

To: DNR

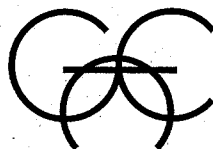
*Phase IV Environmental  
Site Assessment-  
Petroleum Impacted Soil Removal  
and Disposal Monitoring Services*

*Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70*

*Prepared for:  
Wisconsin Dept. of Transportation  
Bureau of Environment  
Madison, Wisconsin*

*August 29, 1997*

*Giles Project No. 1E-9703039*



**GILES**  
ENGINEERING ASSOCIATES, INC.

TABLE OF CONTENTS

PHASE IV ENVIRONMENTAL SITE ASSESSMENT  
PETROLEUM-IMPACTED SOIL REMOVAL  
AND DISPOSAL MONITORING SERVICES

THOMAS SERVICE STATION PROPERTY  
STH 77, STA. 329+10 TO 330+70  
CITY OF MONTREAL, IRON COUNTY, WISCONSIN  
WISDOT PROJECT NO. 9250-09-70  
GILES PROJECT NO. 1E-9703039

Section No.	Description	Page
---	COVER LETTER .....	I
1.0	EXECUTIVE SUMMARY .....	1
	1.1 Findings and Conclusions .....	1
	1.2 Recommendations .....	1
2.0	SITE INVESTIGATION .....	2
	2.1 Site Background .....	2
	2.2 Purpose and Scope of Work .....	4
	2.3 Regulatory Agency Record Review Update .....	4
	2.4 Site History .....	4
	2.5 Site Visit/Field Procedures .....	5
	2.6 Site Maps .....	6
	2.7 Geology .....	7
	2.7.1 Subsurface Conditions .....	7
	2.7.2 Area Geology and Hydrogeology .....	7
	2.8 Soil Collection and Analytical Procedures .....	7
	2.9 Results of Soil Analyses .....	8
	2.9.1 Volatile Vapor Scan Results .....	8
	2.9.2 Results of Soil Chemical Analyses .....	9
3.0	SUMMARY .....	9
4.0	RECOMMENDATIONS .....	10
5.0	SUBMITTAL CERTIFICATION .....	10

TABLE OF CONTENTS (Continued)  
Project No. 1E-9703039

6.0

APPENDICES

6.1	Appendix 1	Map 3	Former Site Feature Plan (from the <i>Phase II½ ESA</i> report prepared by Enviroscience, dated September 22, 1995)
		Map 4	Groundwater Elevations and Flow Direction (from the <i>Phase II½ ESA</i> report prepared by Enviroscience, dated September 22, 1995)
		Map 5	Test Boring/Monitoring Well and Cross Section Locations, and Lateral Extent of Soil Contamination (from the <i>Phase II½ ESA</i> report prepared by Enviroscience, dated September 22, 1995)
		Map 6	A-A' Cross Section with Analytical Results and Vertical Extent of Soil Contamination (from the <i>Phase II½ ESA</i> report prepared by Enviroscience, dated September 22, 1995)
		Map 7	B-B' Cross Section with Analytical Results and Vertical Extent of Soil Contamination (from the <i>Phase II½ ESA</i> report prepared by Enviroscience, dated September 22, 1995)
6.2	Appendix 2		Phase IV Scope of Services (1)
6.3	Appendix 3		Site Photographs (4)
6.4	Appendix 4		PID Meter Calibration Documentation (2)
6.5	Appendix 5		Standard Procedures (1)
6.6	Appendix 6		Chain-of-Custody (1) and Laboratory Reports (8)
6.7	Appendix 7		Standard Soil Chemical Analysis Procedures (1)
6.8	Appendix 8		General Comments (1)

Maps

Map 1	Generalized Site Location .....	6a
Map 2	Extent of Soil Excavation and Sample Locations with Analytical Results .....	6b

Tables

Table 1	<i>Giles</i> Soil Sampling Field Log - Results of VOC Vapor Scan of Soil Samples .....	8a
Table 2	Results of Chemical Analyses-Soil Samples .....	9a



**GILES**  
ENGINEERING ASSOCIATES, INC.

GEOTECHNICAL, ENVIRONMENTAL & CONSTRUCTION MATERIALS CONSULTANTS

- Dallas, TX
- Los Angeles, CA
- Madison, WI
- Milwaukee, WI
- Seattle, WA
- Washington, D.C.

August 29, 1997

WISDOT  
Division of Transportation Infrastructure Development (DTID)  
Bureau of Environment, Room 451  
4802 Sheboygan Avenue  
P.O. Box 7965  
Madison, WI 53707-7965

Attention: Mr. Bob Pearson

Subject: Phase IV Environmental Site Assessment  
Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Giles Project No. 1E-9703039


Dear Mr. Pearson:

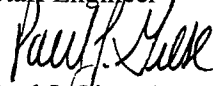
In accordance with your request and the subsequent Giles Engineering Associates, Inc. (*Giles*) Work Order, a *Phase IV Environmental Site Assessment (ESA)* - Petroleum Impacted Soil Removal and Disposal Monitoring Services has been performed for the above referenced property ( herein referenced as the subject property). An overview of the *Phase IV ESA* performed, and the corresponding conclusions and recommendations are provided within the Executive Summary provided as Section 1.0.

We appreciate the opportunity to be of service on this project. If there are any questions regarding the information contained herein, or if we can be of any additional service, please feel free to contact the undersigned at your convenience.

Very truly yours,

GILES ENGINEERING ASSOCIATES, INC.

  
Charley C. Wang, E.I.T.  
Staff Engineer

  
Paul J. Giese, P.E.  
Environmental Division Manager

Distribution: WISDOT  
Attn: Mr. Bob Pearson (2)  
WISDOT-District 7  
Attn: Mr. Marvin Laspa (3)  
WDNR  
Attn: Mr. Scott Watson (1)

1e970339.ltr/djr

PHASE IV ENVIRONMENTAL SITE ASSESSMENT  
PETROLEUM IMPACTED SOIL REMOVAL AND  
DISPOSAL MONITORING SERVICES

THOMAS SERVICE STATION PROPERTY  
STH 77, STA. 329+10 TO 330+70  
CITY OF MONTREAL, IRON COUNTY, WISCONSIN  
WISDOT PROJECT NO. 9250-09-70  
GILES PROJECT NO. 1E-9703039

**1.0 EXECUTIVE SUMMARY**

1.1 Findings and Conclusions

- 1) Approximately 168 cubic yards (252 tons) of soils were removed from the existing STH 77 right-of-way adjacent to the former Thomas service station property in association with the STH 77 roadway construction activities. The potentially petroleum-impacted soils were removed between approximately WISDOT Station Nos. 329+10 and 330+70 on July 8-9, 1997 by Lakeland Enterprise, Inc. The excavated soils were transported to another section of the same road reconstruction for use as backfill material.
- 2) Results of chemical analyses performed on soil samples collected from the resulting roadway excavation during the soil excavation activities between approximately WISDOT Station Nos. 329+10 and 330+70 indicate that the DRO concentration (260 milligrams per kilogram (mg/kg)) in Soil Sample No. S-2 at a depth of approximately 5.0 feet exceeds the WDNR current cleanup level guidelines. However, concentrations of GRO and PVOC in Soil Sample No. S-2 and concentrations of DRO, GRO, and PVOC in the other submitted soil samples are either below the WDNR guidelines, below detection limits, or there are no WDNR standards for comparison.

1.2 Recommendations

- 1) Due to DRO concentrations detected in Soil Sample No. S-2 which exceeds the current WDNR soil cleanup guidelines and based upon results from the previous *Phase II* and *Phase II½ Environmental Site Assessments* which indicate that the soils in the area of the subject property are contaminated with DRO above current WDNR soil cleanup guidelines, it is recommended that a copy of this report be provided to the responsible party and the progress of the remediation activities associated with the adjacent former Thomas Service Station property be monitored to determine the impact on WISDOT STH 77 right-of-way.

- 2) It is recommended that if future construction activities are initiated in the area where petroleum-impacted soils remain, that a contingency plan be developed to properly handle and treat petroleum-impacted soils that may be encountered during construction activities.
- 3) A copy of this report is being provided to the WDNR Northwest District LUST Coordinator.

## 2.0 SITE INVESTIGATION

### 2.1 Site Background

Enviroscience completed a *Phase II ESA* (Project No. 94-059.11, dated July 12, 1994) within the existing State Trunk Highway (STH) 77 right-of-way immediately adjacent to the former Thomas service station property. Two test borings were performed for the *Phase II ESA*. One and two soil samples were collected from Test Boring No. SB-5 and SB-6, respectively, and submitted for DRO and GRO analysis. The analytical results showed that the soil sample collected from Test Boring No. SB-5 had a DRO concentration which exceeded the Wisconsin Department of Natural Resources (WDNR) cleanup guidelines in effect at that time. The DRO concentrations in the two soil samples collected from Test Boring No. SB-6 and the GRO concentrations from all three soil samples were below the WDNR guidelines in effect at that time or were below instrument detection limits. In addition, one groundwater sample collected from a temporary groundwater monitoring well (installed at SB-6) had no measurable concentration of petroleum volatile organic compounds (PVOC). Due to the results of the *Phase II ESA* and considering the former underground storage tank (UST) system and pump islands in the area of the two performed test borings, Enviroscience recommended additional investigation of soil contamination in the anticipated construction zone (surface to five feet) within the existing STH 77 right-of-way to further define the extent of contaminated soils and groundwater within the existing STH 77 right-of-way.

At the request of the WISDOT, Enviroscience completed the recommended *Phase II½ ESA* (dated September 22, 1995) within the existing STH 77 right-of-way, adjacent to the former Thomas service station property. Five test borings were performed within the existing STH 77 right-of-way during the *Phase II½ ESA*. Ten soil samples (two from each test boring) were obtained for laboratory analysis. Each test boring had one soil sample for DRO analysis only and one for DRO and PVOCs. The two soil samples collected from SB-1A at depths of 2.5 to 4.5 feet and 5.0 to 7.0 feet were impacted with DRO contaminants at concentrations that exceeded the WDNR guidelines in effect at that time. One soil sample from SB-3A indicated a DRO concentration which also

exceeded the WDNR guideline in affect at that time. No other analyzed parameters were detected. Groundwater was encountered at 4.5 to 10 feet below grade in the five test borings. Three test borings were converted to groundwater monitoring wells. Two rounds of groundwater sampling were performed at these three monitoring wells. The first round of groundwater samples were analyzed for DRO, VOCs and polynuclear aromatic hydrocarbons (PAHs). The second round of groundwater samples were submitted for DRO and PVOC analysis. Concentrations of the analyzed parameters were not measured in the two rounds of groundwater samples.

Based upon the results of the *Phase II and II½ ESAs*, Enviroscience recommended that "if excavation occurs within STA. 329+10 to 330+70 from the WISDOT right-of-way northwest approximately 25 feet toward the centerline and to a depth of 2.5 to 7.0 feet, Wisconsin Department of Natural Resources (WDNR) guidelines pertaining to the proper removal and treatment or disposal of contaminated soil will need to be followed." Enviroscience also recommended that a general permit under the Wisconsin Pollutant Discharge Elimination System (WPDES) for the discharge of water in connection with dewatering operations be applied with the WDNR Northwest District office. In addition, Enviroscience concluded that groundwater was not impacted in the vicinity of the WISDOT right-of-way adjacent to the former Thomas service station property, and therefore recommended no action in respect to groundwater within the WISDOT right-of-way. Enviroscience concluded that there is a potential for encountering approximately 237 cubic yards (356 tons) of petroleum-impacted soil during roadway construction activities in the areas of Test Boring No. SB-3A and between Test Boring Nos. SB-5 and SB-1A (approximately between WISDOT Station Nos. 329+10 and 330+70) within the planned 6 foot excavation depth for the storm sewer.

On September 6, 1996, Enviroscience prepared a *Phase IV Site Remediation Report* for the subject property. That report summarized the information available and gave recommendations regarding the soil contamination at the subject property. The information summarized in the report indicated that petroleum impacted soils were encountered from a depth of greater than 3 feet to 7 feet from Station 329+10 to 330+70 during environmental assessments. This will place the storm sewer excavation in a zone where impacted soils exist. It was estimated that approximately 237 cubic yards of impacted soil might need to be removed as part of the STH 77 reconstruction. Additionally, as part of the storm sewer installation, dewatering activities may be required, due to the presence of a shallow groundwater table. The groundwater sampling results indicated no impacts to groundwater in the vicinity of the subject property. Enviroscience recommended that petroleum contaminated soils removed as part of storm sewer trenching activities be transported and stockpiled until asphalt operations began. At that time, the impacted soils stockpiled would be transported to the asphalt plant for asphalt incorporation or transported to an approved asphalt plant for asphalt incorporation

or treatment. Additionally, Enviroscience recommended that the water generated as part of the dewatering operations be discharged to the City of Montreal Wastewater Treatment Plant.

Enviroscience prepared the following maps and figures in association with the previous *Phase II* and *Phase II½ ESAs*, which are included in Section 6.1 (Appendix 1):

- Map 3-Former Site Feature Plan (dated September 22, 1995);
- Map 4-Groundwater Elevations and Flow Direction (dated September 22, 1995)
- Map 5-Test Boring/Monitoring Well and Cross Section Locations, and Lateral Extent of Soil Contamination (dated September 22, 1995);
- Map 6-A-A' Cross Section with Analytical Results and Vertical Extent of Soil Contamination (dated September 22, 1995); and
- Map 7-B-B' Cross Section with Analytical Results and Vertical Extent of Soil Contamination (dated September, 1995).

## 2.2 Purpose and Scope of Work

The *Phase IV Environmental Site Assessment* conducted by our firm consisted of monitoring the removal and disposal of petroleum-impacted soils from the existing STH 77 right-of-way (ROW) between approximately WISDOT Station Nos. 329+10 to 330+70 adjacent to the former Thomas service station, documenting the extent of removal, collecting soil samples from excavated soils and the soils remaining in-place, and performing chemical analysis on select soil samples.

A summary of the complete scope of services included for completion of this *Phase IV ESA* is included in Section 6.2 (Appendix 2).

## 2.3 Regulatory Agency Record Review

A comprehensive discussion of the regulatory agency record review previously conducted for the subject property is included in the previously submitted *Phase II and II½ ESA* reports and the *Phase IV Site Remediation Report*, prepared by Enviroscience and dated July 12, 1994; September 22, 1995; and September 6, 1996, respectively.

## 2.4 Site History

The history of the former Thomas service station property was discussed in detail in the previously submitted *Phase II Environmental Site Assessment* report (dated July 12, 1994).



Additional information regarding the history of the former Thomas service station property was also included in the previously completed *Phase II½ Environmental Site Assessment* report (dated September 22, 1995) and the *Phase IV Site Remediation Report* (dated September 6, 1996).

## 2.5 Site Visit/Field Procedures

The former Thomas service station property is located approximately one-fifth of one mile north of the Montreal City Hall on STH 77, in the City of Montreal, Iron County, Wisconsin. The subject property is situated in the northwest one-quarter of the southwest one-quarter of U.S. Public Land Survey Section 27, Township 47 North, Range 2 East. The location of the former Thomas service station property is indicated on Map 1 enclosed in Section 2.6. The features of the former Thomas service station property, as well as the adjacent property usages, are described in the previously completed *Phase II½ Environmental Site Assessment* report (dated September 22, 1995).

Lakeland Enterprise, Inc. provided on-site soil excavation and removal services on July 8-9, 1997. Approximately 168 cubic yards (252 tons) of soils were removed from the STH 77 roadway construction zone (storm sewer installation) between WISDOT Station 329+10 to 330+100 (adjacent to the former Thomas service station property) and transported to another section of the same road reconstruction for use as backfill material. We provided soil excavation and removal monitoring services. The storm sewer installation consisted of removal of soils to a depth of approximately 6 feet, the placement of concrete sewer pipes, and backfill with gravel. The soil excavation monitoring services were performed to monitor the removal of excavated soils located within the STH 77 right-of-way during storm sewer installation activities, collect soil samples from the excavated soils prior to removal, collect soil samples from the resulting excavation walls/bottom to document the conditions of the remaining soils, subject the collected soil samples to a head space volatile organic vapor scan, and submit selected soil samples for chemical analysis for GRO, DRO, and petroleum volatile organic compounds (PVOCs) to Giles Environmental Laboratory (Waukesha, Wisconsin). The scope of services were performed in accordance with Wisconsin Department of Natural Resources (WDNR) guidelines.

Visual and relative odor observations as well as a head space vapor scan were utilized to evaluate the soils requiring removal from the existing STH 77 ROW during the storm sewer installation activities. A soil sample was collected from approximately every 15 cubic yards (approximately one tri-axle dump truck) of petroleum-impacted soil excavated for VOC vapor scanning as required by the WDNR. The petroleum-impacted soil removal activities from the existing STH 77 ROW were terminated at the planned storm sewer installation grade of approximately 6 feet below the ground surface.

A diagram illustrating the location and extent of soil removal activities associated with the STH 77 storm sewer installation is shown on Map 2 enclosed in Section 2.6. Photographs taken during the soil removal activities are enclosed in Section 6.3 (Appendix 3).

Approximately 168 cubic yards (252 tons) of soils were excavated and removed from the existing STH 77 ROW between approximately Stations Nos. 329+10 and 330+100. The original estimate of petroleum-impacted soils to be removed during this project was approximately 237 cubic yards (356 tons). The excavated soils were transported by Lakeland Enterprises, Inc. to a disposal location selected by Lakeland Enterprise, Inc. and used as roadway fill materials within the STH 77 roadway reconstruction limits. Because the field PID screening did not detect any VOCs in the collected soil samples, no stockpiling and treatment was performed for the excavated soils. Consequently, there was no need to file the WDNR Application to Treat or Dispose of Petroleum Contaminated Soils (Form No. 4400-121).

During the storm sewer installation activities associated with the STH 77 roadway reconstruction, a total of fifteen soil samples were collected, including six samples of the soils removed from the storm sewer excavation which were collected from the bucket of the excavation equipment and nine from the sidewall or bottom of the resulting excavations. The depth of storm sewer was approximately 6 feet below grade. The width and length of the storm sewer excavation associated with this study were approximately 10 and 200 feet, respectively. The locations of the soil samples collected from the STH 77 roadway reconstruction excavation are indicated on the previously referenced Map 2 included in Section 2.6.

## 2.6 Site Maps

The generalized location of the former Thomas service station property is shown on the following Map 1. The soil sample locations from within the existing STH 77 ROW are illustrated on Map 2. Map 3-Former Site Feature Plan; Map 4-Groundwater Elevations and Flow Direction; Map 5-Test Boring/Monitoring Well and Cross Section Locations, and Lateral Extent of Soil Contamination; Map 6-A-A' Cross Section with Analytical Results and Vertical Extent of Soil Contamination; and Map 7-B-B' Cross Section with Analytical Results and Vertical Extent of Soil Contamination from the previous Phase II and Phase II½ ESAs performed by Enviroscience associated with this project, are included in the previously referenced Section 6.1 (Appendix 1).

TABLE 2  
RESULTS OF CHEMICAL ANALYSES-SOIL SAMPLES

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Giles Project No. 1E-9703039  
Date Collected: July 8-9, 1997

Sample Number <sup>1</sup>	Sample Depth (Feet)	PID Reading HNU Units	DRO <sup>2</sup>	GRO <sup>2</sup>	Detected Petroleum Volatile Organic Compounds <sup>3</sup>					
					Benzene	Ethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Toluene	Total Xylenes
S-1	5	BDL	20	0.39	<16	<18	<23	<16	<15	<51
S-2	5	BDL	<b>260</b>	15	<16	<18	56	31	53	<51
S-6	5	BDL	<2.1	1.1	<16	<18	<23	<16	<15	<51
S-8	5	BDL	<2.1	0.72	<16	<18	<23	<16	<15	<51
S-10	6	BDL	<2.1	<0.34	<16	<18	<23	<16	<15	<51
WDNR Current Cleanup Guideline <sup>4</sup>	N/A	N/A	100	100	5.5	2,900	--	--	1,500	4,100

**NOTES:**

<sup>1</sup>Soil sample locations shown on Map 2.

<sup>2</sup>Chemical analyses results expressed in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm).

<sup>3</sup>Chemical analyses results expressed in micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ), equivalent to parts per billion (ppb).

<sup>4</sup>Wisconsin Administrative Code NR 720 Standard for soils with a hydraulic conductivity of  $1 \times 10^{-6}$  cm/s or greater.

GRO: Gasoline range organics

DRO: Diesel range organics

PID: Photoionization detector

BDL: Below detection limit

--: No published soil standard.


Results indicated in **bold** exceed current WDNR 720 soil cleanup guideline.

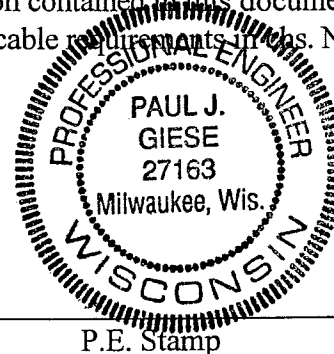
#### 4.0 RECOMMENDATIONS

- 1) Due to DRO concentration detected in Soil Sample No. S-2 which exceeds the current WDNR soil cleanup guidelines and based upon results from the previous *Phase II* and *Phase II½ Environmental Site Assessments* which indicate that the soils in the area of the subject property are contaminated with DRO above current WDNR soil clean up guidelines, it is recommended that a copy of this report be provided to the responsible party to assist in their evaluation and remediation efforts and that the progress of the remediation activities associated with the adjacent former Thomas Service Station property be monitored to evaluate the impact on the WISDOT STH 77 ROW.
- 2) It is recommended that if future construction activities are initiated in the area where petroleum-impacted soils remain, that a contingency plan be developed to properly handle and treat petroleum-impacted soils that may be encountered during construction activities.
- 3) A copy of this report is being provided to the WDNR Northwest District LUST Coordinator.

#### 5.0 SUBMITTAL CERTIFICATION

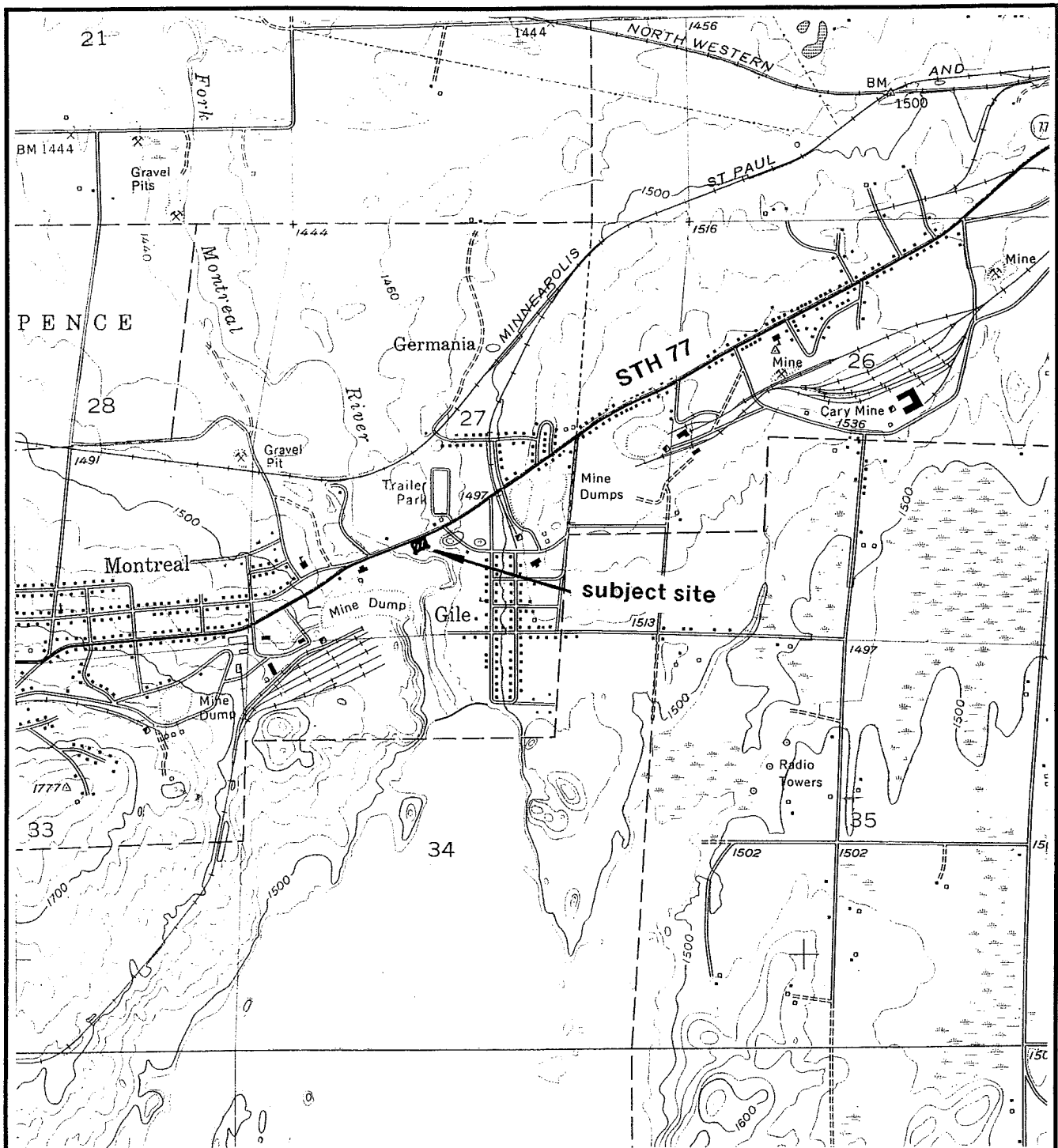
I, Paul J. Giese, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code;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

 Environmental Division Manager #27163  
Signature, Title, and P.E. Number



**SECTION 6.0**

**APPENDICES**



Source: USGS Topographic Map, Ironwood Quadrangle  
1955; Photorevised 1975; Photoinspected 1981

Scale: 1:24,000 (1"=2000')

Contour Interval: 20 Feet

MAP 1  
GENERALIZED SITE LOCATION

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Project No. 1E-9703039



QUADRANGLE LOCATION



**GILES**

ENGINEERING ASSOCIATES, INC.

## 2.7 Geology

### 2.7.1 Subsurface Conditions

The soil conditions encountered during the STH 77 storm sewer installation activities generally consisted of fine to coarse sand and gravel with various amounts of silt and clay. Groundwater was encountered between Station 330+55 to 330+100 during the soil overexcavation activities.

### 2.7.2 Area Geology and Hydrogeology

As documented in the previous *Phase II* (Project No. 94-059.11, dated July 12, 1994) and *Phase II½ Environmental Site Assessments* (dated September 22, 1995) prepared by Enviroscience, Inc., the City of Montreal is in the northern part of Iron County in the Lake Superior Basin. The subsurface geology in this area is composed of Precambrian crystalline rocks (undifferentiated igneous and metamorphic rocks to the south of Montreal and basaltic lava flows to the north). The soils are Quaternary ground moraine (glaciolacustrine unstratified clay, silt, sand, gravel, and cobbles). Bedrock is encountered at an average depth of 10 feet. The topography is deeply dissected lake plane. The groundwater table in the subject property area is approximately 4.5 to 10 feet below grade and the groundwater flows west towards the Montreal River.

## 2.8 Soil Collection and Analytical Procedures

Soil samples were collected during excavation activities from the STH 77 roadway excavation using a properly cleaned hand trowel. The contents of the hand trowel were transferred to laboratory approved sampling containers.

Soil samples collected for volatile organic compound (VOC) vapor scanning with a photoionization detector (PID) were collected in 8 ounce sample jars. The sample jars were filled approximately ½ full, covered with aluminum foil and a lid, agitated and allowed to warm to about room temperature prior to the vapor scans. The VOC vapor readings were taken by piercing the foil layer with the PID probe. The PID meter was properly calibrated before, during and after soil sampling procedures. Documentation of PID calibration is included in Section 6.4 (Appendix 5).

Five select soil samples from the fifteen soil samples collected from the existing STH 77 ROW between approximately WISDOT Station Nos. 329+10 to 330+100 were submitted to Giles Environmental Laboratory, a WDNR accredited analytical laboratory, for chemical analysis for the

presence and concentrations of GRO, DRO, and PVOCs. The number of collected soil samples was determined on the basis of the field vapor scan and to allow for a general evaluation of the soils removed from the storm sewer excavation and that remained in place at the limits of the excavation.

Because field PID scanning did not measure any volatile organic compounds, no excavated soils were stockpiled or treated. And, therefore, no soil samples were collected for waste characterization purposes relative to asphalt incorporation.

Specifics of the soil sampling and VOC vapor scanning standard procedures utilized for completion of this study are included in Section 6.5 (Appendix 5). The sample collection, storage and transportation was performed in general accordance with ASTM and other applicable specifications, and at all times followed standard "Chain-of-Custody" requirements. The Chain-of-Custody forms for the soil analyses performed are included in Section 6.6 (Appendix 6). The standard soil chemical analyses procedures for this specific project are included in Section 6.7 (Appendix 7).

## 2.9 Results of Soil Analyses

### 2.9.1 Volatile Vapor Scan Results

The results of the photoionization detector (PID) volatile organic compound (VOC) vapor scan performed on the fifteen soil samples collected from the bucket of excavation equipment and the STH 77 roadway excavation limits indicated no detectable VOC vapor concentrations in the soil samples collected.

A summary of the soil sampling location depths, time of collection, sample classification and the results of the VOC vapor scan for the soil samples is included on the following Table 1.

Because the field PID screening showed no VOC vapor in the soil samples collected from the bucket of excavation equipment and excavation limits, and visual and relative odor observation indicated no petroleum contamination, excavated soils were not stockpiled for treatment or asphalt incorporation.



TABLE 1

## GILES SOIL SAMPLING FIELD LOG

RESULTS OF VOLATILE ORGANIC COMPOUND (VOC) VAPOR SCAN  
OF SOIL SAMPLES

PROJECT NO. 1E-9703039

INSPECTOR: Charley C. Wang

DATE: July 8-9, 1997

PROJECT NAME AND LOCATION:

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70

SMPL DESC.	REF NO.	Sampling Location	Depth (feet)	Time	Sample Classification	Field HNU <sup>1</sup>
Soil	S-1	Storm sewer excavated soils- bucket	5	4:35 p.m.	fine to coarse Sand with Gravel - Moist	BDL <sup>2</sup>
Soil	S-2	Storm sewer excavated soils- bucket	5	5:05 p.m.	fine to coarse Sand with Gravel - Moist	BDL <sup>2</sup>
Soil	S-3	storm sewer excavation - bottom	6	5:30 p.m.	fine to coarse Sand with Gravel - Moist	BDL
Soil	S-4	storm sewer excavation - bottom	6	6:10 p.m.	fine to coarse Sand with Gravel - Moist	BDL
Soil	S-5	storm sewer excavation - bottom	6	6:40 p.m.	fine to coarse Sand with Gravel - Moist	BDL
Soil	S-6	Storm sewer excavated soils- bucket	5	7:20 a.m.	fine to coarse Sand with Gravel - Moist	BDL <sup>2</sup>
Soil	S-7	Storm sewer excavated soils- bucket	5	7:40 a.m.	fine to coarse Sand with Gravel - Moist	BDL
Soil	S-8	Storm sewer excavated soils- bucket	5	7:50 a.m.	Sand with Organic Matter - Wet	BDL <sup>2</sup>
Soil	S-9	Storm sewer excavated soils- bucket	5	7:58 a.m.	fine to coarse Sand with Gravel - Moist	BDL
Soil	S-10	storm sewer excavation - south side wall	6	8:15 a.m.	fine to coarse Sand - Moist	BDL <sup>2</sup>
Soil	S-11	storm sewer excavation - north side wall	6	8:25 a.m.	Silty Sand - Moist	BDL

TABLE 1 (Continued)

## GILES SOIL SAMPLING FIELD LOG

SIMPL DESC	REF NO.	Sampling Location	Depth (feet)	Time	Sample Classification	Result HNU
Soil	S-12	storm sewer excavation - south side wall	6	8:40 a.m.	Silty Sand	BDL
Soil	S-13	storm sewer excavation - south side wall	6	8:50 a.m.	Silty Sand	BDL
Soil	S-14	storm sewer excavation - north side wall	5	9:40 a.m.	fine to coarse Sand - Moist	BDL
Soil	S-15	storm sewer excavation - north side wall	5	10:20 a.m.	fine to coarse Sand - Moist	BDL

<sup>1</sup>Results of volatile vapor scan conducted on collected soil samples utilizing a HNU photoionization detector (PID) equipped with an 11.7 eV lamp and calibrated to a benzene standard. Results expressed in HNU-units. BDL - Below Detection Level.

<sup>2</sup>Sample submitted to *Giles* Analytical Laboratory for GRO, DRO, and PVOC analyses.

### 2.9.2 Results of Soil Chemical Analyses

Five select soil samples were submitted for DRO, GRO and PVOC analysis. The results of the chemical analyses indicate that a DRO concentration of 260 mg/kg, GRO concentration of 15 mg/kg, toluene concentration of 53 µg/kg, 1,2,4-trimethylbenzene concentration of 56 µg/kg and 1,3,5-trimethylbenzene concentration of 31 µg/kg were measured in soil Sample No. S-2 collected from the bucket at a depth of 5 feet below grade. Soil sample No. S-2 was taken from storm sewer excavated soils that were used as backfill materials on another section of the same road reconstruction. The DRO concentration in Sample S-2 exceeds the WDNR soil cleanup guidelines (100 mg/kg for soils with a hydraulic conductivity of  $1 \times 10^{-6}$  cm/s or greater). However, the DRO, GRO and PVOC concentrations measured in the remaining submitted soil samples are either below the relevant WDNR guidelines, are below the limit of detection, or there are no guidelines available for comparison. The results of the soil analyses performed in the soil samples are summarized on the following Table 2 and on the previously referenced Map 2. The results of the soil chemical analysis, as provided by Giles Environmental Laboratory are included in the previously referenced Section 6.6 (Appendix 6).

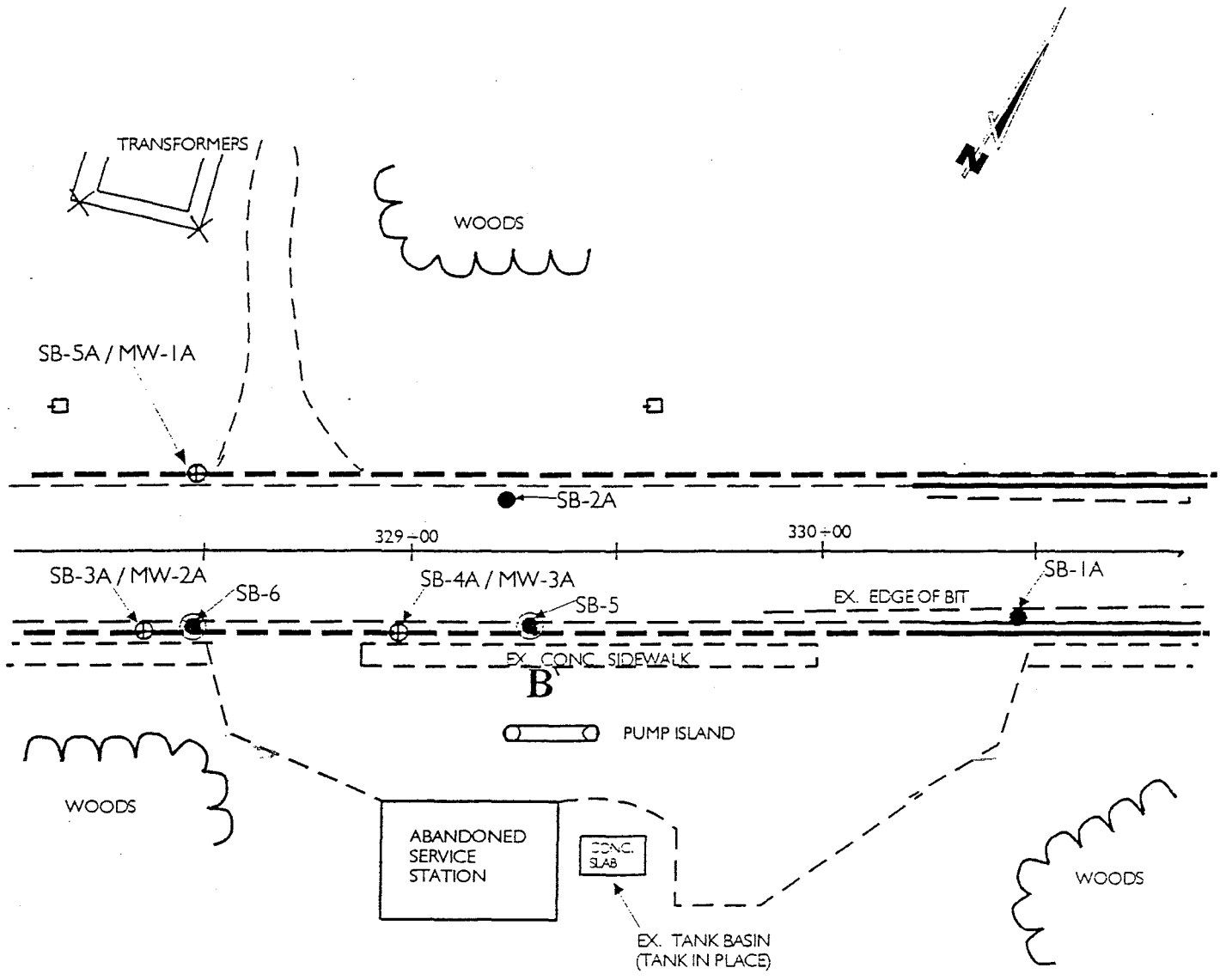
### 3.0 SUMMARY

- 1) Approximately 168 cubic yards (252 tons) of soils were removed from the existing STH 77 right-of-way adjacent to the former Thomas service station in association with the storm sewer installation activities. The petroleum-impacted soils were removed between approximately WISDOT Station Nos. 329+10 and 330+100 on July 8-9, 1997 by Lakeland Enterprise, Inc. The excavated soils were transported to another section of the same road reconstruction for use as roadway backfill material.
- 2) Results of chemical analyses performed on soil samples collected from the resulting roadway excavation during storm sewer installation activities between approximately WISDOT Station Nos. 329+10 and 330+100 indicate that DRO concentration in Soil Sample No. S-2 at a depth of approximately 5 feet exceeds the WDNR current cleanup level guidelines. Soil sample No. S-2 was taken from storm sewers excavated soils that were used as backfill materials on another section of the same road reconstruction. Concentrations of GRO and PVOC for soil sample No. S-2 and concentrations of DRO, GRO and PVOC for all other soil samples are either below the WDNR soil cleanup guidelines, were below the limit of detection, or there are no WDNR guidelines for comparison.

SECTION 6.1

APPENDIX 1

MAPS FROM PREVIOUS ESAs  
PERFORMED BY ENVIROSCIENCE, INC.



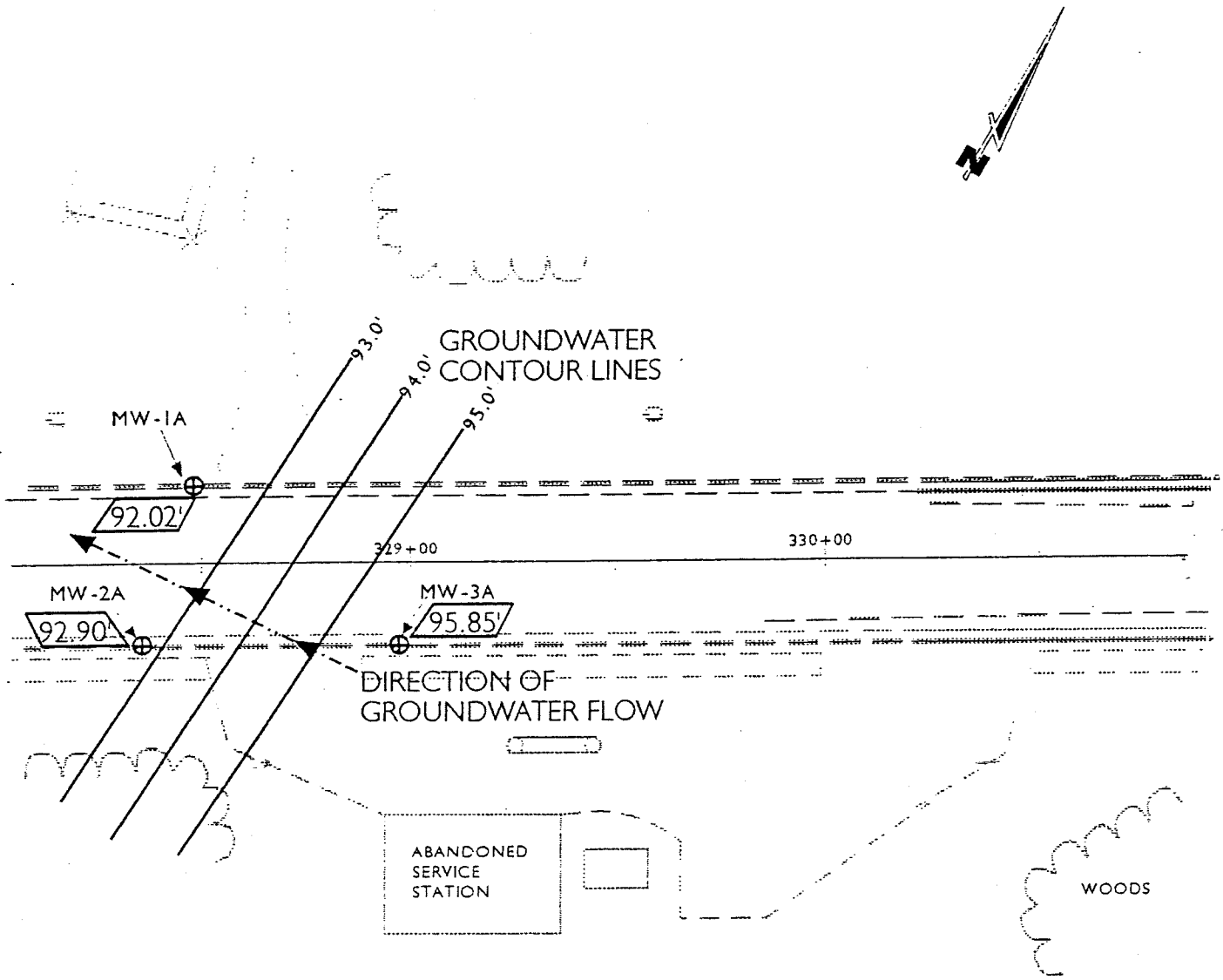
LEGEND	
●	SOIL BORING
⊕	SOIL BORING COVERED TO MONITORING WELL
⊙	SOIL BORING FROM PREVIOUS INVESTIGATION

APPROX. SCALE: 1" = 40'

FIGURE 2.2  
 THOMAS ABANDONED SERVICE STATION  
 MONTREAL, WI  
 SITE MAP

MAP 3  
 FORMER SITE FEATURE PLAN

(from Phase II 1/2 ESA report prepared by  
 Enviroscience, dated September 22, 1995)



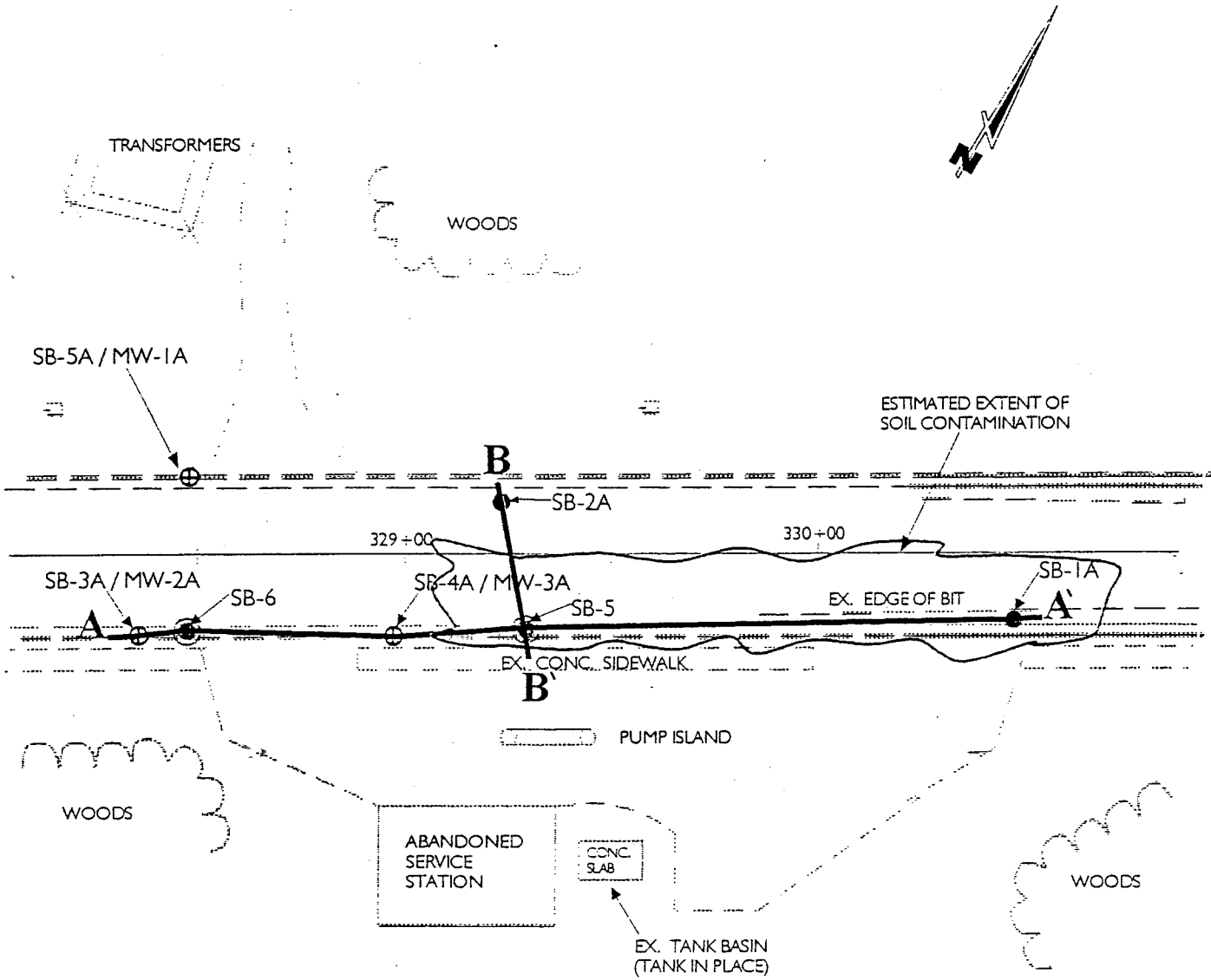
LEGEND	
	MONITORING WELL
	GROUNDWATER ELEVATION IN WELL (6-26-95)

APPROX. SCALE: 1" = 40'

FIGURE 2.3  
 THOMAS ABANDONED SERVICE STATION  
 MONTREAL, WI  
 GROUNDWATER FLOW MAP

MAP 4  
 GROUNDWATER ELEVATIONS AND  
 FLOW DIRECTION

(from Phase II $\frac{1}{2}$  ESA report prepared by  
 Enviroscience, dated September 22, 1995)



LEGEND	
●	SOIL BORING
⊕	SOIL BORING COVERED TO MONITORING WELL
⊙	SOIL BORING FROM PREVIOUS INVESTIGATION

APPROX. SCALE: 1" = 40'

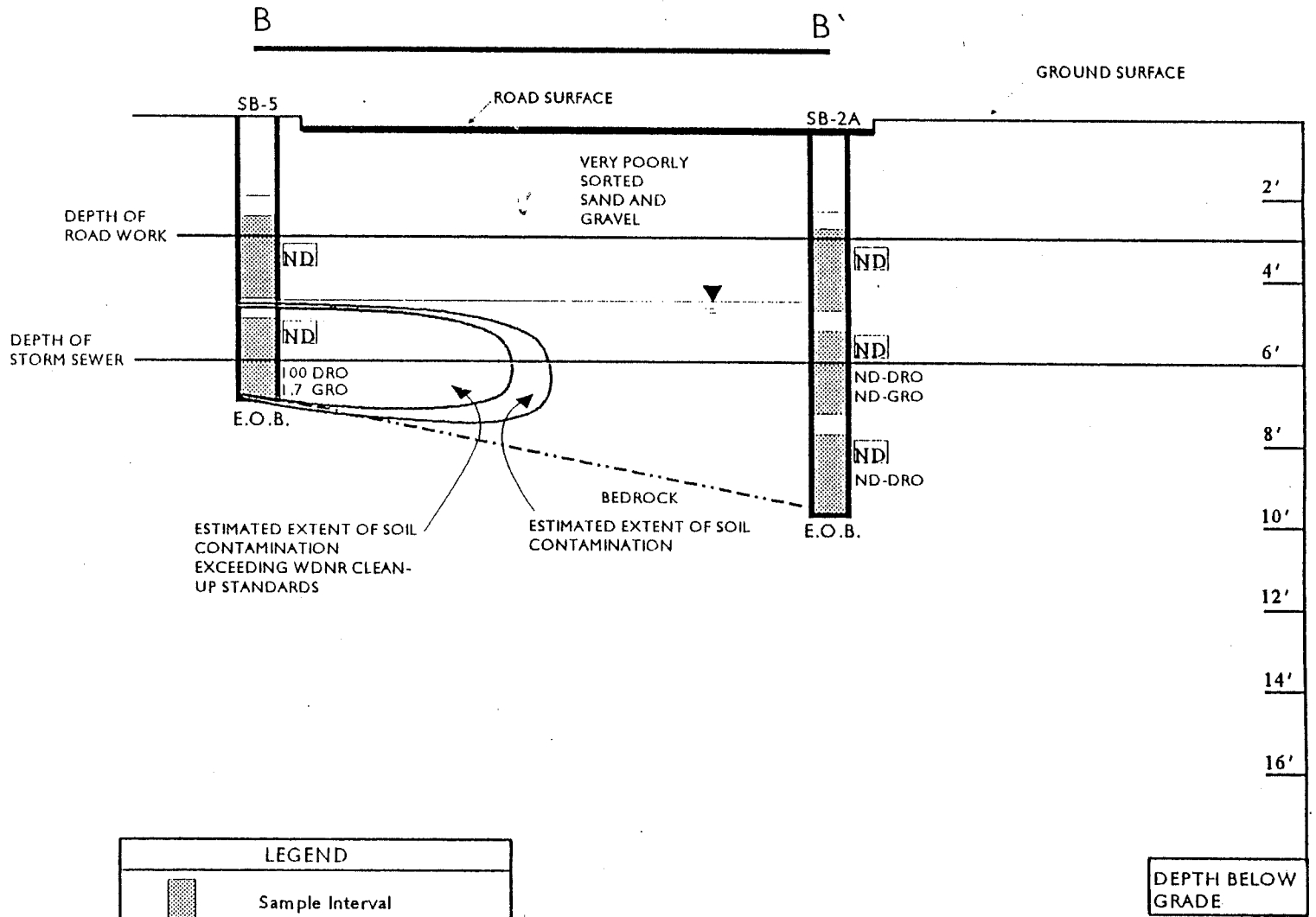
FIGURE 2.4  
 THOMAS ABANDONED SERVICE STATION  
 MONTREAL, WI  
 PLAN VIEW OF CROSS-SECTIONS

MAP 5  
 TEST BORING/MONITORING WELL AND CROSS SECTION LOCATIONS, AND LATERAL EXTENT OF SOIL CONTAMINATION

(from Phase II $\frac{1}{2}$  ESA report prepared by Enviroscience, dated September 22, 1995)







LEGEND	
	Sample Interval
	Water Table (approximate)
ND-DRO	Analytical results (No Detection or ppm)
	PID field screening results in (ppm) or ND (no detection)
E.O.B.	End Of Boring

SCALE	
HORIZ.	1" : 10'
VERT.	1" : 4'

FIGURE 2.6 THOMAS ABANDONED SERVICE STATION  
CROSS-SECTION B-B'

MAP 7  
B-B' CROSS SECTION WITH ANALYTICAL RESULTS  
AND VERTICAL EXTENT OF SOIL CONTAMINATION

(from Phase II $\frac{1}{2}$  ESA report prepared by  
Enviroscience, dated September 22, 1995)

SECTION 6.2

APPENDIX 2

PHASE IV SCOPE OF SERVICES

The scope of services for the *Phase IV Environmental Assessment* included the following:

- 1) Monitoring the removal of the potentially petroleum-impacted soil from the roadway by the excavation contractor (Lakeland Enterprise, Inc.);
- 2) Collecting representative samples of the excavated petroleum-impacted soils (one for every 15± cubic yards as required by the WDNR) for photoionization detector (PID) volatile organic compound (VOC) vapor scanning prior to transport to a disposal location;
- 3) Collecting soil samples from bucket of excavation equipment from the bottom and sidewalls of the resulting roadway excavation during the storm sewer installation activities to document the conditions of excavated and remaining soils at the limits of excavation;
- 4) Subjecting the collected soil samples to a head space volatile organic vapor scan utilizing a PID and submitting select soil samples for chemical analyses to *Giles Environmental Laboratory* for GRO, DRO, and petroleum volatile organic compounds (PVOCs); and
- 5) Summarizing the activities performed in a written report which provides conclusions and recommendations regarding the results of the soil removal activities and the soil analytical testing relative to current Wisconsin Department of Natural Resources (WDNR) guidelines and regulations.

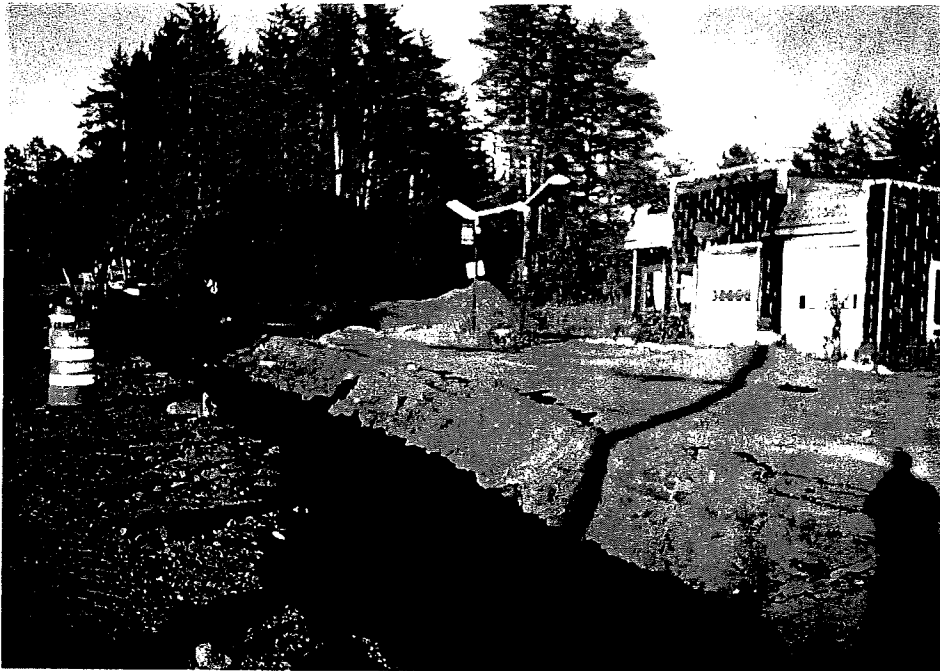
SECTION 6.3

APPENDIX 3

SITE PHOTOGRAPHS



Photograph #1: View of the former Thomas service station (facing southwest).



Photograph #2: View of the former Thomas service station with the installed storm sewer (facing southeast).

PHOTOGRAPHS  
July 9, 1997

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Project No. 1E-9703039



GILES  
ENGINEERING ASSOCIATES, INC.



Photograph #3: A closer view of the former Thomas service station with the pump island (facing southeast).



Photograph #4: View of the excavation and transportation equipment.

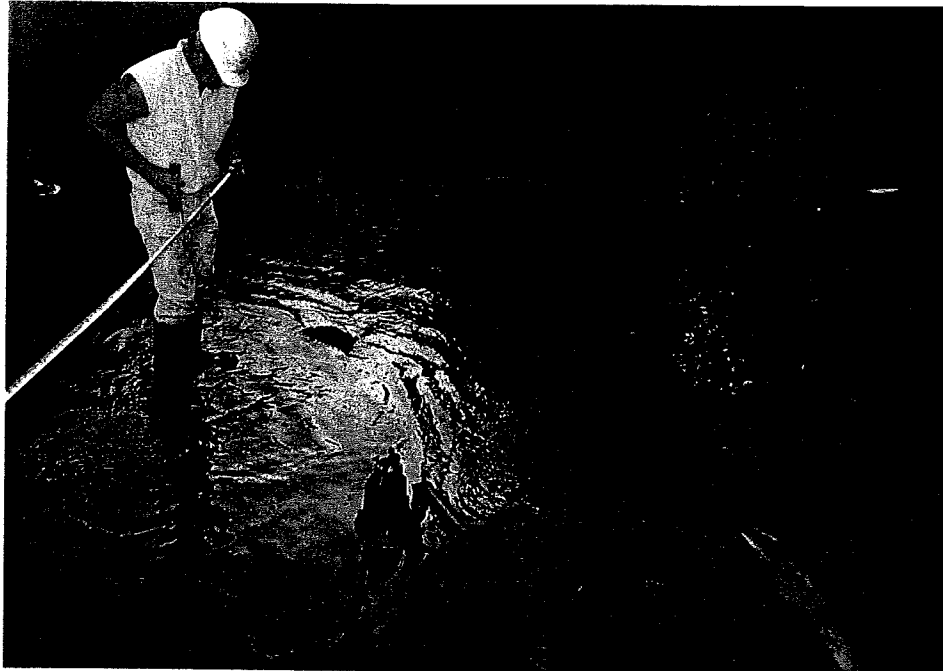
PHOTOGRAPHS  
July 9, 1997

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Project No. 1E-9703039

 **GILES**  
ENGINEERING ASSOCIATES, INC.




Photograph #5: View of storm sewer installation activities (facing northeast).

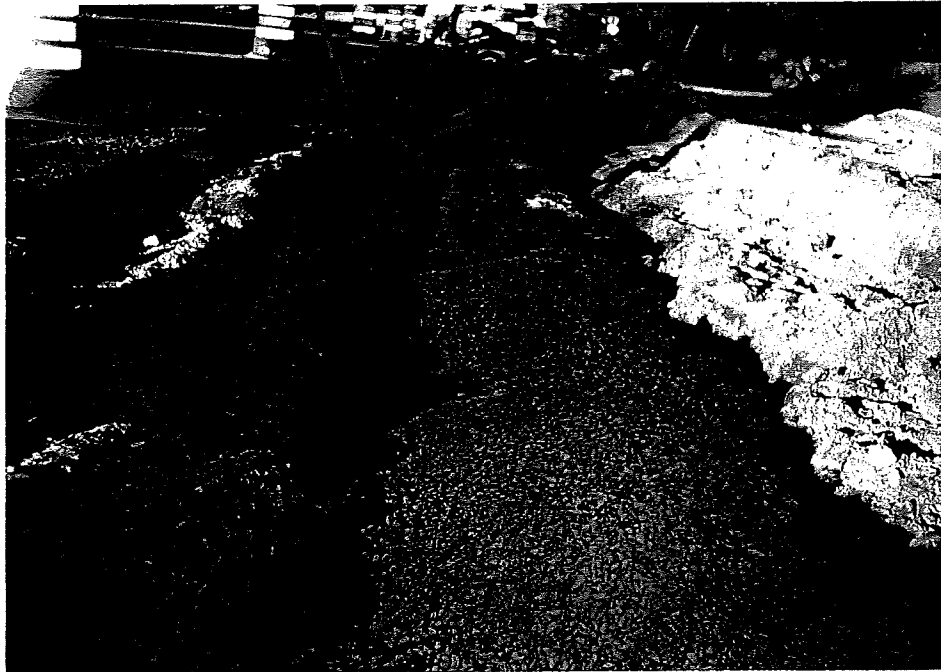


Photograph #6: View of dewatering activities in installing the storm sewer.

PHOTOGRAPHS  
July 9, 1997

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Project No. 1E-9703039

  
GILES ENGINEERING ASSOCIATES, INC.  
GEOTECHNICAL, ENVIRONMENTAL  
AND CONSTRUCTION MATERIALS CONSULTANTS



Photograph #7: Closer view of the installed storm sewer (facing east).



Photograph #8: View of the installed storm sewer (facing southeast).

PHOTOGRAPHS  
July 9, 1997

Thomas Service Station Property  
STH 77, STA. 329+10 to 330+70  
City of Montreal, Iron County, Wisconsin  
WISDOT Project No. 9250-09-70  
Project No. 1E-9703039



GILES  
ENGINEERING ASSOCIATES, INC.



SECTION 6.4

APPENDIX 4

PID METER CALIBRATION

## PID METER CALIBRATION

The Photoionization Detector (PID Model PI-101, 11.7 electron Volt (eV), Serial No. 401173) was calibrated with HNu Span Gas (No. 101-350) Isobutylene standard gas to Benzene equivalents in the *Giles* laboratory and in the field before, during and after soil sampling procedures. The PID meter span dial was placed on the 0 - 200 HNu-unit setting and was set at a span for a PID reading of 72 HNu-units. The photoionization detector calibration documentation is included with this appendix. While in the laboratory, the battery pack of the PID meter was recharged using an HNu converter/charger. The results of the PID field screening are indicated on Table 1 - *Giles* Soil Sampling Field Log of this report.

1e970339.pid/djr

PHOTOIONIZATION DETECTOR CALIBRATION DOCUMENTATION

Facility Name Former Thomas Service Station  
Location STH 77, STA. 329+10 to 330+70  
Montreal, Iron County, Wisconsin  
Project No. 1E-9703039

Photoionization Calibration Record (1)			
Giles Staff: <u>Charley C. Wang</u>			
Weather Conditions: <u>Sunshine, 60's</u>			
Time	Calibration Gas Concentration (2)	Response (HNU® Units)	Span Pot Setting
4:30 pm; July 8, 1997	100 ppm	72 ppm	0.68
7:00 am; July 9, 1997	100 ppm	72 ppm	0.68
11:00 am; July 9, 1997	100 ppm	72 ppm	0.68

- (1) Photoionization Meter Name and Type: HNU Systems, Inc.®  
Model No. PI 101  
Serial No. 401173
- (2) Calibrated with Isobutylene to benzene equivalents.

SECTION 6.5

APPENDIX 5

STANDARD PROCEDURES

## STANDARD PROCEDURES

### Soil Classification and Sampling Procedures

The collected soil samples were placed in new, laboratory approved 60 milliliter (mL) glass sampling jars with Teflon® lined lids, 4 ounce polystyrene plastic jars and 8 ounce glass sampling jars. The select soil samples collected for GRO and PVOC chemical analyses were field weighed, placed in 60 mL glass sampling jars with Teflon® lined lids, methanol preserved in accordance with current WDNR guidelines, sealed, and placed in a controlled environment. The select soil samples collected for DRO chemical analysis were field weighed, placed in 60 mL glass sampling jars with Teflon® lined lids, sealed, and placed in a controlled environment.

The soil samples collected in 8 ounce sampling jars were subjected to a head-space volatile vapor scan using a properly maintained and charged 11.7 electron volt (eV) HNu photoionization detector (PID). The volatile vapor scan technique is a screening method used to evaluate the presence of volatile organic vapor emissions. The head space sample containers were filled ½ to ¾ full, covered with a layer of aluminum foil, a metal lid, and allowed to warm to approximately room temperature prior to the vapor scan. The head space samples were also agitated for 30± seconds prior to the vapor scan. The PID was calibrated in the field before, during, and after the vapor scan.

SECTION 6.6

APPENDIX 6

CHAIN-OF-CUSTODY AND LABORATORY REPORTS

# GILES ENGINEERING ASSOCIATES, INC.

- N8 W22350 Johnson Road Suite A1, Waukesha, WI 53186
- 4875 East La Palma Avenue Suite 607, Anaheim, CA 92807
- 12240 Indian Creek Court Suite 105, Beltsville, MD 20705
- 10031 Monroe Drive Suite 101, Dallas, TX 75229

## CHAIN-OF-CUSTODY

tel: 414-544-0118 fax: 414-549-5868  
 tel: 714-779-0052 fax: 714-779-0068  
 tel: 301-210-1212 fax: 301-210-1215  
 tel: 214-358-5885 fax: 214-358-5884

- closure sample
- confirmation required

Site WIDOT - HWY 77

Address  Hwy 77

Wisconsin

Sample Collector <u>Charley Wang</u>	Project Manager <u>Paul Gieko</u>	Project Number <u>15-9703039</u>
Laboratory Used <u>Giles Engineering Ass</u>	Lab Contact <u>DEM</u>	Lab Job Number <u>92,0055</u>

Sample Description	(Sample Depth)	Sample Matrix (Soil, Water, etc.)	Date Collected	Time Collected	Field Screen	GRO (ml mod)	DRO (ml mod)	TPH (gasoline) 8015	TPH (diesel) 8015	VOC (EPA 8021)	PVOC (EPA 8020)	BTEX (EPA 8020)	Lead	Cadmium	Copper	Silver	Asbestos	TCLP metals	Semi-volatile Org (629/8270)	Purgable Halocarbons	Purgable Aromatics	Number and Type of Containers	Sample Preservative	Due Date	Lab ID	Sample Temperature															
✓ S-1	5'	soil	7/8	7:35	BDL	X	X			X												3C 1F	none	7/27/97	487	ROI															
✓ S-2	5'	"	"	5:05																					488																
✓ S-6	5'	"	"	7:20																					489																
<del>S-7</del>	<del>5'</del>	<del>"</del>	<del>7/9</del>	<del>7:40</del>																						490															
✓ S-8	5'	"	"	7:50																						491															
<del>S-9</del>	<del>5'</del>	<del>"</del>	<del>"</del>	<del>7:58</del>																							492														
✓ S-10	6'	"	SI	8:15																							493														
<del>S-11</del>	<del>6'</del>	<del>"</del>	<del>"</del>	<del>8:25</del>																							494														
<del>S-13</del>	<del>6'</del>	<del>"</del>	<del>"</del>	<del>9:05</del>																							495														
<del>S-14</del>	<del>5'</del>	<del>"</del>	<del>"</del>	<del>9:40</del>																							496														
method blank						X				X												1-C	none				497														
																								DRO sample		None preserved		7/1/97 (6)		9:00 AM											

container code:

A = 8 oz/250 ml  
 B = 4 oz/120 ml Teflon lined

C = 2 oz/60 ml Teflon lined  
 D = 40 mL VOA vial

E = Quart Teflon lined  
 F = 250 mL plastic

G = poly bag  
 H = \_\_\_\_\_

I = \_\_\_\_\_  
 J = \_\_\_\_\_

Relinquished By	Date	Time	Received By
	7/10	8:45	

PAGE

OF

BILL TO:

send copy of invoice to Giles

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Site Information

WDOT - HWY 77

Hurley, WI



GILES ENGINEERING ASSOCIATES, INC.

Giles Project #: 1E-9703039

Client: Paul Giese

Lab Job #: 97.0095

Date Received 7/10/97

DRO (WISCONSIN MODIFIED METHOD)

SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE NUMBER	DATE ANALYZED	DATE SAMPLED	DATE EXTRACTED	DRO RESULT	FLAGS	LIMIT OF DETECTION	LIMIT OF QUANTITATION	DILUTION	PERCENT SOLIDS
S-1 5'	Soil	97.487	7/16/97	7/8/97	7/10/97	20 mg/kg	L	2.1 mg/kg	6.9 mg/kg	1	88.1%
S-2 5'	Soil	97.488	7/15/97	7/8/97	7/10/97	260 mg/kg	L D	21 mg/kg	69 mg/kg	10	86.5%
S-6 5'	Soil	97.489	7/15/97	7/8/97	7/10/97	<		2.1 mg/kg	6.9 mg/kg	1	81.9%
S-8 5'	Soil	97.491	7/15/97	7/9/97	7/10/97	<		2.1 mg/kg	6.9 mg/kg	1	83.2%
S-10 5'	Soil	97.493	7/15/97	7/9/97	7/10/97	<		2.1 mg/kg	6.9 mg/kg	1	85.3%

QC DATA SUMMARY

Batch #: 970715-1A

Blank: <  
Spike: 74%  
Dup Spike: 82%  
RPD: 11%

Begin Calibration Check: 84%  
End Calibration Check: 103%  
Second Source Calibration Check: 90%  
Hexane Blank: <

DATA FLAGS

- Soil analysis reported on a dry weight basis
- < = Below the Limit of Detection
- D = Elevated reporting limits due to sample dilution
- L = Late eluting peaks detected

Approved By:

Date: 7/16/97

Dwight E. Montague, Laboratory Supervisor  
WDNR #268305180



Site Information

WDOT - HWY 77

Hurley, WI



GILES ENGINEERING ASSOCIATES, INC.

Giles Project #: 1E-9703039
Client: Paul Giese

Lab Job #: 97.0095
Date Received: 7/10/97

GRO (WISCONSIN MODIFIED METHOD)

Table with 11 columns: SAMPLE DESCRIPTION, SAMPLE MATRIX, SAMPLE NUMBER, DATE ANALYZED, DATE SAMPLED, GRO RESULT, FLAGS, LIMIT OF DETECTION, LIMIT OF QUANTITATION, DILUTION, PERCENT SOLIDS. Rows include soil samples at various depths (S-1 5', S-2 5', S-6 5', S-8 5', S-10 6') and a DNR trip blank (MeOH).

QC DATA SUMMARY

Batch #: 970710-11

Blank: <
Spike: 99%
Dup Spike: 95%
RPD: 3.7%

Begin Calibration Check: 100%
End Calibration Check: 96%
Second Source Calibration Check: 105%
MeOH Blank: <

DATA FLAGS

- Soil analysis reported on a dry weight basis
< = Below the Limit of Detection
J = Estimated value between the Limit of Detection and the Limit of Quantitation
L = Late eluting peaks detected

Approved By:

Handwritten signature of Dwight E. Montague

Date: 7/15/97

Dwight E. Montague, Laboratory Supervisor
WDNR #268305180

# PVOC Analytical Report

Site Information:  
WDOT - HWY 77

Hurley WI



**GILES**  
ENGINEERING ASSOCIATES, INC.

client	Paul Giese	EPA method	8020B
project	1E-9703039	matrix	Soil
date analyzed	7/14/97	dilution	1: 50.00
date sampled	7/8/97	analyzed by	DEM
date extracted	7/8/97	sample	97.487
percent solids	88.1%	lab job #	97.0095

sample # 97.487 S-1 5'

analyte	result (ug/kg)	LOD (ug/kg)	LOQ (ug/kg)	Flags	MeOH Blank (ug/kg)	Blank times dilution
Benzene	<	16	53		<	<
Toluene	<	15	51		<	<
Ethylbenzene	<	18	59		<	<
Total Xylenes	<	51	170		<	<
Methyl tertiary butyl ether	<	13	44		<	<
1,2,4-Trimethylbenzene	<	23	77	s	<	<
1,3,5-Trimethylbenzene	<	16	54		<	<

## QC SUMMARY

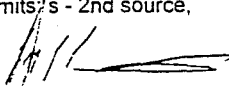
Initial Calibration Check	100.0% passing
Second Source Calibration Check	85.7% passing
methanol blank	100.0% passing
water blank	100.0% passing
spike recovery	100.0% passing
duplicate spike recovery	100.0% passing
RPD	100.0% passing
end calibration check standard	100.0% passing

QC batch number	g14ef2x	
Sequence file	c:\z\03\g14ef.seq	
Calibration file	A	c:\z\bu\03\03ewg077
	B	c:\z\bu\03\03fwg077
Surrogates	97.1% Fluorobenzene (PID)	
	115.7% 2-Bromofluorobenzene	
	100.2% 2-Bromoclorobenzene	
data file	A	c:\z\03\g14e004.rst
data file	B	c:\z\03\g14f004.rst

## DATA FLAGS

☐ Soil analysis reported on a dry weight basis

☐ Elevated LOD due to methanol extraction  
LOQ - limit of quantitation    LOD - limit of detection    < - less than LOD  
QC outside in-house limits: s - 2nd source,

Approved by:   
Dwight E. Montague, Laboratory Supervisor

Date: 07/15/97  
WDNR #268305180

# PVOC Analytical Report

Site Information:  
WDOT - HWY 77

Hurley WI



**GILES**  
ENGINEERING ASSOCIATES, INC.

client	Paul Giese	EPA method	8020B
project	1E-9703039	matrix	Soil
date analyzed	7/15/97	dilution	1: 50.00
date sampled	7/8/97	analyzed by	DEM
date extracted	7/8/97	sample	97.488
percent solids	86.5%	lab job #	97.0095

sample # 97.488 S-2 5'

analyte	result (ug/kg)	LOD (ug/kg)	LOQ (ug/kg)	Flags	MeOH Blank (ug/kg)	Blank times dilution
Benzene	<	16	53		<	<
Toluene	53	15	51		<	<
Ethylbenzene	<	18	59		<	<
Total Xylenes	<	51	170		<	<
Methyl tertiary butyl ether	<	13	44		<	<
1,2,4-Trimethylbenzene	56	23	77	J s	<	<
1,3,5-Trimethylbenzene	31	16	54	J	<	<

## QC SUMMARY

Initial Calibration Check	100.0% passing
Second Source Calibration Check	85.7% passing
methanol blank	100.0% passing
water blank	100.0% passing
spike recovery	100.0% passing
duplicate spike recovery	100.0% passing
RPD	100.0% passing
end calibration check standard	100.0% passing

QC batch number	g14ef2x	
Sequence file	c:\z\03\g14ef.seq	
Calibration file	A	c:\z\bu\03\03ewg077
	B	c:\z\bu\03\03fwg077

Surrogates

98.8%	Fluorobenzene (PID)
116.6%	2-Bromofluorobenzene
104.0%	2-Bromochlorobenzene

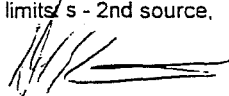
data file	A	c:\z\03\g14e021.rst
data file	B	c:\z\03\g14f021.rst

## DATA FLAGS

▣ J - Estimated value between the LOD and the LOQ

▣ Results not confirmed by second column analysis  
 ▣ Soil analysis reported on a dry weight basis

▣ Elevated LOD due to methanol extraction  
 LOQ - limit of quantitation    LOD - limit of detection    < - less than LOD  
 QC outside in-house limits - 2nd source.

Approved by:   
 Dwight E. Montague, Laboratory Supervisor

Date: 07/15/97  
 WDNR #268305180

# PVOC Analytical Report

Site Information:  
WDOT - HWY 77

Hurley WI



**GILES**  
ENGINEERING ASSOCIATES, INC.

client	Paul Giese	EPA method	8020B
project	1E-9703039	matrix	Soil
date analyzed	7/14/97	dilution	1: 50.00
date sampled	7/8/97	analyzed by	DEM
date extracted	7/8/97	sample	97.489
percent solids	81.9%	lab job #	97.0095

sample # 97.489 S-6 5'

analyte	result (ug/kg)	LOD (ug/kg)	LOQ (ug/kg)	Flags	MeOH Blank (ug/kg)	Blank times dilution
Benzene	<	16	53		<	<
Toluene	<	15	51		<	<
Ethylbenzene	<	18	59		<	<
Total Xylenes	<	51	170		<	<
Methyl tertiary butyl ether	<	13	44		<	<
1,2,4-Trimethylbenzene	<	23	77	s	<	<
1,3,5-Trimethylbenzene	<	16	54		<	<

## QC SUMMARY

Initial Calibration Check	100.0% passing
Second Source Calibration Check	85.7% passing
methanol blank	100.0% passing
water blank	100.0% passing
spike recovery	100.0% passing
duplicate spike recovery	100.0% passing
RPD	100.0% passing
end calibration check standard	100.0% passing

QC batch number	g14ef2x	
Sequence file	c:\z\03\g14ef.seq	
Calibration file	A	c:\z\bu\03\03ewg077
	B	c:\z\bu\03\03fwg077

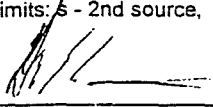
Surrogates  
 103.6% Fluorobenzene (PID)  
 120.9% 2-Bromofluorobenzene  
 103.5% 2-Bromoclorobenzene

data file	A	c:\z\03\g14e012.rst
data file	B	c:\z\03\g14f012.rst

## DATA FLAGS

▣ Soil analysis reported on a dry weight basis

▣ Elevated LOD due to methanol extraction  
 LOQ - limit of quantitation    LOD - limit of detection    < - less than LOD  
 QC outside in-house limits: s - 2nd source,

Approved by:   
 Dwight E. Montague, Laboratory Supervisor

Date: 07/15/97  
 WDNR #268305180

# PVOC Analytical Report

Site Information:  
WDOT - HWY 77

Hurley WI



**GILES**  
ENGINEERING ASSOCIATES, INC.

client Paul Giese  
project 1E-9703039  
date analyzed 7/14/97  
date sampled 7/9/97  
date extracted 7/9/97  
percent solids 83.2%

EPA method 8020B  
matrix  
dilution  
analyzed by  
sample  
lab job #

Soil  
1: 50.00  
DEM  
97.491  
97.0095

sample # 97.491 S-8 5'

analyte	result (ug/kg)	LOD (ug/kg)	LOQ (ug/kg)	Flags	MeOH Blank (ug/kg)	Blank times dilution
Benzene	<	16	53		<	<
Toluene	<	15	51		<	<
Ethylbenzene	<	18	59		<	<
Total Xylenes	<	51	170		<	<
Methyl tertiary butyl ether	<	13	44		<	<
1,2,4-Trimethylbenzene	<	23	77	s	<	<
1,3,5-Trimethylbenzene	<	16	54		<	<

## QC SUMMARY

Initial Calibration Check 100.0% passing  
Second Source Calibration Check 85.7% passing  
methanol blank 100.0% passing  
water blank 100.0% passing  
spike recovery 100.0% passing  
duplicate spike recovery 100.0% passing  
RPD 100.0% passing  
end calibration check standard 100.0% passing

QC batch number g14ef2x  
Sequence file c:\z\03\g14ef.seq  
Calibration file A c:\z\bu\03\03ewg077  
B c:\z\bu\03\03fwg077

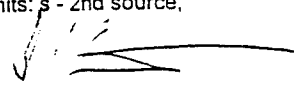
Surrogates  
100.6% Fluorobenzene (PID)  
118.3% 2-Bromofluorobenzene  
99.3% 2-Bromoclorobenzene

data file A c:\z\03\g14e013.rst  
data file B c:\z\03\g14f013.rst

## DATA FLAGS

▣ Soil analysis reported on a dry weight basis

▣ Elevated LOD due to methanol extraction  
LOQ - limit of quantitation LOD - limit of detection < - less than LOD  
QC outside in-house limits: s - 2nd source,

Approved by:   
Dwight E. Montague, Laboratory Supervisor

Date: 07/15/97  
WDNR #268305180



SECTION 6.7

APPENDIX 7

STANDARD SOIL CHEMICAL ANALYSIS PROCEDURES

## SOIL CHEMICAL ANALYSIS PROCEDURES

### Chemical Analysis

### Method

#### **Soil**

- |  |                     |
|--|---------------------|
| - Gasoline Range Organics (GRO)                | Wisconsin Modified* |
| - Diesel Range Organics (DRO)                  | Wisconsin Modified  |
| - Petroleum Volatile Organic Compounds (PVOCs) | USEPA 8020*         |

See Section 6.6 (Appendix 6) for complete results of soil chemical analysis.

- \* Soil samples submitted for Gasoline Range Organic (GRO) and Petroleum Volatile Organic Compounds (PVOCs) analyses were methanol preserved in the field in accordance with current WDNR requirements.



**SECTION 6.8**

**APPENDIX 8**

**GENERAL COMMENTS**

## GENERAL COMMENTS

This report has been prepared specifically for the Wisconsin Department of Transportation (WISDOT). Reproduction and/or distribution of this report should not be performed without consent from the WISDOT and *Giles*.

The information presented in this report is based on field observations and sampling of soils performed within the property boundaries at specific locations at a specific point in time. The opinions formulated regarding the petroleum related compounds encountered on this property are based upon reasonable judgements made in light of this information and the data obtained from the specific site.

The conclusions and recommendations presented in this report have been promulgated in accordance with generally accepted professional practice in the field of environmental consulting at the time of this report. No other warranty is either expressed or implied.

Bureau for Remediation and Redevelopment  
Activity Detail Report - Case Tracking

Activity Number: 03-26-000788

Transferred to:  DCOM  Waste  DATCP

Activity Type: LUST

DCOM Number: 54550999900

Activity Name: THOMAS SERVICE STATION (FORMER)

Activity Address:

Region: Northern Region

County: Iron

FID: 826034110

Location Name: THOMAS SERVICE STATION (FORMER)

EPA ID:

Location Address: STH 77

Start Date: 06/20/1994

End Date: OPEN

Municipality: MONTREAL

Project Manager:

Priority: Low

Score:

LUST Trust Eligible: FEDERAL

Comment:

File Location:

NAR DNR Box No.:

NAR RC Box No.:

Activity Geo Location:

Legal Desc: SE 1/4 of SW 1/4 of Section 27, Township 46N Range 02

Latitude: None Found

Longitude: None Found

SHWIMS Geo Location:

Legal Desc: SW 1/4 of NW 1/4 of Section 27, Township 46N Range 02W

Latitude: None Found

Longitude: None Found

VPLE

Co-Contamination

PECFA Eligible

PECFA 80K Failure

Gen Prop

Tracked by DCOM

PECFA 80K

Impacts:

Soil Contamination

Risk:

Low Risk

Assigned: 12/01/1999

Substances:

Hydrocarbon - Unknown Type

Actions:

1	Notification	06/20/1994
2	RP Letter Sent	07/28/1994
	R.P. LETTER SEND/CONSULT	
2	RP Letter Sent/2	07/29/1994
	R.P. LETTER SEND/CONTACT	
37	SI Report Received (w/out Fee)	10/12/1995
	SI REPORT RECV'D (PHASE II DOT)	
39	Remedial Action Options Report received (w/out Fee)	09/11/1996
	PHASE IV- WDOT	
41	Remedial Action Report Received	09/19/1997
76	Activity Transferred to DCOM	01/22/1998



ENVIRONMENTAL & REGULATORY SERVICES DIVISION  
BUREAU OF PECFA  
P.O. Box 8044  
Madison, Wisconsin 53708-8044  
TDD #: (608) 264-8777  
Fax #: (608) 267-1381  
<http://www.commerce.state.wi.us>  
<http://www.wisconsin.gov>  
Scott McCallum, Governor  
Philip Edw. Albert, Secretary

September 19, 2002

Bill Thomas  
24 Nimikon St  
Gile, WI 54550

RE: **Request for Site Update**

**Commerce # 54550-9999-00**      **WDNR BRRTS # 03-26-000788**  
Thomas Service (Former), State Hwy 77 & 6th Ave, Montreal

Dear Mr. Thomas:

The Wisconsin Department of Commerce (Commerce) is requesting information regarding activities associated with petroleum contamination at the site referenced above. According to information in the case file, petroleum contamination was discovered at the site on June 20, 1994. The most recent correspondence in the file is dated August 29, 1997, and was prepared by Giles Engineering Associates, Inc. for the Department of Transportation.

Commerce requests that you submit any more recent information and provide a plan to fulfill your responsibility to address the petroleum contamination. Under current regulations, many sites require little or no cleanup actions after adequate characterization and risk assessment are performed.

Be aware that periods of inactivity and non-compliance can affect PECFA eligibility (if applicable) and, specifically, deem a percentage of the interest on your PECFA loan as not eligible for reimbursement. In addition, Commerce can pursue enforcement actions if you do not respond to this request for information. **Within 30 days, please inform Commerce in writing of your intentions to bring this case to closure.**

Your prompt attention to this request is appreciated. If you have any questions, please contact me in writing at the letterhead address or by telephone at (608) 261-2515.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Blair', written over a white background.

David E. Blair  
Hydrogeologist  
Site Review Section

cc: Case File

January 30, 1998

Mr. Bill Thomas  
24 Nimikon St  
Gile, WI 54550

**FILE**

Subject: Former Thomas Service, STH 77, Montreal, WI COMM # 54550, BRRT's # 03-26-000788

Dear Mr. Thomas:

I recently reviewed the file for the above noted site.

I have the reports prepared by Level One Engineering and Giles Engineering for the contaminated soils found in the roadway, authorized by Department of Transportation.

These reports indicate that there is contamination located on your property and that there are tanks still present on this property but not in use. I am requesting that you have these tanks removed and perform an investigation to determine the extent and degree of the contamination at your property.

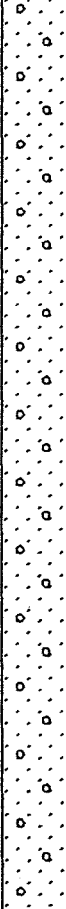
The Department appreciates all efforts to remediate these sites and will offer any assistance that we can to help you through this process.

If you have any questions please call me at 715-762-5557. I will be gone the week of Feb 2-6, but after that I will be in the office.

Sincerely,

Shanna Laube  
Hydrogeologist  
PECFA Program

Facility/Project Name <b>STH 77</b>			License/Permit/Monitoring Number		Boring Number <b>SB5</b>	
Boring Drilled By (Firm name and name of crew chief) <b>WTD, Mark Thuot</b>			Date Drilling Started <b>5/24/94</b>		Date Drilling Completed <b>5/24/94</b>	
DNR Facility Well No.		WI Unique Well No.	Common Well Name		Final Static Water Level Feet MSL	Surface Elevation Feet MSL
						Borehole Diameter <b>8.0</b> Inches
Boring Location State Plane <b>NW 1/4 of SW 1/4 of Section 27 T 46 N.R 2</b>			N, <b>(E)</b>	Lat 0' "	Local Grid Location (If applicable)	
				Long 0' "	Feet <input type="checkbox"/> N	Feet <input type="checkbox"/> E
					Feet <input type="checkbox"/> S	Feet <input type="checkbox"/> W
County <b>Iron</b>			DNR County Code <b>26</b>		Civil Town/City/ or Village <b>Montreal</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	.5	3 8 13 21	1 2 3	Br. F-C SAND, w/Gravel					21	W				
2	.5	31 50 42 50	5 6 7 8 9 10 11 12						92	W				

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

*Mark Thuot*

Firm **WTD Environmental Drilling**  
101 Alderson Schofield, WI 54476-0109  
Tel: (715) 359-7090 Fax: (715) 355-5715

Authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor \$100 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.

Boring Number **SB5**

Use only as an attachment to Form 4400-122.

Page 2 of 2

Sample		Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
Number	Length (in) Recovered								Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
				E.O.B. 12.0										

C♦@♦♦

- Route To:
- Solid Waste
  - Emergency Response
  - Wastewater
  - Haz. Waste
  - Underground Tanks
  - Water Resources
  - Other

Facility/Project Name <b>STH 77</b>		License/Permit/Monitoring Number		Boring Number <b>SB6</b>	
Boring Drilled By (Firm name and name of crew chief) <b>WTD, Mark Thuot</b>		Date Drilling Started <b>5/24/94</b>		Date Drilling Completed <b>5/24/94</b>	
DNR Facility Well No.		WI Unique Well No.		Common Well Name	
Final Static Water Level Feet MSL		Surface Elevation Feet MSL		Borehole Diameter <b>8.0</b> Inches	
Boring Location State Plane <b>N, (E)</b> <b>NW 1/4 of SW 1/4 of Section 27 T 46 N, R 2</b>		Lat <b>0 11</b>		Local Grid Location (If applicable) <input type="checkbox"/> N <input type="checkbox"/> E <input type="checkbox"/> S <input type="checkbox"/> W	
County <b>Iron</b>		DNR County Code <b>26</b>		Civil Town/City/ or Village <b>Montreal</b>	

Sample Number	Length (in) Recovered	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties					RQD/ Comments
									Standard Penetration	Moisture Content	Liquid Limit	Plastic Limit	P 200	
1	1.5	6	1-2	F-C SAND					35	M				
2	1.0	3	3-5						10	W				
3	1.5	5	5-7	F-C SAND, w/Gravel					12	M				
		5	7-8	Br. Silty CLAY										
4	1.5	17	10-11	Br. F-C SAND, w/Gravel					55	W				

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

*Thuot*

Firm **WTD Environmental Drilling**  
101 Alderson Schofield, WI 54476-0109  
Tel: (715) 359-7090 Fax: (715) 355-5715

Authorized by Chapters 144, 147 and 162, Wis. Stats. Completion of this report is mandatory. Penalties: Forfeit not less than \$10 nor more than \$100 for each violation. Fined not less than \$10 or more than \$100 or imprisoned not less than 30 days, or both for each violation. Continued violation is a separate offense, pursuant to ss 144.99 and 162.06, Wis. Stats.







**WISCONSIN**  
Department of Commerce

Office of the Governor    Department Organization    Mail Links Index    News & Statistics    Search

Options

Topics

About Commerce    Business    Community    International    Petroleum Programs    Safety & Buildings    Employment

[Search Instructions](#)

[Search by Site, Owner, or Tank Characteristics](#)

[Search by Tank ID](#)

# Tank Detail

## Site and Owner

### Site Info

ID: 57300 BILLS GILE SERVICE STATION  
55 WISCONSIN AVE  
MONTREAL  
Landowner Type: Private

### County & Municipality

26 - IRON  
City of MONTREAL  
Fire Dept ID: 2609 - Montreal

### Owner

ID: 382347  
WILLIAM E THOMAS  
24 NIMIKON AVE  
GILE WI 54525 0

**Underground Storage Tank - ID: 398867, Wang ID: 260900003, Closed Filled With Inert Material as of 11/01/1989**

<b>Install Date:</b>		<b>Capacity in Gallons:</b> 2000	<b>Contents:</b>	Leaded Gasoline
<b>Tank Occupancy:</b>	Retail Fuel Sales	<b>Marketer:</b>	Y	<b>CAS Number:</b>
<b>Federally Regulated:</b>	Y	<b>Spill Protection:</b>	Required - Not Installed	<b>Overfill Protection:</b> Required - Not Installed
<b>Corrosion Protect Type:</b>		<b>Date of Lining:</b>		<b>Lining Inspected Date:</b>
<b>Leak Detection:</b>	Manual Tank Gauging	<b>Cath Test Date:</b>		<b>Cath Expire Date:</b>
<b>Leak Test Meth:</b>		<b>Leak Expire Date:</b>		<b>Leak Test Date:</b>
<b>Construction Material:</b>	Other	<b>Wall Size:</b>	Single	<b>Underground Piping:</b> Y

**Close Order Date:**

**Close Order By:**

**Piping - Closed Filled With Inert Material**

**Flex Connectors:**

**UST mainfolded:**

**Related Tank ID:**

**Type:**

**Safe Suction Aboveground Piping:**

**Aboveground Pipe Construction:**

**Construction Material:**

**Bare Steel**

**Corrosion Protect Type:**

**Leak Detection:**

**Not Required**

**Cath Test Date:**

**Cath Expire Date:**

**Leak Test Meth:**

**Leak Test Date:**

**Leak Expire Date:**

**Pipe Wall Size:**

**Single**

**Catastrophic Leak Detection:**

**Cat Leak Test Date:**



[Close this response window](#)

**This document was last revised: 15 Feb 2001**

**Wisconsin Department of Commerce**



- Office of the Governor
- Department Organization
- Mail
- Links
- Index
- News & Statistics
- Search
- Options

- Topics
- About Commerce
- Business
- Community
- International
- Petroleum Programs
- Safety & Buildings
- Employment

<a href="#">Search Instructions</a>	<a href="#">Search by Site, Owner, or Tank Characteristics</a>	<a href="#">Search by Tank ID</a>
-------------------------------------	--	-----------------------------------

## Tank Detail

### Site and Owner

**Site Info**

ID: 57300 BILLS GILE SERVICE STATION 26 - IRON  
 55 WISCONSIN AVE  
 MONTREAL  
 Landowner Type: Private

**County & Municipality**

City of MONTREAL  
 Fire Dept ID: 2609 - Montreal

**Owner**

ID: 382347  
 WILLIAM E THOMAS  
 24 NIMIKON AVE  
 GILE WI 54525 0

**Underground Storage Tank - ID: 398866, Wang ID: 260900002, Closed Filled With Inert Material as of 05/13/2001**

Install Date:	Capacity in Gallons: 1000	Contents: Unleaded Gasoline
Tank Occupancy: Retail Fuel Sales	Marketer: Y	CAS Number:
Federally Regulated: Y	Spill Protection: Required - Not Installed	Overfill Protection: Required - Not Installed
Corrosion Protect Type:	Date of Lining:	Lining Inspected Date:
Leak Detection: Manual Tank Gauging	Cath Test Date:	Cath Expire Date:
Leak Test Meth:	Leak Expire Date:	Leak Test Date:
Construction Material: Coated Steel	Wall Size: Single	Underground Piping: Y

**Close Order Date:**

**Close Order By:**

**Piping - Closed Filled With Inert Material**

**Flex Connectors:**

**UST mainfolded:**

**Related Tank ID:**

**Type:**

**Safe Suction Aboveground Piping:**

**Aboveground Pipe Construction:**

**Construction Material:**

**Coated Steel Corrosion Protect Type:**

**Leak Detection:**

**Not Required**

**Cath Test Date:**

**Cath Expire Date:**

**Leak Test Meth:**

**Leak Test Date:**

**Leak Expire Date:**

**Pipe Wall Size:**

**Single**

**Catastrophic Leak Detection:**

**Cat Leak Test Date:**

[To Top](#)

[Close this response window](#)

This document was last revised: 15 Feb 2001

Wisconsin Department of Commerce



- Office of the Governor
  - Department Organization
  - Mail
  - Links
  - Index
  - News & Statistics
  - Search
  - Options
- 
- Topics
  - About Commerce
  - Business
  - Community
  - International
  - Petroleum Programs
  - Safety & Buildings
  - Employment

<a href="#">Search Instructions</a>	<a href="#">Search by Site, Owner, or Tank Characteristics</a>	<a href="#">Search by Tank ID</a>
-------------------------------------	--	-----------------------------------

## Tank Detail

### Site and Owner

**Site Info**

ID: 57300 BILLS GILE SERVICE STATION 26 - IRON  
 55 WISCONSIN AVE  
 MONTREAL  
 Landowner Type: Private

**County & Municipality**

City of MONTREAL  
 Fire Dept ID: 2609 - Montreal

**Owner**

ID: 382347  
 WILLIAM E THOMAS  
 24 NIMIKON AVE  
 GILE WI 54525 0

**Underground Storage Tank - ID: 398865, Wang ID: 260900001, Closed Filled With Inert Material as of 06/01/2001**

<b>Install Date:</b>	<b>Capacity in Gallons:</b> 1000	<b>Contents:</b>	Unknown
<b>Tank Occupancy:</b>	Retail Fuel Sales	<b>Marketer:</b>	Y
<b>Federally Regulated:</b>	Y	<b>Spill Protection:</b>	Required - Not Installed
<b>Corrosion Protect Type:</b>		<b>Date of Lining:</b>	
<b>Leak Detection:</b>		<b>Cath Test Date:</b>	
<b>Leak Test Meth:</b>		<b>Leak Expire Date:</b>	
<b>Construction Material:</b>	Unknown	<b>Wall Size:</b>	Single
<b>Close Order Date:</b>		<b>Close Order By:</b>	
		<b>CAS Number:</b>	
		<b>Overfill Protection:</b>	Required - Not Installed
		<b>Lining Inspected Date:</b>	
		<b>Cath Expire Date:</b>	
		<b>Leak Test Date:</b>	
		<b>Underground Piping:</b>	Y

**Piping - Closed Filled With Inert Material**

<b>Flex Connectors:</b>	<b>UST mainfolded:</b>	<b>Related Tank ID:</b>	
<b>Type:</b>	<b>Aboveground Piping:</b>	<b>Aboveground Pipe Construction:</b>	
<b>Construction Material:</b>	<b>Corrosion Protect Type:</b>	<b>Leak Detection:</b>	
<b>Cath Test Date:</b>	<b>Cath Expire Date:</b>	<b>Leak Test Meth:</b>	
<b>Leak Test Date:</b>	<b>Leak Expire Date:</b>	<b>Pipe Wall Size:</b>	Single
<b>Catastrophic Leak Detection:</b>	<b>Cat Leak Test Date:</b>		

[To Top](#)

---

[Close this response window](#)

This document was last revised: 15 Feb 2001

Wisconsin Department of Commerce