S58	B-6	0.322J	0.31	1.03	1	0.5	5
	2003TN01D58	B-6	0.319J	0.31	1.03	1	1	
cis-1,2-	2003TN01S04	GP-9	0.502J	0.23	0.77	1	7	70
Dichloroethylene	2003TN01S52	MW-1	149	0.23	0.77	50	1	
-	2003TN01D52	MW-1	162	0.23	0.77	50	1	
	2003TN01S55	B-3	16.3	0.23	0.77	5	1	
	2003TN01S53	MW-3	224	0.23	0.77	20	1	and a second
	2003TN01S54	B-12	152	0.23	0.77	10	1	
	2003TN01S58	B-6	13.4	0.23	0.77	1	1	
	2003TN01D58	B-6	14.2	0.23	0.77	1		
trans-1,2-	2003TN01S52	MW-1	26.4	0.39	1.3	1	20	100
Dichloroethylene	2003TN01D52	MW-1	26.2	0.39	1.3	1	1	
	2003TN01S54	B-12	5.70	0.39	1.3	10		
	2003TN01S58	B-6	0.524J	0.39	1.3	1		
Tetrachloroethylene	2003TN01S09	GP-4	0.337J	0.32	1.07	1	0.5	5
	2003TN01S09	GP-4	0.522J	0.32	1.07	1]	
	2003TN01S13	GP-1	1,130	0.32	1.07	100		
	2003TN01S55	B-3	56.1	0.32	1.07	5		
Trichloroethylene	2003TN01S13	GP-1	2.48	0.36	1.2	1	0.5	5
Vinyl Chloride	2003TN01S05	GP-13	2.59	0.2	0.67	1	0.02	0.2
	2003TN01S04	GP-9	7.21	0.2	0.67	1]	
	2003TN01S52	MW-1	2.51	0.2	0.67	1]	
	2003TN01D52	MW-1	2.56	0.2	0.67	1		
	2003TN01S57	B-5	0.272	0.2	0.67	1		
	2003TN01S53	MW-3	8.76	0.2	0.67	20		
	2003TN01S58	B-6	1.98	0.2	0.67	1		
	2003TN01D58	B-6	1.76	0.2	0.67	1		

Note: J - Estimated concentration below laboratory quantitation level.

Detected Volatile Organics in Soil U.S. EPA Brownfields Targeted Brownfields Assessment C&L Industrial Cleaners Site; Kenosha, Wisconsin

Contaminant	Comple ID	Well/	Met	Dilution		
Contaminant	Sample ID	Geoprobe	Result	LOD	LOQ	Factor
cis-1,2-	2003TN01S02	GP-11	0.0718	0.007	0.023	0.9
Dichloroethylene	2003TN01S03	GP-10	0.0768	0.007	0.023	0.9
	2003TN01S04	GP-9	0.0448	0.007	0.023	1
Tetrachloroethylene	2003TN01S13	GP-1	50	0.009	0.03	83.6
Trichloroethylene	2003TN01S02	GP-11	0.504	0.011	0.037	0.9



ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

Qualifier Descriptions

PROJECT NO.: 200106102370 REPORT NO.: 145819.21 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

J	Estimated concentration below laboratory quantitation level.
CSL	Check standard for this analyte exhibited a low bias. Sample results may also be biased low.
CSH	Check standard for this analyte exhibited a high bias. Sample results may also be biased high.



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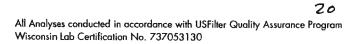
Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

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PROJECT NO.: 200106102370 REPORT NO.: 145819.20 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01D07	Matrix: GRDWTR		Sample Date/Time: 12/09/03 15:20				Lab No. 145829	
	<u>Resul t</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
<u>EPA 3010</u> Metal Prep	COMP		-	-	-		12/17/03	JJP
<u>EPA 6010</u> Total Nickel	0.008	mg∕l	0.003	0.01	1	J	12/24/03	BMS







Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.19 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S07	Matri	C: GROWTR		Sample Date/Tin	Lab No. 145828			
	<u>Resul t</u>	Units	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 8021 1,1,2-Trichloroethane Trichloroeth(yl)ene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl Chloride m- & p-Xylene o-Xylene PID Surrogate Recovery (S) HALL Surrogate Recovery (S)	<0.5 <0.36 <0.7 <1.10 <0.4 <0.31 <0.2 <0.62 <0.3 104. 120.	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.5 0.36 0.7 1.1 0.4 0.31 0.2 0.62 0.3	1.67 1.2 2.33 3.66 1.33 1.03 0.67 2.06 1.0	1 1 1 1 1 1 1 1 1	CSH	12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03	LMP LMP LMP LMP LMP LMP LMP LMP LMP LMP

19





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145819.18 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Benzene<0.31 $\mu g/l$ 0.311.03112/18/03LMPBromobenzene<0.41
Benzene<0.31 $\mu g/l$ 0.311.03112/18/03LMPBromobenzene<0.41
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
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tert-Butylbenzene<0.31 $\mu g/l$ 0.311.03112/18/03LMPCarbon Tetrachloride<0.59
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Chlorobenzene<0.31 $\mu g/l$ 0.311.03112/18/03LMPDibromochloromethane<0.87
Dibromochloromethane (0.87) $\mu g/l$ 0.87 2.9 1 $12/18/03$ LMPChloroethane (0.44) $\mu g/l$ 0.44 1.47 1 $12/18/03$ LMPChloroform (0.27) $\mu g/l$ 0.27 0.90 1 $12/18/03$ LMPChloromethane (0.29) $\mu g/l$ 0.27 0.90 1 $12/18/03$ LMPChlorotoluene (0.3) $\mu g/l$ 0.29 0.97 1 $12/18/03$ LMP2-Chlorotoluene (0.3) $\mu g/l$ 0.3 1.0 1 $12/18/03$ LMPDibromochloropropane(DBCP) (0.61) $\mu g/l$ 0.3 1.0 1 $12/18/03$ LMPDibromoethane(EDB) <1.10 $\mu g/l$ 0.61 2.03 1 $12/18/03$ LMP $1,2-Dichlorobenzene<0.51\mu g/l0.612.03112/18/03LMP1,3-Dichlorobenzene<0.51\mu g/l0.511.7112/18/03LMP1,4-Dichlorobenzene<0.33\mu g/l0.331.0112/18/03LMP1,4-Dichlorobenzene<0.33\mu g/l0.361.2112/18/03LMP1,4-Dichlorobenzene<0.36\mu g/l0.361.2112/18/03LMP1,4-Dichloroethane<0.36\mu g/l0.361.2112/18/03LMP1,1-Dichloroethane<0.36\mu g/l0.36$
Chloroethane<0.44 $\mu g/l$ 0.441.47112/18/03LMPChloroform<0.27
Chloroform $\langle 0.27 \\ \mu g/l$ $\mu g/l$ $0.27 \\ 0.90$ 1 $12/18/03$ LMPChloromethane $\langle 0.29 \\ \mu g/l$ 0.29 0.97 1 $12/18/03$ LMP2-Chlorotoluene $\langle 0.3 \\ \mu g/l$ 0.3 1.0 1 $12/18/03$ LMP4-Chlorotoluene $\langle 0.3 \\ \mu g/l$ 0.3 1.0 1 $12/18/03$ LMPDibromochloropropane(DBCP) $\langle 0.61 \\ \mu g/l$ 0.61 2.03 1 $12/18/03$ LMP1, 2-Dibromoethane(EDB) $\langle 1.10 \\ \mu g/l$ 1.1 3.66 1 $12/18/03$ LMP1, 2-Dichlorobenzene $\langle 0.51 \\ \mu g/l$ 0.51 1.7 1 $12/18/03$ LMP1, 3-Dichlorobenzene $\langle 0.51 \\ \mu g/l$ 0.29 0.977 1 $12/18/03$ LMP1, 4-Dichlorobenzene $\langle 0.32 \\ \mu g/l$ 0.29 0.977 1 $12/18/03$ LMP1, 4-Dichlorobenzene $\langle 0.32 \\ \mu g/l$ 0.29 0.977 1 $12/18/03$ LMP1, 4-Dichlorobenzene $\langle 0.32 \\ \mu g/l$ 0.36 1.2 1 $12/18/03$ LMP1, 2-Dichloroethane $\langle 0.36 \\ \mu g/l$ 0.36 1.2 1 $12/18/03$ LMP1, 2-Dichloroethane $\langle 0.39 \\ \mu g/l$ 0.39 1.3 1 $12/18/03$ LMP1, 2-Dichloroethane $\langle 0.39 \\ \mu g/l$ 0.39 1.3 1 $12/18/03$ LMP1, 2-Dichloroethylene $\langle 0.23 \\ \mu g/l$ 0.39 1.3 1 $12/18/03$ LMP1, 2-Dichlo
Chloromethane<0.29 $\mu g/l$ 0.290.97112/18/03LMP2-Chlorotoluene<0.3
2-Chlorotoluene $\langle 0.3 \\ \mu g/l$ $\mu g/l$ $0.3 \\ 1.0$ 1.0 1 $12/18/03$ LMP4-Chlorotoluene $\langle 0.3 \\ \mu g/l$ $\mu g/l$ 0.3 1.0 1 $12/18/03$ LMPDibromochloropropane(DBCP) $\langle 0.61 \\ \mu g/l$ $\mu g/l$ 0.61 2.03 1 $12/18/03$ LMP $1,2-0$ ibromoethane(EDB) $\langle 1.10 \\ \mu g/l$ $\mu g/l$ 1.1 3.66 1 $12/18/03$ LMP $1,2-0$ ichlorobenzene $\langle 3.00 \\ \mu g/l$ $\mu g/l$ 0.51 1.7 1 $12/18/03$ LMP $1,2-0$ ichlorobenzene $\langle 0.51 \\ \mu g/l$ 0.51 1.7 1 $12/18/03$ LMP $1,3-0$ ichlorobenzene $\langle 0.29 \\ \mu g/l$ 0.29 0.97 1 $12/18/03$ LMP $1,4-0$ ichlorobenzene $\langle 0.32 \\ \mu g/l$ 0.3 1.0 1 $12/18/03$ LMP $1,4-0$ ichlorobenzene $\langle 0.36 \\ \mu g/l$ 0.36 1.2 1 $12/18/03$ LMP $1,1-0$ ichloroethane $\langle 0.36 \\ \mu g/l$ 0.36 1.2 1 $12/18/03$ LMP $1,2-0$ ichloroethane $\langle 0.17 \\ \mu g/l$ 0.17 0.57 1 $12/18/03$ LMP $1,1-0$ ichloroeth(yl)ene $\langle 0.23 \\ \mu g/l$ 0.39 1.3 1 $12/18/03$ LMP $1,2-0$ ichloroeth(yl)ene $\langle 0.39 \\ \mu g/l$ 0.39 1.3 1 $12/18/03$ LMP $1,2-0$ ichloroethylene $\langle 0.25 \\ \mu g/l$ 0.25 0.83 1 $12/18/03$ LMP
4-Chlorotoluene $\langle 0.3 \\ \mu g/l$ $\mu g/l$ $0.3 \\ logon$ $1.0 \\ logon$ 1 $12/18/03 \\ logon$ LMPDibromochloropropane(DBCP) $\langle 0.61 \\ \mu g/l$ $\mu g/l$ $0.61 \\ 2.03 \\ 1.10 \\ \mu g/l$ $1.10 \\ \mu g/l$ $1.1 \\ 1.1 \\ 3.66 \\ 1.11 \\ 12/18/03 \\ 1.2$
Dibromochloropropane(DBCP)<0.61 $\mu g/l$ 0.612.03112/18/03LMP1,2-Dibromoethane(EDB)<1.10
1,2-Dibromoethane(EDB)<1.10
Dibromomethane<3.00 $\mu g/l$ 3.010.0112/18/03LMP1,2-Dichlorobenzene<0.51
1,2-Dichlorobenzene <0.51
1,3-Dichlorobenzene <0.29
1,4-Dichlorobenzene <0.3
Dichlorodifluoromethane <0.46 µg/l 0.46 1.53 1 12/18/03 LMP 1,1-Dichloroethane <0.36
1,1-Dichloroethane <0.36
1,2-Dichloroethane <0.17
cis-1,2-Dichloroeth(yl)ene <0.23
trans-1,2-Dichloroethylene <0.39 µg/l 0.39 1.3 1 12/18/03 LMP 1,2-Dichloropropane <0.25 µg/l 0.25 0.83 1 12/18/03 LMP
1,2-Dichloropropane <0.25 μg/l 0.25 0.83 1 12/18/03 LMP
1,3-Dichloropropane <0.67 μ g/l 0.67 2.23 1 12/18/03 LMP
2,2-Dichloropropane <1.50 μg/l 1.5 5.0 1 12/18/03 LMP
1,1-Dichloroprop(yl)ene <0.31 µg/l 0.31 1.03 1 12/18/03 LMP
t-1,3-Dichloroprop(yl)ene <0.25 μg/l 0.25 0.83 1 12/18/03 LMP
cis-1,3-Dichloroprop(yl)ene <0.26 µg/l 0.26 0.87 1 12/18/03 LMP
Ethylbenzene <0.5 μg/l 0.5 1.67 1 12/18/03 LMP Hexachlorobutadiene <1.00
Hexachlorobutadiene <1.00 µg/l 1.0 3.33 1 12/18/03 LMP Isopropylbenzene <0.31 µg/t 0.31 1.03 1 12/18/03 LMP
Isopropyl Ether <0.46 µg/l 0.46 1.53 1 12/18/03 LMP
p-Isopropyltoluene <0.32 µg/l 0.32 1.07 1 12/18/03 LMP
Methyl t-Butyl Ether(MTBE) <0.3 µg/l 0.3 1.0 1 12/18/03 LMP
Methylene Chloride $<0.51 \ \mu g/l \ 0.51 \ 1.7 \ 1 \ 12/18/03 \ LMP$
Naphthalene <0.8 µg/l 0.8 2.66 1 12/18/03 LMP
n-Propylbenzene <0.3 µg/l 0.3 1.0 1 12/18/03 LMP
Styrene <0.29 µg/l 0.29 0.97 1 12/18/03 LMP
Tetrachloroeth(yl)ene <0.32 µg/l 0.32 1.07 1 12/18/03 LMP
1,1,1,2-Tetrachloroethane <0.56 μg/l 0.56 1.86 1 12/18/03 LMP
1,1,2,2-Tetrachloroethane <0.61 µg/l 0.61 2.03 1 12/18/03 LMP
Toluene <0.3 µg/l 0.3 1.0 1 12/18/03 LMP
1,2,3-Trichlorobenzene <0.33 µg/l 0.33 1.1 1 12/18/03 LMP
1,2,4-Trichlorobenzene <0.47 μg/l 0.47 1.57 1 12/18/03 LMP
1,1,1-Trichloroethane <0.42 μg/l 0.42 1.4 1 12/18/03 LMP

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin lab Certification No. 737053130

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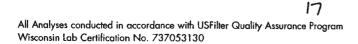


Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.17 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S05	Matrix	X: GRDWTR	S	ample Date/Ti	me: 12/09 /	03 14:00	Lab No. 145827	
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	<u>Analyzed</u>	<u>Analyst</u>
EPA 8021								
1,1,1,2-Tetrachloroethane	<0.56	µg/t	0.56	1.86	1		12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	µg/l	0.61	2.03	1		12/18/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/18/03	LMP
1,2,4-Trichlorobenzene	<0.47	µg/l	0.47	1.57	1		12/18/03	LMP
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	1		12/18/03	LMP
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/18/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/18/03	LMP
Trichlorofluoromethane	<0.7	µg∕l	0.7	2.33	1		12/18/03	LMP
1,2,3-Trichloropropane	<1.10	µg∕l	1.1	3.66	1		12/18/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg∕l	0.4	1.33	1	CSH	12/18/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg∕l	0.31	1.03	1		12/18/03	LMP
Vinyl Chloride	<0.2	µg/l	0.2	0.67	1		12/18/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/18/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
PID Surrogate Recovery (S)	102.	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	121.	%	-	-	1		12/18/03	LMP



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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.16 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S05	Matri	X: GRDWTR	Sar	mple Date/T	ime: 12/09/0	3 14:00	Lab No. 1	45827
	<u>Resul t</u>	Units	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
EPA 3010								
Metal Prep	COMP		-	-	-		12/17/03	JJP
EPA 6010								
Total Nickel	0.009	mg∕l	0.003	0.01	1	J	12/24/03	BMS
EPA 8021								
Benzene	<0.31	µg/l	0.31	1.03	1		12/18/03	LMP
Bromobenzene	<0.41	μg/l	0.41	1.37	1		12/18/03	LMP
Bromochloromethane	<0.19	µg/l	0.19	0.63	1		12/18/03	LMP
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1		12/18/03	LMP
Bromoform	<0.71	µg/l	0.71	2.36	1		12/18/03	LMP
Bromomethane	<0.57	µg/l	0.57	1.9	1		12/18/03	LMP
n-Butylbenzene	<0.36	µg/l	0.36	1.2	1		12/18/03	LMP
sec-Butylbenzene	<0.33	µg/l	0.33	1.1	1		12/18/03	LMP
tert-Butylbenzene	<0.31	µg/l	0.31	1.03	1		12/18/03	LMP
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	1		12/18/03	LMP
Chlorobenzene	<0.31	µg/l	0.31	1.03	1		12/18/03	LMP
Dibromochloromethane	<0.87	µg/l	0.87	2.9	1		12/18/03	LMP
Chloroethane	<0.44	µg/l	0.44	1.47	1		12/18/03	LMP
Chloroform	<0.27	µg/l	0.27	0.90	1		12/18/03	LMP
Chloromethane	<0.29	µg/l	0.29	0.97	1		12/18/03	LMP
2-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
4-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1		12/18/03	LMP
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1		12/18/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10.0	1		12/18/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1		12/18/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1		12/18/03	LMP
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1		12/18/03	LMP
1,1-Dichloroethane	<0.36	µg/l	0.36	1.2	1		12/18/03	LMP
1,2-Dichloroethane	<0.17	µg/l	0.17	0.57	1		12/18/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1		12/18/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	µg/l	0.23	0.77	1		12/18/03	LMP
trans-1,2-Dichloroethylene	<0.39	µg/l	0.39	1.3	1		12/18/03	LMP
1,2-Dichloropropane	<0.25	µg/l	0.25	0.83	1		12/18/03	LMP
1,3-Dichloropropane	<0.67	µg/l	0.67	2.23	1		12/18/03	LMP
2,2-Dichloropropane	<1.50	µg∕l	1.5	5.0	1		12/18/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	µg∕l	0.31	1.03	1		12/18/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	µg∕l	0.25	0.83	1		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0.26	0.87	1		12/18/03	LMP
Ethylbenzene	<0.5	μg/l	0.5	1.67	1		12/18/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/18/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1		12/18/03	LMP
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1		12/18/03	LMP
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/18/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
Methylene Chloride	<0.51	µg/l	0.51	1.7	1		12/18/03	LMP
Naphthalene	<0.8	μg/[0.8	2.66	1		12/18/03	LMP
n-Propylbenzene	<0.3	μg/l	0.3	1.0	1		12/18/03	LMP
Styrene	<0.29	μg/t	0.29	0.97	1		12/18/03	LMP
Tetrachloroeth(yl)ene	<0.32	µg/t	0.32	1.07	1		12/18/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.15 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TNO1SO4	Matri	C: GRDWTR	:	Sample Date/Ti	ime: 12/09/	03 14:35	Lab No. 1	45826
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 8021								
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	µg/l	0.61	2.03	1		12/18/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/18/03	LMP
1,2,4-Trichlorobenzene	<0.47	µg∕l	0.47	1.57	1		12/1 8/ 03	LMP
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	1		12/18/03	LMP
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/18/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/18/03	LMP
Trichlorofluoromethane	<0.7	μg/ l	0.7	2.33	1		12/18/03	LMP
1,2,3-Trichloropropane	<1.10	µg∕l	1.1	3.66	1		12/18/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg∕l	0.4	1.33	1	CSH	12/18/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg∕l	0.31	1.03	1		12/18/03	LMP
Vinyl Chloride	7.21	µg/l	0.2	0.67	1		12/18/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/18/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
PID Surrogate Recovery (S)	104.	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	110.	%	-	-	1		12/18/03	LMP

.





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.14 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Presult Units LOD LOD Dilution factor Qualifiers Analyzed Analyzed PPA 3010 Metal COMP - - 12/17/03 JJP PA 6010 Total 0.008 mg/l 0.003 0.01 1 J 12/17/03 BMS PA 6010 Total 0.008 mg/l 0.31 1.03 1 J 12/18/03 LMP Brownel 0.31 µg/l 0.31 1.03 1 12/18/03 LMP Bromochloromethane 0.31 µg/l 0.41 1.37 1 12/18/03 LMP Bromochloromethane 0.33 µg/l 0.43 1.07 1 12/18/03 LMP Bromochromethane 0.35 1.2 1 12/18/03 LMP Bromochromethane 0.35 1.2 1 12/18/03 LMP Bromochromethane 0.35 1.2 1 12/18/03 LMP Chromochromethane 0.35 µg/l 0.35	Sample ID: 2003TNO1SO4	Matri	X: GRDWTR	San	mple Date/T	ime: 12/09/03 14:35	Lab No. 1	45826
Netal Prep COMP 12/17/03 JJP PA 6010 Total 0.008 mg/l 0.003 0.01 1 J 12/17/03 JJP PA 6021 Berzene 0.011 1.03 1 J 12/18/03 LMP Berzene 0.31 µg/l 0.41 1.37 1 12/18/03 LMP Bromochoromethane 0.19 µg/l 0.41 1.37 1 12/18/03 LMP Bromochionenthane 0.057 µg/l 0.43 2.76 1 12/18/03 LMP Bromochionene 0.36 µg/l 0.33 1.1 1 12/18/03 LMP Bromochiorome 0.33 µg/l 0.33 1.1 1 12/18/03 LMP Sec-Butylbenzene <0.33		<u>Result</u>	Units	LOD	LOQ			Analyst
Netal Prep COMP 12/17/03 JJP PA 6010 Total 0.008 mg/l 0.003 0.01 1 J 12/17/03 JJP PA 6021 Berzene 0.011 1.03 1 J 12/18/03 LMP Berzene 0.31 µg/l 0.41 1.37 1 12/18/03 LMP Bromochoromethane 0.19 µg/l 0.41 1.37 1 12/18/03 LMP Bromochionenthane 0.057 µg/l 0.43 2.76 1 12/18/03 LMP Bromochionene 0.36 µg/l 0.33 1.1 1 12/18/03 LMP Bromochiorome 0.33 µg/l 0.33 1.1 1 12/18/03 LMP Sec-Butylbenzene <0.33	EDA 3010							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		COMP		_	-		12/17/03	
	neede trep	COMP				-	12/17/03	JJP
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	EPA 6010							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Total Nickel	0.008	mg/l	0.003	0.01	1 ј	12/24/03	BMS
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$								
$ \begin{array}{llllllllllllllllllllllllllllllllllll$.0.74		0.74	4 07		40.400.407	
$ \begin{array}{llllllllllllllllllllllllllllllllllll$								
$ \begin{array}{llllllllllllllllllllllllllllllllllll$								
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						-		
$ \begin{array}{llllllllllllllllllllllllllllllllllll$						-		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Bromomethane					-		
sec-Butylbenzene<0.33 $\mu g/l$ 0.331.1112/18/03LMPtert-Butylbenzene<0.31	n-Butylbenzene							
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	sec-Butylbenzene	<0.33		0.33	1.1	1		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		<0.31	µg/l	0.31	1.03	1		LMP
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		<0.59	µg/l	0.59	1.96	1	12/ 18 /03	LMP
Chloroethane <0.44 µg/l 0.44 1.47 1 12/18/03 LMP Chloroform <0.27			µg/l				12/18/03	LMP
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							12/18/03	LMP
Chloromethane (0.29) $\mu g/l$ 0.29 0.97 1 $12/18/03$ LMP2-Chlorotoluene (0.3) $\mu g/l$ 0.3 1.0 1 $12/18/03$ LMP4-chlorotoluene (0.3) $\mu g/l$ 0.3 1.0 1 $12/18/03$ LMP 4 -chlorotoluene (0.3) $\mu g/l$ 0.61 2.03 1 $12/18/03$ LMP $1,2-0$ ibromoethane(EDB) <1.10 $\mu g/l$ 1.1 3.66 1 $12/18/03$ LMP $1,2-0$ ichlorobenzene <0.51 $\mu g/l$ 0.61 2.03 1 $12/18/03$ LMP $1,2-0$ ichlorobenzene <0.51 $\mu g/l$ 0.51 1.7 1 $12/18/03$ LMP $1,3-0$ ichlorobenzene <0.29 $\mu g/l$ 0.29 0.97 1 $12/18/03$ LMP $1,4-0$ ichlorobenzene <0.35 $\mu g/l$ 0.29 0.97 1 $12/18/03$ LMP $1,4-0$ ichlorobenzene <0.36 $\mu g/l$ 0.46 1.553 1 $12/18/03$ LMP $1,1-0$ ichloroethane <0.36 $\mu g/l$ 0.36 1.2 1 $12/18/03$ LMP $1,2-0$ ichloroeth(yl)ene <0.39 $\mu g/l$ 0.39 1.3 1 $12/18/03$ LMP $1,2-0$ ichloroeth(yl)ene <0.29 $\mu g/l$ 0.39 1.3 1 $12/18/03$ LMP $1,2-0$ ichloroeth(yl)ene <0.39 $\mu g/l$ 0.39 1.3 1 $12/18/03$ LMP $1,2-0$ ichlororothylene						-		
2-Chlorotoluene<0.3 $\mu g/l$ 0.31.01 $12/18/03$ LMP4-Chlorotoluene<0.3								
4-ChlorotolueneCO.3 $\mu g/l$ D.31.01 $12/18/03$ LMPDibromochloropropane(DBCP)<0.61								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$								
1,2-Dibromoethane(EDB)<1.10 $\mu g/l$ 1.13.66112/18/03LMPDibromomethane<3.00								
Dibromomethane <3.00 µg/l 3.0 10.0 1 12/18/03 LMP 1,2-Dichlorobenzene <0.51								
1,2-Dichlorobenzene (0.51) $\mu g/l$ (0.51) (1.7) <th< td=""><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	•							
1,3-Dichlorobenzene<0.29 $\mu g/l$ 0.290.97112/18/03LMP1,4-Dichlorobenzene<0.3			• -			-		
1,4-Dichlorobenzene<0.3 $\mu g/l$ 0.31.0112/18/03LMPDichlorodifluoromethane<0.46						-		
Dichlorodifluoromethane<0.46 $\mu g/l$ 0.461.53112/18/03LMP1,1-Dichloroethane<0.36	1,4-Dichlorobenzene							
1,2-Dichloroethane $\langle 0.17 \ \mu g/l$ $0.17 \ 0.57 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloroeth(yl)ene $\langle 0.39 \ \mu g/l$ $0.39 \ 1.3 \ 1$ $12/18/03 \ LMP$ cis-1,2-Dichloroeth(yl)ene $0.502 \ \mu g/l$ $0.23 \ 0.77 \ 1$ $J \ 12/18/03 \ LMP$ trans-1,2-Dichloroethylene $\langle 0.39 \ \mu g/l$ $0.39 \ 1.3 \ 1$ $12/18/03 \ LMP$ 1,2-Dichloroethylene $\langle 0.25 \ \mu g/l \ 0.25 \ 0.83 \ 1$ $12/18/03 \ LMP$ 1,2-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 2,2-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloropropane $\langle 0.67 \ \mu g/l \ 0.67 \ 2.23 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloroprop(yl)ene $\langle 0.25 \ \mu g/l \ 0.31 \ 1.03 \ 1$ $12/18/03 \ LMP$ 1,1-Dichloroprop(yl)ene $\langle 0.25 \ \mu g/l \ 0.25 \ 0.83 \ 1$ $12/18/03 \ LMP$ cis-1,3-Dichloroprop(yl)ene $\langle 0.26 \ \mu g/l \ 0.26 \ 0.87 \ 1$ $12/18/03 \ LMP$ Ethylbenzene $\langle 0.5 \ \mu g/l \ 0.5 \ 1.67 \ 1$ $12/18/03 \ LMP$ Hexachlorobutadiene $\langle 1.00 \ \mu g/l \ 1.0 \ 3.33 \ 1$ $12/18/03 \ LMP$ Isopropylbenzene $\langle 0.46 \ \mu g/l \ 0.46 \ 1.53 \ 1$ $12/18/03 \ LMP$	Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1		
1,1-Dichloroeth(yl)ene <0.39 $\mu g/l$ 0.39 1.3 1 $12/18/03$ LMPcis-1,2-Dichloroeth(yl)ene 0.502 $\mu g/l$ 0.23 0.77 1J $12/18/03$ LMPtrans-1,2-Dichloroethylene <0.39 $\mu g/l$ 0.39 1.3 1 $12/18/03$ LMP1,2-Dichloroptopane <0.25 $\mu g/l$ 0.25 0.83 1 $12/18/03$ LMP1,3-Dichloropropane <0.67 $\mu g/l$ 0.67 2.23 1 $12/18/03$ LMP2,2-Dichloropropane <1.50 $\mu g/l$ 0.67 2.23 1 $12/18/03$ LMP2,2-Dichloropropane <1.50 $\mu g/l$ 0.67 2.23 1 $12/18/03$ LMP1,1-Dichloroprop(yl)ene <0.25 $\mu g/l$ 0.31 1.03 1 $12/18/03$ LMPt-1,3-Dichloroprop(yl)ene <0.25 $\mu g/l$ 0.25 0.83 1 $12/18/03$ LMPt-1,3-Dichloroprop(yl)ene <0.26 $\mu g/l$ 0.26 0.87 1 $12/18/03$ LMPtehylbenzene <0.26 $\mu g/l$ 0.55 1.67 1 $12/18/03$ LMPHexachlorobutadiene <1.00 $\mu g/l$ 0.31 1.03 1 $12/18/03$ LMPIsopropyl Ether <0.46 $\mu g/l$ 0.31 1.03 1 $12/18/03$ LMP		<0.36	µg/l	0.36			12/18/03	LMP
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			µg/l				12/18/03	LMP
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							12/18/03	
1,2-Dichloropropane <0.25								
1,3-Dichloropropane <0.67								
2,2-Dichloropropane <1.50								
1,1-Dichloroprop(yl)ene <0.31								
t-1,3-Dichloroprop(yl)ene <0.25								
cis-1,3-Dichloroprop(yl)ene <0.26								
Ethylbenzene <0.5 µg/l 0.5 1.67 1 12/18/03 LMP Hexachlorobutadiene <1.00							-	
Hexachlorobutadiene <1.00 µg/l 1.0 3.33 1 12/18/03 LMP Isopropylbenzene <0.31						-		
Isopropylbenzene <0.31 µg/l 0.31 1.03 1 12/18/03 LMP IsopropylEther <0.46 µg/l 0.46 1.53 1 12/18/03 LMP	Hexachlorobutadiene							
Isopropyl Ether <0.46 µg/l 0.46 1.53 1 12/18/03 LMP	Isopropylbenzene	<0.31		0.31	1.03	1		
	1 17					1		
p-Isopropyltoluene <0.32 µg/l 0.32 1.07 1 12/18/03 LMP			µg/l			1		
Methyl t-Butyl Ether(MTBE) <0.3 µg/l 0.3 1.0 1 12/18/03 LMP							12/18/03	LMP
Methylene Chloride <0.51 µg/l 0.51 1.7 1 12/18/03 LMP								LMP
Naphthalene <0.8 μg/l 0.8 2.66 1 12/18/03 LMP								
n-Propylbenzene <0.3 μg/l 0.3 1.0 1 12/18/03 LMP	1,7							
Styrene <0.29 μg/l 0.29 0.97 1 12/18/03 LMP Tetrachloroeth(yl)ene <0.32							• •	
Tetrachloroeth(yl)ene <0.32 µg/l 0.32 1.07 1 12/18/03 LMP	retraction detricyt jene	×0.32	μg/t	0.32	1.07	I	12/18/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.13 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S01	Matri	K: GRDWTR	S	ample Date/Tin	ne: 12/09/0	03 13:20	Lab No. 14	45825
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021								
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	μg/l	0.61	2.03	1		12/18/03	LMP
Toluene	<0.3	μg/l	0.3	1.0	1		12/18/03	LMP
1,2,3-Trichlorobenzene	<0.33	μg/l	0.33	1.1	1		12/18/03	LMP
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	1		12/18/03	LMP
1,1,1-Trichloroethane	<0.42	μg/l	0.42	1.4	1		12/18/03	LMP
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/18/03	LMP
Trichloroeth(yl)ene	<0.36	μg/l	0.36	1.2	1		12/18/03	LMP
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/18/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/18/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1	CSH	12/18/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/18/03	LMP
Vinyl Chloride	2.59	μg/l	0.2	0.67	1		12/18/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/18/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/18/03	LMP
PID Surrogate Recovery (S)	104.	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	113.	%	-	-	1		12/18/03	LMP
EPA 8310								
Acenaphthene	<0.33	µg/l	0.06	0.20	5.5		12/23/03	SLO
Acenaphthylene	<0.33	μg/l μg/l	0.06	0.20	5.5		12/23/03	SLO
Anthracene	<0.275	µg/t µg/l	0.05	0.17	5.5		12/23/03	SLO
Benzo(a)Anthracene	<0.275	μg/(μg/(0.04	0.13	5.5		12/23/03	SLO
Benzo(a)Pyrene	<0.0935	μg/l	0.017	0.057	5.5		12/23/03	SLO
Benzo(b)Fluoranthene	<0.22	μg/l	0.04	0.13	5.5		12/23/03	SLO
Benzo(k)Fluoranthene	<0.22	μg/l	0.04	0.13	5.5		12/23/03	SLO
Benzo(ghi)Perylene	<0.275	μg/l	0.05	0.17	5.5		12/23/03	SLO
Chrysene	<0.275	μg/l	0.05	0.17	5.5		12/23/03	SLO
Dibenzo(a,h)Anthracene	<0.33	μg/l	0.06	0.20	5.5		12/23/03	SLO
Fluoranthene	<0.33	μg/l	0.06	0.20	5.5		12/23/03	SLO
Fluorene	<0.66	μg/l	0.12	0.40	5.5		12/23/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.275	μg/l	0.05	0.17	5.5		12/23/03	SLO
1-Methyl Naphthalene	<0.44	μg/l	0.08	0.27	5.5		12/23/03	SLO
2-Methyl Naphthalene	<0.605	µg/l	0.11	0.37	5.5		12/23/03	SLO
Naphthalene	<0.55	μg/l	0.1	0.33	5.5		12/23/03	SLO
Phenanthrene	<0.44	μg/l	0.08	0.27	5.5		12/23/03	SLO
Pyrene	<0.495	μg/l	0.09	0.30	5.5		12/23/03	SLO
9,10-Diphenylanthracene (S)	25.3	¥9/۲	-	-	5.5		12/23/03	SLO
Method 3510 Liquid Ext.	COMP	~*	-	-	-		12/15/03	KAM
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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.12 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S01	Matri	X: GROWTR	San	nple Date/T	ime: 12/09/03 13:20	Lab No. 14	45 825
	<u>Result</u>	<u>Unițs</u>	LOD	LOQ	Dilution <u>Factor Qualifiers</u>	Date <u>Analyzed</u>	<u>Analyst</u>
EDA 3010							
<u>EPA 3010</u> Metal Prep	COMP		_	_	-	12/17/03	JJP
Metatriep	COMP				-	12/17/05	JJP
EPA 6010							
Total Nickel	0.015	mg∕l	0.003	0.01	1	12/24/03	BMS
EPA 8021							
Benzene	<0.31	μg/l	0.31	1.03	1	12/18/03	LMP
Bromobenzene	<0.41	μg/l	0.41	1.37	1	12/18/03	LMP
Bromochloromethane	<0.19	µg∕l	0.19	0.63	1	12/18/03	LMP
Bromodichloromethane Bromoform	<0.83	µg/l	0.83	2.76	1	12/18/03	
Bromomethane	<0.71 <0.57	μg/l μg/l	0.71 0.57	2.36 1.9	1 1	12/18/03	LMP
n-Butylbenzene	<0.36	μg/t μg/t	0.36	1.2	1	12/18/03	LMP LMP
sec-Butylbenzene	<0.33	μg/(μg/(0.33	1.1	1	12/18/03 12/18/03	LMP
tert-Butylbenzene	<0.31	μg/l	0.31	1.03	1	12/18/03	LMP
Carbon Tetrachloride	<0.59	μg/l	0.59	1.96	1	12/18/03	LMP
Chlorobenzene	<0.31	μg/l	0.31	1.03	1	12/18/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1	12/18/03	LMP
Chloroethane	<0.44	μg/l	0.44	1.47	1	12/18/03	LMP
Chloroform	<0.27	μg/l	0.27	0.90	1	12/18/03	LMP
Chloromethane	<0.29	μg/l	0.29	0.97	1	12/18/03	LMP
2-Chlorotoluene	<0.3	µg/l	0.3	1.0	1	12/18/03	LMP
4-Chlorotoluene	<0.3	μg/l	0.3	1.0	1	12/18/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1	12/18/03	LMP
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1	12/18/03	LMP
Dibromomethane	<3.00	μg/l	3.0	10.0	1	12/18/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1	12/18/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1	12/18/03	LMP
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1	12/18/03	LMP
Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	1	12/18/03	LMP
1,1-Dichloroethane 1,2-Dichloroethane	<0.36 <0.17	µg/l	0.36 0.17	1.2 0.57	1 1	12/18/03	
1,1-Dichloroeth(yl)ene	<0.39	μg/l	0.39	1.3	1	12/18/03	LMP LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	μg/l μg/l	0.39	0.77	1	12/18/03 12/18/03	
trans-1,2-Dichloroethylene	<0.25	μg/l	0.39	1.3	1	12/18/03	LMP
1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	i	12/18/03	LMP
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	1	12/18/03	LMP
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1	12/18/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	µg/l	0.31	1.03	1	12/18/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0.25	0.83	1	12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0,26	0.87	1	12/18/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1	12/18/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1	12/18/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1	12/18/03	LMP
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1	12/18/03	LMP
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1	12/18/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	µg/l	0.3	1.0	1	12/18/03	LMP
Methylene Chloride	<0.51	µg/l	0.51	1.7	1	12/18/03	LMP
Naphthalene	<0.8	µg/l	0.8	2.66	1	12/18/03	LMP
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1	12/18/03	LMP
Styrene Totapoblepooth(v/l)one	<0.29	μg/l	0.29	0.97	1	12/18/03	LMP
Tetrachloroeth(yl)ene	<0.32	µg/l	0.32	1.07	1	12/18/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.11 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01D08	Matri	K: GRDWTR	Sa	ample Date/Ti	me: 12/10/0	3 11:15	Lab No. 14	45824
	<u>Result</u>	Units	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
<u>EPA 3010</u> Metal Prep	COMP		-	-	-		12/15/03	JJP
<u>EPA 6010</u> Total Nickel	0.0049	mg∕l	0.003	0.01	1	J	12/16/03	DJB

.





Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145819.10 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TNO1D13	Matri	K: GROWTR	Sam	ple Date/Tin	me: 12/10/0	3 13:00	Lab No. 14	45823
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date Analyzed	<u>Analyst</u>
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)Pyrene 1-Methyl Naphthalene	<0.0924 <0.0924 <0.077 <0.0616 <0.0261 <0.0616 <0.0616 <0.077 <0.0924 <0.0924 <0.0924 <0.185 <0.077 <0.123	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.04 0.05 0.05 0.05 0.06 0.12 0.05 0.12	0.20 0.20 0.17 0.13 0.057 0.13 0.13 0.17 0.20 0.20 0.20 0.40 0.17 0.27	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5		12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/23/03	SL0 SL0 SL0 SL0 SL0 SL0 SL0 SL0 SL0 SL0
2-Methyl Naphthalene Naphthalene Phenanthrene Pyrene 9,10-Diphenylanthracene (S) Method 3510 Liquid Ext.	<0.169 <0.154 <0.123 <0.139 68.8 COMP	μg/l μg/l μg/l μg/l %	0.11 0.1 0.08 0.09	0.37 0.33 0.27 0.30	1.5 1.5 1.5 1.5 1.5		12/23/03 12/23/03 12/23/03 12/23/03 12/23/03 12/15/03	SLO SLO SLO SLO SLO KAM



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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.9 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01D09	Matrix	C: GROWTR	9	Sample Date/Ti	me: 12/10/	03 12:00	Lab No. 14	45822
	<u>Result</u>	Units	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
EPA 8021_								
1,1,1,2-TetrachLoroethane	<0.56	µg/l	0.56	1.86	1		12/17/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	µg∕l	0.61	2.03	1		12/17/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/17/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/17/03	LMP
1,2,4-Trichlorobenzene	<0.47	µg/l	0.47	1.57	1		12/17/03	LMP
1,1,1-Trichloroethane	<0.42	µg∕l	0.42	1.4	1		12/17/03	LMP
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/17/03	LMP
Trichloroeth(yl)ene	<0.36	µg∕l	0.36	1.2	1		12/17/03	LMP
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/17/03	LMP
1,2,3-Trichloropropane	<1.10	µg∕l	1.1	3.66	1		12/17/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg∕l	0.4	1.33	1	CSH	12/17/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/17/03	LMP
Vinyl Chloride	<0.2	µg/l	0.2	0.67	1		12/17/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/17/03	LMP
o-Xylene	<0.3	µg∕l	0.3	1.0	1		12/17/03	LMP
PID Surrogate Recovery (S)	104.	%	-	-	1		12/17/03	LMP
HALL Surrogate Recovery (S)	112.	%	-	-	1		12/17/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.8 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01D09	Matri	K: GROWTR	San	nple Date/T	ime: 12/10/03 12:00	Lab No. 14	45822
	Result	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u> <u>Qualifiers</u>	Date Analyzed	<u>Analyst</u>
704.0							
<u>EPA 3010</u> Metal Prep	COMP		-	-	-	12/15/03	JJP
EPA 6010 Total Nickel	0.0857	mg/l	0.003	0.01	1	12/16/03	DJB
Iotat Micket	0.0007	angy c	0.005	0.01	I	12/10/05	000
EPA 8021							
Benzene	<0.31	μg/l	0.31	1.03	1	12/17/03	LMP
Bromobenzene	<0.41	μg/l	0.41	1.37	1	12/17/03	LMP
Bromochloromethane	<0.19	μg/l	0.19	0.63	1	12/17/03	LMP
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1	12/17/03	LMP
Bromoform	<0.71	μg/l	0.71	2.36	1 1	12/17/03	LMP
Bromomethane	<0.57 <0.36	μg/l	0.57 0.36	1.9 1.2	1	12/17/03	LMP LMP
n-Butylbenzene sec-Butylbenzene	<0.33	μg/l μg/l	0.33	1.1	1	12/17/03 12/17/0 3	LMP
tert-Butylbenzene	<0.33	μg/l	0.33	1.03	1	12/17/03	LMP
Carbon Tetrachloride	<0.59	μg/l	0.59	1.96	1	12/17/03	LMP
Chlorobenzene	<0.31	μg/l	0.31	1.03	1	12/17/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1	12/17/03	LMP
Chloroethane	<0.44	μg/l	0.44	1.47	1	12/17/03	LMP
Chloroform	<0.27	μg/l	0.27	0.90	1	12/17/03	LMP
Chloromethane	<0.29	µg/l	0.29	0.97	1	12/17/03	LMP
2-Chlorotoluene	<0.3	μg/l	0.3	1.0	1	12/17/03	LMP
4-Chlorotoluene	<0.3	µg/l	0.3	1.0	1	12/17/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1	12/17/03	LMP
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1	12/17/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10.0	1	12/17/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1	12/17/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1	12/17/03	LMP
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1	12/17/03	LMP
Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	1 1	12/17/03	LMP
1,1-Dichloroethane	<0.36	μg/l	0.36	1.2 0.57	1	12/17/03 12/17/03	LMP LMP
1,2-Dichloroethane 1,1-Dichloroeth(yl)ene	<0.17 <0.39	µg/l	0.17 0.39	1.3	1	12/17/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	μg/l μg/l	0.23	0.77	1	12/17/03	LMP
trans-1,2-Dichloroethylene	<0.39	μg/l	0.39	1.3	1	12/17/03	LMP
1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	i	12/17/03	LMP
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	1	12/17/03	LMP
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1	12/17/03	LMP
1,1-Dichloroprop(yl)ene	< 0.31	μg/l	0.31	1.03	1	12/17/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0.25	0.83	1	12/17/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1	12/17/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1	12/17/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1	12/17/03	LMP
Isopropylbenzene	<0.31	μg/l	0.31	1.03	1	12/17/03	LMP
Isopropyl Ether	<0.46	μg/l	0.46	1.53	1	12/17/03	LMP
p-Isopropyltoluene	<0.32	μg/l	0.32	1.07	1	12/17/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	μg/l	0.3	1.0	1	12/17/03	LMP
Methylene Chloride	<0.51	µg/l	0.51	1.7	1	12/17/03	LMP
Naphthalene	<0.8	μg/l	0.8	2.66	1	12/17/03	LMP
n-Propylbenzene	<0.3	μg/l	0.3	1.0	1	12/17/03	
Styrene Tetrachloroeth(yl)ene	<0.29	μg/l	0.29	0.97	1 1 J	12/17/03 12/17/03	LMP LMP
recracitor bein(yt)ene	0.522	µg∕l	0.32	1.07	I J	12/11/03	LUF



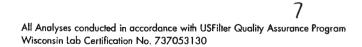


Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.7 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S13	Matrix	K: GRDWTR	Sa	mple Date/Ti	ime: 12/10/0	3 13:00	Lab No. 145821	
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/17/03	LMP
Trichloroeth(yl)ene	2.48	μg/l	0.36	1.2	1		12/17/03	LMP
Trichlorofluoromethane	<0.7	μg/l	0.7	2.33	1		12/17/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/17/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/17/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/17/03	LMP
Vinyl Chloride	<0.2	μg/l	0.2	0.67	1		12/17/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/17/03	LMP
o-Xylene	<0.3	μg/l	0.3	1.0	1		12/17/03	LMP
PID Surrogate Recovery (S)	94.9	%	-	-	1		12/17/03	LMP
HALL Surrogate Recovery (S)	111.	%	-	-	1		12/17/03	LMP
EPA 8310								
Acenaphthene	<0.0858	µg/l	0.06	0.20	1.4		12/23/03	SLO
Acenaphthylene	<0.0858	μg/l	0.06	0.20	1.4		12/23/03	SLO
Anthracene	<0.0715	μg/l	0.05	0.17	1.4		12/23/03	SLO
Benzo(a)Anthracene	<0.0572	μg/l	0.04	0.13	1.4		12/23/03	SLO
Benzo(a)Pyrene	<0.0243	μg/l	0.017	0.057	1.4		12/23/03	SLO
Benzo(b)Fluoranthene	<0.0572	μg/l	0.04	0.13	1.4		12/23/03	SLO
Benzo(k)Fluoranthene	<0.0572	μg/l	0.04	0.13	1.4		12/23/03	SLO
Benzo(ghi)Perylene	<0.0715	µg/l	0.05	0.17	1.4		12/23/03	SLO
Chrysene	<0.0715	µg/l	0.05	0.17	1_4		12/23/03	SLO
Dibenzo(a,h)Anthracene	<0.0858	μg/l	0.06	0.20	1.4		12/23/03	SLO
Fluoranthene	<0.0858	µg/l	0.06	0.20	1.4		12/23/03	SLO
Fluorene	<0.172	μg/l	0.12	0.40	1.4		12/23/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.0715	μg/l	0.05	0.17	1.4		12/23/03	SLO
1-Methyl Naphthalene	<0.114	μg/l	0.08	0.27	1.4		12/23/03	SLO
2-Methyl Naphthalene	<0.157	µg/l	0.11	0.37	1.4		12/23/03	SLO
Naphthalene	<0.143	µg/l	0.1	0.33	1.4		12/23/03	SLO
Phenanthrene	<0.114	μg/l	0.08	0.27	1.4		12/23/03	SLO
Pyrene	<0.129	μg/l	0.09	0.30	1.4		12/23/03	SLO
9,10-Diphenylanthracene (S)	51.9	%	-	-	1.4		12/23/03	SLO
Method 3510 Liquid Ext.	COMP		-	-	-		12/15/03	KAM



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Matrix: GROWTR

TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

Sample ID: 2003TN01S13

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

Sample Date/Time: 12/10/03 13:00

TELEPHONE FACSIMILE WEBSITE

Lab No. 145821

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.6 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample 10. 20051401515	hatti	C. GROWIN	36	imple bale/i	Inc. 12/10/0	5 15.00		5021
					Dilution		Date	
	Result	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
					<u></u>			
EPA 8021								
Benzene	<0.31	µg/l	0.31	1.03	1		12/17/03	LMP
Bromobenzene	<0.41	µg/l	0.41	1.37	1		12/17/03	LMP
Bromochloromethane	<0.19	μg/l	0.19	0.63	1		12/17/03	LMP
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1		12/17/03	LMP
Bromoform	<0.71	µg∕t	0.71	2.36	1		12/17/03	LMP
Bromomethane	<0.57	μg/l	0.57	1.9	1		12/17/03	LMP
n-Butylbenzene	<0.36	μg/l	0.36	1.2	1		12/17/03	LMP
sec-Butylbenzene	<0.33	μg/l	0.33	1.1	1		12/17/03	LMP
tert-Butylbenzene	<0.31	µg/l	0.31	1.03	1		12/17/03	LMP
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	1		12/17/03	LMP
Chlorobenzene	<0.31	μg/l	0.31	1.03	1		12/17/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1		12/17/03	LMP
Chloroethane	<0.44	μg/l	0.44	1.47	1		12/17/03	LMP
Chloroform	<0.27	µg/l	0.27	0.90	1		12/17/03	LMP
Chloromethane	<0.29	µg/l	0.29	0.97	1		12/17/03	LMP
2-Chlorotoluene	<0.3	μg/l	0.3	1.0	1		12/17/03	LMP
4-Chlorotoluene	<0.3	μg/l	0.3	1.0	1		12/17/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1		12/17/03	LMP
1,2-Dibromoethane(EDB)	<1.10	μg/l	1.1	3.66	1		12/17/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10.0	1		12/17/03	
1,2-Dichlorobenzene	<0.51	μg/l	0.51	1.7	1		12/17/03	LMP
1,3-Dichlorobenzene	<0.29	μg/l	0.29	0.97	1		12/17/03	LMP
1,4-Dichlorobenzene	<0.3	μg/l	0.3	1.0	1		12/17/03	
Dichlorodifluoromethane	<0.46	μg/1	0.46	1.53 1.2	1 1		12/17/03	LMP LMP
1,1-Dichloroethane 1,2-Dichloroethane	<0.36 <0.17	μg/l	0.36 0.17	0.57	1		12/17/03 12/17/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	μg/l	0.39	1.3	1		12/17/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	μg/l μg/l	0.39	0.77	1		12/17/03	LMP
trans-1,2-Dichloroethylene	<0.39	μg/l	0.39	1.3	1		12/17/03	LMP
1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	1		12/17/03	LMP
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	i		12/17/03	LMP
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	i	CSL	12/17/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	μg/l	0.31	1.03	1	001	12/17/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0.25	0.83	1		12/17/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0.26	0.87	1		12/17/03	LMP
Ethylbenzene	<0.5	μg/l	0.5	1.67	1		12/17/03	LMP
Kexachlorobutadiene	<1.00	μg/l	1.0	3.33	1		12/17/03	LMP
Isopropylbenzene	<0.31	μg/l	0.31	1.03	1		12/17/03	LMP
Isopropyl Ether	<0.46	μg/l	0.46	1.53	1		12/17/03	LMP
p-Isopropyltoluene	<0.32	μg/l	0.32	1.07	1		12/17/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	μg/l	0.3	1.0	1		12/17/03	LMP
Methylene Chloride	<0.51	μg/l	0.51	1.7	1		12/17/03	LMP
Naphthalene	<0.8	μg/l	0.8	2.66	1		12/17/03	LMP
n-Propylbenzene	<0.3	μg/l	0.3	1.0	1		12/17/03	LMP
Styrene	<0.29	µg/l	0.29	0.97	1		12/17/03	LMP
Tetrachloroeth(yl)ene	1,130.	μg/l	0.32	1.07	100		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.56	μg/l	0.56	1.86	1		12/17/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	μg/l	0.61	2.03	1		12/17/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/17/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/17 /03	LMP
1,2,4-Trichlorobenzene	<0.47	µg∕i	0.47	1.57	1		12/17/03	LMP
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	1		12/17/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.5 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TNO1S09	Matri	K: GRDWTR	:	Sample Date/Ti	me: 12/10/0	03 12:00	Lab No. 14	45820
	Desult	11-14-1	1.00	1.00	Dilution	0	Date	Amelicat
	<u>Result</u>	Units	LOD	LOQ	Factor	Qualifiers	<u>Analyzed</u>	<u>Analyst</u>
EPA 8021								
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/17/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	μg/l	0.61	2.03	1		12/17/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/17/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/17/03	LMP
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	1		12/17/03	LMP
1,1,1-Trichloroethane	<0.42	μg/l	0.42	1.4	1		12/17/03	LMP
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/17/03	LMP
Trichloroeth(yl)ene	<0.36	μg/l	0.36	1.2	1		12/17/03	LMP
Trichlorofluoromethane	<0.7	μg/l	0.7	2.33	1		12/17/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/17/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/17/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/17/03	LMP
Vinyl Chloride	<0.2	µg/l	0.2	0.67	1		12/17/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/17/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/17/03	LMP
PID Surrogate Recovery (S)	102.	%	-	-	1		12/17/03	LMP
HALL Surrogate Recovery (S)	114.	%	-	-	1		12/17/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.4 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S09	Matri	K: GRDWTR	Sar	mple Date/T	ime: 12/10/03 12:00	Lab No. 1	45820
	<u>Result</u>	<u>Units</u>	<u>L00</u>		Dilution <u>Factor</u> <u>Qualifiers</u>	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 3010							
Metal Prep	COMP		-	-	-	12/15/03	JJP
EPA 6010							
Total Nickel	0.0833	mg∕l	0.003	0.01	1	12/16/03	DJB
EPA 8021							
Benzene	<0.31	µg/l	0.31	1.03	1	12/17/03	LMP
Bromobenzene	<0.41	µ9/(µg/l	0.41	1.37	1	12/17/03	LMP
Bromochloromethane	<0.19	μg/l	0.19	0.63	1	12/17/03	LMP
Bromodichloromethane	<0.83	μg/l	0.83	2.76	1	12/17/03	LMP
Bromoform	<0.71	μg/l	0.71	2.36	1	12/17/03	LMP
Bromomethane	<0.57	μg/l	0.57	1.9	1	12/17/03	LMP
n-Butylbenzene	<0.36	μg/l	0.36	1.2	1	12/17/03	LMP
sec-Butylbenzene	<0.33	μg/l	0.33	1.1	1	12/17/03	LMP
tert-Butylbenzene	<0.31	µg/l	0.31	1.03	1	12/17/03	LMP
Carbon TetrachLoride	<0.59	μg/l	0.59	1.96	1	12/17/03	LMP
Chlorobenzene	<0.31	µg/l	0.31	1.03	1	12/17/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1	12/17/03	LMP
Chloroethane	<0.44	µg/l	0.44	1.47	1	12/17/03	LMP
Chloroform	<0.27	µg/l	0.27	0.90	1	12/17/03	LMP
Chloromethane	<0.29	µg/l	0.29	0.97	1	12/17/03	LMP
2-Chlorotoluene	<0.3	µg/l	0.3	1.0	1	12/17/03	LMP
4-Chlorotoluene	<0.3	µg∕l	0.3	1.0	1	12/17/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1	12/17/03	LMP
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1	12/17/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10.0	1	12/17/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1	12/17/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1	12/17/03	LMP
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1	12/17/03	LMP
Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1	12/17/03	LMP
1,1-Dichloroethane	<0.36	μg/l	0.36	1.2	1	12/17/03	LMP
1,2-Dichloroethane	<0.17	μg/l	0.17	0.57	1	12/17/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1	12/17/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	µg/l	0.23	0.77	1	12/17/03	LMP
trans-1,2-Dichloroethylene	<0.39	µg/l	0.39	1.3	1	12/17/03	LMP
1,2-Dichloropropane	<0.25	µg/l	0.25	0.83	1	12/17/03	LMP
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	1	12/17/03	LMP
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1 CSL	12/17/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	µg/l	0.31	1.03	1	12/17/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	µg/l	0.25	0.83	1	12/17/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1	12/17/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1	12/17/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1	12/17/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1	12/17/03	LMP
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1	12/17/03	LMP
p-Isopropyltoluene Methyl t-Butyl Ether(MTBE)	<0.32	µg/l	0.32	1.07	1	12/17/03	LMP
Methyl t-Butyl Ether(MIBE) Methylene Chloride	<0.3	µg/l	0.3	1.0	1	12/17/03	LMP
Naphthalene	<0.51 <0.8	µg/l	0.51 0.8	1.7 2.66	1 1	12/17/03	
n-Propylbenzene	<0.8 <0.3	μg/l			1	12/17/03	
Styrene	<0.29	µg/l ∥g/l	0.3 0.29	1.0 0.97	1	12/17/03	
Tetrachloroeth(yl)ene	0.337	μg/l μg/l	0.32	1.07	1 J	12/17/03	
i cer acireor occir(ye)ene	0.337	#97 t	0.52	1.07	נ ו	12/17/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145819.3 DATE REC'D : 12/11/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003N01S08	Matrix	GROWTR	Sa	ample Date/Tin	ne: 12/10/0	3 11:15	Lab No. 14	\$5819
	<u>Result</u>	<u>Units</u>	LOD	<u>L09</u>	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
<u>EPA 3010</u> Metal Prep	COMP		-	-	-		12/15/03	JJP
<u>EPA 6010</u> Total Nickel	0.0039	mg/l	0.003	0.01	1	J	12/16/03	DJB

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

145819.2

800-338-7226 715-355-3221 www.usfilter.com

Sample Summary

Lab Id 145819 145820 145821 145822 145823 145824 145825 145826 145827 145828	<u>Client Sample ID</u> 2003N01S08 2003TN01S09 2003TN01S13 2003TN01D09 2003TN01D13 2003TN01D08 2003TN01S01 2003TN01S04 2003TN01S05 2003TN01S07 2003TN01S07	Date/Time 12/10/03 11:15 12/10/03 12:00 12/10/03 13:00 12/10/03 12:00 12/10/03 13:00 12/10/03 13:00 12/10/03 11:15 12/09/03 13:20 12/09/03 14:35 12/09/03 14:00 12/09/03 14:45 12/09/03 14:45	Matrix GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER GROUNDWATER
145829	2003TN01D07	12/09/03 15:20	GROUNDWATER

Sample Narrative/Sample Status

LOGIN:

GENERAL:

ANALYSES:

QA/QC:

REPORTING:

<u>Definitions</u>

LOD = Limit of Detection LOQ = Limit of Quantitation < = Less Than COMP = Complete SUBCON = Subcontracted analysis mv = millivolts pCi/l = picocurie per liter ml/l = milliters/Liter µg/l = Micrograms per liter = parts per billion (ppb) µg/kg = Micrograms per kilogram = parts per billion (ppb) mg/l = Milligrams per liter = parts per million (ppm) mg/kg = Milligrams per kilogram = parts per million (ppm) NOT PRES = Not Present ppth = Parts per thousand (S) = Surrogate Compound





ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

145963.2

800-338-7226 715-355-3221 www.usfilter.com

Sample Summary

Lab_Id	<u>Client Sample ID</u>	Date/Time	Matrix
145963	2003TN01\$52	12/11/03 14:45	GROUNDWATER
145964	2003TN01\$51	12/11/03 10:42	GROUNDWATER
145965	2003TN01S50	12/11/03 09:35	GROUNDWATER
145966	2003TN01D52	12/11/03 14:45	GROUNDWATER
145967	2003TN01556	12/12/03 09:00	GROUNDWATER
145968	2003TN01S57	12/12/03 10:00	GROUNDWATER
145969	2003TN01555	12/12/03 08:30	GROUNDWATER
145970	2003TN01S53	12/11/03 11:45	GROUNDWATER
145971	2003TN01\$54	12/11/03 13:30	GROUNDWATER
145972	2003TN01S58	12/12/03 11:15	GROUNDWATER
145973	2003TN01D58	12/12/03 11:15	GROUNDWATER
145974	TRIP BLANK-USF	12/12/03	WATER
145975	2003TN01\$58	12/12/03 11:15	GROUNDWATER
145976	2003TN01D58	12/12/03 11:15	GROUNDWATER
145977	2003TN01\$50	12/12/03	GROUNDWATER
145978	2003TN01\$52	12/11/03 14:45	GROUNDWATER
145979	2003TN01553	12/11/03 11:45	GROUNDWATER
145980	2003TN01D52	12/11/03 14:45	GROUNDWATER

Sample Narrative/Sample Status

LOGIN:

GENERAL:

ANALYSES:

QA/QC:

REPORTING:

Definitions

LOD = Limit of Detection LOQ = Limit of Quantitation < = Less Than COMP = Complete SUBCON = Subcontracted analysis mv = millivolts pCi/l = picocurie per liter ml/l = milliters/Liter µg/l = Micrograms per liter = parts per billion (ppb) µg/kg = Micrograms per kilogram = parts per billion (ppb) mg/l = Milligrams per liter = parts per million (ppm) mg/kg = Milligrams per kilogram = parts per million (ppm) NOT PRES = Not Present ppth = Parts per thousand (S) = Surrogate Compound

VEOLIA

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130



Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.3 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01\$52	Matri	X: GRDWTR	Si	ample Date/T	Lab No. 145963			
	D ecord A	0-1	1.00	1.00	Dilution		Date	
	<u>Resul t</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021								
Benzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Bromobenzene	<0.41	μg/l	0.41	1.37	i		12/19/03	LMP
Bromochloromethane	<0.19	μg/l	0.19	0.63	1		12/19/03	LMP
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1		12/19/03	LMP
Bromoform	<0.71	µg/l	0.71	2.36	1		12/19/03	LMP
Bromomethane	<0.57	µg/l	0.57	1.9	1		12/19/03	LMP
n-Butylbenzene	<0.36	µg∕l	0.36	1.2	1		12/19/03	LMP
sec-Butylbenzene	<0.33	µg∕l	0.33	1.1	1		12/19/03	LMP
tert-Butylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	1		12/19/03	LMP
Chlorobenzene	<0.31	μg/l	0.31	1.03	1		12/19/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1		12/19/03	LMP
Chloroethane	<0.44	µg/l	0.44	1.47	1		12/19/03	LMP
Chloroform Chlorosthana	<0.27	μg/l	0.27	0.90	1		12/19/03	LMP
Chloromethane 2-Chlorotoluene	<0.29 <0.3	µg/l	0.29	0.97	1		12/19/03	LMP
4-Chlorotoluene	<0.3	µg/l	0.3	1.0 1.0	1		12/19/03	LNP
Dibromochloropropane(DBCP)	<0.61	μg/l μg/l	0.61	2.03	1		12/19/03	LMP LMP
1,2-Dibromoethane(EDB)	<1.10	μg/(μg/(1.1	3.66	1		12/19/03	LMP
Dibromomethane	<3.00	μg/l	3.0	10.0	1		12/19/03 12/19/03	LMP
1,2-Dichlorobenzene	<0.51	μg/l	0.51	1.7	1		12/19/03	LMP
1,3-Dichlorobenzene	<0.29	μg/{	0.29	0.97	1		12/19/03	LMP
1,4-Dichlorobenzene	<0.3	μg/{	0.3	1.0	1		12/19/03	LMP
Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	1		12/19/03	LMP
1,1-Dichloroethane	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
1,2-Dichloroethane	<0.17	μg/l	0.17	0.57	1		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	149.	µg/l	0.23	0.77	50		12/22/03	LMP
trans-1,2-Dichloroethylene	26.4	µg/l	0.39	1.3	1		12/19/03	LMP
1,2-Dichloropropane	<0.25	µg/l	0.25	0.83	1		12/19/03	LMP
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	1		12/19/03	LMP
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1	CSL	12/19/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	μg/l	0.31	1.03	1		12/19/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0.25	0.83	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1		12/19/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Hexachlorobutadiene Isopropylbenzene	<1.00	μg/l	1_0 0_31	3.33 1.03	1		12/19/03	LMP
Isopropyl Ether	<0.31 <0.46	µg/l	0.46	1.53	1		12/19/03	LMP
p-lsopropyltoluene	<0.32	μg/l	0.32	1.07	1		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	μg/l μg/l	0.3	1.0	1		12/19/03 12/19/03	LMP LMP
Methylene Chloride	<0.51	μg/l	0.51	1.7	1		12/19/03	LMP
Naphthalene	<0.8	μg/l	0.8	2.66	i	CSH	12/19/03	LMP
n-Propylbenzene	<0.3	μg/l	0.3	1.0	i	6.511	12/19/03	LNP
Styrene	<0.29	μg/l	0.29	0.97	i		12/19/03	LNP
Tetrach(oroeth(yl)ene	<0.32	μg/l	0.32	1.07	i		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.56	μg/l	0.56	1.86	1		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	μg/l	0.61	2.03	1		12/19/03	LMP
Toluene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
1,2,3-Trichlorobenzene	<0.33	μg/l	0.33	1.1	1		12/19/03	LMP
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	1		12/19/03	LMP
1,1,1-Trichloroethane	<0.42	μg/l	0.42	1.4	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.4 DATE REC'D : 12/15/03 REPORT DATE: D1/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S52	Matri	X: GROWTR		Sample Date/Ti	ime: 12/11/0	13 14:45	Lab No. 1	45963
	Result	Units	L00	LOG	Dilution Factor	Qualifiers	Date Analyzed	Analyst
		<u></u>						
EPA 8021								
1,1,2-Trichloroethane	<0.5	μg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	μg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	2.51 <0.62	µg/l ∥g/l	0.2	0.67 2.06	1 1		12/19/03	LMP
m- & p-Xylene o-Xylene	<0.3	μg/l μg/l	0.82	1.0	1		12/19/03 12/19/03	LMP LMP
PID Surrogate Recovery (S)	105.	#9/C	0.5	1.0	1		12/19/03	
HALL Surrogate Recovery (S)	120.	*	-	-	i		12/19/03	LMP
					•		,,	2.0
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2 <0.15	μg/l	0.2	0.67	1		12/16/03	MRD MRD
sec-Butylbenzene tert-Butylbenzene	<0.15	μg/l μg/l	0.15	0.50	1		12/16/03 12/16/03	MRD
Carbon Tetrachloride	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Chloroethane	<0.6	μg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	µg/l	0.3	1.0	1		12/16/03	MRD
1,2-Dibromoethane(EDB)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	µg/l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
1,4-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	0.186 <0.1	µg/l µg/l	0.1 0.1	0.33	1		12/16/03 12/16/03	MRD MRD
1,1-Dichloroethane 1,2-Dichloroethane	<0.1	μg/(μg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	188.	μg/l	0.1	0.33	10		12/17/03	MRD
trans-1,2-Dichloroethylene	20.9	μg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	0.413	µg/l	0.2	0.67	1	J	12/16/03	MRD
cis-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD
i sopropyl benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-isopropyltoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.5 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S52 Ma		Matrix: GRDWTR		mple Date/T	Lab No. 145963			
					Dilution		Date	
	<u>Result</u>	Units	LOD	<u>L00</u>	Factor	Qualifiers	Analyzed	Analyst
EPA 8260_								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg/l	1.0	3.33	1	S1H CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	μg/ ί	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,1,1-TrichLoroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	μ g/ ί	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1	\$2L	12/16/03	MRD
1,2,4-Trimethylbenzene	0.203	µg/l	0.15	0.50	1	J	12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	3.33	µg/l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.uslitter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.6 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01551	Matrix: GRDWTR		Sample Date/Time: 12/11/03 10:42				Lab No. 145964		
					Dilution		Date		
	<u>Resul t</u>	<u>Units</u>	<u>L00</u>	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>	
EPA 8021									
Benzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
Bromobenzene	<0.41	μg/l	0.41	1.37	1		12/19/03	LMP	
Bromochloromethane	<0.19	μg/l	0.19	0.63	1		12/19/03	LMP	
Bromodichloromethane	<0.83	μg/l	0.83	2.76	1		12/19/03	LMP	
Bromoform	<0.71	μg/l	0.71	2.36	1		12/19/03	LMP	
Bromomethane	<0.57	µg/l	0.57	1.9	1		12/19/03	LMP	
n-Butylbenzene	<0.36	µg∕l	0.36	1.2	1		12/19/03	LMP	
sec-Butylbenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP	
tert-Butylbenzene	<0.31	µg∕l	0.31	1.03	1		12/19/03	LMP	
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	1		12/19/03	LMP	
Chlorobenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
Dibromochloromethane	<0.87	µg∕l	0.87	2.9	1		12/19/03	LMP	
Chloroethane	<0.44	µg/l	0.44	1.47	1		12/19/03	LMP	
Chloroform	<0.27	µg∕l	0.27	0.90	1		12/19/03	LMP	
Chloromethane	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP	
2-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
4-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1		12/19/03	LMP	
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP	
Dibromomethane	<3.00	μg/l	3.0	10.0	1		12/19/03	LMP	
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP	
1,3-Dichlorobenzene	<0.29 <0.3	µg/l	0.29 0.3	0.97 1.0	1		12/19/03		
1,4-Dichlorobenzene Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	1		12/19/03		
	<0.46	µg/l	0.46	1.2	1		12/19/03 12/19/03	LMP	
1,1-Dichloroethane 1,2-Dichloroethane	<0.17	μg/l μg/l	0.38	0.57	i		12/19/03	LMP LMP	
1,1-Dichloroeth(yl)ene	<0.39	μ9/(μ9/(0.39	1.3	1		12/19/03	LMP	
cis-1,2-Dichloroeth(yl)ene	<0.23	μg/l	0.23	0.77	1		12/19/03	LMP	
trans-1,2-Dichloroethylene	<0.39	μg/l	0.39	1.3	1		12/19/03	LMP	
1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	1		12/19/03	LMP	
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	1		12/19/03	LMP	
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1	CSL	12/19/03	LMP	
1,1-Dichloroprop(yl)ene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
t-1,3-Dichloroprop(yl)ene	<0.25	µg/l	0,25	0.83	1		12/19/03	LMP	
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1		12/19/03	LMP	
Ethylbenzene	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP	
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/19/03	LMP	
Isopropylbenzene	<0.31	µg∕l	0.31	1.03	1		12/19/03	LMP	
Isopropyl Ether	<0.46	µg∕l	0.46	1.53	1		12/19/03	LMP	
p- isopro pyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP	
Methyl t-Butyl Ether(MTBE)	<0.3	µg∕l	0.3	1.0	1		12/19/03	LMP	
Methylene Chloride	<0.51	μg/l	0.51	1.7	1		12/19/03	LMP	
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LMP	
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
Styrene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP	
TetrachLoroeth(yl)ene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP	
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/19/03	LMP	
1,1,2,2-Tetrachloroethane	<0.61	μg/l	0.61	2.03	1		12/19/03	LMP	
Toluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP	
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	1 1		12/19/03		
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	I		12/19/03	LMP	

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT ND.: 200106102370 REPORT ND.: 145963.7 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01s51	Matri	X: GRDWTR	R Sample Date/Time: 12/11/03 10:42			Lab No. 145964		
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOG	Factor	Qualifiers	Analyzed	Analyst
EPA 8021								
1,1,2-Trichloroethane	<0.5	# m (]	0.5	1.67	1		12/10/07	
Trichloroeth(yl)ene	<0.36	µg/l µg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	μg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	μg/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	μg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µ-g/t µ_g/t	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	<0.2	μ9/t μg/t	0.2	0.67	1		12/19/03 12/19/03	lmp Lmp
m- & p-Xylene	<0.62	μg/l	0.62	2.06	1		12/19/03	LMP
o-Xylene	<0.3	μg/l	0.3	1.0	i		12/19/03	LMP
PID Surrogate Recovery (S)	108.	***	-	-	i		12/19/03	LMP
HALL Surrogate Recovery (S)	123.	x	-	-	i		12/19/03	LMP
	1231	~			•		12/19/03	LFIF
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
sec-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	5.0	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	µg/l	0.3	1.0	1		12/16/03	MRD
1,2-Dibromoethane(EDB) Dibromomethane	<0.1 <0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	#g/l	0.1 0.2	0.33 0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	#g/l #g/l	0.15	0.50	1	LOL	12/16/03	MRD
1,4-Dichlorobenzene	<0.15	µeg/t µeg/t	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	<0.1	#9/(#9/(0.1	0.33	i		12/16/03 12/16/03	MRD MRD
1,1-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	g/l	0.1	0.33	i		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
trans-1,2-Dichloroethylene	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
2,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	<0.2	µg/l	0.2	0.67	i		12/16/03	MRD
cis-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD
lsopropylbenzene	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.8 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S51	Matri	K: GRDWTR		Sample Date/Ti	Lab No. 145964			
					Dilution		Date	
	<u>Result</u>	Units	<u>L0D</u>	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg/l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	<0.1	µg/1	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	#g/1	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,1,1-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	#9/L	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	µg/1	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/1	0.4	1.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.jsfiller.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.9 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01550	Matri	X: GROWTR		Sample Date/Ti	me: 12/11/(09:35	Lab No. 14	45965
					Dilution		Date	
	Result	Units	100	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA_8021								
Benzene	<0.31	µg /l	0.31	1.03	1		12/19/03	LMP
Bromobenzene	<0.41	μg/l	0.41	1.37	i		12/19/03	LMP
Bromochloromethane	<0.19	µg/l	0.19	0.63	1		12/19/03	LMP
Bromodichloromethane	<0.83	µg/l	0.83	2.76	i		12/19/03	LMP
Bromoform	<0.71	µg/l	0.71	2.36	1		12/19/03	LMP
Bromomethane	<0.57	µg/l	0.57	1.9	1		12/19/03	LMP
n-Butylbenzene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
sec-Butylbenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP
tert-Butylbenzene	<0.31	µg /l	0.31	1.03	1		12/19/03	LMP
Carbon Tetrachloride	<0.59	#g/l	0.59	1.96	1		12/19/03	LMP
Chlorobenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Dibromochloromethane	<0.87	µg/l	0.87	2.9	1		12/19/03	LMP
Chloroethane	<0.44	#g/l	0.44	1.47	1		12/19/03	LMP
Chloroform	<0.27	µg/l	0.27	0.90	1		12/19/03	LMP
Chloromethane	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP
2-Chlorotoluene	<0.3	µg/ l	0.3	1.0	1		12/19/03	LMP
4-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1		12/19/03	LMP
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10. 0	1		12/19/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Dichlorodifluoromethane	<0.46	#g/l	0.46	1.53	1		12/19/03	LMP
1,1-Dichloroethane	<0.36	#g/1	0.36	1.2	1		12/19/03	LMP
1,2-Dichloroethane	<0.17	#g/l	0.17	0.57	1		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<0.39 <0.23	µg/l	0.39	1.3	1		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	μg/l	0.39	1.3	1		12/19/03	
trans-1,2-Dichloroethylene 1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	1		12/19/03	LMP LMP
1,3-Dichloropropane	<0.67	µg/l µg/l	0.67	2.23	1		12/19/03	
2,2-Dichloropropane	<1.50	µg/l	1.5	5.0	i	CSL	12/19/03 12/19/03	LMP LMP
1,1-Dichloroprop(yl)ene	<0.31	µsg/t µg/l	0.31	1.03	i	USL	12/19/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	µg/l	0.25	0.83	i		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0.26	0.87	i		12/19/03	LMP
Ethylbenzene	<0.5	μg/l	0.5	1.67	i		12/19/03	LMP
Hexach lorobutadiene	<1.00	µg/l	1.0	3.33	1		12/19/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LNP
Isopropyl Ether	<0.46	<u>µg</u> /l	0.46	1.53	1		12/19/03	LMP
p-isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	µg/ l	0.3	1.0	1		12/19/03	LMP
Nethylene Chloride	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LMP
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Styrene	<0.29	µg/l	0,29	0.97	1		12/19/03	LMP
Tetrachloroeth(yl)ene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12 /19/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	µg/l	0.61	2.03	1		12/19/03	LMP
Toluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP
1,2,4-Trichlorobenzene	<0.47	µg/l	0.47	1.57	1		12/19/03	LMP
1,1,1-Trichloroethane	<0.42	µg/(0.42	1.4	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www._{9s}filter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.10 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S50	Matri.	X: GRDWTR		Sample Date/Ti	me: 12/11/0	3 09:35	Lab No. 14	45965
	014	11-14-	1.00	1.00	Dilution	Qualifiana	Date	Amaliunt
	<u>Result</u>	Units	LOD	<u>L09</u>	Factor	<u>Qualifiers</u>	Analyzed	Analyst
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg∕l	0.31 0.2	1.03 0.67	1		12/19/03 12/19/03	LMP
Vinyl Chloride	0.2> 0.62<	µg∕l µg∕l	0.62	2.06	1		12/19/03	LMP LMP
m- & p-Xylene o-Xyl ene	<0.3	μg/l	0.3	1.0	i		12/19/03	LMP
PID Surrogate Recovery (S)	<0.000	~ %	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	<0.000	*	•		1		12/19/03	LMP
•••••••••••••••••••••••••••••••••••••••								
EPA 8260				0.77	4		13/16/07	
8enzene Recenterene	<0.1	μg/l	0.1 0.1	0.33 0.33	1		12/16/03 12/16/03	MRD MRD
Bromobenzene	<0.1 <0.1	μg/l μg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane Bromodichloromethane	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Bromoform	<0.2	μg/l	0.2	0.67	i		12/16/03	MRD
Bromomethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
sec-Butylbenzene	<0.15	µg∕l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	μg/l	0.6 0.1	2.0 0.33	1		12/16/03 12/16/03	MRD MRD
Chloroform Chloromethane	<0.1 <0.2	μg/l μg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
4-Chlorotoluene	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	μg/l	0.3	1.0	1		12/16/03	MRD
1,2-Dibromoethane(EDB)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	µg∕l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1 1		12/16/03	MRD
1,4-Dichlorobenzene Dichlorodifluoromethane	<0.15 <0.1	μg/l μg/l	0.15	0.50 0.33	1		12/16/03 12/16/03	MRD MRD
1,1-Dichloroethane	<0.1	μg/l μg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,2-Dichloroethylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	μg/l	0.1	0.33	1 1		12/16/03	MRD MRD
1,1-Dichloropropene	<0.2 <0.1	μg/l	0.2 0.1	0.67 0.33	1		12/16/03 12/16/03	MRD
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	<0.1	μg/l μg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	μg/l	1.0	3.33	i		12/16/03	MRD
Isopropylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfiller.com

PROJECT ND.: 200106102370 REPORT ND.: 145963.11 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01550	Matri	C: GROWTR	Sa	mple Date/T	Lab No. 145965						
				Dilution Date							
	Result	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>			
EPA 8260											
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD			
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD			
Naphthalene	<1.00	µg/l	1.0	3.33	1	CSH	12/16/03	MRD			
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD			
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD			
1,1,1,2-Tetrachloroethane	<0.1	μg/ l	0.1	0.33	1		12/16/03	MRD			
1,1,2,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD			
Tetrachloroeth(yl)ene	<0.1	μg /l	0.1	0.33	1		12/16/03	MRD			
Toluene	<0.4	μg/ l	0.4	1.33	1		12/16/03	MRD			
1,2,3-Trichlorobenzene	<0.5	μg/ l	0.5	1.67	1		12/16/03	MRD			
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD			
1,1,1-Trichloroethane	<0.1	µµg/l	0.1	0.33	1		12/16/03	MRD			
1,1,2-Trichloroethane	<0.1	μg/ l	0.1	0.33	1		12/16/03	MRD			
Trichloroeth(yl)ene	<0.2	µg/ l	0.2	0.67	1		12/16/03	MRD			
Trichlorofluoromethane	<0.1	µµg/l	0.1	0.33	1		12/16/03	MRD			
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD			
1,2,4-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD			
1,3,5-Trimethylbenzene	<0.15	μg/l	0.15	0.50	1		12/16/03	MRD			
Vinyl Chloride	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD			
o-Xylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD			
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD			





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.12 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D52	Matrix	K: GRDWTR		Sample Date/Ti	ime: 12/11/0	3 14:45	Lab No. 14	45 966
	Desult	Unito	1.00	1.00	Dilution	Qualifiers	Date	Apolyst
	<u>Result</u>	<u>Units</u>	<u>L00</u>	100	Factor	quaringers	Analyzed	Analyst
EPA 8021								
Benzene	<0.31	µg∕l	0.31	1.03	1		12/19/03	LMP
Bromobenzene	<0.41	µg/l	0.41	1.37	1		12/19/03	LMP
Bromochloromethane	<0.19	µg∕l	0,19	0.63	1		12/19/03	LMP
Bromodichloromethane	<0.83	μg/l	0.83	2.76	1		12/19/03	LMP
Bromoform	<0.71	μg/l	0.71	2.36	1		12/19/03	LMP
Bromomethane	<0.57	μg/l	0.57	1.9	1		12/19/03	LMP
n-Butylbenzene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
sec-Butylbenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP
tert-Butylbenzene	<0.31 <0.59	µg/l	0.31	1.03 1.96	1		12/19/03 12/19/03	LMP LMP
Carbon Tetrachloride Chlorobenzene	<0.31	μg/l	0.31	1.03	1		12/19/03	LMP
Dibromochloromethane	<0.87	μg/l μg/l	0.87	2.9	1		12/19/03	LMP
Chloroethane	<0.44	μg/l	0.44	1.47	1		12/19/03	LMP
Chloroform	<0.27	μg/l	0.27	0.90	1		12/19/03	LMP
Chloromethane	<0.29	μg/l	0.29	0.97	1		12/19/03	LMP
2-Chlorotoluene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
4-Chlorotoluene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
Dibromochloropropane(DBCP)	<0.61	μg/l	0.61	2.03	1		12/19/03	LMP
1,2-Dibromoethane(EDB)	<1.10	μg/l	1.1	3.66	1		12/19/03	LMP
Dibromomethane	<3.00	µg/l	3.0	10.0	1		12/19/03	LMP
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP
1,4-Dichlorobenzene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP
1,1-Dichloroethane	<0.36	μg/l	0.36	1.2	1		12/19/03	LMP
1,2-Dichloroethane	<0.17	µg/l	0.17	0.57	1		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1 50		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	162. 26.2	µg/l	0.23	0.77 1.3	50		12/22/03 12/19/03	LMP LMP
trans-1,2-Dichloroethylene	<0.25	μg/l	0.39	0.83	1		12/19/03	
1,2-Dichloropropane 1,3-Dichloropropane	<0.25	μg/l	0.25	2.23	1		12/19/03	LMP
2,2-Dichloropropane	<1.50	μg/l μg/l	1.5	5.0	i	CSL	12/19/03	
1,1-Dichloroprop(yl)ene	<0.31	μg/l	0.31	1.03	i	656	12/19/03	LMP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0,25	0.83	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0.26	0.87	1		12/19/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/19/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1		12/19/03	LNP
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Methylene Chloride	<0.51	µg/ l	0.51	1.7	1		12/19/03	LMP
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LMP
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Styrene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP
Tetrachloroeth(yl)ene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/19/03	
1,1,2,2-Tetrachloroethane	<0.61	µg/l	0.61	2.03	1		12/19/03	
Toluene	<0.3	µg/l	0.3	1.0	1		12/19/03 12/19/03	LMP LMP
1,2,3-Trichlorobenzene	<0.33 <0.47	μg/l	0.33	1.1 1.57	1		12/19/03	
1,2,4-ĭrichlorobenzene 1,1,1-ĭrichloroethane	<0.47	μg/l μg/l	0.47	1.57	1		12/19/03	LMP
i, i, i = ii i Gittor Oe thane	10.42	#9/ C	0.42	1.4			12/17/03	C.U.





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT ND.: 200106102370 REPORT ND.: 145963.13 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D52	Matrix: GROWTR Sample Date/Time: 12/11/03 14:45				3 14:45	Lab No. 145966		
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	μg/l	0.36	1.2	i		12/19/03	LMP
Trichlorofluoromethane	<0.7	μg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	μg/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	μg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	2.56	µg/l	0.2	0.67	1		12/19/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/19/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
PID Surrogate Recovery (S)	104.	*	-	•	1		12/19/03	LMP
HALL Surrogate Recovery (S)	118.	*	•	•	1		12/19/03	LMP
EPA 8260								
Benzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
sec-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3 <0.1	µg/l	0.3 0.1	1.0 0.33	1 1		12/16/03	MRD MRD
1,2-Dibromoethane(ED8) Dibromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03 12/16/03	MRD
1,2-Dichlorobenzene	<0.2	µg/l µg/l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	μg/l	0.15	0,50	1	UJL	12/16/03	MRD
1,4-Dichlorobenzene	<0.15	μg/l	0,15	0.50	i		12/16/03	MRD
Dichlorodifluoromethane	0.178	μg/l	0.1	0.33	1	J	12/16/03	MRD
1,1-Dichloroethane	<0.1	μg/l	0.1	0.33	i	-	12/16/03	MRD
1,2-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	µg/l	0,1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	186.	µg/l	0.1	0.33	10		12/17/03	MRD
trans-1,2-Dichloroethylene	19.8	μg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	0.326	µg/l	0.2	0.67	1	J	12/16/03	MRD
cis-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD
Isopropylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-isopropyltoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 71<u>5-355</u>-3221 www._{Us}fiker.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.14 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample 1D: 2003TN01D52	Matrio	C: GRDWTR	S	ample Date/⊺i	me: 12/11/0	3 14:45	Lab No. 14	45966
	<u>Resul t</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 8260 Methylene Chloride Methyl t-Butyl Ether(MTBE) Naphthalene n-Propylbenzene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroeth(yl)ene Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichloroethane 1,1,2-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloroethane 1,2,3-Trichloropena 1,2,4-Trimethylbenzene 1,2,5-Trimethylbenzene Vinyl Chloride	<0.25 <0.1 <1.00 <0.1 <0.1 <0.1 <0.1 <0.1 <0.	#9/l #9/l #9/l #9/l #9/l #9/l #9/l #9/l	0.25 0.1 1.0 0.1 0.1 0.1 0.1 0.1 0.5 0.5 0.5 0.1 0.2 0.1 0.15 0.15 0.1	0.83 0.33 0.33 0.33 0.33 0.33 0.33 1.33 1.67 1.67 0.33 0.33 0.67 0.33 0.67 0.33 0.50 0.50 0.50 0.33	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CSH J	12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03	MRD MRD MRD MRD MRD MRD MRD MRD MRD MRD
o-Xylene m-& p-Xylene	<0.1 <0.4	µg/l µg/l	0.1 0.4	0.33 1.33	1 1		12/16/03 12/16/03	MRD MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.15 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01556	Matri	X: GRDWTR	Sample Date/Time: 12/12/03 09:00				Lab No. 145967		
					Dilution		Date		
	<u>Resul t</u>	Units	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	Analyst	
EPA 8021									
Benzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
Bromobenzene	<0.41	μg/l	0.41	1.37	1		12/19/03	LMP	
Bromochloromethane	<0.19	µg/l	0.19	0.63	1		12/19/03	LMP	
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1		12/19/03	LMP	
Bromoform	<0.71	µg/l	0.71	2.36	1		12/19/03	LMP	
Bromomethane	<0.57	µg/l	0.57	1.9	1		12/19/03	LMP	
n-Butylbenzene	<0.36	µg/l	0.36	1.2	1		12/19 /03	LMP	
sec-Butylbenzene	<0.33	μg/ l	0.33	1.1	1		12/19/03	LMP	
tert-Butylbenzene	<0.31	#g/ ↓	0.31	1.03	1		12/19/03	LMP	
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	1		12/19/03	LMP	
Chlorobenzene Dibromochloromethane	<0.31	µg/l	0.31	1.03	1 1		12/19/03	LMP	
Chloroethane	<0.87 <0.44	µg/l #g/l	0.87 0.44	2.9 1.47	1		12/19/03	LMP	
Chloroform	<0.44	µg/l µg/l	0.44	0.90	1		12/19/03	LMP LMP	
Chloromethane	<0.27	μg/l μg/l	0.29	0.97	1		12/19/03 12/19/03	LMP	
2-Chlorotoluene	<0.3	μg/l	0.3	1.0	i		12/19/03		
4-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
Dibromochloropropane(DBCP)	<0.61	μg/l	0.61	2.03	1		12/19/03	LMP	
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP	
Dibromomethane	<3.00	µg/l	3.0	10.0	1		12/19/03	LMP	
1,2-Dichlorobenzene	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP	
1,3-Dichlorobenzene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP	
1,4-Dichlorobenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP	
1,1-Dichloroethane	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP	
1,2-Dichloroethane	<0.17	µg/l	0.17	0.57	1		12/19/03	LMP	
1,1-Dichloroeth(yl)ene cis-1,2-Dichloroeth(yl)ene	<0.39 <0.23	μg/l μg/l	0.39 0.23	1.3 0.77	1		12/19/03	LMP	
trans-1,2-Dichloroethylene	<0.39	μg/l	0.25	1.3	1		12/19/03 12/19/03	LMP LMP	
1,2-Dichloropropane	<0.25	μg/l	0.25	0.83	1		12/19/03	LMP	
1,3-Dichloropropane	<0.67	μg/l	0.67	2.23	i		12/19/03	LMP	
2,2-Dichloropropane	<1.50	μg/l	1.5	5.0	1	CSL	12/19/03	LMP	
1,1-Dichloroprop(yl)ene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
t-1,3-Dichloroprop(yl)ene	<0.25	µg/l	0.25	0.83	1		12/19/03	LMP	
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1		12/19/03	LMP	
Ethylbenzene	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP	
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/19/03	LMP	
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP	
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP	
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP	
Methyl t-Butyl Ether(MTBE)	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
Methylene Chloride Naphthalene	<0.51	µg/l	0.51	1.7 2.66	1	CC14	12/19/03	LMP	
n-Propylbenzene	<0.8 <0.3	μg/l μg/l	0.8 0.3	2.00	1	CSH	12/19/03 12/19/03	LMP LMP	
Styrene	<0.29	μg/l μg/l	0.29	0.97	1		12/19/03		
Tetrachloroeth(yl)ene	<0.32	μg/l	0.32	1.07	1		12/19/03		
1,1,1,2-Tetrachloroethane	<0.56	μg/l	0.56	1.86	1		12/19/03	LMP	
1,1,2,2-Tetrachloroethane	<0.61	<u>µ</u> g/l	0.61	2.03	i		12/19/03	LMP	
Toluene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP	
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP	
1,2,4-Trichlorobenzene	<0.47	µg/l	0.47	1.57	1		12/19/03	LMP	
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	1		12/19/03	LMP	





Attn: David Voight

Sample ID: 2003TN01S56

Sample Date/Time: 12/12/03 09:00

TELEPHONE FACSIMILE WEBSITE

Lab No. 145967

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.16 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 20031W01556	Matri	K: GROWIR		sample Date/II	me: 12/12/0	12 04:00	Lad No. 14	DYO/
					D I Lund au			
					Dilution	a	Date	
	<u>Resul t</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	<u>Analyzed</u>	<u>Analyst</u>
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	µg/ l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	#g/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	<0.2	µg/l	0.2	0.67	1		12/19/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/19/03	LMP
o-Xylene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
PID Surrogate Recovery (S)	108.	2	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	120.	ž	-	•	1		12/19/03	LMP
Ince Surrogate Recovery (3)	120.	~			•		12/17/03	Cru
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Bromochloromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	μg/t μg/t	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2		0.2	0.67	1			MRD
		µg/l			1		12/16/03	
Bromomethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	•		12/16/03	MRD
sec-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1 1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µ∠g/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	µrg/l	0.1	0.33			12/16/03	MRD
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	μg/l	0.3	1.0	1		12/16/03	MRD
1,2-Dibromoethane(EDB)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromomethane	<0.1	<u>µ</u> g/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	µg/l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	#g/l	0.15	0.50	1		12/16/03	MRD
1,4-Dichlorobenzene	<0.15	#g/l	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,2-Dichloroethylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	#g/ l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	µg ∕l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
cis-1,3-Dichloropropene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	µg/ l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD
Isopropylbenzene	<0.1	#g /l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
		-						

Matrix: GRDWTR





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilier.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.17 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S56 Natrix: GRDWTR Sample Date/Time: 12/12/03 09:00 Lab No. 145967 Dilution Date Qualifiers <u>Result</u> Units LOD LOQ Factor Analyzed Analyst EPA 8260 0.25 0.83 12/16/03 MRD Methylene Chloride <0.25 µg/l 1 µg/l Methyl t-Butyl Ether(MTBE) <0.1 0.1 0.33 1 12/16/03 MRD <1.00 1.0 3.33 CSH 12/16/03 MRD Naphthalene µg/l 1 0.1 0.33 1 12/16/03 MRD n-Propylbenzene <0.1 µg/l 12/16/03 MRD 0.33 Styrene <0.1 µg/l 0.1 1 12/16/03 1,1,1,2-Tetrachloroethane <0.1 µg/l 0.1 0.33 1 MRD 1,1,2,2-Tetrachloroethane <0.1 µg/l 0.1 0.33 1 12/16/03 MRD 0.33 12/16/03 MRD Tetrachloroeth(yl)ene <0.1 0.1 1 µg/l <0.4 12/16/03 MRD 1.33 0.4 1 Toluene µg/l 12/16/03 MRD 1,2,3-Trichlorobenzene <0.5 µg/l 0.5 1.67 1 1,2,4-Trichlorobenzene <0.5 0.5 1.67 1 12/16/03 MRD µg/l 1,1,1-Trichloroethane <0.1 µg/l 0.1 0.33 1 12/16/03 MRD 1,1,2-Trichloroethane 0.33 12/16/03 MRD <0.1 0.1 1 µg/l <0.2 0.67 12/16/03 MRD Trichloroeth(yl)ene **µg/**l 0.2 1 0.33 12/16/03 MRD Trichlorofluoromethane <0.1 **µg/l** 0.1 1 MRD 1,2,3-Trichloropropane <0.4 µg/l 0.4 1.33 1 12/16/03 <0.15 0.15 0.50 12/16/03 MRD 1,2,4-Trimethylbenzene µg/l 1 **µg/**l 0.50 12/16/03 MRD 1,3,5-Trimethylbenzene <0.15 0.15 1 <0.1 0.1 0.33 12/16/03 MRD Vinyl Chloride 1 µg/l 12/16/03 0.33 MRD o-Xylene <0.1 µg/l 0.1 1 12/16/03 MRD m-& p-Xylene <0.4 µg/l 0.4 1.33 1





TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145963.18 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S57	Matri	X: GROWTR	s	ample Date/T	ime: 12/12/0	3 10:00	Lab No. 1	45968
	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date <u>Analyzed</u>	Analyst
			<u></u>					
EPA 8021	-0.71		0.71	1.03	1		12/10/07	LAID
Benzene Bromobenzene	<0.31 <0.41	μg/l μg/l	0.31 0.41	1.37	1		12/19/03 12/19/03	LMP LMP
Bromochloromethane	<0.19	μg/l	0.19	0.63	1		12/19/03	LMP
Bromodichloromethane	<0.83	μg/l	0.83	2.76	i		12/19/03	LMP
Bromoform	<0.71	μg/l	0.71	2.36	i		12/19/03	LMP
Bromomethane	<0.57	μg/l	0.57	1.9	1		12/19/03	LMP
n-Butylbenzene	<0.36	µg/l	0.36	1.2	1		12/19/03	LNP
sec-Butylbenzene	<0.33	µg/l	0.33	1.1	1		12/19/03	LMP
tert-Butylbenzene	<0.31	#g/l	0.31	1.03	1		12/19/03	LNP
Carbon Tetrachloride	<0.59	μg/ l	0.59	1.96	1		12/19/03	LMP
Chlorobenzene	<0.31	дg/l	0.31	1.03	1		12/19/03	LMP
Dibromochloromethane	<0.87	µg/l	0.87	2.9	1		12/19/03	LMP
Chloroethane	<0.44	µg/l	0.44	1.47	1		12/19/03	LMP
Chloroform	<0.27	µg/l	0.27	0.90	1		12/19/03	LMP
Chloromethane	<0.29	⊭g/l	0.29	0.97	1		12/19/03	LMP
2-Chlorotoluene	<0.3 <0.3	µg/l	0.3 0.3	1.0 1.0	1 1		12/19/03	LMP
4-Chlorotoluene Dibromochloropropane(DBCP)	<0.61	μg/l μg/l	0.5	2.03	1		12/19/03 12/19/03	LMP LMP
1,2-Dibromoethane(EDB)	<1.10	μg/l	1.1	3.66	1		12/19/03	LMP
Dibromomethane	<3.00	μg/l	3.0	10.0	1		12/19/03	LMP
1,2-Dichlorobenzene	<0.51	μg/l	0.51	1.7	i		12/19/03	LMP
1,3-Dichlorobenzene	<0.29	μg/l	0.29	0.97	1		12/19/03	LMP
1.4-Dichlorobenzene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP
Dichlorodifluoromethane	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP
1,1-Dichloroethane	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
1,2-Dichloroethane	<0.17	µg/l	0.17	0.57	1		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	µg/l	0.23	0.77	1		12/19/03	LMP
trans-1,2-Dichloroethylene	<0.39	µg/l	0.39	1.3	1		12/19/03	LMP
1,2-Dichloropropane	<0.25	µg/l	0.25 0.67	0.83 2.23	1 1		12/19/03	LMP
1,3-Dichloropropane	<0.67 <1.50	μg/l	1.5	5.0	1	CSL	12/19/03 12/19/03	LINP LINP
2,2-Dichloropropane 1,1-Dichloroprop(yl)ene	<0.31	μg/l μg/l	0.31	1.03	1	636	12/19/03	LNP
t-1,3-Dichloroprop(yl)ene	<0.25	μg/l	0.25	0.83	i		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	μg/l	0.26	0.87	i		12/19/03	LMP
Ethylbenzene	<0.5	μg/l	0.5	1.67	1		12/19/03	LMP
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/19/03	LMP
Isopropylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Isopropyl Ether	<0.46	µg∕l	0.46	1.53	1		12/19/03	LMP
p-Isopropyltoluene	<0.32	µg ∕l	0.32	1,07	1		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Methylene Chloride	<0.51	µg/l	0.51	1.7	1		12/19/03	LMP
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LNP
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LNP
Styrene	<0.29	µg/l	0.29	0.97 1.07	1 1		12/19/03	
Tetrachloroeth(yl)ene	<0.32	μg/l	0.32	1.86	1		12/19/03 12/19/03	LNP. LNP
1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	<0.56 <0.61	μg/l μg/l	0.56 0.61	2.03	1		12/19/03	
Toluene	<0.3	μg/t μg/l	0.3	1.0	1		12/19/03	LMP
1,2,3-Trichlorobenzene	<0.33	μg/l	0.33	1.1	1		12/19/03	LNP
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	i		12/19/03	LMP
1,1,1-Trichloroethane	<0.42	μg/l	0.42	1.4	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfiller.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.19 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01857	Matri	X: GRDWTR		Sample Date/T	ime: 12/12/0	3 10:00	Lab No. 145968		
	Regul t	Unite	1.00	1.00	Dilution	Qualifician	Date		
	<u>Result</u>	<u>Units</u>	<u>L0D</u>	<u>L09</u>	Factor	<u>Qualifiers</u>	Analyzed	Analyst	
EPA 8021									
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP	
Trichloroeth(yl)ene	<0.36	μg/l	0.36	1.2	1		12/19/03	LMP	
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/19/03	LMP	
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP	
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP	
1,3,5-Trimethylbenzene	<0.31	µg∕l	0.31	1.03	1		12/19/03	LHP	
Vinyl Chloride	0.272	µg/l	0.2	0.67	1	J	12/19/03	LHP	
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/19/03	LNP	
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/1 9/03	LMP	
PID Surrogate Recovery (S)	109.	*	-	-	1		12/1 9/03	LMP	
HALL Surrogate Recovery (S)	115.	*	-	~	1		12/19/03	LMP	
EPA 8260									
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
Bromobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
Bromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
Bromodichloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
Bromoform	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD	
Bromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD	
sec-Butylbenzene tert-Butylbenzene	<0.15 <0.15	µg/l	0.15	0.50	1		12/16/03	MRD	
Carbon Tetrachloride	<0.15	µg/l	0.15	0.50 0.33	1 1		12/16/03	MRD	
Chlorobenzene	<0.1	μg/l μg/l	0.1	D.33	1		12/16/03 12/16/03	MRD MRD	
Chloroethane	<0.6	μg/l	0.6	2.0	1		12/16/03	MRD	
Chloroform	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD	
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD	
2-Chlorotoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD	
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
Dibromochloropropane(DBCP)	<0.3	µg/l	0.3	1.0	1		12/16/03	MRD	
1,2-Dibromoethane(EDB)	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD	
Dibromomethane	<0.1	μg/(0.1	0.33	1		12/ 16/03	MRD	
1,2-Dichlorobenzene	<0.2	µg/l	0.2	0.67	1	CSL	12/16/03	MRD	
1,3-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD	
1,4-Dichlorobenzene Dichlorodifluoromethane	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD	
1,1-Dichloroethane	<0.1 <0.1	μg/l	0.1 0.1	0.33 0.33	1		12/16/03	MRD	
1,2-Dichloroethane	<0.1	µtg/l µtg/l	0.1	0.33	1		12/16/03	MRD	
1,1-Dichloroeth(yl)ene	<0.1	μg/l	0.1	0.33	1		12/16/03 12/16/03	MRD MRD	
cis-1,2-Dichloroeth(yl)ene	0.252	μg/l	0.1	0.33	1	L	12/17/03	MRD	
trans-1,2-Dichloroethylene	<0.1	дg/l	0.1	0.33	1		12/16/03	MRD	
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
2,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
1,1-Dichloropropene	<0.2	µg/ l	0.2	0.67	1		12/16/03	MRD	
cis-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
trans-1,3-Dichloropropene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD	
Ethylbenzene	<0.1	µg/l	0.1	0.33	1		12/1 6/03	MRD	
Hexachlorob utadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD	
Isopropylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD	
4-Isopropyltoluene	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD	





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.20 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01857	Matri	C: GROWTR	Sa	ample Date/Ti	Lab No. 145968			
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	<u>L09</u>	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg/l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	μg/1	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	<0.1	⊈g/ l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	#g/ l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	#g/l	0.5	1.67	1		12/16/03	MRD
1,1,1-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/ 03	MRD
1,3,5-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

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TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilier.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.21 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S55	Matrix	K: GRDWTR	Sa	mple Date/T	Lab No. 145969			
	Recult	llmite	1.00	1.00	Dilution	0	Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021								
Benzene	<1.55	μg/l	0.31	1.03	5		12/19/03	LMP
Bromobenzene	<2.05	µg/l	0.41	1.37	5		12/19/03	LMP
Bromochloromethane	<0.95	µg/l	0.19	0.63	5		12/19/03	LMP
Bromodichloromethane	<4.15	µg/l	0.83	2.76	5		12/19/03	LMP
Bromoform	<3.55	µg/l	0.71	2.36	5		12/19/03	LMP
Bromomethane	<2.85	μ g/ l	0.57	1.9	5		12/19/03	LMP
n-Butylbenzene	<1.80	µg/l	0.36	1.2	5		12/19/03	LMP
sec-Butylbenzene	<1.65	µg/i	0.33	1.1	5		12/19/03	LMP
tert-Butylbenzene	<1.55	µg/l	0.31	1.03	5		12/19/03	LMP
Carbon Tetrachloride	<2.95	μg/ l	0.59	1.96	5		12/19/03	LMP
Chlorobenzene	<1.55	µg/l	0.31	1.03	5		12/19/03	LMP
Dibromochloromethane	<4.35	µg/l	0.87	2.9	5		12/19/03	LMP
Chloroethane	<2.20 <1.35	μg/ l	0.44	1.47	5		12/19/03	LMP
Chloroform Chloromethane	<1.35	μg/ l	0.27 0.29	0.90	5 5		12/19/03	LMP
2-Chlorotoluene	<1.45	μg/l	0.29	0.97 1.0	5		12/19/03	LMP
4-Chlorotoluene	<1.50	μg/l μg/l	0.3	1.0	5		12/19/03	LMP
Dibromochloropropane(DBCP)	<3.05	μg/t μg/t	0.61	2.03	5		12/19/03 12/19/03	LMP LMP
1,2-Dibromoethane(EDB)	<5.50	µg/l	1.1	3.66	5		12/19/03	LMP
Dibromomethane	<15.0	μg/l	3.0	10.0	5		12/19/03	LMP
1,2-Dichlorobenzene	<2.55	µ=g/t µ_g/t	0.51	1.7	5		12/19/03	LMP
1,3-Dichlorobenzene	<1.45	μg/(0.29	0.97	5		12/19/03	LMP
1,4-Dichlorobenzene	<1.50	µg/l	0.3	1.0	5		12/19/03	LMP
Dichlorodifluoromethane	<2.30	μg/l	0.46	1.53	5		12/19/03	LMP
1,1-Dichloroethane	<1.80	µg/l	0.36	1.2	5		12/19/03	LMP
1,2-Dichloroethane	<0.85	µg/l	0.17	0.57	5		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<1.95	µg/t	0.39	1.3	5		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	16.3	µg/l	0.23	0.77	5		12/19/03	LMP
trans-1,2-Dichloroethylene	<1.95	#g/ l	0.39	1.3	5		12/19/03	LMP
1,2-Dichloropropane	<1.25	µg/l	0.25	0.83	5		12/19/03	LMP
1,3-Dichloropropane	<3.35	#g/1	0.67	2.23	5		12/19/03	LMP
2,2-Dichloropropane	<7.50	#g/l	1.5	5.0	5	CSL	12/19/03	LMP
1,1-Dichloroprop(yl)ene	<1.55	µg/l	0.31	1.03	5 5		12/19/03	LMP
t-1,3-Dichloroprop(yl)ene	<1.25 <1.30	µg/l	0.25	0.83 0.87	5		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene Ethylbenzene	<2.50	ду/ l ду/l	0.5	1.67	5		12/19/03	LMP
Hexachlorobutadiene	<5.00	#g/l	1.0	3.33	5		12/19/03 12/19/03	LMP LMP
Isopropylbenzene	<1.55	μg/l	0.31	1.03	5		12/19/03	LMP
Isopropyl Ether	<2.30	μ <u>g</u> /l	0.46	1.53	5		12/19/03	LMP
p-1sopropyltoluene	<1.60	µg/l	0.32	1.07	5		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<1.50	µg/l	0.3	1.0	5		12/19/03	LMP
Methylene Chloride	<2.55	#g/ l	0.51	1.7	5		12/19/03	LKP
Naphthalene	<4.00	µg/l	0.8	2.66	5	CSH	12/19/03	LMP
n-Propylbenzene	<1.50	µg/l	0.3	1.0	5		12/19/03	LMP
Styrene	<1.45	µg/l	0.29	0.97	5		12/19/03	LMP
Tetrachloroeth(yl)ene	56.1	μg/ l	0.32	1.07	5		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<2.80	µg∕l	0.56	1.86	5		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<3.05	µg/l	0.61	2.03	5		12/19/03	LMP
Toluene	<1.50	µg/l	0.3	1.0	5		12/19/03	LMP
1,2,3-Trichlorobenzene	<1.65	μg/l	0.33	1.1	5		12/19/03	LNP
1,2,4-Trichlorobenzene	<2.35	μg/l	0.47	1.57	5		12/19/03	LMP
1,1,1-Trichloroethane	<2.10	#g/l	0.42	1.4	5		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.22 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Sample ID: 20031N01S55	Matrix	K: GROWTR		Sample Date/Iim	ne: 12/12/(08:3 0	Lab No. 14	5969
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		Denvilt	11-14-	1.00	1.00		Qualifican		Ameliant
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Result	Units	200		ractor	quatifiers	Anatyzeo	Analyst
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FPA 8021								
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		<2.50	µa/l	0.5	1.67	5		12/19/03	LMP
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				0.7	2.33	5			
1,2,4-Trimethylbenzene <2.00	1,2,3-Trichloropropane	<5.50		1.1	3.66	5		12/19/03	LMP
Vinvi Chloride <1.00 rg/l 0.2 0.67 5 12/19/03 LMP m* & p-Kylene <1.50		<2.00		0.4	1.33			12/19/03	LMP
	1,3,5-Trimethylbenzene	<1.55	µg/l	0.31	1.03			12/19/03	LMP
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		<1.00	µg/l	0.2	0.67	5		12/19/03	LMP
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	m- & p-Xylene		µg/l			5			
HALL Surregate Recovery (S) 114. X - 5 12/19/03 LMP EPA 8260 Benzere 0.1 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Bromochloromethane 0.1 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Bromochloromethane 0.1 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Bromochloromethane 0.1 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Bromoform 0.2 $\mu g/l$ 0.2 0.67 1 $12/16/03$ MRD Bromothorzene 0.15 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD sec-Butylbenzene 0.15 $\mu g/l$ 0.15 0.50 1 $12/16/03$ MRD Chlorobenzene 0.15 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Chlorobenzene 0.1 $\mu g/l$ 0.1 0.33 1 $12/16/03$ MRD Chlorobenzene				0.3	1.0				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				-	-				
Benzene <0.1 µg/l 0.1 0.33 1 12/16/03 NRD Bromobenzene <0.1	HALL Surrogate Recovery (S)	114.	×	-	-	5		12/19/03	LMP
Benzene <0.1 µµ/l 0.1 0.33 1 12/16/03 NRD Bromobenzene <0.1	EPA 8260								
Bromobenzene <0.1 µµ/l 0.1 0.33 1 12/16/03 NRD Bromochloromethane <0.1		<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(12/16/03)$ NRDBromostram $(0,2)$ $\mu_3/1$ $(0,2)$ $(0,67)$ (1) $(12/16/03)$ NRDBromostrane $(0,2)$ $\mu_3/1$ $(0,2)$ $(0,67)$ (1) $(12/16/03)$ NRDn-Butylbenzene $(0,2)$ $\mu_3/1$ $(0,2)$ $(0,50)$ (1) $(2/16/03)$ NRDcarbon Tetrachloride $(0,1)$ $\mu_3/1$ $(0,15)$ $(0,50)$ (1) $(2/16/03)$ NRDCarbon Tetrachloride $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDChlorobenzene $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDChloroform $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDChloroform $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDChlorotoluene $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDChlorotoluene $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDDibromochloromethane $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDDibromochloromethane $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDDibromochloromethane $(0,1)$ $\mu_3/1$ $(0,1)$ $(0,33)$ (1) $(2/16/03)$ NRDDibro	Bromobenzene	<0.1		0.1	0.33	1		12/16/03	MRD
Bromoform CO.2 µg/l O.2 0.67 1 12/16/03 NRD Bromomethane <0.1	Bromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromomethane CO.1 #g/l O.1 0.33 1 12/16/03 HED n=Butylbenzene <0.2	Bromodichloromethane	<0.1	µg/l	0.1	0.33			12/16/03	MRD
n-Butylbenzene <0.2 µµ/l 0.2 0.67 1 12/16/03 MRD sec-Butylbenzene <0.15	Bromoform								
sec=Butylbenzene <0.15 µg/l 0.15 0.50 1 12/16/03 MRD tert=Butylbenzene <0.15									
tert-Butylbenzene<0.15 $\mu g/l$ 0.150.501 $12/16/03$ MRDCarbon Tetrachloride<0.1									
Carbon Tetrachloride $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDChlorobenzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDChloroform $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDChloroform $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDChloroform $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDChloronthane $\langle 0,2 \ \mu g/l$ $0,2 \ 0.67$ 1 $12/16/03$ NRD2-Chlorotluene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDDibromochloromethane $\langle 0,2 \ \mu g/l$ $0,2 \ 0.67$ 1 $12/16/03$ NRDDibromochloropethane(EDB) $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDDibromochlorobetnzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRDDibromochlorobetnzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,2-0$ ichlorobenzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,4-0$ ichlorobenzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,4-0$ ichlorobenzene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,4-0$ ichlorobetnene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,2-0$ ichlorobetnene $\langle 0,1 \ \mu g/l$ $0,1 \ 0.33$ 1 $12/16/03$ NRD $1,2-0$ ichloroethylene $\langle 0,1 \ \mu g/l$ <	•								
Chlorobenzene <0.1	•								
Chloroethane <0.6									
Chloroform 40.1 µg/l 0.1 0.33 1 12/16/03 MRD Chloromethane 40.2 µg/l 0.2 0.67 1 12/16/03 MRD 2-Chlorotoluene 40.1 µg/l 0.1 0.33 1 12/16/03 MRD Dibromochloromethane 40.2 µg/l 0.2 0.67 1 12/16/03 MRD Dibromochloromethane 40.1 µg/l 0.1 0.33 1 12/16/03 MRD Dibromochloropropane(DBCP) <0.3									
Chloromethane <0.2 µg/l 0.2 0.67 1 12/16/03 NRD 2-Chlorotoluene <0.1						•			
2-Chlorotoluene <0.1									
4-Chlorotoluene <0.2						-			
Dibromochloromethane<0.1 $\mu g/l$ 0.10.33112/16/03MRDDibromochloropropane(DBCP)<0.3									
Dibromochloropropane(DBCP) <0.3 µg/l 0.3 1.0 1 12/16/03 MRD 1,2-Dibromoethane(EDB) <0.1				0.1		1			MRD
Dibromomethane <0.1 µg/l 0.1 0.33 1 12/16/03 MRD 1,2-Dichlorobenzene <0.2	Dibromochloropropane(DBCP)	<0.3		0.3	1.0	1		12/16/03	MRD
1,2-Dichlorobenzene $\langle 0.2 \\ \mu g/l$ $\mu g/l$ $0.2 \\ 0.67$ 1CSL $12/16/03$ MRD1,3-Dichlorobenzene $\langle 0.15 \\ \mu g/l$ $0.15 \\ 0.50$ 1 $12/16/03$ MRD1,4-Dichlorobenzene $\langle 0.15 \\ \mu g/l$ $0.15 \\ 0.50$ 1 $12/16/03$ MRDDichlorodifluoromethane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.1 \\ 0.33$ 1 $12/16/03$ MRD1,1-Dichloroethane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.1 \\ 0.33$ 1 $12/16/03$ MRD1,2-Dichloroethane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.1 \\ 0.33$ 1 $12/16/03$ MRD1,1-Dichloroeth(yl)ene $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,2-Dichloroeth(yl)ene $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,2-Dichloroethylene $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,2-Dichloropthylene $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,2-Dichloropropane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD2,2-Dichloropropane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,1-Dichloropropene $\langle 0.1 \\ \mu g/l$ $0.1 \\ 0.33$ 0.33 1 $12/16/03$ MRD1,2/16/03MRD $1.2/16/03$ MRD $1.2/16/03$ MRD $1.2/16$	1,2-Dibromoethane(EDB)	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichlorobenzene<0.15 $\mu g/l$ 0.150.50112/16/03MRD1,4-Dichlorobenzene<0.15	Dibromomethane	<0.1	µg/l	0.1	0.33	•		12/16/03	MRD
1,4-Dichlorobenzene<0.15 $\mu g/l$ 0.150.50112/16/03MRDDichlorodifluoromethane<0.1	1,2-Dichlorobenzene		μg/l				CSL		
Dichlorodifluoromethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,1-Dichloroethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,2-Dichloroethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,1-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDcis-1,2-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDcis-1,2-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDtrans-1,2-Dichloroethylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDtrans-1,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,3-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD1,1-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDcis-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDtrans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDtrans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRDtrans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 12/16/03$ MRD <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
1,1-Dichloroethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,2-Dichloroethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,1-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDcis-1,2-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDtrans-1,2-Dichloroethylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDtrans-1,2-Dichloropthylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,3-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD1,1-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDtrans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDtrans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDEthylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRDIsopropylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03$ MRD	•								
1,2-Dichloroethane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 1,1-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ cis-1,2-Dichloroeth(yl)ene $19.4 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ trans-1,2-Dichloroethylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ trans-1,2-Dichloroethylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 1,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 1,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ 1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ cis-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ trans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ trans-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ Ethylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ Isopropylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$ Isopropylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ 1 $12/16/03 \ MRD$						-			
1,1-Dichloroeth(yl)ene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDcis-1,2-Dichloroeth(yl)ene19.4 $\mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDtrans-1,2-Dichloroethylene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD1,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD1,3-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD2,2-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD1,1-Dichloropropane $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDcis-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDcis-1,3-Dichloropropene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDEthylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRDHexachlorobutadiene $\langle 1.00 \ \mu g/l$ $1.0 \ 3.33$ $1 \ 2/16/03$ MRDIsopropylbenzene $\langle 0.1 \ \mu g/l$ $0.1 \ 0.33$ $1 \ 2/16/03$ MRD									
cis-1,2-Dichloroeth(yl)ene19.4 $\mu g/l$ 0.10.33112/16/03MRDtrans-1,2-Dichloroethylene<0.1									
trans-1,2-Dichloroethylene<0.1 $\mu g/l$ 0.10.33112/16/03MRD1,2-Dichloropropane<0.1						-			
1,2-Dichloropropane<0.1 $\mu g/l$ 0.10.33112/16/03MRD1,3-Dichloropropane<0.1									
1,3-Dichloropropane<0.1 $\mu g/l$ 0.10.33112/16/03MRD2,2-Dichloropropane<0.1						-		•	
2,2-Dichloropropane <0.1									
1,1-Dichloropropene<0.2 $\mu g/l$ 0.20.67112/16/03MRDcis-1,3-Dichloropropene<0.1									
cis-1,3-Dichloropropene <0.1									
trans-1,3-Dichloropropene<0.1 $\mu g/l$ 0.10.33112/16/03MRDEthylbenzene<0.1									
Ethylbenzene <0.1 μg/l 0.1 0.33 1 12/16/03 NRD Hexachlorobutadiene <1.00									
Hexachlorobutadiene <1.00 μg/l 1.0 3.33 1 12/16/03 MRD Isopropylbenzene <0.1								• •	
Isopropylbenzene <0.1 µg/l 0.1 0.33 1 12/16/03 MRD						1			
		<0.1		0.1	0.33	1		12/16/03	MRD
	4-Isopropyltoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.23 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01855	Matri	C: GROWTR	Sa	Sample Date/Time: 12/12/03 08:30			Lab No. 145969	
				1.00	Dilution	0	Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	μg/l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	56.5	μ g /l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,1,1-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	1.39	µg/l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD





Sample ID: 2003TN01S53

Attn: David Voight

Sample Date/Time: 12/11/03 11:45

TELEPHONE FACSIMILE WEBSITE

Lab No. 145970

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.24 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

38mpre 10. 20031001335	Place 17		001				200 110. 1	
					Dilution		Date	
	<u>Result</u>	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021								
Benzene	<6.20	µg/l	0.31	1.03	20		12/19/03	LMP
Bromobenzene	<8.20	μg/l	0.41	1.37	20		12/19/03	LMP
Bromochloromethane	<3.80	μg/l	0.19	0.63	20		12/19/03	LMP
Bromodichloromethane	<16.6	μg/l	0.83	2.76	20		12/19/03	LMP
Bromoform	<14.2	μg/l	0.71	2.36	20		12/19/03	LMP
Bromomethane	<11.4	μg/l	0.57	1.9	20		12/19/03	LMP
n-Butylbenzene	<7.20	µg/l	0.36	1.2	20		12/19/03	LMP
sec-Butylbenzene	<6.60	µg/l	0.33	1.1	20		12/19/03	LMP
tert-Butylbenzene	<6.20	µg/l	0.31	1.03	20		12/19/03	LMP
Carbon Tetrachloride	<11.8	µg/l	0.59	1.96	20		12/19/03	LMP
Chlorobenzene	<6.20	µg /l	0.31	1.03	20		12/19/03	LMP
Dibromochloromethane	<17.4	µg/l	0.87	2.9	20		12/19/03	LMP
Chloroethane	<8.80	μg/l	0.44	1.47	20		12/19/03	LMP
Chloroform	<5.40	µg/l	0.27	0.90	20		12/19/03	LMP
Chloromethane	<5.80	µg/l	0.29	0.97	20		12/19/03	LMP
2-Chlorotoluene	<6.00	#g/l	0.3	1.0	20		12/19/03	LMP
4-Chlorotoluene	<6.00	µg/l	0.3	1.0	20		12/19/03	LMP
Dibromochloropropane(DBCP)	<12.2	µg/l	0.61	2.03	20		12/19/03	LMP
1,2-Dibromoethane(EDB)	<22.0	µg/l	1.1	3.66	20		12/19/03	LMP
Dibromomethane	<60.0	µg/l	3.0	10.0	20		12/1 9/03	LMP
1,2-Dichlorobenzene	<10.2	µg/l	0.51	1.7	20		12/19/03	LMP
1,3-Dichlorobenzene	<5.80	µg/l	0.29	0.97	20		12/19/03	LMP
1,4-Dichlorobenzene	<6.00	µg/l	0.3	1.0	20		12/19/03	LMP
Dichlorodifluoromethane	<9.20	µg/l	0.46	1.53	20		12/19/03	LMP
🗙 1, 1-Dichloroethane 🛪	<7.20 🔨		0.36 🗡	1.2 🗶	20 🗶		12/19/03	LMP
1,2-Dichloroethane	<3.40	µg/l	0.17	0.57	20		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<7.80	µtg/l	0.39	1.3	20		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	224.	µg/l	0.23	0.77	20		12/19/03	LMP
trans-1,2-Dichloroethylene	<7.80	µg/l	0.39	1.3	20		12/19/03	LMP
1,2-Dichloropropane	<5.00	µg/l	0.25	0.83	20		12/19/03	LMP
1,3-Dichloropropane	<13.4	µg/l	0.67	2.23	20	601	12/19/03	LMP
2,2-Dichloropropane	<30.0	µg/l	1.5	5.0	20	CSL	12/19/03	LMP
1,1-Dichloroprop(yl)ene	<6.20 <5.00	µg/l	0.31 0.25	1.03 0.83	20 20		12/19/03	LMP LMP
t-1,3-Dichloroprop(yl)ene	<5.20	μg/l μg/l	0.25	0.85	20		12/19/03 12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene Ethyl benzene	<10.0	μg/l	0.20	1.67	20		12/19/03	LMP
Hexachiorobutadiene	<20.0	μg/l	1.0	3.33	20		12/19/03	LMP
Isopropylbenzene	<6.20	μg/(μg/(0.31	1.03	20		12/19/03	LMP
Isopropyl Ether	<9.20	μg/l	0.46	1.53	20		12/19/03	LNP
p-Isopropyltoluene	<6.40	μg/l	0.32	1.07	20		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<6.00	μg/l	0.3	1.0	20		12/19/03	LMP
Methylene Chloride	<10.2	μg/l	0.51	1.7	20		12/19/03	LMP
Naphthalene	<16.0	μg/l	0.8	2.66	20	CSH	12/19/03	LMP
n-Propylbenzene	<6.00	μg/l	0.3	1.0	20	0011	12/19/03	LMP
Styrene	<5.80	μg/l	0.29	0.97	20		12/19/03	LMP
Tetrachloroeth(yl)ene	<6.40	μg/l	0.32	1.07	20		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<11.2	μg/l	0.56	1.86	20		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<12.2	μ g /l	0.61	2.03	20		12/19/03	LNP
Toluene	<6.00	μg/l	0.3	1.0	20		12/19/03	LMP
1,2,3-Trichlorobenzene	<6.60	μg/l	0.33	1.1	20		12/19/03	LMP
1,2,4-Trichlorobenzene	<9.40	μg/l	0.47	1.57	20		12/19/03	LMP
1,1,1-Trichloroethane	<8.40	μg/l	0.42	1.4	20		12/19/03	LMP
· · · ·								

Matrix: GROWTR





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSMAILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145963.25 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S53	Matri	X: GRDWTR		Sample Date/Ti	ime: 12/11/0	3 11:45	Lab No. 14	5970
	Result	Unita	1.00	4.00	Dilution	Qualifiana	Date	Amo 1
	Result	Units	LOD	<u>L09</u>	Factor	Qualifiers	Analyzed	Analyst
EPA 8021								
1,1,2-Trichloroethane	<10.0	µg/l	0.5	1.67	20		12/19/03	LMP
Trichloroeth(yl)ene	<7.20	μg/l	0.36	1.2	20		12/19/03	LMP
Trichlorofluoromethane	<14.0	μg/ l	0.7	2.33	20		12/19/03	LMP
1,2,3-Trichloropropane	<22.0	μg/ l	1.1	3.66	20		12/19/03	LMP
1,2,4-Trimethylbenzene	<8.00	µg/l	0.4	1.33	20		12/19/03	LMP
1,3,5-Trimethylbenzene	<6.20	μg/ l	0.31	1.03	20		12/19/03	LMP
Vinyl Chloride	8.76	µg/l	0.2	0.67	20		12/19/03	LNP
m- & p-Xylene	<12.4	μg/l	0.62	2.06	20		12/19/03	LMP
o-Xylene	<6.00	μg/l	0.3	1.0	20		12/19/03	LMP
PID Surrogate Recovery (S)	108.	*	-	-	20		12/19/03	LNP
HALL Surrogate Recovery (S)	117.	*	-	-	20		12/19/03	LMP
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	NRD
Bromochioromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	μg/l	0.1	0.33	1		12/16/03	NRD
Bromoform	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1	µg/ l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/ 16/03	MRD
sec-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	NRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlor oet hane Chloroform	<0.6	µg∕l	0.6	2.0	1		12/16/03	MRD
Chloromethane	<0.1 <0.2	μg/1	0.1 0.2	0.33 0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.2	μg/l μg/l	0.2	0.33	1		12/16/03 12/16/03	MRD NRD
4-Chlorotoluene	<0.2	μ_g/t μ_g/t	0.2	0.67	1		12/16/03	NRD
Dibromochloromethane	<0.1	μ <u></u> g/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	μg/l	0.3	1.0	1		12/16/03	NRD
1,2-Dibromoethane(EDB)	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Dibromomethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	µg/l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	µµg/l	0.15	0.50	1		12/16/03	MRD
1,4-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	0.132	µ⊈g/l	0.1	0.33	1	J	12/16/03	MRD
1,1-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	0.213	µµg/l	0.1	0.33	1	J	12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	223.	μg/l	0.1	0.33	10		12/17/03	MRD
trans-1,2-Dichloroethylene	1.76	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/1	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
cis-1,3-Dichtoropropene	<0.1	μg/l	0.1	0.33	1 1		12/16/03	MRD
trans-1,3-Dichloropropene Ethylbenzene	<0.1 <0.1	µg/l	0.1 0.1	0.33 0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l µg/l	1.0	3.33	1		12/16/03 12/16/03	MRD MRD
Isopropylbenzene	<0.1		0.1	0.33	i		12/16/03	NRD
4-Isopropyltoluene	<0.1	μg/t μg/l	0.1	0.33	1		12/16/03	MRD
		- 18-1		0.33	'		12/10/03	





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.26 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID; 2003TN01853	Matri	: GRDWTR		Sample Date/Time: 12/11/03 1			Lab No. 14	145970	
	Result	Units	<u>L00</u>	<u>L09</u>	Dilution Factor	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>	
EPA 8260 Methylene Chloride	<0.25	μg/l	0.25 0.1	0.83 0.33	1		12/16/03 12/16/03	MRD MRD	
Methyl t-Butyl Ether(MTBE) Naphthalene n-Propylbenzene	<0.1 <1.00 <0.1	μg/l μg/l μg/l	1.0 0.1	3.330,33	1	CSH	12/16/03 12/16/03	MRD MRD	
Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	<0.1 <0.1 <0.1	μg/l μg/l μg/l	0.1 0.1 0.1	0.33 0.33 0.33	1 1 1		12/16/03 12/16/03 12/16/03	MRD MRD MRD	
Tetrachloroeth(yl)ene Toluene 1,2,3-Trichlorobenzene	<0.1 <0.4 <0.5	μg/l μg/l μg/l	0.1 0.4 0.5	0.33 1.33 1.67	1 1 1		12/16/03 12/16/03 12/16/03	MRD MRD MRD	
1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane	<0.5 <0.1 <0.1	µg/l µg/l µg/l	0.5 0.1 0.1	1.67 0.33 0.33	1 1 1		12/16/03 12/16/03 12/16/03	MRD MRD MRD	
Trichloroeth(yl)ene Trichlorofluoromethane	<0.2 <0.1	μg/l μg/l	0.2 0.1	0.67 0.33	1		12/16/03 12/16/03	MRD MRD	
1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	<0.4 0.579 0.154	μg/l μg/l μg/l	0.4 0.15 0.15	1.33 0.50 0.50	1	J	12/16/03 12/16/03 12/16/03	Mrd Mrd Mrd	
Vinyl Chloride o-Xylene m-& p-Xylene	28.0 <0.1 <0.4	μg/l μg/l μg/l	0.1 0.1 0.4	0.33 0.33 1.33	1 1 1		12/16/03 12/16/03 12/16/03	MRD MRD MRD	





Attn: David Voight

TELEPHONE FACSIMILE WEBSITE 800-338-7226 71 5-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.27 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

PA BO21 Date Date Analyzed Analyzed Analyzed Analyzed Bernzene -3.10 µg/L 0.31 1.03 10 12/19/03 LMP Bromobenzene -4.10 µg/L 0.41 1.37 10 12/19/03 LMP Bromobenzene -4.00 µg/L 0.41 1.37 10 12/19/03 LMP Bromofan -7.10 µg/L 0.57 1.9 10 12/19/03 LMP Bromofan -7.10 µg/L 0.35 1.2 10 12/19/03 LMP Bromomethane -5.70 µg/L 0.35 1.2 10 12/19/03 LMP sec=butylbenzene -3.30 µg/L 0.33 1.10 10 12/19/03 LMP Carbon Tetrachioride -5.90 µg/L 0.33 1.10 12/19/03 LMP Chiorotontane -4.70 µg/L 0.37 1.00 12/19/03 LMP Chiorotontane <	Sample ID: 2003TN01554	Matri;	X: GRDWTR	s	ample Date/Ti	me: 12/11/0	3 13:30	Lab No. 14	5971
EPA 8021 Image: Constraint of the image is a straint of the image is straint of the image is a straint of the image is a straint of t		Pocul t	Unite	100	1.00		Qualifiana		ann luan
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Result	Units	100	LUG	ractor	<u>uuut mers</u>	Analyzed	Analyst
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	EPA 8021								
Bronachloromethane <1.90 µg/l 0.19 0.63 10 12/19/03 LWP Bronachloromethane <5.30									LMP
Bromodich loromethane <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
$ \begin{array}{llllllllllllllllllllllllllllllllllll$									
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $, .						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						-		• • • • -	
sec-Bitylbenzene <3.30									-
tert=Butylbenzene $(3.10 \ \mu g/l \ 0.51 \ 1.03 \ 10 \ 12/19/03 \ LMPCarbon Tetrachloride(5.90 \ \mu g/l \ 0.59 \ 1.96 \ 10 \ 12/19/03 \ LMPDibromochloromethane(3.10 \ \mu g/l \ 0.31 \ 1.03 \ 10 \ 12/19/03 \ LMPDibromochloromethane(4.40 \ \mu g/l \ 0.44 \ 1.47 \ 10 \ 12/19/03 \ LMPChloroberzene(4.70 \ \mu g/l \ 0.27 \ 0.90 \ 10 \ 12/19/03 \ LMPChloroberzene(4.20 \ \mu g/l \ 0.27 \ 0.90 \ 10 \ 12/19/03 \ LMPChlorothane(2.70 \ \mu g/l \ 0.27 \ 0.90 \ 10 \ 12/19/03 \ LMPChlorothane(2.90 \ \mu g/l \ 0.27 \ 0.90 \ 10 \ 12/19/03 \ LMPChlorothane(2.90 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPChlorothane(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPChlorothane(3.00 \ \mu g/l \ 0.51 \ 1.0 \ 10 \ 12/19/03 \ LMPChlorothane(3.00 \ \mu g/l \ 0.51 \ 1.7 \ 10 \ 12/19/03 \ LMPOibromochlaromethane(3.00 \ \mu g/l \ 0.51 \ 1.7 \ 10 \ 12/19/03 \ LMPDibromochloropopare(DBCP)(31.0 \ \mu g/l \ 0.51 \ 1.7 \ 10 \ 12/19/03 \ LMPI, 2-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 4-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 4-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 4-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 4-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 1-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.0 \ 10 \ 12/19/03 \ LMPI, 1-Dichlorobenzene(3.00 \ \mu g/l \ 0.3 \ 1.2 \ 10 \ 12/19/03 \ LMPI, 1-Dichloroethane(3.00 \ \mu g/l \ 0.3 \ 1.3 \ 10 \ 12/19/03 \ LMP$	•							• •	
Carbon Tetrachloride<5.90 $\mu g/l$ 0.591.961012/19/03LMPChlorobenzene<3.10		<3.10		0.31	1.03	10			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Carbon Tetrachloride			0.59				12/19/03	LMP
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$									
Chloroform <2.70 µg/l 0.27 0.90 10 12/19/03 LMP Chloroform <2.70									
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$									
4-Chlorotoluene3.00 $\mu g/l$ 0.31.01012/19/03LNPDibromochloropropane(DBCP)<6.10									
Dibromochloropropane(DBCP) <6.10 µg/l 0.61 2.03 10 12/19/03 LMP 1,2-Dibromochane(EDB) <11.0									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	••								
1,2-Dichlorobenzene<5.10 $\mu g/l$ 0.511.71012/19/03LMP1,3-Dichlorobenzene<2.90		<11.0		1.1	3.66	10			
1,3-Dichlorobenzene2.90 $\mu g/l$ 0.290.971012/19/03LMP1,4-Dichlorobenzene<3.00	Dibromomethane			3.0	10.0	10			LMP
1,4-Dichlorobenzene <3.00									LMP
Dichlorodifluoromethane <4.60 µg/l 0.46 1.53 10 12/19/03 LMP 1,1-Dichloromethane <3.60				-					
1,1-Dichloroethane 3.60 µg/l 0.36 1.2 10 12/19/03 LMP 1,2-Dichloroethane <1.70	• .								
1,2-Dichloroethane <1.70									
1,1-Dichloroeth(yl)ene <3.90									
cis-1,2-Dichloroeth(yl)ene152. $\mu g/l$ 0.230.771012/19/03LMPtrans-1,2-Dichloroethylene5.70 $\mu g/l$ 0.391.31012/19/03LMP1,2-Dichloropropane<2.50									
trans-1,2-Dichloroethylene5.70 $\mu g/l$ 0.391.31012/19/03LMP1,2-Dichloropropane<2.50									
1,3-Dichloropropane <6.70		5.70		0.39	1.3	10			
2,2-Dichloropropane<15.0 $\mu g/l$ 1.55.010CSL12/19/03LMP1,1-Dichloroprop(yl)ene<3.10			µg/l			• •		12/19/03	LMP
1,1-Dichloroprop(yl)ene <3.10									
t-1,3-Dichloroprop(yl)ene<2.50 $\mu g/l$ 0.250.831012/19/03LMPcis-1,3-Dichloroprop(yl)ene<2.60						• •	CSL		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$									
Ethylbenzene<5.00 $\mu g/l$ 0.51.671012/19/03LNPHexachlorobutadiene<10.0									
Hexachlorobutadiene <10.0 μg/l 1.0 3.33 10 12/19/03 LMP Isopropylbenzene <3.10									
Isopropylbenzene <3.10 μg/l 0.31 1.03 10 12/19/03 LNP Isopropyl Ether <4.60	•								
Isopropyl Ether <4.60 μg/l 0.46 1.53 10 12/19/03 LMP p-Isopropyltoluene <3.20	Isopropylbenzene			0.31		10			
Methyl t-Butyl Ether(MTBE) <3.00 μg/l 0.3 1.0 10 12/19/03 LMP Methylene Chloride <5.10	Isopropyl Ether	<4.60		0.46	1.53	10			LMP
Methylene Chloride <5.10 μg/l 0.51 1.7 10 12/19/03 LNP Naphthalene <8.00 μg/l 0.8 2.66 10 CSH 12/19/03 LMP	p-Isopropyltoluene	<3.20	µg/l	0.32	1.07	10		12/19/03	LMP
Naphthalene <8.00 µg/l 0.8 2.66 10 CSH 12/19/03 LMP									
							CSH		
n-Propylbenzene <3.00 μg/l 0.3 1.0 10 12/19/03 LMP Styrene <2.90 μg/l 0.29 0.97 10 12/19/03 LMP									
Styrene <2.90 μg/l 0.29 0.97 10 12/19/03 LMP Tetrachloroeth(yl)ene <3.20 μg/l 0.32 1.07 10 12/19/03 LMP									
$1,1,1,2$ -Tetrachloroethane <5.60 μ g/l 0.56 1.86 10 12/19/03 LMP			• = •						
$1, 1, 2, 2$ -Tetrachloroethane <6.10 μ g/l 0.61 2.03 10 12/19/03 LMP									
Toluene <3.00 μg/l 0.3 1.0 10 12/19/03 LMP									
1,2,3-Trichlorobenzene <3.30 µg/l 0.33 1.1 10 12/19/03 LMP	1,2,3-Trichlorobenzene					10			
1,2,4-Trichlorobenzene <4.70 μg/l 0.47 1.57 10 12/19/03 LMP	1,2,4-Trichlorobenzene	-	μg/ l					12/19/03	LMP
1,1,1-Trichloroethane <4.20 μg/l 0.42 1.4 10 12/19/03 LMP	1,1,1-Trichloroethane	<4.20	µg/l	0.42	1.4	10		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO .: 200106102370 REPORT NO. : 145963.28 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01\$54	Matri	X: GROWTR		Sample Date/Tin	me: 12/11/0	3 13:30	Lab No. 14	45971
	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date	
	Result	Units	200		ractor	quatifiers	Analyzed	Analyst
EPA 8021								
1,1,2-Trichloroethane	<5.00	µg/l	0.5	1.67	10		12/19/03	LMP
Trichloroeth(yl)ene	<3.60	µg/l	0.36	1.2	10		12/19/03	LMP
Trichlorofluoromethane	<7.00	µg/l	0.7	2.33	10		12/19/03	LMP
1,2,3-Trichloropropane	<11.0	µg/l	1.1	3.66	10		12/19/03	LMP
1,2,4-Trimethylbenzene	<4.00	µg/l	0.4	1.33	10		12/19/03	LMP
1,3,5-Trimethylbenzene	<3.10	µg/(0.31	1.03	10		12/19/03	LMP
Vinyl Chloride	<2.00	µg/l	0.2	0.67	10		12/19/03	LMP
m-&p-Xylene o-Xylene	<6.20 <3.00	µg/l	0.62	2.06 1.0	10 10		12/19/03	LMP
PID Surrogate Recovery (S)	108.	µg/l %	0.5	-	10		12/19/03 12/19/03	lmp Lmp
HALL Surrogate Recovery (S)	114.	x	-	-	10		12/19/03	LMP
INEL SUITOgate Recovery (57		~			10		12/19/05	Grif
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1 <0.2	µg/l	0.1	0.33 0.67	1 1		12/16/03	MRD
n-Butylbenzene sec-Butylbenzene	<0.15	μg/l μg/l	0.2	0.50	1		12/16/03 12/16/03	MRD MRD
tert-Butylbenzene	<0.15	μg/(μg/(0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<d.1< td=""><td>µg/l</td><td>0.1</td><td>0.33</td><td>1</td><td></td><td>12/16/03</td><td>MRD</td></d.1<>	µg/l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3	µg/l	0.3	1.0	1		12/16/03	MRD
1,2-Dibromoethane(EDB) Dibromomethane	<0.1 <0.1	µg/l µg/l	0.1 0.1	0.33	1		12/16/03 12/16/03	MRD MRD
1,2-Dichlorobenzene	<0.2	μg/l	0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	µg/l	0.15	0.50	i	COL .	12/16/03	MRD
1,4-Dichlorobenzene	<0.15	μg/l	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	140.	µg/l	0.1	0.33	10		12/17/03	MRD
trans-1,2-Dichloroethylene	7.43	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane 2,2-Dichloropropane	<0.1 <0.1	μg/l	0.1 0.1	0.33	1 1		12/16/03 12/16/03	MRD MRD
1, 1-Dichloropropene	<0.1	μg/l μg/l	0.2	0.67	1		12/16/03	MRD
cis-1,3-Dichloropropene	<0.2	μg/l	0.2	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	μg/l	1.0	3.33	1		12/16/03	MRD
lsopropylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-**3221** www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.29 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S54	Matri	C: GROWTR	Sa	mple Date/T	Lab No. 145971			
					Date			
	Result	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg∕l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	µg/ l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,1,1-Trichloroethane	<0.1	µg/ l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	8.03	µg/l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	µg∕l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	NRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT ND.: 200106102370 REPORT ND.: 145963.30 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Dilution Date	
Benula Materia IAB 144 Proto Aul/// 1111	
<u>Result Units LOD LOQ Factor Qualifiers Analyzed A</u>	nalyşt
EPA 8021	
	1P
	1P
	1P
Bromodichloromethane <0.83 µg/l 0.83 2.76 1 12/19/03 L	4P
	1P
Bromomethane <0.57 μg/L 0.57 1.9 1 12/19/03 L	1P
	1P
	4P
	1P
	1P
	1P
	1P
	4P
	1P
	4P
	4P 4P
	1P 1P
	1P
2,2-Dichloropropane <1.50 gg/l 1.5 5.0 1 CSL 12/19/03 L	
	1P
	1P 1P
cis-1,3-Dichloroprop(yl)ene <0.26 μg/l 0.26 0.87 1 12/19/03 L Ethylbenzene <0.5 μg/l 0.5 1.67 1 12/19/03 L	
	1P (P
	1P
	1) (P
	1P
1	 (Р
	(P
	1P
	1P
	1P
Tetrachloroeth(yl)ene <0.32 µg/l 0.32 1.07 1 12/19/03 L	4P
	4P
	I P
	(P
	1P
	1P
1,1,1-Trichloroethane <0.42 μg/l 0.42 1.4 1 12/19/03 L	1P





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.31 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01558	Matrix	X: GROWTR		Sample Date/⊺i	ime: 12/12/0	13 11:15	Lab No. 14	Lab No. 145972		
	Desult	11-24-		1.55	Dilution		Date			
	Result	<u>Units</u>	<u>L00</u>	LOQ	Factor	Qualifiers	Analyzed	Analyst		
EPA 8021										
1,1,2-Trichloroethane	<0.5	un (1	0 5	1 47	4		40.40.407			
Trichloroeth(yl)ene	<0.36	µg/l	0.5 0.36	1.67 1.2	1		12/19/03	LMP		
Trichlorofluoromethane	<0.30	µg/l	0.30	2.33	1 1		12/19/03	LMP		
1,2,3-Trichloropropane	<1.10	μg/l	1.1	3.66	1		12/19/03	LMP		
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LNP		
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP		
Vinyl Chloride	1.98	µg/l µg/l	0.2	0.67	1		12/19/03	LMP		
m- & p-Xylene	<0.62	μg/l	0.62	2.06	1		12/19/03	LMP		
o-Xylene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP		
PID Surrogate Recovery (S)	108.	#9/ %	0.5	1.0	1		12/19/03	LMP		
HALL Surrogate Recovery (S)	119.	ž	-		1		12/19/03	LMP		
		~					12/19/03	LMP		
EPA 8260										
Benzene	0.278	µg/l	0.1	0.33	1	J	12/16/03	MRD		
Bromobenzene	<0.1	μg/l	0.1	0.33	1	•	12/16/03	MRD		
Bromochloromethane	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD		
Bromodichloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
Bromoform	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD		
Bromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
n-Butylbenzene	<0.2	#g/l	0.2	0.67	1		12/16/03	MRD		
sec-Butylbenzene	<0.15	μg/l	0.15	0.50	1		12/16/03	MRD		
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD		
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD		
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD		
2-Chlorotoluene	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD		
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD		
Dibromochloromethane	<0.1	#g/ l	0.1	0.33	1		12/16/03	MRD		
Dibromochloropropane(DBCP)	<0.3	µg/l	0.3	1.0	1		12/16/03	MRD		
1,2-Dibromoethane(EDB)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
Dibromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
1,2-Dichlorobenzene	<0.2	µg/l	0.2	0.67	1	CSL	12/16/03	MRD		
1,3-Dichlorobenzene	<0.15	#g/l	0.15	0.50	1		12/16/03	MRD		
1,4-Dichlorobenzene	<0.15	#g/l	0.15	0.50	1		12/16/03	MRD		
Dichlorodifluoromethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD		
1,1-Dichloroethane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD		
1,2-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
1,1-Dichloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
cis-1,2-Dichloroeth(yl)ene	10.6	µg/l	0.1	0.33	1		12/16/03	MRD		
trans-1,2-Dichloroethylene	0.572 <0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
1,2-Dichloropropane 1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD		
2, 2-Dichloropropane	<0.1	µg/l			1		12/16/03	MRD		
1,1-Dichloropropene	<0.2	<u>д</u> д/l	0.1 0.2	0.33	1		12/16/03	MRD		
cis-1,3-Dichloropropene	<0.2	µg/l	0.2	0.67 0.33	1		12/16/03	MRD		
trans-1,3-Dichloropropene	<0.1	µg/l µg/l	0.1	0.33	1		12/16/03	MRD		
Ethylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD		
Hexachlorobutadiene	<1.00	μg/l	1.0	3.33	1		12/16/03	MRD		
Isopropylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03 12/16/03	MRD MRD		
4-Isopropyltoluene	<0.1	μg/l	0.1	0.33	1			MRD		
	-0.1	P3/ 1	v. i	0.35	1		12/16/03	MRU		





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.32 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01558	Matrix	ix: GRDWTR Sample Date/Time: 12/12/03 11:15				Lab No. 145972		
					Dilution		Date	
	<u>Resul t</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg/l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Tetrachloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	μg /l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	μg /l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	μg /l	0.5	1.67	1		12/16/03	MRD
1,1,1-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	μg/ l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	μg /l	0.2	0.67	1		12/16/03	MRD
Trichlorofluoromethane	<0.1	μg /l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	μg /l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	#g/ l	0.15	0.50	1		12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	μg/ l	0.15	0.50	1		12/16/03	MRD
Vînyl Chloride	2.53	μg/ l	0.1	0.33	1		12/16/03	MRD
o-Xylene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	μg/ l	0.4	1.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MULTARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfiller.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.33 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D58	Matri	K: GRDWTR	Sample Date/Time: 12/12/03 11:15			03 11:15	Lab No. 145973		
	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date <u>Analyzed</u>	Analyst	
	ACOULT	0/11/03	200	204	140 (0)	<u>udut i i i e i s</u>	Anatyzeu	Miatyst	
EPA 8021									
Benzene	0.319	µg/l	0.31	1.03	1	J	12/19/03	LMP	
Bromobenzene	<0.41	µg/ l	0.41	1.37	1		12/19/03	LMP	
Bromochloromethane	<0.19	µg/l	0.19	0.63	1		12/19/03	LMP	
Bromodichloromethane	<0.83	µg/l	0.83	2.76	1		12/19/03	LMP	
Bromoform	<0.71	µg/l	0.71	2.36	1		12/19/03	LMP	
Bromomethane	<0.57 <0.36	µg/l	0.57 0.36	1.9 1.2	1	CSL	12/19/03	LMP	
n-Butylbenzene	<0.30	μg/l μg/l	0.33	1.1	1		12/19/03	LMP	
sec-Butylbenzene tert-Butylbenzene	<0.33	μg/(μg/(0.33	1.03	1		12/19/03 12/19/03	LMP LMP	
Carbon Tetrachloride	<0.59	µg/l	0.59	1.96	i		12/19/03	LMP	
Chlorobenzene	<0.31	μg/l	0.31	1.03	1		12/19/03	LMP	
Dibromochloromethane	<0.87	μg/l	0.87	2.9	1		12/19/03	LMP	
Chloroethane	<0.44	µg/l	0.44	1.47	1		12/19/03	LMP	
Chloroform	<0.27	µg/l	0.27	0.90	1		12/19/03	LMP	
Chloromethane	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP	
2-Chlorotoluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP	
4-Chlorotoluene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP	
Dibromochloropropane(DBCP)	<0.61	µg/l	0.61	2.03	1		12/19/03	LMP	
1,2-Dibromoethane(EDB)	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP	
Dibromomethane	<3.00	µg∕l	3.0 0.51	10.0 1.7	1 1		12/19/03	LMP	
1,2-Dichlorobenzene	<0.51 <0.29	μg/l μg/l	0.29	0.97	1		12/19/03	LMP	
1,3-Dichlorobenzene 1,4-Dichlorobenzene	<0.3	μg/l	0.29	1.0	1		12/19/03 12/19/03	LMP LMP	
Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	i		12/19/03	LMP	
1,1-Dichloroethane	<0.36	μg/l	0.36	1.2	1		12/19/03	LMP	
1,2-Dichloroethane	<0.17	μg/l	0.17	0.57	1		12/19/03	LMP	
1,1-Dichloroeth(yl)ene	<0.39	µg/l	0.39	1.3	1		12/19/03	LMP	
cis-1,2-Dichloroeth(yl)ene	14.2	µg/l	0.23	0.77	1		12/19/03	LMP	
trans-1,2-Dichloroethylene	<0.39	⊭g/ l	0.39	1.3	1		12/19/03	LMP	
1,2-Dichloropropane	<0.25	µg/l	0.25	0.83	1		12/19/03	LMP	
1,3-Dichloropropane	<0.67	µg/l	0.67	2.23	1		12/19/03	LMP	
2,2-Dichloropropane	<1.50	µg/l	1.5	5.0	1		12/19/03	LMP	
1,1-Dichloroprop(yl)ene	<0.31	µg∕l	0.31	1.03 0.83	1		12/19/03	LMP	
t-1,3-Dichloroprop(yl)ene cis-1,3-Dichloroprop(yl)ene	<0.25 <0.26	μg/l #g/l	0.25	0.87	1		12/19/03 12/19/03	LMP ENP	
Ethylbenzene	<0.20	μg/l μg/l	0.5	1.67	1		12/19/03	LMP	
Kexachlorobutadiene	<1.00	μg/l	1.0	3.33	1		12/19/03	LMP	
Isopropylbenzene	<0.31	µg/l	0.31	1.03	i		12/19/03	LMP	
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP	
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP	
Methyl t-Butyl Ether(MTBE)	<0.3	µg∕l	0.3	1.0	1		12/19/03	LMP	
Methylene Chloride	<0.51	µg/l	0.51	1.7	1		12/19/03	LNP	
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LNP	
n-Propylbenzene	<0.3	μg/l	0.3	1.0	1		12/19/03	LMP	
Styrene	<0.29	μg/l	0.29	0.97	1		12/19/03	LMP	
Tetrachloroeth(yl)ene	<0.32	μg/l	0.32	1.07	1		12/19/03	LMP	
1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	<0.56 <0.61	µg/l	0.56 0.61	1.86 2.03	1		12/19/03	LMP	
Toluene	<0.3	µg/l µg/l	0.3	1.0	1		12/19/03 12/19/03	LMP LMP	
1,2,3-Trichlorobenzene	<0.33	μg/l	0.33	1.1	i		12/19/03	LMP	
1,2,4-Trichlorobenzene	<0.47	μg/l	0.47	1.57	i		12/19/03	LMP	
1,1,1-Trichloroethane	<0.42	μg/l	0.42	1.4	i		12/19/03	LMP	





Attn: David Voight

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.uslilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.34 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D58	Matri	K: GROWTR		Sample Date/⊺i	me: 12/12/0	3 11:15	Lab No. 14	45973
	0	11-1-6-	1.00	1.00	Dilution	Qualifiana	Date	Amalicat
	<u>Result</u>	Units	LOD	LOG	Factor	<u>Qualifiers</u>	Analyzed	Analyst
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	µg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	µg/ l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	1.76 <0.62	μg/l	0.2	0.67 2.06	1		12/19/03	lmp Lmp
m- & p-Xylene	<0.02	μg/l μg/l	0.82	1.0	1		12/19/03 12/19/03	LMP
o-Xylene PID Surrogate Recovery (S)	<0.000	#9/(%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	<0.000	x	-	-	i		12/19/03	LMP
INCE SUITOGALE RECOVERY (S7					•		(2) ()) 00	2 11
EPA 8260								
Benzene	0.285	µg/l	0.1	0.33	1	J	12/16/03	MRD
Bromobenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromodichloromethane	<0.1	#g /l	0.1	0.33	1		12/16/03	MRD
Bromoform	<0.2	#g/l	0.2	0.67	1 1		12/16/03	MRD
Bromomethane	<0.1 <0.2	μg/l	0.1 0.2	0.33 0.67	1		12/16/03	MRD MRD
n-Butylbenzene sec-Butylbenzene	<0.2	µg/l µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	μg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
Chlorobenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	µg/ l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	#g/l	5.0	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP)	<0.3 <0.1	µg /l	0.3 0.1	1.0 0.33	1		12/16/03 12/16/03	MRD MRD
1,2-Dibromoethane(EDB) Dibromomethane	<0.1	μg/l μg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichlorobenzene	<0.2	μg/(μg/(0.2	0.67	1	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	µg/l	0.15		i		12/16/03	MRD
1,4-Dichlorobenzene	<0.15	μg/l	0.15		1		12/16/03	MRD
Dichlorodifluoromethane	<0.1	µg/t	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroethane	<0.1	μg/1	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	μg /l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	µg/ l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	10.6	µg/ [0.1	0.33	1		12/16/03	MRD
trans-1,2-Dichloroethylene	0.571	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD MRD
1,3-Dichloropropane	<0.1 <0.1	μg/l	0.1 0.1	0.33 0.33	1		12/16/03 12/16/03	MRD
2,2-Dichloropropane	<0.1	μg/l μg/l	0.1	0.33	i		12/16/03	MRD
1,1-Dichloropropene cis-1,3-Dichloropropene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Ethylbenzene	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Hexachlorobutadiene	<1.00	μg/l	1.0	3.33	1		12/16/03	MRD
Isopropylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.35 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample 1D: 2003 TN01D58	Matrix	C: GROWTR	Sample Date/Time: 12/1			03 11:15	Lab No. 14	45973
	<u>Resul t</u>	Units	LOD	100	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
EPA 8260								
Methylene Chloride	<0.25	µg/l	0.25	0.83	1		12/16/03	MRD
Methyl t-Butyl Ether(MTBE)	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Naphthalene	<1.00	µg/l	1.0	3.33	1	CSH	12/16/03	MRD
n-Propylbenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Styrene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,1,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2,2-Tetrachloroethane	<0.1	µg/l	0.1	0.33	1		12/16 /03	MRD
Tetrachloroeth(yl)ene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Toluene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD
1,2,3-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16/03	MRD
1,2,4-Trichlorobenzene	<0.5	µg/l	0.5	1.67	1		12/16 /03	MRD
1,1,1-Trichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1,2-Trichloroethane	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Trichloroeth(yl)ene	<0.2	µg/l	0.2	0.67	1		12/16/ 03	MRD
Trichlorofluoromethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2,3-Trichloropropane	<0.4	μg/l	0.4	1.33	1		12/16/03	MRD
1,2,4-Trimethylbenzene	<0.15	µg/ l	0.15	0.50	1		12/16/03	MRD
1,3,5-Trimethylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Vinyl Chloride	2.45	µg/ l	0.1	0.33	1		12/16/0 3	MRD
o-Xylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD





Sample ID: TRIP BLANK-USF

Matrix: WATER

Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

Sample Date/Time: 12/12/03

TELEPHONE FACSIMILE WEBSITE

Lab No. 145974

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.36 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: TRIP BLANK USP	matri	A. WAICK	30	inpre bare/ i	INC. 16/16/1		Lab NO. I	• 37 (4
					Dilution		Date	
	Bogul t	Unito		1.00		Qualifiers		Applyct
	<u>Result</u>	Units	LOD	LOQ	Factor	quatifiers	Analyzed	Analyst
EPA 8021								
Benzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Bromobenzene	<0.41	μg/t μg/t	0.41	1.37	1		12/19/03	LMP
Bromochioromethane	<0.19	μg/(μg/(0.19	0.63	1		12/19/03	LMP
Bromodichloromethane	<0.83	μg/l	0.83	2.76	1		12/19/03	LMP
Bromoform	<0.71	μg/l μg/l	0.71	2.36	i		12/19/03	LMP
Bromomethane	<0.57	μg/l	0.57	1.9	1	CSL	12/19/03	LMP
n-Butylbenzene	<0.36	μg/l	0.36	1.2	i	COL	12/19/03	LMP
sec-Butylbenzene	<0.33	μg/l	0.33	1.1	i		12/19/03	LMP
tert-Butylbenzene	<0.31	μg/l	0.31	1.03	i		12/19/03	LMP
Carbon Tetrachloride	<0.59	μg/l	0.59	1.96	i		12/19/03	LMP
Chlorobenzene	<0.31	μg/l	0.31	1.03	i		12/19/03	LMP
Dibromochloromethane	<0.87	μg/l	0.87	2.9	i		12/19/03	LMP
Chloroethane	<0.44	μg/l	0.44	1.47	i		12/19/03	LMP
Chloroform	<0.27	μg/l	0.27	0.90	i		12/19/03	LMP
Chioromethane	<0.29	μg/l	0.29	0.97	i		12/19/03	LMP
2-Chlorotoluene	<0.3	μg/l	0.3	1.0	i		12/19/03	LMP
4-Chlorotoluene	<0.3	μg/l	0.3	1.0	i		12/19/03	LMP
Dibromochloropropane(DBCP)	<0.61	μg/l	0.61	2.03	i		12/19/03	LMP
1,2-Dibromoethane(EDB)	<1.10	μg/(μg/(1.1	3.66	i		12/19/03	LMP
Dibromomethane	<3.00	µ=9/\ µ=g/l	3.0	10.0	i		12/19/03	LMP
1,2-Dichlorobenzene	<0.51	μg/l	0.51	1.7	1		12/19/03	LMP
1,3-Dichlorobenzene	<0.29	μg/l	0.29	0.97	i		12/19/03	LMP
1,4-Dichlorobenzene	<0.3	μg/(0.3	1.0	i		12/19/03	LMP
Dichlorodifluoromethane	<0.46	μg/l	0.46	1.53	i		12/19/03	LMP
1,1-Dichloroethane	<0.36	μg/l	0.36	1.2	1		12/19/03	LMP
1,2-Dichloroethane	<0.17	μg/l	0.17	0.57	i		12/19/03	LMP
1,1-Dichloroeth(yl)ene	<0.39	μg/l	0.39	1.3	1		12/19/03	LMP
cis-1,2-Dichloroeth(yl)ene	<0.23	µg/l	0.23	0.77	1		12/19/03	LMP
trans-1,2-Dichloroethylene	<0.39	µg/l	0.39	1.3	1		12/19/03	LMP
1,2-Dichloropropane	<0.25	µg/l	0.25	0.83	1		12/19/03	LMP
1,3-Dichloropropane	<0.67	µg/l	0.67	2.23	1		12/19/03	LMP
2,2-Dichloropropane	<1.50	µg/l	1.5	5.0	1		12/19/03	LMP
1,1-Dichloroprop(yl)ene	<0.31	µg/l	0.31	1.03	1		12/19/03	LNP
t-1,3-Dichloroprop(yl)ene	<0.25	µg/l	0.25	0.83	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.26	µg/l	0.26	0.87	1		12/19/03	LMP
Ethylbenzene	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Hexachlorobutadiene	<1.00	μ g/l	1.0	3.33	1		12/19/03	LMP
Isopropylbenzene	<0.31	⊈g/l	0.31	1.03	1		12/19/03	LMP
Isopropyl Ether	<0.46	µg/l	0.46	1.53	1		12/19/03	LMP
p-Isopropyltoluene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
Methyl t-Butyl Ether(MIBE)	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Methylene Chloride	<0.51	⊭g/ l	0.51	1.7	1		12/19/03	LNP
Naphthalene	<0.8	µg/l	0.8	2.66	1	CSH	12/19/03	LNP
n-Propylbenzene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
Styrene	<0.29	µg/l	0.29	0.97	1		12/19/03	LMP
Tetrachloroeth(yl)ene	<0.32	µg/l	0.32	1.07	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.56	µg/l	0.56	1.86	1		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.61	µg/l	0.61	2.03	1		12/19/03	LNP
Toluene	<0.3	µg/l	0.3	1.0	1		12/19/03	LNP
1,2,3-Trichlorobenzene	<0.33	µg/l	0.33	1.1	1		12/ 19/03	LMP
1,2,4-Trichlorobenzene	<0.47	µg/l	0.47	1.57	1		12/19/03	LMP
1,1,1-Trichloroethane	<0.42	µg/l	0.42	1.4	1		12/19/03	LMP

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130

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Attn: David Voight

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.37 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: TRIP BLANK-USF	Matri	X: WATER	Sa	ample Date/Ti	13	Lab No. 145974		
	Baavala	tinite		1.00	Dilution	0	Date	
	<u>Result</u>	<u>Units</u>	LOD	100	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021								
1,1,2-Trichloroethane	<0.5	µg/l	0.5	1.67	1		12/19/03	LMP
Trichloroeth(yl)ene	<0.36	µg/l	0.36	1.2	1		12/19/03	LMP
Trichlorofluoromethane	<0.7	μg/l	0.7	2.33	1		12/19/03	LMP
1,2,3-Trichloropropane	<1.10	µg/l	1.1	3.66	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.4	µg/l	0.4	1.33	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.31	µg/l	0.31	1.03	1		12/19/03	LMP
Vinyl Chloride	<0.2	µg/l	0.2	0.67	1		12/19/03	LMP
m- & p-Xylene	<0.62	µg/l	0.62	2.06	1		12/19/03	LMP
o-Xylene	<0.3	µg/l	0.3	1.0	1		12/19/03	LMP
PID Surrogate Recovery (S)	108.	x	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	115.	*	-	-	1		12/19/03	LMP
EPA 8260								
Benzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Bromobenzene	<0.1	μg/l	0.1	0.33	1		12/16/03	MRD
Bromochloromethane	<0.1	μg/l	0.1	0.33	i		12/16/03	MRD
Bromodichloromethane	<0.1	µg/l	0.1	0.33	i		12/16/03	MRD
Bromoform	<0.2	μg/l	0.2	0.67	1		12/16/03	MRD
Bromomethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
n-Butylbenzene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
sec-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
tert-Butylbenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Carbon Tetrachloride	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chlorobenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloroethane	<0.6	µg/l	0.6	2.0	1		12/16/03	MRD
Chloroform	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Chloromethane	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
2-Chlorotoluene	<0.1	#g /l	0.1	0.33	1		12/16/03	MRD
4-Chlorotoluene	<0.2	µg/l	0.2	0.67	1		12/16/03	MRD
Dibromochloromethane	<0.1 <0.3	µg/l	0.1	0.33	1		12/16/03	MRD
Dibromochloropropane(DBCP) 1,2-Dibromoethane(EDB)	<0.3	μg/l μg/l	0.3 0.1	1.0 0.33	1		12/16/03	MRD
Dibromomethane	<0.1	µ9/(µg/i	0.1	0.33	i		12/16/03 12/16/03	MRD MRD
1,2-Dichlorobenzene	<0.2	μ9/(μ9/ί	0.2	0.67	i	CSL	12/16/03	MRD
1,3-Dichlorobenzene	<0.15	μg/l	0.15	0.50	i	UUL	12/16/03	MRD
1,4-Dichlorobenzene	<0.15	µg/l	0.15	0.50	1		12/16/03	MRD
Dichlorodifluoromethane	<0.1	<u>µg</u> /l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloroethane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloroeth(yl)ene	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
cis-1,2-Dichloroeth(yl)ene	<0.1	µg /l	0.1	0.33	1		12/16/03	MRD
trans-1,2-Dichloroethylene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,2-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
1,3-Dichloropropane	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
2,2-Dichloropropane	<0.1	#g/l	0.1	0.33	1		12/16/03	MRD
1,1-Dichloropropene	<0.2	#g/l	0.2	0.67	1		12/16/03	MRD
cis-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
trans-1,3-Dichloropropene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Ethylbenzene	<0.1	µg/l	0.1	0.33	1		12/16/03	MRD
Hexachlorobutadiene	<1.00	µg/l	1.0	3.33	1		12/16/03	MRD
Isopropylbenzene	<0.1 <0.1	µg/l #g/l	0.1	0.33	1		12/16/03	MRD
4-Isopropyltoluene	×0.1	µg/l	0.1	0.33			12/16/03	MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.38 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: TRIP BLANK-USF	Matrix	C: WATER	Sample Date/Time: 12/1)3	Lab No. 14	45974
	<u>Result</u>	Units	<u>L00</u>	<u>L09</u>	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 8260 Methylene Chloride Methylene Chloride Methyl t-Butyl Ether(MTBE) Naphthalene n-Propylbenzene Styrene 1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroeth(yl)ene Toluene 1,2,3-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Trichloroeth(yl)ene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl Chloride o-Xylene	<0.25 <0.1 <1.00 <0.1 <0.1 <0.1 <0.1 <0.4 <0.5 <0.5 <0.5 <0.1 <0.2 <0.1 <0.4 <0.15 <0.15 <0.15 <0.15 <0.15 <0.1	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.25 0.1 1.0 0.1 0.1 0.1 0.1 0.4 0.5 0.5 0.1 0.1 0.2 0.1 0.4 0.15 0.15 0.1 0.1	0.83 0.33 0.33 0.33 0.33 0.33 1.33 1.67 1.67 0.33 0.67 0.33 0.67 0.33 1.33 0.50 0.50 0.50 0.33 0.33	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CSH	12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03 12/16/03	MRD MRD MRD MRD MRD MRD MRD MRD MRD MRD
m-& p-Xylene	<0.4	µg/l	0.4	1.33	1		12/16/03	MRD





Attn: David Voight

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.uslilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.39 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S58	Matrix	C: GROWTR	Sample Date/Time: 12/12/03 11:15				Lab No. 145975	
	<u>Reșult</u>	<u>Units</u>	L00	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
<u>EPA 6010</u> Diss. Nickel	0.0062	mg∕l	0.003	0.01	1	J	12/19/03	DJB
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(k)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluorene Indeno(1,2,3-cd)Pyrene 1-Methyl Naphthalene 2-Methyl Naphthalene Naphthalene Phenanthrene Pyrene 9,10-Diphenylanthracene (S)	<1.26 <1.26 <1.05 <0.84 <0.357 <0.84 <1.05 <1.26 <1.26 <1.26 <1.26 <1.68 <2.31 <2.10 <1.68 <1.89 <47.9	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.05 0.05 0.05 0.06 0.12 0.05 0.08 0.11 0.1 0.08 0.09	0.20 0.20 0.17 0.13 0.13 0.13 0.17 0.17 0.20 0.20 0.20 0.40 0.17 0.27 0.37 0.33 0.27 0.30	21 21 21 21 21 21 21 21 21 21 21 21 21 2		12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03	SLO SLO SLO SLO SLO SLO SLO SLO SLO SLO
Method 3510 Liquid Ext.	COMP	~	-	-	-		12/18/03	MJG

VEOLIA



Attn: David Voight

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ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT ND.: 200106102370 REPORT ND.: 145963.40 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D58	Matrix	C: GROWTR	Sam	ple Date/Ti	me: 12/12/0	3 11:15	Lab No. 14	\$5976
	<u>Result</u>	<u>Units</u>	LOD	<u>L09</u>	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
<u>EPA 6010</u> Diss. Nickel	0.0069	mg∕l	0.003	0.01	1	J	12/19/03	DJB
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluorenthene Fluorene Indeno(1,2,3-cd)Pyrene 1-Methyl Naphthalene 2-Methyl Naphthalene Naphthalene Phenanthrene Pyrene 9,10-Diphenylanthracene (S)	<1.30 <1.09 <0.868 <0.868 <0.868 <0.868 <1.09 <1.30 <1.30 <1.30 <1.30 <1.74 <2.39 <2.17 <1.74 <2.40 <1.74 <2.40 <1.74 <2.40 <1.74 <2.40 <1.74 <2.40 <2.17 <1.74 <2.40 <2.17 <1.74 <2.40 <2.17 <1.74 <2.40 <2.17 <1.74 <2.85 <2.17 <1.74 <2.85 <2.17 <1.74 <2.85 <2.17 <1.74 <2.85 <2.17 <1.74 <2.85 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.19 <2.17 <1.74 <2.17 <2.17 <1.74 <2.19 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2.17 <2	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.05 0.05 0.06 0.12 0.05 0.06 0.12 0.05 0.08 0.11 0.1 0.08 0.09	0.20 0.20 0.17 0.13 0.13 0.13 0.17 0.17 0.20 0.20 0.20 0.20 0.20 0.20 0.27 0.37 0.33 0.27 0.30	21.7 21.7 21.7 21.7 21.7 21.7 21.7 21.7		12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03	SLO SLO SLO SLO SLO SLO SLO SLO SLO SLO





Attn: David Voight

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PROJECT NO.: 200106102370 REPORT NO.: 145963.41 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S50	Matri	K: GRDWTR	Sample Date/Time: 12/12/03			Lab No. 145977		
	<u>Result</u>	Units	<u>LOD</u>	<u>L09</u>	Dilution <u>Factor</u>	Qualifiers	Date Analyzed	Analyst
<u>EPA 6010</u> Diss. Nickel	0.0201	mg∕l	0.003	0.01	1		12/19/03	DJB
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluorenthene Fluorene Indeno(1,2,3-cd)Pyrene 1-Nethyl Naphthalene 2-Nethyl Naphthalene Naphthalene Phenanthrene Pyrene	<0.0654 <0.0654 <0.0545 <0.0436 <0.0185 <0.0436 <0.0436 <0.0545 <0.0545 <0.0654 <0.0654 <0.0654 <0.131 <0.0545 <0.0872 <0.102 <0.109 <0.0872 <0.0981	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.05 0.05 0.05 0.06 0.12 0.05 0.08 0.11 0.08 0.09	0.20 0.20 0.17 0.13 0.13 0.13 0.13 0.17 0.17 0.20 0.20 0.20 0.40 0.17 0.27 0.37 0.33 0.27 0.30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03	SLO SLO SLO SLO SLO SLO SLO SLO SLO SLO
9,10-Diphenylanthracene (S) Method 3510 Liquid Ext.	76.7 COMP	%	-	-	1		12/24/03 12/18/03	SLO Mjg





Attn: David Voight

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PROJECT NO.: 200106102370 REPORT NO.: 145963.42 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S52	Matri	C: GROWTR	Sample Date/Time: 12/11/03 14:45			3 14:45	Lab No. 145978	
	<u>Result</u>	Units	<u>L00</u>	<u>L00</u>	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
<u>EPA 6010</u> Diss. Nickel	0.0481	mg∕l	0.003	0.01	1		12/19/03	DJB
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluoranthene Fluoranthene Fluorene Indeno(1,2,3-cd)Pyrene 1-Methyl Naphthalene 2-Methyl Naphthalene Naphthalene	<0.0654 <0.0654 <0.0545 <0.0436 <0.0436 <0.0436 <0.0545 <0.0545 <0.0654 <0.0654 <0.0654 <0.0654 <0.0654 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0436 <0.0436 <0.0436 <0.0545 <0.0545 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0436 <0.0545 <0.0436 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0545 <0.0654 <0.0654 <0.0854 <0.0654 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0854 <0.0872 <0.0872 <0.0872 <0.012	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.04 0.05 0.05 0.06 0.06 0.12 0.05 0.08 0.11 0.1	0.20 0.20 0.17 0.13 0.057 0.13 0.17 0.17 0.20 0.20 0.20 0.40 0.17 0.27 0.37 0.33	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03	SLO SLO SLO SLO SLO SLO SLO SLO SLO SLO
Phenanthrene Pyrene 9,10-Diphenylanthracene (S) Nethod 3510 Liquid Ext.	<0.0872 <0.0981 82.7 COMP	μg/l μg/l χ	0.08	0.27 0.30	1 1 1 -		12/24/03 12/24/03 12/24/03 12/18/03	SLO SLO SLO MJG





Attn: David Voight

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PROJECT NO.: 200106102370 REPORT NO.: 145963.43 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01S53	Matri	K: GROWTR	San	nple Date/Ti	ime: 12/11/0	03 11:45	Lab No. 145979	
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA_6010								
Diss. Nickel	0.0129	mg∕l	0.003	0.01	1		12/19/03	DJB
EPA 8310								
Acenaphthene	<0.0654	µg/l	0.06	0.20	1		12/24/03	SLO
Acenaphthylene	<0.0654	µg/l	0.06	0.20	1		12/24/03	SLO
Anthracene	<0.0545	µg∕l	0.05	0.17	1		12/24/03	SLO
Benzo(a)Anthracene	<0.0436	µg/ \	0.04	0.13	1		12/24/03	SLO
Benzo(a)Pyrene	<0.0185	µg/l	0.017	0.057	1		12/24/03	SLO
Benzo(b)Fluoranthene	<0.0436	µg/l	0.04	0.13	1		12/24/03	SLO
Benzo(k)Fluoranthene	<0.0436	µg/l	0.04	0.13	1		12/24/03	SLO
Benzo(ghi)Perylene	<0.0545	µg/l	0.05	0.17	1		12/24/03	SLO
Chrysene	<0.0545	#g/l	0.05	0.17	1		12/24/03	SLO
Dibenzo(a,h)Anthracene	<0.0654	µg/l	0.06	0.20	1		12/24/03	SLO
Fluoranthene	<0.0654	μg/ ί	0.06	0.20	1		12/24/03	SLO
Fluorene	<0.131	µg/l	0.12	0.40	1		12/24/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.0545	µg/l	0.05	0.17	1		12/24/03	SLO
1-Methyl Naphthalene	0.125	#g/ l	0.08	0.27	1	J	12/24/03	SLO
2-Methyl Naphthalene	0.309	µg/l	0.11	0.37	1	J	12/24/03	SLO
Naphthalene	0.285	μg/l	0.1	0.33	1	J	12/24/03	SLO
Phenanthrene	<0.0872	µg/l	0.08	0.27	1		12/24/03	SLO
Pyrene	<0.0981	#g/ l	0.09	0.30	1		12/24/03	SLO
9,10-Diphenylanthracene (S)	83.4	*	-	-	1		12/24/03	SLO
Method 3510 Liquid Ext.	COMP		-	-	-		12/18/03	MJG



Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145963.44 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF

Sample ID: 2003TN01D52	Matrix	C: GRDWTR	Sample Date/Time: 12/11/03 14:45			Lab No. 145980		
	<u>Result</u>	Units	LOD	<u>L09</u>	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
<u>EPA 6010</u> Diss. Nickel	0.0481	mg∕l	0.003	0.01	1		12/19/03	DJB
EPA 8310 Acenaphthene Acenaphthylene Anthracene Benzo(a)Anthracene Benzo(a)Pyrene Benzo(b)Fluoranthene Benzo(b)Fluoranthene Benzo(ghi)Perylene Chrysene Dibenzo(a,h)Anthracene Fluoranthene Fluorene Indeno(1,2,3-cd)Pyrene 1-Methyl Naphthalene 2-Methyl Naphthalene Naphthalene	<0.0654 <0.0545 <0.0436 <0.0185 <0.0436 <0.0436 <0.0436 <0.0545 <0.0545 <0.0654 <0.0654 <0.131 <0.0545 <0.0872 0.136 0.136	μg/l μg/l μg/l μg/l μg/l μg/l μg/l μg/l	0.06 0.05 0.04 0.017 0.04 0.04 0.05 0.05 0.06 0.06 0.12 0.05 0.08 0.11 0.1	0.20 0.20 0.17 0.13 0.057 0.13 0.13 0.17 0.17 0.20 0.20 0.40 0.17 0.27 0.37 0.33	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J	12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03 12/24/03	SLO SLO SLO SLO SLO SLO SLO SLO SLO SLO
Phenanthrene Pyrene 9,10-Diphenylanthracene (S) Method 3510 Liquid Ext.	<0.0872 <0.0981 80.6 COMP	μg/l μg/l %	0.08	0.27 0.30	1 1 1	-	12/24/03 12/24/03 12/24/03 12/18/03	SLO SLO SLO MJG



All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130



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TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

Qualifier Descriptions

CSL	Check standard for this analyte exhibited a low bias. Sample results may also be biased low.
CSH	Check standard for this analyte exhibited a high bias. Sample results may also be biased high.
J	Estimated concentration below laboratory quantitation level.
S1H	Sample matrix spike recovery was high. Sample result may be biased high.
S2L	Sample matrix spike duplicate recovery was low. Sample result may be biased low.

PROJECT NO.: 200106102370 REPORT NO.: 145963.45 DATE REC'D : 12/15/03 REPORT DATE: 01/07/04 PREPARED BY: GPF





ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

COPT

TELEPHONE FACSIMILE WEBSITE

1/5401 2

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	Sample Summary			142091.2
145691 20 145692 20 145693 20 145694 20 145695 20 145696 20 145697 20 145698 20 145697 20 145697 20 145700 20 145701 20	<u>ient Sample ID</u> 03TN01S01 03TN01S02 03TN01S03 003TN01S04 003TN01S05 03TN01S06 03TN01S10 03TN01S10 03TN01S18 03TN01S18 03TN01S19 03TN01S16	Date/Time 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03 12/09/03	09:10 09:30 11:30 11:40 10:15 10:40 12:25 12:40 12:45 13:05 11:20	Matrix SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL
145702 20	03TN01S17	12/09/03	11:30	SOIL
	03TN01S14 03TN01S15	12/09/03 12/09/03	09:10 09:30	SOIL
145705 20	03TN01D90	12/09/03		SOIL

Sample Summary

Sample Narrative/Sample Status

LOGIN:

145691	REC'D	ENCORE	SAMPLER	FOR	VOC
145692	REC'D	ENCORE	SAMPLER	FOR	VOC
145693	REC'D	ENCORE	SAMPLER	FOR	VOC
145694	REC'D	ENCORE	SAMPLER	FOR	VOC

GENERAL:

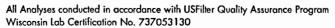
ANALYSES:										
145699	Preserved with	methanol	after	НT	was	up	on	12-19-03	-	EAZ
145700	Preserved with	methanol	after	НT	was	up	on	12-19-03	•	EAZ
	Preserved with									
	Preserved with									
145703	Preserved with	methanol	after	HT	was	up	on	12-19-03	-	EAZ
145704	Preserved with	methanol	after	HT	was	up	on	12-19-03	-	EAZ

QA/QC:

REPORTING:

Definitions

LOD = Limit of Detection LOQ = Limit of Quantitation < = Less Than COMP = Complete SUBCON = Subcontracted analysis mv = millivolts pCi/l = picocurie per liter ml/l = milliters/Liter µg/l = Micrograms per liter = parts per billion (ppb) µg/kg = Micrograms per kilogram = parts per billion (ppb) mg/l = Milligrams per liter = parts per million (ppm) mg/kg = Milligrams per kilogram = parts per million (ppm) NOT PRES = Not Present ppth = Parts per thousand (S) = Surrogate Compound







Attn: David Voight

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.3 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Result Units LO0 Pattor Oualifiers Date Analyzed Analyzed Analyzed FPA 160.3 Total Solids 87.0 X - 0.33 - 12/18/03 LW FPA 8621 (Only positively identified analyzes are reported on a dry weight basis 12/18/03 LW Bromobenzene - 0.025 mg/kg 0.006 0.023 0.8 12/18/03 LW Bromobenzene - 0.025 mg/kg 0.010 0.033 0.8 12/18/03 LW Bromobenzene - 0.025 mg/kg 0.010 0.033 0.8 12/18/03 LW carbon Fetrachoride - 0.025 mg/kg 0.027 0.8 12/18/03 LW Chiorobenzene - 0.025 mg/kg 0.027 0.8 12/18/03 LW Chiorobenzene - 0.025 mg/kg 0.027 0.8 12/18/03 LW Chiorobenzene - 0.025 mg/kg 0.010	Sample ID: 2003TN01S01	Matrix	: SOIL	Sam	ple Date/Ti	ime: 12/09/03 09:10	Lab No. 14	45691
Total Solids B7.0 % - 0.33 - 12/11/03 SAK EPA B021 (Only positively identified analytes are reported on a dry weight basis Bremedication 2/18/03 LIP Bromodichomethane -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LIP Bromodichomethane -0.025 mg/kg 0.006 0.02 0.8 CSL LCL 12/18/03 LIP Bromodichomethane -0.025 mg/kg 0.011 0.033 0.8 12/18/03 LIP carbon Tetrachtoride -0.025 mg/kg 0.011 0.033 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.006 0.027 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.007 0.023 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.003 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.008 <		<u>Result</u>	<u>Units</u>	LOD	LOQ			<u>Analyst</u>
Total Solids B7.0 % - 0.33 - 12/11/03 SAK EPA B021 (Only positively identified analytes are reported on a dry weight basis Bremedication 2/18/03 LIP Bromodichomethane -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LIP Bromodichomethane -0.025 mg/kg 0.006 0.02 0.8 CSL LCL 12/18/03 LIP Bromodichomethane -0.025 mg/kg 0.011 0.033 0.8 12/18/03 LIP carbon Tetrachtoride -0.025 mg/kg 0.011 0.033 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.006 0.027 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.007 0.023 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.003 0.8 12/18/03 LIP Chiorodibromethane -0.025 mg/kg 0.008 <	EPA 160.3							
Benzene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LWP Bromobrane <0.025		87.0	%	-	0.33	-	12/11/03	SAK
Benzene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LWP Bromobrane <0.025	EPA 8021 (Only positively	identified	analytes	are repor	ted on a dr	ry weight basis		
Bromodichloromethane <0.025 mg/kg 0.006 0.02 0.8 CSL LCL 12/18/03 LMP sec-Butylbenzene <0.025							12/18/03	LMP
n-Burylbenzene <0.025 mg/kg 0.012 0.04 0.8 12/18/03 LHP tert-Burylbenzene <0.025 mg/kg 0.01 0.033 0.8 12/18/03 LHP tert-Burylbenzene <0.025 mg/kg 0.007 0.023 0.8 12/18/03 LHP Chlorobenzene <0.025 mg/kg 0.010 0.033 0.8 CSL LCL DUP 12/18/03 LHP Chlorobenzene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LHP 2-Chlorobluene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LHP 2-Chlorobluene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LHP 1,2-01bromo-3-chloropropane <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LHP 1,2-01chorobenzene <0.025 mg/kg 0.008 0.027 0.8 12/18/03 LHP 1,4-01chorobenzene <0.025 mg/kg 0.016 0.033 0.8 12/18/03 LHP 1,4-01chorobenzene <0.025 mg/kg 0.016 0.033 0.8 12/18/03 LHP 1,2-01chlorobenzene <0.025 mg/kg 0.016 0.033 0.8 12/18/03 LHP 1,2-01chlorobenzene <0.025 mg/kg 0.016 0.033 0.8 12/18/03 LHP 1,2-01chlorobenzene <0.025 mg/kg 0.007 0.023 0.8 12/18/03 LHP 1,2-01chlorobenzene <0.025 mg/kg 0.007 0.023 0.8 12/18/03 LHP 1,2-01chloropropane <0.025 mg/kg 0.006 0.027 0.	Bromobenzene	<0.025	mg/kg	0.007	0.023	0.8		LMP
sec-ButyLbenzene <0.025	Bromodichloromethane	<0.025	mg/kg	0.006	0.02	0.8 CSL LCL	12/18/03	LMP
tert-ButyUbenzene -0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 0.8 12/18/03 LMP Chlorodbromenthane -0.025 mg/kg 0.007 0.023 0.8 12/18/03 LMP Chlorodbromenthane -0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP Chlorodbromenthane -0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP Chlorotoluene -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LMP 1,2-0 ibromo-3-chloropropane -0.025 mg/kg 0.009 0.03 0.8 12/18/03 LMP 1,2-0 ibromo-bhane -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LMP 1,2-0 ibromo-bhane -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LMP 1,2-0 ichlorobenzene -0.025 mg/kg <td< td=""><td></td><td></td><td>mg/kg</td><td></td><td></td><td>0.8</td><td>12/18/03</td><td>LMP</td></td<>			mg/kg			0.8	12/18/03	LMP
Carbon Tetrachloride <0.025								LMP
Chlorobenzene -0.025 mg/kg 0.007 0.023 0.8 12/18/03 LMP Chloroothane -0.025 mg/kg 0.02 0.67 0.8 12/18/03 LMP Chloroothane -0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP Chlorootoluene -0.025 mg/kg 0.01 0.033 0.8 CSL LCL DUP 12/18/03 LMP 2-Chlorotoluene -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LMP 1,2-0 ibromoethane -0.025 mg/kg 0.009 0.03 0.8 12/18/03 LMP 1,2-0 ibromoethane -0.025 mg/kg 0.012 0.4 0.8 12/18/03 LMP 1,2-0 ibromoethane -0.025 mg/kg 0.008 0.027 0.8 12/18/03 LMP 1,3-0 ich lorobenzene -0.025 mg/kg 0.016 0.047 0.8 12/18/03 LMP 1,4-0 ich lorobenzene -0.025 mg/kg 0.016 0.057 0.8 12/18/03 LMP 1,-0 ich loro							12/18/03	LMP
Chlorodibromomethane <0.025 mg/kg 0.02 0.067 0.8 12/18/03 LHP Chloroothane <0.025								LMP
Chloroethane c0.025 mg/kg 0.09 0.30 0.8 12/18/03 LHP Chloroform <0.025						-		
Chloroform <0.025 mg/kg 0.01 0.033 0.8 12/18/03 LHP Chloromethane <0.025								
Chloromethane <0.025 mg/kg 0.01 0.033 0.8 CSL LCL DUP 12/18/03 LMP 2-Chlorotoluene <0.025								
2-Chlorotoluene <0.025								
4-Chlorotoluene 0.025 mg/kg 0.009 0.03 0.8 12/18/03 LWP 1,2-Dibromo-3-chloropropane 0.025 mg/kg 0.009 0.03 0.8 12/18/03 LWP 1,2-Dibromo-thane 0.025 mg/kg 0.012 0.04 0.8 12/18/03 LWP 1,2-Dibromoethane 0.025 mg/kg 0.012 0.04 0.8 12/18/03 LWP 1,3-Dichlorobenzene 0.025 mg/kg 0.008 0.027 0.8 12/18/03 LWP 1,4-Dichlorobenzene 0.025 mg/kg 0.009 0.03 0.8 12/18/03 LWP 1,1-Dichloroethane <0.025								
1,2-Dibromo-3-chloropropane <0.025								
1,2-Dibromoethane <0.025								
1,2-Dichlorobenzene <0.025								
1.3-Dichlorobenzene <0.025	•							
1,4-Dichlorobenzene <0.025								
Dichlorodifluoromethane <0.025 mg/kg 0.014 0.047 0.8 LCL DUP 12/18/03 LMP 1,1-Dichloroethane <0.025								
1,1-Dichloroethane <0.025	•							
1,2-Dichloroethane <0.025	1,1-Dichloroethane	<0.025			0.03			
1,1-Dichloroethylene <0.025	1,2-Dichloroethane	<0.025		0.005	0.017	0.8		
trans-1,2-Dichloroethylene <0.025	1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	0.8	12/18/03	
1,2-Dichloropropane <0.025	cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
1,3-Dichloropropane <0.025		<0.025	mg/kg	0.01		0.8	12/18/03	LMP
2,2-Dichloropropane <0.025			mg/kg			0.8	12/18/03	LMP
Ethylbenzene<0.025mg/kg0.0070.0230.812/18/03LMPHexachlorobutadiene<0.025							12/18/03	LMP
Hexachlorobutadiene<0.025mg/kg0.0150.050.812/18/03LMPIsopropylbenzene<0.025								
Isopropylbenzene <0.025 mg/kg 0.009 0.03 0.8 12/18/03 LMP Isopropyl Ether <0.025	•						· . ·	
Isopropyl Ether <0.025								
p-Isopropyltoluene<0.025mg/kg0.0110.0370.812/18/03LMPMethyl t-Butyl Ether(MTBE)<0.025								
Methyl t-Butyl Ether(MTBE)<0.025mg/kg0.0180.060.812/18/03LMPMethylene Chloride<0.025								
Methylene Chloride <0.025								
Naphthalene <0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP n-Propylbenzene <0.025								
n-Propylbenzene<0.025mg/kg0.0090.030.812/18/03LMPTetrachloroethylene<0.025	•							
Tetrachloroethylene<0.025mg/kg0.0090.030.812/18/03LMP1,1,2,2-Tetrachloroethane<0.025								
1,1,2,2-Tetrachloroethane<0.025mg/kg0.0060.020.8CSH12/18/03LMPToluene<0.025								
Toluene<0.025mg/kg0.0070.0230.812/18/03LMP1,2,3-Trichlorobenzene<0.025	· · · · · · · · · · · · · · · · · · ·							
1,2,3-Trichlorobenzene<0.025mg/kg0.0140.0470.812/18/03LMP1,2,4-Trichlorobenzene<0.025								
1,2,4-Trichlorobenzene<0.025mg/kg0.0140.0470.812/18/03LMP1,1,1-Trichloroethane<0.025								
1,1,1-Trichloroethane<0.025mg/kg0.0080.0270.812/18/03LMP1,1,2-Trichloroethane<0.025								
1,1,2-Trichloroethane<0.025mg/kg0.0060.020.812/18/03LMPTrichloroethylene<0.025								
Trichloroethylene<0.025mg/kg0.0110.0370.812/18/03LMPTrichlorofluoromethane<0.025								
Trichlorofluoromethane<0.025mg/kg0.0080.0270.812/18/03LMP1,2,4-Trimethylbenzene<0.025								
1,2,4-Trimethylbenzene <0.025 mg/kg 0.012 0.04 0.8 12/18/03 LMP 1,3,5-Trimethylbenzene <0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP	•							
1,3,5-Trimethylbenzene <0.025 mg/kg 0.01 0.033 0.8 12/18/03 LMP	1,2,4-Trimethylbenzene	<0.025		0.012	0.04			
Vinyl Chloride <0.025 mg/kg 0.018 0.06 0.8 12/18/03 LMP	1,3,5-Trimethylbenzene					0.8		
	Vinyl Chloride	<0.025	mg/kg	0.018	0.06	0.8	12/18/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.4 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S01	Matrix	: SOIL	San	nple Date/Ti	ime: 12/09 /0	03 09:10	Lab No. 1	45691
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	i analytes	are repor	ted on a dr	y weight ba	asis		
m- & p-Xylene	<0.025	mg∕kg	0.015	0.05	0.8		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	0.8		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.8	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	800.0	0.027	0.8		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg∕kg	0.008	0.027	0.8		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
cis-1.3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
PID Surrogate Recovery (S)	93.9	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	127.	%	-	-	1		12/18/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.5 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

EPA 160.3 Total Solids 84.5 % - 0.33 - 12/11/03 S. EPA 8021 Benzene Conly positively identified analytes are reported on a dry weight basis - 12/18/03 Li Benzene <0.025	92
Total Solids 84.5 % - 0.33 - 12/11/03 S. EPA 8021 (Only positively identified analytes are reported on a dry weight basis - 0.33 - 12/11/03 S. Benzene <0.025	nalyst
EPA 8021 (Only positively identified analytes are reported on a dry weight basis Benzene <0.025	
Benzene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LI Bromobenzene <0.025	AK
Bromobenzene <0.025 mg/kg 0.007 0.023 0.9 12/18/03 LI Bromodichloromethane <0.025	
Bromodichloromethane <0.025 mg/kg 0.006 0.02 0.9 CSL LCL 12/18/03 LI n-Butylbenzene <0.025	MP
n-Butylbenzene<0.025mg/kg0.0120.040.912/18/0311sec-Butylbenzene<0.025	MP
sec-Butylbenzene <0.025 mg/kg 0.01 0.033 0.9 12/18/03 Li tert-Butylbenzene <0.025	MP
tert-Butylbenzene <0.025 mg/kg 0.01 0.033 0.9 12/18/03 Lt Carbon Tetrachloride <0.025	MP
Carbon Tetrachloride <0.025 mg/kg 0.008 0.027 0.9 12/18/03 Li Chlorobenzene <0.025	MP
Chlorobenzene<0.025mg/kg0.0070.0230.912/18/03LChlorodibromomethane<0.025	۹P
Chlorodibromomethane <0.025 mg/kg 0.02 0.067 0.9 12/18/03 L	٩P
	1P
	MP
Chloroform <0.025 mg/kg 0.01 0.033 0.9 12/18/03 LM	
Chloromethane <0.025 mg/kg 0.01 0.033 0.9 CSL LCL DUP 12/18/03 LN	
2-Chlorotoluene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LN	
4-Chlorotoluene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LN	
1,2-Dibromo-3-chloropropane <0.025 mg/kg 0.009 0.03 0.9 12/18/03 LN	
1,2-Dibromoethane <0.025 mg/kg 0.012 0.04 0.9 12/18/03 LH	
1,2-Dichlorobenzene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM	
1,3-Dichlorobenzene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM 1,4-Dichlorobenzene <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM	
trans-1,2-Dichloroethylene <0.025 mg/kg 0.01 0.033 0.9 12/18/03 LM 1,2-Dichloropropane <0.025 mg/kg 0.007 0.023 0.9 12/18/03 LM	
1,3-Dichloropropane <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM	
2,2-Dichloropropane <0.025 mg/kg 0.008 0.027 0.9 CSL LCL DUP 12/18/03 LN	
Ethylbenzene <0.025 mg/kg 0.007 0.023 0.9 12/18/03 LM	
Hexachlorobutadiene <0.025 mg/kg 0.015 0.05 0.9 12/18/03 LM	
Isopropylbenzene <0.025 mg/kg 0.009 0.03 0.9 12/18/03 LN	
Isopropyl Ether <0.025 mg/kg 0.014 0.047 0.9 12/18/03 LN	
p-Isopropyltoluene <0.025 mg/kg 0.011 0.037 0.9 12/18/03 Lk	
Methyl t-Butyl Ether(MTBE) <0.025 mg/kg 0.018 0.06 0.9 12/18/03 LM	
Methylene Chloride <0.025 mg/kg 0.014 0.047 0.9 CSL LCL 12/18/03 LN	
Naphthalene <0.025 mg/kg 0.01 0.033 0.9 12/18/03 LN	
n-Propylbenzene <0.025 mg/kg 0.009 0.03 0.9 12/18/03 Li	
Tetrachloroethylene <0.025 mg/kg 0.009 0.03 0.9 12/18/03 LN	
1,1,2,2-Tetrachloroethane <0.025 mg/kg 0.006 0.02 0.9 CSH 12/18/03 LM	1P
Toluene <0.025 mg/kg 0.007 0.023 0.9 12/18/03 LM	1P
1,2,3-Trichlorobenzene <0.025 mg/kg 0.014 0.047 0.9 12/18/03 LN	
1,2,4-Trichlorobenzene <0.025 mg/kg 0.014 0.047 0.9 12/18/03 LM	I ₽
1,1,1-Trichloroethane <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM	1P
1,1,2-Trichloroethane <0.025 mg/kg 0.006 0.02 0.9 12/18/03 LM	1P
Trichloroethylene 0.504 mg/kg 0.011 0.037 0.9 12/18/03 LM	IP
Irichlorofluoromethane <0.025 mg/kg 0.008 0.027 0.9 12/18/03 LM	(P
1,2,4-Trimethylbenzene <0.025 mg/kg 0.012 0.04 0.9 12/18/03 LM	
1,3,5-Trimethylbenzene <0.025 mg/kg 0.01 0.033 0.9 12/18/03 LM	1P
Vinyl Chloride <0.025 mg/kg 0.018 0.06 0.9 12/18/03 LM	





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, W1 54474 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.6 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S02	Matrix	: SOIL	San	mple Date/Ti	me: 12/09/ 0	03 09:30	Lab No. 14	45692
					Dilution		Date	
	Result	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	lanalytes	are repor	ted on a dr	y weight ba	sis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	0.9		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	0.9		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.9	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
PID Surrogate Recovery (S)	\$ 92.9	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	120.	%	-	-	1		12/18/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.7 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample 10+ 20037801007	Nataiv		6		12 (00 (07 44-70		
Sample ID: 2003TN01S03	Matrix	SUIL	Sam	ple Date/Ti	me: 12/09/	03 11:30	Lab No. 14	45693
					Dilution		Date	
	Result	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 160.3								
Total Solids	83.7	%	-	0.33	-		12/11/03	SAK
EPA 8021 (Only positively	identified	applytor	250 50005	tod on a da	v unight h			
Benzene	<0.025	mg/kg	0.008	0.027		asis	12/19/07	
Bromobenzene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03 12/18/03	
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	0.9	CSL LCL	12/18/03	LMP LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	0.9		12/18/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.9		12/18/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.9		12/18/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	0.9		12/18/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	0.9		12/18/03	LMP
Chloroform	<0.025	mg/kg	0.01	0.033	0.9		12/18/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033	0.9	CSL LCL DUP	12/18/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	0.9		12/18/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,4-Dichlorobenzene	<0.025	mg∕kg	0.008	0.027	0.9		12/18/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	0.9	LCL DUP	12/18/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	0.9		12/18/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	0.9		12/18/03	LMP
cis-1,2-Dichloroethylene	0.0768	mg/kg	0.007	0.023	0.9		12/18/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	0.9		12/18/03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.9	CSL LCL DUP	12/18/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	0.9		12/18/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	0.9		12/18/03	LMP
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	0.9		12/18/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	0.9		12/18/03	LMP
Methylene Chloride	<0.025 <0.025	mg/kg	0.014	0.047	0.9	CSL LCL	12/18/03	LMP
Naphthalene n-Propylbenzene	<0.025	mg/kg	0.01 0.009	0.033 0.03	0.9 0.9		12/18/03	LMP
Tetrachloroethylene	<0.025	mg/kg mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	0.9	CSH	12/18/03	
Toluene	<0.025		0.007	0.023	0.9	Con	12/18/03	
1,2,3-Trichlorobenzene	<0.025	mg/kg mg/kg	0.014	0.047	0.9		12/18/03 12/18/03	LMP LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.9		12/18/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	0.9		12/18/03	
Trichloroethylene	<0.025	mg/kg	0.011	0.037	0.9		12/18/03	
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	0.9		12/18/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	0.9		12/18/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	0.9		12/18/03	LMP
,					•••			2.111





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.8 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S03	Matrix	K: SOIL	San	mple Date/Ti	ime: 12/09/0	3 11:30	Lab No. 14	45693
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	d analytes	аге герог	ted on a dr	y weight ba	sis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	0.9		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	0.9		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.9	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
PID Surrogate Recovery (S)	¥ 103.	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	¥ 117.	%	-	-	1		12/18/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.9 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S04	Matri.	x: SOIL	San	nple Date/T	ime: 12/09/03 11:40	Lab No. 14	5694
	<u>Result</u>	Units	LOD	LOQ	Dilution <u>Factor</u> <u>Qualifiers</u>	Date <u>Analyzed</u>	<u>Analyst</u>
EPA 160.3				A 77			
Total Solids	86.9	%	-	0.33	-	12/11/03	SAK
EPA 8021 (Only positively	identifie	d analytes	are repor	ted on a d	ry weight basis		
Benzene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	1 CSL LCL	12/18/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	1	12/18/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1 1	12/18/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067 0.30	1	12/18/03	LMP
Chloroethane Chloroform	<0.025 <0.025	mg/kg	0.09 0.01	0.033	1	12/18/03	LMP
Chloromethane	<0.025	mg/kg mg/kg	0.01	0.033	1 CSL LCL DUP	12/18/03 12/18/03	
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1 036 206 007	12/18/03	LMP LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	i	12/18/03	
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	1	12/18/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	1 LCL DUP	12/18/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP
1,2-Dichloroethane	<0.025	mg∕kg	0.005	0.017	1	12/18/03	LMP
1,1-Dichloroethylene	<0.025	mg∕kg	0.016	0.053	1	12/18/03	LMP
cis-1,2-Dichloroethylene	0.0448	mg/kg	0.007	0.023	1	12/18/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	1 CSL LCL DUP	12/18/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP
Hexachlorobutadiene Isopropylbenzene	<0.025 <0.025	mg/kg	0.015 0.009	0.05 0.03	1 1	12/18/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP
p-Isopropyltoluene	<0.025	mg/kg mg/kg	0.014	0.037	1	12/18/03 12/18/03	lmp Lmp
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1	12/18/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	1 CSL LCL	12/18/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1 CSH	12/18/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1	12/18/03	LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1	12/18/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1	12/18/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1	12/18/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1	12/18/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1	12/18/03	LMP

All results calculated on a dry weight basis.



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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.10 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S04	Matrix	SOIL	San	mple Date/Ti	me: 12/09/0	03 11:40	Lab No. 1	45694
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021 (Only positively	identified	analytes	аге герог	ted on a dr	y weight ba	asis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12 / 18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
PID Surrogate Recovery (S) 7	95.4	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	125.	%	-		1		12/18/03	LMP







Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.11 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S05	Matrix: S	SOIL	Sampl	e Date/Time:	12/09/03	3 10:15	Lab No. 14	5695
				Di	lution		Date	
	<u>Result</u> Ur	nits	LOD		actor	Qualifiers	Analyzed	Analyst
<u>EPA 160.3</u> Total Solids	80.9	%	-	0.33	_		12/11/07	CAK
Iotat Sottas	00.9	<i>7</i> 0	-	0.33	•		12/11/03	SAK
EPA 8021 (Only positively	identified ar	nalytes a	are reported	d on a dry we	ight bas	sis		
Benzene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
Bromobenzene	<0.025 п	ng/kg	0.007	0.023	0.9		12/1 8 /0 3	LMP
BromodichLoromethane		ng/kg	0.006	0.02		SL LCL	12/18/03	LMP
n-Butylbenzene		ng/kg	0.012	0.04	0.9		12/18/03	LMP
sec-Butylbenzene		ng/kg	0.01	0.033	0.9		12/18/03	LMP
tert-Butylbenzene		ng/kg	0.01	0.033	0.9		12/18/03	LMP
Carbon Tetrachloride		ng/kg	0.008	0.027	0.9		12/18/03	LMP
Chlorobenzene		ng/kg	0.007	0.023	0.9		12/18/03	LMP
Chlorodibromomethane		ng/kg	0.02	0.067	0.9		12/18/03	LMP
Chloroethane		ng/kg	0.09	0.30	0.9		12/18/03	LMP
Chloroform		ng/kg	0.01	0.033	0.9		12/18/03	LMP
Chloromethane		ng/kg	0.01	0.033		CSL LCL DUP	12/18/03	LMP
2-Chlorotoluene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
4-Chlorotoluene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
1,2-Dibromo-3-chloropropane		ng/kg	0.009	0.03	0.9		12/18/03	LMP
1,2-Dibromoethane		ng/kg	0.012	0.04	0.9		12/18/03	LMP
1,2-Dichlorobenzene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
1,3-Dichlorobenzene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
1,4-Dichlorobenzene		ng/kg	0.008	0.027	0.9		12/18/03	LMP
Dichlorodifluoromethane		ng/kg	0.014	0.047		CL DUP	12/18/03	LMP
1,1-Dichloroethane		ng/kg	0.009	0.03	0.9		12/18/03	LMP
1,2-Dichloroethane		ng/kg	0.005	0.017	0.9		12/18/03	LMP
1,1-Dichloroethylene		ng/kg	0.016	0.053	0.9		12/18/03	LMP
cis-1,2-Dichloroethylene		ng/kg	0.007	0.023	0.9		12/18/03	LMP
trans-1,2-Dichloroethylene		ng/kg	0.01	0.033 0.023	0.9		12/18/03	LMP
1,2-Dichloropropane		ng/kg	0.007 0.008	0.023	0.9 0.9			LMP
1,3-Dichloropropane		ng/kg	0.008	0.027		SL LCL DUP	12/18/03	LMP
2,2-Dichloropropane		ng/kg	0.007	0.023	0.9	SL LUL DUP	12/18/03	LMP
Ethylbenzene		ng/kg	0.015	0.05	0.9		12/18/03 12/18/03	
Hexachlorobutadiene Isopropylbenzene		ng/kg ng/kg	0.009	0.03	0.9		12/18/03	LMP LMP
Isopropyl Ether		ng/kg	0.014	0.047	0.9		12/18/03	LMP
p-Isopropyltoluene		ng/kg	0.011	0.037	0.9		12/18/03	
Methyl t-Butyl Ether(MTBE)		ng/kg	0.018	0.06	0.9		12/18/03	LMP
Methylene Chloride		ng/kg	0.014	0.047		SL LCL	12/18/03	
Naphthalene		ng/kg	0.01	0.033	0.9		12/18/03	LMP
n-Propylbenzene		ng/kg	0.009	0.03	0.9		12/18/03	LMP
Tetrachloroethylene		ng/kg	0.009	0.03	0.9		12/18/03	LMP
1,1,2,2-Tetrachloroethane		ng/kg	0.006	0.02	0.9	CSH	12/18/03	LMP
Toluene		ng/kg	0.007	0.023	0.9	0011	12/18/03	LMP
1,2,3-Trichlorobenzene		ng/kg	0.014	0.047	0.9		12/18/03	LMP
1,2,4-Trichlorobenzene		ng/kg	0.014	0.047	0.9		12/18/03	LMP
1,1,1-Trichloroethane		ng/kg	0.008	0.027	0.9		12/18/03	LMP
1,1,2-Trichloroethane		ng/kg	0.006	0.02	0.9		12/18/03	LMP
Trichloroethylene		ng/kg	0.011	0.037	0.9		12/18/03	LMP
Trichlorofluoromethane		πg/kg	0.008	0.027	0.9		12/18/03	LMP
1,2,4-Trimethylbenzene		ng/kg	0.012	0.04	0.9		12/18/03	LMP
1,3,5-Trimethylbenzene		mg/kg	0.01	0.033	0.9		12/18/03	LMP
Vinyl Chloride		mg/kg	0.018	0.06	0.9		12/18/03	LMP
		-					-	

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

Sample ID: 2003TN01S05

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

Sample Date/Time: 12/09/03 10:15

TELEPHONE E FACSIMILE 7 WEBSITE ww

Lab No. 145695

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.12 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sumpte IST LOOSTHETEES				,,				
					Dilution		Date	
	Result	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021 (Only positively	identified	analytes			y weight ba	sis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	0.9		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	0.9		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.9	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
trans-1.3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
PID Surrogate Recovery (S)	95.3	%	-	•	1		12/18/03	LMP
HALL Surrogate Recovery (S)	125.	*	-	-	1		12/18/03	LMP
							,,	
EPA 8310								
Acenaphthene	<0.00581	mg/kg	0.0047	0.016	1		12/22/03	SLO
Acenaphthylene	<0.00816	mg/kg	0.0066	0.022	1		12/22/03	SLO
Anthracene	<0.00124	mg/kg	0.001	0.0033	1		12/22/03	SLO
Benzo(a)Anthracene	<0.00507	mg/kg	0.0041	0.014	1		12/22/03	SLO
Benzo(a)Pyrene	<0.00284	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Benzo(b)Fluoranthene	<0.0026	mg/kg	0.0021	0.007	1		12/22/03	SLO
Benzo(k)Fluoranthene	<0.00358	mg/kg	0.0029	0.0097	1		12/22/03	SLO
Benzo(ghi)Perylene	<0.0026	mg/kg	0.0021	0.007	1		12/22/03	SLO
Chrysene	<0.00284	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Dibenzo(a,h)Anthracene	<0.00173	mg/kg	0.0014	0,0047	1		12/22/03	SLO
Fluoranthene	<0.00124	mg/kg	0.001	0.0033	1		12/22/03	SLO
Fluorene	<0.00247	mg/kg	0.002	0.0067	1		12/22/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.00198	mg/kg	0.0016	0.0053	1		12/22/03	SLO
1-Methyl Naphthalene	<0.00433	mg/kg	0.0035	0.012	1		12/22/03	SLO
2-Methyl Naphthalene	<0.00507	mg/kg	0.0041	0.014	1		12/22/03	SLO
Naphthalene	<0.00198	mg/kg	0.0016	0.0053	1		12/22/03	SLO
Phenanthrene	<0.00284	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Pyrene	<0.00124	mg/kg	0.001	0.0033	1		12/22/03	SLO
Method 3550 Ultrasonic Ext.	COMP		-	-	•		12/12/03	KAM
Hether Syste of the source EACT							, ,	

Matrix: SOIL





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.13 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S06	Matrix	C: SOIL	San	nple Date/Ti	ime: 12/09/03 10:40	Lab No. 145696
					Dilution	Date
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor Qualifiers	Analyzed Analyst
EPA 160.3						
Total Solids	82.4	%	-	0.33	-	12/11/03 SAK
EPA 8021 (Only positively	identified	d analytes	are repor	rted on a dr	y weight basis	
Benzene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	0.9	12/18/03 LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	0.9 CSL LCL	12/18/03 LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	0.9	12/18/03 LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.9	12/18/03 LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.9	12/18/03 LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	0.9	12/18/03 LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	0.9	12/18/03 LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	0.9	12/18/03 LMP
Chloroform	<0.025	mg/kg	0.01	0.033	0.9	12/18/03 LMP
Chloromethane	<0.025	mg/kg	0.01	0.033	0.9 CSL LCL DUP	12/18/03 LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	0.9	12/18/03 LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	0.9	12/18/03 LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	0.9 LCL DUP	12/18/03 LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	0.9	12/18/03 LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	0.9	12/18/03 LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	0.9	12/18/03 LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	0.9	12/18/03 LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	0.9	12/18/03 LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	0.9	12/18/03 LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.9 CSL LCL DUP	12/18/03 LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	0.9	12/18/03 LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	0.9	12/18/03 LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	0.9	12/18/03 LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	0.9	12/18/03 LMP
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	0.9	12/18/03 LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	0.9	12/18/03 LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	0.9 CSL LCL	12/18/03 LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	0.9	
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	0.9	12/18/03 LMP 12/18/03 LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	0.9	
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.02	0.9 CSH	12/18/03 LMP 12/18/03 LMP
Toluene	<0.025					
1,2,3-Trichlorobenzene	<0.025	mg∕kg mg∕kg	0.007 0.014	0.023 0.047	0.9 0.9	12/18/03 LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.9	12/18/03 LMP
1,1,1-Trichloroethane	<0.025		0.014	0.047		12/18/03 LMP
1,1,2-Trichloroethane		mg/kg ma/kg			0.9	12/18/03 LMP
	<0.025	mg/kg	0.006	0.02	0.9	12/18/03 LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	0.9	12/18/03 LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	0.9	12/18/03 LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	0.9	12/18/03 LMP
1,3,5-Trimethylbenzene Vinyl Chloride	<0.025	mg/kg	0.01	0.033	0.9	12/18/03 LMP
anyt circoride	<0.025	mg/kg	0.018	0.06	0.9	12/18/03 LMP

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lob Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.14 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S06	Matrix	: SOIL	San	nple Date/Ti	ime: 12/09/ 0	3 10:40	Lab No. 1	45696
					Dilution		Date	
	<u>Result</u>	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021 (Only positively	identified	analytes	are repor	ted on a dr	y weight ba	sis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	0.9		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromochloromethane	<0.025	mg∕kg	0.006	0.02	0.9		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.9	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.9		12/18/03	LMP
Styrene	<0.025	mg∕kg	0.007	0.023	0.9		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.9		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.9		12/18/03	LMP
PID Surrogate Recovery (S)	95.7	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	127.	%	-	-	1		12/18/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.15 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S07	Matrix	: SOIL	San	nple Date/T	ime: 12/09/03 12:25	Lab No. 1	45697
					Dilution	Date	
	Result	Units	LOD	LOQ	Factor Qualifiers	Analyzed	Analyst
EPA 160.3							
Total Solids	80.2	%	-	0.33	-	12/11/03	SAK
EPA 8021 (Only positively	identified	analytes		ted on a d	ry weight basis		
Benzene	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	0.8 CSL LCL	12/18/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	0.8	12/18/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
Chlorodibromomethane	<0.025	mg∕kg	0.02	0.067	0.8	12/18/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	0.8	12/18/03	LMP
Chloroform	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033	0.8 CSL LCL DUP	12/18/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	0.8	12/18/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	0.8	12/18/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
1,3-Dichlorobenzene 1,4-Dichlorobenzene	<0.025 <0.025	mg/kg mg/kg	0.00 8 0.008	0.027 0.027	0.8 0.8	12/18/03	
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	0.8 LCL DUP	12/18/03 12/18/03	LMP LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	0.8 101 009	12/18/03	
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	0.8	12/18/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	0.8	12/18/03	LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.8 CSL LCL DUP	12/18/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	0.8	12/18/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	0.8	12/18/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	0.8	12/1 8/03	LMP
p-Isopropyltoluene	<0.025	mg∕kg	0.011	0.037	0.8	12/18/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	0.8	12/18/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	0.8 CSL LCL	12/18/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	0.8	12/18/03	LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	0.8	12/18/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	0.8 CSH	12/18/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	0.8	12/18/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.8	12/18/03	LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.8	12/18/03	LMP
1,1,1-Trichloroethane 1,1,2-Trichloroethane	<0.025 <0.025	mg/kg mg/kg	0.008 0.006	0.027 0.02	0.8		
Trichloroethylene	<0.025	mg∕kg mg∕kg	0.000	0.02	0.8 0.8	12/18/03 12/18/03	
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	0.8	12/18/03	LMP LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	0.8	12/18/03	
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	0.8	12/18/03	
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	0.8	12/18/03	LMP
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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.16 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S07	Matrix	: SOIL	Sam	ple Date/Time	: 1 <mark>2/09</mark> /0	3 12:25	Lab No. 1	45697
					Dilution		Date	
	Result	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	<u>Analyzed</u>	<u>Analyst</u>
EPA 8021 (Only positively	identified	analytes	are repor	ted on a drv	weight ba	sis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	0.8		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	0.8		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	0.8	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
PID Surrogate Recovery (S)	95.8	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	126.	%	-	-	1		12/18/03	LMP
EPA 8310								
Acenaphthene	<0.00586	mg/kg	0.0047	0.016	1		12/22/03	SLO
Acenaphthylene	<0.00823	mg/kg	0.0066	0.022	1		12/22/03	SLO
Anthracene	<0.00125	mg/kg	0.001	0.0033	1		12/22/03	SLO
Benzo(a)Anthracene	<0.00511	mg/kg	0.0041	0.014	1		12/22/03	SLO
Benzo(a)Pyrene	<0.00287	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Benzo(b)Fluoranthene	<0.00262	mg/kg	0.0021	0.007	1		12/22/03	SLO
Benzo(k)Fluoranthene	<0.00362	mg/kg	0.0029	0.0097	1		12/22/03	SLO
Benzo(ghi)Perylene	<0.00262	mg/kg	0.0021	0.007	1		12/22/03	SLO
Chrysene	<0.00287	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Dibenzo(a,h)Anthracene	<0.00175	mg/kg	0.0014	0.0047	1		12/22/03	SLO
Fluoranthene	<0.00125	mg/kg	0.001	0.0033	1		12/22/03	SLO
Fluorene	<0.00249	mg/kg	0.002	0.0067	1		12/22/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.002	mg/kg	0.0016	0.0053	1		12/22/03	SLO
1-Methyl Naphthalene	<0.00436	mg/kg	0.0035	0.012	1		12/22/03	SLO
2-Methyl Naphthalene	<0.00511	mg/kg	0.0041	0.014	1		12/22/03	SLO
Naphthalene	<0.002	mg/kg	0.0016	0.0053	1		12/22/03	SLO
Phenanthrene	<0.00287	mg/kg	0.0023	0.0077	1		12/22/03	SLO
Pyrene	<0.00125	mg/kg	0.001	0.0033	1		12/22/03	SLO
9,10-Diphenylanthracene (S)	118.	%	-	-	1		12/22/03	SLO
Method 3550 Ultrasonic Ext.	COMP		-	-	-		12/12/03	KAM







Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.17 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S10	Matri	x: SOIL	San	nple Date/T	ime: 12/09/03 12:40	Lab No. 145698		
	<u>Result</u>	Units	LOD	LOQ	Dilution <u>Factor</u> <u>Qualifiers</u>	Date <u>Analyzed</u>	Analyst	
<u>EPA 160.3</u> Total Solids	87.0	9/		0.77		40.44.40		
Totat Solids	82.0	%	-	0.33	-	12/11/03	SAK	
EPA 8021 (Only positively	identifie	d analytes	аге герог	ted on a d	ry weight basis			
Benzene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP	
Bromobenzene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP	
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	1 CSL LCL	12/18/03	LMP	
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	1	12/18/03	LMP	
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP	
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP	
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	1	12/18/03	LMP	
Chloroethane	<0.025	mg/kg	0.09	0.30	1	12/18/03	LMP	
Chloroform	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
Chloromethane	<0.025	mg/kg	0.01	0.033	1 CSL LCL DUP	12/18/03	LMP	
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP	
4-Chlorotoluene 1,2-Dibromo-3-chloropropane	<0.025 <0.025	mg/kg	0.008 0.009	0.027 0.03	1 1	12/18/03	LMP	
1,2-Dibromoethane	<0.025	mg/kg mg/kg	0.012	0.03	1	12/18/03	LMP	
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.04	1	12/18/03	LMP	
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/18/03		
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/18/03 12/18/03	LMP LMP	
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	LCL DUP	12/18/03		
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	1	12/18/03		
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	1	12/18/03	LMP	
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	1	12/18/03	LMP	
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP	
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP	
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP	
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	1 CSL LCL DUP	12/18/03	LMP	
Ethylbenzene	<0.025	mg/kg	0.007	0.023	1	12/18/03	LMP	
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	1	12/18/03	LMP	
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP	
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	1	12/18/03	LMP	
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	1	12/18/03	LMP	
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1	12/18/03	LMP	
Methylene Chloride	<0.025	mg/kg	0.014	0.047	1 CSL LCL	12/18/03	LMP	
Naphthalene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP	
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1	12/18/03	LMP	
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1 CSH	12/18/03	LMP	
Toluene 1,2,3-Trichlorobenzene	<0.025 <0.025	mg/kg	0.007 0.014	0.023	1	12/18/03	LMP	
1,2,4-Trichlorobenzene		mg/kg		0.047	1	12/18/03	LMP	
1,1,1-Trichloroethane	<0.025 <0.025	mg∕kg mg∕kg	0.014 0.008	0.047 0.027	1 1			
1,1,2-Trichloroethane	<0.025	mg/kg	0.008	0.027	1	12/18/03 12/18/03	LMP LMP	
Trichloroethylene	<0.025	mg/kg	0.000	0.02	1	12/18/03		
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1	12/18/03	LMP LMP	
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1	12/18/03		
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1	12/18/03	LMP	
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1	12/18/03	LMP	
					·	,,		





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.18 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample 1D: 2003TN01S10	Matrix	: SOIL	Sar	nple Date/Ti	me: 12/09 /0	03 12:40	Lab No. 1	45 698
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	l analytes	are repoi	rted on a dr	y weight ba	asis		
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0,006	0.02	1		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
PID Surrogate Recovery (S)	95.5	%	-	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	128.	%	-	-	1		12/18/03	LMP

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Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.19 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Result Units LOD LOD Pilution Factor Qualifier Paralyzed Analyzed Analyzet EPA 160.3 Total Solids 87.7 % - 0.33 - 12/11/03 SAK PA 3050 Metal Prep COMP - - - 12/16/03 JJP EPA 4010 Total Nickel 15.1 mg/kg 0.1 0.33 1 12/16/03 BMS EPA 6010 Total Nickel 15.1 mg/kg 0.1 0.33 1 12/19/03 LMP Brancene 0.025 mg/kg 0.007 0.23 1 12/19/03 LMP Bromobenzene 0.025 mg/kg 0.012 0.04 1 12/19/03 LMP sec-Butylbenzene 0.025 mg/kg 0.011 0.033 1 12/19/03 LMP carbon Tetrachloride 0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Chloroebnane 0.025 mg/k
Total Solids 87.7 % - 0.33 - 12/11/03 SAK EPA 3050 Metal Prep COMP - - - 12/16/03 JJP EPA 6010 Total Nickel 15.1 mg/kg 0.1 0.33 1 12/16/03 JJP EPA 6010 Total Nickel 15.1 mg/kg 0.008 0.027 1 12/19/03 LMP Bromobenzene <0.025
Metal Prep COMP - - 12/16/03 JJP EPA 6010 Total Nickel 15.1 mg/kg 0.1 0.33 1 12/24/03 BMS EPA 8021 Benzene (Only positively identified analytes are reported on a dry weight basis Benzene 22/19/03 LMP Bromobenzene <0.025
Total Nickel 15.1 mg/kg 0.1 0.33 1 12/24/03 BMS EPA 8021 Benzene (Only positively identified analytes are reported on a dry weight basis 1 12/19/03 LMP Bromobenzene <0.025
Benzene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromobenzene <0.025
Benzene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromobenzene <0.025
Bromobenzene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Bromodichloromethane <0.025
Bromodichloromethane club mg/kg 0.002 1 CSL 12/19/03 LMP n-Butylbenzene <0.025
n-Butylbenzene <0.025
sec-Butylbenzene <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP tert-Butylbenzene <0.025
tert-Butylbenzene <0.025
Carbon Tetrachloride <0.025 mg/kg 0.008 0.027 1 CSL 12/19/03 LMP Chlorobenzene <0.025
Chlorobenzene <0.025
Chlorodibromomethane
Chloroethane <0.025
Chloroform <0.025
Chloromethane <0.025
2-Chlorotoluene <0.025
4-Chlorotoluene <0.025
1,2-Dibromo-3-chloropropane <0.025
1,2-Dibromoethane <0.025
1,2-Dichlorobenzene <0.025
1,3-Dichlorobenzene <0.025
1,4-Dichlorobenzene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Dichlorodifluoromethane <0.025
Dichlorodifluoromethane <0.025 mg/kg 0.014 0.047 1 LCL 12/19/03 LMP 1,1-Dichloroethane <0.025
1,1-Dichloroethane <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP 1,2-Dichloroethane <0.025 mg/kg
1,2-Dichloroethane <0.025 mg/kg 0.005 0.017 1 12/19/03 LMP
cis-1,2-Dichloroethylene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP
trans-1,2-Dichloroethylene <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP
1,2-Dichloropropane <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP
1,3-Dichloropropane <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP
2,2-Dichloropropane <0.025 mg/kg 0.008 0.027 1 CSL LCL DUP 12/19/03 LMP
Ethylbenzene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP
Hexachlorobutadiene <0.025 mg/kg 0.015 0.05 1 12/19/03 LMP Lappanet/Lappanet
Isopropylbenzene <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP
Isopropyl Ether <0.025 mg/kg 0.014 0.047 1 12/19/03 LMP
p-lsopropyltoluene <0.025 mg/kg 0.011 0.037 1 12/19/03 LMP
Methyl t-Butyl Ether(MTBE) <0.025 mg/kg 0.018 0.06 1 12/19/03 LMP
Methylene Chloride <0.025 mg/kg 0.014 0.047 1 CSL LCL 12/19/03 LMP
Naphthalene <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP
n-Propylbenzene <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP
Tetrachloroethylene <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP
1,1,2,2-Tetrachloroethane <0.025 mg/kg 0.006 0.02 1 12/19/03 LMP
Toluene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP
1,2,3-Trichlorobenzene <0.025 mg/kg 0.014 0.047 1 12/19/03 LMP
1,2,4-Trichlorobenzene <0.025 mg/kg 0.014 0.047 1 12/19/03 LMP
1,1,1-Trichloroethane <0.025 mg/kg 0.008 0.027 1 CSL 12/19/03 LMP

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.20 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S18	Matrix	: SOIL	Sam	ple Date/Ti	me: 12/09 /	03 12:45	Lab No. 1	45 69 9
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Anal yst</u>
EPA 8021 (Only positively	/ identified	analytes	are repor	ted on a dry	v weight b	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/19/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	i		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	95.9	×	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	132.	%	-	-	1		12/19/03	LMP
EPA 8310								
Acenaphthene	<0.00536	mg/kg	0.0047	0.016	1		12/24/03	SLO
Acenaphthylene	<0.00753	mg/kg	0.0066	0.022	1		12/24/03	SLO
Anthracene	<0.00114	mg/kg	0.001	0.0033	1		12/24/03	SLO
Benzo(a)Anthracene	<0.00468	mg/kg	0.0041	0.014	1		12/24/03	SLO
Benzo(a)Pyrene	<0.00262	mg/kg	0.0023	0.0077	1		12/24/03	SLO
Benzo(b)Fluoranthene	<0.00239	mg/kg	0.0021	0.007	1		12/24/03	SLO
Benzo(k)Fluoranthene	<0.00331	mg/kg	0.0029	0.0097	1		12/24/03	SLO
Benzo(ghi)Perylene	<0.00239	mg/kg	0.0021	0.007	1		12/24/03	SLO
Chrysene	<0.00262	mg/kg	0.0023	0.0077	1		12/24/03	SLO
Dibenzo(a,h)Anthracene	<0.0016	mg/kg	0.0014	0.0047	1		12/24/03	SLO
Fluoranthene	<0.00114	mg/kg	0.001	0.0033	1		12/24/03	SLO
Fluorene	<0.00228	mg/kg	0.002	0.0067	1		12/24/03	SLO
Indeno(1,2,3-cd)Pyrene	<0.00182	mg/kg	0.0016	0.0053	1		12/24/03	SLO
1-Methyl Naphthalene	<0.00399	mg/kg	0.0035	0.012	1		12/24/03	SLO
2-Methyl Naphthalene	<0.00468	mg/kg	0.0041	0.014	1		12/24/03	SLO
Naphthalene	<0.00182	mg/kg	0.0016	0.0053	1		12/24/03	SLO
Phenanthrene	<0.00262	mg/kg	0.0023	0.0077	1		12/24/03	SLO
Pyrene	<0.00114	mg/kg	0.001	0.0033	1		12/24/03	SLO
9,10-Diphenylanthracene (S)	96.1	%	-	-	1		12/24/03	SLO
Method 3550 Ultrasonic Ext.	COMP		- .	-	-		12/18/03	MJG





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.21 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S19	Matri	x: \$01L	San	pie Date/T	ime: 12/09/03 13:05	Lab No. 14	5 70 0
					Dilution	Date	
	Result	Units	LOD	LOQ	Factor Qualifiers	Analyzed	Analyst
EPA 160.3							
Total Solids	84.5	%	-	0.33	-	12/11/03	SAK
EDA 3050							
EPA 3050 Metal Prep	COMP		-	-	-	12/16/03	JJP
hetat riep	COMP					12/16/03	JJP
EPA 6010							
Total Nickel	17.9	mg/kg	0.1	0.33	1	12/24/03	BMS
EPA 8021 (Only positively					, .		
Benzene Bromobenzene	<0.025 <0.025	mg/kg	0.008 0.007	0.027 0.023	1	12/19/03	LMP
Bromodichloromethane	<0.025	mg∕kg mg∕kg	0.007	0.023	1 CSL	12/19/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.02	1 1	12/19/03 12/19/03	LMP LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1 CSL	12/19/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	1	12/19/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	1 DUP	12/19/03	LMP
Chloroform	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033	1 CSL LCL DUP	12/19/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
4-Chlorotoluene	<0.025	mg/kg	800.0	0.027	1	12/19/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	1	12/19/03	LMP
1,2-Dichlorobenzene	<0.025	mg∕kg	0.008	0.027	1	12/19/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	1 LCL	12/19/03	LMP
1,1-Dichloroethane	<0.025	mg∕kg	0.009	0.03	1	12/19/03	LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	1 1	12/19/03	LMP
1,1-Dichloroethylene cis-1,2-Dichloroethylene	<0.025 <0.025	mg/kg	0.016 0.007	0.053 0.023	1	12/19/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg mg/kg	0.01	0.023	1	12/19/03 12/19/03	LMP LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	1 CSL LCL DUP	12/19/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	1	12/19/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	1	12/19/03	LMP
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	1	12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1	12/19/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	1 CSL LCL	12/19/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1	12/19/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1	12/19/03	LMP
1,2,4-Trichlorobenzene 1,1,1-Trichloroethane	<0.025 <0.025	mg/kg	0.014 0.008	0.047 0.027	1 1 CSL	12/19/03	
i, i, i e i richtoroethane	NU.025	mg/kg	0.000	0.027	1 CSL	12/19/03	LMP

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145691.22 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S19	Matrix	: SOIL	Sa	mple Date/Ti	me: 12/09/	03 13:05	Lab No. 1	45700
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	Analyst
EPA 8021 (Only positively	identified	analytes	are repo	rted on a dr	y weight b	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	í 1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/ 19/ 03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	96.6	%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	132.	%	-	-	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474

TELEPHONE FACSIMILE WEBSITE

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PROJECT NO .: 200106102370 REPORT NO. : 145691.23 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S16	Matrix	: SOIL	Sar	mple Date∕⊺i	me: 12/09/03	11:20	Lab No. 14	45701
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor 0	Qualifiers	Analyzed	Analyst
EPA 160.3								
Total Solids	88.2	%	-	0.33	-		12/11/03	SAK
				0100			12/11/05	JAK
EPA 3050								
Metal Prep	COMP		-	-	-		12/16/03	JJP
EPA 6010								
Total Nickel	6.93	mg∕kg	0.1	0.33	1		12/24/03	DHC
	0.75	1197 Kg	0.1	0.55	•		12/24/03	BMS
EPA 8021 (Only positively	identified	analytes	аге геро	rted on a dr	<mark>y weight</mark> basi	s		
Benzene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	1	CSL	12/19/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1	CSL	12/19/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	1		12/19/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	1	DUP	12/19/03	LMP
Chloroform	<0.025	mg∕kg	0.01	0.033	1		12/19/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033		L LCL DUP	12/19/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,3-Dichlorobenzene 1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1 1		12/19/03	LMP
Dichlorodifluoromethane	<0.025 <0.025	mg/kg	0.008 0.014	0.027	1		12/19/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.047 0.03	1	LCL	12/19/03	LMP
1,2-Dichloroethane	<0.025	mg/kg mg/kg	0.005	0.017	1		12/19/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	1		12/19/03	LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	1		12/19/03 12/19/03	LMP LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027		L LCL DUP	12/19/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	1 03		12/19/03	LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	i		12/19/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	i		12/19/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	i		12/19/03	LMP
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	i		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047		L LCL	12/19/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1		12/19/03	LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	. 1		12/19/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	800.0	0.027	1	CSL	12/19/03	LMP

All results calculated on a dry weight basis.







Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

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PROJECT NO.: 200106102370 REPORT NO.: 145691.24 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S16	Matrix	: SOIL	San	mple Date/Ti	me: 12/09/	03 11:20	Lab No. 14	45701
					Dilution		Date	
	Result	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	i analytes	are repor	ted on a dr	y weight b	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/19/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	93.0	%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	130.	%	-	-	1		12/19/03	LMP

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.25 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Result Units Loo Loo Dilution Pate Factor Qualifier Analyzed Analyzed FPA 160.3 Total Solids 85.6 X 0.33 - 12/11/03 SAK FPA 3050 Metal Prep COMP - - - 12/15/03 JJP FPA 6010 Total Mickel 8.08 mg/kg 0.1 0.33 1 12/15/03 LMP Bromodenzene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromodenzene <0.025 mg/kg 0.004 0.027 1 12/19/03 LMP Bromodenzene <0.025 mg/kg 0.010 0.033 1 12/19/03 LMP Bromodenzene <0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Bromodenzene <0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Bromodenzene <0.025 mg/kg 0.011 0.033 1 12/19/03	Sample ID: 2003TN01S17	Matrix	: SOIL	Sam	ple Date/T	ime: 12/09/ 03	11:30	Lab No. 14	45702
Result Units L00 L00 Factor Qualifiers Analyzed Analyzed EPA 190_3 Total Solids B5.6 % 0.33 - 12/11/03 SAK EPA 3050 Metal Prep COMP - - - 12/16/03 JJP EPA 6010 Total Nickel B.00 mg/kg 0.1 0.33 1 12/16/03 JJP EPA 6021 Total Nickel B.00 mg/kg 0.010 0.023 1 12/19/03 LMP Bernene - - 0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Bromoberzene - 0.025 mg/kg 0.010 0.033 1 12/19/03 LMP Bromoberzene - 0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Bromoberzene - 0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Carbon Tetrachloride - 0.025 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>Dilution</td><td></td><td>Date</td><td></td></td<>						Dilution		Date	
Total Solids 85.6 % 0.33 12/11/03 SAK EPA 3050 Metal Prep COMP 12/16/03 JJP FA 6010 Total Wickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS EPA 6010 Total Wickel 8.08 mg/kg 0.1 0.33 1 12/19/03 LMP Bernzene -0.025 mg/kg 0.006 0.027 1 12/19/03 LMP Bromodich Ionethane -0.025 mg/kg 0.007 0.033 1 12/19/03 LMP Promodich Ionethane -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP rec-Butylbenzene -0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Carbon Tetrachloride -0.025 mg/kg 0.007 0.223 1 12/19/03 LMP Chlorostname -0.025 mg/kg 0.007 0.233 1 12/19/03 LMP Chlorostname -0.025		<u>Resul t</u>	Units	LOD	LOQ	<u>Factor</u>	ualifiers		Analyst
Total Solids 85.6 % 0.33 12/11/03 SAK EPA 3050 Metal Prep COMP 12/16/03 JJP FA 6010 Total Wickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS EPA 6010 Total Wickel 8.08 mg/kg 0.1 0.33 1 12/19/03 LMP Bernzene -0.025 mg/kg 0.006 0.027 1 12/19/03 LMP Bromodich Ionethane -0.025 mg/kg 0.007 0.033 1 12/19/03 LMP Promodich Ionethane -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP rec-Butylbenzene -0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Carbon Tetrachloride -0.025 mg/kg 0.007 0.223 1 12/19/03 LMP Chlorostname -0.025 mg/kg 0.007 0.233 1 12/19/03 LMP Chlorostname -0.025	EPA 160 3								
PA 3050 Netal Prep COMP 12/16/03 JJP PA 6010 Total Nickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS PA 8021 Total Nickel 0.017 mg/kg 0.008 0.027 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.006 0.027 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.010 0.033 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.010 0.033 1 12/19/03 LMP Chiorodibromethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chiorodibromethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chiorodibromethane -0.025 mg/kg 0.007 0.033 1 12/19/03 LMP <td></td> <td>85.6</td> <td>%</td> <td>-</td> <td>0.33</td> <td>-</td> <td></td> <td>12/11/03</td> <td>SAK</td>		85.6	%	-	0.33	-		12/11/03	SAK
Netal Prep COMP - - - 12/16/03 JJP EPA 6010 Total Nickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS Bromodenzene -0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromodenzene -0.025 mg/kg 0.007 0.022 1 CSL 12/19/03 LMP Bromodicitoromethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Bromodicitoromethane -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP set-Burytberzene -0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Chiorodionemethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chiorodionemethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chiorodionemethane -0.025 mg/kg 0.010 0.033 </td <td>,</td> <td></td> <td></td> <td></td> <td>0100</td> <td></td> <td></td> <td>12/11/05</td> <td>JAK</td>	,				0100			12/11/05	JAK
PA 6010 Total Nickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS EPA 6021 Bornzene COLY mg/kg 0.008 0.027 1 12/19/03 LMP Bornzene -0.025 mg/kg 0.006 0.027 1 12/19/03 LMP Bromobenzene -0.025 mg/kg 0.006 0.022 1 CSL 12/19/03 LMP Bromobenzene -0.025 mg/kg 0.010 0.033 1 12/19/03 LMP Bromobenzene -0.025 mg/kg 0.011 0.033 1 12/19/03 LMP Sec-Butylbenzene -0.025 mg/kg 0.007 0.022 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.008 0.027 1 12									
Total Wickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS EPA B021_ Benzene Colly positively identified analytes are reported on a dry weight basis 1 12/19/03 LMP Bernzene -0.025 mg/kg 0.007 0.025 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP sec-Butylbenzene -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Carbon Tetrachloride -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.010 0.033 1 <	Metal Prep	COMP		-	-	-		12/16/03	JJP
Total Wickel 8.08 mg/kg 0.1 0.33 1 12/24/03 BMS EPA B021_ Benzene Colly positively identified analytes are reported on a dry weight basis 1 12/19/03 LMP Bernzene -0.025 mg/kg 0.007 0.025 1 12/19/03 LMP Bromodichloromethane -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP sec-Butylbenzene -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Carbon Tetrachloride -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorobenzene -0.025 mg/kg 0.010 0.033 1 <	FPA 6010								
EPA 8021 (Only positively identified analytes are reported on a dry weight basis Bernene 0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromobenzene 0.025 mg/kg 0.008 0.027 1 12/19/03 LMP Bromodichloromethane 0.025 mg/kg 0.006 0.021 CSL 12/19/03 LMP n=Burylbenzene -0.025 mg/kg 0.012 0.04 1 12/19/03 LMP carbon Tetrachloride -0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorodibromethane -0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorodibromethane -0.025 mg/kg 0.007 1 12/19/03 LMP Chlorodibromethane -0.025 mg/kg 0.007 1 12/19/03 LMP 2-Chlorotluene -0.025 mg/kg 0.007 1 12/19/03 LMP 2-Chlorotoluene -0.025 <td< td=""><td></td><td>8.08</td><td>mg/kg</td><td>0.1</td><td>0.33</td><td>1</td><td></td><td>12/24/03</td><td>BMS</td></td<>		8.08	mg/kg	0.1	0.33	1		12/24/03	BMS
Benzene <0.025 mg/kg 0.006 0.027 1 12/19/03 LMP Bromoderzene <0.025								(2) 2 () 00	0110
Bromobenzene <0.025 mg/kg 0.007 0.023 1 12/19/03 LWP Bromodichloromethane <0.025							S		
Bromodich loromethane <0.025 mg/kg 0.006 0.02 1 CSL 12/19/03 LWP n-Butylbenzene <0.025									
n-Burylbenzene e.0.025 mg/kg 0.012 0.06 1 12/19/03 LMP sec-Burylbenzene c.0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Carbon Tetrachloride c.0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Carbon Tetrachloride c.0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene c.0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene c.0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorobenzene c.0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chlorobenzene c.0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chloroothane c.0.025 mg/kg 0.01 0.033 1 12/19/03 LMP c.Chlorotoluene c.0.025 mg/kg 0.010 0.033 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.009 0.03 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.012 0.04 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-0 biromooftane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-10 ichlorobenzene c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.1-0 ichlorobethane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.1-10 ichlorobethane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.1-10 ichlorobethane c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-19/03 LMP t.2-19/03 LMP t.2-10/101 Conberthylene c.0.025 mg/kg 0.008 0.027 1 12/19/03 LMP t.2-19/03 LMP t.2-10/101 Conberthylene c.0.025 mg/kg 0.007 0.023 1 12/19/03 LMP t.2-10/101 Conberthylene c.0.025 mg/kg 0.007 0.023 1 12/19/03 LMP t.2/19/03 LMP t.2-10/101 Conberthy							661		
sec-Butylbenzene c0.025 mg/kg 0.01 0.033 1 12/19/03 LWP tert-Butylbenzene <0.025							USL		
tert-ButyUbenzene <0.025 mg/kg 0.01 0.033 1 12/19/03 LWP Carbon Tetrachloride <0.025						-			
Carbon Tetrachloride <0.025 mg/kg 0.007 0.027 1 CSL 12/19/03 LMP Chlorodibromomethane <0.025									
Chlorobenzene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP Chlorodibromomethane <0.025							001		
Chlorodibromomethane <0.025 mg/kg 0.02 0.067 1 12/19/03 LMP Chloroethane <0.025							LSL		
Chloroethane <0.025 mg/kg 0.09 0.30 1 DUP 12/19/03 LMP Chlorooform <0.025									
Chloroform <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP Chloromethane <0.025							DUD		
Chloromethane <0.025 mg/kg 0.01 0.033 1 CSL LCL DUP 12/19/03 LMP 2-Chlorotoluene <0.025							DOP		
2-Chlorotoluene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP 4-Chlorotoluene <0.025									
4-Chlorotoluene <0.025 mg/kg 0.008 0.027 1 12/19/03 LMP 1,2-Dibromo-3-chloropropane <0.025									
1,2-Dibromo-3-chloropropane <0.025									
1,2-Dibromoethane <0.025									
1,2-Dichlorobenzene <0.025									
1,3-Dichlorobenzene <0.025									
1,4-Dichlorobenzene <0.025									
Dichlorodifluoromethane <0.025 mg/kg 0.014 0.047 1 LCL 12/19/03 LMP 1,1-Dichloroethane <0.025									
1,1-Dichloroethane <0.025						-	1.0		
1,2-Dichloroethane <0.025							LUL		
1,1-Dichloroethylene <0.025	•								
cis-1,2-Dichloroethylene <0.025									
trans-1,2-Dichloroethylene<0.025mg/kg0.010.033112/19/03LMP1,2-Dichloropropane<0.025									
1,2-Dichloropropane <0.025									
1,3-Dichloropropane <0.025								-	
2,2-Dichloropropane <0.025						1		-	
Ethylbenzene<0.025mg/kg0.0070.023112/19/03LMPHexachlorobutadiene<0.025		<0.025		0.008		1 CS	L LCL DUP		
Hexachlorobutadiene <0.025 mg/kg 0.015 0.05 1 12/19/03 LMP Isopropylbenzene <0.025	Ethylbenzene	<0.025			0.023	1			
Isopropylbenzene <0.025	Hexachlorobutadiene	<0.025		0.015	0.05	1			
Isopropyl Ether <0.025	Isopropylbenzene	<0.025	mg/kg	0.009	0.03	1			
p-Isopropyltoluene <0.025 mg/kg 0.011 0.037 1 12/19/03 LMP Methyl t-Butyl Ether(MTBE) <0.025	Isopropyl Ether	<0.025	mg/kg	0.014	0.047	1			
Methylene Chloride <0.025 mg/kg 0.014 0.047 1 CSL 12/19/03 LMP Naphthalene <0.025	p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	1			LMP
Naphthalene <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP n-Propylbenzene <0.025	Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
Naphthalene <0.025 mg/kg 0.01 0.033 1 12/19/03 LMP n-Propylbenzene <0.025			mg/kg	0.014	0.047	1 CS	L LCL		LMP
n-Propylbenzene <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP Tetrachloroethylene <0.025			mg∕kg			1			
1,1,2,2-Tetrachloroethane<0.025mg/kg0.0060.02112/19/03LMPToluene<0.025								12/19/03	LMP
Toluene <0.025 mg/kg 0.007 0.023 1 12/19/03 LMP								12/19/03	LMP
									LMP
								12/19/03	LMP
1,2,3-Trichlorobenzene <0.025 mg/kg 0.014 0.047 1 12/19/03 LMP								12/19/03	LMP
1,2,4-Trichlorobenzene <0.025 mg/kg 0.014 0.047 1 12/19/03 LMP									LMP
1,1,1-Trichloroethane <0.025 mg/kg 0.008 0.027 1 CSL 12/19/03 LMP	1,1,1-Trichloroethane	<0.025	mg∕kg	0.008	0.027	1	CSL	12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.26 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S17	Matrix	: SOIL	Sa	mple Date/Ti	me: 12/09 /	03 11:30	Lab No. 1	457 02
					Dilution		Date	
	<u>Result</u>	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	analytes	аге геро	rted on a dr	y weight b	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m-&p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/19/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	94.0	%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	133.	%	-	-	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.27 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S14	Matrix	: SOIL	San	nple Date/T	ime: 12/09 /03	09:10	Lab No. 1	45703
					Dilution		Date	
	Result	Units	LOD	LOQ		ualifiers	Analyzed	<u>Analyst</u>
FDA 1/0 7								
<u>EPA 160.3</u> Total Solids	82.8	%	-	0.33	_		12/11/07	CAK
Totat sortas	02.0	/a		0.33	-		12/11/03	SAK
EPA 3050_								
Metal Prep	COMP		-	-	-		12/16/03	JJP
554 (010								
<u>EPA 6010</u> Total Nickel	6.39	mm (lem	0.1	0.77	4		10/0//07	
Totat NTCKet	0.39	mg/kg	0.1	0.33	1		12/24/03	BMS
EPA 8021 (Only positively	identified	analytes	are repor	ted on a di	ry weight basis	5		
Benzene	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
Bromodichloromethane	<0.025	mg∕kg	0.006	0.02	1	CSL	12/19/03	LMP
n-Butylbenzene	<0.025	mg∕kg	0.012	0.04	1		12/19/03	LMP
sec-Butylbenzene	<0.025	mg∕kg	0.01	0.033	1		12/19/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1	CSL	12/19/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	1		12/19/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	1	DUP	12/19/03	LMP
Chloroform	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033		L LCL DUP	12/19/03	LMP
2-Chlorotoluene	<0.025	mg/kg	800.0	0.027	1		12/19/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	1	LCL	12/19/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	1		12/19/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	1		12/19/03	LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,3-Dichloropropane 2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
	<0.025	mg/kg	0.008	0.027		LCL DUP	12/19/03	LMP
Ethylbenzene Hexachlorobutadiene	<0.025 <0.025	mg∕kg	0.007 0.015	0.023 0.05	1		12/19/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	1 1		12/19/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.009	0.03			12/19/03	LMP
p-Isopropyltoluene	<0.025	mg/kg	0.014	0.047	1 1		12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg∕kg mg/kg	0.018	0.06	1		12/19/03	LMP
	<0.025		0.014	0.047			12/19/03	LMP
Methylene Chloride Naphthalene	<0.025	mg/kg mg/kg	0.01	0.033	1 CSI 1	LCL	12/19/03	
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1		12/19/03 12/19/03	LMP LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1		12/19/03	
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	
Toluene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1		12/19/03	
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1		12/19/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	0.008	0.027	1	CSL	12/19/03	LMP
					•	202	.2, 17, 03	





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.28 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S14	Matri	: SOIL	Sar	mple Date/Ti	me: 12/09 /	03 09:10	Lab No. 1	45703
					Dilution		Date	
	<u>Result</u>	Units	LOD	LOQ	Factor	Qualifiers	Analyzed	Analyst
EPA 8021 (Only positively	identified	analytes	are repor	ted on a dr	y weight ba	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/19/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	98.1	%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	131.	%	-	-	1		12/19/03	LMP

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.29 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01s15	Matri	K: SOIL	San	nple Date/T	ime: 12/09/03 09:30	Lab No. 14	45704
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution Factor Qualifiers	Date <u>Analyzed</u>	Analyst
EPA 160.3							
Total Solids	80.8	%	-	0.33	-	12/ 1 1/0 3	SAK
EPA 3050	00110						
Metal Prep	COMP		-	-	-	12/16/03	JJP
<u>EPA 6010</u> Total Nickel	23.5	mg∕kg	0.1	0.33	1	12/2/ /07	DHC
						12/24/03	BMS
EPA 8021 (Only positively							
Benzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	1 CSL	12/19/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	1	12/19/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	1 CSL	12/19/03	LMP
Chlorobenzene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
Chlorodibromomethane	<0.025	mg/kg	0.02	0.067	1	12/19/03	LMP
Chloroethane	<0.025	mg/kg	0.09	0.30	1 DUP	12/19/03	LMP
Chloroform	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
Chloromethane	<0.025	mg/kg	0.01	0.033	1 CSL LCL DUP	12/19/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	1	12/19/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	1 LCL	12/19/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	1	12/19/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	1	12/19/03	LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	1	12/19 / 03	LMP
1,2-Dichloropropane	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	1	12/19/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	1 CSL LCL DUP	12/19/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
Hexachlorobutadiene	<0.025	mg/kg	0.015	0.05	1	12/19/03	LMP
Isopropylbenzene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
Isopropyl Ether	<0.025	mg/kg	0.014	0.047	1	12/19/03	LMP
p-Isopropyltoluene	<0.025	mg/kg	0.011	0.037	1	12/19/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	1	12/19/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	1 CSL LCL	12/19/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	1	12/19/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
Tetrachloroethylene	<0.025	mg/kg	0.009	0.03	1	12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	1	12/19/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	1	12/19/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1	12/19/03	LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	1	12/19/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	0.008	0.027	1 CSL	12/19/03	LMP
						12, 17, 03	C111

All results calculated on a dry weight basis.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.30 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS

Sample ID: 2003TN01S15	Matri	SOIL	San	nple Date/Ti	me: 12/09/	03 09:30	Lab No. 14	45 70 4
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	analytes	are repor	ted on a dr	y weight b	asis		
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	1		12/19/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/19/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/19/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/19/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/19/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/19/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH LCH DUP	12/19/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/19/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/19/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/19/03	LMP
PID Surrogate Recovery (S)	95.9	%	-	-	1		12/19/03	LMP
HALL Surrogate Recovery (S)	126.	%	~	-	1		12/19/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145691.31 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED 8Y: JRS

Sample ID: 2003TN01D90	Matrix	: SOIL		Sample Date/Ti	me: 12/09/03	Lab No. 14	\$5705
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u> Qualifier	Date <u>Analyzed</u>	Analyst
<u>EPA 160.3</u> Total Solids	83.1	%	-	0.33	-	12/11/03	SAK
<u>EPA 3050</u> Metal Prep	COMP		-	-	-	12/16/03	JJP
<u>EPA 6010</u> Total Nickel	20.9	mg/kg	0.1	0.33	1	12/24/03	BMS





ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

PROJECT NO.: 200106102370

REPORT NO. : 145691.32 DATE REC'D : 12/10/03 REPORT DATE: 12/30/03 PREPARED BY: JRS 800-338-7226 715-355-3221 www.usfilter.com

TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

Qualifier Descriptions

CSL	Check standard for this analyte exhibited a low bias. Sample results may also be biased low.
LCL	The laboratory control sample for this analyte exibited a low bias. Sample results may also be biased low.
DUP	Result of duplicate analysis in this quality assurance batch exceeds the limits for precision.
CSH	Check standard for this analyte exhibited a high bias. Sample results may also be biased high.
LCH	The laboratory control sample for this analyte exibited a high bias. Sample results may also be biased high.

All Analyses conducted in accordance with USFilter Quality Assurance Program Wisconsin Lab Certification No. 737053130



Appendix G

Boring Abandonment Forms

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
Hell/Drillhole/Borehole County	Original Well Owner (If Known)
Cation GP-1 Kenosha	
	Present Well Owner
	Street or Route
Grid Location Gov't Lot Grid Number	
+ПхПs +П⊧Пw	City, State, Zip Code
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet)
(Date) <u>12/10/2003</u>	Pump & Piping Removed? Yes No X Not Applicable
	Liner(s) Removed? Yes No Not Applicable Screen Removed? Yes No Not Applicable
Monitoring Well Construction Report Available? Water Well Xes No	
U Water Well X Yes No	
Borehole	If No, Explain
borenole	Was Casing Cut Off Below Surface? Yes No
Construction Turney	Did Sealing Material Rise to Surface?
Construction Type:	Did Material Settle After 24 Hours?
Other (Specify) Direct Push	If Yes, Was Hole Retopped?
Formation Type:	(5) Required Method of Placing Sealing Material
Unconsolidated Formation	Conductor Pipe - Gravity Conductor Pipe - Pumped
	Dump Bailer 🖾 Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete Bentonite Pellets
Was Well Annular Space Grouted? 🛛 Yes 🗌 No 🗍 Unknown	Clay-Sand Slurry
Was Well Annular Space Grouted? X Yes I No I Unknown If Yes, To What Depth? 12.0 Feet	Bentonite-Sand Slurry Bentonite-Cement Grout
	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 12.0
(8) Comments	
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
mature of Person Doing Work , Date Signed	
nargant Earner 4-14-04	Reviewer/Inspector Complying Work
Street or Route Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	

All abandonment work shall be performed in accordance with the provisions of Chapters NR 811, NR 812 or 141, Wis. Admin. Code, whichever is applicable.

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
ell/Drillhole/Borehole County	Original Well Owner (If Known)
ocation GP-2 Kenosha	
🖾 E	Present Well Owner
1/4 of 1/4 of Sec. <u>18</u> ; T. <u>1</u> N; R. <u>23</u> \Box W	
(If Applicable)	Street or Route
Grid Location Grid Number	City, State, Zip Code
	City, State, Zip Code
ft. 🗋 N. 🗋 S.,ft. 🗋 E. 🗋 W	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
	(4) Depth to Water (Feet)
(3) Original Well/Drillhole/Borehole Construction Completed On	
(Date) <u>12/10/2003</u>	
	Liner(s) Removed? Yes No Xot Applicable
Monitoring Well Construction Report Available?	Screen Removed? Yes No X Not Applicable
🗋 Water Well 🛛 🖾 Yes 🗋 No	Casing Left in Place? 🛛 🏵 Yes 🗖 No
Drillhole	If No, Explain
Borehole	
	Was Casing Cut Off Below Surface? Yes No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 Yes 🗌 No
	Did Material Settle After 24 Hours?
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖄 Yes 🗋 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
🛛 Unconsolidated Formation 🛛 🗍 Bedrock	Dump Bailer Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete Bentonite Pellets
	Clay-Sand Slurry 🛛 🖾 Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗖 No 🗍 Unknown	Bentonite-Sand Slurry Bentonite-Cement Grout
If Yes, To What Depth? <u>12.0</u> Feet	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
General - Destauits	Surface 12.0
Granular Bentonite	Surface 12.0
•	
(8) Comments	
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
finature of Person Doing Work / Date Signed	
Margaret Tainent 4-14-04	Reviewer/Inspector Complying Work
Sileet or Route Telephone Number	Noncomplying Work
	Follow-up Necessary
1033 N. Mayfair Road City, State, Zip Code	solion up hooddaly
Milwaukee, WI 53226	

(I) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
ell/Drillhole/Borehole County	Original Well Owner (If Known)
Cation GP-3 Kenosha	
1/4 of 1/4 of Sec 18 ; T N; R23	E Present Well Owner
(If Applicable)	Street or Route
Carit Lat Crid Numbe	
Grid Location Gov't Lot Grid Numbe	City, State, Zip Code
Grid Location ft. N. S., ft. E. Civil Town Name ft. ft.	
II. [_] N. [_] S., II. [_] E. [_]	W. Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Civil Town Name	Facinity well No. and/or Name (If Applicable) wir Olique well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet)
(b) Original (Vel) Difficie Difficie Construction Completed on $(Date) = \frac{12/10/2003}{2}$	Pump & Piping Removed? Yes No 🛛 Not Applicable
(Date) <u>12/10/2005</u>	Liner(s) Removed? Yes No X Not Applicable
Monitoring Well Construction Report Available	
Drillhole	If No, Explain
🖾 Borehole	
	Was Casing Cut Off Below Surface? 🛛 🔲 Yes 🔲 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🖾 Yes 🔲 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🗌 No
Formation Type:	(5) Required Method of Placing Sealing Material
Unconsolidated Formation Bedrock	Conductor Pipe - Gravity Conductor Pipe - Pumped
Conconsolidated Formation Dedrock	Dump Bailer
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	- Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete ! Bentonite Pellets
	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗖 No 🗍 U	known Bentonite-Sand Slurry
	Feet Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Sealing Material Used	From (FL) 10 (FL) Wix Ratio of Mud weight
Granular Bentonite	Surface 15.0
· · · · · · · · · · · · · · · · · · ·	
(8) Comments	
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
Firmature of Person Doing Work A Date Signed	
hargaret Earnest 4-14-02	Reviewer/Inspector Complying Work
Het or Route Telephone Numb	
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
••••••	
Milwaukee, WI 53226	

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
ell/Drillhole/Borehole County	Original Well Owner (If Known)
ocation GP-4 Kenosha	
$ 1/4 \text{ of } 1/4 \text{ of Sec. } 18 ; \text{T. } 1 \text{ N; R. } 23 \square W$	Present Well Owner
(If Applicable)	Street or Route
Gov't Lot Grid Number	
Grid Location	City, State, Zip Code
ft. \[N. \[S.,ft. \[E. \[W.	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
	(4) Depth to Water (Feet)
(3) Original Well/Drillhole/Borehole Construction Completed On	Pump & Piping Removed? Yes No X Not Applicable
(Date) <u>12/10/2003</u>	Liner(s) Removed?
Construction Borort Auritable?	Screen Removed? Yes Vot Applicable
Monitoring Well Construction Report Available? Water Well X	Casing Left in Place? \square Yes \square No
	5
	If No, Explain
🖾 Borehole	Was Casing Cut Off Below Surface? Yes No
Construction Type:	
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? Yes X No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 Yes 🗌 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
Unconsolidated Formation Dedrock	Dump Bailer 🛛 Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete
_ · · · · · _ · · · · · · · · · · · · ·	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗌 No 🗍 Unknown	Bentonite-Sand Slurry
If Yes, To What Depth? <u>12.0</u> Feet	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 12.0
·	
(8) Comments	·
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
Date Signed	
nalgarit Carner 4-14-04	Reviewer/Inspector Complying Work
Sileet or Route Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	

(1) GENERAL INFORMATION				TY NAME	C & L Industria	I Cleaners	
ell/Drillhole/Borehole	County		Original We	ell Owner (If]	Known)		
ocation GP-5	Kenosha						
		23 E	Present We	ll Owner		* <u>,</u> 0.2 **	
1/4 of 1/4 of Sec (If Applicable)	<u>10</u> ;T. <u>1</u> N;R		Street or Ro				
(If Applicable)			Street or Ko	oute			
Grid Location Gov't Lot	Gr	id Number	City, State,	7 in Code			
			City, State,	Lip Code			
II. LI N. LI S., Civil Town Name	ft. [<u> E. L W. </u>	Facility Wa	II No. and/or	Name (If Applica	hle)	WI Unique Well No.
Civit Town Name			Facility we		Name (II Applica	010)	WI Omque Wen No.
Street Address of Well			Reason For	Abandonmen			
8927 Sheridan Road							
City, Village			Date of Aba	indonment			
Kenosha							
WELL/DRILLHOLE/BOREHOLE	NFORMATION		I				
		10	(4) Depth to	o Water (Feet))		
(3) Original Well/Drillhole/Boreho	le Construction Complete	d On		Piping Remo			o 🔯 Not Applicable
(Date) <u>12/10/2003</u>					_		o X Not Applicable
		A		Removed?		$es \square N$	
Monitoring Well	Construction Report			Removed?	E E E		
Water Well	🛛 🖾 Yes	l No	-	Left in Place?		es 🗌 No	0
Drillhole			If No, E	xplain			
🔯 Borehole							
			1	-	Below Surface?		es 🗌 No
Construction Type:	_	_	1	•	Rise to Surface?		es 🔲 No
Drilled D		Dug	Did Ma	terial Settle A	fter 24 Hours?		es 🖾 No
Other (Specify) _Direct]	Push		If Yes,	Was Hole Ret	opped?	X Y	es 🗌 No
			(5) Require	d Method of I	Placing Sealing M	aterial	
Formation Type:				ductor Pipe -			Pipe - Pumped
🔯 Unconsolidated Formation	Bedrock		· _	np Bailer			plain) Gravity
		、		-			
Total Well Depth (ft)	Casing Diameter (in. Casing Depth (ft.)	.)		Materials			nitoring wells and
(From groundsurface)	Casing Depth (It.)			t Cement Gro		monitor	ring well boreholes only
Laura Drillhala Diamatan (in)				•	oncrete) Grout		tonite Pellets
Lower Drillhole Diameter (in.)			= ***	ncrete	1		
				y-Sand Slurry		_	nular Bentonite
Was Well Annular Space Grou If Yes, To What Depth?	12.0	D Unknown Feet		tonite-Sand S	•	Ben	tonite-Cement Grout
		reet	Chi	pped Bentoni	te		
(7) Sealin	g Material Used		From (Ft.)	To (Ft.)		Mix I	Ratio or Mud Weight
			<u> </u>				-
Granular Bentonite			Surface	12.0			
······································							
<u></u>			ļ				
• · · · · · · · · · · · · · · · · · · ·							
(8) Comments	· · · · · ·						
	Cooling Wast		1		OR DNR OR COU	NITY UC	E ONI V
(9) Name of Person or Firm Doing	Searing work		(10) Date 1	Received/Insp			ict/County
T N & Associates, Inc.	Date Si	imed	Date	Received/insp	letteu	Distri	or county
		-14-04	Paula	wer/Inspector			Completing West
Silvet or Route	Talanh	one Number	- Kevie	wer/inspector		H	Complying Work Noncomplying Work
()	relepho	one number	Faller	w-up Necessa	F V		Noncomprying work
1033 N. Mayfair Road City, State, Zip Code			rono	w-up Necessa	.,		
••••••							
Milwaukee, WI 53226			J				

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
Lell/Drillhole/Borehole County	Original Well Owner (If Known)
cation GP-6 Kenosha	
- 1/4 of - 1/4 of Sec. -18 ; T1 N; R23 W	Present Well Owner
(If Applicable)	Street or Route
Gov't Lot Grid Number	·
Grid Location	City, State, Zip Code
ft. N. S.,ft. E. W.	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet)
(Date) <u>12/9/2003</u>	Pump & Piping Removed?
	Liner(s) Removed?
Monitoring Well Construction Report Available?	Screen Removed? 🛛 Yes 🔲 No 🖾 Not Applicable
🗌 Water Well 🛛 🖾 Yes 🗌 No	Casing Left in Place? 🛛 Yes 🗌 No
Drillhole	If No, Explain
Borehole	
	Was Casing Cut Off Below Surface? 🛛 Yes 🗌 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 Yes 🗌 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🔲 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
Unconsolidated Formation Dedrock	Dump Bailer \bigotimes Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete Bentonite Pellets
	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? Xes No Unknown If Yes, To What Depth? 16.0 Feet	Bentonite-Sand Slurry Bentonite-Cement Grout
If Yes, To What Depth? Feet	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 16.0
(8) Comments	
(9) Name of Person or Firm Doing Scaling Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc. rature of Person Doing Work Date Signed	Date Received/Inspected District/County
	Paulawar/Jaanaatar
	Reviewer/Inspector Complying Work
V	Follow-up Necessary Noncomplying Work
1033 N. Mayfair Road City, State, Zip Code	ronow-up necessary
Milwaukee, WI 53226	J

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
Hell/Drillhole/Borehole County	Original Well Owner (If Known)
Cation GP-7 Kenosha	
	Present Well Owner
(If Applicable)	Street or Route
Grid Location Gov't Lot Grid Number	
Grid Location	City, State, Zip Code
Grid Location ft. N. S., ft. E. W. Civil Town Name Ci	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet) Pump & Piping Removed? □ Yes □ No ⊠ Not Applicable
(Date) <u>12/9/2003</u>	Liner(s) Removed? \Box res \Box No \boxtimes Not Applicable
Monitoring Well Construction Report Available?	Screen Removed?
Water Well	Casing Left in Place? \boxtimes Yes \square No
Drillhole	If No, Explain
🖾 Borehole	
	Was Casing Cut Off Below Surface? 🛛 Yes 🗌 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🖾 Yes 🔲 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🔲 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
Unconsolidated Formation 🔲 Bedrock	Dump Bailer 🛛 Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete Bentonite Pellets
	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? X Yes No Unknown If Yes, To What Depth? 12.0 Feet	Bentonite-Sand Slurry Bentonite-Cement Grout
	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 12.0
• • · · · · · · · · · · · · · · · · · ·	
(8) Comments	
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
the lature of Person Doing, Work / Date Signed	
Than gavet Carnest 4-14-04	Reviewer/Inspector Complying Work
Street or Route Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	

State of Wisconsin Department of Natural Resources

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners			
ell/Drillhole/Borehole County	Original Well Owner (If Known)			
Cation GP-8 Kenosha				
E E	Present Well Owner			
$1/4 \text{ of} \qquad 1/4 \text{ of Sec} 18 : T = 1 = N; R = 23 \qquad \square W$				
	Street or Route			
(If Applicable)	Sheet of Roule			
Gov't Lot Grid Number				
Grid Location	City, State, Zip Code			
ft. 🗋 N. 🗋 S.,ft. 🗋 E. 🗋 W.				
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.			
Street Address of Well	Reason For Abandonment			
8927 Sheridan Road				
City, Village	Date of Abandonment			
Kenosha				
WELL/DRILLHOLE/BOREHOLE INFORMATION				
	(4) Don'th to Water (East)			
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet) \square			
(Date) <u>12/9/2003</u>	Pump & Piping Removed? Yes No X Not Applicable			
	Liner(s) Removed? Yes No X Not Applicable			
Monitoring Well Construction Report Available?	Screen Removed? Yes No X Not Applicable			
🗌 Water Well 🛛 🖾 Yes 🗌 No	Casing Left in Place? 🛛 🖾 Yes 🗖 No			
Drillhole	If No, Explain			
🖾 Borehole				
	Was Casing Cut Off Below Surface? 🛛 Yes 🗍 No			
Construction Type:	Did Sealing Material Rise to Surface? 🛛 Yes 🗖 No			
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? Yes X No			
Other (Specify) _Direct Push	If Yes, Was Hole Retopped? Yes No			
V Other (Specify)				
	(5) Required Method of Placing Sealing Material			
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped			
Unconsolidated Formation 🔲 Bedrock	Dump Bailer 🛛 Other (Explain) Gravity			
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and			
(From groundsurface) Casing Danteet (in.)	Neat Cement Grout Monitoring well boreholes only			
(From groundsurface) Casing Deput (ii.)				
Lower Drillhole Diameter (in.)	Sand-Cement (Concrete) Grout			
Lower Drithole Diameter (III.)				
	Clay-Sand Slurry Granular Bentonite			
Was Well Annular Space Grouted? Xes Do Unknown If Yes To What Depth? 12.0 Feet				
If Yes, To What Depth? <u>12.0</u> Feet	Chipped Bentonite			
(7)				
Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight			
Granular Bentonite	Surface 12.0			
(8) Comments				
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY			
	Date Received/Inspected District/County			
T N & Associates, Inc. nature of Person Doing Work / Date Signed				
	Reviewer/Inspector Complying Work			
Street or Routed Telephone Number	Noncomplying Work			
1033 N. Mayfair Road	Follow-up Necessary			
City, State, Zip Code				
Milwaukee, WI 53226				

State of Wisconsin Department of Natural Resources

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
Hell/Drillhole/Borehole County	Original Well Owner (If Known)
	Present Well Owner
(If Applicable)	Street or Route
Gov't Lot Grid Number	
Grid Location	City, State, Zip Code
ft. \[N. \] S.,ft. \[E. \] W.	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet)
(Date) <u>12/9/2003</u>	Pump & Piping Removed? Yes No X Not Applicable
	Liner(s) Removed? Yes No X Not Applicable
Monitoring Well Construction Report Available?	Screen Removed?
🔲 Water Well 🛛 🖾 Yes 🗌 No	Casing Left in Place? 🛛 🖾 Yes 🗖 No
Drillhole	If No, Explain
🖾 Borehole	
	Was Casing Cut Off Below Surface? 🛛 Yes 🗌 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 Yes 🗌 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🗖 No
Formation Type:	(5) Required Method of Placing Sealing Material
	Conductor Pipe - Gravity Conductor Pipe - Pumped
🖾 Unconsolidated Formation 🛛 🖾 Bedrock	🗌 Dump Bailer 🛛 🖾 Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete
	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗌 No 🗍 Unknown	Bentonite-Sand Slurry
If Yes, To What Depth? <u>12.0</u> Feet	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Scaling Matchai Oscu	
	0-0-100
Granular Bentonite	Surface 12.0
••••••••••••••••••••••••••••••••••••••	
(8) Comments	
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
	Date Received/Inspected District/County
T N & Associates, Inc.	Date Received District/County
nature of Person Doing Work	
hargaset Earnest 4-14-04	Reviewer/Inspector Complying Work
Street or Route Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	

Remediation/Redevelopmen Other Form 4400-113A Rev. 6-97 Facility/Project Name Local Grid Location of Well Well Name Well Name C & L Industrial Cleaners ft. □ Sft. □ W. Well Name Well Name Facility License, Permit or Monitoring No. Grid Origin Location (Check if estimated: □) Wis.Unique WellNo. DNR Well Number Lat
C & L Industrial Cleaners ft. N. ft. E. Facility License, Permit or Monitoring No. Grid Origin Location (Check if estimated:]) Wis.UniqueWellNo. DNR Well Number Heat
Image: Section Control of Well Code 11/mw Image: Section Control of Well Relative to Waste/Source Image: Section Control of Well Relative to Waste/Source Image: Well Code 11/mw Image: Section Control of Well Relative to Waste/Source Image: Well Installed By: Image: Well Installed By:<
Lat.
Type of Well Section Location of Waste/Source Image: Bit
Type of Well Section Location of Waste/Source Image: Bit
Type of Well
Distance Well Is From Waste/Source u Upgradient s Sidegradient Boundary ft. d Downgradient n Not Known A. Protective pipe, top elevation
Distance Well Is From Waste/Source u Upgradient s Sidegradient Boundary ft. d Downgradient n Not Known A. Protective pipe, top elevation
A. Protective pipe, top elevation ft. MSL 1. Cap and lock? Z. Protective cover pipe:
2. Protective cover pipe:
\sim 2. Protective cover pipe:
B. Well casing, top elevation ft. MSL a. Inside diameter: in.
C. Land surface elevation ft. MSL b. Length:
D. Surface seal, bottom ft. MSL or ft
D. Surface seal, bottom ft. MSL or0.0 ft. C. Material: Steel04 12. USC classification of soil near screen: Other & C. Material: Steel04 GP GM GC GW SW SP Fill Fill Fill Fill If yes, describe: no If yes, describe: If yes, describe: If yes, describe: If yes, describe:
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$ SM \Box SC \square M \Box M \Box C \Box C \Box C H \Box N \Box U N = 0$
Bedrock□ 3. Surface seal: Concrete ⊠ 0 1
13. Sieve analysis attached? □ Yes ⊠ No Other □
14. Drilling method used: Rotary 🗆 5 0 4. Material between well casing and protective pipe:
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Other □ Other □ Other ⊠
5. Annular space seal: a. Granular Bentonite 🗆 3.3
15. Drilling fluid used: Water 0 2 Air 0 1 Drilling Mud 0 3 None Ø 9 b. Lbs/gal mud wt Bentonite-sand slurry 3 5 c. Lbs/gal mud wt Bentonite slurry 3 1
d% Bentonite Bentonite-cement grout □ 50
$\frac{116}{10}$ Drilling additives used? \boxtimes Yes \square No $e. \underline{0.9}$ Ft ³ volume added for any of the above
Index DescribeNo f. How installed: Tremie □ 01
Describe Tremie pumped □ 0 2 17. Source of water (attach analysis): Gravity ⊠ 0.8
Gravity 🖾 0 8
City of Sheboygan 6. Bentonite seal: a. Bentonite granules 3 3
E Bentonite seal ton f MSL or 1.0 ft c c c c c c c c
E. Bentonite seal, top ft. MSL or ft. Other Other _
E. Bentomite seal, top It. MSL of ft. F. Fine sand, top ft. MSL or ft. F. Fine sand, top ft. MSL or ft.
b. Volume added 3.1 ft ³
G. Filter pack, top ft. MSL or4.0 ft 8. Filter pack material: Manufacturer, product name and mesh si
a
H. Screen joint, top ft. MSL or5.0 ft b. Volume added ft ³
9. Well casing: Flush threaded PVC schedule 40 🛛 2 3
I. Well bottom ft. MSL or ft ft Flush threaded PVC schedule 80 □ 2 4 Johnson Screen Other 🖾
J. Filter pack, bottom ft. MSL or5 ft10. Screen material:Schedule 40 PVC
a. Screen Type: Factory cut 🛛 11
K. Borehole, bottom ft. MSL or 15.5 ft. Continuous slot \Box 0 1
Other 🗆
L. Borehole, diameter in. b. Manufacturer Johnson Screen
c. Slot size: d. Slotted length: $\frac{0.010}{10.0}$ in. $\frac{10.0}{10.0}$ ft.
M. O.D. well casing 2.38 in. d. Slotted length: $11.$ Backfill material (below filter pack): None \Box 14
None
N. I.D. well casing in Other 🛛
ereby certify that the information on this form is true and correct to the best of my knowledge.

Firm TN & Associates, Inc.

mature

 Maguet
 In Consistences, mile.
 International construction

 Please completed both Forms 4400-113A and 4400-113B and return to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personnally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be constructed forms should be formed to be used for any other purpose.

 sent.

Tel:

(1) GENERAL INFORMATION			TY NAME	C & L Industria	al Cleaners	
Hell/Drillhole/Borehole County		Original W	ell Owner (If]	Known)		
cation GP-10 Kenosha						
1/4 of 1/4 of Sec18; T1 N; R2. (If Applicable)	⊠ E 3_ □ w	Present We	ll Owner			
(If Applicable)		Street or Ro	oute			
Grid Location Gov't Lot Grid		City, State,	Zip Code			
	ЕПW	,	F			
Grid Location ft. N. S.,ft Civil Town Name		Facility We	II No. and/or	Name (If Applica	ble) W	I Unique Well No.
Street Address of Well		Reason For	Abandonmen	ıt		<u></u>
8927 Sheridan Road		Detectal				
City, Village		Date of Ab	andonment			
Kenosha						
WELL/DRILLHOLE/BOREHOLE INFORMATION						
 (3) Original Well/Drillhole/Borehole Construction Completed ((Date) <u>12/9/2003</u> Monitoring Well Construction Report A 	vailable?	Pump & Liner(s) Screen	o Water (Feet) 2 Piping Remo 9 Removed? Removed?	oved? Y Y Y	es 🗌 No es 🔲 No	Not ApplicableNot ApplicableNot Applicable
 □ Water Well □ Drillhole ☑ Borehole 	No	-	Left in Place? Explain		es 🗌 No	
Construction Type:	Dug	Did Sea	ling Material	Below Surface? Rise to Surface? fter 24 Hours?	☐ Yes ⊠ Yes ☐ Yes	□ No ⊠ No
Other (Specify) Direct Push		If Yes,	Was Hole Ret	opped?	🔀 Yes	🔲 No
Formation Type:		Cor Du	nductor Pipe - np Bailer		Conductor Pi Other (Explai	in) Gravity
Total Well Depth (ft)Casing Diameter (in.)(From groundsurface)Casing Depth (ft.)		🗌 Nea	Materials at Cement Gro d-Cement (Co	out oncrete) Grout		oring wells and g well boreholes only
Lower Drillhole Diameter (in.)			ncrete y-Sand Slurry		Benton	ite Pellets ar Bentonite
Was Well Annular Space Grouted? Xes No If Yes, To What Depth? 12.0	Unknown Feet	🗌 🗌 Ber	ntonite-Sand S pped Bentoni	lurry		ite-Cement Grout
(7) Sealing Material Used		From (Ft.)	To (Ft.)		Mix Rat	io or Mud Weight
Granular Bentonite		Surface	12.0			
• · · · · · · · · · · · · · · · · · · ·						
(8) Comments						
		·····				
(9) Name of Person or Firm Doing Sealing Work		(10)		OR DNR OR COU		
T N & Associates, Inc.		Date	Received/Insp	ected	District/0	County
ature of Person Doing Work Date Sign						
	-04 Number	Revie	wer/Inspector			omplying Work
Street or Routed Telephone 1033 N. Mayfair Road	e Number	Follo	w-up Necessa	гу		oncomplying Work
City, State, Zip Code						
Milwaukee, WI 53226						

(1) GENERAL INFORMATION		(2) FACILI	TY NAME	C & L Industria	Cleaners	
(1) GENERAL INFORMATION ell/Drillhole/Borehole County		Original W	ell Owner (If)	Known)		
ocation GP-11 Kenosha						
	ΒE	Present We	ll Owner			
1/4 of 1/4 of Sec. <u>18</u> ; T. <u>1</u> N; R. <u>2</u>	3 🗋 w					
(If Applicable)		Street or Ro	oute			
Grid Location Grid	Number	City, State,	7in Cada			
		City, State,	Zip Code			
<u>ft.</u> N. S., <u>ft.</u>	E. 🗌 W.					
Civil Town Name		Facility We	ll No. and/or	Name (If Applicat	ole)	WI Unique Well No.
Street Address of Well		Reason For	Abandonmen	it		
8927 Sheridan Road						
City, Village		Date of Aba	indonment			
Kenosha						
WELL/DRILLHOLE/BOREHOLE INFORMATION						
	<u>On</u>	(4) Depth to	Water (Feet)		
12/0/2002	011		Piping Remo			Not Applicable
(Date) $12/9/2003$		-	Removed?			Not Applicable
	1-11-0		Removed?		$ s \square No$	
Monitoring Well Construction Report A						
Water Well 🛛 Yes 🗌	No	-	Left in Place?		s 🗌 No	
Drillhole		If No, E	xplain			
Borehole						
		Was Ca	sing Cut Off I	Below Surface?		s 🔲 No
Construction Type:		Did Sea	ling Material	Rise to Surface?	🖾 Ye	s 🔲 No
	Dug	Did Ma	terial Settle A	fter 24 Hours?	🗌 Ye	s 🖾 No
Other (Specify) Direct Push		If Yes.	Was Hole Ret	opped?		s 🔲 No
Formation Type:				Placing Sealing M		
		and the second se	ductor Pipe -			Pipe - Pumped
Unconsolidated Formation Dedrock			np Bailer	\boxtimes (Other (Exp	lain) Gravity
Total Well Depth (ft) Casing Diameter (in.)		(6) Sealing	Materials		For mon	itoring wells and
(From groundsurface) Casing Depth (ft.)			t Cement Gro	nut		ing well boreholes only
				oncrete) Grout	monnon	ing word contractor comp
Lower Drillhole Diameter (in.)			crete	I I	Bent	onite Pellets
			y-Sand Slurry	. !		ular Bentonite
Was Well Annular Space Grouted? 🛛 🖾 Yes 🗌 No	Unknown	· _	•			
Was Well Annular Space Grouted? X Yes Volume No If Yes, To What Depth? 12.0	Feet		tonite-Sand S	-	L Bento	onite-Cement Grout
	Feel		pped Bentoni	te		
(7)			T (T))	,		
Sealing Material Used		From (Ft.)	To (Ft.)		MIX K	atio or Mud Weight
Granular Bentonite		Surface	12.0			
						· · · · · · · · · · · · · · · · · · ·
				-		
· · · · · · · · · · · · · · · · · · ·		<u></u>				
(8) Comments						
		·····				
(9) Name of Person or Firm Doing Sealing Work		(10)	FC	OR DNR OR COU	NTY USE	ONLY
T N & Associates, Inc.		Date	Received/Insp	ected	Distric	ct/County
finature of Person Doing Work / Date Sign	ned	1				
	4-04	Revie	wer/Inspector	•		Complying Work
	e Number					Noncomplying Work
1033 N. Mayfair Road		Follo	w-up Necessa	rv		<i>p</i> ,
City, State, Zip Code				- 5		
Milwaukee, WI 53226]				

State of Wisconsin Department of Natural Resources

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
(1) GENERAL INFORMATION Vell/Drillhole/Borehole County	Original Well Owner (If Known)
ocation GP-12 Kenosha	
	Present Well Owner
(If Applicable)	Street or Route
Coult Lot Crid Number	
Grid Location	City, State, Zip Code
ft. 🗋 N. 🗋 S.,ft. 🗋 E. 🗋 W.	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On	(4) Depth to Water (Feet)
(Date) <u>12/9/2003</u>	Pump & Piping Removed? Yes No X Not Applicable
(Date)	Liner(s) Removed? Yes No X Not Applicable
Monitoring Well Construction Report Available?	Screen Removed? Yes No X Not Applicable
🗌 Water Well 🛛 🖾 Yes 🔲 No	Casing Left in Place? 🛛 🖾 Yes 🔲 No
Drillhole	If No, Explain
🖾 Borehole	
	Was Casing Cut Off Below Surface? 🛛 Yes 🗌 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🖾 Yes 🗌 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🗖 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
Unconsolidated Formation Bedrock	Dump Bailer Stavity Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Neat Cement Grout monitoring well boreholes only
Louis Dillhala Diamatan (in)	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete Bentonite Pellets Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗌 No 🗍 Unknown	
Was Well Annular Space Grouted? X Yes Volume No Unknown If Yes, To What Depth? 12.0 Feet	Bentonite-Sand Slurry Bentonite-Cement Grout
	Chipped Bentonite
(7) Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 12.0
(8) Comments	· · · · · · · · · · · · · · · · · · ·
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
	Date Received/Inspected District/County
T N & Associates, Inc.	Districtedunty
	Reviewer/Inspector Complying Work
Sileet or Route Tainest 4-14-04 Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	
1VIII WAUKEE, WI JJ220	

(1) GENERAL INFORMATION	(2) FACILITY NAME C & L Industrial Cleaners
Hell/Drillhole/Borehole County	Original Well Owner (If Known)
cation GP-13 Kenosha ·	
$- 1/4 \text{ of } - 1/4 \text{ of Sec. } 18 ; \text{T. } 1 \text{ N; R. } 23 \qquad \boxtimes \qquad W$	Present Well Owner
(If Applicable)	Street or Route
Gov't Lot Grid Number	
Grid Location	City, State, Zip Code
<u>ft.</u> N. S., <u>ft.</u> E. W.	
Civil Town Name	Facility Well No. and/or Name (If Applicable) WI Unique Well No.
Street Address of Well	Reason For Abandonment
8927 Sheridan Road	
City, Village	Date of Abandonment
Kenosha	
WELL/DRILLHOLE/BOREHOLE INFORMATION	
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) 12/9/2003	(4) Depth to Water (Feet) Pump & Piping Removed?
(Date)	Liner(s) Removed? Yes No X Not Applicable
Monitoring Well Construction Report Available?	Screen Removed? Yes No X Not Applicable
Water Well 🛛 Yes 🗆 No	Casing Left in Place? 🛛 🖾 Yes 🗖 No
Drillhole	If No, Explain
Borehole	
	Was Casing Cut Off Below Surface? 🛛 🗌 Yes 🔲 No
Construction Type:	Did Sealing Material Rise to Surface? 🛛 🖾 Yes 🔲 No
Drilled Driven (Sandpoint) Dug	Did Material Settle After 24 Hours? 🛛 🗌 Yes 🖾 No
Other (Specify) Direct Push	If Yes, Was Hole Retopped? 🛛 🖾 Yes 🔲 No
	(5) Required Method of Placing Sealing Material
Formation Type:	Conductor Pipe - Gravity Conductor Pipe - Pumped
Unconsolidated Formation 🛛 Bedrock	Dump Bailer 🛛 Other (Explain) Gravity
Total Well Depth (ft) Casing Diameter (in.)	(6) Sealing Materials For monitoring wells and
(From groundsurface) Casing Depth (ft.)	Scaling Matchars For Horntoning wers and monitoring well boreholes only
	Sand-Cement (Concrete) Grout
Lower Drillhole Diameter (in.)	Concrete
	Clay-Sand Slurry Granular Bentonite
Was Well Annular Space Grouted? 🛛 Yes 🗌 No 🗌 Unknown	Bentonite-Sand Slurry Bentonite-Cement Grout
If Yes, To What Depth? <u>12.0</u> Feet	Chipped Bentonite
(7)	
Sealing Material Used	From (Ft.) To (Ft.) Mix Ratio or Mud Weight
Granular Bentonite	Surface 12.0
(8) Comments	· · · · · · · · · · · · · · · · · · ·
(9) Name of Person or Firm Doing Sealing Work	(10) FOR DNR OR COUNTY USE ONLY
T N & Associates, Inc.	Date Received/Inspected District/County
mature of Person Doing/Work, Date Signed	
margaret Carnest 4-14-04	Reviewer/Inspector Complying Work
Street or Route Telephone Number	Noncomplying Work
1033 N. Mayfair Road	Follow-up Necessary
City, State, Zip Code	
Milwaukee, WI 53226	

Appendix H

Waste Disposal Documentation



ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

Sample Summary

145785.2

<u>Lab Id</u>	<u>Client Sample ID</u>	Date/Time	<u>Matrix</u>
145785	203TN01S13	12/10/03 10:50	SOIL
145786	2003TN01S08	12/10/03 09:00	SOIL
145787	2003TN01S14	12/10/03 14:05	SOIL
145788	2003TN01S14 EXT	12/16/03	TCLP EXTRACT

Sample Narrative/Sample Status

LOGIN:

145787 HOLD= POSSIBLE ADDITIONAL TCLP TESTING FOR METALS, SEMI, PEST, HERB 145788 HOLD= POSSIBLE ADDITIONAL TCLP TESTING

GENERAL:

ANALYSES:

145787 CANC ALK & ACID - PH BETWEEN 4-10. TCLP SEMI,HERB & PEST COMPLETE ON 11/18/03.

QA/QC:

REPORTING:

Definitions

LOD = Limit of Detection LOQ = Limit of Quantitation < = Less Than COMP = Complete SUBCON = Subcontracted analysis mv = millivolts pCi/l = picocurie per liter ml/l = milliters/Liter µg/l = Micrograms per liter = parts per billion (ppb) µg/kg = Micrograms per kilogram = parts per billion (ppb) mg/l = Milligrams per liter = parts per million (ppm) mg/kg = Milligrams per kilogram = parts per million (ppm) NOT PRES = Not Present ppth = Parts per thousand (S) = Surrogate Compound





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145785.3 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 203TN01S13	Matrix:	SOIL	Sam	ple Date/Ti	me: 12/10/	03 10:50	Lab No. 14	\$5785
	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date Analyzed	Analyst
	<u>neour</u>	011100			100001	440(111615	<u>Anacy 200</u>	Maryor
EPA_8021 (Only positively	identified	analytes	are repor	ted on a dr	y weight b	asis		
Benzene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Bromobenzene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
Bromodichloromethane	<0.025	mg/kg	0.006	0.02	0.8	CSL LCL	12/18/03	LMP
n-Butylbenzene	<0.025	mg/kg	0.012	0.04	0.8		12/18/03	LMP
sec-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.8		12/18/03	LMP
tert-Butylbenzene	<0.025	mg/kg	0.01	0.033	0.8		12/18/03	LMP
Carbon Tetrachloride	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Chlorobenzene Chlorodibromomethane	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
Chloroethane	<0.025 <0.025	mg/kg	0.02	0.067 0.30	0.8 0.8		12/18/03	LMP LMP
Chloroform	<0.025	mg/kg mg/kg	0.09	0.033	0.8		12/18/03 12/18/03	
Chloromethane	<0.025	mg/kg	0.01	0.033	0.8	CSL LCL DUP	12/18/03	LMP
2-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
4-Chlorotoluene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,2-Dibromo-3-chloropropane	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	LMP
1,2-Dibromoethane	<0.025	mg/kg	0.012	0.04	0.8		12/18/03	LMP
1,2-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,3-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,4-Dichlorobenzene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
Dichlorodifluoromethane	<0.025	mg/kg	0.014	0.047	0.8	LCL DUP	12/18/03	LMP
1,1-Dichloroethane	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	LMP
1,2-Dichloroethane	<0.025	mg/kg	0.005	0.017	0.8		12/18/03	LMP
1,1-Dichloroethylene	<0.025	mg/kg	0.016	0.053	0.8		12/18/03	LMP
cis-1,2-Dichloroethylene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
trans-1,2-Dichloroethylene	<0.025	mg/kg	0.01	0.033	0.8		12/18/03	LMP
1,2-Dichloropropane	<0.025	mg∕kg	0.007	0.023	0.8		12/18/03	LMP
1,3-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
2,2-Dichloropropane	<0.025	mg/kg	0.008	0.027	0.8	CSL LCL DUP	12/18/03	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.023	0.8 0.8		12/18/03	LMP
Hexachlorobutadiene Isopropylbenzene	<0.025 <0.025	mg/kg mg/kg	0.015 0.009	0.05 0.03	0.8		12/18/03 12/18/03	LMP LMP
Isopropyl Ether	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	
p-Isopropyltoluene	<0.025	mg/kg	0.014	0.037	0.8		12/18/03	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.06	0.8		12/18/03	LMP
Methylene Chloride	<0.025	mg/kg	0.014	0.047	0.8	CSL LCL	12/18/03	LMP
Naphthalene	<0.025	mg/kg	0.01	0.033	0.8		12/18/03	LMP
n-Propylbenzene	<0.025	mg/kg	0.009	0.03	0.8		12/18/03	LMP
Tetrachloroethylene	50.0	mg/kg	0,009	0.03	83.6		12/19/03	LMP
1,1,2,2-Tetrachloroethane	<0.025	mg/kg	0.006	0.02	0.8	CSH	12/18/03	LMP
Toluene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP
1,2,3-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.8		12/18/03	LMP
1,2,4-Trichlorobenzene	<0.025	mg/kg	0.014	0.047	0.8		12/18/03	LMP
1,1,1-Trichloroethane	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,1,2-Trichloroethane	<0.025	mg/kg	0.006	0.02	0.8		12/18/03	LMP
Trichloroethylene	<0.025	mg/kg	0.011	0.037	0.8		12/18/03	LMP
Trichlorofluoromethane	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	0.8		12/18/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	0.8			LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	0.8		12/18/03	
m-&p-Xylene	<0.025	mg/kg	0.015	0.05	0.8		12/18/03	
o-Xylene Bromochloromethane	<0.025 <0.025	mg∕kg mg/kg	0.008 0.006	0.027 0.02	0.8 0.8		12/18/03 12/18/03	LMP LMP
or oncertor oncernance	10.025	may ka	0.000	0.02	0.0		12/10/03	LIT





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145785.4 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 203TN01S13	Matrix	: SOIL	San	nple Date/Ti	me: 12/10/0	03 10:50	Lab No. 14	45 78 5	
					Dilution		Date		
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>	
EPA 8021 (Only positively	identified	analytes	are repor	ted on a dr	y weight ba	asis			
Bromoform	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP	
Bromomethane	<0.025	mg/kg	0.009	0.03	0.8	CSH	12/18/03	LMP	
Dibromomethane	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP	
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP	
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	0.8		12/18/03	LMP	
Styrene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP	
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0,009	0.03	0.8		12/18/03	LMP	
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP	
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	0.8		12/18/03	LMP	
PID Surrogate Recovery (S)	91.7	%	-	-	1		12/18/03	LMP	
HALL Surrogate Recovery (S)	130.	%	-	-	1		12/18/03	LMP	
MOSAZ1-2									
Total Solids	79.2	%	-	0.33	-		12/15/03	SAK	





Attn: David Voight

PROJECT NO.: 200106102370 REPORT NO.: 145785.5 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Result Units LOD LoD Pattor Qualifiers Analyzed Analyzed FPA 3050 Metal Prep COMP - - - 12/16/03 JJP FPA 4010 Total Nickel 7.60 mg/kg 0.11 0.33 1 12/24/03 BMB Benzene 0.025 mg/kg 0.006 0.027 1 12/24/03 LWP Benzene 0.025 mg/kg 0.007 0.023 1 12/28/03 LWP Benzene 0.025 mg/kg 0.007 0.023 1 12/28/03 LWP Benzene 0.025 mg/kg 0.012 0.04 1 12/18/03 LWP Sec-Butylbenzene -0.025 mg/kg 0.01 0.033 1 12/18/03 LWP Chiorobenzene -0.025 mg/kg 0.067 1 12/18/03 LWP Chiorobenzene -0.025 mg/kg 0.033 1 12/18/03 LWP Chiorobenzene	Sample ID: 2003TN01S08	Matrix: SOIL	. Samp	le Date/Ti	me: 12/10/03 09:00	Lab No. 14	45786
PA 3050 Metal Prep COMP . . 12/16/03 JJP PA 4010 Total Nickel 7.60 mg/kg 0.1 0.33 1 12/24/03 BMS PA 8021 Benzene 0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Bromobrazene 0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Bromobrazene 0.025 mg/kg 0.007 0.023 1 12/18/03 LMP sec-Butylbenzene 0.025 mg/kg 0.010 0.033 1 12/18/03 LMP Chlorobenzene 0.025 mg/kg 0.01 0.033 1 12/18/03 LMP		Result Units		1.00			Analyst
Netal Prep COMP - - 12/16/03 JJP EPA 0010 Total Nickel 7.60 mg/kg 0.1 0.33 1 12/26/03 BMS EPA 0021 Benzene 0.025 mg/kg 0.008 0.027 1 12/18/03 LMP Bromobenzene 0.025 mg/kg 0.006 0.023 1 12/18/03 LMP Bromobenzene 0.025 mg/kg 0.006 0.02 1 12/18/03 LMP sec-Butylbenzene 0.025 mg/kg 0.010 0.033 1 12/18/03 LMP Chlorobenzene 0.025 mg/kg 0.011 0.033 1 12/18/03 LMP Chlorobenzene 0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorobenzene 0.025 mg/kg 0.010 0.033 1 12/18/03 LMP Chlorobenzene 0.025 mg/kg 0.010 0.033 1 12/18/03 LMP				<u></u>		Anatyzed	Kildt Jat
PPA 6010 Total Nickel 7.60 mg/kg 0.1 0.33 1 12/24/03 BMS PPA 6021 Genzene 0.0025 mg/kg 0.007 0.027 1 12/18/03 LMP Bromobenzene 0.0025 mg/kg 0.007 0.023 1 12/18/03 LMP Bromodichoromethane 0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Bromodichoromethane 0.025 mg/kg 0.012 0.04 1 12/18/03 LMP sec-Burytberzene -0.025 mg/kg 0.01 0.033 1 12/18/03 LMP carbon Tetrachlorid -0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorodiforomethane -0.025 mg/kg 0.007 0.033 1 12/18/03 LMP Chlorodiforomethane -0.025 mg/kg 0.01 0.033 1 12/18/03 LMP Chlorodiform -0.025 mg/kg 0.008 0.027 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Total Wickel 7.60 mg/kg 0.1 0.33 1 12/24/03 BMS EPA A021_ Benzene (Only positively identified analytes are reported on a dry weight basis 12/18/03 LMP Bromadic Informethane <0.025	Metal Prep	COMP	-	-	-	12/16/03	JJP
Total Wickel 7.60 mg/kg 0.1 0.33 1 12/24/03 BMS EPA A021_ Benzene (Only positively identified analytes are reported on a dry weight basis 12/18/03 LMP Bromadic Informethane <0.025	EDA 6010						
PPA 8021 CON1y positively identified analytes are reported on a dry weight basis Entrope Control of the second		7 60 mg/k	0 1	0 33	1	12/2//07	PHC
Benzene <0.025 mg/kg 0.008 0.027 1 12/18/03 LNP Bromodrichoromethane <0.025	locat where	7.00 liig/k	.g 0.1	0.35	1	12/24/03	DMS
Benzene <0.025 mg/kg 0.008 0.027 1 12/18/03 LNP Bromodrichoromethane <0.025	EPA 8021 (Only positively	identified analy	tes are report	ed on a dr	y weight basis		
Bromdichloromethane <						12/18/03	LMP
n-Butylbenzene <0.025	Bromobenzene		g 0.007	0.023	1	12/18/03	LMP
sec-Butylbenzene -0.025 mg/kg 0.01 0.033 1 12/18/03 LMP Carbon Tetrachloride -0.025 mg/kg 0.008 0.027 1 12/18/03 LMP Chlorobenzene -0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorodibrommethane -0.025 mg/kg 0.02 0.0667 1 12/18/03 LMP Chlorodibrommethane -0.025 mg/kg 0.01 0.033 1 12/18/03 LMP Chloroform -0.025 mg/kg 0.01 0.033 1 12/18/03 LMP 2-Chlorotoluene -0.025 mg/kg 0.012 0.04 1 12/18/03 LMP 1,2-0ibromoethane -0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,2-18/10robenzene -0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,2-0ibromoethane -0.025 mg/kg 0.008 0.027				0.02	1 CSL LCL	12/18/03	LMP
tert-Butylberzene c0.025 mg/kg 0.008 0.027 1 12/18/03 LMP Carbon Tetrachloride c0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorodbrzene c0.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorodbrane c0.025 mg/kg 0.097 0.033 1 12/18/03 LMP Chlorodbrane c0.025 mg/kg 0.01 0.033 1 12/18/03 LMP Chlorodbrane c0.025 mg/kg 0.01 0.033 1 12/18/03 LMP 2-Chlorotoluene c0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,2-Dibromo-3-chloropropane c0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,3-Dichlorobenzene c0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,4-Dichlorobenzene c0.025 mg/kg 0.008 0.027 </td <td>•</td> <td>•••</td> <td>-</td> <td></td> <td></td> <td>12/18/03</td> <td>LMP</td>	•	•••	-			12/18/03	LMP
Carbon Tetrachloride 40.025 mg/kg 0.008 0.027 1 12/18/03 LMP Chloroberzene 40.025 mg/kg 0.007 0.023 1 12/18/03 LMP Chlorodibromomethane 40.025 mg/kg 0.02 0.067 1 12/18/03 LMP Chlorodibromomethane 40.025 mg/kg 0.01 0.033 1 12/18/03 LMP Chlorotoluene 40.025 mg/kg 0.010 0.033 1 12/18/03 LMP 2-chlorotoluene 40.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,2-0ibromoethane 40.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,2-bibromoethane 40.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,3-bichlorobenzene 40.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,4-bichlorobenzene 40.025 mg/kg 0.006	•	· · · · · · · · · · · · · · · · · · ·	•			12/18/03	LMP
Chloroberzene <0.025 mg/kg 0.007 0.023 1 12/18/03 LWP Chlorodibromomethane <0.025		•••	•			12/18/03	
Chlorodibromomethane <0.025 mg/kg 0.02 0.067 1 12/18/03 LMP Chloroethane <0.025			•				
Chloroethane -0.025 mg/kg 0.09 0.33 1 12/18/03 LWP Chloroform <0.025		.	-				
Chloroform -0.025 mg/kg 0.01 0.033 1 12/18/03 LHP Chloromethane -0.025 mg/kg 0.01 0.033 1 CSL LCL DUP 12/18/03 LHP 2-Chlorotoluene -0.025 mg/kg 0.008 0.027 1 12/18/03 LHP 4-Chlorotoluene -0.025 mg/kg 0.009 0.027 1 12/18/03 LHP 1,2-0ibromoethane -0.025 mg/kg 0.009 0.03 1 12/18/03 LHP 1,2-0ibromoethane -0.025 mg/kg 0.008 0.027 1 12/18/03 LHP 1,3-bichlorobenzene -0.025 mg/kg 0.008 0.027 1 12/18/03 LHP 1,4-bichlorobenzene -0.025 mg/kg 0.004 0.047 1 LCL DUP 12/18/03 LHP 1,1-bichoroethane -0.025 mg/kg 0.005 0.017 1 12/18/03 LHP 1,2-bichloropethylene -0.025 mg/			•		-		
Chloromethane <0.025 mg/kg 0.01 0.033 1 CSL LCL DUP 12/18/03 LHP 2-Chlorotoluene <0.025			-				
2-Chlorotoluene <0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 4-Chlorotoluene <0.025		•.	•				
4-Chlorotoluene <0.025			•				
1,2-0ibromo-3-chloropropane <0.025		.	•				
1,2-0 ibromoethane <0.025			•				
1,2-Dichlorobenzene <0.025		Q ,	-				
1,3-0ichlorobenzene <0.025							
1.4-Dichlorobenzene <0.025		•.	•				
Dichlorodifluoromethane <0.025 mg/kg 0.014 0.047 1 LCL DUP 12/18/03 LMP 1,1-Dichloroethane <0.025			•				
1,1-Dichloroethane <0.025		•	•				
1,2-Dichloroethane <0.025	1,1-Dichloroethane		-				
1,1-Dichloroethylene <0.025	1,2-Dichloroethane		•		1		
trans-1,2-Dichloroethylene<0.025mg/kg0.010.033112/18/03LMP1,2-Dichloropropane<0.025	1,1-Dichloroethylene			0.053	1		
1,2-Dichloropropane <0.025	cis-1,2-Dichloroethylene		g 0.007	0.023	1	12/18/03	LMP
1,3-Dichloropropane <0.025		<0.025 mg/k			1	12/18/03	LMP
2,2-Dichloropropane <0.025			-			12/18/03	LMP
Ethylbenzene<0.025mg/kg0.0070.023112/18/03LMPHexachlorobutadiene<0.025		•••	•				
Hexachlorobutadiene <0.025							
Isopropylbenzene <0.025 mg/kg 0.009 0.03 1 12/18/03 LMP Isopropyl Ether <0.025		· · · · ·	•				
Isopropyl Ether <0.025		•••	•				
p-Isopropyltoluene<0.025mg/kg0.0110.037112/18/03LMPMethyl t-Butyl Ether(MTBE)<0.025			•				
Methyl t-Butyl Ether(MTBE) <0.025			-				
Methylene Chloride <0.025 mg/kg 0.014 0.047 1 CSL 12/18/03 LMP Naphthalene <0.025			•				
Naphthalene <0.025 mg/kg 0.01 0.033 1 12/18/03 LMP n-Propylbenzene <0.025			-				
n-Propylbenzene <0.025 mg/kg 0.009 0.03 1 12/18/03 LMP Tetrachloroethylene <0.025	•		-				
Tetrachloroethylene <0.025 mg/kg 0.009 0.03 1 12/19/03 LMP 1,1,2,2-Tetrachloroethane <0.025			•				
1,1,2,2-Tetrachloroethane <0.025			-		•		
Toluene <0.025 mg/kg 0.007 0.023 1 12/18/03 LMP 1,2,3-Trichlorobenzene <0.025		•	•				
1,2,3-Trichlorobenzene <0.025						· · ·	
1,2,4-Trichlorobenzene <0.025 mg/kg 0.014 0.047 1 12/18/03 LMP 1,1,1-Trichloroethane <0.025							
1,1,1-Trichloroethane <0.025 mg/kg 0.008 0.027 1 12/18/03 LMP 1,1,2-Trichloroethane <0.025	1,2,4-Trichlorobenzene						
1,1,2-Trichloroethane <0.025 mg/kg 0.006 0.02 1 12/18/03 LMP Trichloroethylene <0.025 mg/kg 0.011 0.037 1 12/18/03 LMP	1,1,1-Trichloroethane	•.					
Trichloroethylene <0.025 mg/kg 0.011 0.037 1 12/18/03 LMP							
Trichlorofluoromethane <0.025 mg/kg 0.008 0.027 1 12/18/03 LMP		<0.025 mg/k		0.037	1	12/18/03	
	Trichlorofluoromethane	<0.025 mg/k	(g 0.008	0.027	1	12/18/03	LMP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE w

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145785.6 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 2003TN01S08	Matrix	: SOIL	Sar	nple Date/Ti	me: 12/10/0	03 09:00	Lab No. 14	45786
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	<u>Factor</u>	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8021 (Only positively	identified	analytes	are repoi	rted on a dr	y weight ba	asis		
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		12/18/03	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.033	1		12/18/03	LMP
Vinyl Chloride	<0.025	mg/kg	0.018	0.06	1		12/18/03	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		12/18/03	LMP
o-Xylene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromochloromethane	<0.025	mg/kg	0.006	0.02	1		12/18/03	LMP
Bromoform	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Bromomethane	<0.025	mg/kg	0.009	0.03	1	CSH	12/18/03	LMP
Dibromomethane	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
1,1-Dichloropropene	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
trans-1,3-dichloroprop(yl)e	<0.025	mg/kg	0.008	0.027	1		12/18/03	LMP
Styrene	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
1,1,1,2-Tetrachloroethane	<0.025	mg/kg	0.009	0.03	1		12/18/03	LMP
1,2,3-Trichloropropane	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
cis-1,3-Dichloroprop(yl)ene	<0.025	mg/kg	0.007	0.023	1		12/18/03	LMP
PID Surrogate Recovery (S)	101.	%	•	-	1		12/18/03	LMP
HALL Surrogate Recovery (S)	122.	%	-	-	1		12/18/03	LMP
MOSA21-2								
Total Solids	82.3	%	-	0.33	-		12/15/03	SAK





Attn: David Voight

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 8 FACSIMILE 7 WEBSITE www

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO. : 145785.7 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 2003TN01S14	Matri	: SOIL	s	ample Date/Ti	me: 12/10/0	Lab No. 145787		
	<u>Result</u>	Units	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
<u>EPA 1030</u> Flash Point	Non-flammal	ole		-	-		12/31/03	JCH
EPA 1311 TCLP Extraction Zero Headspace Extraction TCLP Phase Determination	COMP COMP COMP		- -	- -	-		12/18/03 12/16/03 12/17/03	116 116 116
<u>EPA 300.0</u> Chloride	273.	mg/kg	1.0	3.33	10		12/17/03	YMD
EPA 8082 PCB-1016 PCB-1221 PCB-1232 PCB-1242 PCB-1248 PCB-1254 PCB-1254 PCB-1260 Tetrachloro-m-xylene (S) Decachlorobiphenyl (S) Method 3550 Ultrasonic Ext	<15.4 <30.7 <53.2 <11.8 7,240. <10.6 <16.5 86.1 53.2 . COMP	µg/kg µg/kg µg/kg µg/kg µg/kg µg/kg % %	1.3 2.6 4.5 1.0 3.1 0.9 1.4	4.33 8.66 15.0 3.33 10.3 3.0 4.66	10 10 10 10 100 10 10 10 10		01/02/04 01/02/04 01/02/04 12/31/03 01/02/04 01/02/04 01/02/04 01/02/04 12/18/03	CKV CKV CKV CKV CKV CKV CKV CKV CKV MJG
<u>EPA 9045</u> pH - Laboratory	7.60		-	-	1		12/15/03	JJP
EPA 9095 Free Liquids	0.000	%	-		1		12/17/03	JJP
<u>ES-180</u> Sp. Gravity	2.11		-	-	1		12/18/03	JJP
MOSA21-2 Total Solids	84.7	%	-	0.33	-		12/15/03	SAK
<u>SW846 MET</u> Reactive Cyanide Reactive Sulfide	<0.0154 <29.5	mg/kg mg/kg	0.013	0.043 25.0	1 1		12/16/03 12/16/03	LCK JJP





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE 800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145785.8 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 2003TN01S14 EXT	Matri	x: TCLP-EX	T Sar	ple Date/Ti	me: 12/16/0	3	Lab No. 1	45788
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Dilution <u>Factor</u>	Qualifiers	Date <u>Analyzed</u>	<u>Analyst</u>
<u>EPA 420.2</u> Phenols,colorimetric	<100.	mg∕t	0.005	0.017	5		12/30/03	LCK
<u>EPA 6010</u> Arsenic Barium Cadmium Chromium Copper	<0.016 0.629 0.02 <0.0032 0.404	mg/l mg/l mg/l mg/l mg/l	0.008 0.001 0.0011 0.0016 0.004	0.027 0.0033 0.0037 0.0053 0.013	2 2 2 2 2		12/29/03 12/29/03 12/29/03 12/29/03 12/29/03 12/29/03	BMS BMS BMS BMS BMS
Lead Nickel Selenium Silver Zinc	0.037 0.078 <0.036 <0.006 2.96	mg/l mg/l mg/l mg/l	0.016 0.003 0.018 0.003	0.053 0.01 0.06 0.01 0.005	2 2 2 2 2 2		12/29/03 12/29/03 12/29/03 12/29/03 12/29/03	BMS BMS BMS BMS BMS
<u>EPA 7470</u> Mercury	<0.00175	mg∕l	0.00007	0.0002	25		12/22/03	JCH
EPA 8021 Benzene Carbon Tetrachloride Chlorobenzene Chloroform 1,4-Dichlorobenzene 1,2-Dichloroethane 1,1-Dichloroeth(yl)ene Methyl Ethyl Ketone(MEK) Tetrachloroeth(yl)ene Trichloroeth(yl)ene Vinyl Chloride EPA 8081 g-BHC (Lindane) Chlordane Endrin Heptachlor Heptachlor Epoxide Methoxychlor Toxaphene Tetrachloro-m-xylene (S) Decachlorobiphenyl (S) Method 3510 Liquid Ext.	<6.20 <11.8 <6.20 <5.40 <5.40 <7.80 <40.0 <7.20 <4.00 <7.20 <4.00 <0.013 <0.15 <0.033 <0.009 <0.014 <0.119 <0.74 80.9 54.1 COMP	μα/l μα/l μα/l μα/l μα/l μα/l μα/l μα/l	0.31 0.59 0.31 0.27 0.3 0.17 0.39 2.0 0.32 0.36 0.2 0.0013 0.015 0.0033 0.009 0.0014 0.0119 0.074	1.03 1.96 1.03 0.90 1.0 0.57 1.3 6.66 1.07 1.2 0.67 0.0043 0.05 0.011 0.003 0.0047 0.04 0.25 - -	20 20 20 20 20 20 20 20 20 20 20 20 20 2	SL	12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 12/18/03 01/02/04 01/02/04 01/02/04 01/02/04 01/02/04 01/02/04 01/02/04 01/02/04	LMP LMP LMP LMP LMP LMP LMP LMP LMP JMM JMM JMM JMM JMM JMM JMM JMM JMM
<u>EPA 8151</u> 2,4-D 2,4,5-TP (Silvex) DCAA (S) Method 3510 Liquid Ext.	<6.00 <0.7 47.6 COMP	μg/l μg/l %	0.6 0.07	2.0 0.23 -	10 10 1	CSH CSH SL	12/30/03 12/30/03 12/30/03 12/23/03	EAL EAL EAL JAS
<u>EPA 8270</u> o-Cresol m-&p-Cresol 2,4-Dinitrotoluene	<43.0 <51.0 <11.0	μg/l μg/l μg/l	43.0 51.0 11.0	143. 170. 36.6	1 1 1		12/29/03 12/29/03 12/29/03	MRD MRD MRD





Attn: David Voight

ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

800-338-7226 715-355-3221 www.usfilter.com

PROJECT NO.: 200106102370 REPORT NO.: 145785.9 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS

Sample ID: 2003TN01S14 EXT	Matrix	K: TCLP-E	XT	Sample Date/T	Lab No. 145788			
					Dilution		Date	
	<u>Result</u>	<u>Units</u>	LOD	LOQ	Factor	Qualifiers	Analyzed	<u>Analyst</u>
EPA 8270								
Hexachlorobenzene	<5.90	µg/l	5.9	19.6	1		12/29/03	MRD
Hexachlorobutadiene	<14.5	µg/l	14.5	48.3	1		12/29/03	MRD
Hexachloroethane	<12.0	µg/l	12.0	40.0	1		12/29/03	MRD
Nitrobenzene	<13.5	µg/l	13.5	45.0	1		12/29/03	MRD
Pentachlorophenol	<38.0	µg/l	38.0	127.	1		12/29/03	MRD
2,4,5-Trichlorophenol	<50.0	µg/l	50.0	167.	1		12/29/03	MRD
2,4,6-Trichlorophenol	<37.0	µg/l	37.0	123.	1		12/29/03	MRD
Pyridine	<11.0	µg/l	11.0	36.6	1		12/29/03	MRD
Méthod 3510 Liquid Ext.	COMP		-	-	-		12/19/03	JAS





ENVIROSCAN SERVICES 301 WEST MILITARY ROAD ROTHSCHILD, WI 54474 TELEPHONE FACSIMILE WEBSITE

PROJECT NO .: 200106102370

800-338-7226 715-355-3221 www.usfilter.com

TN & Assosiates 1033 N. Mayfair Road Suite 200 Milwaukee, WI 53226

Attn: David Voight

Qualifier Descriptions

CSL	Check standard for this analyte exhibited a low bias. Sample results may also be biased low.
LCL	The laboratory control sample for this analyte exibited a low bias. Sample results may also be biased low.
DUP	Result of duplicate analysis in this quality assurance batch exceeds the limits for precision.
CSH	Check standard for this analyte exhibited a high bias. Sample results may also be biased high.
SL	Surrogate recovery was low. Result for sample may be biased low.

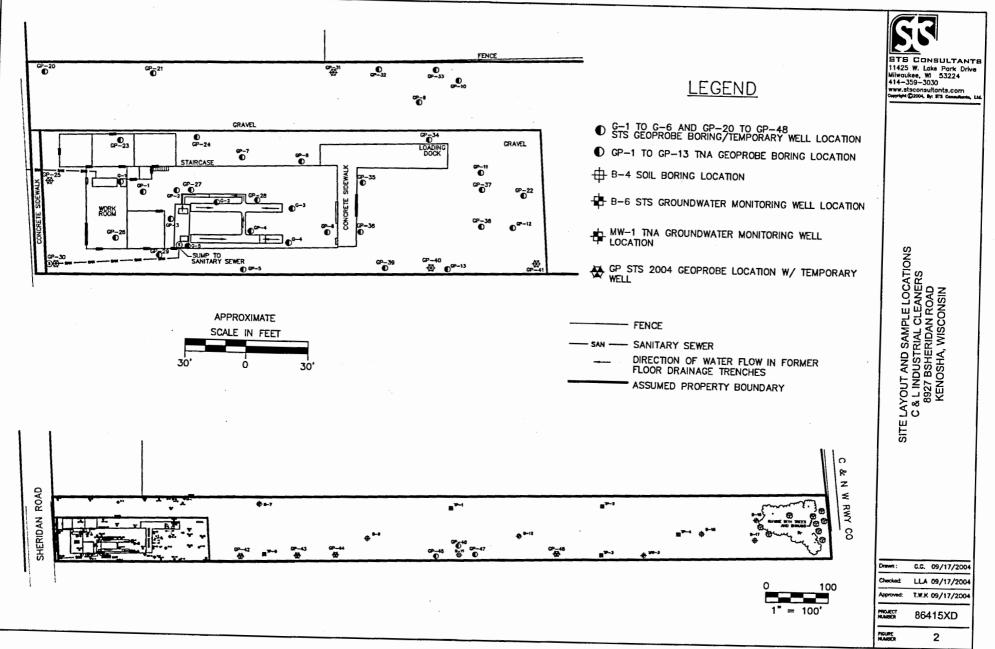
REPORT NO. : 145785.10 DATE REC'D : 12/11/03 REPORT DATE: 01/13/04 PREPARED BY: JRS



REQUEST	FORS	SERVI	CES	S	-	ĺ		Í	er
ENVIROSCAN S	ERVICES	3	01 W. MILIT				NI 544		1-800-338-SCAN
REPORT TO: Name: Dav	id Vo	ight		BILL TO Name:			t from R	eport T	o info)
Company: TN	\$ Assoc	ides		Compar	ıy:				
Address: 103	3. N. M. NAUKES		5322	<u>uite 200</u> Address					ext
Phone: (414)			-	Phone:	()	TALP V	100 0	
P.O.# Project # 200/00	1-07-27	ToTOucto	#		r Jt	Test	pwork	- •	
Location Kend	sha u		#	E30412 12-11-0 VO	Syle	Ter	ΔΝΔΙΥ		L REQUESTS
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LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMPLE ID	4	A	12	3 -+5	REMARKS
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Summary of Groundwater Analytical Results - Metals	
Kenosha Brownfield Investigation - C&L Industrial Cleaners	
STS Project No. 86415XD	

Sample Location	Sample ID#	Sample Date	Antimony	Arsenic	Barium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	STS 2001Temp Wells							_					
G-1	CL-G1-W010501	5-1-01	<1.21	4.90	11	<0.2	<1	<4	<1.00	<0.2	4 ³	<3.00	<3
G-2	CL-G2-W010501 (Dup)	5-1-01	<1.21	<2.40	22	<0.2	1.6 ³ 1 ³	<4	<1.00	<0.2	4'	<3.00	<3
G-2	CL-G2-D010501	5-1-01	<1.21	<2.40	22	<0.2		<4	<1.00	< 0.2	6'	<3.00	<3
G-3	CL-G3-W010501	5-1-01	<1.21	<2.40	72	<0.2	<1	<4	<1.00	<0.2	<3	<3.00	<3
G-3 G-4	CL-G3-B010501 (Blank)	5-1-01	<1,21	<2.40	39 17	<0.2	<1	<4 10 ⁷	<1.00	<0.2	74	<3.00	<3
G-4 G-5	CL-G4-W010501	5-1-01	<1.21	<2.40		0.37	<1		<1.00	<0.2	120	<3.60	-
6-5	CL-G5-W010501 TNA 2003 Temp Wells	5-1-01	<1.21	<2.40	77	<0.2	<1	<4	<1.00	<0.2	<3	<3.00	<3
0.0.4		40.40.00										l	
GP-4	2003TN01S09	12-10-03	NT NT	NT	NT	NT	NT	NT	NT	NT	<u>83.3</u>	NT	NT
GP-4	2003NO1D08 (Dup)	12-10-03	NT NT	NT	NT	NT	NT	NT	NT	NT	<u>85.7</u> 3.9 ³	NT	NT
GP-5 GP-5	2003N01S08	12-10-03 12-10-03	NT	NT NT	NT	NT	NT	NT	NT	NT NT	3.9 4.9 ¹	NT	NT
GP-5 GP-8	2003N01D08 (Dup) 2003TN01D07	12-10-03			NT	NT NT	NT	NT NT	NT NT	NI NT	4.9 ⁻ 8 ⁻	NT NT	NT NT
GP-8 GP-9	2003TN01D07 2003TN01S04	12-9-03	NT	NT NT	NT	NI	NT NT	NT	NI NT	NI NT	8' - 8'	NI NT	NT
GP-9 GP-12	2003TN01504 2003TN01201	12-9-03	NT NT	NT	NT NT	NT NT	NT NT	NT	NT	NI NT	8 15	NI NT	 NT
GP-12 GP-13	2003TN01201 2003TN01S05	12-9-03	NT	NT	NT	NT	NT	NT	NT	NT	15 9 ¹	NT	NT
013	STS Monitoring Wells	12-9-03	- 1911	141	IN I	191	INT	141		1/1	9	141	141
		<i></i>											
B-3	CL-SB-3W010514	5-14-01	<1.21	<2.40	69	<0.2	<1	<4	<1.00	<0.2	<3	<3.00	<3
B-5	CL-SB-5W10514	5-14-01	<1.21	<2.40	157	<0.2	<1	<4	<1.00	<0.2	8 ^J	<3.00	<3
B-6	CL-SB-6W010514	5-14-01	<1.21	3.01	189	<0.2	<1	<4	<1.00	<0.2	<u>23</u>	<3,00	<3
B-6	2003TN01S58	12-12-03	NT	NT	NT	NT	NT	NT	NT	NT	6.2J	NT	NT
B-6	2003TN01D58 (Dup)	12-12-03	NT	NT	NT	NT	NT	NT	NT	NT	9.6J	NT	NT
B-7	CL-SB-7W010514	5-14-01	<1.21	<2.40	56	<0.2	<1	<4	<1.00	<0.2	4 ³	<3.00	<3
B-7	CL-SB-7D010514 (Dup)	5-14-01	<1.21	<2.40	53	<0.2	<1	<4	<1.00	<0.2	4 ³	<3.00	<3
B-12	CL-SB-12W010514	5-14-01	<1.21	<2.40	134	<0.2	<1	<4	<1.00	<0.2	<3	<3.00	<3
B-12	CL-SB-12B010514 (blank)	5-14-01	<1.21	<2.40	<2	<0.2	<1	<4	<1.00	< 0.2	<3	<3.00	<3
B-16	CL-SB-16W010514	5-14-01	<1.21	<2.40	199	<0.2	<1	<4	<1.00	<0.2	4 ^J	<3.00	<3
B-16	2003TN01S50	12-12-03	NT	NT	NT	NT	NT	NT	NT	NT	<u>20.1</u>	NT	NT
	TNA Monitoring Wells				[1						1	
MW-1	MW-1	12-11-03	NT	NT	NT	NT	NT	NT	NT	NT	48.10	NT	NT
MW-1	MW-1(Dup)	12-11-03	NT	NT	NT	NT	NT	NT	NT	NT	48.10	NT	NT
MW-3	MW-3	12-11-03	NT	NT	NT	NT	NT	NT	NT	NT	12.9	NT	NT
	PAL		1.2	5	400	0.5	10	130	1.5	0.2	20	10	10
	ES		6	50	2000	5	100	1300	15	2	100	50	50

Notes: Dup = Duplicate sample

PAL = Preventive Action Limit established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are underlined, italic's. ES = Enforcement standard established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are bold.

NT = Not Tested

K:\projects\586415XD\DOCS\T586415XD-GW_SummaryMetals

Summary of Groundwater Analytical Results - VOCs Kenosha Brownfield Investigation - C&L Industrial Cleaners STS Project No. 86415XD

Sample Location	Sample ID#	Sample Date	Benzene	Dichloro difluoromethane	cis-1,2- Dichloroethene	trans-1,2- Dichloroethene	1,1-Dichloro ethylene	1-1 Dichloro propene	Tetrachloro- ethene	Trichloroethene	1,2,4-Trimethyl benzene	benzene	Vinyl Chloride
			μg/ L .	µg/L	µg/L	µg/L i	µg/L	µg/L,	_μg/L	µg/L	µg/L	µg/L	µg/L
	STS 2001 Temp Wells												
G-1	CL-G1-W010501	5-1-01	<150	<150	<150	<150	<150	<250	27,200	<100	<400	<150	<120
G-2	CL-G2-W010501	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	<u>4.20</u> 4.18	<0.1	<0.4	<0.15	<0.12
G-2	CL-G2-D010501 (Dup)	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25		<0.1	<0.4	<0.15	<0.12
G-3	CL-G3-W010501	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0 25	<0.15	<0.1	<0.4	<0.15	<0.12
G-3	CL-G3-B010501 (Blank)	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	<0.12
G-4	CL-G4-W010501	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	0.224 ^J	<0.1	<0.4	<0.15	<0.12
G-5	CL-G5-W010501	5-1-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	<0.12
	TNA 2003 Temp Wells												
GP-1	2003TN01S13	12-10-03	<0.31	<0.46	<0.23	<0.39	< 0.39	<0.31	1130	2.48	<0.4	< 0.31	<0.2
GP-4	2003TN01S09	12-10-03	<0.31	< 0.46	<0.23	< 0.39	< 0.39	<0.31	0.337 ^J	< 0.36	<0.4	< 0.31	<0.2
GP-4	2003TN01D09 (Dup)	12-10-03	< 0.31	<0.45	<.023	< 0.39	< 0.39	< 0.31	0.522	<0.36	<0.4	< 0.31	< 0.2
GP-8	2003TN01507	12-19-04	< 0.31	<0.46	<0.23	< 0.39	< 0.39	< 0.31	< 0.32	< 0.36	<0.4	< 0.31	<0.2
GP-9	2003TN01504	12-19-04	< 0.31	<0.46	0.502 ^J	<0.39	< 0.39	< 0.31	< 0.32	<0.36	<0.4	< 0.31	7.21
GP-12	2003TN01501	12-19-04	< 0.31	<0.46	<0.23	<0.30	<0.39	< 0.31	< 0.32	<0.36	<0.4	< 0.31	2.59
GP-13	2003TN01505	12-19-04	< 0.31	<0.46	<0.23	<0.39	< 0.39	< 0.31	< 0.32	<0.36	<0.4	< 0.31	<0.2
	STS Monitoring Wells												
B-3	CL-SB03W010514	5-14-01	<0.15	<0.15	0.524	<0.15	<0.15	<0.25	<u>3.41</u>	0.486	<0.4	<0.15	<0.12
B-3	2003TN01555	12-12-03	<0.1	<0.1	19.4	<0.1	<0.1	<0.2	56.5	1.39	<0.15	<0,15	<0.1
B-5	CL-SB05W10514	5-14-01	<0.15	<0,15	1.28	<0.15	<0.15	<0.25	<0.15	<0.1	<0,4	<0.15	1.16
B-5	2003TN01557	12-12-03	<0.1	<0.1	0.252 ^J	<0.1	<0.1	<0.2	<0.1	<0.2	<0.15	<0.15	0.272 ^{JZ}
B-6	CL-SB06W010514	5-14-01	0.375 ^J	<0.15	6.65	0.415 ^J	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	4.51
B-6	2003TN01S58	12-12-03	0.319 ^{J,Z}	<0.15	14.2 ^z	0.751	<0.1	<0.2	<0.1	<0.2	<0.15	<0.15	2.45
B-0 B-7	CL-SB07D010514 (Dup)	5-14-01	<0.15	<0.15	<0,15	<0.15	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	<0.12
B-7	CL-SB07W010514	5-14-01	0.216 ^J	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	<0.12
B-7	2003NO1S51	12-11-03	<0.1	<0.15	<0.15	<0,1	<0.15	<0.25	<0.15	<0.2	<0.15	<0.15	<0.12
B-12	CL-SB12B010514 (Blank)	5-14-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	<0.12
B-12 B-12	CL-SB12B010514 (Blank) CL-SB12W010514	5-14-01	<0.15	<0.15	138	6.10	<0.15	<0.25	<0.15	<0.1	<0.4	<0.15	10.3
B-12 B-12	2003TN01S54	12-11-03	<.01	<0.1	152 ²	7.43	<0.1	<0.2	<0.1	<0,2	<0.15	<0.15	8.03
B-12 B-16	CL-SB16W010514	5-14-01	<0.15	<0.15	<0.15	<0.15	<0.15	<0.25	<0.15	<0.2	<0.4	<0.15	<0.12
B-16	2003TN01550	12-11-03	<0.15	<0.13	<0.1	<0.1	<0.1	<0.2	<.01	<0.2	<0.15	<0.15	<0.1
	TNA Monitoring Wells	12-11-03	.0.1	~0.1	-0.1	-0.1	-0.1	-0.2	- 10.7	~0.2	50.15	-0.10	<0.1
								I					
MW-1	2003TN01552	12-11-03	<0.1	0.186	188	<u>26.4</u> ^z	<0.1	0.413 ^J	<0.1	<0.2	0.203J	<0.15	3.33
MW-1	2003TN01552 (Dup)	12-11-03	<0.1	0.178J	186	<u>26.2²</u>	<0.1	0.326 ^J	<0.1	<0.2	0.166J	<0.15	3.11
MW-2	2003TN01556	12-12-03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.2	<0.15	<0.15	<0.1
MW-3	2003TN01553	12-11-03	<0.1	0.132 ^J	224 ^z	1.76	0.213 ^J	<0.2	<0,1	<0.2	0.579	0.154 ^J	28.0
	PAL		<u>0.5</u>	200	<u> </u>	20	<u>0.7</u>	NE	<u>0.5</u>	<u>0.5</u>	96	96	<u>0.02</u>
	ES		5	1000	70	100	7	NE	5	5	480	480	0.2

All values for VOCs on 12/12/03 from Method 8260B except where flagged with ^Z: ^Z Analytical method SW-846 8021B results were reported because analyte was not detected in 8260 method or was detected at a higher concentration in the 8021B method. • PAL and ES values are for total trimethylebenzenes (both 1,2,4- and 1,3,5-)

Dup = Duplicate sample

PAL = Proventive Action Limit established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are underlined, italic's. ES = Enforcement standard established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are bold.

K:\projects\586415XD\DOCS\T586415XD-GW_SummaryVOCs

Summary of Groundwater Analytical Results - PAHs Kenosha Brownfield Investigation - C&L Industrial Cleaners STS Project No. 86415XD

Sample Location	Sample ID#	Sample Date	Acenaphthene µg/L	Acenaphthylene µg/L	Anthracene µg/L	Benzo(a) Anthracene µg/L	Benzo(a) Pyrene µg/L	Benzo(b) Fluoranthene µg/L	Benzo(k) Fluoranthene µg/L	Benzo(ghi) Perylene µg/L	Chrysene µg/L	Dibenzo(a,h) Anthracene µg/L	Fluoranthene µg/L	Fluorene µg/L	Indeno(1,2,3- cd)Pyrene µg/L	1-Methył Naphthalene µg/L	2-Methył Naphthalene µg/L	Naphthalene µg/L	Phenanthrene µg/L	Pyrene µg/L
	STS Temp Wells (2001)							Î							î		i	I		1
G-1	CL-G1-W010501	5-1-01	<0.1	<0.15	<0.09	<0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
G-2	CL-G2-D010501	5-1-01	<0.1	<0.15	<0.09	< 0.03	<0.02	< 0.02	< 0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0,1
G-2	CL-G2-W010501 (Dup)	5-1-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
G-3	CL-G3-W010501	5-1-01	<0.1	<0.15	<0.09	0.07 ^J	0.175	0.213	0.105	0.159 ^J	0.071	<0.06	0.16	<0.11	0.206	0.162	0.284 ^J	0.128	0.197 ^J	0.115 ^J
G-3	CL-G3-B010501 (Blank)	5-1-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	< 0.03	<0.09	<0.02	<0.06	< 0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
G-4	CL-G4-W010501	5-1-01	<0.1	<0.15	<0.09	<0.03	<0.02	<0.02	<0.03	<0:09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
G-5	CL-G5-W010501	5-1-01	<0.1	<0.15	<0.09	0.084 ^J	0.17	0.233	0,104	0.151 ^J	0.085	<0.06	0.087 ^J	<0.11	0.196	<0.13	0.151 ^J	<0.06	<0.11	< 0.1
	TNA Temp Wells (2003)																1			1
GP-1	2003TN01S13	12-10-03	<0.0353	<0.0858	<0.0715	<0.0572	<0.0243	<0.0572	<0.0572	<0.0715	<0.0715	<0.0858	<0.0858	<0.172	<0.0715	<0.114	<0.157	<0.143	<0.114	<0.129
	STS Monitoring Wells (2001)																	01110		
B-3	CL-SB-3W010514	5-14-01	<0.1	<0.15	<0.09	<0.03	<0.02	<0.02	< 0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0,1
B-5	CL-SB-5W10514	5-14-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	< 0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
B-6	CL-SB-6W010514	5-14-01	<0.1	<0.15	<0.09	< 0.03	<0.02	< 0.02	< 0.03	<0.09	<0.02	<0.06	< 0.03	<0.11	<0.06	< 0.13	<0.12	< 0.06	<0.11	<0.1
	2003TN01\$58	12-12-03	<1.26	<1.26	<1.05	< 0.84	<0.357	<0.84	< 0.84	<1.05	<1.05	<1.26	<1.26	<2.52	<1.05	<1.68	<2.31	<2.10	<1.68	<1.89
	2003TN01D58 (Dup)	12-12-03	<0.30	<1.30	<1.09	<0.868	<0.369	<0.868	<0.868	<1.09	<1.09	<1.30	<1.30	<2.60	<1.09	<1.74	<2.39	<2.17	<1.74	<1.95
B-7	CL-SB-7D010514 (Dup)	5-14-01	<0.1	<0.15	<0.09	<0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
B-7	CL-SB-7W010514	5-14-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	<0.03	<0.09	< 0.02	<0.06	< 0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
B-12	CL-SB-12B010514 (Blank)	5-14-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	< 0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	< 0.13	<0.12	< 0.06	<0.11	<0.1
B-12	CL-SB12W010514	5-14-01	<0.1	<0.15	<0.09	< 0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
B-16	CL-SB-16W010514	5-14-01	<0.1	<0.15	<0.09	<0.03	<0.02	<0.02	<0.03	<0.09	<0.02	<0.06	<0.03	<0.11	<0.06	<0.13	<0.12	<0.06	<0.11	<0.1
	2003TN01S50	12-12-03	<0.0654	<0.0654	<0.0545	<0.0436	<0.0185	<0.0436	<0.0436	<0.0545	<0.0545	<0.0654	<0.0654	<0.131	<0.0545	<0.0872	<0.12	<0.109	<0.0872	<0.0981
	TNA Monitoring Wells (2003)							1										1		1
MW-1	2003TN01S52	12-11-03	<0.0654	<0.0654	<0.0545	<0.0436	<0.0185	<0.0436	<0.0436	<0.0545	<0.0545	<0.0654	<0.0654	<0.131	<0.0545	<0.0872	<0.12	<0.109	<0.0872	<0.0981
MW-1 (Dup)	2003TN01D52	12-11-03	<0.0654	<0.0654	<0.0545	<0.0436	<0.0185	<0.0436	<0.0436	<0.0545	<0.0545	<0.0654	<0.0654	<0.131	<0.0545	<0.0872	0.136	0.109	<0.0872	<0.0981
MW-3	2003TN01S53	12-11-03	<0.0654	<0.0654	<0.0545	<0.0436	<0.0185	<0.0438	<0.0436	<0.0545	<0.0545	<0.0654	<0.0654	<0.131	<0.0545	0.125	0.309	0.285	<0 0872	< 0.0981
	PAL	I			600		0.02	<u>0.02</u>			0.02		<u>80</u>	<u>80</u>				8	-	50
Notes:	ES Dup = Duplicate sample		-		3000	- 1	0.2	0.2	-	-	0.2		400	400	-			40	-	250

PAL = Preventive Action Limit established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are underlined, italic's. ES = Enforcement standard established under Wisconsin Administrative Code NR140.10 Table 1, October 2003, Exceedances are bold.

- = Not Established

Summary of Soil Analytical Results - VOCs Kenosha Brownfield Investigation - C&L Industrial Cleaners STS Project No. 86415XD

Sample Location/				cis-1,2-	trans-1,2-							1,2,4-			
Sample Location	Depth	n-Butyl benzene	sec-Butyl benzene	Dichloro ethylene	Dichloro	Ethyl benzene	Isopropyl Ether	Naphthalene	Tetrachloro ethylene	Toluene	Trichloro ethylene	Trimethyl benzene	o-Xylena	m-&p- Xylene	Vinyl Chloride
			1				_								
STS 2001 Soil Probes	(feet bgs)	(mg/kg)	(mg/kg) I	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
G-1 (CL-G1-SO3)	4-6'	<1.00	<1.00	<1.00	<1.00	<1.00	<1.22	<1.00	132 ^{A,C}	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
							1		322 ^{AC}					,	
G-1 (CL-G1-SO4)	6-8'	<2.00	<2.00	<2.00	<2.00	<2.00	<2.41	<2.00		<2.00	<2.00	<2.00	<2.00	<2.00	<2.00
G-2 (CL-G2-SO3)	4-6'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.0944 ^C	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025
G-2 (CL-G2-SO4)	6-8'	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.24	<0.025	0.0481 ^C	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025
G-3 (CL-G3-SO3)	4-6'	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.023	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
G-3 (CL-G3-SO4)	6-8'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.022	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
G-4 (CL-G4-SO3)	4-6' 6-8'	< 0.025	< 0.025	< 0.025	<0.025	< 0.025	< 0.024	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	<0.025
G-4 (CL-G4-SO4)		<0.025	<0.025	<0.025	<0.025	<0.025	< 0.024	<0.025	<0.025	< 0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025
G-5 (CL-G5-SO1)	0-2'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.022	0.0334	0.42 ^C	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
G-5 (CL-G5-SO3)	4-6'	<0.025	0.0701	<0.025	<0.025	<0.025	<0.024	<0.025	0.112 ^c	< 0.025	< 0.025	<0.025	<0.025	<0.025	<0.025
STS 2001 Soil Borings		0.005	0.005	0.005	0.000	0.005	0.000	0.005	0.005	0.005	0.005	0.005	0.005		
B-1 (CL-B01-SO2)	2.5-4.5' 5-7'	<0.025 <0.025	<0.025 <0.025	< 0.025	<0.025	< 0.025	< 0.023	<0.025 <0.025	< 0.025	<0.025 <0.025	< 0.025	<0.025	<0.025	<0.025	<0.025
B-1 (CL-B01-SO3)				<0.025	<0.025	< 0.025	< 0.024		<0.025		< 0.025	<0.025	<0.025	<0.025	<0.025
B-2 (CL-B02-SO1)	0-2'	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.024	<0.025	4.13 ^{A,C}	<0.025	0.0521 ^c	<0.025	<0.025	<0.025	<0.025
B-2 (CL-B02-SO2)	2-4'	<0.025	< 0.025	0.485 ^c	0.032	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-3 (CL-B03-SO2)	2-4'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.023	<0.025	0.12 ^{A,C}	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-3 (CL-B03-SO3)	5-7'	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.024	<0.025	0.0594	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025
B-4 (CL-B04-SO2)	2.5-4.5'	<0.025	<0.025	<0.025	<0.025	< 0.025	< 0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-4 (CL-B04-SO4)	7.5-9.5'	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-5 (CL-B05-SO1)	0-2'	0.174	0.121	<0.025	<0.025	<0.025	<0.022	<0.025	0.327 ^C	<0.025	<0.025	0.0452	<0.025	0.0341	<0.025
B-5 (CL-B05-SO2)	2.5-4.5'	0.319	0.166	<0.025	<0.025	< 0.025	<0.023	0.0828	< 0.025	<0.025	< 0.025	0.064	< 0.025	<0.025	<0.025
B-6 (CL-B06-S01)	0-2'	<0.025	<0.025	0.361 ^c	0.031	<0.025	0.255	<0.025	0.595 ^C	<0.025	0.271 ^{A,C}	<0.025	<0.025	<0.025	<0.025
B-6 (CL-B06-S02)	2.5-4.5'	<0.025	<0.025_	10.8 ^C	0.399 ^C	0.065	<0.023	<0.025	0.138 ^c	0.0683	0.0364 ^C	<0.025	0.0341	0.0415	0.221 ^{A,C}
B-7 (CL-B07-S02)	2.5-4.5'	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.023	<0.025	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
B-9 (CL-B09-S03)	5-7'	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.024	<0.025	<0.025	<0.025	<0.025	0.0342	<0.025	<0.025	<0.025
B-11 (CL-B11-S01)	0-2'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.022	<0.025	0.737 ^c	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-12 (CL-B12-SO3)	5-7'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.024	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
B-15 (CL-B15-S03)	5-7'	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.027	<0.025	< 0.025	<0.025	<0.025	<0.025	<0.025	< 0.025	<0.025
B-16 (CL-B16-S03)	5-7'	<0.025	<0.025	< 0.025	<0.025	< 0.025	<0.027	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
B-17 (CL-B17-S02)	2.5-4.5'	<0.025	< 0.025	<0.025	< 0.025	<0.025	<0.027	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	< 0.025
B-17 (CL-B17-S03)	5-7'	<0.025	<0.025	<0.025	<0.025	<0.025	<0.027	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
TNA 2003 Soll Probes															
GP-1 (2003TN01513)	11-12'	<0.025	<0.025	< 0.025	< 0.024	< 0.025	<0.024	< 0.025	50 ^{A,C}	<0.025	<0.025	< 0.025	< 0.025	< 0.025	< 0.025
GP-5 (2003TN01S08)	11-12'	< 0.025	< 0.025	< 0.025	< 0.024	< 0.025	< 0.024	< 0.025	<0.025	<0.025	< 0.025	< 0.025	<0.025	<0.025	<0.025
GP-6 92003TN01S06) GP-7 (2003TN01S10)	9' 10-12'	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025	<0.025 <0.025
GP-8 (2003TN01S10)	10-12	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
GP-9 (2003TN01S07) GP-9 (2003TN01S04)	8-9'	<0.025	<0.025	0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
	8-9'		<0.025	0.0448	<0.025	<0.025				<0.025	<0.025		<0.025		
GP-10 (2003TN01S03)		<0.025					<0.025	<0.025	<0.025		<0.025 0.504 ^{A,C}	< 0.025		<0.025	< 0.025
GP-11 (2003TN01S02)	9-10' 9-10'	<0.025	<0.025	1.0718 ^c <0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025 <0.025	<0.025	<0.025	<0.025	<0.025	<0.025
GP-12 (2003TN01S01)	9-10 11-12'	<0.025	<0.025 <0.025	<0.025	<0.025	<0.025	<0.025 <0.025	<0.025	<0.025 <0.025	<0.025	<0.025	<0.025 <0.025	<0.025 <0.025	<0.025	<0.025 <0.025
GP-13 (2003TN01S05) TNA 2003 Monitoring Wells	11-12	KU.U25	0.025	<0.025	<0.025	<0.025	<0.023	K0.025	<0.025	0.025	<0.025	<0.023	KU.025	<0.025	CU.U25
MW-1 (2003TN01S16)	4-6	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
MW-1 (2003 TN01S17)	12-14	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
MW-2 (2003TN01S18)	6-8	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
MW-2 (2003TN01S19)	12-14	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
MW-3 92003TN01S14)	6-8	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
MW-3 (2003TN01S15)	12-14	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Non-Industrial RCL ^A				156	313	156	6260	313	1.23		0.16	782	31300	3130	0.1456
Industrial RCL ⁸			-	-					5500		7.15		2.040.000	204.000	2.04
Groundwater Pathway RCLC				0.055	0.098	2.9		0.4	0.0041	1.5	0.0037	2.8	4.1	4.1	0.0013
Notes:															

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VOCs = Volatile Organic Compounds. RCL = Residual Contaminant Level.

RCL = Residual Contaminant Level.
 -- = Not Established, human health criteria not available on USEPA web page.
 ^ = Exceedance of generic direct contact RCL for non industrial site calculated from USEPA web page using WDNR default values, on 9/2/04.
 ^e = Exceedance of generic RCL for soil to groundwater risk path calculated from USEPA web page using WDNR default values, on 9/2/04.
 ^e = Exceedance of generic RCL for soil to groundwater risk path calculated from USEPA web page using WDNR default values, on 9/2/04.
 ^e = Exceedance of generic RCL for soil to groundwater risk path calculated from USEPA web page using WDNR default values, on 9/2/04.
 Note: Sample depth for TN & A probe samples were taken from the bore logs-not the TN & A produced tables.
 Bold = Exceedances.

Standard font = Detected, no exceedances. Grey font = Not detected at the detection limit shown.

			_		313 FIOJE	ct No. 86415)						
Sample Location/Sample Number	Depth (feet bgs)	Total Antimony (mg/kg)	Total Arsenic (mg/kg)	Total Barium (mg/kg)	Total Cadmium (mg/kg)	Total Chromium (mg/kg)	Total Copper (mg/kg)	Total Lead (mg/kg)	Total Mercury (mg/kg)	Total Nickel (mg/kg)	Total Selenium (mg/kg)	Total Silver (mg/kg)
STS 2001 Soll Probes												
G-1 (CL-G1-SO3)	4-6'	<2.07	1.24^	6.91	0.219	9.81	21.1	5.88	<0.0487	11.7	<0.402	<0.122
G-1 (CL-G1-SO4)	6-8'	<2.05	8.70 ^{A.8}	15.7	0.112	14.5	25.0	7.60	< 0.0483	16.6	<0.398	<0.121
G-2 (CL-G2-SO3)	4-6'	<2.11	9.00 ^{A,B}	49.0	0.249	16.2	26.4	13.6	<0.0498	33.5	1.02	<0.124
G-2 (CL-G2-SO4)	6-8'	<2.04	2.93 ^{A,B}	5.91	0.103	4.21	8.38	4.34	< 0.0481	6.79	< 0.397	<0.12
G-3 (CL-G3-SO3)	4-6'	<1.99	5.92 ^{A,B}	101	0.409	15.8	23.7	11.4	<0.0467	28.7	0.491	<0.117
G-3 (CL-G3-SO4)	6-8'	<1.88	5.07 ^{A,B}	14.4	0.0632	12.1	12.7	5.80	<0.0443	14.0	<0.366	<0.111
G-4 (CL-G4-SO3)	4-6'	<2.00	8.67 ^{A,B}	197	1.11	19.4	36.4	11.5	<0.0471	114	1.08	<0.118
G-4 (CL-G4-SO4)	6-8'	<2.08	1.39^.8	7.47	0.159	4.85	10.4	4.38	<0.0488	9.46	<0.403	<0.122
G-5 (CL-G5-SO1)	0-2'	<1.87	3.98 ^{A,B}	31.5	0.507	13.3	113	38.2	0.0771	20.8	< 0.363	0.363
G-5 (CL-G5-SO3)	4-6'	<2.04	4.07 ^{A,B}	32.7	0.886	12.3	90.7	38.1	0.079	19.8	<0 395	<0.12
STS 2001 Soll Borngs												
B-1 (CL-B01-SO2)	2.5-4.5	<1.97	2.60 ^{A,B}	38.9	0.151	12.6	7.25	4.92	0.0742	8.42	<0.382	<0.116
B-1 (CL-B01-SO3)	5-7'	<2.01	3.85 ^{A,B}	12.8	0.272	7.62	7.27	4.07	< 0.0473	11.6	< 0.391	<0.118
B-2 (CL-B02-SO1)	0-2'	<2.00	3.40 ^{A,B}	49.4	0.141	13.6	22.7	6.92	< 0.0469	16.5	<0.387	<0.117
B-2 (CL-B02-SO2)	2-4'	<2.12	6.10 ^{A,B}	86.9	0.96	14.8	18.6	461^	0.0561	15.3	1.03	<0.125
B-3 (CL-B03-SO2)	2-4'	<1.93	2.51 ^{A,B}	34.9	0.204	11.8	20.4	32.1	0.059	8.75	0.522	<0.113
B-3 (CL-B03-SO3)	5-7'	<2.03	3.56 ^{A,B}	22.0	0.0752	18.3	7.63	6.30	<0.0477	9.83	<0.394	<0.119
B-4 (CL-804-SO2)	2.5-4.5'	<2.06	3.33 ^{A,B}	64.5	0.339	14.5	14.8	20.5	0.0582	11.9	<0.4	<0.121
B-4 (CL-B04-SO4)	7.5-9.5'	<2.05	1.40^	3.98	0.277	3.89	13.0	4.24	<0.0481	6.14	<0.397	<0.12
B-5 (CL-B05-SO1)	0-2'	<1.88	4.58 ^{A,B}	37.4	0.255	9.05	45.5	22.2	< 0.0443	9.99	<0.366	<0.111
B-5 (CL-B05-SO2)	2.5-4.5'	<1.98	7.30 ^{A,B}	66.7	0.256	12.3	18.0	9.91	<0.0466	17.8	< 0.384	<0.116
B-6 (CL-B06-S01)	0-2'	<1.94	3.28 ^{A,B}	25.9	0.137	9.01	38.6	8.13	<0.0456	9.17	0.433	<0.114
B-6 (CL-B06-S02)	2.5-4.5	<1.94	3.66 ^{A,B}	31.1	0.308	22.3	66.5	26.2	0.125	23.8	0.764	<0.114
B-7 (CL-B07-S02)	2.5-4.5'	<1.97	5.06 ^{A,B}	50.8	0.22	6.96	6.79	7.77	< 0.0463	10.2	0.544	<0.116
B-9 (CL-B09-\$03)	5-7'	<2.05	3.27 ^{A,B}	41.3	0.104	14.5	15.5	71.7*	< 0.0432	12.7	<0.398	<0.12
B-11 (CL-B11-S01)	0-2'	<1.89	4.11 ^{A,B}	20.4	0.211	15.1	34.3	20.9	<0.0444	17.2	<0.367	<0.111
B-12 (CL-B12-SO3)	5-7'	<1.91	9.89 ^{A,B}	79.7	0.248	14.1	16.9	10.1	0.0529	22.3	< 0.372	<0.113
B-15 (CL-B15-S03)	5-7'	<2.32	2.02 ^{A,B}	69.7	0.559	12.1	19.1	8.09	0.0832	9.75	0.982	<0.136
B-16 (CL-B16-S03)	5-7'	<2.14	1.14^	31.8	0.0754	6.77	3.73	3.35	<0.0503	4.54	0.427	<0.126
B-17 (CL-B17-S02)	2.5-4.5'	<2.48	2.22 ^{A,B}	57.5	0.321	9.39	10.4	10.2	0.0584	6.15	1.2	< 0.146
B-17 (CL-B17-S03)	5-7'	<2.25	1.67 ^{A,B}	67.4	0.265	9.38	8.20	5.58	0.0796	5.40	0.57	<0.133
TNA 2003 Data					01200	0.00		0.00		0.10	0.07	
MW-1 (2003TN01S16)	4-6'	NT	NT	NT	NT	NT	NT	NT	NT	6.93	NT	NT
MW-1 (2003 TN01S17)	12-14'	NT	NT	NT	NT	NT	NT	NT	NT	8.08	NT	NT
MW-2 (2003TN01S18)	6-8'	NT	NT	NT	NT	NT	NT	NT	NT	15.1	NT	NT
MW-2 (2003TN01S19)	12-14'	NT	NT	NT	NT	NT	NT	NT	NT	17.9	NT	NT
MW-3 92003TN01S14)	6-8'	NT	NT	NT	NT	NT	NT	NT	NT	6.39	NT	NT
MW-3 (2003TN01S15)	12-14'	NT	NT	NT	NT 8 ⁰	NT	NT	NT	NT	23.5	NT	NT
Non-Industrial RCL			0.039 ^D	1,100		16,000 ^D		50 ^D			78.2	78.2
Industrial RCL [®] GW Pathway RCL ^C			1.6 ^D	71,500	510 ^D	• NA		500 ^D			5,110	5,110
GH Faulway RGL			0.58	330	38	18,000			0.42		1	0.083

Summary of Soll Analytical Results - Metals Kenosha Brownfield Investigation - C&L Industrial Cleaners STS Project No. 86415XD

NT = Not Tested --- Not Established

* = Exceedance of generic direct contact RCL for non industrial site calculated from USEPA web page using WDNR default values on 9/2/04.

^B = Exceedance of generic direct contact RCL for industrial site calculated from USEPA web page using WDNR default values on 9/2/04.

c = Exceedance of generic direct contact RCL for soil to groundwater pathway calculated from USEPA web page using WDNR default values on 9/2/04.

^D = Wisc. Administrative Code NR 720.11, Table 2 direct contact RCLs, January 2001.

Summary of Soli Analytical Results - PAHs Kenosha Brownfield Investigation - C&L Industrial Cleaners STS Project No. 86415XD

Sample Location/	í	i i			Benzo(a)	Benzo(a)	Benzo(b)	Benzo(k)	Benzo(ghi)		Dibenzo(a,h)	1		Indeno(1,2,3-	1-Methyl	2-Methyl			(
Sample Number	Depth (feet bgs)	Acenaphthene (mg/kg)	Acenaphthylene (mg/kg)	Anthrecene (mg/kg)	Anthrecene (mg/kg)	Pyrene (mg/kg)	Fluoranthene (mg/kg)	Fluoranthene (mg/kg)	Perylene (mg/kg)	Chrysene (mg/kg)	Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	cd) Pyrene (mg/kg)	Naphthalene (mg/kg)	Naphthalene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)	Pyrene (mg/kg)
STS 2001 Solt Probes														1					
G-1 (CL-G1-SO3)	4-6'	<0.0755	<0.0512	<0.0363	<0.0305	< 0.028	<0.0134	<0.0146	<0.0122	<0.0244	<0.0171	<0.0317	<0.0426	<0.0207	<0.0353	<0.028	<0.0475	0.0667	<0.0378
G-1 (CL-G1-SO4)	6-8'	<0.00748	<0.00507	<0.0035	<0.00302	<0.00277	<0.00133	<0.00145	<0.00121	<0.00241	<0.00169	<0.00314	<0.00422	<0 00205	<0.0035	<0.00277	<0.0047	0.00456 ^J	<0.00374
G-2 (CL-G2-SO3)	4-6'	<0.00771	<0.00522	<0.00361	<0.00311	<0 00235	<0.00137	<0.00149	<0.00124	<0.00249	<0.00174	<0.00323	<0.00435	<0.00211	<0.003€1	<0.00286	<0.00465	<0.00199	<0.00386
G-2 (CL-G2-SO4)	6-8'	<0.00745	<0.00505	<0.00349	<0.003	<0.00276_	<0.00132	<0.00144	<0.0012	<0.0024	<0.00163	<0.00\$13	<0.00421	<0.00204	<0.00349	<0.00276	<0.00469	<0.00192	<0.00373
G-3 (CL-G3-SO3)	4-6'	<0.00724	<0.00491	<0.00339	<0.00292	<0.00269	<0.00129	<0.0014	<0.00117	<0.00234	<0.00164	<0.00(8)4	<0.00403	<0.00199	<0.00339	<0.00269	<0.00466	<0.00187	<0.00382
G-3 (CL-G3-SO4)	6-8'	<0.00637	<0.00466	<0.00322	<0.00277	<0.00255	<0.00122	<0.00133	<0.00111	<0.00222	<0.00155	<0.00268	<0.00388	×0.00168	<0.00322	<0.00255	<0.00432	<0.00177	<0.00344
G-4 (CL-G4-SO3)	4-6'	<0.0073	<0.00495	<0.00342	<0 00294	<0.00271 <0.00281	<0.0013 <0.00134	<0.00141 <0.00147	<0.00118 <0.00122	<0.00238 <0.00244	<0.00105 <0.00171	<0.00306 <0.00317	<0.00412 <0.00427	<0.002 <0.00208	<0.00342 <0.00354	<0.00271 <0.00281	<0.00459 <0.00476	<0.00168 <0.00195	<0.00365
G-4 (CL-G4-SO4)	6-8'	<0.00757	<0.00513	<0.00354	<0.00305 0.464 ^A	0.677	1.08		0.805	0.446	0.0441			0.848	<0.0319	<0.0253	<0.0478		<0.00379
G-5 (CL-G5-SO1)	0-2	<0.0683	<0.0463	0.0628				0.322				0.568	<0.0382					0.194	0.637
G-5 (CL-G5-SO3)	4-6'	<0.0743	<0.0503	<0.0347	0.108 ^A	0.172	0.325 ^A	0.0965	0.326	0.11	0.402 ^{A,B}	0.125	<0.0419	0.327*	<0.0347	<0.0275	<0.0467	0.0423	0.157
STS 2001 Soil Borings					0.00502 ^J	0.0046	0.0262		0.00505	0.00684			<0 00408	0.00592'	<0.00338	<0.60267	0.00461		1
B-1 (CL-B01-SO2)	2.5-4.5' 5-7'	<0.00718 <0.00734	<0.00487 <0.00497	<0.00338 <0.00343	<0.00245	<0.0046	<0.0262	<0.00139 <0.00142	<0.00118	<0.00237	0.00783 <0.00166	0.0221 <0.00308	<0.00414	<0.00592	<0.00343	<0.00267	<0.00461	0.0129 <0.00189	0.0166 <0.00367
B-1 (CL-B01-SO3)		<0.00734	<0.00493	<0.00343	<0.00246	<0.00272	0.0129	0.0194	0.0604	<0.00235	<0.00164	0.0553 ^J	<0.00411	0.011	<0.0034	<0.00272	<0.00462		0.00798 ^J
B-2 (CL-802-SO1)	0-2"					<0.0027	0.0129	0.0194	0.0192		0.0279			0.0276	<0.0034	<0.0027		0.0158	
B-2 (CL-802-SO2)	2-4'	<0.0773	<0.0524	<0.0362 0.00632 ³	<0.0312 0.147 ^A	0.265	0.0584 0.362 ^A			0.0423		0.0374	<0.0436	0.0276	0.00687	·····	<0.0488	0.0608	0.063
8-3 (CL-803-SO2)	2-4'	0.0136	<0.00476					0.138	0.26		<0.00159	0.164	<0.00397			0.00937			0.209
B-3 (CL-803-SO3)	5-7	<0.0074	<0.00501	<0.00346	<0.00293	<0.00274 0.65 ^{A,B}	<0.00131	<0.00143	<0.00119	<0.00239	<0.00167 0.0305 ^A	0.00348	<0.00418	<0.00203	<0.00346	<0.00274	<0.00465	<0.00191	<0.0037
B-4 (CL-B04-SO2)	2.5-4.5'	<0.0752 <0.0746	<0.0509 <0.0505	0.13 <0.0349	0.762 ^A <0.0301	0.65 <0.0277	0.629 ^A <0.0132	0.379 <0.0144	0.253 <0.012	0.857 <0.0241	<0.0305	1.52 <0.0313	<0.0424 <0.0421	0.285 ^A <0.0205	0.0632 <0.0349	0.0314	<0.0473 <0.0469	0.469	2.29
B-4 (CL-B04-SO4)	7.5-9.5					0.0142	0.0312	0.00965	0.00831		0.0367		<0.00328	0.0171	<0.00322	<0.00255		<0.0193	<0.0373
8-5 (CL-805-SO1)	0-2*	<0.00687	<0.00468	<0.00322	0.0122	0.00808 ^J		0.00965	0.00831	0.0106	0.0253	0.0366			<0.00322	0.00303	<0.00432	0.0162	0.0314
8-5 (CL-805-SO2)	2.5-4.5	<0.00722	<0.00489	0.0111	0.0115	0.0371	0.0136		0.0228		0.0253	0.032	<0.00407	0.00853	0.00539	0.00303	<0.00454	0.035	0.0315
8-6 (CL-805-S01)	0-2*	<0.00708	<0.00478	<0.0033	0.0178	0.03/1 0.027 ^A	0.0429	0.0253		0.0191		0.0281	<0.00309	0.0296			<0.00444	0.0179	0.0413
B-6 (CL-806-S02)	2.5-4.5	<0.0707	<0.0479	<0.0331	<0.0285	0.00363	<0.0125	<0.0137	<0.0114 0.00242 ^J	0.0335	<0.018	0.0425	<0.0399	0.029	<0.0331	0.1	< 0.0445	0.0566	0.0675
B-7 (CL-807-S02)	2.5-4.5	<0.00718	<0.00488	<0.00336	0.00389		0.00704	<0.00139			<0.00162	0.0177	<0.00405	0.00731	<0.00336	<0.00266	<0 00451	0.0116	0.0105
B-9 (CL-B09-S03)	5-7	<0.0747	<0.0506	0.173	0.242^	0.249^	0.292	0.131	0.181	0.2	0.1284	0.801	<0.0422	0.198*	<0.0349	<0.0277	<0 047	0.665	0.199
B-11 (CL-B11-S01)	0-2"	<0.0689	<0.0487	<0.0322	<0.0278	0.0439*	0.0753	0.0356	0.0294	0.0333	<0.0155	0.0587	<0.0389	0.0429	<0.0322	< 0.0258	<0.0433	0.0531	0.0637
B-12 (CL-B12-SO3)	5-7	\$6900 0>	<0.00473	<0.00327	<0.002A2	<0.00259	<0.00124	<0.00135	<0.00113	<0.00225	<0.00168	<0.00293	<0.00394	<0.00191	<0.00327	<0.00259	<0.004.19	<0.0013	<0.00349
B-15 (CL-815-S03)	5-7'	<0.00846	<0.00573	<0.00396	<0.00341	<0.00314	*0.0015	<0.00164	<0.00138	<0.00273	<0.00191	0.0057	<0.00477	<0.00232	<0.00396	<0.00314	<0.00532	0.0117	0.00714
B-16 (CL-816-S03)	5-7	<0.00779	<0.00528	<0.00364	<0 00314	<0 C0269	0.00461	0.0029	<0.00128	0.00307	<0.00176	0.0079 ^J	<0.0044	0.00489	<0.00364	<0.00289	<0.0049	0.00882	0.00745
B-17 (CL-B17-S02)	2.5-4.5	<0.00905	<0.00613	<0.00423	<0 00365	0.00413	0.00778	0.0027	0.00323	<0.00292	<0.00204	0.0171	<0.00513	0.0122	0.00426	0.00667	<0.00569	0.0165	0.0147
B-17 (CL-B17-S03)	5-7	<0.00822	<0.00557	<0.00385	<0.00332	<0,00305	<0.00146	< 0.00159	<0.00133	<0.00265	<0.00185	<0.00845	<0.00464	<0.00225	<0.00385	<0.00305	<0.00517	<0.00212	<0.00411
TNA 2003 Data	10-12	<0.00588	<0.00523	<0.00125	<0.00511	<0.00287	<0.00282	0.00362	<0.00262	<0.00287	<0.00175	<0.00125	<0.00249	<0.002	<0.00436	<0.00511	<0.002	<0.00257	<0.00125
GP-8 (2003TN01507) GP-13 (2003TN01505)	11-12	<0.00581	<0.00616	<0.00123	<0.00507	<0.00284	<0.0026	<0.00352	<0.0026	<0.00284	<0.00173	<0.00124	<0.00247	<0.00198	<0.00433	<0.00507	<0.00198	<0.00284	<0.00125
MW-2 (2003TN01S18)	6-8'	<0.00536	<0.00753	<0.00114	<0.00468	<0.00262	<0.00239	<0.00331	<0.00239	<0.00262	<0.0015	<0.0014	<0.00228	<0.00182	0.00399	0.00468	<0.00182	<0.00254	<0.00124
Non-Industrial RCL ^A	<u>+</u>	900	18	5.000	0.088	0.0088	0.088	0.88	1.8	8.8	0.0088	600	600	0.088	1,100	600	20	18	500
Industrial RCL®	1	60,000	360	300,000	3.9	0.39	3.9	39	39	390	0.39	40,000	40,000	3.9	70,000	40,000	110	390	30,000
GW Pathway RCL	1	38	0.7	3.000	17	48	360	870	6.800	37	38	500	100	680	23	20	0.4	1.8	8,700

PAHs = Polynuclear Aromatic Hydrocarbons

PAHs = Porynuclear Aromatic Hydrocarbons ^A = Exceedance of generic direct contact RCL for non-industrial site per the "Soil Cleanup Levels for PAHs, Interim Guidance", WDNR Publication RR-519-97, April 1997. ^e = Exceedance of generic direct for industrial site per the "Soil Cleanup Levels for PAHs, Interim Guidance", WDNR Publication RR-519-97, April 1997. ^c = Exceedance of generic soil to groundwater pathway RCL per the "Soil Cleanup Levels for PAHs, Interim Guidance", WDNR Publication RR-519-97, April 1997. ^c = Exceedance of generic soil to groundwater pathway RCL per the "Soil Cleanup Levels for PAHs, Interim Guidance", WDNR Publication RR-519-97, April, 1997. ^d = Estimated concentration below laboratory quantitation level. RCL = Residual Contaminant Level - = Not Established

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STS Consultants, Ltd. 11425 W. Lake Park Drive, Suite 100 Milwaukee, Wisconsin 53224-3025

voice 414-359-3030 fax 414-359-0822 web www.stsconsultants.com

recid 7/29/04 MW

July 22, 2004

Ms. Sharon Krewson City of Kenosha - Department of City Development 625 - 52nd Street, Room 308 Kenosha, WI 53140

Re: Proposal for NR 716 Site Investigation at C&L Industrial Cleaners Property at 8927 Sheridan Road, in Kenosha, Wisconsin -- STS Proposal No. 514035PP

Dear Ms. Krewson:

STS Consultants, Ltd. (STS) is pleased to submit this proposal to provide a scope of work for Supplemental Site Investigation, at the above-referenced property. A cost estimate for our services is provided. Please sign one copy of this letter and return it to our office as authorization to proceed. A signed copy will signify acceptance of the proposal.

We look forward to working with you on this project. If you have any questions with regard to the information contained in this proposal, or if we can be of any further service to you, please feel free to contact us at (414) 359-3030.

Sincerely,

STS CONSULTANTS LTD.

nettlaldenbark

Lánette L. Altenbach, PG, C.P.G. Senior Hydrogeologist

Veoeger (lla) mas

Thomas W. Kroeger, P.H. Principal Hydrologist

Attachments

NR 716 Site Investigation Proposal Terms & Conditions(Negotiated) Schedule of Fees(N73) ACCEPTED BY:

SIGNATURE:

TITLE:

FIRM:

DATE: _

STS Proposal No. 514035PP

Advised Shavon that the

initial workplan is sound, they may need to do more (i.e. more

is no duplication of work

HE INFRASTRUCTURE IMPERATIVE

piezometers ... etc) and that they need to incorporate TUK'S data so there K: (projects)514035PP. DOCS \P514035PP-NR716_SI_proposal. doc/MOM-dz 1004-11 (1902)

ST CONSULTANTS

PROPOSAL FOR AN NR 716 SITE INVESTIGATION C & L INDUSTRIAL CLEANERS KENOSHA, WISCONSIN

PROJECT OVERVIEW

This proposal has been prepared by STS Consultants, Ltd. (STS) at the request of Ms. Sharon Krewson of the City of Kenosha - Department of City Development. In this proposal, STS presents a scope of work, cost estimate and project schedule to perform an NR 716 Site Investigation at C&L Industrial Cleaners located at 8927 Sheridan Road in Kenosha, Wisconsin. We understand that the City of Kenosha is has taken title to this property as part of a brownfields redevelopment plan and that the state of Wisconsin has awarded the City of Kenosha a Site Assessment Grant (SAG) to assist in the funding for additional investigation at the site.

Summary of Prior Work

A Phase II Environmental Site Assessment (ESA) conducted by STS at the site identified contamination by chlorinated solvents, primarily perchloroethene (PCE) and its breakdown compounds, in and around the main building on the site and at other areas of the property to the north, south and east of the building. Contaminant levels of PCE detected in the groundwater from a soil probe boring performed inside the building was at a level that may be indicative of free product in the subsurface. Polycyclic aromatic hydrocarbons (PAHs) were also identified in shallow soils above residential residual contaminant levels in the area to the south of the main building and to the south of the storage shed located east of the main building. Nickel was identified in the sediments in the pits inside the building and in the groundwater above Wisconsin groundwater quality standards in three wells at the site.

The site buildings were demolished in 2003 under a SAG previously awarded to the City of Kenosha by the Wisconsin Department of Natural Resources. Prior to demolition, an immediate removal was performed under US EPA's START program. The START program personnel mobilized to remove sludges from the pits inside the building. The pits were emptied, cleaned and the waste materials were disposed.

After demolition, additional assessment was conducted by TN & Associates (TN&A) under a US EPA Brownfields program. The additional assessment included advancing 14 soil probes and

installing three groundwater monitoring wells for the collection of soil and groundwater samples. This work was documented in a draft report prepared by TN&A dated April 2004. The TN&A report includes separate figures for the TN&A assessment results and the prior STS Phase II ESA results. In verbal comments to TN&A, the WDNR has asked TN&A to provide a figure and a discussion of the combined results. The draft TN&A report recommended additional investigation at the site.

SCOPE OF WORK

STS has reviewed both the STS Phase II ESA and TN&A data and has identified six areas which require further evaluation. These areas are:

- Area 1 The westernmost portion of the site (the Sheridan Road-side of the former building) near probe location G-1. Probe G-1 had been completed adjacent to a small pit which appears to have had its own sanitary lateral to the street. Concentrations of PCE were high in the groundwater collected from a temporary well in this soil probe. TN&A advanced 3 probes to the east of G-1, but only sampled one of the three probes.
- Area 2 The area on the south side of the building by monitoring well B-3. This
 monitoring well is just east of a sanitary catch basin that is/was connected to the main
 collection pit inside the building. This area may be a source area based on PCE
 concentrations in soil, in groundwater samples from B-3 and the configuration of the drain pits
 in the building, as revealed by the START cleanup work.
- Area 3 The north side of the property by STS boring B-2. PCE and its breakdown products were identified in shallow soils at B-2. TN&A advanced two soil probes (southwest and southeast of B-2) and installed a monitoring well east of B-2 all of which were approximately 20 feet distant from B-2. However, only one soil sample per probe/boring was collected by TN&A and the depth the soil samples which were collected were from a depth greater than four feet (below the zone considered the direct contact zone for soil). The lack of surface soil samples prevents an assessment of the direct contact risk and the extent of a potential source area at the B-2 location.
- Area 4 The area east of the shed that is located east of the main building, and near existing monitoring wells B-5 and B-6. PCE and/or its breakdown products were detected in the surficial soils and groundwater at both well locations. Drum storage occurred in this area and the extent of soil impacts should be defined.



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- Area 5 An area near the south property line, near the location of Test Pit 5, approximately 200 feet east of the buildings. PCE and its breakdown products were identified in a soil sample collected from 4 to 6 feet below ground surface. The extent of soil impacts should be defined.
- Area 6 An area approximately 500 feet east of the buildings, along the south property line, near boring B-11. PCE and its breakdown products were detected in surficial soils at this boring. The extent of soil impacts should be defined.

The proposed scope of work is comprised of 5 elements. These elements are:

- · Preparing a work plan;
- Conducting the field work;
- Evaluating the Data;
- Preparing the NR 716 Report; and
- Disposing of the Investigative Waste.

Work Plan

STS will combine and compare the Phase II ESA data collected by STS and the TN&A data collected in 2003 into one data table and soil and groundwater figures to further depict the current conditions at the site. This information will be included in the preparation of an update to the sampling and analysis plan prepared for previous work at the site by STS. Final probe and well sampling locations will be selected following an analysis of the combined data. The new work plan will meet the requirements of NR 716 and will be submitted to the WDNR prior to the start of the activities. A review of the work plan by WDNR will not be requested and the fee for such review is not included in this scope of work.

Field Services

Based on review of the existing data, STS estimates that 30 soil probes, 3 monitoring wells and 1 piezometer will be sufficient to characterize the site. Six of the soil probe borings will be converted to temporary monitoring wells. The results of the groundwater samples from the temporary wells will be used to determine the location for the planned additional permanent monitoring wells. The piezometer will be installed adjacent to one of the water table wells for calculation of vertical groundwater gradients.



STS will provide labor and equipment for the collection of soil and groundwater samples from the above described locations. STS will subcontract with a soil probe contractor for the advancement of the soil probes and a drilling firm for the installation of the monitoring wells and piezometer. Two soil samples will be collected from each of the proposed well/probe locations using the procedures and sample selection criteria described in the work plan STS will update for this site.

One groundwater sample will be collected from the temporary wells and existing monitoring wells shortly after the temporary wells are constructed. The temporary wells will be completed to remain at the site for a second sampling event after the proposed additional monitoring wells are installed.

The monitoring wells and piezometer will be located after the results of the first round of groundwater samples has been obtained from the laboratory. After well installation, the wells will be developed and permitted to equilibrate approximately two weeks prior to sampling. Groundwater samples will then be collected from the temporary wells, the existing wells and the newly installed wells, after the new wells have equilibrated.

Soil and groundwater samples will be analyzed for volatile organic compounds by EPA Method SW-846 8260B. Select soil samples will be analyzed for PAHs by EPA method 8270. Approximately 13 soil samples will be collected for total organic carbon content to aid in the determination of site specific residual contaminant levels. Groundwater samples collected from wells in which nickel was previously detected will also be sampled for nickel.

Data Evaluation and Report Preparation

The laboratory analytical results will be reviewed and tabulated. The new data will be compared to applicable state standards. Site specific residual contaminant levels will be calculated from a US EPA web site using approved WDNR default values and site specific measured total organic carbon content values. Cross sections of the subsurface using the existing and the new data will be completed to aid in the evaluation of the soil and groundwater impacted areas.



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A Site Investigation Report will be prepared that will describe the investigation activities and the results of the laboratory analysis. The report will also discuss the new data and the previously collected data to support conclusions and recommendations, if necessary for further work.

Investigative Waste Disposal

Investigative waste consisting of soil from the monitoring well soil borings, ground water from developing the wells and purged groundwater collected prior to well sampling. We have assumed that these wastes will be able to be managed as a non-hazardous solid waste. As such we have included the cost for both soil and groundwater waste characterization samples and assumed a cost for disposal of four drums of soil and three drums of groundwater.

PROJECT SCHEDULE

Preparation of the work plan update can begin upon receipt of written authorization. After completion of the work plan, the field work can be scheduled. The soil probe and temporary wells will require approximately 4 days to complete. The installation of the monitoring wells and piezometer are anticipated to require 3 working days. Groundwater sampling may require 1 to 2 working days per sample event. Laboratory turnaround time is approximately 10 working days. Data reduction and evaluation is anticipated to require 15 working days. The site investigation report would be provided to the City approximately 3 weeks after completion of the data reduction. The proposed schedule is depicted on the table below.

	Elapsed Time from
Task	written authorization
Prepare Site Investigation Work Plan	2 weeks
Advance Soil probes	4 weeks
Soil and First round groundwater sample results	6 weeks
Install Monitoring wells and Piezometers	7 weeks
Soil Sample Analysis	9 weeks
Sample temporary, existing and new wells	10 weeks
Laboratory analysis of groundwater samples	12 weeks
Data Reduction	15 weeks
Report preparation	18 weeks

PROJECT FEES

Based upon the above-outlined scope of work, we propose to complete the above described scope of work for a not-to-exceed fee of \$49,000.00.

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The fee estimate is based on the following:

NR 716 Site Investigation	
Work Plan	\$ 3,975
Soil Probe Installation Labor & Equipment Soil Probe Contractor Laboratory Analysis Groundwater Sampling (Temporary & Existing Wells) Includes labor, equipment, laboratory fees	\$ 5,750 \$ 4,600 \$ 6,650 \$ 2,725
Install Monitoring Wells, Sample Groundwater Labor and Equipment Drilling Subcontractor Laboratory Analysis (soil and groundwater) Investigative Waste Disposal (includes analytical fees)	\$ 6,100 \$ 4,325 \$ 2,175 \$ 2,700
Data Evaluation and Report Preparation	<u>\$10,000</u>
Investigation Total	\$49,000

Proposed changes, if any, to the scope of work following commencement of STS' services will be discussed with you and amendments made as described in the attached General Conditions of Service. For additional services rendered, if any, but not included in the scope of work described in this proposal, invoice amounts will be based on the actual units used at the rates shown on the attached fee schedule, and will also include travel costs, and other expenses incurred by STS in rendering the services described in this proposal. After acceptance of this proposal, adjustments, if any, to the fee schedule will be subject to the General Conditions of Service.

Terms and Conditions

This Additional Phase II Site Investigation, as applicable, will be completed under the General Conditions and Fee Schedule which are attached to this proposal and have approval by the Kenosha City Attorney Mr. James Conway. The General Conditions and Fee Schedule are expressly incorporated into, and are an integral part of, our contract for professional services. Please indicate your acceptance of this proposal by having an authorized representative execute one copy and return it to this office. If we are given verbal or written notification to proceed, without first receiving a signed copy of the proposal, it will be mutually understood that both of us

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will, nonetheless, be contractually bound by the proposal, even in the absence of written acceptance by you. In any event, a signed copy of this proposal will need to be returned to STS before a written report can be submitted.

Your acceptance of our proposal confirms that the terms and conditions are understood, including payment to STS Consultants, Ltd. upon receipt of the invoice, unless specifically arranged otherwise in writing. Of course, should you wish to discuss the terms, conditions, and provisions of our proposal, we would be pleased to do so at your convenience.

In the performance of an ESA, it must be recognized that latent underground pollution of a non-hazardous nature may be discovered. The discovery may require the Owner or Tenant under Federal and State regulations to undertake remedial measures. STS considers the responsibility for reporting of any results to appropriate State and/or Federal agencies and subsequent clean-up measures to rest with the Owner and/or Tenant. STS will not report the results of our assessment to parties other than those to which we have contracted, unless, in our opinion, there is an acutely dangerous public health condition or safety risk. Project information will not be released to other parties unless a written request to do so is provided by you or your representative.

STS CONSULTANTS, LTD. GENERAL CONDITIONS OF SERVICE

These General Conditions of Service, including any Supplemental Conditions of Service which are or may become applicable to the services described in STS' Proposal, are incorporated by reference into the foregoing Proposal and shall also be incorporated by reference into any Agreement under which services are to be performed by STS for the Client. No agreement or understanding, oral or written, which in any way modifies or waives these General Conditions of Service shall be binding on STS (whether contained in the Client's purchase forms or otherwise) unless hereafter made in writing and executed by STS' authorized representative.

SECTION 1: SCOPE OF WORK

a. The scope of work and the time schedules defined in the Proposal are based on the information provided by the Client and shall be subject to the provisions of this agreement. If this information is incomplete or inaccurate, or if site conditions are encountered which materially vary from those indicated by the Client, or if the Client directs STS to change the original scope of work established by the Proposal, a written amendment to the Agreement equitably adjusting the costs, performance time and/or terms and conditions thereunder, shall be executed by the Client and STS as soon as practicable. STS, at its discretion, may suspend performance of its services until such an Amendment has been executed and, if such an Amendment is not agreed to within a reasonable time, STS may terminate this Agreement. In the event this Agreement is terminated pursuant to this Section, the Client shall pay STS for all services performed prior to termination and termination expenses as set forth in Section 15c of these General Conditions of Service.

SECTION 2: BILLINGS AND PAYMENTS

- a. Payments for services and reimbursable expenses will be made on the basis set forth in the attached proposal. STS shall periodically submit invoices for services performed and expenses incurred and not previously billed. Payment is due upon receipt. For all amounts unpaid after 30 days from the invoice date, as set forth on STS' invoice form, the Client agrees to pay a finance charge of one and one-half percent (1-1/2%) per month, eighteen percent (18%) annually. The fees described in this agreement may be adjusted annually on the anniversary date of the effective date of this agreement.
- b. The Client shall provide STS with a clear written statement within fifteen (15) days after receipt of the invoice of any objections to the invoice or any portion or element thereof. Failure to provide such a written statement shall constitute a waiver of any such objections and acceptance of the invoice as submitted.
- c. The Client's obligation to pay for the services performed by STS under this Agreement shall not be reduced or in any way impaired by or because of the Client's inability to

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obtain financing, zoning, approval of governmental or regulatory agencies, or any other cause, reason, or contingency. No deduction shall be made from any invoice on account of penalty or liquidated damages nor will any other sums be withheld or set off from payments to STS. Client further agrees to pay STS any and all expenses incurred in recovering any delinquent amounts due, including, but not limited to reasonable attorney's fees arbitration or other dispute resolution costs and all court costs.

d. If any subpoena or court order is served upon STS and/or any of its staff, subconsultants or subcontractors requiring presentation of documents or the appearance of STS' staff, subconsultants or subcontractors at a trial, deposition, or for other discovery purposes arising out of STS' services performed under this Agreement, Client will pay STS' fees (if any) applicable to STS' compliance with the subpoena or court order. Fees will be based on actual units used at the standard rates in effect at time of service upon STS of the subpoena or court order. Billings shall include time and expenses incurred gathering, organizing, duplicating documents, preparing to give testimony, travel and testifying in deposition or trial.

SECTION 3: RIGHT OF ACCESS

- a. If services to be provided under this Agreement require the agents, employees, or contractors of STS to enter onto the Project site, Client shall provide right-of-access to the site to STS, its employees, agents and contractors, to conduct the planned field observations or services.
- b. If the scope of services includes, or is amended to include, the performance of exploratory borings or test pit excavations, Client will furnish to STS all diagrams, and other information in its possession or reasonably attainable by Client indicating the location and boundaries of the site and subsurface structures (pipes, tanks, cables, sewers, other utilities, etc.) in such detail as to permit identifying, in the field, boring/test pit locations which will avoid interferences with any subsurface structures. In the absence of negligence, STS shall not be liable for damages to subsurface structures of which are not indicated or are incorrectly indicated by the information provided by the Client.
- c. STS reserves the right to deviate a reasonable distance from prescribed or selected exploratory boring or test pit locations.
- d. STS shall take reasonable precautions to minimize damage to the site due to its operations, but STS has not included in its fee, and is not responsible for, the cost of restoration for any damage resulting from its operations. At the Client's request and for additional fee, STS will, to the extent reasonably practicable, restore the site to conditions substantially similar to those existing prior to STS' operations.

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SECTION 4: SAFETY

- a. It is understood and agreed that, with respect to Project site health and safety, STS is responsible solely for the safe performance by its field personnel of their activities in performance of the required services. It is expressly agreed that STS' professional services hereunder do not involve any responsibility for the protection and safety of persons on and about the Project nor is STS to review the adequacy of job safety on the Project. It is further understood and agreed, and not in limitation of the foregoing, that STS shall not be in charge of, and shall have no control or responsibility over any aspect of the erection, construction or use of any scaffolds, hoists, cranes, stays, ladders, supports or other similar mechanical contrivances or safety devices as defined and interpreted under any structural work act or other statute, regulation or ordinance relating in any way to Project safety.
- b. Unless otherwise specifically provided in this Agreement, Client shall provide, at its expense, facilities and labor necessary to afford STS field personnel access to sampling, testing, or observation locations in conformance with federal, state, and local laws, ordinances and regulations specifically, including, but not limited to regulations set forth in OSHA 29 CFR 1926.
- c. If, in STS' opinion, its field personnel are unable to access required locations and perform the required services in conformance with Federal, state, and local laws, ordinances and regulations due to Project site conditions or operations of other parties present on the Project site, STS may, at its discretion, suspend its services until such conditions or operations are brought into conformance with applicable laws, ordinances and regulations. If, within a reasonable time, operations or conditions are not in conformance with applicable laws, ordinances, and regulations, STS may, at its discretion, terminate this Agreement. In the event that the Agreement is terminated pursuant to this Section, the Client shall pay STS for services and termination expenses as set forth in Section 15 of this Agreement.
- d. Current regulations promulgated by the Occupational Safety and Health Administration (OSHA) require that a "competent person" conduct inspections of excavations and review any supporting system if workers are to enter the excavations. See OSHA 29 CFR Part 1926 (Subpart P). Under the scope of work incorporated in this Agreement, STS does not provide and has not assumed any duties of inspection and/or monitoring of excavations required of the "competent person" under OSHA 29 CFR Part 1926 (Subpart P). STS has neither been assigned nor assumed the authority required of the "competent person" under OSHA 29 CFR Part 1926 (Subpart P).

SECTION 5: SAMPLES

a. Unless otherwise specifically provided in this Agreement or amendments thereto, STS reserves the right to discard samples immediately after testing. Upon request, the samples will be shipped, (shipping charges collected) or stored at the rate indicated in the fee schedule attached.

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SECTION 6: REPORTS AND OWNERSHIP OF DOCUMENTS

a. STS shall furnish up to six (6) copies of each report to Client. Additional copies shall be furnished at the rates specified in the fee schedule. With the exception of STS reports to Client, all documents, including original boring logs, field data, field notes, laboratory test data, calculations and estimates are and remain the property of STS. Client agrees that all reports and other work product furnished to the Client not paid for in full will be returned upon demand and will not be used for any purpose, including, but not limited to design, construction, permits or licensing.

SECTION 7: STANDARD OF CARE

- a. STS represents that it will perform its services under this Agreement in conformance with the care and skill ordinarily exercised by reputable members of the professional engineering community practicing under similar conditions at the same time in the same or similar locality.
 - b. NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, AT COMMON LAW OR CREATED BY STATUTE, IS EXTENDED, MADE, OR INTENDED BY THE RENDITION OF CONSULTING SERVICES OR BY FURNISHING ORAL OR WRITTEN REPORTS OF THE FINDINGS MADE.
 - c. Any exploration, testing, surveys and analysis associated with the work will be performed by STS for the Client's sole use to fulfill the purpose of this Agreement and STS is not responsible for interpretation by others of the information developed. The Client recognizes that subsurface conditions beneath the Project site may vary from those encountered in borings, surveys or explorations and the information and recommendations developed by STS are based solely on the information available.
 - d. STS is not responsible for supervising, directing, controlling or otherwise being in charge of the construction activities at the Project site; or supervising, directing, controlling or otherwise being in charge of the actual work of the contractor, its subcontractors, or other materialmen or service providers not engaged by STS.

SECTION 8: HAZARDOUS SUBSTANCES

a. Upon entering into this Agreement, the Client shall notify STS of all such hazardous substances which it knows or which it reasonably suspects are or may be present at or contiguous to the Project site or which may otherwise affect the services to be provided. Thereafter, such notification to STS shall be required as soon as practicable after the Client discovers either the presence of hazardous substances which were not previously disclosed, increased concentrations of previously disclosed hazardous substances, or facts or information which cause the Client to reasonably suspect the presence of any such hazardous substances. Hazardous substances shall include, but

not be limited to, any substance which poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, byproduct, waste or sample and whether it exists in a solid, liquid, semi-solid or gaseous form.

If all or any part of the scope of work is to be performed in the general vicinity of a facility or in an area where asbestos, dust, fumes, gas, noise, vibrations or other particulate or nonparticulate matter is in the atmosphere where it raises a potential health hazard or nuisance to those working in the area of such conditions, Client shall immediately notify STS of such conditions, potential health hazard or nuisance which it knows, should know or reasonably suspects exists and thereafter STS is authorized by the Client to take all reasonable measures STS deems necessary to protect its employees against such possible health hazards or nuisance. The reasonable direct cost of such measures shall be borne by the Client.

Following any disclosure as set forth in the preceding paragraphs, or if any hazardous substances or conditions are discovered or reasonably suspected by STS after its services are undertaken, STS may, at its discretion, suspend its services until reasonable measures have been taken at the Client's expense to protect STS' employees from such hazardous substances or conditions. Whether or not STS suspends its services in whole or in part, the Client and STS agree that the scope of services, terms, and conditions, schedule and the estimated fee or budget shall be adjusted in accordance with the disclosed information or condition, or STS may, at its discretion, terminate the Agreement. In the event that this Agreement is terminated pursuant to this Section, the Client shall pay STS for all services rendered prior to termination and all termination expenses as set forth in Section 15 of these General Conditions of Service.

- d. In the event that services under this Agreement may involve or relate to hazardous substances, or constituents, including hazardous waste (as defined by federal, state or local statutes, regulations or ordinances), whether or not involvement or relationship was contemplated at the time this Agreement was made or when services by STS began under this Agreement, the following conditions shall also be incorporated into the Agreement and be made applicable thereto:
 - d.1. In the event that samples collected by or received by STS on behalf of the Client contain hazardous substances or constituents, including hazardous waste, STS will, after completion of testing and, at Client's expense, (1) return such samples to Client, or (2) upon written request and using a manifest signed by the Client as generator, release such samples to a carrier selected by the Client to be transported to a location selected by the Client for final disposal. The Client agrees to pay all costs associated with the storage, transport, and disposal of samples. The Client recognizes and agrees that STS is acting as a bailee and at no time assumes title to said samples or substances.
 - d.2. All laboratory and field equipment contaminated in performing services under this Agreement which cannot be reasonably decontaminated shall become the property and responsibility of the Client. All such equipment shall be delivered

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to the Client or disposed of in a manner similar to that indicated for hazardous samples above. The Client agrees to pay the fair market value of any such equipment which cannot reasonably be decontaminated and all other costs associated with the storage, transport and disposal of such equipment.

SECTION 9: CONSTRUCTION MONITORING SERVICES

- a. "Construction Monitoring Services" is defined as services, furnished by STS to the Client, which are performed for the purpose of evaluating and/or documenting general conformance of construction operations or completed work with Project specifications, plans, and/or specific reports of the Project. Such services may include taking of tests or collecting samples of natural or manmade materials at various locations on a project site, and making visual observations related to earthwork, foundations, and/or materials. If the services to be provided by STS under this agreement include or are amended to include Construction Monitoring Services, the provisions of this Section 9 shall be an integral part of this agreement and applicable thereto.
- b. The presence of STS field personnel will be for the purpose of providing the client with a professional service based on observations and testing of the work which is performed by a contractor, subcontractor, or other materialmen or service provider. Such services will only be those specifically requested by the Client and agreed to by STS. Discrepancies between construction operations or completed work and project requirements which are noted by STS field personnel will be referred to the Client, or the Client's representative, as designated prior to STS' involvement in the project.
- c. It is understood and agreed by the Client that the observation and testing of natural and/or man made materials by STS in no way implies a guarantee or warranty of the work of the contractor, subcontractor, or other materialmen or service providers, and the services rendered by STS will in no way excuse such contractor, subcontractor or other materialmen or service providers from liability in the event of subsequently discovered defects, omissions, errors or other deficiencies in their work. The presence or absence of STS on the Project site will not affect any obligation of any contractor, subcontractor or other materialmen or service providers. The Client further understands that STS is not a quality assurance representative for any contractor, subcontractor or other materialman or service provider on the Project.
- d. The Client agrees to supply STS with specifications, plans and other necessary material for the Project pertinent to providing its services.

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- Due to the nature of its services, observing and field testing the work of contractors, subcontractors or materialmen or service providers on the Project, STS cannot always be responsible for the schedule or length of time its field personnel remain on the Project site. The time STS' field personnel spend on the Project site is dependent upon the schedule of the contractor, subcontractor or materialman or service provider whose work they are observing and/or testing. STS shall make reasonable effort to utilize its time on the Project site judiciously, but the Client understands and agrees that any delays, cancellations, rescheduling, overtime or other construction activities that may alter the anticipated number of hours and the anticipated costs of STS on the Project site and that are beyond the control of STS field personnel are legitimate and chargeable time and will be invoiced at the rates designated in the attached fee schedules.
- f. Part-time work is defined as Construction Monitoring Services provided by STS where its field personnel are on the Project less than five (5) working days per week or less than forty (40) hours per week, or both. It is agreed that the Client will furnish STS with a minimum of one working day's notice, or twenty-four (24) hours notice, whichever is greater, on any part-time work of STS if field personnel are requested. STS shall make reasonable effort to provide field personnel on all projects, but reserves the right to schedule its field personnel as it deems appropriate, including the scheduling of different field personnel from day to day on any given part-time project of STS. The Client agrees to inform STS of the anticipated services required by STS field personnel on any day, including but not restricted to the kind and number of tests to be required and the anticipated amount of time the field personnel will be required on the Project site.
- g. The Client agrees that STS shall charge a minimum of four (4) hours for any part-time Construction Monitoring Services, regardless of the actual number of hours utilized. All field personnel charges will be made on a portal-to-portal basis. Mileage to and from the Project site will be billed at the rate designated in the attached fee schedules as will any office engineering time needed to review, evaluate or analyze the field data. All calls made by the Client or the Client's representative to cancel requested part-time STS field personnel must be received by STS in time for STS to notify field personnel before they leave for the Project site. STS will make reasonable effort to contact its field personnel as quickly as possible, but reserves the right to bill the Client the four-hour minimum charge in the event STS received a cancellation call too late for it to intercept the field personnel enroute to the Project site.

SECTION 10: OPINIONS OF COST

a. STS' opinions of probable total Project costs and Project construction costs, if any, provided as part of the services under this Agreement are made on the basis of STS' knowledge, experience and qualifications and represent STS' judgment as an experienced and qualified professional engineer, familiar with the construction industry; but STS cannot and does not guarantee that proposals, bids or actual total Project costs or Project construction costs will not vary from opinions of probable cost provided by STS.

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SECTION 11: SHOP DRAWINGS

- a. In the event that the scope of services includes review and approval of Shop Drawings or other data which contractor(s) are required to submit, STS' review and approval will be only for conformance with the design concept of the Project and for compliance with the information given in the Project plans and specifications and shall not extend to means, methods, techniques, sequences or procedures of construction, or to safety precautions or programs incident thereto.
- b. STS' review and approval of Shop Drawings or other data shall not relieve the contractor(s) from responsibility for any variation from the requirements of the plans and specifications unless the contractor(s) has, in writing, called STS' attention to each such variation at the time of submission and STS has given written approval of each such variation by a specific written notation incorporated into or accompanying the Shop Drawing or other data. Approval by STS will not relieve the contractor(s) from responsibility for errors or omissions in the Shop Drawings or other data.

c. STS will accept Shop Drawings or other data submittals only from the contractor(s) required by the Project contract documents to furnish the Shop Drawings or data. STS will reasonably promptly review and approve, or take other appropriate action in regard to, Shop Drawings or data properly submitted to STS.

SECTION 12: ALLOCATION OF RISK

- a. Documents, including but not limited to, technical reports, original boring logs, field data, field notes, laboratory test data, calculations and estimates furnished to the Client or its agents pursuant to this Agreement are not intended or represented to be suitable for reuse by the Client or others on extensions of the Project or on any other project. Any reuse without STS' written consent will be at Client's sole risk and without liability or legal exposure to STS or to STS' contractor(s).
- b. Under no circumstances shall STS be liable for extra work or other consequences due to changed conditions or for costs related to failure of the construction contractor or materialmen or service providers to install work in accordance with the plans and specifications.
- c. Indemnity and Hold Harmless. STS shall indemnify, and hold harmless CLIENT, and its officers and employees from and against any and all damages, losses, judgements, expenses and attorney fees which they may incur, pay or sustain as a result of any negligent act, error, or omission of STS which causes death, personal injury or property damage to any person or party, or which violates the rights of any person or party protected by law to the extent of the limits of proceeds from STS's Professional Liability insurance policy.

- c.1. Client's Acts and Omissions. STS is not responsible for any acts, errors or omissions of CLIENT or CLIENT's officers and employees.
- c.2. Data Not Provided By STS. STS is not responsible for the accuracy of the data provided by CLIENT or data obtained or available from public or governmental records or sources of the public domain.
- c.3. Reproduced Data Furnished by CLIENT. CLIENT shall obtain from Owner of documents provided by CLIENT any and all consents required by law to reproduce data protected by patent, trademark, service mark, copyright or trade secret, and STS assumes no responsibility of any failure of CLIENT to obtain any required consents.
- d. STS is not responsible for the dispersal, discharge, escape, release, spillage or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollution in or into the atmosphere, or on, onto, upon, in or into the surface or subsurface (a) soil, (b) water or watercourses, (c) objects, or (d) any tangible or intangible matter, whether such event or circumstances is sudden or not, which is not caused by STS' own negligent acts or omissions.

SECTION 13: LIABILITY INSURANCE

a. Insurance. STS shall procure and maintain, during the term of this Agreement, insurance policies, herein specified. STS, prior to this agreement, shall furnish a Certificate of Insurance indicating compliance with the foregoing, and proof of payment of premium to the City Attorney, for approval. The insurance policy or policies shall contain a clause that in the event that any policy issued is canceled for any reason, or any material changes are made therein, the Administrator of Public Service will be notified, in writing, by the insurer at least twenty (20) days before any cancellation or change takes effect. If, for any reason, the insurance coverage required herein lapses, CLIENT may declare this Agreement null and void as of the date no valid insurance policy was in effect. Certificates of policy renewals shall be furnished to the Administrator of Public Service throughout the term of this Agreement. The insurance requirement shall not be construed to conflict with the obligations of STS to Indemnity and Hold Harmless CLIENT.

The following insurance must be in effect and continue in effect during the term of this Agreement in not less than the following amounts:

- Worker's Compensation Statutory In compliance with the Worker's Compensation Law of the State of Wisconsin
- General Liability Insurance with a minimum limit of One Million (\$1,000,000) Dollars per occurance having the following coverage: Contractual, Environmental Pollution, and Death, Personal Injury and Property Loss or Damage.

- Automobile Liability Insurance with minimum single limits of liability of One Million (\$1,000,000.00) Dollars for death and bodily injury, and Five Hundred Thousand (\$500,000.00) Dollars for property damage, per occurrence, having the following coverage: Owned Automobiles; Hired Automobiles; Non-owned automobiles.
- Professional Errors and Omissions Insurance with a minimum of One Million (\$1,000,000.00) Dollars per claims made basis.

SECTION 14: DISPUTE RESOLUTION

a. All claims, disputes, controversies or matters in question arising out of, or relating to this Agreement or any breach thereof, including but not limited to disputes arising out of alleged design defects, breaches of contract, errors, omissions, or acts of professional negligence, (collectively "disputes") shall be submitted to mediation before and as a condition precedent to any other remedy. Upon written request by either party to this Agreement for mediation of any dispute, Client and STS shall select by mutual agreement a neutral mediator. Such selection shall be made within ten (10) calendar days of the date of receipt by the other party of the written request for mediation. In the event of failure to reach such agreement or in any instance when the selected mediator is unable or unwilling to serve and a replacement mediator shall be chosen as specified in the Construction Industry Mediation Rules of the American Arbitration Association then in effect.

SECTION 15: TERMINATION

- a. This Agreement may be terminated by either party upon at least seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. The only exceptions to this seven-day written notice condition are STS' rights to terminate this Agreement as set forth in Sections 1, 4 and 8 of the Agreement.
- b. In addition, STS may terminate this Agreement if the Client suspends STS' services for more than sixty (60) consecutive days through no fault of STS.
- c. If this Agreement is terminated, STS shall be paid for services performed prior to the termination date set forth in the notice.

SECTION 16: EMPLOYMENT

a. Client agrees that, prior to the completion of STS' services on the Project, Client and its officers, agents or employees shall neither (1) offer employment to STS' employees, (2) advise STS' employees of employment opportunities with Client, Client's parent or

affiliate organization(s), if any, nor (3) inquire into employment satisfaction of STS' employees.

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SECTION 17: INDEPENDENT CONTRACTOR

a. The relationship between the Client and STS created under this Agreement is that of principal and independent contractor. Neither the terms of this Agreement nor the performance thereof is intended to directly or indirectly benefit any person or entity not a party hereto and no such person or entity is intended to be or shall be construed as being, a third-party beneficiary of this Agreement unless specified by name herein or in an Amendment hereto, executed by STS' authorized representative.

SECTION 18: SEVERABILITY

a. In the event that any provision herein shall be deemed invalid or unenforceable, the other provisions hereof shall remain in full force and effect, and binding upon the parties hereto.

SECTION 19: SECTION HEADINGS

a. The heading or title of a section is provided for convenience and information and shall not serve to alter or affect the provisions included herein.

SECTION 20: SURVIVAL

a. All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between the Client and STS shall survive the completion of services and the termination of this Agreement.

SECTION 21: ASSIGNS

a. Neither the Client nor STS may delegate, assign, sublet or transfer its duties, responsibilities or interests in this Agreement without the written consent of the other party.

SECTION 22: CHOICE OF LAW

a. This Agreement shall be governed by the law of the State of Wisconsin.

SECTION 23: WRITTEN NOTICE

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a. Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the last business address known to the party giving notice.

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FEE SCHEDULE

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> Charges for technical personnel will be made for time spent in the field, in consultation, in preparation of reports and invoices, in administrating contracts and project coordination, and in traveling.

*Overtime will be charged after 8 hours per day; before 7:00 am and after 6:00 pm Monday through Friday; or all day Saturday-technical rate x 1.25. Doubletime will be charged on Sundays or Holidays--technical rate x 2.

Expert Witness Testimony will be billed at the rates shown here x 1.5.

Laboratory test programs will be identified in our proposal and billed out on a lump sum basis. Additional laboratory work will be billed on the following hourly basis plus expenses, expendables and equipment.

The cost of equipment to complete the project will be identified in our proposal.

Drill rig rates include two (2) persons. Additional persons will be charged according to the technical classifications.

ENVIRONMENTAL SERVICES

Technical Classifications Grade

Principal	Per Hour	\$ 140.00
Associate	Per Hour	\$ 136.00
Senior Consultant	Per Hour	\$ 120.00
Consultant	Per Hour	\$ 103.00
Technical Project Staff	Per Hour	\$ 93.00
Technical Staff	Per Hour	\$ 78.00
CAD Specialist	Per Hour	\$ 57.00
Technical Support Staff	Per Hour	\$ 46.00
Senior Technician	Per Hour	\$ 65.00
Technician	Per Hour	\$ 53.00

Technical Support Services

Subsurface Exploration

Drill Rig Mobilization (Local within 30 miles) Per Trip		\$ 300.00
(Out-of-Town)	Per Mile One Way	\$ 6.25
All-Terrain Rig	Per Hour	\$ 200.00
Drill Rig-Class I	Per Hour	\$ 185.00
Drill Rig - Class II	Per Hour	\$ 170.00
PID or FID Rental	Per Day	\$ 75.00

Laboratory Services

Manager	Per Hour	\$ 85.00
Supervisor	Per Hour	\$ 60.00
Technician	Per Hour	\$ 50.00

Site Safety

Personnel Protection: Level C	Per Person Per Day	\$	60.00
Personnel Protection: Level C	Per Person Per Day	\$	170.00
Personnel Protection: Level B		Upor	Request

Expenses and Expendables

All Expenses to Complete the Project **		Cost + 12%	
	Per Mile	\$	0.40
All Expendables to Complete the Project		Co	st + 12%

Milwaukee 6/02 - N73

STS Consultants, Ltd. Consulting Engineers



Williams, Michelle L.

From:David Voight [dvoight@tnainc.com]Sent:Monday, May 17, 2004 1:22 PMTo:Williams, Michelle L.Cc:ripley.laura@epamail.epa.gov; Deborah Orr (Deborah Orr)Subject:FW: C&L Report Comments (WDNR)Hi Michelle,

Attached are your comments regarding the C&L report (along with EPA responses)a. Thanks. Dave

From: David Voight Sent: Monday, May 17, 2004 10:23 AM To: Laura Ripley (ripley.laura@epamail.epa.gov) Cc: Deborah Orr (Deborah Orr) Subject: C&L Report Comments (WDNR)

Hi Laura,

Attached are comments that I received verbally from Michelle Williams at the WDNR following her review of the draft TBA Report prepared for the C&L Industrial Cleaners Site in Kenosha. The responses that we discussed are included (please let me know if any changes are needed).

WDNR Comment	Response
Michelle commented that the methodology	TN&A will provide the feedback received from the
outlined in the EPA Superfund Guide for	WDNR in the report recommendations.
Screening Chemicals, needs to be followed for	
sites that are submitted to the WDNR for closure	
reviews. As you know, this approach allows for	
the actual calculation soil screening levels	
(SSLs) for different contaminants of concern and	
media. Since we were not pursuing closure,	· · · · ·
TN&A did not use this approach in our report.	
Instead, we compared the concentrations	
detected to EPA Region 9 PRGs (an approach	
consistent with that previously used by STS).	
Either approach is conservative and protective.	· · · · · ·
Clarification regarding the data (and resulting	TN&A will revise accordingly.
figures) presenting the STS data vs. the EPA	
data appears needed. Michelle had some	
questions regarding the source of the data (i.e.,	
STS, EPA) shown on Figure 4. She asked that	
we look at including all of the data from both	
investigations together (modify Figure 7).	
Michelle also asked that the construction of the	
STS wells be discussed (temporary wells or	
constructed in accordance with NR141?).	
Michelle speculated that there might be a	Will recheck field data. A site survey is needed to
groundwater "high" in the vicinity of the building.	better determine groundwater flow directions.
She asked that the elevation of MW-4 be	This may be especially helpful in verifying that
checked.	off-site releases are affecting the property.
If another well is installed to identify the	Site constraints (topography, etc) will affect

downgradient extent, she would like to see it placed as far east (towards the back of the property) as possible.	placement of this well. This will be noted in the report.
Clarification regarding which wells were sampled appears needed.	TN&A will revise accordingly.
Where is the location of the piezometer recommended as part of the supplemental investigation? Is it correct to assume that this well will be placed near the GP-1 locn?	Yes. The piezometer location will be clarified.
Mark where the house with the sump is located.	TN&A will revise accordingly

As discussed, I'll call Sharon Krewson-Baker at the City of Kenosha to see if she has any comments. I'll let you know if the issue regarding disposal of the on-site waste comes up.

Dave Voight, PG, CPG Sr. Project Manager/Environmental Services T N & Associates, Inc. 1033 North Mayfair Road Milwaukee, WI 53226

General: (414) 257-4200 Direct: (414) 607-6772 Fax: (414) 257-2492 email: dvoight@tnainc.com

Williams, Michelle L.

From: David Voight [dvoight@tnainc.com]

Sent: Monday, May 17, 2004 1:22 PM

To: Williams, Michelle L.

Cc: ripley.laura@epamail.epa.gov; Deborah Orr (Deborah Orr)

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Dave Voight, PG, CPG Sr. Project Manager/Environmental Services T N & Associates, Inc. 1033 North Mayfair Road Milwaukee, WI 53226

General: (414) 257-4200 Direct: (414) 607-6772 Fax: (414) 257-2492 email: dvoight@tnainc.com



April 28, 2004

Ms. Laura Ripley, SE-4J U.S. Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, IL 60604

Subject: Investigation Report Submittal (Draft) Targeted Brownfields Assessment C&L Industrial Cleaners Site Kenosha, Wisconsin

Technical Direction Document No. S05-0209-009 Tetra Tech Contract No. 68-W-00-129

Dear Ms. Ripley:

T N & Associates, Inc. (TN&A), a subcontractor for the Tetra Tech EM Inc. (Tetra Tech) START, is submitting the enclosed (draft) report for the C&L Industrial Property Site in Kenosha, Wisconsin. As requested, a copy of this document is also being forwarded to Ms. Sharon Krewson with the City of Kenosha, and Ms. Michelle Williams with the Wisconsin Department of Natural Resources.

Please contact me at (414) 607-6772 if you have any questions or comments.

Sincerely,

T N & Associates, Inc.

David S. Voight, PG, CPG

Project Manager

Enclosure

cc: Deborah Orr, U.S. EPA Raghu Nagam, T N & Associates, Inc.