Phase 2.5 Environmental Sampling Investigation

A-Z Sales and Service
100 West Main Street
Bowler, Shawano County, Wisconsin

DNR BRRTS No. 03-59-190963

Prepared for:
Wisconsin Department of Transportation - Bureau of Environment
WisDOT Project I.D. 9308-04-00

Prepared by:
Earth Tech, Inc.
200 Indiana Avenue
Stevens Point, WI 54481

July 2002

Earth Tech Project No. 52065

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July 2002

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Date

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LIST OF ABBREVIATIONS

bgs	below ground surface
i.u.	instrument units
kg	kilogram
l	liter
mg	milligram
ppm	parts per million
ug	microgram
COMM	Wisconsin Department of Commerce
DCA	Dichloroethane
DNR	Wisconsin Department of Natural Resources
DRO	Diesel Range Organics
EPA	U.S. Environmental Protection Agency
GRO	Gasoline Range Organics
MEOH	Methanol
PVOCs	Petroleum Volatile Organic Compounds
PID	Photoionization Detector
RCL	Residual Containment Level
USGS	U.S. Geological Survey
VOCs	Volatile Organic Compounds
WisDOT	Wisconsin Department of Transportation
WGNHS	Wisconsin Geological and Natural History Survey

1.0 EXECUTIVE SUMMARY

This report summarizes the results of a Phase 2.5 Environmental Sampling Investigation conducted in the CTH A right of way next to A-Z Sales and Service, 100 West Main Street, Bowler, Wisconsin. The site was investigated for possible impacts related to the release of petroleum hydrocarbons from USTs located on the subject property. Two 1,000-gallon leaded gasoline USTs were previously removed from the property. A 1,200-gallon UST containing fuel oil is still in use according to COMM's storage tank database.

The investigation was conducted to determine if contaminated soil may be encountered at three planned storm inlet locations near A-Z Sales and Service during the reconstruction of CTH A. Highway reconstruction will include regrading and the installation of storm sewer and inlets. The planned maximum depth of excavation during storm inlet installation is estimated by WisDOT to be 3 feet. The planned maximum depth of the storm sewer trench is 6 feet. Highway reconstruction is scheduled to begin in 2003.

During the field investigation completed by Earth Tech on April 29, 2002, three soil probe borings (B-1, B-2, and B-3) were advanced to 3 feet bgs within WisDOT right of way next to the planned storm inlets. Soil samples were collected from each boring for laboratory analysis of GRO, DRO, PVOCs, and lead.

1.1 FINDINGS AND CONCLUSIONS

The following is concluded from the information collected during the Phase 2.5 Environmental Sampling Investigation:

1. Subsurface materials encountered while drilling included brown, fine to coarse-grained sand with varying amounts of gravel to the terminus of the borings. Groundwater was not encountered in any of the borings. The approximate depth to groundwater ranges from 10 to 12 feet bgs.

2. No obvious petroleum odors or stains were identified in the borings. All PID readings were 0 i.u.

3. DRO, GRO, PVOCs, and lead were not detected above DNR RCLs in soil samples from Borings B-2 and B-3. DRO was detected at 125 ppm in B-1, which exceeds the NR 720 RCL (100 ppm).

4. Free phase petroleum product was measured in Mary's Place upgradient Monitoring Well, MW-2, at a thickness of about 0.5 feet. The layer of free product is approximately 4 feet below the planned maximum depth of the storm sewer trench.

1.2 OPINION

Based on the data and information collected during the Phase 2.5 investigation conducted at the A-Z Sales and Service site, it is Earth Tech's opinion that no additional investigation is warranted at this time for the CTH A reconstruction.

Options for managing DRO impacted soil within construction limits include the following:

1. Beneficial reuse as fill material during construction by placing the impacted soil within the CTH A roadway subgrade or another acceptable location within the WisDOT right of way. A plan for beneficial reuse would have to be approved by the DNR prior to construction. The material could be excavated and temporarily stockpiled on site prior to the letting of the highway construction contract. Special Provisions

in the highway construction contract could provide "Instructions to Contractor" for placing the stockpiled material within a specific location during reconstruction of CTH A and storm sewers.

2. Off-site treatment at a DNR permitted bioremediation facility approved by WisDOT. The material could be excavated and transported to the biopile facility during the highway construction.

2.0 SITE INVESTIGATION

2.1 BACKGROUND

Two 1,000-gallon leaded gasoline USTs were closed and removed in October 1988, according to COMM's Storage Tank Database. A third 1,200-gallon fuel oil UST remains in use at A-Z Sales and Service. Free phase petroleum product was detected in a Mary's Place upgradient monitoring well (MW-2). Monitoring Well MW-2 is located near the north perimeter of the A-Z Sales and Service property. The release was reported to the DNR by Envirogen in November 1998. The DNR issued a Notice of Noncompliance on April 23, 1999, and a Notice of Violation on November 15, 1999. A-Z Sales and Service is currently under a land contract. However, the landowner cannot be located by the DNR. Consequently, the DNR is taking the lead responsibility for the site investigation. Limited background information for this site was taken from the Phase 1 Hazardous Materials Assessment Report prepared by Graef, Anhalt, Schloemer and Associates, Inc., dated August 16, 2001. Additional information was obtained by calling Cheryl Laatsch of the Wisconsin DNR in Oshkosh.

This investigation was conducted to determine if contaminated soils may be encountered during the planned reconstruction of CTH A. Highway reconstruction will include regrading and installation of storm sewer and inlets. Acquisition of additional right of way is not anticipated. The maximum depth of excavation during storm inlet installation is estimated by WisDOT to be 3 feet. The planned maximum depth of the storm sewer trench is 6 feet. Highway reconstruction is scheduled to begin in 2003.

2.2 PURPOSE AND SCOPE

The purpose of this project was to investigate for evidence and extent of soil contamination by petroleum hydrocarbons at the planned storm inlet locations within the existing highway right of way next to A-Z Sales and Service.

The Phase 2.5 scope of work included:

1. Advancement of three soil probe borings to approximately 3 feet bgs directly next to the planned storm inlets.

2. Visual classification of soil samples obtained continuously from the borings and field screening of samples for volatile organic vapors using a PID and the headspace method.

3. Collection of one soil sample from each boring for laboratory analysis.

4. Measurement of free product and depth to water in Mary's Place Monitoring Well MW-2.

5. Completion of borehole closure in accordance with the requirements of Wisconsin Administrative Code, Chapter NR 141.

6. Preparation of this report summarizing the results of the Phase 2.5 Environmental Sampling Investigation.

2.3 SITE DESCRIPTION

A-Z Sales and Service is located at the southwest corner of the intersection of CTH A and Main Street in Bowler, Wisconsin (see Figure 2-1). General site information includes:

Location: NE 1/4, SE 1/4, Section 36, Township 28 North, Range 12 East

Address: 100 West Main Street
Bowler, Wisconsin 54416

County: Shawano

2.4 DESCRIPTION OF FIELD INVESTIGATION

On April 29, 2002, three soil probe borings (B-1, B-2, and B-3 on Figure 2-2) were performed next to the planned location of the storm sewer inlets. The borings were advanced using a truck-mounted Geoprobe™ rig operated by SES, Inc. of Madison, Wisconsin. Soil boring logs are presented in Appendix 3.1. Photographs of the site indicating boring locations are included in Appendix 3.2.

Field measurements detected approximately 0.5 feet of free product in Mary's Place Monitoring Well MW-2 at 9.89 feet below top of casing.

Soil samples collected continuously from the borings were field screened using a PID. The PID is capable of detecting and measuring relative concentrations of volatile organic vapors in the soil gas. PID readings were recorded on the soil boring logs. Soil gas monitoring procedures are described in Appendix 3.3.

One soil sample was collected from the bottom interval of each boring for laboratory analysis. Soil sampling procedures are discussed in Appendix 3.4.

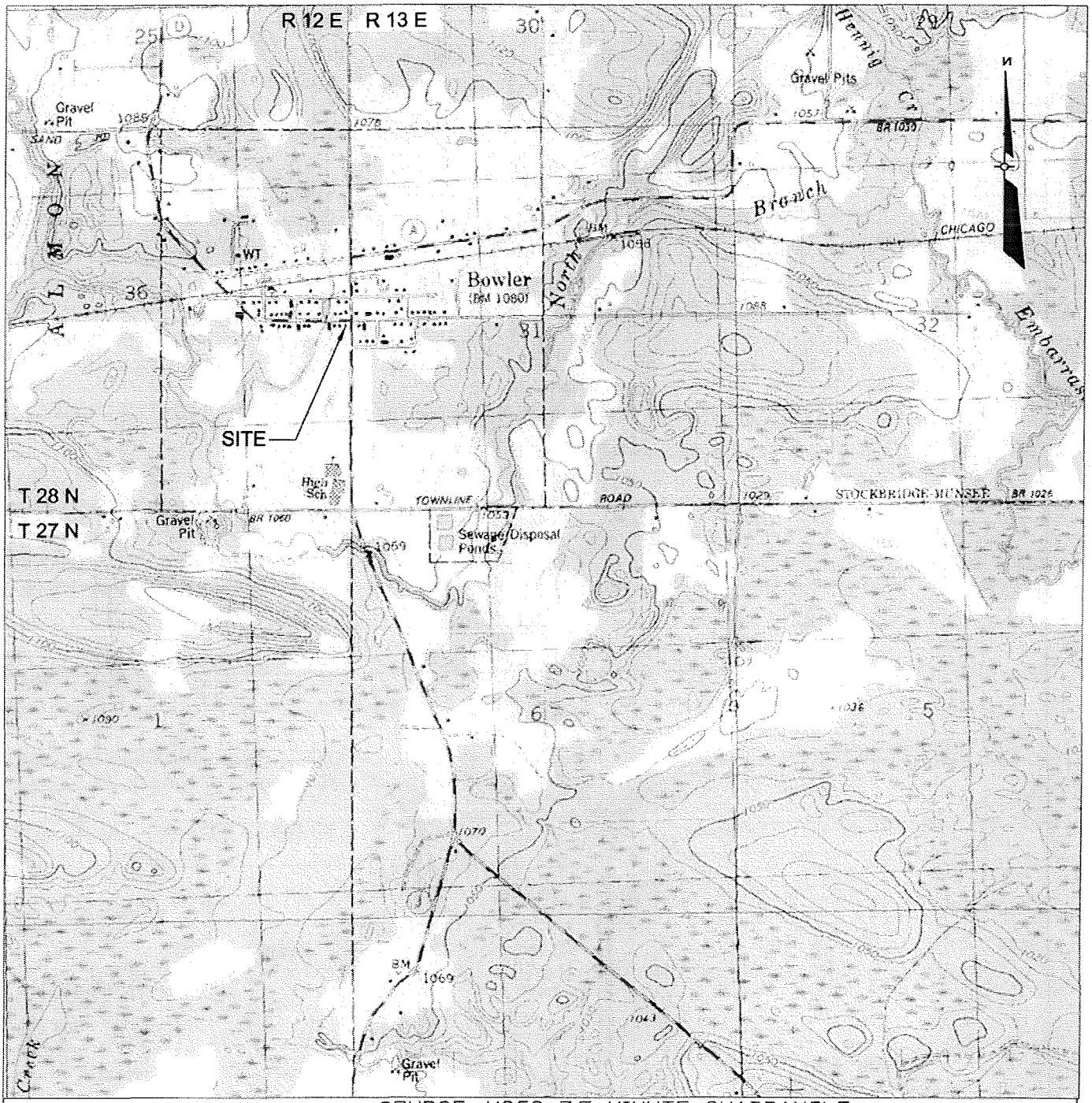
Upon completion of sampling, the borings were abandoned with granular bentonite poured into the boreholes in accordance with the requirements of Wisconsin Administrative Code, Chapter NR 141. Borehole abandonment forms are presented in Appendix 3.5.

A negligible volume of soil cuttings were thin-spread on the ground surface in the vicinity of the respective borings because field screening results indicated that soil cuttings generated during borehole construction were not impacted.

2.5 SUBSURFACE CONDITIONS

A-Z Sales and Service is located in the north central portion of the Fox-Wolf River Basin. The area was glaciated and is generally covered with an average of approximately 100 feet of stratified glacial drift composed of sand and gravel. The stratified drift is underlain by Precambrian crystalline bedrock. Soil permeability is relatively high, ranging from 2.0 to 2.5 inches per hour. The regional direction of groundwater flow is southeast, toward the Wolf and upper Fox Rivers. Based on previous site investigation reporting for Mary's Place the direction of groundwater flow at the site is to the north/ northeast. The depth to groundwater ranges from approximately 10 to 12 feet bgs.

Subsurface materials encountered while drilling included brown, fine to coarse grained sand with varying amounts of gravel to the terminus of the borings (approximately 3 feet bgs). Groundwater was not encountered



SOURCE: USGS 7.5 MINUTE QUADRANGLE,
GRESHAM, WISCONSIN, 1979

SHAWANO COUNTY

INDEX MAP

SCALE 1: 24000

1 0 1/2 0 1 MILE

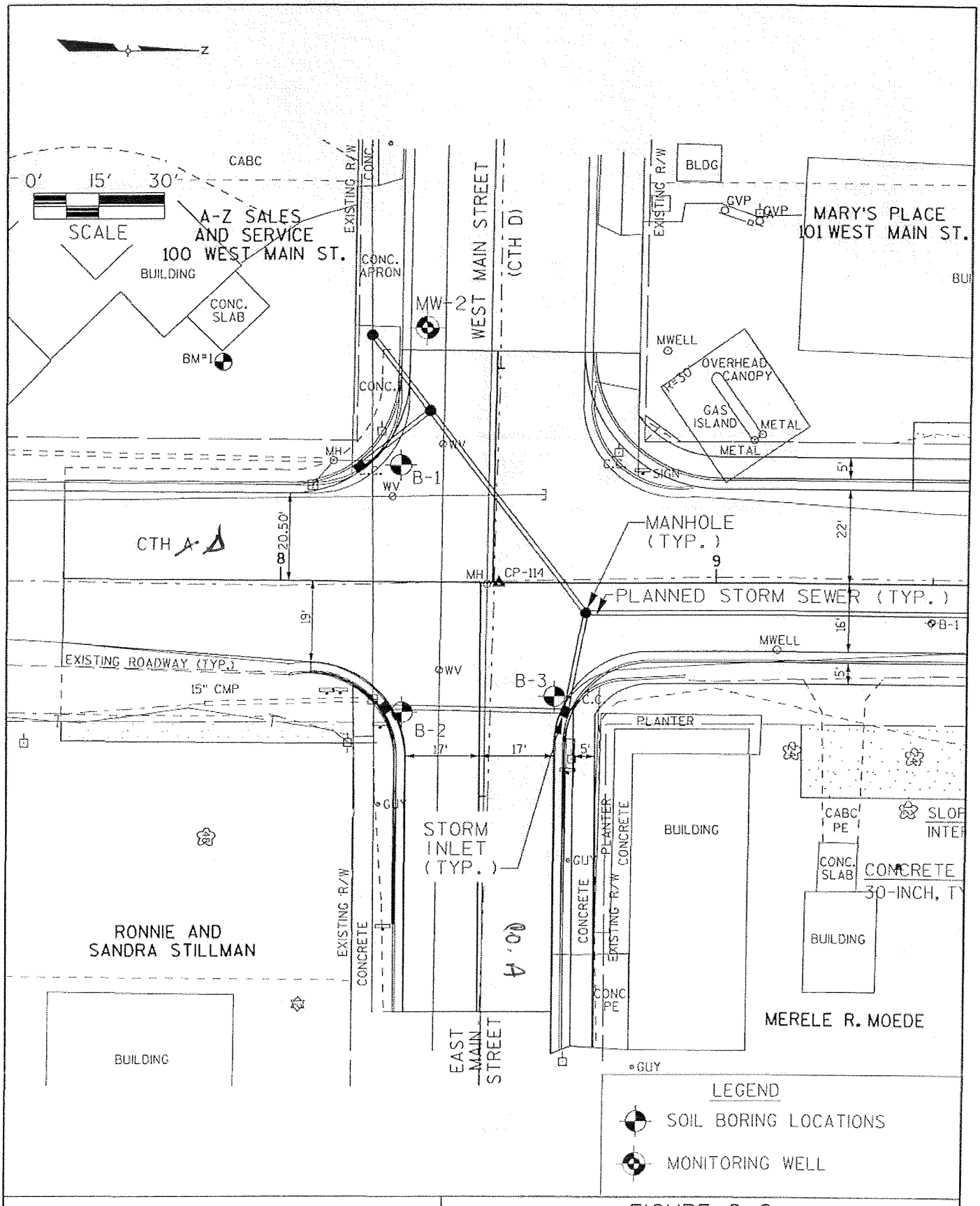
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

EARTH TECH

FIGURE 2-1
LOCATION MAP
A-Z SALES AND SERVICE
100 WEST MAIN STREET
BOWLER, WISCONSIN

JUNE 2002 WI DOT PROJECT ID 9308-04-00 52065



EARTH TECH

FIGURE 2-2
SITE MAP
A-Z SALES AND SERVICE

100 WEST MAIN STREET
BOWLER, WISCONSIN

JUNE 2002

52065

in any of the borings. No obvious petroleum odors or stains were identified in the borings. All PID readings were 0 i.u.

2.6 ANALYTICAL PARAMETERS AND RESULTS

Analytical parameters were selected in general accordance with WisDOT and DNR guidance for investigations of petroleum storage tank sites and included GRO, DRO, PVOCs, and lead. Standard analytical procedures are discussed in Appendix 3.6.

2.6.1 Soil

Soil samples were collected from Soil Borings B-1, B-2, and B-3 at 2 to 3 feet bgs. The soil sample collected at Soil Boring B-1, located next to the storm inlet nearest A-Z Sales and Service, had a DRO concentration of 125 ppm which exceeds the DNR NR 720 RCL of 100 ppm for DRO in soil. Lead levels in soil samples from Soil Borings B-1, B-2, and B-3 were below the non-industrial RCL of 50 ppm. PVOC concentrations in soil samples collected from Borings B-1, B-2, and B-3 were either below the minimum detection limits or below the NR 720 RCLs. GRO was not detected.

Soil sample analytical results are summarized in Table 2-1. The sample chain of custody form and laboratory reports are included in Appendices 3.7 and 3.8, respectively.

2.7 CONCLUSIONS

The following is concluded from the data and information collected during the Phase 2.5 Environmental Sampling Investigation:

1. Subsurface materials encountered while drilling included brown, fine to coarse grained sand with varying amounts of gravel to the terminus of the borings.

2. No obvious petroleum odors or stains were identified in the borings. All PID readings were 0 i.u.

3. DRO, GRO, PVOCs, and lead were not detected above DNR RCLs in soil samples from Borings B-2 and B-3. DRO was detected at 125 ppm in B-1, which exceeds the NR 720 RCL (100 ppm).

4. Approximately 0.5 feet of free phase petroleum was measured in Mary's Place Monitoring Well MW-2 at a depth of 9.89 feet bgs. The layer of free product is approximately 4 feet below the planned maximum depth of the storm sewer trench.

2.8 OPINION

Based on the data and information collected during the Phase 2.5 investigation conducted at the A-Z Sales and Service site, it is Earth Tech's opinion that no additional investigation is warranted at this time for the CTH A reconstruction.

Options for managing DRO impacted soil within construction limits include the following:

1. Beneficial reuse as fill material during construction by placing the impacted soil within the CTH A roadway subgrade or another acceptable location within the WisDOT right of way. A plan for beneficial reuse would have to be approved by the DNR prior to construction. The material could be excavated and

TABLE 2-1
SOIL SAMPLE ANALYTICAL RESULTS
A-Z SALES AND SERVICES
100 WEST MAIN STREET
BOWLER, SHAWANO COUNTY, WISCONSIN
WISDOT PROJECT I.D. No. 9308-04-00

		Boring No.:	**B-1**	**B-2**	**B-3**
		Sample Depth Interval (feet):	2.0 to 3.0	2.0 to 3.0	2.0 to 3.0
		Date Collected:	04/29/02	04/29/02	04/29/02
		PID (i.u.):	0.0	0.0	0.0
Analyte	**NR 720 RCL**	**COMM 46 SSL**			
GRO (mg/kg)	**100**	**N/A**	<5.18	<5.77	<5.29
DRO (mg/kg)	**100**	**N/A**	**125.0**	28.4	<5.29
PVOCs (mg/kg)					
Benzene	**0.0055**	**8.5**	<0.025	<0.025	<0.025
Ethylbenzene	**2.9**	**4.6**	<0.025	<0.025	0.0299
Methyl-tert-butyl ether	**N/A**	**N/A**	<0.025	<0.025	<0.025
Toluene	**1.5**	**38**	<0.025	<0.025	<0.025
1,2,4-Trimethylbenzene	**N/A**	**83**	<0.025	<0.025	0.106
1,3,5-Trimethylbenzene	**N/A**	**11**	<0.025	<0.025	0.0355
Xylene (total)	**4.1**	**42**	<0.050	<0.050	<0.171
Lead (mg/kg)	**50**	**N/A**	3.37	4.21	6.89

Notes:

1. "RCL" means applicable "Residual Contaminant Level" for non-industrial sites as listed in Tables 1 and 2 of NR 720.
2. "SSL" means applicable "Soil Screening Level" as listed in Table 1 of COMM 46.
3. Bold type indicates an analyte which exceeds NR 720 RCL.

L:\WORK\Projects\52065\wp\reports\a-z sales\[table2-1_mwm.xls]A

temporarily stockpiled on site prior to the letting of the highway construction contract. Special Provisions in the highway construction contract could provide "Instructions to Contractor" for placing the stockpiled material within a specific location during reconstruction of CTH A and storm sewers.

2. Off-site treatment at a DNR permitted bioremediation facility approved by WisDOT. The material could be excavated and transported to the biopile facility during the highway construction.

2.9 STATEMENT OF LIMITATIONS

Earth Tech's Scope of Services was limited to conducting a Phase 2.5 Environmental Sampling Investigation within the existing highway right of way next to A-Z Sales and Service.

Earth Tech's opinion regarding existing conditions at the site does not constitute a guarantee or warranty as to the potential environmental liability associated with the site. Furthermore, the findings and conclusions given are not scientific certainties, but rather probabilities based on data obtained or activities performed during this assessment and professional judgment concerning the significance of this data. All information was collected in accordance with generally accepted professional standards and practices, accepted in good faith, and is assumed to be factual and accurate.

Earth Tech is not able to determine whether the site or adjoining land areas contain hazardous waste, oil, or other latent conditions beyond those detected or observed by Earth Tech at the time the investigation was conducted. The possibility always exists for contaminants to migrate through the surface water, air, or groundwater. Detailed analysis and discussion of the environmental risk associated with contaminant transport in these media was beyond the scope of this assessment.

The findings, conclusions, and opinion contained in this report are intended for exclusive use by WisDOT and are applicable to only the A-Z Sales and Service Phase 2.5 Environmental Sampling Investigation. Earth Tech has no obligations to other persons or organizations who may use or rely upon this information.

3.0 APPENDICES

APPENDIX 3.1

SOIL BORING LOGS

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WIS DOT - BOWLER - CTH A	_ _ _ _ _ _ _	B-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: RICH Last Name: Firm: SES INC	04/29/2002 (mm dd yyyy)	04/29/2002 (mm dd yyyy)	2" split spoon

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _		_____ Feet MSL	_____ Feet MSL	_____ inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N
NE 1/4 of SE 1/4 of Section 36, T 28 N, R 12 ☒E/W
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	SHAWANO	54	BOWLER

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				7" CONCRETE										
S-1	14		1	0.5 TO 2.0 LOOSE, BROWN (10YR 4/4), F/M SAND MOIST	SP			0		MOIST	NONE			10:50
			2	2.0 TO 3.0 SAA										
S-2			3		SP			0		MOIST	NONE			10:55 DRO GRO/VOC Pb
				EOB @ 3.0'										
			4											
			5											
			6											

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

Signature	Firm
Rick Eagan	EARTH TECH, INC.

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

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WisDOT - BOWLER - CTH A	_ _ _ _ _ _ _ _	B-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: RICH Last Name: Firm: SES INC	04/29/2003 (m m d d y y y y)	04/29/2003 (m m d d y y y y)	2" split spoon

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _ _ _		_____ Feet MSL	_____ Feet MSL	2-5 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N
NW 1/4 of SW 1/4 of Section 36, T 28 N, R 13 E W
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	SHAWANO	54	BOWLER

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	2" ASPHALT 0.3 TO 2.0 BROWN (10YR 4/4) LOOSE SILTY F/M SAND, MOIST	SP			0			NONE			11:10
S-1	12		2	2.0 TO 3.0 SAA										
S-2	16		3		SP			0			NONE			11:12 DRO GRO/PVOC Pb
				EOB @ 3.0'										

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

Signature	Firm
Phil Eggum	EARTH TECH, INC

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

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☐ Other ☐ _____

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
WISDOT- BOWLER- CTH A	_ _ _ _ _ _ _	B-3

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: RICH Last Name: Firm: SES INC.	04 29 2002 (m m d d y y y y)	04 29 2002 (m m d d y y y y)	2" SPLIT SPOON

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _		_____ Feet MSL	_____ Feet MSL	2.5 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E S/C/N
NW 1/4 of SW 1/4 of Section 31, T 28 N, R 13 E W
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	SHAWANO	59	BOWLER

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth in Feet (Below ground surface)	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
				9" CONCRETE										
	16		1	0.7 TO 1.6 SAND FILL	SW			0		MOIST	NONE			11:25
S-1				1.6 TO 2.0 LOOSE, BROWN (10YR 4/4) FINE SAND, MOIST	SP									
S-2	9		2	2.0 TO 3.0 GRAVELLY SAND, MOIST	SW			0		WET	NONE			11:30 DRO GRO/VOC Pb
			3	EOB @ 3.0'										

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

Signature	Firm
Phil Eagan	EARTH TECH, INC

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

APPENDIX 3.2

PHOTOGRAPH LOG

Phase 2.5 Environmental Sampling Investigation
A-Z Sales and Service
100 West Main Street
Bowler, Shawano County, Wisconsin
April 29, 2002

View southwest of A-Z Sales and Service at the corner of CTH A and Main Street. The orange cones indicate the locations of Soil Borings B-1 (right cone) and B-2 (left cone).

View northeast from A-Z Sales and Service. The orange cones indicate the locations of Soil Borings B-1 (foreground), B-2 (right), and B-3 (background).

APPENDIX 3.3

SOIL GAS MONITORING

3.3 SOIL GAS MONITORING

PID Model: HNu PI-101
Probe: 10.2 eV Lamp
Calibration Gas: 100 ppm Isobutylene/Air
Reading: 55 ppm

The PID was calibrated before and after sampling was conducted.

Date	Time	Initial Setting	Final Adjusted Setting
04/29/02	10:45 a.m.	7.60	7.80
04/29/02	12:30 p.m.	7.80	7.06

Soil gas readings were obtained using the headspace method. Soil samples were placed in plastic zip-lock bags, and the air in each bag was allowed to equilibrate with the soil sample for up to 30 minutes. If the outside air temperature was below 70 degrees Fahrenheit, the soil samples were heated to a temperature of approximately 75 degrees Fahrenheit. The PID probe was then inserted into the bag headspace and the instrument reading was recorded.

APPENDIX 3.4

STANDARD SAMPLING PROCEDURES

3.4 STANDARD SAMPLING PROCEDURES

3.4.1 Soil

Soil samples were collected continuously from the soil probe borings using 2-inch diameter samplers with disposable teflon liners. Samples collected for laboratory analysis were removed from the teflon liners and placed directly into laboratory supplied glass jars using new protective gloves. Protective gloves were disposed after collection of each sample. All soil samples were preserved according to DNR and EPA protocol. The samplers were washed in a solution of Alconox soap and water, and double rinsed with tap water between samples.

APPENDIX 3.5

BOREHOLE ABANDONMENT FORMS

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B
Rev. 8-89

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

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location

County: SHAWANO

NE 1/4 of SE 1/4 of Sec. 36 ; T. 28 N; R. 12 ☒ E ☐ W

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

Grid Location _____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Civil Town Name: ALMON

Street Address of Well: 100 W. MAIN

City, Village: BOWLER

(2) FACILITY NAME

Original Well Owner (If Known): WISDOT - BOE

Present Well Owner

Street or Route: 4802 SHEBOYGAN AVE

City, State, Zip Code: MADISON WI 53707

Facility Well No. and/or Name (If Applicable): B-1

WI Unique Well No.: _____

Reason For Abandonment: TEMPORARY BOREHOLE

Date of Abandonment: 4/29/02

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 4/29/02

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) PUSH SPLIT-SPOON

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 3.0 Casing Diameter (ins.) _____
(From groundsurface)

Casing Depth (ft.) NA

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

(4) Depth to Water (Feet) NA

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☒ No	

If No, Explain _____

Was Casing Cut Off Below Surface?	☐ Yes	☐ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☐ No

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☒ Other (Explain) GRAVITY - DUMP

(6) Sealing Materials — For monitoring wells and monitoring well boreholes only
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite
☒ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite - Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
QUICKCRETE	Surface	0.4		
HOLE PLUG	0.4	3.0	1/8	

(8) Comments: _____

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

Signature of Person Doing Work: Mark Eggar
Date Signed: 4/29/02

Street or Route: 200 INDIANA
Telephone Number: (715) 347-3037

City, State, Zip Code: STEVENS POINT, WI 54481

(10) FOR DNR OR COUNTY USE ONLY

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

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B Rev. 8-89

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

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location

County: SHAWANO

NW 1/4 of SW 1/4 of Sec. 31 ; T. 28 N; R. 13 ☒ E ☐ W

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

Grid Location _____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Civil Town Name

Street Address of Well: E. MAIN

City, Village: BOWLER

(2) FACILITY NAME

Original Well Owner (If Known): WISDOT - BOE

Present Well Owner

Street or Route: 4802 SHERIDAN

City, State, Zip Code: MADISON, WI 53707

Facility Well No. and/or Name (If Applicable): B-2

WI Unique Well No. _ _ _ _ _ _

Reason For Abandonment: TEMPORARY BOREHOLE

Date of Abandonment: 4/29/02

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 4/29/02

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) PUSH SPLIT - SPOON

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 3.0 Casing Diameter (ins.) _____
(From groundsurface)

Casing Depth (ft.) _____

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

(4) Depth to Water (Feet) NA

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain _____

Was Casing Cut Off Below Surface?	☐ Yes	☐ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☐ No

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☒ Other (Explain) GRAVITY - DUMP

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☒ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite - Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
COLD PATCH	Surface	0.2		
HOLE PLUG	0.2	3.0	1#	

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work: SES, INC. / EARTH TECH

Signature of Person Doing Work: Mark Fagan
Date Signed: 4/29/02
Street or Route: 200 INDIANA
Telephone Number: (715) 342-3037
City, State, Zip Code: STEVENS POINT WI 54481

(10) FOR DNR OR COUNTY USE ONLY

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

State of Wisconsin
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT

Form 3300-5B
Rev. 8-89

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

(1) GENERAL INFORMATION

Well/Drillhole/Borehole Location

County: SHAWANO

NW 1/4 of SW 1/4 of Sec. 31 ; T. 28 N; R. 13 ☒ E ☐ W

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

Grid Location _____ ft. ☐ N. ☐ S., _____ ft. ☐ E. ☐ W.

Civil Town Name: BARTELME

Street Address of Well: E. MAIN

City, Village: BOWLER

(2) FACILITY NAME

Original Well Owner (If Known): WIS DOT - BOE

Present Well Owner:

Street or Route: 4802 SHEBOYGAN AVE

City, State, Zip Code: MADISON, WI 53707

Facility Well No. and/or Name (If Applicable): B-3

WI Unique Well No.: _____

Reason For Abandonment: TEMPORARY BOREHOLE

Date of Abandonment: 4/29/02

WELL/DRILLHOLE/BOREHOLE INFORMATION

(3) Original Well/Drillhole/Borehole Construction Completed On

(Date) 4/29/02

☐ Monitoring Well
☐ Water Well
☐ Drillhole
☒ Borehole

Construction Report Available? ☒ Yes ☐ No

Construction Type:
☐ Drilled ☐ Driven (Sandpoint) ☐ Dug
☒ Other (Specify) PUSH SPLIT SPOON

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth (ft.) 3.0 Casing Diameter (ins.) ____
(From groundsurface)

Casing Depth (ft.) N/A

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

(4) Depth to Water (Feet) N A

Pump & Piping Removed?	☐ Yes	☐ No	☒ Not Applicable
Liner(s) Removed?	☐ Yes	☐ No	☒ Not Applicable
Screen Removed?	☐ Yes	☐ No	☒ Not Applicable
Casing Left in Place?	☐ Yes	☐ No	

If No, Explain _____

Was Casing Cut Off Below Surface?	☐ Yes	☐ No
Did Sealing Material Rise to Surface?	☒ Yes	☐ No
Did Material Settle After 24 Hours?	☐ Yes	☒ No
If Yes, Was Hole Retopped?	☐ Yes	☐ No

(5) Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped
☐ Dump Bailer ☒ Other (Explain) GRAVITY-DUMP

(6) Sealing Materials
☐ Neat Cement Grout
☐ Sand-Cement (Concrete) Grout
☐ Concrete
☐ Clay-Sand Slurry
☐ Bentonite-Sand Slurry
☐ Chipped Bentonite

For monitoring wells and monitoring well boreholes only
☒ Bentonite Pellets
☐ Granular Bentonite
☐ Bentonite - Cement Grout

(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks Sealant or Volume	Mix Ratio or Mud Weight
QUICK CRETE	Surface	0.4		
HOLE PLUG	0.4	3.0	1/8	

(8) Comments: _____

(9) Name of Person or Firm Doing Sealing Work: SES INC. EARTH TECH

Signature of Person Doing Work: Phil Egan
Date Signed: 4/29/02
Street or Route: 200 INDIANA
Telephone Number: (715) 342-3037
City, State, Zip Code: STEVENS POINT, WI 54481

(10) FOR DNR OR COUNTY USE ONLY

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

APPENDIX 3.6

STANDARD ANALYTICAL PROCEDURES

3.6 STANDARD ANALYTICAL PROCEDURES

Soil samples were analyzed by U.S. Filter/Enviroscan, Rothschild, Wisconsin (DNR Certification No. 737053130).

The analytical methods used included:

1. GRO by the Wisconsin Modified GRO Method
2. DRO by the Wisconsin Modified DRO Method
3. PVOCs by EPA Method 8021
4. Lead by EPA Method 6010

Sample detection limits for specific analyses are included on the laboratory data sheets.

APPENDIX 3.7

CHAIN OF CUSTODY FORM

REQUEST FOR SERVICES USFilter

ENVIROSCAN SERVICES 301 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

REPORT TO:
Name: Kyle Wagoner
Company: Earth Tech, Inc.
Address: 200 Indiana Ave.
Stevens Point, WI 54481
Phone: (715) 342-3038
P. O. #
Project # 52065 Quote #
Location WisDOT - Bowler

BILL TO: (if different from Report To info)
Name:
Company: ~~SAME~~
Address:
Phone: ( )

Sample Type (Check all that apply)
- ☐ Groundwater
- ☐ Wastewater
- ☒ Soil/Solid
- ☐ Drinking Water
- ☐ Oil
- ☐ Vapor
- ☐ Other

Turnaround Time
- ☒ Normal
- ☐ Rush (Pre-approved by Lab)

Date Needed
Approved By

ANALYTICAL REQUESTS
(use separate sheet if necessary)

LAB USE ONLY	DATE	TIME	No. of Containers COMP	No. of Containers GRAB	SAMPLE ID	DRO	GRO/PVOC	Pb			REMARKS
16099634	4/29/02	10:45		1	MeOH BLANK		X				17. Soil 160g MeOH
16099635		10:55		3	B-1 2.0'TO3.0	X	X	X			160g Unpres
16099636		11:12		3	B-2 2.0' TO 3.0	X	X	X			
16099637		11:30		3	B-3 2.0' TO 3.0'	X	X	X			
16099638		11:50		3	B-4 4.0' TO 6.0'	X	X	X			
16099639		12:05		3	B-5 4.0 TO 6.0	X	X	X			

Del'v: (Hand) Comm:
Ship. Cont. OK (Y) N N/A
Samples leaking? Y (N) N/A
Seals OK? (Y) N N/A
Rec'd on ice? (Y) N N/A 2°C

Comments:

CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature) Phil Cagan

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
Phil Cagan	4/30/02 16:30	Mark W. Stuth
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature) / DATE/TIME
Mark W. Stuth	4/30/02 17:00	Kim Ely 4-30-02 17:10

✓

APPENDIX 3.8

LABORATORY REPORTS

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

May 18, 2002

Earth Tech, Inc.
200 Indiana Ave
Stevens Point, Wi 54481

Attn: Kyle Wagoner

REPORT NO.: 099634 **PROJECT NO.: 52065**

Please find enclosed the analytical report, including the Sample Summary, Sample Narrative and Chain of Custody for your sample set received April 30, 2002.

All analyses were performed in accordance with approved methods as indicated on this report.

If you have any questions about the results, please call. Thank you for using USFilter, Enviroscan Services for your analytical needs.

Sincerely,

USFilter, Enviroscan Services

Gary L. Scharrer
Organic Laboratory Supervisor

I certify that the data contained in this report has been generated and reviewed in accordance with the USFilter, Enviroscan Services Quality Assurance Program. Exceptions, if any, are discussed in the sample narrative. Samples will be retained for 30 days from the date of this report, then disposed in an appropriate manner. USFilter, Enviroscan Services reserves the right to return samples identified as hazardous. Release of this Final Report is authorized as verified by the following signature.

Approved by: _____

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Sample Summary

099634.2

Lab Id	Client Sample ID	Date/Time	Matrix
099634	MEOH BLANK-USF	04/29/02 10:45	SOIL
099635	B-1 2.0-3.0	04/29/02 10:55	SOIL
099636	B-2 2.0-3.0	04/29/02 11:12	SOIL
099637	B-3 2.0-3.0	04/29/02 11:30	SOIL
099638	B-4 4.0-6.0	04/29/02 11:50	SOIL
099639	B-5 4.0-6.0	04/29/02 12:05	SOIL

Sample Narrative/Sample Status

LOGIN:

GENERAL:

ANALYSES:

QA/QC:

REPORTING:

Definitions

LOD = Limit of Detection
LOQ = Limit of Quantitation
< = Less Than
COMP = Complete
SUBCON = Subcontracted analysis
mv = millivolts
pCi/l = picocurie per liter
ml/l = mililiters/Liter

µg/l = Micrograms per liter = parts per billion (ppb)
µg/kg = Micrograms per kilogram = parts per billion (ppb)
mg/l = Milligrams per liter = parts per million (ppm)
mg/kg = Milligrams per kilogram = parts per million (ppm)
NOT PRES = Not Present
ppth = Parts per thousand
(S) = Surrogate Compound

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Earth Tech, Inc.
200 Indiana Ave
Stevens Point, Wi 54481

PROJECT NO.: 52065
REPORT NO. : 099634.4
DATE REC'D : 04/30/02
REPORT DATE: 05/18/02
PREPARED BY: GLS

Attn: Kyle Wagoner

Sample ID: **B-1 2.0-3.0** Matrix: **SOIL** Sample Date/Time: **04/29/02 10:55** Lab No. **099635**

	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date Analyzed	Analyst
EPA 3050								
Metal Prep	COMP		-	-	-		05/03/02	DJB
EPA 6010								
Total Lead	3.37	mg/kg	0.33	1.1	1		05/16/02	BMS
EPA 8021 (Only positively identified analytes are reported on a dry weight basis								
Benzene	<0.025	mg/kg	0.008	0.0266	1		05/03/02	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.0233	1		05/03/02	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.0599	1		05/03/02	LMP
Toluene	<0.025	mg/kg	0.007	0.0233	1		05/03/02	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		05/03/02	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.0333	1		05/03/02	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		05/03/02	LMP
o-Xylene	<0.025	mg/kg	0.008	0.0266	1		05/03/02	LMP
MOSA21-2								
Total Solids	96.6	%	-	0.33	-		05/01/02	LMV
WI DNR								
Soil Diesel Range Organics	125.	mg/kg	-	5.0	1	D2B D5	05/11/02	LTD
Soil Org Ext - DRO	COMP		-	-	-		05/09/02	CKV
Soil Gasoline Range Organic	<5.18	mg/kg	-	5.0	1		05/03/02	LMP

All results calculated on a dry weight basis.

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Earth Tech, Inc.
200 Indiana Ave
Stevens Point, Wi 54481

PROJECT NO.: 52065
REPORT NO. : 099634.5
DATE REC'D : 04/30/02
REPORT DATE: 05/18/02
PREPARED BY: GLS

Attn: Kyle Wagoner

Sample ID: **B-2 2.0-3.0** Matrix: **SOIL** Sample Date/Time: **04/29/02 11:12** Lab No. **099636**

	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date Analyzed	Analyst
EPA 3050								
Metal Prep	COMP		-	-	-		05/03/02	DJB
EPA 6010								
Total Lead	4.21	mg/kg	0.33	1.1	1		05/16/02	BMS
EPA 8021 (Only positively identified analytes are reported on a dry weight basis								
Benzene	<0.025	mg/kg	0.008	0.0266	1		05/04/02	LMP
Ethylbenzene	<0.025	mg/kg	0.007	0.0233	1		05/04/02	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.0599	1		05/04/02	LMP
Toluene	<0.025	mg/kg	0.007	0.0233	1		05/04/02	LMP
1,2,4-Trimethylbenzene	<0.025	mg/kg	0.012	0.04	1		05/04/02	LMP
1,3,5-Trimethylbenzene	<0.025	mg/kg	0.01	0.0333	1		05/04/02	LMP
m- & p-Xylene	<0.025	mg/kg	0.015	0.05	1		05/04/02	LMP
o-Xylene	<0.025	mg/kg	0.008	0.0266	1		05/04/02	LMP
MOSA21-2								
Total Solids	86.7	%	-	0.33	-		05/01/02	LMV
WI DNR								
Soil Diesel Range Organics	28.4	mg/kg	-	5.0	1	D2B D5	05/11/02	LTD
Soil Org Ext - DRO	COMP		-	-	-		05/09/02	CKV
Soil Gasoline Range Organic	<5.77	mg/kg	-	5.0	1		05/04/02	LMP

All results calculated on a dry weight basis.

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Earth Tech, Inc.
200 Indiana Ave
Stevens Point, Wi 54481

PROJECT NO.: 52065
REPORT NO. : 099634.6
DATE REC'D : 04/30/02
REPORT DATE: 05/18/02
PREPARED BY: GLS

Attn: Kyle Wagoner

Sample ID: **B-3 2.0-3.0** Matrix: **SOIL** Sample Date/Time: **04/29/02 11:30** Lab No. **099637**

	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date Analyzed	Analyst
EPA 3050								
Metal Prep	COMP		-	-	-		05/03/02	DJB
EPA 6010								
Total Lead	6.89	mg/kg	0.33	1.1	1		05/16/02	BMS
EPA 8021 (Only positively identified analytes are reported on a dry weight basis								
Benzene	<0.025	mg/kg	0.008	0.0266	1		05/04/02	LMP
Ethylbenzene	0.0299	mg/kg	0.007	0.0233	1		05/04/02	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/kg	0.018	0.0599	1		05/04/02	LMP
Toluene	<0.025	mg/kg	0.007	0.0233	1		05/04/02	LMP
1,2,4-Trimethylbenzene	0.106	mg/kg	0.012	0.04	1		05/04/02	LMP
1,3,5-Trimethylbenzene	0.0355	mg/kg	0.01	0.0333	1		05/04/02	LMP
m- & p-Xylene	0.146	mg/kg	0.015	0.05	1		05/04/02	LMP
o-Xylene	<0.025	mg/kg	0.008	0.0266	1		05/04/02	LMP
MOSA21-2								
Total Solids	94.6	%	-	0.33	-		05/01/02	LMV
WI DNR								
Soil Diesel Range Organics	<5.29	mg/kg	-	5.0	1		05/11/02	LTD
Soil Org Ext - DRO	COMP		-	-	-		05/09/02	CKV
Soil Gasoline Range Organic	<5.29	mg/kg	-	5.0	1		05/04/02	LMP

All results calculated on a dry weight basis.

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Earth Tech, Inc.
200 Indiana Ave
Stevens Point, Wi 54481

PROJECT NO.: 52065
REPORT NO. : 099634.3
DATE REC'D : 04/30/02
REPORT DATE: 05/18/02
PREPARED BY: GLS

Attn: Kyle Wagoner

Sample ID: **MEOH BLANK-USF** Matrix: **SOIL** Sample Date/Time: **04/29/02 10:45** Lab No. **099634**

	Result	Units	LOD	LOQ	Dilution Factor	Qualifiers	Date Analyzed	Analyst
EPA 8021								
Benzene	<0.025	mg/l	0.008	0.0266	1		05/03/02	LMP
Ethylbenzene	<0.025	mg/l	0.007	0.0233	1		05/03/02	LMP
Methyl t-Butyl Ether(MTBE)	<0.025	mg/l	0.018	0.0599	1		05/03/02	LMP
Toluene	<0.025	mg/l	0.007	0.0233	1		05/03/02	LMP
1,2,4-Trimethylbenzene	<0.025	mg/l	0.012	0.04	1		05/03/02	LMP
1,3,5-Trimethylbenzene	<0.025	mg/l	0.01	0.0333	1		05/03/02	LMP
m- & p-Xylene	<0.025	mg/l	0.015	0.05	1		05/03/02	LMP
o-Xylene	<0.025	mg/l	0.008	0.0266	1		05/03/02	LMP
WI DNR								
Soil Gasoline Range Organic	<2.50	mg/l	-	5.0	1		05/03/02	LMP

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

a VIVENDI water company

USFilter

ENVIROSCAN SERVICES
301 WEST MILITARY ROAD
ROTHSCHILD, WI 54474

TELEPHONE 800-338-7226
FACSIMILE 715-355-3221

Sample Receipt Report

Client: Eartec Date Received: 4/30/02

Analytical No.: 160996H Through 99639

Check all deviations from EPA or WDNR sample protocol.

[ ] Sample(s) received at ____°C which is above the EPA and WDNR limit of 4°C.

[ ] VOC vial(s) received with headspace. Explain: _____

[ ] Sample(s) received in bottles not furnished by Enviroscan. Preservation method, if used, is unknown.

[ ] Sample(s) not properly preserved per EPA/WDNR protocol for the following: _____

[ ] Sample(s) received beyond EPA holding time for: _____

[ ] Sample date/time not supplied by client. Actual holding time unknown.

[ ] GRO/PVOC/VOC/DRO (circle appropriate) sample(s) are <19.5 gms and this report is the flag for that information. Sample(s) under-weight: _____

[X] GRO/PVOC/VOC (circle appropriate) sample(s) were between 26.4-35.4 gms so methanol was added in a 1:1 ratio. Sample(s) included: 99635 → 4ml, 99636 → 3ml, 99637 → 5ml, 99638 → 3ml, 99639 → 4ml

[ ] GRO/PVOC/VOC/DRO (circle appropriate) sample(s) were >35.4 gms and are required to be rejected. Sample(s) included: _____

[ ] Other: _____

Client contact concerning the above deviations:

Client _____ (contact name) notified of the above deviation(s) on __/__/__ at __:__ am/pm by _____ and the client ordered:
(signature)

[ ] Proceed with analyses as ordered.
[ ] Proceed with analyses after taking the following corrective action: _____
[ ] Do NOT proceed with analyses.

REQUEST FOR SERVICES USFilter

ENVIROSCAN SERVICES 301 W. MILITARY RD. ROTHSCHILD, WI 54474 1-800-338-SCAN

REPORT TO:
Name: Kyle Wagoner
Company: Earth Tech, Inc
Address: 200 Indiana Ave.
Stevens Point, WI 54481
Phone: (715) 342-3038
P. O. #
Project # 52065 Quote #
Location WisDOT - Bowler

BILL TO: (if different from Report To info)
Name:
Company: ~~SAME~~ SAME
Address:
Phone: ( )

Sample Type *(Check all that apply)*
- ☐ Groundwater
- ☐ Wastewater
- ☒ Soil/Solid
- ☐ Drinking Water
- ☐ Oil
- ☐ Vapor
- ☐ Other

Turnaround Time
- ☒ Normal
- ☐ Rush (Pre-approved by Lab)

Date Needed
Approved By

ANALYTICAL REQUESTS
(use separate sheet if necessary)

LAB USE ONLY	DATE	TIME	No. of Containers COMP	No. of Containers GRAB	SAMPLE ID	DRO	GRO/PVOC	Pb			REMARKS
16099634	4/29/02	10:45		1	MeOH BLANK		+				17.5 ml MeOH 160 ml MeOH
16099635		10:55		3	B-1 2.0' TO 3.0'	+	+	+			160 ml on pres
16099636		11:12		3	B-2 2.0' TO 3.0'	+	+	+			
16099637		11:30		3	B-3 2.0' TO 3.0'	+	+	+			
16099638		11:50		3	B-4 4.0' TO 6.0'	+	+	+			
16099639		12:05		3	B-5 4.0 TO 6.0	+	+	+			

Del'v: (Hand) Comm.
Ship. Cont. OK (Y) N N/A
Samples leaking? Y (N) N/A
Seals OK? (Y) N N/A
Rec'd on ice? (Y) N N/A

Comments:

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Phil Cogan

RELINQUISHED BY: *(Signature)*	DATE/TIME	RECEIVED BY: *(Signature)*
Phil Cogan	4/30/02 16:30	Mark W. Stadt
RELINQUISHED BY: *(Signature)*	DATE/TIME	RECEIVED BY: *(Signature)*
RELINQUISHED BY: *(Signature)* Mark W. Stadt	DATE/TIME 4/30/02 17:00	RECEIVED FOR LABORATORY BY: *(Signature)* [illegible] DATE/TIME 4-30-02 17:10