

# **PROPOSAL**

SITE INVESTIGATION

FORMER DRY CLEANING FACILITY

N89W16744-46 APPLETON AVE.

MENOMONEE FALLS, WISCONSIN

Prepared For:

**Bence Family Limited Partnership** 

MAXIM Proposal No.:P2350028

January, 2002



January 8, 2002

Bence Family Limited Partnership Attn: Mr. Todd Bence W200N9356 Woodside Lane Menomonee Falls, Wisconsin 53051

Subject:

Site Investigation and Cleanup Former Dry Cleaning Facility N89W16744-46 Appleton Avenue Menomonee Falls, WI Maxim Proposal No. P2350028

Dear Mr. Bence:

Maxim Technologies, Inc. (Maxim) is pleased to provide a proposal and cost estimate for performing a site investigation for the property referenced above. This proposal is being submitted pursuant to the requirements of the State of Wisconsin's Dry Cleaner Environmental Response Program, and will be submitted to the Wisconsin Department of Natural Resources (WDNR) as part of its requirements for approving funding under the program. To facilitate your aggressive schedule, we have included a Site Investigation Work Plan for our proposed investigation as part of this proposal.

#### **Background Information**

The property at N89 W16744-46 Appleton Avenue, Menomonee Falls, WI, consists of a 10,000 square foot commercial building with two rental units on the first floor. One of the rental units is used as a music store and the other is presently vacant. There are eight one-bedroom apartments on the upper level of the building that were added in the 1970's. The building has a basement, which is used for storage.

A dry cleaning facility operated in the vacant rental unit for approximately 20 years from the mid 1970s to the mid 1990s. A Phase II Environmental Property Assessment was performed by Maxim Technologies in December 2001 to assess potential impacts from the dry cleaning operations.

The assessment included three Geoprobes at the site. For each boring, grab samples were taken at the bottom of the boring (at bedrock) and analyzed for VOCs. One of the borings, GP-1 was located next to a drain in the bottom of a loading dock ramp recessed approximately five feet below the surrounding ground surface. Summary tables of the soil analytical results are attached.

Soil chemical analysis for VOCs in GP-1 detected tetrachloroethane (PCE), n-butylbenzene, cis-1,2-dichloroethane, naphthalene, tetrachloroethane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m&p xylene and o-xylene at the bedrock surface, approximately 1.5 feet below the bottom of the loading dock ramp. Soil chemical analysis for VOCs in the remaining borings (GP-2 and GP-3) only detected small amounts of methylene chloride, which we understand is commonly found as a laboratory artifact, and toluene.

#### Proposed Consultant and Contract Services to be Provided

#### Conceptual Model

Maxim's proposed scope of services is based on the following conceptual model of contaminant transport at the site:

- ▶ The PCE was discharged to the drain, most likely through an accidental release. Based on discussions with the site owner, and documentation that the dry cleaning operator disposed of used PCE properly, the release probably was not the result of on-going practices over a long period of time.
- Some of the PCE would have leaked from the drain to the surrounding soil.
- ▶ The PCE should have moved straight down from the vicinity of the drain.
- ▶ When it reached the bedrock surface, it continued downward through fractures to the water table.
- As it moved through the fractures, its concentration reduced through adsorption and absorption. Based on a county water table map (Gonthier, 1979), the estimated water table depth is 20 to 40 feet.
- At the present time, the site is potentially a continuing source of groundwater impacts through PCE in the soil and rock being released to infiltrating water.

Based on the discussions with the site owner, and documentation that the dry cleaning operator disposed of used PCE properly, we believe the detected PCE is the result of an isolated spill and was not the result of long-term practices at the facility. We therefore anticipate that most of the PCE should have been attenuated before it reached the water table

#### Scope of Investigation

The primary objective of the site investigation will be to define the extent to which the PCE reached the bedrock surface and its fate as it moved downward through the rock. Maxim therefore proposes to excavate the base of the loading dock and expose the bedrock surface. This will also serve a secondary objective of removing the contaminated soils identified in the Phase II Assessment. The excavated soil will be stockpiled on the site while it is being profiled for disposal. Maxim will sample the base of the excavation for VOC to define the concentration of the remaining PCE at the bedrock surface. A sample will also be taken from the soil adjacent to the drain pipe at the side of the excavation. An additional sample from the base of the excavation will be tested for SPLP to establish a site-specific soil standard.

Maxim will also perform a shallow test pit (1 to 2 feet) to provide access for sampling bedrock fractures below the base of the excavation to establish an attenuation rate as the PCE moves down into the bedrock

Maxim will also identify and sample any downgradient water supply wells that may be present.

Maxim's work will be performed in accordance with the requirements of Chapters NR169 and NR700 of the Wisconsin Administrative Code. Analytical work will be performed by laboratories certified by the WDNR for the analyses performed.

Additional details as to the proposed investigation are given in the attached Work Plan.

The Site Investigation Report will describe the investigation and present the results and Maxim's recommendations. If the investigation shows that the remaining PCE does not present a risk to health or to the environment, Maxim will recommend case closure. If the investigation shows that the site may be impacting the bedrock aquifer, Maxim will recommend additional investigation of the bedrock aquifer or that a remedial action be performed.

#### **Cost Estimates**

A unit price schedule for Maxim's services is attached. We have also included unit price lists for a qualified local excavator and for a laboratory certified by the State of Wisconsin. These rates have been used for cost estimating purposes. If Maxim is selected as your consultant, the excavating contractor and laboratory will be selected based on a minimum of three bids. Qualification statements for Maxim personnel and for the laboratory are included. Super Western is part of Super Excavating, which has a performance history of over 50 years in the Milwaukee area. They are experienced at performing environmental remediations and in rock excavation. They have sufficient equipment and staff to perform a project of this magnitude.

We were not able to obtain a price for disposal because the total PCE value was too high for profiling as a special waste. A TCLP extraction of the actual waste proposed for disposal will be needed to accurately define the disposal requirements for the removed soil. In our cost estimate for the project, we have assumed the soil will be classified as a special waste and have used a conservative estimate of \$20 per ton for disposal of soil as a special waste. In the event the soil is classified as a hazardous waste, the disposal cost will be much higher.

Based on the scope of services described above and the attached unit rates, we estimate that the investigation will not exceed <u>\$8,841</u> for work eligible for reimbursement by the Dry Cleaning Fund. A cost breakdown including the estimated number of each of the units to be provided is attached. We will not exceed this estimate without written authorization from you.

This price does not include restoration of the drain or the asphalt pavement. Based upon the attached quotation by Super Western, the cost of these services will be, respectively, \$1600 and \$1000 to \$1200.

#### **Insurance Coverage**

A sample certificate of insurance is attached which generally describes Maxim's insurance coverage. A specific certificate for this project will be provided if we are awarded the work.

## **Certifications**

Pursuant to the requirements of NR. 169, Maxim Technologies will comply with Chapters NR169 and NR700 of the Wisconsin Administrative Code.

#### **Schedule**

Listed below is a tentative schedule of work activities for this project. It assumes that additional work will not be needed. Field conditions and other unforeseen circumstances can temporarily delay the project.

Proposals and Work Plans Submitted to WDNR

Field Work Initiated

Return of Laboratory Results

Report Completed

January 11, 2002

February 11, 2002

February 22, 2002

#### **Conditions of Engagement**

This proposal may be accepted by notifying Maxim of the acceptance. We will then prepare our Standard Form of Agreement and send it to you for execution. The Terms and Conditions for the Agreement, including termination requirements, are attached.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. Feel free to give me a call should you have any questions or comments regarding this proposal.

Sincerely,

MAXIM TECHNOLOGIES, INC.®

James P. Rose, P.G.

Jume Mus

Project Manager

Patrick J. Harrison, P.E Executive Vice President

#### Attachments:

Site Investigation Work Plan

Figure 1, Site Location and Local Topography

Figure 2, Site Sketch

Figure 3, Cross Sectional Diagram

Table 1, Soil Analytical Results

Logs of Test Borings GP-1, GP-2, and GP-3

Maxim Fee Schedule

Maxim Qualification Information

Super Western, Inc. Price Quotation

CTLaboratories Qualification Information and Fee Schedule

Project Price Estimate

Maxim Terms and Conditions

Sample Certificate of Insurance

# SITE INVESTIGATION WORK PLAN SITE INVESTIGATION AND CLEANUP FORMER DRY CLEANING FACILITY N89W16744-46 APPLETON AVENUE MENOMONEE FALLS, WI

#### BACKGROUND

#### Introduction

Maxim Technologies, Inc. has prepared this work plan describing our recommended approach to investigating the nature and extent of contamination from release at a dry cleaning facility. The release was detected in the soil adjacent to a loading dock drain behind the building at N89 W16744-46 Appleton Avenue, Menomonee Falls, WI.

The following work plan is designed to identify the extent of contamination at the site. Tasks include an investigatory test pit, and laboratory analysis of soil samples. If the field investigation indicates that groundwater may have been impacted, additional investigation may be proposed. Otherwise, a case closure request will be submitted.

#### Site Data

Site Location:

N89 W16744-46 Appleton Avenue, Menomonee Falls, WI.

Legal Description of site:

Lot 1, Block 2, Village of Menomonee Falls Assessor's Plat No. 1 in the NE ¼, SE ¼ and SW ¼ of the SW ¼, Section 3, Township 8 North, Range 20 East., Village of Menomonee Falls, Waukesha

Co., Wisconsin

Responsible Party:

Bence Family Limited Partnership W200N9356 Woodside Lane Menomonee Falls, Wisconsin 53051

Representative:

Todd Bence

Phone: Fax:

262-251-0660 262-251-0662

Consultant:

Maxim Technologies, Inc 6333 W. Douglas Ave

Milwaukee, WI 53218

Representative:

James Rose, PG

Phone:

(414) 466-5090

Fax:

(414) 466-5154

Site Location Map:

Figure 1

Site Plan:

Figure 2

### Site Topography and Hydrology.

The site is located on the northeast side of Appleton Avenue in downtown Menomonee Falls. The site and the surrounding area is urbanized and most of the ground surface is paved or covered with buildings. The topography of the surrounding area is gently rolling and slopes to the Menomonee River, which is located approximately 800 feet to the east of the site.

The site is occupied by a two-story building with a basement that fronts on Appleton Avenue. The back of the lot is paved with asphalt and is used for parking. A ramp for a basement loading dock is cut approximately five feet below the ground surface. The immediate site topography is otherwise generally flat and drainage is provided by storm drains. One of the drains is located in the bottom of the ram, next to the building. The elevation of the site is approximately 860 feet above mean sea level.

## Geology and Hydrogeology

According to regional geologic maps, the soils in this area are ground moraine and end moraine, and the USGS 7.5 minute topographic quadrangle for the area shows typical glacial topographic features. Bedrock in the area is Silurian Dolomite.

Soil borings for a Phase II Environmental Assessment encountered fine-grained glacial deposits over bedrock. Logs of the borings are attached and their locations are shown on Figure 2. The thickness of the glacial deposits was four (4) to nine (9) feet at two locations in the parking area, and was 1.5 feet at the bottom of the loading dock ramp. The apparent weathering depth for the bedrock was zero to six feet, but this is based on the depth to which a direct push sampler could penetrate the rock. Since direct push samplers are not very effective at penetrating weathered rock, the actual weathering depth is likely to be greater.

According to a 1979 groundwater maps for Waukesha County (USGS – OFR 79-43), regional groundwater flow in the glacial deposits is eastward towards Lake Michigan and towards the Menomonee River. The borings at the site did not encounter bedrock. Based on the site topography and on the water elevation contours shown on the map, the estimated groundwater depth is 20 to 40 feet.

#### History

A dry cleaning facility operated at the site for approximately 20 years from the mid 1970s to the mid 1990s. The rental unit formerly occupied by the dry cleaning facility is presently vacant. Other present uses of the property include a music store on the first floor and residential apartments on the second floor.

A Phase II Environmental Property Assessment was performed by Maxim Technologies in December 2001 to assess potential impacts from the dry cleaning operations. The assessment included three Geoprobes at the site. For each boring, grab samples were taken at the bottom of the boring (at bedrock) and analyzed for VOCs. One of the borings, GP-1 was located next to a drain in the bottom of a loading dock ramp recessed approximately five feet below the surrounding ground surface. Summary tables of the soil analytical results are attached.

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The Wisconsin Department of Natural Resources (WDNR) regulates spills and releases of hazardous materials. State regulations require that spills and releases be reported to the WDNR. Accordingly, the owner of the property has notified the WDNR. The next step in the process of investigating and cleaning up the contamination is for the responsible party to hire an environmental consultant. This work plan provides a detailed scope of services to the WDNR and to the Responsible Party as part of the selection process.

#### **Potential Contaminant Migration Pathways and Receptors**

Maxim's proposed scope of services is based on the following conceptual model of contaminant transport at the site:

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Based on the discussions with the site owner, and documentation that the dry cleaning operator disposed of used PCE properly, we believe the detected PCE is the result of an isolated spill and was not the result of long-term practices at the facility. We therefore anticipate that most of the PCE should have been attenuated before it reached the water table.

Potential receptors include private wells, public wells and the Menomonee River. The area is urban and has a municipal water supply. The source of the municipal water supply is high capacity wells. Isolated private wells may also be present in the area. The nearest wells are believed to be upgradient, but this will be confirmed as part of this investigation.

#### **WORK PLAN**

#### **Summary**

The primary objective of the site investigation will be to define the extent to which the PCE reached the bedrock surface and its fate as it moved downward through the rock. Maxim therefore proposes to excavate the base of the loading dock and expose the bedrock surface. This will also serve a secondary objective of removing the contaminated soils identified in the Phase II Assessment. The excavated soil will be stockpiled on the site while it is being profiled for disposal. Maxim will sample the base of the excavation for VOC to define the concentration of the remaining PCE at the bedrock surface. A sample will also be taken from the soil adjacent to the drain pipe at the side of the excavation. An additional sample from the base of the excavation will be tested for SPLP to establish a site-specific soil standard.

Maxim will also perform a shallow test pit (1 to 2 feet) to provide access for sampling bedrock fractures below the base of the excavation to establish an attenuation rate as the PCE moves down into the bedrock.

Maxim will also identify and sample any downgradient water supply wells that may be present.

## **Project Coordination and Site Access**

During the project, coordination of activities and communication will be a number-one priority, so that the ongoing residential us of the building is not disturbed. Site activities will therefore be coordinated with Todd Bence, the owner's representative. Maxim Technologies, Inc. will also contact utility locators.

#### Soil and Groundwater Sampling

Figure 2 shows the proposed test pit locations. Figure 3 is a cross sectional diagram of the test pit and shows sampling locations.

Samples will be collected at the following locations:

- ▶ The base of the excavation at the soil-rock contact. This sample will be tested for VOC and SPLP VOC.
- Exposed Side Walls, Including one sample where the drain pipe exits the excavation. These samples will be tested for VOC.
- ▶ One sample of fracture fill at a depth 1-2 feet below the soil-rock contact, or as deep as can be excavated into weathered rock using hand methods. This sample will be tested for VOC.
- ▶ Water samples will be collected from downgradient wells. These samples will be tested for VOC.
- ▶ A composite sample of the excavated soil will be collected and tested for TCLP-VOC for disposal characterization.

One duplicate water sample, a distilled water blank, and a methanol blank will also be submitted to ensure that adequate laboratory QA/QC measures were taken and to validate the test results. These samples will be collected and shipped in accordance with WDNR requirements and in compliance with the method descriptions. This will include keeping the samples on ice and shipping to arrive at the laboratory within acceptable holding times. Measured quantities (20-35 gm) of the VOC soil samples will be placed in tared containers and preserved with 25 ml of methanol. A minimum of 100 grams of sample will be collected for the SPLP test. Water samples will be collected in vials and preserved with HCl. WDNR chain-of-custody forms will be used throughout sample collection, handling, transportation, and analysis to document sample integrity.

The lithology of the samples will be determined and recorded using the Unified Soil Classification System. All observations concerning soil structure, color, odor, or other signs of contamination will be recorded.

Following the receipt and review of the soil chemistry data, a decision will be made as to whether any additional work will be needed. If needed, the additional work will be the subject of a Work Plan Addendum to be submitted to the WDNR.

#### **Conduct of Field Work**

To reduce the potential for cross-contamination, decontamination of sample collection equipment will be conducted between each sample. The equipment will be washed with a soap solution and rinsed with tap water and distilled water. Alternatively, new equipment (gloves, sampling syringes, etc.) will be used in contact with each sample.

All field work will be conducted in accordance with the work plan and a site specific health and safety plan. After the field work is completed, the site will be restored to its original condition.

#### Site Investigation Report and Remedial Action Plan

Following completion of the field activities, the hydrogeologic and engineering evaluations will be documented in the Site Investigation Report. If additional remediation work is required, it will also include a Remedial Action Plan. The site investigation portion of this document will address all items outlined in Wisconsin Administrative Code Chapter NR 716. The remedial action plan portion of the report will consider remediation alternatives with a basic comparison of costs for all alternatives, as well as a detailed cost estimate for the recommended alternative. If soil contamination proves to be limited and the report concludes that groundwater impacts are not likely, a case closure request will be prepared.

#### Schedule

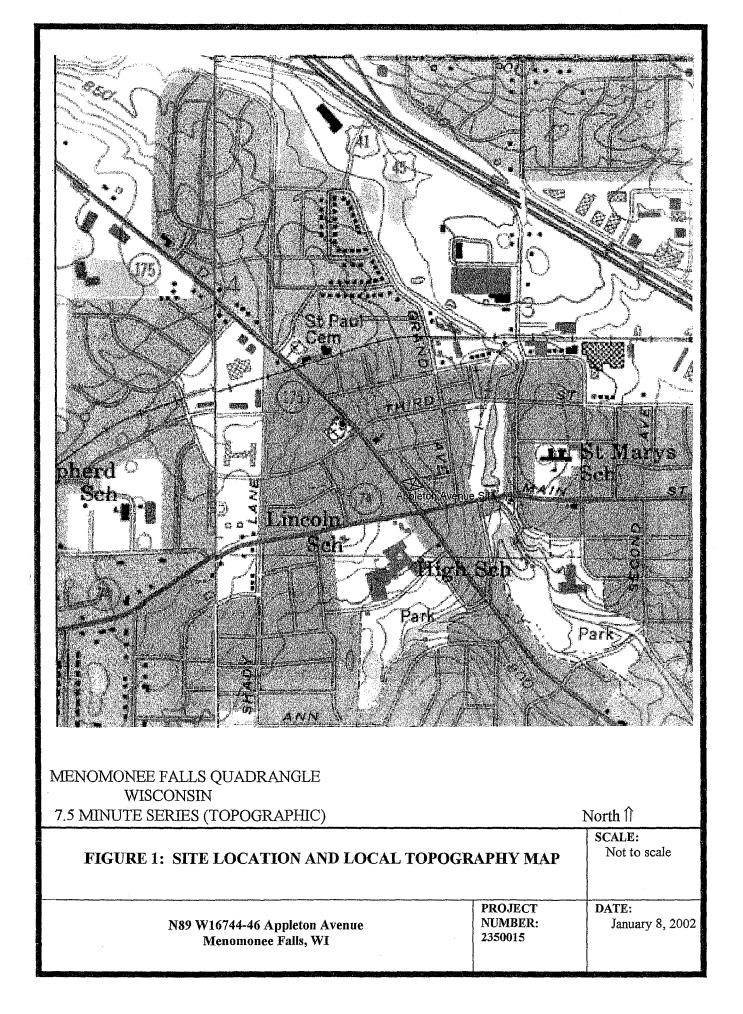
Listed below is a tentative schedule of work activities for this project. It assumes that additional work will not be needed. Field conditions and other unforeseen circumstances can temporarily delay the project.

Proposals and Work Plans Submitted to WDNR	January 11, 2002
Field Work Initiated	January 28, 2002
Return of Laboratory Results	February 11, 2002
Report Completed	February 22, 2002

#### REFERENCES

Mudrey, M.G., Brown, B.A., and Greenberg, J.K., 1982, Bedrock Geologic Map of Wisconsin. Wisconsin Geological and Natural History Survey.

Gonthier, J.B., 1979, Water Table Map of Waukesha County, Wisconsin: USGS Open-File Report 79-43.



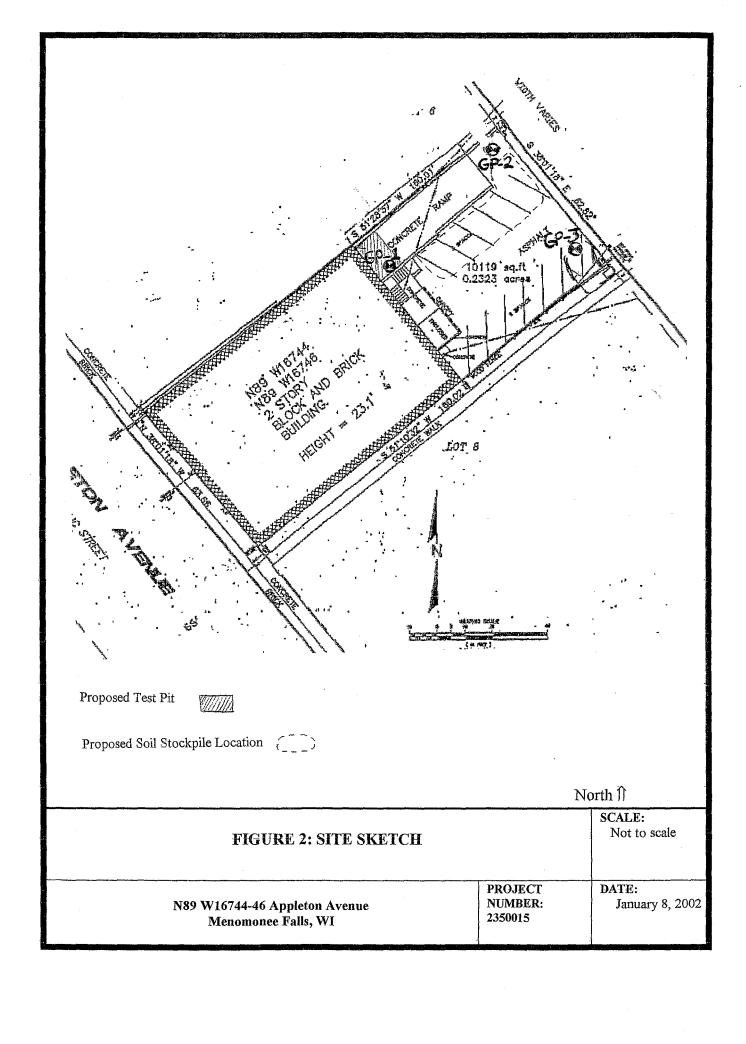


Figure 3 - Cross Sectional Diagram of Proposed Test Pit, Showing Sampling Locations

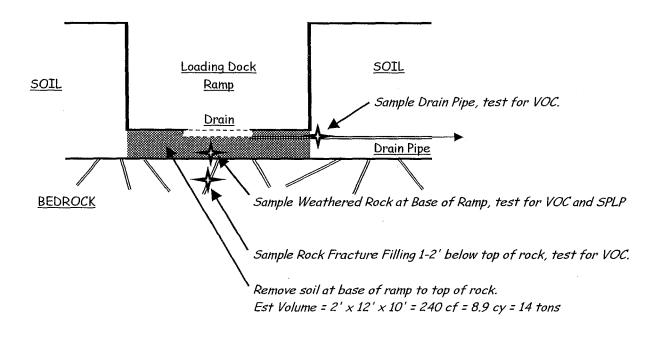


Table 1 - Analysis of Soil Samples for VOCs N89 W16744-46 Appleton Avenue, Menomonee Falls, WI

	s	Sample ID ampling Date		<u>GP-2</u> 04 Dec 01	GP+3
Analysis	Parameter	Units			<b>0</b> т
VOC	Benzene	ug/kg	<25	<25	<25
	Bromobenzene	ug/kg ug/kg	<25	<25	<25 <25
	Bromodichloromethane	ug/kg ug/kg	<25	<25 <25	<25
	Tert-Butylbenzene	ug/kg	<25	<25	<25
	Sec-Butylbenzene	ug/Kg	<25	<25	<25
	n-Butylbenzene	ug/Kg ug/Kg	190	<25	<25 <25
	Carbon Tetrachloride	ug/Kg	<25	<25	<25
	Chlorobenzene	ug/Kg	<25	<25	<25
	Chloethane	ug/kg	<25	<25	<25 <25
	Chloroform	ug/Kg	<25	<25	<25
	Chloromethane	ug/Kg	<25	<25	<25 <25
	2-Chlorotoluene	ug/Kg	<25	<25	<25
	4-Chlorotoluene	ug/kg	<25	<25	<25 <25
	2,2 DCP,cis-1,2 Dichloroethane	ug/kg	<50	<50	<50
	1,2-Dibromo-3-chloropropane	ug/kg ug/kg	<25	<25	<25
	Dibromochloromethane	ug/kg ug/kg	<25	<25	<25
	1,4-Dichlorobenzene	ug/kg ug/kg	<25	<25 <25	<25 <25
	1,3,-Dichlorobenzene	ug/kg ug/kg	<25	<25	<25 <25
	1,2-Dichlorobenene	ug/kg ug/kg	<25	<25 <25	<25 <25
	Dichlorodifluoromethane	ug/kg ug/kg	<25	<25	<25 <25
	1,2-Dichloroethane	ug/kg ug/kg	<25	<25	<25
	1,1-Dichloroethane	ug/kg ug/kg	<25	<25	<25 <25
	1,1-Dichloroethene	ug/kg ug/kg	<25	<25	<25 <25
	cis-1,2-Dichloroethane	ug/kg ug/kg	550	<25	<25
	trans-1,2-Dichloroethane	ug/kg ug/kg	<25	<25	<25 <25
	1,2-Dichloropropane	ug/kg ug/kg	<25 <25	<25	<25 <25
	1,3-Dichloropropane	ug/kg ug/kg	<25 <25	<25 <25	<25 <25
	Di-isopropyl ether	ug/kg ug/kg	<25 <25	<25 <25	<25 <25
	EDB (1,2-Dibromoethane)	ug/kg ug/kg	<25	<25 <25	<25 <25
	Ethylbenzene	ug/kg ug/kg	92	<25 <25	
	Hexachlorobutadiene		<b>92</b> <25		<25
	Isopropylbenzene	ug/kg		<25	<25
	p-Isopropyltoluene	ug/kg	<25 <25	<25	<25
	methylene chloride	ug/kg		<25	<25
	MTBE	ug/kg	49	48	84
	Naphthalene	ug/kg	<25	<25	<25
	n-Propylbenzene	ug/kg	110	<25	<25
	1,1,2,2-Tetrachloroethane	ug/kg	<25	<25	<25
	Tetrachloroethane	uġ/kg	<25	<25	<25
	Toluene	ug/kg	71000	<25	<25
	1,2,4-Trichlorobenzene	ug/kg	<25	28	<25
	1,2,3-Trichlorobenzene	ug/kg	<25	<25	<25
	1,1,1-Trichloroethane	ug/kg	<25	<25	<25
		ug/kg	<25	<25	<25
	1,1,2-Trichloroethane Trichloroethane	ug/kg	<25	<25	<25
	Trichlorofluoromethane	ug/kg	920	<25	<25
		ug/kg	<25	<25	<25
	1,2,4-Trimethylbenzene	ug/kg	180	<25	<25
	1,3,5-Trimethylbenzene	ug/kg	110	<25	<25
	Vinyl Chloride	ug/kg	<25	<25	<25
	m&p Xylene	ug/kg	460	< <b>5</b> 0	<50
	o-xylene	ug/kg	250	<25	<25

Note: Bold results indicate high concentrations in soil.

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# <u>Project Price Estimate</u>

Project: N89 W16744-46 Appleton Ave

Date:

01/08/2002

Task	Category	Item	Unit Cost Unit	# Units	Extension	Totals
Work Pla	n (Completed as	s Part of Proposal)				
Investigat	ion/CleanUp and	Report				
	<u>Labor:</u>					
		Technician II/Clerical	\$35.00 Hr	4	\$140.00	
		Env. Technician	\$45.00 Hr	4	\$180.00	
		Staff Engineer/Geologist-HASP	\$65.00 Hr	4	\$260.00	
		Staff Engineer/Geologist-Field	\$65.00 Hr	10	\$650.00	
		Registered Geologist - Field	\$85.00 Hr	3	\$255.00	
		Staff Engineer/Geologist-Office	\$65.00 Hr	8	\$520.00	
		Staff Engineer/Geologist-Report	\$65.00 Hr	40	\$2,600.00	
		PMIII Senior Consultant	\$95.00 Hr \$125.00 Hr	4 2	\$380.00 \$250.00	
	Consultant		\$125.00 MI	2	φ <b>2</b> 50.00	\$5,235.00
	Consultant	. Subtotal				φ5,253.00
	Analytical Se	rvices				
	Soil	I VOC	\$70.00 ea	8	\$560.00	
	Soil	I SPLP	\$60.00 ea	1	\$60.00	
		VOC on SPLP	\$70.00 ea	1	\$70.00	
	Soi	1 TCLP Extraction	\$60.00 ea	1	\$60.00	
		VOC on TCLP	\$70.00 ea	1	\$70.00	
	Water		\$70.00 ea	2	\$140.00	
	Lab Subtot	al	4		,,,,,,,,	\$960.00
	C	sian at				
	Contractor/D	Excavating, and Loading	\$220.00 Hr	5	\$1,100.00	
		Rock Excavation & Sampling Standby	\$220.00 Hr	2	\$440.00	
		Hauling	\$65.00 Hr	3	\$440.00 \$195.00	
		Backfill With TB	\$20.00 mi	14	\$280.00	
		Disposal	\$20.00 ton	20	\$400.00	
	Contractor	•	Ψ20.00 111	20	Ψ-00.00	\$2,415.00
	Field Equipme	ent and Expenses				
		Mileage	\$0.31 Mile	100	\$31.00	
		PID and other Equipment Rental	\$200.00 Lump Sum	1	\$200.00	
	Field Ea	uipment and Expenses Subtotal				\$231.00

TOTALS

\$8,841.00

# MAXIM TECHNOLOGIES, INC.

# GEOTECHNICAL and HYDROGEOLOGIC FEE SCHEDULE

# For Maxim Proposal Number 2350028

# 1. PERSONNEL

Program Manager	\$ 135 00/hour
Senior Consultant	
Project Manager III	
Registered Engineer or Geologist	
Staff Engineer	
Environmental Technician/Technician II	\$ 50.00/hour
Soils Technician/Technician I	
Clerical/Typist	
Mileage Expense	\$0.45/mile
2. LABORATORY TESTS	
Unconfined Compression Test	\$ 43.00/test
Moisture/Density	
Atterberg Limits	\$ 50.00/test
Gradation	\$ 50.00/test
Additional Testing and Chemical Analyses	per quotation

# Janel M. Foht Environmental Geologist

#### PROJECT ASSIGNMENT:

Staff Geologist

NAME OF FIRM:

Maxim Technologies, Inc. - Milwaukee, WI

YEARS EXPERIENCE:

With Maxim - 3

EDUCATION - Degree(s)/Discipline/Years /Specialization:

BS/Geology/2000

BA/Environmental Geology/1998

AA/General Education/1995

ACTIVE REGISTRATIONS- Year first registered/discipline:

Certified Lead Inspector - WI,

Certified Lead Risk Assessor - WI,

PROFESSIONAL TRAINING:

40-hour OSHA HAZWOPER Training

Radiation Safety Training, Maxim Technologies, Inc., 2000

X-ray Fluorescence (XRF) Detector,

XL Spectrum Analyzer, NITON® Corporation, Milwaukee, WI, 2000

American Red Cross Adult CPR and Standard First Aid – Annual

Lead Risk Assessor - Milwaukee Lead and Asbestos Information Center, Milwaukee, WI, 2000

Lead Inspector - Milwaukee Lead and Asbestos Information Center, 2000

Troxler Nuclear Gage - Troxler Electronic Laboratories, 1998

#### QUALIFICATIONS AND EXPERIENCE

Ms. Foht has performed environmental, geotechnical, and construction materials services for commercial, industrial, and agricultural properties. Her environmental experience consists primarily of Phase I environmental site assessments (ESAs), groundwater and soil sampling, well installation and abandonment, and leaking underground storage tank (LUST) investigations and removals. Her geotechnical experience includes foundation inspections; overseeing geotechnical soil borings, fill placement, and compaction; and field and laboratory soil classifications. Construction materials experience includes field and laboratory soil moisture and density testing and field and laboratory concrete testing.

#### REPRESENTATIVE PROJECTS

- Phase I ESAs for Private Sector Clients Wisconsin. Environmental Geologist. Reviewed historical site information, regulatory records, and physical setting data; conducted a site reconnaissance; and developed a report detailing results and recommendations.
- Site Assessments for U.S. Postal Service (USPS) Wisconsin.
   Environmental Geologist. Assessments completed throughout the state prior to finalization of lease agreements.
- Subsurface Investigation and Report Preparation. Project Scientist. Responsible for oversight of Geoprobe™ installation in conjunction with subsurface investigations for commercial and industrial clients. Investigations conducted to define the degree and extent of potential petroleum-related contamination. Collected soil and groundwater samples and prepared project reports.
- Compliance Monitoring at Large Refining Company Southeastern Wisconsin. Project Scientist. Conducted quarterly groundwater sample collection, performed compliance monitoring, and prepared reports for the client.
- Subsurface Investigations Milwaukee, Wisconsin. Project Scientist. Responsible for oversight of soil boring and temporary well installation in conjunction with subsurface investigations conducted to define the degree and extent of soil and groundwater contamination in the city of Milwaukee. Collected groundwater samples and prepared report for submission to the client.
- Subsurface Field Investigation at Niagara Falls Storage Site (Currently a Formerly Utilized Sites Remedial Action Program [FUSRAP] Site) Lewiston, New York. Project Scientist. Participated in a remedial investigation/baseline risk assessment performed for the Buffalo District USACE. Site was impacted by high and low activity radioactive waste from uranium extraction related to the Manhattan Project and chemical impact from TNT manufacturing processes during World War II. Assisted with subsurface field investigation activities (i.e., installation of soil borings and groundwater monitoring wells; development, purging, and sampling of wells; and collection of soil, sediment, and groundwater samples).

#### Patrick J. Harrison, P.E.

PROJECT ASSIGNMENT:

Project Principal

NAME OF FIRM:

Maxim Technologies, Inc. - Milwaukee, WI

YEARS EXPERIENCE:

With Maxim - 7 With Other Firms - 23

EDUCATION - Degree(s)/Discipline/Years /Specialization:

MS/Geotechnical Engineering/1974

BS/Structural Mechanics/1972

ACTIVE REGISTRATIONS - Year first registered/discipline:

Professional Engineer - WI; AZ, IL, IN, MN, OH, MI,

PROFESSIONAL AFFILIATIONS:

American Society of Civil Engineers International Society of Soil Mechanics and Foundation Engineers American Society of Military Engineers

#### QUALIFICATIONS AND EXPERIENCE

Mr. Harrison has specialized in geotechnical engineering and engineering geology for major projects throughout the Midwest and beyond for over 29 years. He has conducted investigations for major buildings, highways, bridge structures, tunnels, landfills, harbor and river developments, major embankments, deep excavations, and other civil works projects. He has been the project manager and project engineer on several projects that included activities in the areas of siting analysis, alignment constraints evaluation, special foundation design, constructability evaluations, feasibility studies, and development of construction monitoring and documentation requirements. He has a thorough knowledge of geotechnical engineering, slope stability analysis, earth retaining structures, soil nailing and reinforced earth, ground improvement methods, groundwater control methods, soil and rock instrumentation, river and waterfront protection, lateral load analysis, settlement and subsidence analysis, *in situ* pressure meter testing, foundation design, and pavement performance and design.

#### RELAVANT EXPERIENCE

 Coal Pile Run-off Basins Power Plant – Wisconsin. Geotechnical Engineer. Developed quality assurance testing for construction of twocoal pile run-off storage basins at Wisconsin Electric Power's Port Washington Power Plant. The basins were constructed adjacent to Lake Michigan on a reclaimed parcel.

- *Tippy & Hodenpyl Dams Manistee, Michigan*. Project Manager. Provided comprehensive evaluation of existing concrete dams, including a non-destructive testing program, analysis of test data, development of an instrumentation program, and recommendations for rehabilitation.
- Section III Shore Erosion Studies Eastern Shore of Lake Michigan.
   Project Engineer. Provided coastal engineering analysis for five Lake Michigan harbors. Used computer modeling to determine potential sediment transport at each harbor location and comparison of computer rates to measured quantities determined from hydrographic surveys and aerial photography analysis.
- Indian Creek Parkway and Brown Deer Relief Sewers Wisconsin.
  Geotechnical Engineer. Responsible for investigation, analysis, and development of design parameters for two MMSD relief sewers. Developed field investigation and laboratory test program to identify soil and groundwater properties for design and construction. Evaluated potential construction problems.

# Gary Schoeder Hydrogeologist/Geotechnical Technician

#### PROJECT ASSIGNMENT:

Hydrogeologist/Geotechnical Technician

NAME OF FIRM:

Maxim Technologies, Inc. - Milwaukee, WI

YEARS EXPERIENCE:

With Maxim - 1 With Other Firms - 6

EDUCATION - Degree(s)/Discipline/Years /Specialization:

BS/Geosciences and Geography/1993

ACTIVE REGISTRATIONS- Year first registered/discipline:

Hydrogeologist - WI, meets NR720 definition

UST Site Assessor – WI

PROFESSIONAL TRAINING:

40-hour OSHA HAZWOPER TRAINING

#### **QUALIFICATIONS AND EXPERIENCE**

Mr. Schoeder has over six years of experience in the consulting industry as a geologist. Past experience has included project management of Phase I, II, and III environmental site assessments (ESAs), primarily related to the petroleum industry. Mr. Schoeder has also functioned as a project geologist on bluff stabilization and shoreline protection projects along Lake Michigan in Wisconsin. Responsibilities on these projects included landslide investigation, slope stability analysis, and permit acquisition from the U.S. Army Corps of Engineers (USACE) and the Wisconsin Department of Natural Resources (WDNR). He has participated in geotechnical investigations for foundation design and landfill construction, and has reviewed reports for legal proceedings. Mr. Schoeder also has over 15 years of experience as a journeyman and supervisor on industrial, commercial, and residential construction projects. He is currently working as a hydrogeologist and geotechnical technician participating in project management and performing laboratory and field assessments of foundation soils.

#### REPRESENTATIVE PROJECTS

#### Environmental Site Assessments

#### Hydrocarbon/LUST Investigation/Mitigation

• Removal of USTs and Remediation of Soil and Groundwater – Southeastern Wisconsin. Project Manager/Geologist. Assisted with UST/aboveground storage tank (AST) cleanups on projects ranging in complexity from home heating tanks to bulk plants. Cleanup technologies included overexcavation, thermal extraction, pump- and-treat, and vapor extraction. Supervised removal of USTs and perform assessments. Functioned as project manager on seven projects.

#### Landslide Investigation and Analysis

Bluff Stabilization Projects along Lake Michigan – Wisconsin. Project
Manager for 25 projects. Tasks included bluff inspections, slope stability
investigation, and remedial design. Responsible for quarry stone selection for
revetments. Implemented erosion control during and after construction.

### Stormwater Runoff Permitting and Management

 Groundwater/Stormwater Flood Investigations of Residential Dwellings – Southeastern Wisconsin. Project Manager. Tasks included report preparation and assistance with legal proceedings.

## Soil and Foundation Investigation

- Laboratory Analysis Detroit, Michigan. Geotechnical Technician. Perform laboratory analysis of underlying soils and analysis of bedrock formations at the site of a proposed power plant facility.
- Soil Bearing Investigations Southeastern Wisconsin. Geotechnical Technician. Conducted investigation of in situ soils for residential construction.

#### Landfill Investigations/Engineering

Laboratory Soil Tests and Field Tests of Clay Soils used for Construction

 Southeastern Wisconsin.
 Geotechnical Technician.
 Conducted soil and field tests during construction of a new refuse cell at a hazardous materials landfill.

## Amy L. Thorstenson Environmental Scientist

#### PROJECT ASSIGNMENT:

Environmental Scientist

NAME OF FIRM:

Maxim Technologies, Inc. - Wausau, WI

#### YEARS EXPERIENCE:

With Maxim = 3 With Other Firms = 2

### EDUCATION - Degree(s)/Discipline/Years /Specialization:

BS [With Distinction] /Waters/1997/Wetland Sciences specialization

#### **ACTIVE REGISTRATIONS:**

Soil Tester Certification - WI, 1997 year

Nuclear Densometer Gauge Operation Certification – Troxler Electronic Laboratories Inc. 1999 year

#### PROFESSIONAL AFFILIATIONS:

American Water Resources Association

WI Society of Professional Soil Scientists

#### PROFESSIONAL TRAINING:

Adult CPR and Standard First Aid – American Red Cross, Annual Availability of Digitized Soil Survey Data – WI Society of Professional

Soil Scientists Educational Session, UW-Stevens Point, 2000
Basic and Advanced Wetland Delineation Training Workshop – UW-LaCrosse and UW-Extension System, Door County, WI, 2000

AutoCAD®2000 for the Professional, Level I – Fox Valley Technical College, Appleton, WI, 1999

Soil Profile Description (refresher) – UW-Extension System, Manawa, WI, 1999

Wetland Delineation and Restoration – WI Society of Professional Soil Scientists Educational Session, UW-Eau Claire, 1999

#### QUALIFICATIONS AND EXPERIENCE

Ms. Thorstenson has over five years experience in natural resource management, field and laboratory chemistry analyses, and survey, sampling, and analyses of soil, water, and vegetation. She currently works on Maxim's wetland delineation and permitting, groundwater remediation, and construction materials analysis projects. Environmental responsibilities include monitoring well installation observation, monitoring well development and groundwater sample collection, soil sample collection and screening, and required reporting to clients and regulatory agencies. Ms. Thorstenson's wetland related duties *Maxim Technologies, Inc.*®

include wetland delineations (including all aspects of fieldwork, boundary survey using global positioning system [GPS], map design using AutoCAD2000) and assistance with various permitting and monitoring duties.

Ms. Thorstenson is certified and experienced in sampling and mechanical analysis of base course and concrete aggregate, testing and sampling of concrete (including air and slump tests, and casting of compressive strength test cylinders), and nuclear density gauge operations for backfill and asphalt.

#### RELEVANT PROJECTS

• Site Characterization – Former Dry Cleaning Facility. Environmental Scientist. Sampled and tested waters and soils for a former dry cleaning site. Project activities included soil sampling and field screening, photographic documentation, monitoring well installation oversight, development and sampling of monitoring wells, and reporting results to client and regulatory agencies. Reviewed and evaluated data to determine the severity and extent of contamination. Required working knowledge of clean-sampling methods, sample preservation requirements, and environmental guidelines and standards regarding dry cleaning chemical contamination in soil and groundwater.

Proiect duration:

December 1999 - August 2001

Project cost:

\$10,000

• Site Characterization for Leaking Underground Storage Tank (LUST) Removal and Petroleum Remediation Projects. Environmental Scientist. Sampled and tested waters and soils for LUST removal and petroleum remediation projects for Koch Petroleum Group, L.P., Goodyear Corporation, U.S. Postal Service (USPS), and other clients. Investigation included soil sampling and field screening, photographic documentation, monitoring well installation oversight, development and quarterly sampling of monitoring wells, reporting of results to client and regulatory agencies, and compiling and summarizing historical results for site closure requests to regulatory agencies. Required working knowledge of clean-sampling methods, sample preservation requirements, and environmental guidelines and standards regarding petroleum product contamination in soil and groundwater.

# Geologist / Hydrogeologist Wausau, Wisconsin

#### **EDUCATION**

DB.S., Geology, University of Cincinnati, 1974 M.S., Geology, University of Texas, 1981

#### **CONTINUING EDUCATION**

40-Hour Occupational Safety and Health Act (OSHA) Hazardous Waste Operations and Emergency Response (HAZWOPER) Training - Current
American Red Cross Adult CPR and Standard First Aid - Annual
Introduction to Excel, University of Wisconsin, 1999
Hard Drive Maintenance & Hardware Trouble Shooting, Northcentral Technical College, 1999
Bedrock Geology of Marathon County, University of Wisconsin, 1997
Glacial Geology of Marathon County, University of Wisconsin, 1995
Introduction to Computers, Northcentral Technical College, Wausau, Wisconsin, 1995
Hydrogeology, (Nine Graduate Credits), Oklahoma State University, 1992
Hydrology I & II, Midland College, Midland, Texas, 1990

#### PROFESSIONAL AFFILIATIONS

Wisconsin Groundwater Association

#### PROFESSIONAL REGISTRATIONS

Petroleum Environmental Cleanup Fund Award (PECFA) Program Consultant - # 246382

#### **QUALIFICATIONS SUMMARY**

Mr. Roush has over 20 years experience in various aspects of the geologic and geo-environmental industries. He spent 15 years in west Texas as an operations and an exploration geologist, where he initiated and managed \$1 million drilling projects. He has shown his versatility and team-member philosophy in the geo-environmental industry by working closely and enthusiastically with all departments, even those outside his area of expertise. Mr. Roush is a problem-solver, always keeping good science and the needs of the client foremost.

#### PROFESSIONAL EXPERIENCE

#### **Environmental Site Assessments**

 Performed property transaction environmental site assessments for warehouses, grocery stores, and dry cleaners.

#### **Environmental Site Investigations**

 Provided field supervision and decision making, and performed operation and maintenance duties during environmental site investigations at various sites.

#### **Geological Reconnaissance and Mapping**

 Supervised staff of well-site geologists and analyzing stratigraphic and structural aspects of the Bend Arch and eastern shelf of the Permian Basin of central Texas. Analyzed the structure and stratigraphy of the deep Permian Basin (9,500 to 12,500 feet) of west Texas, utilizing all varieties of wire line well logs and extensive geophysics. Analyzed stratigraphy and depositional environment of shallow to deep-water sand in southeastern New Mexico.

#### **Drill Project Supervision/Management**

- Provided drilling supervision and technical expertise for two U.S. Army Corps of Engineers (USACE) projects. Sites included seven new buildings or additions at Billy Mitchell Field in Milwaukee, Wisconsin, and wastewater treatment plant improvements at Fort McCoy in Tomah, Wisconsin.
- Assist drilling department with drilling and recording exploratory borings, boring layout, standard splitbarrel penetration testing, thin-walled tube sampling, flite-auger boring, hollowstem auger boring, wireline coring, field sample classifying in accordance with the Unified Soil Classification System.

#### **Construction Materials Testing**

Assist geotechnical department with lithologic analysis of local bedrock and geological interpretations
(i.e., depositional environments) based on soil tests. Well-versed in soil testing and interpretation of
results, including mechanical analysis, hydrometer, Atterberg limits, densities, and moisture contents.

#### **Groundwater Modeling**

 Knowledgeable in vadose zone and aquifer characterization using soil vapor extraction pilot tests, slug tests, pumping tests, inorganic geochemistry, Piper and Stiff diagrams; and computer programs and models such as QUICKFLOW and AQTESOLV.

#### **Release Investigation and Corrective Actions**

- Conducted extensive geologic and hydrogeologic studies and prepared remedial plans for two
  petroleum storage facilities. Performed site investigation at several sites along a petroleum pipeline.
  Tasks included soil sampling and analysis, monitoring well installation, pumping and slug testing, and
  groundwater modeling.
- Performed site investigation at a PCE release at an industrial facility in central Wisconsin. Responsibilities included identifying breakdown products from chlorinated hydrocarbon degradation.

#### **Regulatory Compliance**

Deal with state regulatory agencies in all phases of various projects, including multiple case closures.
 Use risk-based criteria (i.e., site-specific soil standards) for early closure of some sites.

#### Research and Development

 Conducted master's degree research on structural geology and stratigraphy of a portion of Zacatecus, Mexico. Research involved extensive fieldwork, thin section preparation, photogeology, and paleontology The following are available to serve in a technical advisory and peer review capacity as needed. They will be invoiced at the Senior Consultant rate on the Maxim fee schedule. They are members of the Geotrans office in Pewaukee, Wisconsin. Maxim and Geotrans are both subsidiaries of Tetra Tech, Inc.

#### Gerald DeMers, P.E. - Senior Engineer

Over 20 years of experience in environmental engineering. He has been the project manager for the Feasibility Studies of two Superfund landfills in Wisconsin where chlorinated solvents were the primary contaminants of concern in groundwater. This work included evaluating the fate and transport of chlorinated solvents and their breakdown products, and evaluating remedial options. Mr. DeMers has also served as the project manager of several other projects involving the investigation and remediation of chlorinated solvents. These include the cleanup of soils, and a pump and treat system for PCE at the East Troy Airport, dry cleaning wastes and other solvents at a site on the north side of Milwaukee, and an industrial property in St. Francis, Wisconsin.

#### Mark A. Manthey, P.G. - Senior Hydrogeologist

12+ Years Professional Experience, 11 Years with GeoTrans M.S., Geological Sciences, University of Wisconsin, Milwaukee, Wisconsin 1989 B.S., Geological Sciences, University of Wisconsin, Milwaukee, Wisconsin 1985 Wisconsin Professional Geologist #34 Certified Site Assessor, Division of Safety and Buildings, WI

Mr. Manthey has more than twelve years of professional experience as a project manager and hydrogeologist. He has experience in preparing work plans, conducting investigation activities and evaluating remedial action options at sites with PCE and/or TCE impacts to the soil and groundwater. Mr. Manthey is currently managing a project for a site with chlorinated solvent, ketone and aromatic hydrocarbon impacts to the soil and groundwater. The primary chlorinated solvent contaminants of concern are PCE and TCE. The contaminant plume extends more than 1.5 miles from the site. DNAPL occurs in a permeable bedrock horizon, which is the source of the groundwater impacts at the downgradient edge of the contaminant plume. The project involves quarterly groundwater and surface water monitoring, continued site investigation activities to further define the downgradient edge of the contaminant plume, the evaluation of in-situ remedial alternatives for the DNAPL and highly impacted groundwater near the source area, and the design and construction of a hydraulic barrier system to control/prevent the downgradient migration of impacted groundwater from the DNAPL zone in the bedrock.

Additional experience includes two-dimensional and three-dimensional groundwater flow modeling; using SiteGIS to evaluate groundwater, surface water, and soil chemistry data; the supervision of underground storage tank (UST) removals; installation of groundwater monitor wells, groundwater extraction wells, dual soil vapor/groundwater extraction wells, and soil test borings; collection of soil, surface water, groundwater, and sediment samples for various laboratory analyses; monitor well development; hydraulic conductivity testing; logging soil and bedrock samples; conducting aquifer tests; dual soil vapor/groundwater extraction pilot tests; and report writing for UST closure assessments, Phase I and Phase II environmental site assessments, and Remedial Investigation/Feasibility Studies (RI/FS).



#### SUPER WESTERN, INC.

January 3, 2002

Phone: 414-466-5090

Fax: 414-466-5154

Mr. Jim Rose Maxim Technologies 9404 North 107<sup>th</sup> Street Milwaukee, WI 53224

RE: N89 W16744-46 Appleton Avenue Menomonee Falls, WI

Dear Mr. Rose,

Following is our price for the work that you have requested.

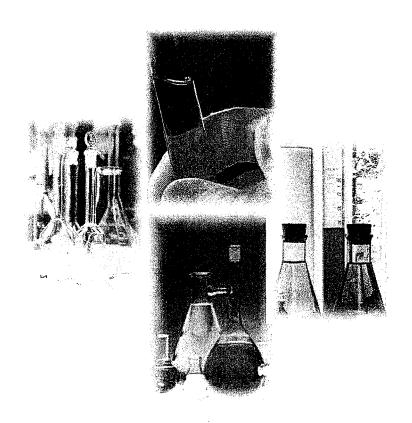
- 7. Asphalt Has to be determined on amount disturbed, but based on what we talked about, \$1,000 \$1,200.

If there is anything else I can help you with, please feel free to call.

Respectfully submitted, Super Western, Inc.

Robert A. Mertz, President

# Statement of Qualifications



1230 Lange Court Baraboo, WI 53913-3901 linleyd@ctlaboratories.com Phone: 608-356-2760 Toll Free: 800-228-3012

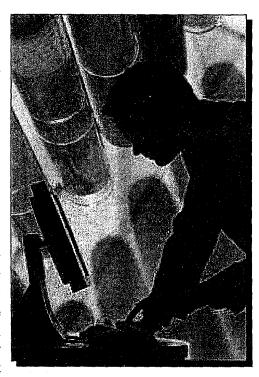
Fax: 608-356-2766

# Introduction

CT Laboratories (CTL) is a full service environmental laboratory located in Baraboo, Wisconsin. Opened in 1987, CTL has continually provided what our clients are looking for: quality services, on time, at a fair price. CTL is considered a technological leader in the environmental laboratory field. Our goal has always been to employ the best people in the field and equip them with the most technically advanced instruments available. Combine that with a state-of-the-art Laboratory Information Management System (LIMS), and our services are unmatched in the industry.

Extraordinary customer service through automation has always been our motto at CTL. We realize that the most important part of our job is to deliver to the client what they want, when they need it. Communication is the key to a successful project. At CTL, our clients are assigned a specific project manager to take care of their needs. We have designed our LIMS to work with our project managers to ensure client satisfaction. The LIMS is used to track samples upon receipt, follow them through sample receiving, sample preparation, and analysis. The LIMS is used to assure that the results are validated and the final report is exactly what the client is expecting.

Quality is not a "given" or an afterthought at CTL. Our quality assurance program is designed to ensure legally defensible data. From the numerous performance evaluation studies, state audits, and validation by the Army Corps of Engineers and the American Association for Laboratory Accreditation (A2LA), we continually monitor our quality to ensure our clients get the best results.



Experience cannot be overlooked. CTL has worked with some of the largest corporations in the world. We work on very high profile projects, to very small projects. Our clients range from industry leaders, to consulting firms, to governments, to average people looking to test their drinking water. CTL works on projects from Washington to Texas, from Florida to New York. What does this mean to you? It means we've been there, and we'll be able to ask the right questions to ensure your projects are done right.

# Laboratory Fee Schedule 4-Dec-01

Parameter	Method	List Price
WASTE CHARACTERIZATION		
Volatile Organics	8021/8260	\$70.00
Semi-Volatiles	8270	\$200.00
Pesticides/PCBs	8081	\$225.00
8 RCRA Metals	200 Series	\$90.00
PCB	8081	\$80.00
Reactive Cyanide	9012/7.3.3.2	\$65.00
Reactive Sulfide	9031/7.3.4.2	\$65.00
Free Liquids	9095	\$20.00
Flashpoint	1020A	\$35.00
Corrosivity (pH)	9045C	\$10.00
Explosives	8330	\$125.00
Ignitability	7.1.2	\$10.00
WASTERWATER/GROUNDWATER		
CLASSICAL CHEMISTRY		
Alkalinity	310.2	\$10.00
BOD	5210B	\$12.00
CBOD	5210B	\$12.00
COD	410.1	\$10.00
Chloride	352.2	\$10.00
Conductivity	120.1	\$10.00
Cyanide, Amendable	335.1	\$40.00
Cyanide, Total	335.3	\$30.00
Flouride	340.2	\$30.00
Hardness, Total	130.1	\$10.00
Hexavalent Chromium	7196	\$20.00
Mercury	245.1	\$20.00
Metals	7000 Series	\$12.00
Nitrogen, Ammonia	350.1	\$15.00
Nitrogen, Nitrate + Nitrite	353.2	\$15.00
Nitrogen, Organic	351.2/350.1	\$25.00
Nitrogen, Total Kjeldahl	351.2	\$25.00
Oil and Grease	413.1	\$30.00
Orthophosphate	365.1	\$15.00
pH	150.1	\$10.00
Phenolics, Total	420.2	\$30.00
Phosphorous, Total	365.4	\$20.00
Solids, Total	160.3	\$10.00
Solids, Total Dissolved	160.1	\$10.00
Solids, Total Suspended	160.2	\$10.00
Solids, Total Volatile	160.4	\$15.00
Solids, Volatile Suspended	160.4	\$15.00
Sulfate	375.2	\$10.00
Sulfide	376.1	\$40.00

Page 2

TCLP ZHE Extraction: Volatiles         1311         \$60.00           TCLP Extraction: Non-Volatiles         1311         \$60.00           TCLP Analysis: Volatiles         8270B         \$200.00           TCLP Analysis: Pesticides         8081         \$125.00           TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Herbicides         8000/7000 Series         \$90.00           DRINKING WATER         \$90.00         \$90.00           DRINKING WATER         \$15.00         \$20.00           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Coliliert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO         \$25.00           VOC         8021 (LUST)         \$70.00           SPLP Extraction         1312         \$60.00	TCLP		
TCLP Extraction: Non-Volatiles         1311         \$60.00           TCLP Analysis: Volatiles         8260A         \$70.00           TCLP Analysis: Semi-Volatiles         8270B         \$200.00           TCLP Analysis: Pesticides         8151         \$200.00           TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER         \$53.2         \$40.00           SDWA Nitrate Panel         353.2         \$40.00           Cotal Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           VOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION		1211	\$60.00
TCLP Analysis: Volatiles         8260A         \$70.00           TCLP Analysis: Semi-Volatiles         8270B         \$200.00           TCLP Analysis: Pesticides         8081         \$125.00           TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER         \$53.2         \$40.00           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         Per qoute           UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           VOC         8020         \$25.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Heteroleum Degrading	i :		,
TCLP Analysis: Semi-Volatiles         8270B         \$200.00           TCLP Analysis: Pesticides         8081         \$125.00           TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST           DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           VOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           SPLP Extraction         1312         \$60.00           SPEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Heterotrophic Plate Count         SM907 Mod OECD         \$40.00 <tr< td=""><td></td><td></td><td>-</td></tr<>			-
TCLP Analysis: Pesticides         8081         \$125.00           TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER         \$53.2         \$40.00           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           SALP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         50.00         \$50.00           Total Organic Nitrogen         9045         \$10.00           Available Phospho			
TCLP Analysis: Herbicides         8151         \$200.00           TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER         353.2         \$40.00           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Coliliert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO         WI Mod GRO/8020         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           VOC         8021 (LUST)         \$70.00           SALP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           PO45         \$10.00           Available Phosphorous         MOSA 24			
TCLP Analysis: Metals         6000/7000 Series         \$90.00           DRINKING WATER         353.2         \$40.00           Total Coliform         Colillert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         S0907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         MOSA 24-5.3         \$25.00           Total Organic Carbon (as % organic matter) <td></td> <td></td> <td>1</td>			1
DRINKING WATER         353.2         \$40.00           SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         S020         \$25.00           Heterotrophic Plate Count         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00         \$25.00           Total Organic Nitrogen         \$50.00         \$25.00           pH         9045         \$10.00           Available Phosphorous         \$25.00 <td></td> <td></td> <td>•</td>			•
SDWA Nitrate Panel         353.2         \$40.00           Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           VOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Heterotrophic Plate Count         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Air-filled Porosity         Calculation         \$10.00           MOSA 28-4.2         \$75.00 </td <td></td> <td>6000/7000 Series</td> <td>\$90.00</td>		6000/7000 Series	\$90.00
Total Coliform         Colilert ONPG-MUG         \$20.00           Lead         239.2         \$15.00           Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Heterotrophic Plate Count         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           PAVAILABLE Phosphorous         MOSA 24-5.3         \$25.00           MOSA 25.00         \$25.00         \$25.00           MOSA 28-4.2         \$75.00           MOSA 28-4.2         \$75.00 <td></td> <td>252.0</td> <td>640.00</td>		252.0	640.00
Lead       239.2       \$15.00         Copper       220.1       \$15.00         Volatiles       524.2/502.2       \$80.00         Cryptosporidium & Giardia       EPA       per qoute         UST       DRO       WI Mod DRO       \$25.00         GRO       WI Mod GRO       \$25.00         GRO/PVOC       WI Mod GRO/8020       \$25.00         PVOC       8020       \$25.00         VOC       8021 (LUST)       \$70.00         PAH       8310       \$70.00         SPLP Extraction       1312       \$60.00         BTEX       8020       \$25.00         BIOENUMERATION       SM907 Mod OECD       \$40.00         Heterotrophic Plate Count       SM907 Mod OECD       \$40.00         Petroleum Degrading Bacteria       \$50.00       \$50.00         Total Organic Nitrogen       351.2/350.2       \$25.00         PA       9045       \$10.00         Available Phosphorous       MOSA 24-5.3       \$25.00         Total Organic Carbon (as % organic matter)       MOSA 24-5.3       \$75.00         Air-filled Porosity       Calculation       \$10.00         Permeability(hydraulic conductivity)       MOSA 28-4.2       \$75.00	1		
Copper         220.1         \$15.00           Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         WI Mod DRO         \$25.00           DRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           Air-filled Porosity         Calculation         \$10.00           Permeability(hydraulic conductivity)         MOSA 28-4.2         \$75.00           MOSA 28-4.2         \$15.00			' · · ·
Volatiles         524.2/502.2         \$80.00           Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           PH         9045         \$10.00           Available Phosphorous         Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           MOSA 28-4.2         \$75.00           MOSA 28-4.2         \$75.00           MOSA 36-2.2.3         \$15.00	1		·
Cryptosporidium & Giardia         EPA         per qoute           UST         DRO         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           MOSA 24-5.3         \$25.00           MOSA 28-4.2         \$75.00           MOSA 28-4.2         \$75.00           MOSA 36-2.2.3         \$15.00			l '
UST         WI Mod DRO         \$25.00           GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         MOSA 24-5.3         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           Mosa 28-4.2         \$75.00           Field Capacity(soil moisture holding capacity)         MOSA 36-2.2.3         \$15.00	1		. '
DRO GRO GRO WI Mod GRO \$25.00 GRO/PVOC WI Mod GRO/8020 \$25.00 PVOC 8020 \$25.00 PVOC 8021 (LUST) \$70.00 PAH 8310 \$70.00 SPLP Extraction BTEX 8020 \$25.00  8021 (LUST) \$70.00  \$60.00 BTEX 8020 \$25.00  SPLP Extraction SPLP Extraction BIOENUMERATION Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen PH 9045 \$10.00 Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  WI Mod GRO \$25.00  WI Mod GRO \$25.00  \$40.00 \$40.00 \$50.00 \$50.00 \$50.00  WOSA 24-5.3 \$25.00  MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$25.00  MOSA 28-4.2 \$75.00 \$15.00 \$351.20 \$3		EFA	per doute
GRO         WI Mod GRO         \$25.00           GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         MOSA 24-5.3         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           Air-filled Porosity         Calculation         \$10.00           Permeability(hydraulic conductivity)         MOSA 28-4.2         \$75.00           Field Capacity(soil moisture holding capacity)         \$15.00		WI Mad DBO	¢25.00
GRO/PVOC         WI Mod GRO/8020         \$25.00           PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         MOSA 24-5.3         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           Air-filled Porosity         Calculation         \$10.00           Permeability(hydraulic conductivity)         MOSA 28-4.2         \$75.00           Field Capacity(soil moisture holding capacity)         MOSA 36-2.2.3         \$15.00			1
PVOC         8020         \$25.00           VOC         8021 (LUST)         \$70.00           PAH         8310         \$70.00           SPLP Extraction         1312         \$60.00           BTEX         8020         \$25.00           BIOENUMERATION         SM907 Mod OECD         \$40.00           Petroleum Degrading Bacteria         \$50.00           Total Organic Nitrogen         351.2/350.2         \$25.00           pH         9045         \$10.00           Available Phosphorous         \$25.00           Total Organic Carbon (as % organic matter)         MOSA 24-5.3         \$25.00           Air-filled Porosity         Calculation         \$10.00           Permeability(hydraulic conductivity)         MOSA 28-4.2         \$75.00           Field Capacity(soil moisture holding capacity)         MOSA 36-2.2.3         \$15.00		Į.	) '
VOC PAH 8310 \$70.00 SPLP Extraction BTEX 8020 \$25.00  BIOENUMERATION Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen PH 9045 \$10.00 Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  8021 (LUST) 870.00 \$70.00 \$70.00 \$40.00 \$40.00 \$50.00 \$40.00 \$40.00 \$50.00 \$10.00 \$25.00 \$10.00 \$25.00  MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$25.00  MOSA 28-4.2 \$75.00 \$15.00	1	•	r ·
PAH SPLP Extraction BTEX 8020  BIOENUMERATION Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen pH Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  8310 \$70.00 \$40.00 \$		1	1 '
SPLP Extraction BTEX  BIOENUMERATION Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen pH Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  SM907 Mod OECD \$40.00 \$40.00 \$40.00 \$50.00  MOSA 24-5.3 \$50.00  MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$10.00 \$75.00 \$75.00 \$MOSA 36-2.2.3 \$15.00	1		1
BTEX  BIOENUMERATION  Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen PH Available Phosphorous Total Organic Carbon (as % organic matter)  Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  SM907 Mod OECD \$40.00	[		1 '
BIOENUMERATION Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen pH Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  SM907 Mod OECD \$40.00 \$50.00 \$11.00 \$25.00 MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$10.00 \$10.00 \$75.00 MOSA 28-4.2 \$75.00 \$15.00	1	1	3 "
Heterotrophic Plate Count Petroleum Degrading Bacteria Total Organic Nitrogen pH Available Phosphorous Total Organic Carbon (as % organic matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  SM907 Mod OECD \$40.00 \$50.00 \$10.00 \$25.00 MOSA 24-5.3 \$25.00  MOSA 24-5.3 \$25.00  **Aunument of the process of the		8020	\$25.00
Petroleum Degrading Bacteria  Total Organic Nitrogen  pH  Available Phosphorous  Total Organic Carbon (as % organic matter)  Air-filled Porosity  Permeability(hydraulic conductivity)  Field Capacity(soil moisture holding capacity)  \$50.00  \$25.00  MOSA 24-5.3  \$25.00  MOSA 24-5.3  \$25.00  MOSA 24-5.3  \$10.00  \$75.00  MOSA 28-4.2  \$75.00  MOSA 36-2.2.3  \$15.00		CMOOZ MAN OFOD	0.00
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Available Phosphorous Total Organic Carbon (as % organic matter)  Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  S25.00  Calculation MOSA 24-5.3  \$25.00  \$25.00  \$10.00  \$75.00  \$75.00  \$15.00	, -	I .	1.
Total Organic Carbon (as % organic matter)  Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  MOSA 24-5.3  \$25.00  \$10.00  \$75.00  \$MOSA 28-4.2  \$MOSA 36-2.2.3  \$15.00		9045	1 7
matter) Air-filled Porosity Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  Calculation MOSA 28-4.2 MOSA 36-2.2.3 \$15.00		11001 01 50	1.
Air-filled Porosity  Permeability(hydraulic conductivity) Field Capacity(soil moisture holding capacity)  Calculation  MOSA 28-4.2  MOSA 36-2.2.3  \$15.00		IVIUSA 24-5.3	1\$25.00
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capacity)	1 2, 2	1	1 '
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	Bulk Density	MOSA 13-2.1	\$10.00
Acute & Chronic Toxicity per qoute			_ <del></del>

Amendments. Client, without invalidating this Agreement, may request changes within the general scope of the Services required by this Agreement by attering or adding to the Services to be performed, and any shapes in the Services shall be performed subject to this Agreement. Upon receiving Client's request, Consultant shall return to Client a change proposal setting forth an adjustment to the Services and Project set testimated by Consultant to represent the value of the requested changes. Following Client's review of Consultant's change proposal, Client shall execute a written change order or contract amendment directing subject.

2. Relationship of Parties. Consultant and its employees, agents, affiliates and subcontractors shall act solely as independent contractors in performing services under this Agreement. Except as specifically provided in this Agreement, Consultant shall have no right or authority to act for Client and will not enter into any contract or other agreement, or incur any debt, liability or obligation of any nature in the name of, or on behalf of, client. Consultant, its employees, agents, affiliates and subcontractors shall not be considered agents or employees of Client. Reliance upon the Services provided under this Agreement is limited to Client and any third rty reliance that may be available is contingent upon written agreement executed by Consultant and upon the full execution by the third party of a letter of understanding provided by Consultant. Client acknowledges at the services provided under this Agreement shall in no way be construed, designed or intended to be relied upon as legal advice or interpretation.

Confidentiality and Ownership of Documents. All data developed pursuant to the performance of Services under this Agreement, or supplied to or obtained by Consultant from Client or any of their subcontractors or agents, will be treated as confidential, and will only be released to those individuals identified by Client as appropriate recipients of such information. Concepts, systems, reports, methodology and ideas developed by Consultant during performance of the Services authorized under this Agreement, and all other proprietary or trade secret information of Consultant, shall remain the property of Consultant. Confidential information shall be disclosed to any third party without the prior written consent of Client or Consultant as the case may be. Upon completion of Services or other termination under this Agreement, any confidential information provided Elient and retained by Consultant shall be returned to Client's request. The mutual obligations set forth in this paragraph shall survive until either Consultant or Client, as appropriate, waives such affidentially, or until such confidential information provided and the proprietary or until such confidential information or Client, as appropriate, waives such information or only any governmental agency of matters pertaining to the Project or Project site conditions, unless Client authorizes Consultant to provide such notification solely on Client's behalf, and Client shall be solely responsible for the subject matter and content of such notification. Nothing herein is meant to prevent nor shall be interpreted as preventing either party from disclosing and/or using said information or data (i) when information or data are actually known to the receiving party before being obtained or derived from the transmitting party, or (iii) when information or data are generally available to the public without the receiving party in respect thereto; (iv) when the information or data are generally available to the public without the receiving party from the transmitting p

Eite Access and Control. Client grants to Consultant the right of entry to the Project Site by Consultant, its employees, agents, and subcontractors, to perform the Services. If Client does not own the Project Site, it warrants to Consultant that Client has the authority and permission of the owner or occupant of the Project Site to grant such right of entry to Consultant. If as a requirement of performing the Services, Consultant urnages or alters a Project Site owned by a third party, Client agrees to pay the cost of restoring the Project Site to the condition of the Project Site prior to the performance of the Services, unless such damage or alteration is caused by the sole negligent acris, negligent ornissions, or willful misconduct of Consultant, its agents, employees or contractors. Except as set forth herein, Consultant does not, by its entry into the Project Site, or the performance of the Services, assume any responsibilities ability with respect to the Project Site. Consultant does not undertake to report to any federal, state, or local governmental agency any conditions existing at the Project Site which may present a potential danger to under any applicable federal, state or local law, rule, regulation or interpretation. If at any time during the performance of the Services, Consultant reasonably believes the safety of its employees, agents, and such as a condition cannot be remediated to the reasonable instance of the Services and such as a condition cannot be remediated to the reasonable instance of the Services and such as a condition cannot be remediated to the reasonable instance of the Services and such as a condition cannot be remediated to the reasonable instance of the Services and such condition is remediated, or if such condition cannot be remediated to the reasonable instance or condition and the project Site and such as a condition cannot be remediated to the reasonable instance or condition and condition cannot be remediated to the reasonable instance or condition and condition cannot

Project Information. Consultant shall indicate to Client the information reasonably needed for rendering the Services described in each purchase order, proposal or scope of work. Consultant shall review existing mation provided by others and shall give Client its opinion as to the risks associated with reliance on such information. Client will immediately transmit to Consultant any new information concerning the Project that becomes available to it, either directly or indirectly, during the performance of this Agreement. Client agrees to render reasonable assistance as requested by Consultant so the performance of the Services under this Agreement may proceed without delay or interference. Consultant will not be liable for any advice, judgment or decision based on inaccurate or incomplete information furnished by Client. To the extent that Consultant is required to rely solely upon existing information, Client agrees to waive any claim against Consultant and to indemnify and hold harmless Consultant from and against any and all claims, damages, losses, liability, and enses, including attorney's fees, which may arise from errors, omissions, or inaccuracies in existing information provided to Consultant by Client, unless caused by or arising out of the sole negligent acts or omissions, willful misconduct of Consultant or its employees, agents, or contractors.

Permit Assistance. Consultant agrees to assist Client in obtaining all necessary governmental permits, licenses, approvals, and documents required for the performance of the Services. Consultant's obligations to perform the Services are specifically subject to the issuance of all permits, licenses, approvals, or other documents required to enable Consultant to perform the Services.

7. Standard Practice. The Services will be performed on behalf of and solely for the exclusive use of Client and for no others. The Services performed by Consultant shall be conducted in a manner consistent with that Tof care and skill ordinarily exercised by members of the engineering and environmental consulting professions in the same locale acting under similar circumstances and conditions. EXCEPT AS SET FORTH HEREIN, INSULTANT MAKES NO OTHER REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESSED OR IMPLIED, IN FACT OR BY LAW, CONCERNING ANY OF THE SERVICES WHICH MAY BE FURNISHED BONSULTANT TO CLIENT.

nsurance. In addition to any other insurance which Consultant may choose to carry, Consultant shall, at its sole expense, maintain in effect during the performance of the Services under this Agreement insurance coverages as follows: Workers' Compensation as required by state law, General Liability and Automobile Liability with a combined single limit of \$1,000,000 per occurrence; Professional Liability, including Pollution Liability \$1,000,000 for claims made against Consultant for negligent errors or omissions in performance of Services hereunder. Consultant shall deliver to Client certificates of insurance, if requested by Client.

ndemnification. Consultant shall defend, indemnify and hold harmless the Client and its officers, employees, servants, agents, successors, and assigns from and against any and all liability, claims, demands, suits, sits, s

Limitation of Liability. Client hereby agrees, to the fullest extent permitted by law, that Consultant's total liability to Client for any and all injuries, claims, losses, expenses, or damages whatsoever arising out of or y way related to the Project or this Agreement, from any cause or causes, including, but not limited to, Consultant's negligence, errors, omissions, strict liability, breach of contract, or otherwise, will not exceed (i) cotal compensation received by Consultant under this Agreement, or (ii) \$50,000, whichever is the lesser amount.

11. Third Party Claims. In the event any third party brings a suit or a claim for damages against Consultant alleging exposure to or damage from materials, elements or constituents at or from the Project Site before, during or after services are performed by Consultant under this Agreement, which is alleged to have resulted in or caused any adverse condition to any third party or resulted in claims arising from remedial action, cleanup, until habitability of property, or other property damage, Client, except to the extent of Consultant's gross negligence or willful misconduct, agrees to defend, indemnify and hold Consultant harmless against any such suit and any obligation or liability arising therefrom.

Termination. This Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, Consultant shall be paid for services performed to the termination notice date plus reasonable termination and project closeout expenses. In the event of suspension for more than three (3) months, prior to completion of all reports contemplated by this Agreement, Consultant may complete such analyses and records as are necessary to complete its files and may also complete a report on the Services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct and indirect costs of Consultant in completing such analyses, records, and reports.

Subcontract and Assignment Authorization. Consultant shall have the right to subcontract Project Services to be provided under this Agreement to qualified providers of services selected by Consultant. The fees bosts of such subcontractor(s) shall be included in Consultant's fee as specified in this Agreement, unless Client agrees that subcontractor services are to be directly billed to Client. Consultant shall have the right sign and delegate any portion or all of its rights and obligations under this Agreement to qualified providers of services selected by Consultant, provided that such providers of services are related to Consultant as parent, subsidiary or otherwise affiliated entities. Such assignment and delegation shall be on the same terms and conditions as set forth in this Agreement, except that assignee's share of the fee for services and the scope of work shall be set forth in a schedule that incorporates by reference the terms and conditions of this Agreement, unless otherwise modified. Such schedule shall include an express assignment and delegation of the such assignment and delegation by the assignee. Client hereby prospectively consents to and ratifies such assignment and delegation, which shall be effected at the discretion of

Inforeseen Occurrences. If, during the performance of Services under this Agreement, any unforeseen conditions or occurrences, including without limitation unforeseen hazardous substances or waste, are encountered which, in Consultant's sole judgment, may significantly affect the Services, the risk involved in providing the Services, or the scope of Services, Client will agree with Consultant to modify the scope of Services and Consultant will provide an estimate of additional charges to include provision for the previously unforseen circumstances. Such estimate, when calculated by Client and Consultant will be a valid change order. As an alternative, Consultant may terminate Services under this Agreement in writing effective on the date specified by Consultant, in which event Client shall pay Consultant for services performed to the date of termination, reasonable expenses of termination.

Force Majeure. Consultant shall not be liable to Client for any loss, liability, cost, damage or expense arising out of the delay or failure to render Services under this Agreement where such delay or failure arises by real on of legislative, administrative or government prohibition, fire, weather conditions, hostilities, civil disturbances, labor or industrial disputes, acts of God or any other event beyond the reasonable control of Consultant, in which event either party may terminate that portion of the Services under this Agreement not yet completed, and Consultant shall have no further liability to Client therefor. A change authorization extending the time to perform and stating an appropriate fee adjustment may be elected by mutual agreement of the parties hereto as an alternative to termination.

to enjoin the other party shall be successful in any action (a) alleging breach of this Agreement, (b) to construe or enforce the terms and conditions of this Agreement, including nonpayment of invoices; to enjoin the other party from violating any term or condition of this Agreement, the prevailing party shall, to the maximum extent permitted by law, be entitled to recover its reasonable legal fees, costs, and expenses in a ging and maintaining any such action.

Soverning Law. This Agreement shall be governed by and interpreted pursuant to the laws of the state or jurisdiction where the particular Services are to be performed.

18. Captions. The captions and headings in this Agreement are for purposes of reference only, and shall in no way limit or otherwise affect any of the terms or provisions hereof.

19. Payment. Invoices are due upon receipt. A late payment finance charge will be charged at the rate of 1.5% per month (or the maximum allows by law) on any balance remaining unpaid thirty (30) days after the date

19. Payment. Invoices are due upon receipt. A late payment finance charge will be charged at the rate of 1.5% per month (or the maximum allows by law) on any balance remaining unpaid thirty (30) days after the date

If any conflict exists between the terms of this Agreement and any other Agreement between Consultant and Client, the terms of this Agreement shall prevail with respect to the services performed under.

By signing this Agreement, Client assents to the terms and conditions set forth above.

CHEPT'S INITIALS\_\_\_\_\_

# ACORD. CERTIFICATE OF LIABILITY INSURANCE

OPID MC MAXIM-1 DATE (MM/DD/YY) 11/30/01

PRODUCER
Lyons Insurance Agency, Inc.
Powdermill Square
3844 Kennett Pike, Suite 210

Phone: 302-658-5508

3844 Kennett Pike, Suite 210 Wilmington DE 19807

Fax: 302-658-1253

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

#### INSURERS AFFORDING COVERAGE

INSURED

Maxim Technologies, Inc. 14673 Midway Rd Ste 210 Addison TX 75001

INSURER A:	Hartford Insurance
INSURER B:	Twin City Fire Insurance Co.
INSURER C:	Greenwich Insurance Company
INSURER D:	
INSURER E	

#### COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMIT	3
	GENERAL LIABILITY				EACH OCCURRENCE	\$ 1,000,000
A	X COMMERCIAL GENERAL LIABILITY	44UUNGA1452	10/01/01	10/01/02	FIRE DAMAGE (Any one fire)	\$ 300,000
	CLAIMS MADE X OCCUR	ı			MED EXP (Any one person)	\$ 10,000
					PERSONAL & ADV INJURY	\$1,000,000
					GENERAL AGGREGATE	\$2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$2,000,000
	POLICY X PRO- JECT LOC					
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	\$ 1,000,000
A	X ANY AUTO	44UENFU3301	10/01/01	10/01/02	(Ea accident)	\$ 1,000,000
	ALL OWNED AUTOS				BODILY INJURY	\$
	SCHEDULED AUTOS				(Per person)	
	X HIRED AUTOS	Ţ			BODILY INJURY	\$
	X NON-OWNED AUTOS				(Per accident)	
		1			PROPERTY DAMAGE (Per accident)	\$ ,
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	\$
	ANY AUTO				OTHER THAN EA ACC	\$
					AUTO ONLY: AGG	\$
	EXCESS LIABILITY				EACH OCCURRENCE	\$5,000,000
A	X OCCUR CLAIMS MADE	44XHUFU0785	10/01/01	10/01/02	AGGREGATE	\$5,000,000
						\$
	DEDUCTIBLE					\$
	RETENTION \$					\$
	WORKERS COMPENSATION AND				X WC STATU- OTH- TORY LIMITS ER	
В	EMPLOYERS' LIABILITY	44WBRMP3350	10/01/01	10/01/02	E.L. EACH ACCIDENT	\$ 1,000,000
В		44WNMP3351	10/01/01	10/01/02	E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	·				E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
А	Texas Auto Policy	44UENGBA4253	10/01/01	10/01/02	CSL	1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

CERTIFICATE HOLDER	N	ADDITIONAL INSURED; INSURER LE	TTER:	CANCELLATION		
			INSURAN	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEF	ORE THE EXPIRATION	
				DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL	30 DAYS WRITTE	
				NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILU	RE TO DO SO SHALL	
*********	MCE	PURPOSES ONLY***	ONT V**	IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR		
INSORE	MCE	FOREODED ONLL		REPRESENTATIVES.		
1				AUTHORIZED REPRESENTATIVE		
1.0000000000000000000000000000000000000				- /5/1//	CONTRACTION ACCO	