

Ashland Lakefront Property

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***Existing Conditions Report***

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Ashland, Wisconsin

SEH No. WIDNR9401

February 1995

SHORT ELLIOTT HENDRICKSON INC.



MULTIDISCIPLINED.  
SINGLE SOURCE.



421 FRENETTE DRIVE, CHIPPEWA FALLS, WI 54729 715 723-8506 800 472-5881  
ARCHITECTURE • ENGINEERING • ENVIRONMENTAL • TRANSPORTATION

February 27, 1995

RE: Ashland Lakefront Property  
Existing Conditions Report  
SEH No. WIDNR9401

Mr. James R. Dunn, Hydrogeologist  
Wisconsin Department of Natural Resources  
Highway 70 West, P.O. Box 309  
Spooner, WI 54801

Dear Mr. Dunn:

Short Elliott Hendrickson Inc. (SEH) is submitting eight copies of the enclosed report titled, "Existing Conditions Report - Ashland Lakefront Property". This report is the second of three submittals for the project to be completed for the Wisconsin Department of Natural Resources (WDNR) in accordance with our June 22, 1994 agreement. The first submittal (Remedial Investigation Interim Report) was submitted to the WDNR on August 22, 1994. The remaining submittal (Treatability Study/Remedial Action Plan Report) is scheduled to be completed later in 1995.

SEH appreciates the opportunity to provide WDNR with environmental services on this project. If you have any questions regarding the Existing Conditions Report, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cyrus Ingraham', is written over a horizontal line.

Cyrus Ingraham, P.E.  
Senior Project Manager

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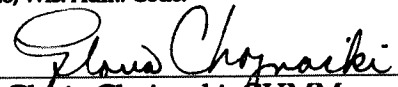
Existing Conditions Report

Ashland Lakefront Property  
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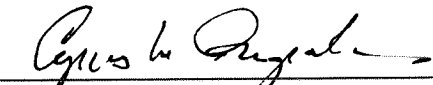
Prepared for:  
Wisconsin Department of Natural Resources – Northwest District  
Spooner, Wisconsin

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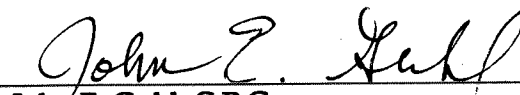
I, Gloria Chojnacki, hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

  
\_\_\_\_\_  
Gloria Chojnacki, CHMM  
Environmental Scientist

I, Cyrus Ingraham, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

  
\_\_\_\_\_  
Cyrus Ingraham, P.E.  
Project Manager

I, John E. Guhl, hereby certify that I am a Hydrogeologist as that term is defined in s. NR 712.03(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. NR 700 to 726, Wis. Adm. Code.

  
\_\_\_\_\_  
John E. Guhl, C.P.G.  
Hydrogeologist

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# Existing Conditions Report

## Ashland Lakefront Property

Ashland, Wisconsin

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### 1.0 Introduction

Short Elliott Hendrickson Inc. (SEH) has completed an Existing Conditions Report for the Ashland Lakefront Property in Ashland, Wisconsin. The property is located along Chequamegon Bay between Ellis Avenue and Prentice Avenue in Ashland, Wisconsin. The ongoing Remedial Investigation (RI) of the property is being performed for the Wisconsin Department of Natural Resources (WDNR) under an agreement with SEH dated June 22, 1994. The scope of the RI includes a Remedial Investigation Interim Report submitted to the WDNR on August 22, 1994, this Existing Conditions Report, and a Treatability Study/Remedial Action Plan Report scheduled for completion later in 1995.

#### 1.1 Purpose

Subsurface contamination has been identified at the Ashland Lakefront Property during past excavation activities and during past environmental assessments of the site performed by Northern Environmental Technologies, Inc. (Northern Environmental) in 1989 and 1991. To-date, the full nature, extent, and sources of contaminants have not been identified. The purpose of SEH's RI was to identify the nature, extent, and potential source(s) of contaminants in soils and groundwater at the Ashland Lakefront Property, as well as the evaluation of potential remedial technologies applicable for the property.

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## 1.2 Scope of Work

The scope of work for the RI was divided into the following three primary tasks.

Task 1: Site Characterization (Remedial Investigation Interim Report completed August 1994)

Task 2: Field Investigation (Existing Conditions Report)

Task 3: Treatability Study and Remedial Action Plan preparation

This report summarizes the results of the Field Investigation (Task 2) which included the following activities:

- Drilling and sampling of fifteen soil borings on the property and vicinity.
- Instrumentation of thirteen borings with temporary groundwater monitoring wells.
- Collection of two rounds of groundwater samples from the temporary wells, a groundwater seep, existing wells, and artesian wells in the vicinity of the site.
- Conversion of five temporary wells to permanent wells.
- Abandonment of eight temporary wells.
- Performance of nine test pits on the subject property.
- Analysis of soil and groundwater samples collected from the property.
- Topographic and monitoring well survey.
- Report preparation.

## 1.3 Project Contacts

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## 2.0 General Site Description

The Ashland Lakefront Property is located in Section 33, Township 48 North, Range 4 West in Ashland County, Wisconsin as shown in Figure 1, "Site Location". The latitude and longitude of the property is 46°35'41" North and 90°53'01" West. The property is approximately ten acres in size, and is currently vacant with no street address. The property is owned by the City of Ashland.

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The Ashland Lakefront Property is located generally east of the intersection of Ellis Avenue and Marina Drive in the City of Ashland. The property is bounded to the north by Chequamegon Bay, to the east by Prentice Avenue and vacant parkland and boat parking areas, to the south by the Wisconsin Central Rail Line, with a bluff and residential dwellings located across the way, and to the west by Ellis Avenue and a pier and breakwater with adjacent boat slips. Businesses in the immediate vicinity include the Chequamegon Hotel (one block southwest of property), the Lake Aire Motel (one block south of the property), and the Northern States Power Company (NSP) offices (one block southeast of property).

Topography of the property is relatively flat, with a gentle slope to the northwest towards Chequamegon Bay as shown in Figure 2, "Existing Conditions". A lakefront bluff is located along the south property line with an approximate rise of 30 feet. A majority of the property is currently maintained as grass lawn. More dense brushy vegetation is present on the south side of the property. A boat parking lot is located on the southwest side of the property. The former City of Ashland Wastewater Treatment Plant (WWTP) facility is located on the northeast corner of the property. A subsurface clay berm was historically constructed around the northern perimeter of the WWTP along the shoreline of Chequamegon Bay. This berm apparently extends from the ground surface to the historical lake bottom. Marina Drive runs in an east-west direction through the property. Riprap comprised largely of concrete debris and quarried stone is located along the shoreline of Chequamegon Bay.

### **3.0 Geology and Hydrogeology**

#### **3.1 Regional Geology**

According to the Wisconsin Geological and Natural History Survey (WGNHS), Pleistocene lake deposits belonging to the Miller Creek Formation occur beneath the native surface soil horizon in the Ashland area (Clayton, 1984). The Miller Creek Formation is generally a red silty clay, which typically contains some gravel, pebbles, and cobbles. The Miller Creek Formation in the Ashland area ranges from approximately 15 to 50 feet in thickness based on a City of Ashland WGNHS geologic log, well drillers reports, and on-site soil borings. The Pleistocene-age, Copper Falls Formation is encountered beneath the Miller Creek and extends to at least 130 feet below grade. The Copper Falls Formation consists of interbedded glacial clays, sands, and gravels. Precambrian age bedrock has not been encountered in the immediate Ashland area, but is anticipated to occur several hundred



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to five hundred feet below grade. Precambrian age sandstone of the Oronto Group is likely to be the first bedrock unit encountered (Mudrey, 1988).

### **3.2 Regional Hydrogeology**

A shallow water table is commonly found at the contact of the Miller Creek Formation with the surficial soils. This saturated zone can locally be up to ten feet thick but is not commonly used as a water supply source. Three aquifers occur in the Lake Superior Basin in the vicinity of Ashland; the Pleistocene sand and gravel aquifer of the Copper Falls Formation, the Precambrian sandstone aquifer, and the Precambrian basalt aquifer (Zaporozec, 1985).

The sand and gravel aquifer of the Copper Falls Formation begins at 25 to 55 feet below the surface in the Ashland area. Sandy till yields low volumes of water (5 to 10 gpm) while sand and gravel lenses can yield up to 100 gpm. Flowing artesian wells are common within the Copper Falls Formation in the Ashland and Bayfield Peninsula area. The artesian head results mainly from the restriction of vertical groundwater movement through the thick horizontally bedded "red clays" of the overlying Miller Creek Formation. Static heads of more than 30 feet above the level of Lake Superior have been reported near Chequamegon Bay.

The Precambrian sandstone aquifer is the primary water supply source for several nearby Bayfield Peninsula municipalities (e.g., Washburn, Bayfield). Moderate to low permeabilities exist within the sandstone. Sandstone wells in the Ashland area typically yield between 5 and 50 gallons per minute (Young, 1974).

The Precambrian basalt aquifer produces moderate to low yields of groundwater. Yields are commonly controlled by fracture densities within the basalt. This aquifer is commonly used as a water supply source south of the Ashland area where it occurs closer to the surface.

### **3.3 Site Geology**

The near-surface soils at the Ashland Lakefront Property are comprised largely of various fill materials placed in the late 1800's and early 1900's. The fill materials were placed along the former shoreline of Chequamegon Bay, eventually extending the shoreline north from its former location by approximately 400 feet. Fill materials identified at the property to-date include wood wastes, clay, silt, peat, and sand. Fill soils are typically comprised of a surficial soil layer overlying a layer of slab wood and sawdust mixed with some soils. Thickness of fill ranges from approximately 5.5 feet to 14.5 feet.

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Fill soils at the property are underlain by 0 to 5.5 feet of sand and silty sand beach deposits, which are in turn underlain by lacustrine and glacial till units comprised largely of clays (Miller Creek Formation). The clay units extend to depths ranging from 26 feet to 56 feet below ground surface in borings previously performed on the property. The clay units were not penetrated during this phase of investigation. The clay units are underlain by silty sand and gravel water-bearing glacial outwash and glacial till deposits (Copper Falls Formation) which were present to the maximum depth previously penetrated at the property (61 feet). No borings to bedrock have been performed on the property to-date.

### **3.4 Site Hydrogeology**

A shallow groundwater table is present at the property in fill materials and soils overlying the clay layer. Depth to groundwater ranges from approximately two feet to nine feet below ground surface on the Ashland Lakefront Property. Groundwater elevation data from the permanent and temporary monitoring wells on the property is presented in Table 1, "Summary of Groundwater Elevation Data".

The deeper silty sand and gravel glacial outwash and glacial till units comprise an aquifer which is confined by the overlying clay layers (the clay layers act as an aquitard between the shallow saturated zone and the deeper confined silty sand and gravel aquifer). The recharge zone for the deeper aquifer is in the upland regions south of Ashland. A strong upward hydraulic gradient is present in the silty sand and gravel aquifer, with artesian conditions observed in wells screened in this unit. An artesian head of approximately 17 feet above existing ground surface was measured in an on-site artesian well during the Northern Environmental assessment of the site. Two existing artesian wells screened in the deeper aquifer are present in the proximity of the property.

### **4.0 Previous Investigations**

Previous investigations of the site includes a 1989 and 1991 Environmental Assessment performed by Northern Environmental and site characterization activities performed by SEH as described in the August 22, 1994 Interim Report. Several areas of concern were identified during previous site investigations. The following subsections describe the investigative activities performed and the areas of concern identified during previous investigation of the site.

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#### **4.1 Northern Environmental Assessment**

Northern Environmental performed an Environmental Assessment of the site in 1989 and in 1991 as part of a proposed expansion project for the former City of Ashland WWTP. Northern Environmental's assessment focused on creosote treatment of wood timbers reportedly conducted on the property prior to the 1920's. Northern Environmental's 1989 assessment included the drilling of eight soil borings and installation of three groundwater monitoring wells and analysis of soil and groundwater samples.

Northern Environmental's 1991 assessment consisted of the excavation of three test pits to the south and east of the former WWTP. One composite soil/wood sample and one groundwater sample were collected from the test pits and analyzed for toxicity characteristic leaching procedure (TCLP) Cresol, volatile organic compounds (VOCs), and polynuclear aromatic hydrocarbons (PAHs). These compounds were selected to investigate the possible presence of creosote.

Northern Environmental's analytical results identified significant concentrations of VOCs and PAHs in site groundwater. The VOCs detected were primarily the benzene, ethylbenzene, toluene, and xylenes (BETX) compounds. A wide range of PAH compounds were detected on site. State groundwater quality standards described in ch. NR 140.10 Wis. Admin. Code were exceeded for benzene, xylenes, benzo(a)pyrene, and naphthalene.

#### **4.2 SEH Site Characterization**

SEH performed initial site investigation activities in June through August 1994 in order to characterize the site. Initial investigation activities performed by SEH included a detailed historical review, topographic survey, geophysical survey, background groundwater sampling and analysis, and an evaluation of contaminant chemistry.

The historical review of the site included review of historical maps, photographs, and documents focusing on past industrial operations in the immediate vicinity of the property. The purpose of the historical review was to identify potential contaminant source areas in the vicinity of the site.

The geophysical survey included electromagnetic and magnetic surveys of the Ashland Lakefront Property. The geophysical program was intended to nonintrusively identify the presence of buried metal objects and determine areas of electromagnetic anomalies which could potentially indicate subsurface areas of contamination.

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Background groundwater sampling of three existing monitoring wells and an on-site artesian well was performed to identify existing concentrations of VOCs, PAHs, and select metals in site groundwater. This data was used in scoping additional investigative activities for the property.

The evaluation of contaminant chemistry was performed to compare existing site contaminants to potential historic sources of site contamination (i.e., on-site wood treatment, manufactured gas plant (MGP) waste disposal). The topographic survey was used to establish existing site conditions and to generate a site plan.

SEH's preliminary findings indicated that site groundwater had been contaminated by a number of parameters. Concentrations of benzene, ethylbenzene, toluene, xylenes, naphthalene, benzo(a)pyrene, and iron exceeded ch. NR 140 Wis. Admin. Code groundwater quality standards in one or more groundwater samples analyzed from the site. A source of site contamination and horizontal extent of contamination were not identified during SEH's preliminary investigation of the Ashland Lakefront Property.

#### **4.3 Potential Areas of Concern**

SEH's preliminary investigation results combined with the results of Northern Environmental's assessment were used to identify potential areas of concern to be addressed during subsurface investigation of the site. The potential areas of concern identified were as follows:

- Location marked as "Coal Tar Dump" on 1951 historical site map.
- Electromagnetic low conductivity anomalies on the south-southeast and north-northwest portions of the property.
- Deep magnetic anomaly located northeast of the existing WWTP.
- The potential presence of numerous small buried ferrous metal objects on the west side of the property, based on the magnetometer survey.
- The presence of elevated concentrations of VOCs, PAHs, and iron in site groundwater.
- The lack of definition of horizontal extent of contamination (including potential off-site contaminant migration and/or potential source area(s)).
- Area of groundwater seepage exhibiting an apparent sheen observed on the south side of the property.

These potential areas of concern were used to select the scope of activities for the investigation of the property.

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## 5.0 Field Investigation

A field investigation of the property was performed by SEH from September through December 1994. The investigation was performed in general accordance with the Investigation Work Plan outlined in SEH's August 1994 Interim Report. Methods used during the field investigation are described in detail in Appendix A, "Field Methodologies".

### 5.1 Test Pit Excavation

A total of nine test pits were excavated on the Ashland Lakefront Property by Ashland Construction Co. (subcontractor to SEH) on September 7, 1994. Test pit locations and orientations are depicted on Figure 2. The locations excavated were selected to address the following concerns:

Location	Concern
TP-1, TP-2, and TP-3	Potential small buried metal objects identified during magnetometer survey
TP-4	Area marked "Coal Tar Dump" on a 1951 historical site map by Greeley and Hanson.
TP-5 and TP-6	Low conductivity anomaly on south side of property
TP-7	Low conductivity anomaly on north side of property
TP-8	Deep magnetic anomaly identified during magnetometer survey.
TP-9	Potential demolition debris or solid waste in this area

Test pit excavations were performed with a backhoe under the direction of an SEH hydrogeologist. Excavated soils were screened in the field for the presence of VOCs using a flame ionization detector (FID). Excavated soils were used as backfill after completion of test pit excavation (cleaner soils were placed over the top of apparently contaminated soils). Test pit logs are presented in Appendix B, "Test Pit Logs".

The test pits were excavated to depths ranging from six to ten feet below ground surface. Groundwater filled all test pits except TP-6 during the excavation process (test pit TP-6 was excavated in a clay-filled utility trench). Consequently, lithologic observations below the water table were based on observations of excavated soils (the bottoms of the test pits were not visible). Fill material was encountered at each test pit location, and extended to the bottom of each test pit except TP-3, where natural clay soil was encountered 6 feet below ground surface. Fill materials generally consisted of a 1 to 5 foot thick soil layer overlying wood waste. Some demolition debris and/or solid

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waste was observed in the soil fill layer at test pits TP-2, TP-7 and TP-9. These materials included metal pieces, concrete, bricks, bottles, and cinders. The metal pieces included in the debris and solid waste generally correlate to the anomalies identified during the shallow magnetometer survey of the property. A vertical steel pipe (apparent abandoned well casing) was exposed during the excavation of TP-8, and was apparently responsible for the deep magnetic anomaly in this location. A black tarry substance was noted at numerous test pit locations. It could not be determined if the tarry substance was responsible for the conductivity anomalies detected on the site. The presence or absence of a coal tar dump near TP-4 was not ascertained.

One to two soil samples were collected from each test pit for laboratory analysis. Samples were analyzed for VOCs, PAHs, total cadmium (Cd), total lead (Pb) and total selenium (Se). In addition, one sample collected from the soil/refuse layer was analyzed for polychlorinated biphenyls (PCBs).

## **5.2 Soil Borings/Temporary Wells**

A total of twelve soil borings were initially drilled on the Ashland Lakefront Property by Huntingdon TCT (subcontractor to SEH) to define the horizontal and vertical extent of soil and groundwater contamination on the property. The locations of soil borings and temporary wells are depicted on Figure 2. Soil boring logs are presented in Appendix C, "Soil Boring Logs".

Initial soil boring activities were performed under the direction of a SEH hydrogeologist from September 6 through 8, 1994. Soil borings were performed using a track-mounted rotary drill rig and hollow-stem augers. Soil samples were collected at approximate 2.5 foot intervals using standard penetration test (SPT) methods (ASTM D1586). Soil samples were field-screened for the presence of VOCs as they were collected using a FID. One to three soil samples from each boring were selected for laboratory analysis. Sample selection was based in part on field FID readings, visual observations, and sample recovery volume. Soil samples were analyzed for VOCs, PAHs, Cd, Pb and Se.

Upon completion of drilling, each of the 12 initial borings was instrumented as a temporary monitoring well. The temporary wells were installed in general accordance with ch. NR 141, Wis. Admin. Code with the exception that protective steel casings were not installed. Locking caps were placed on the top of the PVC casings to maintain well security. The well screens were installed from 4 to 14 feet below ground surface to generally intersect the water table above the

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natural clay layer and to provide sufficient height above the screen for a bentonite seal. Monitoring well construction details are provided in Appendix D, "Well Construction Documentation".

### **5.3 Well Sampling**

Upon completion of well installation, the temporary wells were developed in accordance with ch. NR 141 Wis. Admin. Code guidelines. Well development forms are included in Appendix D. Two rounds of groundwater samples were collected from the temporary wells, three existing permanent wells, and two nearby artesian wells. The samples were analyzed for VOCs, PAHs, total organic carbon (TOC) and in some samples, select metals (arsenic, chromium, copper, lead, zinc, cadmium and/or selenium).

### **5.4 Seep Sampling**

Two groundwater samples were collected from a seep located on the southern portion of the site. The samples were collected concurrently with the two temporary well sampling rounds. The samples were collected directly from the seep, preserved as necessary, and analyzed for VOCs and PAHs.

### **5.5 Permanent Well Installation**

Upon review of the two rounds of groundwater data, four of the twelve temporary wells were selected for conversion to permanent wells. The wells selected (TW-6, TW-9, TW-11, and TW-12) were chosen to optimize distribution of permanent sampling points on the site, and to provide relevant design data for site remediation. The wells selected as permanent monitoring points were fitted with steel above-ground locking protective casings. Wells not selected for conversion were abandoned in accordance with ch. NR 141 Wis. Admin. Code. Well abandonment forms are presented in Appendix D.

### **5.6 Upper Bluff Investigation**

The analytical results from both rounds of groundwater sampling were used to identify areas where concentrations of contaminants existed. Upon review of the groundwater results, there appeared to be an area where groundwater was impacted with significant concentrations of PAHs and BETX compounds in the proximity of the seep and TW-9. The concentrations generally decreased radially moving away from this location. Based on these results, it appeared likely that a source of site contamination was present either in the vicinity of the seep and TW-9 or hydraulically upgradient from this location. Historical Sanborn Fire Insurance Maps of this location were again reviewed to see if there was any indication of potential

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contaminated source areas (i.e., pits, tanks). No indication of a potential on-site source was revealed during the historical map review of the TW-9/seep area. This area appears to have been used for railroad spurs. Physical evidence of a potential on-site source area (pits, tanks, etc.) was not observed in the borings and test pits performed near TW-9. A former ravine on the upper bluff was observed on several early Sanborn maps of the area. The mouth of this former ravine appears to have previously discharged in the immediate vicinity of the seep and TW-9.

Based on site topography, the likely upgradient direction is up the bluff to the south. Since this area was not included in SEH's original investigation, the WDNR requested additional investigation of the upper bluff area, including investigation of the former ravine (possible conduit for movement of contaminants).

Three additional soil borings (B-1, B-2, and B-3) were performed on the upper bluff on November 21 and 22, 1994 under the direction of SEH. The borings were located on the south side of St. Claire Street between Prentice Avenue and 3rd Avenue. The boring locations were selected to identify the location of the former ravine in this area. Soil samples were collected continuously from two feet below ground surface to the bottom of each borehole using SPT methods. Soil boring logs are included in Appendix C.

Thickness of fill soils was approximately nine feet at B-1, nineteen feet at B-2, and three feet at B-3. Since the ground surface in this area is relatively flat, it appears the former ravine was located in the proximity of B-2. Field FID screening and visual observation of soil samples indicated VOC contamination was present in the proximity of B-2. Two soil samples were collected from B-2 and analyzed for concentrations of VOCs and PAHs.

Upon completion of drilling, boring B-2 was instrumented as a groundwater monitoring well (TW-13). The well screen was placed to intersect the saturated portion of fill soils. A flush-mounted protective casing was installed to avoid damage from traffic. A well construction detail and well development form is included in Appendix D.

Well TW-13 was developed and sampled on December 2, 1994. One round of groundwater samples was collected from TW-13 for VOC and PAH analysis. The sampling of TW-13 was not concurrent with groundwater sampling in the remaining site wells.



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## **5.7 Shallow Aquifer Characterization**

Several rounds of water level elevations were recorded in the site monitoring wells in order to determine direction of groundwater flow and horizontal hydraulic gradients. Water level readings are summarized on Table 1, "Summary of Groundwater Elevation Data".

Field hydraulic conductivity tests were performed by SEH on the three existing wells (MW-1, MW-2 and MW-3) and the five new wells (TW-6, TW-9, TW-11, TW-12, and TW-13). An Aquistar DL-1 data logger was used to record the bail down test data on each well except TW-13, where an electric water level indicator and stopwatch were used. The hydraulic conductivity tests were performed by instantaneously lowering the head of water in each well and then measuring the rate of recharge. The hydraulic conductivity values for each well were then computed using the AQTESOLV® computer program. Hydraulic conductivity results for each well are presented in Appendix E, "Hydraulic Conductivity Results".

## **6.0 Investigation Results**

The results of SEH's field investigation and observations were used to identify the existing conditions at the Ashland Lakefront Property. The existing conditions identified are defined in the following subsections.

### **6.1 Soils**

The stratigraphy and degree and extent of on-site soil contamination were identified as part of the investigation. The following subsections describe the results of the investigation of site soils.

#### **6.1.1 Site Stratigraphy**

As identified in the site investigation section, fill soils at the site generally consist of a earthen fill layer underlain by a layer of wood waste fill mixed with soil in places. The fill soils are generally underlain by a thin sand or silty sand layer (likely beach deposit) which is in turn underlain by lean clay glacial soils of the Miller Creek Formation. The distribution of the various soil and fill units encountered during the investigation is depicted in Geological Cross-Sections A-A' and B-B' (Figure 3). Approximately 100,000 cubic yards of earthen fill, 100,000 cubic yards of wood waste fill, and 25,000 cubic yards of natural sand soils are present in the near-surface soils at the property.

#### **6.1.2 Field Headspace Results**

The relative levels (instrument units) of VOCs identified during headspace analysis of site soil samples are summarized in Table 2, "FID Headspace Results". As reflected in Table 2, VOCs were detected

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in headspace analysis in one or more soil samples from all soil borings except TW-7. The highest concentrations of VOCs identified during headspace analysis generally occurred within the wood waste fill (where present). Concentrations of VOCs generally decreased significantly when the cohesive soils of the Miller Creek Formation were encountered.

### **6.1.3 Soil Analytical Results**

Soil analytical results from Enviroscan Environmental and Analytical Services laboratory (Wisconsin Lab Certification No. 737053130) are provided in Appendix F, "Soil Analytical Results". A summary of soil analytical results is provided in Table 3, "Summary of Soil Analytical Results - Volatile Organic Compounds", Table 4, "Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons", and Table 5, "Summary of Soil Analytical Results - Metals".

As indicated in Table 3, several VOCs were detected in soil samples collected during the field investigation. VOCs were detected in one or more soil samples collected from each boring or test pit performed on the site (except borings B-1 and B-3 on the upper bluff, where no soil samples were analyzed).

As reflected in Table 4, PAHs were detected in soil samples collected from each boring and test pit except TW-7, B-1 and B-3. The highest concentrations of PAHs appear to be located in the wood waste layer as well as the underlying sand layer.

Table 5 lists the metals detected in soil samples collected from the site. Cadmium and selenium were detected in relatively low concentrations in several isolated samples. Lead was detected in numerous soil samples collected from the site. The highest concentrations of lead appear to occur in the upper fill soil layer. Horizontally, concentrations of lead are highest in a wide band of soil on the northern portion of the site (Figure 4, "Total Lead Soils Isoconcentration Map").

## **6.2 Groundwater**

The hydrogeologic conditions and degree and extent of on-site groundwater contamination were determined as part of this investigation. The following subsections describe the results of the groundwater investigation activities performed to date.

### **6.2.1 Site Hydrogeology**

A groundwater contour map of the property including the upper bluff area is presented in Figure 5, "Groundwater Contour Map". As depicted in Figure 5, direction of shallow groundwater flow in the

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upper bluff is generally to the north toward the site. The groundwater surface at the site is relatively flat, with direction of groundwater flow likely controlled in part by the water elevation of Chequamegon Bay. However, due to the apparent inflow from the bluff, a general northerly component of shallow groundwater flow at the site is likely. Horizontal hydraulic gradients in the upper bluff are approximately 0.07 ft/ft.

In situ hydraulic conductivity test results were measured to evaluate permeability of the various shallow geologic units on-site. The hydraulic conductivity results indicate the wood waste fill is very permeable, with hydraulic conductivity values ranging from approximately  $1 \times 10^{-1}$  to  $6 \times 10^{-4}$  cm/sec. The hydraulic conductivity of the sand layer underlying site fill soils was measured at approximately  $3 \times 10^{-5}$  cm/sec. (TW-11). The hydraulic conductivity of fill soils located in the former ravine was measured at approximately  $1 \times 10^{-4}$  cm/sec (TW-13).

#### **6.2.2 Groundwater Analytical Results**

Groundwater sample analytical results from Enviroscan Environmental and Analytical Services Laboratory are provided in Appendix G, "Groundwater Analytical Results". Groundwater Analytical Results are summarized on Table 6, "Summary of Groundwater Analytical Results - Volatile Organic Compounds", Table 7, "Summary of Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons", and Table 8, "Summary of Groundwater Analytical Results - Metals".

As indicated on Table 6, several VOCs were identified in site groundwater. The concentrations of VOCs were compared to State groundwater quality standards established in ch. NR140.10 and NR 140.12, Wis. Admin. Code.

Concentrations of benzene, ethylbenzene, toluene, xylenes and naphthalene exceeded their respective Enforcement Standards (ES) and Preventive Action Limits (PALs) in one or more groundwater samples collected during the investigation.

The most prevalent compounds present in most samples were benzene, ethylbenzene, xylenes, and naphthalene. Naphthalene also is included in the PAH scan. In some cases, the concentrations of naphthalene vary considerably for individual samples due to the different analytical methods used for VOC and PAH analysis. Elevated concentrations of toluene were present in the sample collected from the former ravine (TW-13).

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Isoconcentrations of total BETX were plotted as shown on Figure 6, "Total BETX Groundwater Isoconcentration Map". As depicted on Figure 6, the highest concentration of BETX compounds was in the former ravine area (TW-13). The next highest concentrations were in the groundwater seep and TW-9 (near the mouth of the former ravine). The concentration of BETX generally decreases radially to the north moving away from the mouth of the former ravine.

As reflected in Table 7, all the PAHs included on the EPA Method 8270 list were present in one or more groundwater samples collected from the site. The concentrations of benzo (a) pyrene and naphthalene exceeded their respective ES and/or PAL in several groundwater samples collected during the investigation. Wisconsin groundwater quality standards for the remaining PAHs identified have not been established.

An Isoconcentration map of total PAHs in groundwater was plotted for the site (Figure 7, "Total PAH Groundwater Isoconcentration Map"). As shown in Figure 7, the highest concentration of total PAHs was located to the north of the former ravine in the seep sample and in TW-9, and in the former ravine at TW-13. Concentrations of PAHs generally decrease radially to the north moving away from the mouth of the former ravine. The total PAH concentrations increase somewhat along the northeast side of the site. This may be attributable in part to the clay berm at this location restricting groundwater flow to the sand layer located directly over natural clays. The heavier PAH compounds may be more concentrated in this sand layer.

The metals detected in site groundwater samples are listed on Table 8. As indicated on Table 8, concentrations of arsenic (two samples) and chromium (one sample) exceeded their respective PALs. No ESs were exceeded for either of these parameters. The presence of arsenic in samples collected from both artesian wells indicates some or all of the arsenic detected in site groundwater may be naturally occurring. Chromium was not detected in the artesian wells. However, naturally occurring chromium at concentrations between 4 and 40  $\mu\text{g}/\text{l}$  has been identified in thirteen wells in Ashland and Bayfield Counties (Mudrey, 1992). The localized chromium detected in site groundwater may thus be naturally occurring.

Lead was detected in numerous site groundwater samples in concentrations exceeding the PAL for lead. The locations of elevated lead concentrations in groundwater were widely scattered across the site and relatively inconsistent between sampling rounds. Typical background concentrations for lead in the Ashland area were not

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identified. Lead was detected in one sample collected from one of the artesian wells in the vicinity of the site, so some naturally occurring lead may be present in site groundwater. However, based on elevated lead concentrations in site fill soils, it is possible that the lead in site groundwater may be attributed in part to leaching from the upper fill soils present onsite.

Concentrations of iron exceeding the ES were detected in several groundwater samples collected from the site. The location of elevated iron concentrations were widely scattered across the site, and the consistency between sampling rounds was poor. A source of iron contamination on-site was not identified. However, the elevated iron concentrations may be due in part to historical iron ore transportation activities at the Port of Ashland.

## **7.0 Discussion of Results**

The results of the investigation of the Ashland Lakefront Property indicated that the property has been impacted by VOCs, PAHs, and metals. Consequently, an evaluation of the results relative to the composition of the contamination at various locations, the distribution of contamination, and the potential sources of the contamination was performed.

Three potential sources of contamination were identified as a result of the historical review of the site which SEH presented in the Remedial Investigation Interim Report dated August 1994. These include:

- The possibility that wood treatment occurred on-site using coal tar/creosote compounds;
- The potential for on-site disposal or migration of wastes from off-site related to the operation of an historical manufactured gas plant; and,
- The disposal of various waste materials in the fill placed on-site through the long-term development and use of the site.

The composition and distribution of on-site contaminants were used to evaluate the potential source areas described in the following sections.

### **7.1 Contaminant Composition**

Groundwater samples were collected from selected locations across the site and from a hydraulically upgradient temporary well located south of the site at the top of the bluff. Groundwater sample results, as discussed in Section 6.5, are summarized in Tables 6, 7, and 8.

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SEH calculated individual component percentages for analyzed parameters at each sampling point. These component percentages were calculated using the sum total of compounds analyzed in the categories of BETX, PAH, and dissolved metals. An attempt was then made to assess if component parameter composition across the site remained constant. Data from the second round of groundwater analyses was used to correlate results with Isoconcentration maps plotted. These will be discussed in Section 7.2.

Results of the comparative analysis showed considerable ratio variation of individual parameters both within each sampling point and between various points. While the percentage of some parameters increased from point to point, others decreased with no apparent pattern. This is understandable for several reasons. Based on the age of the site and potential length of time the contaminants may have been on site, aging, biodegradation, partitioning and fractionation may have produced materials having different characteristics and compositions than those of the original contaminants deposited. These varying components would be dependent on site-specific environmental conditions.

A second reason that parameter compositions may vary is because the original contaminant chemistry likely varied over time. For example, the composition of MGP wastes is dependant upon the process employed, the volume of coal in the reaction vessel, the reaction temperature, the source of coal, and the oxygen present in the vessel from leakage (Bart, 1988). The historical review conducted by SEH and presented in the Remedial Investigation Interim Report (August 1994) indicated that a process shift from coal carbonization to a water gas process did occur at the MGP in the vicinity of the site and other variables also likely changed over time. Another example of original contaminant chemistry change which could affect the composition of the potential contaminants presently at the site would be that creosote composition has varied over time. Prior to the mid 1930's when creosote was a non-regulated product, as much as 50 percent of total creosote oil may have been comprised of naphthalene (Dramm, 1994). However, no specific formula defined the product and conceivably creosote component relationships varied with individual batches.

A third reason for parameter composition variation is that the individual compounds which are detected across the site each have specific chemical properties which will affect their fate and transport through a medium. Soil attenuation factors further influence the movement of these parameters over time. Moreover, the unique nature of the medium, namely wood waste, further complicates the fate and transport model by making it less predictable.

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Based on the fact that no specific discernible pattern was obvious, a more generalized approach to identifying potential source areas was adopted. According to a Gas Research Institute document titled "Management of Manufactured Gas Plant Sites - Vol. 1", chemicals of concern have been identified based on a survey of 33 MGP sites. Chemicals of concern which were identified in groundwater at a minimum of 50% of the sites in the survey are included in Table 9, "Characteristic Compounds Found in Groundwater at MGP Sites". Typical BETX and PAH compounds in Table 9 have been found associated with the Ashland site also.

The period of time when wood treatment could have occurred corresponds to the time frame when creosote formulas were undefined, therefore, a standard chemical composition of creosote was not available. Typical components of creosote are listed in Table 10, "Major Components in Creosote" (Lorenz and Gjovik, 1972). Many of these components are found on site. However, no treatment pits or buildings were noted historically or physically observed during the site investigation.

## **7.2 Contaminant Distribution**

Isoconcentrations of total BETX and PAH compounds indicate the highest concentrations were found in the vicinity of the former ravine. Concentrations of BETX and PAH generally decrease radially to the north moving away from the mouth of the former ravine.

Based on a review of historical Sanborn Maps of the site, a number of railroad spurs were historically located in the general area of highest site contamination (seep area). These obstructions would have limited the potential for wood treatment pits in this location. In addition, the observations made during field investigation activities in this area did not indicate the presence of structures (pits, sumps, etc.) related to historical wood treatment.

The historical Sanborn maps of the vicinity indicate that the MGP previously located upgradient handled waste materials in the vicinity of the former ravine. The investigative results (soil stratigraphy, soil and groundwater analytical results) indicate that contamination similar in nature to that found on the Lakefront Property exists in the former ravine adjacent to the former MGP. These results indicate that the ravine may have been and potentially continues to be a conduit for contamination onto the Ashland Lakefront Property. However, no environmental data between the MGP site (TW-13) and the Ashland Lakefront Property (TW-9) was obtained during this investigation. Data from this area would show whether or not the contamination extends down the former ravine.

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### **7.3 Anomalies**

Based on a review of laboratory results of soils and groundwater samples at the site, the following anomalies in the results were noted.

- Elevated concentrations of toluene were noted in the samples collected from MW-13. Concentrations of toluene were generally much lower in the samples collected from the Ashland Lakefront Property. The presence of elevated toluene in the upper bluff may be from the previously stated differences in constituents in MGP waste materials generated over time, or possibly due to an additional contaminant source area present in the upper bluff area.
- Elevated concentrations of 1,2,4-Trimethylbenzene concentrations were identified at two locations on the site. One area is east of the ravine near the base of the bluff at TW-3. The other area is west of the ravine at TW-5 and TW-6. This compound has been associated with diesel fuel. Based on the noted absence of this compound from both the seep and upper bluff samples, and the proximity of the location of the two areas to the railroad tracks, a possible source for this compound may be associated with on-site activities.
- The concentrations of VOCs and PAHs were significantly lower in samples collected from TW-4 compared to immediately adjacent wells. This may be due to an isolated change in geology limiting contaminant movement in the vicinity of TW-4.
- Elevated lead concentrations were identified in several soil samples collected across the site. The highest concentrations were found in a wide band along the northern portion of the site. Vertically, lead concentrations appeared to be highest in shallower samples obtained from the soil fill overlying the wood waste. The source of the lead was not determined during this investigation; however, it may be related to historical filling of the site with various materials.

### **8.0 Conclusions and Recommendations**

SEH's Existing Conditions Report was prepared to identify the extent, magnitude, and potential source areas of subsurface contaminants previously identified at the Ashland Lakefront Property. Conclusions of SEH's investigation and recommendations are presented in the following subsections.

#### **8.1 Conclusions**

##### **8.1.1 Site Soils**

The Ashland Lakefront Property is generally underlain, in descending order, by earthen fill, wood waste fill, and sand/silty sand layer, a lean clay unit (Miller Creek Formation) and a Sand and Gravel Till Unit



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(Copper Falls Formation). Downward movement of contaminants appears to be limited by the cohesive soils of the Miller Creek Formation and by the strong upward hydraulic gradient of the Copper Falls Formation.

#### **8.1.2 Site Contaminants**

Site soils and groundwater have been contaminated extensively by VOCs, PAHs, lead, and/or iron. Concentrations of several parameters exceed existing ch. NR 140 Wis. Admin. Code groundwater quality standards.

VOC and PAH contamination in soil and groundwater extend across the site and upgradient in the vicinity of the former MGP. The concentrations are highest near the mouth of the former ravine and upgradient at the MGP. The concentrations generally decrease radially across the site from the former ravine area. No environmental data between the mouth of the ravine and the former MGP was obtained during this investigation.

Lead and iron contamination exists in soil and/or groundwater at the site. Lead contamination appears to be highest in shallow fill soils along the northern portion of the site. Elevated iron concentrations were found in groundwater samples from various wells.

PAH and VOC contamination has been identified on the surface of the property in the vicinity of the seep. No other surficial contamination was identified at the property.

The horizontal extent of contamination has not been identified offsite. It is possible contaminants have moved off-site to the north and west in lake sediments and into the waters of Chequamegon Bay. It is also possible contamination extends off-site to the east of Prentice Avenue. Off-site movement of contaminants to the south does not appear likely (outside of the former ravine area) based on direction of shallow groundwater flow in the bluff area.

#### **8.1.3 Contaminant Source Areas**

VOC and PAH contamination appears to be emanating across the site from the proximity of the mouth of the former ravine located on the south side of the property. Based on hydraulic gradients in this bluff area, and the presence of VOC and PAH contaminants within the former ravine soils and groundwater (TW-13) it appears on-site contamination may have originated from past contamination of the former ravine. The source of on-site lead and iron contamination was not identified.

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## **8.2 Recommendations**

Based on the results of SEH's investigation of the Ashland Lakefront Property, the following additional activities are recommended for the site:

- Completion of a Site Remediation Feasibility Study (FS) (currently being prepared by SEH). The FS should be conducted in general accordance with CERCLA procedures. Based on the potential cost of remediation associated with sites of this size and complexity, feasible technologies for insitu and exsitu remediation warrant evaluation.
- Additional investigation of potential off-site contamination. Recommended activities to include offshore sediment and groundwater sampling and analysis, and soil and groundwater sampling east of Prentice Avenue.
- Fencing of seep area to limit possible exposure of public to contaminants.
- Evaluation of the potential for wastes generated during remediation to be classified as hazardous should be completed.
- Evaluation of the results of investigative activities performed by others in the upper bluff area.

## **9.0 Standard of Care**

The conclusions and recommendations contained in this report were arrived at in accordance with generally accepted professional engineering practice at this time and location. Other than this, no warranty is implied or intended.

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## References

1. Bart, E.F., 1988. "The Chemistry of Coal Tar Pitch". Allied Signal, Inc. Coal Tar Pitch Technical and Environmental Seminar.
2. Clayton, L. 1984, "Pleistocene Geology of the Superior Region, Wisconsin". Wisconsin Geological and Natural History Survey, Information Circular No. 46.
3. Dramm, J.R., 1994. U.S. Department of Agriculture, Forest Products Laboratory. Personal correspondence.
4. Lorenz, L.F., and Gjovik, L.R., 1972. "Analyzing Creosote by Gas Chromatography: Relationship to Creosote Specifications". American Wood-Preserving Association.
5. Mudrey, M.G. and Bradbury, K.R., 1992. "Evaluation of NURE Hydrogeochemical Data for Use in Wisconsin Groundwater Studies". Wisconsin Geological and Natural History Survey, Open File-Report 93-2.
6. Mudrey, M.G., and Brown, B.A., 1988, "Summary of Field Mapping in the Superior Map Sheet". Wisconsin Geological and Natural History Survey, Open File Report 88-7.
7. Young, H.L., and Skinner, E.L., 1974, "Water Resources of Wisconsin Lake Superior Basin", Wisconsin Geological and Natural History Survey, Hydrologic Investigations Atlas HA-524.
8. Zaporozec, A., and Cotter, R.D., 1985. "Major Groundwater Units of Wisconsin". Wisconsin Geological and Natural History Survey.

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## **Tables**

**Table 1 – Summary of Groundwater Elevation Data**

**Table 2 – FID Headspace Results**

**Table 3 – Summary of Soil Analytical Results - Volatile Organic Compounds**

**Table 4 – Summary of Soil Analytical Results - Polynuclear Aromatic Hydrocarbons**

**Table 5 – Summary of Soil Analytical Results - Metals**

**Table 6 – Summary of Groundwater Analytical Results - Volatile Organic Compounds**

**Table 7 – Summary of Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons**

**Table 8 – Summary of Groundwater Analytical Results - Metals**

**Table 9 – Characteristic Compounds Found in Groundwater at MGP Sites**

**Table 10 – Major Components in Creosote**

**Table 1  
Summary of Groundwater Elevation Data**

	MW-1	MW-2	MW-3	TW-1	TW-2	TW-3	TW-4	TW-5	TW-6	TW-7	TW-8	TW-9	TW-10	TW-11	TW-12	TW-13
Top of Casing Elevation (MSL)	608.40	608.23	612.10	608.48	606.91	609.30	609.89	608.95	609.20	609.13	606.74	608.84	606.40	606.80	608.45	634.71
Land Surface Elevation (MSL)	605.57	605.30	609.47	605.71	604.46	606.70	607.40	606.29	606.70	606.37	604.11	606.29	603.91	603.48	606.03	635.18
<b>Date</b>	<b>Depth to Groundwater Below Top of Casing (Feet)</b>															
06/28/94	8.59	6.89	10.80	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/94	6.65	6.56	9.49	--	--	--	--	--	--	--	--	--	--	--	--	--
09/14/94	--	--	--	6.60	5.21	--	--	6.66	--	6.31	4.90	--	4.58	4.55	6.61	--
09/15/94	6.59	6.47	10.10	6.50	--	7.47	7.83	--	7.08	--	5.71	6.95	--	--	--	--
09/19/94	6.60	6.50	10.53	6.83	5.28	7.65	8.16	7.24	7.43	6.30	5.01	7.11	4.72	6.00	6.79	--
11/22/94	7.26	7.25	11.31	7.52	5.97	8.33	8.85	7.91	8.23	7.48	5.67	7.92	5.45	6.06	7.52	11.90
12/13/94	7.19	7.07	11.15	--	--	--	--	--	8.06	--	--	7.66	--	5.30	7.29	12.36
<b>Date</b>	<b>Groundwater Elevation (MSL)</b>															
06/28/94	599.81	601.34	601.30	--	--	--	--	--	--	--	--	--	--	--	--	--
08/23/94	601.75	601.67	602.61	--	--	--	--	--	--	--	--	--	--	--	--	--
09/14/94	--	--	--	601.88	601.70	--	--	602.29	--	602.82	601.84	--	601.82	602.25	601.85	--
09/15/94	601.81	601.76	602.00	601.98	--	601.83	602.06	--	602.12	--	601.03	601.85	--	--	--	--
09/19/94	601.80	601.73	601.57	601.65	601.63	601.65	601.73	601.71	601.77	602.83	601.73	601.73	601.68	600.80	601.66	--
11/22/94	601.14	600.98	600.79	600.96	600.94	600.97	601.04	601.04	600.97	601.65	601.07	600.92	600.95	600.74	600.93	622.81
12/13/94	601.21	601.16	600.95	--	--	--	--	--	601.14	--	--	601.16	--	601.50	601.16	622.35

All elevations recorded in Mean Sea Level (MSL) datum  
All depth measurements recorded in feet

**Table 2  
FID Headspace Results**

Sample	Depth (ft)	Media	FID Reading (ppm)
TW-1	0.5-2	Fill Soil	ND
	2-4	Wood Waste	42
	4.5-6.5	Wood Waste	1,000+
	7-9	Wood Waste	1,000+
	9.5-11.5	Wood Waste/Sand	240
	12-14	Clay	60
TW-2	0.5-2	Fill Soil	25
	2-4	Fill Soil/Wood Waste	250
	4.5-6.5	Wood Waste	1,000+
	7-9	Wood Waste	1,000+
	9.5-11.5	Wood Waste/Sand	1,000+
	12-14 14.5-16.5	Clay Clay	40 ND
TW-3	0.5-2	Fill Soil	ND
	2-4	Fill Soil	ND
	4.5-6.5	Fill Soil/Wood Waste	400
	7-9	Wood Waste/Clay	270
	9.5-11.5	Clay	25
	12-14	Clay	60
TW-4	0.5-2	Fill Soil	ND
	2-4	Fill Soil	ND
	4.5-6.5	Fill Soil	38
	7-9	Wood Waste	700
	9.5-11.5	Wood Waste	540
	12-14 14.5-16.5	Silt/Silty Clay Silty Clay	60 10
TW-5	1-2	Fill Soil	ND
	2-4	Fill Soil	ND
	4.5-6.5	Fill Soil	ND
	7-9	Wood Waste	ND
	9.5-11.5	Wood Waste/Sand	40
	12-14 14.5-16.5	Sand/Clay Clay	32 ND
TW-6	1-2	Fill Soil	ND
	2-4	Fill Soil	ND
	4.5-6.5	Fill Soil/Wood Waste	ND
	7-9	Fill Soil/Wood Waste	145
	9.5-11.5	Gravel Fill	50
	12-14 14.5-16.5	Sand Sand/Clay	30 ND

Sample	Depth (ft)	Media	FID Reading (ppm)
TW-7	1-2	Fill Soil	ND
	2-4	Fill Soil	ND
	4.5-6.5	Fill Soil	ND
	7-9	Fill Soil	ND
	9.5-11.5	Sand	ND
	12-14	Clay	ND
	14.5-16.5	Clay	ND
TW-8	0.5-2	Fill Soil	2
	2-4	Fill Soil	150
	4.5-6.5	Wood Waste	325
	7-9	Wood Waste	1,000
	9.5-11.5	Wood Waste/Sand	820
	12-14	Silt	180
TW-9	0.5-2	Fill Soil	ND
	2-4	Fill Soil	2
	4.5-6.5	Wood Waste	70
	7-9	Wood Waste	1,000+
	9.5-11.5	Wood Waste/Silty Sand	1,000+
	12-14 14.5-16.5	Clay Clay	200 50
TW-10	0.5-2	Fill Soil	ND
	2-4	Fill Soil	18
	4.5-6.5	Wood Waste	500
	7-9	Wood Waste	1,000+
	9.5-11.5	Wood Waste/Silty Sand	1,000+
	12-14 14.5-16.5	Silty Sand/Silt Silt	440 230
TW-11	0.5-2	Fill Soil	ND
	2-4	Clay Fill	ND
	4.5-6.5	Clay Fill	ND
	7-9	Clay Fill	ND
	9.5-11.5	Clay Fill	4
	12-14 14.5-16.5	Sand/Silt Silt	250 40
TW-12	0.5-2	Fill Soil	ND
	2-4	Fill Soil	110
	4.5-6.5	Wood Waste	1,000+
	7-9	Wood Waste	1,000+
	9.5-11.5	Wood Waste	1,000+
	12-14 14.5-16.5	Sand Fill Clay	500 250

Sample	Depth (ft)	Media	FID Reading (ppm)
TW-13	2-4	Fill Soil	760
	4-6	Fill Soil	600
	6-8	Fill Soil	860
	8-10	Fill Soil	1,000+
	10-12	Fill Soil	1,000+
	12-14	Fill Soil	1,000+
	14-16	Fill Soil	1,000+
	16-18	Fill Soil	1,000+
	18-20	Fill Soil/Clay	1,000+
	20-22	Clay	1,000+
TP-2	2-4	Fill Soil	ND
	6-8	Wood Waste	240
TP-3	2-4	Wood Waste	1,000+
	4-6	Wood Waste	1,000+
TP-4	6-8	Wood Waste	1,000+
	5-7	Clay Fill	ND
TP-5	6-8	Wood Waste	1,000+
	5-7	Clay Fill	ND
TP-6	6-8	Wood Waste	1,000+
	5-7	Clay Fill	ND

Sample	Depth (ft)	Media	FID Reading (ppm)
TP-8	5-7	Wood Waste	400
B-1	2-4	Fill Soil	ND
	4-6	Fill Soil	ND
	6-8	Fill Soil	4
	8-10	Clay	10
	10-12	Clay	2
	12-14	Clay	2
	14-16	Clay	2
	16-18	Clay	ND
	18-20	Clay	ND
B-3	2-4	Fill Soil	45
	4-6	Clay	ND
	6-8	Clay	ND
	8-10	Clay	ND
	10-12	Clay/Sand	ND
	12-14	Clay	ND
	14-16	Clay	ND
	16-18	Clay	ND
	18-20	Clay	ND

**Table 3**  
**Summary of Soil Analytical Results**  
**Volatile Organic Compounds**  
**Concentrations in micrograms per gram (µg/g)**

Well Number	Depth (ft)	Date Sampled	Media	Parameter												
				Benzene	Ethylbenzene	Naphthalene	p-Isopropyltoluene	n-Propylbenzene	n-Butylbenzene	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Xylenes	sec-Butylbenzene	Toluene	
TW-1	4.5-6.5	9/6/94	Wood Waste	2.60	ND	3.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12-14	9/6/94	Lean Clay	ND	ND	0.293	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-2	9.5-11.5	9/6/94	Wood Waste	ND	ND	ND	1.51	1.85	ND	ND	ND	ND	ND	ND	ND	ND
	14.5-16.5	9/6/94	Lean Clay	ND	ND	0.125	ND	0.020	ND	ND	ND	ND	ND	ND	ND	ND
TW-3	7-9	9/6/94	Lean Clay	ND	ND	1.63	2.81	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-4	7-9	9/7/94	Wood Waste	ND	ND	2.81	0.490	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-5	9.5-11.5	9/7/94	Wood Waste	8.38	38.2	666	ND	ND	25.1	ND	21.4	ND	41.3	ND	ND	ND
	12-14	9/7/94	Sand	ND	ND	0.254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	14.5-16.5	9/7/94	Lean Clay	ND	ND	0.342	ND	ND	0.009	ND	ND	ND	ND	ND	ND	ND
TW-6	7-9	9/7/94	Wood Waste	ND	276	2260	ND	ND	ND	ND	157	ND	197	ND	ND	ND
	9.5-11.5	9/7/94	Gravel Fill	ND	7.91	375	20.2	ND	5.52	ND	5.24	ND	9.37	ND	ND	ND
	14.5-16.5	9/7/94	Lean Clay	0.018	0.014	1.58	ND	ND	0.022	ND	0.053	0.025	0.179	0.065	0.053	0.053
TW-7	12-14	9/7/94	Lean Clay	ND	ND	0.137	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-8	4.5-6.5	9/7/94	Wood Waste	1.92	ND	19.2	2.34	ND	ND	2.79	ND	ND	ND	ND	ND	ND
TW-9	9.5-11.5	9/8/94	Wood Waste	3.05	49.5	863	29.7	6.69	30.1	6.46	24.6	15.8	52.9	ND	ND	ND
TW-10	4.5-6.5	9/8/94	Wood Waste	0.011	ND	0.064	0.066	0.142	0.343	ND	0.079	0.173	0.031	ND	ND	ND
	12-14	9/8/94	Silty Sand/Silt	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-11	12-14	9/8/94	Sand/Silt	ND	2.45	83.6	ND	ND	3.74	ND	2.93	ND	ND	ND	ND	ND
TW-12	4.5-6.5	9/8/94	Wood Waste	ND	ND	0.070	0.019	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-13	14-16	11/21/94	Fill Soil	11.2	12.2	NA	35.9	1.66	4.43	ND	8.56	3.18	13.48	2.45	6.97	6.97
	18-20	11/21/94	Fill Soil	19.8	75.8	NA	ND	6.50	16.8	6.67	62.9	22.6	94.1	ND	43.2	43.2
TP-1	5-7	9/7/94	Wood Waste	2.10	0.469	10.2	1.16	0.850	3.48	ND	1.81	1.36	2.75	ND	ND	ND
TP-2	2-4	9/7/94	Fill Soil	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.029
	6-8	9/7/94	Wood Waste/Fill Soil	0.005	ND	0.019	ND	ND	0.020	ND	ND	ND	ND	ND	ND	0.027
TP-3	2-4	9/7/94	Wood Waste	ND	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-4	4-6	9/7/94	Wood Waste	645	2973	28469	95.1	101	648	190	2994	742	4981	2688	2007	2007
TP-5	6-8	9/7/94	Wood Waste	5.62	51.1	1122	21.3	4.89	54.9	6.20	6.15	17.4	68.8	ND	ND	ND
TP-6	5-7	9/7/94	Clay Fill Soil	0.068	ND	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TP-7	2-4	9/7/94	Fill Soil/Refuse	1.01	0.147	1.23	ND	ND	0.140	0.029	0.187	0.068	0.375	ND	ND	ND
TP-8	5-7	9/7/94	Wood Waste	0.337	0.149	1.57	0.283	0.053	0.058	ND	0.042	0.112	0.232	ND	ND	ND
TP-9	2-4	9/7/94	Wood Waste	0.675	0.323	2.00	0.104	0.056	0.415	0.056	0.282	0.154	0.499	ND	ND	ND

ND = Not detected above laboratory quantitation limit

**Table 4  
Summary of Soil Analytical Results  
Polynuclear Aromatic Hydrocarbons  
Concentrations in micrograms per gram (µg/g)**

Well Number	Depth (ft)	Date Sampled	Media	Parameter																
				Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-Anthracene	Benzo(a)Pyrene	Benzo(b)-Fluoranthene	Benzo(k)-Fluoranthene	Benzo(g,h,i)-Perylene	Chrysene	Dibenzo(a,h)-Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-Pyrene	2-Methyl Naphthalene	Phenanthrene	Pyrene	Naphthalene
TW-1	4.5-6.5	9/6/94	Wood Waste	ND	12.4	3.47	0.271	20.1	12.6	2.61	86.0	5.03	3.03	2.33	1.74	42.8	ND	ND	5.39	ND
	12-14	9/6/94	Lean Clay	0.110	ND	0.048	ND	ND	ND	ND	ND	ND	ND	0.111	0.038	ND	0.092	0.148	0.195	0.149
TW-2	9.5-11.5	9/6/94	Wood Waste	14.8	1.81	4.94	16.9	9.77	8.14	2.62	3.98	13.4	ND	29.6	4.48	3.53	1.08	5.37	50.5	4.09
	14.5-16.5	9/6/94	Lean Clay	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-3	7-9	9/6/94	Lean Clay	1.71	0.233	1.16	1.09	0.862	0.641	0.188	0.492	0.959	ND	1.73	1.15	ND	1.60	3.79	3.13	0.975
TW-4	7-9	9/7/94	Wood Waste	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.616	ND	ND	ND	0.469	0.750	ND
TW-5	9.5-11.5	9/7/94	Wood Waste	349	ND	83.6	34.3	21.4	19.7	4.09	10.1	27.6	ND	66.5	113	8.70	711	426	124	924
	12-14	9/7/94	Sand	0.041	ND	0.047	ND	ND	ND	ND	ND	ND	ND	0.057	ND	ND	0.033	0.192	0.108	0.052
	14.5-16.5	9/7/94	Lean Clay	ND	ND	0.024	ND	ND	ND	ND	ND	ND	ND	0.035	ND	ND	0.025	0.103	0.061	ND
TW-6	7-9	9/7/94	Wood Waste	836	27.3	295	186	126	110	17.1	65.7	118	10.8	276	306	58.5	1,064	1,308	616	1,583
	9.5-11.5	9/7/94	Gravel Fill	35.2	1.32	16.5	10.0	6.34	4.6	2.15	ND	8.53	ND	14.9	10.1	ND	55.4	56.8	32.7	118
	14.5-16.5	9/7/94	Lean Clay	1.12	0.397	1.09	2.75	1.89	1.78	1.14	1.04	2.35	ND	4.23	0.725	1.15	0.510	3.75	5.78	1.48
TW-7	12-14	9/7/94	Lean Clay	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-8	4.5-6.5	9/7/94	Wood Waste	4.38	0.827	4.27	8.31	6.06	5.02	3.05	3.02	8.13	ND	13.5	3.0	3.22	1.37	13.8	20.6	3.38
TW-9	9.5-11.5	9/8/94	Wood Waste	148	5.54	42.9	33.4	27.6	20.2	10.8	ND	25.4	ND	54.7	48.3	ND	162	270	136	466
TW-10	4.5-6.5	9/8/94	Wood Waste	4.68	0.275	0.900	1.29	1.10	1.28	ND	ND	0.940	ND	1.87	1.25	1.05	1.05	3.37	3.49	6.21
	12-14	9/8/94	Silty Sand/Silt	1.73	0.386	1.23	0.794	0.657	0.509	ND	ND	0.691	ND	1.59	1.40	ND	1.38	5.90	2.65	0.504
TW-11	12-14	9/8/94	Sand/Silt	46.4	1.26	15.1	8.23	4.81	3.85	2.31	ND	6.94	ND	13.2	19.4	ND	82.4	64.6	24.2	50.7
TW-12	4.5-6.5	9/8/94	Wood Waste	0.106	ND	ND	0.203	0.172	0.247	ND	0.179	0.151	ND	0.180	ND	ND	0.240	0.237	0.286	0.204
TW-13	14-16	11/21/94	Fill Soil	77.2	40.7	42.5	36.4	44.1	36.0	16.3	28.8	37.0	4.27	54.7	46.4	24.0	168	247	159	93.5
	18-20	11/21/94	Fill Soil	93.6	354	163	106	111	89.6	42.8	67.6	101	10.6	200	184	56.0	1,209	2,256	545	292
TP-1	5-7	9/7/94	Wood Waste	6.64	1.01	3.13	4.70	6.66	5.83	ND	4.96	5.32	ND	5.33	2.70	4.35	6.40	10.1	13.8	4.93
TP-2	2-4	9/7/94	Fill Soil	0.098	0.292	0.520	2.78	2.03	3.14	0.972	2.44	1.92	0.513	5.70	0.187	2.21	0.071	2.98	3.42	0.169
	6-8	9/7/94	Wood Waste/Fill Soil	0.0488	0.0835	0.313	1.39	0.845	1.43	0.330	0.772	1.00	ND	3.11	0.099	0.788	0.0360	1.75	1.91	0.0591
TP-3	2-4	9/7/94	Wood Waste	ND	6.24	1.66	5.65	20.9	11.3	4.53	24.7	5.90	ND	4.67	1.31	19.4	ND	1.94	10.8	ND
TP-4	4-6	9/7/94	Wood Waste	241	1,875	640	323	205	191	ND	ND	313	ND	605	1,003	ND	8,745	2,690	945	10,225
TP-5	6-8	9/7/94	Wood Waste	782	27.3	324	204	206	118	74.0	79.0	208	ND	366	279	65.6	706	1,254	759	1,077
TP-6	5-7	9/7/94	Clay Fill Soil	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.049	ND	ND	ND	0.049	0.063	ND
TP-7	2-4	9/7/94	Fill Soil/Refuse	1.15	3.26	1.54	6.06	14.7	10.0	3.65	26.3	5.80	ND	4.45	0.898	22.0	ND	1.67	14.2	1.11
TP-8	5-7	9/7/94	Wood Waste	1.00	ND	ND	0.535	ND	ND	ND	ND	0.449	ND	0.887	ND	ND	ND	1.69	1.61	ND
TP-9	2-4	9/7/94	Wood Waste	4.91	4.22	2.82	8.08	12.5	11.2	2.52	25.1	6.69	ND	5.65	2.01	17.4	3.10	7.00	17.8	5.26

ND = Not detected above laboratory quantitation limit



**Table 5**  
**Summary of Soil Analytical Results**  
**Metals**  
**Concentrations in micrograms per gram (µg/g)**

Sample	Depth (ft)	Date Sampled	Parameter		
			Cadmium	Lead	Selenium
TW-1	4.5-6.5	9/6/94	ND	180	ND
	12-14	9/6/94	ND	ND	ND
TW-2	9.5-11.5	9/6/94	ND	ND	ND
	14.5-16.5	9/6/94	ND	ND	ND
TW-3	7-9	9/6/94	ND	ND	ND
TW-4	7-9	9/7/94	ND	43.9	ND
TW-5	9.5-11.5	9/7/94	ND	22.2	ND
	12-14	9/7/94	ND	ND	ND
	14.5-16.5	9/7/94	ND	ND	15.1
TW-6	7-9	9/7/94	ND	42.7	ND
	9.5-11.5	9/7/94	ND	14.9	ND
	14.5-16.5	9/7/94	ND	6.52	ND
TW-7	12-14	9/7/94	ND	ND	ND
TW-8	4.5-6.5	9/7/94	24.8	1321	ND
TW-9	9.5-11.5	9/8/94	ND	ND	ND
TW-10	4.5-6.5	9/8/94	ND	129	ND
	12-14	9/8/94	ND	ND	ND
TW-11	12-14	9/8/94	ND	12.0	ND
TW-12	4.5-6.5	9/8/94	0.465	204	16.5
TP-1	5-7	9/7/94	0.394	78.1	ND
TP-2	2-4	9/7/94	0.846	682	ND
	6-8	9/7/94	0.432	358	ND
TP-3	2-4	9/7/94	0.981	177	ND
TP-4	4-6	9/7/94	1.94	354	ND
TP-5	6-8	9/7/94	ND	28.5	ND
TP-6	5-7	9/7/94	ND	54.9	ND
TP-7	2-4	9/7/94	2.99	344	ND
TP-8	5-7	9/7/94	ND	202	ND
TP-9	2-4	9/7/94	ND	101	ND

ND = Not detected above laboratory quantitation limit

**Table 8**  
**Summary of Groundwater Analytical Results**  
**Dissolved Metals**  
**Concentrations in micrograms per liter (µg/l)**

Well Number	Date Sampled	Parameter						
		Arsenic	Copper	Lead	Iron	Zinc	Chromium	Cadmium
MW-1	9/15/94	ND	ND	2.72	1,540	ND	ND	N/A
	10/20/94	1.16	ND	ND	2,020	ND	4.37	N/A
MW-2	9/15/94	ND	30	3.02	429	68	ND	N/A
	10/20/94	2.96	ND	ND	5,020	ND	ND	N/A
MW-3	9/15/94	ND	ND	3.83	1,180	77	ND	N/A
	10/20/94	1.18	ND	ND	844	ND	ND	N/A
TW-1	9/15/94	ND	ND	ND	3,140	25	ND	N/A
	10/20/94	2.94	ND	ND	5,880	ND	ND	N/A
TW-2	9/15/94	ND	ND	2.65	1,230	43	ND	N/A
	10/20/94	1.33	ND	2.85	5,060	59	ND	N/A
TW-3	9/19/94	24.6	ND	3.19	63,100	44	15.1	N/A
	10/20/94	1.42	ND	3.46	855	ND	ND	N/A
TW-4	9/19/94	ND	ND	3.72	99	35	ND	N/A
	10/20/94	1.77	27	3.49	520	ND	ND	0.20
TW-5	9/19/94	ND	ND	ND	2,150	26	ND	ND
	10/20/94	2.79	ND	2.61	2,600	ND	ND	ND
TW-6	9/19/94	ND	16	2.08	1,720	ND	ND	ND
	10/20/94	2.05	ND	ND	1,340	20	ND	ND
TW-7	9/19/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TW-8	9/15/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/94	2.46	ND	ND	11,300	ND	ND	ND
TW-9	9/19/94	ND	ND	2.07	3,200	23	ND	N/A
	10/20/94	ND	ND	ND	3,670	ND	ND	N/A

Only parameters detected are listed  
 ND = Not detected above laboratory quantitation limit  
 N/A = Sample not analyzed for indicated parameter  
 Preventive Action Limits (PALs) and Enforcement Standards (ES) published in ch. NR 140.10 and NR 140.12, Wis. Admin. Code, March, 1994

**Table 8 (Continued)**  
**Summary of Groundwater Analytical Results**  
**Dissolved Metals**  
**Concentrations in micrograms per liter (µg/l)**

Well Number	Date Sampled	Parameter						
		Arsenic	Copper	Lead	Iron	Zinc	Chromium	Cadmium
TW-10	9/19/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TW-11	9/19/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	10/20/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TW-12	9/19/94	ND	ND	ND	2,910	23	ND	ND
	10/20/94	ND	ND	ND	8,080	ND	ND	ND
AW-1	9/19/94	ND	ND	4.72	10	58	ND	N/A
	10/20/94	5.07	26	ND	15	ND	ND	N/A
AW-2	9/19/94	ND	ND	ND	ND	ND	ND	N/A
	10/20/94	1.45	15	ND	18	ND	ND	N/A
PAL		5	130	1.5	150	2,500	10	0.5
ES		50	1,300	15	300	5,000	100	5

Only parameters detected are listed  
 ND = Not detected above laboratory quantitation limit  
 N/A = Sample not analyzed for indicated parameter  
 Preventive Action Limits (PALs) and Enforcement Standards (ES) published in ch. NR 140.10 and NR 140.12, Wis. Admin. Code, March, 1994

**Table 9  
Characteristic Compounds Found In Groundwater at MGP Sites**

<b>Component</b>	<b>Number of Sites Represented by Detects (a)</b>	<b>Percent of Sites Represented by Detects (a)</b>
Benzene	26	79%
Ethylbenzene	26	79%
Toluene	26	79%
Xylenes	13	39%
Acenaphthene	25	76%
Acenaphthylene	27	82%
Anthracene	23	70%
Benzo(a)anthracene	23	70%
Fluoranthene	24	73%
Fluorene	24	73%
Naphthalene	29	88%
Phenanthrene	26	79%
Phenol	19	58%
Pyrene	23	70%
<p>a) The total number of sites included in the chemical database is 33; however, all analyses were not performed on all samples from all sites. Therefore, the number of sites represented in this column represents a minimum number of the 33 sites having detectable levels of the compound indicated.</p>		

**Table 10**  
**Major Components in Creosote**

<b>Peak No.</b>	<b>Component</b>	<b>Whole Creosote (Approx. %)</b>
1	Naphthalene	3.0
2	2-Methylnaphthalene	1.2
3	1-Methylnaphthalene	0.9
4	Biphenyl	0.8
5	Dimethylnaphthalenes	2.0
6	Acenaphthene	9.0
7	Dibenzofuran	5.0
8	Fluorene	10.0
9	Methylfluorenes	3.0
10	Phenanthrene	21.0
11	Anthracene	2.0
12	Carbazole	2.0
13	Methylphenanthrenes	3.0
14	Methylantracenes	4.0
15	Fluoranthene	10.0
16	Pyrene	8.5
17	Benzofluorenes	2.0
18	Chrysene	3.0

**Table 6**  
**Summary of Groundwater Analytical Results**  
**Volatile Organic Compounds**  
**Concentrations in micrograms per liter (µg/l)**

Well Number	Date Sampled	Parameter											
		Benzene	Ethylbenzene	Xylenes	n-Propylbenzene	Toluene	Isopropylbenzene	Naphthalene	tert-Butylbenzene	n-Butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	p-Isopropyltoluene
MW-1	9/15/94	2440	292	ND	ND	ND	ND	2360	202	652	ND	ND	ND
	10/20/94	3340	353	443	ND	ND	ND	1930	ND	ND	ND	ND	ND
MW-2	9/15/94	236	124	104	ND	ND	ND	1000	66.6	279	ND	ND	ND
	10/20/94	659	178	207.7	ND	ND	ND	1020	ND	ND	ND	ND	ND
MW-3	9/15/94	1.2	ND	ND	ND	ND	ND	1.4	1.0	1.5	ND	ND	ND
	10/20/94	2.55	ND	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND
TW-1	9/15/94	513	46.6	104.2	ND	ND	ND	455	ND	ND	ND	ND	ND
	10/20/94	450	95.4	99.9	ND	ND	ND	749	ND	ND	ND	ND	38.7
TW-2	9/19/94	379	ND	ND	ND	ND	ND	98.2	ND	ND	ND	ND	ND
	10/20/94	578	71.1	52.4	ND	ND	ND	111	ND	ND	ND	ND	134
TW-3	9/15/94	8.3	11.4	33.7	ND	ND	ND	331	ND	7.2	12.2	ND	18.0
	10/20/94	546	43	52	ND	34.9	ND	701	ND	17.9	33.9	8.17	23.0
TW-4	9/19/94	ND	ND	ND	ND	ND	ND	29.9	ND	ND	ND	ND	ND
	10/20/94	1.29	5	ND	ND	ND	ND	52.2	ND	ND	ND	ND	9.18
TW-5	9/19/94	738	459	366	7.5	35.1	16.3	392	ND	615	67.5	12.2	ND
	10/20/94	601	308	251	ND	ND	ND	3120	ND	ND	67.9	ND	ND
TW-6	9/19/94	3150	1290	1285	ND	ND	ND	3,600	296	ND	ND	ND	ND
	10/20/94	3400	1370	1331	ND	ND	ND	4050	ND	ND	219	ND	ND
TW-7	9/19/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-8	9/15/94	1150	56.4	ND	ND	ND	ND	89.8	ND	ND	ND	ND	ND
	10/20/94	1590	82.3	ND	ND	ND	ND	151	ND	ND	ND	ND	ND
TW-9	9/19/94	833	1170	ND	ND	ND	ND	8740	ND	ND	ND	ND	ND
	10/20/94	1590	2300	2430	ND	ND	ND	18600	ND	ND	ND	ND	ND
TW-10	9/19/94	509	78.0	ND	ND	ND	ND	919	73.6	ND	ND	ND	ND
	10/20/94	479	ND	ND	ND	ND	ND	540	ND	ND	ND	ND	ND
TW-10 (Duplicate)	10/20/94	434	ND	ND	ND	ND	ND	529	ND	ND	ND	ND	ND

ND = Not detected above laboratory quantitation limit  
 Preventive Action Limits (PALs) and Enforcement Standards (ES) Published in ch. NR 140.10, Wis. Admin. Code, March, 1994  
 -- = ES/PAL Standards have not been developed

**Table 6 (Continued)**  
**Summary of Groundwater Analytical Results**  
**Volatile Organic Compounds**  
**Concentrations in micrograms per liter (µg/l)**

Well Number	Date Sampled	Parameter											
		Benzene	Ethylbenzene	Xylenes	n-Propylbenzene	Toluene	Isopropylbenzene	Naphthalene	tert-Butylbenzene	n-Butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	p-Isopropyltoluene
TW-11	9/19/94	ND	200	134	ND	ND	ND	2290	127	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	1270	ND	ND	ND	ND	ND
TW-11 (Duplicate)	9/19/94	ND	186	125	ND	ND	ND	2210	ND	ND	ND	ND	ND
TW-12	9/19/94	141	53.3	ND	ND	ND	ND	530	ND	ND	ND	ND	73.3
	10/20/94	253	70	ND	ND	ND	ND	634	ND	ND	ND	ND	75.1
TW-13	12/2/94	20500	3180	5180	ND	10000	ND	8760	ND	ND	ND	ND	ND
Seep Sample	9/19/94	1640	ND	ND	ND	ND	ND	1300	ND	ND	ND	ND	ND
	10/20/94	3250	378	483	ND	ND	ND	2590	ND	ND	ND	ND	ND
AW-1	9/19/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AW-2	9/19/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trip Blank	9/19/94	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Preventive Action Limit		0.5	140	124	-	68.6	-	8	-	-	-	-	-
Enforcement Standard		5	700	620	-	343	-	40	-	-	-	-	-

ND = Not detected above laboratory quantitation limit  
Preventive Action Limits (PALs) and Enforcement Standards (ES) Published in ch. NR 140.10, Wis. Admin. Code, March, 1994  
-- = ES/PAL Standards have not been developed

**Table 7**  
**Summary of Groundwater Analytical Results**  
**Polynuclear Aromatic Hydrocarbons**  
**Concentrations in micrograms per liter (µg/l)**

Well Number	Date Sampled	Parameter																
		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)-Anthracene	Benzo(a)Pyrene	Benzo(b)-Fluoranthene	Benzo(k)-Fluoranthene	Benzo(g,h,i)-Perylene	Chrysene	Dibenzo(a,h)-Anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)-Pyrene	2-Methyl Naphthalene	Phenanthrene	Pyrene	Naphthalene
MW-1	9/15/94	185	5.16	8.25	4.37	3.39	2.69	ND	ND	ND	ND	9.39	44.4	ND	268	52.4	14.6	470
	10/20/94	182	7.93	20.4	10.4	10.6	8.50	2.10	4.97	9.03	ND	25.0	59.9	4.84	353	93.9	28.9	228
MW-2	9/15/94	7.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.81	1.34	ND	ND	0.812	3.40	0.894
	10/20/94	43.3	3.53	2.92	2.61	4.29	2.92	1.53	3.26	2.89	ND	4.85	9.54	2.75	91.4	11.2	6.79	857
MW-3	9/15/94	24.9	13.2	25.9	142	163	97.4	59.8	63.0	125	ND	169	ND	53.7	ND	33.8	502	ND
	10/20/94	ND	ND	ND	37.5	49.4	31.0	14.9	26.3	39.0	ND	65.7	ND	24.6	ND	ND	127	ND
TW-1	9/15/94	75.2	6.7	21.7	49.8	48.3	37.7	18.0	29.1	48.8	ND	78.9	24.2	24.1	7.56	28.5	188	12.0
	10/20/94	121	13.4	29.0	37.0	45.7	32.1	17.5	29.2	44.0	ND	80.8	38.3	24.2	55.0	53.4	125	58.7
TW-2	9/19/94	23.4	3.08	8.71	31.7	31.8	21.9	12.0	12.1	29.0	ND	51.0	8.50	10.9	ND	7.45	120	20.6
	10/20/94	33.3	3.65	7.03	17.0	17.1	13.6	5.97	7.48	17.8	1.45	37.0	10.8	6.57	ND	6.88	51.5	48.5
TW-3	9/15/94	194	31.5	107	172	206	142	81.5	103	158	ND	215	112	85.9	87.4	298	529	47.8
	10/20/94	164	36.5	83.7	80.4	115	72.9	37.0	67.8	89.1	ND	148	95.3	57.4	151	219	220	75.1
TW-4	9/19/94	38.9	6.34	21.7	41.8	45.2	32.5	10.2	ND	36.9	ND	51.6	16.2	ND	8.13	37.5	146	10.7
	10/20/94	37.2	8.03	19.7	18.9	22.3	15.7	9.53	13.6	20.7	ND	38.1	16.8	12.6	5.67	25.8	59.9	ND
TW-5	9/19/94	1,631	95.6	700	481	386	282	ND	192	427	ND	768	839	165	2,376	2,829	1,362	2,634
	10/20/94	243	17.3	91.6	42.2	46.6	31.3	14.9	26.1	43.7	ND	92.1	110	25.1	372	339	132	678
TW-6	9/19/94	2,301	142	1,131	685	507	375	ND	182	540	ND	1,107	1,005	153	2,693	3,751	2,192	5,907
	10/20/94	1,691	144	866	366	335	236	123	153	377	ND	775	671	136	2,034	2,482	1,152	5,500
TW-7	9/19/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TW-8	9/15/94	32.1	ND	2.02	2.64	ND	ND	ND	ND	1.75	ND	4.22	6.80	ND	3.59	8.84	6.14	62.6
	10/20/94	73.2	ND	6.61	5.22	ND	4.04	ND	ND	4.94	ND	11.4	16.9	ND	ND	22.5	12.4	140
TW-9	9/19/94	14,460	587	4,373	3,465	3,278	2,136	1,272	1,090	2,597	ND	5,615	4,644	1,044	16,465	24,186	13,911	39,749
	10/20/94	6,544	480	2,689	1,344	1,434	921	428	695	1,363	ND	3,215	2,663	571	7,252	8,925	4,241	19,267
TW-10	9/19/94	523	77.4	164	116	104	74.1	43.6	40.1	102	ND	176	223	36.5	977	864	420	1,005
	10/20/94	216	40.6	69.3	30.0	29.2	20.7	11.6	14.9	30.9	ND	70.2	101	13.8	149	229	89.2	23.1
TW-11	9/19/94	447	7.25	60.2	27.1	14.5	12.6	9.36	ND	19.7	ND	47.8	122	ND	732	280	85.5	2,794
	10/20/94	375	17.1	113	36.2	27.5	20.5	14.5	12.4	34.9	ND	88.2	159	11.6	518	282	109	656
TW-12	9/19/94	39.3	2.47	1.09	ND	7.59	5.46	2.33	14.4	ND	ND	2.19	6.11	10.2	5.18	4.42	4.85	459
	10/20/94	68.1	ND	ND	ND	5.37	ND	ND	7.45	ND	ND	ND	11.9	5.76	9.44	6.81	ND	563
TW-13	12/02/94	914	3,570	1,685	921	898	715	339	389	843	ND	1,862	1,879	362	9,780	6,072	3,380	24,769
AW-1	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AW-2	9/19/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/20/94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Seep Sample	9/19/94	26,429	2,130	8,056	6,764	5,866	4,753	2,201	2,891	5,626	ND	13,235	11,009	2,522	38,120	62,103	39,877	18,776
	10/20/94	19,625	3,823	8,842	6,800	7,754	6,260	3,066	4,022	7,298	624	15,725	11,437	3,578	24,594	38,293	22,136	30,250
PAL	--	--	--	--	--	0.0003	--	--	--	--	--	--	--	--	--	--	--	8
ES	--	--	--	--	--	0.003	--	--	--	--	--	--	--	--	--	--	--	40

ND = Not detected above laboratory quantitation limit  
 Preventive Action Limits (PALs) and Enforcement Standards (ES) published in CH NR 140.10, Wis. Admin. Code, March 1994

-- = ES/PAL Standards have not been developed



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## **Figures**

**Figure 1 – Site Location**

**Figure 2 – Existing Conditions**

**Figure 3 – Geologic Cross-Sections**

**Figure 4 – Total Lead Soils Isoconcentration Map**

**Figure 5 – Groundwater Contour Map**

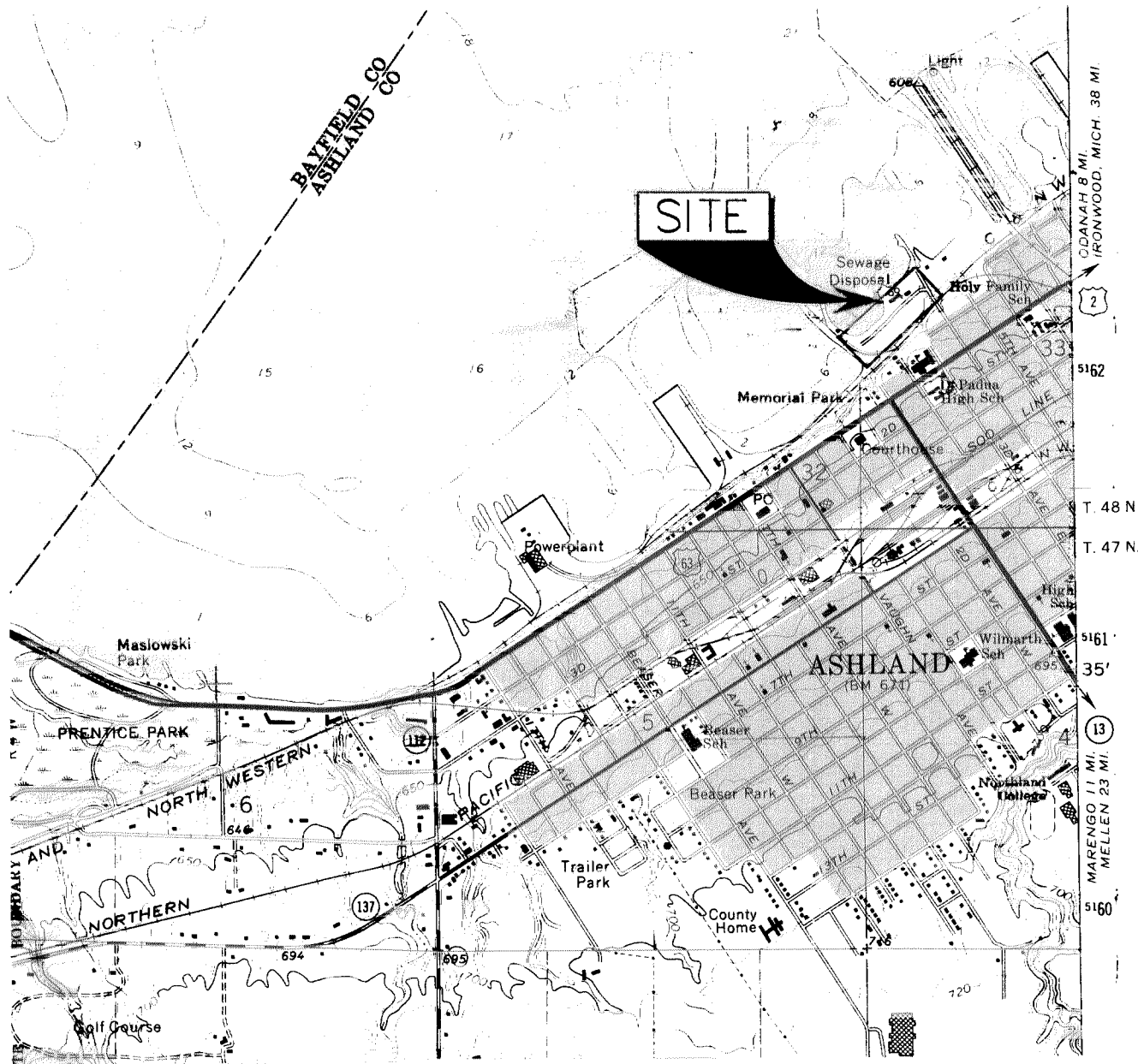
**Figure 6 – Total BETX Groundwater Isoconcentration Map**

**Figure 7 – Total PAH Groundwater Isoconcentration Map**

REPRODUCED FROM  
**USGS ASHLAND WEST QUADRANGLE**  
 WISCONSIN - ASHLAND CO. 7.5 MINUTE SERIES



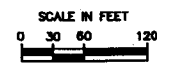
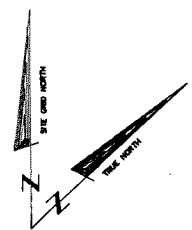
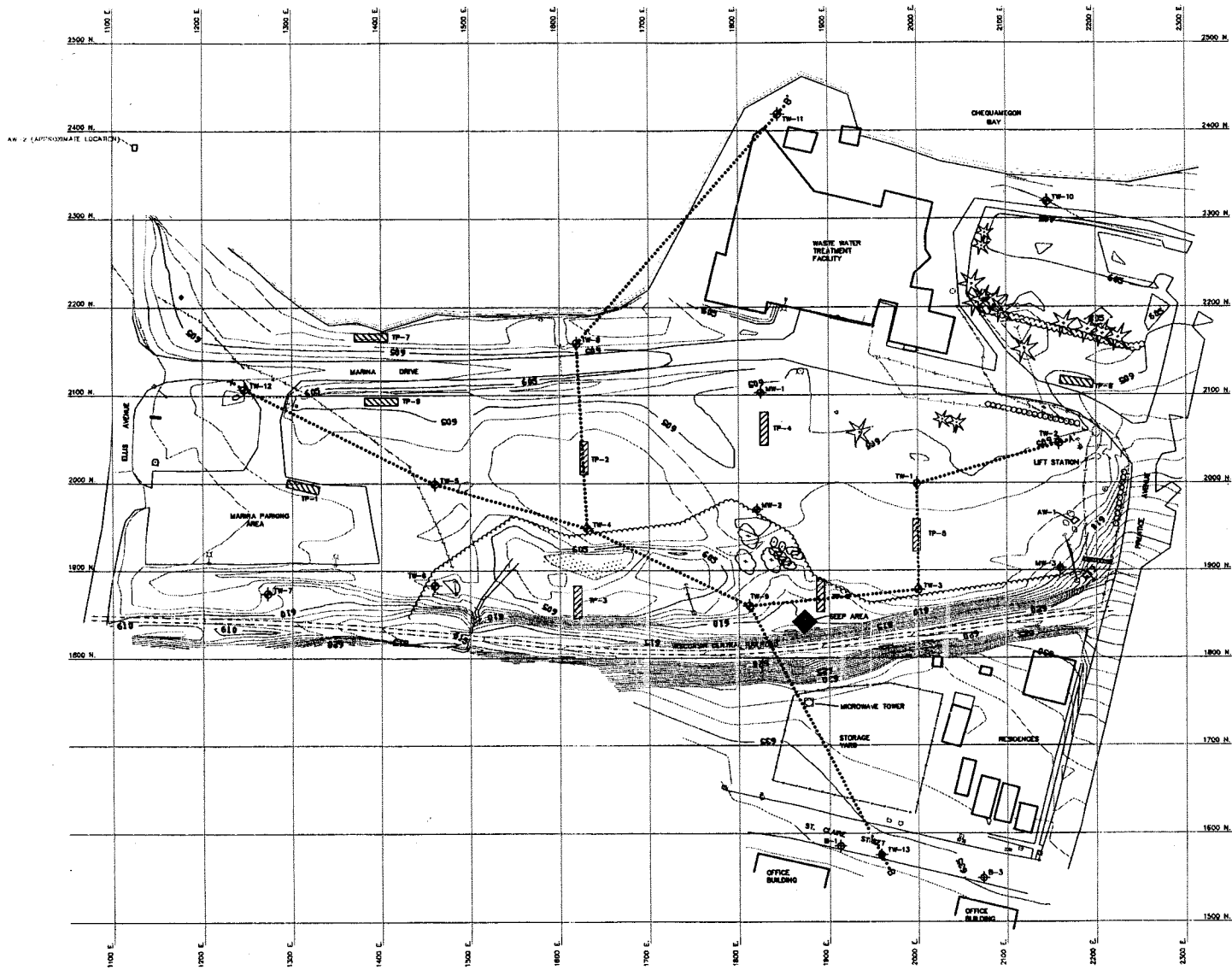
SCALE: 1" = 2,000'



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 CPE 02/27/95  
 CHECKED BY:  
 JG 02/27/95

**ASHLAND LAKEFRONT PROPERTY**  
**FIGURE 1**  
**SITE LOCATION**

FILE NO.  
 ASHLA9401  
 DRG. NO.  
 9401FUA1



- LEGEND**
- TP-# TEST PIT APPROXIMATE LOCATION AND NUMBER
  - TW-# TEMPORARY GROUND WATER MONITORING WELL LOCATION AND NUMBER
  - B-# SOIL BORING LOCATION AND NUMBER
  - MW-# EXISTING GROUND WATER MONITORING WELL LOCATION AND NUMBER
  - AW-# EXISTING ARTESIAN WELL LOCATION AND NUMBER
  - 605 TOPOGRAPHIC CONTOUR (1' INTERVAL)
  - A-A' GEOLGIC CROSS SECTION TRANSECTS
  - HYDRANT
  - SANITARY SEWER MANHOLE
  - STORM SEWER MANHOLE
  - TELEPHONE PEDISTAL
  - POWER POLE
  - GUY ANCHOR
  - LIGHT POLE
  - POWER POLE WITH LIGHT
  - UNDERGROUND GAS LINE
  - UNDERGROUND ELECTRIC LINE
  - UNDERGROUND TELEPHONE LINE
  - CULVERT
  - PINE TREE
  - TREE
  - SHRUB / HEDGE
  - SWAMP

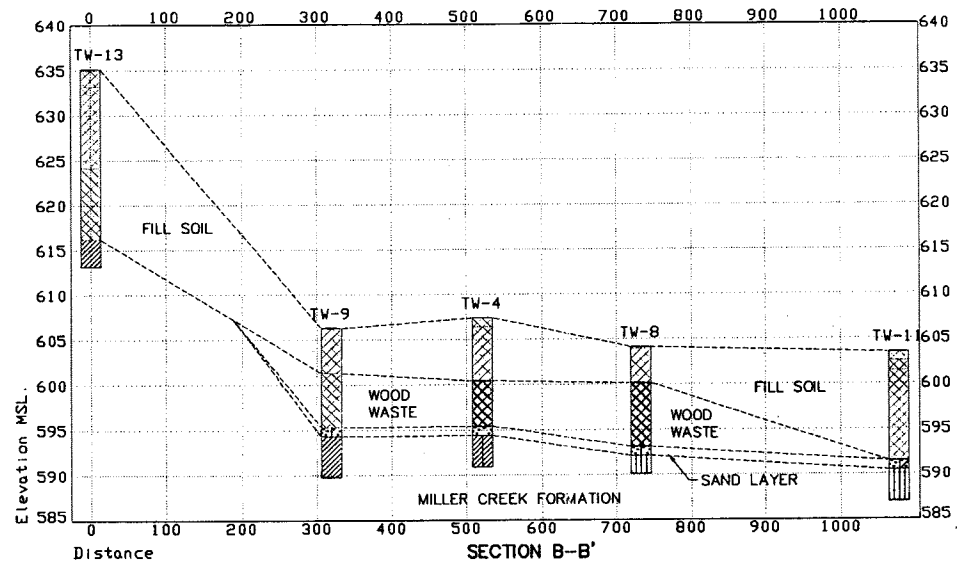
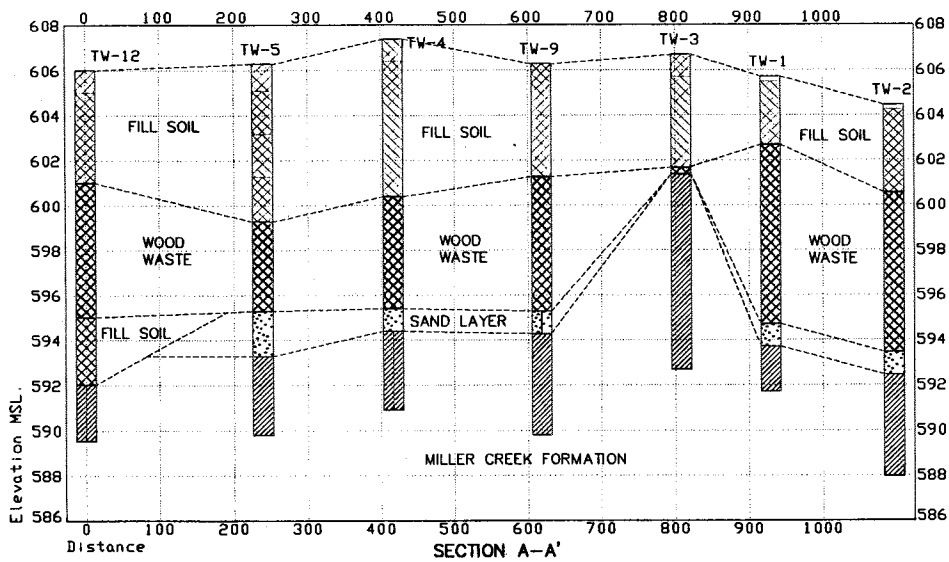
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DESIGNER: <u>JG</u>	DATE: <u>02/17/95</u>								
CHECKED BY: <u>CE</u>	DATE: <u>02/21/95</u>								
NO.	BY	DATE	REVISIONS	NO.	DESIGN	CHECKED			



**ASHLAND LAKEFRONT PROPERTY**

**FIGURE 2  
EXISTING CONDITIONS**

FILE NO.  
WDRR8401  
DATE  
01/12/85



NOTE: LOCATION OF GEOLOGICAL CROSS SECTION TRANSECTS DEPICTED ON FIGURE 2

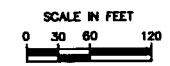
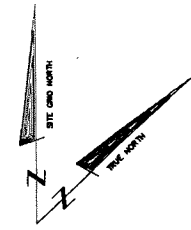
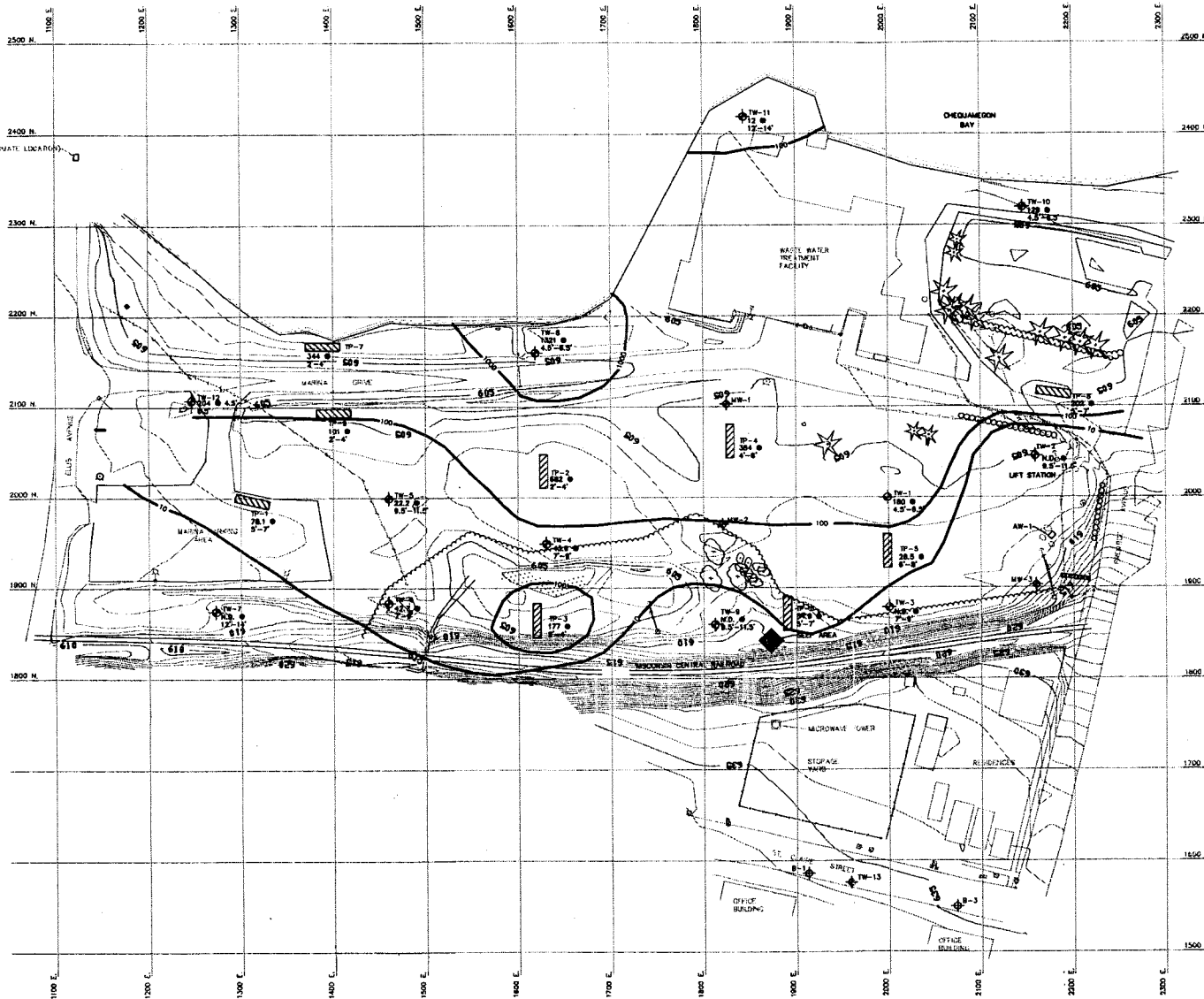
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DESIGNER: <u>JE</u>	DATE: <u>1995</u>						
CHECKED BY: <u>SCC</u>	DATE: <u>2/27</u>						
NO.	BY	DATE	REVISIONS	DESIGN	CHECKED		



ASHLAND LAKEFRONT  
PROPERTY

FIGURE 3  
GEOLOGICAL CROSS SECTIONS

FILE NO.  
MDNR95401  
DATE  
01/12/95



**LEGEND**

- TP-9 SOIL TEST PIT LOCATION AND NUMBER AND TOTAL LEAD CONCENTRATION (mg/m²) AND SAMPLE DEPTH BELOW GROUND SURFACE
- TP-1 T.D. T.D. TEMPORARY GROUND WATER MONITORING WELL LOCATION AND NUMBER AND TOTAL LEAD CONCENTRATION (mg/m²) AND SAMPLE DEPTH BELOW GROUND SURFACE
- B-1 SOIL BORING LOCATION AND NUMBER
- MW-2 EXISTING GROUND WATER MONITORING WELL LOCATION AND NUMBER
- AW-1 EXISTING ARTESIAN WELL LOCATION AND NUMBER
- 100 TOTAL LEAD CONCENTRATION (ISOCONTOUR (mg/m²) SAMPLE DATE 9/94)
- 625 TOPOGRAPHIC CONTOUR (1' INTERVAL)
- HYDRANT
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- TELEPHONE PEDestal
- POWER POLE
- GUY ANCHOR
- LIGHT POLE
- POWER POLE WITH LIGHT
- UNDERGROUND GAS LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- CULVERT
- PINE TREE
- TREE
- SHRUB / HEDGE
- SWAMP

NOTES: 1. ISOCONTOUR INTERVALS ARE LABELED WITH THE TOTAL LEAD CONCENTRATIONS (MG/M²)  
 2. SOIL TOTAL LEAD ANALYTICAL SAMPLES COLLECTED BY SEH ON SEPTEMBER 6 THROUGH SEPTEMBER 8, 1994.

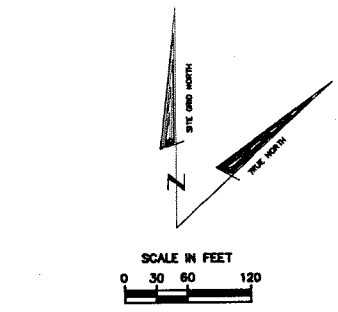
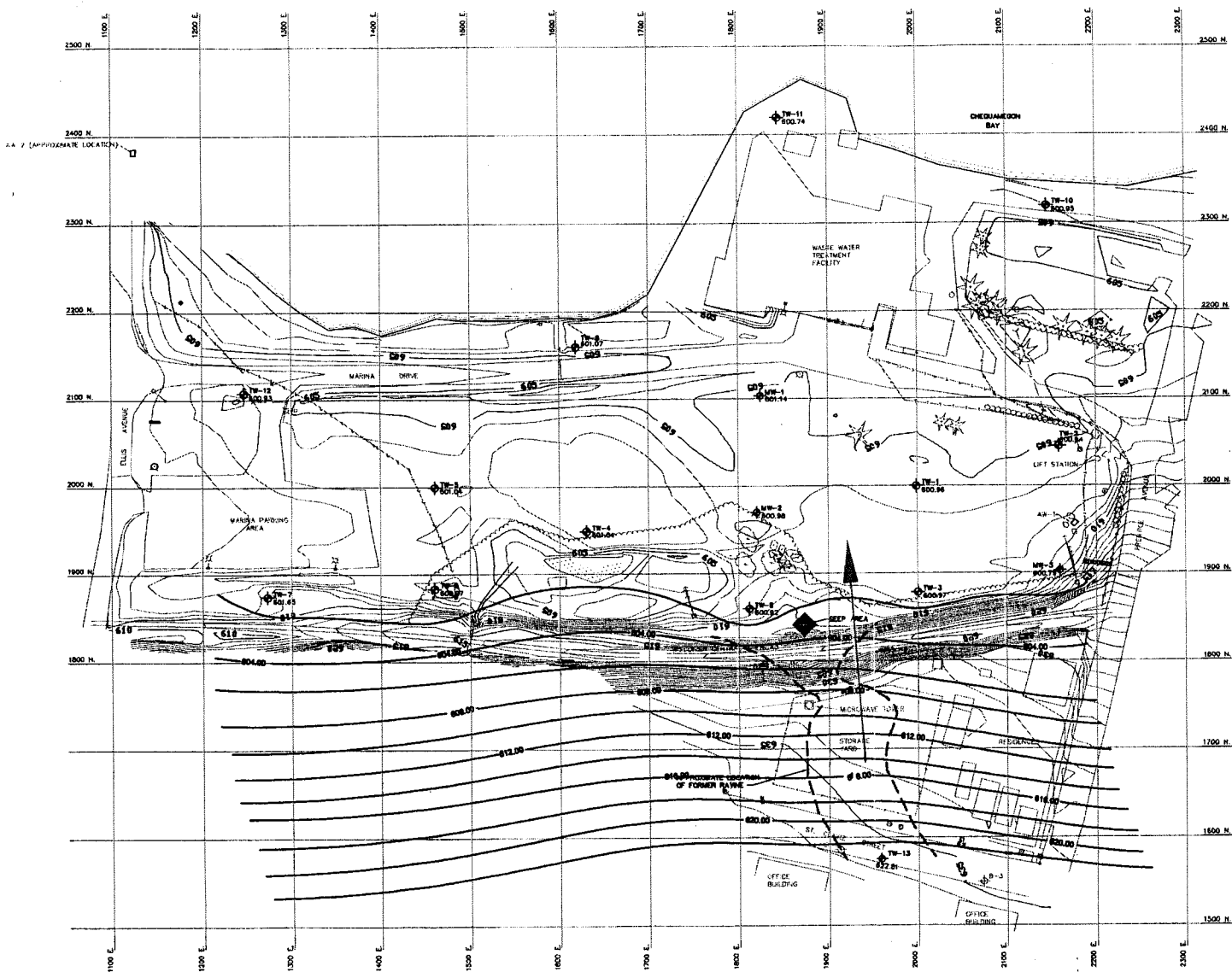
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CHECKED BY: <u>CE</u>	DATE: <u>2/21</u>	NO.	BY	DATE	REVISIONS	DESIGN	CHECKED		



**ASHLAND LAKEFRONT PROPERTY**

**FIGURE 4  
TOTAL LEAD SOILS ISOCONCENTRATION MAP**

FILE NO. WDMR9401  
 DATE 01/12/95



- LEGEND**
- 8' GROUNDWATER CONTOUR AND FLOW DIRECTION
  - ⊕ TW-11 800.74 TEMPORARY GROUND WATER MONITORING WELL LOCATION AND WATER ELEVATION
  - ⊕ B-1 SOIL BORING LOCATION AND NUMBER
  - ⊕ MW-2 600.80 EXISTING GROUND WATER MONITORING WELL LOCATION AND WATER ELEVATION
  - ⊕ AW-1 EXISTING ARTESIAN WELL LOCATION AND NUMBER
  - 6' 6" TOPOGRAPHIC CONTOUR (6' INTERVAL)
  - ⊕ HYDRANT
  - ⊕ SANITARY SEWER MANHOLE
  - ⊕ STORM SEWER MANHOLE
  - ⊕ TELEPHONE PEDESTAL
  - ⊕ POWER POLE
  - ⊕ GUY ANCHOR
  - ⊕ LIGHT POLE
  - ⊕ POWER POLE WITH LIGHT
  - UNDERGROUND GAS LINE
  - UNDERGROUND ELECTRIC LINE
  - UNDERGROUND TELEPHONE LINE
  - CULVERT
  - ★ PINE TREE
  - TREE
  - SHRUB / HEDGE
  - ⊕ SWAMP

NOTES: 1. CONTOUR INTERVALS ARE LABELED WITH THE GROUNDWATER ELEVATIONS IN MEAN SEA LEVEL (MSL) DATUM.  
 2. GROUNDWATER ELEVATIONS MEASURED BY SEH ON NOVEMBER 22, 1984.

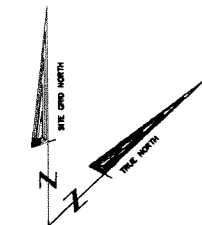
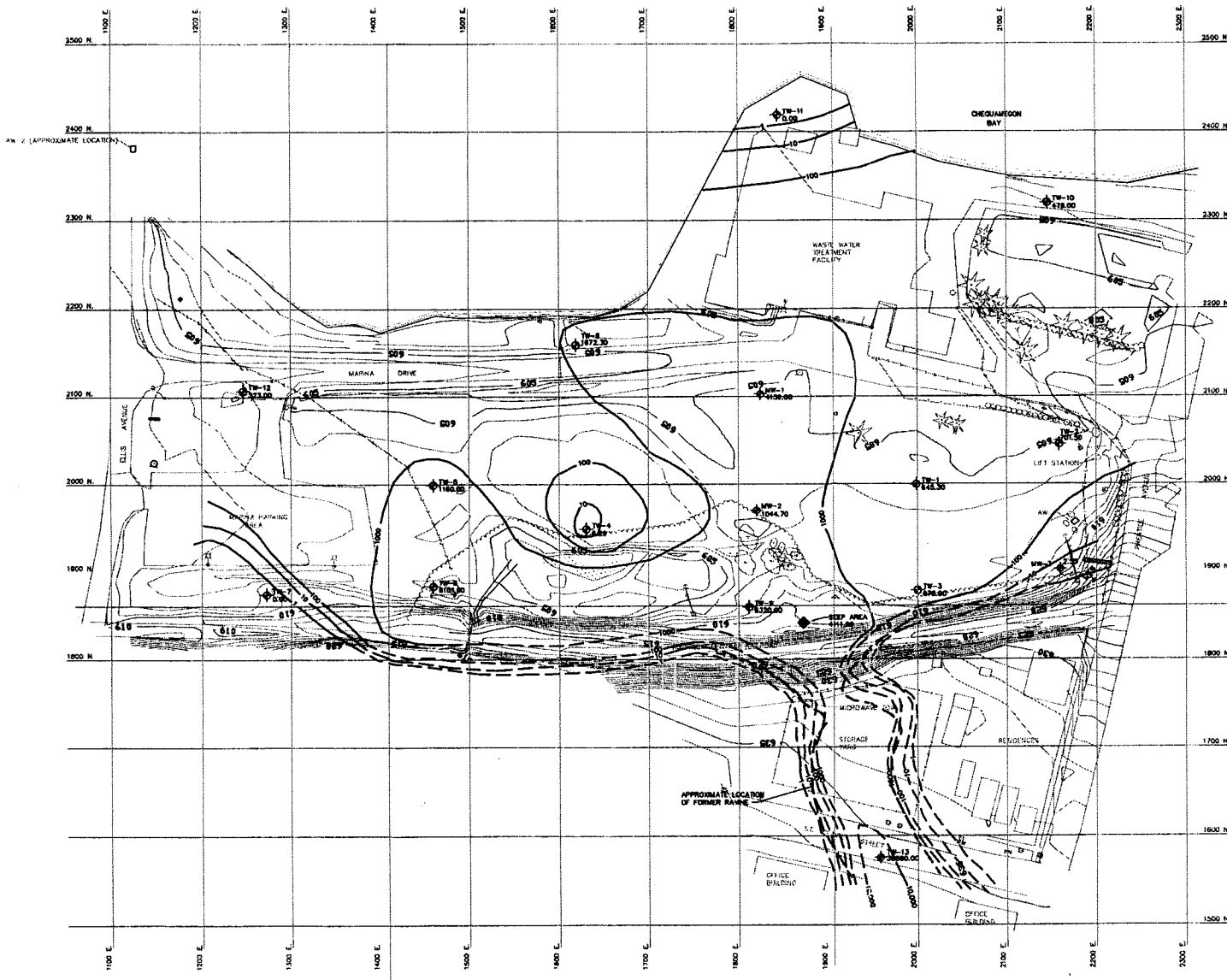
DRAWN BY: <u>CE</u>	DATE: <u>01/85</u>								
DESIGNER: <u>AG</u>	DATE: <u>02/85</u>								
CHECKED BY: <u>CE</u>	DATE: <u>1/85</u>								
NO.	BY	DATE	REVISIONS	DESIGN	CHECKED				



**ASHLAND LAKEFRONT PROPERTY**

**FIGURE 5  
GROUNDWATER CONTOUR MAP**

FILE NO.  
WDRNR 401  
DATE  
01/12/85



SCALE IN FEET  
0 30 60 120

- LEGEND**
- 1000' — TOTAL BETX ISOCONCENTRATION CONTOUR (ug/l)
  - TW-1-13 842.15 — TEMPORARY GROUNDWATER MONITORING WELL LOCATION AND TOTAL BETX CONCENTRATION IN ug/l
  - MW-2 1044.7 — EXISTING GROUND WATER MONITORING WELL LOCATION AND TOTAL BETX CONCENTRATION IN ug/l
  - SEEP 4111.00 — SEEP SAMPLE LOCATION AND TOTAL BETX CONCENTRATION IN ug/l
  - AW-1 — EXISTING ARTESIAN WELL LOCATION AND NUMBER
  - 60' — TOPOGRAPHIC CONTOUR (1' INTERVAL)
  - ⊕ — HYDRANT
  - ⊙ — SANITARY SEWER MANHOLE
  - ⊙ — STORM SEWER MANHOLE
  - ⊙ — TELEPHONE PEDISTAL
  - ⊙ — POWER POLE
  - ⊙ — GUY ANCHOR
  - ⊙ — LIGHT POLE
  - ⊙ — POWER POLE WITH LIGHT
  - — UNDERGROUND GAS LINE
  - — UNDERGROUND ELECTRIC LINE
  - — UNDERGROUND TELEPHONE LINE
  - — CLAVERT
  - ★ — PINE TREE
  - — TREE
  - ⊞ — SHRUB / HEDGE
  - ⊞ — SWAMP

- NOTES:**
1. CONTOUR INTERVALS ARE LABELED WITH THE TOTAL BETX CONCENTRATIONS (ug/l).
  2. GROUNDWATER BETX ANALYTICAL SAMPLES COLLECTED ON OCTOBER 20, 1984 (SAMPLE FROM TW-13 COLLECTED ON DECEMBER 2, 1984)
  3. APPROXIMATE FORMER RAINE LOCATION OBTAINED FROM 1880 SANBORN FIRE INSURANCE MAP OF SITE

DRAWN BY: <u>CE</u>	DATE: <u>01/85</u>								
DESIGNER: <u>JE</u>	DATE: <u>02/85</u>								
CHECKED BY: <u>SKM</u>	DATE: <u>2/18/85</u>								
NO.	BY	DATE	REVISIONS	DESIGN	CHECKED				



**ASHLAND LAKEFRONT PROPERTY**

**FIGURE 8  
TOTAL BETX GROUNDWATER  
ISOCONCENTRATION MAP**

FILE NO.  
W0NR8401  
DATE  
01/12/85





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# **Appendix A**

## **Field Methodologies**

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## Field Methodologies

### Soil Boring Installation and Soil Sample Collection

The boreholes were installed using 4-1/4 inch inside diameter hollow stem augers, in accordance with the American Society for Testing and Materials (ASTM) Method D1586, section 5.1.3. A standard 2-inch outside diameter split-barrel sampler was used to collect soil samples in accordance with ASTM method D1586.

Samples were described in the field with respect to the soil type (Unified Soil Classification System Code), grain size distribution, color (or discoloration), odor, moisture content, consistency and flame ionizable constituent content, as appropriate. Observations were recorded in a bound field notebook and on soil boring logs (Appendix C). Between each sampling episode, the split barreled sampler was washed in an Alconox solution and double rinsed in clean tap water. All down-hole equipment was cleaned between borings using a high-pressure hot water wash.

Recovered soil samples were containerized for potential laboratory analysis ("primary" samples) or in-field analysis ("co-located" samples). Primary samples were collected for laboratory analysis of various parameters including VOCs, PAHs and select metals. Following collection, all primary samples were clearly labeled, placed in a cooler, on-ice, and securely stored pending delivery to the laboratory. Sample labels identified the date of sample collection, the project discreet identification number, the sampling location, the depth from which the sample was collected, and the sample matrix. Samples were delivered to the laboratory within 96 hours of sample collection.

Samples intended for laboratory analysis were containerized in laboratory-supplied four ounce glass jars. The jars were tightly packed to minimize headspace and were securely capped with a teflon-lined lid.

### Field FID Screening

Co-located samples were collected from each sampling interval for in-field screening with a flame ionization detector (FID). The FID yields a semi-quantitative headspace analysis of the volatile compounds. The FID was calibrated in the field, according to manufacturer's instructions, using 100 ppm methane gas, and checked between each screening event for proper response. The peak instrument readings were recorded on the soil boring logs. A methane screen was used to deduct the concentration of methane from the total VOC concentrations. FID readings from the co-located samples were assumed to be similar to the primary samples.

As such, the primary samples were not screened. This procedure reduces the escape of volatile components from the samples submitted for laboratory analysis.

The co-located samples were loosely placed in resealable plastic bags to provide sufficient headspace to optimize FID screening results. The samples were allowed to warm to approximately 70 degrees F and screened in the field using a Foxboro Organic Vapor Analyzer - 128 Flame Ionization Detector. The samples were then screened with the methane screen, and the concentrations of methane was

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subtracted from the initial reading to obtain the concentration of VOCs. Methane concentrations were not subtracted if the field screening result exceeded the capacity of the FID (1,000 instrument units).

### **Monitoring Well Installation**

Following soil boring drilling and sampling, groundwater monitoring wells were installed in a manner consistent with ch. NR 141 Wis. Admin. Code using standard methodologies. Monitoring wells were installed by Huntingdon TCT of Wausau, Wisconsin, and by Wisconsin Test Drilling, Inc. of Schofield, Wisconsin. In general, the wells are constructed of Schedule 40 polyvinyl chloride (PVC) flush threading factory cut 0.010 slot (10 slot) well screens, and flush threading Schedule 40 PVC riser pipes. Filter pack materials consist of coarse sand, extending approximately one foot above the top of the well screen, overlain by approximately one foot of fine sand. Coarse sand generally consisted of Red Flint Sand and Gravel Company #30 flint sand. Fine sand generally consisted of Red Flint Sand and Gravel Company #45-#55 flint sand. Pure Gold brand chipped bentonite was used as a sealing material, and extends from the top of the fine sand to ground surface. The wells converted to permanent wells were finished with locking, steel, protective casings. Well TW-13 was installed with a flush-mounted protective casing to prevent damage from traffic. Following installation, the wells were allowed to equilibrate and were then developed by surging and purging the wells using a standard decontaminated stainless steel bailer or by pumping using a submersible pump.

### **Depth to Water Measurements**

Depth to water measurements were collected with a Solinst Model 101 electric water level meter. The depth to water is a measurement of the distance from a well's preestablished measuring point to the surface of the water table within the monitoring well. The distance from the measuring point to the surface of the water table is measured to the nearest 0.01 inch. Once the depth to water has been determined, the measured distance is recorded on field data sheets.

The depth to water measurements are converted to water table elevation readings by subtracting the measurement from the known elevation of the well's measuring point. The elevation of the well's measuring point has been determined by surveying the elevation of the point to a local survey bench mark.

### **Well Development**

The monitoring wells were developed in accordance with ch. NR 141 Wis. Admin. Code by surging and purging the wells of an appropriate volume of water. The appropriate volume of water to purge from a well during development, based on the volume of water within the well, is dependent on the thickness of the water column within a well. The thickness of the water column within a well is determined by subtracting the measured depth to water from the known depth of the well. Once the thickness of the water column is known, it is broken down into the number of feet of saturated sand pack within the well, and the number of feet of saturated riser within the well. For the purposes of this project, the volume of water per foot of saturated sand pack has been estimated to be 0.74 gallons/foot (gpf), and the volume of water per foot of saturated riser has been estimated to be 0.16 gpf. The total volume of water within a well is therefore 0.74 gpf multiplied by the thickness of the saturated sand pack, added to 0.16 gpf multiplied by the thickness of saturated riser. For the purposes of this project, the appropriate volume of water to remove during development is ten times

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the volume of water within a well. If, however, the well can be pumped or bailed dry during development, and will not produce the calculated appropriate volume of water, the well is bailed or pumped dry three times to complete development. The volume of water actually removed from the well is recorded in a project dedicated, bound, field notebook.

### **Well Purging/Groundwater Sample Collection**

Prior to collection of groundwater samples, the wells were purged of an appropriate volume of water. The volume of water to purge from a well prior to sampling is calculated by multiplying 0.16 gallons (volume per foot of riser pipe) by the thickness of the saturated riser. For the purposes of this project, the appropriate volume of water to remove prior to sampling is four times the volume of water within the well riser. If, however, the well can be pumped or bailed dry during purging, and will not produce the calculated appropriate volume of water, the well is bailed or pumped dry prior to sampling. The volume of water actually removed from the well is recorded in a project dedicated, bound, field notebook.

After purging an appropriate volume of water, or purging a well dry, the wells were allowed to recharge. Following a period of recharge, groundwater samples were collected. Sampling was conducted by lowering a decontaminated bailer into the water column within the well, in a manner such that disturbance to the water column was minimized. The bailer was then raised to the surface and fitted with a bottom-discharging sampling point. Water was then discharged from the bailer, through the bottom-discharging sampling point, into the appropriate, laboratory supplied, sample container, and if necessary, preserved with 1:1 HCL,  $H_2SO_4$  or  $HN0_3$ . Following collection, all samples were clearly labeled, placed in a cooler, on-ice, and securely stored pending delivery to the laboratory. Sample labels identified the date of sample collection, the project discreet identification number, the sampling location, and the sample matrix.

Samples for VOC analysis were containerized in laboratory-supplied 40 ml glass vials, and preserved with 1:1 HCL to a pH of less than 2. The vials were securely capped with a teflon-lined lid and checked to ensure that no headspace existed within the sample container.

Samples for PAH analysis were placed in laboratory-supplied, 1,000 ml amber glass bottles. The bottles were securely capped with a teflon-lined lid.

Samples for TOC analysis were placed in 250 ml polyethylene bottles, preserved with  $H_2SO_4$ , and securely capped. Samples for dissolved metals analysis were field filtered using a peristaltic pump and a 0.45 micron filter. The samples were then placed in 1000 ml polyethylene bottles, preserved with  $HN0_3$ , and securely capped.

### **Seep Sampling**

Two rounds of water samples were collected from a groundwater seep which is present on the south side of the property in the vicinity of the mouth of the former ravine. The samples were collected from ponded water located on the ground surface immediately adjacent to the flowing seep. Water was collected in a clean glass jar and decanted into the appropriate samples bottles. Following collection, samples were placed in a cooler, on-ice, and securely stored pending delivery to the

laboratory. Sample labels identified the date of sample collection, the project discreet identification number, the sampling location, and the sample matrix. Samples were delivered to the laboratory within 96 hours of sample collection.

Samples for VOC analysis were containerized in laboratory supplied 40 ml glass vials with teflon septum caps. The samples were preserved with 1:1 HCL to a pH of less than 2. No visible headspace was allowed inside the sealed bottles.

Samples for PAH analysis were placed in 1,000 ml amber glass bottles and secured with a teflon lined lid.

### Analytical Methodology

The soil and groundwater samples collected from the Ashland Lakefront Property were analyzed in accordance with the following analytical methods:

Parameter	Method	
	Soils	Groundwater
VOCs	EPA SW846-8021	EPA SW846-8021
PAHs	EPA SW846-8270	EPA SW846-8270
PCBs	EPA SW846-8080	N/A
Arsenic (As)	N/A	EPA Method 200.9
Cadmium (Cd)	EPA Method 200.7	EPA Method 200.9
Chromium (Cr)	N/A	EPA Method 200.9
Copper (Cu)	N/A	EPA Method 200.7
Lead (Pb)	EPA Method 200.7	EPA Method 200.9
Selenium (Se)	EPA Method 200.7	EPA Method 200.9
Zinc (Zn)	N/A	EPA Method 200.7
Iron (Fe)	N/A	EPA Method 200.7
TOC	N/A	APHA Method 505B

N/A = Not Applicable

### Sample Custody

Sample custody procedures are designed to comply with U.S. EPA and National Enforcement Investigation Council (NEIC) requirements for sample control. Samples collected during the site investigation were the responsibility of identified persons from the time they were collected until they or their derived data were incorporated into the final report. Stringent chain-of-custody procedures were followed to maintain and document sample possession. A sample or evidence file is considered to be in the custody of the designated person if it is in possession; in view, after being in possession; was in possession and was placed in a secured location; or in a designated secure area.

Chain-of-custody forms were completed to the fullest extent possible prior to delivery of the sample to the laboratory (copies provided in Appendix E). They included the following information: sample number, date collected, source of sample (including type of sample and site identification) and name

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of sampler. The forms were filled out in a legible manner using waterproof ink and were signed by the sampler. Samples were also accompanied by a chain-of-custody record. When transferring samples, the individuals relinquishing and receiving them signed, dated and noted the time on the record. The custody record documents sample custody transfer from the sampler to the laboratory.

Samples were packaged properly for shipment and delivered for analysis to Enviroscan Corporation of Rothschild, Wisconsin, with a separate custody record accompanying each shipment. The original record accompanied the shipment and a copy was retained by the field sampler and filed immediately upon return to the office.

#### **In Situ Hydraulic Conductivity Analysis**

Hydraulic conductivity analyses were performed in the field on the three existing permanent wells (MW-1, MW-2, and MW-3), and the five new permanent wells (TW-6, TW-9, TW-11, TW-12, and TW-13). The tests were performed by instantaneously lowering the head of water in each well and then measuring the rate of recharge. Water levels were lowered by removing one bailerful of water from each well at the onset of the test. Rates of recharge were measured using an Aquistar DL-1 datalogger which recorded water levels each second for the first two minutes of recharge, and every five second thereafter. The recharge in well TW-13 was measured with a water tape due to slower recharge rate in this well.

Hydraulic conductivity values for each well were computed using the AQTESOLV® program. The Bouwer-Rice method for unconfined aquifers was used to perform the computations. A "best fit" line was plotted for each well based on the data points (Appendix E).

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## **Appendix B**

### **Test Pit Logs**

Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No. <b>33</b>		Common Well Name <b>T 48 N,R 4W</b>	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane 1/4 of      1/4 of Section <b>33</b>			N, E <b>T 48 N,R 4W</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input checked="" type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	1		2	Dark Brown TOPSOIL		[Cross-hatched]		ND		M				
			4	FILL: Brown Lean Clay Mixed with Demolition Debris (e.g., bricks, concrete, wire, steel pieces, bottles)										
2	1		6	FILL: Black Silt and Clay Mixed with some Wood Pieces and Sawdust. Some Black Material on Wood Pieces (not fully coated).		[Cross-hatched]		240		W				
			8	End of Test Pit at 9.0 feet										

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.



Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-3</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No. <b>33</b>		Common Well Name	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane <b>1/4 of      1/4 of Section      33      T 48 N,R 4W</b>			Lat      0 ' '' Long      0 ' ''		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1			0-2	Black Peaty Topsoil											
			2-4	FILL: Wood Slabs, Pieces, and Sawdust, Stained Black, Oily Globules and Sheen on Water.				1000+		M					
			4-7	Very Stiff, Brown Lean CLAY, Little Sand and Gravel	CL										
			7.0	End of Test Pit at 7.0 Feet Test Pit excavated in low area resulting in higher water table.											

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

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-4</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	Drilling Method <b>Backhoe</b>
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL		Surface Elevation Feet MSL	Borehole Diameter Inches
Boring Location State Plane <b>N, E</b> 1/4 of      1/4 of Section <b>33</b> T <b>48</b> N,R <b>4W</b>			Lat ° ' "	Long ° ' "	Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>	Civil Town/City/ or Village <b>ASHLAND</b>		

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
			0	Black TOPSOIL											
			2	FILL: Gray Lean Clay, Little Sand and Gravel, Occasional Large Wood Posts											
			4	FILL: Wood Slabs, Pieces and Sawdust, Some Oily Solid Chunks, Black Oily Coating on Wood from below Water Table. Black Oily Consistency to Water.				1000+		M-W					
			10	End of Test Pit and 10.0 Feet											

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-5</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane 1/4 of      1/4 of Section <b>33</b> <b>T 48 N,R 4W</b>			Lat      0'' Long      0''		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments		
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200			
1			0	Dark Brown TOPSOIL												
			2	FILL: Brown Lean Clay, Some Sand, Trace Gravel												
			4	FILL: Black Lean Clay, Some Sand and Wood Waste												
			6	FILL: Wood Slabs, Pieces and Sawdust. Black Oily Coating on Wood below Water Table. Water Black, Oily Consistency.				1000+			W					
			8	End of Test Pit at 9.0 Feet												

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-6</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No. <b>33</b>		Common Well Name <b>T 48 N,R 4W</b>	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane 1/4 of      1/4 of Section			N, E <b>33</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
			0-2	Black TOPSOIL											
			2-4	FILL: Brown to Gray Lean Clay, Little Sand and Gravel											
			4-6					ND		M					
			6-7.5	End of Test Pit at 7.5 Feet Approx. 10" diameter ductile iron pipe (running north-south) encountered at 7.5 feet below ground surface. Test pit terminated at 7.5 feet due to pipe. Water not observed in excavation.											

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-7</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane 1/4 of      1/4 of Section      33      T 48 N,R 4W			Lat      0' "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E Feet <input type="checkbox"/> S      Feet <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments		
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200			
1	1		2	FILL: Brown to Black Silty Sand and Gravel, Numerous Glass Pieces.		[Cross-hatched pattern]										
			4	FILL: Black Silty Sand with Glass and Wood												w
			6	FILL: Wood Slabs, Pieces and Sawdust. Stained Black.												
				End of Test Pit at 6.0 Feet												

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TP-8</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter Inches	
Boring Location State Plane 1/4 of 1/4 of Section 33 T 48 N,R 4W			Lat 0 0 "		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1			0-2	Black TOPSOIL										
			2-4	FILL: Brown to Gray Lean Clay, Some Sand, Little Gravel, Occasional Wood Pieces and Cinders										
			4-6	FILL: Wood Slabs, Pieces and Sawdust. Approx. 5" diameter Vertical Steel Pipe and some Pieces of 2" Steel Pipe. Water flooded the Test Pit to 3' below Ground Surface				400		W				
			6-8	End of Test Pit at 8 feet										
				NOTE: A city representative observed the vertical steel pipe and said it was likely, an old artesian well casing used at the former lumber yard. No horizontal component to the pipe was identified (8 feet maximum depth penetrated)										

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

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>				License/Permit/Monitoring Number		Boring Number <b>TP-9</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Ashland Construction Co.</b>				Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name		Final Static Water Level Feet MSL	
						Surface Elevation Feet MSL	
						Borehole Diameter Inches	
Boring Location State Plane 1/4 of      1/4 of Section      33      T 48 N,R 4W				Lat      ° ' "		Local Grid Location (If applicable)	
				Long      ° ' "		<input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>				DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments							
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200								
1			2	FILL: Brown to Black Silty Sand and Gravel, Broken Glass Pieces																	
			4	FILL: Wood Slabs, Pieces and Sawdust. Stained Black in Some Places																	
			6	End of Test Pit at 6.0 Feet																	

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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## **Appendix C**

### **Soil Boring Logs**



Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-1</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>			Date Drilling Started <b>9/6/94</b>		Date Drilling Completed <b>9/6/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name <b>TW-1</b>	
Final Static Water Level <b>600.9 Feet MSL</b>			Surface Elevation <b>605.7 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1	6	3-3-2	0-1	Black TOPSOIL				ND	4	M					
2	12	4-3-2-7	1-2	FILL: Brown Lean Clay, Some Sand, Little Gravel				42	5	M					
3	10	2-1-2-10	3-4	FILL: Wood Chips, Slabs and Sawdust Mixed with Some Silt and Sand				1000+	3	M-W					
4	3	8-5-9-13	7-8					1000+	14	W					
5	7	4-7-11-11	9-10					240	18	W					
6	11	5-17-25-28	11-12	Gray, Medium Grained SAND, Trace Silt	SP			60	42	M					
			13-14	Hard, Brown Lean CLAY; Some Fine Sand, Trace Gravel	CL										
			14	End of Boring at 14.0 feet											

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon - TCT Brad Davis</b>			Date Drilling Started <b>9/6/94</b>		Date Drilling Completed <b>9/6/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
					<b>TW-2</b>	
Final Static Water Level <b>601.0 Feet MSL</b>			Surface Elevation <b>604.5 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane			Lat <b>46° 35' 41"</b>		Local Grid Location (If applicable)	
1/4 of      1/4 of Section <b>33</b> T <b>48</b> N,R <b>4W</b>			Long <b>90° 53' 01"</b>		<input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	10	2-2-2	0-10	Black TOPSOIL				25	4	M				
2	12	2-2-2-2	10-22	FILL: Black Organic Clay, Occasional Cinders				250	4	M				
3	8	6-3-2-2	22-30	FILL: Wood Chips, Slabs and Sawdust. Oily Sheen Noted on Cuttings				1000+	5	M				
4	6	3-1-2-16	30-36					1000+	4	W				
5	11	7-10-16-17	36-47					1000+	26	W				
6	18	10-10-19-20	47-65	Gray, Medium Grained SAND, Trace Silt	SP			40	29	M				
7	20	13-40-49-54	65-85	Hard, Brown Lean CLAY, Some Fine Sand, Little Gravel, Occasional Dense Silty Sand Seams and Layers	CL			ND	89	M				
			15.5-16.5	Dense Silty Sand Layer from 15.5 to 16.5 feet										
			16.5	End of Boring at 16.5 feet										

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>				License/Permit/Monitoring Number		Boring Number <b>TW-3</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon - TCT Brad Davis</b>				Date Drilling Started <b>9/6/94</b>		Date Drilling Completed <b>9/6/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name <b>TW-3</b>		Final Static Water Level <b>601.0 Feet MSL</b>	
				Surface Elevation <b>606.7 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>N, E</b>				Lat <b>46° 35' 41"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E	
1/4 of		1/4 of Section <b>33</b>		T <b>48</b> N,R <b>4W</b>		Long <b>90° 53' 01"</b>	
				1878 Feet		<input type="checkbox"/> S      2000 Feet <input type="checkbox"/> W	
County <b>ASHLAND</b>				DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	10	3-2	0-1	Black TOPSOIL				ND	6	M				
2	12	3-3-4	1-2	FILL: Dark Brown Lean Clay, Little Sand and Gravel, Occasional Cinders and Wood Pieces.				ND	11	M				
3	4	1-1-1	3-4	FILL: Wood Chips, Slabs and Sawdust Mixed with Silt and Clay	CL			400	3	M-W				
4	10	2-4-7-10	5-8	Very Stiff to Hard, Brown Lean CLAY, Some Fine Sand, Little Gravel, Occasional Silty and Clayey Sand Seams and Layers				270	11	M				
5	22	7-14-18-22	9-10					25	32	M				
6	24	1-18-23-25	11-12					60	46	M				
				End of Boring at 14.0 feet										
				NOTE: Boring offset 10' south of proposed location due to overhead lines.										

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-4</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon - TCT Brad Davis</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name <b>TW-4</b>	
Final Static Water Level <b>601.0 Feet MSL</b>			Surface Elevation <b>607.4 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	6	3-3	0-1	Black TOPSOIL				ND	6	M				
2	12	3-3-3	1-2	FILL: Brown Lean Clay, Little Sand and Gravel, Occasional Wood Pieces				ND	5	M				
3	5	1-0-1	3-4					38	2	M				
4	10	1-1-2	5-8	FILL: Wood Pieces, Slabs and Sawdust				700	3	M				
5	4	1-0-1	9-10					540	1	M				
6	16	7-10-2-8	11-12	Gray Medium Grained SAND, Trace Silt	SP			60	38	M-W				
7	20	17-21-18-17	13-16	Very Stiff to Hard, Brown Silty CLAY, Some Fine Sand, Trace Gravel, Occasional Silty Sand Seams. End of Boring at 16.5 feet	CL ML			10	39	M				

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-5</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon - TCT Brad Davis</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.		WI Unique Well No.	Common Well Name <b>TW-5</b>		Final Static Water Level <b>601.0 Feet MSL</b>	
					Surface Elevation <b>606.3 Feet MSL</b>	
					Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane 1/4 of      1/4 of Section <b>33</b> <b>T 48 N.R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1	12	4-5	2	FILL: Red-Brown Sandy Lean Clay, Trace Gravel				ND							
2	15.5	4-44	4	FILL: Black Silty Sand w/Gravel				ND							
3	24	3-34	6	FILL: Red-Brown Sandy Lean Clay, Trace Gravel				ND							
4	9	3-7-53	8	FILL: Dark Brown to Black Sandy Silt w/Pieces of Wood				ND							
5	11.5	5-5-7-11	10	FILL: Wood Pieces with Trace Black Sand, Wet				40							
6	16	4-4-12	12	Medium Dense, Brown Fine to Medium SAND	SP			32							
7	24	9-15-20-29	14	Stiff, Brown Sandy Lean CLAY	CL			ND							
			16	End of Boring at 16.5 feet											

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-6</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
			<b>TW-6</b>		<b>TW-6</b>	
Final Static Water Level <b>601.0 Feet MSL</b>			Surface Elevation <b>606.7 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1	12	2	0-12	FILL: Red-Brown Sandy Lean Clay, Trace Gravel		[Cross-hatched]		ND							
2	11	3-4-4	12-23					ND							
3	21	1-2-3	23-44	FILL: Black, Silty Sand with Roots, Trace Gravel		[Cross-hatched]		ND							
4	9.5	1-2-3	44-53.5	FILL: Black, Silty Clay w/Wood Pieces, Organic Odor Wood Pieces w/Black Oily Silt, Strong Odor		[Cross-hatched]		145							
5	18	2-2-3-3-3	53.5-71.5	FILL: Gravel and Black Silty Sand, Wet, Strong Odor		[Cross-hatched]		50							
6	11	1-1-1	71.5-82.5	Very Loose, Brown Well Graded SAND	SW	[Dotted]		30							
7	14	2-3-4	82.5-96.5	Stiff, Red-Brown Sandy Lean CLAY, Trace Gravel End of Boring at 16.5 feet	CL	[Diagonal lines]		ND							

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>				License/Permit/Monitoring Number		Boring Number <b>TW-7</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>				Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name <b>TW-7</b>		Final Static Water Level <b>601.7 Feet MSL</b>	
				Surface Elevation <b>606.4 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>				Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>				DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	12	1-3	2	FILL: Red-Brown Fine to Medium Sand		#4		ND						
2	19.5	3-3-3	4				ND							
3	18	1-1-3	6	FILL: Red-Brown Fat Clay, Trace Sand			ND							
4	11	3-3-12	8	FILL: Brown Fine to Medium Sand with Wood Pieces			ND							
5	19	1-4-5-1	10	Loose, Brown Fine to Medium SAND	SP		ND							
6	20	6-10-20-26	12	Very Stiff, Red-Brown Sandy Lean CLAY, Trace Gravel	CL		ND							
7	21	12-15-15-16	16	End of Boring at 16.5 feet			ND							

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-8</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>			Date Drilling Started <b>9/7/94</b>		Date Drilling Completed <b>9/7/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name <b>TW-8</b>	
Final Static Water Level <b>601.1 Feet MSL</b>			Surface Elevation <b>604.1 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane 1/4 of      1/4 of Section <b>33</b> <b>T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	7	2-2	0-1	Dark Brown TOPSOIL				2	3	M				
2	8	2-3-4	1-2	FILL: Dark Brown to Black Silty Sand and Gravel, Occasional Bricks, Glass Pieces, Cinders and Wood				150	6	M				
3	9	0-2-2	3-4	FILL: Wood Pieces, Slabs and Sawdust, Some Silt and Clay, Some Areas Stained Slightly Black				325	5	M				
4	6	2-4-10	5-8					1000	8	M				
5	8	3-3-5-6	9-10					820	8	M				
6	12	7-17-20-24	11-12	Gray Silty SAND Hard, Brown SILT, Some Fine Sand	SM ML			180	37	M				
			14	End of Boring at 14.0 feet										

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>				License/Permit/Monitoring Number		Boring Number <b>TW-9</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>				Date Drilling Started <b>9/8/94</b>		Date Drilling Completed <b>9/8/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name <b>TW-9</b>		Final Static Water Level <b>600.9 Feet MSL</b>	
				Surface Elevation <b>606.3 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N.R 4W</b>				Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>				DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	1	1-1-1	1	FILL: Dark Brown to Black Organic Clay				ND	2	M				
2	3	1-1-1	2					2	M					
3	2	1-1-1	4					70	M					
4	3	7-4-2	8					1000+	W					
5	7	20-5-7-6	10					1000+	W					
6	16	4-7-12	12	Gray Silty SAND	SM			200	13	M				
			14	Hard, Brown Lean CLAY, Some Sand, Little Gravel, Occasional Silty Layers	CL			50	14	M				
7	19	4-4-12	16	End of Boring at 16.5 Feet NOTE: FID results may be inaccurate for samples 6 & 7 due to oil coating the outside of the samples from uphole.										

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-10</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>			Date Drilling Started <b>9/8/94</b>		Date Drilling Completed <b>9/8/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name <b>TW-10</b>	
Final Static Water Level <b>600.9 Feet MSL</b>			Surface Elevation <b>603.9 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	2	1-1	0-2	Dark Brown TOPSOIL				ND	2	M				
2	3	2-5	2-4	FILL: Brown Silty Sand, Little Gravel, Occasional Wood Pieces				18	15	M				
3	8	2-2-3	4-12	FILL: Wood Pieces, Slabs and Sawdust				500	4	M				
4	1	3-2-2	8-9					1000+	6	M				
5	9	2-2-5	10-19					1000+	9	M-W				
6	14	6-9-11-15	12-26	Gray Silty SAND, Petroleum Odor	SM			440	20	M-W				
7	19	13-20-23-33	14-33	Very Stiff, Brown SILT; Some Fine Sand, Occasional Wet, Silty and Clayey Sand Seams and Layers. Petroleum Odor	ML			230	42	M-W				
			16.5	End of Boring at 16.5 Feet										

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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This form is authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$5,000 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Each day of continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>TW-11</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>			Date Drilling Started <b>9/8/94</b>		Date Drilling Completed <b>9/8/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name <b>TW-11</b>	
Final Static Water Level <b>600.8 Feet MSL</b>			Surface Elevation <b>603.5 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of      1/4 of Section    33    T 48 N,R 4W</b>			Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	4	7-53	0-2	Black TOPSOIL				ND	8	M				
2	8	4-22-1	2-4	FILL: Brown Silty Sand, Some Gravel and Concrete Pieces				ND	4	M-W				
3	16	0-0-22	4-10	FILL: Brown Lean Clay, Little Sand and Gravel				ND	2	M				
4	14	0-1-12	8-12					ND	2	M				
5	11	0-0-22	10-11					4	2	M				
6	15	3-4-11	12-14	Gray Medium Grained SAND, Little Silt	SP SM ML			250	10	M-W				
7	14	8-13-17-22	14-16	Very Stiff, Brown SILT, Some Fine Sand. Occasional Silty Sand Seams, Petroleum Odor				40	30	M				
				End of Boring at 16.5 Feet										

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>				License/Permit/Monitoring Number		Boring Number <b>TW-12</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Huntingdon-TCT Brad Davis</b>				Date Drilling Started <b>9/8/94</b>		Date Drilling Completed <b>9/8/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name <b>TW-12</b>		Final Static Water Level <b>600.9 Feet MSL</b>	
						Surface Elevation <b>606.0 Feet MSL</b>	
						Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>				Lat <b>46° 35' 41"</b> Long <b>90° 53' 01"</b>		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>				DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	6	1-3	0-1	Dark Brown TOPSOIL				ND	7	M				
2	4	34-100+	2	FILL: Gray Silty Clay, Some Fine Sand, Occasional Concrete Pieces				110	104	M				
3	11	1-1-3	4	FILL: Wood Slabs, Pieces and Sawdust				1000+	3	M				
4	8	2-3-11-4	8					1000+	14	M				
5	3	2-3-4	10					1000+	6	M				
6	9	4-14-11-12	12	FILL: Fine to Medium Grained Sand, Little Silt, Occasional Wood Slabs				500	25	M				
7	16	15-22-30-42	14	Hard, Brown Silty CLAY, Some Fine Sand	CL ML			250	52	M				
			16	End of Boring at 16.5 feet										

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>B-1</b>
Boring Drilled By (Firm name and name of crew chief) <b>Wisconsin Test Drill/Eric Schoemberg</b>			Date Drilling Started <b>11/21/94</b>	Date Drilling Completed <b>11/21/94</b>	Drilling Method <b>4 1/4" ID ASA</b>
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Final Static Water Level Feet MSL	Surface Elevation Feet MSL	Borehole Diameter <b>8.2 Inches</b>
Boring Location State Plane 1/4 of      1/4 of Section <b>33</b> T <b>48</b> N,R <b>4W</b>			Lat    0 ' "	Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E 1586 Feet <input type="checkbox"/> S      1912 Feet <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>	Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1	12	2222	2	Asphalt											
2	16	2222	4	Brown Sand and Gravel Base Coarse				ND	4	M					
3	19	2222	6	Probable FILL: Brown Lean Clay, Little Sand and Gravel				4	4	M					
4	23	2344	8					10	9	M					
5	24	67-10-11	10	Very Stiff to Hard, Brown Lean CLAY, Little Sand and Gravel	CL			2	17	M					
6	24	7-10-11-14	12					2	21	M					
7	24	7-11-12-24	14					2	23	M					
8	24	13-15-17-24	16					ND	29	M					
9	24	12-22-27-31	18					ND	49	M					
			20	End of Boring at 20.0 Feet											

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>B-2</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Wisconsin Test Drill/Eric Schoemberg</b>			Date Drilling Started <b>11/21/94</b>		Date Drilling Completed <b>11/21/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
Final Static Water Level <b>622.8 Feet MSL</b>			Surface Elevation <b>635.2 Feet MSL</b>		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat 0' "		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments		
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200			
1	20	21-35	2	Asphalt												
2	18	22-34	4	Brown Silty Sand and Gravel Base Coarse				760	3	M						
3	18	21-13	6	FILL: Brown Lean Clay, Some Sand, Little Gravel, Petroleum Like Odor in Places				600	4	M						
4	14	13-23	8					860	2	M						
5	9	22-22	10					1000+	4	M						
6	3	21-21	12	FILL: Mixture of Peat, Wood Pieces, Silt, Sand and Clay. Heavy Black Petroleum - like Product Coating Pieces below 14 feet.				1000+	4	M						
7	7	11-21	14					1000+	3	M						
8	3	11-10	16	Drill Rods Coated with Black Tarry Substance				1000+	3	M						
9	8	11-12	18					1000+	2	M						
10	16	24-40	20	Very Stiff, Brown Lean CLAY, Some Sand, Little Gravel	CL			1000+	2	M						
			22	End of Boring at 22.0 Feet				1000+	10	M						

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

Signature \_\_\_\_\_ Firm **SEH**  
 421 Frenette Drive, Chippewa Falls, WI.  
 Tel: 715-720-6200, Fax: 715-720-6300

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Facility/Project Name <b>WDNR - ASHLAND LAKEFRONT PROPERTY</b>			License/Permit/Monitoring Number		Boring Number <b>B-3</b>	
Boring Drilled By (Firm name and name of crew chief) <b>Wisconsin Test Drill/Eric Schoemberg</b>			Date Drilling Started <b>11/22/94</b>		Date Drilling Completed <b>11/22/94</b>	
DNR Facility Well No.			WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL			Surface Elevation Feet MSL		Borehole Diameter <b>8.2 Inches</b>	
Boring Location State Plane <b>1/4 of 1/4 of Section 33 T 48 N,R 4W</b>			Lat 0 0 "		Local Grid Location (If applicable) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>ASHLAND</b>			DNR County Code <b>02</b>		Civil Town/City/ or Village <b>ASHLAND</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments	
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200		
1	19	1-3-4	2	Asphalt											
2	22	3-5-7	4	Brown Silty Sand and Gravel Base Coarse				45	6	M					
3	24	3-4-7	6	FILL: Mixture of Brown and Black Lean Clay, Little Sand and Gravel	CL			ND	12	M					
4	18	3-4-15-20	8	Very Stiff to Hard, Brown Lean Clay, Little to Some Sand, Little Gravel				ND	10	M					
5	21	15-21-10-21	10	Thin Wet Sand Seam at 7.0 ft.				ND	19	M					
6	19	5-4-11-16	12	Cobble or Boulder at 9.5 ft.				ND	31	M-W					
7	24	7-10-15-20	14	Dense, Fine SAND, Little Silt	SP			ND	19	M					
8	24	4-10-15-24	16	Hard, Brown Lean CLAY, Some Sand, Little Gravel	CL			ND	25	M					
9	18	5-10-21-32	18					ND	22	M					
			20	End of Boring at 20.0 feet				ND	31	M					

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

Signature	Firm <b>SEH</b> 421 Frenette Drive, Chippewa Falls, WI. Tel: 715-720-6200, Fax: 715-720-6300
-----------	---

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## **Appendix D**

### **Well Construction Documentation**



**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name <b>Ashland Lakefront Property</b>	Local Grid Location of Well ft. <u>  </u> N. <u>  </u> ft. <u>  </u> E. <u>  </u> W.	Well Name <b>TW-1</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Wm. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ E. <input type="checkbox"/> W. <input type="checkbox"/>	Date Well Installed <b>09/06/94</b> m m d d y y
Distance Well Is From Waste/Source Boundary ft. _____	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL

B. Well casing, top elevation \_\_\_\_\_ ft. MSL

C. Land surface elevation \_\_\_\_\_ ft. MSL

D. Surface seal, bottom \_\_\_\_\_ ft. MSL or 30 ft.

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Backfill

13. Sieve analysis attached?  Yes  No

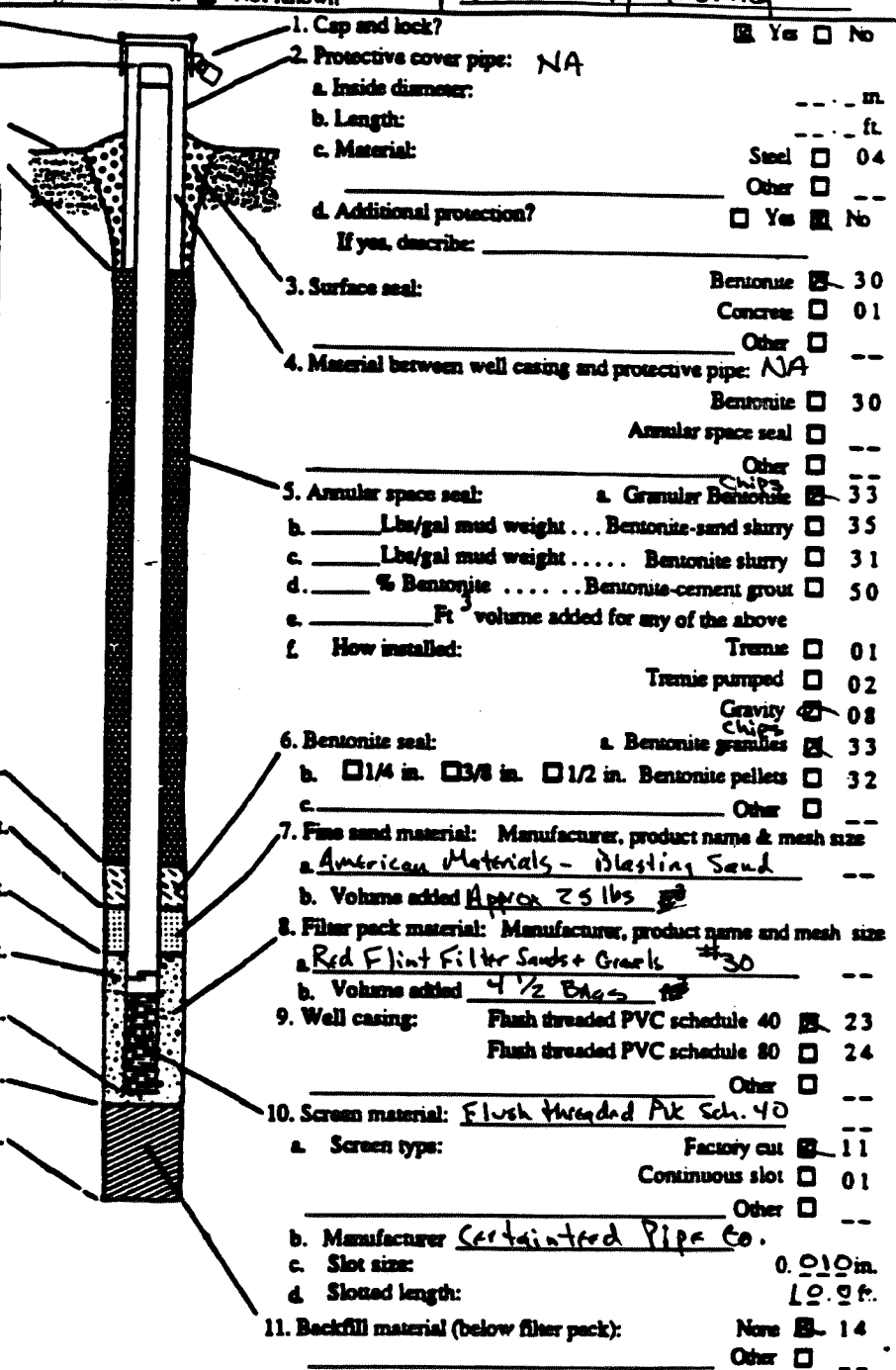
14. Drilling method used:  
 Rotary  50  
 Hollow Stem Auger  41  
 Oct  --

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_



E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 30 ft.

F. Fine sand, top \_\_\_\_\_ ft. MSL or 30 ft.

G. Filter pack, top \_\_\_\_\_ ft. MSL or 35 ft.

H. Screen joint, top \_\_\_\_\_ ft. MSL or 40 ft.

I. Well bottom \_\_\_\_\_ ft. MSL or 140 ft.

J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 140 ft.

K. Borehole, bottom \_\_\_\_\_ ft. MSL or 140 ft.

L. Borehole, diameter 8.2 in.

M. O.D. well casing 2.40 in.

N. I.D. well casing 2.00 in.

1. Cap and lock?  Yes  No

2. Protective cover pipe: **NA**

a. Inside diameter: \_\_\_\_\_ in.

b. Length: \_\_\_\_\_ ft.

c. Material: Steel  04  
Other  --

d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_

3. Surface seal: Bentonite  30  
Concrete  01  
Other  --

4. Material between well casing and protective pipe: **NA**

Bentonite  30  
Annular space seal  --  
Other  --

5. Annular space seal: a. Granular Bentonite chips  33  
b. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite-sand slurry  35  
c. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite slurry  31  
d. \_\_\_\_\_ % Bentonite ... Bentonite-cement grout  50  
e. \_\_\_\_\_ Ft. volume added for any of the above

f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  08  
Bentonite granules  33

6. Bentonite seal: a. Bentonite granules  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
c. Other  --

7. Fine sand material: Manufacturer, product name & mesh size  
a. **American Materials - Blasting Sand** --  
b. Volume added **Approx 25 lbs**

8. Filter pack material: Manufacturer, product name and mesh size  
a. **Red Flint Filter Sands + Gravel #30** --  
b. Volume added **4 1/2 Bags**

9. Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other  --

10. Screen material: **Flush threaded PVC Sch. 40** --  
a. Screen type: Factory cut  11  
Continuous slot  01  
Other  --  
b. Manufacturer **Certainated Pipe Co.**  
c. Slot size: **0.010 in.**  
d. Slotted length: **10 ft.**

11. Backfill material (below filter pack): None  14  
Other  --

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John P. Gull Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stat. and ch. NR 741, Wis. Ad. Code. In accordance with ch. 144, Wis. Stat., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stat., failure to file this form may result in a forfeiture of not more than \$10,000 for day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name <b>Ashland Lakefront Property</b>	Local Grid Location of Well _____ ft. <b>N</b> _____ ft. <b>E</b> _____ ft. <b>S</b> _____ ft. <b>W</b>	Well Name <b>TW-2</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Well Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <b>E</b> <b>W</b>	Date Well Installed <u>09/06/94</u> m m d d v v
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Sid. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

- A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL
- B. Well casing, top elevation \_\_\_\_\_ ft. MSL
- C. Land surface elevation \_\_\_\_\_ ft. MSL
- D. Surface seal, bottom \_\_\_\_\_ ft. MSL or 3.0 ft.

**12. USCS classification of soil near screen:**  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

**13. Sieve analysis attached?**  Yes  No

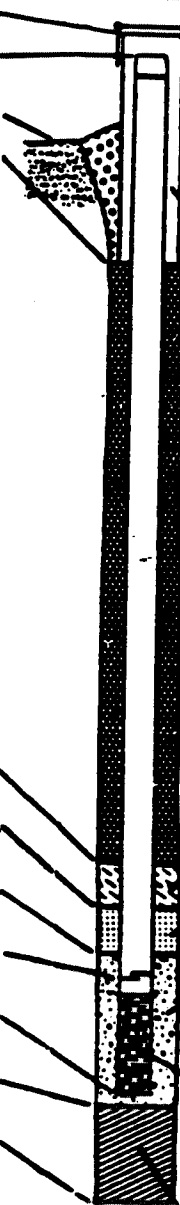
**14. Drilling method used:**  
 Rotary  50  
 Hollow Stem Auger  A1  
 Other

**15. Drilling fluid used:** Water  02 Air  01  
 Drilling Mud  03 None  99

**16. Drilling additives used?**  Yes  No

Describe \_\_\_\_\_

**17. Source of water (attach analysis):**  
 \_\_\_\_\_



- 1. Cap and lock?  Yes  No
- 2. Protective cover pipe: **NA**
  - a. Inside diameter: \_\_\_\_\_ in.
  - b. Length: \_\_\_\_\_ ft.
  - c. Material: Steel  04  
Other
  - d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_
- 3. Surface seal: Bentonite  30  
Concrete  01  
Other
- 4. Material between well casing and protective pipe: **NA**  
Bentonite  30  
Annular space seal   
Other
- 5. Annular space seal:
  - a. Grains Bentonite  33
  - b. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite-sand slurry  35
  - c. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite slurry  31
  - d. \_\_\_\_\_ % Bentonite ... Bentonite-cement grout  50
  - e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above
  - f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  08
- 6. Bentonite seal:
  - a. Bentonite grains  33
  - b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32
  - c. \_\_\_\_\_ Other
- 7. Fine sand material: Manufacturer, product name & mesh size  
a. **American Materials - Blasting Sand** ---  
b. Volume added **approx. 25 lbs**
- 8. Filter pack material: Manufacturer, product name and mesh size  
a. **Red Flint Filter Sands + Gravels - 30** ---  
b. Volume added **5 bags**
- 9. Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other
- 10. Screen material: **Flush threaded PVC sch. 40** ---
  - a. Screen type: Factory cut  11  
Continuous slot  01  
Other
  - b. Manufacturer **Certained Pipe Co.**
  - c. Slot size: **0.060** in.
  - d. Slotted length: **10.0** ft.
- 11. Backfill material (below filter pack): **SAND** None  14  
Other

- E. Bentonite seal, top \_\_\_\_\_ ft. MSL or 3.0 ft.
- F. Fine sand, top \_\_\_\_\_ ft. MSL or 3.0 ft.
- G. Filter pack, top \_\_\_\_\_ ft. MSL or 3.5 ft.
- H. Screen joint, top \_\_\_\_\_ ft. MSL or 4.0 ft.
- I. Well bottom \_\_\_\_\_ ft. MSL or 14.0 ft.
- J. Filter pack, bottom \_\_\_\_\_ ft. MSL or 14.0 ft.
- K. Borehole, bottom \_\_\_\_\_ ft. MSL or 16.5 ft.
- L. Borehole, diameter 8.2 in.
- M. O.D. well casing 2.40 in.
- N. I.D. well casing 2.00 in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John E. Hull Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>N.</b> _____ ft. <b>E.</b>	Well Name <b>TW-3</b>
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Was. Unique Well Number DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ E. W.	Date Well Installed <b>09/06/94</b> m m d d v v
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL B. Well casing, top elevation _____ ft. MSL C. Land surface elevation _____ ft. MSL D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.		1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 2. Protective cover pipe: <b>NA</b> a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: _____ d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____ 3. Surface seal: <b>Bentonite</b> <input checked="" type="checkbox"/> 30 <b>Concrete</b> <input type="checkbox"/> 01 Other <input type="checkbox"/> -- 4. Material between well casing and protective pipe: <b>NA</b> <b>Bentonite</b> <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> -- Other <input type="checkbox"/> -- 5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: <b>Gravity</b> <input checked="" type="checkbox"/> 08 <b>Tremie</b> <input type="checkbox"/> 01 <b>Tremie pumped</b> <input type="checkbox"/> 02 6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> -- 7. Fine sand material: Manufacturer, product name & mesh size a. <b>American Materials - Blasting Sand</b> -- b. Volume added _____ ft <sup>3</sup> 8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sands + Gravel - #30</b> -- b. Volume added _____ ft <sup>3</sup> 9. Well casing: <b>Flush threaded PVC schedule 40</b> <input checked="" type="checkbox"/> 23 <b>Flush threaded PVC schedule 80</b> <input type="checkbox"/> 24 Other <input type="checkbox"/> -- 10. Screen material: <b>Flush threaded PVC Sch. 40</b> -- a. Screen type: <b>Factory cut</b> <input checked="" type="checkbox"/> 11 <b>Continuous slot</b> <input type="checkbox"/> 01 Other <input type="checkbox"/> -- b. Manufacturer <b>Certainated Pipe Co.</b> c. Slot size: <b>0.010</b> in. d. Slotted length: <b>10.0</b> ft. 11. Backfill material (below filter pack): <b>None</b> <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> --
--	--	---

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis attached?  Yes  No

14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other  --

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
 Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_

E. Bentonite seal, top \_\_\_\_\_ ft. MSL or **3.0** ft.

F. Fine sand, top \_\_\_\_\_ ft. MSL or **3.0** ft.

G. Filter pack, top \_\_\_\_\_ ft. MSL or **3.5** ft.

H. Screen joint, top \_\_\_\_\_ ft. MSL or **4.0** ft.

I. Well bottom \_\_\_\_\_ ft. MSL or **14.0** ft.

J. Filter pack, bottom \_\_\_\_\_ ft. MSL or **14.0** ft.

K. Borehole, bottom \_\_\_\_\_ ft. MSL or **14.0** ft.

L. Borehole, diameter **8.2** in.

M. O.D. well casing **2.40** in.

N. I.D. well casing **2.00** in.

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

Signature John C. Gull Firm Short Elliott Hendrickson Inc

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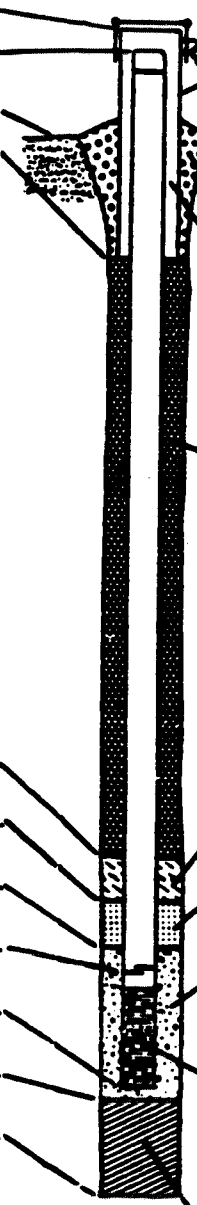
**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev. 4-90

Facility/Project Name <b>Ashland Lakefront Property</b>	Local Grid Location of Well ft. <u>85</u> N. ft. <u>85</u> E. W.	Well Name <b>TW-4</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Was. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source ____ 1/4 of ____ 1/4 of Sec. ____ T. ____ N. R. <input type="checkbox"/> E. W.	Date Well Installed <u>09/07/94</u> m m d d y y
Distance Well Is From Waste/Source Boundary ft. _____	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <u>3.0</u> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input checked="" type="checkbox"/> 41                  Other <input type="checkbox"/> _____</p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <u>3.0</u> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <u>3.0</u> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <u>3.5</u> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <u>4.0</u> ft.</p> <p>I. Well bottom _____ ft. MSL or <u>14.0</u> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <u>14.0</u> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <u>16.5</u> ft.</p> <p>L. Borehole, diameter <u>8.2</u> in.</p> <p>M. O.D. well casing <u>2.40</u> in.</p> <p>N. I.D. well casing <u>2.00</u> in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: <b>NA</b></p> <p>a. Inside diameter: _____ in.</p> <p>b. Length: _____ ft.</p> <p>c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> _____</p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> _____</p> <p>4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> _____ Other <input type="checkbox"/> _____</p> <p>5. Annular space seal: a. Gravel Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input checked="" type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input checked="" type="checkbox"/> 50 e. _____ Ft. volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> _____</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size <b>American Materials - Blasting Sand</b> b. Volume added <b>Approx 20 lbs</b></p> <p>8. Filter pack material: Manufacturer, product name and mesh size <b>Red Flint Filter Sands + Gravels #30</b> b. Volume added <b>5 bags</b></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/> _____</p> <p>10. Screen material: <b>Flush threaded PVC Sch. 40</b> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> _____ b. Manufacturer <b>Certainteed Pipe Co.</b> c. Slot size: <b>0.010 in.</b> d. Slotted length: <b>10.0 ft.</b></p> <p>11. Backfill material (below filter pack): None <input type="checkbox"/> 14 <b>Sand</b> <input checked="" type="checkbox"/> _____</p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature John E. Gill Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

MONITORING WELL CONSTRUCTION  
Form 4400-113A Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>NS</b> _____ ft. <b>EW</b>	Well Name <b>TW-5</b>
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Well Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. <b>BEW</b>	Date Well Installed <b>09/10/94</b> (m m d d y y)
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>TWIN CITY TESTING</b> <b>BRAD DAVIS</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL B. Well casing, top elevation _____ ft. MSL C. Land surface elevation _____ ft. MSL D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.		1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 2. Protective cover pipe: <b>NA</b> a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: _____ d. Additional protection? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe: _____ 3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> ____ 4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> ____ Other <input type="checkbox"/> ____ 5. Annular space seal: a. <b>Bentonite Chips</b> <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08 a. <b>Bentonite Chips</b> <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> ____ 7. Fine sand material: Manufacturer, product name & mesh size a. <b>American Materials - Blasting Sand</b> ____ b. Volume added _____ ft <sup>3</sup> 8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sands + gravels #30</b> ____ b. Volume added _____ ft <sup>3</sup> 9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> ____ 10. Screen material: <b>Flush Threaded PVC Sch 40</b> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> ____ b. Manufacturer <b>Certainfeed Pipe Co.</b> c. Slot size: <b>0.010 in.</b> d. Slotted length: <b>10.0 ft.</b> 11. Backfill material (below filter pack): <b>Sand</b> None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/> ____
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12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/> ____
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____
17. Source of water (attach analysis): _____
E. Bentonite seal, top _____ ft. MSL or <b>3.0</b> ft. F. Fine sand, top _____ ft. MSL or <b>3.0</b> ft. G. Filter pack, top _____ ft. MSL or <b>3.5</b> ft. H. Screen joint, top _____ ft. MSL or <b>4.0</b> ft. I. Well bottom _____ ft. MSL or <b>14.0</b> ft. J. Filter pack, bottom _____ ft. MSL or <b>14.0</b> ft. K. Borehole, bottom _____ ft. MSL or <b>16.5</b> ft. L. Borehole, diameter <b>8.2</b> in. M. O.D. well casing <b>2.40</b> in. N. I.D. well casing <b>2.00</b> in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John Dwoah Firm Short Elliott Hendrickson Inc.

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**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name  
**ASHLAND LAKEFRONT PROPERTY**

Local Grid Location of Well  
\_\_\_\_\_ ft. **NS** \_\_\_\_\_ ft. **EW**

Well Name  
**TW-6**

Facility License, Permit or Monitoring Number

Grid Origin Location

Well Unique Well Number DNR Well Number

Type of Well Water Table Observation Well  11  
Piezometer  12

Lat \_\_\_\_\_ Long \_\_\_\_\_ or  
St. Plane \_\_\_\_\_ ft. N. \_\_\_\_\_ ft. E.

Date Well Installed  
**09107194**  
m m d d y y

Distance Well Is From Waste/Source Boundary  
\_\_\_\_\_ ft.

Section Location of Waste/Source  
\_\_\_\_ 1/4 of \_\_\_\_ 1/4 of Sec. \_\_\_\_ T. \_\_\_\_ N. R. \_\_\_\_ E. W.

Well Installed By: (Person's Name and Firm)  
**TWIN CITY TESTING**

Is Well A Point of Enforcement Sid. Application?  
 Yes  No

Location of Well Relative to Waste/Source  
u  Upgradient s  Sidegradient  
d  Downgradient n  Not Known

**BRAD DAVIS**

- A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL
- B. Well casing, top elevation \_\_\_\_\_ ft. MSL
- C. Land surface elevation \_\_\_\_\_ ft. MSL
- D. Surface seal, bottom \_\_\_\_\_ ft. MSL or **3.0** ft.

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis attached?  Yes  No

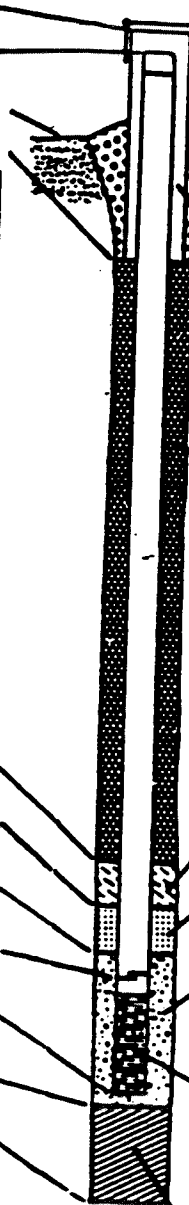
14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other  \_\_\_\_\_

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis):



- 1. Cap and lock?  Yes  No
- 2. Protective cover pipe: **NA**
  - a. Inside diameter: \_\_\_\_\_ in.
  - b. Length: \_\_\_\_\_ ft.
  - c. Material: \_\_\_\_\_
  - d. Additional protection?  Yes  No
  - If yes, describe: \_\_\_\_\_
- 3. Surface seal:
  - Bentonite  30
  - Concrete  01
  - Other  \_\_\_\_\_
- 4. Material between well casing and protective pipe: **NA**
  - Bentonite  30
  - Annular space seal  \_\_\_\_\_
  - Other  \_\_\_\_\_
- 5. Annular space seal:
  - a. Bentonite Chips  33
  - b. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite-sand slurry  35
  - c. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite slurry  31
  - d. \_\_\_\_\_ % Bentonite ... Bentonite-cement grout  50
  - e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above
  - f. How installed:
    - Tremie  01
    - Tremie pumped  02
    - Gravity  08
- 6. Bentonite seal:
  - a. Bentonite chips  33
  - b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32
  - c. \_\_\_\_\_ Other  \_\_\_\_\_
- 7. Fine sand material: Manufacturer, product name & mesh size  
 a. **American Materials - Blasting Sand**  
 b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 8. Filter pack material: Manufacturer, product name and mesh size  
 a. **Red Flint Filter Sands & Gravels #30**  
 b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 9. Well casing:
  - Flush threaded PVC schedule 40  23
  - Flush threaded PVC schedule 80  24
  - Other  \_\_\_\_\_
- 10. Screen material: **Flush Threaded PVC Sch 40**
  - a. Screen type:
    - Factory cut  11
    - Continuous slot  01
    - Other  \_\_\_\_\_
  - b. Manufacturer **Certainfeed Pipe Co.**
  - c. Slot size: **0.010 in.**
  - d. Slotted length: **10.0 ft.**
- 11. Backfill material (below filter pack):
  - Sand**
  - None  14
  - Other  \_\_\_\_\_

- E. Bentonite seal, top \_\_\_\_\_ ft. MSL or **3.0** ft.
- F. Fine sand, top \_\_\_\_\_ ft. MSL or **3.0** ft.
- G. Filter pack, top \_\_\_\_\_ ft. MSL or **3.5** ft.
- H. Screen joint, top \_\_\_\_\_ ft. MSL or **4.0** ft.
- I. Well bottom \_\_\_\_\_ ft. MSL or **14.0** ft.
- J. Filter pack, bottom \_\_\_\_\_ ft. MSL or **14.0** ft.
- K. Borehole, bottom \_\_\_\_\_ ft. MSL or **16.5** ft.
- L. Borehole, diameter **8.2** in.
- M. O.D. well casing **2.40** in.
- N. I.D. well casing **2.00** in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature *Steve Dwork* Firm *Short Elliott Hendrickson Inc.*

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**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4.90

Facility/Project Name  
**ASHLAND LAKEFRONT PROPERTY**

Local Grid Location of Well  
\_\_\_\_\_ ft. **NS** \_\_\_\_\_ ft. **EW**

Well Name  
**TW-7**  
Well Unique Well Number \_\_\_\_\_ DNR Well Number \_\_\_\_\_

Facility License, Permit or Monitoring Number \_\_\_\_\_

Grid Origin Location  
Lat. \_\_\_\_\_ Long. \_\_\_\_\_ or  
St. Plane \_\_\_\_\_ ft. N. \_\_\_\_\_ ft. E.

Date Well Installed  
**09/07/94**  
m m d d y y

Type of Well Water Table Observation Well  11  
Piezometer  12

Section Location of Waste/Source  
\_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4 of Sec. \_\_\_\_\_ T. \_\_\_\_\_ N. R. **EW**

Well Installed By: (Person's Name and Firm)  
**TWIN CITY TESTING**  
**BRAD DAVIS**

Distance Well Is From Waste/Source Boundary  
\_\_\_\_\_ ft.

Is Well A Point of Enforcement Std. Application?  
 Yes  No

Location of Well Relative to Waste/Source  
u  Upgradient s  Sidegradient  
d  Downgradient n  Not Known

- A. Protective pipe, top elevation \_\_\_\_\_ ft. MSL
- B. Well casing, top elevation \_\_\_\_\_ ft. MSL
- C. Land surface elevation \_\_\_\_\_ ft. MSL
- D. Surface seal, bottom \_\_\_\_\_ ft. MSL or **3.0** ft.

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

13. Sieve analysis attached?  Yes  No

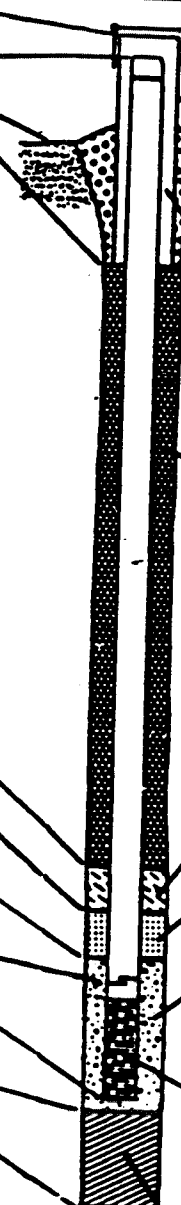
14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other  \_\_\_\_\_

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No

Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_



- 1. Cap and lock?  Yes  No
- 2. Protective cover pipe: **NA**
  - a. Inside diameter: \_\_\_\_\_ in.
  - b. Length: \_\_\_\_\_ ft.
  - c. Material: \_\_\_\_\_ Steel  04  
Other  \_\_\_\_\_
  - d. Additional protection?  Yes  No  
If yes, describe: \_\_\_\_\_
- 3. Surface seal: Bentonite  30  
Concrete  01  
Other  \_\_\_\_\_
- 4. Material between well casing and protective pipe: **NA**  
Bentonite  30  
Annular space seal  \_\_\_\_\_  
Other  \_\_\_\_\_
- 5. Annular space seal: a. Bentonite Chips  33  
b. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite-sand slurry  35  
c. \_\_\_\_\_ Lbs/gal mud weight ... Bentonite slurry  31  
d. \_\_\_\_\_ % Bentonite ... Bentonite-cement grout  50  
e. \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above
- f. How installed: Tremie  01  
Tremie pumped  02  
Gravity  08
- 6. Bentonite seal: a. Bentonite chips  33  
b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
c. \_\_\_\_\_ Other  \_\_\_\_\_
- 7. Fine sand material: Manufacturer, product name & mesh size  
a. **American Materials - Blasting Sand**  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 8. Filter pack material: Manufacturer, product name and mesh size  
a. **Red Flint Filter Sands + Gravels #30**  
b. Volume added \_\_\_\_\_ ft<sup>3</sup>
- 9. Well casing: Flush threaded PVC schedule 40  23  
Flush threaded PVC schedule 80  24  
Other  \_\_\_\_\_
- 10. Screen material: **Flush Threaded PVC Sch 40**  
a. Screen type: Factory cut  11  
Continuous slot  01  
Other  \_\_\_\_\_
- b. Manufacturer **Certainfeed Pipe Co.**  
c. Slot size: 0.010 in.  
d. Slotted length: 10.0 ft.
- 11. Backfill material (below filter pack): None  14  
Other  **Sand**

- E. Bentonite seal, top \_\_\_\_\_ ft. MSL or **3.0** ft.
- F. Fine sand, top \_\_\_\_\_ ft. MSL or **3.0** ft.
- G. Filter pack, top \_\_\_\_\_ ft. MSL or **3.5** ft.
- H. Screen joint, top \_\_\_\_\_ ft. MSL or **4.0** ft.
- I. Well bottom \_\_\_\_\_ ft. MSL or **14.0** ft.
- J. Filter pack, bottom \_\_\_\_\_ ft. MSL or **14.0** ft.
- K. Borehole, bottom \_\_\_\_\_ ft. MSL or **16.5** ft.
- L. Borehole, diameter **8.2** in.
- M. O.D. well casing **2.40** in.
- N. I.D. well casing **2.00** in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John Dwoah Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well ft. <b>N</b> _____ ft. <b>E</b> _____	Well Name <b>TW-8</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Was. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Sources _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <b>E</b> <b>W</b>	Date Well Installed <b>09/07/94</b> <small>m m d d v v</small>
Distance Well Is From Waste/Source Boundary ft. _____	Location of Well Relative to Waste/Sources u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Sid. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input checked="" type="checkbox"/> 41                  Other <input type="checkbox"/> _____</p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <b>3.5</b> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <b>4.0</b> ft.</p> <p>I. Well bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>L. Borehole, diameter <b>8.2</b> in.</p> <p>M. O.D. well casing <b>2.10</b> in.</p> <p>N. I.D. well casing <b>2.00</b> in.</p>	<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: <b>NA</b></p> <p>a. Inside diameter: _____ in.</p> <p>b. Length: _____ ft.</p> <p>c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> _____</p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> _____</p> <p>4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> _____</p> <p>5. Annular space seal: a. <b>Chipped</b> Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft<sup>3</sup> volume added for any of the above</p> <p>f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. Other <input type="checkbox"/> _____</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. <b>American Materials - Blasting Sand</b> _____ b. Volume added <b>Approx 25 lbs</b></p> <p>8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sands + Gravel - #30</b> _____ b. Volume added _____ ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____</p> <p>10. Screen material: <b>Flush threaded PVC Sch. 40</b> _____ a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____</p> <p>b. Manufacturer <b>Certainfred Pipe Co.</b></p> <p>c. Slot size: <b>0.010</b> in.</p> <p>d. Slotted length: <b>10.0</b> ft.</p> <p>11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> _____</p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature John P. Skell Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.



**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A  
Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>N</b> _____ ft. <b>E</b>	Well Name <b>TW-9</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. N. _____ ft. E.	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source ____ 1/4 of ____ 1/4 of Sec. ____ T. ____ N. R. <input type="checkbox"/> E. <input type="checkbox"/> W.	Date Well Installed <b>09/08/94</b> <small>m m d d v v</small>
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Sid. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <u>3.0</u> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/>                  SM <input checked="" type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input checked="" type="checkbox"/> 41                  Other <input type="checkbox"/> _____</p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <u>3.0</u> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <u>3.0</u> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <u>3.5</u> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <u>4.0</u> ft.</p> <p>I. Well bottom _____ ft. MSL or <u>14.0</u> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <u>14.0</u> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <u>16.5</u> ft.</p> <p>L. Borehole, diameter <u>8.2</u> in.</p> <p>M. O.D. well casing <u>2.40</u> in.</p> <p>N. I.D. well casing <u>2.00</u> in.</p>	<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: <b>NA</b></p> <p>a. Inside diameter: _____ in.</p> <p>b. Length: _____ ft.</p> <p>c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> --</p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> --</p> <p>4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> -- Other <input type="checkbox"/> --</p> <p>5. Annular space seal: a. Gummular Bentonite Chips <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight... Bentonite-sand slurry <input checked="" type="checkbox"/> 35 c. _____ Lbs/gal mud weight... Bentonite slurry <input checked="" type="checkbox"/> 31 d. _____ % Bentonite... Bentonite-cement grout <input checked="" type="checkbox"/> 50 e. _____ Ft³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input checked="" type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite pellets <input checked="" type="checkbox"/> 33 b. <input checked="" type="checkbox"/> 1/4 in. <input checked="" type="checkbox"/> 3/8 in. <input checked="" type="checkbox"/> 1/2 in. Bentonite pellets <input checked="" type="checkbox"/> 32 c. Other <input type="checkbox"/> --</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. <b>American Materials - Blasting Sand</b> <input checked="" type="checkbox"/> -- b. Volume added <b>Approx 20 lbs</b></p> <p>8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sands + Gravels - #30</b> <input checked="" type="checkbox"/> -- b. Volume added <b>5 bags ft³</b></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input checked="" type="checkbox"/> 24 Other <input type="checkbox"/> --</p> <p>10. Screen material: <b>Flush threaded PVC sch. 40</b> <input checked="" type="checkbox"/> -- a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> -- b. Manufacturer <b>CertainTeed Pipe Co.</b> c. Slot size: <b>0.010 in.</b> d. Slotted length: <b>10.0 ft.</b></p> <p>11. Backfill material (below filter pack): <b>SAND</b> <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> --</p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John E. Gull Firm Short Elliott Hendrickson Inc.

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**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

MONITORING WELL CONSTRUCTION  
Form 4400-113A  
Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>N</b> _____ ft. <b>E</b>	Well Name <b>TW-10</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or _____	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> <b>11</b> Piezometer <input type="checkbox"/> <b>12</b>	St. Plane _____ ft. N. _____ ft. E.	Date Well Installed <b>09/08/94</b> <small>m m / d d / y y</small>
Distance Well Is From Waste/Source Boundary _____ ft.	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ E. W.	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input checked="" type="checkbox"/> 41                  Other <input type="checkbox"/> _____</p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis): _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <b>3.5</b> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <b>4.0</b> ft.</p> <p>I. Well bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <b>16.5</b> ft.</p> <p>L. Borehole, diameter <b>8.2</b> in.</p> <p>M. O.D. well casing <b>2.40</b> in.</p> <p>N. I.D. well casing <b>2.00</b> in.</p>	<p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: <b>NA</b></p> <p>a. Inside diameter: _____ in.</p> <p>b. Length: _____ ft.</p> <p>c. Material: Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> _____</p> <p>d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> _____</p> <p>4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> _____ Other <input type="checkbox"/> _____</p> <p>5. Annular space seal: a. Grout/Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft<sup>3</sup> volume added for any of the above</p> <p>f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08 Chisel <input type="checkbox"/> _____ Bentonite granules <input checked="" type="checkbox"/> 33</p> <p>6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. Other <input type="checkbox"/> _____</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size a. <b>American Materials - Blasting Sand</b> _____ b. Volume added <b>Approx. 20 lbs</b></p> <p>8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sands + Gravels - #30</b> _____ b. Volume added _____ ft<sup>3</sup></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> _____</p> <p>10. Screen material: <b>Flush threaded PVC sch. 40</b> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> _____</p> <p>b. Manufacturer <b>Certainteed Pipe Co.</b> c. Slot size: <b>0.010</b> in. d. Slotted length: <b>10.0</b> ft.</p> <p>11. Backfill material (below filter pack): None <input type="checkbox"/> 14 <b>SAND</b> <input checked="" type="checkbox"/> _____</p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature John E. Hill Firm Short Elliott Henderson Inc.

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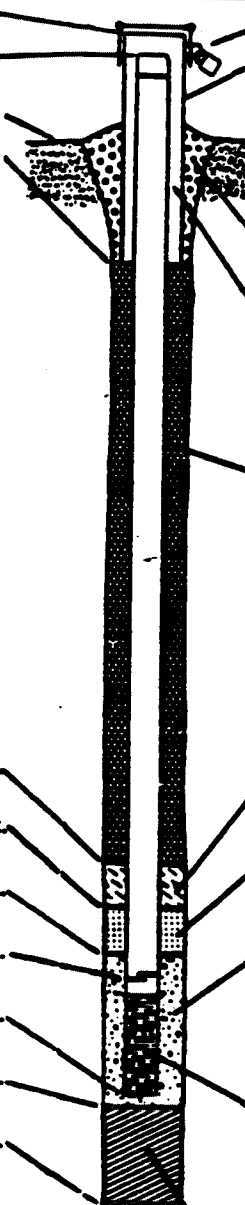
**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

MONITORING WELL CONSTRUCTION  
Form 4400-113A  
Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>N</b> _____ ft. <b>E</b> _____ ft. <b>S</b> _____ ft. <b>W</b>	Well Name <b>TW-11</b>
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or _____	Well Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> <b>W1</b> Piezometer <input type="checkbox"/> <b>12</b>	St. Plane _____ ft. N. _____ ft. E. Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. <input type="checkbox"/> <b>W</b>	Date Well Installed <b>09/08/94</b> <small>m m d d v v</small>
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source <input type="checkbox"/> u Upgradient <input type="checkbox"/> s Sidgradient <input type="checkbox"/> d Downgradient <input checked="" type="checkbox"/> n <b>Not Known</b>	Well Installed By: (Person's Name and Firm) <b>BRAD DAVIS</b> <b>TWIN CITY TESTING</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

<p>A. Protective pipe, top elevation _____ ft. MSL</p> <p>B. Well casing, top elevation _____ ft. MSL</p> <p>C. Land surface elevation _____ ft. MSL</p> <p>D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>12. USCS classification of soil near screen:                  GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input checked="" type="checkbox"/>                  SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/>                  Bedrock <input type="checkbox"/></p> <p>13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>14. Drilling method used: Rotary <input type="checkbox"/> 50                  Hollow Stem Auger <input checked="" type="checkbox"/> 41                  Other <input type="checkbox"/> _____</p> <p>15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01                  Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99</p> <p>16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  Describe _____</p> <p>17. Source of water (attach analysis):                  _____</p> </div> <p>E. Bentonite seal, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>F. Fine sand, top _____ ft. MSL or <b>3.0</b> ft.</p> <p>G. Filter pack, top _____ ft. MSL or <b>3.5</b> ft.</p> <p>H. Screen joint, top _____ ft. MSL or <b>4.0</b> ft.</p> <p>I. Well bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>J. Filter pack, bottom _____ ft. MSL or <b>14.0</b> ft.</p> <p>K. Borehole, bottom _____ ft. MSL or <b>16.5</b> ft.</p> <p>L. Borehole, diameter <b>8.2</b> in.</p> <p>M. O.D. well casing <b>2.40</b> in.</p> <p>N. I.D. well casing <b>2.00</b> in.</p>	 <p>1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>2. Protective cover pipe: <b>NA</b>                  a. Inside diameter: _____ in.                  b. Length: _____ ft.                  c. Material: Steel <input type="checkbox"/> 04                  Other <input type="checkbox"/> _____                  d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                  If yes, describe: _____</p> <p>3. Surface seal: Bentonite <input checked="" type="checkbox"/> 30                  Concrete <input type="checkbox"/> 01                  Other <input type="checkbox"/> _____</p> <p>4. Material between well casing and protective pipe: <b>NA</b>                  Bentonite <input type="checkbox"/> 30                  Annular space seal <input type="checkbox"/> _____                  Other <input type="checkbox"/> _____</p> <p>5. Annular space seal: a. <del>Bentonite</del> <b>Chips</b> <input checked="" type="checkbox"/> 33                  b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35                  c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31                  d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50                  e. _____ Ft. volume added for any of the above                  f. How installed: Tremie <input type="checkbox"/> 01                  Tremie pumped <input type="checkbox"/> 02                  Gravity <input checked="" type="checkbox"/> 08</p> <p>6. Bentonite seal: a. Bentonite <input checked="" type="checkbox"/> 33                  b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32                  c. Other <input type="checkbox"/> _____</p> <p>7. Fine sand material: Manufacturer, product name &amp; mesh size                  a. <b>American Materials - Blasting Sand</b>                  b. Volume added <b>Approx 20 lbs</b></p> <p>8. Filter pack material: Manufacturer, product name and mesh size                  a. <b>Red Flint Filter Sands &amp; Gravel - #30</b>                  b. Volume added <b>3 Bags</b></p> <p>9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23                  Flush threaded PVC schedule 80 <input type="checkbox"/> 24                  Other <input type="checkbox"/> _____</p> <p>10. Screen material: <b>Flush threaded PVC Sch 40</b>                  a. Screen type: Factory cut <input checked="" type="checkbox"/> 11                  Continuous slot <input type="checkbox"/> 01                  Other <input type="checkbox"/> _____                  b. Manufacturer <b>Cerharted Pipe Co.</b>                  c. Slot size: <b>0.010</b> in.                  d. Slotted length: _____ ft.</p> <p>11. Backfill material (below filter pack): None <input type="checkbox"/> 14  <b>Sand</b> <input checked="" type="checkbox"/> _____</p>
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I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John E. Shelf Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**ATTACHMENT A**

State of Wisconsin  
Department of Natural Resources

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**  
Form 4400-113A Rev 4-90

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	Local Grid Location of Well _____ ft. <b>N.</b> _____ ft. <b>E.</b>	Well Name <b>TW-12</b>
Facility License, Permit or Monitoring Number _____	Grid Origin Location Lat. _____ Long. _____ or St. Plane _____ ft. <b>N.</b> _____ ft. <b>E.</b>	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	Section Location of Waste/Source _____ 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <b>E.</b> <b>W.</b>	Date Well Installed <b>09/08/94</b> m m a a v v
Distance Well Is From Waste/Source Boundary _____ ft.	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known	Well Installed By: (Person's Name and Firm) <b>Brad Davis</b> <b>Twin City Testing</b>
Is Well A Point of Enforcement Std. Application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

A. Protective pipe, top elevation _____ ft. MSL B. Well casing, top elevation _____ ft. MSL C. Land surface elevation _____ ft. MSL D. Surface seal, bottom _____ ft. MSL or <b>3.0</b> ft.		1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 2. Protective cover pipe: <b>NA</b> a. Inside diameter: _____ in. b. Length: _____ ft. c. Material: _____ Steel <input type="checkbox"/> 04 Other <input type="checkbox"/> -- d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____ 3. Surface seal: _____ Bentonite <input checked="" type="checkbox"/> 30 Concrete <input type="checkbox"/> 01 Other <input type="checkbox"/> -- 4. Material between well casing and protective pipe: <b>NA</b> Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> -- Other <input type="checkbox"/> -- 5. Annular space seal: a. <del>Chips</del> Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: _____ Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08 Chips <input type="checkbox"/> -- 6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> -- 7. Fine sand material: Manufacturer, product name & mesh size a. <b>American Materials - Blasting Sand</b> -- b. Volume added <b>Approx 20 lbs</b> -- 8. Filter pack material: Manufacturer, product name and mesh size a. <b>Red Flint Filter Sand + Gravel - #30</b> -- b. Volume added <b>6 bags</b> -- 9. Well casing: _____ Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> -- 10. Screen material: <b>Flush threaded PVC Sch. 40</b> -- a. Screen type: _____ Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> -- b. Manufacturer <b>Certainteed Pipe Co.</b> c. Slot size: _____ 0.010 in. d. Slotted length: _____ 10.0 ft. 11. Backfill material (below filter pack): _____ <b>SAND</b> <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> --
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input checked="" type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/>		
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/> -- 15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99 16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____ 17. Source of water (attach analysis): _____		
E. Bentonite seal, top _____ ft. MSL or <b>3.0</b> ft. F. Fine sand, top _____ ft. MSL or <b>3.0</b> ft. G. Filter pack, top _____ ft. MSL or <b>3.5</b> ft. H. Screen joint, top _____ ft. MSL or <b>4.0</b> ft. I. Well bottom _____ ft. MSL or <b>14.0</b> ft. J. Filter pack, bottom _____ ft. MSL or <b>14.0</b> ft. K. Borehole, bottom _____ ft. MSL or <b>16.5</b> ft. L. Borehole, diameter <b>8.2</b> in. M. O.D. well casing <b>2.40</b> in. N. I.D. well casing <b>2.00</b> in.		

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
 Signature John E. Goff Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

Project Name <b>ISLAND LAKEFRONT PROPERTY</b>		Local Grid Location of Well ft. <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W		Well Name <b>TW-13</b>	
Activity License, Permit or Monitoring Number		Grid Origin Location		Wis. Unique Well Number / DNR Well Number	
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12		St. Plane _____ ft. N. _____ ft. E.		Date Well Installed <u>11/21/94</u> m m d d y y	
Distance Well Is From Waste/Source Boundary ft.		Section Location of Waste/Source 1/4 of _____ 1/4 of Sec. _____ T. _____ N. R. _____ <input type="checkbox"/> E. <input type="checkbox"/> W.		Well Installed By: (Person's Name and Firm) <u>Eric Schornberg</u>	
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No		Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input checked="" type="checkbox"/> Not Known		<u>Wisconsin Test Drill</u>	

A. Protective pipe, top elevation _____ ft. MSL	1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B. Well casing, top elevation _____ ft. MSL	2. Protective cover pipe: <u>Flush Mount</u> a. Inside diameter: <u>8.0 in.</u> b. Length: <u>1.0 ft.</u> c. Material: <u>Aluminum</u> Steel <input type="checkbox"/> 04 d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____
C. Land surface elevation _____ ft. MSL	3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/>
D. Surface seal bottom _____ ft. MSL or <u>1.0 ft.</u>	4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input checked="" type="checkbox"/> <u>Sand</u>
12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/> <u>Fill</u>	5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft <sup>3</sup> volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input type="checkbox"/> 08
13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/>
14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/>	7. Fine sand material: Manufacturer, product name & mesh size a. <u>Badger Mining Corp BA #7</u> b. Volume added _____ ft <sup>3</sup>
15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99	8. Filter pack material: Manufacturer, product name and mesh size a. <u>Red Flat Filter Sand + Gravel #30</u> b. Volume added _____ ft <sup>3</sup>
16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____	9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/>
17. Source of water (attach analysis): _____	10. Screen material: <u>Flush Threaded PVC; Sch 40</u> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/>
E. Bentonite seal, top _____ ft. MSL or <u>1.0 ft.</u>	b. Manufacturer: <u>Long Year</u> 0.019 in. c. Slot size: d. Slotted length: <u>(2 - 5 ft pieces)</u> 64.0 ft.
F. Fine sand, top _____ ft. MSL or <u>6.0 ft.</u>	11. Backfill material (below filter pack): <u>SAND</u> None <input type="checkbox"/> 14 Other <input checked="" type="checkbox"/>
G. Filter pack, top _____ ft. MSL or <u>7.0 ft.</u>	
H. Screen joint, top _____ ft. MSL or <u>9.0 ft.</u>	
I. Well bottom _____ ft. MSL or <u>19.0 ft.</u>	
J. Filter pack, bottom _____ ft. MSL or <u>19.0 ft.</u>	
K. Borehole, bottom _____ ft. MSL or <u>22.0 ft.</u>	
L. Borehole, diameter <u>8.2 in.</u>	
M. O.D. well casing <u>7.40 in.</u>	
N. I.D. well casing <u>7.00 in.</u>	

I hereby certify that the information on this form is true and correct to the best of my knowledge.  
Signature John E. Hull Firm Short Elliott Hendrickson Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation.

ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TRW-1</b>
Facility License, Permit or Monitoring Number	County Code	DNR Well Number

<p>1. Can this well be curved dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>2. Well development method</p> <table style="width:100%;"> <tr><td>surged with bailer and bailed</td><td><input checked="" type="checkbox"/> 41</td></tr> <tr><td>surged with bailer and pumped</td><td><input type="checkbox"/> 61</td></tr> <tr><td>surged with block and bailed</td><td><input type="checkbox"/> 42</td></tr> <tr><td>surged with block and pumped</td><td><input type="checkbox"/> 62</td></tr> <tr><td>surged with block, bailed and pumped</td><td><input type="checkbox"/> 70</td></tr> <tr><td>compressed air</td><td><input type="checkbox"/> 20</td></tr> <tr><td>bailed only</td><td><input type="checkbox"/> 10</td></tr> <tr><td>pumped only</td><td><input type="checkbox"/> 51</td></tr> <tr><td>pumped slowly</td><td><input type="checkbox"/> 50</td></tr> <tr><td>Other _____</td><td><input type="checkbox"/> _____</td></tr> </table> <p>3. Time spent developing well _____ <u>60</u> min.</p> <p>4. Depth of well (from top of well casing) _____ <u>17.0</u> ft.</p> <p>5. Inside diameter of well _____ <u>2.00</u> in.</p> <p>6. Volume of water in filter pack and well casing _____ <u>9.5</u> gal.</p> <p>7. Volume of water removed from well _____ <u>95.0</u> gal.</p> <p>8. Volume of water added (if any) _____ <u>0.0</u> gal.</p> <p>9. Source of water added _____</p> <p>10. Analysis performed on water added? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results)</p>	surged with bailer and bailed	<input checked="" type="checkbox"/> 41	surged with bailer and pumped	<input type="checkbox"/> 61	surged with block and bailed	<input type="checkbox"/> 42	surged with block and pumped	<input type="checkbox"/> 62	surged with block, bailed and pumped	<input type="checkbox"/> 70	compressed air	<input type="checkbox"/> 20	bailed only	<input type="checkbox"/> 10	pumped only	<input type="checkbox"/> 51	pumped slowly	<input type="checkbox"/> 50	Other _____	<input type="checkbox"/> _____	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Before Development</th> <th style="text-align: center;">After Development</th> </tr> </thead> <tbody> <tr> <td>11. Depth to Water (from top of well casing)</td> <td style="text-align: center;">a. <u>6.60</u> ft.</td> <td style="text-align: center;"><u>6.69</u> ft.</td> </tr> <tr> <td>Date</td> <td style="text-align: center;">b. <u>09/14/94</u> m m d d y y</td> <td style="text-align: center;"><u>09/14/94</u> m m d d y y</td> </tr> <tr> <td>Time</td> <td style="text-align: center;">c. <u>3:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.</td> <td style="text-align: center;"><u>4:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.</td> </tr> <tr> <td>12. Sediment in well bottom</td> <td style="text-align: center;"><u>0.0</u> inches</td> <td style="text-align: center;"><u>0.0</u> inches</td> </tr> <tr> <td>13. Water clarity</td> <td>Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Very Turbid, Brown, oily Sheen</u></td> <td>Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Very Turbid, Brown, Oily Sheen</u></td> </tr> <tr> <td colspan="3">Fill in if drilling fluids were used and well is at solid waste facility:</td> </tr> <tr> <td>14. Total suspended solids</td> <td style="text-align: center;">_____ mg/l</td> <td style="text-align: center;">_____ mg/l</td> </tr> <tr> <td>15. COD</td> <td style="text-align: center;">_____ mg/l</td> <td style="text-align: center;">_____ mg/l</td> </tr> </tbody> </table>		Before Development	After Development	11. Depth to Water (from top of well casing)	a. <u>6.60</u> ft.	<u>6.69</u> ft.	Date	b. <u>09/14/94</u> m m d d y y	<u>09/14/94</u> m m d d y y	Time	c. <u>3:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>4:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches	13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Very Turbid, Brown, oily Sheen</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Very Turbid, Brown, Oily Sheen</u>	Fill in if drilling fluids were used and well is at solid waste facility:			14. Total suspended solids	_____ mg/l	_____ mg/l	15. COD	_____ mg/l	_____ mg/l
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Time	c. <u>3:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>4:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.																																														
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14. Total suspended solids	_____ mg/l	_____ mg/l																																														
15. COD	_____ mg/l	_____ mg/l																																														

13. Additional comments on development:

<p>Well developed by: Person's Name and Firm</p> <p>Name: <u>John E. Guhl</u></p> <p>Firm: <u>Short Elliott Hendrickson Inc.</u></p>	<p>I hereby certify that the above information is true and correct to the best of my knowledge.</p> <p>Signature: <u>John E. Guhl</u></p> <p>Print Initials: <u>J E G</u></p> <p>Firm: <u>Short Elliott Hendrickson Inc.</u></p>
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NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

**ATTACHMENT B**

State of Wisconsin  
Department of Natural Resources

**MONITORING WELL DEVELOPMENT**  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>MW-2</b>
Facility License, Permit or Monitoring Number	County Code <b>02</b>	Wiz. Unique Well Number
		DNR Well Number

1. Can this well be curved dry?       Yes     No

2. Well development method

surged with bailer and bailed	<input checked="" type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input checked="" type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well      75 min.

4. Depth of well (from top of well casing)      16.2 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      10.0 gal.

7. Volume of water removed from well      100.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>5.21</u> ft.	<u>5.21</u> ft.
Date	b. <u>09/14/94</u> m m d d y y	<u>09/14/94</u> m m d d y y
Time	c. <u>1:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>2:30</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Brown</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Brown</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	----- mg/l	----- mg/l
15. COD	----- mg/l	----- mg/l

11. Additional comments on development:

Well developed by: Person's Name and Firm	I hereby certify that the above information is true and correct to the best of my knowledge.
Name: <u>John E. Guhl</u>	Signature: <u>John E. Guhl</u>
Firm: <u>Short Elliott Hendrickson</u>	Print Initials: <u>JEG</u>
	Firm: <u>Short Elliott Hendrickson</u>

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
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Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-3</b>
Facility License, Permit or Monitoring Number	County Code	WIS. Unique Well Number
		DNR Well Number

1. Can this well be surved dry?  Yes  No

2. Well development method
- surged with bailer and bailed  41
  - surged with bailer and pumped  61
  - surged with block and bailed  42
  - surged with block and pumped  62
  - surged with block, bailed and pumped  70
  - compressed air  20
  - bailed only  10
  - pumped only  51
  - pumped slowly  50
  - Other  \_\_\_\_\_

3. Time spent developing well 75 min.

4. Depth of well (from top of well casing) 16.7 ft.

5. Inside diameter of well 2.06 in.

6. Volume of water in filter pack and well casing 8.5 gal.

7. Volume of water removed from well 85.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?  Yes  No  
(If yes, attach results)

11. Additional comments on development:

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>7.47</u> ft.	<u>7.5</u> ft.
Date	b. <u>09/15/94</u> m m d d y y	<u>09/15/94</u> m m d d y y
Time	c. <u>7:45</u> <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>9:00</u> <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	<u>16.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Brown, very turbid</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Brown, Very Turbid</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

Well developed by: Person's Name and Firm

Name: John E. Gull

Firm: Short Elliott Hendrickson Inc.

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

Signature: John E. Gull

Print Initials: JEG

Firm: Short Elliott Hendrickson

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State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-4</b>
Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number
_____	_____	_____

1. Can this well be surved dry?       Yes     No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input checked="" type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well      \_\_\_\_\_ min.

4. Depth of well (from top of well casing)      16.0 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      85.0 gal.

7. Volume of water removed from well      85.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added      \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>7.83</u> ft.	_____ ft.
Date	b. <u>09/15/94</u> m m d d y y	<u>09/15/94</u> m m d d y y
Time	c. <u>09:00</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>10:00</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.
12. Sediment in well bottom	_____ inches	_____ inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) _____	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) _____
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

11. Additional comments on development: \_\_\_\_\_

Well developed by: Person's Name and Firm  Name: <u>John E. Gohl</u>  Firm: <u>Short Elliott Hendrickson Inc</u>	I hereby certify that the above information is true and correct to the best of my knowledge.  Signature: <u>John E. Gohl</u>  Print Initials: <u>JEG</u>  Firm: <u>Short Elliott Hendrickson Inc</u>
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**ATTACHMENT B**

State of Wisconsin  
Department of Natural Resources

**MONITORING WELL DEVELOPMENT**  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

<b>Facility/Project Name</b> ASHLAND LAKEFRONT PROPERTY	<b>County Name</b> ASHLAND	<b>Well Name</b> TW-5
<b>Facility License, Permit or Monitoring Number</b>	<b>County Code</b>	<b>Wis. Unique Well Number</b>
		<b>DNR Well Number</b>

1. Can this well be cured dry?       Yes     No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input checked="" type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well      65 min.

4. Depth of well (from top of well casing)      16.4 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      9.0 gal.

7. Volume of water removed from well      90.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added      \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	<u>6.66</u> ft.	<u>6.66</u> ft.
Date	<u>09/14/94</u> m m d d y y	<u>09/14/94</u> m m d d y y
Time	<u>8:00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>9:05</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Brown, Petroleum Odor</u>	Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>Brown, Petroleum Odor</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

13. Additional comments on development:

Well developed by: Person's Name and Firm

Name: Chris Haller

Firm: Short Elliott Hendrickson Inc.

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

Signature: John P. Seely

Print Initials: SES

Firm: Short Elliott Hendrickson

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ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <u>Ashland Lake Front Property</u>	County Name <u>Ashland</u>	Well Name <u>TW-6</u>
Facility License, Permit or Monitoring Number _____	County Code _____	Win. Unique Well Number _____
		DNR Well Number _____

<p>1. Can this well be curred dry?      <input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p> <p>2. Well development method</p> <table style="width:100%; border: none;"> <tr><td style="padding: 2px;">surged with bailer and bailed</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 41</td></tr> <tr><td style="padding: 2px;">surged with bailer and pumped</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 61</td></tr> <tr><td style="padding: 2px;">surged with block and bailed</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 42</td></tr> <tr><td style="padding: 2px;">surged with block and pumped</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 62</td></tr> <tr><td style="padding: 2px;">surged with block, bailed and pumped</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 70</td></tr> <tr><td style="padding: 2px;">compressed air</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 20</td></tr> <tr><td style="padding: 2px;">bailed only</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 10</td></tr> <tr><td style="padding: 2px;">pumped only</td><td style="text-align: right; padding: 2px;"><input checked="" type="checkbox"/> 51</td></tr> <tr><td style="padding: 2px;">pumped slowly</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> 50</td></tr> <tr><td style="padding: 2px;">Other _____</td><td style="text-align: right; padding: 2px;"><input type="checkbox"/> _____</td></tr> </table> <p>3. Time spent developing well      <u>65</u> min.</p> <p>4. Depth of well (from top of well casing)      <u>17.2</u> ft.</p> <p>5. Inside diameter of well      <u>2.00</u> in.</p> <p>6. Volume of water in filter pack and well casing      _____ gal.</p> <p>7. Volume of water removed from well      <u>90.0</u> gal.</p> <p>8. Volume of water added (if any)      <u>0.0</u> gal.</p> <p>9. Source of water added _____</p> <p>10. Analysis performed on water added?      <input type="checkbox"/> Yes    <input type="checkbox"/> No (If yes, attach results)</p>	surged with bailer and bailed	<input type="checkbox"/> 41	surged with bailer and pumped	<input type="checkbox"/> 61	surged with block and bailed	<input type="checkbox"/> 42	surged with block and pumped	<input type="checkbox"/> 62	surged with block, bailed and pumped	<input type="checkbox"/> 70	compressed air	<input type="checkbox"/> 20	bailed only	<input type="checkbox"/> 10	pumped only	<input checked="" type="checkbox"/> 51	pumped slowly	<input type="checkbox"/> 50	Other _____	<input type="checkbox"/> _____	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;"></th> <th style="width:35%;">Before Development</th> <th style="width:35%;">After Development</th> </tr> </thead> <tbody> <tr> <td>11. Depth to Water (from top of well casing)</td> <td>a. <u>7.08</u> ft.</td> <td><u>7.08</u> ft.</td> </tr> <tr> <td>Date</td> <td>b. <u>9/15/94</u> m m d d y y</td> <td><u>9/15/94</u> m m d d y y</td> </tr> <tr> <td>Time</td> <td>c. <u>7:45</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.</td> <td><u>8:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.</td> </tr> <tr> <td>12. Sediment in well bottom</td> <td><u>0.5</u> inches</td> <td><u>0.0</u> inches</td> </tr> <tr> <td>13. Water clarity</td> <td>Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Dark brown</u></td> <td>Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>light brown/clear</u></td> </tr> <tr> <td colspan="3">Fill in if drilling fluids were used and well is at solid waste facility:</td> </tr> <tr> <td>14. Total suspended solids</td> <td>_____ mg/l</td> <td>_____ mg/l</td> </tr> <tr> <td>15. COD</td> <td>_____ mg/l</td> <td>_____ mg/l</td> </tr> </tbody> </table>		Before Development	After Development	11. Depth to Water (from top of well casing)	a. <u>7.08</u> ft.	<u>7.08</u> ft.	Date	b. <u>9/15/94</u> m m d d y y	<u>9/15/94</u> m m d d y y	Time	c. <u>7:45</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>8:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	12. Sediment in well bottom	<u>0.5</u> inches	<u>0.0</u> inches	13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Dark brown</u>	Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>light brown/clear</u>	Fill in if drilling fluids were used and well is at solid waste facility:			14. Total suspended solids	_____ mg/l	_____ mg/l	15. COD	_____ mg/l	_____ mg/l
surged with bailer and bailed	<input type="checkbox"/> 41																																															
surged with bailer and pumped	<input type="checkbox"/> 61																																															
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pumped slowly	<input type="checkbox"/> 50																																															
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	Before Development	After Development																																														
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Date	b. <u>9/15/94</u> m m d d y y	<u>9/15/94</u> m m d d y y																																														
Time	c. <u>7:45</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.	<u>8:50</u> <input checked="" type="checkbox"/> a.m. <input type="checkbox"/> p.m.																																														
12. Sediment in well bottom	<u>0.5</u> inches	<u>0.0</u> inches																																														
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Dark brown</u>	Clear <input type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe) <u>light brown/clear</u>																																														
Fill in if drilling fluids were used and well is at solid waste facility:																																																
14. Total suspended solids	_____ mg/l	_____ mg/l																																														
15. COD	_____ mg/l	_____ mg/l																																														

15. Additional comments on development:  
Heavy petroleum type product on water surface, dark tar color strong odor!

Well developed by: Person's Name and Firm  Name: <u>Chris Haller</u> Firm: <u>SEH</u>	I hereby certify that the above information is true and correct to the best of my knowledge.  Signature: <u>Chris Haller</u> Print Initials: <u>CEH</u> Firm: <u>SEH</u>
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**ATTACHMENT B**

State of Wisconsin  
Department of Natural Resources

**MONITORING WELL DEVELOPMENT**  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <u>Ashland Lakefront Property</u>	County Name <u>ASHLAND</u>	Well Name <u>TW-7</u>
Facility License, Permit or Monitoring Number _____	County Code <u>02</u>	WIS. Unique Well Number _____
DNR Well Number _____		

1. Can this well be surved dry?       Yes     No
2. Well development method
- surged with bailer and bailed       41
  - surged with bailer and pumped       61
  - surged with block and bailed       42
  - surged with block and pumped       62
  - surged with block, bailed and pumped       70
  - compressed air       20
  - bailed only       10
  - pumped only       51
  - pumped slowly       50
  - Other \_\_\_\_\_       \_\_\_\_\_

3. Time spent developing well      68 min.
4. Depth of well (from top of well casing)      17.0 ft.
5. Inside diameter of well      2.00 in.
6. Volume of water in filter pack and well casing      9.6 gal.
7. Volume of water removed from well      96.0 gal.
8. Volume of water added (if any)      0.0 gal.
9. Source of water added      \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

15. Additional comments on development:

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>6.31</u> ft.	<u>10.01</u> ft.
Date	b. <u>09/14/94</u> m m d d y y	<u>09/14/94</u> m m d d y y
Time	c. <u>6:15</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>6:23</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Slightly Turbid - Brown</u>	Clear <input checked="" type="checkbox"/> 0 Turbid <input type="checkbox"/> 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids      \_\_\_\_\_ mg/l      \_\_\_\_\_ mg/l

15. COD      \_\_\_\_\_ mg/l      \_\_\_\_\_ mg/l

Well developed by: Person's Name and Firm

Name: Chris Haller

Firm: Short Elliott Hendrickson Inc.

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

Signature: John E. Hall

Print Initials: JEH

Firm: Short Elliott Hendrickson

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State of Wisconsin  
Department of Natural Resources

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Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

Facility/Project Name <u>Ashland Lakefront Property</u>	County Name <u>Ashland</u>	Well Name <u>TW-8</u>
Facility License, Permit or Monitoring Number	County Code	DNR Well Number

1. Can this well be cased dry?       Yes     No
2. Well development method
- surged with bailer and bailed       41
  - surged with bailer and pumped       61
  - surged with block and bailed       42
  - surged with block and pumped       62
  - surged with block, bailed and pumped       70
  - compressed air       20
  - bailed only       10
  - pumped only       51
  - pumped air only       50
  - Other \_\_\_\_\_

3. Time spent developing well      65 min.

4. Depth of well (from top of well casing)      16.4 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      10.5 gal.

7. Volume of water removed from well      105.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	4.90 <u>3.90</u> ft.	3.90 <u>3.90</u> ft.
Date	<u>09/14/94</u> m m d d y y	<u>09/04/94</u> m m d d y y
Time	<u>3:05</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>4:10</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>6.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Dark Brown</u>	Clear <input checked="" type="checkbox"/> 20 Turbid <input type="checkbox"/> 25 (Describe)

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

13. Additional comments on development:

Well developed by: Person's Name and Firm

Name: Chris Haller

Firm: Short Elliott Hendrickson Inc.

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

Signature: John E. Stull

Print Initials: JEG

Firm: Short Elliott Hendrickson Inc.

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ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-9</b>
Facility License, Permit or Monitoring Number _____	County Code _____	WIS. Unique Well Number _____
		DNR Well Number _____

1. Can this well be cured dry?       Yes     No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input checked="" type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well      60 min.

4. Depth of well (from top of well casing)      16.7 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      90.0 gal.

7. Volume of water removed from well      90.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>6.99</u> ft.	_____ ft.
Date	b. <u>09/15/94</u> m m d d y y	<u>09/15/94</u> m m d d y y
Time	c. <u>8:50</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>8:50</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0</u> inches	<u>0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) _____	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) _____
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

13. Additional comments on development:

Well developed by: Person's Name and Firm

Name: John E. Gohl

Firm: Short Elliott Hendrickson Inc.

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

Signature: *John E. Gohl*

Print Initials: JEG

Firm: Short Elliott Hendrickson Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

**ATTACHMENT B**

State of Wisconsin  
Department of Natural Resources

**MONITORING WELL DEVELOPMENT**  
Form 4400-113B Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-10</b>
Facility License, Permit or Monitoring Number _____	County Code <b>02</b>	WIS Unique Well Number _____
		DNR Well Number _____

1. Can this well be surved dry?       Yes     No

2. Well development method

surged with bailer and bailed	<input type="checkbox"/> 41
surged with bailer and pumped	<input type="checkbox"/> 61
surged with block and bailed	<input type="checkbox"/> 42
surged with block and pumped	<input type="checkbox"/> 62
surged with block, bailed and pumped	<input type="checkbox"/> 70
compressed air	<input type="checkbox"/> 20
bailed only	<input type="checkbox"/> 10
pumped only	<input checked="" type="checkbox"/> 51
pumped slowly	<input type="checkbox"/> 50
Other _____	<input type="checkbox"/> _____

3. Time spent developing well      60 min.

4. Depth of well (from top of well casing)      17.9 ft.

5. Inside diameter of well      2.00 in.

6. Volume of water in filter pack and well casing      12.0 gal.

7. Volume of water removed from well      120.0 gal.

8. Volume of water added (if any)      0.0 gal.

9. Source of water added      \_\_\_\_\_

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>4.58</u> ft.	<u>4.58</u> ft.
Date	b. <u>09/14/94</u> m m d d y y	<u>09/14/94</u> m m d d y y
Time	c. <u>1:00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>2:00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Brown Petroleum Sheen</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Slight Brown Petroleum Sheen</u>
Fill in if drilling fluids were used and well is at solid waste facility:		
14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

15. Additional comments on development: \_\_\_\_\_

Well developed by: Person's Name and Firm

Name: JOHN E. GUNL

Firm: SHORT ELLIOTT HENDRICKSON

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

Signature: John E. Gunl

Print Initials: JEG

Firm: Short Elliott Hendrickson

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-11</b>
Facility License, Permit or Monitoring Number	County Code <b>02</b>	Well Unique Wall Number
		DNR Well Number

1. Can this well be surved dry?       Yes     No
2. Well development method
  - surged with bailer and bailed       41
  - surged with bailer and pumped       61
  - surged with block and bailed       42
  - surged with block and pumped       62
  - surged with block, bailed and pumped       70
  - compressed air       20
  - bailed only       10
  - pumped only       51
  - pumped slowly       50
  - Other       \_\_\_\_\_
3. Time spent developing well      30 min.
4. Depth of well (from top of well casing)      17.2 ft.
5. Inside diameter of well      2.00 in.
6. Volume of water in filter pack and well casing      11.4 gal.
7. Volume of water removed from well      12.0 gal.
8. Volume of water added (if any)      0.0 gal.
9. Source of water added      \_\_\_\_\_

	Before Development	After Development
11. Depth to Water (from top of well casing)	<u>4.52</u> ft.	<u>14.70</u> ft.
Date	<u>09/14/94</u> <small>m m d d y y</small>	<u>09/14/94</u> <small>m m d d y y</small>
Time	<u>12:05</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>12:35</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Brown</u> <u>Petroleum</u> <u>Sheen</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>Brown</u> <u>Petroleum</u> <u>Sheen</u>

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

10. Analysis performed on water added?       Yes     No  
(If yes, attach results)

15. Additional comments on development:

Well developed by: Person's Name and Firm

Name: JOHN E. GUHL

Firm: SHORT ELLIOTT HENDRICKSON

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

Signature: John E. Guhl

Print Initials: J/E G

Firm: Short Elliott Hendrickson

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.



**ATTACHMENT B**

State of Wisconsin  
Department of Natural Resources

**MONITORING WELL DEVELOPMENT**  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other  \_\_\_\_\_

Facility/Project Name <b>ASHLAND LAKEFRONT PROPERTY</b>	County Name <b>ASHLAND</b>	Well Name <b>TW-12</b>
Facility License, Permit or Monitoring Number	County Code	WIS Unique Well Number
		DNR Well Number

<p>1. Can this well be surved dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>2. Well development method</p> <table style="width:100%; border: none;"> <tr><td style="padding-left: 20px;">surged with bailer and bailed</td><td style="text-align: right;"><input type="checkbox"/> 41</td></tr> <tr><td style="padding-left: 20px;">surged with bailer and pumped</td><td style="text-align: right;"><input type="checkbox"/> 61</td></tr> <tr><td style="padding-left: 20px;">surged with block and bailed</td><td style="text-align: right;"><input type="checkbox"/> 42</td></tr> <tr><td style="padding-left: 20px;">surged with block and pumped</td><td style="text-align: right;"><input type="checkbox"/> 62</td></tr> <tr><td style="padding-left: 20px;">surged with block, bailed and pumped</td><td style="text-align: right;"><input type="checkbox"/> 70</td></tr> <tr><td style="padding-left: 20px;">compressed air</td><td style="text-align: right;"><input type="checkbox"/> 20</td></tr> <tr><td style="padding-left: 20px;">bailed only</td><td style="text-align: right;"><input type="checkbox"/> 10</td></tr> <tr><td style="padding-left: 20px;">pumped only</td><td style="text-align: right;"><input checked="" type="checkbox"/> 51</td></tr> <tr><td style="padding-left: 20px;">pumped : lowly</td><td style="text-align: right;"><input type="checkbox"/> 50</td></tr> <tr><td style="padding-left: 20px;">Other _____</td><td style="text-align: right;"><input type="checkbox"/> _____</td></tr> </table> <p>3. Time spent developing well <u>    55    </u> min.</p> <p>4. Depth of well (from top of well casing) <u>  17.0  </u> ft.</p> <p>5. Inside diameter of well <u>  2.00  </u> in.</p> <p>6. Volume of water in filter pack and well casing <u>  9.5  </u> gal.</p> <p>7. Volume of water removed from well <u>  95.0  </u> gal.</p> <p>8. Volume of water added (if any) <u>  0.0  </u> gal.</p> <p>9. Source of water added _____</p> <p>10. Analysis performed on water added? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, attach results)</p>	surged with bailer and bailed	<input type="checkbox"/> 41	surged with bailer and pumped	<input type="checkbox"/> 61	surged with block and bailed	<input type="checkbox"/> 42	surged with block and pumped	<input type="checkbox"/> 62	surged with block, bailed and pumped	<input type="checkbox"/> 70	compressed air	<input type="checkbox"/> 20	bailed only	<input type="checkbox"/> 10	pumped only	<input checked="" type="checkbox"/> 51	pumped : lowly	<input type="checkbox"/> 50	Other _____	<input type="checkbox"/> _____	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;"></th> <th style="width:35%;">Before Development</th> <th style="width:35%;">After Development</th> </tr> </thead> <tbody> <tr> <td>11. Depth to Water (from top of well casing)</td> <td>a. <u>  6.61  </u> ft.</td> <td><u>  6.53  </u> ft.</td> </tr> <tr> <td>Date</td> <td>b. <u>  09/14/94  </u> m m d d y y</td> <td><u>  09/14/94  </u> m m d d y y</td> </tr> <tr> <td>Time</td> <td>c. <u>  6:45  </u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.</td> <td><u>  7:40  </u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.</td> </tr> <tr> <td>12. Sediment in well bottom</td> <td><u>  2.0  </u> inches</td> <td><u>  0.0  </u> inches</td> </tr> <tr> <td>13. Water clarity</td> <td>Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>  Brown, slightly Turbid  </u></td> <td>Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>  Brown, slightly Turbid  </u></td> </tr> </tbody> </table> <p>Fill in if drilling fluids were used and well is at solid waste facility:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>14. Total suspended solids</td> <td style="text-align: right;">_____ mg/l</td> <td style="text-align: right;">_____ mg/l</td> </tr> <tr> <td>15. COD</td> <td style="text-align: right;">_____ mg/l</td> <td style="text-align: right;">_____ mg/l</td> </tr> </table>		Before Development	After Development	11. Depth to Water (from top of well casing)	a. <u>  6.61  </u> ft.	<u>  6.53  </u> ft.	Date	b. <u>  09/14/94  </u> m m d d y y	<u>  09/14/94  </u> m m d d y y	Time	c. <u>  6:45  </u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>  7:40  </u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	12. Sediment in well bottom	<u>  2.0  </u> inches	<u>  0.0  </u> inches	13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>  Brown, slightly Turbid  </u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 (Describe) <u>  Brown, slightly Turbid  </u>	14. Total suspended solids	_____ mg/l	_____ mg/l	15. COD	_____ mg/l	_____ mg/l
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15. COD	_____ mg/l	_____ mg/l																																											

15. Additional comments on development:

<p>Well developed by: Person's Name and Firm</p> <p>Name: <u>  Chris Haller  </u></p> <p>Firm: <u>  Short Elliott Henderson  </u></p>	<p>I hereby certify that the above information is true and correct to the best of my knowledge.</p> <p>Signature: <u>  John P. Shelf  </u></p> <p>Print Initials: <u>  JEG  </u></p> <p>Firm: <u>  Short Elliott Henderson  </u></p>
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NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

ATTACHMENT B

State of Wisconsin  
Department of Natural Resources

MONITORING WELL DEVELOPMENT  
Form 4400-113B  
Rev. 4-90

Route to: Solid Waste  Haz. Waste  Wastewater   
Env. Response & Repair  Underground Tanks  Other

Facility/Project Name <u>ASHLAND LAKEFRONT PROPERTY</u>	County Name <u>ASHLAND</u>	Well Name <u>TW-13</u>
Facility License, Permit or Monitoring Number	County Code <u>02</u>	Wis. Unique Well Number
		DNR Well Number

1. Can this well be surged dry?  Yes  No

2. Well development method
- surged with bailer and bailed  41
  - surged with bailer and pumped  61
  - surged with block and bailed  42
  - surged with block and pumped  62
  - surged with block, bailed and pumped  70
  - compressed air  20
  - bailed only  10
  - pumped only  51
  - pumped slowly  50
  - Other

3. Time spent developing well 95 min

4. Depth of well (from top of well casing) 18.5 ft

5. Inside diameter of well 2.00 in.

6. Volume of water in filter pack and well casing 5.0 gal

7. Volume of water removed from well 20.0 gal  
*Approx.*

8. Volume of water added (if any) 0.0 gal

9. Source of water added N.A.

10. Analysis performed on water added? NA  Yes  No  
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. <u>12.24</u> ft	<u>18.15</u> ft
Date	b. <u>12/02/94</u> m m d d y y	<u>12/02/94</u> m m d d y y
Time	c. <u>11:25</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.	<u>1:00</u> <input type="checkbox"/> a.m. <input checked="" type="checkbox"/> p.m.
12. Sediment in well bottom	<u>0.0</u> inches	<u>0.0</u> inches
13. Water clarity	Clear <input type="checkbox"/> 10 Turbid <input checked="" type="checkbox"/> 15 (Describe) <u>Black</u> <u>Petroleum</u> <u>odor</u> <u>Shen</u>	Clear <input type="checkbox"/> 20 Turbid <input checked="" type="checkbox"/> 25 Slight (Describe) <u>Light Gray</u> <u>colored</u> <u>(nearly</u> <u>clear)</u>

Fill in if drilling fluids were used and well is at solid waste facility:

14. Total suspended solids	_____ mg/l	_____ mg/l
15. COD	_____ mg/l	_____ mg/l

13. Additional comments on development:

Black oily consistency to bailed water. Cleaned up somewhat as bailing proceeded.

Well developed by: Person's Name and Firm

Name: John E. Guhl

Firm: Short Elliott Hendrickson Inc.

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

Signature: John E. Guhl

Print Initials: JEG

Firm: Short Elliott Hendrickson Inc.

NOTE: Shaded areas are for DNR use only. See instructions for more information including a list of county codes.

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

<b>GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT BLP</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>	
1/4 of 1/4 of Sec. _____; T. _____ N. R. _____ <input type="checkbox"/> E <input type="checkbox"/> W		Present Well Owner <u>WDNR</u>	
(If applicable) Gov't Lot _____ Grid Number _____		Street or Route <u>Hwy 70</u>	
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>SPONDER WI 54729</u>	
Civil Town Name <u>ASHLAND</u>		Factory Well No. and/or Name (If Applicable) <u>TW-1</u>	WI Unique Well No. _____
Street Address of Well <u>Marina Drive</u>		Reason For Abandonment <u>Temporary Well</u>	
City, Village <u>Ashland Wisconsin</u>		Date of Abandonment <u>11-22-94</u>	

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) Depth to Water (Feet)</b> <u>7.52</u>	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-06-94</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole		Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)		If No, Explain <u>Removed</u>	
Casing Depth (ft.) <u>NA</u>		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
		Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	
		<b>(5) Required Method of Placing Sealing Material</b>	
		<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped	
		<input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		<b>(6) Sealing Materials</b>	
		For monitoring wells and monitoring well boreholes only	
		<input type="checkbox"/> Neat Cement Grout	
		<input type="checkbox"/> Sand-Cement (Concrete) Grout	
		<input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets	
		<input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite	
		<input type="checkbox"/> Bentonite-Sand Slurry <input type="checkbox"/> Bentonite - Cement Grout	
		<input checked="" type="checkbox"/> Chipped Bentonite	

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

Comments: \_\_\_\_\_

**(9) Name of Person or Firm Doing Sealing Work**  
WTD / SEH

Signature of Person Doing Work <u>John E. Self</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 Fremont Drive</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Donner Falls, WI 54729</u>	

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

<b>GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT BOE</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>	
1/4 of 1/4 of Sec. _____; T. _____ N. R. _____ (If applicable)		Present Well Owner <u>WDNR</u>	
Grid Location Gov't Lot _____ Grid Number _____	Street or Route <u>HWY 20</u>		
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	City, State, Zip Code <u>SPONER WI</u>		
Civil Town Name <u>ASHLAND</u>	Factory Well No. and/or Name (If Applicable) <u>PW-2</u>	WI Unique Well No. _____	
Street Address of Well	Reason For Abandonment <u>Temporary well</u>		
City, Village <u>ASHLAND WI</u>	Date of Abandonment <u>11-22-92</u>		

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) Depth to Water (Feet)</b> <u>5.97</u>	
1) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-06-94</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain _____	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole  Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock  Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)  Casing Depth (ft.) <u>NA</u>  Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		6) Sealing Materials For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Clay-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite <input type="checkbox"/> Bentonite-Sand Slurry	

7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14 ft</u>	<u>1/2 Bag</u>	

8) Comments: \_\_\_\_\_

9) Name of Person or Firm Doing Sealing Work <u>WTD/SEH</u>	
Signature of Person Doing Work <u>John E. Seiff</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 Fugnetta Dr.</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Wisconsin Falls, WI 54729</u>	

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

<b>GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT PROP</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>	
1/4 of ___ 1/4 of Sec. ___ ; T. ___ N. R. ___ <input type="checkbox"/> E <input type="checkbox"/> W		Present Well Owner <u>WDNR</u>	
(If applicable) Gov't Lot ___ Grid Number ___		Street or Route <u>Hwy 70</u>	
Grid Location ___ ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ___ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>SPRING WIS</u>	
Civil Town Name <u>Ashland</u>		Facility Well No. and/or Name (If Applicable) <u>TW-3</u>	WI Unique Well No. _____
Street Address of Well <u>Marina Drive</u>		Reason For Abandonment <u>Temporary Well</u>	
City, Village <u>Ashland, WI</u>		Date of Abandonment <u>11-22-94</u>	

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) Depth to Water (Feet)</b> <u>8.33</u>	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-06-94</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole  Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Temporary Well - Removed</u>	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock  Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)  Casing Depth (ft.) <u>N/A</u>  Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	
		<b>(5) Required Method of Placing Sealing Material</b>	
		<input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		<b>(6) Sealing Materials</b>	
		For monitoring wells and monitoring well boreholes only: <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

(8) Comments: \_\_\_\_\_

**(9) Name of Person or Firm Doing Sealing Work**  
WTD / SEH

Signature of Person Doing Work <u>John G. Smith</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 Greene Hts Drive</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Spring Falls WI 54779</u>	

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

<b>GENERAL INFORMATION</b>		<b>(2) FACILITY NAME</b>	
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT PROP</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>	
<u>1/4</u> of <u>1/4</u> of Sec. <u>    </u> ; T. <u>    </u> N. R. <u>    </u>	<input type="checkbox"/> E <input type="checkbox"/> W	Present Well Owner <u>WDNR</u>	
(If applicable)	Gov't Lot <u>    </u> Grid Number <u>    </u>	Street or Route <u>Hwy 70</u>	
Grid Location <u>    </u> ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <u>    </u> ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Civil Town Name <u>Ashland</u>	City, State, Zip Code <u>Spencer WI</u>	
Street Address of Well <u>Marina Drive</u>	Facility Well No. and/or Name (If Applicable) <u>TW-4</u>	WI Unique Well No. <u>    </u>	
City, Village <u>Ashland, WI</u>	Reason For Abandonment <u>Temporary Well</u>	Date of Abandonment <u>11-22-94</u>	

<b>WELL/DRILLHOLE/BOREHOLE INFORMATION</b>		<b>(4) Depth to Water (Feet)</b> <u>885</u>	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-07-94</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Well Removed</u>	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Boring Log Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) <u>    </u>	Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	<b>(5) Required Method of Placing Sealing Material</b> <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) <u>    </u>	
Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)	Casing Depth (ft.) <u>NA</u>	<b>(6) Sealing Materials</b> For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? <u>    </u> Feet			

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

Comments:     

**(9) Name of Person or Firm Doing Sealing Work**

WTD / SEH

Signature of Person Doing Work <u>John E. Self</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 FRENCH DRIVE</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Chippewa Falls, WI 54729</u>	

**(10) FOR DNR OR COUNTY USE ONLY**

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION		(2) FACILITY NAME
Well/Drillhole/Borehole Location <u>ASHLAND MARINA DRIVE</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDRP</u>
1/4 of _____ 1/4 of Sec. _____ ; T. _____ N. R. _____	<input type="checkbox"/> E <input type="checkbox"/> W	Present Well Owner <u>WDRP</u>
(If applicable) Gov't Lot _____ Grid Number _____		Street or Route <u>High 70</u>
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>SPONGER WI 53199</u>
Civil Town Name <u>ASHLAND</u>		Facility Well No. and/or Name (If Applicable) <u>TW-5</u>
Street Address of Well <u>MARINA DRIVE</u>		Reason For Abandonment <u>Temporary Well</u>
City, Village <u>ASHLAND, WI</u>		Date of Abandonment <u>11-22-94</u>
		WI Unique Well No. _____

WELL/DRILLHOLE/BOREHOLE INFORMATION	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-07-94</u>	(4) Depth to Water (Feet) <u>7.91</u>
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Well Removed</u>
<input checked="" type="checkbox"/> Boring Log Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	(6) Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite
Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>1 1/2</u> (From ground surface)	For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout
Casing Depth (ft.) <u>NA</u>	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet	

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

8) Comments: \_\_\_\_\_

9) Name of Person or Firm Doing Sealing Work  
WTD / Self

Signature of Person Doing Work <u>John E. Self</u>	Date Signed <u>11-22-94</u>
Street or Route <u>471 Franette Drive</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Ashland, WI</u>	

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION		(2) FACILITY NAME
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT PROP</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>
1/4 of 1/4 of Sec. : T. N. R. <input type="checkbox"/> E <input type="checkbox"/> W		Present Well Owner <u>WDNR</u>
(If applicable) Gov't Lot _____ Grid Number _____		Street or Route <u>HWY 70</u>
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>SPRONER, WI</u>
Civil Town Name <u>ASHLAND</u>		Facility Well No. and/or Name (If Applicable) WI Unique Well No. <u>TW-7</u>
Street Address of Well <u>MARINA DRIVE</u>		Reason For Abandonment <u>Temporary Well</u>
City, Village <u>ASHLAND, WI</u>		Date of Abandonment <u>11-22-94</u>

WELL/DRILLHOLE/BOREHOLE INFORMATION	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-07-94</u>	(4) Depth to Water (Feet) <u>7.48</u>
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole  Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Well Removed</u>
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock  Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>DA</u> (From ground surface)  Casing Depth (ft.) <u>NA</u>  Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____
	(6) Sealing Materials <input type="checkbox"/> Near Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite  For monitoring wells and monitoring well boreholes only: <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work <u>WTD / BEH</u> Signature of Person Doing Work <u>John P. Gush</u> Street or Route <u>421 Fenette Drive</u> City, State, Zip Code <u>Chippewa Falls WI 54729</u>	Date Signed <u>11-22-94</u> Telephone Number <u>(715) 720-6200</u>	(10) *FOR DNR OR COUNTY USE ONLY*	
		Date Received/Inspected	District/County
		Reviewer/Inspector	
		Follow-up Necessary	



Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION

(2) FACILITY NAME

Well/Drillhole/Borehole Location: ASHLAND LAKEFRONT RD County: ASHLAND

1/4 of \_\_\_ 1/4 of Sec. \_\_\_ : T. \_\_\_ N. R. \_\_\_  E  W

Gov't Lot \_\_\_ Grid Number \_\_\_

Grid Location: \_\_\_ ft.  N.  S. \_\_\_ ft.  E.  W.

Civil Town Name: ASHLAND

Street Address of Well: MARINA DRIVE

City, Village: ASHLAND, WI

Original Well Owner (If Known): WDNR

Present Well Owner: WDNR

Street or Route: Hwy 70

City, State, Zip Code: SPONER, WI

Facility Well No. and/or Name (If Applicable): TW-8 WI Unique Well No. \_\_\_\_\_

Reason For Abandonment: Temporary Well

Date of Abandonment: 11-22-94

WELL/DRILLHOLE/BOREHOLE INFORMATION

Original Well/Drillhole/Borehole Construction Completed On (Date): 9-07-94

Monitoring Well  Water Well  Drillhole  Borehole

Construction Type:  Drilled  Driven (Sandpoint)  Dug  Other (Specify) \_\_\_\_\_

Formation Type:  Unconsolidated Formation  Bedrock

Total Well Depth (ft.) 14.0 Casing Diameter (ins.) NA

Casing Depth (ft.) NA

Was Well Annular Space Grouted?  Yes  No  Unknown  
If Yes, To What Depth? \_\_\_\_\_ Feet

(4) Depth to Water (Feet) 5.67

Pump & Piping Removed?  Yes  No  Not Applicable

Liner(s) Removed?  Yes  No  Not Applicable

Screen Removed?  Yes  No  Not Applicable

Casing Left in Place?  Yes  No

If No, Explain: Well Removed

Was Casing Cut Off Below Surface?  Yes  No

Did Sealing Material Rise to Surface?  Yes  No

Did Material Settle After 24 Hours?  Yes  No

If Yes, Was Hole Retopped? NA  Yes  No

(5) Required Method of Placing Sealing Material

Conductor Pipe-Gravity  Conductor Pipe-Pumped

Dump Bailer  Other (Explain) \_\_\_\_\_

(6) Sealing Materials

Neat Cement Grout  Sand-Cement (Concrete) Grout  Concrete  Clay-Sand Slurry  Bentonite-Sand Slurry  Chipped Bentonite

For monitoring wells and monitoring well boreholes only

Bentonite Pellets  Granular Bentonite  Bentonite - Cement Grout

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work: WDNR / SEH

Signature of Person Doing Work: John G. Smith Date Signed: 11-22-94

Street or Route: 421 Fremont Drive Telephone Number: (715) 720-6200

City, State, Zip Code: Chippewa Falls, WI 54729

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected: \_\_\_\_\_ District/County: \_\_\_\_\_

Reviewer/Inspector: \_\_\_\_\_

Follow-up Necessary: \_\_\_\_\_

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location <u>ASHLAND LAKEFRONT POND</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>	Present Well Owner <u>WDNR</u>
1/4 of 1/4 of Sec. _____; T. _____ N. R. _____ (If applicable)		Street or Route <u>Awy 70</u>	City, State, Zip Code <u>Spencer, WI</u>
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	Gov't Lot _____ Grid Number _____	Facility Well No. and/or Name (If Applicable) <u>TW-10</u>	WI Unique Well No. _____
Civil Town Name <u>ASHLAND</u>	Street Address of Well <u>Marina Drive</u>	Reason For Abandonment <u>Temporary Well</u>	Date of Abandonment <u>11-22-94</u>
City, Village <u>Ashland, WI</u>			

WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) Depth to Water (Feet)	
(3) Original Well/Drillhole/Borehole Construction Completed On (Date) <u>9-08-94</u>		<u>5.45</u>	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____	Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Well Removed</u>	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Total Well Depth (ft.) <u>14.0</u> Casing Diameter (ins.) <u>1 1/4</u> (From ground surface)	Casing Depth (ft.) <u>NA</u>	(6) Sealing Materials For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Chipped Bentonite</u>	<u>Surface</u>	<u>14.0</u>	<u>1/2 Bag</u>	

(8) Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work  
WTD / SEH

Signature of Person Doing Work <u>John E. Huff</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 Fremont Drive</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Wausau, WI 54729</u>	

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION		(2) FACILITY NAME
Well/Drillhole/Borehole Location <u>B1</u>	County <u>ASHLAND</u>	Original Well Owner (If Known) <u>WDNR</u>
1/4 of 1/4 of Sec. _____; T. _____ N. R. _____ (If applicable)		Present Well Owner <u>WDNR</u>
Gov't Lot _____	Grid Number _____	Street or Route _____
Grid Location _____ ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.	City, State, Zip Code <u>Spencer, WI</u>	
Civil Town Name <u>ASHLAND</u>	Facility Well No. and/or Name (If Applicable) <u>B1</u>	WI Unique Well No. _____
Street Address of Well <u>St. Claire St.</u>	Reason For Abandonment <u>Boring Completed</u>	
City, Village <u>ASHLAND</u>	Date of Abandonment <u>11-21-94</u>	

WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) Depth to Water (Feet)
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>11-21-94</u>	Boring Log Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>NONE</u>
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Borehole Only</u>
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____	Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock	Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No
Total Well Depth (ft.) <u>20.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)	Casing Depth (ft.) <u>NA</u>	(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet	(6) Sealing Materials <input type="checkbox"/> Near Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite                 For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Cement Grout	

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
<u>Concrete</u>	<u>Surface</u>	<u>0.5</u>	<u>1/4 bag</u>	
<u>Chipped Bentonite</u>	<u>0.5</u>	<u>20.0</u>	<u>8 bags</u>	

(3) Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work  
Wisconsin Test Drill  
 Signature of Person Doing Work: [Signature]  
 Date Signed: 11-21-94  
 Street or Route: 421 Fenette Dr.  
 Telephone Number: (715) 720-6200  
 City, State, Zip Code: Chippewa Falls WI 54721

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected: _____	District/County: _____
Reviewer/Inspector: _____	
Follow-up Necessary: _____	

Abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Code, whichever is applicable. Also, see instructions on back.

GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location <u>Ashland Lakesfront Prop.</u>	County <u>Ashland</u>	Original Well Owner (If Known) <u>WDNR</u>	
1/4 of ___ 1/4 of Sec. ___ : T. ___ N. R. ___ <input type="checkbox"/> E <input type="checkbox"/> W		Present Well Owner <u>WDNR</u>	
(If applicable) Gov't Lot ___ Grid Number ___		Street or Route <u>Highway 70</u>	
Grid Location ___ ft. <input type="checkbox"/> N. <input type="checkbox"/> S. ___ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Spencer, WI</u>	
Civil Town Name <u>Ashland</u>		Facility Well No. and/or Name (If Applicable) <u>B-3</u>	WI Unique Well No. _____
Street Address of Well <u>E. St. Claire</u>		Reason For Abandonment <u>Boring Completed</u>	
City, Village <u>Ashland, Wisconsin</u>		Date of Abandonment <u>11-22-94</u>	

WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) Depth to Water (Feet) <u>7.0</u>	
Original Well/Drillhole/Borehole Construction Completed On (Date) <u>11-22-94</u>		Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Line(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable Casing Left in Place? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, Explain <u>Borehole Only</u>	
<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input checked="" type="checkbox"/> Borehole  Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <u>NA</u> <input type="checkbox"/> Yes <input type="checkbox"/> No	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock  Total Well Depth (ft.) <u>20.0</u> Casing Diameter (ins.) <u>NA</u> (From ground surface)  Casing Depth (ft.) <u>NA</u>  Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet		(5) Required Method of Placing Sealing Material <input checked="" type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
		(6) Sealing Materials For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	

Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
Concrete	Surface	0.5	1/4 bag	
Chipped Bentonite	0.5	20.0	8 Bags	

(8) Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work  
WTD / SEH

Signature of Person Doing Work <u>John E. Seib</u>	Date Signed <u>11-22-94</u>
Street or Route <u>421 Frontette Drive</u>	Telephone Number <u>(715) 720-6200</u>
City, State, Zip Code <u>Spencer, WI 54779</u>	

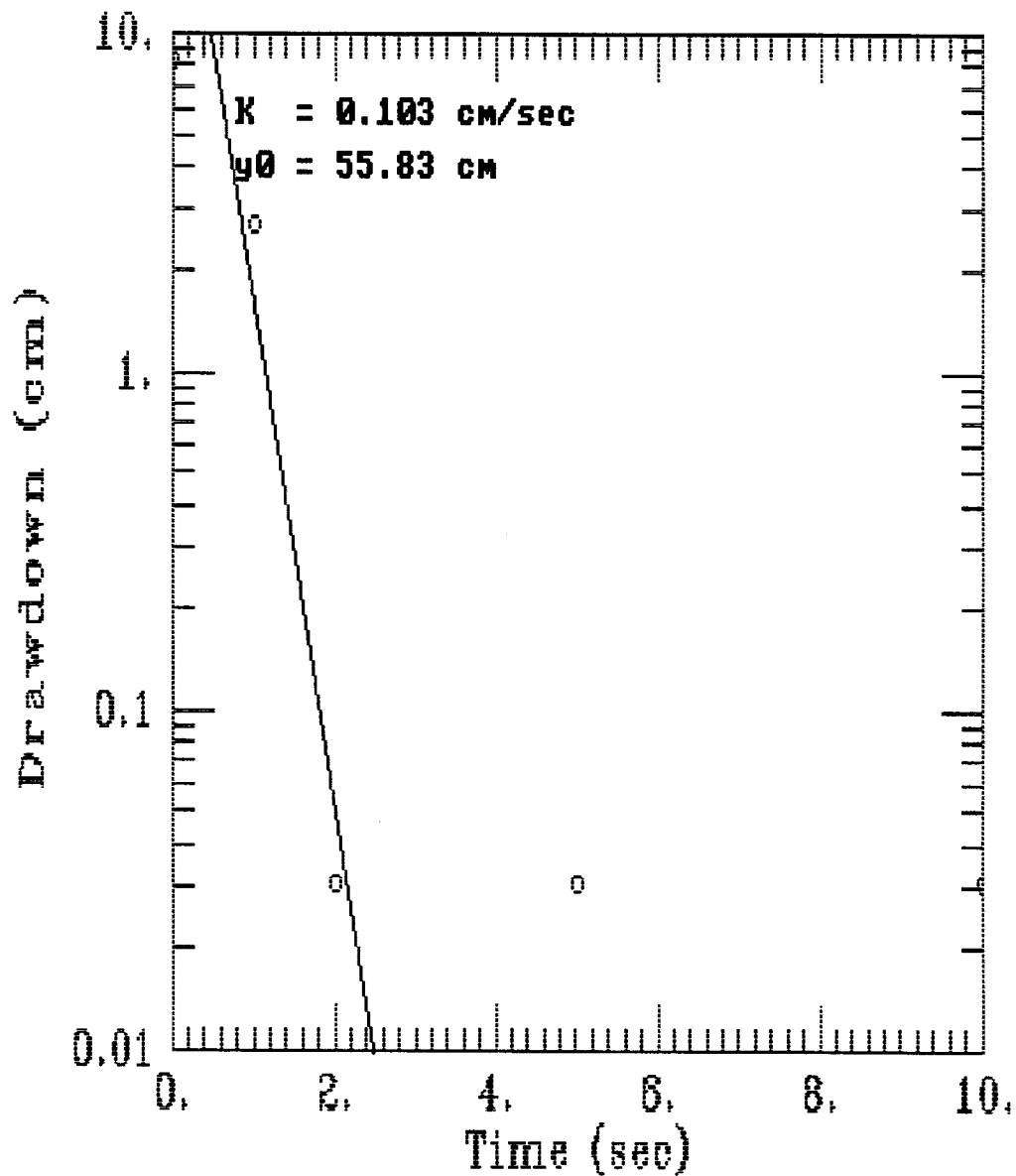
(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow-up Necessary	

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## **Appendix E**

### **Hydraulic Conductivity Results**

MW-1

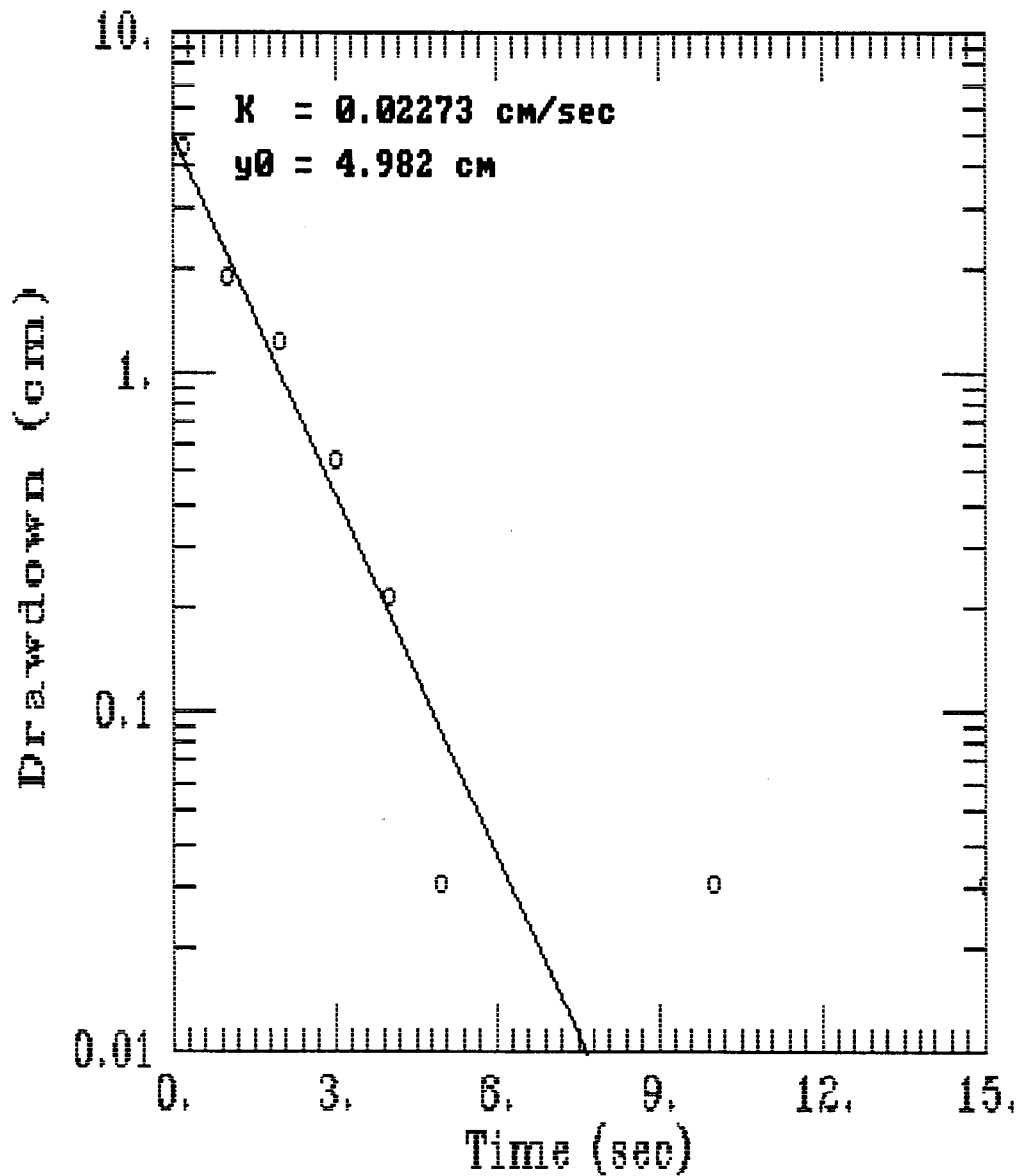


AQTESOLV

 GERAGHTY  
& MILLER, INC.

 Modeling Group

MW-2

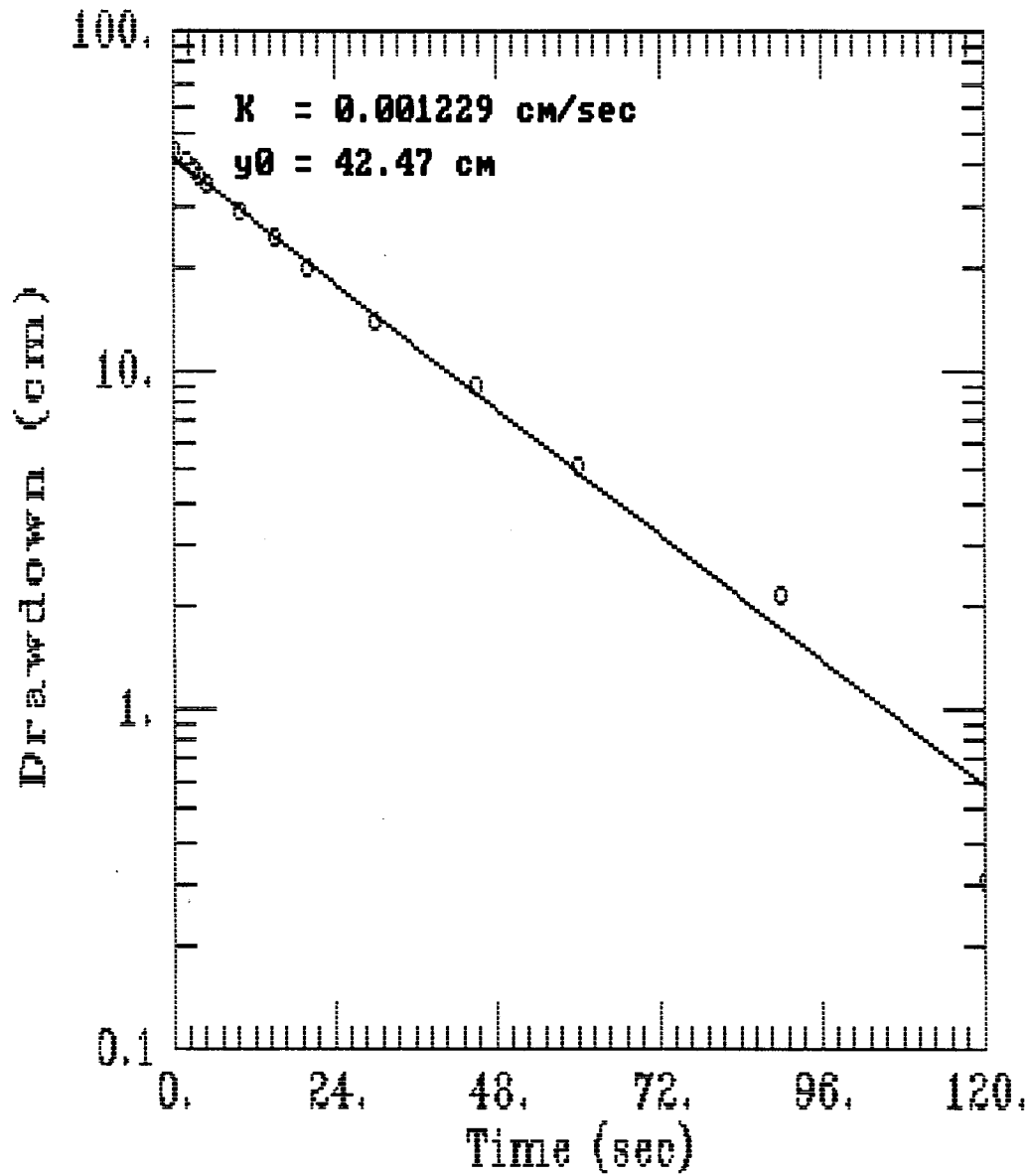


AQTESOLV

 GERAGHTY  
& MILLER, INC.

 Modeling Group

MW-3



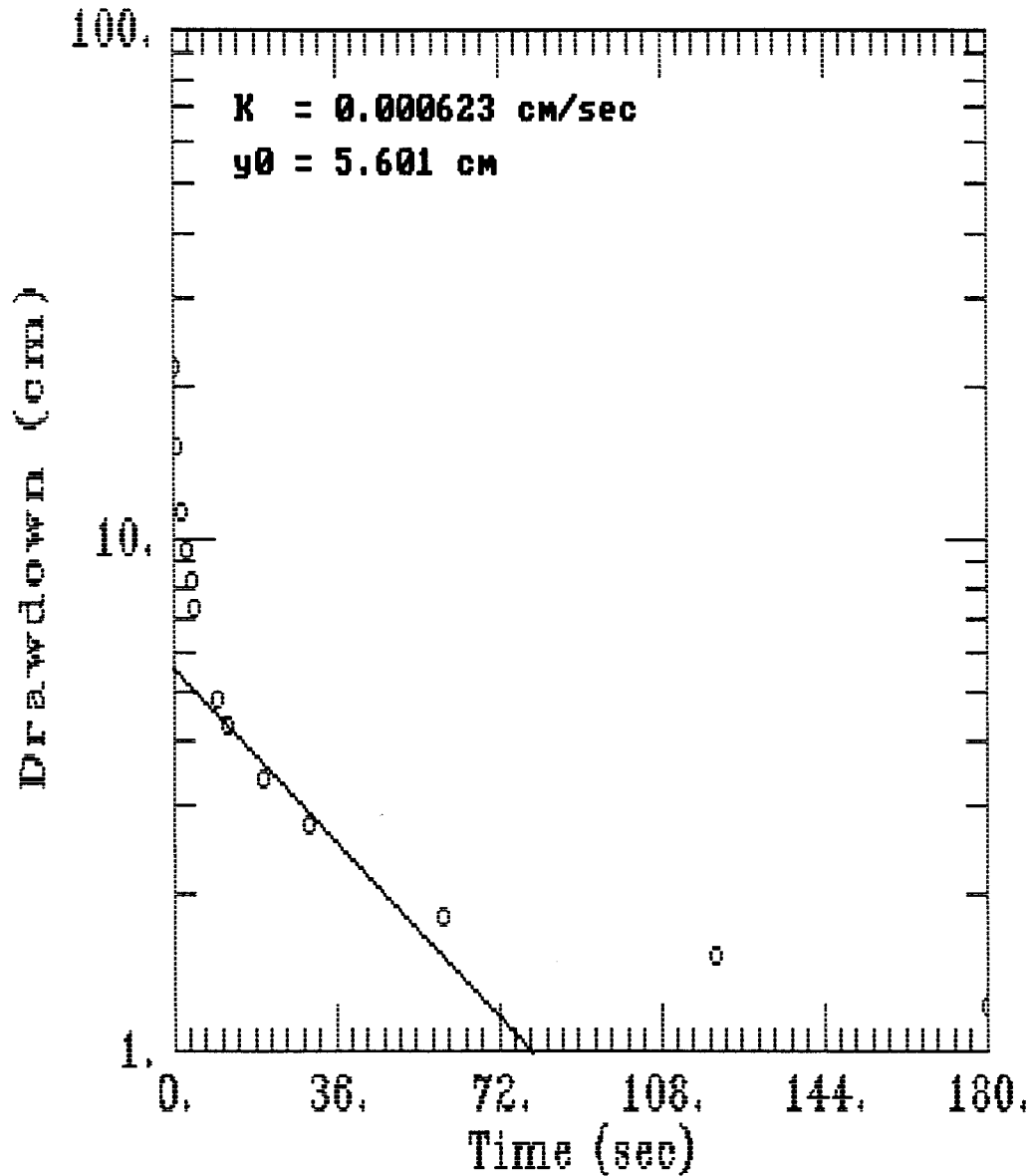
AQTESOLV

 GERAGHTY  
& MILLER, INC.



 Modeling Group



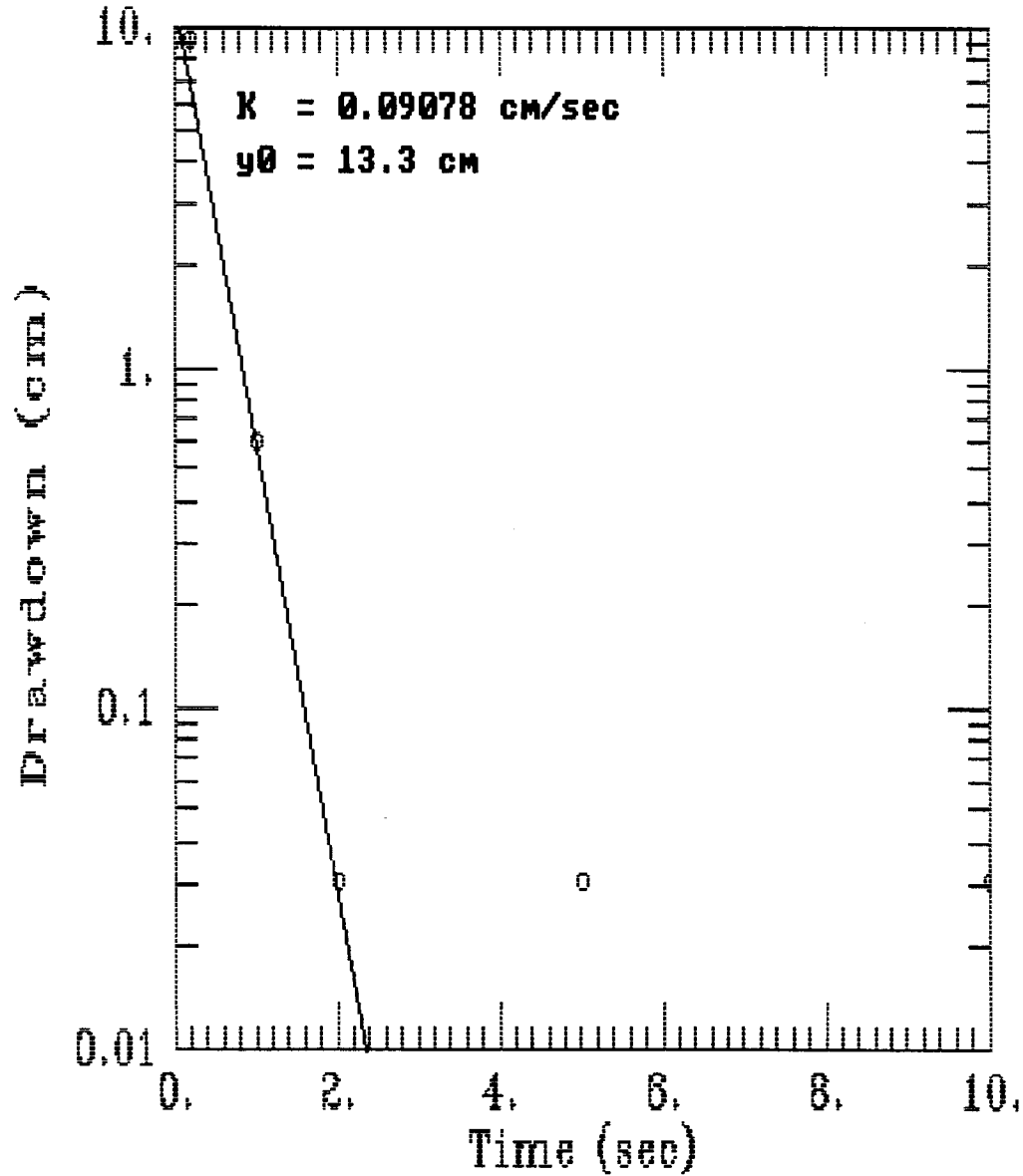
TW-6



AQTESOLV

 GERAGHTY  
& MILLER, INC.  
 Modeling Group

TW-9

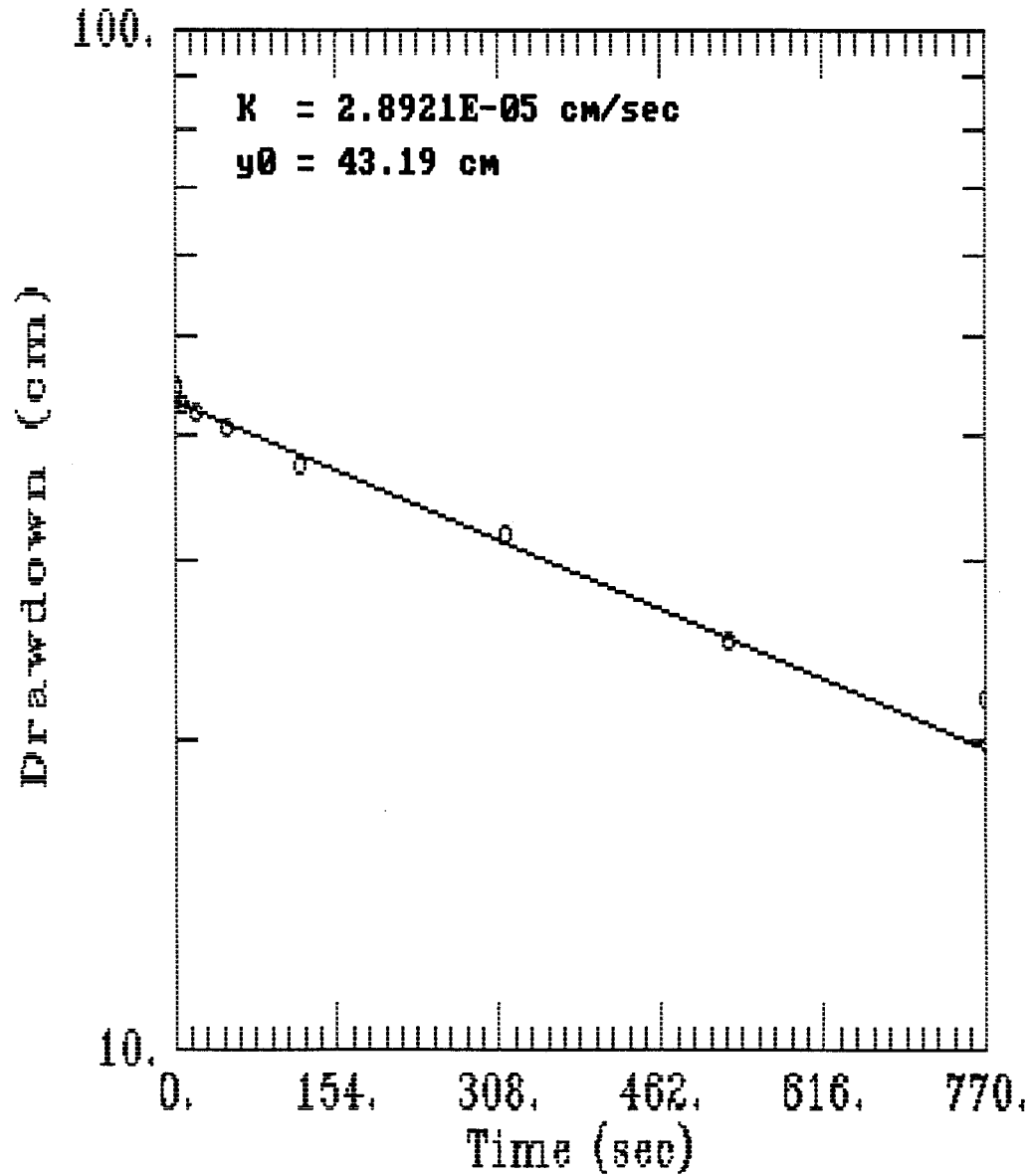


AQTESOLV



 GERAGHTY  
& MILLER, INC.

 Modeling Group

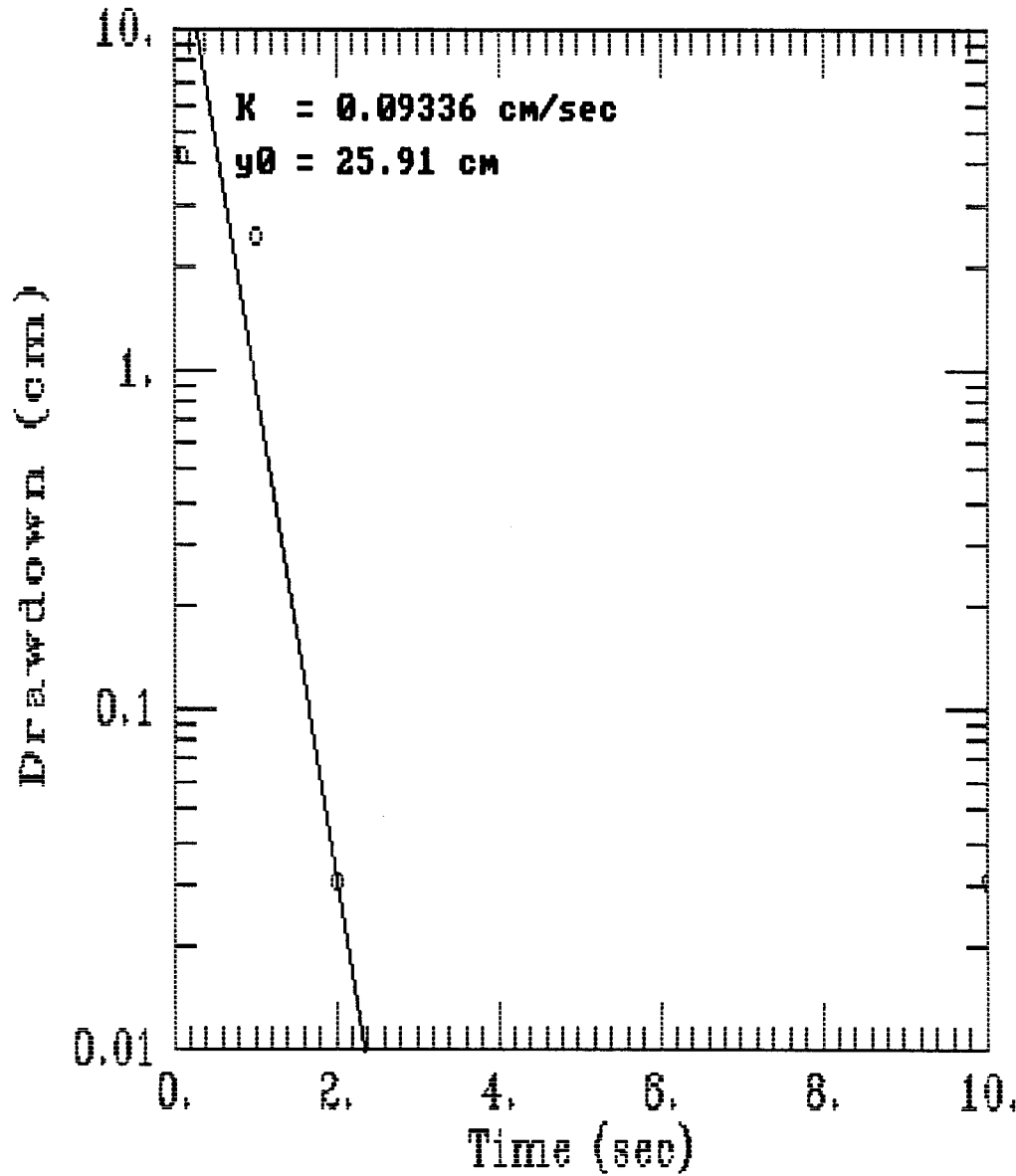
TW-11



AQTESOLV

 GERAGHTY  
& MILLER, INC.  
 Modeling Group

TW-12

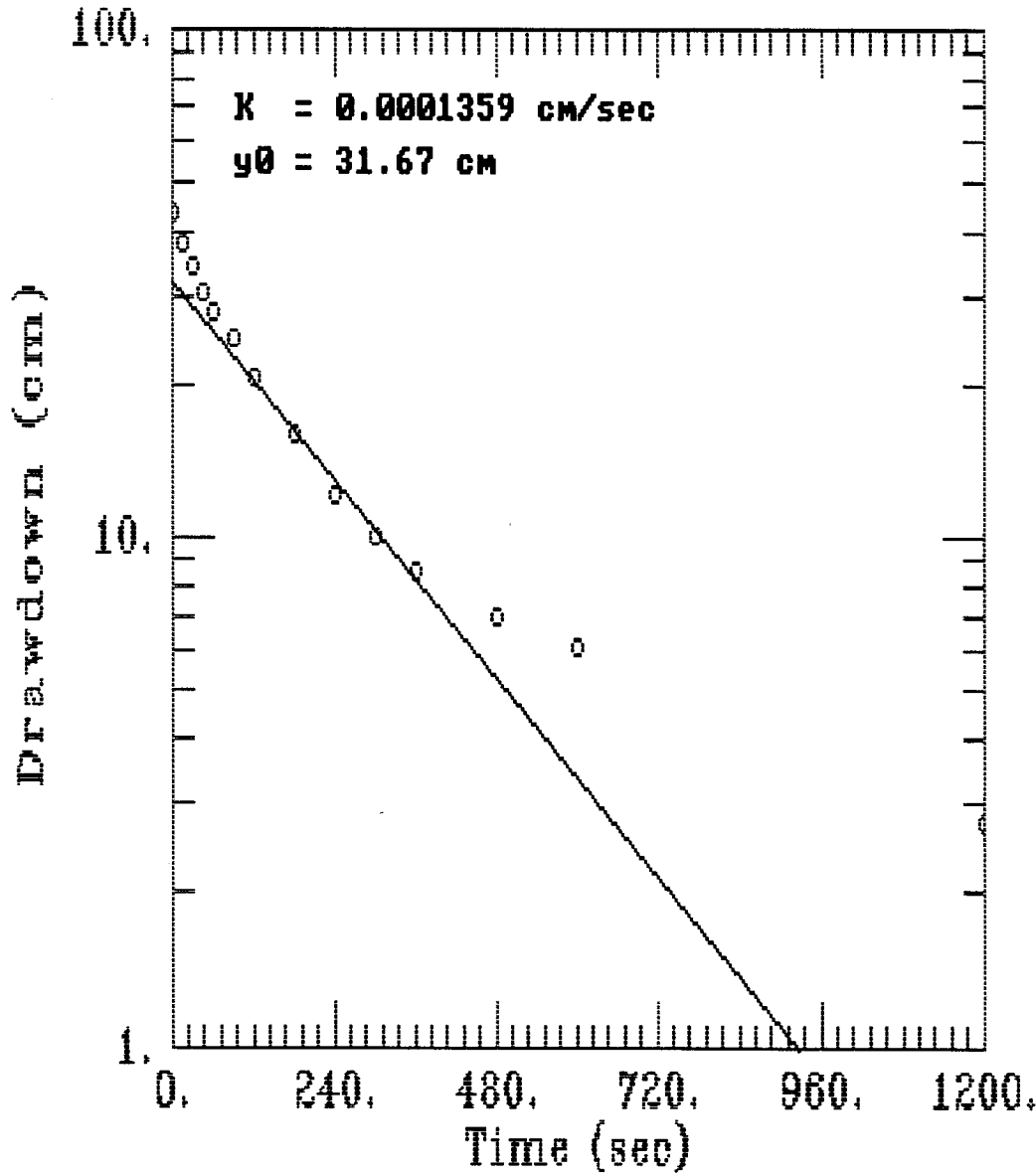


AQTESOLV

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& MILLER, INC.

 Modeling Group

TW-13



AQTESOLV



GERAGHTY  
& MILLER, INC.



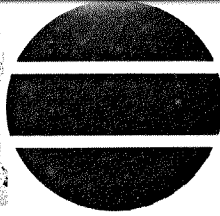
Modeling Group

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## **Appendix F**

### **Soil Analytical Results**

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JLO*

Attn: Cy Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-1, S3 4.5-6.5</u>	<u>09/06/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
<b>EPA 6010</b>						
Cadmium	µg/g	0.56		X		09/29/94
Lead	µg/g	16.0	180.			09/29/94
Selenium	µg/g	29.0		X		09/29/94
<b>EPA 8021</b>						
Benzene	µg/g	0.13		2.60		09/20/94
Bromobenzene	µg/g	0.33		X		09/20/94
Bromochloromethane	µg/g	0.20		X		09/20/94
Bromodichloromethane	µg/g	0.33		X		09/20/94
Bromoform	µg/g	1.30		X		09/20/94
Bromomethane	µg/g	2.60		X	CSL	09/20/94
n-Butylbenzene	µg/g	0.65		X		09/20/94
sec-Butylbenzene	µg/g	0.65		X		09/20/94
tert-Butylbenzene	µg/g	0.65		X		09/20/94
Carbon Tetrachloride	µg/g	0.33		X		09/20/94
Chlorobenzene	µg/g	1.30		X		09/20/94
Chlorodibromomethane	µg/g	0.33		X		09/20/94
Chloroethane	µg/g	1.30		X		09/20/94
Chloroform	µg/g	0.33		X		09/20/94
Chloromethane	µg/g	1.30		X	CSL	09/20/94
o-Chlorotoluene	µg/g	0.65		X		09/20/94
p-Chlorotoluene	µg/g	0.65		X		09/20/94
1,2-Dibromo-3-chloropropane	µg/g	8.70		X		09/20/94
1,2-Dibromoethane	µg/g	0.65		X		09/20/94
Dibromomethane	µg/g	0.33		X		09/20/94
1,2-Dichlorobenzene	µg/g	0.65		X		09/20/94
1,3-Dichlorobenzene	µg/g	0.65		X		09/20/94
1,4-Dichlorobenzene	µg/g	0.33		X		09/20/94
Dichlorodifluoromethane	µg/g	1.30		X	CSH	09/20/94
1,1-Dichloroethane	µg/g	0.33		X		09/20/94
1,2-Dichloroethane	µg/g	0.33		X		09/20/94
1,1-Dichloroethylene	µg/g	0.26		X		09/20/94
cis-1,2-Dichloroethylene	µg/g	0.33		X		09/20/94
trans-1,2-Dichloroethylene	µg/g	0.33		X	CSL	09/20/94
1,2-Dichloropropane	µg/g	0.33		X		09/20/94
1,3-Dichloropropane	µg/g	0.33		X		09/20/94
2,2-Dichloropropane	µg/g	1.30		X		09/20/94
1,1-Dichloropropene	µg/g	0.65		X		09/20/94
1,3-Dichloropropene	µg/g	0.33		X		09/20/94

Analytical No.: 20784

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

Analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW-1, S3 4.5-6.5 09/06/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.65	X		09/20/94
Hexachlorobutadiene	µg/g	0.65	X		09/20/94
Isopropylbenzene	µg/g	0.65	X		09/20/94
p-Isopropyltoluene	µg/g	0.65	X		09/20/94
Methyl tert Butyl Ether	µg/g	1.30	X		09/20/94
Methylene Chloride	µg/g	1.60	X	CSH	09/20/94
Naphthalene	µg/g	0.65	3.86		09/20/94
n-Propylbenzene	µg/g	0.65	X		09/20/94
Styrene	µg/g	3.30	X		09/20/94
Tetrachloroethylene	µg/g	0.33	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.33	X		09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.65	X	CSL	09/20/94
Toluene	µg/g	1.30	X		09/20/94
1,2,3-Trichlorobenzene	µg/g	0.65	X		09/20/94
1,2,4-Trichlorobenzene	µg/g	0.65	X		09/20/94
1,1,1-Trichloroethane	µg/g	0.33	X		09/20/94
1,1,2-Trichloroethane	µg/g	0.33	X		09/20/94
Trichloroethylene	µg/g	0.13	X	CSH	09/20/94
Trichlorofluoromethane	µg/g	0.65	X		09/20/94
1,2,3-Trichloropropane	µg/g	1.30	X	CSH	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.65	X		09/20/94
1,3,5-Trimethylbenzene	µg/g	0.65	X		09/20/94
Vinyl Chloride	µg/g	0.13	X	CSL	09/20/94
m- & p-Xylene	µg/g	0.65	X		09/20/94
o-Xylene	µg/g	0.65	X		09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	11.	X		09/20/94
Acenaphthylene	µg/g	11.	12.4		09/20/94
Anthracene	µg/g	11.	3.47	J	09/20/94
Benzo (a) Anthracene	µg/g	11.	0.271	J	09/20/94
Benzo (a) Pyrene	µg/g	11.	20.1		09/20/94
Benzo (b) Fluoranthene	µg/g	11.	12.6		09/20/94
Benzo (k) Fluoranthene	µg/g	11.	2.61	J	09/20/94
Benzo (ghi) Perylene	µg/g	11.	86.0		09/20/94
Chrysene	µg/g	11.	5.03	J	09/20/94
Dibenzo (a, h) Anthracene	µg/g	11.	3.03	J	09/20/94
Fluoranthene	µg/g	11.	2.33	J	09/20/94
Fluorene	µg/g	11.	1.74	J	09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	11.	42.8		09/20/94
2-Methyl Naphthalene	µg/g	11.	X		09/20/94
Phenanthrene	µg/g	11.	X		09/20/94
Pyrene	µg/g	11.	5.39	J	09/20/94
Naphthalene	µg/g	11.	X		09/20/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.:

20784

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD  
REVIEWED BY: *JHC*

Attn: Cy Ingraham

	Units	Detection Limit	TW-1, S6 12-14FT 09/06/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.60	X		09/29/94
Selenium	µg/g	9.80	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.002	X	SL	09/16/94
Bromobenzene	µg/g	0.005	X		09/16/94
Bromochloromethane	µg/g	0.010	X		09/16/94
Bromodichloromethane	µg/g	0.005	X	CSL	09/16/94
Bromoform	µg/g	0.021	X		09/16/94
Bromomethane	µg/g	0.042	X	DUP	09/16/94
n-Butylbenzene	µg/g	0.011	X	DUP SL	09/16/94
sec-Butylbenzene	µg/g	0.011	X	SL	09/16/94
tert-Butylbenzene	µg/g	0.011	X	SL	09/16/94
Carbon Tetrachloride	µg/g	0.005	X		09/16/94
Chlorobenzene	µg/g	0.021	X		09/16/94
Chlorodibromomethane	µg/g	0.005	X		09/16/94
Chloroethane	µg/g	0.021	X		09/16/94
Chloroform	µg/g	0.005	X	DUP	09/16/94
Chloromethane	µg/g	0.021	X	CSL	09/16/94
o-Chlorotoluene	µg/g	0.011	X		09/16/94
p-Chlorotoluene	µg/g	0.011	X		09/16/94
1,2-Dibromo-3-chloropropane	µg/g	0.140	X		09/16/94
1,2-Dibromoethane	µg/g	0.011	X		09/16/94
Dibromomethane	µg/g	0.005	X		09/16/94
1,2-Dichlorobenzene	µg/g	0.011	X		09/16/94
1,3-Dichlorobenzene	µg/g	0.011	X		09/16/94
1,4-Dichlorobenzene	µg/g	0.005	X		09/16/94
Dichlorodifluoromethane	µg/g	0.021	X	CSL	09/16/94
1,1-Dichloroethane	µg/g	0.005	X	DUP	09/16/94
1,2-Dichloroethane	µg/g	0.005	X	DUP	09/16/94
1,1-Dichloroethylene	µg/g	0.004	X		09/16/94
cis-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/16/94
trans-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/16/94
1,2-Dichloropropane	µg/g	0.005	X		09/16/94
1,3-Dichloropropane	µg/g	0.005	X		09/16/94
2,2-Dichloropropane	µg/g	0.021	X	DUP	09/16/94
1,1-Dichloropropene	µg/g	0.011	X		09/16/94
1,3-Dichloropropene	µg/g	0.005	X		09/16/94

Analytical No.:

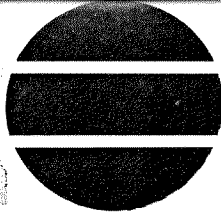
20785

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *TRK*  
REVIEWED BY: *JG*

Attn: Cy Ingraham

	Units	Detection TW-1, S6 12-14FT		Qualifiers	Date Analyzed
		Limit	09/06/94		
Ethylbenzene	µg/g	0.011	X	SL	09/16/94
Hexachlorobutadiene	µg/g	0.011	X		09/16/94
Isopropylbenzene	µg/g	0.011	X	SL	09/16/94
p-Isopropyltoluene	µg/g	0.011	X	SL	09/16/94
Methyl tert Butyl Ether	µg/g	0.021	X	SL	09/16/94
Methylene Chloride	µg/g	0.027	X	CSH	09/16/94
Naphthalene	µg/g	0.011	0.293	SL	09/16/94
n-Propylbenzene	µg/g	0.011	X	SL	09/16/94
Styrene	µg/g	0.053	X	SL	09/16/94
Tetrachloroethylene	µg/g	0.005	X	CSH	09/16/94
1,1,1,2-Tetrachloroethane	µg/g	0.005	X		09/16/94
1,1,2,2-Tetrachloroethane	µg/g	0.011	X		09/16/94
Toluene	µg/g	0.021	X	SL	09/16/94
1,2,3-Trichlorobenzene	µg/g	0.011	X		09/16/94
1,2,4-Trichlorobenzene	µg/g	0.011	X		09/16/94
1,1,1-Trichloroethane	µg/g	0.005	X	DUP	09/16/94
1,1,2-Trichloroethane	µg/g	0.005	X		09/16/94
Trichloroethylene	µg/g	0.002	X	CSH	09/16/94
Trichlorofluoromethane	µg/g	0.011	X		09/16/94
1,2,3-Trichloropropane	µg/g	0.021	X	DUP	09/16/94
1,2,4-Trimethylbenzene	µg/g	0.011	X	SL	09/16/94
1,3,5-Trimethylbenzene	µg/g	0.011	X	SL	09/16/94
Vinyl Chloride	µg/g	0.002	X	CSL	09/16/94
m- & p-Xylene	µg/g	0.011	X	SL	09/16/94
o-Xylene	µg/g	0.011	X	SL	09/16/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.37	0.110	J	09/20/94
Acenaphthylene	µg/g	0.37	X		09/20/94
Anthracene	µg/g	0.37	0.048	J	09/20/94
Benzo (a) Anthracene	µg/g	0.37	X		09/20/94
Benzo (a) Pyrene	µg/g	0.37	X		09/20/94
Benzo (b) Fluoranthene	µg/g	0.37	X		09/20/94
Benzo (k) Fluoranthene	µg/g	0.37	X		09/20/94
Benzo (ghi) Perylene	µg/g	0.37	X		09/20/94
Chrysene	µg/g	0.37	X		09/20/94
Dibenzo (a, h) Anthracene	µg/g	0.37	X		09/20/94
Fluoranthene	µg/g	0.37	0.111	J	09/20/94
Fluorene	µg/g	0.37	0.038	J	09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.37	X		09/20/94
2-Methyl Naphthalene	µg/g	0.37	0.092	J	09/20/94
Phenanthrene	µg/g	0.37	0.148	J	09/20/94
Pyrene	µg/g	0.37	0.195	J	09/20/94
Naphthalene	µg/g	0.37	0.149	J	09/20/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.:

20785

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JK*

Attn: Cy Ingraham

	Units	Detection Limit	TW2, S5 9.5-11.5 09/06/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.6	X		09/29/94
Lead	µg/g	18.0	X		09/29/94
Selenium	µg/g	31.0	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.27	X		09/20/94
Bromobenzene	µg/g	0.69	X		09/20/94
Bromochloromethane	µg/g	0.39	X		09/20/94
Bromodichloromethane	µg/g	0.69	X		09/20/94
Bromoform	µg/g	2.70	X		09/20/94
Bromomethane	µg/g	5.50	X	CSL	09/20/94
n-Butylbenzene	µg/g	1.40	X		09/20/94
sec-Butylbenzene	µg/g	1.40	X		09/20/94
tert-Butylbenzene	µg/g	1.40	X		09/20/94
Carbon Tetrachloride	µg/g	0.69	X		09/20/94
Chlorobenzene	µg/g	2.70	X		09/20/94
Chlorodibromomethane	µg/g	0.69	X		09/20/94
Chloroethane	µg/g	2.70	X		09/20/94
Chloroform	µg/g	0.69	X		09/20/94
Chloromethane	µg/g	2.70	X	CSL	09/20/94
o-Chlorotoluene	µg/g	1.40	X		09/20/94
p-Chlorotoluene	µg/g	1.40	X		09/20/94
1,2-Dibromo-3-chloropropane	µg/g	18.0	X		09/20/94
1,2-Dibromoethane	µg/g	1.40	X		09/20/94
Dibromomethane	µg/g	0.69	X		09/20/94
1,2-Dichlorobenzene	µg/g	1.40	X		09/20/94
1,3-Dichlorobenzene	µg/g	1.40	X		09/20/94
1,4-Dichlorobenzene	µg/g	0.69	X		09/20/94
Dichlorodifluoromethane	µg/g	2.70	X	CSH	09/20/94
1,1-Dichloroethane	µg/g	0.69	X		09/20/94
1,2-Dichloroethane	µg/g	0.69	X		09/20/94
1,1-Dichloroethylene	µg/g	0.55	X		09/20/94
cis-1,2-Dichloroethylene	µg/g	0.69	X		09/20/94
trans-1,2-Dichloroethylene	µg/g	0.69	X	CSL	09/20/94
1,2-Dichloropropane	µg/g	0.69	X		09/20/94
1,3-Dichloropropane	µg/g	0.69	X		09/20/94
2,2-Dichloropropane	µg/g	2.70	X		09/20/94
1,1-Dichloropropene	µg/g	1.40	X		09/20/94
1,3-Dichloropropene	µg/g	0.69	X		09/20/94

Analytical No.:

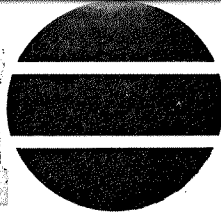
20786

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *JRS*

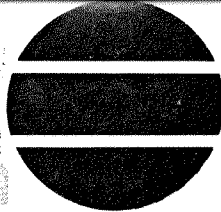
Attn: Cy Ingraham

	Units	Detection Limit	TW2, S5 9.5-11.5 09/06/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	1.40	X		09/20/94
Hexachlorobutadiene	µg/g	1.40	X		09/20/94
Isopropylbenzene	µg/g	1.40	X		09/20/94
p-Isopropyltoluene	µg/g	1.37	1.51		09/20/94
Methyl tert Butyl Ether	µg/g	2.70	X		09/20/94
Methylene Chloride	µg/g	3.40	X	CSH	09/20/94
Naphthalene	µg/g	1.40	X		09/20/94
n-Propylbenzene	µg/g	1.37	1.85		09/20/94
Styrene	µg/g	6.90	X		09/20/94
Tetrachloroethylene	µg/g	0.69	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.69	X		09/20/94
1,1,2,2-Tetrachloroethane	µg/g	1.40	X	CSL	09/20/94
Toluene	µg/g	2.70	X		09/20/94
1,2,3-Trichlorobenzene	µg/g	1.40	X		09/20/94
1,2,4-Trichlorobenzene	µg/g	1.40	X		09/20/94
1,1,1-Trichloroethane	µg/g	0.69	X		09/20/94
1,1,2-Trichloroethane	µg/g	0.69	X		09/20/94
Trichloroethylene	µg/g	0.27	X	CSH	09/20/94
Trichlorofluoromethane	µg/g	1.40	X		09/20/94
1,2,3-Trichloropropane	µg/g	2.70	X	CSH	09/20/94
1,2,4-Trimethylbenzene	µg/g	1.40	X		09/20/94
1,3,5-Trimethylbenzene	µg/g	1.40	X		09/20/94
Vinyl Chloride	µg/g	0.27	X	CSL	09/20/94
m- & p-Xylene	µg/g	1.40	X		09/20/94
o-Xylene	µg/g	1.40	X		09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	12.	14.8		09/21/94
Acenaphthylene	µg/g	12.	1.81	J	09/21/94
Anthracene	µg/g	12.	4.94	J	09/21/94
Benzo (a) Anthracene	µg/g	12.	16.9		09/21/94
Benzo (a) Pyrene	µg/g	12.	9.77	J	09/21/94
Benzo (b) Fluoranthene	µg/g	12.	8.14	J	09/21/94
Benzo (k) Fluoranthene	µg/g	12.	2.62	J	09/21/94
Benzo (ghi) Perylene	µg/g	12.	3.98	J	09/21/94
Chrysene	µg/g	12.	13.4		09/21/94
Dibenzo (a, h) Anthracene	µg/g	12.	X		09/21/94
Fluoranthene	µg/g	12.	29.6		09/21/94
Fluorene	µg/g	12.	4.48	J	09/21/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	12.	3.53	J	09/21/94
2-Methyl Naphthalene	µg/g	12.	1.08	J	09/21/94
Phenanthrene	µg/g	12.	5.37	J	09/21/94
Pyrene	µg/g	12.	50.5		09/21/94
Naphthalene	µg/g	12.	4.09	J	09/21/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.: 20786

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *Mrd*  
 REVIEWED BY: *[Signature]*

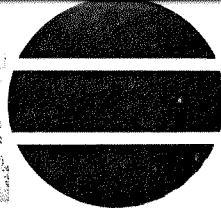
Attn: Cy Ingraham

	Units	Detection Limit	TW2, S714.5-16.5 09/06/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.2	X		09/29/94
Lead	µg/g	5.8	X		09/29/94
Selenium	µg/g	10.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.002	X		09/17/94
Bromobenzene	µg/g	0.005	X		09/17/94
Bromochloromethane	µg/g	0.008	X		09/17/94
Bromodichloromethane	µg/g	0.005	X	CSL	09/17/94
Bromoform	µg/g	0.019	X		09/17/94
Bromomethane	µg/g	0.036	X	DUP	09/17/94
n-Butylbenzene	µg/g	0.009	X	DUP	09/17/94
sec-Butylbenzene	µg/g	0.009	X		09/17/94
tert-Butylbenzene	µg/g	0.009	X		09/17/94
Carbon Tetrachloride	µg/g	0.005	X		09/17/94
Chlorobenzene	µg/g	0.019	X		09/17/94
Chlorodibromomethane	µg/g	0.005	X		09/17/94
Chloroethane	µg/g	0.019	X		09/17/94
Chloroform	µg/g	0.005	X	DUP	09/17/94
Chloromethane	µg/g	0.019	X	CSL	09/17/94
o-Chlorotoluene	µg/g	0.009	X		09/17/94
p-Chlorotoluene	µg/g	0.009	X		09/17/94
1,2-Dibromo-3-chloropropane	µg/g	0.120	X		09/17/94
1,2-Dibromoethane	µg/g	0.009	X		09/17/94
Dibromomethane	µg/g	0.005	X		09/17/94
1,2-Dichlorobenzene	µg/g	0.009	X		09/17/94
1,3-Dichlorobenzene	µg/g	0.009	X		09/17/94
1,4-Dichlorobenzene	µg/g	0.005	X		09/17/94
Dichlorodifluoromethane	µg/g	0.019	X	CSL	09/17/94
1,1-Dichloroethane	µg/g	0.005	X	DUP	09/17/94
1,2-Dichloroethane	µg/g	0.005	X	DUP	09/17/94
1,1-Dichloroethylene	µg/g	0.004	X		09/17/94
cis-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/17/94
trans-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/17/94
1,2-Dichloropropane	µg/g	0.005	X		09/17/94
1,3-Dichloropropane	µg/g	0.005	X		09/17/94
2,2-Dichloropropane	µg/g	0.019	X	DUP	09/17/94
1,1-Dichloropropene	µg/g	0.009	X		09/17/94
1,3-Dichloropropene	µg/g	0.005	X		09/17/94

Analytical No.: 20787

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *JPO*

Attn: Cy Ingraham

	Units	Detection Limit	TW2, S714.5-16.5 09/06/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.009	X		09/17/94
Hexachlorobutadiene	µg/g	0.009	X		09/17/94
Isopropylbenzene	µg/g	0.009	X		09/17/94
p-Isopropyltoluene	µg/g	0.009	X		09/17/94
Methyl tert Butyl Ether	µg/g	0.019	X		09/17/94
Methylene Chloride	µg/g	0.023	X	CSH	09/17/94
Naphthalene	µg/g	0.009	0.125		09/17/94
n-Propylbenzene	µg/g	0.009	0.020		09/17/94
Styrene	µg/g	0.045	X		09/17/94
Tetrachloroethylene	µg/g	0.005	X	CSH	09/17/94
1,1,1,2-Tetrachloroethane	µg/g	0.004	X		09/17/94
1,1,2,2-Tetrachloroethane	µg/g	0.009	X		09/17/94
Toluene	µg/g	0.019	X		09/17/94
1,2,3-Trichlorobenzene	µg/g	0.009	X		09/17/94
1,2,4-Trichlorobenzene	µg/g	0.009	X		09/17/94
1,1,1-Trichloroethane	µg/g	0.005	X	DUP	09/17/94
1,1,2-Trichloroethane	µg/g	0.005	X		09/17/94
Trichloroethylene	µg/g	0.002	X	CSH	09/17/94
Trichlorofluoromethane	µg/g	0.009	X		09/17/94
1,2,3-Trichloropropane	µg/g	0.019	X	DUP	09/17/94
1,2,4-Trimethylbenzene	µg/g	0.009	X		09/17/94
1,3,5-Trimethylbenzene	µg/g	0.009	X		09/17/94
Vinyl Chloride	µg/g	0.002	X	CSL	09/17/94
m- & p-Xylene	µg/g	0.009	X		09/17/94
o-Xylene	µg/g	0.009	X		09/17/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.38	X		09/20/94
Acenaphthylene	µg/g	0.38	X		09/20/94
Anthracene	µg/g	0.38	X		09/20/94
Benzo (a) Anthracene	µg/g	0.38	X		09/20/94
Benzo (a) Pyrene	µg/g	0.38	X		09/20/94
Benzo (b) Fluoranthene	µg/g	0.38	X		09/20/94
Benzo (k) Fluoranthene	µg/g	0.38	X		09/20/94
Benzo (ghi) Perylene	µg/g	0.38	X		09/20/94
Chrysene	µg/g	0.38	X		09/20/94
Dibenzo (a, h) Anthracene	µg/g	0.38	X		09/20/94
Fluoranthene	µg/g	0.38	X		09/20/94
Fluorene	µg/g	0.38	X		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.38	X		09/20/94
2-Methyl Naphthalene	µg/g	0.38	X		09/20/94
Phenanthrene	µg/g	0.38	X		09/20/94
Pyrene	µg/g	0.38	X		09/20/94
Naphthalene	µg/g	0.38	X		09/20/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.: 20787

X = Analyzed but not detected.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *nr*  
REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-3, S4 7-9FT</u> <u>09/06/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
<b><u>EPA 6010</u></b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.6	X		09/29/94
Selenium	µg/g	10.	X		09/29/94
<b><u>EPA 8021</u></b>					
Benzene	µg/g	0.085	X		09/20/94
Bromobenzene	µg/g	0.210	X		09/20/94
Bromochloromethane	µg/g	0.373	X		09/20/94
Bromodichloromethane	µg/g	0.210	X		09/20/94
Bromoform	µg/g	0.840	X		09/20/94
Bromomethane	µg/g	1.70	X	CSL	09/20/94
n-Butylbenzene	µg/g	0.420	X		09/20/94
sec-Butylbenzene	µg/g	0.420	X		09/20/94
tert-Butylbenzene	µg/g	0.420	X		09/20/94
Carbon Tetrachloride	µg/g	0.210	X		09/20/94
Chlorobenzene	µg/g	0.840	X		09/20/94
Chlorodibromomethane	µg/g	0.210	X		09/20/94
Chloroethane	µg/g	0.840	X		09/20/94
Chloroform	µg/g	0.210	X		09/20/94
Chloromethane	µg/g	0.840	X	CSL	09/20/94
o-Chlorotoluene	µg/g	0.420	X		09/20/94
p-Chlorotoluene	µg/g	0.420	X		09/20/94
1,2-Dibromo-3-chloropropane	µg/g	5.60	X		09/20/94
1,2-Dibromoethane	µg/g	0.420	X		09/20/94
Dibromomethane	µg/g	0.210	X		09/20/94
1,2-Dichlorobenzene	µg/g	0.420	X		09/20/94
1,3-Dichlorobenzene	µg/g	0.420	X		09/20/94
1,4-Dichlorobenzene	µg/g	0.210	X		09/20/94
Dichlorodifluoromethane	µg/g	0.840	X	CSH	09/20/94
1,1-Dichloroethane	µg/g	0.210	X		09/20/94
1,2-Dichloroethane	µg/g	0.210	X		09/20/94
1,1-Dichloroethylene	µg/g	0.170	X		09/20/94
cis-1,2-Dichloroethylene	µg/g	0.210	X		09/20/94
trans-1,2-Dichloroethylene	µg/g	0.210	X	CSL	09/20/94
1,2-Dichloropropane	µg/g	0.210	X		09/20/94
1,3-Dichloropropane	µg/g	0.210	X		09/20/94
2,2-Dichloropropane	µg/g	0.840	X		09/20/94
1,1-Dichloropropene	µg/g	0.420	X		09/20/94
1,3-Dichloropropene	µg/g	0.210	X		09/20/94

Analytical No.:

20788

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW-3, S4 7-9FT 09/06/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.420	X		09/20/94
Hexachlorobutadiene	µg/g	0.420	X		09/20/94
Isopropylbenzene	µg/g	0.420	X		09/20/94
p-Isopropyltoluene	µg/g	0.420	2.81		09/20/94
Methyl tert Butyl Ether	µg/g	0.840	X		09/20/94
Methylene Chloride	µg/g	1.00	X	CSH	09/20/94
Naphthalene	µg/g	0.420	1.63		09/20/94
n-Propylbenzene	µg/g	0.420	X		09/20/94
Styrene	µg/g	2.10	X		09/20/94
Tetrachloroethylene	µg/g	0.210	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.210	X		09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.420	X	CSL	09/20/94
Toluene	µg/g	0.840	X		09/20/94
1,2,3-Trichlorobenzene	µg/g	0.420	X		09/20/94
1,2,4-Trichlorobenzene	µg/g	0.420	X		09/20/94
1,1,1-Trichloroethane	µg/g	0.210	X		09/20/94
1,1,2-Trichloroethane	µg/g	0.210	X		09/20/94
Trichloroethylene	µg/g	0.085	X	CSH	09/20/94
Trichlorofluoromethane	µg/g	0.420	X		09/20/94
1,2,3-Trichloropropane	µg/g	0.840	X	CSH	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.420	X		09/20/94
1,3,5-Trimethylbenzene	µg/g	0.420	X		09/20/94
Vinyl Chloride	µg/g	0.085	X	CSL	09/20/94
m- & p-Xylene	µg/g	0.420	X		09/20/94
o-Xylene	µg/g	0.420	X		09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	1.9	1.71	J	09/20/94
Acenaphthylene	µg/g	1.9	0.233	J	09/20/94
Anthracene	µg/g	1.9	1.16	J	09/20/94
Benzo (a) Anthracene	µg/g	1.9	1.09	J	09/20/94
Benzo (a) Pyrene	µg/g	1.9	0.862	J	09/20/94
Benzo (b) Fluoranthene	µg/g	1.9	0.641	J	09/20/94
Benzo (k) Fluoranthene	µg/g	1.9	0.188	J	09/20/94
Benzo (ghi) Perylene	µg/g	1.9	0.492	J	09/20/94
Chrysene	µg/g	1.9	0.959	J	09/20/94
Dibenzo (a, h) Anthracene	µg/g	1.9	X		09/20/94
Fluoranthene	µg/g	1.9	1.73	J	09/20/94
Fluorene	µg/g	1.9	1.15	J	09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	1.9	X		09/20/94
2-Methyl Naphthalene	µg/g	1.9	1.60	J	09/20/94
Phenanthrene	µg/g	1.9	3.79		09/20/94
Pyrene	µg/g	1.9	3.13		09/20/94
Naphthalene	µg/g	1.9	0.975	J	09/20/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.:

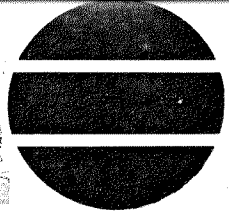
20788

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *JK*

Attn: Cy Ingraham

	Units	Detection Limit	TW-4, S4 7-9FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.37	X		09/29/94
Lead	µg/g	11.0	43.9		09/29/94
Selenium	µg/g	19.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.086	X		09/21/94
Bromobenzene	µg/g	0.220	X		09/21/94
Bromochloromethane	µg/g	0.197	X		09/21/94
Bromodichloromethane	µg/g	0.220	X		09/21/94
Bromoform	µg/g	0.870	X		09/21/94
Bromomethane	µg/g	1.70	X	CSL	09/21/94
n-Butylbenzene	µg/g	0.430	X		09/21/94
sec-Butylbenzene	µg/g	0.430	X		09/21/94
tert-Butylbenzene	µg/g	0.430	X		09/21/94
Carbon Tetrachloride	µg/g	0.220	X		09/21/94
Chlorobenzene	µg/g	0.870	X		09/21/94
Chlorodibromomethane	µg/g	0.220	X		09/21/94
Chloroethane	µg/g	0.870	X	CSL	09/21/94
Chloroform	µg/g	0.220	X		09/21/94
Chloromethane	µg/g	0.870	X	DUP	09/21/94
o-Chlorotoluene	µg/g	0.430	X		09/21/94
p-Chlorotoluene	µg/g	0.430	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	5.70	X		09/21/94
1,2-Dibromoethane	µg/g	0.430	X		09/21/94
Dibromomethane	µg/g	0.220	X		09/21/94
1,2-Dichlorobenzene	µg/g	0.430	X		09/21/94
1,3-Dichlorobenzene	µg/g	0.430	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.220	X		09/21/94
Dichlorodifluoromethane	µg/g	0.870	X		09/21/94
1,1-Dichloroethane	µg/g	0.220	X		09/21/94
1,2-Dichloroethane	µg/g	0.220	X		09/21/94
1,1-Dichloroethylene	µg/g	0.170	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.220	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.220	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.220	X		09/21/94
1,3-Dichloropropane	µg/g	0.220	X		09/21/94
2,2-Dichloropropane	µg/g	0.870	X		09/21/94
1,1-Dichloropropene	µg/g	0.430	X		09/21/94
1,3-Dichloropropene	µg/g	0.220	X		09/21/94

Analytical No.: 20789

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

	Units	Detection Limit	TW-4, S4 7-9FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.430	X		09/21/94
Hexachlorobutadiene	µg/g	0.430	X		09/21/94
Isopropylbenzene	µg/g	0.430	X		09/21/94
p-Isopropyltoluene	µg/g	0.433	0.490		09/21/94
Methyl tert Butyl Ether	µg/g	0.870	X	CSL	09/21/94
Methylene Chloride	µg/g	1.10	X		09/21/94
Naphthalene	µg/g	0.433	2.81		09/21/94
n-Propylbenzene	µg/g	0.430	X		09/21/94
Styrene	µg/g	2.20	X		09/21/94
Tetrachloroethylene	µg/g	0.220	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.220	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	0.430	X	CSL	09/21/94
Toluene	µg/g	0.870	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	0.430	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	0.430	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.220	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.220	X		09/21/94
Trichloroethylene	µg/g	0.086	X		09/21/94
Trichlorofluoromethane	µg/g	0.430	X		09/21/94
1,2,3-Trichloropropane	µg/g	0.870	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	0.430	X		09/21/94
1,3,5-Trimethylbenzene	µg/g	0.430	X		09/21/94
Vinyl Chloride	µg/g	0.086	X	CSL	09/21/94
m- & p-Xylene	µg/g	0.430	X		09/21/94
o-Xylene	µg/g	0.430	X		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	3.5	X		09/20/94
Acenaphthylene	µg/g	3.5	X		09/20/94
Anthracene	µg/g	3.5	X		09/20/94
Benzo (a) Anthracene	µg/g	3.5	X		09/20/94
Benzo (a) Pyrene	µg/g	3.5	X		09/20/94
Benzo (b) Fluoranthene	µg/g	3.5	X		09/20/94
Benzo (k) Fluoranthene	µg/g	3.5	X		09/20/94
Benzo (ghi) Perylene	µg/g	3.5	X		09/20/94
Chrysene	µg/g	3.5	X		09/20/94
Dibenzo (a, h) Anthracene	µg/g	3.5	X		09/20/94
Fluoranthene	µg/g	3.5	0.616	J	09/20/94
Fluorene	µg/g	3.5	X		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	3.5	X		09/20/94
2-Methyl Naphthalene	µg/g	3.5	X		09/20/94
Phenanthrene	µg/g	3.5	0.469	J	09/20/94
Pyrene	µg/g	3.5	0.750	J	09/20/94
Naphthalene	µg/g	3.5	X		09/20/94
Soil Organic Extraction			COMP		09/19/94

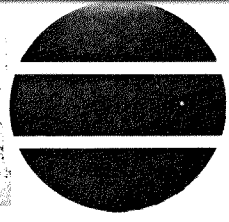
Analytical No.:

20789

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *[Signature]*

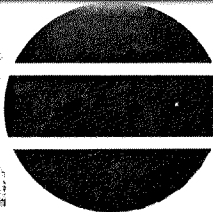
Attn: Cy Ingraham

	Units	Detection Limit	TW5, S5 9.5-11.5 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.71	X		09/29/94
Lead	µg/g	21.0	22.2		09/29/94
Selenium	µg/g	37.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	3.2	8.38	S2L	09/18/94
Bromobenzene	µg/g	8.0	X		09/18/94
Bromochloromethane	µg/g	3.8	X		09/18/94
Bromodichloromethane	µg/g	8.0	X	CSL	09/18/94
Bromoform	µg/g	32.	X		09/18/94
Bromomethane	µg/g	64.	X	DUP	09/18/94
n-Butylbenzene	µg/g	16.	25.1	DUP	09/18/94
sec-Butylbenzene	µg/g	16.	X		09/18/94
tert-Butylbenzene	µg/g	16.	X		09/18/94
Carbon Tetrachloride	µg/g	8.0	X		09/18/94
Chlorobenzene	µg/g	32.	X		09/18/94
Chlorodibromomethane	µg/g	8.0	X		09/18/94
Chloroethane	µg/g	32.	X		09/18/94
Chloroform	µg/g	8.0	X	DUP	09/18/94
Chloromethane	µg/g	32.	X	CSL	09/18/94
o-Chlorotoluene	µg/g	16.	X		09/18/94
p-Chlorotoluene	µg/g	16.	X		09/18/94
1,2-Dibromo-3-chloropropane	µg/g	213.	X		09/18/94
1,2-Dibromoethane	µg/g	16.	X		09/18/94
Dibromomethane	µg/g	8.0	X		09/18/94
1,2-Dichlorobenzene	µg/g	16.	X		09/18/94
1,3-Dichlorobenzene	µg/g	16.	X		09/18/94
1,4-Dichlorobenzene	µg/g	8.0	X		09/18/94
Dichlorodifluoromethane	µg/g	32.	X	CSL	09/18/94
1,1-Dichloroethane	µg/g	8.0	X	DUP	09/18/94
1,2-Dichloroethane	µg/g	8.0	X	DUP	09/18/94
1,1-Dichloroethylene	µg/g	6.4	X		09/18/94
cis-1,2-Dichloroethylene	µg/g	8.0	X	DUP	09/18/94
trans-1,2-Dichloroethylene	µg/g	8.0	X	DUP	09/18/94
1,2-Dichloropropane	µg/g	8.0	X		09/18/94
1,3-Dichloropropane	µg/g	8.0	X		09/18/94
2,2-Dichloropropane	µg/g	32.	X	DUP	09/18/94
1,1-Dichloropropene	µg/g	16.	X		09/18/94
1,3-Dichloropropene	µg/g	8.0	X		09/18/94

Analytical No.: 20790

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JOS*

Attn: Cy Ingraham

	Units	Detection Limit	TW5, S5 9.5-11.5 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	16.	38.2	S2L	09/18/94
Hexachlorobutadiene	µg/g	16.	X		09/18/94
Isopropylbenzene	µg/g	16.	X		09/18/94
p-Isopropyltoluene	µg/g	16.	X		09/18/94
Methyl tert Butyl Ether	µg/g	32.	X		09/18/94
Methylene Chloride	µg/g	40.	X	CSL	09/18/94
Naphthalene	µg/g	16.	666.	CAL	09/18/94
n-Propylbenzene	µg/g	16.	X		09/18/94
Styrene	µg/g	80.	X		09/18/94
Tetrachloroethylene	µg/g	8.0	X	CSH	09/18/94
1,1,1,2-Tetrachloroethane	µg/g	8.0	X		09/18/94
1,1,2,2-Tetrachloroethane	µg/g	16.	X		09/18/94
Toluene	µg/g	32.	X		09/18/94
1,2,3-Trichlorobenzene	µg/g	16.	X		09/18/94
1,2,4-Trichlorobenzene	µg/g	16.	X		09/18/94
1,1,1-Trichloroethane	µg/g	8.0	X	DUP	09/18/94
1,1,2-Trichloroethane	µg/g	8.0	X		09/18/94
Trichloroethylene	µg/g	3.2	X	CSH	09/18/94
Trichlorofluoromethane	µg/g	16.	X	DUP	09/18/94
1,2,3-Trichloropropane	µg/g	32.	X	CSH	09/18/94
1,2,4-Trimethylbenzene	µg/g	16.	21.4		09/18/94
1,3,5-Trimethylbenzene	µg/g	16.	X	S2L	09/18/94
Vinyl Chloride	µg/g	3.2	X	CSL	09/18/94
m- & p-Xylene	µg/g	16.	23.5	S2L	09/18/94
o-Xylene	µg/g	16.	17.8		09/18/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	14.	349.		09/20/94
Acenaphthylene	µg/g	14.	X		09/20/94
Anthracene	µg/g	14.	83.6		09/20/94
Benzo (a) Anthracene	µg/g	14.	34.3		09/20/94
Benzo (a) Pyrene	µg/g	14.	21.4		09/20/94
Benzo (b) Fluoranthene	µg/g	14.	19.7		09/20/94
Benzo (k) Fluoranthene	µg/g	14.	4.09	J	09/20/94
Benzo (ghi) Perylene	µg/g	14.	10.1	J	09/20/94
Chrysene	µg/g	14.	27.6		09/20/94
Dibenzo (a, h) Anthracene	µg/g	14.	X		09/20/94
Fluoranthene	µg/g	14.	66.5		09/20/94
Fluorene	µg/g	14.	113.		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	14.	8.70	J	09/20/94
2-Methyl Naphthalene	µg/g	14.	711.		09/20/94
Phenanthrene	µg/g	14.	426.		09/20/94
Pyrene	µg/g	14.	124.		09/20/94
Naphthalene	µg/g	14.	924.		09/20/94
Soil Organic Extraction			COMP		09/19/94

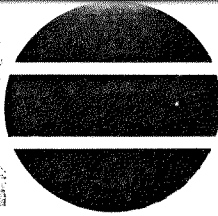
Analytical No.:

20790

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *Mrd*  
REVIEWED BY: *JK*

Attn: Cy Ingraham

	Units	Detection Limit	TW5, S5 12-14FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.5	X		09/29/94
Selenium	µg/g	9.7	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.002	X		09/17/94
Bromobenzene	µg/g	0.005	X		09/17/94
Bromochloromethane	µg/g	0.009	X		09/17/94
Bromodichloromethane	µg/g	0.005	X	CSL	09/17/94
Bromoform	µg/g	0.020	X		09/17/94
Bromomethane	µg/g	0.039	X	DUP	09/17/94
n-Butylbenzene	µg/g	0.010	X	DUP	09/17/94
sec-Butylbenzene	µg/g	0.010	X		09/17/94
tert-Butylbenzene	µg/g	0.010	X		09/17/94
Carbon Tetrachloride	µg/g	0.005	X		09/17/94
Chlorobenzene	µg/g	0.020	X		09/17/94
Chlorodibromomethane	µg/g	0.005	X		09/17/94
Chloroethane	µg/g	0.020	X		09/17/94
Chloroform	µg/g	0.005	X	DUP	09/17/94
Chloromethane	µg/g	0.020	X	CSL	09/17/94
o-Chlorotoluene	µg/g	0.010	X		09/17/94
p-Chlorotoluene	µg/g	0.010	X		09/17/94
1,2-Dibromo-3-chloropropane	µg/g	0.130	X		09/17/94
1,2-Dibromoethane	µg/g	0.010	X		09/17/94
Dibromomethane	µg/g	0.005	X		09/17/94
1,2-Dichlorobenzene	µg/g	0.010	X		09/17/94
1,3-Dichlorobenzene	µg/g	0.010	X		09/17/94
1,4-Dichlorobenzene	µg/g	0.005	X		09/17/94
Dichlorodifluoromethane	µg/g	0.020	X	CSL	09/17/94
1,1-Dichloroethane	µg/g	0.005	X	DUP	09/17/94
1,2-Dichloroethane	µg/g	0.005	X	DUP	09/17/94
1,1-Dichloroethylene	µg/g	0.004	X		09/17/94
cis-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/17/94
trans-1,2-Dichloroethylene	µg/g	0.005	X	DUP	09/17/94
1,2-Dichloropropane	µg/g	0.005	X		09/17/94
1,3-Dichloropropane	µg/g	0.005	X		09/17/94
2,2-Dichloropropane	µg/g	0.020	X	DUP	09/17/94
1,1-Dichloropropene	µg/g	0.010	X		09/17/94
1,3-Dichloropropene	µg/g	0.005	X		09/17/94

Analytical No.:

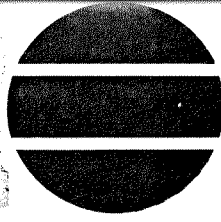
20791

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *MS*

Attn: Cy Ingraham

	Units	Detection Limit	TW5, S5 12-14FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.010	X		09/17/94
Hexachlorobutadiene	µg/g	0.010	X		09/17/94
Isopropylbenzene	µg/g	0.010	X		09/17/94
p-Isopropyltoluene	µg/g	0.010	X		09/17/94
Methyl tert Butyl Ether	µg/g	0.020	X		09/17/94
Methylene Chloride	µg/g	0.024	X	CSH	09/17/94
Naphthalene	µg/g	0.010	0.254		09/17/94
n-Propylbenzene	µg/g	0.010	X		09/17/94
Styrene	µg/g	0.050	X		09/17/94
Tetrachloroethylene	µg/g	0.005	X	CSH	09/17/94
1,1,1,2-Tetrachloroethane	µg/g	0.005	X		09/17/94
1,1,2,2-Tetrachloroethane	µg/g	0.010	X		09/17/94
Toluene	µg/g	0.020	X		09/17/94
1,2,3-Trichlorobenzene	µg/g	0.010	X		09/17/94
1,2,4-Trichlorobenzene	µg/g	0.010	X		09/17/94
1,1,1-Trichloroethane	µg/g	0.005	X	DUP	09/17/94
1,1,2-Trichloroethane	µg/g	0.005	X		09/17/94
Trichloroethylene	µg/g	0.002	X	CSH	09/17/94
Trichlorofluoromethane	µg/g	0.010	X		09/17/94
1,2,3-Trichloropropane	µg/g	0.020	X	DUP	09/17/94
1,2,4-Trimethylbenzene	µg/g	0.010	X		09/17/94
1,3,5-Trimethylbenzene	µg/g	0.010	X		09/17/94
Vinyl Chloride	µg/g	0.002	X	CSL	09/17/94
m- & p-Xylene	µg/g	0.010	X		09/17/94
o-Xylene	µg/g	0.010	X		09/17/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.36	0.041	J	09/20/94
Acenaphthylene	µg/g	0.36	X		09/20/94
Anthracene	µg/g	0.36	0.047	J	09/20/94
Benzo (a) Anthracene	µg/g	0.36	X		09/20/94
Benzo (a) Pyrene	µg/g	0.36	X		09/20/94
Benzo (b) Fluoranthene	µg/g	0.36	X		09/20/94
Benzo (k) Fluoranthene	µg/g	0.36	X		09/20/94
Benzo (ghi) Perylene	µg/g	0.36	X		09/20/94
Chrysene	µg/g	0.36	X		09/20/94
Dibenzo (a, h) Anthracene	µg/g	0.36	X		09/20/94
Fluoranthene	µg/g	0.36	0.057	J	09/20/94
Fluorene	µg/g	0.36	X		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.36	X		09/20/94
2-Methyl Naphthalene	µg/g	0.36	0.033	J	09/20/94
Phenanthrene	µg/g	0.36	0.192	J	09/20/94
Pyrene	µg/g	0.36	0.108	J	09/20/94
Naphthalene	µg/g	0.36	0.052	J	09/20/94
Soil Organic Extraction			COMP		09/19/94

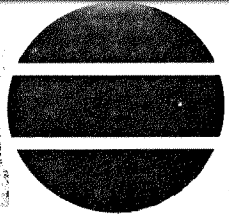
Analytical No.:

20791

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

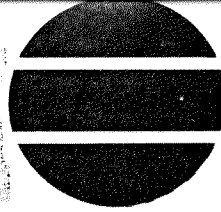
	Units	Detection Limit	TW5, S714.5-16.5 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.6	X		09/29/94
Selenium	µg/g	9.5	15.1		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.002	X		09/17/94
Bromobenzene	µg/g	0.004	X		09/17/94
Bromochloromethane	µg/g	0.007	X		09/17/94
Bromodichloromethane	µg/g	0.004	X	CSL	09/17/94
Bromoform	µg/g	0.016	X		09/17/94
Bromomethane	µg/g	0.032	X	DUP	09/17/94
n-Butylbenzene	µg/g	0.008	0.009	DUP	09/17/94
sec-Butylbenzene	µg/g	0.008	X		09/17/94
tert-Butylbenzene	µg/g	0.008	X		09/17/94
Carbon Tetrachloride	µg/g	0.004	X	S1L	09/17/94
Chlorobenzene	µg/g	0.016	X		09/17/94
Chlorodibromomethane	µg/g	0.004	X		09/17/94
Chloroethane	µg/g	0.016	X		09/17/94
Chloroform	µg/g	0.004	X	DUP S1L	09/17/94
Chloromethane	µg/g	0.016	X	CSL	09/17/94
o-Chlorotoluene	µg/g	0.008	X		09/17/94
p-Chlorotoluene	µg/g	0.008	X		09/17/94
1,2-Dibromo-3-chloropropane	µg/g	0.110	X		09/17/94
1,2-Dibromoethane	µg/g	0.008	X		09/17/94
Dibromomethane	µg/g	0.004	X		09/17/94
1,2-Dichlorobenzene	µg/g	0.008	X		09/17/94
1,3-Dichlorobenzene	µg/g	0.008	X		09/17/94
1,4-Dichlorobenzene	µg/g	0.004	X		09/17/94
Dichlorodifluoromethane	µg/g	0.016	X	CSL	09/17/94
1,1-Dichloroethane	µg/g	0.004	X	DUP S1L	09/17/94
1,2-Dichloroethane	µg/g	0.004	X	DUP S1L	09/17/94
1,1-Dichloroethylene	µg/g	0.003	X		09/17/94
cis-1,2-Dichloroethylene	µg/g	0.004	X	DUP S1L	09/17/94
trans-1,2-Dichloroethylene	µg/g	0.004	X	DUP S1L	09/17/94
1,2-Dichloropropane	µg/g	0.004	X		09/17/94
1,3-Dichloropropane	µg/g	0.004	X		09/17/94
2,2-Dichloropropane	µg/g	0.016	X	DUP S1L	09/17/94
1,1-Dichloropropene	µg/g	0.008	X		09/17/94
1,3-Dichloropropene	µg/g	0.004	X		09/17/94

Analytical No.: 20792

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 Results calculated on a dry weight basis.

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JPO*

Attn: Cy Ingraham

	Units	Detection Limit	TW5, S714.5-16.5 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.008	X		09/17/94
Hexachlorobutadiene	µg/g	0.008	X		09/17/94
Isopropylbenzene	µg/g	0.008	X		09/17/94
p-Isopropyltoluene	µg/g	0.008	X		09/17/94
Methyl tert Butyl Ether	µg/g	0.016	X		09/17/94
Methylene Chloride	µg/g	0.020	X	CSH	09/17/94
Naphthalene	µg/g	0.008	0.342	CAL	09/17/94
n-Propylbenzene	µg/g	0.008	X		09/17/94
Styrene	µg/g	0.040	X		09/17/94
Tetrachloroethylene	µg/g	0.004	X	CSH	09/17/94
1,1,1,2-Tetrachloroethane	µg/g	0.004	X		09/17/94
1,1,2,2-Tetrachloroethane	µg/g	0.008	X		09/17/94
Toluene	µg/g	0.016	X		09/17/94
1,2,3-Trichlorobenzene	µg/g	0.008	X		09/17/94
1,2,4-Trichlorobenzene	µg/g	0.008	X		09/17/94
1,1,1-Trichloroethane	µg/g	0.004	X	DUP S1L	09/17/94
1,1,2-Trichloroethane	µg/g	0.004	X		09/17/94
Trichloroethylene	µg/g	0.002	X	CSH	09/17/94
Trichlorofluoromethane	µg/g	0.008	X		09/17/94
1,2,3-Trichloropropane	µg/g	0.016	X	DUP S1L	09/17/94
1,2,4-Trimethylbenzene	µg/g	0.008	X		09/17/94
1,3,5-Trimethylbenzene	µg/g	0.008	X		09/17/94
Vinyl Chloride	µg/g	0.002	X	CSL	09/17/94
m- & p-Xylene	µg/g	0.008	X		09/17/94
o-Xylene	µg/g	0.008	X		09/17/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.36	X		09/20/94
Acenaphthylene	µg/g	0.36	X		09/20/94
Anthracene	µg/g	0.36	0.024	J	09/20/94
Benzo (a) Anthracene	µg/g	0.36	X		09/20/94
Benzo (a) Pyrene	µg/g	0.36	X		09/20/94
Benzo (b) Fluoranthene	µg/g	0.36	X		09/20/94
Benzo (k) Fluoranthene	µg/g	0.36	X		09/20/94
Benzo (ghi) Perylene	µg/g	0.36	X		09/20/94
Chrysene	µg/g	0.36	X		09/20/94
Dibenzo (a, h) Anthracene	µg/g	0.36	X		09/20/94
Fluoranthene	µg/g	0.36	0.035	J	09/20/94
Fluorene	µg/g	0.36	X		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.36	X		09/20/94
2-Methyl Naphthalene	µg/g	0.36	0.025	J	09/20/94
Phenanthrene	µg/g	0.36	0.103	J	09/20/94
Pyrene	µg/g	0.36	0.061	J	09/20/94
Naphthalene	µg/g	0.36	X		09/20/94
Soil Organic Extraction			COMP		09/19/94

Analytical No.:

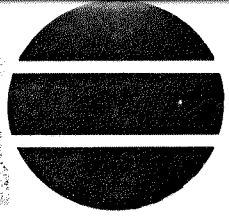
20792

X = Analyzed but not detected.

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *Mrd*  
 REVIEWED BY: *[Signature]*

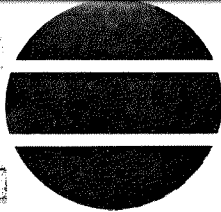
Attn: Cy Ingraham

	Units	Detection Limit	TW-6, S4 7-9FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.59	X		09/29/94
Lead	µg/g	17.0	42.7		09/29/94
Selenium	µg/g	30.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	27.	X		09/18/94
Bromobenzene	µg/g	66.	X		09/18/94
Bromochloromethane	µg/g	39.	X		09/18/94
Bromodichloromethane	µg/g	66.	X		09/18/94
Bromoform	µg/g	266.	X		09/18/94
Bromomethane	µg/g	532.	X	CSL	09/18/94
n-Butylbenzene	µg/g	133.	X		09/18/94
sec-Butylbenzene	µg/g	133.	X		09/18/94
tert-Butylbenzene	µg/g	133.	X		09/18/94
Carbon Tetrachloride	µg/g	66.	X		09/18/94
Chlorobenzene	µg/g	266.	X		09/18/94
Chlorodibromomethane	µg/g	66.	X		09/18/94
Chloroethane	µg/g	266.	X		09/18/94
Chloroform	µg/g	66.	X		09/18/94
Chloromethane	µg/g	266.	X	CSL	09/18/94
o-Chlorotoluene	µg/g	133.	X		09/18/94
p-Chlorotoluene	µg/g	133.	X		09/18/94
1,2-Dibromo-3-chloropropane	µg/g	1769.	X		09/18/94
1,2-Dibromoethane	µg/g	133.	X		09/18/94
Dibromomethane	µg/g	66.	X		09/18/94
1,2-Dichlorobenzene	µg/g	133.	X		09/18/94
1,3-Dichlorobenzene	µg/g	133.	X		09/18/94
1,4-Dichlorobenzene	µg/g	66.	X		09/18/94
Dichlorodifluoromethane	µg/g	266.	X	CSH	09/18/94
1,1-Dichloroethane	µg/g	66.	X		09/18/94
1,2-Dichloroethane	µg/g	66.	X		09/18/94
1,1-Dichloroethylene	µg/g	53.	X		09/18/94
cis-1,2-Dichloroethylene	µg/g	66.	X		09/18/94
trans-1,2-Dichloroethylene	µg/g	66.	X	CSL	09/18/94
1,2-Dichloropropane	µg/g	66.	X		09/18/94
1,3-Dichloropropane	µg/g	66.	X		09/18/94
2,2-Dichloropropane	µg/g	266.	X		09/18/94
1,1-Dichloropropene	µg/g	133.	X		09/18/94
1,3-Dichloropropene	µg/g	66.	X		09/18/94

Analytical No.: 20793

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW-6, S4 7-9FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	133.	276.		09/18/94
Hexachlorobutadiene	µg/g	133.	X		09/18/94
Isopropylbenzene	µg/g	133.	X		09/18/94
p-Isopropyltoluene	µg/g	133.	X		09/18/94
Methyl tert Butyl Ether	µg/g	266.	X		09/18/94
Methylene Chloride	µg/g	333.	X	CSH	09/18/94
Naphthalene	µg/g	133.	2,260.		09/18/94
n-Propylbenzene	µg/g	133.	X		09/18/94
Styrene	µg/g	665.	X		09/18/94
Tetrachloroethylene	µg/g	66.	X	CSH	09/18/94
1,1,1,2-Tetrachloroethane	µg/g	66.	X		09/18/94
1,1,2,2-Tetrachloroethane	µg/g	133.	X	CSL	09/18/94
Toluene	µg/g	266.	X		09/18/94
1,2,3-Trichlorobenzene	µg/g	133.	X		09/18/94
1,2,4-Trichlorobenzene	µg/g	133.	X		09/18/94
1,1,1-Trichloroethane	µg/g	66.	X		09/18/94
1,1,2-Trichloroethane	µg/g	66.	X		09/18/94
Trichloroethylene	µg/g	27.	X	CSH	09/18/94
Trichlorofluoromethane	µg/g	133.	X		09/18/94
1,2,3-Trichloropropane	µg/g	266.	X	CSH	09/18/94
1,2,4-Trimethylbenzene	µg/g	133.	157.		09/18/94
1,3,5-Trimethylbenzene	µg/g	133.	X		09/18/94
Vinyl Chloride	µg/g	27.	X	CSL	09/18/94
m- & p-Xylene	µg/g	133.	197.		09/18/94
o-Xylene	µg/g	133.	X		09/18/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	11.	836.		09/20/94
Acenaphthylene	µg/g	11.	27.3		09/20/94
Anthracene	µg/g	11.	295.		09/20/94
Benzo (a) Anthracene	µg/g	11.	186.		09/20/94
Benzo (a) Pyrene	µg/g	11.	126.		09/20/94
Benzo (b) Fluoranthene	µg/g	11.	110.		09/20/94
Benzo (k) Fluoranthene	µg/g	11.	17.1		09/20/94
Benzo (ghi) Perylene	µg/g	11.	65.7		09/20/94
Chrysene	µg/g	11.	118.		09/20/94
Dibenzo (a, h) Anthracene	µg/g	11.	10.8	J	09/20/94
Fluoranthene	µg/g	11.	276.		09/20/94
Fluorene	µg/g	11.	306.		09/20/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	11.	58.5		09/20/94
2-Methyl Naphthalene	µg/g	11.	1,064.		09/20/94
Phenanthrene	µg/g	11.	1,308.		09/20/94
Pyrene	µg/g	11.	616.		09/20/94
Naphthalene	µg/g	11.	1,583.		09/20/94
Soil Organic Extraction			COMP		09/19/94

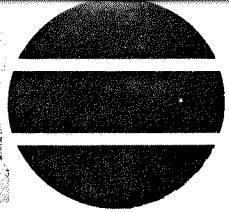
Analytical No.:

20793

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *JH*

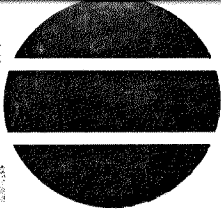
Attn: Cy Ingraham

	Units	Detection TW6,S5 9.5-11.5		Qualifiers	Date Analyzed
		Limit	09/07/94		
<b>EPA 6010</b>					
Cadmium	µg/g	0.47	X		09/29/94
Lead	µg/g	14.0	14.9		09/29/94
Selenium	µg/g	24.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	1.0	X		09/21/94
Bromobenzene	µg/g	2.6	X		09/21/94
Bromochloromethane	µg/g	1.9	X		09/21/94
Bromodichloromethane	µg/g	2.6	X		09/21/94
Bromoform	µg/g	10.	X		09/21/94
Bromomethane	µg/g	21.	X	CSL	09/21/94
n-Butylbenzene	µg/g	5.2	5.52		09/21/94
sec-Butylbenzene	µg/g	5.2	X		09/21/94
tert-Butylbenzene	µg/g	5.2	X		09/21/94
Carbon Tetrachloride	µg/g	2.6	X		09/21/94
Chlorobenzene	µg/g	10.	X		09/21/94
Chlorodibromomethane	µg/g	2.6	X		09/21/94
Chloroethane	µg/g	10.	X	CSL	09/21/94
Chloroform	µg/g	2.6	X		09/21/94
Chloromethane	µg/g	10.	X	DUP	09/21/94
o-Chlorotoluene	µg/g	5.2	X		09/21/94
p-Chlorotoluene	µg/g	5.2	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	70.	X		09/21/94
1,2-Dibromoethane	µg/g	5.2	X		09/21/94
Dibromomethane	µg/g	2.6	X		09/21/94
1,2-Dichlorobenzene	µg/g	5.2	X		09/21/94
1,3-Dichlorobenzene	µg/g	5.2	X		09/21/94
1,4-Dichlorobenzene	µg/g	2.6	X		09/21/94
Dichlorodifluoromethane	µg/g	10.	X		09/21/94
1,1-Dichloroethane	µg/g	2.6	X		09/21/94
1,2-Dichloroethane	µg/g	2.6	X		09/21/94
1,1-Dichloroethylene	µg/g	2.1	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	2.6	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	2.6	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	2.6	X		09/21/94
1,3-Dichloropropane	µg/g	2.6	X		09/21/94
2,2-Dichloropropane	µg/g	10.	X		09/21/94
1,1-Dichloropropene	µg/g	5.2	X		09/21/94
1,3-Dichloropropene	µg/g	2.6	X		09/21/94

Analytical No.: 20794

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 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *JIS*

Attn: Cy Ingraham

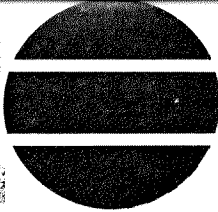
	Units	Detection TW6, S5 9.5-11.5		Qualifiers	Date Analyzed
		Limit	09/07/94		
Ethylbenzene	µg/g	5.2	7.91		09/21/94
Hexachlorobutadiene	µg/g	5.2	X		09/21/94
Isopropylbenzene	µg/g	5.2	X		09/21/94
p-Isopropyltoluene	µg/g	5.2	20.2		09/21/94
Methyl tert Butyl Ether	µg/g	10.	X	CSL	09/21/94
Methylene Chloride	µg/g	13.	X		09/21/94
Naphthalene	µg/g	5.2	375		09/21/94
n-Propylbenzene	µg/g	5.2	X		09/21/94
Styrene	µg/g	26.	X		09/21/94
Tetrachloroethylene	µg/g	2.6	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	2.6	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	5.2	X	CSL	09/21/94
Toluene	µg/g	10.	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	5.2	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	5.2	X		09/21/94
1,1,1-Trichloroethane	µg/g	2.6	X		09/21/94
1,1,2-Trichloroethane	µg/g	2.6	X		09/21/94
Trichloroethylene	µg/g	1.0	X		09/21/94
Trichlorofluoromethane	µg/g	5.2	X		09/21/94
1,2,3-Trichloropropane	µg/g	10.	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	5.2	5.24		09/21/94
1,3,5-Trimethylbenzene	µg/g	5.2	X		09/21/94
Vinyl Chloride	µg/g	1.0	X	CSL	09/21/94
m- & p-Xylene	µg/g	5.2	X		09/21/94
o-Xylene & Styrene	µg/g	5.2	9.37		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	9.1	35.2		09/21/94
Acenaphthylene	µg/g	9.1	1.32	J	09/21/94
Anthracene	µg/g	9.1	16.5		09/21/94
Benzo (a) Anthracene	µg/g	9.1	10.0		09/21/94
Benzo (a) Pyrene	µg/g	9.1	6.34	J	09/21/94
Benzo (b) Fluoranthene	µg/g	9.1	4.60	J	09/21/94
Benzo (k) Fluoranthene	µg/g	9.1	2.15	J	09/21/94
Benzo (ghi) Perylene	µg/g	9.1	X		09/21/94
Chrysene	µg/g	9.1	8.53	J	09/21/94
Dibenzo (a, h) Anthracene	µg/g	9.1	X		09/21/94
Fluoranthene	µg/g	9.1	14.9		09/21/94
Fluorene	µg/g	9.1	10.1		09/21/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	9.1	X		09/21/94
2-Methyl Naphthalene	µg/g	9.1	55.4		09/21/94
Phenanthrene	µg/g	9.1	56.8		09/21/94
Pyrene	µg/g	9.1	32.7		09/21/94
Naphthalene	µg/g	9.1	118.		09/21/94
Soil Organic Extraction			COMP		09/20/94

Analytical No.: 20794

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *Mrd*  
 REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection TW6, S714.5-16.5		Qualifiers	Date Analyzed
		Limit	09/07/94		
<b>EPA 6010</b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.7	6.52		09/29/94
Selenium	µg/g	10.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.001	0.018		09/17/94
Bromobenzene	µg/g	0.003	X		09/17/94
Bromochloromethane	µg/g	0.006	X		09/17/94
Bromodichloromethane	µg/g	0.003	X	CSL	09/17/94
Bromoform	µg/g	0.014	X		09/17/94
Bromomethane	µg/g	0.027	X	DUP	09/17/94
n-Butylbenzene	µg/g	0.007	0.022	DUP	09/17/94
sec-Butylbenzene	µg/g	0.007	0.065		09/17/94
tert-Butylbenzene	µg/g	0.007	X		09/17/94
Carbon Tetrachloride	µg/g	0.003	X		09/17/94
Chlorobenzene	µg/g	0.014	X		09/17/94
Chlorodibromomethane	µg/g	0.003	X		09/17/94
Chloroethane	µg/g	0.014	X		09/17/94
Chloroform	µg/g	0.003	X	DUP	09/17/94
Chloromethane	µg/g	0.014	X	CSL	09/17/94
o-Chlorotoluene	µg/g	0.007	X		09/17/94
p-Chlorotoluene	µg/g	0.007	X		09/17/94
1,2-Dibromo-3-chloropropane	µg/g	0.089	X		09/17/94
1,2-Dibromoethane	µg/g	0.007	X		09/17/94
Dibromomethane	µg/g	0.003	X		09/17/94
1,2-Dichlorobenzene	µg/g	0.007	X		09/17/94
1,3-Dichlorobenzene	µg/g	0.007	X		09/17/94
1,4-Dichlorobenzene	µg/g	0.003	X		09/17/94
Dichlorodifluoromethane	µg/g	0.014	X	CSL	09/17/94
1,1-Dichloroethane	µg/g	0.003	X	DUP	09/17/94
1,2-Dichloroethane	µg/g	0.003	X	DUP	09/17/94
1,1-Dichloroethylene	µg/g	0.003	X		09/17/94
cis-1,2-Dichloroethylene	µg/g	0.003	X	DUP	09/17/94
trans-1,2-Dichloroethylene	µg/g	0.003	X	DUP	09/17/94
1,2-Dichloropropane	µg/g	0.003	X		09/17/94
1,3-Dichloropropane	µg/g	0.003	X		09/17/94
2,2-Dichloropropane	µg/g	0.014	X	DUP	09/17/94
1,1-Dichloropropene	µg/g	0.007	X		09/17/94
1,3-Dichloropropene	µg/g	0.003	X		09/17/94

Analytical No.:

20795

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

	Units	Detection Limit	TW6, S714.5-16.5 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.007	0.014		09/17/94
Hexachlorobutadiene	µg/g	0.007	X		09/17/94
Isopropylbenzene	µg/g	0.007	X		09/17/94
p-Isopropyltoluene	µg/g	0.007	X		09/17/94
Methyl tert Butyl Ether	µg/g	0.014	X		09/17/94
Methylene Chloride	µg/g	0.017	X	CSH	09/17/94
Naphthalene	µg/g	0.007	1.58	CAL	09/17/94
n-Propylbenzene	µg/g	0.007	X		09/17/94
Styrene	µg/g	0.034	X		09/17/94
Tetrachloroethylene	µg/g	0.003	X	CSH	09/17/94
1,1,1,2-Tetrachloroethane	µg/g	0.003	X		09/17/94
1,1,2,2-Tetrachloroethane	µg/g	0.007	X		09/17/94
Toluene	µg/g	0.014	0.053		09/17/94
1,2,3-Trichlorobenzene	µg/g	0.007	X		09/17/94
1,2,4-Trichlorobenzene	µg/g	0.007	X		09/17/94
1,1,1-Trichloroethane	µg/g	0.003	X	DUP	09/17/94
1,1,2-Trichloroethane	µg/g	0.003	X		09/17/94
Trichloroethylene	µg/g	0.001	X	CSH	09/17/94
Trichlorofluoromethane	µg/g	0.007	X		09/17/94
1,2,3-Trichloropropane	µg/g	0.014	X	DUP	09/17/94
1,2,4-Trimethylbenzene	µg/g	0.007	0.053		09/17/94
1,3,5-Trimethylbenzene	µg/g	0.007	0.025		09/17/94
Vinyl Chloride	µg/g	0.001	X	CSL	09/17/94
m- & p-Xylene	µg/g	0.007	0.054		09/17/94
o-Xylene & Styrene	µg/g	0.007	0.125		09/17/94

**EPA 8270**

Acenaphthene	µg/g	1.8	1.12	J SL *	09/22/94
Acenaphthylene	µg/g	1.8	0.397	J SL *	09/22/94
Anthracene	µg/g	1.8	1.09	J SL *	09/22/94
Benzo (a) Anthracene	µg/g	1.8	2.75	SL *	09/22/94
Benzo (a) Pyrene	µg/g	1.8	1.89	SL *	09/22/94
Benzo (b) Fluoranthene	µg/g	1.8	1.78	J SL *	09/22/94
Benzo (k) Fluoranthene	µg/g	1.8	1.14	J SL *	09/22/94
Benzo (ghi) Perylene	µg/g	1.8	1.04	J SL *	09/22/94
Chrysene	µg/g	1.8	2.35	SL *	09/22/94
Dibenzo (a, h) Anthracene	µg/g	1.8	X	SL	09/22/94
Fluoranthene	µg/g	1.8	4.23	SL *	09/22/94
Fluorene	µg/g	1.8	0.725	J SL *	09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	1.8	1.15	J SL *	09/22/94
2-Methyl Naphthalene	µg/g	1.8	0.510	J SL	09/22/94
Phenanthrene	µg/g	1.8	3.75	SL *	09/22/94
Pyrene	µg/g	1.8	5.78	SL *	09/22/94
Naphthalene	µg/g	1.8	1.48	J SL *	09/22/94

Soil Organic Extraction

COMP

09/20/94

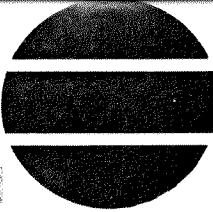
Analytical No.:

20795

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JR*

Attn: Cy Ingraham

	Units	Detection Limit	TW7,S6 12-14FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.19	X		09/29/94
Lead	µg/g	5.5	X		09/29/94
Selenium	µg/g	9.7	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.001	X		09/17/94
Bromobenzene	µg/g	0.004	X		09/17/94
Bromochloromethane	µg/g	0.007	X		09/17/94
Bromodichloromethane	µg/g	0.004	X	CSL	09/17/94
Bromoform	µg/g	0.014	X		09/17/94
Bromomethane	µg/g	0.030	X	DUP	09/17/94
n-Butylbenzene	µg/g	0.007	X	DUP	09/17/94
sec-Butylbenzene	µg/g	0.007	X		09/17/94
tert-Butylbenzene	µg/g	0.007	X		09/17/94
Carbon Tetrachloride	µg/g	0.004	X		09/17/94
Chlorobenzene	µg/g	0.014	X		09/17/94
Chlorodibromomethane	µg/g	0.004	X		09/17/94
Chloroethane	µg/g	0.014	X		09/17/94
Chloroform	µg/g	0.004	X	DUP	09/17/94
Chloromethane	µg/g	0.014	X	CSL	09/17/94
o-Chlorotoluene	µg/g	0.007	X		09/17/94
p-Chlorotoluene	µg/g	0.007	X		09/17/94
1,2-Dibromo-3-chloropropane	µg/g	0.100	X		09/17/94
1,2-Dibromoethane	µg/g	0.007	X		09/17/94
Dibromomethane	µg/g	0.004	X		09/17/94
1,2-Dichlorobenzene	µg/g	0.007	X		09/17/94
1,3-Dichlorobenzene	µg/g	0.007	X		09/17/94
1,4-Dichlorobenzene	µg/g	0.004	X		09/17/94
Dichlorodifluoromethane	µg/g	0.014	X	CSL	09/17/94
1,1-Dichloroethane	µg/g	0.004	X	DUP	09/17/94
1,2-Dichloroethane	µg/g	0.004	X	DUP	09/17/94
1,1-Dichloroethylene	µg/g	0.003	X		09/17/94
cis-1,2-Dichloroethylene	µg/g	0.004	X	DUP	09/17/94
trans-1,2-Dichloroethylene	µg/g	0.004	X	DUP	09/17/94
1,2-Dichloropropane	µg/g	0.004	X		09/17/94
1,3-Dichloropropane	µg/g	0.004	X		09/17/94
2,2-Dichloropropane	µg/g	0.014	X	DUP	09/17/94
1,1-Dichloropropene	µg/g	0.007	X		09/17/94
1,3-Dichloropropene	µg/g	0.004	X		09/17/94

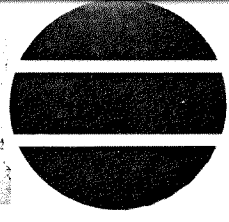
Analytical No.:

20796

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW7,S6 12-14FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.007	X		09/17/94
Hexachlorobutadiene	µg/g	0.007	X		09/17/94
Isopropylbenzene	µg/g	0.007	X		09/17/94
p-Isopropyltoluene	µg/g	0.007	X		09/17/94
Methyl tert Butyl Ether	µg/g	0.014	X		09/17/94
Methylene Chloride	µg/g	0.019	X	CSH	09/17/94
Naphthalene	µg/g	0.007	0.137		09/17/94
n-Propylbenzene	µg/g	0.007	X		09/17/94
Styrene	µg/g	0.037	X		09/17/94
Tetrachloroethylene	µg/g	0.004	X	CSH	09/17/94
1,1,1,2-Tetrachloroethane	µg/g	0.004	X		09/17/94
1,1,2,2-Tetrachloroethane	µg/g	0.007	X		09/17/94
Toluene	µg/g	0.014	X		09/17/94
1,2,3-Trichlorobenzene	µg/g	0.007	X		09/17/94
1,2,4-Trichlorobenzene	µg/g	0.007	X		09/17/94
1,1,1-Trichloroethane	µg/g	0.004	X	DUP	09/17/94
1,1,2-Trichloroethane	µg/g	0.004	X		09/17/94
Trichloroethylene	µg/g	0.001	X	CSH	09/17/94
Trichlorofluoromethane	µg/g	0.007	X		09/17/94
1,2,3-Trichloropropane	µg/g	0.014	X	DUP	09/17/94
1,2,4-Trimethylbenzene	µg/g	0.007	X		09/17/94
1,3,5-Trimethylbenzene	µg/g	0.007	X		09/17/94
Vinyl Chloride	µg/g	0.001	X	CSL	09/17/94
m- & p-Xylene	µg/g	0.007	X		09/17/94
o-Xylene	µg/g	0.007	X		09/17/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.36	X		09/21/94
Acenaphthylene	µg/g	0.36	X		09/21/94
Anthracene	µg/g	0.36	X		09/21/94
Benzo (a) Anthracene	µg/g	0.36	X		09/21/94
Benzo (a) Pyrene	µg/g	0.36	X		09/21/94
Benzo (b) Fluoranthene	µg/g	0.36	X		09/21/94
Benzo (k) Fluoranthene	µg/g	0.36	X		09/21/94
Benzo (ghi) Perylene	µg/g	0.36	X		09/21/94
Chrysene	µg/g	0.36	X		09/21/94
Dibenzo (a, h) Anthracene	µg/g	0.36	X		09/21/94
Fluoranthene	µg/g	0.36	X		09/21/94
Fluorene	µg/g	0.36	X		09/21/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.36	X		09/21/94
2-Methyl Naphthalene	µg/g	0.36	X		09/21/94
Phenanthrene	µg/g	0.36	X		09/21/94
Pyrene	µg/g	0.36	X		09/21/94
Naphthalene	µg/g	0.36	X		09/21/94
Soil Organic Extraction			COMP		09/20/94

Analytical No.:

20796

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

	Units	Detection Limit	TW8, S3 4.5-6.5 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.27	24.8		09/29/94
Lead	µg/g	7.8	1,321.		09/29/94
Selenium	µg/g	14.	X		09/29/94
<b>EPA 8021</b>					
Benzene	µg/g	0.309	1.92		09/21/94
Bromobenzene	µg/g	0.770	X		09/21/94
Bromochloromethane	µg/g	0.990	X		09/21/94
Bromodichloromethane	µg/g	0.770	X		09/21/94
Bromoform	µg/g	3.10	X		09/21/94
Bromomethane	µg/g	6.20	X	CSL	09/21/94
n-Butylbenzene	µg/g	1.50	X		09/21/94
sec-Butylbenzene	µg/g	1.50	X		09/21/94
tert-Butylbenzene	µg/g	1.50	X		09/21/94
Carbon Tetrachloride	µg/g	0.770	X		09/21/94
Chlorobenzene	µg/g	3.10	X		09/21/94
Chlorodibromomethane	µg/g	0.770	X		09/21/94
Chloroethane	µg/g	3.10	X	CSL	09/21/94
Chloroform	µg/g	0.770	X		09/21/94
Chloromethane	µg/g	3.10	X	DUP	09/21/94
o-Chlorotoluene	µg/g	1.50	X		09/21/94
p-Chlorotoluene	µg/g	1.50	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	20.0	X		09/21/94
1,2-Dibromoethane	µg/g	1.50	X		09/21/94
Dibromomethane	µg/g	0.770	X		09/21/94
1,2-Dichlorobenzene	µg/g	1.50	X		09/21/94
1,3-Dichlorobenzene	µg/g	1.50	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.770	X		09/21/94
Dichlorodifluoromethane	µg/g	3.10	X		09/21/94
1,1-Dichloroethane	µg/g	0.770	X		09/21/94
1,2-Dichloroethane	µg/g	0.770	X		09/21/94
1,1-Dichloroethylene	µg/g	0.620	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.770	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.770	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.770	X		09/21/94
1,3-Dichloropropane	µg/g	0.770	X		09/21/94
2,2-Dichloropropane	µg/g	3.10	X		09/21/94
1,1-Dichloropropene	µg/g	1.50	X		09/21/94
1,3-Dichloropropene	µg/g	0.770	X		09/21/94

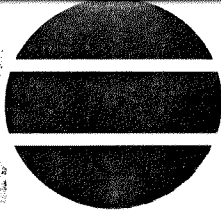
Analytical No.:

20797

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JG*

Attn: Cy Ingraham

	Units	Detection Limit	TW8, S3 4.5-6.5 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	1.50	X		09/21/94
Hexachlorobutadiene	µg/g	1.50	X		09/21/94
Isopropylbenzene	µg/g	1.54	2.79		09/21/94
p-Isopropyltoluene	µg/g	1.54	2.34		09/21/94
Methyl tert Butyl Ether	µg/g	3.10	X	CSL	09/21/94
Methylene Chloride	µg/g	3.90	X		09/21/94
Naphthalene	µg/g	1.54	19.2		09/21/94
n-Propylbenzene	µg/g	1.50	X		09/21/94
Styrene	µg/g	7.70	X		09/21/94
Tetrachloroethylene	µg/g	0.770	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.770	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	1.50	X	CSL	09/21/94
Toluene	µg/g	3.10	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	1.50	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	1.50	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.770	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.770	X		09/21/94
Trichloroethylene	µg/g	0.310	X		09/21/94
Trichlorofluoromethane	µg/g	1.50	X		09/21/94
1,2,3-Trichloropropane	µg/g	3.10	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	1.50	X		09/21/94
1,3,5-Trimethylbenzene	µg/g	1.50	X		09/21/94
Vinyl Chloride	µg/g	0.310	X	CSL	09/21/94
m- & p-Xylene	µg/g	1.50	X		09/21/94
o-Xylene	µg/g	1.50	X		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	6.4	4.38	J SL	09/22/94
Acenaphthylene	µg/g	6.4	0.827	J SL	09/22/94
Anthracene	µg/g	6.4	4.27	J SL	09/22/94
Benzo (a) Anthracene	µg/g	6.4	8.31	J SL	09/22/94
Benzo (a) Pyrene	µg/g	6.4	6.06	J SL	09/22/94
Benzo (b) Fluoranthene	µg/g	6.4	5.02	J SL	09/22/94
Benzo (k) Fluoranthene	µg/g	6.4	3.05	J SL	09/22/94
Benzo (ghi) Perylene	µg/g	6.4	3.02	J SL	09/22/94
Chrysene	µg/g	6.4	8.13	J SL	09/22/94
Dibenzo (a, h) Anthracene	µg/g	6.4	X	J SL	09/22/94
Fluoranthene	µg/g	6.4	13.5	J SL	09/22/94
Fluorene	µg/g	6.4	3.00	J SL	09/22/94
Indeno (1,2,3-cd) Pyrene	µg/g	6.4	3.22	J SL	09/22/94
2-Methyl Naphthalene	µg/g	6.4	1.37	J SL	09/22/94
Phenanthrene	µg/g	6.4	13.8	J SL	09/22/94
Pyrene	µg/g	6.4	20.6	J SL	09/22/94
Naphthalene	µg/g	6.4	3.38	J SL	09/22/94

Soil Organic Extraction

COMP

09/20/94

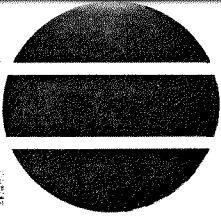
Analytical No.:

20797

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *msd*  
 REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW9, S5, 9.5-11.5 09/08/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.23	X		09/30/94
Lead	µg/g	6.9	X		09/30/94
Selenium	µg/g	12.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.53	3.05		09/22/94
Bromobenzene	µg/g	1.3	X		09/22/94
Bromochloromethane	µg/g	1.9	X		09/22/94
Bromodichloromethane	µg/g	1.3	X		09/22/94
Bromoform	µg/g	5.3	X		09/22/94
Bromomethane	µg/g	11.	X	CSL	09/22/94
n-Butylbenzene	µg/g	2.7	30.1		09/22/94
sec-Butylbenzene	µg/g	2.7	X		09/22/94
tert-Butylbenzene	µg/g	2.7	X		09/22/94
Carbon Tetrachloride	µg/g	1.3	X		09/22/94
Chlorobenzene	µg/g	5.3	X		09/22/94
Chlorodibromomethane	µg/g	1.3	X		09/22/94
Chloroethane	µg/g	5.3	X	CSL	09/22/94
Chloroform	µg/g	1.3	X		09/22/94
Chloromethane	µg/g	5.3	X	DUP	09/22/94
o-Chlorotoluene	µg/g	2.7	X		09/22/94
p-Chlorotoluene	µg/g	2.7	X		09/22/94
1,2-Dibromo-3-chloropropane	µg/g	36.	X		09/22/94
1,2-Dibromoethane	µg/g	2.7	X		09/22/94
Dibromomethane	µg/g	1.3	X		09/22/94
1,2-Dichlorobenzene	µg/g	2.7	X		09/22/94
1,3-Dichlorobenzene	µg/g	2.7	X		09/22/94
1,4-Dichlorobenzene	µg/g	1.3	X		09/22/94
Dichlorodifluoromethane	µg/g	5.3	X		09/22/94
1,1-Dichloroethane	µg/g	1.3	X		09/22/94
1,2-Dichloroethane	µg/g	1.3	X		09/22/94
1,1-Dichloroethylene	µg/g	1.1	X		09/22/94
cis-1,2-Dichloroethylene	µg/g	1.3	X	CSH	09/22/94
trans-1,2-Dichloroethylene	µg/g	1.3	X	CSL	09/22/94
1,2-Dichloropropane	µg/g	1.3	X		09/22/94
1,3-Dichloropropane	µg/g	1.3	X		09/22/94
2,2-Dichloropropane	µg/g	5.3	X		09/22/94
1,1-Dichloropropene	µg/g	2.7	X		09/22/94

Analytical No.: 20798

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *and*  
REVIEWED BY: *J/S*

Attn: Cy Ingraham

	Units	Detection TW9, S5, 9.5-11.5		Qualifiers	Date Analyzed
		Limit	09/08/94		
1,3-Dichloropropene	µg/g	1.3	X		09/22/94
Ethylbenzene	µg/g	2.7	49.5		09/22/94
Hexachlorobutadiene	µg/g	2.7	X		09/22/94
Isopropylbenzene	µg/g	2.7	6.46		09/22/94
p-Isopropyltoluene	µg/g	2.7	29.7		09/22/94
Methyl tert Butyl Ether	µg/g	5.3	X	CSL	09/22/94
Methylene Chloride	µg/g	6.7	X		09/22/94
Naphthalene	µg/g	2.7	863.	CAL	09/22/94
n-Propylbenzene	µg/g	2.7	6.69		09/22/94
Styrene	µg/g	13.	X		09/22/94
Tetrachloroethylene	µg/g	1.3	X		09/22/94
1,1,1,2-Tetrachloroethane	µg/g	1.3	X		09/22/94
1,1,2,2-Tetrachloroethane	µg/g	2.7	X	CSL	09/22/94
Toluene	µg/g	5.3	X		09/22/94
1,2,3-Trichlorobenzene	µg/g	2.7	X		09/22/94
1,2,4-Trichlorobenzene	µg/g	2.7	X		09/22/94
1,1,1-Trichloroethane	µg/g	1.3	X		09/22/94
1,1,2-Trichloroethane	µg/g	1.3	X		09/22/94
Trichloroethylene	µg/g	0.53	X		09/22/94
Trichlorofluoromethane	µg/g	2.7	X		09/22/94
1,2,3-Trichloropropane	µg/g	5.3	X		09/22/94
1,2,4-Trimethylbenzene	µg/g	2.7	24.6		09/22/94
1,3,5-Trimethylbenzene	µg/g	2.7	15.8		09/22/94
Vinyl Chloride	µg/g	0.53	X	CSL	09/22/94
m- & p-Xylene	µg/g	2.7	37.0		09/22/94
o-Xylene & Styrene	µg/g	2.7	15.9		09/22/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	18.	148.		09/27/94
Acenaphthylene	µg/g	18.	5.54	J	09/27/94
Anthracene	µg/g	18.	42.9		09/27/94
Benzo (a) Anthracene	µg/g	18.	33.4		09/27/94
Benzo (a) Pyrene	µg/g	18.	27.6		09/27/94
Benzo (b) Fluoranthene	µg/g	18.	20.2		09/27/94
Benzo (k) Fluoranthene	µg/g	18.	10.8	J	09/27/94
Benzo (ghi) Perylene	µg/g	18.	X		09/27/94
Chrysene	µg/g	18.	25.4		09/27/94
Dibenzo (a, h) Anthracene	µg/g	18.	X		09/27/94
Fluoranthene	µg/g	18.	54.7		09/27/94
Fluorene	µg/g	18.	48.3		09/27/94
Indeno (1,2,3-cd) Pyrene	µg/g	18.	X		09/27/94
2-Methyl Naphthalene	µg/g	18.	162.		09/27/94
Phenanthrene	µg/g	18.	270.		09/27/94
Pyrene	µg/g	18.	136.		09/27/94
Naphthalene	µg/g	18.	466.		09/27/94
Soil Organic Extraction			COMP		09/22/94

Analytical No.:

20798

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *1/9/94*

Attn: Cy Ingraham

	Units	Detection Limit	TW10, S3, 4.5-6.5 09/08/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.52	X		09/30/94
Lead	µg/g	15.	129.		09/30/94
Selenium	µg/g	27.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.005	0.011		09/21/94
Bromobenzene	µg/g	0.012	X		09/21/94
Bromochloromethane	µg/g	0.008	X		09/21/94
Bromodichloromethane	µg/g	0.012	X		09/21/94
Bromoform	µg/g	0.049	X		09/21/94
Bromomethane	µg/g	0.100	X	CSL	09/21/94
n-Butylbenzene	µg/g	0.025	0.343		09/21/94
sec-Butylbenzene	µg/g	0.024	X		09/21/94
tert-Butylbenzene	µg/g	0.024	X		09/21/94
Carbon Tetrachloride	µg/g	0.012	X		09/21/94
Chlorobenzene	µg/g	0.049	X		09/21/94
Chlorodibromomethane	µg/g	0.012	X		09/21/94
Chloroethane	µg/g	0.049	X	CSL	09/21/94
Chloroform	µg/g	0.012	X		09/21/94
Chloromethane	µg/g	0.049	X	DUP	09/21/94
o-Chlorotoluene	µg/g	0.024	X		09/21/94
p-Chlorotoluene	µg/g	0.024	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	0.320	X		09/21/94
1,2-Dibromoethane	µg/g	0.024	X		09/21/94
Dibromomethane	µg/g	0.012	X		09/21/94
1,2-Dichlorobenzene	µg/g	0.024	X		09/21/94
1,3-Dichlorobenzene	µg/g	0.024	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.012	X		09/21/94
Dichlorodifluoromethane	µg/g	0.049	X		09/21/94
1,1-Dichloroethane	µg/g	0.012	X		09/21/94
1,2-Dichloroethane	µg/g	0.012	X		09/21/94
1,1-Dichloroethylene	µg/g	0.010	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.012	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.012	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.012	X		09/21/94
1,3-Dichloropropane	µg/g	0.012	X		09/21/94
2,2-Dichloropropane	µg/g	0.049	X		09/21/94
1,1-Dichloropropene	µg/g	0.024	X		09/21/94
1,3-Dichloropropene	µg/g	0.012	X		09/21/94

Analytical No.:

20799

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JRS*

Attn: Cy Ingraham

	Units	Detection TW10, S3, 4.5-6.5		Qualifiers	Date Analyzed
		Limit	09/08/94		
Ethylbenzene	µg/g	0.024	X		09/21/94
Hexachlorobutadiene	µg/g	0.024	X		09/21/94
Isopropylbenzene	µg/g	0.024	X		09/21/94
p-Isopropyltoluene	µg/g	0.025	0.066		09/21/94
Methyl tert Butyl Ether	µg/g	0.049	X	CSL	09/21/94
Methylene Chloride	µg/g	0.061	X		09/21/94
Naphthalene	µg/g	0.025	0.064		09/21/94
n-Propylbenzene	µg/g	0.025	0.142		09/21/94
Styrene	µg/g	0.120	X		09/21/94
Tetrachloroethylene	µg/g	0.012	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.012	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	0.024	X	CSL	09/21/94
Toluene	µg/g	0.049	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	0.024	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	0.024	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.012	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.012	X		09/21/94
Trichloroethylene	µg/g	0.005	X		09/21/94
Trichlorofluoromethane	µg/g	0.024	X		09/21/94
1,2,3-Trichloropropane	µg/g	0.049	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	0.025	0.079		09/21/94
1,3,5-Trimethylbenzene	µg/g	0.025	0.173		09/21/94
Vinyl Chloride	µg/g	0.005	X	CSL	09/21/94
m- & p-Xylene	µg/g	0.024	X		09/21/94
o-Xylene & Styrene	µg/g	0.025	0.031		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	2.0	4.68	SH	09/27/94
Acenaphthylene	µg/g	2.0	0.275	SH J	09/27/94
Anthracene	µg/g	2.0	0.900	SH J	09/27/94
Benzo (a) Anthracene	µg/g	2.0	1.29	SH J	09/27/94
Benzo (a) Pyrene	µg/g	2.0	1.10	SH J	09/27/94
Benzo (b) Fluoranthene	µg/g	2.0	1.28	SH J	09/27/94
Benzo (k) Fluoranthene	µg/g	2.0	X	SH	09/27/94
Benzo (ghi) Perylene	µg/g	2.0	X	SH	09/27/94
Chrysene	µg/g	2.0	0.940	SH J	09/27/94
Dibenzo (a, h) Anthracene	µg/g	2.0	X	SH	09/27/94
Fluoranthene	µg/g	2.0	1.87	SH J	09/27/94
Fluorene	µg/g	2.0	1.25	SH J	09/27/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	2.0	1.05	SH J	09/27/94
2-Methyl Naphthalene	µg/g	2.0	1.05	SH J	09/27/94
Phenanthrene	µg/g	2.0	3.37	SH	09/27/94
Pyrene	µg/g	2.0	3.49	SH	09/27/94
Naphthalene	µg/g	2.0	6.21	SH	09/27/94

Soil Organic Extraction

COMP

09/22/94

Analytical No.:

20799

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JCO*

Attn: Cy Ingraham

	Units	Detection Limit	TW10, S6 12-14FT 09/08/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.2	X		09/30/94
Lead	µg/g	5.9	X		09/30/94
Selenium	µg/g	10.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.22	X		09/21/94
Bromobenzene	µg/g	0.55	X		09/21/94
Bromochloromethane	µg/g	0.93	X		09/21/94
Bromodichloromethane	µg/g	0.55	X		09/21/94
Bromoform	µg/g	2.2	X		09/21/94
Bromomethane	µg/g	4.4	X	CSL	09/21/94
n-Butylbenzene	µg/g	1.1	X		09/21/94
sec-Butylbenzene	µg/g	7.1	X	XXX	09/21/94
tert-Butylbenzene	µg/g	1.1	X		09/21/94
Carbon Tetrachloride	µg/g	0.55	X		09/21/94
Chlorobenzene	µg/g	2.2	X		09/21/94
Chlorodibromomethane	µg/g	0.55	X		09/21/94
Chloroethane	µg/g	2.2	X	CSL	09/21/94
Chloroform	µg/g	0.55	X		09/21/94
Chloromethane	µg/g	2.2	X	DUP	09/21/94
o-Chlorotoluene	µg/g	1.1	X		09/21/94
p-Chlorotoluene	µg/g	1.1	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	15.	X		09/21/94
1,2-Dibromoethane	µg/g	1.1	X		09/21/94
Dibromomethane	µg/g	0.55	X		09/21/94
1,2-Dichlorobenzene	µg/g	1.1	X		09/21/94
1,3-Dichlorobenzene	µg/g	1.1	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.55	X		09/21/94
Dichlorodifluoromethane	µg/g	2.2	X		09/21/94
1,1-Dichloroethane	µg/g	0.55	X		09/21/94
1,2-Dichloroethane	µg/g	0.55	X		09/21/94
1,1-Dichloroethylene	µg/g	0.44	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.55	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.55	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.55	X		09/21/94
1,3-Dichloropropane	µg/g	0.55	X		09/21/94
2,2-Dichloropropane	µg/g	2.2	X		09/21/94
1,1-Dichloropropene	µg/g	1.1	X		09/21/94
1,3-Dichloropropene	µg/g	0.55	X		09/21/94

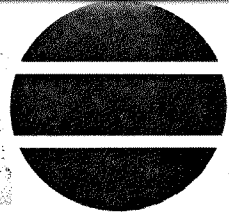
Analytical No.:

20800

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TW10, S6 12-14FT 09/08/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	1.1	X		09/21/94
Hexachlorobutadiene	µg/g	1.1	X		09/21/94
Isopropylbenzene	µg/g	7.1	X	XXX	09/21/94
p-Isopropyltoluene	µg/g	12.	X	XXX	09/21/94
Methyl tert Butyl Ether	µg/g	2.2	X	CSL	09/21/94
Methylene Chloride	µg/g	2.8	X		09/21/94
Naphthalene	µg/g	15.	X	XXX	09/21/94
n-Propylbenzene	µg/g	14.	X	XXX	09/21/94
Styrene	µg/g	5.5	X		09/21/94
Tetrachloroethylene	µg/g	0.55	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.55	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	1.1	X	CSL	09/21/94
Toluene	µg/g	2.2	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	1.1	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	1.1	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.55	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.55	X		09/21/94
Trichloroethylene	µg/g	0.22	X		09/21/94
Trichlorofluoromethane	µg/g	1.1	X		09/21/94
1,2,3-Trichloropropane	µg/g	2.2	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	1.1	X		09/21/94
1,3,5-Trimethylbenzene	µg/g	1.1	X		09/21/94
Vinyl Chloride	µg/g	0.22	X	CSL	09/21/94
m- & p-Xylene	µg/g	1.1	X		09/21/94
o-Xylene	µg/g	1.1	X		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.77	1.73		09/22/94
Acenaphthylene	µg/g	0.77	0.386	J	09/22/94
Anthracene	µg/g	0.77	1.23		09/22/94
Benzo (a) Anthracene	µg/g	0.77	0.794		09/22/94
Benzo (a) Pyrene	µg/g	0.77	0.657	J	09/22/94
Benzo (b) Fluoranthene	µg/g	0.77	0.509	J	09/22/94
Benzo (k) Fluoranthene	µg/g	0.77	X		09/22/94
Benzo (ghi) Perylene	µg/g	0.77	X		09/22/94
Chrysene	µg/g	0.77	0.691	J	09/22/94
Dibenzo (a, h) Anthracene	µg/g	0.77	X		09/22/94
Fluoranthene	µg/g	0.77	1.59		09/22/94
Fluorene	µg/g	0.77	1.40		09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.77	X		09/22/94
2-Methyl Naphthalene	µg/g	0.77	1.38	J	09/23/94
Phenanthrene	µg/g	0.77	5.90		09/22/94
Pyrene	µg/g	0.77	2.65		09/22/94
Naphthalene	µg/g	0.77	0.504	J	09/22/94
Soil Organic Extraction			COMP		09/22/94

Analytical No.:

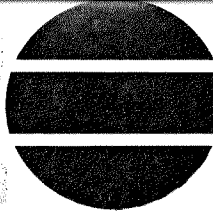
20800

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *JG*

Attn: Cy Ingraham

	Units	Detection Limit	TW11, S6, 12-14FT 09/08/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.2	X		09/30/94
Lead	µg/g	6.0	12.0		09/30/94
Selenium	µg/g	10.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.47	X		09/22/94
Bromobenzene	µg/g	1.20	X		09/22/94
Bromochloromethane	µg/g	1.98	X		09/22/94
Bromodichloromethane	µg/g	1.20	X		09/22/94
Bromoform	µg/g	4.70	X		09/22/94
Bromomethane	µg/g	9.50	X	CSL	09/22/94
n-Butylbenzene	µg/g	2.38	3.74		09/22/94
sec-Butylbenzene	µg/g	2.40	X		09/22/94
tert-Butylbenzene	µg/g	2.40	X		09/22/94
Carbon Tetrachloride	µg/g	1.20	X		09/22/94
Chlorobenzene	µg/g	4.70	X		09/22/94
Chlorodibromomethane	µg/g	1.20	X		09/22/94
Chloroethane	µg/g	4.70	X	CSL	09/22/94
Chloroform	µg/g	1.20	X		09/22/94
Chloromethane	µg/g	4.70	X	DUP	09/22/94
o-Chlorotoluene	µg/g	2.40	X		09/22/94
p-Chlorotoluene	µg/g	2.40	X		09/22/94
1,2-Dibromo-3-chloropropane	µg/g	32.0	X		09/22/94
1,2-Dibromoethane	µg/g	2.40	X		09/22/94
Dibromomethane	µg/g	1.20	X		09/22/94
1,2-Dichlorobenzene	µg/g	2.40	X		09/22/94
1,3-Dichlorobenzene	µg/g	2.40	X		09/22/94
1,4-Dichlorobenzene	µg/g	1.20	X		09/22/94
Dichlorodifluoromethane	µg/g	4.70	X		09/22/94
1,1-Dichloroethane	µg/g	1.20	X		09/22/94
1,2-Dichloroethane	µg/g	1.20	X		09/22/94
1,1-Dichloroethylene	µg/g	0.95	X		09/22/94
cis-1,2-Dichloroethylene	µg/g	1.20	X	CSH	09/22/94
trans-1,2-Dichloroethylene	µg/g	1.20	X	CSL	09/22/94
1,2-Dichloropropane	µg/g	1.20	X		09/22/94
1,3-Dichloropropane	µg/g	1.20	X		09/22/94
2,2-Dichloropropane	µg/g	4.70	X		09/22/94
1,1-Dichloropropene	µg/g	2.40	X		09/22/94
1,3-Dichloropropene	µg/g	1.20	X		09/22/94

Analytical No.:

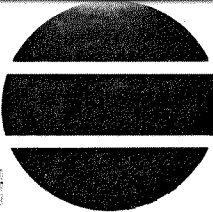
20801

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *10/10/94*

Attn: Cy Ingraham

	Units	Detection Limit	TW11, S6, 12-14FT 09/08/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	2.38	2.45		09/22/94
Hexachlorobutadiene	µg/g	2.40	X		09/22/94
Isopropylbenzene	µg/g	2.40	X		09/22/94
p-Isopropyltoluene	µg/g	2.40	X		09/22/94
Methyl tert Butyl Ether	µg/g	4.70	X	CSL	09/22/94
Methylene Chloride	µg/g	5.90	X		09/22/94
Naphthalene	µg/g	2.38	83.6		09/22/94
n-Propylbenzene	µg/g	2.40	X		09/22/94
Styrene	µg/g	12.0	X		09/22/94
Tetrachloroethylene	µg/g	1.20	X		09/22/94
1,1,1,2-Tetrachloroethane	µg/g	1.20	X		09/22/94
1,1,2,2-Tetrachloroethane	µg/g	2.40	X	CSL	09/22/94
Toluene	µg/g	4.70	X		09/22/94
1,2,3-Trichlorobenzene	µg/g	2.40	X		09/22/94
1,2,4-Trichlorobenzene	µg/g	2.40	X		09/22/94
1,1,1-Trichloroethane	µg/g	1.20	X		09/22/94
1,1,2-Trichloroethane	µg/g	1.20	X		09/22/94
Trichloroethylene	µg/g	0.47	X		09/22/94
Trichlorofluoromethane	µg/g	2.40	X		09/22/94
1,2,3-Trichloropropane	µg/g	4.70	X		09/22/94
1,2,4-Trimethylbenzene	µg/g	2.38	2.93		09/22/94
1,3,5-Trimethylbenzene	µg/g	2.40	X		09/22/94
Vinyl Chloride	µg/g	0.47	X	CSL	09/22/94
m- & p-Xylene	µg/g	2.40	X		09/22/94
o-Xylene	µg/g	2.40	X		09/22/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	7.8	46.4		09/27/94
Acenaphthylene	µg/g	7.8	1.26	J	09/27/94
Anthracene	µg/g	7.8	15.1		09/27/94
Benzo (a) Anthracene	µg/g	7.8	8.23		09/27/94
Benzo (a) Pyrene	µg/g	7.8	4.81	J	09/27/94
Benzo (b) Fluoranthene	µg/g	7.8	3.85	J	09/27/94
Benzo (k) Fluoranthene	µg/g	7.8	2.31	J	09/27/94
Benzo (ghi) Perylene	µg/g	7.8	X		09/27/94
Chrysene	µg/g	7.8	6.94	J	09/27/94
Dibenzo (a, h) Anthracene	µg/g	7.8	X		09/27/94
Fluoranthene	µg/g	7.8	13.2		09/27/94
Fluorene	µg/g	7.8	19.4		09/27/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	7.8	X		09/27/94
2-Methyl Naphthalene	µg/g	7.8	82.4		09/27/94
Phenanthrene	µg/g	7.8	64.6		09/27/94
Pyrene	µg/g	7.8	24.2		09/27/94
Naphthalene	µg/g	7.8	50.7		09/27/94
Soil Organic Extraction			COMP		09/22/94

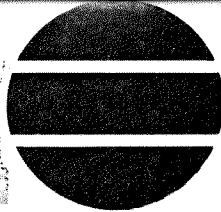
Analytical No.:

20801

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *rend*  
REVIEWED BY: *JR*

Attn: Cy Ingraham

	Units	Detection Limit	TW12, S3, 4.5-6.5 09/08/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.24	0.465		09/30/94
Lead	µg/g	7.0	204		09/30/94
Selenium	µg/g	12.0	16.5		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.003	X		09/21/94
Bromobenzene	µg/g	0.007	X		09/21/94
Bromochloromethane	µg/g	0.009	X		09/21/94
Bromodichloromethane	µg/g	0.007	X		09/21/94
Bromoform	µg/g	0.027	X		09/21/94
Bromomethane	µg/g	0.054	X	CSL	09/21/94
n-Butylbenzene	µg/g	0.013	X		09/21/94
sec-Butylbenzene	µg/g	0.013	X		09/21/94
tert-Butylbenzene	µg/g	0.013	X		09/21/94
Carbon Tetrachloride	µg/g	0.007	X		09/21/94
Chlorobenzene	µg/g	0.027	X		09/21/94
Chlorodibromomethane	µg/g	0.007	X		09/21/94
Chloroethane	µg/g	0.027	X	CSL	09/21/94
Chloroform	µg/g	0.007	X		09/21/94
Chloromethane	µg/g	0.027	X	DUP	09/21/94
o-Chlorotoluene	µg/g	0.013	X		09/21/94
p-Chlorotoluene	µg/g	0.013	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	0.180	X		09/21/94
1,2-Dibromoethane	µg/g	0.013	X		09/21/94
Dibromomethane	µg/g	0.007	X		09/21/94
1,2-Dichlorobenzene	µg/g	0.013	X		09/21/94
1,3-Dichlorobenzene	µg/g	0.013	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.007	X		09/21/94
Dichlorodifluoromethane	µg/g	0.027	X		09/21/94
1,1-Dichloroethane	µg/g	0.007	X		09/21/94
1,2-Dichloroethane	µg/g	0.007	X		09/21/94
1,1-Dichloroethylene	µg/g	0.005	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.007	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.007	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.007	X		09/21/94
1,3-Dichloropropane	µg/g	0.007	X		09/21/94
2,2-Dichloropropane	µg/g	0.027	X		09/21/94
1,1-Dichloropropene	µg/g	0.013	X		09/21/94
1,3-Dichloropropene	µg/g	0.007	X		09/21/94

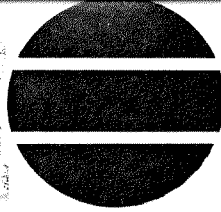
Analytical No.:

20802

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *J/S*

Attn: Cy Ingraham

	Units	Detection Limit	TW12, S3, 4.5-6.5 09/08/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.013	X		09/21/94
Hexachlorobutadiene	µg/g	0.013	X		09/21/94
Isopropylbenzene	µg/g	0.013	X		09/21/94
p-Isopropyltoluene	µg/g	0.013	0.019		09/21/94
Methyl tert Butyl Ether	µg/g	0.027	X	CSL	09/21/94
Methylene Chloride	µg/g	0.034	X		09/21/94
Naphthalene	µg/g	0.013	0.070		09/21/94
n-Propylbenzene	µg/g	0.013	X		09/21/94
Styrene	µg/g	0.066	X		09/21/94
Tetrachloroethylene	µg/g	0.007	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.007	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	0.013	X	CSL	09/21/94
Toluene	µg/g	0.027	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	0.013	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	0.013	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.007	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.007	X		09/21/94
Trichloroethylene	µg/g	0.003	X		09/21/94
Trichlorofluoromethane	µg/g	0.013	X		09/21/94
1,2,3-Trichloropropane	µg/g	0.027	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	0.013	X		09/21/94
1,3,5-Trimethylbenzene	µg/g	0.013	X		09/21/94
Vinyl Chloride	µg/g	0.003	X	CSL	09/21/94
m- & p-Xylene	µg/g	0.013	X		09/21/94
o-Xylene	µg/g	0.013	X		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.93	0.106	J	09/23/94
Acenaphthylene	µg/g	0.93	X		09/23/94
Anthracene	µg/g	0.93	X		09/23/94
Benzo (a) Anthracene	µg/g	0.93	0.203	J	09/23/94
Benzo (a) Pyrene	µg/g	0.93	0.172	J	09/23/94
Benzo (b) Fluoranthene	µg/g	0.93	0.247	J	09/23/94
Benzo (k) Fluoranthene	µg/g	0.93	X		09/23/94
Benzo (ghi) Perylene	µg/g	0.93	0.179	J	09/23/94
Chrysene	µg/g	0.93	0.151	J	09/23/94
Dibenzo (a, h) Anthracene	µg/g	0.93	X		09/23/94
Fluoranthene	µg/g	0.93	0.180	J	09/23/94
Fluorene	µg/g	0.93	X		09/23/94
Indeno (1,2,3-cd) Pyrene	µg/g	0.93	X		09/23/94
2-Methyl Naphthalene	µg/g	0.93	0.240	J	09/23/94
Phenanthrene	µg/g	0.93	0.237	J	09/23/94
Pyrene	µg/g	0.93	0.286	J	09/23/94
Naphthalene	µg/g	0.93	0.204	J	09/23/94
Soil Organic Extraction			COMP		09/22/94

Analytical No.:

20802

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *MRD*

Attn: Cy Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TP-1,5-7FT 09/07/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
<b><u>EPA 6010</u></b>					
Cadmium	µg/g	0.29	0.394		09/30/94
Lead	µg/g	8.5	78.1		09/30/94
Selenium	µg/g	15.	X		09/30/94
<b><u>EPA 8021</u></b>					
Benzene	µg/g	0.070	2.10		09/21/94
Bromobenzene	µg/g	0.170	X		09/21/94
Bromochloromethane	µg/g	0.205	X		09/21/94
Bromodichloromethane	µg/g	0.170	X		09/21/94
Bromoform	µg/g	0.690	X		09/21/94
Bromomethane	µg/g	1.40	X	CSL	09/21/94
n-Butylbenzene	µg/g	0.348	3.48		09/21/94
sec-Butylbenzene	µg/g	0.350	X		09/21/94
tert-Butylbenzene	µg/g	0.350	X		09/21/94
Carbon Tetrachloride	µg/g	0.170	X		09/21/94
Chlorobenzene	µg/g	0.690	X		09/21/94
Chlorodibromomethane	µg/g	0.170	X		09/21/94
Chloroethane	µg/g	0.690	X	CSL	09/21/94
Chloroform	µg/g	0.170	X		09/21/94
Chloromethane	µg/g	0.690	X	DUP	09/21/94
o-Chlorotoluene	µg/g	0.350	X		09/21/94
p-Chlorotoluene	µg/g	0.350	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	4.60	X		09/21/94
1,2-Dibromoethane	µg/g	0.350	X		09/21/94
Dibromomethane	µg/g	0.170	X		09/21/94
1,2-Dichlorobenzene	µg/g	0.350	X		09/21/94
1,3-Dichlorobenzene	µg/g	0.350	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.170	X		09/21/94
Dichlorodifluoromethane	µg/g	0.690	X		09/21/94
1,1-Dichloroethane	µg/g	0.170	X		09/21/94
1,2-Dichloroethane	µg/g	0.170	X		09/21/94
1,1-Dichloroethylene	µg/g	0.140	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.170	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.170	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.170	X		09/21/94
1,3-Dichloropropane	µg/g	0.170	X		09/21/94
2,2-Dichloropropane	µg/g	0.690	X		09/21/94
1,1-Dichloropropene	µg/g	0.350	X		09/21/94
1,3-Dichloropropene	µg/g	0.170	X		09/21/94

Analytical No.:

20803

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *JPS*

Attn: Cy Ingraham

	Units	Detection Limit	TP-1,5-7FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.348	0.469		09/21/94
Hexachlorobutadiene	µg/g	0.350	X		09/21/94
Isopropylbenzene	µg/g	0.350	X		09/21/94
p-Isopropyltoluene	µg/g	0.350	1.16		09/21/94
Methyl tert Butyl Ether	µg/g	0.690	X	CSL	09/21/94
Methylene Chloride	µg/g	0.870	X		09/21/94
Naphthalene	µg/g	0.348	10.2		09/21/94
n-Propylbenzene	µg/g	0.348	0.850		09/21/94
Styrene	µg/g	1.70	X		09/21/94
Tetrachloroethylene	µg/g	0.170	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.170	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	0.350	X	CSL	09/21/94
Toluene	µg/g	0.690	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	0.350	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	0.350	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.170	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.170	X		09/21/94
Trichloroethylene	µg/g	0.070	X		09/21/94
Trichlorofluoromethane	µg/g	0.350	X		09/21/94
1,2,3-Trichloropropane	µg/g	0.690	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	0.348	1.81		09/21/94
1,3,5-Trimethylbenzene	µg/g	0.348	1.36		09/21/94
Vinyl Chloride	µg/g	0.070	X	CSL	09/21/94
m- & p-Xylene	µg/g	0.348	1.24		09/21/94
o-Xylene & Styrene	µg/g	0.348	1.51		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	5.6	6.64	J	09/27/94
Acenaphthylene	µg/g	5.6	1.01	J	09/27/94
Anthracene	µg/g	5.6	3.13	J	09/27/94
Benzo (a) Anthracene	µg/g	5.6	4.70	J	09/27/94
Benzo (a) Pyrene	µg/g	5.6	6.66		09/27/94
Benzo (b) Fluoranthene	µg/g	5.6	5.83		09/27/94
Benzo (k) Fluoranthene	µg/g	5.6	X		09/27/94
Benzo (ghi) Perylene	µg/g	5.6	4.96	J	09/27/94
Chrysene	µg/g	5.6	5.32	J	09/27/94
Dibenzo (a, h) Anthracene	µg/g	5.6	X		09/27/94
Fluoranthene	µg/g	5.6	5.33	J	09/27/94
Fluorene	µg/g	5.6	2.70	J	09/27/94
Indeno (1,2,3-cd) Pyrene	µg/g	5.6	4.35	J	09/27/94
2-Methyl Naphthalene	µg/g	5.6	6.40		09/27/94
Phenanthrene	µg/g	5.6	10.1		09/27/94
Pyrene	µg/g	5.6	13.8		09/27/94
Naphthalene	µg/g	5.6	4.93	J	09/27/94
Soil Organic Extraction			COMP	HT	09/22/94

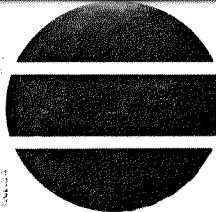
Analytical No.:

20803

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *ms*  
REVIEWED BY: *JK*

Attn: Cy Ingraham

	Units	Detection Limit	TP-2,2-4FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.21	0.846		09/30/94
Lead	µg/g	6.1	682.		09/30/94
Selenium	µg/g	11.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.002	X		09/20/94
Bromobenzene	µg/g	0.006	X	SL	09/20/94
Bromochloromethane	µg/g	0.010	X	SL	09/20/94
Bromodichloromethane	µg/g	0.006	X	SL	09/20/94
Bromoform	µg/g	0.024	X	SL	09/20/94
Bromomethane	µg/g	0.048	X	CSL SL	09/20/94
n-Butylbenzene	µg/g	0.012	X		09/20/94
sec-Butylbenzene	µg/g	0.012	X		09/20/94
tert-Butylbenzene	µg/g	0.012	X		09/20/94
Carbon Tetrachloride	µg/g	0.006	X	SL	09/20/94
Chlorobenzene	µg/g	0.024	X	SL	09/20/94
Chlorodibromomethane	µg/g	0.006	X	SL	09/20/94
Chloroethane	µg/g	0.024	X	SL	09/20/94
Chloroform	µg/g	0.006	X	SL	09/20/94
Chloromethane	µg/g	0.024	X	CSL SL	09/20/94
o-Chlorotoluene	µg/g	0.012	X	SL	09/20/94
p-Chlorotoluene	µg/g	0.012	X	SL	09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.160	X	SL	09/20/94
1,2-Dibromoethane	µg/g	0.012	X	SL	09/20/94
Dibromomethane	µg/g	0.006	X	SL	09/20/94
1,2-Dichlorobenzene	µg/g	0.012	X	SL	09/20/94
1,3-Dichlorobenzene	µg/g	0.012	X	SL	09/20/94
1,4-Dichlorobenzene	µg/g	0.006	X	SL	09/20/94
Dichlorodifluoromethane	µg/g	0.024	X	CSH SL	09/20/94
1,1-Dichloroethane	µg/g	0.006	X	SL	09/20/94
1,2-Dichloroethane	µg/g	0.006	X	SL	09/20/94
1,1-Dichloroethylene	µg/g	0.005	X	SL	09/20/94
cis-1,2-Dichloroethylene	µg/g	0.006	X	SL	09/20/94
trans-1,2-Dichloroethylene	µg/g	0.006	X	CSL SL	09/20/94
1,2-Dichloropropane	µg/g	0.006	X	SL	09/20/94
1,3-Dichloropropane	µg/g	0.006	X	SL	09/20/94
2,2-Dichloropropane	µg/g	0.024	X	SL	09/20/94
1,1-Dichloropropene	µg/g	0.012	X	SL	09/20/94
1,3-Dichloropropene	µg/g	0.006	X	SL	09/20/94

Analytical No.:

20804

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *js*

Attn: Cy Ingraham

	Units	Detection Limit	TP-2, 2-4FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.012	X		09/20/94
Hexachlorobutadiene	µg/g	0.012	X	SL	09/20/94
Isopropylbenzene	µg/g	0.012	X	SL	09/20/94
p-Isopropyltoluene	µg/g	0.012	X		09/20/94
Methyl tert Butyl Ether	µg/g	0.024	X		09/20/94
Methylene Chloride	µg/g	0.031	X	CSH SL	09/20/94
Naphthalene	µg/g	0.012	X		09/20/94
n-Propylbenzene	µg/g	0.012	X	SL	09/20/94
Styrene	µg/g	0.060	X		09/20/94
Tetrachloroethylene	µg/g	0.006	X	CSH SL	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.006	X	SL	09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.012	X	CSL SL	09/20/94
Toluene	µg/g	0.025	0.029		09/20/94
1,2,3-Trichlorobenzene	µg/g	0.012	X	SL	09/20/94
1,2,4-Trichlorobenzene	µg/g	0.012	X	SL	09/20/94
1,1,1-Trichloroethane	µg/g	0.006	X	SL	09/20/94
1,1,2-Trichloroethane	µg/g	0.006	X	SL	09/20/94
Trichloroethylene	µg/g	0.002	X	CSH SL	09/20/94
Trichlorofluoromethane	µg/g	0.012	X	SL	09/20/94
1,2,3-Trichloropropane	µg/g	0.024	X	CSH SL	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.012	X		09/20/94
1,3,5-Trimethylbenzene	µg/g	0.012	X		09/20/94
Vinyl Chloride	µg/g	0.002	X	CSL SL	09/20/94
m- & p-Xylene	µg/g	0.012	X		09/20/94
o-Xylene	µg/g	0.012	X		09/20/94
<b>EPA 8080</b>					
PCB-1016	µg/g	8.6	X	SCR	09/26/94
PCB-1221	µg/g	8.6	X	SCR	09/26/94
PCB-1232	µg/g	8.6	X	SCR	09/26/94
PCB-1242	µg/g	8.6	X	SCR	09/26/94
PCB-1248	µg/g	8.6	X	SCR	09/26/94
PCB-1254	µg/g	8.6	X	SCR	09/26/94
PCB-1260	µg/g	8.6	X	SCR	09/26/94

Soil Organic Extraction

COMP

09/21/94

**EPA 8270**

Acenaphthene	µg/g	0.40	0.098	J	09/22/94
Acenaphthylene	µg/g	0.40	0.292	J	09/22/94
Anthracene	µg/g	0.40	0.520		09/22/94
Benzo (a) Anthracene	µg/g	0.40	2.78		09/22/94
Benzo (a) Pyrene	µg/g	0.40	2.03		09/22/94
Benzo (b) Fluoranthene	µg/g	0.40	3.14		09/22/94
Benzo (k) Fluoranthene	µg/g	0.40	0.972		09/22/94
Benzo (ghi) Perylene	µg/g	0.40	2.44		09/22/94
Chrysene	µg/g	0.40	1.92		09/22/94

Analytical No.:

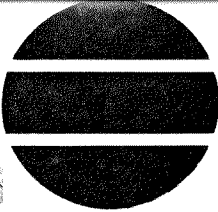
20804

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *Mrd*  
REVIEWED BY: *HR*

Attn: Cy Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TP-2, 2-4FT 09/07/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Dibenzo (a, h) Anthracene	µg/g	0.40	0.513		09/22/94
Fluoranthene	µg/g	0.40	5.70		09/22/94
Fluorene	µg/g	0.40	0.187	J	09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.40	2.21		09/22/94
2-Methyl Naphthalene	µg/g	0.40	0.071	J	09/22/94
Phenanthrene	µg/g	0.40	2.98		09/22/94
Pyrene	µg/g	0.40	3.42		09/22/94
Naphthalene	µg/g	0.40	0.169	J	09/22/94
Soil Organic Extraction			COMP		09/20/94
Analytical No.:			20804		

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *mrj*  
REVIEWED BY: *JR*

Attn: Cy Ingraham

	Units	Detection Limit	TP-2,6-8FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.22	0.432		09/30/94
Lead	µg/g	6.4	358		09/30/94
Selenium	µg/g	11.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.003	0.005	ISL	09/20/94
Bromobenzene	µg/g	0.007	X	SL	09/20/94
Bromochloromethane	µg/g	0.010	X	SL	09/20/94
Bromodichloromethane	µg/g	0.007	X	SL	09/20/94
Bromoform	µg/g	0.026	X	SL	09/20/94
Bromomethane	µg/g	0.051	X	CSL SL	09/20/94
n-Butylbenzene	µg/g	0.013	0.020	ISL	09/20/94
sec-Butylbenzene	µg/g	0.013	X	ISL	09/20/94
tert-Butylbenzene	µg/g	0.013	X	ISL	09/20/94
Carbon Tetrachloride	µg/g	0.007	X	SL	09/20/94
Chlorobenzene	µg/g	0.026	X	SL	09/20/94
Chlorodibromomethane	µg/g	0.007	X	SL	09/20/94
Chloroethane	µg/g	0.026	X	SL	09/20/94
Chloroform	µg/g	0.007	X	SL	09/20/94
Chloromethane	µg/g	0.026	X	CSL SL	09/20/94
o-Chlorotoluene	µg/g	0.013	X	SL	09/20/94
p-Chlorotoluene	µg/g	0.013	X	SL	09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.170	X	SL	09/20/94
1,2-Dibromoethane	µg/g	0.013	X	SL	09/20/94
Dibromomethane	µg/g	0.007	X	SL	09/20/94
1,2-Dichlorobenzene	µg/g	0.013	X	SL	09/20/94
1,3-Dichlorobenzene	µg/g	0.013	X	SL	09/20/94
1,4-Dichlorobenzene	µg/g	0.007	X	SL	09/20/94
Dichlorodifluoromethane	µg/g	0.026	X	CSH SL	09/20/94
1,1-Dichloroethane	µg/g	0.007	X	SL	09/20/94
1,2-Dichloroethane	µg/g	0.007	X	SL	09/20/94
1,1-Dichloroethylene	µg/g	0.005	X	SL	09/20/94
cis-1,2-Dichloroethylene	µg/g	0.007	X	SL	09/20/94
trans-1,2-Dichloroethylene	µg/g	0.007	X	CSL SL	09/20/94
1,2-Dichloropropane	µg/g	0.007	X	SL	09/20/94
1,3-Dichloropropane	µg/g	0.007	X	SL	09/20/94
2,2-Dichloropropane	µg/g	0.026	X	SL	09/20/94
1,1-Dichloropropene	µg/g	0.013	X	SL	09/20/94
1,3-Dichloropropene	µg/g	0.007	X	SL	09/20/94

Analytical No.:

20805

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *mj*  
REVIEWED BY: *JH*

Attn: Cy Ingraham

	Units	Detection Limit	TP-2,6-8FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.013	X	ISL	09/20/94
Hexachlorobutadiene	µg/g	0.013	X	SL	09/20/94
Isopropylbenzene	µg/g	0.013	X	ISL	09/20/94
p-Isopropyltoluene	µg/g	0.013	X	ISL	09/20/94
Methyl tert Butyl Ether	µg/g	0.026	X	ISL	09/20/94
Methylene Chloride	µg/g	0.032	X	CSH SL	09/20/94
Naphthalene	µg/g	1.28	0.019	ISL	09/20/94
n-Propylbenzene	µg/g	0.013	X	ISL	09/20/94
Styrene	µg/g	0.066	X	ISL	09/20/94
Tetrachloroethylene	µg/g	0.007	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.007	X	SL	09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.013	X	CSL SL	09/20/94
Toluene	µg/g	0.026	0.027	ISL	09/20/94
1,2,3-Trichlorobenzene	µg/g	0.013	X	SL	09/20/94
1,2,4-Trichlorobenzene	µg/g	0.013	X	SL	09/20/94
1,1,1-Trichloroethane	µg/g	0.007	X	SL	09/20/94
1,1,2-Trichloroethane	µg/g	0.007	X	SL	09/20/94
Trichloroethylene	µg/g	0.003	X	CSH SL	09/20/94
Trichlorofluoromethane	µg/g	0.013	X	SL	09/20/94
1,2,3-Trichloropropane	µg/g	0.026	X	CSH SL	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.013	X	ISL	09/20/94
1,3,5-Trimethylbenzene	µg/g	0.013	X	ISL	09/20/94
Vinyl Chloride	µg/g	0.003	X	CSL SL	09/20/94
m- & p-Xylene	µg/g	0.013	X	ISL	09/20/94
o-Xylene	µg/g	0.013	X	ISL	09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.42	0.0488	J	09/22/94
Acenaphthylene	µg/g	0.42	0.0835	J	09/22/94
Anthracene	µg/g	0.42	0.313	J	09/22/94
Benzo (a) Anthracene	µg/g	0.42	1.39		09/22/94
Benzo (a) Pyrene	µg/g	0.42	0.845		09/22/94
Benzo (b) Fluoranthene	µg/g	0.42	1.43		09/22/94
Benzo (k) Fluoranthene	µg/g	0.42	0.330	J	09/22/94
Benzo (ghi) Perylene	µg/g	0.42	0.772		09/22/94
Chrysene	µg/g	0.42	1.00		09/22/94
Dibenzo (a, h) Anthracene	µg/g	0.42	X		09/22/94
Fluoranthene	µg/g	0.42	3.11		09/22/94
Fluorene	µg/g	0.42	0.099	J	09/22/94
Indeno (1,2,3-cd) Pyrene	µg/g	0.42	0.788		09/22/94
2-Methyl Naphthalene	µg/g	0.42	0.0360	J	09/22/94
Phenanthrene	µg/g	0.42	1.75		09/22/94
Pyrene	µg/g	0.42	1.91		09/22/94
Naphthalene	µg/g	0.42	0.0591	J	09/22/94
Soil Organic Extraction			COMP		09/20/94

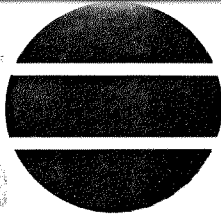
Analytical No.:

20805

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *JR*

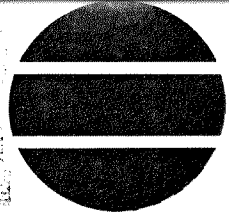
Attn: Cy Ingraham

	Units	Detection Limit	TP-3,2-4FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.84	0.981		09/30/94
Lead	µg/g	25.0	177.		09/30/94
Selenium	µg/g	43.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.19	X		09/21/94
Bromobenzene	µg/g	0.49	X		09/21/94
Bromochloromethane	µg/g	0.20	X		09/21/94
Bromodichloromethane	µg/g	0.49	X		09/21/94
Bromoform	µg/g	1.9	X		09/21/94
Bromomethane	µg/g	3.9	X	CSL	09/21/94
n-Butylbenzene	µg/g	0.98	X		09/21/94
sec-Butylbenzene	µg/g	0.98	X		09/21/94
tert-Butylbenzene	µg/g	0.98	X		09/21/94
Carbon Tetrachloride	µg/g	0.49	X		09/21/94
Chlorobenzene	µg/g	1.9	X		09/21/94
Chlorodibromomethane	µg/g	0.49	X		09/21/94
Chloroethane	µg/g	1.9	X	CSL	09/21/94
Chloroform	µg/g	0.49	X		09/21/94
Chloromethane	µg/g	1.9	X	DUP	09/21/94
o-Chlorotoluene	µg/g	0.98	X		09/21/94
p-Chlorotoluene	µg/g	0.98	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	13.	X		09/21/94
1,2-Dibromoethane	µg/g	0.98	X		09/21/94
Dibromomethane	µg/g	0.49	X		09/21/94
1,2-Dichlorobenzene	µg/g	0.98	X		09/21/94
1,3-Dichlorobenzene	µg/g	0.98	X		09/21/94
1,4-Dichlorobenzene	µg/g	0.49	X		09/21/94
Dichlorodifluoromethane	µg/g	1.9	X		09/21/94
1,1-Dichloroethane	µg/g	0.49	X		09/21/94
1,2-Dichloroethane	µg/g	0.49	X		09/21/94
1,1-Dichloroethylene	µg/g	0.39	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	0.49	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	0.49	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	0.49	X		09/21/94
1,3-Dichloropropane	µg/g	0.49	X		09/21/94
2,2-Dichloropropane	µg/g	1.9	X		09/21/94
1,1-Dichloropropene	µg/g	0.98	X		09/21/94
1,3-Dichloropropene	µg/g	0.49	X		09/21/94

Analytical No.: 20806

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *JG*

Attn: Cy Ingraham

	Units	Detection Limit	TP-3, 2-4FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.98	X		09/21/94
Hexachlorobutadiene	µg/g	0.98	X		09/21/94
Isopropylbenzene	µg/g	0.98	X		09/21/94
p-Isopropyltoluene	µg/g	0.98	X		09/21/94
Methyl tert Butyl Ether	µg/g	1.9	X	CSL	09/21/94
Methylene Chloride	µg/g	2.4	X		09/21/94
Naphthalene	µg/g	0.97	29.		09/21/94
n-Propylbenzene	µg/g	0.98	X		09/21/94
Styrene	µg/g	4.9	X		09/21/94
Tetrachloroethylene	µg/g	0.49	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	0.49	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	0.98	X	CSL	09/21/94
Toluene	µg/g	1.9	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	0.98	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	0.98	X		09/21/94
1,1,1-Trichloroethane	µg/g	0.49	X		09/21/94
1,1,2-Trichloroethane	µg/g	0.49	X		09/21/94
Trichloroethylene	µg/g	0.19	X		09/21/94
Trichlorofluoromethane	µg/g	0.98	X		09/21/94
1,2,3-Trichloropropane	µg/g	1.9	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	0.98	X		09/21/94
1,3,5-Trimethylbenzene	µg/g	0.98	X		09/21/94
Vinyl Chloride	µg/g	0.19	X	CSL	09/21/94
m- & p-Xylene	µg/g	0.98	X		09/21/94
o-Xylene	µg/g	0.98	X		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	7.9	X		09/22/94
Acenaphthylene	µg/g	7.9	6.24	J	09/22/94
Anthracene	µg/g	7.9	1.66	J	09/22/94
Benzo (a) Anthracene	µg/g	7.9	5.65	J	09/22/94
Benzo (a) Pyrene	µg/g	7.9	20.9		09/22/94
Benzo (b) Fluoranthene	µg/g	7.9	11.3		09/22/94
Benzo (k) Fluoranthene	µg/g	7.9	4.53	J	09/22/94
Benzo (ghi) Perylene	µg/g	7.9	24.7		09/22/94
Chrysene	µg/g	7.9	5.90	J	09/22/94
Dibenzo (a, h) Anthracene	µg/g	7.9	X		09/22/94
Fluoranthene	µg/g	7.9	4.67	J	09/22/94
Fluorene	µg/g	7.9	1.31	J	09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	7.9	19.4		09/22/94
2-Methyl Naphthalene	µg/g	7.9	X		09/22/94
Phenanthrene	µg/g	7.9	1.94	J	09/22/94
Pyrene	µg/g	7.9	10.8		09/22/94
Naphthalene	µg/g	7.9	X		09/22/94

Soil Organic Extraction COMP 09/20/94

Analytical No.: 20806

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *JK*

Attn: Cy Ingraham

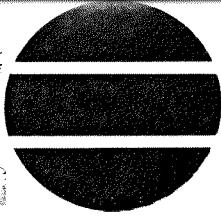
	Units	Detection Limit	TP-4,4-6FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.26	1.94		09/30/94
Lead	µg/g	7.6	354.		09/30/94
Selenium	µg/g	13.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	3.1	645.	CAL	09/21/94
Bromobenzene	µg/g	7.8	X		09/21/94
Bromochloromethane	µg/g	10.3	X		09/21/94
Bromodichloromethane	µg/g	7.8	X		09/21/94
Bromoform	µg/g	31.	X		09/21/94
Bromomethane	µg/g	63.	X	CSL	09/21/94
n-Butylbenzene	µg/g	16.	648.	CAL	09/21/94
sec-Butylbenzene	µg/g	16.	2,688.	CAL	09/21/94
tert-Butylbenzene	µg/g	16.	X		09/21/94
Carbon Tetrachloride	µg/g	7.8	X		09/21/94
Chlorobenzene	µg/g	31.	X		09/21/94
Chlorodibromomethane	µg/g	7.8	X		09/21/94
Chloroethane	µg/g	31.	X	CSL	09/21/94
Chloroform	µg/g	7.8	X		09/21/94
Chloromethane	µg/g	31.	X	DUP	09/21/94
o-Chlorotoluene	µg/g	16.	X		09/21/94
p-Chlorotoluene	µg/g	16.	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	208.	X		09/21/94
1,2-Dibromoethane	µg/g	16.	X		09/21/94
Dibromomethane	µg/g	7.8	X		09/21/94
1,2-Dichlorobenzene	µg/g	16.	X		09/21/94
1,3-Dichlorobenzene	µg/g	16.	X		09/21/94
1,4-Dichlorobenzene	µg/g	7.8	X		09/21/94
Dichlorodifluoromethane	µg/g	31.	X		09/21/94
1,1-Dichloroethane	µg/g	7.8	X		09/21/94
1,2-Dichloroethane	µg/g	7.8	X		09/21/94
1,1-Dichloroethylene	µg/g	6.3	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	7.8	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	7.8	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	7.8	X		09/21/94
1,3-Dichloropropane	µg/g	7.8	X		09/21/94
2,2-Dichloropropane	µg/g	31.	X		09/21/94
1,1-Dichloropropene	µg/g	16.	X		09/21/94
1,3-Dichloropropene	µg/g	7.8	X		09/21/94

Analytical No.:

20807

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *msd*  
 REVIEWED BY: *J/S*

Attn: Cy Ingraham

	Units	Detection Limit	TP-4, 4-6FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	16.	2,973.	CAL	09/21/94
Hexachlorobutadiene	µg/g	16.	X		09/21/94
Isopropylbenzene	µg/g	16.	190.		09/21/94
p-Isopropyltoluene	µg/g	16.	95.1		09/21/94
Methyl tert Butyl Ether	µg/g	31.	X	CSL	09/21/94
Methylene Chloride	µg/g	39.	X		09/21/94
Naphthalene	µg/g	16.	28,469.	OR	09/21/94
n-Propylbenzene	µg/g	16.	101.		09/21/94
Styrene	µg/g	78.	X		09/21/94
Tetrachloroethylene	µg/g	7.8	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	7.8	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	16.	X	CSL	09/21/94
Toluene	µg/g	31.	2,007.	CAL	09/21/94
1,2,3-Trichlorobenzene	µg/g	16.	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	16.	X		09/21/94
1,1,1-Trichloroethane	µg/g	7.8	X		09/21/94
1,1,2-Trichloroethane	µg/g	7.8	X		09/21/94
Trichloroethylene	µg/g	3.1	X		09/21/94
Trichlorofluoromethane	µg/g	16.	X		09/21/94
1,2,3-Trichloropropane	µg/g	31.	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	16.	2,994.	CAL	09/21/94
1,3,5-Trimethylbenzene	µg/g	16.	742.	CAL	09/21/94
Vinyl Chloride	µg/g	3.1	X	CSL	09/21/94
m- & p-Xylene	µg/g	16.	2,715.	CAL	09/21/94
o-Xylene & Styrene	µg/g	16.	2,266.	CAL	09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	363.	241.	J	09/22/94
Acenaphthylene	µg/g	363.	1,875.		09/22/94
Anthracene	µg/g	363.	640.		09/22/94
Benzo (a) Anthracene	µg/g	363.	323.	J	09/22/94
Benzo (a) Pyrene	µg/g	363.	205.	J	09/22/94
Benzo (b) Fluoranthene	µg/g	363.	191.	J	09/22/94
Benzo (k) Fluoranthene	µg/g	363.	X		09/22/94
Benzo (ghi) Perylene	µg/g	363.	X		09/22/94
Chrysene	µg/g	363.	313.	J	09/22/94
Dibenzo (a, h) Anthracene	µg/g	363.	X		09/22/94
Fluoranthene	µg/g	363.	605.		09/22/94
Fluorene	µg/g	363.	1,003.		09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	363.	X		09/22/94
2-Methyl Naphthalene	µg/g	363.	8,745.		09/22/94
Phenanthrene	µg/g	363.	2,690.		09/22/94
Pyrene	µg/g	363.	945.		09/22/94
Naphthalene	µg/g	363.	10,225.		09/22/94

Soil Organic Extraction

COMP

09/20/94

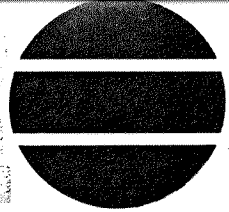
Analytical No.:

20807

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

	Units	Detection Limit	TP-5,6-8FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.25	X		09/30/94
Lead	µg/g	7.4	28.5		09/30/94
Selenium	µg/g	13.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.6	5.62		09/21/94
Bromobenzene	µg/g	1.4	X		09/21/94
Bromochloromethane	µg/g	1.9	X		09/21/94
Bromodichloromethane	µg/g	1.4	X		09/21/94
Bromoform	µg/g	5.5	X		09/21/94
Bromomethane	µg/g	11.	X	CSL	09/21/94
n-Butylbenzene	µg/g	2.8	54.9		09/21/94
sec-Butylbenzene	µg/g	2.8	X		09/21/94
tert-Butylbenzene	µg/g	2.8	X		09/21/94
Carbon Tetrachloride	µg/g	1.4	X		09/21/94
Chlorobenzene	µg/g	5.5	X		09/21/94
Chlorodibromomethane	µg/g	1.4	X		09/21/94
Chloroethane	µg/g	5.5	X	CSL	09/21/94
Chloroform	µg/g	1.4	X		09/21/94
Chloromethane	µg/g	5.5	X	DUP	09/21/94
o-Chlorotoluene	µg/g	2.8	X		09/21/94
p-Chlorotoluene	µg/g	2.8	X		09/21/94
1,2-Dibromo-3-chloropropane	µg/g	37.	X		09/21/94
1,2-Dibromoethane	µg/g	2.8	X		09/21/94
Dibromomethane	µg/g	1.4	X		09/21/94
1,2-Dichlorobenzene	µg/g	2.8	X		09/21/94
1,3-Dichlorobenzene	µg/g	2.8	X		09/21/94
1,4-Dichlorobenzene	µg/g	1.4	X		09/21/94
Dichlorodifluoromethane	µg/g	5.5	X		09/21/94
1,1-Dichloroethane	µg/g	1.4	X		09/21/94
1,2-Dichloroethane	µg/g	1.4	X		09/21/94
1,1-Dichloroethylene	µg/g	1.1	X		09/21/94
cis-1,2-Dichloroethylene	µg/g	1.4	X	CSH	09/21/94
trans-1,2-Dichloroethylene	µg/g	1.4	X	CSL	09/21/94
1,2-Dichloropropane	µg/g	1.4	X		09/21/94
1,3-Dichloropropane	µg/g	1.4	X		09/21/94
2,2-Dichloropropane	µg/g	5.5	X		09/21/94
1,1-Dichloropropene	µg/g	2.8	X		09/21/94
1,3-Dichloropropene	µg/g	1.4	X		09/21/94

Analytical No.: 20808

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.



# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *ymd*  
REVIEWED BY: *HS*

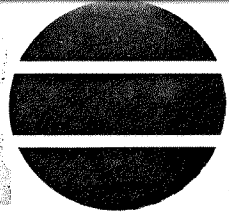
Attn: Cy Ingraham

	Units	Detection Limit	TP-5,6-8FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	2.8	51.1		09/21/94
Hexachlorobutadiene	µg/g	2.8	X		09/21/94
Isopropylbenzene	µg/g	2.8	6.20		09/21/94
p-Isopropyltoluene	µg/g	2.8	21.3		09/21/94
Methyl tert Butyl Ether	µg/g	5.5	X	CSL	09/21/94
Methylene Chloride	µg/g	6.9	X		09/21/94
Naphthalene	µg/g	2.8	1,122.	CAL	09/21/94
n-Propylbenzene	µg/g	2.8	4.89		09/21/94
Styrene	µg/g	14.	X		09/21/94
Tetrachloroethylene	µg/g	1.4	X		09/21/94
1,1,1,2-Tetrachloroethane	µg/g	1.4	X		09/21/94
1,1,2,2-Tetrachloroethane	µg/g	2.8	X	CSL	09/21/94
Toluene	µg/g	5.5	X		09/21/94
1,2,3-Trichlorobenzene	µg/g	2.8	X		09/21/94
1,2,4-Trichlorobenzene	µg/g	2.8	X		09/21/94
1,1,1-Trichloroethane	µg/g	1.4	X		09/21/94
1,1,2-Trichloroethane	µg/g	1.4	X		09/21/94
Trichloroethylene	µg/g	0.55	X		09/21/94
Trichlorofluoromethane	µg/g	2.8	X		09/21/94
1,2,3-Trichloropropane	µg/g	5.5	X		09/21/94
1,2,4-Trimethylbenzene	µg/g	1.47	6.15		09/21/94
1,3,5-Trimethylbenzene	µg/g	2.77	17.4		09/21/94
Vinyl Chloride	µg/g	0.55	X	CSL	09/21/94
m- & p-Xylene	µg/g	2.77	41.6		09/21/94
o-Xylene & Styrene	µg/g	2.77	27.2		09/21/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	53.	782.		09/22/94
Acenaphthylene	µg/g	53.	27.3	J	09/22/94
Anthracene	µg/g	53.	324.		09/22/94
Benzo (a) Anthracene	µg/g	53.	204.		09/22/94
Benzo (a) Pyrene	µg/g	53.	206.		09/22/94
Benzo (b) Fluoranthene	µg/g	53.	118.		09/22/94
Benzo (k) Fluoranthene	µg/g	53.	74.0		09/22/94
Benzo (ghi) Perylene	µg/g	53.	79.0		09/22/94
Chrysene	µg/g	53.	208.		09/22/94
Dibenzo (a, h) Anthracene	µg/g	53.	X		09/22/94
Fluoranthene	µg/g	53.	366.		09/22/94
Fluorene	µg/g	53.	279.		09/22/94
Indeno (1,2,3-cd) Pyrene	µg/g	53.	65.6		09/22/94
2-Methyl Naphthalene	µg/g	53.	706.		09/22/94
Phenanthrene	µg/g	53.	1,254.		09/22/94
Pyrene	µg/g	53.	759.		09/22/94
Naphthalene	µg/g	53.	1,077.		09/22/94
Soil Organic Extraction			COMP		09/20/94
Analytical No.:			20808		

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *HO*

Attn: Cy Ingraham

	Units	Detection Limit	TP-6, 5-7FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.2	X		09/30/94
Lead	µg/g	6.0	54.9		09/30/94
Selenium	µg/g	10.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.001	0.068		09/20/94
Bromobenzene	µg/g	0.003	X		09/20/94
Bromochloromethane	µg/g	0.005	X		09/20/94
Bromodichloromethane	µg/g	0.003	X		09/20/94
Bromoform	µg/g	0.013	X		09/20/94
Bromomethane	µg/g	0.025	X	CSL	09/20/94
n-Butylbenzene	µg/g	0.006	X		09/20/94
sec-Butylbenzene	µg/g	0.006	X		09/20/94
tert-Butylbenzene	µg/g	0.006	X		09/20/94
Carbon Tetrachloride	µg/g	0.003	X		09/20/94
Chlorobenzene	µg/g	0.013	X		09/20/94
Chlorodibromomethane	µg/g	0.003	X		09/20/94
Chloroethane	µg/g	0.013	X		09/20/94
Chloroform	µg/g	0.003	X		09/20/94
Chloromethane	µg/g	0.013	X	CSL	09/20/94
o-Chlorotoluene	µg/g	0.006	X		09/20/94
p-Chlorotoluene	µg/g	0.006	X		09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.084	X		09/20/94
1,2-Dibromoethane	µg/g	0.006	X		09/20/94
Dibromomethane	µg/g	0.003	X		09/20/94
1,2-Dichlorobenzene	µg/g	0.006	X		09/20/94
1,3-Dichlorobenzene	µg/g	0.006	X		09/20/94
1,4-Dichlorobenzene	µg/g	0.003	X		09/20/94
Dichlorodifluoromethane	µg/g	0.013	X	CSH	09/20/94
1,1-Dichloroethane	µg/g	0.003	X		09/20/94
1,2-Dichloroethane	µg/g	0.003	X		09/20/94
1,1-Dichloroethylene	µg/g	0.003	X		09/20/94
cis-1,2-Dichloroethylene	µg/g	0.003	X		09/20/94
trans-1,2-Dichloroethylene	µg/g	0.003	X	CSL	09/20/94
1,2-Dichloropropane	µg/g	0.003	X		09/20/94
1,3-Dichloropropane	µg/g	0.003	X		09/20/94
2,2-Dichloropropane	µg/g	0.013	X		09/20/94
1,1-Dichloropropene	µg/g	0.006	X		09/20/94
1,3-Dichloropropene	µg/g	0.003	X		09/20/94

Analytical No.: 20809

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JG*

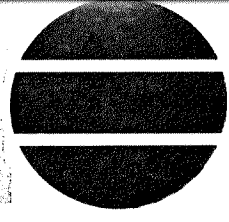
Attn: Cy Ingraham

	Units	Detection Limit	TP-6, 5-7FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.072	X	XXX	09/20/94
Hexachlorobutadiene	µg/g	0.006	X		09/20/94
Isopropylbenzene	µg/g	0.006	X		09/20/94
p-Isopropyltoluene	µg/g	0.006	X		09/20/94
Methyl tert Butyl Ether	µg/g	0.013	X		09/20/94
Methylene Chloride	µg/g	0.016	X	CSH	09/20/94
Naphthalene	µg/g	0.006	0.008		09/20/94
n-Propylbenzene	µg/g	0.006	X		09/20/94
Styrene	µg/g	0.032	X		09/20/94
Tetrachloroethylene	µg/g	0.003	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.003	X		09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.006	X	CSL	09/20/94
Toluene	µg/g	0.013	X		09/20/94
1,2,3-Trichlorobenzene	µg/g	0.006	X		09/20/94
1,2,4-Trichlorobenzene	µg/g	0.006	X		09/20/94
1,1,1-Trichloroethane	µg/g	0.003	X		09/20/94
1,1,2-Trichloroethane	µg/g	0.003	X		09/20/94
Trichloroethylene	µg/g	0.001	X	CSH	09/20/94
Trichlorofluoromethane	µg/g	0.006	X		09/20/94
1,2,3-Trichloropropane	µg/g	0.013	X	CSH	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.006	X		09/20/94
1,3,5-Trimethylbenzene	µg/g	0.007	X	XXX	09/20/94
Vinyl Chloride	µg/g	0.001	X	CSL	09/20/94
m- & p-Xylene	µg/g	0.072	X	XXX	09/20/94
o-Xylene	µg/g	0.006	X		09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	0.39	X		09/21/94
Acenaphthylene	µg/g	0.39	X		09/21/94
Anthracene	µg/g	0.39	X		09/21/94
Benzo (a) Anthracene	µg/g	0.39	X		09/21/94
Benzo (a) Pyrene	µg/g	0.39	X		09/21/94
Benzo (b) Fluoranthene	µg/g	0.39	X		09/21/94
Benzo (k) Fluoranthene	µg/g	0.39	X		09/21/94
Benzo (ghi) Perylene	µg/g	0.39	X		09/21/94
Chrysene	µg/g	0.39	X		09/21/94
Dibenzo (a, h) Anthracene	µg/g	0.39	X		09/21/94
Fluoranthene	µg/g	0.39	0.049	J	09/21/94
Fluorene	µg/g	0.39	X		09/21/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	0.39	X		09/21/94
2-Methyl Naphthalene	µg/g	0.39	X		09/21/94
Phenanthrene	µg/g	0.39	0.049	J	09/21/94
Pyrene	µg/g	0.39	0.063	J	09/21/94
Naphthalene	µg/g	0.39	X		09/21/94
Soil Organic Extraction			COMP		09/20/94
Analytical No.:			20809		

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/14/94  
 REPORT DATE: 10/10/94  
 PREPARED BY: MRD *MRD*  
 REVIEWED BY: *JR*

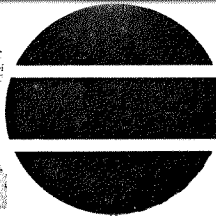
Attn: Cy Ingraham

	Units	Detection Limit	TP-7,2-4FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.45	2.99		09/30/94
Lead	µg/g	13.0	344.		09/30/94
Selenium	µg/g	23.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.005	1.01	SL	09/20/94
Bromobenzene	µg/g	0.012	X		09/20/94
Bromochloromethane	µg/g	0.009	X		09/20/94
Bromodichloromethane	µg/g	0.012	X		09/20/94
Bromoform	µg/g	0.048	X		09/20/94
Bromomethane	µg/g	0.100	X	CSL	09/20/94
n-Butylbenzene	µg/g	0.024	0.140	SL	09/20/94
sec-Butylbenzene	µg/g	0.024	X	SL	09/20/94
tert-Butylbenzene	µg/g	0.024	X	SL	09/20/94
Carbon Tetrachloride	µg/g	0.012	X		09/20/94
Chlorobenzene	µg/g	0.048	X		09/20/94
Chlorodibromomethane	µg/g	0.012	X		09/20/94
Chloroethane	µg/g	0.048	X		09/20/94
Chloroform	µg/g	0.012	X		09/20/94
Chloromethane	µg/g	0.048	X	CSL	09/20/94
o-Chlorotoluene	µg/g	0.024	X		09/20/94
p-Chlorotoluene	µg/g	0.024	X		09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.320	X		09/20/94
1,2-Dibromoethane	µg/g	0.024	X		09/20/94
Dibromomethane	µg/g	0.012	X		09/20/94
1,2-Dichlorobenzene	µg/g	0.024	X		09/20/94
1,3-Dichlorobenzene	µg/g	0.024	X		09/20/94
1,4-Dichlorobenzene	µg/g	0.012	X		09/20/94
Dichlorodifluoromethane	µg/g	0.048	X	CSH	09/20/94
1,1-Dichloroethane	µg/g	0.012	X		09/20/94
1,2-Dichloroethane	µg/g	0.012	X		09/20/94
1,1-Dichloroethylene	µg/g	0.010	X		09/20/94
cis-1,2-Dichloroethylene	µg/g	0.012	X		09/20/94
trans-1,2-Dichloroethylene	µg/g	0.012	X	CSL	09/20/94
1,2-Dichloropropane	µg/g	0.012	X		09/20/94
1,3-Dichloropropane	µg/g	0.012	X		09/20/94
2,2-Dichloropropane	µg/g	0.048	X		09/20/94
1,1-Dichloropropene	µg/g	0.024	X		09/20/94
1,3-Dichloropropene	µg/g	0.012	X		09/20/94

Analytical No.: 20810

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *HSC*

Attn: Cy Ingraham

	Units	Detection Limit	TP-7,2-4FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.024	0.147	SL	09/20/94
Hexachlorobutadiene	µg/g	0.024	X		09/20/94
Isopropylbenzene	µg/g	0.024	0.029	SL	09/20/94
p-Isopropyltoluene	µg/g	0.024	X	SL	09/20/94
Methyl tert Butyl Ether	µg/g	0.048	X	SL	09/20/94
Methylene Chloride	µg/g	0.061	X	CSH	09/20/94
Naphthalene	µg/g	0.024	1.23	SL	09/20/94
n-Propylbenzene	µg/g	0.024	X	SL	09/20/94
Styrene	µg/g	0.120	X	SL	09/20/94
Tetrachloroethylene	µg/g	0.012	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.012	X		09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.024	X	CSL	09/20/94
Toluene	µg/g	0.048	X	SL	09/20/94
1,2,3-Trichlorobenzene	µg/g	0.024	X		09/20/94
1,2,4-Trichlorobenzene	µg/g	0.024	X		09/20/94
1,1,1-Trichloroethane	µg/g	0.012	X		09/20/94
1,1,2-Trichloroethane	µg/g	0.012	X		09/20/94
Trichloroethylene	µg/g	0.005	X	CSH	09/20/94
Trichlorofluoromethane	µg/g	0.024	X		09/20/94
1,2,3-Trichloropropane	µg/g	0.048	X	CSH	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.024	0.187	SL	09/20/94
1,3,5-Trimethylbenzene	µg/g	0.024	0.068	SL	09/20/94
Vinyl Chloride	µg/g	0.005	X	CSL	09/20/94
m- & p-Xylene	µg/g	0.024	0.135	SL	09/20/94
o-Xylene	µg/g	0.024	0.240	SL	09/20/94

**EPA 8270**

Acenaphthene	µg/g	8.7	1.15	DUP J	09/23/94
Acenaphthylene	µg/g	8.7	3.26	J	09/23/94
Anthracene	µg/g	8.7	1.54	J	09/23/94
Benzo (a) Anthracene	µg/g	8.7	6.06	J	09/23/94
Benzo (a) Pyrene	µg/g	8.7	14.7		09/23/94
Benzo (b) Fluoranthene	µg/g	8.7	10.0		09/23/94
Benzo (k) Fluoranthene	µg/g	8.7	3.65	DUP J	09/23/94
Benzo (ghi) Perylene	µg/g	8.7	26.3	DUP S1L	09/23/94
Chrysene	µg/g	8.7	5.80	J	09/23/94
Dibenzo (a, h) Anthracene	µg/g	8.7	X		09/23/94
Fluoranthene	µg/g	8.7	4.45	J	09/23/94
Fluorene	µg/g	8.7	0.898	DUP J	09/23/94
Indeno (1,2,3-cd) Pyrene	µg/g	8.7	22.0	DUP S1L	09/23/94
2-Methyl Naphthalene	µg/g	8.7	X	S1H	09/23/94
Phenanthrene	µg/g	8.7	1.67	J	09/23/94
Pyrene	µg/g	8.7	14.2		09/23/94
Naphthalene	µg/g	8.7	1.11	J	09/23/94

Soil Organic Extraction

COMP

09/21/94

Analytical No.:

20810

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JK*

Attn: Cy Ingraham

	Units	Detection Limit	TP-8,5-7FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.92	X		09/30/94
Lead	µg/g	27.0	202		09/30/94
Selenium	µg/g	47.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.009	0.337		09/20/94
Bromobenzene	µg/g	0.021	X	SL	09/20/94
Bromochloromethane	µg/g	0.008	X	SL	09/20/94
Bromodichloromethane	µg/g	0.021	X	SL	09/20/94
Bromoform	µg/g	0.087	X	SL	09/20/94
Bromomethane	µg/g	0.170	X	CSL SL	09/20/94
n-Butylbenzene	µg/g	0.042	0.058		09/20/94
sec-Butylbenzene	µg/g	0.042	X		09/20/94
tert-Butylbenzene	µg/g	0.042	X		09/20/94
Carbon Tetrachloride	µg/g	0.021	X	SL	09/20/94
Chlorobenzene	µg/g	0.087	X	SL	09/20/94
Chlorodibromomethane	µg/g	0.021	X	SL	09/20/94
Chloroethane	µg/g	0.087	X	SL	09/20/94
Chloroform	µg/g	0.021	X	SL	09/20/94
Chloromethane	µg/g	0.087	X	CSL SL	09/20/94
o-Chlorotoluene	µg/g	0.042	X	SL	09/20/94
p-Chlorotoluene	µg/g	0.042	X	SL	09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.560	X	SL	09/20/94
1,2-Dibromoethane	µg/g	0.042	X	SL	09/20/94
Dibromomethane	µg/g	0.021	X	SL	09/20/94
1,2-Dichlorobenzene	µg/g	0.042	X	SL	09/20/94
1,3-Dichlorobenzene	µg/g	0.042	X	SL	09/20/94
1,4-Dichlorobenzene	µg/g	0.021	X	SL	09/20/94
Dichlorodifluoromethane	µg/g	0.087	X	CSH SL	09/20/94
1,1-Dichloroethane	µg/g	0.021	X	SL	09/20/94
1,2-Dichloroethane	µg/g	0.021	X	SL	09/20/94
1,1-Dichloroethylene	µg/g	0.017	X	SL	09/20/94
cis-1,2-Dichloroethylene	µg/g	0.021	X	SL	09/20/94
trans-1,2-Dichloroethylene	µg/g	0.021	X	CSL SL	09/20/94
1,2-Dichloropropane	µg/g	0.021	X	SL	09/20/94
1,3-Dichloropropane	µg/g	0.021	X	SL	09/20/94
2,2-Dichloropropane	µg/g	0.087	X	SL	09/20/94
1,1-Dichloropropene	µg/g	0.042	X	SL	09/20/94
1,3-Dichloropropene	µg/g	0.021	X	SL	09/20/94

Analytical No.:

20811

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

*J*

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *Wend*  
REVIEWED BY: *JR*

Attn: Cy Ingraham

	Units	Detection Limit	TP-8,5-7FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.042	0.149		09/20/94
Hexachlorobutadiene	µg/g	0.042	X	SL	09/20/94
Isopropylbenzene	µg/g	0.042	X		09/20/94
p-Isopropyltoluene	µg/g	0.042	0.283		09/20/94
Methyl tert Butyl Ether	µg/g	0.087	X		09/20/94
Methylene Chloride	µg/g	0.110	X	CSH SL	09/20/94
Naphthalene	µg/g	0.408	1.57		09/20/94
n-Propylbenzene	µg/g	0.042	0.053		09/20/94
Styrene	µg/g	0.210	X		09/20/94
Tetrachloroethylene	µg/g	0.021	X	CSH SL	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.021	X	SL	09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.042	X	CSL SL	09/20/94
Toluene	µg/g	0.087	X		09/20/94
1,2,3-Trichlorobenzene	µg/g	0.042	X	SL	09/20/94
1,2,4-Trichlorobenzene	µg/g	0.042	X	SL	09/20/94
1,1,1-Trichloroethane	µg/g	0.021	X	SL	09/20/94
1,1,2-Trichloroethane	µg/g	0.021	X	SL	09/20/94
Trichloroethylene	µg/g	0.009	X	CSH SL	09/20/94
Trichlorofluoromethane	µg/g	0.042	X	SL	09/20/94
1,2,3-Trichloropropane	µg/g	0.087	X	CSH SL	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.042	0.042		09/20/94
1,3,5-Trimethylbenzene	µg/g	0.042	0.112		09/20/94
Vinyl Chloride	µg/g	0.008	X	CSL SL	09/20/94
m- & p-Xylene	µg/g	0.042	0.070		09/20/94
o-Xylene	µg/g	0.042	0.162		09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	3.6	1.00	J	09/22/94
Acenaphthylene	µg/g	3.6	X		09/22/94
Anthracene	µg/g	3.6	X		09/22/94
Benzo (a) Anthracene	µg/g	3.6	0.535	J	09/22/94
Benzo (a) Pyrene	µg/g	3.6	X		09/22/94
Benzo (b) Fluoranthene	µg/g	3.6	X		09/22/94
Benzo (k) Fluoranthene	µg/g	3.6	X		09/22/94
Benzo (ghi) Perylene	µg/g	3.6	X		09/22/94
Chrysene	µg/g	3.6	0.449	J	09/22/94
Dibenzo (a, h) Anthracene	µg/g	3.6	X		09/22/94
Fluoranthene	µg/g	3.6	0.887	J	09/22/94
Fluorene	µg/g	3.6	X		09/22/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	3.6	X		09/22/94
2-Methyl Naphthalene	µg/g	3.6	X		09/22/94
Phenanthrene	µg/g	3.6	1.69	J	09/22/94
Pyrene	µg/g	3.6	1.61	J	09/22/94
Naphthalene	µg/g	3.6	X		09/22/94

Soil Organic Extraction

COMP

09/21/94

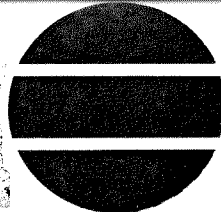
Analytical No.:

20811

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *grnd*  
REVIEWED BY: *H/S*

Attn: Cy Ingraham

	Units	Detection Limit	TP-9,2-4FT 09/07/94	Qualifiers	Date Analyzed
<b>EPA 6010</b>					
Cadmium	µg/g	0.74	X		09/30/94
Lead	µg/g	22.0	101		09/30/94
Selenium	µg/g	38.	X		09/30/94
<b>EPA 8021</b>					
Benzene	µg/g	0.008	0.675	ISL	09/20/94
Bromobenzene	µg/g	0.020	X	SL	09/20/94
Bromochloromethane	µg/g	0.009	X	SL	09/20/94
Bromodichloromethane	µg/g	0.020	X	SL	09/20/94
Bromoform	µg/g	0.078	X	SL	09/20/94
Bromomethane	µg/g	0.160	X	CSL SL	09/20/94
n-Butylbenzene	µg/g	0.039	0.415	ISL	09/20/94
sec-Butylbenzene	µg/g	0.039	X	ISL	09/20/94
tert-Butylbenzene	µg/g	0.039	X	ISL	09/20/94
Carbon Tetrachloride	µg/g	0.020	X	SL	09/20/94
Chlorobenzene	µg/g	0.078	X	SL	09/20/94
Chlorodibromomethane	µg/g	0.020	X	SL	09/20/94
Chloroethane	µg/g	0.078	X	SL	09/20/94
Chloroform	µg/g	0.020	X	SL	09/20/94
Chloromethane	µg/g	0.078	X	CSL SL	09/20/94
o-Chlorotoluene	µg/g	0.039	X	SL	09/20/94
p-Chlorotoluene	µg/g	0.039	X	SL	09/20/94
1,2-Dibromo-3-chloropropane	µg/g	0.520	X	SL	09/20/94
1,2-Dibromoethane	µg/g	0.039	X	SL	09/20/94
Dibromomethane	µg/g	0.020	X	SL	09/20/94
1,2-Dichlorobenzene	µg/g	0.039	X	SL	09/20/94
1,3-Dichlorobenzene	µg/g	0.039	X	SL	09/20/94
1,4-Dichlorobenzene	µg/g	0.020	X	SL	09/20/94
Dichlorodifluoromethane	µg/g	0.078	X	CSH SL	09/20/94
1,1-Dichloroethane	µg/g	0.020	X	SL	09/20/94
1,2-Dichloroethane	µg/g	0.020	X	SL	09/20/94
1,1-Dichloroethylene	µg/g	0.016	X	SL	09/20/94
cis-1,2-Dichloroethylene	µg/g	0.020	X	SL	09/20/94
trans-1,2-Dichloroethylene	µg/g	0.020	X	CSL SL	09/20/94
1,2-Dichloropropane	µg/g	0.020	X	SL	09/20/94
1,3-Dichloropropane	µg/g	0.020	X	SL	09/20/94
2,2-Dichloropropane	µg/g	0.078	X	SL	09/20/94
1,1-Dichloropropene	µg/g	0.039	X	SL	09/20/94
1,3-Dichloropropene	µg/g	0.020	X	SL	09/20/94

Analytical No.:

20812

X = Analyzed but not detected.  
Results calculated on a dry weight basis.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *MS*

Attn: Cy Ingraham

	Units	Detection Limit	TP-9, 2-4FT 09/07/94	Qualifiers	Date Analyzed
Ethylbenzene	µg/g	0.039	0.323	ISL	09/20/94
Hexachlorobutadiene	µg/g	0.039	X	SL	09/20/94
Isopropylbenzene	µg/g	0.039	0.056	ISL	09/20/94
p-Isopropyltoluene	µg/g	0.039	0.104	ISL	09/20/94
Methyl tert Butyl Ether	µg/g	0.078	X	ISL	09/20/94
Methylene Chloride	µg/g	0.100	X	CSH SL	09/20/94
Naphthalene	µg/g	0.039	2.00	ISL	09/20/94
n-Propylbenzene	µg/g	0.039	0.056	ISL	09/20/94
Styrene	µg/g	0.200	X	ISL	09/20/94
Tetrachloroethylene	µg/g	0.020	X	CSH	09/20/94
1,1,1,2-Tetrachloroethane	µg/g	0.020	X	SL	09/20/94
1,1,2,2-Tetrachloroethane	µg/g	0.039	X	CSL	09/20/94
Toluene	µg/g	0.078	X	ISL	09/20/94
1,2,3-Trichlorobenzene	µg/g	0.039	X	SL	09/20/94
1,2,4-Trichlorobenzene	µg/g	0.039	X	SL	09/20/94
1,1,1-Trichloroethane	µg/g	0.020	X	SL	09/20/94
1,1,2-Trichloroethane	µg/g	0.020	X	SL	09/20/94
Trichloroethylene	µg/g	0.008	X	CSH SL	09/20/94
Trichlorofluoromethane	µg/g	0.039	X	SL	09/20/94
1,2,3-Trichloropropane	µg/g	0.078	X	CSH SL	09/20/94
1,2,4-Trimethylbenzene	µg/g	0.039	0.282	ISL	09/20/94
1,3,5-Trimethylbenzene	µg/g	0.039	0.154	ISL	09/20/94
Vinyl Chloride	µg/g	0.008	X	CSL	09/20/94
m- & p-Xylene	µg/g	0.039	0.209	ISL	09/20/94
o-Xylene & Styrene	µg/g	0.039	0.290	ISL	09/20/94
<b>EPA 8270</b>					
Acenaphthene	µg/g	2.9	4.91		09/23/94
Acenaphthylene	µg/g	2.9	4.22		09/23/94
Anthracene	µg/g	2.9	2.82	J	09/23/94
Benzo (a) Anthracene	µg/g	2.9	8.08		09/23/94
Benzo (a) Pyrene	µg/g	2.9	12.5		09/23/94
Benzo (b) Fluoranthene	µg/g	2.9	11.2		09/23/94
Benzo (k) Fluoranthene	µg/g	2.9	2.52	J	09/23/94
Benzo (ghi) Perylene	µg/g	2.9	25.1		09/23/94
Chrysene	µg/g	2.9	6.69		09/23/94
Dibenzo (a, h) Anthracene	µg/g	2.9	X		09/23/94
Fluoranthene	µg/g	2.9	5.65		09/23/94
Fluorene	µg/g	2.9	2.01	J	09/23/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	2.9	17.4		09/23/94
2-Methyl Naphthalene	µg/g	2.9	3.10		09/23/94
Phenanthrene	µg/g	2.9	7.00		09/23/94
Pyrene	µg/g	2.9	17.8		09/23/94
Naphthalene	µg/g	2.9	5.26		09/23/94

Soil Organic Extraction

COMP

09/21/94

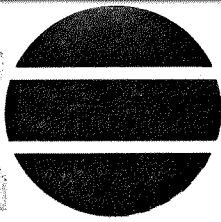
Analytical No.:

20812

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JH*

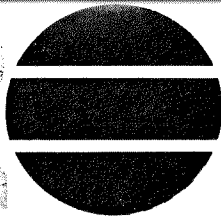
Attn: Cy Ingraham

## Qualifier Descriptions

CSL	Check standard for this analyte exhibited a low bias. Sample results may also be biased low. Non-detects were verified by comparison with a low standard.
DUP	Result of duplicate analysis in this quality assurance batch exceeds the limits for precision. Sample results may also show a degree of variability.
CSH	Check standard for this analyte exhibited a high bias. Sample results may also be biased high. Non-detects were verified by comparison with a low standard.
J	Estimated concentration below reporting limit.
SL	Recovery of surrogate was low. Result for sample may also be biased low.
SCR	Determination for indicated parameter is based on comparison of sample to a low standard at this equivalent concentration.
ISL	Internal standard recovery was below normal limits. Sample results may be biased high.
CAL	Estimated concentration beyond the calibration range, but within the detector range of the instrument.
OR	Estimated concentration beyond range of instrument detector.
XXX	Elevated detection limit.
MSL	Matrix spike recovery was low. Sample concentration may also be biased low.
HT	Extraction for this analysis was not completed within allowable holding time.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/14/94  
REPORT DATE: 10/10/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *[Signature]*

Attn: Cy Ingraham

## Qualifier Descriptions

- SH Recovery of surrogate was high. Result for sample may also be biased high.
- S1L Matrix spike recovery was low. Result for sample may also be biased low.
- S2L Matrix spike duplicate recovery was low. Result for sample may also be biased low.
- \* See cover letter narrative.
- S1H Matrix spike recovery was high. Sample concentration may also be biased high.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# REQUEST FOR SERVICES

303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## CLIENT INFORMATION

Name: SHORT ELLIOTT HENDRICKSON INC.  
Company: \_\_\_\_\_  
Address: 421 Franette Drive  
Chippewa Falls, WI 54729  
Phone: (715) 720-6200  
P.O. #/ Project #: WIDNR9401  
Quote Reference #: 02265-9  
Note: Terms and conditions printed on back apply. 21-0412

Turnaround Time \_\_\_\_\_  
 Normal  
 Rush  
Date Needed \_\_\_\_\_  
(Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

- Sample Type**  
(Check all that apply)  
 Groundwater  
 Wastewater  
 Soil  
 Solid Waste  
 Oil  
 Other \_\_\_\_\_
- Sample Handling**  
 Nonhazardous  
 Flammable  
 Skin Irritant  
 Highly Toxic  
 Other (specify) \_\_\_\_\_  
 Refrigerate  
 Work in Hood  
 Wear Gloves

LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMPLE ID	REMARKS
12020784	9-06-94	12:55pm	2	TW-1, S3 4.5-6.5ft	<i>S-EPA 8021 SW846-8021 S-EPA 8021 SW846-8270 S-Vent VOCs, PAHs, Cd, Pb, Se, EPA 200.7 MPREP, TS</i>
12020785	9-06-94	1:25pm	2	TW-1, S6 12-14ft	
12020786	9-06-94	2:35pm	2	TW-2, S5 9.5-11.5ft	
12020787	9-06-94	3:10pm	2	TW-2, S7 14.5-16.5ft	
12020788	9-06-94	4:50pm	2	TW-3, S4 7-9ft	
12020789	9-07-94	7:05am	2	TW-4, S4 7-9ft	
12020790	9-07-94	9:05am	2	TW-5, S5 9.5-11.5ft	
12020791	9-07-94	9:20am	2	TW-5, S6 12-14ft	
12020792	9-07-94	9:30am	1	TW-5, S7 14.5-16.5ft	
12020793	9-07-94	10:55am	1	TW-6, S4 7-9ft	2 jars

SHORT

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)  
John E. Hull

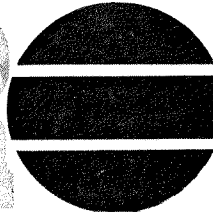
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
<u>John E. Hull</u>	9-12-94 8:00am	

Del'v: Hand Comm  
Ship. Cont. OK?  N: N/A  
Rec'd Refrig.?  N: N/A  
Seals OK?  N: N/A  
Samples leaking?  N: N/A  
Comments: 21408-21426  
*Rec'd in ice*

Pg 1 of 3

RECEIVED FOR LABORATORY BY: (Signature) Thm... DATE/TIME 9/14/94 12:35 P.M.

# REQUEST FOR SERVICES



303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## CLIENT INFORMATION

Name: Cy Ingraham  
 Company: Short Elliott Hendrickson Inc.  
 Address: 421 Frenette Drive  
Chippewa Falls, WI 54729  
 Phone: (715) 720-6200  
 P.O. # / Project #: WIDNR9401  
 Quote / Reference #: 02265-9  
 Note: Terms and conditions printed on back apply.

Turnaround Time \_\_\_\_\_  
 Normal  
 Rush  
 Date Needed \_\_\_\_\_  
 (Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

- | Sample Type                              | Sample Handling  |
|--|--|
| (Check all that apply)                   | <input type="checkbox"/> Nonhazardous <input checked="" type="checkbox"/> Refrigerate  |
| <input type="checkbox"/> Groundwater     | <input type="checkbox"/> Flammable <input type="checkbox"/> Work in Hood               |
| <input type="checkbox"/> Wastewater      | <input type="checkbox"/> Skin Irritant <input checked="" type="checkbox"/> Wear Gloves |
| <input checked="" type="checkbox"/> Soil | <input type="checkbox"/> Highly Toxic  |
| <input type="checkbox"/> Solid Waste     | <input type="checkbox"/> Other (specify) _____   |
| <input type="checkbox"/> Oil             |  |
| <input type="checkbox"/> Other _____     |  |

21-0412

LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMPLE ID	REMARKS
12020794	9-07-94	11:05am	2	TW-6, S5 9.5-11.5ft	S-EPA 8021 S-EPA 8021 VOCs SW846 - 8021 PAH S-OXY S-EPA 8270 PAH SW846 - 8021 Cd, Pb, Se EPA-200.7 MPEPITS
12020795	9-07-94	11:35am	2	TW-6, S7 14.5-16.5ft	
12020796	9-07-94	3:30pm	2	TW-7, S6 12-14ft	
12020797	9-07-94	4:45pm	2	TW-8, S3 4.5-6.5ft	
12020798	9-08-94	6:45am	2	TW-9, S5 9.5-11.5ft	
12020799	9-08-94	9:50am	2	TW-10, S3 4.5-6.5ft	
12020800	9-08-94	10:05am	2	TW-10, S6 12-14ft	
12020801	9-08-94	11:30am	2	TW-11, S6 12-14ft	
12020802	9-08-94	2:10pm	2	TW-12, S3 4.5-6.5ft	

SHORT

## CHAIN OF CUSTODY RECORD

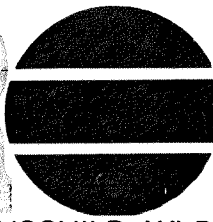
SAMPLERS: (Signature)  
John E. Hoff

RELINQUISHED BY: (Signature) <u>John E. Hoff</u>	DATE/TIME 9-12-94 8:00am	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) <u>John Wilson</u>
		DATE/TIME 9/14/94 12:35 P.M.

Del'v: Hand Comm  
 Ship. Cont. OK?  Y  N N/A  
 Rec'd Refrig.?  Y  N N/A  
 Seals OK?  Y  N N/A  
 Samples leaking?  Y  N N/A  
 Comments: \_\_\_\_\_  
 21408-21426  
 pg 2 of 3

Rec'd  
 ok  
 use

# REQUEST FOR SERVICES



303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## CLIENT INFORMATION

Name: Cy Ingraham  
 Company: Short Elliott Hendrickson Inc.  
 Address: 421 Fernette Drive  
Chippewa Falls, WI 54729  
 Phone: (715) 720-6200  
 P.O. #/Project #: WIDNR 9401  
 Quote/Reference #: 02265-9  
 Note: Terms and conditions printed on back apply.

Turnaround Time \_\_\_\_\_

- Normal  
 Rush

Date Needed \_\_\_\_\_

(Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

### Sample Type

- (Check all that apply)
- Groundwater
  - Wastewater
  - Soil
  - Solid Waste
  - Oil
  - Other \_\_\_\_\_

### Sample Handling

- Nonhazardous
- Flammable
- Skin Irritant
- Highly Toxic
- Other (specify) \_\_\_\_\_
- Refrigerate
- Work in Hood
- Wear Gloves

21-0412

S EPA 802	VOCs SW846-VOC PUV	PAHs SW846-8021	PCBs SW846-EPA 8270	Cd, Pb, Se EPA 8080	MPCP ITS
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LAB USE ONLY	DATE	TIME	No. of Containers		SAMPLE ID	REMARKS
			COMP	GRAB		
12020803	9-07-94	3:00pm		2	TP-1, 5-7 ft	
12020804	9-07-94	11:35am		3	TP-2, 2-4 ft	
12020805	9-07-94	11:35am		2	TP-2, 6-8 ft	
12020806	9-07-94	1:30pm		2	TP-3, 2-4 ft	
12020807	9-07-94	11:00am		2	TP-4, 4-6 ft	
12020808	9-07-94	9:30am		2	TP-5, 6-8 ft	
12020809	9-07-94	10:15am		2	TP-6, 5-7 ft	
12020810	9-07-94	2:10pm		2	TP-7, 2-4 ft	
12020811	9-07-94	8:50am		2	TP-8, 5-7 ft	
12020812	9-07-94	2:35pm		2	TP-9, 2-4 ft	

SHORT

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)  
John E. Helf

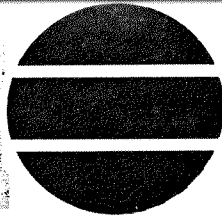
RELINQUISHED BY: (Signature) <u>John E. Helf</u>	DATE/TIME 9-12-94 8:00am	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) <u>John Wilborn</u>

Del'v: Hand Comm  
 Ship. Cont. OK?  N N/A  
 Rec'd Refrig.?  N N/A  
 Seals OK?  N N/A  
 Samples leaking?  N N/A  
 Comments: \_\_\_\_\_  
 21405-21426

pg 3 of 3

9/14/94 12:35 P.M.

# ANALYTICAL REPORT



Port Elliott Hendrickson, Inc.  
 21 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 11/29/94  
 REPORT DATE: 12/09/94  
 PREPARED BY: MRD *Mrd*  
 REVIEWED BY: *[Signature]*

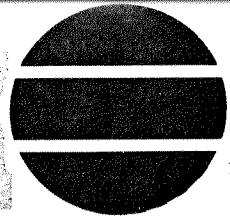
Attn: John Guhl

	Units	Detection Limit	TW-13, S7 14-16' 11/21/94	Qualifiers	Date Analyzed
<b>8020</b>					
Naphthalene	µg/g	10.2	165.		12/02/94
<b>8021</b>					
Benzene	µg/g	0.25	11.2	DUP	11/30/94
Bromobenzene	µg/g	0.64	X	CSH	11/30/94
Bromochloromethane	µg/g	0.94	X	CSL	11/30/94
Bromodichloromethane	µg/g	0.64	X	CSL	11/30/94
Bromoform	µg/g	2.6	X	CSL	11/30/94
Bromomethane	µg/g	5.1	X		11/30/94
n-Butylbenzene	µg/g	1.3	4.43		11/30/94
sec-Butylbenzene	µg/g	1.3	2.45		11/30/94
tert-Butylbenzene	µg/g	1.3	X		11/30/94
Carbon Tetrachloride	µg/g	0.64	X	CSL	11/30/94
Chlorobenzene	µg/g	2.6	X		11/30/94
Chlorodibromomethane	µg/g	0.64	X	CSL	11/30/94
Chloroethane	µg/g	2.6	X		11/30/94
Chloroform	µg/g	0.64	X	CSL	11/30/94
Chloromethane	µg/g	2.6	X	CSH	11/30/94
o-Chlorotoluene	µg/g	1.3	X	CSH	11/30/94
p-Chlorotoluene	µg/g	1.3	X	CSH	11/30/94
1,2-Dibromo-3-chloropropane	µg/g	17.	X	CSL	11/30/94
1,2-Dibromoethane	µg/g	1.3	X		11/30/94
Dibromomethane	µg/g	0.64	X	CSL	11/30/94
1,2-Dichlorobenzene	µg/g	1.3	X	CSH	11/30/94
1,3-Dichlorobenzene	µg/g	1.3	X	CSH	11/30/94
1,4-Dichlorobenzene	µg/g	0.64	X	CSH	11/30/94
Dichlorodifluoromethane	µg/g	2.6	X	CSH	11/30/94
1,1-Dichloroethane	µg/g	0.64	X	CSL	11/30/94
1,2-Dichloroethane	µg/g	0.64	X		11/30/94
1,1-Dichloroethylene	µg/g	0.51	X		11/30/94
cis-1,2-Dichloroethylene	µg/g	0.64	X	CSL	11/30/94
trans-1,2-Dichloroethylene	µg/g	0.64	X	CSL	11/30/94
1,2-Dichloropropane	µg/g	0.64	X	CSL	11/30/94
1,3-Dichloropropane	µg/g	0.64	X		11/30/94
2,2-Dichloropropane	µg/g	2.6	X	CSL	11/30/94
1,1-Dichloropropene	µg/g	1.3	X	CSL	11/30/94
1,3-Dichloropropene	µg/g	0.64	X		11/30/94
Ethylbenzene	µg/g	1.3	12.2		11/30/94
Hexachlorobutadiene	µg/g	1.3	X	CSL	11/30/94
Isopropylbenzene	µg/g	1.3	X	CSH DUP	11/30/94
p-Isopropyltoluene	µg/g	1.3	35.9		11/30/94

Analytical No.: 26758

= Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



Port Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 11/29/94  
 REPORT DATE: 12/09/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *[Signature]*

Attn: John Guhl

	Units	Detection TW-13, S7 14-16'		Qualifiers	Date Analyzed
		Limit	11/21/94		
Methyl tert Butyl Ether	µg/g	2.6	X		11/30/94
Methylene Chloride	µg/g	3.2	X		11/30/94
n-Propylbenzene	µg/g	1.3	1.66		11/30/94
Styrene	µg/g	6.4	X		11/30/94
Tetrachloroethylene	µg/g	0.64	X		11/30/94
1,1,1,2-Tetrachloroethane	µg/g	0.64	X	CSL	11/30/94
1,1,2,2-Tetrachloroethane	µg/g	1.3	X	CSL	11/30/94
Toluene	µg/g	2.5	6.97		11/30/94
1,2,3-Trichlorobenzene	µg/g	1.3	X	CSH	11/30/94
1,2,4-Trichlorobenzene	µg/g	1.3	X	CSH	11/30/94
1,1,1-Trichloroethane	µg/g	0.64	X	CSL	11/30/94
1,1,2-Trichloroethane	µg/g	0.64	X	CSL	11/30/94
Trichloroethylene	µg/g	0.26	X		11/30/94
Trichlorofluoromethane	µg/g	1.3	X		11/30/94
1,2,3-Trichloropropane	µg/g	2.6	X		11/30/94
1,2,4-Trimethylbenzene	µg/g	1.3	8.56		11/30/94
1,3,5-Trimethylbenzene	µg/g	1.3	3.18		11/30/94
Vinyl Chloride	µg/g	0.26	X		11/30/94
m- & p-Xylene	µg/g	1.3	8.58	DUP	11/30/94
o-Xylene & Styrene	µg/g	1.3	4.90		11/30/94
<b>270</b>					
Acenaphthene	µg/g	6.6	77.2		12/02/94
Acenaphthylene	µg/g	6.6	40.7		12/02/94
Anthracene	µg/g	6.6	42.5		12/02/94
Benzo (a) Anthracene	µg/g	6.6	36.4		12/02/94
Benzo (a) Pyrene	µg/g	6.6	44.1		12/02/94
Benzo (b) Fluoranthene	µg/g	6.6	36.0		12/02/94
Benzo (k) Fluoranthene	µg/g	6.6	16.3		12/02/94
Benzo (ghi) Perylene	µg/g	6.6	28.8		12/02/94
Chrysene	µg/g	6.6	37.0		12/02/94
Dibenzo (a, h) Anthracene	µg/g	6.6	4.27	J	12/02/94
Fluoranthene	µg/g	6.6	54.7		12/02/94
Fluorene	µg/g	6.6	46.4		12/02/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	6.6	24.0		12/02/94
2-Methyl Naphthalene	µg/g	6.6	168.		12/02/94
Naphthalene	µg/g	6.6	247.		12/02/94
Phenanthrene	µg/g	6.6	159.		12/02/94
Pyrene	µg/g	6.6	93.5		12/02/94
Soil Organic Extraction			COMP		12/01/94

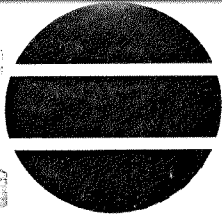
Analytical No.:

26758

= Analyzed but not detected.



# ANALYTICAL REPORT



Port Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 11/29/94  
 REPORT DATE: 12/09/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *HS*

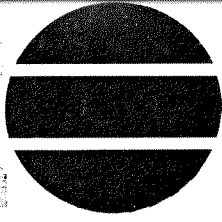
Attn: John Guhl

	Units	Detection TW-13, S9 18-20'		Qualifiers	Date Analyzed
		Limit	11/21/94		
<u>8020</u> Naphthalene	µg/g	24.	1,640.		12/02/94
<u>8021</u> Benzene	µg/g	0.95	19.8	DUP	11/30/94
Bromobenzene	µg/g	2.4	X	CSH	11/30/94
Bromochloromethane	µg/g	3.51	X	CSL	11/30/94
Bromodichloromethane	µg/g	2.4	X	CSL	11/30/94
Bromoform	µg/g	9.5	X	CSL	11/30/94
Bromomethane	µg/g	19.	X		11/30/94
n-Butylbenzene	µg/g	4.8	16.8		11/30/94
sec-Butylbenzene	µg/g	4.8	X		11/30/94
tert-Butylbenzene	µg/g	4.8	X		11/30/94
Carbon Tetrachloride	µg/g	2.4	X	CSL	11/30/94
Chlorobenzene	µg/g	9.5	X		11/30/94
Chlorodibromomethane	µg/g	2.4	X	CSL	11/30/94
Chloroethane	µg/g	9.5	X		11/30/94
Chloroform	µg/g	2.4	X	CSL	11/30/94
Chloromethane	µg/g	9.5	X	CSH	11/30/94
o-Chlorotoluene	µg/g	4.8	X	CSH	11/30/94
p-Chlorotoluene	µg/g	4.8	X	CSH	11/30/94
1,2-Dibromo-3-chloropropane	µg/g	63.	X	CSL	11/30/94
1,2-Dibromoethane	µg/g	4.8	X		11/30/94
Dibromomethane	µg/g	2.4	X	CSL	11/30/94
1,2-Dichlorobenzene	µg/g	4.8	X	CSH	11/30/94
1,3-Dichlorobenzene	µg/g	4.8	X	CSH	11/30/94
1,4-Dichlorobenzene	µg/g	2.4	X	CSH	11/30/94
Dichlorodifluoromethane	µg/g	9.5	X	CSH	11/30/94
1,1-Dichloroethane	µg/g	2.4	X	CSL	11/30/94
1,2-Dichloroethane	µg/g	2.4	X		11/30/94
1,1-Dichloroethylene	µg/g	1.9	X		11/30/94
cis-1,2-Dichloroethylene	µg/g	2.4	X	CSL	11/30/94
trans-1,2-Dichloroethylene	µg/g	2.4	X	CSL	11/30/94
1,2-Dichloropropane	µg/g	2.4	X	CSL	11/30/94
1,3-Dichloropropane	µg/g	2.4	X		11/30/94
2,2-Dichloropropane	µg/g	9.5	X	CSL	11/30/94
1,1-Dichloropropene	µg/g	4.8	X	CSL	11/30/94
1,3-Dichloropropene	µg/g	2.4	X		11/30/94
Ethylbenzene	µg/g	4.8	75.8		11/30/94
Hexachlorobutadiene	µg/g	4.8	X	CSL	11/30/94
Isopropylbenzene	µg/g	4.8	6.67	CSH DUP	11/30/94
p-Isopropyltoluene	µg/g	4.8	X		11/30/94
Methyl tert Butyl Ether	µg/g	9.5	X		11/30/94

Analytical No.: 26759

X = Analyzed but not detected.  
 Results calculated on a dry weight basis.

# ANALYTICAL REPORT



hort Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 11/29/94  
 REPORT DATE: 12/09/94  
 PREPARED BY: MRD *MD*  
 REVIEWED BY: *[Signature]*

Attn: John Guhl

	Units	Detection TW-13, S9 18-20'		Qualifiers	Date Analyzed
		Limit	11/21/94		
Methylene Chloride	µg/g	12.	X		11/30/94
n-Propylbenzene	µg/g	4.8	6.50		11/30/94
Styrene	µg/g	24.	X		11/30/94
Tetrachloroethylene	µg/g	2.4	X		11/30/94
1,1,1,2-Tetrachloroethane	µg/g	2.4	X	CSL	11/30/94
1,1,2,2-Tetrachloroethane	µg/g	4.8	X	CSL	11/30/94
Toluene	µg/g	9.5	43.2		11/30/94
1,2,3-Trichlorobenzene	µg/g	4.8	X	CSH	11/30/94
1,2,4-Trichlorobenzene	µg/g	4.8	X	CSH	11/30/94
1,1,1-Trichloroethane	µg/g	2.4	X	CSL	11/30/94
1,1,2-Trichloroethane	µg/g	2.4	X	CSL	11/30/94
Trichloroethylene	µg/g	0.95	X		11/30/94
Trichlorofluoromethane	µg/g	4.8	X		11/30/94
1,2,3-Trichloropropane	µg/g	9.5	X		11/30/94
1,2,4-Trimethylbenzene	µg/g	4.8	62.9		11/30/94
1,3,5-Trimethylbenzene	µg/g	4.8	22.6		11/30/94
Vinyl Chloride	µg/g	0.95	X		11/30/94
m- & p-Xylene	µg/g	4.8	62.7	DUP	11/30/94
o-Xylene	µg/g	4.8	31.4		11/30/94
<b>270</b>					
Acenaphthene	µg/g	16.	93.6		12/02/94
Acenaphthylene	µg/g	16.	354		12/02/94
Anthracene	µg/g	16.	163		12/02/94
Benzo (a) Anthracene	µg/g	16.	106		12/02/94
Benzo (a) Pyrene	µg/g	16.	111		12/02/94
Benzo (b) Fluoranthene	µg/g	16.	89.6		12/02/94
Benzo (k) Fluoranthene	µg/g	16.	42.8		12/02/94
Benzo (ghi) Perylene	µg/g	16.	67.6		12/02/94
Chrysene	µg/g	16.	101		12/02/94
Dibenzo (a, h) Anthracene	µg/g	16.	10.6	J	12/02/94
Fluoranthene	µg/g	16.	200		12/02/94
Fluorene	µg/g	16.	184		12/02/94
Indeno (1, 2, 3-cd) Pyrene	µg/g	16.	56.0		12/02/94
2-Methyl Naphthalene	µg/g	16.	1,209		12/02/94
Naphthalene	µg/g	16.	2,256		12/02/94
Phenanthrene	µg/g	16.	545		12/02/94
Pyrene	µg/g	16.	292		12/02/94
Soil Organic Extraction			COMP		12/01/94

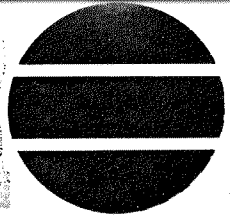
analytical No.:

26759

\* = Analyzed but not detected.

Analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



hort Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

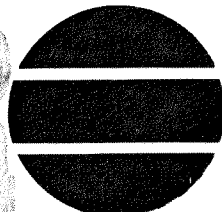
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 11/29/94  
REPORT DATE: 12/09/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JG*

Attn: John Guhl

## Qualifier Descriptions

- HT Analysis of this analyte was not completed within the allowable holding time.
- CAL Estimated concentration beyond the calibration range, but within the detector range of the instrument.
- DUP Result of duplicate analysis in this quality assurance batch exceeds the limits for precision. Sample results may also show a degree of variability.
- CSH Check standard for this analyte exhibited a high bias. Sample results may also be biased high. Non-detects were verified by comparison with a low standard.
- CSL Check standard for this analyte exhibited a low bias. Sample results may also be biased low. Non-detects were verified by comparison with a low standard.
- J Estimated concentration below reporting limit.

# REQUEST FOR SERVICES



303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## JOHN GULL CLIENT INFORMATION

Name: SHORT ELLIOTT HENDRICKSON INC.  
 Company: \_\_\_\_\_  
 Address: 421 FRENETTE DR.  
CHIPPEWA FALLS, WI 54724  
 Phone: (715) 720-6200  
 P.O. # Project # WIDNR9401  
 Quote / Reference #: 2528-9  
 Note: Terms and conditions printed on back apply.

Turnaround Time \_\_\_\_\_  
 Normal  
 Rush  
 Date Needed \_\_\_\_\_  
 (Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

01-0412

*Handwritten notes:*  
 5-EPA 8021 VOC  
 VOCs  
 PAHs 8021  
 EPA 625 P 50-EXT  
 TS

### Sample Type

(Check all that apply)

- Groundwater
- Wastewater
- Soil
- Solid Waste
- Oil
- Other \_\_\_\_\_

### Sample Handling

- Nonhazardous
- Flammable
- Skin Irritant
- Highly Toxic
- Other (specify) \_\_\_\_\_
- Refrigerate
- Work in Hood
- Wear Gloves

LAB USE ONLY	DATE	TIME	No. of Containers		SAMPLE ID	REMARKS
			COMP	GRAB		
04026758	11-21-94	3:00pm	2		TW-13, S7 14-16ft	
04026759	11-21-94	3:15pm	2		TW-13, S9 18-20ft	

SHORT

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)  
*John E. Gull*

RELINQUISHED BY: (Signature) <i>John E. Gull</i>	DATE/TIME 11-28-94 10:42	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) <i>Deborah</i>
		DATE/TIME 11/29/94 8:30 am

Del'v: Hand Comm  
 Ship. Cont. OK?  Y  
 Rec'd Refrig.?  Y  
 Seals OK?  Y  
 Samples leaking?  Y  
 Comments: \_\_\_\_\_

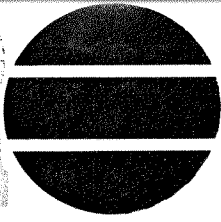
*Rec'd*  
*W*

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## **Appendix G**

### **Groundwater Analytical Results**

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD-mrd  
 REVIEWED BY: *[Signature]*

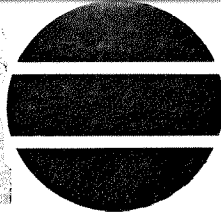
Attn: Cyrus W. Ingraham

	Units	Detection Limit	MW-1 09/15/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	1.54		10/06/94
Zinc	mg/l	0.017	X		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 218.5</b>					
Chromium (GFAAS)	mg/l	0.0032	X		09/29/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00272		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	8.89		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	40.0	2,440.		09/27/94
Bromobenzene	µg/l	100.0	X		09/27/94
Bromochloromethane	µg/l	200.0	X		09/27/94
Bromodichloromethane	µg/l	100.0	X	CSL	09/27/94
Bromoform	µg/l	400.0	X		09/27/94
Bromomethane	µg/l	800.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	200.0	652.		09/27/94
sec-Butylbenzene	µg/l	200.0	X		09/27/94
tert-Butylbenzene	µg/l	200.0	202.	CSH	09/27/94
Carbon Tetrachloride	µg/l	100.0	X		09/27/94
Chlorobenzene	µg/l	400.0	X		09/27/94
Chlorodibromomethane	µg/l	100.0	X		09/27/94
Chloroethane	µg/l	400.0	X	CSH	09/27/94
Chloroform	µg/l	100.0	X	CSL	09/27/94
Chloromethane	µg/l	400.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	2660.0	X		09/27/94
1,2-Dibromoethane	µg/l	200.0	X		09/27/94
Dibromomethane	µg/l	100.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	100.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	400.0	X	DUP	09/27/94
1,1-Dichloroethane	µg/l	100.0	X		09/27/94
1,2-Dichloroethane	µg/l	100.0	X		09/27/94
1,1-Dichloroethylene	µg/l	80.0	X		09/27/94

Analytical No.: 21410

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *Muc*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	MW-1 09/15/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	100.0	X		09/27/94
1,3-Dichloropropane	µg/l	100.0	X		09/27/94
2,2-Dichloropropane	µg/l	400.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	200.0	X		09/27/94
1,3-Dichloropropene	µg/l	100.0	X	CSL	09/27/94
Ethylbenzene	µg/l	200.0	292.		09/27/94
Hexachlorobutadiene	µg/l	200.0	X		09/27/94
Isopropylbenzene	µg/l	200.0	X		09/27/94
p-Isopropyltoluene	µg/l	200.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	400.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	500.0	X		09/27/94
Naphthalene	µg/l	200.0	2,360.		09/27/94
n-Propylbenzene	µg/l	200.0	X	CSH	09/27/94
Styrene	µg/l	1000.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	100.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	100.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	200.0	X		09/27/94
Toluene	µg/l	400.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	200.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	100.0	X		09/27/94
1,1,2-Trichloroethane	µg/l	100.0	X		09/27/94
Trichloroethylene	µg/l	40.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	200.0	X		09/27/94
1,2,3-Trichloropropane	µg/l	400.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	200.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	200.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	40.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	200.0	X		09/27/94
o-Xylene	µg/l	200.0	X	CSH	09/27/94

**EPA 8270**

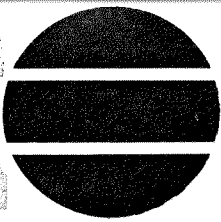
Acenaphthene	µg/l	10.0	185.		09/23/94
Acenaphthylene	µg/l	10.0	5.16	J	09/23/94
Anthracene	µg/l	10.0	8.25	J	09/23/94
Benzo (a) Anthracene	µg/l	10.0	4.37	J	09/23/94
Benzo (a) Pyrene	µg/l	10.0	3.39	J	09/23/94
Benzo (b) Fluoranthene	µg/l	10.0	2.69	J	09/23/94
Benzo (k) Fluoranthene	µg/l	10.0	X		09/23/94
Benzo (ghi) Perylene	µg/l	10.0	X		09/23/94
Chrysene	µg/l	10.0	X		09/23/94
Dibenzo (a, h) Anthracene	µg/l	10.0	X		09/23/94
Fluoranthene	µg/l	10.0	9.39	J	09/23/94
Fluorene	µg/l	10.0	44.4		09/23/94

Analytical No.: 21410

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

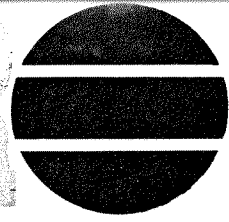
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-1 09/15/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1, 2, 3-cd) Pyrene	µg/l	10.0	X		09/23/94
2-Methyl Naphthalene	µg/l	10.0	268.		09/23/94
Phenanthrene	µg/l	10.0	52.4		09/23/94
Pyrene	µg/l	10.0	14.6		09/23/94
Naphthalene	µg/l	10.0	470.		09/23/94
Water Organic Extraction			COMP		09/22/94

Analytical No.: 21410



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *mnd*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

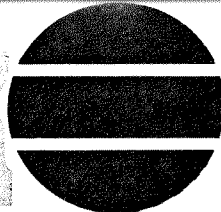
	Units	Detection Limit	MW-2 09/15/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	0.030		10/05/94
Iron	mg/l	0.010	0.429		10/06/94
Zinc	mg/l	0.017	0.068		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 218.5</b>					
Chromium (GFAAS)	mg/l	0.0032	X		09/29/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00302		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	17.4		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	236.		09/27/94
Bromobenzene	µg/l	25.0	X		09/27/94
Bromochloromethane	µg/l	50.0	X		09/27/94
Bromodichloromethane	µg/l	25.0	X	CSL	09/27/94
Bromoform	µg/l	100.0	X		09/27/94
Bromomethane	µg/l	200.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	50.0	279.		09/27/94
sec-Butylbenzene	µg/l	50.0	X		09/27/94
tert-Butylbenzene	µg/l	50.0	66.6	CSH	09/27/94
Carbon Tetrachloride	µg/l	25.0	X		09/27/94
Chlorobenzene	µg/l	100.0	X		09/27/94
Chlorodibromomethane	µg/l	25.0	X		09/27/94
Chloroethane	µg/l	100.0	X	CSH	09/27/94
Chloroform	µg/l	25.0	X	CSL	09/27/94
Chloromethane	µg/l	100.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	50.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	50.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X		09/27/94
1,2-Dibromoethane	µg/l	50.0	X		09/27/94
Dibromomethane	µg/l	25.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	25.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	100.0	X	DUP	09/27/94
1,1-Dichloroethane	µg/l	25.0	X		09/27/94
1,2-Dichloroethane	µg/l	25.0	X		09/27/94
1,1-Dichloroethylene	µg/l	20.0	X		09/27/94

Analytical No.: 21409

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mod*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	MW-2 09/15/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	25.0	X		09/27/94
1,3-Dichloropropane	µg/l	25.0	X		09/27/94
2,2-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	50.0	X		09/27/94
1,3-Dichloropropene	µg/l	25.0	X	CSL	09/27/94
Ethylbenzene	µg/l	50.0	124.		09/27/94
Hexachlorobutadiene	µg/l	50.0	X		09/27/94
Isopropylbenzene	µg/l	50.0	X		09/27/94
p-Isopropyltoluene	µg/l	50.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	100.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	125.0	X		09/27/94
Naphthalene	µg/l	50.0	1,000.		09/27/94
n-Propylbenzene	µg/l	50.0	X	CSH	09/27/94
Tetrachloroethylene	µg/l	25.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		09/27/94
Toluene	µg/l	100.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	50.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	25.0	X		09/27/94
1,1,2-Trichloroethane	µg/l	25.0	X		09/27/94
Trichloroethylene	µg/l	10.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	50.0	X		09/27/94
1,2,3-Trichloropropane	µg/l	100.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	50.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	10.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	50.0	X		09/27/94
o-Xylene & Styrene	µg/l	50.0	104.	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.0	7.85	J	09/23/94
Acenaphthylene	µg/l	10.0	X		09/23/94
Anthracene	µg/l	10.0	X		09/23/94
Benzo (a) Anthracene	µg/l	10.0	X		09/23/94
Benzo (a) Pyrene	µg/l	10.0	X		09/23/94
Benzo (b) Fluoranthene	µg/l	10.0	X		09/23/94
Benzo (k) Fluoranthene	µg/l	10.0	X		09/23/94
Benzo (ghi) Perylene	µg/l	10.0	X		09/23/94
Chrysene	µg/l	10.0	X		09/23/94
Dibenzo (a, h) Anthracene	µg/l	10.0	X		09/23/94
Fluoranthene	µg/l	10.0	1.81	J	09/23/94
Fluorene	µg/l	10.0	1.34	J	09/23/94

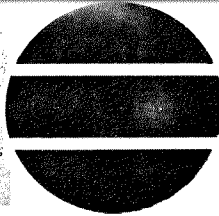
Analytical No.:

21409

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *J*

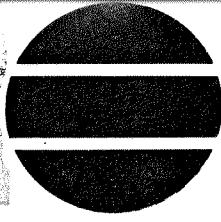
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-2 09/15/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	10.0	X		09/23/94
2-Methyl Naphthalene	µg/l	10.0	X		09/23/94
Phenanthrene	µg/l	10.0	0.812	J	09/23/94
Pyrene	µg/l	10.0	3.40	J	09/23/94
Naphthalene	µg/l	10.0	0.894	J	09/23/94
Water Organic Extraction			COMP		09/22/94

Analytical No.: 21409

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

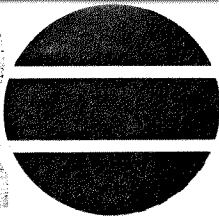
Attn: Cyrus W. Ingraham

	Units	Detection Limit	MW-3 09/15/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	1.18		10/06/94
Zinc	mg/l	0.017	0.077		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00383		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	17.1		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	1.2		09/27/94
Bromobenzene	µg/l	0.5	X		09/27/94
Bromochloromethane	µg/l	1.0	X		09/27/94
Bromodichloromethane	µg/l	0.5	X	CSL	09/27/94
Bromoform	µg/l	2.0	X		09/27/94
Bromomethane	µg/l	4.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	1.0	1.5		09/27/94
sec-Butylbenzene	µg/l	1.0	X		09/27/94
tert-Butylbenzene	µg/l	1.0	1.0	CSH	09/27/94
Carbon Tetrachloride	µg/l	0.5	X		09/27/94
Chlorobenzene	µg/l	2.0	X		09/27/94
Chlorodibromomethane	µg/l	0.5	X		09/27/94
Chloroethane	µg/l	2.0	X	CSH	09/27/94
Chloroform	µg/l	0.5	X	CSL	09/27/94
Chloromethane	µg/l	2.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	1.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	1.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X		09/27/94
1,2-Dibromoethane	µg/l	1.0	X		09/27/94
Dibromomethane	µg/l	0.5	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	0.5	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	2.0	X	DUP	09/27/94
1,1-Dichloroethane	µg/l	0.5	X		09/27/94
1,2-Dichloroethane	µg/l	0.5	X		09/27/94
1,1-Dichloroethylene	µg/l	0.4	X		09/27/94

Analytical No.: 21413

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	MW-3 09/15/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	0.5	X		09/27/94
1,3-Dichloropropane	µg/l	0.5	X		09/27/94
2,2-Dichloropropane	µg/l	2.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	1.0	X		09/27/94
1,3-Dichloropropene	µg/l	0.5	X	CSL	09/27/94
Ethylbenzene	µg/l	1.0	X		09/27/94
Hexachlorobutadiene	µg/l	1.0	X		09/27/94
Isopropylbenzene	µg/l	1.0	X		09/27/94
p-Isopropyltoluene	µg/l	1.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	2.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	2.5	X		09/27/94
Naphthalene	µg/l	1.0	1.4		09/27/94
n-Propylbenzene	µg/l	1.0	X	CSH	09/27/94
Styrene	µg/l	5.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	0.5	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		09/27/94
Toluene	µg/l	2.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	1.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	0.5	X		09/27/94
1,1,2-Trichloroethane	µg/l	0.5	X		09/27/94
Trichloroethylene	µg/l	0.2	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	1.0	X		09/27/94
1,2,3-Trichloropropane	µg/l	2.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	1.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	0.2	X	DUP	09/27/94
m- & p-Xylene	µg/l	1.0	X		09/27/94
o-Xylene	µg/l	1.0	X	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	100.0	24.9	J	09/27/94
Acenaphthylene	µg/l	100.0	13.2	J	09/27/94
Anthracene	µg/l	100.0	25.9	J	09/27/94
Benzo (a) Anthracene	µg/l	100.0	142.		09/27/94
Benzo (a) Pyrene	µg/l	100.0	163.		09/27/94
Benzo (b) Fluoranthene	µg/l	100.0	97.4	J	09/27/94
Benzo (k) Fluoranthene	µg/l	100.0	59.8	J	09/27/94
Benzo (ghi) Perylene	µg/l	100.0	63.0	J	09/27/94
Chrysene	µg/l	100.0	125.		09/27/94
Dibenzo (a, h) Anthracene	µg/l	100.0	X		09/27/94
Fluoranthene	µg/l	100.0	169.		09/27/94
Fluorene	µg/l	100.0	X		09/27/94

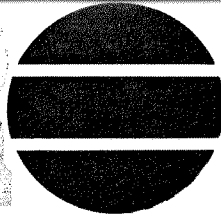
Analytical No.:

21413

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mad*  
REVIEWED BY: *[Signature]*

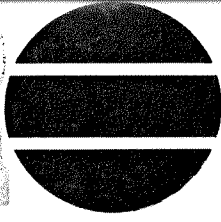
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-3 09/15/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	100.0	53.7	J	09/27/94
2-Methyl Naphthalene	µg/l	100.0	X		09/27/94
Phenanthrene	µg/l	100.0	33.8	J	09/27/94
Pyrene	µg/l	100.0	502.		09/27/94
Naphthalene	µg/l	100.0	X		09/27/94
Water Organic Extraction			COMP		09/22/94

Analytical No.: 21413

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *JC*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-1 09/15/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	3.14		10/06/94
Zinc	mg/l	0.017	0.025		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 218.5</b>					
Chromium (GFAAS)	mg/l	0.0032	X		09/29/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	X		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	37.7		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	5.0	513.	CSL	09/29/94
Bromobenzene	µg/l	12.5	X		09/29/94
Bromochloromethane	µg/l	25.0	X	CSH	09/29/94
Bromodichloromethane	µg/l	12.5	X		09/29/94
Bromoform	µg/l	50.0	X		09/29/94
Bromomethane	µg/l	100.0	X	CC	09/29/94
n-Butylbenzene	µg/l	25.0	X		09/29/94
sec-Butylbenzene	µg/l	25.0	X		09/29/94
tert-Butylbenzene	µg/l	25.0	X		09/29/94
Carbon Tetrachloride	µg/l	12.5	X		09/29/94
Chlorobenzene	µg/l	50.0	X	CSH	09/29/94
Chlorodibromomethane	µg/l	12.5	X	CSH	09/29/94
Chloroethane	µg/l	50.0	X		09/29/94
Chloroform	µg/l	12.5	X		09/29/94
Chloromethane	µg/l	50.0	X	CSL CC	09/29/94
o-Chlorotoluene	µg/l	25.0	X	CSH	09/29/94
p-Chlorotoluene	µg/l	25.0	X	CSH	09/29/94
1,2-Dibromo-3-chloropropane	µg/l	332.5	X	CSL CC	09/29/94
1,2-Dibromoethane	µg/l	25.0	X	CSH	09/29/94
Dibromomethane	µg/l	12.5	X		09/29/94
1,2-Dichlorobenzene	µg/l	25.0	X	CSH	09/29/94
1,3-Dichlorobenzene	µg/l	25.0	X	CSH	09/29/94
1,4-Dichlorobenzene	µg/l	12.5	X	CSH	09/29/94
Dichlorodifluoromethane	µg/l	50.0	X	CSL	09/29/94
1,1-Dichloroethane	µg/l	12.5	X		09/29/94
1,2-Dichloroethane	µg/l	12.5	X		09/29/94
1,1-Dichloroethylene	µg/l	10.0	X		09/29/94

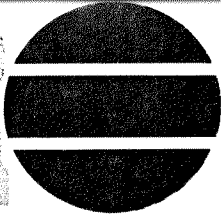
Analytical No.:

21411

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-1 09/15/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	12.5	X	CSL	09/29/94
trans-1,2-Dichloroethylene	µg/l	12.5	X		09/29/94
1,2-Dichloropropane	µg/l	12.5	X		09/29/94
1,3-Dichloropropane	µg/l	12.5	X	CSL	09/29/94
2,2-Dichloropropane	µg/l	50.0	X	CSL	09/29/94
1,1-Dichloropropene	µg/l	25.0	X		09/29/94
1,3-Dichloropropene	µg/l	12.5	X		09/29/94
Ethylbenzene	µg/l	25.0	46.6	CSL	09/29/94
Hexachlorobutadiene	µg/l	25.0	X		09/29/94
Isopropylbenzene	µg/l	25.0	X		09/29/94
p-Isopropyltoluene	µg/l	25.0	X		09/29/94
Methyl tert Butyl Ether	µg/l	50.0	X	CSL	09/29/94
Methylene Chloride	µg/l	62.5	X		09/29/94
Naphthalene	µg/l	25.0	455.		09/29/94
n-Propylbenzene	µg/l	25.0	X		09/29/94
Tetrachloroethylene	µg/l	12.5	X		09/29/94
1,1,1,2-Tetrachloroethane	µg/l	12.5	X		09/29/94
1,1,2,2-Tetrachloroethane	µg/l	25.0	X		09/29/94
Toluene	µg/l	50.0	X	CSL	09/29/94
1,2,3-Trichlorobenzene	µg/l	25.0	X	CSH	09/29/94
1,2,4-Trichlorobenzene	µg/l	25.0	X		09/29/94
1,1,1-Trichloroethane	µg/l	12.5	X		09/29/94
1,1,2-Trichloroethane	µg/l	12.5	X		09/29/94
Trichloroethylene	µg/l	5.0	X		09/29/94
Trichlorofluoromethane	µg/l	25.0	X		09/29/94
1,2,3-Trichloropropane	µg/l	50.0	X	CSH	09/29/94
1,2,4-Trimethylbenzene	µg/l	25.0	X	CSL	09/29/94
1,3,5-Trimethylbenzene	µg/l	25.0	X		09/29/94
Vinyl Chloride	µg/l	5.0	X		09/29/94
m- & p-Xylene	µg/l	25.0	30.7	CSH	09/29/94
o-Xylene & Styrene	µg/l	25.0	73.5	CSL	09/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.0	75.2		09/27/94
Acenaphthylene	µg/l	50.0	6.7	J	09/27/94
Anthracene	µg/l	50.0	21.7	J	09/27/94
Benzo (a) Anthracene	µg/l	50.0	49.8	J	09/27/94
Benzo (a) Pyrene	µg/l	50.0	48.3	J	09/27/94
Benzo (b) Fluoranthene	µg/l	50.0	37.7	J	09/27/94
Benzo (k) Fluoranthene	µg/l	50.0	18.0	J	09/27/94
Benzo (ghi) Perylene	µg/l	50.0	29.1	J	09/27/94
Chrysene	µg/l	50.0	48.8	J	09/27/94
Dibenzo (a, h) Anthracene	µg/l	50.0	X		09/27/94
Fluoranthene	µg/l	50.0	78.9		09/27/94
Fluorene	µg/l	50.0	24.2	J	09/27/94

Analytical No.:

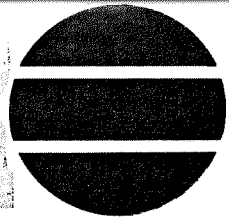
21411

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD/mrd  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-1</u> <u>09/15/94</u>	<u>Qualifiers</u>	<u>Date</u> <u>Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	50.0	24.1	J	09/27/94
2-Methyl Naphthalene	µg/l	50.0	7.56	J	09/27/94
Phenanthrene	µg/l	50.0	28.5	J	09/27/94
Pyrene	µg/l	50.0	188.		09/27/94
Naphthalene	µg/l	50.0	12.0	J	09/27/94
Water Organic Extraction			COMP		09/22/94

Analytical No.: 21411

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JR*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-2 09/19/94	Qualifiers	Date Analyzed
<b><u>EPA 200.7</u></b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	1.23		10/06/94
Zinc	mg/l	0.017	0.043		10/05/94
<b><u>EPA 206.2</u></b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b><u>EPA 218.2</u></b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b><u>EPA 239.2</u></b>					
Lead (GFAAS)	mg/l	0.002	0.00265		09/27/94
<b><u>EPA 415.2</u></b>					
Nonpurge Org. Carbon	mg/l	0.6	23.9		10/07/94
<b><u>EPA 8021</u></b>					
Benzene	µg/l	10.0	379.	CSL DUP	09/28/94
Bromobenzene	µg/l	25.0	X	CSL	09/28/94
Bromochloromethane	µg/l	50.0	X	CSL	09/28/94
Bromodichloromethane	µg/l	25.0	X	CSL	09/28/94
Bromoform	µg/l	100.0	X		09/28/94
Bromomethane	µg/l	200.0	X	CSL	09/28/94
n-Butylbenzene	µg/l	50.0	X	DUP	09/28/94
sec-Butylbenzene	µg/l	50.0	X		09/28/94
tert-Butylbenzene	µg/l	50.0	X		09/28/94
Carbon Tetrachloride	µg/l	25.0	X	CSL	09/28/94
Chlorobenzene	µg/l	100.0	X		09/28/94
Chlorodibromomethane	µg/l	25.0	X		09/28/94
Chloroethane	µg/l	100.0	X	CSL	09/28/94
Chloroform	µg/l	25.0	X	CSL DUP	09/28/94
Chloromethane	µg/l	100.0	X	CSL DUP	09/28/94
o-Chlorotoluene	µg/l	50.0	X		09/28/94
p-Chlorotoluene	µg/l	50.0	X		09/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X		09/28/94
1,2-Dibromoethane	µg/l	50.0	X	CSL	09/28/94
Dibromomethane	µg/l	25.0	X	CSL	09/28/94
1,2-Dichlorobenzene	µg/l	50.0	X		09/28/94
1,3-Dichlorobenzene	µg/l	50.0	X		09/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		09/28/94
Dichlorodifluoromethane	µg/l	100.0	X	CSL	09/28/94
1,1-Dichloroethane	µg/l	25.0	X	CSL	09/28/94
1,2-Dichloroethane	µg/l	25.0	X	CSL	09/28/94
1,1-Dichloroethylene	µg/l	20.0	X	CSL	09/28/94

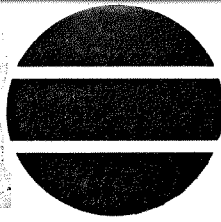
Analytical No.:

21419

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-2 09/19/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/28/94
1,2-Dichloropropane	µg/l	25.0	X		09/28/94
1,3-Dichloropropane	µg/l	25.0	X	CSL	09/28/94
2,2-Dichloropropane	µg/l	100.0	X	CSL	09/28/94
1,1-Dichloropropene	µg/l	50.0	X	CSL	09/28/94
1,3-Dichloropropene	µg/l	25.0	X	CSL	09/28/94
Ethylbenzene	µg/l	50.0	X	DUP	09/28/94
Hexachlorobutadiene	µg/l	50.0	X		09/28/94
Isopropylbenzene	µg/l	50.0	X		09/28/94
p-Isopropyltoluene	µg/l	50.0	X		09/28/94
Methyl tert Butyl Ether	µg/l	100.0	X	CSL DUP	09/28/94
Methylene Chloride	µg/l	125.0	X	CSL	09/28/94
Naphthalene	µg/l	50.0	98.2		09/28/94
n-Propylbenzene	µg/l	50.0	X		09/28/94
Styrene	µg/l	250.0	X	CSL	09/28/94
Tetrachloroethylene	µg/l	25.0	X		09/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X		09/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		09/28/94
Toluene	µg/l	100.0	X	CSL	09/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X		09/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X		09/28/94
1,1,1-Trichloroethane	µg/l	25.0	X	CSL	09/28/94
1,1,2-Trichloroethane	µg/l	25.0	X	CSL	09/28/94
Trichloroethylene	µg/l	10.0	X	CSL	09/28/94
Trichlorofluoromethane	µg/l	50.0	X	CSL	09/28/94
1,2,3-Trichloropropane	µg/l	100.0	X		09/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	09/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X		09/28/94
Vinyl Chloride	µg/l	10.0	X	CSL	09/28/94
m- & p-Xylene	µg/l	50.0	X		09/28/94
o-Xylene	µg/l	50.0	X	DUP	09/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.0	23.4		09/28/94
Acenaphthylene	µg/l	10.0	3.08	J	09/28/94
Anthracene	µg/l	10.0	8.71	J	09/28/94
Benzo (a) Anthracene	µg/l	10.0	31.7		09/28/94
Benzo (a) Pyrene	µg/l	10.0	31.8		09/28/94
Benzo (b) Fluoranthene	µg/l	10.0	21.9		09/28/94
Benzo (k) Fluoranthene	µg/l	10.0	12.0		09/28/94
Benzo (ghi) Perylene	µg/l	10.0	12.1		09/28/94
Chrysene	µg/l	10.0	29.0		09/28/94
Dibenzo (a, h) Anthracene	µg/l	10.0	X		09/28/94
Fluoranthene	µg/l	10.0	51.0		09/28/94
Fluorene	µg/l	10.0	8.50	J	09/28/94

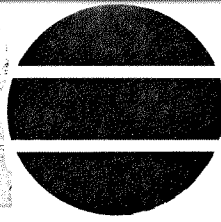
Analytical No.:

21419

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *ma*  
REVIEWED BY: *[Signature]*

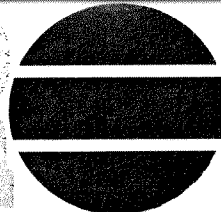
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-2</u> <u>09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	10.0	10.9		09/28/94
2-Methyl Naphthalene	µg/l	10.0	X		09/29/94
Phenanthrene	µg/l	10.0	7.45	J	09/28/94
Pyrene	µg/l	10.0	120.		09/28/94
Naphthalene	µg/l	10.0	20.6		09/28/94
Water Organic Extraction			COMP		09/23/94

Analytical No.: 21419

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

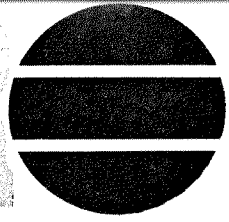
Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-3 09/15/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	63.1		10/06/94
Zinc	mg/l	0.017	0.044		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	0.0246		09/29/94
<b>EPA 218.5</b>					
Chromium (GFAAS)	mg/l	0.0032	0.0151		09/29/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00319		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	19.7		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	1.0	8.3	CSL	09/29/94
Bromobenzene	µg/l	2.5	X		09/29/94
Bromochloromethane	µg/l	5.0	X	CSH	09/29/94
Bromodichloromethane	µg/l	2.5	X		09/29/94
Bromoform	µg/l	10.0	X		09/29/94
Bromomethane	µg/l	20.0	X	CC	09/29/94
n-Butylbenzene	µg/l	5.0	7.2		09/29/94
sec-Butylbenzene	µg/l	5.0	X		09/29/94
tert-Butylbenzene	µg/l	5.0	X		09/29/94
Carbon Tetrachloride	µg/l	2.5	X		09/29/94
Chlorobenzene	µg/l	10.0	X	CSH	09/29/94
Chlorodibromomethane	µg/l	2.5	X	CSH	09/29/94
Chloroethane	µg/l	10.0	X		09/29/94
Chloroform	µg/l	2.5	X		09/29/94
Chloromethane	µg/l	10.0	X	CSL CC	09/29/94
o-Chlorotoluene	µg/l	5.0	X	CSH	09/29/94
p-Chlorotoluene	µg/l	5.0	X	CSH	09/29/94
1,2-Dibromo-3-chloropropane	µg/l	66.5	X	CSL CC	09/29/94
1,2-Dibromoethane	µg/l	5.0	X	CSH	09/29/94
Dibromomethane	µg/l	2.5	X		09/29/94
1,2-Dichlorobenzene	µg/l	5.0	X	CSH	09/29/94
1,3-Dichlorobenzene	µg/l	5.0	X	CSH	09/29/94
1,4-Dichlorobenzene	µg/l	2.5	X	CSH	09/29/94
Dichlorodifluoromethane	µg/l	10.0	X	CSL	09/29/94
1,1-Dichloroethane	µg/l	2.5	X		09/29/94
1,2-Dichloroethane	µg/l	2.5	X		09/29/94
1,1-Dichloroethylene	µg/l	2.0	X		09/29/94

Analytical No.: 21412

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *Hand*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-3 09/15/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	2.5	X	CSL	09/29/94
trans-1,2-Dichloroethylene	µg/l	2.5	X		09/29/94
1,2-Dichloropropane	µg/l	2.5	X		09/29/94
1,3-Dichloropropane	µg/l	2.5	X	CSL	09/29/94
2,2-Dichloropropane	µg/l	10.0	X	CSL	09/29/94
1,1-Dichloropropene	µg/l	5.0	X		09/29/94
1,3-Dichloropropene	µg/l	2.5	X		09/29/94
Ethylbenzene	µg/l	5.0	11.4	CSL	09/29/94
Hexachlorobutadiene	µg/l	5.0	X		09/29/94
Isopropylbenzene	µg/l	5.0	X		09/29/94
p-Isopropyltoluene	µg/l	5.0	18.0		09/29/94
Methyl tert Butyl Ether	µg/l	10.0	X	CSL	09/29/94
Methylene Chloride	µg/l	12.5	X		09/29/94
Naphthalene	µg/l	5.0	331.		09/29/94
n-Propylbenzene	µg/l	5.0	X		09/29/94
Tetrachloroethylene	µg/l	2.5	X		09/29/94
1,1,1,2-Tetrachloroethane	µg/l	2.5	X		09/29/94
1,1,2,2-Tetrachloroethane	µg/l	5.0	X		09/29/94
Toluene	µg/l	10.0	X	CSL	09/29/94
1,2,3-Trichlorobenzene	µg/l	5.0	X	CSH	09/29/94
1,2,4-Trichlorobenzene	µg/l	5.0	X		09/29/94
1,1,1-Trichloroethane	µg/l	2.5	X		09/29/94
1,1,2-Trichloroethane	µg/l	2.5	X		09/29/94
Trichloroethylene	µg/l	1.0	X		09/29/94
Trichlorofluoromethane	µg/l	5.0	X		09/29/94
1,2,3-Trichloropropane	µg/l	10.0	X	CSH	09/29/94
1,2,4-Trimethylbenzene	µg/l	5.0	12.2	CSL	09/29/94
1,3,5-Trimethylbenzene	µg/l	5.0	X		09/29/94
Vinyl Chloride	µg/l	1.0	X		09/29/94
m- & p-Xylene	µg/l	5.0	12.5	CSH	09/29/94
o-Xylene & Styrene	µg/l	5.0	21.2	CSL	09/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	100.0	194.		09/27/94
Acenaphthylene	µg/l	100.0	31.5	J	09/27/94
Anthracene	µg/l	100.0	107.		09/27/94
Benzo (a) Anthracene	µg/l	100.0	172.		09/27/94
Benzo (a) Pyrene	µg/l	100.0	206.		09/27/94
Benzo (b) Fluoranthene	µg/l	100.0	142.		09/27/94
Benzo (k) Fluoranthene	µg/l	100.0	81.5	J	09/27/94
Benzo (ghi) Perylene	µg/l	100.0	103.		09/27/94
Chrysene	µg/l	100.0	158.		09/27/94
Dibenzo (a,h) Anthracene	µg/l	100.0	X		09/27/94
Fluoranthene	µg/l	100.0	215.		09/27/94
Fluorene	µg/l	100.0	112.		09/27/94

Analytical No.: 21412

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mrcl*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-3 09/15/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1, 2, 3-cd) Pyrene	µg/l	100.0	85.9	J	09/27/94
2-Methyl Naphthalene	µg/l	100.0	87.4	J	09/27/94
Phenanthrene	µg/l	100.0	298.		09/27/94
Pyrene	µg/l	100.0	529.		09/27/94
Naphthalene	µg/l	100.0	47.8	J	09/27/94
Water Organic Extraction			COMP		09/22/94

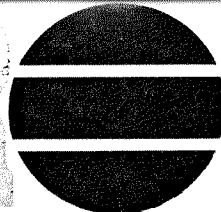
Analytical No.:

21412

All analyses conducted in accordance with **Enviroscan** Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mm*  
REVIEWED BY: *JS*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-4 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	0.099		10/06/94
Zinc	mg/l	0.017	0.035		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	mg/l	0.0001	X		10/06/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00372		09/27/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	mg/l	0.005	X		10/03/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	22.5		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	1.0	X		10/01/94
Bromobenzene	µg/l	2.5	X		10/01/94
Bromochloromethane	µg/l	5.0	X	CSL	10/01/94
Bromodichloromethane	µg/l	2.5	X	CSL	10/01/94
Bromoform	µg/l	10.0	X		10/01/94
Bromomethane	µg/l	20.0	X	CSL	10/01/94
n-Butylbenzene	µg/l	5.0	X	DUP	10/01/94
sec-Butylbenzene	µg/l	5.0	X	DUP	10/01/94
tert-Butylbenzene	µg/l	5.0	X	DUP	10/01/94
Carbon Tetrachloride	µg/l	2.5	X	CSL	10/01/94
Chlorobenzene	µg/l	10.0	X		10/01/94
Chlorodibromomethane	µg/l	2.5	X	CSL	10/01/94
Chloroethane	µg/l	10.0	X		10/01/94
Chloroform	µg/l	2.5	X	CSL	10/01/94
Chloromethane	µg/l	10.0	X	CSL CC	10/01/94
o-Chlorotoluene	µg/l	5.0	X		10/01/94
p-Chlorotoluene	µg/l	5.0	X		10/01/94
1,2-Dibromo-3-chloropropane	µg/l	66.5	X		10/01/94
1,2-Dibromoethane	µg/l	5.0	X	CSL	10/01/94
Dibromomethane	µg/l	2.5	X	CSL	10/01/94
1,2-Dichlorobenzene	µg/l	5.0	X		10/01/94

Analytical No.:

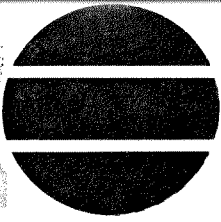
21418

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *mr*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-4 09/19/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	5.0	X		10/01/94
1,4-Dichlorobenzene	µg/l	2.5	X		10/01/94
Dichlorodifluoromethane	µg/l	10.0	X		10/01/94
1,1-Dichloroethane	µg/l	2.5	X	CSL	10/01/94
1,2-Dichloroethane	µg/l	2.5	X	CSL	10/01/94
1,1-Dichloroethylene	µg/l	2.0	X	CSL	10/01/94
cis-1,2-Dichloroethylene	µg/l	2.5	X	CSL	10/01/94
trans-1,2-Dichloroethylene	µg/l	2.5	X	CSL	10/01/94
1,2-Dichloropropane	µg/l	2.5	X	CSL	10/01/94
1,3-Dichloropropane	µg/l	2.5	X	CSL	10/01/94
2,2-Dichloropropane	µg/l	10.0	X	CSL	10/01/94
1,1-Dichloropropene	µg/l	5.0	X	CSL	10/01/94
1,3-Dichloropropene	µg/l	2.5	X		10/01/94
Ethylbenzene	µg/l	5.0	X		10/01/94
Hexachlorobutadiene	µg/l	5.0	X		10/01/94
Isopropylbenzene	µg/l	5.0	X	DUP	10/01/94
p-Isopropyltoluene	µg/l	5.0	X	DUP	10/01/94
Methyl tert Butyl Ether	µg/l	10.0	X	CSL DUP	10/01/94
Methylene Chloride	µg/l	12.5	X		10/01/94
Naphthalene	µg/l	5.0	29.9	DUP S2H	10/01/94
n-Propylbenzene	µg/l	5.0	X	DUP	10/01/94
Styrene	µg/l	25.0	X	DUP	10/01/94
Tetrachloroethylene	µg/l	2.5	X		10/01/94
1,1,1,2-Tetrachloroethane	µg/l	2.5	X		10/01/94
1,1,2,2-Tetrachloroethane	µg/l	5.0	X		10/01/94
Toluene	µg/l	10.0	X		10/01/94
1,2,3-Trichlorobenzene	µg/l	5.0	X		10/01/94
1,2,4-Trichlorobenzene	µg/l	5.0	X		10/01/94
1,1,1-Trichloroethane	µg/l	2.5	X	CSL	10/01/94
1,1,2-Trichloroethane	µg/l	2.5	X	CSL	10/01/94
Trichloroethylene	µg/l	1.0	X	CSL	10/01/94
Trichlorofluoromethane	µg/l	5.0	X	CSL	10/01/94
1,2,3-Trichloropropane	µg/l	10.0	X		10/01/94
1,2,4-Trimethylbenzene	µg/l	5.0	X	DUP	10/01/94
1,3,5-Trimethylbenzene	µg/l	5.0	X	CSL	10/01/94
Vinyl Chloride	µg/l	1.0	X		10/01/94
m- & p-Xylene	µg/l	5.0	X	DUP	10/01/94
o-Xylene	µg/l	5.0	X		10/01/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.0	38.9	SL J	09/28/94
Acenaphthylene	µg/l	50.0	6.34	SL J	09/28/94
Anthracene	µg/l	50.0	21.7	SL J	09/28/94
Benzo (a) Anthracene	µg/l	50.0	41.8	SL J	09/28/94
Benzo (a) Pyrene	µg/l	50.0	45.2	SL J	09/28/94
Benzo (b) Fluoranthene	µg/l	50.0	32.5	SL J	09/28/94

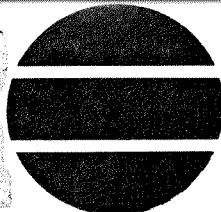
Analytical No.:

21418

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *JCS*

Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-4 09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Benzo (k) Fluoranthene	µg/l	50.0	10.2	SL J	09/28/94
Benzo (ghi) Perylene	µg/l	50.0	X	SL	09/28/94
Chrysene	µg/l	50.0	36.9	SL J	09/28/94
Dibenzo (a,h) Anthracene	µg/l	50.0	X	SL	09/28/94
Fluoranthene	µg/l	50.0	51.6	SL	09/28/94
Fluorene	µg/l	50.0	16.2	SL J	09/28/94
Indeno (1,2,3-cd) Pyrene	µg/l	50.0	X	SL	09/28/94
2-Methyl Naphthalene	µg/l	50.0	8.13	SL J	09/29/94
Phenanthrene	µg/l	50.0	37.5	SL J	09/28/94
Pyrene	µg/l	50.0	146.	SL	09/28/94
Naphthalene	µg/l	50.0	10.7	SL J	09/28/94
Water Organic Extraction			COMP		09/23/94

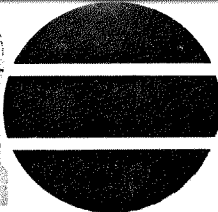
Analytical No.:

21418

X = Analyzed but not detected.

All analyses conducted in accordance with **Enviroscan** Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-5 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	2.15		10/06/94
Zinc	mg/l	0.017	0.026		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/30/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	mg/l	0.0001	X		10/06/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	X		09/27/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	mg/l	0.005	X		10/03/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	19.4		10/07/94
<b>EPA 8021</b>					
Benzene	µg/l	1.0	738.	CAL	10/03/94
Bromobenzene	µg/l	2.5	X		10/03/94
Bromochloromethane	µg/l	5.0	X	CSL	10/03/94
Bromodichloromethane	µg/l	2.5	X	CSL	10/03/94
Bromoform	µg/l	10.0	X		10/03/94
Bromomethane	µg/l	20.0	X	CSL	10/03/94
n-Butylbenzene	µg/l	5.0	615.	CSL CAL	10/03/94
sec-Butylbenzene	µg/l	5.0	X		10/03/94
tert-Butylbenzene	µg/l	5.0	X	DUP	10/03/94
Carbon Tetrachloride	µg/l	2.5	X	CSL	10/03/94
Chlorobenzene	µg/l	10.0	X		10/03/94
Chlorodibromomethane	µg/l	2.5	X	CSL	10/03/94
Chloroethane	µg/l	10.0	X		10/03/94
Chloroform	µg/l	2.5	X	CSL	10/03/94
Chloromethane	µg/l	10.0	X	CSL CC	10/03/94
o-Chlorotoluene	µg/l	5.0	X		10/03/94
p-Chlorotoluene	µg/l	5.0	X		10/03/94
1,2-Dibromo-3-chloropropane	µg/l	66.5	X		10/03/94
1,2-Dibromoethane	µg/l	5.0	X	CSL	10/03/94
Dibromomethane	µg/l	2.5	X	CSL	10/03/94
1,2-Dichlorobenzene	µg/l	5.0	X		10/03/94

Analytical No.:

21423

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *WJ*  
*WPO*

Attn: Cyrus W. Ingraham

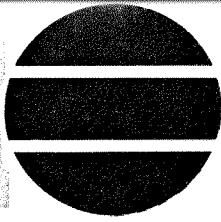
	Units	Detection Limit	TW-5 09/19/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	5.0	X		10/03/94
1,4-Dichlorobenzene	µg/l	2.5	X		10/03/94
Dichlorodifluoromethane	µg/l	10.0	X		10/03/94
1,1-Dichloroethane	µg/l	2.5	X	CSL	10/03/94
1,2-Dichloroethane	µg/l	2.5	X	CSL	10/03/94
1,1-Dichloroethylene	µg/l	2.0	X	CSL	10/03/94
cis-1,2-Dichloroethylene	µg/l	2.5	X	CSL	10/03/94
trans-1,2-Dichloroethylene	µg/l	2.5	X	CSL	10/03/94
1,2-Dichloropropane	µg/l	2.5	X	CSL	10/03/94
1,3-Dichloropropane	µg/l	2.5	X	CSL	10/03/94
2,2-Dichloropropane	µg/l	10.0	X	CSL	10/03/94
1,1-Dichloropropene	µg/l	5.0	X	CSL	10/03/94
1,3-Dichloropropene	µg/l	2.5	X		10/03/94
Ethylbenzene	µg/l	5.0	459.	DUP CAL	10/03/94
Hexachlorobutadiene	µg/l	5.0	X		10/03/94
Isopropylbenzene	µg/l	5.0	16.3	DUP	10/03/94
p-Isopropyltoluene	µg/l	5.0	X	DUP	10/03/94
Methyl tert Butyl Ether	µg/l	10.0	X		10/03/94
Methylene Chloride	µg/l	12.5	X		10/03/94
Naphthalene	µg/l	200.0	392.		09/29/94
n-Propylbenzene	µg/l	5.0	7.5	DUP	10/03/94
Tetrachloroethylene	µg/l	2.5	X		10/03/94
1,1,1,2-Tetrachloroethane	µg/l	2.5	X		10/03/94
1,1,2,2-Tetrachloroethane	µg/l	5.0	X		10/03/94
Toluene	µg/l	10.0	35.1	DUP	10/03/94
1,2,3-Trichlorobenzene	µg/l	5.0	X		10/03/94
1,2,4-Trichlorobenzene	µg/l	5.0	X		10/03/94
1,1,1-Trichloroethane	µg/l	2.5	X	CSL	10/03/94
1,1,2-Trichloroethane	µg/l	2.5	X		10/03/94
Trichloroethylene	µg/l	1.0	X	CSL	10/03/94
Trichlorofluoromethane	µg/l	5.0	X	CSL	10/03/94
1,2,3-Trichloropropane	µg/l	10.0	X		10/03/94
1,2,4-Trimethylbenzene	µg/l	5.0	67.5	DUP	10/03/94
1,3,5-Trimethylbenzene	µg/l	5.0	12.2		10/03/94
Vinyl Chloride	µg/l	1.0	X		10/03/94
m- & p-Xylene	µg/l	5.0	221.	DUP CAL	10/03/94
o-Xylene & Styrene	µg/l	5.0	145.		10/03/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	1000.0	1,631.		10/06/94
Acenaphthylene	µg/l	1000.0	95.6	J	10/06/94
Anthracene	µg/l	1000.0	700.	J	10/06/94
Benzo (a) Anthracene	µg/l	1000.0	481.	J	10/06/94
Benzo (a) Pyrene	µg/l	1000.0	386.	J	10/06/94
Benzo (b) Fluoranthene	µg/l	1000.0	282.	J	10/06/94

Analytical No.: 21423

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

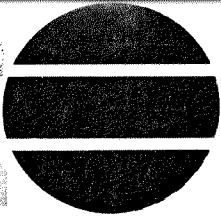
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-5</u> <u>09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Benzo (k) Fluoranthene	µg/l	1000.0	X		10/06/94
Benzo (ghi) Perylene	µg/l	1000.0	192.	J	10/06/94
Chrysene	µg/l	1001.0	427.	J	10/06/94
Dibenzo (a, h) Anthracene	µg/l	1000.0	X		10/06/94
Fluoranthene	µg/l	1000.0	768.	J	10/06/94
Fluorene	µg/l	1000.0	839.	J	10/06/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	1000.0	165.	J	10/06/94
2-Methyl Naphthalene	µg/l	1000.0	2,376.		10/06/94
Phenanthrene	µg/l	1000.0	2,829.		10/06/94
Pyrene	µg/l	1000.0	1,362.		10/06/94
Naphthalene	µg/l	1000.0	2,634.		10/06/94
Water Organic Extraction			COMP		09/26/94

Analytical No.: 21423

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *me*  
 REVIEWED BY: *me*

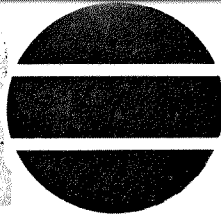
Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-6 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	0.016		10/05/94
Iron	mg/l	0.010	1.72		10/06/94
Zinc	mg/l	0.017	X		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/30/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	mg/l	0.0001	X		10/06/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00208		09/27/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	mg/l	0.005	X		10/03/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	14.9		10/07/94
<b>EPA 8021</b>					
Benzene	µg/l	40.0	3,150.		09/27/94
Bromobenzene	µg/l	100.0	X	CSL	09/27/94
Bromochloromethane	µg/l	200.0	X	CSL	09/27/94
Bromodichloromethane	µg/l	100.0	X	CSL	09/27/94
Bromoform	µg/l	400.0	X		09/27/94
Bromomethane	µg/l	800.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	200.0	X		09/27/94
sec-Butylbenzene	µg/l	200.0	X		09/27/94
tert-Butylbenzene	µg/l	200.0	296.	CSH	09/27/94
Carbon Tetrachloride	µg/l	100.0	X	CSL	09/27/94
Chlorobenzene	µg/l	400.0	X		09/27/94
Chlorodibromomethane	µg/l	100.0	X	CSL	09/27/94
Chloroethane	µg/l	400.0	X	CSH	09/27/94
Chloroform	µg/l	100.0	X	CSL	09/27/94
Chloromethane	µg/l	400.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	2660.0	X		09/27/94
1,2-Dibromoethane	µg/l	200.0	X	CSL	09/27/94
Dibromomethane	µg/l	100.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94

Analytical No.: 21422

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *mmcl*  
 REVIEWED BY: *JPS*

Attn: Cyrus W. Ingraham

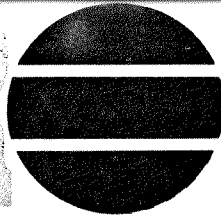
	Units	Detection Limit	TW-6 09/19/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	100.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	400.0	X	DUP CSL	09/27/94
1,1-Dichloroethane	µg/l	100.0	X	CSL	09/27/94
1,2-Dichloroethane	µg/l	100.0	X	CSL	09/27/94
1,1-Dichloroethylene	µg/l	80.0	X	CSL	09/27/94
cis-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
1,3-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
2,2-Dichloropropane	µg/l	400.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	200.0	X	CSL	09/27/94
1,3-Dichloropropene	µg/l	100.0	X	CSL	09/27/94
Ethylbenzene	µg/l	200.0	1,290.		09/27/94
Hexachlorobutadiene	µg/l	200.0	X	CSL	09/27/94
Isopropylbenzene	µg/l	200.0	X		09/27/94
p-Isopropyltoluene	µg/l	200.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	400.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	500.0	X	CSL	09/27/94
Naphthalene	µg/l	200.0	3,600.		09/27/94
n-Propylbenzene	µg/l	200.0	X	CSH	09/27/94
Tetrachloroethylene	µg/l	100.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	100.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	200.0	X		09/27/94
Toluene	µg/l	400.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	200.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	100.0	X	CSL	09/27/94
1,1,2-Trichloroethane	µg/l	100.0	X	CSL	09/27/94
Trichloroethylene	µg/l	40.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	200.0	X	CSL	09/27/94
1,2,3-Trichloropropene	µg/l	400.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	200.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	200.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	40.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	200.0	792.		09/27/94
o-Xylene & Styrene	µg/l	200.0	493.	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	500.0	2,301.		10/06/94
Acenaphthylene	µg/l	500.0	142.	J	10/06/94
Anthracene	µg/l	500.0	1,131.		10/06/94
Benzo (a) Anthracene	µg/l	500.0	685.		10/06/94
Benzo (a) Pyrene	µg/l	500.0	507.		10/06/94
Benzo (b) Fluoranthene	µg/l	500.0	375.	J	10/06/94

Analytical No.: 21422

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *MD*

Attn: Cyrus W. Ingraham

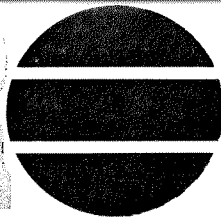
	<u>Units</u>	<u>Detection Limit</u>	<u>TW-6 09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Benzo (k) Fluoranthene	µg/l	500.0	X		10/06/94
Benzo (ghi) Perylene	µg/l	500.0	182.	J	10/06/94
Chrysene	µg/l	500.0	540.		10/06/94
Dibenzo (a, h) Anthracene	µg/l	500.0	X		10/06/94
Fluoranthene	µg/l	500.0	1,107.		10/06/94
Fluorene	µg/l	500.0	1,005.		10/06/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	500.0	153.	J	10/06/94
2-Methyl Naphthalene	µg/l	500.0	2,693.		10/06/94
Phenanthrene	µg/l	500.0	3,751.		10/06/94
Pyrene	µg/l	500.0	2,192.		10/06/94
Naphthalene	µg/l	500.0	5,907.		10/06/94
Water Organic Extraction			COMP		09/26/94

Analytical No.: 21422

X = Analyzed but not detected.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

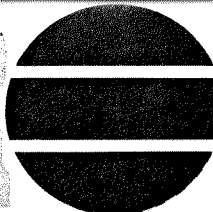
Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-7 09/19/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	19.3		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	X		10/01/94
Bromobenzene	µg/l	0.5	X		10/01/94
Bromochloromethane	µg/l	1.0	X	CSL	10/01/94
Bromodichloromethane	µg/l	0.5	X	CSL	10/01/94
Bromoform	µg/l	2.0	X		10/01/94
Bromomethane	µg/l	4.0	X	CSL	10/01/94
n-Butylbenzene	µg/l	1.0	X	DUP	10/01/94
sec-Butylbenzene	µg/l	1.0	X	DUP	10/01/94
tert-Butylbenzene	µg/l	1.0	X	DUP	10/01/94
Carbon Tetrachloride	µg/l	0.5	X	CSL	10/01/94
Chlorobenzene	µg/l	2.0	X		10/01/94
Chlorodibromomethane	µg/l	0.5	X	CSL	10/01/94
Chloroethane	µg/l	2.0	X		10/01/94
Chloroform	µg/l	0.5	X	CSL	10/01/94
Chloromethane	µg/l	2.0	X	CSL CC	10/01/94
o-Chlorotoluene	µg/l	1.0	X		10/01/94
p-Chlorotoluene	µg/l	1.0	X		10/01/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X		10/01/94
1,2-Dibromoethane	µg/l	1.0	X	CSL	10/01/94
Dibromomethane	µg/l	0.5	X	CSL	10/01/94
1,2-Dichlorobenzene	µg/l	1.0	X		10/01/94
1,3-Dichlorobenzene	µg/l	1.0	X		10/01/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/01/94
Dichlorodifluoromethane	µg/l	2.0	X		10/01/94
1,1-Dichloroethane	µg/l	0.5	X	CSL	10/01/94
1,2-Dichloroethane	µg/l	0.5	X	CSL	10/01/94
1,1-Dichloroethylene	µg/l	0.4	X	CSL	10/01/94
cis-1,2-Dichloroethylene	µg/l	0.5	X	CSL	10/01/94
trans-1,2-Dichloroethylene	µg/l	0.5	X	CSL	10/01/94
1,2-Dichloropropane	µg/l	0.5	X	CSL	10/01/94
1,3-Dichloropropane	µg/l	0.5	X	CSL	10/01/94
2,2-Dichloropropane	µg/l	2.0	X	CSL	10/01/94
1,1-Dichloropropene	µg/l	1.0	X	CSL	10/01/94
1,3-Dichloropropene	µg/l	0.5	X		10/01/94
Ethylbenzene	µg/l	1.0	X		10/01/94
Hexachlorobutadiene	µg/l	1.0	X		10/01/94
Isopropylbenzene	µg/l	1.0	X	DUP	10/01/94
p-Isopropyltoluene	µg/l	1.0	X	DUP	10/01/94
Methyl tert Butyl Ether	µg/l	2.0	X	CSL DUP	10/01/94
Methylene Chloride	µg/l	2.5	X		10/01/94
Naphthalene	µg/l	1.0	X	DUP	10/01/94
n-Propylbenzene	µg/l	1.0	X	DUP	10/01/94

Analytical No.: 21416

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *MD*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-7 09/19/94	Qualifiers	Date Analyzed
Styrene	µg/l	5.0	X	DUP	10/01/94
Tetrachloroethylene	µg/l	0.5	X		10/01/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X		10/01/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/01/94
Toluene	µg/l	2.0	X		10/01/94
1,2,3-Trichlorobenzene	µg/l	1.0	X		10/01/94
1,2,4-Trichlorobenzene	µg/l	1.0	X		10/01/94
1,1,1-Trichloroethane	µg/l	0.5	X	CSL	10/01/94
1,1,2-Trichloroethane	µg/l	0.5	X	CSL	10/01/94
Trichloroethylene	µg/l	0.2	X	CSL	10/01/94
Trichlorofluoromethane	µg/l	1.0	X	CSL	10/01/94
1,2,3-Trichloropropane	µg/l	2.0	X		10/01/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	DUP	10/01/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/01/94
Vinyl Chloride	µg/l	0.2	X		10/01/94
m- & p-Xylene	µg/l	1.0	X	DUP	10/01/94
o-Xylene	µg/l	1.0	X		10/01/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.	X		09/28/94
Acenaphthylene	µg/l	10.	X		09/28/94
Anthracene	µg/l	10.	X		09/28/94
Benzo (a) Anthracene	µg/l	10.	X		09/28/94
Benzo (a) Pyrene	µg/l	10.	X		09/28/94
Benzo (b) Fluoranthene	µg/l	10.	X		09/28/94
Benzo (k) Fluoranthene	µg/l	10.	X		09/28/94
Benzo (ghi) Perylene	µg/l	10.	X		09/28/94
Chrysene	µg/l	10.	X		09/28/94
Dibenzo (a, h) Anthracene	µg/l	10.	X		09/28/94
Fluoranthene	µg/l	10.	X		09/28/94
Fluorene	µg/l	10.	X		09/28/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	10.	X		09/28/94
2-Methyl Naphthalene	µg/l	10.	X		09/29/94
Phenanthrene	µg/l	10.	X		09/28/94
Pyrene	µg/l	10.	X		09/28/94
Naphthalene	µg/l	10.	X		09/28/94
Water Organic Extraction			COMP		09/23/94

Analytical No.:

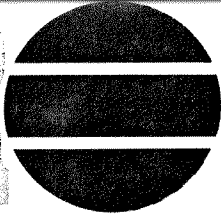
21416

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

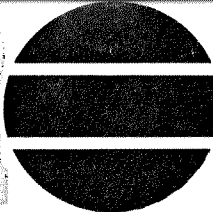
	Units	Detection Limit	TW-8 09/15/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	4.82		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	1,150.	CSL	09/29/94
Bromobenzene	µg/l	25.0	X		09/29/94
Bromochloromethane	µg/l	50.0	X	CSH	09/29/94
Bromodichloromethane	µg/l	25.0	X		09/29/94
Bromoform	µg/l	100.0	X		09/29/94
Bromomethane	µg/l	200.0	X	CC	09/29/94
n-Butylbenzene	µg/l	50.0	X		09/29/94
sec-Butylbenzene	µg/l	50.0	X		09/29/94
tert-Butylbenzene	µg/l	50.0	X		09/29/94
Carbon Tetrachloride	µg/l	25.0	X		09/29/94
Chlorobenzene	µg/l	100.0	X	CSH	09/29/94
Chlorodibromomethane	µg/l	25.0	X	CSH	09/29/94
Chloroethane	µg/l	100.0	X		09/29/94
Chloroform	µg/l	25.0	X		09/29/94
Chloromethane	µg/l	100.0	X	CSL CC	09/29/94
o-Chlorotoluene	µg/l	50.0	X	CSH	09/29/94
p-Chlorotoluene	µg/l	50.0	X	CSH	09/29/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X	CSL CC	09/29/94
1,2-Dibromoethane	µg/l	50.0	X	CSH	09/29/94
Dibromomethane	µg/l	25.0	X		09/29/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSH	09/29/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSH	09/29/94
1,4-Dichlorobenzene	µg/l	25.0	X	CSH	09/29/94
Dichlorodifluoromethane	µg/l	100.0	X	CSL	09/29/94
1,1-Dichloroethane	µg/l	25.0	X		09/29/94
1,2-Dichloroethane	µg/l	25.0	X		09/29/94
1,1-Dichloroethylene	µg/l	20.0	X		09/29/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/29/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		09/29/94
1,2-Dichloropropane	µg/l	25.0	X		09/29/94
1,3-Dichloropropane	µg/l	25.0	X	CSL	09/29/94
2,2-Dichloropropane	µg/l	100.0	X	CSL	09/29/94
1,1-Dichloropropene	µg/l	50.0	X		09/29/94
1,3-Dichloropropene	µg/l	25.0	X		09/29/94
Ethylbenzene	µg/l	50.0	56.4	CSL	09/29/94
Hexachlorobutadiene	µg/l	50.0	X		09/29/94
Isopropylbenzene	µg/l	50.0	X		09/29/94
p-Isopropyltoluene	µg/l	50.0	X		09/29/94
Methyl tert Butyl Ether	µg/l	100.0	X	CSL	09/29/94
Methylene Chloride	µg/l	125.0	X		09/29/94
Naphthalene	µg/l	50.0	89.8		09/29/94
n-Propylbenzene	µg/l	50.0	X		09/29/94

Analytical No.: 21408

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: \_\_\_\_\_

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-8 09/15/94	Qualifiers	Date Analyzed
Styrene	µg/l	250.0	X	CSL	09/29/94
Tetrachloroethylene	µg/l	25.0	X		09/29/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X		09/29/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		09/29/94
Toluene	µg/l	100.0	X	CSL	09/29/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSH	09/29/94
1,2,4-Trichlorobenzene	µg/l	50.0	X		09/29/94
1,1,1-Trichloroethane	µg/l	25.0	X		09/29/94
1,1,2-Trichloroethane	µg/l	25.0	X		09/29/94
Trichloroethylene	µg/l	10.0	X		09/29/94
Trichlorofluoromethane	µg/l	50.0	X		09/29/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSH	09/29/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	09/29/94
1,3,5-Trimethylbenzene	µg/l	50.0	X		09/29/94
Vinyl Chloride	µg/l	10.0	X		09/29/94
m- & p-Xylene	µg/l	50.0	X	CSH	09/29/94
o-Xylene	µg/l	50.0	X	CSL	09/29/94

**EPA 8270**

Acenaphthene	µg/l	10.0	32.1		09/23/94
Acenaphthylene	µg/l	10.0	X		09/23/94
Anthracene	µg/l	10.0	2.02	J	09/23/94
Benzo (a) Anthracene	µg/l	10.0	2.64	J	09/23/94
Benzo (a) Pyrene	µg/l	10.0	X		09/23/94
Benzo (b) Fluoranthene	µg/l	10.0	X		09/23/94
Benzo (k) Fluoranthene	µg/l	10.0	X		09/23/94
Benzo (ghi) Perylene	µg/l	10.0	X		09/23/94
Chrysene	µg/l	10.0	1.75	J	09/23/94
Dibenzo (a, h) Anthracene	µg/l	10.0	X		09/23/94
Fluoranthene	µg/l	10.0	4.22	J	09/23/94
Fluorene	µg/l	10.0	6.80	J	09/23/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	10.0	X		09/23/94
2-Methyl Naphthalene	µg/l	10.0	3.59	J	09/23/94
Phenanthrene	µg/l	10.0	8.84	J	09/23/94
Pyrene	µg/l	10.0	6.14	J	09/23/94
Naphthalene	µg/l	10.0	62.6		09/23/94

Water Organic Extraction

COMP

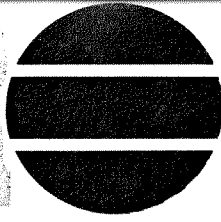
09/22/94

Analytical No.:

21408

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *msd*  
REVIEWED BY: *JR*

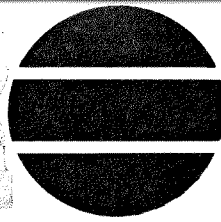
Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-9 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	3.20		10/06/94
Zinc	mg/l	0.017	0.023		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00207		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	20.1		10/07/94
<b>EPA 8021</b>					
Benzene	µg/l	200.0	833.		09/27/94
Bromobenzene	µg/l	500.0	X	CSL	09/27/94
Bromochloromethane	µg/l	1000.0	X		09/27/94
Bromodichloromethane	µg/l	500.0	X	CSL	09/27/94
Bromoform	µg/l	2000.0	X		09/27/94
Bromomethane	µg/l	4000.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	1000.0	X		09/27/94
sec-Butylbenzene	µg/l	1000.0	X		09/27/94
tert-Butylbenzene	µg/l	1000.0	X	CSH	09/27/94
Carbon Tetrachloride	µg/l	500.0	X	CSL	09/27/94
Chlorobenzene	µg/l	2000.0	X		09/27/94
Chlorodibromomethane	µg/l	500.0	X	CSL	09/27/94
Chloroethane	µg/l	2000.0	X	CSH	09/27/94
Chloroform	µg/l	500.0	X	CSL	09/27/94
Chloromethane	µg/l	2000.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	1000.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	1000.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	13300.0	X		09/27/94
1,2-Dibromoethane	µg/l	1000.0	X	CSL	09/27/94
Dibromomethane	µg/l	500.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	1000.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	1000.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	500.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	2000.0	X	DUP CSL	09/27/94
1,1-Dichloroethane	µg/l	500.0	X	CSL	09/27/94
1,2-Dichloroethane	µg/l	500.0	X	CSL	09/27/94
1,1-Dichloroethylene	µg/l	400.0	X	CSL	09/27/94

Analytical No.: 21420

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

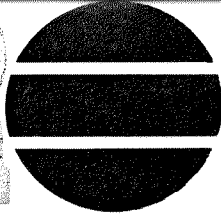
	Units	Detection Limit	TW-9 09/19/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	500.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	500.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	500.0	X	CSL	09/27/94
1,3-Dichloropropane	µg/l	500.0	X	CSL	09/27/94
2,2-Dichloropropane	µg/l	2000.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	1000.0	X	CSL	09/27/94
1,3-Dichloropropene	µg/l	500.0	X	CSL	09/27/94
Ethylbenzene	µg/l	1000.0	1,170.		09/27/94
Hexachlorobutadiene	µg/l	1000.0	X	CSL	09/27/94
Isopropylbenzene	µg/l	1000.0	X		09/27/94
p-Isopropyltoluene	µg/l	1000.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	2000.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	2500.0	X	CSL	09/27/94
Naphthalene	µg/l	1000.0	8,740.		09/27/94
n-Propylbenzene	µg/l	1000.0	X	CSH	09/27/94
Styrene	µg/l	5000.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	500.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	500.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	1000.0	X		09/27/94
Toluene	µg/l	2000.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	1000.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	1000.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	500.0	X	CSL	09/27/94
1,1,2-Trichloroethane	µg/l	500.0	X	CSL	09/27/94
Trichloroethylene	µg/l	200.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	1000.0	X	CSL	09/27/94
1,2,3-Trichloropropane	µg/l	2000.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	1000.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	1000.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	200.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	1000.0	X		09/27/94
o-Xylene	µg/l	1000.0	X	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	1000.0	14,460.		09/28/94
Acenaphthylene	µg/l	1000.0	587.	J	09/28/94
Anthracene	µg/l	1000.0	4,373.		09/28/94
Benzo (a) Anthracene	µg/l	1000.0	3,465.		09/28/94
Benzo (a) Pyrene	µg/l	1000.0	3,278.		09/28/94
Benzo (b) Fluoranthene	µg/l	1000.0	2,136.		09/28/94
Benzo (k) Fluoranthene	µg/l	1000.0	1,272.		09/28/94
Benzo (ghi) Perylene	µg/l	1000.0	1,090.		09/28/94
Chrysene	µg/l	1000.0	2,597.		09/28/94
Dibenzo (a, h) Anthracene	µg/l	1000.0	X		09/28/94
Fluoranthene	µg/l	1000.0	5,615.		09/28/94
Fluorene	µg/l	1000.0	4,644.		09/28/94

Analytical No.: 21420

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

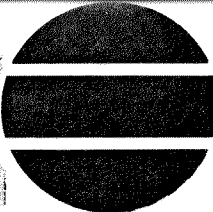
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-9 09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno(1,2,3-cd) Pyrene	µg/l	1000.0	1,044.		09/28/94
2-Methyl Naphthalene	µg/l	1000.0	16,465.		09/28/94
Phenanthrene	µg/l	1000.0	24,186.		09/28/94
Pyrene	µg/l	1000.0	13,911.		09/28/94
Naphthalene	µg/l	1000.0	39,749.		09/28/94
Water Organic Extraction			COMP		09/26/94

Analytical No.: 21420

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *Mad*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-10 09/19/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	22.1		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	509.		09/27/94
Bromobenzene	µg/l	25.0	X	CSL	09/27/94
Bromochloromethane	µg/l	50.0	X		09/27/94
Bromodichloromethane	µg/l	25.0	X	CSL	09/27/94
Bromoform	µg/l	100.0	X	CSL	09/27/94
Bromomethane	µg/l	200.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	50.0	X		09/27/94
sec-Butylbenzene	µg/l	50.0	X		09/27/94
tert-Butylbenzene	µg/l	50.0	73.6	CSH	09/27/94
Carbon Tetrachloride	µg/l	25.0	X	CSL	09/27/94
Chlorobenzene	µg/l	100.0	X		09/27/94
Chlorodibromomethane	µg/l	25.0	X	CSL	09/27/94
Chloroethane	µg/l	100.0	X	CSH	09/27/94
Chloroform	µg/l	25.0	X	CSL	09/27/94
Chloromethane	µg/l	100.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	50.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	50.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X		09/27/94
1,2-Dibromoethane	µg/l	50.0	X	CSL	09/27/94
Dibromomethane	µg/l	25.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	25.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	100.0	X	DUP CSL	09/27/94
1,1-Dichloroethane	µg/l	25.0	X	CSL	09/27/94
1,2-Dichloroethane	µg/l	25.0	X	CSL	09/27/94
1,1-Dichloroethylene	µg/l	20.0	X	CSL	09/27/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	25.0	X	CSL	09/27/94
1,3-Dichloropropane	µg/l	25.0	X	CSL	09/27/94
2,2-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	50.0	X	CSL	09/27/94
1,3-Dichloropropene	µg/l	25.0	X	CSL	09/27/94
Ethylbenzene	µg/l	50.0	78.0		09/27/94
Hexachlorobutadiene	µg/l	50.0	X	CSL	09/27/94
Isopropylbenzene	µg/l	50.0	X		09/27/94
p-Isopropyltoluene	µg/l	50.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	100.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	125.0	X	CSL	09/27/94
Naphthalene	µg/l	50.0	919.		09/27/94
n-Propylbenzene	µg/l	50.0	X	CSH	09/27/94

Analytical No.:

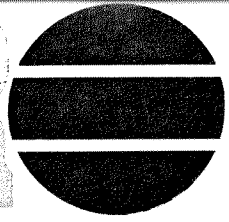
21415

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *10/10*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-10 09/19/94	Qualifiers	Date Analyzed
Styrene	µg/l	250.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	25.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		09/27/94
Toluene	µg/l	100.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	50.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	25.0	X	CSL	09/27/94
1,1,2-Trichloroethane	µg/l	25.0	X	CSL	09/27/94
Trichloroethylene	µg/l	10.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	50.0	X	CSL	09/27/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSL	09/27/94
1,2,4-Trimethylbenzene	µg/l	50.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	10.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	50.0	X		09/27/94
o-Xylene	µg/l	50.0	X	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.0	523.		09/28/94
Acenaphthylene	µg/l	50.0	77.4		09/28/94
Anthracene	µg/l	50.0	164.		09/28/94
Benzo (a) Anthracene	µg/l	50.0	116.		09/28/94
Benzo (a) Pyrene	µg/l	50.0	104.		09/28/94
Benzo (b) Fluoranthene	µg/l	50.0	74.1		09/28/94
Benzo (k) Fluoranthene	µg/l	50.0	43.6	J	09/28/94
Benzo (ghi) Perylene	µg/l	50.0	40.1	J	09/28/94
Chrysene	µg/l	50.0	102.		09/28/94
Dibenzo (a, h) Anthracene	µg/l	50.0	X		09/28/94
Fluoranthene	µg/l	50.0	176.		09/28/94
Fluorene	µg/l	50.0	223.		09/28/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	50.0	36.5	J	09/28/94
2-Methyl Naphthalene	µg/l	50.0	977.		09/29/94
Phenanthrene	µg/l	50.0	864.		09/28/94
Pyrene	µg/l	50.0	420.		09/28/94
Naphthalene	µg/l	50.0	1,005.		09/28/94
Water Organic Extraction			COMP		09/23/94

Analytical No.: 21415

X = Analyzed but not detected.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 11/18/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JH*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-11 09/19/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	24.4		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	20.0	X		09/27/94
Bromobenzene	µg/l	50.0	X	CSL	09/27/94
Bromochloromethane	µg/l	100.0	X	CSL	09/27/94
Bromodichloromethane	µg/l	50.0	X	CSL	09/27/94
Bromoform	µg/l	200.0	X		09/27/94
Bromomethane	µg/l	400.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	100.0	X		09/27/94
sec-Butylbenzene	µg/l	100.0	X		09/27/94
tert-Butylbenzene	µg/l	100.0	127.	CSH	09/27/94
Carbon Tetrachloride	µg/l	50.0	X	CSL	09/27/94
Chlorobenzene	µg/l	200.0	X		09/27/94
Chlorodibromomethane	µg/l	50.0	X	CSL	09/27/94
Chloroethane	µg/l	200.0	X	CSH	09/27/94
Chloroform	µg/l	50.0	X	CSL	09/27/94
Chloromethane	µg/l	200.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	100.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	100.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	1330.0	X		09/27/94
1,2-Dibromoethane	µg/l	100.0	X	CSL	09/27/94
Dibromomethane	µg/l	50.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	100.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	100.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	50.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	200.0	X	DUP	09/27/94
1,1-Dichloroethane	µg/l	50.0	X	CSL	09/27/94
1,2-Dichloroethane	µg/l	50.0	X	CSL	09/27/94
1,1-Dichloroethylene	µg/l	40.0	X	CSL	09/27/94
cis-1,2-Dichloroethylene	µg/l	50.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	50.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	50.0	X	CSL	09/27/94
1,3-Dichloropropane	µg/l	50.0	X	CSL	09/27/94
2,2-Dichloropropane	µg/l	200.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	100.0	X	CSL	09/27/94
1,3-Dichloropropene	µg/l	50.0	X	CSL	09/27/94
Ethylbenzene	µg/l	100.0	200.		09/27/94
Hexachlorobutadiene	µg/l	100.0	X	CSL	09/27/94
Isopropylbenzene	µg/l	100.0	X		09/27/94
p-Isopropyltoluene	µg/l	100.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	200.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	250.0	X	CSL	09/27/94
Naphthalene	µg/l	100.0	2,290.		09/27/94
n-Propylbenzene	µg/l	100.0	X	CSH	09/27/94

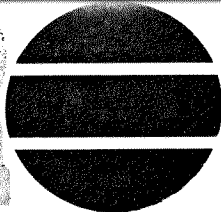
Analytical No.:

21414

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 11/18/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-11 09/19/94	Qualifiers	Date Analyzed
Styrene	µg/l	500.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	50.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	50.0	X		09/27/94
1,1,2,2-Tetrachloroethane	µg/l	100.0	X		09/27/94
Toluene	µg/l	200.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	100.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	100.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	50.0	X	CSL	09/27/94
1,1,2-Trichloroethane	µg/l	50.0	X	CSL	09/27/94
Trichloroethylene	µg/l	20.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	100.0	X	CSL	09/27/94
1,2,3-Trichloropropane	µg/l	200.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	100.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	100.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	20.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	100.0	134.		09/27/94
o-Xylene	µg/l	100.0	X	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	20.0	447.	S1H	09/28/94
Acenaphthylene	µg/l	20.0	7.25	J	09/28/94
Anthracene	µg/l	20.0	60.2		09/28/94
Benzo (a) Anthracene	µg/l	20.0	27.1		09/28/94
Benzo (a) Pyrene	µg/l	20.0	14.5	J	09/28/94
Benzo (b) Fluoranthene	µg/l	20.0	12.6	J	09/28/94
Benzo (k) Fluoranthene	µg/l	20.0	9.36	J	09/28/94
Benzo (ghi) Perylene	µg/l	20.0	X		09/28/94
Chrysene	µg/l	20.0	19.7	J	09/28/94
Dibenzo (a, h) Anthracene	µg/l	20.0	X		09/28/94
Fluoranthene	µg/l	20.0	47.8		09/28/94
Fluorene	µg/l	20.0	122.	S1H S2H	09/28/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	20.0	X		09/28/94
2-Methyl Naphthalene	µg/l	20.0	732.		09/28/94
Phenanthrene	µg/l	20.0	280.	S1H S2H	09/28/94
Pyrene	µg/l	20.0	85.5	S1H	09/28/94
Naphthalene	µg/l	20.0	2,794.	S1H DUP	09/28/94
Water Organic Extraction			COMP		09/23/94

Analytical No.:

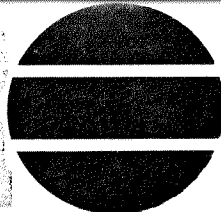
21414

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All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JW*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-12 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	2.91		10/06/94
Zinc	mg/l	0.017	0.023		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/29/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	mg/l	0.0001	X		10/06/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	X		09/27/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	mg/l	0.005	X		10/03/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	18.2		10/06/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	141.	CSL DUP	09/28/94
Bromobenzene	µg/l	25.0	X	CSL	09/28/94
Bromochloromethane	µg/l	50.0	X	CSL	09/28/94
Bromodichloromethane	µg/l	25.0	X	CSL	09/28/94
Bromoform	µg/l	100.0	X		09/28/94
Bromomethane	µg/l	200.0	X	CSL	09/28/94
n-Butylbenzene	µg/l	50.0	X	DUP	09/28/94
sec-Butylbenzene	µg/l	50.0	X		09/28/94
tert-Butylbenzene	µg/l	50.0	X		09/28/94
Carbon Tetrachloride	µg/l	25.0	X	CSL	09/28/94
Chlorobenzene	µg/l	100.0	X		09/28/94
Chlorodibromomethane	µg/l	25.0	X	DUP	09/28/94
Chloroethane	µg/l	100.0	X	CSL	09/28/94
Chloroform	µg/l	25.0	X	CSL DUP	09/28/94
Chloromethane	µg/l	100.0	X	CSL DUP	09/28/94
o-Chlorotoluene	µg/l	50.0	X		09/28/94
p-Chlorotoluene	µg/l	50.0	X		09/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X		09/28/94
1,2-Dibromoethane	µg/l	50.0	X	CSL	09/28/94
Dibromomethane	µg/l	25.0	X	CSL	09/28/94
1,2-Dichlorobenzene	µg/l	50.0	X		09/28/94

Analytical No.:

21417

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JPS*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TW-12 09/19/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	50.0	X		09/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		09/28/94
Dichlorodifluoromethane	µg/l	100.0	X	CSL	09/28/94
1,1-Dichloroethane	µg/l	25.0	X	CSL	09/28/94
1,2-Dichloroethane	µg/l	25.0	X	CSL	09/28/94
1,1-Dichloroethylene	µg/l	20.0	X	CSL	09/28/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X	CSL	09/28/94
1,2-Dichloropropane	µg/l	25.0	X		09/28/94
1,3-Dichloropropane	µg/l	25.0	X	CSL	09/28/94
2,2-Dichloropropane	µg/l	100.0	X	CSL	09/28/94
1,1-Dichloropropene	µg/l	50.0	X	CSL	09/28/94
1,3-Dichloropropene	µg/l	25.0	X	CSL	09/28/94
Ethylbenzene	µg/l	50.0	53.3	DUP	09/28/94
Hexachlorobutadiene	µg/l	50.0	X		09/28/94
Isopropylbenzene	µg/l	50.0	X		09/28/94
p-Isopropyltoluene	µg/l	50.0	73.3		09/28/94
Methyl tert Butyl Ether	µg/l	100.0	X	CSL DUP	09/28/94
Methylene Chloride	µg/l	125.0	X	CSL	09/28/94
Naphthalene	µg/l	50.0	530.		09/28/94
n-Propylbenzene	µg/l	50.0	X		09/28/94
Styrene	µg/l	250.0	X	CSL	09/28/94
Tetrachloroethylene	µg/l	25.0	X		09/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X		09/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		09/28/94
Toluene	µg/l	100.0	X	CSL	09/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X		09/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X		09/28/94
1,1,1-Trichloroethane	µg/l	25.0	X	CSL	09/28/94
1,1,2-Trichloroethane	µg/l	25.0	X	CSL	09/28/94
Trichloroethylene	µg/l	10.0	X	CSL	09/28/94
Trichlorofluoromethane	µg/l	50.0	X	CSL	09/28/94
1,2,3-Trichloropropane	µg/l	100.0	X		09/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	09/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X		09/28/94
Vinyl Chloride	µg/l	10.0	X	CSL	09/28/94
m- & p-Xylene	µg/l	50.0	X		09/28/94
o-Xylene	µg/l	50.0	X	DUP	09/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.0	39.3		09/28/94
Acenaphthylene	µg/l	10.0	2.47	J	09/28/94
Anthracene	µg/l	10.0	1.09	J	09/28/94
Benzo (a) Anthracene	µg/l	10.0	X		09/28/94
Benzo (a) Pyrene	µg/l	10.0	7.59	J	09/28/94
Benzo (b) Fluoranthene	µg/l	10.0	5.46	J	09/28/94

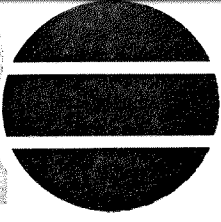
Analytical No.:

21417

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *hnd*  
REVIEWED BY: *[Signature]*

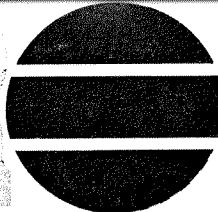
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-12</u> <u>09/19/94</u>	<u>Qualifiers</u>	<u>Date</u> <u>Analyzed</u>
Benzo (k) Fluoranthene	µg/l	10.0	2.33	J	09/28/94
Benzo (ghi) Perylene	µg/l	10.0	14.4		09/28/94
Chrysene	µg/l	10.0	X		09/28/94
Dibenzo (a, h) Anthracene	µg/l	10.0	X		09/28/94
Fluoranthene	µg/l	10.0	2.19	J	09/28/94
Fluorene	µg/l	10.0	6.11	J	09/28/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	10.0	10.2		09/28/94
2-Methyl Naphthalene	µg/l	10.0	5.18	J	09/29/94
Phenanthrene	µg/l	10.0	4.42	J	09/28/94
Pyrene	µg/l	10.0	4.85	J	09/28/94
Naphthalene	µg/l	10.0	459.		09/28/94
Water Organic Extraction			COMP		09/23/94

Analytical No.: 21417

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *MrD*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	SEEP SAMPLE 09/19/94	Qualifiers	Date Analyzed
<b>EPA 8021</b>					
Benzene	µg/l	40.0	1,640.		09/27/94
Bromobenzene	µg/l	100.0	X	CSL	09/27/94
Bromochloromethane	µg/l	200.0	X	CSL	09/27/94
Bromodichloromethane	µg/l	100.0	X	CSL	09/27/94
Bromoform	µg/l	400.0	X		09/27/94
Bromomethane	µg/l	800.0	X	CSL	09/27/94
n-Butylbenzene	µg/l	200.0	X		09/27/94
sec-Butylbenzene	µg/l	200.0	X		09/27/94
tert-Butylbenzene	µg/l	200.0	X	CSH	09/27/94
Carbon Tetrachloride	µg/l	100.0	X	CSL	09/27/94
Chlorobenzene	µg/l	400.0	X		09/27/94
Chlorodibromomethane	µg/l	100.0	X		09/27/94
Chloroethane	µg/l	400.0	X	CSH	09/27/94
Chloroform	µg/l	100.0	X	CSL	09/27/94
Chloromethane	µg/l	400.0	X	CSH CSL DUP	09/27/94
o-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
p-Chlorotoluene	µg/l	200.0	X	CSL	09/27/94
1,2-Dibromo-3-chloropropane	µg/l	2660.0	X		09/27/94
1,2-Dibromoethane	µg/l	200.0	X	CSL	09/27/94
Dibromomethane	µg/l	100.0	X	CSL	09/27/94
1,2-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,3-Dichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,4-Dichlorobenzene	µg/l	100.0	X	CSL	09/27/94
Dichlorodifluoromethane	µg/l	400.0	X	DUP CSL	09/27/94
1,1-Dichloroethane	µg/l	100.0	X	CSL	09/27/94
1,2-Dichloroethane	µg/l	100.0	X	CSL	09/27/94
1,1-Dichloroethylene	µg/l	80.0	X	CSL	09/27/94
cis-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
trans-1,2-Dichloroethylene	µg/l	100.0	X	CSL	09/27/94
1,2-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
1,3-Dichloropropane	µg/l	100.0	X	CSL	09/27/94
2,2-Dichloropropane	µg/l	400.0	X	CSL	09/27/94
1,1-Dichloropropene	µg/l	200.0	X	CSL	09/27/94
1,3-Dichloropropene	µg/l	100.0	X	CSL	09/27/94
Ethylbenzene	µg/l	200.0	X		09/27/94
Hexachlorobutadiene	µg/l	200.0	X	CSL	09/27/94
Isopropylbenzene	µg/l	200.0	X		09/27/94
p-Isopropyltoluene	µg/l	200.0	X		09/27/94
Methyl tert Butyl Ether	µg/l	400.0	X	CSH CSL DUP	09/27/94
Methylene Chloride	µg/l	500.0	X	CSL	09/27/94
Naphthalene	µg/l	200.0	1,300.		09/27/94
n-Propylbenzene	µg/l	200.0	X	CSH	09/27/94
Styrene	µg/l	1000.0	X	CSL CC	09/27/94
Tetrachloroethylene	µg/l	100.0	X	CSH	09/27/94
1,1,1,2-Tetrachloroethane	µg/l	100.0	X		09/27/94

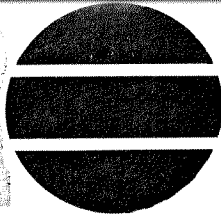
Analytical No.:

21421

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

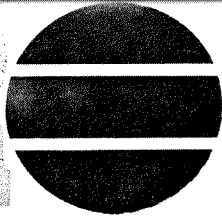
	Units	Detection Limit	SEEP SAMPLE 09/19/94	Qualifiers	Date Analyzed
1,1,2,2-Tetrachloroethane	µg/l	200.0	X		09/27/94
Toluene	µg/l	400.0	X		09/27/94
1,2,3-Trichlorobenzene	µg/l	200.0	X		09/27/94
1,2,4-Trichlorobenzene	µg/l	200.0	X	CSL	09/27/94
1,1,1-Trichloroethane	µg/l	100.0	X	CSL	09/27/94
1,1,2-Trichloroethane	µg/l	100.0	X	CSL	09/27/94
Trichloroethylene	µg/l	40.0	X	CSH	09/27/94
Trichlorofluoromethane	µg/l	200.0	X	CSL	09/27/94
1,2,3-Trichloropropane	µg/l	400.0	X		09/27/94
1,2,4-Trimethylbenzene	µg/l	200.0	X		09/27/94
1,3,5-Trimethylbenzene	µg/l	200.0	X	CSL	09/27/94
Vinyl Chloride	µg/l	40.0	X	DUP	09/27/94
m- & p-Xylene	µg/l	200.0	X		09/27/94
o-Xylene	µg/l	200.0	X	CSH	09/27/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	1000.0	26,429.		09/28/94
Acenaphthylene	µg/l	1000.0	2,130.		09/28/94
Anthracene	µg/l	1000.0	8,056.		09/28/94
Benzo (a) Anthracene	µg/l	1000.0	6,764.		09/28/94
Benzo (a) Pyrene	µg/l	1000.0	5,866.		09/28/94
Benzo (b) Fluoranthene	µg/l	1000.0	4,753.		09/28/94
Benzo (k) Fluoranthene	µg/l	1000.0	2,201.		09/28/94
Benzo (ghi) Perylene	µg/l	1000.0	2,891.		09/28/94
Chrysene	µg/l	1000.0	5,626.		09/28/94
Dibenzo (a, h) Anthracene	µg/l	1000.0	X		09/28/94
Fluoranthene	µg/l	1000.0	13,235.		09/28/94
Fluorene	µg/l	1000.0	11,009.		09/28/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	1000.0	2,522.		09/28/94
2-Meethyl Naphthalene	µg/l	1000.0	38,120.		09/28/94
Phenanthrene	µg/l	1000.0	62,103.		09/28/94
Pyrene	µg/l	1000.0	39,877.		09/28/94
Naphthalene	µg/l	1000.0	18,776.		09/28/94
Water Organic Extraction			COMP		09/26/94

Analytical No.: 21421

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JFB*

Attn: Cyrus W. Ingraham

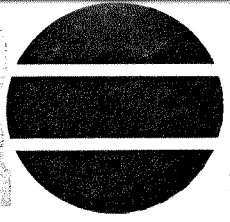
	Units	Detection Limit	AW-1 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	0.010		10/06/94
Zinc	mg/l	0.017	0.058		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/30/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	0.00472		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	12.6		10/07/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	X	CSL DUP	09/28/94
Bromobenzene	µg/l	0.5	X	CSL	09/28/94
Bromochloromethane	µg/l	1.0	X	CSL	09/28/94
Bromodichloromethane	µg/l	0.5	X	CSL	09/28/94
Bromoform	µg/l	2.0	X		09/28/94
Bromomethane	µg/l	4.0	X	CSL	09/28/94
n-Butylbenzene	µg/l	1.0	X	DUP	09/28/94
sec-Butylbenzene	µg/l	1.0	X		09/28/94
tert-Butylbenzene	µg/l	1.0	X		09/28/94
Carbon Tetrachloride	µg/l	0.5	X	CSL	09/28/94
Chlorobenzene	µg/l	2.0	X		09/28/94
Chlorodibromomethane	µg/l	0.5	X	CSL	09/28/94
Chloroethane	µg/l	2.0	X	CSL	09/28/94
Chloroform	µg/l	0.5	X	CSL DUP	09/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	09/28/94
o-Chlorotoluene	µg/l	1.0	X		09/28/94
p-Chlorotoluene	µg/l	1.0	X		09/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X		09/28/94
1,2-Dibromoethane	µg/l	1.0	X	CSL	09/28/94
Dibromomethane	µg/l	0.5	X	CSL	09/28/94
1,2-Dichlorobenzene	µg/l	1.0	X		09/28/94
1,3-Dichlorobenzene	µg/l	1.0	X		09/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		09/28/94
Dichlorodifluoromethane	µg/l	2.0	X	CSL	09/28/94
1,1-Dichloroethane	µg/l	0.5	X	CSL	09/28/94
1,2-Dichloroethane	µg/l	0.5	X	CSL	09/28/94
1,1-Dichloroethylene	µg/l	0.4	X	CSL	09/28/94

Analytical No.: 21424

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *handwritten*  
 REVIEWED BY: *handwritten initials*

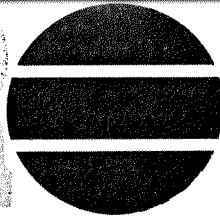
Attn: Cyrus W. Ingraham

	Units	Detection Limit	AW-1 09/19/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/28/94
1,2-Dichloropropane	µg/l	0.5	X		09/28/94
1,3-Dichloropropane	µg/l	0.5	X	CSL	09/28/94
2,2-Dichloropropane	µg/l	2.0	X	CSL	09/28/94
1,1-Dichloropropene	µg/l	1.0	X	CSL	09/28/94
1,3-Dichloropropene	µg/l	0.5	X	CSL	09/28/94
Ethylbenzene	µg/l	1.0	X	DUP	09/28/94
Hexachlorobutadiene	µg/l	1.0	X		09/28/94
Isopropylbenzene	µg/l	1.0	X		09/28/94
p-Isopropyltoluene	µg/l	1.0	X		09/28/94
Methyl tert Butyl Ether	µg/l	2.0	X	CSL DUP	09/28/94
Methylene Chloride	µg/l	2.5	X	CSL	09/28/94
Naphthalene	µg/l	1.0	X		09/28/94
n-Propylbenzene	µg/l	1.0	X		09/28/94
Styrene	µg/l	5.0	X	CSL	09/28/94
Tetrachloroethylene	µg/l	0.5	X		09/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X		09/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		09/28/94
Toluene	µg/l	2.0	X	CSL	09/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X		09/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X		09/28/94
1,1,1-Trichloroethane	µg/l	0.5	X	CSL	09/28/94
1,1,2-Trichloroethane	µg/l	0.5	X	CSL	09/28/94
Trichloroethylene	µg/l	0.2	X	CSL	09/28/94
Trichlorofluoromethane	µg/l	1.0	X	CSL	09/28/94
1,2,3-Trichloropropane	µg/l	2.0	X		09/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	09/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X		09/28/94
Vinyl Chloride	µg/l	0.2	X	CSL	09/28/94
m- & p-Xylene	µg/l	1.0	X		09/28/94
o-Xylene	µg/l	1.0	X	DUP	09/28/94

Analytical No.: 21424

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *Mrd*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	AW-2 09/19/94	Qualifiers	Date Analyzed
<b>EPA 200.7</b>					
Copper	mg/l	0.012	X		10/05/94
Iron	mg/l	0.010	X		10/06/94
Zinc	mg/l	0.017	X		10/05/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	mg/l	0.0011	X		09/30/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	mg/l	0.0032	X		10/03/94
<b>EPA 239.2</b>					
Lead (GFAAS)	mg/l	0.002	X		09/27/94
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	4.81		10/07/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	X	CSL DUP	09/28/94
Bromobenzene	µg/l	0.5	X	CSL	09/28/94
Bromochloromethane	µg/l	1.0	X	CSL	09/28/94
Bromodichloromethane	µg/l	0.5	X	CSL	09/28/94
Bromoform	µg/l	2.0	X		09/28/94
Bromomethane	µg/l	4.0	X	CSL	09/28/94
n-Butylbenzene	µg/l	1.0	X	DUP	09/28/94
sec-Butylbenzene	µg/l	1.0	X		09/28/94
tert-Butylbenzene	µg/l	1.0	X		09/28/94
Carbon Tetrachloride	µg/l	0.5	X	CSL	09/28/94
Chlorobenzene	µg/l	2.0	X		09/28/94
Chlorodibromomethane	µg/l	0.5	X	CSL	09/28/94
Chloroethane	µg/l	2.0	X	CSL	09/28/94
Chloroform	µg/l	0.5	X	CSL DUP	09/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	09/28/94
o-Chlorotoluene	µg/l	1.0	X		09/28/94
p-Chlorotoluene	µg/l	1.0	X		09/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X		09/28/94
1,2-Dibromoethane	µg/l	1.0	X	CSL	09/28/94
Dibromomethane	µg/l	0.5	X	CSL	09/28/94
1,2-Dichlorobenzene	µg/l	1.0	X		09/28/94
1,3-Dichlorobenzene	µg/l	1.0	X		09/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		09/28/94
Dichlorodifluoromethane	µg/l	2.0	X	CSL	09/28/94
1,1-Dichloroethane	µg/l	0.5	X	CSL	09/28/94
1,2-Dichloroethane	µg/l	0.5	X	CSL	09/28/94
1,1-Dichloroethylene	µg/l	0.4	X	CSL	09/28/94

Analytical No.:

21425

X = Analyzed but not detected.

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# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	AW-2 09/19/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X	CSL	09/28/94
1,2-Dichloropropane	µg/l	0.5	X		09/28/94
1,3-Dichloropropane	µg/l	0.5	X	CSL	09/28/94
2,2-Dichloropropane	µg/l	2.0	X	CSL	09/28/94
1,1-Dichloropropene	µg/l	1.0	X	CSL	09/28/94
1,3-Dichloropropene	µg/l	0.5	X	CSL	09/28/94
Ethylbenzene	µg/l	1.0	X	DUP	09/28/94
Hexachlorobutadiene	µg/l	1.0	X		09/28/94
Isopropylbenzene	µg/l	1.0	X		09/28/94
p-Isopropyltoluene	µg/l	1.0	X		09/28/94
Methyl tert Butyl Ether	µg/l	2.0	X	CSL DUP	09/28/94
Methylene Chloride	µg/l	2.5	X	CSL	09/28/94
Naphthalene	µg/l	1.0	X		09/28/94
n-Propylbenzene	µg/l	1.0	X		09/28/94
Styrene	µg/l	5.0	X	CSL	09/28/94
Tetrachloroethylene	µg/l	0.5	X		09/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X		09/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		09/28/94
Toluene	µg/l	2.0	X	CSL	09/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X		09/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X		09/28/94
1,1,1-Trichloroethane	µg/l	0.5	X	CSL	09/28/94
1,1,2-Trichloroethane	µg/l	0.5	X	CSL	09/28/94
Trichloroethylene	µg/l	0.2	X	CSL	09/28/94
Trichlorofluoromethane	µg/l	1.0	X	CSL	09/28/94
1,2,3-Trichloropropane	µg/l	2.0	X		09/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	09/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X		09/28/94
Vinyl Chloride	µg/l	0.2	X	CSL	09/28/94
m- & p-Xylene	µg/l	1.0	X		09/28/94
o-Xylene	µg/l	1.0	X	DUP	09/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	20.	X		10/06/94
Acenaphthylene	µg/l	20.	X		10/06/94
Anthracene	µg/l	20.	X		10/06/94
Benzo (a) Anthracene	µg/l	20.	X		10/06/94
Benzo (a) Pyrene	µg/l	20.	X		10/06/94
Benzo (b) Fluoranthene	µg/l	20.	X		10/06/94
Benzo (k) Fluoranthene	µg/l	20.	X		10/06/94
Benzo (ghi) Perylene	µg/l	20.	X		10/06/94
Chrysene	µg/l	20.	X		10/06/94
Dibenzo (a, h) Anthracene	µg/l	20.	X		10/06/94
Fluoranthene	µg/l	20.	X		10/06/94
Fluorene	µg/l	20.	X		10/06/94

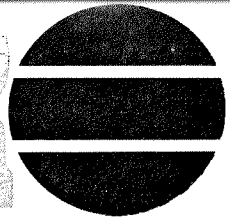
Analytical No.:

21425

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *[Signature]*

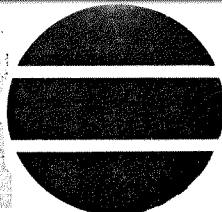
Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>AW-2 09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	20.	X		10/06/94
2-Methyl Naphthalene	µg/l	20.	X		10/06/94
Phenanthrene	µg/l	20.	X		10/06/94
Pyrene	µg/l	20.	X		10/06/94
Naphthalene	µg/l	20.	X		10/06/94
Water Organic Extraction			COMP		09/26/94

Analytical No.: 21425

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mod*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

	Units	Detection Limit	TRIP BLANK 09/19/94	Qualifiers	Date Analyzed
<b>EPA 8021</b>					
Benzene	µg/l	0.2	0.3		10/03/94
Bromobenzene	µg/l	0.5	X		10/03/94
Bromochloromethane	µg/l	1.0	X	CSL	10/03/94
Bromodichloromethane	µg/l	0.5	X	CSL	10/03/94
Bromoform	µg/l	2.0	X		10/03/94
Bromomethane	µg/l	4.0	X	CSL	10/03/94
n-Butylbenzene	µg/l	1.0	X	CSL	10/03/94
sec-Butylbenzene	µg/l	1.0	X		10/03/94
tert-Butylbenzene	µg/l	1.0	X	DUP	10/03/94
Carbon Tetrachloride	µg/l	0.5	X	CSL	10/03/94
Chlorobenzene	µg/l	2.0	X		10/03/94
Chlorodibromomethane	µg/l	0.5	X	CSL	10/03/94
Chloroethane	µg/l	2.0	X		10/03/94
Chloroform	µg/l	0.5	X	CSL	10/03/94
Chloromethane	µg/l	2.0	X	CSL CC	10/03/94
o-Chlorotoluene	µg/l	1.0	X		10/03/94
p-Chlorotoluene	µg/l	1.0	X		10/03/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X		10/03/94
1,2-Dibromoethane	µg/l	1.0	X	CSL	10/03/94
Dibromomethane	µg/l	0.5	X	CSL	10/03/94
1,2-Dichlorobenzene	µg/l	1.0	X		10/03/94
1,3-Dichlorobenzene	µg/l	1.0	X		10/03/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/03/94
Dichlorodifluoromethane	µg/l	2.0	X		10/03/94
1,1-Dichloroethane	µg/l	0.5	X	CSL	10/03/94
1,2-Dichloroethane	µg/l	0.5	X	CSL	10/03/94
1,1-Dichloroethylene	µg/l	0.4	X	CSL	10/03/94
cis-1,2-Dichloroethylene	µg/l	0.5	X	CSL	10/03/94
trans-1,2-Dichloroethylene	µg/l	0.5	X	CSL	10/03/94
1,2-Dichloropropane	µg/l	0.5	X	CSL	10/03/94
1,3-Dichloropropane	µg/l	0.5	X	CSL	10/03/94
2,2-Dichloropropane	µg/l	2.0	X	CSL	10/03/94
1,1-Dichloropropene	µg/l	1.0	X	CSL	10/03/94
1,3-Dichloropropene	µg/l	0.5	X		10/03/94
Ethylbenzene	µg/l	1.0	X	DUP	10/03/94
Hexachlorobutadiene	µg/l	1.0	X		10/03/94
Isopropylbenzene	µg/l	1.0	X	DUP	10/03/94
p-Isopropyltoluene	µg/l	1.0	X	DUP	10/03/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/03/94
Methylene Chloride	µg/l	2.5	X		10/03/94
Naphthalene	µg/l	1.0	X	DUP	10/03/94
n-Propylbenzene	µg/l	1.0	X	DUP	10/03/94
Styrene	µg/l	5.0	X		10/03/94
Tetrachloroethylene	µg/l	0.5	X		10/03/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X		10/03/94

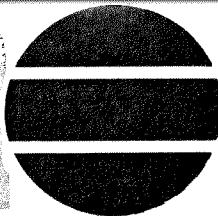
Analytical No.:

21426

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *md*  
REVIEWED BY: *JG*

Attn: Cyrus W. Ingraham

	<u>Units</u>	<u>Detection Limit</u>	<u>TRIP BLANK</u> <u>09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/03/94
Toluene	µg/l	2.0	X	DUP	10/03/94
1,2,3-Trichlorobenzene	µg/l	1.0	X		10/03/94
1,2,4-Trichlorobenzene	µg/l	1.0	X		10/03/94
1,1,1-Trichloroethane	µg/l	0.5	X	CSL	10/03/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/03/94
Trichloroethylene	µg/l	0.2	X	CSL	10/03/94
Trichlorofluoromethane	µg/l	1.0	X	CSL	10/03/94
1,2,3-Trichloropropane	µg/l	2.0	X		10/03/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	DUP	10/03/94
1,3,5-Trimethylbenzene	µg/l	1.0	X		10/03/94
Vinyl Chloride	µg/l	0.2	X		10/03/94
m- & p-Xylene	µg/l	1.0	X	DUP	10/03/94
o-Xylene	µg/l	1.0	X		10/03/94

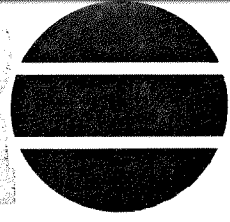
Analytical No.:

21426

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 09/21/94  
 REPORT DATE: 10/20/94  
 PREPARED BY: MRD *md*  
 REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

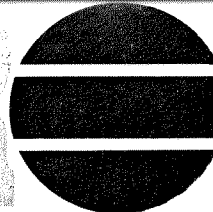
	Units	Detection Limit	TW-11 DUP 09/19/94	Qualifiers	Date Analyzed
<b>EPA 8021</b>					
Benzene	µg/l	20.0	X	CSL DUP	09/28/94
Bromobenzene	µg/l	50.0	X	CSL	09/28/94
Bromochloromethane	µg/l	100.0	X	CSL	09/28/94
Bromodichloromethane	µg/l	50.0	X	CSL	09/28/94
Bromoform	µg/l	200.0	X		09/28/94
Bromomethane	µg/l	400.0	X	CSL	09/28/94
n-Butylbenzene	µg/l	100.0	X	DUP	09/28/94
sec-Butylbenzene	µg/l	100.0	X		09/28/94
tert-Butylbenzene	µg/l	100.0	X		09/28/94
Carbon Tetrachloride	µg/l	50.0	X	CSL	09/28/94
Chlorobenzene	µg/l	200.0	X		09/28/94
Chlorodibromomethane	µg/l	50.0	X	CSL	09/28/94
Chloroethane	µg/l	200.0	X	CSL	09/28/94
Chloroform	µg/l	50.0	X	CSL DUP	09/28/94
Chloromethane	µg/l	200.0	X	CSL DUP	09/28/94
o-Chlorotoluene	µg/l	100.0	X		09/28/94
p-Chlorotoluene	µg/l	100.0	X		09/28/94
1,2-Dibromo-3-chloropropane	µg/l	1330.0	X		09/28/94
1,2-Dibromoethane	µg/l	100.0	X	CSL	09/28/94
Dibromomethane	µg/l	50.0	X	CSL	09/28/94
1,2-Dichlorobenzene	µg/l	100.0	X		09/28/94
1,3-Dichlorobenzene	µg/l	100.0	X		09/28/94
1,4-Dichlorobenzene	µg/l	50.0	X		09/28/94
Dichlorodifluoromethane	µg/l	200.0	X	CSL	09/28/94
1,1-Dichloroethane	µg/l	50.0	X	CSL	09/28/94
1,2-Dichloroethane	µg/l	50.0	X	CSL	09/28/94
1,1-Dichloroethylene	µg/l	40.0	X	CSL	09/28/94
cis-1,2-Dichloroethylene	µg/l	50.0	X	CSL	09/28/94
trans-1,2-Dichloroethylene	µg/l	50.0	X	CSL	09/28/94
1,2-Dichloropropane	µg/l	50.0	X		09/28/94
1,3-Dichloropropane	µg/l	50.0	X	CSL	09/28/94
2,2-Dichloropropane	µg/l	200.0	X	CSL	09/28/94
1,1-Dichloropropene	µg/l	100.0	X	CSL	09/28/94
1,3-Dichloropropene	µg/l	50.0	X	CSL	09/28/94
Ethylbenzene	µg/l	100.0	186.	DUP	09/28/94
Hexachlorobutadiene	µg/l	100.0	X		09/28/94
Isopropylbenzene	µg/l	100.0	X		09/28/94
p-Isopropyltoluene	µg/l	100.0	X		09/28/94
Methyl tert Butyl Ether	µg/l	200.0	X	CSL DUP	09/28/94
Methylene Chloride	µg/l	250.0	X	CSL	09/28/94
Naphthalene	µg/l	100.0	2,210.		09/28/94
n-Propylbenzene	µg/l	100.0	X		09/28/94
Styrene	µg/l	500.0	X	CSL	09/28/94
Tetrachloroethylene	µg/l	50.0	X		09/28/94
1,1,1,2-Tetrachloroethane	µg/l	50.0	X		09/28/94
1,1,2,2-Tetrachloroethane	µg/l	100.0	X		09/28/94
Toluene	µg/l	200.0	X	CSL	09/28/94

Analytical No.: 21427

X = Analyzed but not detected.  
 All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *JPS*

Attn: Cyrus W. Ingraham

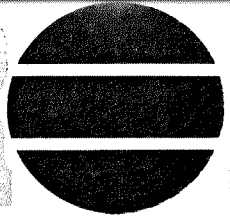
	<u>Units</u>	<u>Detection Limit</u>	<u>TW-11 DUP 09/19/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
1,2,3-Trichlorobenzene	µg/l	100.0	X		09/28/94
1,2,4-Trichlorobenzene	µg/l	100.0	X		09/28/94
1,1,1-Trichloroethane	µg/l	50.0	X	CSL	09/28/94
1,1,2-Trichloroethane	µg/l	50.0	X	CSL	09/28/94
Trichloroethylene	µg/l	20.0	X	CSL	09/28/94
Trichlorofluoromethane	µg/l	100.0	X	CSL	09/28/94
1,2,3-Trichloropropane	µg/l	200.0	X		09/28/94
1,2,4-Trimethylbenzene	µg/l	100.0	X	CSL	09/28/94
1,3,5-Trimethylbenzene	µg/l	100.0	X		09/28/94
Vinyl Chloride	µg/l	20.0	X	CSL	09/28/94
m- & p-Xylene	µg/l	100.0	125.		09/28/94
o-Xylene	µg/l	100.0	X	DUP	09/28/94

Analytical No.:

21427

X = Analyzed but not detected.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

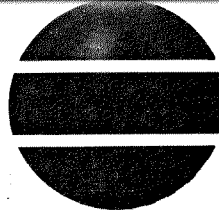
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 09/21/94  
REPORT DATE: 10/20/94  
PREPARED BY: MRD *mr*  
REVIEWED BY: *[Signature]*

Attn: Cyrus W. Ingraham

## Qualifier Descriptions

- CSL Check standard for this analyte exhibited a low bias. Sample results may also be biased low. Non-detects were verified by comparison with a low standard.
- CSH Check standard for this analyte exhibited a high bias. Sample results may also be biased high. Non-detects were verified by comparison with a low standard.
- CC Estimated concentration due to the calibration correlation coefficient not meeting the minimum requirements under Wisconsin NR149.
- J Estimated concentration below reporting limit.
- DUP Result of duplicate analysis in this quality assurance batch exceeds the limits for precision. Sample results may also show a degree of variability.
- CAL Estimated concentration beyond the calibration range, but within the detector range of the instrument.
- S2H Matrix spike duplicate recovery was high. Result for sample may also be biased high.
- SL Recovery of surrogate was low. Result for sample may also be biased low.
- S1L Matrix spike recovery was low. Result for sample may also be biased low.
- S2L Matrix spike duplicate recovery was low. Result for sample may also be biased low.

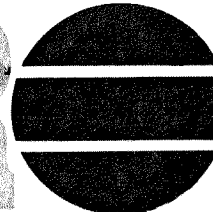
All analyses conducted in accordance with Enviroscan Quality Assurance Program.



QUALITY ASSURANCE

Haloalkane check standards for September 28, 1994 were below control limits. The problem appears to be preparation or stock standard variation since the Aromatic check standard results were acceptable. The matrix spike and matrix spike duplicate were also acceptable. Our normal course of action would be to rerun these samples, but due to the relatively short holding time for the analysis we were unable to rerun the analysis.

# REQUEST FOR SERVICES



# ENVIRONMENTAL SCIENCES

303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## CLIENT INFORMATION

Name: Cyrus W. Ingraham  
 Company: Short Elliott Hendrickson Inc.  
 Address: 421 Frenette Drive  
Chippewa Falls, Wisconsin 54729  
 Phone: (715) 820-6200  
 P.O. # / Project #: WIDNR9401  
 Quote / Reference #: \_\_\_\_\_  
 Note: Terms and conditions printed on back apply.

Turnaround Time \_\_\_\_\_

- Normal  
 Rush

Date Needed \_\_\_\_\_

(Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

- Sample Type**  
 (Check all that apply)  
 Groundwater  
 Wastewater  
 Soil  
 Solid Waste  
 Oil  
 Other \_\_\_\_\_
- Sample Handling**  
 Nonhazardous  
 Flammable  
 Skin Irritant  
 Highly Toxic  
 Other (specify) Preserved w/ Acids  
 Refrigerate  
 Work in Hood  
 Wear Gloves

LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMPLE ID	VOLs	PANs	TOC	Total As, Cr, Cu, Pb, Zn, Fe	Methods 200.7 or 200.9	Method 200.9	REMARKS
	9-15-94	10:00am	5	TW-8	/	/	/	/	/	/	
	9-15-94	1:50pm	6	MW-2	/	/	/	/	/	/	Metals Sample Field Filtered
	9-15-94	2:40pm	6	MW-1	/	/	/	/	/	/	
	9-15-94	3:45pm	6	TW-1	/	/	/	/	/	/	
	9-15-94	3:45pm	6	TW-3	/	/	/	/	/	/	
	9-15-94	4:10pm	6	MW-3	/	/	/	/	/	/	
	9-19-94	11:55pm	5	TW-11	/	/	/	/	/	/	Dup.
	9-19-94	12:10pm	5	TW-10	/	/	/	/	/	/	
	9-19-94	1:10pm	5	TW-7	/	/	/	/	/	/	
	9-19-94	1:40pm	6	TW-12	/	/	/	/	/	/	Metals Sample Field Filtered

SHORT

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)

John E. Guff

Del'v: Hand Comm   
 Ship. Cont. OK?  N N/A  
 Rec'd Refrig.?  N N/A  
 Seals OK?  N N/A  
 Samples leaking? Y  N/A  
 Comments: \_\_\_\_\_

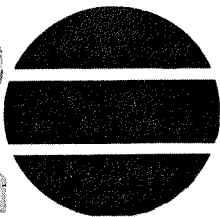
Rec'd  
 OK  
 OK

21408-21426

RELINQUISHED BY: (Signature) <u>John E. Guff</u>	DATE/TIME 9-20-94 9:10am	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) <u>Douglas Retenauer</u>

9/21/94 11:30am

# REQUEST FOR SERVICES



# SCAN

303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

## CLIENT INFORMATION

Name: Cyrus W. Ingraham  
 Company: Short Elliott Hendrickson Inc.  
 Address: 421 Fenette Drive  
Chippewa Falls, Wisconsin 54729  
 Phone: (715) 720-6200  
 P.O. # / Project #: WIDNR 9401  
 Quote / Reference #: \_\_\_\_\_  
 Note: Terms and conditions printed on back apply.

Turnaround Time \_\_\_\_\_  
 Normal  
 Rush  
 Date Needed \_\_\_\_\_  
 (Preapproved by Lab)

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

LAB USE ONLY	DATE	TIME	No. of Containers	SAMPLE ID	REMARKS
			COMP GRAB		
	9-19-94	2:25pm	6	TW-4	Metals Sample Field Filtered
	9-19-94	3:05pm	6	TW-2	↓ ↓
	9-19-94	3:45pm	6	TW-9	↓ ↓
	9-19-94	4:20pm	4	SEEP SAMPLE	
	9-19-94	4:45pm	6	TW-6	Metals Sample Field Filtered
	9-19-94	5:30pm	6	TW-5	↓ ↓
	9-19-94	6:00pm	6	AW-1	↓ ↓
	9-19-94	6:25pm	6	AW-2	↓ ↓
	9-19-94	11:30am	3	Trip Blank	
	9/19/94			TW11-DUP	X

- Sample Type**  
 (Check all that apply)  
 Groundwater  
 Wastewater  
 Soil  
 Solid Waste  
 Oil  
 Other \_\_\_\_\_
- Sample Handling**  
 Nonhazardous  
 Flammable  
 Skin Irritant  
 Highly Toxic  
 Other (specify) Preserved w/ acids  
 Refrigerate  
 Work in Hood  
 Wear Gloves

VOCS SW 8021  
 PAHs SW 8270  
 TOC APHA 505B  
 Total As, Cr, Cu, Pb, Zn  
 Total Cd, Se Methods 200.7, 200.9

SHORT

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)  
John E. Gull

RELINQUISHED BY: (Signature) <u>John E. Gull</u>	DATE/TIME 9-20-94 9:00am	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) <u>Doris Retinger</u>

Del'v: Hand Comm  
 Ship. Cont. OK? Y N N/A  
 Rec'd Refrig.? Y N N/A  
 Seals OK? Y N N/A  
 Samples leaking? Y N N/A  
 Comments:  
21408-21406  
Rec'd per ice

9/21/94 11:30 AM

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

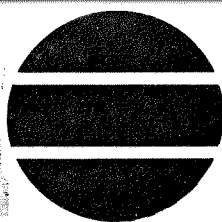
	Units	Detection Limit	MW-1 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	10.2		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	2,020.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	1.16		11/02/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	4.37		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>EPA 8021</b>					
Benzene	µg/l	40.0	3,340.		10/29/94
Bromobenzene	µg/l	100.	X		10/29/94
Bromochloromethane	µg/l	200.	X		10/29/94
Bromodichloromethane	µg/l	100.	X		10/29/94
Bromoform	µg/l	400.	X	CC	10/29/94
Bromomethane	µg/l	800.	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	200.	X		10/29/94
sec-Butylbenzene	µg/l	200.	X		10/29/94
tert-Butylbenzene	µg/l	200.	X		10/29/94
Carbon Tetrachloride	µg/l	100.	X		10/29/94
Chlorobenzene	µg/l	400.	X		10/29/94
Chlorodibromomethane	µg/l	100.	X		10/29/94
Chloroethane	µg/l	400.	X		10/29/94
Chloroform	µg/l	100.	X		10/29/94
Chloromethane	µg/l	400.	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	200.	X	CSL	10/29/94
p-Chlorotoluene	µg/l	200.	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	2660.	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	200.	X		10/29/94
Dibromomethane	µg/l	100.	X		10/29/94
1,2-Dichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	100.	X		10/29/94
Dichlorodifluoromethane	µg/l	400.	X		10/29/94
1,1-Dichloroethane	µg/l	100.	X		10/29/94
1,2-Dichloroethane	µg/l	100.	X		10/29/94
1,1-Dichloroethylene	µg/l	80.0	X		10/29/94

Analytical No.: 24202

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

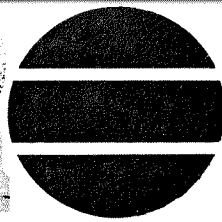
	Units	Detection Limit	MW-1 10/20/94	Qualifiers	Date Analyzed
- cis-1,2-Dichloroethylene	µg/l	100.	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	100.	X		10/29/94
1,2-Dichloropropane	µg/l	100.	X		10/29/94
1,3-Dichloropropane	µg/l	100.	X		10/29/94
2,2-Dichloropropane	µg/l	400.	X	CC	10/29/94
1,1-Dichloropropene	µg/l	200.	X		10/29/94
1,3-Dichloropropene	µg/l	100.	X		10/29/94
Ethylbenzene	µg/l	200.	353.		10/29/94
- Hexachlorobutadiene	µg/l	200.	X		10/29/94
Isopropylbenzene	µg/l	200.	X		10/29/94
p-Isopropyltoluene	µg/l	200.	X		10/29/94
Methyl tert Butyl Ether	µg/l	400.	X		10/29/94
Methylene Chloride	µg/l	500.	X		10/29/94
Naphthalene	µg/l	200.	1,930.	DUP	10/29/94
n-Propylbenzene	µg/l	200.	X		10/29/94
Styrene	µg/l	1000.	X	CSL	10/29/94
- Tetrachloroethylene	µg/l	100.	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	100.	X	CSH	10/29/94
1,1,2,2-Tetrachloroethane	µg/l	200.	X		10/29/94
Toluene	µg/l	400.	X		10/29/94
- 1,2,3-Trichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	100.	X		10/29/94
1,1,2-Trichloroethane	µg/l	100.	X		10/29/94
- Trichloroethylene	µg/l	40.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	200.	X		10/29/94
1,2,3-Trichloropropane	µg/l	400.	X	CSL CC	10/29/94
1,2,4-Trimethylbenzene	µg/l	200.	X	CSL	10/29/94
- 1,3,5-Trimethylbenzene	µg/l	200.	X	CSL	10/29/94
Vinyl Chloride	µg/l	40.0	X		10/29/94
m- & p-Xylene	µg/l	200.	202.	CSL	10/29/94
- o-Xylene	µg/l	200.	241.		10/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.	182.		11/02/94
Acenaphthylene	µg/l	10.	7.93	J	11/02/94
- Anthracene	µg/l	10.	20.4		11/02/94
Benzo (a) Anthracene	µg/l	10.	10.4		11/02/94
Benzo (a) Pyrene	µg/l	10.	10.6		11/02/94
Benzo (b) Fluoranthene	µg/l	10.	8.50	J	11/02/94
Benzo (k) Fluoranthene	µg/l	10.	2.10	J	11/02/94
Benzo (ghi) Perylene	µg/l	10.	4.97	J	11/02/94
Chrysene	µg/l	10.	9.03	J	11/02/94
Dibenzo (a, h) Anthracene	µg/l	10.	X		11/02/94
- Fluoranthene	µg/l	10.	25.0		11/02/94
Fluorene	µg/l	10.	59.9		11/02/94

Analytical No.: 24202

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

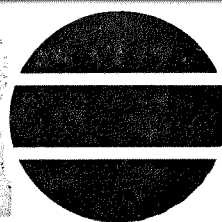
Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-1 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno(1,2,3-cd)Pyrene	µg/l	10.	4.84	J	11/02/94
2-Methyl Naphthalene	µg/l	10.	353.		11/08/94
Phenanthrene	µg/l	10.	93.9		11/02/94
Pyrene	µg/l	10.	28.9		11/02/94
Naphthalene	µg/l	10.	228.		11/08/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24202		

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# ANALYTICAL REPORT



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DATE REC'D: 10/25/94  
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PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

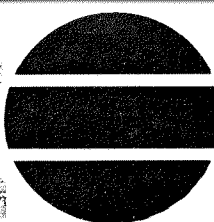
<u>EPA 415.2</u>	<u>Units</u>	<u>Detection Limit</u>	<u>MW-2</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Nonpurge Org. Carbon	mg/l	0.6	14.2		10/31/94
<u>EPA 200.7</u>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	5,020.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<u>EPA 206.2</u>					
Arsenic (GFAAS)	µg/l	1.1	2.96		11/01/94
<u>EPA 218.2</u>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<u>EPA 239.2</u>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<u>EPA 8021</u>					
Benzene	µg/l	10.0	659.		10/28/94
Bromobenzene	µg/l	25.0	X		10/28/94
Bromochloromethane	µg/l	50.0	X		10/28/94
Bromodichloromethane	µg/l	25.0	X		10/28/94
Bromoform	µg/l	100.	X	CC	10/28/94
Bromomethane	µg/l	200.	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	50.0	X		10/28/94
sec-Butylbenzene	µg/l	50.0	X		10/28/94
tert-Butylbenzene	µg/l	50.0	X		10/28/94
Carbon Tetrachloride	µg/l	25.0	X		10/28/94
Chlorobenzene	µg/l	100.	X		10/28/94
Chlorodibromomethane	µg/l	25.0	X		10/28/94
Chloroethane	µg/l	100.	X		10/28/94
Chloroform	µg/l	25.0	X		10/28/94
Chloromethane	µg/l	100.	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	50.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	50.0	X		10/28/94
Dibromomethane	µg/l	25.0	X		10/28/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/28/94
Dichlorodifluoromethane	µg/l	100.	X		10/28/94
1,1-Dichloroethane	µg/l	25.0	X		10/28/94
1,2-Dichloroethane	µg/l	25.0	X		10/28/94
1,1-Dichloroethylene	µg/l	20.0	X		10/28/94

Analytical No.: 24203

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
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DATE REC'D: 10/25/94  
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PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	MW-2 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/28/94
1,2-Dichloropropane	µg/l	25.0	X		10/28/94
1,3-Dichloropropane	µg/l	25.0	X		10/28/94
2,2-Dichloropropane	µg/l	100.	X	CC	10/28/94
1,1-Dichloropropene	µg/l	50.0	X		10/28/94
1,3-Dichloropropene	µg/l	25.0	X		10/28/94
Ethylbenzene	µg/l	50.0	178.		10/28/94
Hexachlorobutadiene	µg/l	50.0	X		10/28/94
Isopropylbenzene	µg/l	50.0	X		10/28/94
p-Isopropyltoluene	µg/l	50.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	100.	X		10/28/94
Methylene Chloride	µg/l	125.	X		10/28/94
Naphthalene	µg/l	50.0	1,020.	DUP	10/28/94
n-Propylbenzene	µg/l	50.0	X		10/28/94
Styrene	µg/l	250.	X	CSL	10/28/94
Tetrachloroethylene	µg/l	25.0	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/28/94
Toluene	µg/l	100.	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/28/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/28/94
Trichloroethylene	µg/l	10.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	50.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	100.	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	10.0	X		10/28/94
m- & p-Xylene	µg/l	50.0	86.7	CSL	10/28/94
o-Xylene	µg/l	50.0	121.		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.	43.3		11/02/94
Acenaphthylene	µg/l	10.	3.53	J	11/02/94
Anthracene	µg/l	10.	2.92	J	11/02/94
Benzo (a) Anthracene	µg/l	10.	2.61	J	11/02/94
Benzo (a) Pyrene	µg/l	10.	4.29	J	11/02/94
Benzo (b) Fluoranthene	µg/l	10.	2.92	J	11/02/94
Benzo (k) Fluoranthene	µg/l	10.	1.53	J	11/02/94
Benzo (ghi) Perylene	µg/l	10.	3.26	J	11/02/94
Chrysene	µg/l	10.	2.89	J	11/02/94
Dibenzo (a, h) Anthracene	µg/l	10.	X		11/02/94
Fluoranthene	µg/l	10.	4.85	J	11/02/94
Fluorene	µg/l	10.	9.54	J	11/02/94

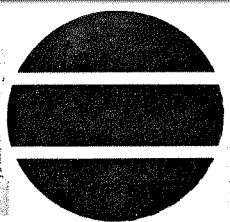
Analytical No.:

24203

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

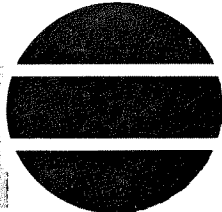
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-2 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno(1,2,3-cd) Pyrene	µg/l	10.	2.75	J	11/02/94
2-Methyl Naphthalene	µg/l	10.	91.4		11/02/94
Phenanthrene	µg/l	10.	11.2		11/02/94
Pyrene	µg/l	10.	6.79	J	11/02/94
Naphthalene	µg/l	10.	857.		11/08/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24203		

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
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 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

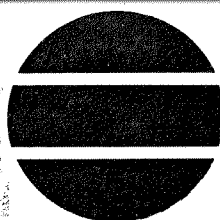
	Units	Detection Limit	MW-3 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	9.59		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	844.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	1.18		11/01/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	2.55		10/28/94
Bromobenzene	µg/l	0.5	X		10/28/94
Bromochloromethane	µg/l	1.0	X		10/28/94
Bromodichloromethane	µg/l	0.5	X		10/28/94
Bromoform	µg/l	2.0	X	CC	10/28/94
Bromomethane	µg/l	4.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	1.0	X		10/28/94
sec-Butylbenzene	µg/l	1.0	X		10/28/94
tert-Butylbenzene	µg/l	1.0	X		10/28/94
Carbon Tetrachloride	µg/l	0.5	X		10/28/94
Chlorobenzene	µg/l	2.0	X		10/28/94
Chlorodibromomethane	µg/l	0.5	X		10/28/94
Chloroethane	µg/l	2.0	X		10/28/94
Chloroform	µg/l	0.5	X		10/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	1.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	1.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	1.0	X		10/28/94
Dibromomethane	µg/l	0.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/28/94
Dichlorodifluoromethane	µg/l	2.0	X		10/28/94
1,1-Dichloroethane	µg/l	0.5	X		10/28/94
1,2-Dichloroethane	µg/l	0.5	X		10/28/94
1,1-Dichloroethylene	µg/l	0.4	X		10/28/94

Analytical No.: 24204

X = Analyzed but not detected.

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# ANALYTICAL REPORT



hort Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	MW-3 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	0.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X		10/28/94
1,2-Dichloropropane	µg/l	0.5	X		10/28/94
1,3-Dichloropropane	µg/l	0.5	X		10/28/94
2,2-Dichloropropane	µg/l	2.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	1.0	X		10/28/94
1,3-Dichloropropene	µg/l	0.5	X		10/28/94
Ethylbenzene	µg/l	1.0	X		10/28/94
Hexachlorobutadiene	µg/l	1.0	X		10/28/94
Isopropylbenzene	µg/l	1.0	X		10/28/94
p-Isopropyltoluene	µg/l	1.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/28/94
Methylene Chloride	µg/l	2.5	X		10/28/94
Naphthalene	µg/l	1.0	1.15	DUP	10/28/94
n-Propylbenzene	µg/l	1.0	X		10/28/94
Styrene	µg/l	5.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	0.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/28/94
Toluene	µg/l	2.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	0.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/28/94
Trichloroethylene	µg/l	0.2	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	1.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	2.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	0.2	X		10/28/94
m- & p-Xylene	µg/l	1.0	X	CSL	10/28/94
o-Xylene	µg/l	1.0	X		10/28/94
<b>PA 8270</b>					
Acenaphthene	µg/l	100.	X		11/08/94
Acenaphthylene	µg/l	100.	X		11/08/94
Anthracene	µg/l	100.	X		11/08/94
Benzo (a) Anthracene	µg/l	100.	37.5	J	11/08/94
Benzo (a) Pyrene	µg/l	100.	49.4	J	11/08/94
Benzo (b) Fluoranthene	µg/l	100.	31.0	J	11/08/94
Benzo (k) Fluoranthene	µg/l	100.	14.9	J	11/08/94
Benzo (ghi) Perylene	µg/l	100.	26.3	J	11/08/94
Chrysene	µg/l	100.	39.0	J	11/08/94
Dibenzo (a, h) Anthracene	µg/l	100.	X		11/08/94
Fluoranthene	µg/l	100.	65.7	J	11/08/94
Fluorene	µg/l	100.	X		11/08/94

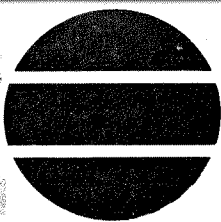
Analytical No.:

24204

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

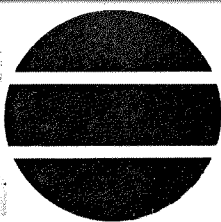
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *MRD*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>MW-3 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	100.	24.6	J	11/08/94
2-Methyl Naphthalene	µg/l	100.	X		11/08/94
Phenanthrene	µg/l	100.	X		11/08/94
Pyrene	µg/l	100.	127.		11/08/94
Naphthalene	µg/l	100.	X		11/08/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24204		

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Attn: John E. Guhl

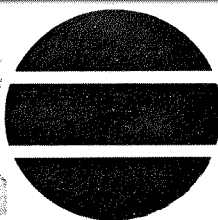
	Units	Detection Limit	TW-1 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	18.2		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	5,880.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	-	2.94		11/01/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	450.	CSL	11/02/94
Bromobenzene	µg/l	12.5	X		10/28/94
Bromochloromethane	µg/l	25.0	X		10/28/94
Bromodichloromethane	µg/l	12.5	X		10/28/94
Bromoform	µg/l	50.0	X	CC	10/28/94
Bromomethane	µg/l	100.	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	25.0	X		10/28/94
sec-Butylbenzene	µg/l	25.0	X		10/28/94
tert-Butylbenzene	µg/l	25.0	X		10/28/94
Carbon Tetrachloride	µg/l	12.5	X		10/28/94
Chlorobenzene	µg/l	50.0	X		10/28/94
Chlorodibromomethane	µg/l	12.5	X		10/28/94
Chloroethane	µg/l	50.0	X		10/28/94
Chloroform	µg/l	12.5	X		10/28/94
Chloromethane	µg/l	50.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	25.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	25.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	333.	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	25.0	X		10/28/94
Dibromomethane	µg/l	12.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	25.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	25.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	12.5	X		10/28/94
Dichlorodifluoromethane	µg/l	50.0	X		10/28/94
1,1-Dichloroethane	µg/l	12.5	X		10/28/94
1,2-Dichloroethane	µg/l	12.5	X		10/28/94
1,1-Dichloroethylene	µg/l	10.0	X		10/28/94

Analytical No.: 24205

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-1 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	12.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	12.5	X		10/28/94
1,2-Dichloropropane	µg/l	12.5	X		10/28/94
1,3-Dichloropropane	µg/l	12.5	X		10/28/94
2,2-Dichloropropane	µg/l	50.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	25.0	X		10/28/94
1,3-Dichloropropene	µg/l	12.5	X		10/28/94
Ethylbenzene	µg/l	25.0	95.4		10/28/94
Hexachlorobutadiene	µg/l	25.0	X		10/28/94
Isopropylbenzene	µg/l	25.0	X		10/28/94
p-Isopropyltoluene	µg/l	25.0	38.7		10/28/94
Methyl tert Butyl Ether	µg/l	50.0	X		10/28/94
Methylene Chloride	µg/l	62.5	X		10/28/94
Naphthalene	µg/l	25.0	805.	DUP	10/28/94
Naphthalene	µg/l	50.0	749.		11/02/94
n-Propylbenzene	µg/l	25.0	X		10/28/94
Styrene	µg/l	125.	X	CSL	10/28/94
Tetrachloroethylene	µg/l	12.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	12.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	25.0	X		10/28/94
Toluene	µg/l	50.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	25.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	25.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	12.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	12.5	X		10/28/94
Trichloroethylene	µg/l	5.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	25.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	50.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	25.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	25.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	5.0	X		10/28/94
m- & p-Xylene	µg/l	25.0	45.4	CSL	10/28/94
o-Xylene	µg/l	25.0	54.5		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.	121.		11/08/94
Acenaphthylene	µg/l	50.	13.4	J	11/08/94
Anthracene	µg/l	50.	29.0	J	11/08/94
Benzo (a) Anthracene	µg/l	50.	37.0	J	11/08/94
Benzo (a) Pyrene	µg/l	50.	45.7	J	11/08/94
Benzo (b) Fluoranthene	µg/l	50.	32.1	J	11/08/94
Benzo (k) Fluoranthene	µg/l	50.	17.5	J	11/08/94
Benzo (ghi) Perylene	µg/l	50.	29.2	J	11/08/94
Chrysene	µg/l	50.	44.0	J	11/08/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/08/94
Fluoranthene	µg/l	51.	80.8		11/08/94

Analytical No.:

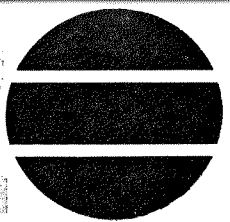
24205

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

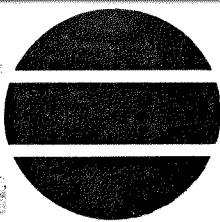
CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-1 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Fluorene	µg/l	50.	38.3	J	11/08/94
Indeno(1,2,3-cd) Pyrene	µg/l	50.	24.2	J	11/08/94
2-Methyl Naphthalene	µg/l	50.	55.0		11/08/94
Phenanthrene	µg/l	50.	53.4		11/08/94
Pyrene	µg/l	50.	125.		11/08/94
Naphthalene	µg/l	50.	58.7		11/08/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24205		

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-2 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	13.5		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	5,060.		11/09/94
Zinc	µg/l	17.	59.		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	1.33		11/01/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	2.85		11/03/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	578.		10/28/94
Bromobenzene	µg/l	25.0	X		10/28/94
Bromochloromethane	µg/l	50.0	X		10/28/94
Bromodichloromethane	µg/l	25.0	X		10/28/94
Bromoform	µg/l	100.	X	CC	10/28/94
Bromomethane	µg/l	200.	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	50.0	X		10/28/94
sec-Butylbenzene	µg/l	50.0	X		10/28/94
tert-Butylbenzene	µg/l	50.0	X		10/28/94
Carbon Tetrachloride	µg/l	25.0	X		10/28/94
Chlorobenzene	µg/l	100.	X		10/28/94
Chlorodibromomethane	µg/l	25.0	X		10/28/94
Chloroethane	µg/l	100.	X		10/28/94
Chloroform	µg/l	25.0	X		10/28/94
Chloromethane	µg/l	100.	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	50.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	50.0	X		10/28/94
Dibromomethane	µg/l	25.0	X		10/28/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/28/94
Dichlorodifluoromethane	µg/l	100.	X		10/28/94
1,1-Dichloroethane	µg/l	25.0	X		10/28/94
1,2-Dichloroethane	µg/l	25.0	X		10/28/94
1,1-Dichloroethylene	µg/l	20.0	X		10/28/94

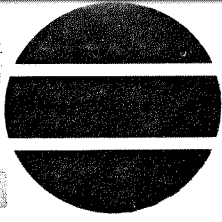
Analytical No.:

24206

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-2 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/28/94
1,2-Dichloropropane	µg/l	25.0	X		10/28/94
1,3-Dichloropropane	µg/l	25.0	X		10/28/94
2,2-Dichloropropane	µg/l	100.	X	CC	10/28/94
1,1-Dichloropropene	µg/l	50.0	X		10/28/94
1,3-Dichloropropene	µg/l	25.0	X		10/28/94
Ethylbenzene	µg/l	50.0	71.1		10/28/94
Hexachlorobutadiene	µg/l	50.0	X		10/28/94
Isopropylbenzene	µg/l	50.0	X		10/28/94
p-Isopropyltoluene	µg/l	50.0	134.		10/28/94
Methyl tert Butyl Ether	µg/l	100.	X		10/28/94
Methylene Chloride	µg/l	125.	X		10/28/94
Naphthalene	µg/l	50.0	111.	DUP	10/28/94
n-Propylbenzene	µg/l	50.0	X		10/28/94
Styrene	µg/l	250.	X	CSL	10/28/94
Tetrachloroethylene	µg/l	25.0	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/28/94
Toluene	µg/l	100.	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/28/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/28/94
Trichloroethylene	µg/l	10.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	50.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	100.	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	10.0	X		10/28/94
m- & p-Xylene	µg/l	50.0	X	CSL	10/28/94
o-Xylene	µg/l	50.0	52.4		10/28/94

**EPA 8270**

Acenaphthene	µg/l	10.	33.3		11/02/94
Acenaphthylene	µg/l	10.	3.65	J	11/02/94
Anthracene	µg/l	10.	7.03	J	11/02/94
Benzo (a) Anthracene	µg/l	10.	17.0		11/02/94
Benzo (a) Pyrene	µg/l	10.	17.1		11/02/94
Benzo (b) Fluoranthene	µg/l	10.	13.6		11/02/94
Benzo (k) Fluoranthene	µg/l	10.	5.97	J	11/02/94
Benzo (ghi) Perylene	µg/l	10.	7.48	J	11/02/94
Chrysene	µg/l	10.	17.8		11/02/94
Dibenzo (a, h) Anthracene	µg/l	10.	1.45	J	11/02/94
Fluoranthene	µg/l	10.	37.0		11/02/94
Fluorene	µg/l	10.	10.8		11/02/94

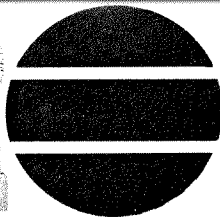
Analytical No.:

24206

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-2 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	10.	6.57	J	11/02/94
2-Methyl Naphthalene	µg/l	10.	X		11/02/94
Phenanthrene	µg/l	10.	6.88	J	11/02/94
Pyrene	µg/l	10.	51.5		11/02/94
Naphthalene	µg/l	10.	48.5		11/02/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24206		

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *MRD*

Attn: John E. Guhl

	Units	Detection Limit	TW-3 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	12.6		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	855.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	1.42		11/01/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	3.46		11/03/94
<b>EPA 8021</b>					
Benzene	µg/l	10.0	546.	CSL	11/02/94
Bromobenzene	µg/l	2.5	X		10/28/94
Bromochloromethane	µg/l	5.0	X		10/28/94
Bromodichloromethane	µg/l	2.5	X		10/28/94
Bromoform	µg/l	10.0	X	CC	10/28/94
Bromomethane	µg/l	20.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	5.0	17.9		10/28/94
sec-Butylbenzene	µg/l	5.0	X		10/28/94
tert-Butylbenzene	µg/l	5.0	X		10/28/94
Carbon Tetrachloride	µg/l	2.5	X		10/28/94
Chlorobenzene	µg/l	10.0	X		10/28/94
Chlorodibromomethane	µg/l	2.5	X		10/28/94
Chloroethane	µg/l	10.0	X		10/28/94
Chloroform	µg/l	2.5	X		10/28/94
Chloromethane	µg/l	10.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	5.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	5.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	66.5	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	5.0	X		10/28/94
Dibromomethane	µg/l	2.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	2.5	X		10/28/94
Dichlorodifluoromethane	µg/l	10.0	X		10/28/94
1,1-Dichloroethane	µg/l	2.5	X		10/28/94
1,2-Dichloroethane	µg/l	2.5	X		10/28/94
1,1-Dichloroethylene	µg/l	2.0	X		10/28/94

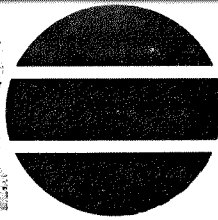
Analytical No.:

24207

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-3 10/20/94	Qualifiers	Date Analyzed
- cis-1,2-Dichloroethylene	µg/l	2.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	2.5	X		10/28/94
1,2-Dichloropropane	µg/l	2.5	X		10/28/94
1,3-Dichloropropane	µg/l	2.5	X		10/28/94
- 2,2-Dichloropropane	µg/l	10.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	5.0	X		10/28/94
1,3-Dichloropropene	µg/l	2.5	X		10/28/94
Ethylbenzene	µg/l	5.0	43.0		10/28/94
- Hexachlorobutadiene	µg/l	5.0	X		10/28/94
Isopropylbenzene	µg/l	5.0	X		10/28/94
p-Isopropyltoluene	µg/l	5.0	23.0		10/28/94
Methyl tert Butyl Ether	µg/l	10.0	X		10/28/94
- Methylene Chloride	µg/l	12.5	X		10/28/94
Naphthalene	µg/l	5.0	701.	DUP	10/28/94
n-Propylbenzene	µg/l	5.0	X		10/28/94
Styrene	µg/l	25.0	X	CSL	10/28/94
- Tetrachloroethylene	µg/l	2.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	2.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	5.0	X		10/28/94
Toluene	µg/l	10.0	34.9		10/28/94
- 1,2,3-Trichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	2.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	2.5	X		10/28/94
- Trichloroethylene	µg/l	1.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	5.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	10.0	X		10/28/94
1,2,4-Trimethylbenzene	µg/l	5.0	33.9	CSL	10/28/94
- 1,3,5-Trimethylbenzene	µg/l	5.0	8.17	CSL	10/28/94
Vinyl Chloride	µg/l	1.0	X		10/28/94
m- & p-Xylene	µg/l	5.0	18.4	CSL	10/28/94
o-Xylene	µg/l	5.0	33.6		10/28/94

**EPA 8270**

Acenaphthene	µg/l	100.	164.		11/10/94
Acenaphthylene	µg/l	100.	36.5	J	11/10/94
- Anthracene	µg/l	100.	83.7	J	11/10/94
Benzo (a) Anthracene	µg/l	100.	80.4	J	11/10/94
Benzo (a) Pyrene	µg/l	100.	115.		11/10/94
Benzo (b) Fluoranthene	µg/l	100.	72.9	J	11/10/94
- Benzo (k) Fluoranthene	µg/l	100.	37.0	J	11/10/94
Benzo (ghi) Perylene	µg/l	100.	67.8	J	11/10/94
Chrysene	µg/l	100.	89.1	J	11/10/94
Dibenzo (a, h) Anthracene	µg/l	100.	X		11/10/94
- Fluoranthene	µg/l	100.	148.		11/10/94
Fluorene	µg/l	100.	95.3	J	11/10/94

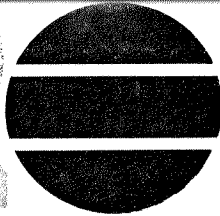
Analytical No.:

24207

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

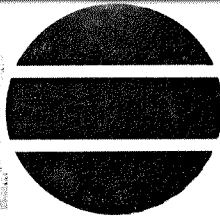
Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-3</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date</u> <u>Analyzed</u>
Indeno (1,2,3-cd) Pyrene	µg/l	100.	57.4	J	11/10/94
2-Methyl Naphthalene	µg/l	100.	151.		11/10/94
Phenanthrene	µg/l	100.	219.		11/10/94
Pyrene	µg/l	100.	220.		11/10/94
Naphthalene	µg/l	100.	75.1	J	11/10/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24207		

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-4 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	5.36		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	27.		10/31/94
Iron	µg/l	10.	520.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	1.77		11/01/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	µg/l	0.2	0.200	MSL	11/10/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	3.49		11/03/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	µg/l	5.0	X		10/28/94
<b>EPA 8021</b>					
Benzene	µg/l	1.0	1.29		10/28/94
Bromobenzene	µg/l	2.5	X		10/28/94
Bromochloromethane	µg/l	5.0	X		10/28/94
Bromodichloromethane	µg/l	2.5	X		10/28/94
Bromoform	µg/l	10.0	X	CC	10/28/94
Bromomethane	µg/l	20.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	5.0	X		10/28/94
sec-Butylbenzene	µg/l	5.0	X		10/28/94
tert-Butylbenzene	µg/l	5.0	X		10/28/94
Carbon Tetrachloride	µg/l	2.5	X		10/28/94
Chlorobenzene	µg/l	10.0	X		10/28/94
Chlorodibromomethane	µg/l	2.5	X		10/28/94
Chloroethane	µg/l	10.0	X		10/28/94
Chloroform	µg/l	2.5	X		10/28/94
Chloromethane	µg/l	10.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	5.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	5.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	66.5	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	5.0	X		10/28/94
Dibromomethane	µg/l	2.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	5.0	X	CSL	10/28/94

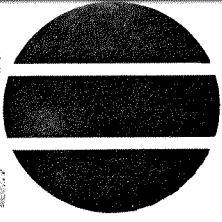
Analytical No.: 24208

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-4 10/20/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	2.5	X		10/28/94
Dichlorodifluoromethane	µg/l	10.0	X		10/28/94
1,1-Dichloroethane	µg/l	2.5	X		10/28/94
1,2-Dichloroethane	µg/l	2.5	X		10/28/94
1,1-Dichloroethylene	µg/l	2.0	X		10/28/94
cis-1,2-Dichloroethylene	µg/l	2.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	2.5	X		10/28/94
1,2-Dichloropropane	µg/l	2.5	X		10/28/94
1,3-Dichloropropane	µg/l	2.5	X		10/28/94
2,2-Dichloropropane	µg/l	10.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	5.0	X		10/28/94
1,3-Dichloropropene	µg/l	2.5	X		10/28/94
Ethylbenzene	µg/l	5.0	5.00		10/28/94
Hexachlorobutadiene	µg/l	5.0	X		10/28/94
Isopropylbenzene	µg/l	5.0	X		10/28/94
p-Isopropyltoluene	µg/l	5.0	9.18		10/28/94
Methyl tert Butyl Ether	µg/l	10.0	X		10/28/94
Methylene Chloride	µg/l	12.5	X		10/28/94
Naphthalene	µg/l	5.0	52.2	DUP	10/28/94
n-Propylbenzene	µg/l	5.0	X		10/28/94
Styrene	µg/l	25.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	2.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	2.5	X	CSH	10/28/94
1,1,1,2,2-Tetrachloroethane	µg/l	5.0	X		10/28/94
Toluene	µg/l	10.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	5.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	2.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	2.5	X		10/28/94
Trichloroethylene	µg/l	1.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	5.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	10.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	5.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	5.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	1.0	X		10/28/94
m- & p-Xylene	µg/l	5.0	X	CSL	10/28/94
o-Xylene	µg/l	5.0	X		10/28/94

**EPA 8270**

Acenaphthene	µg/l	50.	37.2	J	11/10/94
Acenaphthylene	µg/l	50.	8.03	J	11/10/94
Anthracene	µg/l	50.	19.7	J	11/10/94
Benzo (a) Anthracene	µg/l	50.	18.9	J	11/10/94
Benzo (a) Pyrene	µg/l	50.	22.3	J	11/10/94
Benzo (b) Fluoranthene	µg/l	50.	15.7	J	11/10/94

Analytical No.:

24208

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-4 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Benzo (k) Fluoranthene	µg/l	50.	9.53	J	11/10/94
Benzo (ghi) Perylene	µg/l	50.	13.6	J	11/10/94
Chrysene	µg/l	50.	20.7	J	11/10/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/10/94
Fluoranthene	µg/l	50.	38.1	J	11/10/94
Fluorene	µg/l	50.	16.8	J	11/10/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	50.	12.6	J	11/10/94
2-Methyl Naphthalene	µg/l	50.	5.67	J	11/10/94
Phenanthrene	µg/l	50.	25.8	J	11/10/94
Pyrene	µg/l	50.	59.9		11/10/94
Naphthalene	µg/l	50.	X		11/10/94
Water Organic Extraction			COMP		10/27/94

Analytical No.:

24208

X = Analyzed but not detected.

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Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-5 10/20/94	Qualifiers	Date Analyzed
<u>EPA 415.2</u>					
Nonpurge Org. Carbon	mg/l	0.6	8.75		10/31/94
<u>EPA 200.7</u>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	2,600.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<u>EPA 206.2</u>					
Arsenic (GFAAS)	µg/l	1.1	2.79		11/01/94
<u>EPA 213.2</u>					
Cadmium (GFAAS)	µg/l	0.2	X	MSL	11/10/94
<u>EPA 218.2</u>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<u>EPA 239.2</u>					
Lead (GFAAS)	µg/l	2.0	2.61		11/03/94
<u>EPA 270.2</u>					
Selenium (GFAAS)	µg/l	5.0	X		10/28/94
<u>EPA 8021</u>					
Benzene	µg/l	10.0	601.	CSL	11/03/94
Bromobenzene	µg/l	25.0	X		11/03/94
Bromochloromethane	µg/l	50.0	X		11/03/94
Bromodichloromethane	µg/l	25.0	X		11/03/94
Bromoform	µg/l	100.	X	CC	11/03/94
Bromomethane	µg/l	200.	X	CSL	11/03/94
n-Butylbenzene	µg/l	50.0	X	CSL	11/03/94
sec-Butylbenzene	µg/l	50.0	X		11/03/94
tert-Butylbenzene	µg/l	50.0	X	DUP	11/03/94
Carbon Tetrachloride	µg/l	25.0	X		11/03/94
Chlorobenzene	µg/l	100.	X		11/03/94
Chlorodibromomethane	µg/l	25.0	X		11/03/94
Chloroethane	µg/l	100.	X		11/03/94
Chloroform	µg/l	25.0	X		11/03/94
Chloromethane	µg/l	100.	X	CSL	11/03/94
o-Chlorotoluene	µg/l	50.0	X	CSL DUP	11/03/94
p-Chlorotoluene	µg/l	50.0	X	CSH DUP	11/03/94
1,2-Dibromo-3-chloropropane	µg/l	665.	X	CSL CC	11/03/94
1,2-Dibromoethane	µg/l	50.0	X		11/03/94
Dibromomethane	µg/l	25.0	X		11/03/94
1,2-Dichlorobenzene	µg/l	50.0	X		11/03/94

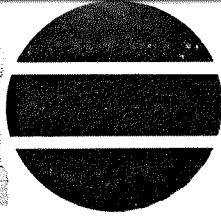
Analytical No.:

24209

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-5 10/20/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	50.0	X	CSL DUP	11/03/94
1,4-Dichlorobenzene	µg/l	25.0	X		11/03/94
Dichlorodifluoromethane	µg/l	100.	X	CSL	11/03/94
1,1-Dichloroethane	µg/l	25.0	X		11/03/94
1,2-Dichloroethane	µg/l	25.0	X		11/03/94
1,1-Dichloroethylene	µg/l	20.0	X		11/03/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CSL	11/03/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		11/03/94
1,2-Dichloropropane	µg/l	25.0	X		11/03/94
1,3-Dichloropropane	µg/l	25.0	X		11/03/94
2,2-Dichloropropane	µg/l	100.	X	CSL	11/03/94
1,1-Dichloropropene	µg/l	50.0	X		11/03/94
1,3-Dichloropropene	µg/l	25.0	X		11/03/94
Ethylbenzene	µg/l	50.0	308.	CSL	11/03/94
Hexachlorobutadiene	µg/l	50.0	X		11/03/94
Isopropylbenzene	µg/l	50.0	X	DUP	11/03/94
p-Isopropyltoluene	µg/l	50.0	X		11/03/94
Methyl tert Butyl Ether	µg/l	100.	X		11/03/94
Methylene Chloride	µg/l	125.	X	CSL	11/03/94
Naphthalene	µg/l	50.0	3,120.	CAL	11/03/94
n-Propylbenzene	µg/l	50.0	X		11/03/94
Styrene	µg/l	250.	X	CSL	11/03/94
Tetrachloroethylene	µg/l	25.0	X		11/03/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	11/03/94
1,1,1,2-Tetrachloroethane	µg/l	50.0	X		11/03/94
Toluene	µg/l	100.	X		11/03/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL DUP	11/03/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL DUP	11/03/94
1,1,1-Trichloroethane	µg/l	25.0	X		11/03/94
1,1,2-Trichloroethane	µg/l	25.0	X		11/03/94
Trichloroethylene	µg/l	10.0	X		11/03/94
Trichlorofluoromethane	µg/l	50.0	X		11/03/94
1,2,3-Trichloropropane	µg/l	100.	X		11/03/94
1,2,4-Trimethylbenzene	µg/l	50.0	67.9	CSL CC	11/03/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL CC	11/03/94
Vinyl Chloride	µg/l	10.0	X		11/03/94
m- & p-Xylene	µg/l	50.0	128.	CSL	11/03/94
o-Xylene	µg/l	50.0	123.	CSL	11/03/94

**EPA 8270**

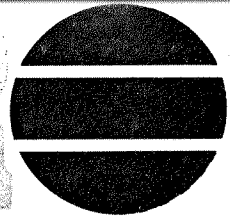
Acenaphthene	µg/l	200.	243.		11/10/94
Acenaphthylene	µg/l	200.	17.3	J	11/10/94
Anthracene	µg/l	200.	91.6	J	11/10/94
Benzo (a) Anthracene	µg/l	200.	42.2	J	11/10/94
Benzo (a) Pyrene	µg/l	200.	46.6	J	11/10/94
Benzo (b) Fluoranthene	µg/l	200.	31.3	J	11/10/94

Analytical No.: 24209

X = Analyzed but not detected.

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *WJG*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-5</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date</u> <u>Analyzed</u>
Benzo (k) Fluoranthene	µg/l	200.	14.9	J	11/10/94
Benzo (ghi) Perylene	µg/l	200.	26.1	J	11/10/94
Chrysene	µg/l	200.	43.7	J	11/10/94
Dibenzo (a,h) Anthracene	µg/l	200.	X		11/10/94
Fluoranthene	µg/l	200.	92.1	J	11/10/94
Fluorene	µg/l	200.	110.		11/10/94
Indeno (1,2,3-cd) Pyrene	µg/l	200.	25.1	J	11/10/94
2-Methyl Naphthalene	µg/l	200.	372.	DUP	11/10/94
Phenanthrene	µg/l	200.	339.		11/10/94
Pyrene	µg/l	200.	132.		11/10/94
Naphthalene	µg/l	200.	678.	DUP	11/10/94
Water Organic Extraction			COMP		10/27/94

Analytical No.: 24209

X = Analyzed but not detected.

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Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
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CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-6 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	16.2		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	1,340.		11/09/94
Zinc	µg/l	17.	20.		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	2.05		11/01/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	µg/l	0.2	X	MSL	11/10/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	µg/l	5.0	X		10/28/94
<b>EPA 8021</b>					
Benzene	µg/l	40.0	3,400.		10/29/94
Bromobenzene	µg/l	100.	X		10/29/94
Bromochloromethane	µg/l	200.	X		10/29/94
Bromodichloromethane	µg/l	100.	X		10/29/94
Bromoform	µg/l	400.	X	CC	10/29/94
Bromomethane	µg/l	800.	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	200.	X		10/29/94
sec-Butylbenzene	µg/l	200.	X		10/29/94
tert-Butylbenzene	µg/l	200.	X		10/29/94
Carbon Tetrachloride	µg/l	100.	X		10/29/94
Chlorobenzene	µg/l	400.	X		10/29/94
Chlorodibromomethane	µg/l	100.	X		10/29/94
Chloroethane	µg/l	400.	X		10/29/94
Chloroform	µg/l	100.	X		10/29/94
Chloromethane	µg/l	400.	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	200.	X	CSL	10/29/94
p-Chlorotoluene	µg/l	200.	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	2660.	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	200.	X		10/29/94
Dibromomethane	µg/l	100.	X		10/29/94
1,2-Dichlorobenzene	µg/l	200.	X	CSL	10/29/94

Analytical No.: 24210

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *MRD*

Attn: John E. Guhl

	Units	Detection Limit	TW-6 10/20/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	100.	X		10/29/94
Dichlorodifluoromethane	µg/l	400.	X		10/29/94
1,1-Dichloroethane	µg/l	100.	X		10/29/94
1,2-Dichloroethane	µg/l	100.	X		10/29/94
1,1-Dichloroethylene	µg/l	80.0	X		10/29/94
cis-1,2-Dichloroethylene	µg/l	100.	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	100.	X		10/29/94
1,2-Dichloropropane	µg/l	100.	X		10/29/94
1,3-Dichloropropane	µg/l	100.	X		10/29/94
2,2-Dichloropropane	µg/l	400.	X	CC	10/29/94
1,1-Dichloropropene	µg/l	200.	X		10/29/94
1,3-Dichloropropene	µg/l	100.	X		10/29/94
Ethylbenzene	µg/l	200.	1,370.		10/29/94
Hexachlorobutadiene	µg/l	200.	X		10/29/94
Isopropylbenzene	µg/l	200.	X		10/29/94
p-Isopropyltoluene	µg/l	200.	X		10/29/94
Methyl tert Butyl Ether	µg/l	400.	X		10/29/94
Methylene Chloride	µg/l	500.	X		10/29/94
Naphthalene	µg/l	200.	4,050.	DUP	10/29/94
n-Propylbenzene	µg/l	200.	X		10/29/94
Styrene	µg/l	1000.	X	CSL	10/29/94
Tetrachloroethylene	µg/l	100.	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	100.	X	CSH	10/29/94
1,1,2,2-Tetrachloroethane	µg/l	200.	X		10/29/94
Toluene	µg/l	400.	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	200.	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	100.	X		10/29/94
1,1,2-Trichloroethane	µg/l	100.	X		10/29/94
Trichloroethylene	µg/l	40.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	200.	X		10/29/94
1,2,3-Trichloropropane	µg/l	400.	X	CSL CC	10/29/94
1,2,4-Trimethylbenzene	µg/l	200.	219.	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	200.	X	CSL	10/29/94
Vinyl Chloride	µg/l	40.0	X		10/29/94
m- & p-Xylene	µg/l	200.	742.	CSL	10/29/94
o-Xylene	µg/l	200.	589.		10/29/94

**EPA 8270**

Acenaphthene	µg/l	500.	1,691.		11/10/94
Acenaphthylene	µg/l	500.	144.	J	11/10/94
Anthracene	µg/l	500.	866.		11/10/94
Benzo (a) Anthracene	µg/l	500.	366.	J	11/10/94
Benzo (a) Pyrene	µg/l	500.	335.	J	11/10/94
Benzo (b) Fluoranthene	µg/l	500.	236.	J	11/10/94

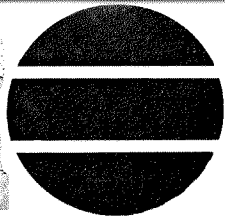
Analytical No.:

24210

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-6</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date</u> <u>Analyzed</u>
Benzo (k) Fluoranthene	µg/l	500.	123.	J	11/10/94
Benzo (ghi) Perylene	µg/l	500.	153.	J	11/10/94
Chrysene	µg/l	500.	377.	J	11/10/94
Dibenzo (a, h) Anthracene	µg/l	500.	X		11/10/94
Fluoranthene	µg/l	500.	775		11/10/94
Fluorene	µg/l	500.	671.		11/10/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	500.	136	J	11/10/94
2-Methyl Naphthalene	µg/l	500.	2,034.		11/10/94
Phenanthrene	µg/l	500.	2,482.		11/10/94
Pyrene	µg/l	500.	1,152.		11/10/94
Naphthalene	µg/l	500.	5,500.		11/10/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24210		

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Short Elliott Hendrickson, Inc.  
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 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

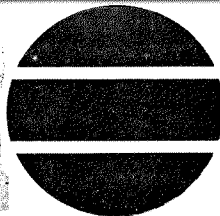
	Units	Detection Limit	TW-7 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	3.90		10/31/94
<b>EPA 8021</b>					
Benzene	µg/l	0.2	X		10/28/94
Bromobenzene	µg/l	0.5	X		10/28/94
Bromochloromethane	µg/l	1.0	X		10/28/94
Bromodichloromethane	µg/l	0.5	X		10/28/94
Bromoform	µg/l	2.0	X	CC	10/28/94
Bromomethane	µg/l	4.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	1.0	X		10/28/94
sec-Butylbenzene	µg/l	1.0	X		10/28/94
tert-Butylbenzene	µg/l	1.0	X		10/28/94
Carbon Tetrachloride	µg/l	0.5	X		10/28/94
Chlorobenzene	µg/l	2.0	X		10/28/94
Chlorodibromomethane	µg/l	0.5	X		10/28/94
Chloroethane	µg/l	2.0	X		10/28/94
Chloroform	µg/l	0.5	X		10/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	1.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	1.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	1.0	X		10/28/94
Dibromomethane	µg/l	0.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/28/94
Dichlorodifluoromethane	µg/l	2.0	X		10/28/94
1,1-Dichloroethane	µg/l	0.5	X		10/28/94
1,2-Dichloroethane	µg/l	0.5	X		10/28/94
1,1-Dichloroethylene	µg/l	0.4	X		10/28/94
cis-1,2-Dichloroethylene	µg/l	0.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X		10/28/94
1,2-Dichloropropane	µg/l	0.5	X		10/28/94
1,3-Dichloropropane	µg/l	0.5	X		10/28/94
2,2-Dichloropropane	µg/l	2.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	1.0	X		10/28/94
1,3-Dichloropropene	µg/l	0.5	X		10/28/94
Ethylbenzene	µg/l	1.0	X		10/28/94
Hexachlorobutadiene	µg/l	1.0	X		10/28/94
Isopropylbenzene	µg/l	1.0	X		10/28/94
p-Isopropyltoluene	µg/l	1.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/28/94
Methylene Chloride	µg/l	2.5	X		10/28/94
Naphthalene	µg/l	1.0	X	DUP	10/28/94
n-Propylbenzene	µg/l	1.0	X		10/28/94

Analytical No.: 24211

X = Analyzed but not detected.

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# ANALYTICAL REPORT



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 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
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 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-7 10/20/94	Qualifiers	Date Analyzed
Styrene	µg/l	5.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	0.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/28/94
Toluene	µg/l	2.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	0.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/28/94
Trichloroethylene	µg/l	0.2	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	1.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	2.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	0.2	X		10/28/94
m- & p-Xylene	µg/l	1.0	X	CSL	10/28/94
o-Xylene	µg/l	1.0	X		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.	X		11/02/94
Acenaphthylene	µg/l	10.	X		11/02/94
Anthracene	µg/l	10.	X		11/02/94
Benzo (a) Anthracene	µg/l	10.	X		11/02/94
Benzo (a) Pyrene	µg/l	10.	X		11/02/94
Benzo (b) Fluoranthene	µg/l	10.	X		11/02/94
Benzo (k) Fluoranthene	µg/l	10.	X		11/02/94
Benzo (ghi) Perylene	µg/l	10.	X		11/02/94
Chrysene	µg/l	10.	X		11/02/94
Dibenzo (a, h) Anthracene	µg/l	10.	X		11/02/94
Fluoranthene	µg/l	10.	X		11/02/94
Fluorene	µg/l	10.	X		11/02/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	10.	X		11/02/94
2-Methyl Naphthalene	µg/l	10.	X		11/02/94
Phenanthrene	µg/l	10.	X		11/02/94
Pyrene	µg/l	10.	X		11/02/94
Naphthalene	µg/l	10.	X		11/02/94

Water Organic Extraction COMP 10/27/94

Analytical No.: 24211

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# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
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DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-8 10/20/94	Qualifiers	Date Analyzed
<u>EPA 415.2</u>					
Nonpurge Org. Carbon	mg/l	0.6	9.83		10/31/94
<u>EPA 200.7</u>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	11,300.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<u>EPA 206.2</u>					
Arsenic (GFAAS)	µg/l	1.1	2.46		11/01/94
<u>EPA 213.2</u>					
Cadmium (GFAAS)	µg/l	0.2	X	MSL	11/10/94
<u>EPA 218.2</u>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<u>EPA 239.2</u>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<u>EPA 270.2</u>					
Selenium (GFAAS)	µg/l	5.0	X		10/28/94
<u>601/602</u>					
Benzene	µg/l	10.0	1,590.		10/28/94
Bromobenzene	µg/l	25.0	X		10/28/94
Bromochloromethane	µg/l	50.0	X		10/28/94
Bromodichloromethane	µg/l	25.0	X		10/28/94
Bromoform	µg/l	100.0	X	CC	10/28/94
Bromomethane	µg/l	200.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	50.0	X		10/28/94
sec-Butylbenzene	µg/l	50.0	X		10/28/94
tert-Butylbenzene	µg/l	50.0	X		10/28/94
Carbon Tetrachloride	µg/l	25.0	X		10/28/94
Chlorobenzene	µg/l	100.0	X		10/28/94
Chlorodibromomethane	µg/l	25.0	X		10/28/94
Chloroethane	µg/l	100.0	X		10/28/94
Chloroform	µg/l	25.0	X		10/28/94
Chloromethane	µg/l	100.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	50.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	50.0	X		10/28/94
Dibromomethane	µg/l	25.0	X		10/28/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94

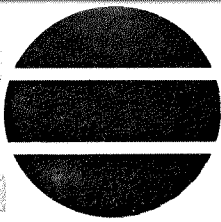
Analytical No.:

24212

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# ANALYTICAL REPORT



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REVIEWED BY: *[Signature]*

Attn: John E. Guhl

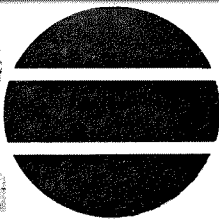
	Units	Detection Limit	TW-8 10/20/94	Qualifiers	Date Analyzed
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/28/94
Dichlorodifluoromethane	µg/l	100.0	X		10/28/94
1,1-Dichloroethane	µg/l	25.0	X		10/28/94
1,2-Dichloroethane	µg/l	25.0	X		10/28/94
1,1-Dichloroethylene	µg/l	20.0	X		10/28/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/28/94
1,2-Dichloropropane	µg/l	25.0	X		10/28/94
1,3-Dichloropropane	µg/l	25.0	X		10/28/94
2,2-Dichloropropane	µg/l	100.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	50.0	X		10/28/94
1,3-Dichloropropene	µg/l	25.0	X		10/28/94
Ethylbenzene	µg/l	50.0	82.3		10/28/94
Hexachlorobutadiene	µg/l	50.0	X		10/28/94
Isopropylbenzene	µg/l	50.0	X		10/28/94
p-Isopropyltoluene	µg/l	50.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	100.0	X		10/28/94
Methylene Chloride	µg/l	125.0	X		10/28/94
Naphthalene	µg/l	50.0	151.	DUP	10/28/94
n-Propylbenzene	µg/l	50.0	X		10/28/94
Styrene	µg/l	250.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	25.0	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/28/94
Toluene	µg/l	100.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/28/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/28/94
Trichloroethylene	µg/l	10.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	50.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	10.0	X		10/28/94
m- & p-Xylene	µg/l	50.0	X	CSL	10/28/94
o-Xylene & Styrene	µg/l	50.0	X		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.	73.2		11/08/94
Acenaphthylene	µg/l	50.	X		11/08/94
Anthracene	µg/l	50.	6.61	J	11/08/94
Benzo (a) Anthracene	µg/l	50.	5.22	J	11/08/94
Benzo (a) Pyrene	µg/l	50.	X		11/08/94
Benzo (b) Fluoranthene	µg/l	50.	4.04	J	11/08/94

Analytical No.: 24212

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
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DATE REC'D: 10/25/94  
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REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-8 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Benzo (k) Fluoranthene	µg/l	50.	X		11/08/94
Benzo (ghi) Perylene	µg/l	50.	X		11/08/94
Chrysene	µg/l	50.	4.94	J	11/08/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/08/94
Fluoranthene	µg/l	50.	11.4	J	11/08/94
Fluorene	µg/l	50.	16.9	J	11/08/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	50.	X		11/08/94
2-Methyl Naphthalene	µg/l	50.	X		11/08/94
Phenanthrene	µg/l	50.	22.5	J	11/08/94
Pyrene	µg/l	50.	12.4	J	11/08/94
Naphthalene	µg/l	50.	140.		11/08/94
Water Organic Extraction			COMP		10/27/94

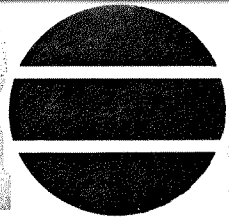
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24212

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# ANALYTICAL REPORT



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 REVIEWED BY: *[Signature]*

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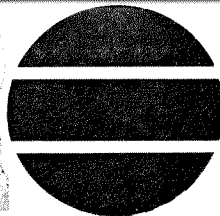
	Units	Detection Limit	TW-9 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	22.4		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	3,670.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	X		11/02/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>601/602</b>					
Benzene	µg/l	200.0	1,590.		10/29/94
Bromobenzene	µg/l	500.0	X		10/29/94
Bromochloromethane	µg/l	1000.0	X		10/29/94
Bromodichloromethane	µg/l	500.0	X		10/29/94
Bromoform	µg/l	2000.0	X	CC	10/29/94
Bromomethane	µg/l	4000.0	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	1000.0	X		10/29/94
sec-Butylbenzene	µg/l	1000.0	X		10/29/94
tert-Butylbenzene	µg/l	1000.0	X		10/29/94
Carbon Tetrachloride	µg/l	500.0	X		10/29/94
Chlorobenzene	µg/l	2000.0	X		10/29/94
Chlorodibromomethane	µg/l	500.0	X		10/29/94
Chloroethane	µg/l	2000.0	X		10/29/94
Chloroform	µg/l	500.0	X		10/29/94
Chloromethane	µg/l	2000.0	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	1000.0	X	CSL	10/29/94
p-Chlorotoluene	µg/l	1000.0	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	13300.0	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	1000.0	X		10/29/94
Dibromomethane	µg/l	500.0	X		10/29/94
1,2-Dichlorobenzene	µg/l	1000.0	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	1000.0	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	500.0	X		10/29/94
Dichlorodifluoromethane	µg/l	2000.0	X		10/29/94
1,1-Dichloroethane	µg/l	500.0	X		10/29/94
1,2-Dichloroethane	µg/l	500.0	X		10/29/94
1,1-Dichloroethylene	µg/l	400.0	X		10/29/94

Analytical No.: 24213

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

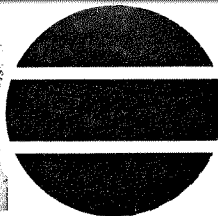
	Units	Detection Limit	TW-9 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	500.0	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	500.0	X		10/29/94
1,2-Dichloropropane	µg/l	500.0	X		10/29/94
1,3-Dichloropropane	µg/l	500.0	X		10/29/94
2,2-Dichloropropane	µg/l	2000.0	X	CC	10/29/94
1,1-Dichloropropene	µg/l	1000.0	X		10/29/94
1,3-Dichloropropene	µg/l	500.0	X		10/29/94
Ethylbenzene	µg/l	1000.0	2,300.		10/29/94
Hexachlorobutadiene	µg/l	1000.0	X		10/29/94
Isopropylbenzene	µg/l	1000.0	X		10/29/94
p-Isopropyltoluene	µg/l	1000.0	X		10/29/94
Methyl tert Butyl Ether	µg/l	2000.0	X		10/29/94
Methylene Chloride	µg/l	2500.0	X		10/29/94
Naphthalene	µg/l	1000.0	18,600.	DUP	10/29/94
n-Propylbenzene	µg/l	1000.0	X		10/29/94
Styrene	µg/l	5000.0	X	CSL	10/29/94
Tetrachloroethylene	µg/l	500.0	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	500.0	X	CSH	10/29/94
1,1,2,2-Tetrachloroethane	µg/l	1000.0	X		10/29/94
Toluene	µg/l	2000.0	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	1000.0	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	1000.0	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	500.0	X		10/29/94
1,1,2-Trichloroethane	µg/l	500.0	X		10/29/94
Trichloroethylene	µg/l	200.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	1000.0	X		10/29/94
1,2,3-Trichloropropane	µg/l	2000.0	X	CSL CC	10/29/94
1,2,4-Trimethylbenzene	µg/l	1000.0	X	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	1000.0	X	CSL	10/29/94
Vinyl Chloride	µg/l	200.0	X		10/29/94
m- & p-Xylene	µg/l	1000.0	1,380.	CSL	10/29/94
o-Xylene & Styrene	µg/l	1000.0	1,050.		10/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	2000.	6,544.		11/10/94
Acenaphthylene	µg/l	2000.	480.	J	11/10/94
Anthracene	µg/l	2000.	2,689.		11/10/94
Benzo (a) Anthracene	µg/l	2000.	1,344.	J	11/10/94
Benzo (a) Pyrene	µg/l	2000.	1,434.	J	11/10/94
Benzo (b) Fluoranthene	µg/l	2000.	921.	J	11/10/94
Benzo (k) Fluoranthene	µg/l	2000.	428.	J	11/10/94
Benzo (ghi) Perylene	µg/l	2000.	695.	J	11/10/94
Chrysene	µg/l	2000.	1,363.	J	11/10/94
Dibenzo (a,h) Anthracene	µg/l	2000.	X		11/10/94
Fluoranthene	µg/l	2000.	3,215.		11/10/94
Fluorene	µg/l	2000.	2,663.		11/10/94

Analytical No.: 24213

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

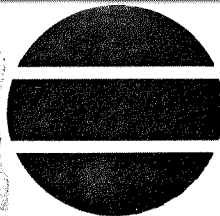
Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-9 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno (1, 2, 3-cd) Pyrene	µg/l	2000.	571.	J	11/10/94
2-Methyl Naphthalene	µg/l	2000.	7,252.		11/10/94
Phenanthrene	µg/l	2000.	8,925.		11/10/94
Pyrene	µg/l	2000.	4,241.		11/10/94
Naphthalene	µg/l	2000.	19,267.		11/10/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24213		

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

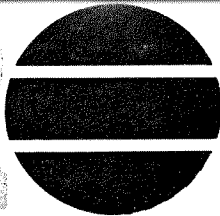
	Units	Detection Limit	TW-10 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	15.2		10/31/94
<b>601/602</b>					
Benzene	µg/l	10.0	479.		10/28/94
Bromobenzene	µg/l	25.0	X		10/28/94
Bromochloromethane	µg/l	50.0	X		10/28/94
Bromodichloromethane	µg/l	25.0	X		10/28/94
Bromoform	µg/l	100.0	X	CC	10/28/94
Bromomethane	µg/l	200.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	50.0	X		10/28/94
sec-Butylbenzene	µg/l	50.0	X		10/28/94
tert-Butylbenzene	µg/l	50.0	X		10/28/94
Carbon Tetrachloride	µg/l	25.0	X		10/28/94
Chlorobenzene	µg/l	100.0	X		10/28/94
Chlorodibromomethane	µg/l	25.0	X		10/28/94
Chloroethane	µg/l	100.0	X		10/28/94
Chloroform	µg/l	25.0	X		10/28/94
Chloromethane	µg/l	100.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	50.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	50.0	X		10/28/94
Dibromomethane	µg/l	25.0	X		10/28/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/28/94
Dichlorodifluoromethane	µg/l	100.0	X		10/28/94
1,1-Dichloroethane	µg/l	25.0	X		10/28/94
1,2-Dichloroethane	µg/l	25.0	X		10/28/94
1,1-Dichloroethylene	µg/l	20.0	X		10/28/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/28/94
1,2-Dichloropropane	µg/l	25.0	X		10/28/94
1,3-Dichloropropane	µg/l	25.0	X		10/28/94
2,2-Dichloropropane	µg/l	100.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	50.0	X		10/28/94
1,3-Dichloropropene	µg/l	25.0	X		10/28/94
Ethylbenzene	µg/l	50.0	X		10/28/94
Hexachlorobutadiene	µg/l	50.0	X		10/28/94
Isopropylbenzene	µg/l	50.0	X		10/28/94
p-Isopropyltoluene	µg/l	50.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	100.0	X		10/28/94
Methylene Chloride	µg/l	125.0	X		10/28/94
Naphthalene	µg/l	50.0	540.	DUP	10/28/94
n-Propylbenzene	µg/l	50.0	X		10/28/94

Analytical No.: 24214

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-10 10/20/94	Qualifiers	Date Analyzed
Styrene	µg/l	250.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	25.0	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/28/94
Toluene	µg/l	100.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/28/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/28/94
Trichloroethylene	µg/l	10.0	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	50.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	10.0	X		10/28/94
m- & p-Xylene	µg/l	50.0	X	CSL	10/28/94
o-Xylene & Styrene	µg/l	50.0	X		10/28/94

**EPA 8270**

Acenaphthene	µg/l	50.	216.		11/10/94
Acenaphthylene	µg/l	50.	40.6	J	11/10/94
Anthracene	µg/l	50.	69.3		11/10/94
Benzo (a) Anthracene	µg/l	50.	30.0	J	11/10/94
Benzo (a) Pyrene	µg/l	50.	29.2	J	11/10/94
Benzo (b) Fluoranthene	µg/l	50.	20.7	J	11/10/94
Benzo (k) Fluoranthene	µg/l	50.	11.6	J	11/10/94
Benzo (ghi) Perylene	µg/l	50.	14.9	J	11/10/94
Chrysene	µg/l	50.	30.9	J	11/10/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/10/94
Fluoranthene	µg/l	50.	70.2		11/10/94
Fluorene	µg/l	50.	101.		11/10/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	50.	13.8	J	11/10/94
2-Methyl Naphthalene	µg/l	50.	149.		11/10/94
Phenanthrene	µg/l	50.	229.		11/10/94
Pyrene	µg/l	50.	89.2		11/10/94
Naphthalene	µg/l	50.0	23.1	J	11/10/94

Water Organic Extraction

COMP

10/27/94

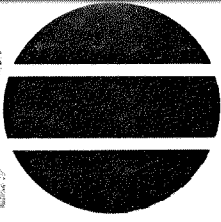
Analytical No.:

24214

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-10 10/20/94	Qualifiers	Date Analyzed
<u>601/602</u>					
Benzene	µg/l	10.0	434.		10/29/94
Bromobenzene	µg/l	25.0	X		10/29/94
Bromochloromethane	µg/l	50.0	X		10/29/94
Bromodichloromethane	µg/l	25.0	X		10/29/94
Bromoform	µg/l	100.0	X	CC	10/29/94
Bromomethane	µg/l	200.0	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	50.0	X		10/29/94
sec-Butylbenzene	µg/l	50.0	X		10/29/94
tert-Butylbenzene	µg/l	50.0	X		10/29/94
Carbon Tetrachloride	µg/l	25.0	X		10/29/94
Chlorobenzene	µg/l	100.0	X		10/29/94
Chlorodibromomethane	µg/l	25.0	X		10/29/94
Chloroethane	µg/l	100.0	X		10/29/94
Chloroform	µg/l	25.0	X		10/29/94
Chloromethane	µg/l	100.0	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/29/94
p-Chlorotoluene	µg/l	50.0	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	50.0	X		10/29/94
Dibromomethane	µg/l	25.0	X		10/29/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/29/94
Dichlorodifluoromethane	µg/l	100.0	X		10/29/94
1,1-Dichloroethane	µg/l	25.0	X		10/29/94
1,2-Dichloroethane	µg/l	25.0	X		10/29/94
1,1-Dichloroethylene	µg/l	20.0	X		10/29/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/29/94
1,2-Dichloropropane	µg/l	25.0	X		10/29/94
1,3-Dichloropropane	µg/l	25.0	X		10/29/94
2,2-Dichloropropane	µg/l	100.0	X	CC	10/29/94
1,1-Dichloropropene	µg/l	50.0	X		10/29/94
1,3-Dichloropropene	µg/l	25.0	X		10/29/94
Ethylbenzene	µg/l	50.0	X		10/29/94
Hexachlorobutadiene	µg/l	50.0	X		10/29/94
Isopropylbenzene	µg/l	50.0	X		10/29/94
p-Isopropyltoluene	µg/l	50.0	X		10/29/94
Methyl tert Butyl Ether	µg/l	100.0	X		10/29/94
Methylene Chloride	µg/l	125.0	X		10/29/94
Naphthalene	µg/l	50.0	529.	DUP	10/29/94
n-Propylbenzene	µg/l	50.0	X		10/29/94
Styrene	µg/l	250.0	X	CSL	10/29/94
Tetrachloroethylene	µg/l	25.0	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/29/94

Analytical No.: 24215

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *JG*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-10 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/29/94
Toluene	µg/l	100.0	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/29/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/29/94
Trichloroethylene	µg/l	10.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	50.0	X		10/29/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSH	10/29/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/29/94
Vinyl Chloride	µg/l	10.0	X		10/29/94
m- & p-Xylene	µg/l	50.0	X	CSL	10/29/94
o-Xylene & Styrene	µg/l	50.0	X		10/29/94

Analytical No.:

24215

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-11 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	5.93		10/31/94
<b>601/602</b>					
Benzene	µg/l	20.0	X		10/29/94
Bromobenzene	µg/l	50.0	X		10/29/94
Bromochloromethane	µg/l	100.0	X		10/29/94
Bromodichloromethane	µg/l	50.0	X		10/29/94
Bromoform	µg/l	200.0	X	CC	10/29/94
Bromomethane	µg/l	400.0	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	100.0	X		10/29/94
sec-Butylbenzene	µg/l	100.0	X		10/29/94
tert-Butylbenzene	µg/l	100.0	X		10/29/94
Carbon Tetrachloride	µg/l	50.0	X		10/29/94
Chlorobenzene	µg/l	200.0	X		10/29/94
Chlorodibromomethane	µg/l	50.0	X		10/29/94
Chloroethane	µg/l	200.0	X		10/29/94
Chloroform	µg/l	50.0	X		10/29/94
Chloromethane	µg/l	200.0	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	100.0	X	CSL	10/29/94
p-Chlorotoluene	µg/l	100.0	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	1330.0	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	100.0	X		10/29/94
Dibromomethane	µg/l	50.0	X		10/29/94
1,2-Dichlorobenzene	µg/l	100.0	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	100.0	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	50.0	X		10/29/94
Dichlorodifluoromethane	µg/l	200.0	X		10/29/94
1,1-Dichloroethane	µg/l	50.0	X		10/29/94
1,2-Dichloroethane	µg/l	50.0	X		10/29/94
1,1-Dichloroethylene	µg/l	40.0	X		10/29/94
cis-1,2-Dichloroethylene	µg/l	50.0	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	50.0	X		10/29/94
1,2-Dichloropropane	µg/l	50.0	X		10/29/94
1,3-Dichloropropane	µg/l	50.0	X		10/29/94
2,2-Dichloropropane	µg/l	200.0	X	CC	10/29/94
1,1-Dichloropropene	µg/l	100.0	X		10/29/94
1,3-Dichloropropene	µg/l	50.0	X		10/29/94
Ethylbenzene	µg/l	100.0	X		10/29/94
Hexachlorobutadiene	µg/l	100.0	X		10/29/94
Isopropylbenzene	µg/l	100.0	X		10/29/94
p-Isopropyltoluene	µg/l	100.0	X		10/29/94
Methyl tert Butyl Ether	µg/l	200.0	X		10/29/94
Methylene Chloride	µg/l	250.0	X		10/29/94
Naphthalene		100.0	1,270.	DUP	10/29/94
n-Propylbenzene	µg/l	100.0	X		10/29/94

Analytical No.:

24216

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	TW-11 10/20/94	Qualifiers	Date Analyzed
Styrene	µg/l	500.0	X	CSL	10/29/94
Tetrachloroethylene	µg/l	50.0	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	50.0	X	CSH	10/29/94
1,1,2,2-Tetrachloroethane	µg/l	100.0	X		10/29/94
Toluene	µg/l	200.0	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	100.0	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	100.0	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	50.0	X		10/29/94
1,1,2-Trichloroethane	µg/l	50.0	X		10/29/94
Trichloroethylene	µg/l	20.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	100.0	X		10/29/94
1,2,3-Trichloropropane	µg/l	200.0	X	CSH	10/29/94
1,2,4-Trimethylbenzene	µg/l	100.0	X	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	100.0	X	CSL	10/29/94
Vinyl Chloride	µg/l	20.0	X		10/29/94
m- & p-Xylene	µg/l	100.0	X	CSL	10/29/94
o-Xylene & Styrene	µg/l	100.0	X		10/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.	375.		11/10/94
Acenaphthylene	µg/l	50.	17.1	J	11/10/94
Anthracene	µg/l	50.	113.		11/10/94
Benzo (a) Anthracene	µg/l	50.	36.2	J	11/10/94
Benzo (a) Pyrene	µg/l	50.	27.5	J	11/10/94
Benzo (b) Fluoranthene	µg/l	50.	20.5	J	11/10/94
Benzo (k) Fluoranthene	µg/l	50.	14.5	J	11/10/94
Benzo (ghi) Perylene	µg/l	50.	12.4	J	11/10/94
Chrysene	µg/l	50.	34.9	J	11/10/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/10/94
Fluoranthene	µg/l	50.	88.2		11/10/94
Fluorene	µg/l	50.	159.		11/10/94
Indeno (1, 2, 3-cd) Pyrene	µg/l	50.	11.6	J	11/10/94
2-Methyl Naphthalene	µg/l	50.	518.		11/10/94
Phenanthrene	µg/l	50.	282.		11/10/94
Pyrene	µg/l	50.	109.		11/10/94
Naphthalene	µg/l	50.	656.		11/10/94
Water Organic Extraction			COMP		10/27/94

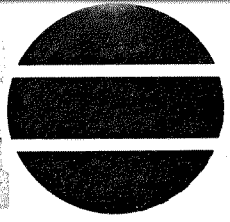
Analytical No.:

24216

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

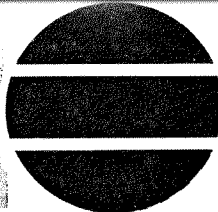
Attn: John E. Guhl

	Units	Detection Limit	TW-12 (MW-12) 10/20/94	Qualifiers	Date Analyzed
<b>EPA 415.2</b>					
Nonpurge Org. Carbon	mg/l	0.6	12.6		10/31/94
<b>EPA 200.7</b>					
Copper	µg/l	12.	X		10/31/94
Iron	µg/l	10.	8,080.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<b>EPA 206.2</b>					
Arsenic (GFAAS)	µg/l	1.1	X		11/01/94
<b>EPA 213.2</b>					
Cadmium (GFAAS)	µg/l	0.2	X		11/15/94
<b>EPA 218.2</b>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<b>EPA 239.2</b>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<b>EPA 270.2</b>					
Selenium (GFAAS)	µg/l	5.0	X		11/15/94
<b>601/602</b>					
Benzene	µg/l	10.0	253.		10/29/94
Bromobenzene	µg/l	25.0	X		10/29/94
Bromochloromethane	µg/l	50.0	X		10/29/94
Bromodichloromethane	µg/l	25.0	X		10/29/94
Bromoform	µg/l	100.0	X	CC	10/29/94
Bromomethane	µg/l	200.0	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	50.0	X		10/29/94
sec-Butylbenzene	µg/l	50.0	X		10/29/94
tert-Butylbenzene	µg/l	50.0	X		10/29/94
Carbon Tetrachloride	µg/l	25.0	X		10/29/94
Chlorobenzene	µg/l	100.0	X		10/29/94
Chlorodibromomethane	µg/l	25.0	X		10/29/94
Chloroethane	µg/l	100.0	X		10/29/94
Chloroform	µg/l	25.0	X		10/29/94
Chloromethane	µg/l	100.0	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	50.0	X	CSL	10/29/94
p-Chlorotoluene	µg/l	50.0	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	665.0	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	50.0	X		10/29/94
Dibromomethane	µg/l	25.0	X		10/29/94
1,2-Dichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	25.0	X		10/29/94
Dichlorodifluoromethane	µg/l	100.0	X		10/29/94
1,1-Dichloroethane	µg/l	25.0	X		10/29/94

Analytical No.: 24217

X = Analyzed but not detected  
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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *JG*

Attn: John E. Guhl

	Units	Detection Limit	TW-12 (MW-12) 10/20/94	Qualifiers	Date Analyzed
1,2-Dichloroethane	µg/l	25.0	X		10/29/94
1,1-Dichloroethylene	µg/l	20.0	X		10/29/94
cis-1,2-Dichloroethylene	µg/l	25.0	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	25.0	X		10/29/94
1,2-Dichloropropane	µg/l	25.0	X		10/29/94
1,3-Dichloropropane	µg/l	25.0	X		10/29/94
2,2-Dichloropropane	µg/l	100.0	X	CC	10/29/94
1,1-Dichloropropene	µg/l	50.0	X		10/29/94
1,3-Dichloropropene	µg/l	25.0	X		10/29/94
Ethylbenzene	µg/l	50.0	70.0		10/29/94
Hexachlorobutadiene	µg/l	50.0	X		10/29/94
Isopropylbenzene	µg/l	50.0	X		10/29/94
p-Isopropyltoluene	µg/l	50.0	75.1		10/29/94
Methyl tert Butyl Ether	µg/l	100.0	X		10/29/94
Methylene Chloride	µg/l	125.0	X		10/29/94
Naphthalene	µg/l	50.0	634.	DUP	10/29/94
n-Propylbenzene	µg/l	50.0	X		10/29/94
Styrene	µg/l	250.0	X	CSL	10/29/94
Tetrachloroethylene	µg/l	25.0	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	25.0	X	CSH	10/29/94
1,1,2,2-Tetrachloroethane	µg/l	50.0	X		10/29/94
Toluene	µg/l	100.0	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	50.0	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	25.0	X		10/29/94
1,1,2-Trichloroethane	µg/l	25.0	X		10/29/94
Trichloroethylene	µg/l	10.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	50.0	X		10/29/94
1,2,3-Trichloropropane	µg/l	100.0	X	CSH	10/29/94
1,2,4-Trimethylbenzene	µg/l	50.0	X	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	50.0	X	CSL	10/29/94
Vinyl Chloride	µg/l	10.0	X		10/29/94
m- & p-Xylene	µg/l	50.0	X	CSL	10/29/94
o-Xylene & Styrene	µg/l	50.0	X		10/29/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	50.	68.1		11/08/94
Acenaphthylene	µg/l	50.	X		11/08/94
Anthracene	µg/l	50.	X		11/08/94
Benzo (a) Anthracene	µg/l	50.	X		11/08/94
Benzo (a) Pyrene	µg/l	50.	5.37	J	11/08/94
Benzo (b) Fluoranthene	µg/l	50.	X		11/08/94
Benzo (k) Fluoranthene	µg/l	50.	X		11/08/94
Benzo (ghi) Perylene	µg/l	50.	7.45	J	11/08/94
Chrysene	µg/l	50.	X		11/08/94
Dibenzo (a, h) Anthracene	µg/l	50.	X		11/08/94

Analytical No.:

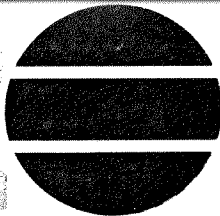
24217

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TW-12 (MW-12)</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Fluoranthene	µg/l	50.	X		11/08/94
Fluorene	µg/l	50.	11.9	J	11/08/94
Indeno (1,2,3-cd) Pyrene	µg/l	50.	5.76	J	11/08/94
2-Methyl Naphthalene	µg/l	50.	9.44	J	11/08/94
Phenanthrene	µg/l	50.	6.81	J	11/08/94
Pyrene	µg/l	50.	X		11/08/94
Naphthalene	µg/l	50.	563.		11/08/94
Water Organic Extraction			COMP		10/27/94
Analytical No.:			24217		

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	AW-1 10/20/94	Qualifiers	Date Analyzed
<u>EPA 415.2</u>					
Nonpurge Org. Carbon	mg/l	0.6	X		10/31/94
<u>EPA 200.7</u>					
Copper	µg/l	12.	26.		10/31/94
Iron	µg/l	10.	15.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<u>EPA 206.2</u>					
Arsenic (GFAAS)	µg/l	1.1	5.07		11/01/94
<u>EPA 218.2</u>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<u>EPA 239.2</u>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<u>601/602</u>					
Benzene	µg/l	0.2	X		10/28/94
Bromobenzene	µg/l	0.5	X		10/28/94
Bromochloromethane	µg/l	1.0	X		10/28/94
Bromodichloromethane	µg/l	0.5	X		10/28/94
Bromoform	µg/l	2.0	X	CC	10/28/94
Bromomethane	µg/l	4.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	1.0	X		10/28/94
sec-Butylbenzene	µg/l	1.0	X		10/28/94
tert-Butylbenzene	µg/l	1.0	X		10/28/94
Carbon Tetrachloride	µg/l	0.5	X		10/28/94
Chlorobenzene	µg/l	2.0	X		10/28/94
Chlorodibromomethane	µg/l	0.5	X		10/28/94
Chloroethane	µg/l	2.0	X		10/28/94
Chloroform	µg/l	0.5	X		10/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	1.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	1.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	1.0	X		10/28/94
Dibromomethane	µg/l	0.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/28/94
Dichlorodifluoromethane	µg/l	2.0	X		10/28/94
1,1-Dichloroethane	µg/l	0.5	X		10/28/94
1,2-Dichloroethane	µg/l	0.5	X		10/28/94
1,1-Dichloroethylene	µg/l	0.4	X		10/28/94

Analytical No.: 24218

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# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *JC*

Attn: John E. Guhl

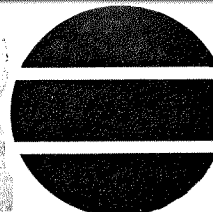
	Units	Detection Limit	AW-1 10/20/94	Qualifiers	Date Analyzed
- cis-1,2-Dichloroethylene	µg/l	0.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X		10/28/94
1,2-Dichloropropane	µg/l	0.5	X		10/28/94
1,3-Dichloropropane	µg/l	0.5	X		10/28/94
- 2,2-Dichloropropane	µg/l	2.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	1.0	X		10/28/94
1,3-Dichloropropene	µg/l	0.5	X		10/28/94
Ethylbenzene	µg/l	1.0	X		10/28/94
- Hexachlorobutadiene	µg/l	1.0	X		10/28/94
Isopropylbenzene	µg/l	1.0	X		10/28/94
p-Isopropyltoluene	µg/l	1.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/28/94
- Methylene Chloride	µg/l	2.5	X		10/28/94
Naphthalene	µg/l	1.0	X	DUP	10/28/94
n-Propylbenzene	µg/l	1.0	X		10/28/94
Styrene	µg/l	5.0	X	CSL	10/28/94
- Tetrachloroethylene	µg/l	0.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/28/94
Toluene	µg/l	2.0	X		10/28/94
- 1,2,3-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	0.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/28/94
- Trichloroethylene	µg/l	0.2	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	1.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	2.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
- 1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	0.2	X		10/28/94
m- & p-Xylene	µg/l	1.0	X	CSL	10/28/94
o-Xylene & Styrene	µg/l	1.0	X		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	10.	X		11/02/94
Acenaphthylene	µg/l	10.	X		11/02/94
- Anthracene	µg/l	10.	X		11/02/94
Benzo (a) Anthracene	µg/l	10.	X		11/02/94
Benzo (a) Pyrene	µg/l	10.	X		11/02/94
Benzo (b) Fluoranthene	µg/l	10.	X		11/02/94
- Benzo (k) Fluoranthene	µg/l	10.	X		11/02/94
Benzo (ghi) Perylene	µg/l	10.	X		11/02/94
Chrysene	µg/l	10.	X		11/02/94
Dibenzo (a,h) Anthracene	µg/l	10.	X		11/02/94
- Fluoranthene	µg/l	10.	X		11/02/94
Fluorene	µg/l	10.	X		11/02/94

Analytical No.: 24218

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# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>AW-1 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno(1,2,3-cd) Pyrene	µg/l	10.	X		11/02/94
2-Methyl Naphthalene	µg/l	10.	X		11/02/94
Phenanthrene	µg/l	10.	X		11/02/94
Pyrene	µg/l	10.	X		11/02/94
Naphthalene	µg/l	10.	X		11/02/94
Water Organic Extraction			COMP		10/27/94

Analytical No.:

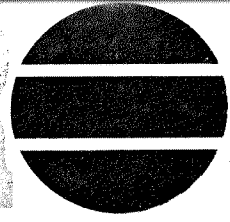
24218

X = Analyzed but not detected.

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Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

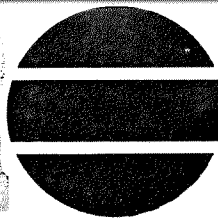
	Units	Detection Limit	AW-2 10/20/94	Qualifiers	Date Analyzed
<u>EPA 415.2</u>					
Nonpurge Org. Carbon	mg/l	0.6	X		10/31/94
<u>EPA 200.7</u>					
Copper	µg/l	12.	15.		10/31/94
Iron	µg/l	10.	18.		11/09/94
Zinc	µg/l	17.	X		10/31/94
<u>EPA 206.2</u>					
Arsenic (GFAAS)	µg/l	1.1	1.45		11/01/94
<u>EPA 218.2</u>					
Chromium (GFAAS)	µg/l	3.2	X		11/08/94
<u>EPA 239.2</u>					
Lead (GFAAS)	µg/l	2.0	X		11/03/94
<u>601/602</u>					
Benzene	µg/l	0.2	X		10/28/94
Bromobenzene	µg/l	0.5	X		10/28/94
Bromochloromethane	µg/l	1.0	X		10/28/94
Bromodichloromethane	µg/l	0.5	X		10/28/94
Bromoform	µg/l	2.0	X	CC	10/28/94
Bromomethane	µg/l	4.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	1.0	X		10/28/94
sec-Butylbenzene	µg/l	1.0	X		10/28/94
tert-Butylbenzene	µg/l	1.0	X		10/28/94
Carbon Tetrachloride	µg/l	0.5	X		10/28/94
Chlorobenzene	µg/l	2.0	X		10/28/94
Chlorodibromomethane	µg/l	0.5	X		10/28/94
Chloroethane	µg/l	2.0	X		10/28/94
Chloroform	µg/l	0.5	X		10/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	1.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	1.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	1.0	X		10/28/94
Dibromomethane	µg/l	0.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/28/94
Dichlorodifluoromethane	µg/l	2.0	X		10/28/94
1,1-Dichloroethane	µg/l	0.5	X		10/28/94
1,2-Dichloroethane	µg/l	0.5	X		10/28/94
1,1-Dichloroethylene	µg/l	0.4	X		10/28/94

Analytical No.: 24219

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	AW-2 10/20/94	Qualifiers	Date Analyzed
cis-1,2-Dichloroethylene	µg/l	0.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X		10/28/94
1,2-Dichloropropane	µg/l	0.5	X		10/28/94
1,3-Dichloropropane	µg/l	0.5	X		10/28/94
2,2-Dichloropropane	µg/l	2.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	1.0	X		10/28/94
1,3-Dichloropropene	µg/l	0.5	X		10/28/94
Ethylbenzene	µg/l	1.0	X		10/28/94
Hexachlorobutadiene	µg/l	1.0	X		10/28/94
Isopropylbenzene	µg/l	1.0	X		10/28/94
p-Isopropyltoluene	µg/l	1.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/28/94
Methylene Chloride	µg/l	2.5	X		10/28/94
Naphthalene	µg/l	1.0	X	DUP	10/28/94
n-Propylbenzene	µg/l	1.0	X		10/28/94
Styrene	µg/l	5.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	0.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X	CSH	10/28/94
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/28/94
Toluene	µg/l	2.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	0.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/28/94
Trichloroethylene	µg/l	0.2	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	1.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	2.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	0.2	X		10/28/94
m- & p-Xylene	µg/l	1.0	X	CSL	10/28/94
o-Xylene & Styrene	µg/l	1.0	X		10/28/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	20.	X		11/02/94
Acenaphthylene	µg/l	20.	X		11/02/94
Anthracene	µg/l	20.	X		11/02/94
Benzo (a) Anthracene	µg/l	20.	X		11/02/94
Benzo (a) Pyrene	µg/l	20.	X		11/02/94
Benzo (b) Fluoranthene	µg/l	20.	X		11/02/94
Benzo (k) Fluoranthene	µg/l	20.	X		11/02/94
Benzo (ghi) Perylene	µg/l	20.	X		11/02/94
Chrysene	µg/l	20.	X		11/02/94
Dibenzo (a, h) Anthracene	µg/l	20.	X		11/02/94
Fluoranthene	µg/l	20.	X		11/02/94
Fluorene	µg/l	20.	X		11/02/94

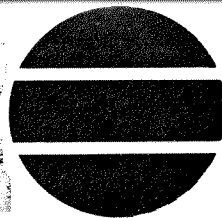
Analytical No.:

24219

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>AW-2 10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
Indeno(1,2,3-cd) Pyrene	µg/l	20.	X		11/02/94
2-Methyl Naphthalene	µg/l	20.	X		11/02/94
Phenanthrene	µg/l	20.	X		11/02/94
Pyrene	µg/l	20.	X		11/02/94
Naphthalene	µg/l	20.	X		11/02/94
Water Organic Extraction			COMP		10/27/94

Analytical No.:

24219

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT

Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	Units	Detection Limit	SEEP SAMPLE 10/20/94	Qualifiers	Date Analyzed
<b>501/602</b>					
Benzene	µg/l	40.0	3,250.		10/29/94
Bromobenzene	µg/l	100.0	X		10/29/94
Bromochloromethane	µg/l	200.0	X		10/29/94
Bromodichloromethane	µg/l	100.0	X		10/29/94
Bromoform	µg/l	400.0	X	CC	10/29/94
Bromomethane	µg/l	800.0	X	CSL CC	10/29/94
n-Butylbenzene	µg/l	200.0	X		10/29/94
sec-Butylbenzene	µg/l	200.0	X		10/29/94
tert-Butylbenzene	µg/l	200.0	X		10/29/94
Carbon Tetrachloride	µg/l	100.0	X		10/29/94
Chlorobenzene	µg/l	400.0	X		10/29/94
Chlorodibromomethane	µg/l	100.0	X		10/29/94
Chloroethane	µg/l	400.0	X		10/29/94
Chloroform	µg/l	100.0	X		10/29/94
Chloromethane	µg/l	400.0	X	CSL DUP	10/29/94
o-Chlorotoluene	µg/l	200.0	X	CSL	10/29/94
p-Chlorotoluene	µg/l	200.0	X		10/29/94
1,2-Dibromo-3-chloropropane	µg/l	2660.0	X	CSL CC	10/29/94
1,2-Dibromoethane	µg/l	200.0	X		10/29/94
Dibromomethane	µg/l	100.0	X		10/29/94
1,2-Dichlorobenzene	µg/l	200.0	X	CSL	10/29/94
1,3-Dichlorobenzene	µg/l	200.0	X	CSL	10/29/94
1,4-Dichlorobenzene	µg/l	100.0	X		10/29/94
Dichlorodifluoromethane	µg/l	400.0	X		10/29/94
1,1-Dichloroethane	µg/l	100.0	X		10/29/94
1,2-Dichloroethane	µg/l	100.0	X		10/29/94
1,1-Dichloroethylene	µg/l	80.0	X		10/29/94
cis-1,2-Dichloroethylene	µg/l	100.0	X	CC	10/29/94
trans-1,2-Dichloroethylene	µg/l	100.0	X		10/29/94
1,2-Dichloropropane	µg/l	100.0	X		10/29/94
1,3-Dichloropropane	µg/l	100.0	X		10/29/94
2,2-Dichloropropane	µg/l	400.0	X	CC	10/29/94
1,1-Dichloropropene	µg/l	200.0	X		10/29/94
1,3-Dichloropropene	µg/l	100.0	X		10/29/94
Ethylbenzene	µg/l	200.0	378.		10/29/94
Hexachlorobutadiene	µg/l	200.0	X		10/29/94
Isopropylbenzene	µg/l	200.0	X		10/29/94
p-Isopropyltoluene	µg/l	200.0	X		10/29/94
Methyl tert Butyl Ether	µg/l	400.0	X		10/29/94
Methylene Chloride	µg/l	500.0	X		10/29/94
Naphthalene	µg/l	200.0	2,590.	DUP	10/29/94
n-Propylbenzene	µg/l	200.0	X		10/29/94
Styrene	µg/l	1000.0	X	CSL	10/29/94
Tetrachloroethylene	µg/l	100.0	X		10/29/94
1,1,1,2-Tetrachloroethane	µg/l	100.0	X	CSH	10/29/94

Analytical No.:

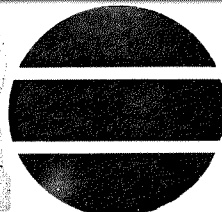
24220

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: VG/

Attn: John E. Guhl

	Units	Detection Limit	SEEP SAMPLE 10/20/94	Qualifiers	Date Analyzed
1,1,2,2-Tetrachloroethane	µg/l	200.0	X		10/29/94
Toluene	µg/l	400.0	X		10/29/94
1,2,3-Trichlorobenzene	µg/l	200.0	X	CSL	10/29/94
1,2,4-Trichlorobenzene	µg/l	200.0	X	CSL	10/29/94
1,1,1-Trichloroethane	µg/l	100.0	X		10/29/94
1,1,2-Trichloroethane	µg/l	100.0	X		10/29/94
Trichloroethylene	µg/l	40.0	X	CSH	10/29/94
Trichlorofluoromethane	µg/l	200.0	X		10/29/94
1,2,3-Trichloropropane	µg/l	400.0	X	CSL CC	10/29/94
1,2,4-Trimethylbenzene	µg/l	200.0	X	CSL	10/29/94
1,3,5-Trimethylbenzene	µg/l	200.0	X	CSL	10/29/94
Vinyl Chloride	µg/l	40.0	X		10/29/94
m- & p-Xylene	µg/l	200.0	227.	CSL	10/29/94
o-Xylene & Styrene	µg/l	200.0	256.		10/29/94

### EPA 8270

Acenaphthene	µg/l	3225.	19,625.		11/10/94
Acenaphthylene	µg/l	3225.	3,823.		11/10/94
Anthracene	µg/l	3225.	8,842.		11/10/94
Benzo (a) Anthracene	µg/l	3225.	6,800.		11/10/94
Benzo (a) Pyrene	µg/l	3225.	7,754.		11/10/94
Benzo (b) Fluoranthene	µg/l	3225.	6,260.		11/10/94
Benzo (k) Fluoranthene	µg/l	3225.	3,066.		11/10/94
Benzo (ghi) Perylene	µg/l	3225.	4,022.		11/10/94
Chrysene	µg/l	3225.	7,298.		11/10/94
Dibenzo (a, h) Anthracene	µg/l	3225.	624	J	11/10/94
Fluoranthene	µg/l	3225.	15,725.		11/10/94
Fluorene	µg/l	3225.	11,437.		11/10/94
Indeno (1,2,3-cd) Pyrene	µg/l	3225.	3,578.		11/10/94
2-Methyl Naphthalene	µg/l	3225.	24,594.		11/10/94
Phenanthrene	µg/l	3225.	38,293.		11/10/94
Pyrene	µg/l	3225.	22,136.		11/10/94
Naphthalene	µg/l	3225.	30,250.		11/10/94

Water Organic Extraction

COMP

10/27/94

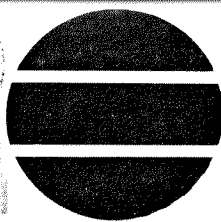
Analytical No.:

24220

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
 421 Frenette Drive  
 Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
 SAMPLED BY: Client  
 DATE REC'D: 10/25/94  
 REPORT DATE: 11/14/94  
 PREPARED BY: MRD  
 REVIEWED BY: *[Signature]*

Attn: John E. Guhl

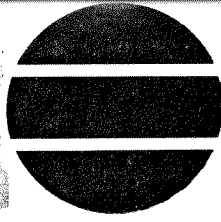
	Units	Detection Limit	TRIP BLANK-DR 10/20/94	Qualifiers	Date Analyzed
<b>601/602</b>					
Benzene	µg/l	0.2	X		10/28/94
Bromobenzene	µg/l	0.5	X		10/28/94
Bromochloromethane	µg/l	1.0	X		10/28/94
Bromodichloromethane	µg/l	0.5	X		10/28/94
Bromoform	µg/l	2.0	X	CC	10/28/94
Bromomethane	µg/l	4.0	X	CSL CC	10/28/94
n-Butylbenzene	µg/l	1.0	X		10/28/94
sec-Butylbenzene	µg/l	1.0	X		10/28/94
tert-Butylbenzene	µg/l	1.0	X		10/28/94
Carbon Tetrachloride	µg/l	0.5	X		10/28/94
Chlorobenzene	µg/l	2.0	X		10/28/94
Chlorodibromomethane	µg/l	0.5	X		10/28/94
Chloroethane	µg/l	2.0	X		10/28/94
Chloroform	µg/l	0.5	X		10/28/94
Chloromethane	µg/l	2.0	X	CSL DUP	10/28/94
o-Chlorotoluene	µg/l	1.0	X	CSL	10/28/94
p-Chlorotoluene	µg/l	1.0	X		10/28/94
1,2-Dibromo-3-chloropropane	µg/l	13.3	X	CSL CC	10/28/94
1,2-Dibromoethane	µg/l	1.0	X		10/28/94
Dibromomethane	µg/l	0.5	X		10/28/94
1,2-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,3-Dichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,4-Dichlorobenzene	µg/l	0.5	X		10/28/94
Dichlorodifluoromethane	µg/l	2.0	X		10/28/94
1,1-Dichloroethane	µg/l	0.5	X		10/28/94
1,2-Dichloroethane	µg/l	0.5	X		10/28/94
1,1-Dichloroethylene	µg/l	0.4	X		10/28/94
cis-1,2-Dichloroethylene	µg/l	0.5	X	CC	10/28/94
trans-1,2-Dichloroethylene	µg/l	0.5	X		10/28/94
1,2-Dichloropropane	µg/l	0.5	X		10/28/94
1,3-Dichloropropane	µg/l	0.5	X		10/28/94
2,2-Dichloropropane	µg/l	2.0	X	CC	10/28/94
1,1-Dichloropropene	µg/l	1.0	X		10/28/94
1,3-Dichloropropene	µg/l	0.5	X		10/28/94
Ethylbenzene	µg/l	1.0	X		10/28/94
Hexachlorobutadiene	µg/l	1.0	X		10/28/94
Isopropylbenzene	µg/l	1.0	X		10/28/94
p-Isopropyltoluene	µg/l	1.0	X		10/28/94
Methyl tert Butyl Ether	µg/l	2.0	X		10/28/94
Methylene Chloride	µg/l	2.5	X		10/28/94
Naphthalene	µg/l	1.0	X	DUP	10/28/94
n-Propylbenzene	µg/l	1.0	X		10/28/94
Styrene	µg/l	5.0	X	CSL	10/28/94
Tetrachloroethylene	µg/l	0.5	X		10/28/94
1,1,1,2-Tetrachloroethane	µg/l	0.5	X	CSH	10/28/94

Analytical No.: 24221

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *[Signature]*

Attn: John E. Guhl

	<u>Units</u>	<u>Detection Limit</u>	<u>TRIP BLANK-DR</u> <u>10/20/94</u>	<u>Qualifiers</u>	<u>Date Analyzed</u>
1,1,2,2-Tetrachloroethane	µg/l	1.0	X		10/28/94
Toluene	µg/l	2.0	X		10/28/94
1,2,3-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,2,4-Trichlorobenzene	µg/l	1.0	X	CSL	10/28/94
1,1,1-Trichloroethane	µg/l	0.5	X		10/28/94
1,1,2-Trichloroethane	µg/l	0.5	X		10/28/94
Trichloroethylene	µg/l	0.2	X	CSH	10/28/94
Trichlorofluoromethane	µg/l	1.0	X		10/28/94
1,2,3-Trichloropropane	µg/l	2.0	X	CSH	10/28/94
1,2,4-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
1,3,5-Trimethylbenzene	µg/l	1.0	X	CSL	10/28/94
Vinyl Chloride	µg/l	0.2	X		10/28/94
m- & p-Xylene	µg/l	1.0	X	CSL	10/28/94
o-Xylene & Styrene	µg/l	1.0	X		10/28/94

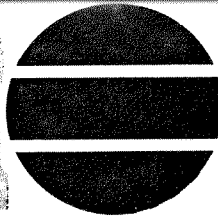
Analytical No.: 24221

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

Enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 10/25/94  
REPORT DATE: 11/14/94  
PREPARED BY: MRD  
REVIEWED BY: *MRD*

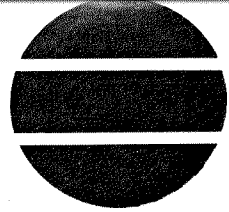
Attn: John E. Guhl

## Qualifier Descriptions

- CC Estimated concentration due to the calibration correlation coefficient not meeting the minimum requirements under Wisconsin NR149.
- CSL Check standard for this analyte exhibited a low bias. Sample results may also be biased low. Non-detects were verified by comparison with a low standard.
- DUP Result of duplicate analysis in this quality assurance batch exceeds the limits for precision. Sample results may also show a degree of variability.
- CSH Check standard for this analyte exhibited a high bias. Sample results may also be biased high. Non-detects were verified by comparison with a low standard.
- J Estimated concentration below reporting limit.
- MSL Matrix spike recovery was low. Sample concentration may also be biased low.
- CAL Estimated concentration beyond the calibration range, but within the detector range of the instrument.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

enviroscan Corp., 303 West Military Rd., Rothschild, WI 54474 1/800/338-SCAN Wisconsin Lab Certification No. 737053130



Sample Receipt Report

Client: SHORT

Date Rec'd: 10/25/94

Analytical No.: 21-24202 Thru 24221

Check all deviations from EPA or WDNR sample protocol.

- Sample(s) received at \_\_\_\_°C which is above the EPA and WDNR limit of 4°C.
- VOC vial(s) received with headspace. Explain: \_\_\_\_\_
- Sample(s) received in bottles not furnished by Enviroscan. Preservation method, if used, is unknown.
- Sample(s) not properly preserved per EPA/WDNR protocol for the following: \_\_\_\_\_
- Sample(s) received beyond EPA holding time for: \_\_\_\_\_
- Sample date/time not supplied by client. Actual holding time unknown.
- GRO/DRO (circle appropriate) sample(s) exceed 20 gm, but are within the WDNR stated 1.2 gm tolerance allowed for average vial weight. Sample(s) over-weight: \_\_\_\_\_
- GRO/DRO (circle appropriate) sample(s) exceed 20 gm. Sample(s) over-weight: \_\_\_\_\_

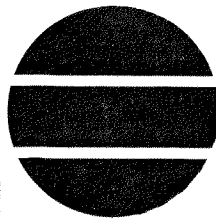
Other: #24217 COC SAMPLE ID READS TW-12  
Labels read MW-12 Times + Dates match

*(u)lets*

Client \_\_\_\_\_ (contact name) notified of the above deviation(s) on \_\_\_/\_\_\_/\_\_\_ at \_\_\_:\_\_\_ am/pm by \_\_\_\_\_ (signature) and the client ordered:

- Proceed with analyses as ordered.
- Proceed with analyses after taking the following corrective action: \_\_\_\_\_
- Do NOT proceed with analyses.

# REQUEST FOR SERVICES



303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

**REPORT TO:**

Name: JOHN E. GUHL  
 Company: SHORT ELLIOTT HENDRICKSON INC.  
 Address: 421 FRENETTE DRIVE  
CHIPPEWA FALLS, WI  
 Phone: ( 715 ) 720-6200  
 P.O. # \_\_\_\_\_  
 Project # WIDNR 9401 Quote # 2528-9

**BILL TO: (if different from Report To info):**

Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

**ANALYTICAL REQUESTS**

(use separate sheet if necessary)

**Sample Type**

(Check all that apply)

- Groundwater
- Wastewater
- Soil/Solid
- Drinking Water
- Oil
- Vapor
- Other

**Turnaround Time**

- Normal
- Rush (Pre-approved by Lab)
- Date Needed \_\_\_\_\_
- Approved By \_\_\_\_\_

21-0412

LAB USE ONLY	DATE	TIME	No. of Containers COMP GRAB	SAMPLE ID	REMARKS
21024202	10-20-94	12:05	6	MW-1	✓
21024203	10-20-94	11:45	6	MW-2	✓
21024204	10-20-94	11:30	6	MW-3	✓
21024205	10-20-94	11:00	6	TW-1	✓
21024206	10-20-94	10:30	6	TW-2	✓
21024207	10-20-94	11:05	6	TW-3	✓
21024208	10-20-94	12:20	6	TW-4	✓
21024209	10-20-94	2:20 PM	6	TW-5	✓
21024210	10-20-94	2:45 PM	6	TW-6	✓
21024211	10-20-94	8:20	5	TW-7	✓

*Handwritten notes in table:*  
 (A) VOCs SW8021  
 (B) FAH's SW8270  
 (C) TOCS APHA 505B  
 (D) Total As, Cr, Cu, Pb, Zn, Fe  
 (E) Method 200.7 + 200.9  
 (F) Method 200.9

SHORT

**CHAIN OF CUSTODY RECORD**

SAMPLERS: (Signature)

*John E. Guhl* *Brian Kent*

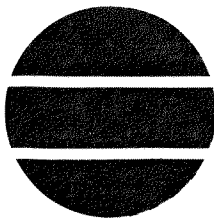
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
<i>John E. Guhl</i>	10-24-94 4:30am	
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature)
		<i>Doris Btzinger</i>

Del'v: Hand Comm  
 Ship. Cont. OK?  N N/A  
 Samples leaking? Y  N N/A  
 Seals OK?  N N/A  
 Rec'd on ice?  N N/A °C

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

DATE/TIME  
 10/25/94 11:10AM

# REQUEST FOR SERVICES



# SCAN

303 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

**REPORT TO:**  
 Name: JOHN E. GUHL  
 Company: SHORT ELLIOTT HENDRICKSON INC  
 Address: 421 FRENETTE DRIVE  
CHIPPWA FALLS, WISCONSIN  
 Phone: ( 715 ) 720-6200  
 P.O. # \_\_\_\_\_  
 Project # WIDNR9401 Quote # 2528-9

**BILL TO: (if different from Report To info):**  
 Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

## ANALYTICAL REQUESTS

(use separate sheet if necessary)

**Sample Type**  
 (Check all that apply)  
 Groundwater  
 Wastewater  
 Soil/Solid  
 Drinking Water  
 Oil  
 Vapor  
 Other

**Turnaround Time**  
 Normal  
 Rush (Pre-approved by Lab)  
 Date Needed \_\_\_\_\_  
 Approved By \_\_\_\_\_

*21-0412*

LAB USE ONLY	DATE	TIME	No. of Containers	SAMPLE ID	REMARKS
			COMP GRAB		
21024212	10-20-94	9:10	6	TW-8	✓
21024213	10-20-94	1:45pm	6	TW-9	✓
21024214	10-20-94	10:00	5	TW-10	✓
21024215	10-20-94	10:00	3	TW-10 Duplicate	✓
21024216	10-20-94	9:15	5	TW-11	✓
21024217	10-20-94	8:35	6	TW-12 (MW-12)	✓
21024218	10-20-94	3:00	6	AW-1	✓
21024219	10-20-94	3:15	6	AW-2	✓
21024220	10-20-94	2:05pm	4	SEEP SAMPLE	✓
21024221			3	TRIP BLANK-DR	✓

*Handwritten notes in table:*  
 VOCs, PAHs, TOCS, TOTAL APHA, Total As, Cr, Cu, Pb, Zn, Method 200.7, Method 200.9, Method 200.9

*SHORT*

## CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature)  
John E. Guhl Brian Kent

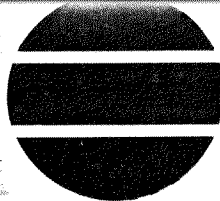
Del'v: Hand Comm  
 Ship. Cont. OK? Y N N/A  
 Samples leaking? Y N N/A  
 Seals OK? Y N N/A  
 Rec'd on ice? Y N N/A °C

RELINQUISHED BY: (Signature) <u>John E. Guhl</u>	DATE/TIME <u>10-24-94 4:30am</u>	RECEIVED BY: (Signature) _____
RELINQUISHED BY: (Signature) _____	DATE/TIME _____	RECEIVED BY: (Signature) _____
RELINQUISHED BY: (Signature) _____	DATE/TIME _____	RECEIVED FOR LABORATORY BY: (Signature) <u>Doris Ketzinger</u>

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

DATE/TIME  
10/25/94 11:10 AM

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 12/07/94  
REPORT DATE: 12/27/94  
PREPARED BY: MRD *MRD*  
REVIEWED BY: *JF*

Attn: John Guhl

	Units	Detection Limit	TW-13 12/02/94	Qualifiers	Date Analyzed
<b>EPA 8021</b>					
Benzene	µg/l	400.0	20,500.		12/15/94
Bromobenzene	µg/l	1000.0	X		12/15/94
Bromochloromethane	µg/l	2000.0	X	CSH	12/15/94
Bromodichloromethane	µg/l	1000.0	X		12/15/94
Bromoform	µg/l	4000.0	X	CSH	12/15/94
Bromomethane	µg/l	8000.0	X	CSL	12/15/94
n-Butylbenzene	µg/l	2000.0	X		12/15/94
sec-Butylbenzene	µg/l	2000.0	X		12/15/94
tert-Butylbenzene	µg/l	2000.0	X		12/15/94
Carbon Tetrachloride	µg/l	1000.0	X		12/15/94
Chlorobenzene	µg/l	4000.0	X		12/15/94
Chlorodibromomethane	µg/l	1000.0	X		12/15/94
Chloroethane	µg/l	4000.0	X		12/15/94
Chloroform	µg/l	1000.0	X		12/15/94
Chloromethane	µg/l	4000.0	X	CSH	12/15/94
o-Chlorotoluene	µg/l	2000.0	X		12/15/94
p-Chlorotoluene	µg/l	2000.0	X		12/15/94
1,2-Dibromo-3-chloropropane	µg/l	26600.0	X	CSH CSL	12/15/94
1,2-Dibromoethane	µg/l	2000.0	X		12/15/94
Dibromomethane	µg/l	1000.0	X	CSH	12/15/94
1,2-Dichlorobenzene	µg/l	2000.0	X		12/15/94
1,3-Dichlorobenzene	µg/l	2000.0	X		12/15/94
1,4-Dichlorobenzene	µg/l	1000.0	X		12/15/94
Dichlorodifluoromethane	µg/l	4000.0	X		12/15/94
1,1-Dichloroethane	µg/l	1000.0	X		12/15/94
1,2-Dichloroethane	µg/l	1000.0	X	CSH	12/15/94
1,1-Dichloroethylene	µg/l	800.0	X		12/15/94
cis-1,2-Dichloroethylene	µg/l	1000.0	X		12/15/94
trans-1,2-Dichloroethylene	µg/l	1000.0	X		12/15/94
1,2-Dichloropropane	µg/l	1000.0	X		12/15/94
1,3-Dichloropropane	µg/l	1000.0	X	CSH	12/15/94
2,2-Dichloropropane	µg/l	4000.0	X		12/15/94
1,1-Dichloropropene	µg/l	2000.0	X		12/15/94
1,3-Dichloropropene	µg/l	1000.0	X		12/15/94
Ethylbenzene	µg/l	2000.0	3,180.		12/15/94
Hexachlorobutadiene	µg/l	2000.0	X	CSL	12/15/94
Isopropylbenzene	µg/l	2000.0	X	CSH	12/15/94
p-Isopropyltoluene	µg/l	2000.0	X		12/15/94
Methyl tert Butyl Ether	µg/l	4000.0	X		12/15/94
Methylene Chloride	µg/l	5000.0	X	CSH	12/15/94
Naphthalene	µg/l	2000.0	8,760.		12/15/94
n-Propylbenzene	µg/l	2000.0	X		12/15/94
Styrene	µg/l	10000.0	X		12/15/94
Tetrachloroethylene	µg/l	1000.0	X		12/15/94
1,1,1,2-Tetrachloroethane	µg/l	1000.0	X		12/15/94

Analytical No.:

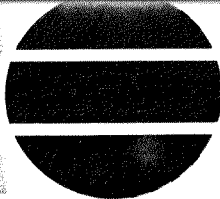
27699

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.



# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls, WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 12/07/94  
REPORT DATE: 12/27/94  
PREPARED BY: MRD *mlw*  
REVIEWED BY: *JJ*

Attn: John Guhl

	Units	Detection Limit	TW-13 12/02/94	Qualifiers	Date Analyzed
1,1,2,2-Tetrachloroethane	µg/l	2000.0	X	CSH	12/15/94
Toluene	µg/l	4000.0	10,000.		12/15/94
1,2,3-Trichlorobenzene	µg/l	2000.0	X		12/15/94
1,2,4-Trichlorobenzene	µg/l	2000.0	X	CSL	12/15/94
1,1,1-Trichloroethane	µg/l	1000.0	X		12/15/94
1,1,2-Trichloroethane	µg/l	1000.0	X	CSH	12/15/94
Trichloroethylene	µg/l	400.0	X		12/15/94
Trichlorofluoromethane	µg/l	2000.0	X	CSH	12/15/94
1,2,3-Trichloropropane	µg/l	4000.0	X	CSH	12/15/94
1,2,4-Trimethylbenzene	µg/l	2000.0	X		12/15/94
1,3,5-Trimethylbenzene	µg/l	2000.0	X		12/15/94
Vinyl Chloride	µg/l	400.0	X		12/15/94
m- & p-Xylene	µg/l	2000.0	2,280.		12/15/94
o-Xylene & Styrene	µg/l	2000.0	2,900.		12/15/94
<b>EPA 8270</b>					
Acenaphthene	µg/l	400.0	914.		12/14/94
Acenaphthylene	µg/l	400.0	3,570.		12/14/94
Anthracene	µg/l	400.0	1,685.		12/14/94
Benzo (a) Anthracene	µg/l	400.0	921.		12/14/94
Benzo (a) Pyrene	µg/l	400.0	898.		12/14/94
Benzo (b) Fluoranthene	µg/l	400.0	715.		12/14/94
Benzo (k) Fluoranthene	µg/l	400.0	339.	J	12/14/94
Benzo (ghi) Perylene	µg/l	400.0	389.	J	12/14/94
Chrysene	µg/l	400.0	843.		12/14/94
Dibenzo (a, h) Anthracene	µg/l	400.0	X		12/14/94
Fluoranthene	µg/l	400.0	1,862.		12/14/94
Fluorene	µg/l	400.0	1,879.		12/14/94
Indeno (1,2,3-cd) Pyrene	µg/l	400.0	362.	J	12/14/94
2-Methyl Naphthalene	µg/l	400.0	9,780.		12/14/94
Phenanthrene	µg/l	400.0	6,072.		12/14/94
Pyrene	µg/l	400.0	3,380.		12/14/94
Naphthalene	µg/l	400.0	24,769.		12/14/94

Analytical No.: 27699

X = Analyzed but not detected.

All analyses conducted in accordance with Enviroscan Quality Assurance Program.

# ANALYTICAL REPORT



Short Elliott Hendrickson, Inc.  
421 Frenette Drive  
Chippewa Falls , WI 54729

CUST NUMBER: WIDNR9401  
SAMPLED BY: Client  
DATE REC'D: 12/07/94  
REPORT DATE: 12/27/94  
PREPARED BY: MRD *MLP*  
REVIEWED BY: *Jr*

Attn: John Guhl

## Qualifier Descriptions

- CSH      Check standard for this analyte exhibited a high bias. Sample results may also be biased high. Non-detects were verified by comparison with a low standard.
- CSL      Check standard for this analyte exhibited a low bias. Sample results may also be biased low. Non-detects were verified by comparison with a low standard.
- J        Estimated concentration below reporting limit.



# TERMS AND CONDITIONS

## 1. ORDERS

Customer may order Analytical Services by completing this form, submitting a written purchase order to Enviroscan, Inc. or by placing a telephone order which is subsequently confirmed in writing.

## 2. SAMPLES

When analyses only are ordered, Customer will be responsible for obtaining representative sample(s), preserving same in an appropriate manner, and forwarding them intact to Enviroscan, Inc. Customer has these responsibilities whether using own sample containers or containers provided by Enviroscan, Inc. Enviroscan, Inc. will exercise reasonable care in handling samples, but in no event shall Enviroscan's liability for loss or destruction of any sample exceed the amount paid for analysis of that particular sample.

## 3. CHARGES AND PAYMENT

Enviroscan, Inc. will perform Analytical Services in return for charges as outlined in our quotation, or as stated on Enviroscan's current price list. Terms of payment are Net/30 days. An additional charge of one and one half percent per month will be added to unpaid accounts.

## 4. WARRANTY-LIABILITY

Enviroscan, Inc. will perform Analytical Services and provide Customer with a written report of results. Notwithstanding anything herein to the contrary, liability in connection with any claim relating to Analytical Services shall be limited to, at Enviroscan's option, repeating the Services at Enviroscan's expense, or the refund of the charges paid for performance of the Services.

Except as expressly stated above, Enviroscan, Inc. makes no warranty, expressed or implied, whether of merchantability or fitness for any particular purpose or use or otherwise of the Services. In no event shall Enviroscan, Inc. be liable to Customer for any special, indirect, incidental or consequential damages arising out of, or as the result of, the performance of the Services, the use or loss of the use of a report prepared by Enviroscan, Inc., or for any charges or expenses of any nature incurred without Enviroscan's written consent, even though Enviroscan, Inc. has been negligent.

In no event shall Enviroscan, Inc., be responsible to the Customer for incidental, consequential, or special damages of any type or nature.

Except for claims for personal injury, the total liability of Enviroscan, Inc., to Customer arising under this order, whether arising by contract, tort, warranty (express or implied), strict liability, delay, inaccuracy in testing results, or otherwise shall not exceed the contract price of this order in the aggregate.

## 5. FORCE MAJEURE

Enviroscan, Inc. shall not be liable for any default or delay in performance if caused, directly or indirectly, by acts of God, war, force or arms, fire, the elements, riot, labor disputes, picketing or other labor controversies, sabotage, civil commotion, accidents, any governmental action, prohibition or regulation, delay in transportation facilities, shortage or breakdown of or inability to obtain or nonarrival of any labor, material or equipment used in the performance of the Services, failure of any party to perform any contract with Enviroscan, Inc. relative to the performance of the Services covered hereby, or from any cause whatsoever beyond Enviroscan's control, whether or not such cause be similar or dissimilar to those enumerated.

Enviroscan, Inc. shall be compensated for costs incurred when Services cannot be completed for any of the above causes.

## 6. MISCELLANEOUS

The Analytical Services are contracted for according to the laws of the State of Wisconsin. This document constitutes the full understanding of the parties (Enviroscan, Inc. and Customer), and no terms, conditions, understanding or agreement purporting to modify or vary the terms of this document shall be binding unless hereafter made in writing and signed by the party to be bound.