

State of Wisconsin | DEPARTMENT OF NATURAL RESOURCES

Southeast District - Annex building

Post Office Box 12436

4041 N. Richards St.

Milwaukee, Wisconsin 53212

TELEPHONE: 414-961-2727

TELEFAX #: 414-961-2770

George E. Meyer
Secretary

July 18, 1994

File Ref: 936

FID #: 267083850

ERR LUST

Mr. J. Thomas Ravn
Serigraph, Inc.
760 Indiana Ave.
P.O. Box 438
West Bend, WI 53095

53095-4050-60 - B

RE: CASE CLOSURE, 2,000 g. Fuel Oil Underground Storage Tank,
Serigraph, Inc. 760 Indiana Ave., West Bend, WI

Dear Mr. Ravn:

The Wisconsin Department of Natural Resources (WDNR) reviewed the *Phase IV Environmental Site Assessment Report...* (December 1990), prepared by Aqua-Tech, Inc. (now known as Advent Environmental Services, Inc.). The report describes site investigation and remediation activities related to one fuel oil underground storage tank formerly present on the subject site.

Based on the information provided, we are not requiring any further investigation or other action in connection with this cleanup. The WDNR retains the right to require remedial action in the future if additional environmental impacts are detected.

You should note that this letter does not constitute Department "certification" under s. 144.765 (2) (a) 3, Stats., as created by 1993 Wisconsin Act 453 (May 12, 1994). Persons who meet the definition of "purchaser" in s.144.765 (1) (c) must receive Department pre-approval prior to conducting a site investigation in order to be eligible for the liability exemption under s. 144.765, Stats.

The WDNR appreciates the actions you have taken to restore the environment at this site. I apologize that the large number of leaking underground storage tank cases throughout the state prevented us from addressing this case more quickly. If you have any questions, please contact me at (414) 961-2746.

Sincerely,

Nancy S. Kochis

Nancy S. Kochis
Hydrogeologist

cc: Peter Pavalko, Advent Environmental Services, Inc.

✓ SED case file #936



1991 1 0 1891

AQUA-TECH INC.

PHASE IV
ENVIRONMENTAL ASSESSMENT REPORT
FOR THE
SERIGRAPH, INC. SITE
760 INDIANA AVENUE
WEST BEND, WISCONSIN

DECEMBER 1990

PREPARED BY
AQUA-TECH, INC.
140 SOUTH PARK STREET
PORT WASHINGTON, WISCONSIN 53074
ATI PROJECT NO. 93727

SIGNATURE PAGE

FOR THE
ENVIRONMENTAL SITE ASSESSMENT REPORT

FOR THE
SERIGRAPH, INC. SITE
760 INDIANA AVENUE
WEST BEND, WISCONSIN

Prepared By: *Peter E. Pavalko* Date: 12-18-90
Peter E. Pavalko
Environmental Assessment Specialist
Aqua-Tech, Inc.

Reviewed By: *Neil W. Rismeyer* Date: 12/18/90
Neil Rismeyer, C.P.G.
Hydrogeologist
AIPG Certificate #7962
Aqua-Tech, Inc.



TABLE OF CONTENTS

| <u>SECTION</u> | <u>PAGE</u> |
|--|-------------|
| 1.0 Summary | 1-1 |
| 2.0 Site Background | 2-1 |
| 2.1 Introduction | 2-1 |
| 2.2 Summary of Previous Investigation | 2-1 |
| 3.0 Site Assessment Procedures and Field Observations | 3-1 |
| 3.1 Introduction | 3-1 |
| 3.2 Field Operations | 3-1 |
| 3.3 Sampling Procedures | 3-1 |
| 3.4 Chain of Custody Procedures | 3-3 |
| 4.0 Analytical Procedures and Results | 4-1 |
| 4.1 Introduction | 4-1 |
| 4.2 Analytical Procedures | 4-1 |
| 4.3 Results of Chemical Analyses of Aqua-Tech Collected Samples | 4-1 |
| 5.0 Discussion of Assessment Results | 5-1 |
| 5.1 Introduction | 5-1 |
| 5.2 Soil | 5-1 |
| 5.3 Groundwater | 5-1 |
| 6.0 Recommendations | 6-1 |

LIST OF FIGURES

| <u>FIGURE</u> | | <u>PAGE</u> |
|---------------|---|-------------|
| 3-1 | Serigraph Excavation Detail | 3-2 |
| 3-2 | Excavation Limits and Soil Sampling Locations | 3-4 |

LIST OF TABLES

| <u>TABLE</u> | | <u>PAGE</u> |
|--------------|--|-------------|
| 4-1 | Chemical Analyses of Site Closure Soil Samples | 4-2 |

LIST OF APPENDIXES

| <u>APPENDIX</u> | | <u>PAGE</u> |
|-----------------|--|-------------|
| A. | Underground Heating Oil Tank Closure Assessment Report, October 4, 1990 | A-1 |
| B. | Site Photographs | B-1 |
| C. | Chain of Custody and Laboratory Documentation | C-1 |

1.0 SUMMARY

Aqua-Tech, Inc. has completed a Phase IV Environmental Assessment for the Serigraph, Inc. site in West Bend, Wisconsin. The assessment was conducted by Aqua-Tech, Inc. on October 30, 1990. The Phase IV Environmental Assessment included the following:

- * Excavation of approximately 88.6 cubic yards of soil and disposal at Payne & Dolan, Inc. asphalt plant in Sussex, Wisconsin.
- * Screening of soil samples collected from the excavation walls and floor for volatile organic compounds (VOCs) with a photoionization detector (PID).
- * Collection of four soil samples for laboratory analyses for total petroleum hydrocarbons (TPH).
- * Documentation of sampling procedures and soil conditions at the excavation.

LABORATORY RESULTS AND FIELD SCREENING WITH A PID INDICATE THAT ALL OF THE SOIL CONTAMINATED ABOVE THE 10 MG/KG WISCONSIN DEPARTMENT OF INDUSTRY, LABOR, AND HUMAN RELATIONS STANDARD FOR TPH WAS REMOVED FROM THE SITE.

No groundwater was encountered within the excavation. Based on the proven extent of contamination identified during this excavation and through soil borings completed during a previous assessment, GROUNDWATER IS NOT BELIEVED TO HAVE BEEN IMPACTED AT THE SITE.

After completing the Phase IV Environmental Assessment for the Serigraph, Inc. site, Aqua-Tech, Inc. recommends no additional investigation or corrective action. Field screening of the excavation with a PID and results of laboratory analyses of samples collected from the excavation indicate that all of the contaminated soil was removed from the site.

2.0 SITE BACKGROUND

2.1 Introduction

This section summarizes activities and results of the previous environmental investigation of the site.

2.2 Summary of Previous Investigation

Aqua-Tech, Inc. completed an underground heating oil tank excavation at the Serigraph site on August 15, 1990. In addition, four soil borings were completed around the perimeter of the tank bed on August 22, 1990.

The purpose of the soil borings was to delineate the vertical and horizontal extent of petroleum contamination identified at the site during the excavation of one 2,000 gallon underground heating oil tank.

Results of this investigation indicated that there had not been significant migration of petroleum components from the tank bed through the subsurface soils. The extent of contaminated soil was believed to be localized to the soils directly beneath the tank bed to a depth of 15 to 20 feet deep.

Aqua-Tech, Inc. recommended that the contaminated soil be excavated and all excavated soil be disposed of at Payne & Dolan Asphalt Plant in Sussex, Wisconsin. Aqua-Tech, Inc. estimated that approximately 40 cubic yards of contaminated soil would have to be excavated around and underneath the tank bed.

A copy of the underground heating oil tank closure assessment report can be found in Appendix A.

3.0 SITE ASSESSMENT PROCEDURES AND FIELD OBSERVATIONS

3.1 Introduction

This section outlines procedures and observations for the Phase IV Environmental Assessment at the Serigraph, Inc. site in West Bend, Wisconsin. Individual subsections address the specific assessment activities including field operations, sampling procedures, and chain of custody procedures.

3.2 Field Operations

Peter E. Pavalko of Aqua-Tech, Inc. arrived at the Serigraph site at 9:00 a.m. on October 30, 1990, to supervise the excavation process. Mr. Thomas Ravn, Serigraph Environmental Engineer, was also present during the excavation process.

The excavation was enlarged until screening of soil samples collected with a backhoe from the walls and floor of the excavation with a PID indicated no volatile organic compounds present or until physical barriers (building foundation) were encountered. The excavation was enlarged to a size of 23 feet long and 15 feet wide (See Figure 3-1). The floor of the excavation was 18 feet below ground surface.

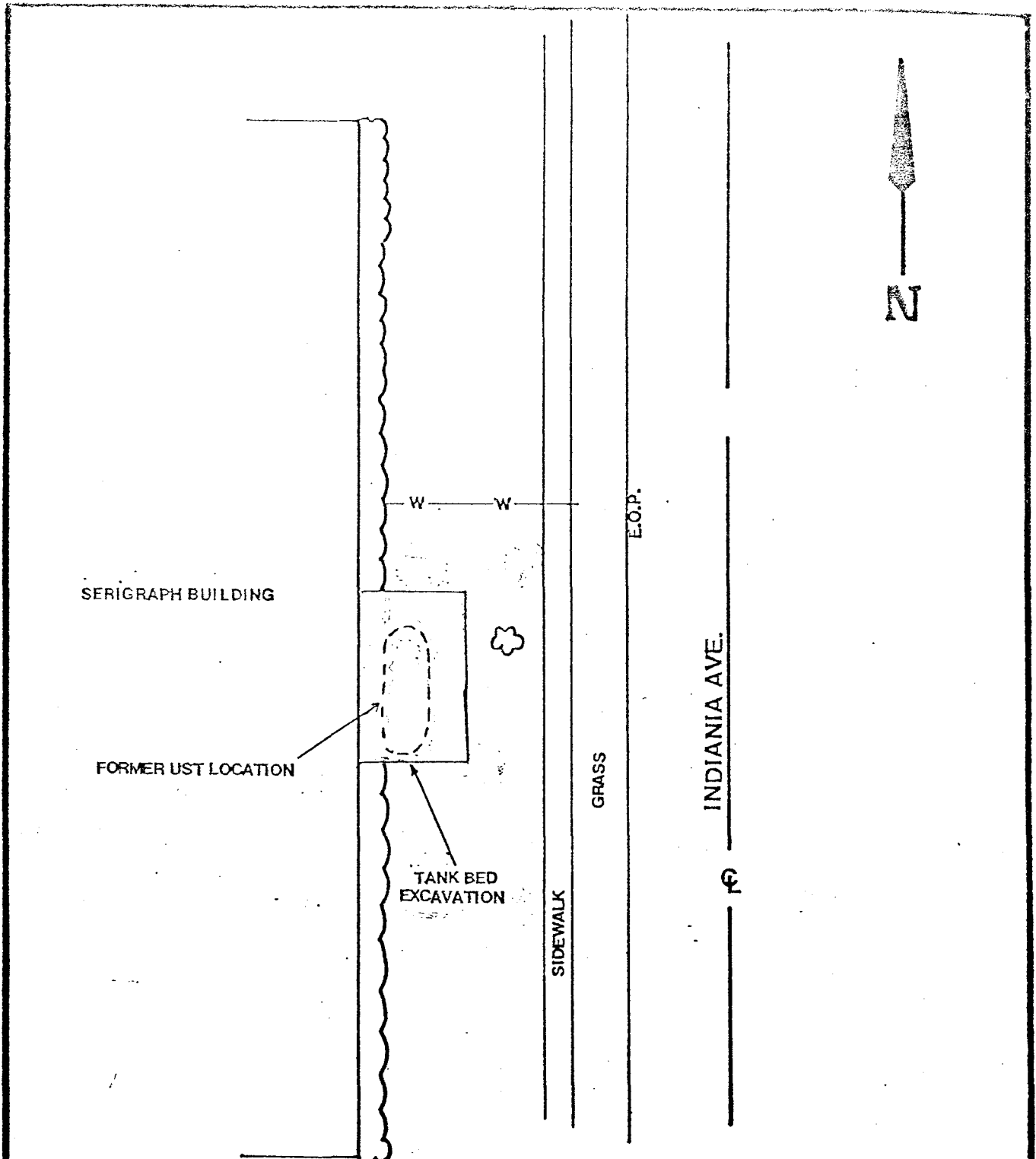
The majority of the contaminated soil was located between the tank bed and building foundation to the west. During the excavation process, the soil caved away from the foundation and fell onto the floor of the excavation where it was removed. Site photographs are provided in Appendix B.

After sampling was completed, the excavation was backfilled and fill material was compacted by Autoquip, Inc., 3861 North 35th Street, Milwaukee, Wisconsin.

3.3 Sampling Procedures

Four soil samples were collected from the walls (except the west wall) and floor of the excavation after the removal

FIGURE 3-1



NOTE: -
● -SOIL TEST BORING.

AQUA-TECH INC.

SCALE: 1"=20'
DATE: 9/6/90

APPROVED:
PP

DRAWN BY:
RICHARDSON

SERIGRAPH

93727

of contaminated soil. Due to soil caving in from the foundation of the building, no soil remained to be sampled from the west wall of the excavation. Soil samples were collected from the center of the south (SS-S), east (SS-E), and north (SS-N) walls of the excavation at a depth of 15.0 feet. One sample (SS-F) was collected from the center of the floor of the excavation at a depth of 18.0 feet. Refer to Figure 3-2 for soil sample locations.

All collected samples were packed into four ounce, TeflonTM lidded jars, cooled to 4°C, and transported to the laboratory for chemical analysis.

3.4 Chain of Custody Procedures

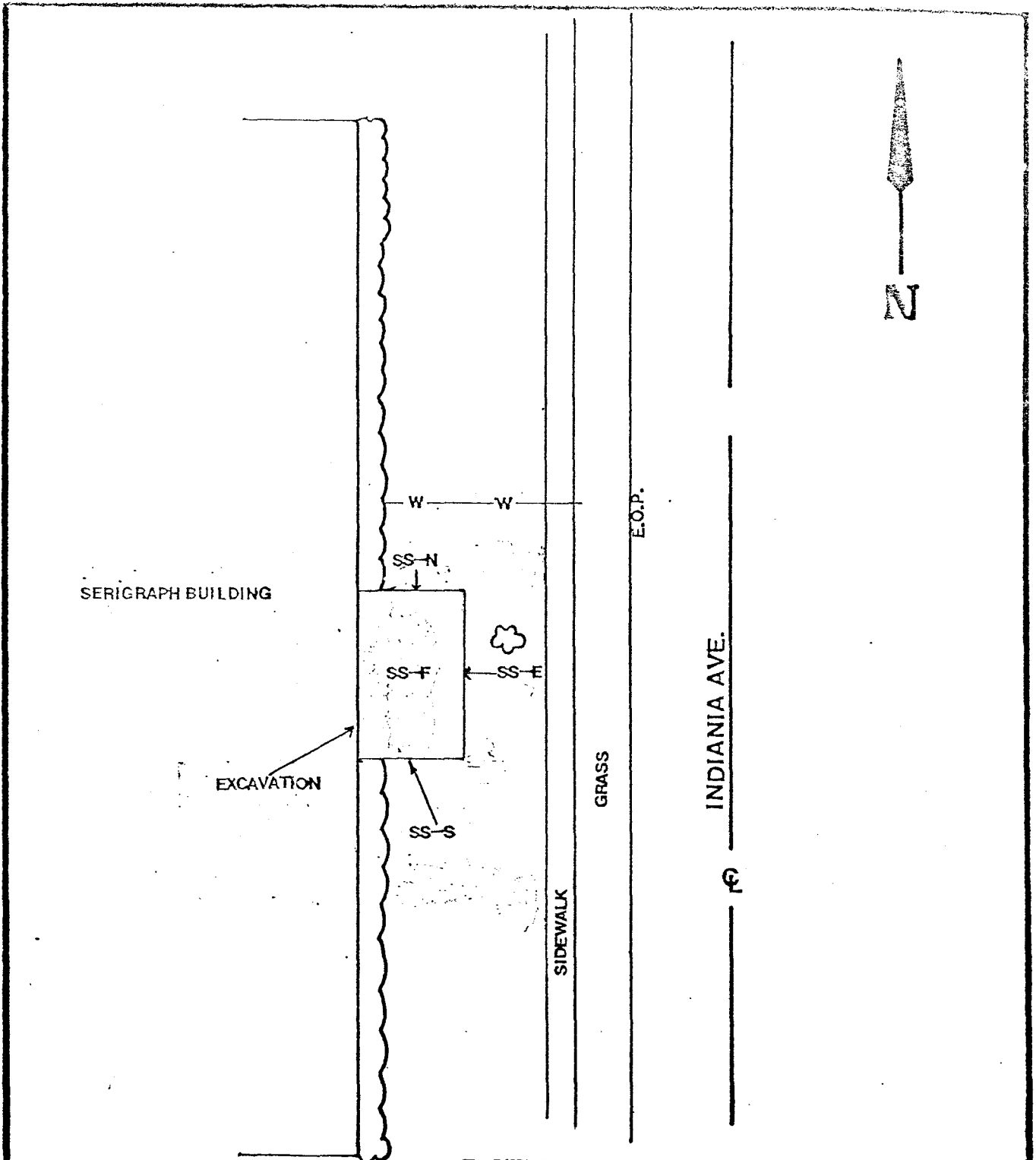
This section describes procedures used for sample identification and chain of custody. The purpose of these procedures is to ensure that the integrity of the samples is maintained during their collection, transportation, and storage through analysis.

Sample identification documents are carefully prepared so that sample identification and chain of custody are maintained and sample disposition is controlled. Sample identification documents include:

- * Field Notebooks
- * Sample Labels
- * Chain of Custody Records

Each sample is labeled, physically preserved, and sealed immediately after collection. To minimize handling of sampling containers, labels are filled out prior to sample collection. The sample label is completed using waterproof ink and is firmly affixed to the sample containers. The sample label provides the following information:

FIGURE 3-2



NOTE: -

⊙ - SOIL TEST BORING

AQUA-TECH INC.

SCALE: 1"=20'

APPROVED:

DRAWN BY:

DATE: 9/6/90

RICHARDSON

SERIGRAPH

93727

- * Location
- * Sample Number
- * Date and Time of Collection
- * Analysis Required
- * Name of Sampler

A chain of custody (See Appendix C) is fully completed by the Aqua-Tech sampler immediately following sample collection.

Transfer of Custody Shipment

The cooler in which the samples are packed is accompanied by the chain of custody record. When transferring samples, the individuals relinquishing and receiving them sign, date, and note the time on the chain of custody record. This record documents sample custody.

Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the chain of custody record. A copy of the completed chain of custody record is retained by the laboratory until analyses are complete. The record is then transferred to the site file with the analytical results.

4.0 ANALYTICAL PROCEDURES AND RESULTS

4.1 Introduction

This section includes results of chemical analyses of Aqua-Tech collected soil samples for total petroleum hydrocarbons (TPH). The samples were analyzed for TPH by National Environmental Testing, Inc., Rockford, Illinois.

4.2 Analytical Procedures

TPH soil samples were analyzed by the Modified California Gas Chromatography (GC) Method.

Analytical methodology references for each sampling task contain specific quality control (QC) criteria associated with the particular methods. These specific requirements include calibration and QC samples and are described in detail within the methods. Daily performance tests and demonstration of precision and accuracy are required.

4.3 Results of Chemical Analyses of Aqua-Tech Collected Samples

Concentrations of petroleum hydrocarbons above the 10 mg/kg laboratory detection limit were not identified in any of the four soil samples collected from the excavation.

Table 4-1 contains complete results of the chemical analysis for each soil sample. Laboratory data are provided in Appendix C.

TABLE 4-1

CHEMICAL ANALYSES OF SITE CLOSURE SOIL SAMPLES

FOR THE

SERIGRAPH, INC. SITE

WEST BEND, WISCONSIN

DATE SAMPLED: OCTOBER 30, 1990

| <u>Sample Number</u> | <u>Total Petroleum Hydrocarbons (mg/kg)*</u> | <u>Laboratory Detection Limits (mg/kg)</u> | <u>Maximum Photoionization Detector Readings (ppm)</u> |
|----------------------|--|--|--|
| SS-F | <10 | 10.0 | 0 |
| SS-S | <10 | 10.0 | 0 |
| SS-E | <10 | 10.0 | 0 |
| SS-N | <10 | 10.0 | 0 |

* All results reported on a dry weight basis.

** Ten mg/kg is the maximum level of petroleum contamination allowed in soil before remediation is required by the Wisconsin Department of Industry, Labor, and Human Relations (WDILHR).

5.0 DISCUSSION OF ASSESSMENT RESULTS

5.1 Introduction

This section discusses data and information that apply to observed and potential contamination that may be attributable to the Serigraph, Inc. site.

5.2 Soil

Approximately 88.6 cubic yards (124 tons) of soil was excavated from the Serigraph, Inc. site and transported to Payne & Dolan Asphalt Plant, Sussex, Wisconsin. In order to assure that all soil contaminated by TPH above 10 ppm was removed, slightly more soil than was absolutely necessary was excavated around the perimeter of the excavation. This was determined to be the best plan of action to ensure that no contaminated soil remained at the site, therefore reducing the probability that additional soil remediation would be required.

After the removal of contaminated soils, PID screening of the excavation walls and floor did not detect the presence of volatile organic compounds. Laboratory analyses of soil samples SS-F, SS-S, SS-E, and SS-N did not detect contamination by TPH above the 10 mg/kg remediation level prescribed by the Wisconsin Department of Industry, Labor, and Human Relations.

The results of laboratory analyses of the excavation samples and the five soil samples collected during the soil borings suggest that the limited amount of contaminated soil at the site has been removed.

5.3 Groundwater

No groundwater was encountered within the excavation which reached to a maximum depth of 18 feet below grade. Based on the demonstrated limited extent of contamination

identified at the site and results of laboratory analysis,
groundwater is not believed to have been adversely impacted.

6.0 RECOMMENDATIONS

After completing the Phase IV Environmental Assessment for the Serigraph, Inc. site, Aqua-Tech, Inc. recommends no additional investigation or corrective action. Field screening of the excavation with a PID and results of laboratory analyses of samples collected from the excavation indicate that the contaminated soil has been removed from the site.

APPENDIX A

AQUA-TECH, INC.

October 4, 1990

Mr. Thomas Ravn
Environmental Engineer
Serigraph, Inc.
760 Indiana Avenue
P.O. Box 438
West Bend, WI 53094

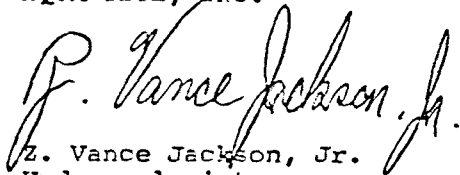
Dear Mr. Ravn:

Enclosed is the Underground Heating Oil Tank Closure Assessment Report for Serigraph, Inc., 760 Indiana Avenue, West Bend, Wisconsin.

If you have any questions regarding this report, please do not hesitate to contact me.

Sincerely,

AQUA-TECH, INC.



Z. Vance Jackson, Jr.
Hydrogeologist

ZVJ/rk
Enclosure

UNDERGROUND HEATING OIL TANK CLOSURE ASSESSMENT

FOR

SERIGRAPH, INC.

760 INDIANA AVENUE

WEST BEND, WISCONSIN

SEPTEMBER 1990

PREPARED BY

AQUA-TECH, INC.

140 SOUTH PARK STREET

PORT WASHINGTON, WISCONSIN 53074

ATI PROJECT NO. 93727

UNDERGROUND HEATING OIL TANK CLOSURE ASSESSMENT

FOR

SERIGRAPH, INC.

760 INDIANA AVENUE

WEST BEND, WISCONSIN

Prepared By: *Peter Pavalko* Date: 10-4-90
Peter Pavalko
Environmental Assessment Specialist
Aqua-Tech, Inc.

Reviewed By: *Z. Vance Jackson, Jr.* Date: 10/5/90
Z. Vance Jackson, Jr.
Hydrogeologist
Aqua-Tech, Inc.

TABLE OF CONTENTS

| <u>SECTION</u> | | <u>PAGE</u> |
|----------------|--|-------------|
| 1.0 | Summary | 1-1 |
| 2.0 | Site Background..... | 2-1 |
| 2.1 | Introduction | 2-1 |
| 2.2 | Site Location..... | 2-1 |
| 2.3 | Site Geology..... | 2-1 |
| 2.4 | Site History..... | 2-3 |
| 3.0 | Site Assessment Procedures and Field Observations..... | 3-1 |
| 3.1 | Introduction..... | 3-1 |
| 3.2 | Field Observations..... | 3-1 |
| 3.3 | Soil Borings | 3-2 |
| 3.4 | Chain of Custody Procedures..... | 3-5 |
| 4.0 | Analytical Procedures and Results | 4-1 |
| 4.1 | Introduction | 4-1 |
| 4.2 | Analytical Procedures | 4-1 |
| 4.3 | Results of the Chemical Analyses of Aqua-Tech Collected Samples | 4-2 |
| 5.0 | Discussion of Assessment Results | 5-1 |
| 5.1 | Introduction | 5-1 |
| 5.2 | Soil | 5-1 |
| 5.3 | Groundwater | 5-2 |
| 6.0 | Recommendations | 6-1 |

LIST OF FIGURES

| <u>FIGURE</u> | | <u>PAGE</u> |
|---------------|---------------------|-------------|
| 2-1 | Site Location | 2-2 |
| 3-1 | Site Features | 3-4 |

LIST OF TABLES

| <u>TABLE</u> | | <u>PAGE</u> |
|--------------|--|-------------|
| 4-1 | Chemical Analyses of Site Closure Soil Samples | 4-3 |
| 4-2 | Chemical Analyses of Soil Boring Soil Samples | 4-4 |

LIST OF APPENDIXES

| <u>APPENDIX</u> | | <u>PAGE</u> |
|-----------------|--|-------------|
| A. | Site Photographs | A-1 |
| B. | Soil Profile Logs and Well/Drill Abandonment Forms (WDNR Form 3300-5) | B-1 |
| C. | Chain of Custody and Laboratory Documentation | C-1 |
| D. | Estimate of Remediation Costs for Landfill Disposal Option | D-1 |
| E. | Estimate of Remediation Costs for Asphalt Plant Disposal Option | E-1 |

1.0 SUMMARY

Aqua-Tech, Inc. was contracted by Serigraph, Inc. to conduct a tank closure assessment for the removal of one underground heating oil storage tank located at 760 Indiana Avenue, West Bend, Wisconsin. The tank closure assessment included the following:

- * Excavation of one heating oil tank underground heating oil tank and approximately 10 cubic yards of fuel oil contaminated soil.
- * Screening the tank bed for volatile organic compounds (VOCs) with a photoionization detector (PID)
- * Collection and laboratory analysis of one soil sample from a depth of 7.0 feet from the tank bed for: total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylenes (BTEX), free liquids, pH, flash point, total lead and E.P. toxicity lead.
- * Collection and laboratory analyses of one soil sample from the excavation (16.0 feet) for TPH.
- * Four soil borings to a maximum depth of 23.0 feet.
- * Collection and field screening of subsurface soil samples from the soil borings for VOCs with a PID.
- * Chemical analyses of five subsurface soil samples from the soil borings for TPH.
- * Documentation of sampling procedures and soil and groundwater conditions in the tank bed excavation.

Results of this investigation indicate that a release of fuel oil and subsequent contamination of subsurface soils has occurred at the site. Laboratory analyses of the soil sample collected directly beneath the underground heating oil tank identified TPH contamination above the 10 mg/kg Wisconsin Department of Industry, Labor, and Human Relations (WDILHR) remedial action level. In addition, field

screening of the north end of the excavation with a PID indicated the presence of VOCs.

Three soil borings were completed around the perimeter of the tank bed. Laboratory analyses of the samples did not indicate the presence of TPH contamination above the WDILHR remedial action levels. Field screening of soils from the borings did not detect the presence of VOCs above background levels.

One soil boring was completed within the area of known soil contamination. Based on field screening and laboratory analysis of soil samples from this boring, soils in the 7.0 to 20.0 foot depth interval are believed to be contaminated by fuel oil.

No groundwater was encountered during the underground heating oil tank excavation which reached a depth of 16.0 feet. Groundwater was encountered in the four soil borings at depths of 10.0 to 15.0 feet. No groundwater samples could be collected due to sand clogging the collection bailer. Since no groundwater samples were collected, the impact to groundwater could not be assessed.

Based on the soil borings completed at the site, the area of contamination is believed to be isolated to soils below the north end of the tank bed, from 8.0 to 20.0 feet. The horizontal migration of contamination appears to have been minimal.

Aqua-Tech, Inc. estimates that approximately 40 yards of fuel oil contaminated soil exists at the site. Aqua-Tech, Inc. recommends that the contaminated soil be excavated and disposed of off-site.

2.0 SITE BACKGROUND

2.1 Introduction

This section includes information obtained from the on-site operations and the site representative interview.

2.2 Site Location

The Serigraph, Inc. site is located at 760 Indiana Avenue, West Bend, Wisconsin. Serigraph, Inc. occupies approximately five acres of residential/commercial area in Washington County, Wisconsin (See Figure 2-1).

2.3 Site Geology

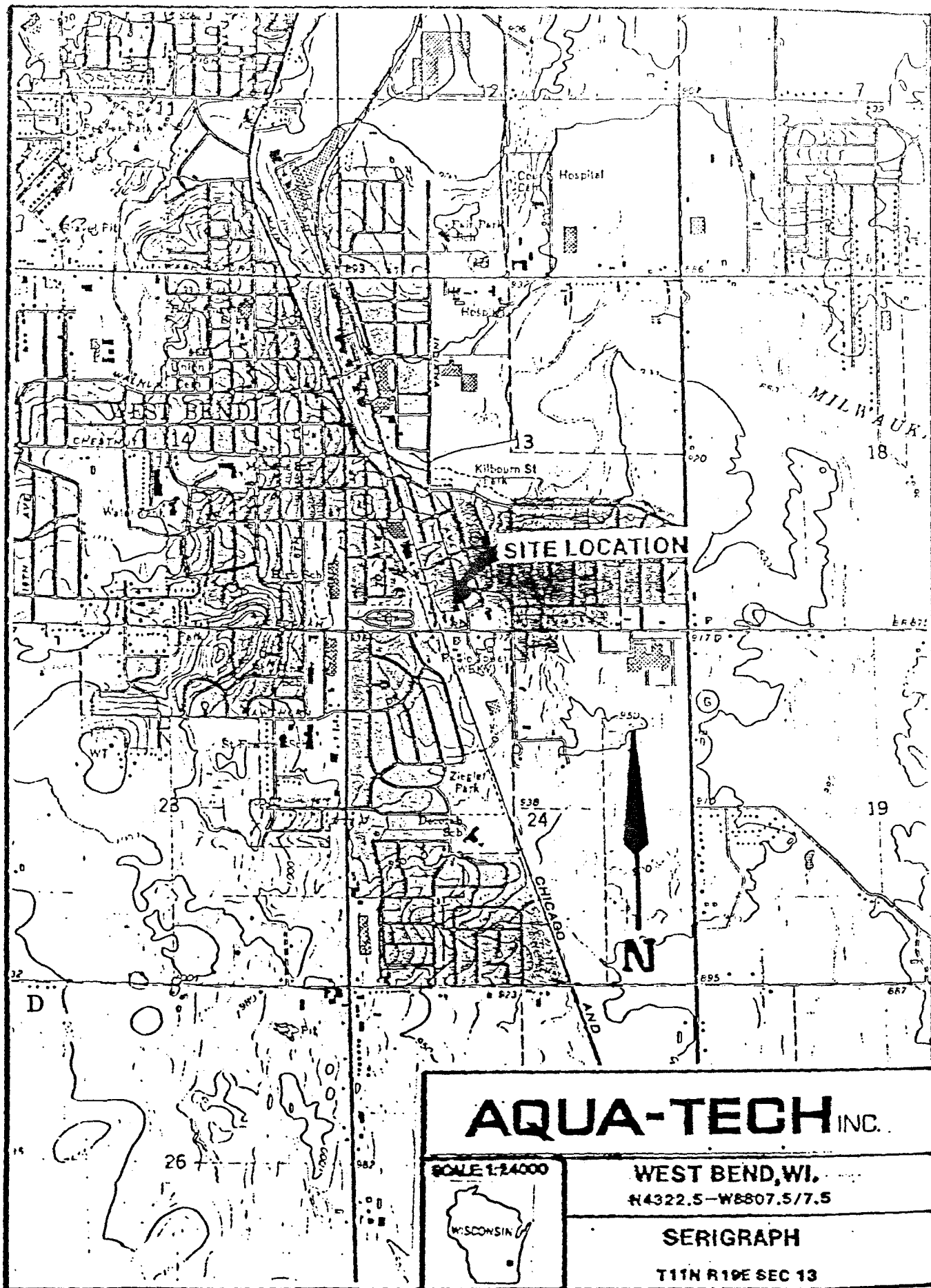
The site is located in the Eastern Ridges and Lowlands Province in southeastern Wisconsin. Glaciation has been an important agent in determining the geology and physiography of the site. It is part of the eastern end moraine of the Green Bay lobe of the Wisconsinan ice sheet deposited during the Woodfordian time.

The soils encountered within the excavation at the site consisted of sands, gravels, and silty clays which are consistent with the regional complex of soils typical of the glaciated uplands of southeastern Wisconsin.

Bedrock in the area is buried to varying depths by glacial deposits. Regionally, it consists of Silurian age dolomite of the Niagaran Series. Bedrock was not encountered in the soil borings which reached to a maximum depth of 23.0 feet.

Surface topography at the site slopes gently to the northeast. Based on surface topography, the regional groundwater flow is believed to be northeast toward the Milwaukee River, located 2,000 feet north of the site.

FIGURE 2-1



AQUA-TECH INC.

SCALE 1:24000



WEST BEND, WI.
N4322.5-W8807.5/7.5

SERIGRAPH

T11N R10E SEC 13

2.4 Site History

The Serigraph, Inc. facility was built in 1955. Specialty graphics products are manufactured at the facility. The 2,000 gallon underground heating oil tank was installed on the east side of the building at the time of facility construction. See Figure 3-1 for tank bed location. The underground heating oil tank was used to store fuel oil and served as the only fuel sources from 1955 through 1970. In 1970 natural gas became the primary fuel source at the site. From 1970 until 1990 the underground heating oil tank was filled with fuel oil and served as a back-up energy supply.

3.0 SITE ASSESSMENT PROCEDURES AND FIELD OBSERVATIONS

3.1 Introduction

This section outlines procedures and observations of the underground heating oil tank closure assessment at the Serigraph, Inc. site in West Bend, Wisconsin. Individual subsections address specific assessment activities including field observations, sampling procedures, and chain of custody procedures.

3.2 Field Observations

Vance Jackson and Peter Pavalko of Aqua-Tech arrived at the Serigraph, Inc. site on August 15, 1990, to observe the underground heating oil tank removal process. Also present on the site was Inspector R. Labuda of the West Bend Fire Department. The underground heating oil tank was excavated and disposed of by Petroleum Equipment, Inc., 3950 West Douglas Avenue, Milwaukee, Wisconsin, in accordance with Department of Industry, Labor, and Human Relations (DILER) requirements.

The 2,000 gallon underground heating oil tank and associated piping were located on the east side of the Serigraph, Inc. building, approximately 46 feet west of the Indiana Avenue centerline. The tank bed was covered by grass and small shrubs. Site photographs are provided in Appendix A.

Removal of the Underground Storage Tank

Prior to the underground heating oil tank excavation, approximately 1800 gallons of fuel oil were pumped from the tank. During the excavation process the tank appeared to be in good condition despite its advanced age (35 years). However, closer inspection of the underground heating oil tank

upon its removal did identify a one inch spherical hole along the seam of the bottom of the north end of the tank.

Soil in the north end of the tank bed, below the hole, did have a marked petroleum odor and dark stain. Screening of soil from this contaminated area with a PID indicated the presence of VOCs in the 20-30 ppm range. Soil sample SS-1 was collected in this area at a depth of 7.0 feet. The walls and floor of the entire tank bed were screened with a PID on a 2 foot by 2 foot grid pattern. The presence of VOCs was detected only on the north end of the tank bed.

The excavation was continued to a depth of 16.0 feet in the contaminated area (north end of tank bed) in an attempt to identify the vertical extent of contamination. Soil sample SS-2 was collected from a depth of 16.0 feet from the bucket of the backhoe. Soil from the bucket had a PID reading of 6 ppm.

Serigraph, Inc. representative, Tom Ravn was advised of the situation by Aqua-Tech. The decision was made to backfill the excavation and schedule soil boring to determine the vertical and horizontal extent of contamination. Care was taken to segregate the contaminated and uncontaminated soil upon its return to the excavation. An impermeable plastic liner separated the two soils. In addition, a plastic barrier was placed over the top of the excavation to prevent precipitation from percolating through the excavated soils.

3.3 Soil Borings

Four soil borings were completed by Aqua-Tech, Inc. on August 22, 1990. The purpose of the borings was to delineate the extent of soil contamination identified on August 15, 1990 during the excavation of the 2,000 gallon underground heating oil tank.

Soil Sample Locations

Soil borings B-1, B-2, and B-3 were completed around the perimeter of the tank bed to the north, northeast, and southeast (Refer to Figure 3-1 for sampling location). The purpose of these borings was to identify any horizontal migration of contamination from the tank bed. The Serigraph facility is located directly west of the tank bed.

Soil boring B-4 was completed through the north end of the tank bed, previously identified during the excavation as being contaminated. The purpose of this boring was to determine the vertical extent of contamination.

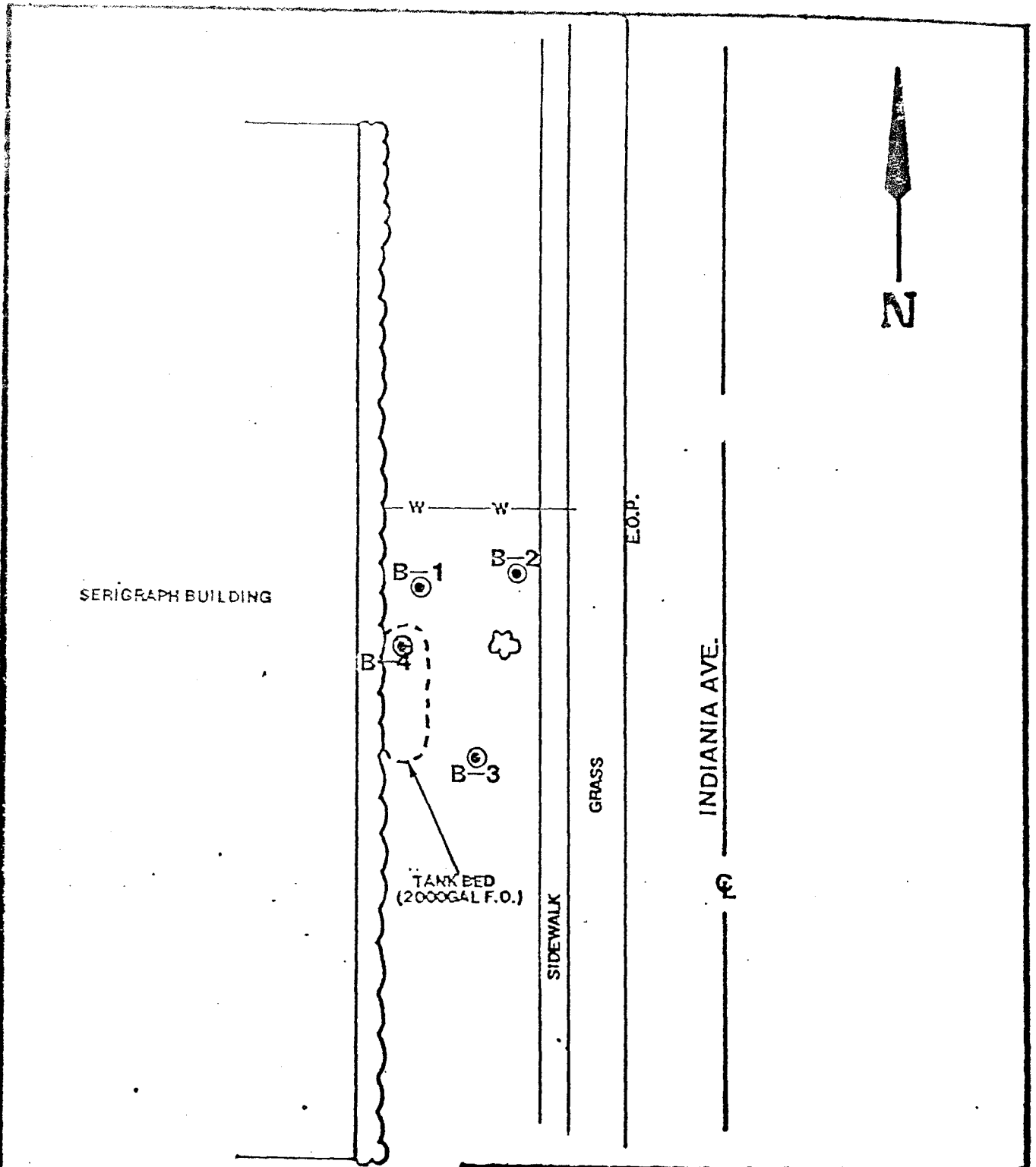
Soil sample B-1 was collected as a grab sample from soil boring B-1 at the 17.0 to 19.0 foot depth interval. Soil sample B-2 was collected as a grab sample from boring B-2 at the 7.0 to 9.0 foot depth interval. Soil sample B-3 was collected as a grab sample from boring B-3 at the 15.0 to 17.0 foot depth interval. Soil sample B-4 and B-44 were collected as grab samples from soil boring B-4 at the 17.0 to 19.0 and 21.0 to 23.0 foot depth intervals, respectively.

Groundwater was encountered in each boring at depths ranging from 10.0 to 15.0 feet. However, no water samples could be collected due to sand infiltration into the borehole which clogged the bailer.


Soil Sample Procedures

Subsurface soil samples were collected with a truck mounted rotary drill equipped with hollow stem augers and a two inch diameter, 24 inch split spoon sampler. The split spoon sampler was advanced by conventional methods, including the attachment of the sampler to an AW rod and standard 140 pound hammer.

FIGURE 3-1



NOTE: -
⊙ -SOIL TEST BORING

| | | |
|-----------------------|---|------------|
| AQUA-TECH INC. | | |
| SCALE: 1"=20' | APPROVED:  | DRAWN BY: |
| DATE: 9/6/90 | | RICHARDSON |
| SERIGRAPH | | 93727 |

All drilling tools and equipment were washed with high pressure steam equipment prior to the start of sampling work. All sampling equipment was decontaminated with an alconox and reagent water solution between sampling points to prevent cross contamination.

Samples selected for laboratory analyses were stored in clean 4 ounce jars and cooled to 4°C for transport to the laboratory. Additional subsurface soil samples were collected, warmed and field screened with a PID. The depth and PID reading for each sample was recorded on soil profile logs (See Appendix B).

Upon completion of sampling, the borehole was completely backfilled with bentonite and abandoned according to Wisconsin Administrative Code N.R. 141.25 (See Appendix B).

3.4 Chain of Custody Procedures

This section describes procedures used for sample identification and chain of custody. The purpose of these procedures is to ensure that the quality of the samples is maintained during their collection, transportation, storage, and analysis.

Sample identification documents are carefully prepared so that sample identification and chain of custody are maintained and sample disposition is controlled. Sample identification documents include:

- * Field Notebooks
- * Sample Labels
- * Chain of Custody Records

Each sample is labeled, physically preserved, and sealed immediately after collection. To minimize handling of sample containers, labels are filled out prior to sample collection. The sample label is completed using waterproof ink and is

firmly affixed to the sample containers. The sample label provides the following information:

- * Location
- * Sample Number
- * Date and Time of Collection
- * Analysis Required
- * Name of Sampler

A Chain of Custody Record (See Appendix C) is fully completed in triplicate by the Aqua-Tech sampler immediately following sample collection.

Transfer of Custody Shipment

The cooler in which the samples are packed is accompanied by the Chain of Custody Record. When transferring samples, the individuals relinquishing and receiving them sign, date, and note the time on the Chain of Custody Record. This record documents sample custody.

Laboratory Custody Procedures

A designated sample custodian accepts custody of the shipped samples and verifies that the sample identification number matches that on the Chain of Custody Record. A copy of the completed Chain of Custody Record is retained by the laboratory until analyses are complete. The record is then transferred to the site file with the analytical results.

4.0 ANALYTICAL PROCEDURES AND RESULTS

4.1 Introduction

This section includes results of chemical analyses of Aqua-Tech collected soil samples from the tank bed excavation (SS-1 and SS-2) and soil borings B-1, B-2, B-3, and B-4 for total petroleum hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX). Samples were analyzed at the NET Midwest Laboratory in Rockford, Illinois.

4.2 Analytical Procedures

Soil samples were analyzed for TPH and BTEX by the Modified California Method, and EPA Method 8240, respectively. Total lead, pH, free liquids and flash point were determined by using EPA Methods 7450, 8045-40 and 9095 and 1010, respectively.

Analytical methodology references for each sampling task contain specific quality control (QC) criteria associated with the particular methods. These specific requirements include calibration and QC samples and are described in detail within the methods. Daily performance tests and demonstration of precision and accuracy are required.

4.3 Results of Chemical Analyses of Aqua-Tech Collected Samples

Chemical analyses of soil samples SS-1 and SS-2 collected during the tank bed excavation yielded the following results:

- * Total petroleum hydrocarbons (TPH) were detected at concentrations of 18,900 mg/kg in soil sample SS-1 collected from the north wall/floor of the tank bed excavation.
- * Petroleum hydrocarbons were not detected above the WDILHR 10 mg/kg remedial action level in soil sample SS-

2 collected from a depth of 16.0 feet below the north end of the tank bed.

- * Laboratory analysis of soil sample SS-1 indicated elevated levels of toluene (590 ug/kg) and xylenes (17,000 ug/kg).
- * EP toxicity lead at a level of 0.08 ppm was identified in soil sample SS-1.

Chemical analysis of soil samples collected from soil borings completed around the perimeter of the tank bed (B-1, B-2, B-3) and through the north end of the tank bed (B-4, B-44) yielded the following results:

- * Total petroleum hydrocarbons were not detected above the 10 mg/kg laboratory detection limit from soil samples B-1, B-2, B-3, B-4, and B-44.

Table 4-1 and 4-2 contains the laboratory results of the collected soil samples. Complete laboratory results are provided in Appendix C. All results were calculated on a dry weight basis as required by WDILHR.

TABLE 4-1

CHEMICAL ANALYSES OF SITE CLOSURE SOIL SAMPLES

SERIGRAPH, INC.

WEST BEND, WISCONSIN

DATE COLLECTED: 8/15/90

| <u>Parameter</u> | <u>Soil Sample 1</u> | <u>Soil Sample 2</u> |
|---|--------------------------|--------------------------|
| Photoionization Detector Reading (ppm) | 30 | 6 |
| Total Solids (%) | 88.62 | 81.28 |
| TPH (mg/kg)* | 18,900** | <10.0 |
| Laboratory Detection Limits (mg/kg) | 10.0 | 10.0 |
| Benzene (ug/kg) (ppb) | 500 | |
| Ethylbenzene (ug/kg) | 500 | |
| Toluene (ug/kg) | 590 | |
| Xylene (ug/kg) | 17,000 | |
| Free Liquids (Paint Filler) | No liquid | |
| Total Lead (ug/g) | 12.5 | |
| EP Toxic Lead (mg/L) | 0.08 | |
| pH | 7.84 | |
| Flashpoint | >210 | |

* All TPH results reported on a dry weight basis as required by WDILHR.

** Ten mg/kg is the maximum level of petroleum contamination allowed in soil before remediation is required by the Wisconsin DILHR.

TABLE 4-2

CHEMICAL ANALYSES OF SOIL BORING SOIL SAMPLES

SERIGRAPH, INC.

WEST BEND, WISCONSIN

DATE COLLECTED: 8/22/90

| Sample Number | Depth Interval (feet) | Total Petroleum Hydrocarbons (mg/kg)* | Laboratory Detection Limits (mg/kg) | Maximum Photoionization Meter Readings (ppm) |
|---------------|-----------------------|---------------------------------------|-------------------------------------|--|
| B-1 | 17.0 to 19.0 | <10** | 10 | 0 |
| B-2 | 9.0 to 11.0 | <10 | 10 | 0 |
| B-3 | 15.0 to 17.0 | <10 | 10 | 0 |
| B-4 | 17.0 to 19.0 | <10 | 10 | 0.2 |
| B-44 | 21.0 to 23.0 | <10 | 10 | 0 |

* All results are calculated on a dry weight basis.

** Ten mg/kg is the maximum level of TPH contamination allowed in soil before remediation is required by the Wisconsin Department of Industry, Labor, and Human Relations.

5.0 DISCUSSION

5.1 Introduction

This section discusses data and information that apply to observed and potential contamination that may be attributable to the Serigraph, Inc. underground heating oil tank site.

5.2 Soil

Based on the results of the tank closure assessment and the soil borings completed at the site, Aqua-Tech, Inc. estimates that approximately 40 cubic yards of contaminated soil exists below the north end of the tank bed.

Observations made during the tank excavation and from soil borings completed around the perimeter of the tank bed indicate that the horizontal migration of contamination from the underground storage tank has been minimal. Soil samples B-4 and B-44, collected from 17.0 to 23.0 feet below the north end of the tank bed indicate that the vertical extent of contamination does not extend more than 20.0 feet deep.

5.3 Groundwater

It was not possible to collect a groundwater sample during the soil borings due to sand entering the boring and subsequently clogging the bailer. Since no groundwater samples were collected, the impact to groundwater could not be assessed.

6.0 RECOMMENDATIONS

Aqua-Tech, Inc. recommends that the contaminated soil (approximately 40 cubic yards) be excavated and disposed of off-site. The excavation will continue until all contaminated soil is removed. Aqua-Tech, Inc. recommends that the excavated soil be disposed of at Parkview Landfill in Menomonee Falls, Wisconsin. Aqua-Tech, Inc. estimates the cost of this work to be \$3,960.56. An itemized list of estimated expenses associated with the remedial work is provided in Appendix D.

A disposal option other than landfilling is available. Payne & Dolan, Inc., in Waukesha, Wisconsin will accept petroleum contaminated soil. Payne & Dolan will require a sample of the contaminated soil to be tested for a variety of other components before it will accept the soil. Aqua-Tech, Inc. estimates the cost of asphalt plant disposal to be \$8,950.36. An itemized list of estimated expenses associated with this option is provided in Appendix E.

If it is determined during the excavation process that groundwater is entering the excavation, a collection sump will be installed, at an additional cost, prior to backfilling of the excavation.

APPENDIX A

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Serioraph, Inc.

PAGE 1 OF 2

DATE: 8/22/90

TIME: 8:30 a.m.

DIRECTION OF PHOTOGRAPH:

West

WEATHER CONDITIONS:

Cloudy

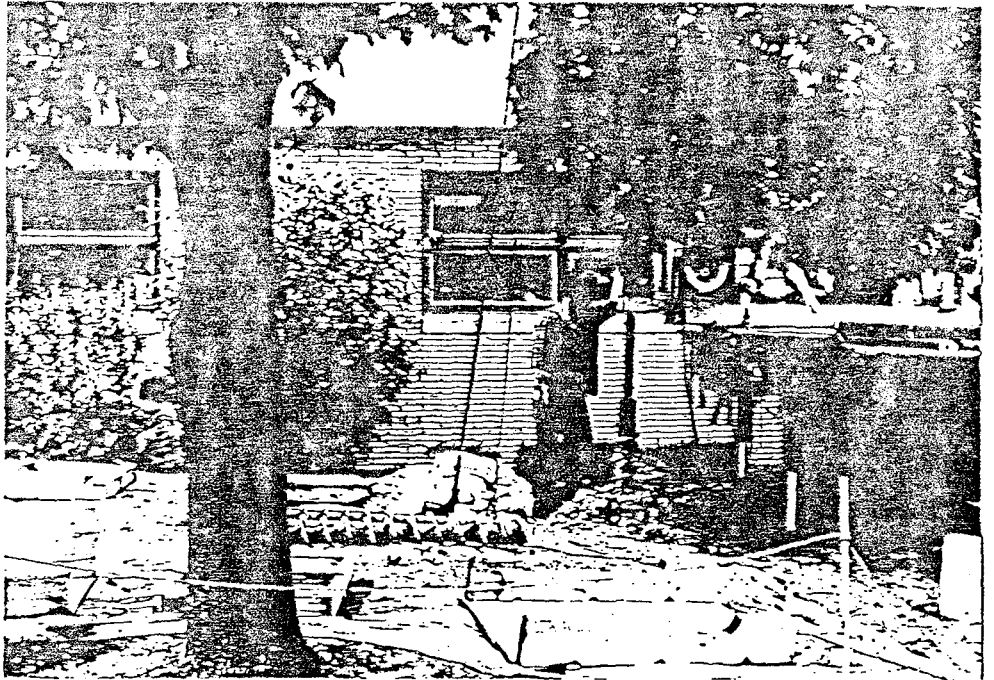
20°C

PHOTOGRAPHED BY:

Pete Pavalko

SAMPLE ID:
(If Applicable):

B-1



DESCRIPTION: The location of soil boring B-1 as seen from Indiana Avenue. The north end of the tank bed is approximately 5 feet to the south (left) of the boring.

DATE: 8/22/90

TIME: 9:30 a.m.

DIRECTION OF PHOTOGRAPH:

West

WEATHER CONDITIONS:

Cloudy

20°C

PHOTOGRAPHED BY:

Pete Pavalko

SAMPLE ID:
(If Applicable):

B-2



DESCRIPTION: The location of boring B-2 as seen from Indiana Avenue.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Teriograph, Inc.

PAGE 2 OF 2

DATE: 8/22/90

TIME: 11:00 a.m.

DIRECTION OF PHOTOGRAPH:

North

WEATHER CONDITIONS:

Cloudy

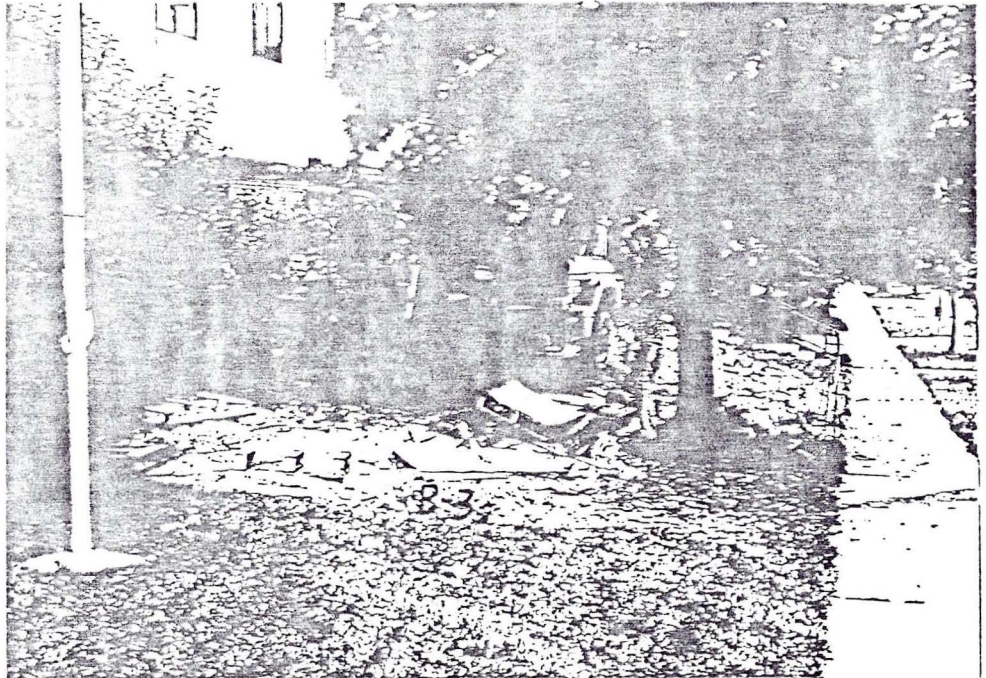
20°C

PHOTOGRAPHED BY:

Pete Pavalko

SAMPLE ID:
(If Applicable):

B-3, B-4



DESCRIPTION: The location of soil boring B-3 and B-4 are indicated on the photograph.

DATE: 8/22/90

TIME: 11:00 a.m.

DIRECTION OF PHOTOGRAPH:

Northwest

WEATHER CONDITIONS:

Cloudy

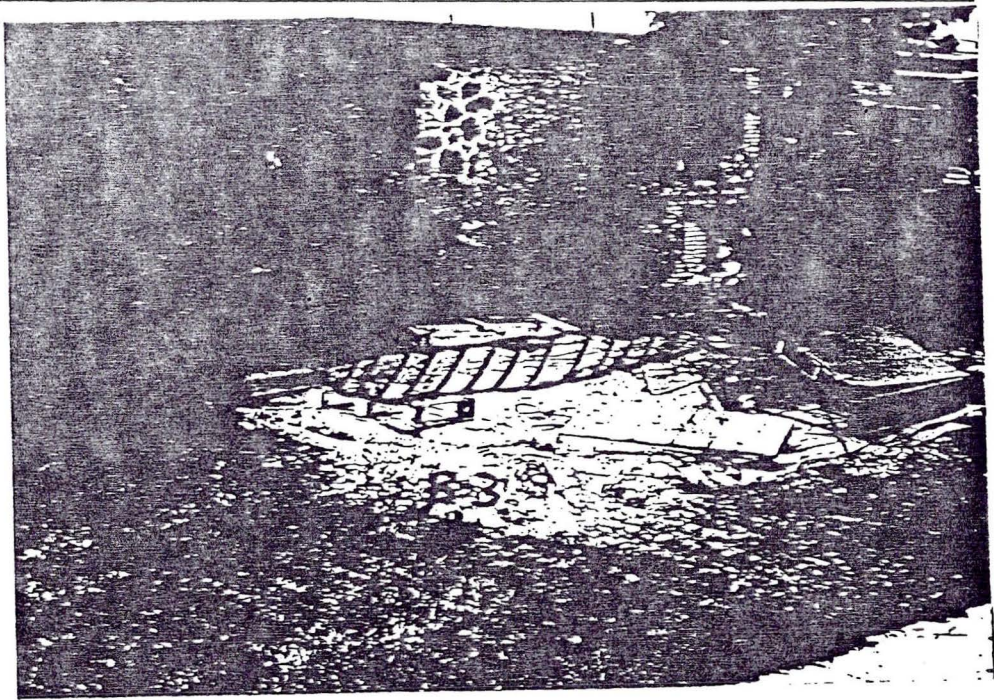
20°C

PHOTOGRAPHED BY:

Pete Pavalko

SAMPLE ID:
(If Applicable):

B-3, B-4



DESCRIPTION: The approximate location of the 2,000 gallon UST prior to its excavation.

APPENDIX B

| | |
|--|---|
| AQUA-TECH, INC 140 S. PARK ST. PORT WASHINGTON, WI 53074 TELEPHONE: (414) 284-5746 (414) 375-0407 (MILW METRO) | SOIL PROFILE LOG PROJECT: SERIGRAPH INC LOCATION: WEST BEND, WI PROJECT#: _____ ATI NO#: 93727 |
|--|---|

BORING B-1 SURFACE ELEVATION _____

| SAMPLES | | | | DEPTH (FT) | DESCRIPTION AND REMARKS |
|---------|----------------|-----|------------------|------------|--|
| NO. | (hpf) MOISTURE | REC | HNU LEVELS (PPM) | | |
| | | | | 0.0 | |
| | DRY | | 0 | 5.0 | 5.0' - 7.0' LT BROWN MEDIUM GRAINED SAND |
| | | | .5 | | 7.0' - 9.0' SAND W/TRACE OF GRAVEL, SILT |
| | MOIST | | 0 | 10.0 | 9.0' - 11.0' GREY SAND W/TRACE OF SILT |
| | WET | | 0 | ▽ | 11.0' - 13.0' SAND |
| | | | 0 | | 13.0' - 15.0' VERY FINE SAND TO SILT |
| | V. WET | | 0 | | 15.0' - 17.0' VERY FINE SAND |
| B-1 | | | 0 | 17.0 | 17.0' - 19.0' VERY FINE SAND/SILT |
| | | | | 20.0 | 19.0' - 20.0' SAND |
| | | | | | TERMINATED BORING AT 20.0' *SOIL SAMPLE B-1: 17.0' - 19.0' *AUGERED TO 20.0' LOTS OF WATER IN HOLE, BUT SAND HELD UP BALL IN BAITER AND WATER RUNS OUT AND BEDROCK ENCOUNTERED |

| WATER LEVEL OBSERVATIONS | GENERAL INFORMATION |
|------------------------------|--|
| WHILE DRILLING <u>12.0'▽</u> | START DATE <u>8/22/90</u> COMPLETION DATE <u>8/22/90</u> |
| DEPTH TO WATER <u>----</u> | DRILLING METHOD: <u>HOLLOW STEM AUGERS; SPLIT SPOON SAMPLING</u> |
| DEPTH TO CAVE-IN <u>----</u> | LOGGER: <u><i>Pat E. Porath</i></u> |

AQUA-TECH, INC

140 S. PARK ST.

PORT WASHINGTON, WI 53074

TELEPHONE:

(414) 284-5746
(414) 375-0407 (MILW METRO)

SOIL PROFILE LOG

PROJECT: SERIGRAPH INC

LOCATION: WEST BEND, WI

PROJECT#:

ATI NO# : 93727

BORING B-2

SURFACE ELEVATION _____

SAMPLES

DESCRIPTION AND REMARKS

| NO. | (hpf) MOISTURE | REC | HNU LEVELS (PPH) | DEPTH (FT) | DESCRIPTION AND REMARKS |
|-----|----------------|-----|------------------|------------|---|
| | | | | 0.0 | SAND |
| | DRY | | 0 | 5.0 | 5.0' - 7.0' FINE SAND W/TRACE OF SILT |
| B-2 | WET | | 0 | ▽ | 7.0' - 9.0' POOR RECOVERY, SAND/SILT |
| | V. WET | | | | 9.0' - 11.0' FINE SAND |
| | | | 0 | | 11.0' - 13.0' FINE SAND - POOR RECOVERY |
| | | | 0 | | 13.0' - 15.0' VERY FINE SAND |
| | | | 0 (CUTTINGS) | | 15.0' - 18.0' SAND |
| | | | | | 18.0' - 20.0' VERY FINE SAND |
| | | | | 20.0 | TERMINATED BORING AT 20.0' *SOIL SAMPLE B-2: 9.0' - 11.0' *NO WATER SAMPLE COLLECTED DUE TO CAVING IN AT BOTTOM OF AUGER *NO BEDROCK ENCOUNTERED |

WATER LEVEL OBSERVATIONS

GENERAL INFORMATION

WHILE DRILLING 10.0'▽
DEPTH TO WATER ----
DEPTH TO CAVE-IN ----

START DATE 8/22/90 COMPLETION DATE 8/22/90
DRILLING METHOD: HOLLOW STEM AUGERS; SPLIT SPOON SAMPLING

LOGGER: *Robert G. Powell*

AQUA-TECH, INC

140 S. PARK ST.

PORT WASHINGTON, WI 53074

TELEPHONE:

(414) 284-5746
(414) 375-0407 (MILW METRO)

SOIL PROFILE LOG

PROJECT: ERIGRAPH INC

LOCATION: WEST BEAD, WI

PROJECT#:

ATI NO# : 93727

BORING B-3

SURFACE ELEVATION _____

SAMPLES

DESCRIPTION AND REMARKS

| NO. | (bpf) MOISTURE | REC | HNU LEVELS (PPM) | DEPTH (FT) | DESCRIPTION AND REMARKS |
|-----|----------------|-----|------------------|------------|---|
| | | | 0 (CUTTINGS) | 0.0 | SILT SAND |
| | | | | | SAND |
| | DRY | █ | 0 | 5.0 | 5.0' - 6.0' GRAVEL/SILT |
| | | | 0 - (CUT) | | 6.0' - 7.0' SAND/SILT |
| | | █ | 0 | | 7.0' - 8.0' BROWN SILT |
| | | | 0 | | 8.0' - 9.0' SILT |
| | MOIST | | 0 (CUTTINGS) | | 9.0' - 10.0' SAND |
| | | █ | 0 | | 10.0' - 13.0' SAND |
| | | | 0 | | 13.0' - 15.0' POOR RECOVERY - 3PPM OFF END OF SPLIT SPOON |
| B-3 | V. WET | █ | 0 | | 15.0' - 17.0' FINE SAND |
| | | | | | 17.0' - 20.0' SAND |
| | | █ | | 20.0 | 20.0' - 22.0' VERY FINE WET SAND |
| | | | | 22.0 | TERMINATED BORING AT 22.0' |
| | | | | | *SOIL SAMPLE B-3: 15.0' - 17.0' *NO BEDROCK ENCOUNTERED *GROUNDWATER ENCOUNTERED AT 15.0', NO SAMPLE COLLECTED DUE TO SAND COMING INTO BOREHOLE |

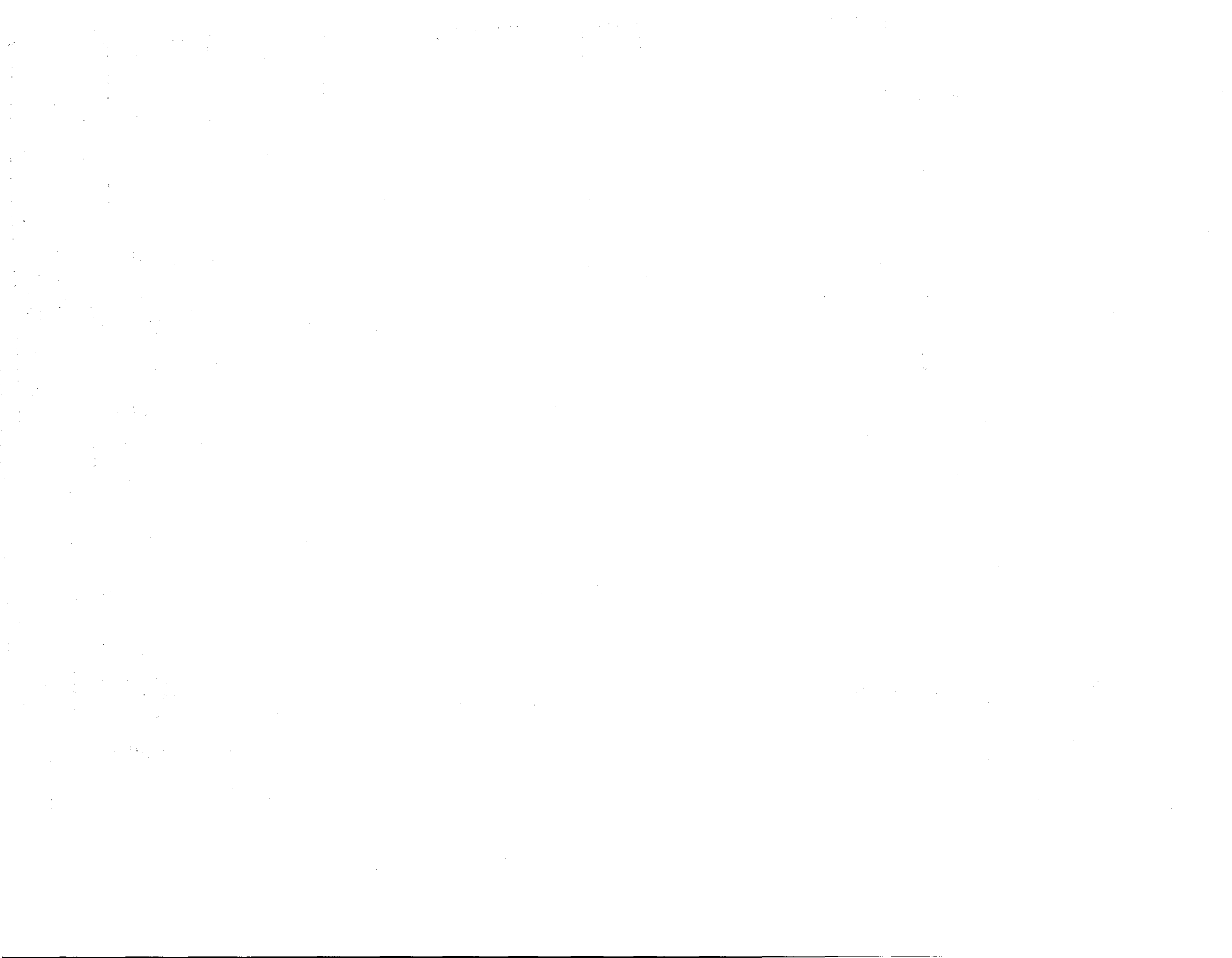
WATER LEVEL OBSERVATIONS

GENERAL INFORMATION

WHILE DRILLING 15.0' ∇
DEPTH TO WATER ----
DEPTH TO CAVE-IN ----

START DATE 8/22/90 COMPLETION DATE 8/22/90
DRILLING METHOD: HOLLOW STEM AUGERS; SPLIT SPOON SAMPLING

LOGGER: Peter E. Swalk



AQUA-TECH, INC

140 S. PARK ST.

PORT WASHINGTON, WI 53074

TELEPHONE:

(414) 284-5746

(414) 375-0407 (MILW METRO)

SOIL PROFILE LOG

PROJECT: SERIGRAPH INC

LOCATION: WEST BEND, WI

PROJECT#:

ATI NO# : 93727

BORING B-4

SURFACE ELEVATION _____

SAMPLES

DESCRIPTION AND REMARKS

| NO. | (bpf) MOISTURE | REC | HNU LEVELS (PPM) | DEPTH (FT) | DESCRIPTION AND REMARKS |
|------|-------------------|-----|---------------------|---------------|--|
| | | | | 0.0 | GRAVEL FILL PLASTIC *AUGERED THROUGH FILL CLEAN SOIL |
| | | | | 5.0 | |
| | MOIST | | 3 | | 8.0' - 10.0' VERY FINE SAND |
| | | | | | 10.0' - 15.0' SAND |
| | | | | ▽ | |
| | WET | | 25 0 | | 15.0' - 17.0' SAND TOP 1.0' = 25PPM BOTTOM 1.0' = 0PPM |
| B-4 | | | .2 | | 17.0' - 19.0' VERY FINE COMPACT SAND |
| | V. WET | | 0 | 20.0 | 19.0' - 21.0' VERY FINE SAND - PETROLEUM SHEEN IN WATER FROM SPLIT SPOON |
| B-44 | | | 0 | | 21.0' - 23.0' VERY FINE SAND |
| | | | | 23.0 | TERMINATED BORING AT 23.0' *SOIL SAMPLE B-4: 17.0' - 19.0' B-44: 21.0' - 23.0' |

WATER LEVEL OBSERVATIONS

GENERAL INFORMATION

WHILE DRILLING 15.0'▽
DEPTH TO WATER ----
DEPTH TO CAVE-IN ----

START DATE 8/22/90 COMPLETION DATE 8/22/90
DRILLING METHOD: HOLLOW STEM AUGERS; SPLIT SPOON SAMPLING

LOGGER: Robert E. Swalbo

(1) GENERAL INFORMATION

Well/Drillhole Location: _____ County: **WASHINGTON**

SE 1/4 of SW 1/4 of Sec. **13**; T. **11** N.R. **19**

(If Applicable) Gov't Lot _____ Grid Number _____

Civil Town Name: **WEST BEND**

Street Address of Well: **760 INDIANA AVE**

City, Village: **WEST BEND**

Date of Abandonment: **8-22-90**

(2) FACILITY NAME

Original Well Owner (If Known): **SERIGRAPH INC.**

Present Well Owner: _____

Street or Route: _____

City, State, Zip Code: _____

Well Number and/or Name (If Applicable): **B-1**

Reason For Abandonment: **Soil boring completed**

WELL/DRILLHOLE INFORMATION

(3) Original Well/Drillhole Construction Completed on (Date): **8-22-90**

Well Well Construction Report Available? Yes No

Drillhole

Construction Type: Drilled Driven (Sandpoint) Dug Other (Specify) _____

Well Type: Unconsolidated Formation Well Bedrock Well

Total Well Depth (ft.): **20** Casing Diameter (ins.): _____

Casing Depth (ft.): _____

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

(4) Depth to Water (Feet): **12.0**

Pump & Piping Removed? Yes No Not Applicable

Line(s) Removed? Yes No Not Applicable

Screen Removed? Yes No Not Applicable

Casing Left in Place? Yes No

If No, Explain: _____

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 Drillhole Retapped? Yes No

(5) Required Method of Placing Sealing Material

Conductor Pipe-Gravity Conductor Pipe-Pumped

Dump Barrel Other (Explain) _____

(6) Acceptable Sealing Materials

Neat Cement Grout Concrete Grout Concrete Clay Slurry Sodium Bentonite Slurry

| (7) Kind of Sealing Material | From (ft.) | To (ft.) | No. Yards or Sacks Sealed | Mix Ratio or Mud Weight |
|------------------------------|------------|-----------|---------------------------|-------------------------|
| BENTONITE Clay | Surface | 20 | | 100% |
| | | | | |
| | | | | |

(8) COMMENTS:

(9) Name of Person or Firm Doing Sealing Work: **AQUA TECH, INC.**

Signature of Person Doing Work: **[Signature]** Date Signed: **8-27-90**

Street or Route: **140 S. PARK ST** Telephone Number: **(414) 284-5746**

City, State, Zip Code: **BIT WASHINGTON WI 53074**

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected: _____ District/County: _____

Reviewer/Inspector: _____

Follow-up Necessary: _____

| | | | |
|--|-----------------------------|---|------------------------------|
| (1) GENERAL INFORMATION | | (2) FACILITY NAME | |
| Well/Drillhole Location | County WASHINGTON | Original Well Owner (if known) | SERIGRAPH INC. |
| SE 1/4 of SW 1/4 of Sec. 13; T. 11 N.R. 19 <input checked="" type="checkbox"/> E <input type="checkbox"/> W (If applicable) | | Present Well Owner | |
| Gov't Lot | Grid Number | Street or Route | |
| Civil Town Name | WEST BEND | City, State, Zip Code | |
| Street Address of Well | 760 INDIANA AVE | Well Number and/or Name (if applicable) | B-2 |
| City, Village | WEST BEND | Reason for Abandonment | Soil boring completed |
| Date of Abandonment | 8-22-90 | | |

| | | | |
|--|--|--|--|
| (3) WELL/DRILLHOLE INFORMATION | | (4) Depth to Water (Feet) 10.0 | |
| (5) Original Well/Drillhole Construction Completed on (Date) 8-22-90 | | <input type="checkbox"/> Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Lines Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain: | |
| <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Drillhole Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) | Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Was Drillhole Retapped? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Well Type: <input type="checkbox"/> Unconsolidated Formation Well <input type="checkbox"/> Bedrock Well | Total Well Depth (ft.) 20 Casing Diameter (ins.) | (5) Required Method of Placing Sealing Material | |
| Casing Depth (ft.) | Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet | <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Barrel <input type="checkbox"/> Other (Explain) | |
| | | (6) Applicable Sealing Materials Note: Cement Grout; Concrete Grout; Concrete; Clay Slurry; Sodium Benzoate Slurry | |

| (7) Kind of Sealing Material | From (ft) | To (ft) | No. Yards or Sacks Sealed | Mix Ratio or Mud Weight |
|------------------------------|-----------|-------------|---------------------------|-------------------------|
| BENTONITE Clay | Surface | 20.0 | | 100% |
| | | | | |
| | | | | |

(8) Comments:

| | | | |
|---|---|---------------------------------|-----------------|
| (9) Name of Person or Firm Doing Sealing Work AQUA TECH, INC. | | (10) FOR DNR OR COUNTY USE ONLY | |
| Signature of Person Doing Work <i>Robert E. Paralle</i> | Date Signed 8-27-90 | Date Received/Inspected | District/County |
| Street or Route 140 S. Park St | Telephone Number (414) 284-5746 | Reviewer/Inspector | |
| City, State, Zip Code West Bend, WI 57071 | | Follow-up Necessary | |

| | | | |
|---|-----------------------------|--|-----------------------|
| (1) GENERAL INFORMATION | | (2) FACILITY NAME | |
| Well/Drillhole Location | County WASHINGTON | Original Well Owner (if known) | SERIGRAPH INC. |
| SE 1/4 of SW 1/4 of Sec. 13 ; T. 11 N.R. 19 (if applicable) | | Reason Well Owner | |
| Gov't Lot | Grid Number | Street or Route | |
| Civil Town Name WEST BEND | | City, State, Zip Code | |
| Street Address of Well 760 INDIANA AVE | | Well Number and/or Name (if applicable) B-3 | |
| City, Village WEST BEND | | Reason For Abandonment Soil boring completed | |
| Date of Abandonment 8-22-90 | | | |

| | | | |
|---|---|--|--|
| WELL/DRILLHOLE INFORMATION | | (4) Depth to Water (feet) <u>15.0</u> | |
| (3) Original Well/Drillhole Construction Completed on (Date) 8-22-90 | | Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable | |
| <input type="checkbox"/> Water Well | Construction Report Available? | Line(s) Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable | |
| <input checked="" type="checkbox"/> Drillhole | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Screen Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable | |
| Construction Type | | Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| <input checked="" type="checkbox"/> Drilled | <input type="checkbox"/> Driven (Sandpoint) | If No, Explain | |
| <input type="checkbox"/> Other (Specify) | | | |
| Well Type: | | Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| <input type="checkbox"/> Unconsolidated Formation Well | <input type="checkbox"/> Bored Well | Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Total Well Depth (ft) <u>22.0</u> | Casing Diameter (ins) | Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Casing Depth (ft) | | If Yes, Was Drillhole Reopened? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown | | (5) Required Method of Placing Sealing Material | |
| If Yes, To What Depth? _____ Feet | | <input type="checkbox"/> Conductor Pipe-Gravity | <input type="checkbox"/> Conductor Pipe-Pumped |
| | | <input type="checkbox"/> Dry Bailer | <input type="checkbox"/> Other (Explain) |
| | | (6) Acceptable Sealing Materials | |
| | | Neat Cement Grout; Concrete Grout; Concrete; Clay Slurry; Sodium Bentonite Slurry | |

| (7) Kind of Sealing Material | From (ft) | To (ft) | No. Yards or Sacks Sealed | Mix Ratio or Mud Weight |
|------------------------------|-----------|-------------|---------------------------|-------------------------|
| BENTONITE Clay | Surface | 22.0 | | 100% |
| | | | | |
| | | | | |

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
AQUA TECH, INC.

| | |
|--|---|
| Signature of Person Doing Work <i>Robert Parake</i> | Date Signed 8-27-90 |
| Street or Route 140 S. PARK ST | Telephone Number (414) 284-5746 |
| City, State, Zip Code | |

(10) FOR DNR OR COUNTY USE ONLY

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

| | | | |
|---|-----------------------------|---|--|
| (1) GENERAL INFORMATION | | (2) FACILITY NAME | |
| Well/Drillhole Location | County WASHINGTON | Original Well Owner (if known) SERIGRAPH INC. | |
| SE 1/4 of SW 1/4 of Sec. 13; T. 11 N. R. 19 (if applicable) | | Present Well Owner | |
| Gov't Lot | Grid Number | Street or Route | |
| Civil Town Name WEST BEND | | City, State, Zip Code | |
| Street Address of Well 760 INDIANA AVE | | Well Number and/or Name (if Applicable) B-4 | |
| City, Village WEST BEND | | Reason For Abandonment Soil boring completed | |
| Date of Abandonment 8-22-90 | | | |

| | |
|---|---|
| WELL/DRILLHOLE INFORMATION | |
| (3) Original Well/Drillhole Construction Completed on (Date) 8-22-90 | (4) Depth to Water (Feet) 15.0 |
| <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Drillhole | Pump & Piping Removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable |
| Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Line(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 |
| Well Type <input type="checkbox"/> Unconsolidated Formation Well <input type="checkbox"/> Bedrock Well | Casing Left in Place? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Total Well Depth (ft.) 230 Casing Diameter (ins.) | If No, Explain |
| Casing Depth (ft.) | Was Casing Cut Off Below Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet | Did Sealing Material Rise to Surface? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | If Yes, Was Drillhole Retapped? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | (5) Required Method of Placing Sealing Material |
| | <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Basket <input type="checkbox"/> Other (Explain) |
| | (6) Acceptable Sealing Materials |
| | Neat Cement Grout Concrete Grout Concrete Clay Slurry Sodium Bentonite Slurry |

| (7) Kind of Sealing Material | From (ft) | To (ft) | No. Yards or Sacks Sealed | Mix Ratio or Mud Weight |
|------------------------------|-----------|-------------|---------------------------|-------------------------|
| BENTONITE Clay | Surface | 23.0 | | 100% |
| | | | | |
| | | | | |

(8) Comments:

(9) Name of Person or Firm Doing Sealing Work
AQUA TECH, INC.

Signature of Person Doing Work
Robert E. Paralle

Date Signed
8-27-90

Street or Route
140 S. Park St

Telephone Number
(414) 284-5946

City, State, Zip Code
West Bend, WI 53074

(10) FOR DNR OR COUNTY USE ONLY

Date Received/Inspected _____ District/County _____

Review & Approval _____

Following Necessary _____

APPENDIX C

40511111767 2000
not used since 11/76

405
Installed?

AQUA ECH | CORPORATE
GEOCL. LABORATORIES | Aqua-Tech, Inc.
140 S. Park St., Port Washington, WI 53074
414.214.5746 FAX 414.214.6341

CHAIN OF CUSTODY RECORD

| PROJ. NO. | | PROJECT NAME | | | | NO. OF CONTAINERS | ANALYSIS | | | | | | | REMARKS |
|--|------|--------------|------|------|----------------------|-------------------|----------------|----------|------|------------|----|-------------|--------------------|---------|
| SAMPLERS: (Signature) <i>Pete B. Pavalko</i> | | | | | | | TPH (Fuel Oil) | SOLIDS % | BTEX | TOTAL LEAD | PH | Flash Point | Free Liquids | |
| LAB NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | | | | | | | | | |
| | 8-15 | 10:00 | X | | SS #1 7-8" | 2 | X | X | X | X | X | X | 20-30 ppm FOR Lead | |
| | 8-15 | 10:30 | X | | SS #2 16" | 1 | X | | | | | | 6 ppm | |
| | 8-15 | 12:00 | X | | Surface (Stock Pile) | 2 | | | | | | X | | |

| | | | |
|---|-------------------------|--|----------------------------|
| Relinquished by: (Signature) <i>Pete B. Pavalko</i> | Date / Time 8-15 5:00pm | Received by: (Signature) | Date / Time |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Date / Time |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) <i>Thomas J. ...</i> | Date / Time 8-15-90 5:00pm |

Report to:
 Name PETE PAVALKO
 Street 140 S Park St
 City PORT WASHINGTON State WI Zip 53012
 Phone no. (414) 284-5746

Remarks
RETURN W/ ATC # 93727
 NET 8-16-90
 Sieve Analysis (Swanson 8-16-90)

Remarks

CHAIN OF CUSTODY RECORD

| PROJ. NO. | | PROJECT NAME | | NO. OF CONTAINERS | REMARKS | | |
|-----------------------|------|------------------|------|-------------------|------------------|-------------------|---|
| 93727 | | Seisigraph (UST) | | | | | |
| SAMPLERS: (Signature) | | | | NO. OF CONTAINERS | REMARKS | | |
| Pete Pavalko | | | | | | | |
| LAB NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | NO. OF CONTAINERS | REMARKS |
| 79505 | 8.15 | 8:00 | X | | SS #1 7-8' | 2 | TPH (Fuel Oil) Solids % BTEX Total Pb PH Flash Point Paint Filter |
| 79506 | 8.15 | 10:00 | X | | SS #2 16' | 1 | |
| Job # 90.2103 | | | | | | | |

| | | | | |
|---|---------------------------|---|-------------|----------------------------------|
| Relinquished by: (Signature) <i>Pete Pavalko</i> | Date / Time 8-16 12:40 | Received by: (Signature) | Date / Time | Report to: Pete Pavalko |
| Relinquished by: (Signature) | Date / Time | Received by: (Signature) | Date / Time | Name <u>Aqua-Tech, Inc.</u> |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) <i>Donna Meyer</i> | Date / Time | Street _____ |
| Remarks | | | | City _____ State _____ Zip _____ |
| | | | | Phone no. () _____ |
| | | | | Remarks |

CHAIN OF CUSTODY RECORD

| PROJ. NO. | | PROJECT NAME | | | | | NO. OF CONTAINERS | REMARKS | | | | | | | | | | | |
|---|---------|--------------|------|------|------------------|--|-------------------|---------|-----------|-----------|--|---------------|--|--|--|--|--|--|--|
| 93727 | | SERIGRAPH | | | | | | | | | | | | | | | | | |
| SAMPLERS: (Signature) <i>Pete Pawalko</i> | | | | | | | | | | | | | | | | | | | |
| LAB NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | | TPH (fuel oil) | | 90 Solids | | | | | | | | | | |
| 79860 | 8-22-90 | 9:30 | | X | B-1 17-19" | | 1 | X | X | HNU = 0 | | | | | | | | | |
| 79861 | | 10:30 | | X | B-2 9-11" | | 1 | X | X | HNU = 0 | | | | | | | | | |
| 79862 | | 11:30 | | X | B-3 15-17" | | 1 | X | X | HNU = 0 | | | | | | | | | |
| 79863 | | 12:30 | | X | B-4 17-19" | | 1 | X | X | HNU = 0.2 | | | | | | | | | |
| 79864 | | 12:45 | | F | B-44 21-23" | | 1 | X | X | HNU = 0 | | | | | | | | | |
| | | | | | | | | | | | | Job # 90.2198 | | | | | | | |

| | | | | |
|--|-----------------------------|---|----------------------------|-------------------------------------|
| Relinquished by: (Signature) <i>Pete Pawalko</i> | Date / Time 8-22-90 3:00pm | Received by: (Signature) <i>Donna Myers</i> | Date / Time 8-22-90 3:30pm | Report to: Name <u>PETE PAWALKO</u> |
| Relinquished by: (Signature) <i>Donna Myers</i> | Date / Time 8-23-90 11:00am | Received by: (Signature) | Date / Time | Street _____ |
| Relinquished by: (Signature) | Date / Time | Received for Laboratory by: (Signature) <i>Pete Pawalko</i> | Date / Time 8-22-90 | City _____ State _____ Zip _____ |
| | | | | Phone no. () _____ |

Remarks Include ATE# 93727 Serigraph and Station location with results / NET sign here please
Donna Myers
 8/24/90 1330



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/11/1990

Sample No: 79505
Job No: 90.2103

SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

Tot. Pet. Hydrocarbons 18,900.(comp. to Diesel) mg/kg

Roline Milne

Roline Milne, Project Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/12/1990

Sample No: 79505
Job No: 90.2103

SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

| | | |
|----------------------------|----------------------|----------|
| Solids, Total | 88.62 | % |
| Paint Filter | Y-Contains no liquid | |
| Lead | 12.5 | ug/g |
| Corrosivity (pH) | 7.84 | units |
| Ignitability (Flash Point) | No Flash @ 210. | Degree F |
| EP Tox - Lead | 0.08 | mg/L |

Brian Wanner, Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/11/1990

Sample No: 79505
Job No: 90.2103

SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

UST VOLATILE COMPOUNDS - 8240

| | | |
|--------------|---------|-------|
| Benzene | <500. | ug/kg |
| Ethylbenzene | <500. | ug/kg |
| Toluene | 590. | ug/kg |
| Xylenes | 17,000. | ug/kg |

Roline Milne
Roline Milne, Project Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/11/1990

Sample No: 79506
Job No: 90.2103

SAMPLE DESCRIPTION: SS#2 16', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

| | | |
|------------------------|-------|-------|
| Solids, Total | 81.28 | % |
| Tot. Pet. Hydrocarbons | <10. | mg/kg |

Roline Milne
Roline Milne, Project Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5822

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/12/1990

Job No: 90.2198

JOB DESCRIPTION: ATI#93727 Serigraph Stat.

Date Taken: SEE BELOW

Date Received: 08/24/1990

| | | |
|-------|------------------------|------------------|
| 79860 | B-1 17-19', Grab Soil | 08/22/1990 09:30 |
| | Solids, Total | 79.58 % |
| | Tot. Pet. Hydrocarbons | <10. mg/kg |
| 79861 | B-2 9-11', Grab Soil | 08/22/1990 10:30 |
| | Solids, Total | 83.63 % |
| | Tot. Pet. Hydrocarbons | <10. mg/kg |
| 79862 | B-3 15-17', Grab Soil | 08/22/1990 11:30 |
| | Solids, Total | 83.34 % |
| | Tot. Pet. Hydrocarbons | <10. mg/kg |
| 79863 | B-4 17-19', Grab Soil | 08/22/1990 12:30 |
| | Solids, Total | 85.59 % |
| | Tot. Pet. Hydrocarbons | <10. mg/kg |

Brian Wanner, Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/12/1990

Job No: 90.2198

JOB DESCRIPTION: ATI#93727 Serigraph Stat.

Date Taken: SEE BELOW

Date Received: 08/24/1990

79864 B-44 21-23', Grab Soil

08/22/1990 12:45

| | | |
|------------------------|-------|-------|
| Solids, Total | 82.81 | % |
| Tot. Pet. Hydrocarbons | <10. | mg/kg |

Brian Wanner
Brian Wanner, Manager
Rockford Division

3150 North Brookfield Road
Brookfield, Wisconsin 53045
telephone (414) 783-6111
facsimile (414) 783-5752



AIHA Accreditation = 352
WDNR Certification = 266181760

ANALYTICAL REPORT

REPORT NUMBER: B2534

Aqua-Tech, Inc.
140 South Park Street
Port Washington, WI 53704

Attn: Mr. Pete Pavalko

DATE: September 19, 1990
PURCHASE ORDER:
SEI JOB NO: WL3947
DATE COLLECTED: 08/15/90
DATE RECEIVED: 08/17/90

Soil Sample (Serigraph [UST]))

SEI ID: WL4194-1
Sample ID: SS #1 7-8'

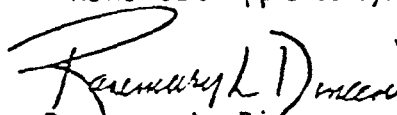
GRAIN SIZE

| <u>Sieve Size</u> | <u>% Retained on Top</u> |
|-------------------|--------------------------|
| 8 | 2.76 |
| 16 | 1.83 |
| 30 | 3.49 |
| 60 | 25.02 |
| 80 | 16.47 |
| 100 | 4.99 |
| 200 | 12.32 |
| 230 | 2.35 |

% Total Solids 96.5

NOTE: All results reported on a dry weight basis.

Reviewed & Approved by:


Rosemary L. Dineen
Laboratory Director

APPENDIX D

APPENDIX D

SERIGRAPH, INC.

ESTIMATE OF REMEDIATION COSTS

FOR LANDFILL DISPOSAL

| | <u>Unit Cost</u> | <u>Total Cost</u> |
|--|------------------|-------------------|
| Landfill disposal of 56 tons (40 yd ³) of contaminated soil | \$ 27.15/ton | \$1,520.40 |
| Excavation and transportation of 56 tons of contaminated soil to Parkview Landfill | 8.00/ton | 448.00 |
| Backfill and compaction of 56 tons of crushed gravel fill | 9.86/ton | 552.16 |
| Aqua-Tech professional field services | | 500.00 |
| 4 soil analyses (TPH) per WDNR protocol to verify contamination removal | 110.00/sample | 440.00 |
| Consulting with WDNR and Report Preparation (20 hours) | 50.00/hour | <u>500.00</u> |
| | TOTAL | \$3,960.56 |

APPENDIX E

APPENDIX E

SERIGRAPH, INC.

ESTIMATE OF REMEDIATION COSTS

FOR ASPHALT DISPOSAL

| | <u>Unit Cost</u> | <u>Total Cost</u> |
|--|------------------|-------------------|
| Collection and Analysis of additional soil samples per Payne and Dolan requirements | | \$3,335.00 |
| Asphalt Plant disposal of 56 tons (40 yd ³) of contaminated soil | 55.20/ton | 3,091.20 |
| Excavation and transportation of 56 tons of contaminated soil to Payne & Dolan, Inc. | 9.50/ton | 532.00 |
| Backfill and compaction of 56 tons of crushed gravel fill | 9.86/ton | 552.16 |
| Aqua-Tech professional field services | | 500.00 |
| 4 soil analyses (TPH) per WDNR protocol to verify contamination | 110.00/sample | 440.00 |
| Consulting with WDNR and Report Preparation (10 hours) | 50.00/hour | <u>500.00</u> |
| | TOTAL | \$8,950.36 |

APPENDIX B

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Serigraph, Inc.

PAGE 1 OF 2

DATE: 10/30/90

TIME: 2:00 pm

DIRECTION OF PHOTOGRAPH:

West

WEATHER CONDITIONS:

50°F

PHOTOGRAPHED BY:

Peter Pavalko

SAMPLE ID:
(If Applicable):

N/A



DESCRIPTION: Pictured is the west wall of the excavation before the soil fell away from the foundation.

DATE: 10/30/90

TIME: 2:30 pm

DIRECTION OF PHOTOGRAPH:

West

WEATHER CONDITIONS:

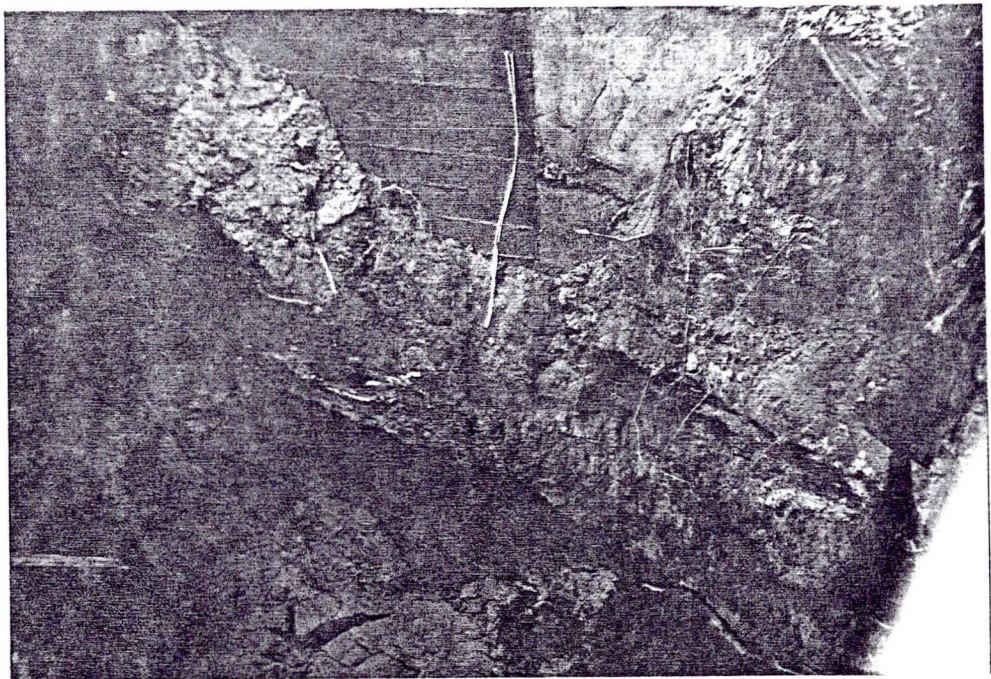
50°F

PHOTOGRAPHED BY:

Peter Pavalko

SAMPLE ID:
(If Applicable):

N/A



DESCRIPTION: Pictured is the west wall of the excavation as portions of the contaminated soil fell into the pit.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: Serigraph, Inc.

PAGE 2 OF 2

DATE: 10/30/90

TIME: 3:00 pm

DIRECTION OF
PHOTOGRAPH:

West

WEATHER CONDITIONS:

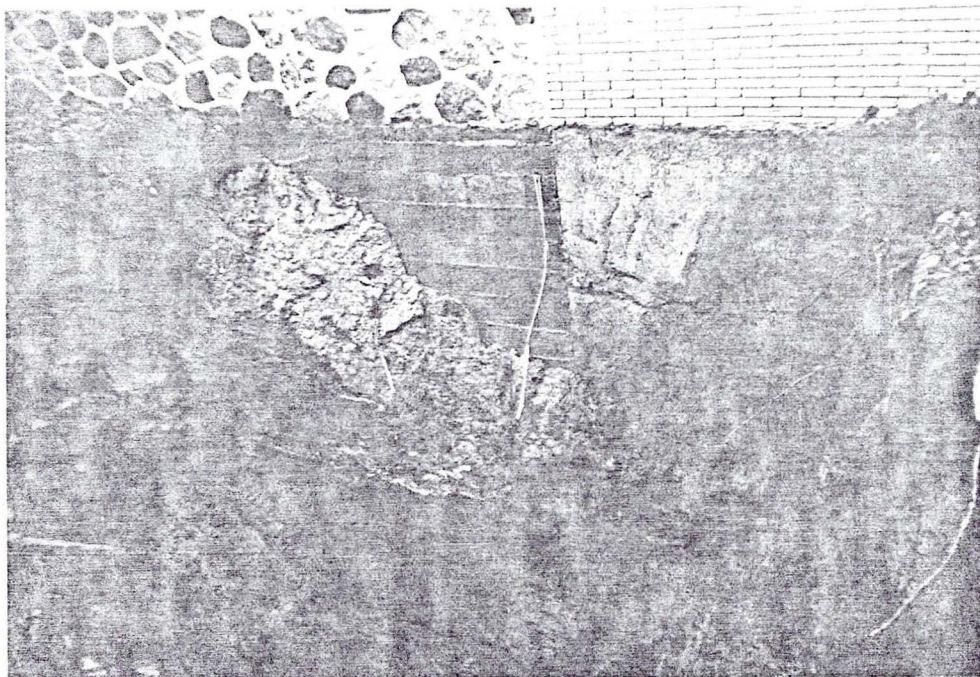
50°F

PHOTOGRAPHED BY:

Peter Pavalko

SAMPLE ID:
(If Applicable):

N/A

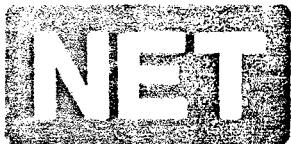


DESCRIPTION: Pictured is the west wall of the excavation/east wall of the
foundation of the Serigraph building. By the end of the excavation all the soil
had fallen off this wall.

APPENDIX C

CHAIN OF CUSTODY RECORD

| PROJ. NO. 93727 | | PROJECT NAME Seniograph - Excavation | | | | NO. OF CONTAINERS | <table border="1"> <tr> <td>% Solids</td> <td>TPH Fuel Oil</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> | % Solids | TPH Fuel Oil | | | | | | | | | REMARKS |
|--|--------------|---|------|---|---------------------|-------------------|--|----------------------------------|--------------|--|--|--|--|---------|--|--|--|---------|
| % Solids | TPH Fuel Oil | | | | | | | | | | | | | | | | | |
| SAMPLERS: (Signature) <i>Pete Pawalko</i> | | | | | | | | | | | | | | | | | | |
| LAB NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | | | | | | | | | | | | | |
| 83027 | 10-30-98 | 3:00 | | | SS-F Floor 180" | 1 | | X | | | | | | HNU = 0 | | | | |
| 28 | | 3:10 | | | SS-S South wall 15" | 1 | X | X | | | | | | HNU = 0 | | | | |
| 29 | | 3:20 | | | SS-E East wall 15" | 1 | X | X | | | | | | HNU = 0 | | | | |
| 83030 | | 3:30 | | | SS-N North wall 15" | 1 | X | X | | | | | | HNU = 0 | | | | |
| Job # | | | | | | | | | | | | | | | | | | |
| 90. 3222 | | | | | | | | | | | | | | | | | | |
| Relinquished by: (Signature) | | Date / Time | | Received by: (Signature) | | Date / Time | | Report to: | | | | | | | | | | |
| <i>Pete Pawalko</i> | | 10/31/90 9:00am | | | | | | Name <u>PETE PAWALKO</u> | | | | | | | | | | |
| Relinquished by: (Signature) | | Date / Time | | Received by: (Signature) | | Date / Time | | Street _____ | | | | | | | | | | |
| | | | | | | | | City _____ State _____ Zip _____ | | | | | | | | | | |
| Relinquished by: (Signature) | | Date / Time | | Received for Laboratory by: (Signature) | | | Phone no. (_____) _____ | | | | | | | | | | | |
| | | 11/1/90 1100 | | <i>Donna Myers</i> | | | Remarks | | | | | | | | | | | |
| Remarks | | <i>Return signed CofC.</i> | | | | | | | | | | | | | | | | |



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

11/16/1990

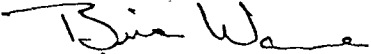
Job No: 90.3222

JOB DESCRIPTION: #93727 Serigraph-Excav.

Date Taken: SEE BELOW

Date Received: 11/01/1990

| | | | |
|-------|---------------------------|------------|-------|
| 83027 | SS-F Floor 18.0', Soil | 10/30/1990 | 15:00 |
| | Solids, Total | 83.48 | % |
| | Tot. Pet. Hydrocarbons | <10. | mg/kg |
| 83028 | SS-S South Wall 15', Soil | 10/30/1990 | 15:10 |
| | Solids, Total | 78.37 | % |
| | Tot. Pet. Hydrocarbons | <10. | mg/kg |
| 83029 | SS-E East Wall 15', Soil | 10/30/1990 | 15:20 |
| | Solids, Total | 84.07 | % |
| | Tot. Pet. Hydrocarbons | <10. | mg/kg |
| 83030 | SS-N North Wall 15', Soil | 10/30/1990 | 15:30 |
| | Solids, Total | 82.03 | % |
| | Tot. Pet. Hydrocarbons | <10. | mg/kg |


Brian Wanner, Manager
Rockford Division



PAYNE & DOLAN, INC.

JAN 16 1991

December 27, 1990

Mr. Tom Ravn
Serigraph, Inc.
760 Indiana Ave.
West Bend, WI 53095

Dear Mr. Ravn:

The enclosed D.N.R. 440 Tracking Form has been forwarded to the Southeast D.N.R. L.U.S.T. Specialist.

If you have any questions, please call me at 414-524-1769.

Very truly yours,

PAYNE & DOLAN, INC.

A handwritten signature in cursive script that reads "Kurt Bechthold".

Kurt Bechthold

KB:ehm
Enclosure

ASPHALT PRODUCERS AND CONTRACTORS SINCE 1930

Kenosha Office
1740 120th Avenue
Kenosha, WI 53142
Phone: (414) 859-3081
Fax: (414) 859-3031

An Equal Opportunity Employer

Post Office Box 781
N3 W23650 Badinger Road
Waukesha, WI 53187
Phone: (414) 524-1700
Fax: (414) 524-1845

This form is required to be submitted by subchapters III and IV of ch. 144, Wis. Stats. Failure to submit this form may result in forfeitures of not less than \$10 or more than \$25,000 for each violation, pursuant to ss. 144.426, 144.469, 144.74(1), and 144.99, Wis. Stats., or fines of not less than \$100 or more than \$150,000 or imprisonment for not more than 10 years, or both, pursuant to s. 144.74(2), Wis. Stats. Each day of a continuing violation constitutes a separate violation.

Form to be completed by Asphalt Plant and sent to: L.U.S.T. Specialist at the appropriate District or Area Office.

| | |
|--|---|
| Name of Plant Payne & Dolan, Inc. - Control 4 | |
| Location W240 N8097 Hillside Road, Sussex, WI 53089 | |
| Generator of Soils (Include site ID#) Serigraph, Inc. | Date of DNR Approval to Remediate Soils 10/11/90 |
| Date of Soil Transport 10/30/90 | Method of Soil Storage Concrete Pad - tarped |
| Type of Remediation Roasting _____ Incorporation <u> X </u> | Date of Roasting/Incorporation 11/27/90 |

ROASTING OPTION

Post Burn Sample Results (Two representative composite samples for every 300 cubic yards):

| Sample Number | TPH |
|---------------|-----|
| N/A | |
| | |
| | |

| |
|---|
| Date of DNR Approval for Backfilling or Use as Common Fill N/A |
| Location of Common Fill or Backfilling Site N/A |
| Date of Backfilling or Use as Common Fill N/A |
| Total Benzene Emissions in Pounds for Batch (Apply 50% destruction factor if no afterburner is being used) .062035 |
| Total Benzene Emissions for Plant for Calendar Year (Portable or fixed plant) 2.322 |

Actual tons shipped 124.07

$$124.07 \times 2,000 \times \frac{.5}{1,000,000} \times .5 = .062035$$

Wash. Co

This form is required to be submitted by subchapters III and IV of ch. 144, Wis. Stats. Failure to submit this form may result in forfeitures of not less than \$10 or more than \$25,000 for each violation, pursuant to ss. 144.426, 144.469, 144.74(1), and 144.99, Wis. Stats., or fines of not less than \$100 or more than \$150,000 or imprisonment for not more than 10 years, or both, pursuant to s. 144.74(2), Wis. Stats. Each day of a continuing violation constitutes a separate violation.

Form to be completed by Asphalt Plant and sent to: L.U.S.T. Specialist at the appropriate District or Area Office.

| | |
|--|---|
| Name of Plant Payne & Dolan, Inc. - Control 4 | |
| Location W240 N8097 Hillside Road, Sussex, WI 53089 | |
| Generator of Soils (Include site ID#) Serigraph, Inc. | Date of DNR Approval to Remediate Soils 10/11/90 |
| Date of Soil Transport 10/30/90 | Method of Soil Storage Concrete Pad - tarped |
| Type of Remediation Roasting _____ Incorporation <u> X </u> | Date of Roasting/Incorporation 11/27/90 |

ROASTING OPTION

Post Burn Sample Results (Two representative composite samples for every 300 cubic yards):

| Sample Number | TPH |
|---------------|-----|
| N/A | |
| | |
| | |

| |
|---|
| Date of DNR Approval for Backfilling or Use as Common Fill N/A |
| Location of Common Fill or Backfilling Site N/A |
| Date of Backfilling or Use as Common Fill N/A |
| Total Benzene Emissions in Pounds for Batch (Apply 50% destruction factor if no afterburner is being used) .062035 |
| Total Benzene Emissions for Plant for Calendar Year (Portable or fixed plant) 2.322 |

Actual tons shipped 124.07

$$124.07 \times 2,000 \times \frac{.5}{1,000,000} \times .5 = .062035$$

10/12/90

This form is required to be submitted by subchapters III and IV of ch. 144, Wis. Stats. Failure to complete and submit this form may lead to violations of these statutes and result in forfeitures of not less than \$10 or more than \$25,000 for a violation, pursuant to ss. 144.426, 144.469, 144.74(1), and 144.99, Wis. Stats., or fines of not less than \$100 or more than \$150,000 or imprisonment for not more than 10 years, or both, pursuant to s. 144.74(2), Wis. Stats. Each day continuing violation constitutes a separate violation.

Sections I, II & IV must be filled out completely. Also, complete other sections that apply.

Return completed forms to: L.U.S.T. Specialist at the appropriate District or Area Office.

I. SOURCE OF SOIL

| | |
|--|---|
| Facility Name <u>SERIGRAPH, INC.</u> | Site ID# (For DNR use only) |
| Site Address <u>760 INDIANA AVE</u> | Contact Name <u>TOM RAVN</u> |
| City, State, Zip Code <u>WEST BEND, WISCONSIN 53095</u> | Telephone Number (Include Area Code) <u>414-334-9427</u> |
| Section, Township and Range <u>SEC 13 T11N R19E</u> | Facility Owner/Operator Signature |

II. CONTAMINATION DETAILS

| | |
|--|---|
| Volume Soil (Cubic yards) <u>APPROXIMATELY 30 YDS³</u> | Certified DNR Lab Number <u>999447240</u> |
| Type of Petroleum Contamination (Circle one) 1 Gasoline 2 Diesel Fuel <u>3 #2 Fuel Oil</u> | Lab Name <u>NET MIDWEST, ROCKFORD DIV.</u> |
| 4 Other _____ | Sampling Method (Brief description of method used to obtain representative sample of soil) <u>USE OF A DECONTAMINATED STEEL SHOVEL WITH USE OF A PHOTOIONIZATION METER</u> |
| Contaminant Concentration (Two representative composite samples for every 300 cubic yards of soil, in ppm.) Attach Laboratory Analyses | Total Benzene In Soil To Be Remediated (Attach calculations) <u>< 1.0 lbs (0.02 lbs)</u> |
| Sample No. <u>SS#1</u> | Total Amount of Petroleum Hydrocarbons In Soil to Be Remediated (Attach calculations) <u>750 lbs</u> |
| Benzene <u>< 500 ug/kg</u> | Percent Soil Less Than 200 Mesh or 74 Microns <u>APPROXIMATELY 10%</u> |
| Toluene <u>590 ug/kg</u> | Soil Classification Type (Sand, silt, clay, etc.) <u>SAND</u> |
| Ethylbenzene <u>< 500 ug/kg</u> | Anticipated Time Frame for Remediation |
| Total Xylenes <u>17,000 ug/kg</u> | Start Date <u>ASAP</u> End Date _____ |
| Total Petroleum Hydrocarbons as Gasoline <u>< 10 mg/kg</u> | Method of Pulverizing Silt or Clay Soils <u>N/A</u> |
| Total Petroleum Hydrocarbons as Fuel Oil <u>18,900 mg/kg</u> | |

III. PROPOSED METHOD OF SOIL TREATMENT

| | | |
|--|--|--|
| 1. Asphalt Plant/Other Type of Thermal Evaporation Unit | WDNR Air Quality Permit Number | WPDES Permit Number |
| Name <u>PAYNE + DOLAN INC</u> | s. 144.04 Plan Approval Number or Equivalent | |
| Address <u>N3W23650 BADINGER Rd.</u> | (Sealed ponds according to NR 213) | |
| City, State, Zip Code <u>WAUKESHA WI 53187</u> | Distance to Nearest Residence/Business | |
| (If portable, where will plant be located) | Burner Temperature During Soil Treatment | Soil Residence Time in Burner During Treatment |
| Plant Number and Model <u>EID# 268185610</u> | Anticipated Date Treatment Will be Completed | |
| DNR Facility Identification Number | (If stockpiled before being treated, all petroleum contaminated soil to be underlain and overlain by an impermeable membrane.) | |
| Contact Name <u>LARRY KRISTAPOVICH</u> | Final Disposition of Treated Soil (How used, specific location) | |
| Title <u>OR KURT BECHTHOLD</u> | | |
| Telephone Number (Include area code) <u>414 524-1799</u> | | |
| Site Telephone Number (Include area code) <u>414 334-9427</u> | | |

Section 1 continued.
 If soils will not be incorporated into asphalt, post burn soil testing is required. Soils will need to be sampled for the same parameters listed in Item II. Two composite soil samples are to be taken every 300 cubic yards of soil.

Highest Emission of VOC's Intended to Occur
 _____ hourly* _____ daily*

Highest Emission of Benzene Intended to Occur
 _____ daily* _____ total*

* Attach Calculations

2. Volatilization of Contaminants In Soil (Passive Evaporation)
 Type of Impervious Surface _____

Curbing or Berms (Existing or proposed construction) _____

Thickness of Soil Undergoing Remediation (As placed) _____

Techniques to Cover During Inclement Weather _____

Method of Turning or Mixing Soil _____

Method of Field Sampling _____

Proposed Verification Method of Contaminant Content (Lab sampling)

Location and Size of Remediation Site _____

Distance to Nearest Residence/Business _____

Highest Emission of VOC's Intended to Occur
 _____ hourly* _____ daily*

Highest Emission of Benzene Intended to Occur
 _____ daily* _____ total*

* Attach Calculations

3. Disposal of Contaminated Soils at a Sanitary Landfill NR 500
 Name PARKVIEW LANDFILL

License No. _____

Location MENOMONEE FALLS, WI

IV. OWNER/OPERATOR OR CONSULTANT SUBMITTING REQUEST
 Company Name AQUA-TECH, INC

Address 140 SOUTH PARK STREET

City, State, Zip Code PORT WASHINGTON, WI 53074

Section 3 Continued
 Contact Name TOM RAVN

DNR Area Investigator Contacted Name JEFF FISCHER

Date 9-24-90

Volume to Be Disposed Of APPROXIMATELY 30 Cubic Yds

Amount Total VOCs* 756 lbs

Amount Benzene* < 1.0 lbs (0.02 lbs)

* Attach Calculations

Attach Map Showing Location of Approved Landfill _____

4. Soil Venting/Vacuum Extraction
 Responsible Party _____

Consultant Responsible for System _____

Size and Rating (in cfm) of Blower _____

Distance to Nearest Residence/Business _____

VOC Discharge Rate From Pilot Testing _____ lbs/day at _____ CFM

Benzene Discharge Rate From Pilot Testing _____ lbs/day at _____ CFM

Note: This option may need an air pollution control permit. Any exceedance of an emission limit will require the installation of an activated carbon unit or similar treatment system to strip VOCs from the blower discharge.

5. Other Method of Soil Remediation
 Please Describe the Method to Be Used

Contact Name BETH TIERNAN

Telephone Number (include area code) 414-284-5746

Signature Beth Tiernan

LEAVE BLANK - DEPARTMENT OF NATURAL RESOURCES USE ONLY

| | | |
|-------------|----------------------|-----------------|
| APPLICATION | Consent Name | Date |
| Consentance | <u>David Johnson</u> | <u>10/11/90</u> |
| <u>YES</u> | Air Management | Date |
| <u>YES</u> | Solid Waste | <u>10/11/90</u> |
| Comments: | | Date |

BENZENE CALC.

$$\frac{.5 \text{ ppm (max)}}{1,000,000} \times 2,000 \times 42 \text{ tons} \times .5 = .021 \text{ lbs} = 9.5 \text{ grams}$$

TPH CALC

$$\frac{18,900^*}{1,000,000} \times 2,000 \times 42 \text{ tons} \times .5 = 756 \text{ lbs}$$

*NOTE THAT THIS SAMPLE WAS TAKEN FROM WHAT APPEARED TO BE THE MOST GROSSLY CONTAMINATED ARE, DIRECTLY BENEATH THE UST, AND IS NOT REPRESENTATIVE OF THE LEVEL OF CONTAMINATION IN THE 30YD³ OF SOIL WHICH WILL BE TREATED.

October 5, 1990

1990 OCT -8 PM 12:58

Mr. Jeff Fischer
Southeast District
Department of Natural Resources
2300 N. Dr. Martin Luther King, Jr. Drive
Milwaukee, Wisconsin 53212

*Signed & sent to
Greg P. 10-11-90*

Dear Mr. Fischer:

Enclosed is the application form for the disposal of petroleum contaminated soil, in reference to Aqua-Tech's Project 93727 for Serigraph, Inc.

A representative sample was taken by use of a decontaminated steel shovel. Laboratory analysis finds this material to be non-hazardous. We would like you to review these forms for disposal approval at Payne & Dolan, Inc. or Parkview Landfill. Your promptness in this matter would be greatly appreciated, for we would like to begin this project as soon as possible. The analytical data has been submitted to Parkview Landfill for their approval process. Analytical data will be submitted to Payne & Dolan after the collection of a soil sample for PCBs is completed.

Confirmation of acceptance should be forwarded to the following:

Ms. Peggy Slind
Parkview Landfill
N96 W13475 County Line Road
Menomonee Falls, WI 53051

Mr. Glenn Elliott
Payne & Dolan, Inc.
P. O. Box 781
Waukesha, WI 53187

Mr. Mike Koepke
Aqua-Tech, Inc.
140 South Park Street
Port Washington, Wisconsin 53074

Any questions, please do not hesitate to contact me.

Sincerely,

AQUA-TECH, INC.



Pete Pavalko
Environmental Assessment Specialist

PP/jls

ENC.



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/25/1990

Sample No: 79505
Job No: 90.2103

SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

| Name | Result | Units | Date Analyzed |
|------------------------|---------------------------|-------|---------------|
| Tot. Pet. Hydrocarbons | 18,900. (comp. to Diesel) | mg/kg | 08/29/90 |

A handwritten signature in black ink that reads "Brian Wanner".

Brian Wanner, Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-5822

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/25/1990

Sample No: 79505
Job No: 90.2103

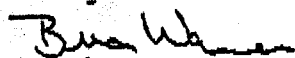
SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

UST VOLATILE COMPOUNDS - 8240

| Test Name | Result | Units | Date Analyzed |
|--------------|---------|-------|---------------|
| Benzene | <500. | ug/kg | 08/29/90 |
| Ethylbenzene | <500. | ug/kg | 08/29/90 |
| Toluene | 590. | ug/kg | 08/29/90 |
| Xylenes | 17,000. | ug/kg | 08/29/90 |


Brian Wanner, Manager
Rockford Division



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Midwest, Inc.
Rockford Division
3548 35th Street
Rockford, IL 61109
Tel: (815) 874-2171
Fax: (815) 874-6622

ANALYTICAL REPORT

Mr. Pete Pavalko
AQUA-TECH INC.
140 South Park Street
Port Washington, WI 53074

09/25/1990

Sample No: 79505
Job No: 90.2103

SAMPLE DESCRIPTION: SS#1 7-8', Composite Soil
#93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

| Test Name | Result | Units | Date Analyzed |
|----------------------------|----------------------|----------|---------------|
| Solids, Total | 88.62 | % | 08/24/90 |
| Paint Filter | Y-Contains no liquid | | 08/29/90 |
| Lead | 12.5 | ug/g | 09/07/90 |
| Corrosivity (pH) | 7.84 | units | 08/29/90 |
| Ignitability (Flash Point) | No Flash @ 210. | Degree F | 08/29/90 |
| EP Tox - Lead | 0.08 | mg/L | 09/08/90 |

Brian Wanner
Brian Wanner, Manager
Rockford Division



NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc. Rockford Division 3648 35th Street Rockford, IL 61109 Tel: (815) 874-2171 Fax: (815) 874-5622

ANALYTICAL REPORT

Mr. Pete Pavalko AQUA-TECH INC. 140 South Park Street Port Washington, WI 53074

09/25/1990

Sample No: 79506 Job No: 90.2103

SAMPLE DESCRIPTION: SS#2 16', Composite Soil #93727 Serigraph UST

Date Taken: 08/15/1990

Date Received: 08/17/1990

Table with 4 columns: Test Name, Result, Units, Date Analyzed. Rows include Solids, Total (81.28 %) and Tot. Pet. Hydrocarbons (<10. mg/kg).

Brian Wanner signature and title: Brian Wanner, Manager Rockford Division

3150 North Brookfield Road
Brookfield, Wisconsin 53045
telephone (414) 783-6111
facsimile (414) 783-5752



AIHA Accreditation #352
WDNR Certification #268181760

ANALYTICAL REPORT

REPORT NUMBER: B2534

Aqua-Tech, Inc.
140 South Park Street
Port Washington, WI 53704

Attn: Mr. Pete Pavalko

DATE: September 19, 1990
PURCHASE ORDER:
SEI JOB NO: WL3947
DATE COLLECTED: 08/15/90
DATE RECEIVED: 08/17/90

Soil Sample (Serigraph [UST]))

SEI ID: WL4194-1
Sample ID: SS #1 7-8'

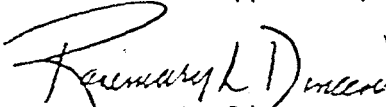
GRAIN SIZE

| <u>Sieve Size</u> | <u>% Retained on Top</u> |
|-------------------|--------------------------|
| 8 | 2.76 |
| 16 | 1.83 |
| 30 | 3.49 |
| 60 | 25.02 |
| 80 | 16.47 |
| 100 | 4.99 |
| 200 | 12.32 |
| 230 | 2.35 |

% Total Solids 96.5

NOTE: All results reported on a dry weight basis.

Reviewed & Approved by:


Rosemary L. Dineen
Laboratory Director



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

Box 12436
Milwaukee, Wisconsin 53212
Fax: (414) 263-8483

August 17, 1990

File Ref:

Tom Raven
760 Indiana Ave.
West Bend Wisconsin 53095

Dear Mr. Raven:

RE: Serigraph Corporation/760 Indiana Ave. West Bend WI. 53095

The Wisconsin Department of Natural Resources (WDNR) has been notified that petroleum contamination was discovered during the removal of one 2000 gallon under ground storage tank at the above referenced location. Jeff Fischer, the Leaking Underground Storage Tank (LUST) Project Manager for your area, may be reached at the above address or at (414) 263-8655. Based on the site specific information provided, this case has been assigned to the Medium Priority Rank group. The purpose of this letter is to inform you of your legal responsibilities to address this situation.

Releases from underground storage tanks regulated under Subtitle I of the Resource Conservation and Recovery Act require compliance with the provisions of 40 CFR Parts 280 and 281. The Environmental Protection Agency (EPA) has the authority to take enforcement action at any time, but will generally not take action against parties cooperating with the state. The WDNR proceeds in LUST cases under the authority of s.144.76, Wisconsin Statutes, commonly referred to as Wisconsin's Hazardous Substance Spill Law. The definition of "hazardous substance" as found in s.144.01(4m), Wisconsin Statutes, includes petroleum products.

Wisconsin Statute 144.76(2a) states: "A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall notify the Department immediately of any discharge not exempted under sub.(9)"

Wisconsin Statute 144.76(3) states: "A person who possesses or controls a hazardous substance which is discharged or who causes the discharge of a hazardous substance shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands, or waters of this state."

Because you possess or control a hazardous substance which has been released to the environment, the Department identifies you as the party responsible for taking the actions necessary to restore the environment. You are required to:

1. Conduct an investigation to determine the extent of soil and groundwater contamination.

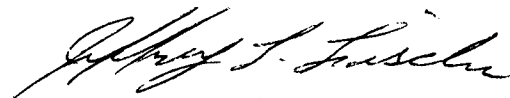
2. Remediate all environmental impacts caused by this situation.

Final documentation of the investigation and cleanup should be prepared according to the guidance enclosed and sent to this office on completion of the project. Remedial actions must adequately cleanup contaminated soil and/or groundwater to current WDNR guidelines and/or standards. All product, soil, wastewater, and sludge must be disposed of in compliance with all applicable federal, state and local laws and regulations. Because the Department is experiencing a backlog of leaking underground storage tank cases of emergency status and your case is not currently ranked as an emergency, your submittals will be reviewed as time permits. Investigation and cleanup should not, however, be delayed pending WDNR review of your case.

You are encouraged to contact the Department of Industry, Labor, and Human Relations (DILHR), the state agency that administers the Petroleum Environmental Cleanup Fund (PECFA). This fund may reimburse you for eligible costs associated with the remedial investigation and clean up. DILHR should be contacted at (608) 267-4545 to obtain current information regarding the PECFA program.

Your cooperation in this matter will be appreciated. Please be aware that your ability to use PECFA funds is dependent on your cooperation in adequately addressing this problem. If you have any questions, please contact your WDNR Project Manager.

Sincerely



Jeffrey L. Fischer
Hydrogeologist, Environmental Response Section

c: SED Case File

Enclosures: Petroleum Tank Release Remedial Investigation Report
Application to Treat or Dispose of Petroleum Contaminated Soil

TELEPHONE LOG

SITE NAME/ID#: Serigraph Corporation

DATE/TIME: 8/15/90 2:15 PM

CONTACT: Wendell Hojner

TELEPHONE NUMBER: (608) 275-3297

COMPANY / AGENCY: Southern District - WDNR

SUMMARY:

Miles Mickelson, DILHR, reported a problem UST at this facility.

Product: heating oil (commercial use)

Facility: Serigraph Corporation
760 Indiana Avenue
West Bend, WI

Contact: Tom Raven

no add'l info given.

#2
2,000 gallon Fuel oil. Pumped in Dec. 1800 gallons
Pulled tank 8-15-90. Holes in south & north end of
TANKS Aqua TECH detected cont. 5 FT soil sample
to lab. moist soil at 16'

p. document

RECEIVED

MAR 29 1993

PECFA SITE REVIEW
MILWAUKEE OFFICE

N. KOCHIS

UID Number: 936 FID Number: 267083850 PMN Number: _____

County: WASHINGTON Initial Contact Date: 8.15.90

Site Name: SERIGRAPH CORPORATION Date RPLetter Sent: 8.17.90

Address: 760 INDIANA AVE Date Closure Approved: 7.18.94

Municipality: WEST BEND, WI Person/Firm Reporting: WENDELL WOJNER,

Legal Descript: SE 1/4 SW 1/4 sec 13 - 1 NR 19 (E) WI WDNR SED, MILLS MICKELSON, DILHR

Lat: _____ Long: _____ Phone Number: (608) 275-3297

| Priority Screening | Scoring Criteria | Funding Source | Effective Date | LUST Trust Eligible |
|--|------------------|--|----------------|--|
| <input type="checkbox"/> 1 = High | 1. _____ | <input checked="" type="checkbox"/> 1 = RP | ____/____/____ | <input type="checkbox"/> 1 = Federal |
| <input checked="" type="checkbox"/> 2 = Medium | 2. _____ | <input type="checkbox"/> 2 = LTF | ____/____/____ | <input type="checkbox"/> 2 = Non-Federal |
| <input type="checkbox"/> 3 = Low | 3. _____ | <input type="checkbox"/> 3 = EF | ____/____/____ | |
| <input type="checkbox"/> 4 = Unknown | 4. _____ | <input type="checkbox"/> 4 = Other | ____/____/____ | |
| | 5. _____ | | | |

Score: _____ Init.: _____ Date: _____

Case Status

| | Start Date | End Date |
|--|----------------|----------------|
| <input type="checkbox"/> F) Free Product Removal | ____/____/____ | ____/____/____ |
| <input type="checkbox"/> E) RP Emergency Response | ____/____/____ | ____/____/____ |
| <input type="checkbox"/> R) LTF Emergency Response | ____/____/____ | ____/____/____ |
| <input type="checkbox"/> L) Long Term Monitoring | ____/____/____ | ____/____/____ |

| Responsible Party | Impacts |
|--------------------------------------|---|
| Company Name: <u>SERIGRAPH CORP.</u> | Enter "P" for potential and "K" for known |
| Contact Person: <u>TOM RAVN</u> | <input type="checkbox"/> Fire/Explosion Threat |
| Address: <u>760 INDIANA AVE</u> | <input type="checkbox"/> (2) Contaminated Private Well(s), _____ # of Wells |
| <u>W. BEND, WI 53095</u> | <input type="checkbox"/> (3) Contaminated Public Well |
| Phone Number: <u>414 335-7343</u> | <input type="checkbox"/> (4) Groundwater Contamination |
| CC's: _____ | <input checked="" type="checkbox"/> (5) Soil Contamination |
| _____ | <input type="checkbox"/> (6) Other: _____ |
| _____ | <input type="checkbox"/> (7) Surface Water Impacts |
| _____ | <input type="checkbox"/> (9) Floating Product |

| Consultant | Substances | # Tanks | Size |
|---|--|----------|-------------|
| Company Name: <u>ADVENT</u> | <input type="checkbox"/> (1) Leaded Gas | _____ | _____ |
| Contact Name: <u>PETER PAVALKO</u> | <input type="checkbox"/> (2) Unleaded Gas | _____ | _____ |
| Address: <u>6100 W. EXECUTIVE DR. SUITE E</u> | <input type="checkbox"/> (3) Diesel | _____ | _____ |
| <u>MERUON WI 53092</u> | <input checked="" type="checkbox"/> (4) Fuel Oil | <u>1</u> | <u>2000</u> |
| Telephone: <u>414 238-1998</u> | <input type="checkbox"/> (5) Unkwn Hydrocrbn | _____ | _____ |
| | <input type="checkbox"/> (8) Other | _____ | _____ |
| | <input type="checkbox"/> (12) Waste Oil | _____ | _____ |

REMARKS:

Fuel oil tank removed 8-15-90

PRIORITY SCREENING WORKSHEET

HIGH FACTORS: (DEFINITION: Any case which presents an actual threat to human health, or has a high potential of causing a threat to human health and property; and/or any case which has caused or has a high potential of causing substantial impacts to the soil, waters and air of the State of Wisconsin.)

EMERGENCY FACTORS:

- Contaminated private or public well >NR 140 enf. std.
- Explosive or toxic vapors in structures
- Threat of fire

HIGH FACTORS:

- Floating product (including sheen)
- GW contamination (>140 enf. std.)
- Impacted surface water -- wetland, trout stream, etc. impacted
- Saturated soil contamination posing a risk to groundwater

MEDIUM FACTORS: (DEFINITION: Any case which does not appear to be an immediate threat to human health or vital natural resources but which shows levels of contamination that may cause substantial environmental impacts if left unaddressed.)

- Moderate soil contamination with potential for impacting groundwater.
- Impacted surface water -- no critical habitat threats.
- Groundwater contamination >NR 140 PAL.

LOW FACTORS: (DEFINITION: Any case where contamination has been documented, but which presents limited potential for immediate threat to human health and vital natural resources.)

- Soil contamination which appears to have a limited potential for impacting groundwater.
- Initial Remedial action has substantially reduced environmental threat.

UNKNOWN FACTORS: (DEFINITION: Any case where some indication of contamination is present, but due to incomplete or inaccurate information the level of threat to human health or the environment can not be assessed at this time.)

- Inadequate information to assign a high, medium, or low ranking.

NUMERICAL LUST SCORING WORKSHEET

1. **GROUNDWATER & SOILS:**

POINTS:

- 20 Municipal well impacted
- 18 >6 private wells impacted
- 16 4 - 6 private wells impacted
- 14 2 - 3 private wells impacted
- 12 1 private well impacted

Points:

- 10 Major soil and/or gw >ES within 1200' of a public well
- 8 Major soil and/or gw >ES within 1200' of one or more private wells
- 6 Groundwater contamination >ES
- 4 Groundwater contamination <ES
- 2 Soil contamination

For purposes of this scoring, private well includes any non-municipal water supply system (e.g. non-community and other than municipal)

2. **EXPLOSIVE OR TOXIC VAPORS:**

POINTS:

| CONFIRMED |
|-----------|
| 20 |
| 16 |
| 12 |

POTENTIAL

| |
|----|
| 10 |
| 8 |
| 6 |

- Explosive levels in a residence or building
- Explosive levels in a sewer or other confined space
- Toxic levels in a residence or building

NOTE: Explosive levels determined to be >20% LEL as per an explosivity meter, toxicity levels are based on OSHA permissible exposure limits (PEL's)

3. **SURFACE WATER IMPACTS:**

POINTS:

| CONFIRMED |
|-----------|
| 14 |
| 10 |
| 6 |

POTENTIAL

| |
|---|
| 7 |
| 5 |
| 3 |

- Visible sheen or product on sensitive surface water environment (e.g. wetland, trout stream)
- Visible sheen or product on non-sensitive surface water area.
- Exceedance of NR 102, 103 or 104 surface water quality standards.

Request assistance from District Water Resources staff in evaluating surface water impacts.

4. **HYDROGEOLOGIC SETTING:**

Points:

- 12 Permeable stratigraphy (gravel, sand, fractured bedrock or utilities capable of intercepting and directing flow) and groundwater within 25 feet of the ground surface.
- 10 Permeable stratigraphy and groundwater greater than 25 feet below ground surface.
- 8 Moderately permeable stratigraphy (silty sands, silty gravel, clayey sands) and groundwater within 25 feet of ground surface.
- 6 Moderately permeable stratigraphy and groundwater greater than 25 feet below ground surface.
- 4 Low permeability stratigraphy (silt, clayey silt, sand clays) and groundwater within 25 feet of ground surface.
- 2 Low permeability stratigraphy and groundwater greater than 25 feet below ground surface.

TYPE OF PRODUCT:

POINTS:

| FREE PRODUCT |
|--------------|
| 12 |
| 10 |

DISSOLVED PRODUCT

| |
|---|
| 8 |
| 6 |

- Gasoline, mixture of gasoline and other products, other light petroleum products
- Diesel fuel oil

936 + 1408

REV. 10/89

DEPARTMENT OF NATURAL RESOURCES
LEAKING UNDERGROUND STORAGE TANK

COMPUTER TRACKING
FORM 4400

PHN#: _____ FID#: 267083850

PROJECT MGR: FISCHER J. KOCHIS

SUPPORT PERSON: _____

DISTRICT: SED COUNTY: Washington HNDI: _____

SITE NAME: serigraph Corporation

ADDRESS: 760 Indiana Ave.
West Bend, WI 53095 TM CITY VIL

LEGAL DESC: 1/4 1/4 SEC T R E/W

DATE OF INITIAL CONTACT: 8/15/90 (mo day yr)

DATE OF RP LETTER: 08/17/90 (mo day yr)

DATE SITE CLOSURE APPROVED: ___/___/___ (mo day yr)

LUST TRUST ELIGIBLE: (X)

1 = FEDERAL

2 = NON-FEDERAL

STATUS: (X)

1 = STATE LEAD

2 = RP LEAD

PRIORITY SCREENING: (X)

1 = HIGH SCORE: _____

2 = MEDIUM

3 = LOW

4 = UNKNOWN

(see worksheet on back)

FUNDING SOURCE: (X)

1 = RESPONSIBLE PARTY

2 = LUST TRUST FUND

3 = ENVIRONMENTAL RESPONSE FUND

4 = SUPER FUND

5 = NONE

6 = OTHER _____

| (X AS APPROPRIATE) | DATE INITIATED (MO DAY YR) | DATE COMPLETED (MO DAY YR) | COMMENTS: |
|---|----------------------------|----------------------------|--------------------|
| <input type="checkbox"/> NO ACTION TAKEN | ___/___/___ | ___/___/___ | _____ |
| <input type="checkbox"/> EMERGENCY | ___/___/___ | ___/___/___ | _____ |
| <input type="checkbox"/> EMERGENCY RESPONSE | ___/___/___ | ___/___/___ | _____ |
| <input type="checkbox"/> FIELD INVESTIGATION | ___/___/___ | ___/___/___ | _____ |
| <input checked="" type="checkbox"/> REMEDIAL ACTION | <u>8/15/90</u> | ___/___/___ | <u>Pulled TANK</u> |
| <input type="checkbox"/> LONG TERM MONITORING | ___/___/___ | ___/___/___ | _____ |

FIRM OR PERSON RESPONSIBLE: serigraph INC

CONTACT: Tom RAVEN

ADDRESS: 760 Indiana Ave
West Bend Wis. 53095

PHONE: 414/334-9427
(list additional on separate list & attach)

CONSULTANT: ADVA Teck

CONTACT: Vance Jackson/Pete

ADDRESS: _____

PHONE: 414/784-5746

AMOUNT COMMITTED: \$ _____ AMOUNT SPENT: \$ _____
(list additional on separate list & attach)

PECFA REVIEW REQUESTED: (X) YES NO

petroleum environ cleanup fund that get from DIER

DATE PECFA REQUEST RECEIVED: (mo day yr) ___/___/___

KNOWN IMPACTS: (X) POTENTIAL IMPACTS: (X) SUBSTANCES: (X) QUANTITY DISCHARGED: (gals)

FIRE/EXPLOSION THREAT _____

CONTAMINATED PRIVATE WELL _____

CONTAMINATED PUBLIC WELL _____

GROUNDWATER CONTAMINATION _____

SOIL CONTAMINATION XX

OTHER: _____

LEADED GAS _____

UNLEADED GAS _____

DIESEL _____

FUEL OIL 2,000 GALLONS

UNKNOWN HYDROCARBONS _____

OTHER _____

- ***ENFORCEMENT ACTION TAKEN***
- 01=INF. CONTACT, RESP INITIATED
 - 06=INSPECTION LETTER
 - 14=NOTICE OF VIOLATION
 - 23=REFERRAL TO DOJ
 - 02=RP LETTER, RESP INITIATED
 - 07=RESPONSE RECEIVED
 - 18=ADMIN. ORDER FINAL
 - 25=REFERRAL TO EPA
 - 03=NTC OF NON COMPLIANCE
 - 11=CLOSE OUT
 - 20=ADMIN. ORDER CANCELLED
 - 99=OTHER ACTION: _____

| ACTION (code from above) | DATE (mo/day/yr) | COMMENT: |
|--------------------------|------------------|---|
| <u>07</u> | <u>07/30/91</u> | <u>application to treat contam. soils rec'd</u> |
| <u>07</u> | <u>09/11/91</u> | <u>"Env'tl Assess Rept." rec'd</u> |
| <u>07</u> | <u>11/13/91</u> | <u>Letter approving Monitoring Plan</u> |
| <u>07</u> | <u>12/14/91</u> | <u>Additional Soil Remediation</u> |

(for additional action codes see instructions/list additional on separate list and attach)

OVER ALL CASE COMMENT: Received notification of Problems from miles Mickelson DIER 8-15-91
moisture 16% SANDY SOIL

LUST CASE PRIORITY SCREENING WORKSHEET

HIGH FACTORS: (DEFINITION: Any case which presents an actual threat to human health, or has a high potential of causing a threat to human health and property; and/or any case which has caused or has a high potential of causing substantial impacts to the soil, water, and air of the State of Wisconsin)

- | | |
|---|--|
| HIGH FACTORS: | HIGH OR MEDIUM FACTORS: (write in choice of high or medium) |
| <input type="checkbox"/> Contaminated private or public well >NR140 enf. std. | <input type="checkbox"/> Floating product (medium if no receptors within 1 mile) |
| <input type="checkbox"/> Explosive or toxic vapors in structures | <input type="checkbox"/> Known gw contamination (private or public well <140 enf. std.) |
| <input type="checkbox"/> Threat of fire | <input type="checkbox"/> Impacted surface water--wetland, trout stream, etc. impacted saturated soil contamination |

MEDIUM FACTORS: (DEFINITION: Any case which does not appear to be an immediate threat to human health or vital natural resources but which shows levels of contamination that may cause substantial environmental impacts if left unaddressed.)

- Moderate soil contamination with moderate potential for impacting groundwater.
- Impacted surface water--no critical habitat threats.

LOW FACTORS: (DEFINITION: Any case where contamination has been documented, but which presents limited potential for any immediate threat to human health and vital natural resources.)

- Soil contamination which appears to have a limited potential for impacting groundwater.
- Initial remedial action has substantially reduced environmental threat.

UNKNOWN FACTOR: (DEFINITION: Any case where some indication of contamination is present, but due to incomplete or inaccurate information the level of threat to human health or the environment can not be assessed at this time.)

- Inadequate information to assign a high, medium, or low ranking.

OVERALL RANKING: The screening rank for the site along with the date of ranking. This may be updated when additional information is received. Special circumstances for a particular case may be taken into account in the comment section. The District coordinator may independently set the ranking of a site based upon "special circumstances."

Circle one & date, indicate in priority screening box opposite side HIGH MEDIUM LOW UNKNOWN

COMMENT: _____

NUMERICAL LUST SCORING WORKSHEET (complete for LUST cases ranked HIGH)

GROUNDWATER & SOILS: (circle one)

| POINTS | Documented Petroleum Contamination: | POINTS | |
|--------|-------------------------------------|--------|---|
| 20 | Municipal well | 8 | Soil & gw within 1200' of a public well |
| 18 | >6 private wells | 6 | Soil & gw within 1200' of one or more private wells |
| 16 | 4 - 6 private wells | 4 | GW contamination, no wells within 1200' |
| 14 | 2 - 3 private wells | 2 | Soil contamination |
| 12 | 1 private well | | |

EXPLOSIVE OR TOXIC VAPORS: (circle one)

| POINTS | CONFIRMED | POTENTIAL | |
|--------|-----------|-----------|---|
| 20 | 10 | | Explosive levels in a residence or building |
| 16 | 8 | | Explosive levels in a sewer or structure |
| 12 | 6 | | Toxic levels in a residence or building |

Note: Explosive levels determined to be >20% LEL as per an explosivity meter; toxicity levels are based on OSHA permissible exposure limits (PEL)

HYDROGEOLOGIC SETTING: (circle one)

| POINTS | |
|--------|---|
| 12 | Highly permeable sub-soils (gravel, well sorted sand, fractured bedrock or utilities capable of intercepting and directing flow) <u>and</u> groundwater within 25 feet of the ground surface. |
| 10 | Highly permeable sub-soils <u>and</u> groundwater more than 25 feet below ground surface. |
| 8 | Moderately permeable sub-soils (silty sands, silty gravel, clayey sands) <u>and</u> groundwater within 25 feet of ground surface |
| 6 | Moderately permeable sub-soils <u>and</u> groundwater greater than 25 feet below ground surface. |
| 4 | Low permeability sub-soils (silt, clayey silt, sand clays) <u>and</u> groundwater within 25 feet of ground surface. |
| 2 | Low permeability sub-soils <u>and</u> groundwater greater than 25 feet below ground surface. |

TYPE OF PRODUCT: (circle one)

| POINTS | NOTE: Add 4 points if free product is present. (score in parentheses) |
|--------|---|
| 8 (12) | Gasoline, mixture of gasoline and other products, other light petroleum products. |
| 6 (10) | Diesel, fuel oil |
| 2 (6) | Bunker oil, other heavy oils or crude fractions |