

Source Property Information

BRRTS #:	03-67-003514	Closure Date:	August 19, 2009
ACTIVITY NAME:	Snak Shak	FID#:	
PROPERTY ADDRESS:	N168 W20379 Main St	DATCP#:	
MUNICIPALITY:	Jackson	COMM#:	53037-9602-79
PARCEL ID#:	V30178		

***WTM Coordinates:**

X:	669043	Y:	318396
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**Coordinates are in WTM83, NAD83 (1991)*

WTM Coordinates Represent:

- Approximate Center of Contaminant Source
- Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

- | | |
|---|---|
| <input checked="" type="checkbox"/> <u>Groundwater</u> Contamination > ES (236) | <input type="checkbox"/> <u>Soil</u> Contamination > *RCLs or **SSRCL (232) |
| <input checked="" type="checkbox"/> Groundwater Contamination in ROW | <input type="checkbox"/> Soil Contamination in ROW |
| <input type="checkbox"/> Off-Source Contamination | <input type="checkbox"/> Off-Source Contamination |

(note: for list of impacted off-source properties see attached list of "Impacted Off-Source Property")

(note: for list of impacted off-source properties see attached list of "Impacted Off-Source Property")

Land Use Controls:

- | | |
|---|---|
| <input type="checkbox"/> Soil: maintain industrial zoning (220) | <input type="checkbox"/> Cover or Barrier (222) |
| <input type="checkbox"/> Structural Impediment (224) | <input type="checkbox"/> Vapor Mitigation (226) |
| <input type="checkbox"/> Site-Specific Condition (228) | <input type="checkbox"/> Maintain Liability Exemption (230) |

(note: soil contaminant concentrations between residential and industrial levels)

(note: maintenance plan for groundwater or direct contact)

(note: local government or economic development corporation)

Monitoring wells properly abandoned? (234)

- Yes No N/A

**Residual Contaminant Level*

***Site Specific Residual Contaminant Level*

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-67-003514

PARCEL ID #: V30178

ACTIVITY NAME: Snak Shak

WTM COORDINATES: X: 669043 Y: 318396

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

- Closure Letter**
- Maintenance Plan** (if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)
- Conditional Closure Letter**
- Certificate of Completion (COC)** for VPLE sites

SOURCE LEGAL DOCUMENTS

- Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
Figure #: **Title:**
- Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 8.5 x 14 inches unless the map is submitted electronically.

- Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
Note: Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.
Figure #: 1-1 **Title: Site Location**
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: 1 **Title: Monitoring Well Locations**
- Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: NA **Title:**

BRRTS #: 03-67-003514

ACTIVITY NAME: Snak Shak

MAPS (continued)

- Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: 4-1 Title: Geologic Cross-Sections A to A' and B to B'

Figure #: Title:

- Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.

Note: This is intended to show the total area of contaminated groundwater.

Figure #: 1 Title: MTBE Concentrations

- Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 4-4 Title: Interpreted Shallow Groundwater Flow Direction October 28, 1996

Figure #: 5 Title: Interpreted Shallow Groundwater Flow Direction April 14, 1999

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 8.5 x 14 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

- Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.
Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: NA Title:

- Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 2 and 3 Title: Summary of Groundwater Analytical Results and Summary of NA Parameters

- Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: 1 Title: Groundwater Elevation Data

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.

Note: If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.

- Not Applicable**

- Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.

Note: If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.

Figure #: Title:

- Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

- Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

- Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-67-003514

ACTIVITY NAME: Snak Shak

NOTIFICATIONS

Source Property

- Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.
- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

- Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.
Note: Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.

Number of "Off-Source" Letters:

- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.
- Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies)**. This does not apply to right-of-ways.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).

Number of "Governmental Unit/Right-Of-Way Owner" Letters: One



ENVIRONMENTAL & REGULATORY SERVICES DIVISION
BUREAU OF PECFA
9316 North 107th Street
Milwaukee, Wisconsin 53224-1121
TTY: Contact Through Relay
Fax: (414) 357-4700
Jim Doyle, Governor
Richard J. Leinenkugel, Secretary

August 19, 2009

Mr. John Kruepke
J & M, Ltd
N166 W21060 Parkway Drive
Jackson, WI 53037

RE: **Final Closure**

Commerce # 53037-9602-79-A DNR BRRTS # 03-67-003514
Snak Shak, N168 W20379 Main Street, Jackson

Dear Mr. Kruepke:

The Wisconsin Department of Commerce (Commerce) has received the monitoring well abandonment form that was required for closure of the site referenced above. This site is now listed as "closed" on the Commerce database and will be included on the Department of Natural Resources (DNR) Geographic Information System (GIS) Registry of Closed Remediation Sites to address residual groundwater contamination. To review all sites on the GIS Registry internet database, visit <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If you intend to construct or reconstruct a potable well on this property, you must get prior DNR approval.

All current and future owners and occupants of the property need to be aware that excavation of contaminated soil may pose a hazard. Special precautions may be needed to prevent inhalation, ingestion or dermal contact with the residual contamination when it is removed. If soil is excavated, the property owner at the time of excavation must have the soil sampled and analyzed to determine if residual contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation must determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable State regulations and standards.

Costs for sampling and excavation activities conducted after case closure are not eligible for PECFA reimbursement. However, if it is determined that any undisturbed remaining petroleum contamination poses a threat, the case may be reopened and further investigation or remediation may be required. If this case is reopened, any original claim under the PECFA fund would also reopen and you may apply for assistance to the extent of remaining eligibility. It is in your best interest to keep all documentation related to environmental activities at your site.

Thank you for your efforts to bring this case to closure. If you have any questions, please contact me in writing at the letterhead address or by telephone at (414) 357-4703.

Sincerely,

A handwritten signature in black ink, appearing to read "L. M. Michalets".

Linda M. Michalets
Senior Hydrogeologist
Site Review Section

cc: Mr. Kevin Cooper, Cooper Environmental Resources, Inc.



ENVIRONMENTAL & REGULATORY SERVICES DIVISION
BUREAU OF PECFA
9316 North 107th Street
Milwaukee, Wisconsin 53224-1121
TTY: Contact Through Relay
Fax: (414) 357-4700
Jim Doyle, Governor
Richard J. Leinenkugel, Secretary

July 17, 2009

Mr. John Kruepke
J & M, Ltd.
N166 W21060 Parkway Drive
Jackson, WI 53037

RE: **Additional Activities Required for Case Closure**

Commerce # 53037-9602-79-A DNR BRRTS # 03-67-003514
Snak Shak, N168 W20379 Main Street, Jackson

Dear Mr. Kruepke:

The Wisconsin Department of Commerce (Commerce) has reviewed the results of additional groundwater monitoring conducted by your consultant, Cooper Environmental Resources, Inc., for the site referenced above. Commerce approved conditional case closure for this petroleum release on April 6, 2000. However, because data indicated that the groundwater contaminant plume likely extended onto the adjacent property to the south, Commerce required that the adjacent property, identified as W204 N16766 Jackson Drive, be included in the GIS Registry of Closed Remediation sites. In a letter dated May 1, 2003, your attorney informed Commerce that groundwater monitoring of well MW2 would continue instead of seeking final closure.

Contaminant concentrations in well MW2 have significantly decreased over time. Therefore, the W204 N16766 Jackson Drive property is not required to be included in the GIS Registry of Closed Remediation Sites. You should proceed to bring this case to final closure.

The following documentation is required to obtain final closure:

- Monitoring well MW2 must be properly abandoned within 60 days and the appropriate documentation forwarded to Commerce at the letterhead address within 120 days of the date of this letter. Noncompliance with the abandonment requirement and deadline can result in enforcement action and financial penalties.

Information submitted with your closure request will be included on the Department of Natural Resources (DNR) GIS Registry of Closed Remediation Sites. All sites on the Registry can be viewed via the Remediation and Redevelopment (RR) Sites Map at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. Because residual contamination remains at the time of case closure, if you intend to construct or reconstruct a potable well on this property, you must get prior DNR approval.

All current and future owners and occupants of the property need to be aware that excavation of contaminated soil may pose a hazard. Special precautions may be needed to prevent inhalation, ingestion or dermal contact with the residual contamination when it is removed. If soil is excavated, the property owner at the time of excavation must have the soil sampled and analyzed to determine if residual contamination remains. If sampling confirms that contamination is present, the property owner at the time

of excavation must determine whether the material would be considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Costs for sampling and excavation activities conducted after the date of this letter are not eligible for PECFA reimbursement.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (414) 357-4703.

Sincerely,

LM 

Linda M. Michalets
Senior Hydrogeologist
Site Review Section

cc: Mr. Kevin Cooper, Cooper Environmental Resources, Inc.



April 6, 2000

Mr. Kurt Kruepke
Snak Shak
N168 W20379 Main Street
Jackson, WI 53037

RE: **COMMERCE # 53037-9602-79**
Snak Shak, N168 W20379 Main Street, Jackson, WI
One 4,000-gallon and Two 8,000-gallon Unleaded Gasoline Underground Storage
Tanks Upgraded in 1993 and 1994

Conditional Case Closure

Dear Mr. Kruepke:

On February 11, 2000, the Wisconsin Department of Natural Resources (WDNR) transferred the referenced case to the Wisconsin Department of Commerce for regulatory oversight. The Department reviewed the case file to determine if closure is appropriate.

It is understood that groundwater contamination remains at this site and extends off-site to the south. Using the standards established in NR 700, and the risk criteria of Comm 46, the Department has determined that this site does not pose a significant threat to the environment and human health and no further investigation or remedial action is necessary.

The following items are necessary to satisfy the conditions of closure:

- A groundwater use restriction must be placed on the deed to the Snak Shak property and on the deed to the property to the south of monitoring well MW2. Each deed instrument must state that if a potable well is ever constructed, the Wisconsin Department Natural Resources water supply unit must be contacted to assist in proper design and placement. An example of the deed language is enclosed for your reference. Please submit copies that have been signed, notarized, and filed with the County Register of Deeds. If you wish to modify the language of either deed instrument, submit a copy to this office for review prior to filing.
- Monitoring wells must be abandoned per chapter NR 141 requirements. Please submit copies of the well abandonment forms to this office.

IMPORTANT: Before this case can be officially listed as "closed" on the Wisconsin Department of Commerce/Natural Resources computer database, you or your consultant must submit all of the requested information.

If, in the future, site conditions indicate that any contamination that remains poses a threat, the need for further remediation would be determined and required if necessary. If subsequent information indicates a need to reopen this case, any original claim under the PECFA fund would also reopen and you may apply for assistance to the extent of remaining eligibility.

Mr. Kurt Kruepke

RE: Commerce # 53037-9602-79
Snak Shak
N168 W20379 Main Street, Jackson, WI

April 6, 2000

Page 2

If the land use conditions change in the future and the contaminated soil is disturbed, appropriate measures must be implemented to assure any residual contamination is managed following all applicable State of Wisconsin regulations and standards.

Upon receipt of the requested documents, this case will be entered as "closed" on the database. If you have any questions, feel free to contact me at (414) 220-5376.

Sincerely,



Linda M. Michalets
Hydrogeologist
Site Review Section

Enclosure

cc: Ms. Sandra Barnick, Cooper Environmental & Engineering Resources, Inc.
Commerce electronic file

12th day of October, 1937

Countersigned

Henry Abel
Village Clerk

WISCONSIN
COUNTY ss
JACKSON

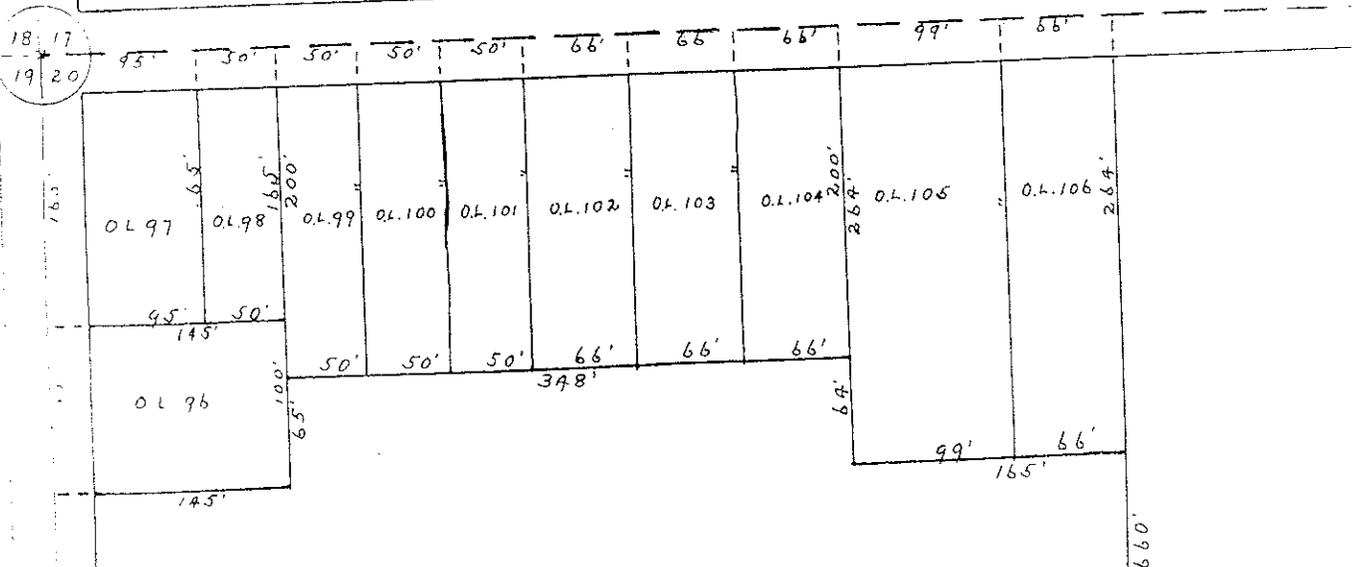
I, Henry Abel, Clerk of the Village of Jackson, Washington County, Wisconsin true and correct copy of a resolution adopted by the Village Board of said Village and meeting held on the 12th day of October, 1937.

Henry Abel
Village Clerk

WISCONSIN
COUNTY ss

I, Carl G. Engelke, do hereby certify that the annexed Assessors Plat is a parcel of Land within the Corporate Limits of the Village of Jackson, Washington County, Wisconsin, in the Northwest Quarter of Section 20- Township 10 North- Range 20 East, as recorded in the Register of Deeds Office of Washington County, Wisconsin, at West Bend, Wisconsin, October 10th 1937

Carl G. Engelke



Legal description of property

O. L. 107 N168 W20379 Main St.
V of Jackson Assrs plat NW NW OL 97
Described in V987 P112&V1613 P577
Sec.20-10-20 Tax key # V3 0178
Longitude-88.161788 Latitude 43.323671

The Property described above is owned by:

J & M Properties Ltd

John Kruepke

John Kruepke

Kurt Kruepke

Kurt Kruepke

330'

CORPORATE

16487111

REGISTER'S OFFICE
Washington Co., Wisconsin

Received for record this 15th day of October 1937 at 1:15 p.m.
clock
and recorded in 1937
16487111

330'

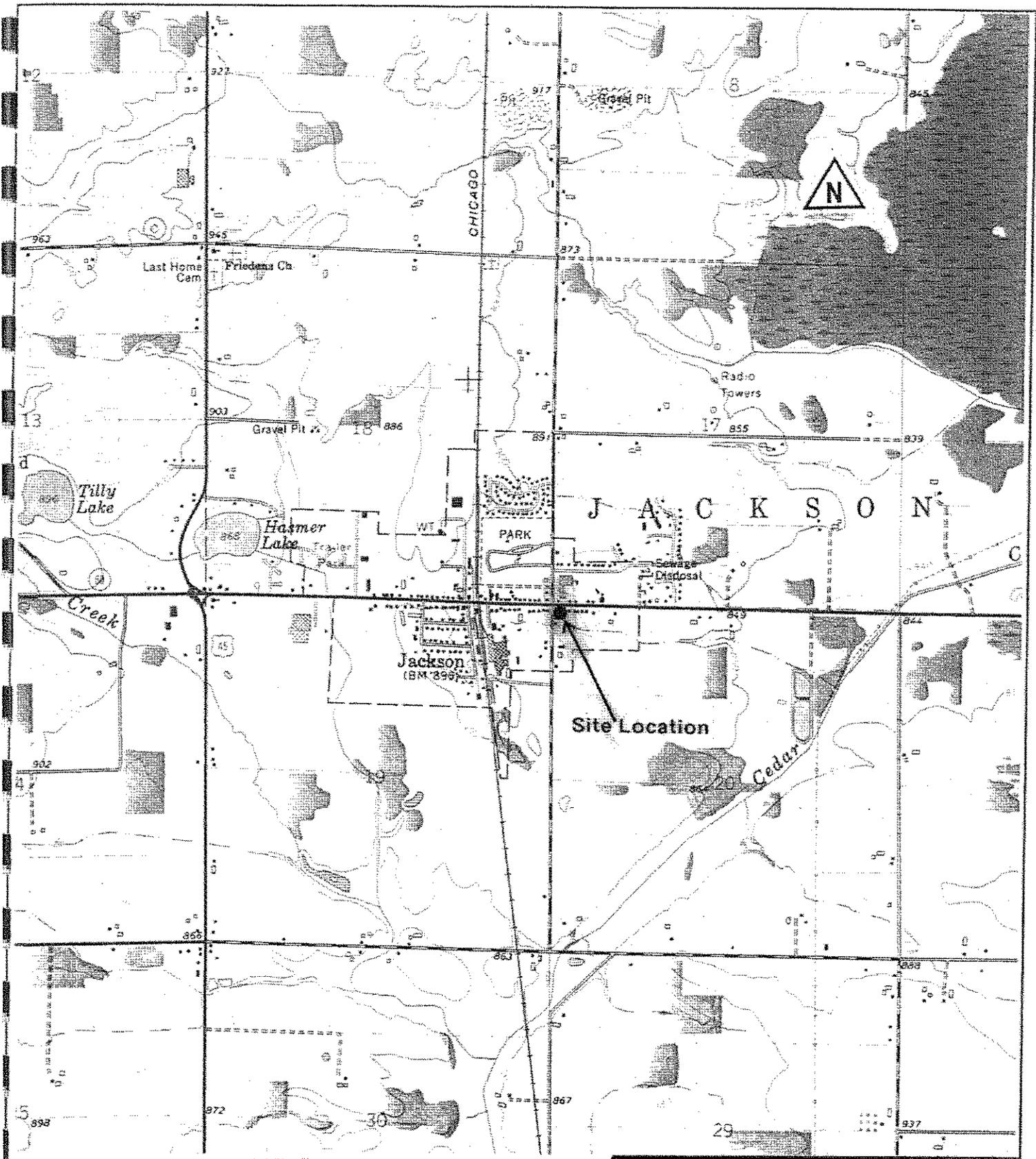


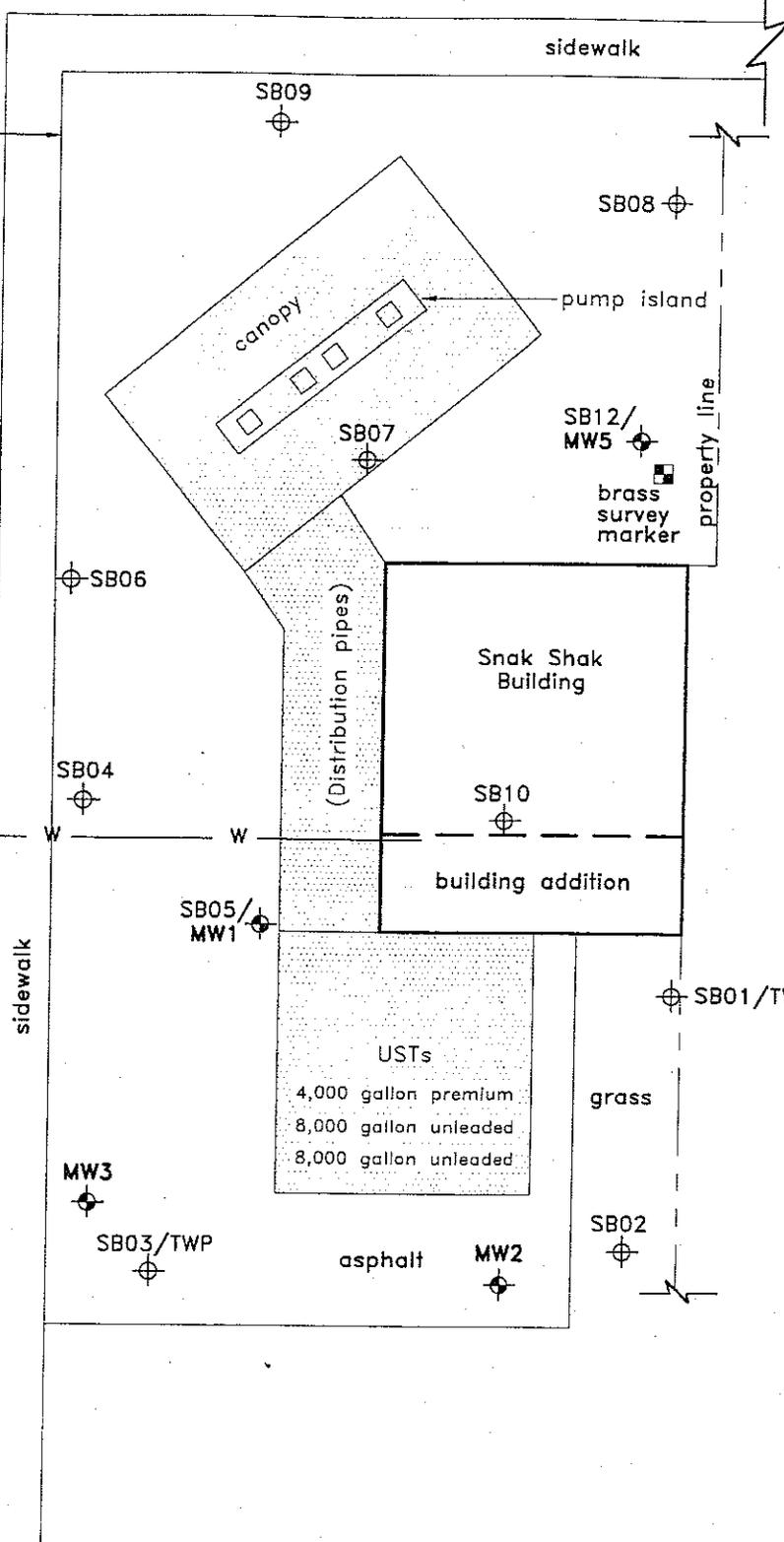
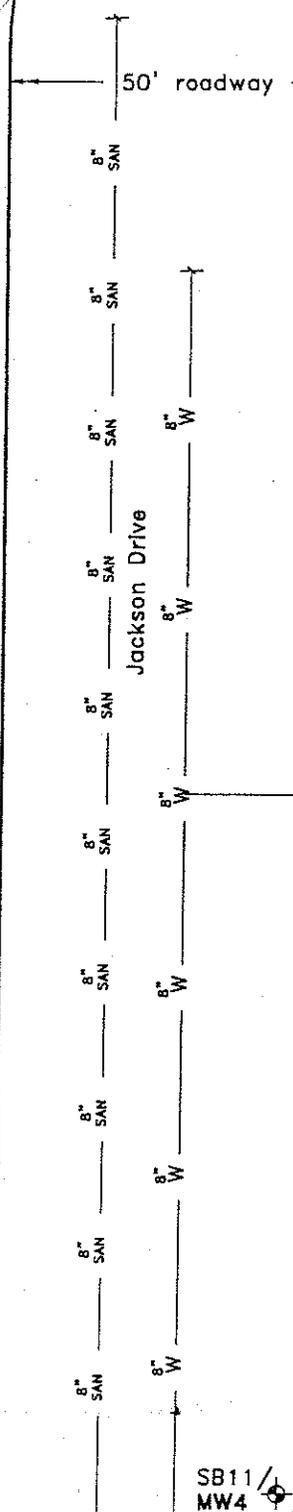
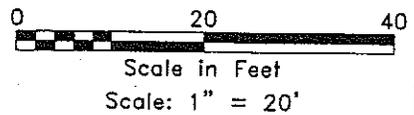
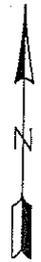
Figure 1-1
SITE LOCATION
 Snak Shak
 N 168 W 20379 Main Street
 Jackson, WI

source: USGS 7.5' Quadrangle; (Jackson, WI; 1976)

date:	drafted by:	checked by:	approved by:
10/19/95	PDF	SKB	

Cooper
 Environmental and Engineering Resources, Inc.
 1411 North Main Street, West Bend, Wisconsin, 53095
 scale: 1 : 24,000

Main Street



- SB01
⊕ = soil boring location and I.D.
- MW2
⊙ = monitoring well location and I.D.
- TWP = temporary wellpoint location
- SAN — = sanitary sewer
- W — = water line

Figure 1
MONITORING WELL LOCATIONS

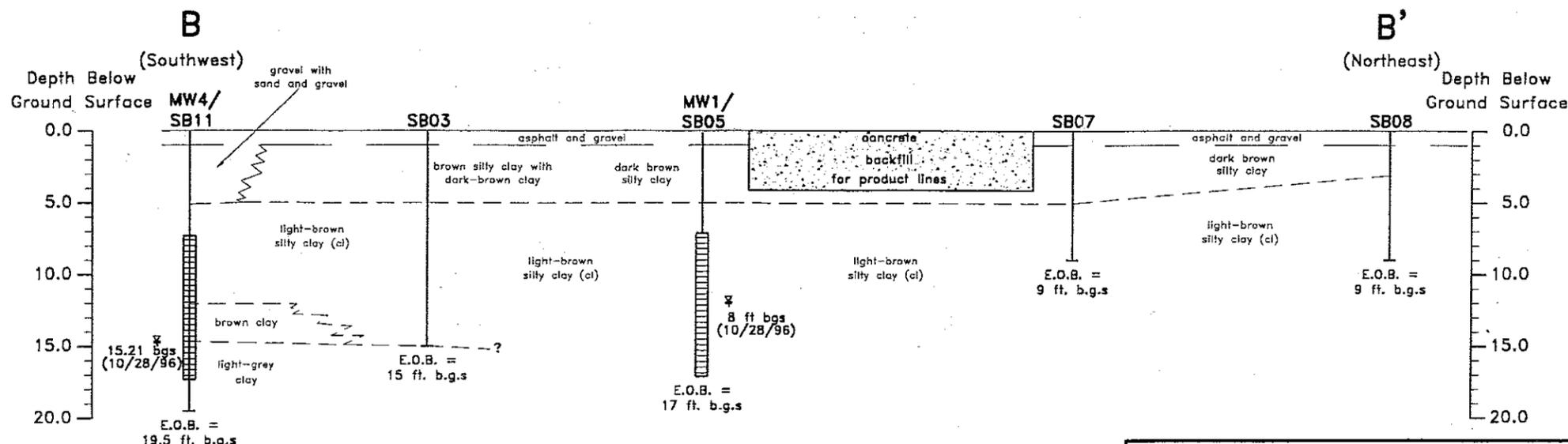
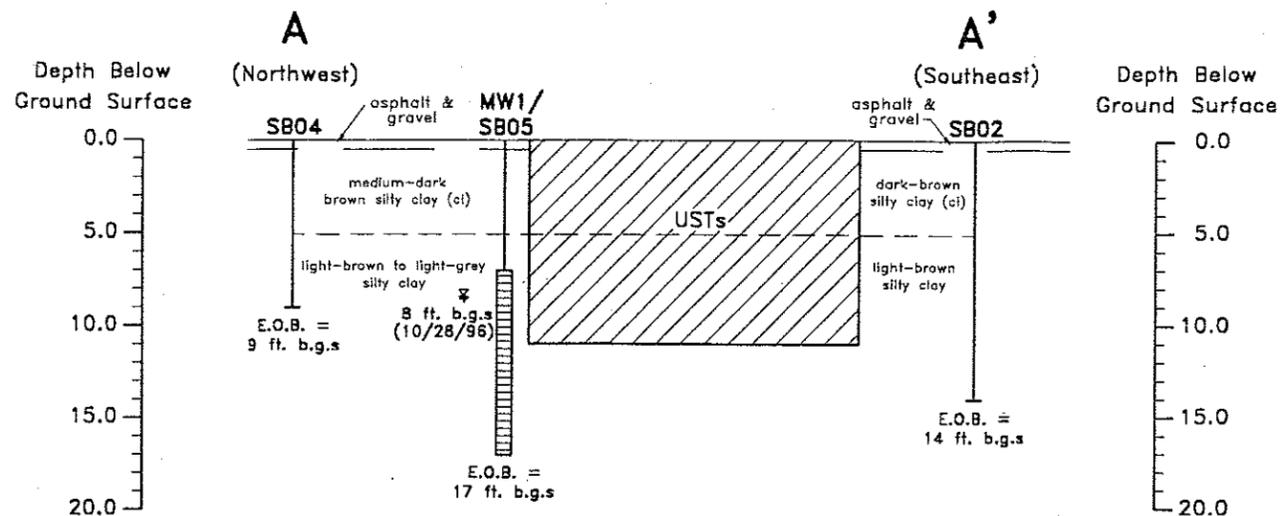
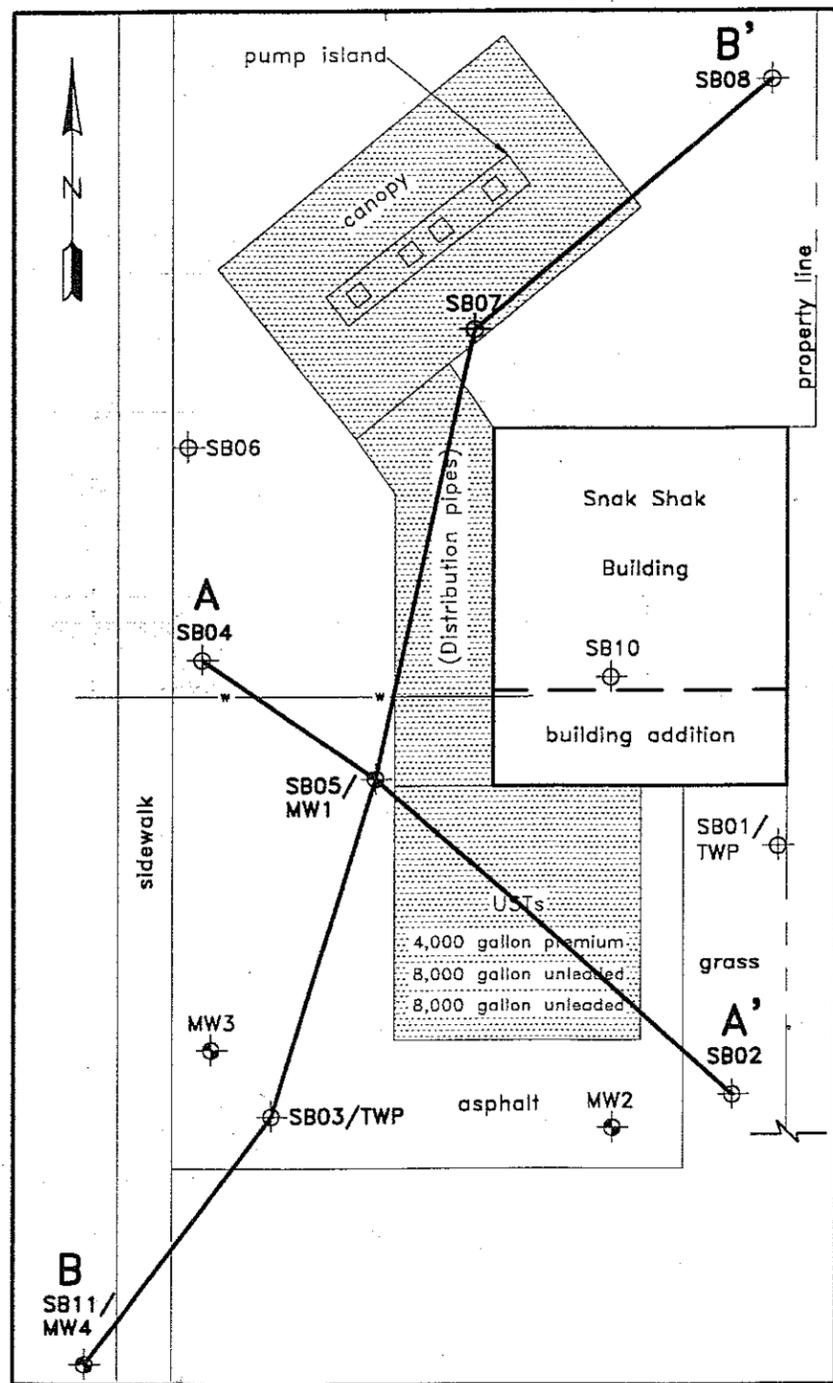
Snak Shak
N 168 W 20379 Main Street
Jackson, WI

date:	drafted by:	checked by:	approved by:
8/20/99	JGK	SKS	

Cooper
Environmental & Engineering Resources Inc.
1411 North Main Street, West Bend, Wisconsin 53090
scale: 1" = 20' file: C:\DWGS\SNKSHAK\MWL

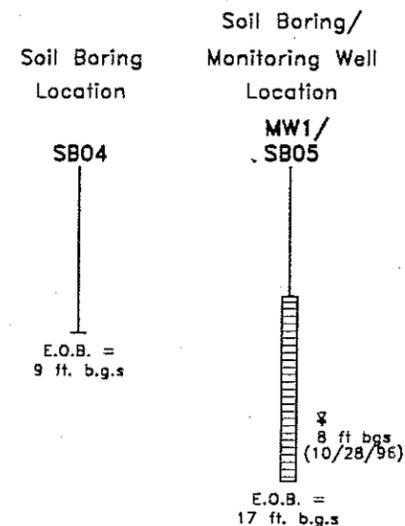
REFERENCE MAP

(Scale: 1" = 20')



USCS SOIL CLASSIFICATION:

COARSE-GRAINED SOILS		FINE-GRAINED SOILS	
CLEAN GRAVELS (LITTLE OR NO FINES)	GW GP	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GM GC	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	CLAYEY GRAVELS GRAVEL-SAND-CLAY MIXTURES
CLEAN SANDS (LITTLE OR NO FINES)	SW SP	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SM SC	SILTY SANDS, SAND-SILT MIXTURES	CLAYEY SANDS, SAND-CLAY MIXTURES
		SILTS AND CLAYS LIQUID LIMIT (LESS THAN 50)	ML CL OL
		SILTS AND CLAYS LIQUID LIMIT (GREATER THAN 50)	MH CH OH
		HIGHLY ORGANIC SOILS	PT
		FILL	HF



**Figure 4-1
GEOLOGIC CROSS-SECTIONS
A to A' and B to B'**

**Snak Shak
N 168 W 20379 Main Street
Jackson, WI**

Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 10'

E.O.B. = End of Boring
∇ = water table
bgs = below ground surface

DATE: 7/21/99 DRAFTED BY: SKB CHECKED BY: SKB APPROVED BY:

Cooper

Environmental & Engineering Resources Inc.
1411 North Main Street, West Bend, Wisconsin 53095
C:\DWG5\SNKSHAK\XSECTION

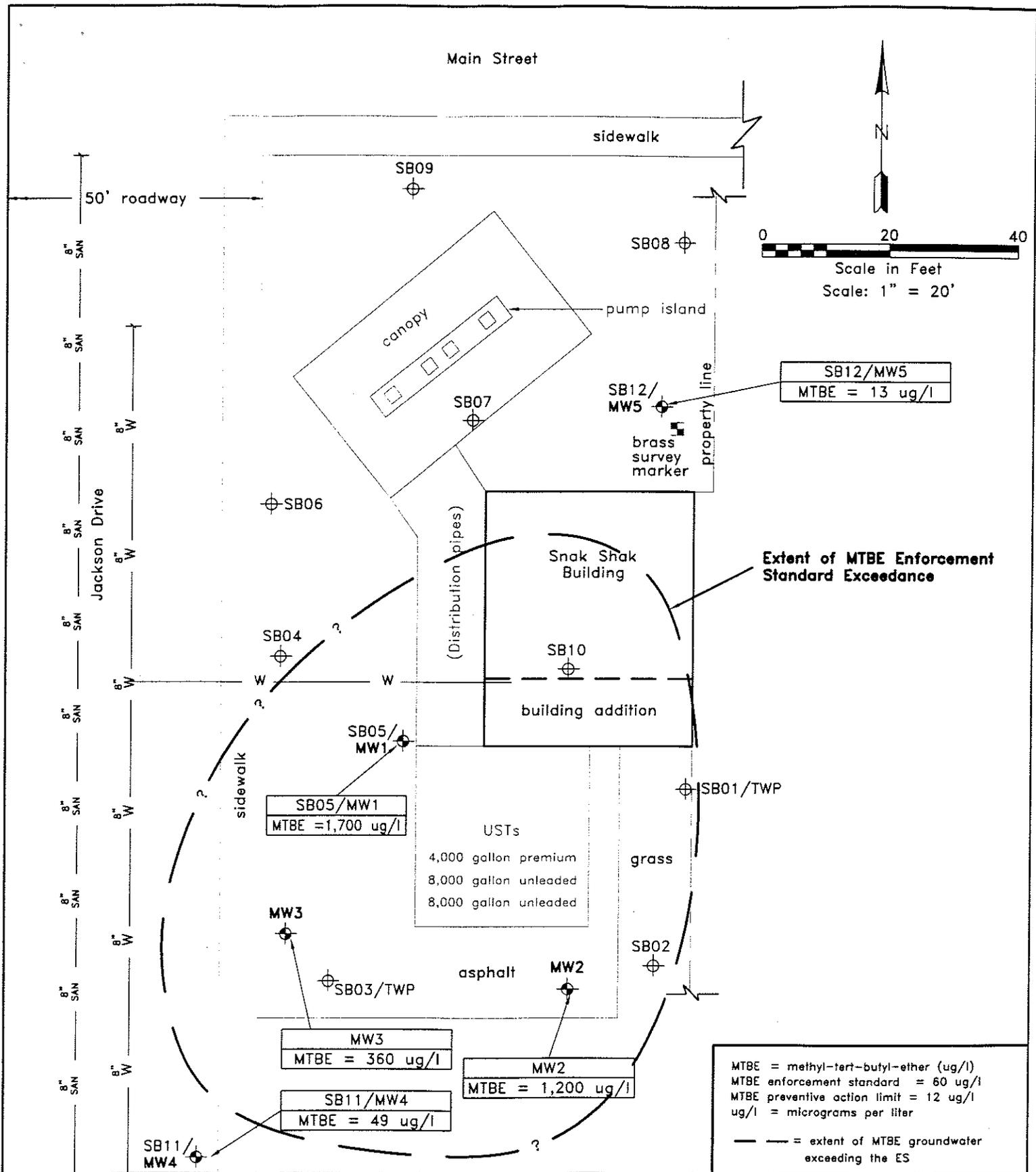


Figure 1
MTBE CONCENTRATIONS

JUNE 28, 1999

Snak Shak
N 168 W 20379 Main Street
Jackson, WI

- SB01
⊕ = soil boring location and I.D.
- TPW = temporary well point location
- MW2
⊕ = monitoring well location and I.D.
- SAN — = sanitary sewer
- W — = water line

date:	drafted by:	checked by:	approved by:
8/20/99	JGK		

Cooper

Environmental & Engineering Resources Inc.
1411 North Main Street, West Bend, Wisconsin 53090
scale: 1" = 20' file: C:\DWGS\SNAKSHAK\MTBE2

Jackson Drive

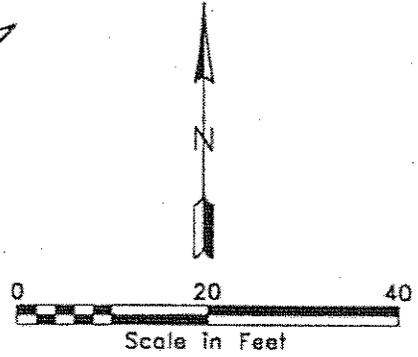
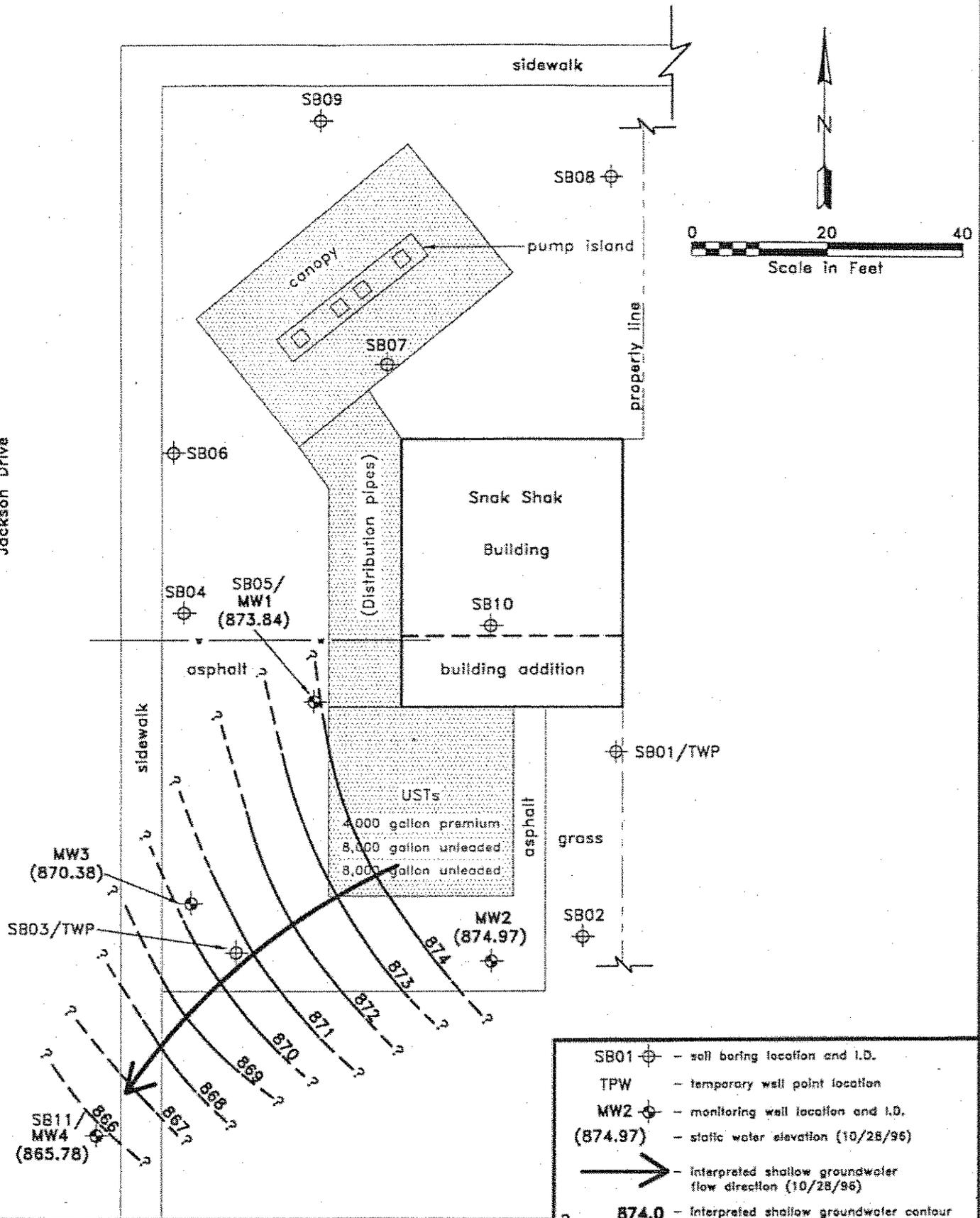


Figure 4-4

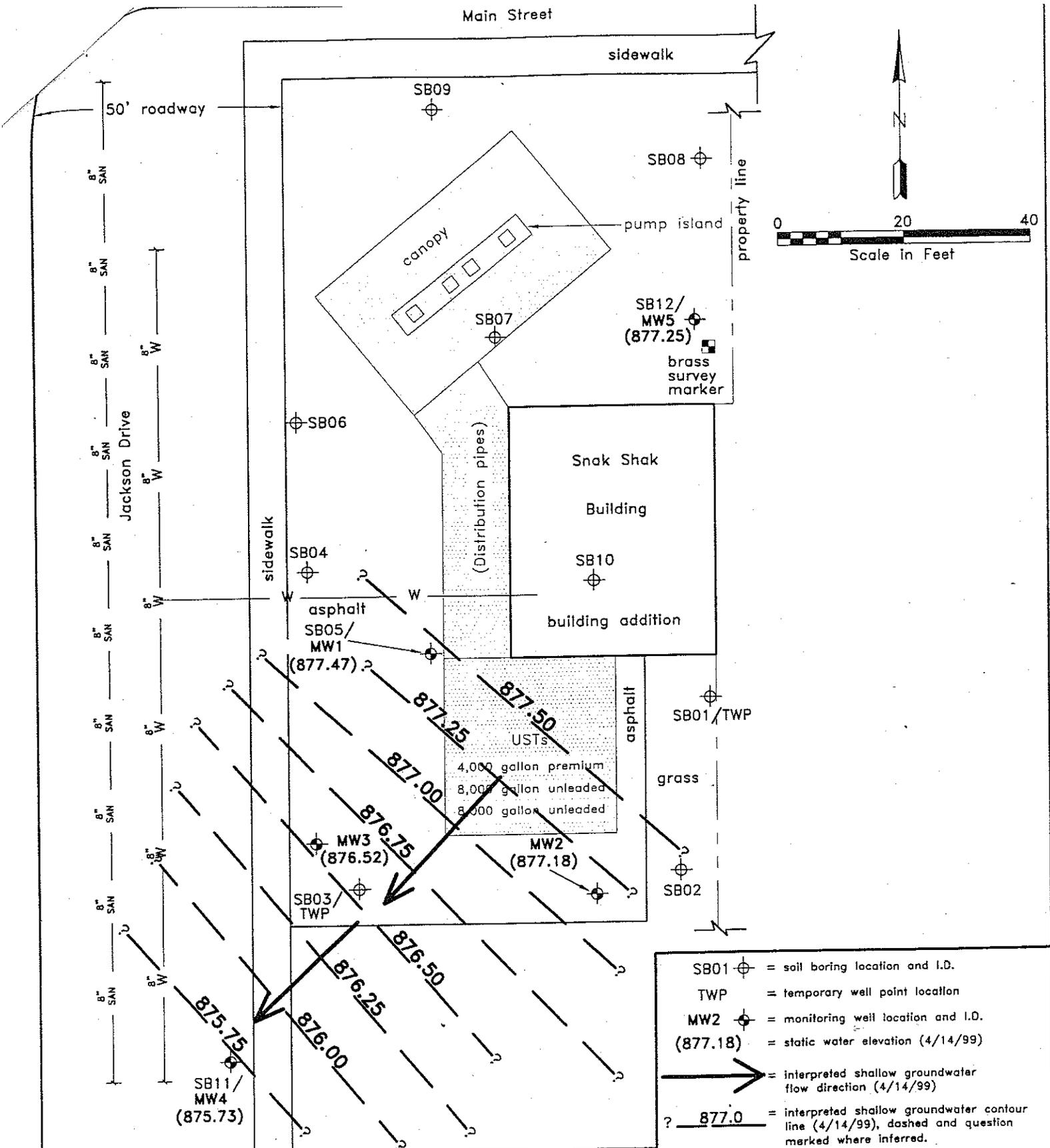
INTERPRETED SHALLOW GROUNDWATER FLOW DIRECTION
October 28, 1996

Snak Shak
N 168 W 20379 Main Street
Jackson, WI

- SB01 ⊕ - well boring location and I.D.
- TPW - temporary well point location
- MW2 ⊕ - monitoring well location and I.D.
(874.97) - static water elevation (10/28/96)
- - interpreted shallow groundwater flow direction (10/28/96)
- ? - 874.0 - interpreted shallow groundwater contour line (10/28/96), dashed and question marked where inferred.
- w — = water lateral

date:	drafted by:	checked by:	approved by:
8/5/97		SKB	

Cooper
Environmental & Engineering Resources Inc.
1411 North Main Street, West Bend, Wisconsin 53095
scale: 1" = 20' file: C:/DWGS/SNAKSHAK/GF102896



SB01 ⊕ = soil boring location and I.D.
 TWP = temporary well point location
 MW2 ⊕ = monitoring well location and I.D.
 (877.18) = static water elevation (4/14/99)
 → = interpreted shallow groundwater flow direction (4/14/99)
 ? - 877.0 = interpreted shallow groundwater contour line (4/14/99), dashed and question marked where inferred.
 — SAN — = sanitary sewer
 — W — = water line

date:	drafted by:	checked by:	approved by:
8/20/99	JGK	SKB	

Cooper
 Environmental & Engineering Resources Inc.
 1411 North Main Street, West Bend, Wisconsin 53090
 scale: 1" = 20' file: C:\DWGS\SNKSHAK\GF41499

Figure 5
INTERPRETED SHALLOW GROUNDWATER FLOW DIRECTION
 April 14, 1999
 Snak Shak
 N 168 W 20379 Main Street
 Jackson, WI

Table 2
Summary of Groundwater Analytical Results
Snak Shak
Jackson, Wisconsin

Well Number	Date Sampled	Sample ID	Benzene	Ethylene Benzene	MTBE	Toluene	Total Xylenes
MW1	4/3/96	SS/MW1-01	ND(<30)	ND(<50)	5,900	ND(<50)	ND(<50)
	7/2/96	SS/MW1-02	ND(<30)	ND(<50)	7,300	ND(<50)	ND(<50)
	10/25/96	SS/MW1-03	ND(<30)	ND(<50)	7,600	ND(<50)	ND(<50)
	1/22/97	SS/MW1-04	ND(<10)	ND(<15)	6,500	ND(<20)	ND(<45)
	6/18/97	SS/MW1-05	ND(<8.0)	ND(<14)	5,900	ND(<18)	ND(<47)
	10/15/97	SS/MW1-06	ND(<4.0)	ND(<7.2)	4,400	ND(<9.0)	ND(<23)
	4/23/98	SS/MW1-4/98	ND(<5.2)	ND(<4.8)	1,800	ND(<4.2)	ND(<19)
	7/22/98	SS/MW1-7/98	ND(<5.4)	ND(<6.4)	3,200	ND(<5.4)	ND(<8.6)
	4/19/99	SS/MW1-4/99	0.38	ND(<.22)	760	ND(<.17)	ND(<.81)
6/28/99	SS/MW1-6/99	1	ND(<4.4)	1,700	ND(<1.0)	ND(<1.2)	
MW2	4/3/96	SS/MW2-01	ND(<12)	ND(<20)	1,900	ND(<20)	ND(<20)
	7/2/96	SS/MW2-02	ND(<15)	ND(<25)	3,700	ND(<25)	ND(<25)
	1/22/97	SS/MW2-04	ND(<5.0)	ND(<7.5)	2,900	ND(<10)	ND(<23)
	6/18/97	SS/MW2-05	ND(<3.2)	ND(<5.8)	3,300	ND(<7.2)	ND(<19)
	10/15/97	SS/MW2-06	ND(<3.2)	ND(<5.8)	2,400	ND(<7.2)	ND(<19)
	1/13/98	SS/MW2-1/98	ND(<0.2)	ND(<0.3)	2,400	ND(<0.2)	ND(<0.6)
	4/23/98	SS/MW2-4/98	ND(<2.7)	ND(<3.2)	2,000	ND(<2.7)	ND(<4.3)
	7/22/98	SS/MW2-7/98	ND(<5.4)	ND(<6.4)	2,400	ND(<5.4)	ND(<8.6)
	12/11/98	SS/MW2-11/98	ND(2.6)	ND(<2.4)	2,100	ND(<2.1)	ND(<9.7)
	4/14/99	SS/MW2-4/99	ND(<.18)	ND(<.22)	1,900	0.24	ND(<.81)
	6/28/99	SS/MW2-6/99	ND(<2.6)	ND(<4.4)	1,200	ND(<4.0)	ND(<4.6)
	11/14/20	SS/MW2-11/20	ND(<.50))	ND(<.50)	1,760	ND(<.50)	ND(<.50)
6/6/03	SS/MW2-6/03	ND(<.50))	ND(<.50)	932	ND(<.50)	ND(<.50)	
5/29/09	SS/MW2-5/09	ND(<.31)	ND(<.50)	508	ND(<.37)	ND(<.77)	
MW3	4/3/96	SS/MW3-01	ND(<0.6)	ND(<1.0)	57	ND(<1.0)	ND(<1.0)
	7/2/96	SS/MW3-02	ND(<0.6)	ND(<1.0)	150	ND(<1.0)	ND(<1.0)
	10/25/96	SS/MW3-03	ND(<1.5)	ND(<2.5)	340	ND(<2.5)	ND(<2.5)
	1/22/97	SS/MW3-04	ND(<1.0)	ND(<1.5)	750	ND(<2.0)	ND(<4.5)
	6/18/97	SS/MW3-05	ND(<1.6)	ND(<2.9)	1,100	ND(<3.6)	ND(<9.4)
	10/15/97	SS/MW3-06	ND(<1.6)	ND(<2.9)	1,800	ND(<3.6)	ND(<9.4)
	1/13/98	SS/MW3-1/98	ND(<0.2)	ND(<0.3)	1,600	ND(<0.2)	ND(<0.6)
	4/23/98	SS/MW3-4/98	ND(<2.7)	ND(<3.2)	1,200	ND(<2.7)	ND(<4.3)
	7/22/98	SS/MW3-7/98	ND(<2.7)	ND(<3.2)	1,100	ND(<2.7)	ND(<4.3)
	12/11/98	SS/MW3-12/98	ND(<1.3)	ND(<1.2)	900	ND(<1.1)	ND(<4.8)
	4/14/99	SS/MW3-4/99	ND(<0.18)	ND(<0.22)	760	ND(<0.17)	ND(<0.18)
6/28/99	SS/MW3-6/99	ND(<0.65)	ND(<1.1)	360	ND(<1.0)	ND(<1.2)	
NR 140 ES*			5	700	60	1mg/l	10mg/l
NR 140 PAL*			0.5	140	12	.2mg/l	1mg/l

Notes: all concentrations in ug/L unless noted
VOCs = Volatile Organic Compounds
Q = reported result is between the limit of detection (LOD) and the limit of quantification (LOQ)
ND() = Not detected above limit of detection (detection limit)
* = Groundwater standards from NR 140, Wis. Adm Code, Jan.2008
ES = NR 140 Enforcement Standard
PAL = NR 140 Preventive Action Limit
150 = Enforcement Standard Exceedence
57 = Preventive Action Limit Exceedence

Table 2, continued
 Summary of Groundwater Analytical Results
 Snak Shak
 Jackson, Wisconsin

Well Number	Date Sampled	Sample ID	Benzene	Ethylene benzene	MTBE	Toluene	Total Xylenes
MW4	04/03/96	well not installed					
	07/02/96	well not installed					
	10/25/96	SS/MW4-03	ND(<0.6)	ND(<1.0)	ND(<1.0)	ND(<1.0)	ND(<1.0)
	01/22/97	SS/MW4-04	ND(<0.2)	ND(<0.3)	0.4Q	ND(<0.4)	ND(<0.9)
	06/18/97	SS/MW4-05	ND(<0.16)	ND(<0.29)	ND(<0.2)	ND(<0.36)	ND(<0.94)
	10/15/97	SS/MW4-06	ND(<0.16)	ND(<0.29)	1.50	ND(<0.36)	ND(<0.94)
	01/13/98	SS/MW4-1/98	ND(<0.2)	ND(<0.3)	6.6	ND(<0.2)	ND(<0.6)
	04/23/98	SS/MW4-4/98	ND(<0.27)	ND(<0.32)	11	ND(<0.27)	ND(<0.43)
	07/22/98	SS/MW4-7/98	ND(<0.27)	ND(<0.32)	<u>30</u>	0.34Q	ND(<0.43)
MW5	04/03/96	well not installed					
	07/02/96	well not installed					
	10/25/96	well not installed					
	01/22/97	well not installed					
	06/18/97	SS/MW5-05	ND(<0.41)	ND(<0.23)	<u>35</u>	ND(<0.28)	ND(<0.51)
	10/15/97	SS/MW5-06	ND(<0.16)	ND(<0.29)	<u>40</u>	ND(<0.36)	ND(<0.94)
	01/13/98	SS/MW5-1/98	ND(<0.2)	ND(<0.3)	<u>44</u>	ND(<0.2)	ND(<0.6)
	04/23/98	SS/MW5-4/98	ND(<0.27)	ND(<0.32)	<u>30</u>	ND(<0.27)	ND(<0.43)
	07/22/98	SS/MW5-7/98	ND(<0.27)	ND(<0.32)	<u>21</u>	ND(<0.27)	ND(<0.43)
NR 140 ES		5	700	60	343	620	
NR140 PAL		0.5	140	12	68.6	124	

Notes: all concentrations reported in ug/L unless noted
 VOCs = Volatile Organic Compounds
 Q = reported result is between the the limit of detection (LOD) and the limit of quantification (
 ND() = Not detected above limit of detection (detection limit)
 * = Groundwater Standards from NR 140, Wis. Adm. Code, October 1996
 ES = NR 140 Enforcement Standard
 PAL = NR 140 Preventive Action Limit
180 = Enforcement Standard Exceedence
180 = Preventive Action Limit Exceedence

Table 3
 Summary of Natural Attenuation Parameters
 Snak Shak
 Jackson, Wisconsin

Well Number	Date Sampled	pH	Conductivity (us)	Temperature (Fahrenheit)	D.O. (mg/l)	Nitrate (mg/l)	Ferrous Iron (mg/l)	Sulfate (mg/l)
MW1	10/25/96	8.40	2330	60.4	7.20	0.5	0.12	82.1
	01/22/97	7.08	1630	49.7	5.70	0.4	0.01	70.6
	06/18/97	---	---	50.9	1.47	0.0	0.00	84.3
	10/15/97	7.45	2030	58.0	2.24	7.6	0.00	60.6
	01/13/98	7.72	1901	52.9	6.01	0.2	0.03	85.6
	04/23/98	7.42	2000	49.7	1.56	0.3	0.03	79.3
	07/22/98	7.36	1848	56.9	4.76	0.0	0.04	81.7
MW2	10/25/96	8.64	1980	56.7	7.53	0.1	0.16	63.2
	01/22/97	7.19	1515	49.9	5.80	0.0	0.15	67.7
	06/18/97	---	---	48.4	1.76	0.0	0.04	59.1
	10/15/97	7.27	1779	52.5	7.14	0.0	0.00	61.9
	01/13/98	7.33	1962	49.3	6.81	0.0	0.04	58.4
	04/23/98	7.58	1840	48.9	3.93	0.0	0.02	86.7
	07/22/98	7.38	1913	53.3	8.92	0.0	0.00	58.0
MW3	10/25/96	8.52	2210	58.9	6.73	1.1	0.21	112.2
	01/22/97	7.07	1740	50.5	5.20	0.0	0.00	109.7
	06/18/97	---	---	---	1.47	0.0	0.09	101.8
	10/15/97	7.00	1908	56.5	2.19	0.0	0.00	114.6
	01/13/98	7.21	2105	54.3	4.02	0.0	0.05	104.7
	04/23/98	7.58	1998	49.9	1.73	0.0	0.00	103.9
	07/22/98	7.35	1926	55.1	6.28	0.2	0.00	99.4
MW4	10/25/96	8.08	1800	60.4	3.60	1.5	0.57	128.5
	01/22/97	6.70	2.63	48.2	7.40	0.0	0.08	112.8
	06/18/97	---	---	51.1	2.06	0.0	0.17	108.2
	10/15/97	7.11	3215	55.5	5.24	0.0	0.01	107.0
	01/13/98	7.59	3565	53.4	3.65	0.0	0.00	115.1
	04/23/98	7.47	3758	50.1	7.22	0.0	0.14	116.8
	07/22/98	7.20	3870	55.3	7.32	0.1	0.35	109.7
MW5	06/18/97	---	---	57.4	7.60	0.0	2.08	96.4
	10/15/97	7.16	2691	60.3	6.90	0.0	0.27	98.4
	01/13/98	7.92	2369	51.6	6.32	0.0	1.89	121.6
	04/23/98	7.65	2747	48.7	8.19	0.0	0.10	79.4
	07/22/98	7.25	2696	59.4	5.19	0.0	2.70	102.0

ND = Not Detected
 D.O. = Dissolved Oxygen
 us = micro siemens
 mg/l = milligramliter

Table 1
 Groundwater Elevation Data
 Snak Shak
 N168 W20379 Main Street
 Jackson, WI

Well Number	Ground Surface Elevation	T.O.C. Elevation	Date	Depth Groundwater	Groundwater Elevation
MW1	881.84	881.40	04/03/96	5.37	876.03
			07/02/96	4.50	876.90
			10/25/96	7.56	873.84
			01/22/97	6.12	875.28
			06/18/97	5.26	876.14
			10/15/97	5.26	876.14
			01/13/98	6.13	875.27
			04/23/98	3.41	877.99
			07/22/98	7.96	873.44
			12/11/98	7.29	874.11
			04/14/99	3.93	877.47
06/28/99	4.49	876.91			
MW2	881.19	880.87	04/03/96	4.96	875.91
			07/02/96	4.66	876.21
			10/25/96	5.90	874.97
			01/22/97	5.85	875.02
			06/18/97	4.93	875.94
			10/15/97	5.69	875.18
			01/13/98	5.20	875.67
			04/23/98	4.25	876.62
			07/22/98	4.81	876.06
			12/11/98	5.39	875.48
			04/14/99	3.69	877.18
06/28/99	4.79	876.08			
MW3	881.42	881.12	04/03/96	6.23	874.89
			07/02/96	6.41	874.71
			10/25/96	10.74	870.38
			01/22/97	9.71	871.41
			06/18/97	9.54	871.58
			10/15/97	6.96	874.16
			01/13/98	8.28	872.84
			04/23/98	5.44	875.68
			07/22/98	10.26	870.86
			12/11/98	9.52	871.60
			04/14/99	4.60	876.52
06/28/99	10.43	870.69			
MW4	880.99	880.53	04/03/96	N.I.	N.I.
			07/02/96	N.I.	N.I.
			10/25/96	14.75	865.78
			01/22/97	5.89	874.64
			06/18/97	5.86	874.67
			10/15/97	5.79	874.74
			01/13/98	5.82	874.71
			04/23/98	4.79	875.74
			07/22/98	5.94	874.59
			12/11/98	5.95	874.58
			04/14/99	4.80	875.73
06/28/99	5.62	874.91			
MW5	882.52	882.14	04/03/96	N.I.	N.I.
			07/02/96	N.I.	N.I.
			10/25/96	N.I.	N.I.
			01/22/97	N.I.	N.I.
			06/18/97	5.89	876.25
			10/15/97	6.38	875.76
			01/13/98	6.01	876.13
			04/23/98	5.34	876.80
			07/22/98	6.11	876.03
			12/11/98	6.15	875.99
			04/14/99	4.89	877.25
06/28/99	5.78	876.36			

N.I. = Well Not Installed



Village of Jackson Engineering Dept.
N168 W20733 Main Street P.O. Box 107
Jackson, WI.
53073

RE: WDNR Notification Requirement-Petroleum Contamination of City
Roadway Fronting Snak Shak Convenience Service Station N168
W20379 Main Street, Jackson WI.

Sirs/Mdms

The WDNR GIS Registry program requires that a notification of petroleum contamination be provided to the Village of Jackson. The WDNR GIS program requires that the agency/department that is responsible for the maintenance of affected right-of-ways be notified. The project site's location and affected sub-surface areas are shown on the attached Figure 3.

Shallow groundwater, immediately West and adjacent to the Snak Shak Convenience Station, may still exhibit petroleum concentrations of the chemical constituent Methyl-tert-Butyl-Ether (MTBE). The remaining low level petroleum concentration may exceed the State of Wisconsin's NR 140 groundwater quality standard of 100 ug/l. The aerial extent of the groundwater contaminant plume is limited in size. Figure 3 presents a graphic representation of the plumes configuration.

Groundwater MTBE petroleum concentrations, within the Village's roadway, have historically shown a consistent reduction in extent and magnitude. The residual low level petroleum concentrations will naturally attenuate in time. The undersigned can be contacted at 262-338-9697.

Sincerely,

A handwritten signature in black ink, appearing to read "K Cooper", is written over the typed name.

Kevin Cooper
President, Prof.Geol.#984
Cooper Environmental
c/o J&M Ltd.

RECEIVED

SEP 21 2001

VILLAGE OF JACKSON

A handwritten signature in black ink, appearing to read "B. W. [unclear]", is written over the typed name.

cc: Kurt/John Kruepke