

GIS Registry Disclaimer

This case was closed by the DNR prior to August 1, 2002, when DNR began adding approved cleanups with residual soil contamination into the GIS Registry. Certain documents that are currently required by ch. NR 726, Wis. Adm. Code may therefore not be included in this packet as they were unavailable at the time the original case was closed.

The information contained in this document was assembled by DNR from a previously closed case file, and added to the GIS Registry to provide the public with information on closed sites with residual soil and/or groundwater contamination remaining above applicable state standards.

GIS REGISTRY

Cover Sheet

July, 2008
(RR 5367)

Source Property Information

BRRTS #: 03-02-000099

ACTIVITY NAME: EXPRESS MART

PROPERTY ADDRESS: SE CORNER OF STH 13 & STH 77

MUNICIPALITY: MELLENN

PARCEL ID #: 251-00021-0100 & 251-00021-0200 & 251-00022-0000

CLOSURE DATE: 11/01/1993

FID #: 802064560

DATCP #:

COMM #: 54546999994

*WTM COORDINATES:

X: 469176 Y: 650337

** 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:

Groundwater Contamination > ES (236)

Contamination in ROW

Off-Source Contamination

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

Soil Contamination > *RCL or **SSRCL (232)

Contamination in ROW

Off-Source Contamination

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

Land Use Controls:

Soil: maintain industrial zoning (220)

*(note: soil contamination concentrations
between residential and industrial levels)*

Structural Impediment (224)

Site Specific Condition (228)

Cover or Barrier (222)

*(note: maintenance plan for
groundwater or direct contact)*

Vapor Mitigation (226)

Maintain Liability Exemption (230)

*(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 #: 03-02-000099 PARCEL ID #: 251-00021-0100 & 251-00021-0200 & 251-00022-0000

ACTIVITY NAME: EXPRESS MART WTM COORDINATES: X: 469176 Y: 650337

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.

NA **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)).

NA **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 Title: Site Location Map

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 #: 2 Title: Site Base Map

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 #: 9 Title: Approximate Extent of Soil Contamination at the Groundwater Table (6-8ft bgs)

BRRTS #: 03-02-000099

ACTIVITY NAME: EXPRESS MART

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 **Title: Geologic Cross Section Locations**

Figure #: 5 & 6 **Title: Geologic Cross Section and Profile A - A' & B - B'**

- 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 #: 10 **Title: Approximate Extent of Dissolved Groundwater Contamination For THC as Gasoline**

- 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 #: 7 **Title: Water Table Elevation Contour Map January 30, 1991**

Figure #: 8 **Title: Water Table Elevation Contour Map February 7, 1991**

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 #: 1 **Title: Summary of Analytical Results**

- 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 & Lab **Title: Summary of Groundwater Analytical Results (1) & Lab report for 1993 Sampling**

- 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 #: NA **Title:**

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 #: 03-02-000099

ACTIVITY NAME: EXPRESS MART

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

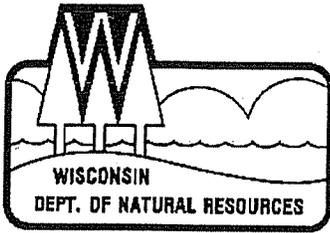
Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

- 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:



George E. Meyer
Secretary

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Brule Area Headquarters
P.O. Box 125
Brule, WI 54820
TELEPHONE 715-372-4866
TELEFAX 715-372-4836

November 1, 1993

03-02-000099

MR GEORGE THALER
THALER OIL COMPANY INC
310 S MAIN ST
CHIPPEWA FALLS WI 54729

Re: Site Closure Request for the Express Mart (NWD LUST Case #99), Mellen, Wisconsin 54546

Dear Mr. Thaler:

The Department has received the Declarations of Restrictions and monitoring well abandonment forms for the above named site. After presenting the available investigation results to the Department's Northwest District Close Out Committee, we agree with your consultant's recommendation of no further action at this time.

Based upon the groundwater monitoring work performed by Delta Environmental Consultants, Inc., it appears that groundwater contaminant levels have decreased significantly since the beginning of this project. The remedial actions taken at this site appear to have been sufficient, and it is not likely that an exceedance of groundwater standards stated in ch. NR 140, Wisconsin Administrative Code, will occur, or that this site will pose a threat to public health and safety, or the environment.

Also, based on the reports submitted by your consultant and the work that has been accomplished, I have signed Form 4 of your application for reimbursement from the Petroleum Environmental Cleanup Fund (PECFA). A copy of the Form is attached; the original has been forwarded to the Department of Industry, Labor and Human Relations (DILHR) in Madison.

In accordance with the provisions of PECFA, evidence of a hazardous substance release was reported to the Department of Natural Resources as required in s. 144.76(2), Wis. Stats. The investigation and remedial work were not performed by the Department using federal LUST Trust funding (42 USC 6991).

This certification is for a completed remedial action, as additional remedial efforts do not seem to be necessary at this time. This site appears to be in substantial compliance with s. 144.76, Wisconsin Statutes.

This decision is based upon information as presented to us. The Department may require responsible parties to undertake appropriate investigative or remedial actions should new information regarding this site come to light in the future.

Mr. George Thaler - November 1, 1993

2

We appreciate the efforts you have undertaken to address the environmental contamination on your property. We also appreciate your patience in awaiting our review of your Form 4 and proposal for site closure. If you have any further questions concerning this project, please do not hesitate to contact me at 715/372-4866.

Sincerely,



Christopher A. Saari
Hydrogeologist

encl.

cc: Tom Kendzierski - DNR Spooner
Linda Baldrige - Safety & Buildings Division, DILHR, PO Box 7969, Madison, WI 53707
Deborah Johnson - LC/5
Andrew Vikman - Delta Environmental Consultants, Inc., 3900 Northwoods Drive, Suite 200, Saint Paul,
MN 55112

DECLARATION OF RESTRICTION

IN RE: Property located in The East 15' of Lot One (1) and all of Lot Two (2), Bennett's Addition to the City of Mellen, Ashland County, Wisconsin, more particular described in the warranty deed recorded at Volume 428 of Records on Page 611 (Document No. X229826).

State of Wisconsin)
)ss.
County of Ashland)

WHEREAS Owners George W. Thaler and Steven M. Thaler, as joint tenants, are the owners of record of the above-described property; and

WHEREAS it is the desire and intention of the property owner to impose on it restrictions which will make it unnecessary to conduct further soil remediation activities on the property at the present time;

Now, therefore, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitations and restrictions:

One or more gasoline discharges have occurred at this property. Structural impediments existing at the time of clean-up made complete remediation of the discharges impracticable. Gasoline contaminated soil may remain at this property at the following location: Underlying the entire property at the water table interface, approximately seven (7) to nine (9) feet below ground surface. Pursuant to the requirements of s. 144.76, Wis. Stats., any future subsurface work in this location which removes the structural impediments which currently exist shall provide for investigation of the degree and extent of gasoline contamination. To the extent of contamination is found at that time, the Wisconsin Department of Natural Resources shall be immediately notified and the contamination shall be properly treated or disposed of in accordance with applicable laws.

This restriction is hereby declared to be a covenant running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. This restriction inures to the benefit of and is enforceable by the Wisconsin Department of Natural Resources, its successor or assign. The Department, its successor or assign, may initiate proceedings at law or in equity against any person or persons violating or proposing to violate this covenant to prevent the proposed violation or to recover damages for such violation.

Signed by the property owner or owners this 19 day of Oct, 1993

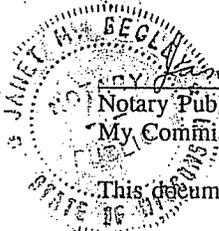
By: George W. Thaler
George W. Thaler

By: Steven M. Thaler
Steven M. Thaler

REGISTER OF DEEDS OFFICE
ASHLAND COUNTY, WI
Received for Record
at 11:50 o'clock A. M. duly recorded in
Vol. 450 of Records on Page 543
OCT 21 1993
Wendell R. Fricke
REGISTER OF DEEDS

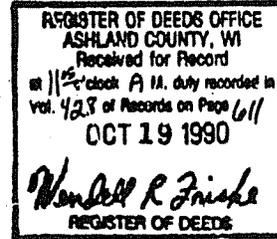
Subscribed and sworn to before me this 19th day of Oct, 1993

Janet M. Begley
Notary Public, State of Wisconsin,
My Commission 10-23-94



This document was drafted by the Wisconsin Department of Natural Resources.

X229826



RETURN TO

Robert Stilin and Rita Jean Stilin, husband and wife,

conveys and warrants to George W. Thaler and Steven M. Thaler, joint tenants with right of survivorship

the following described real estate in Ashland County, State of Wisconsin:

Tax Parcel No:

The East 15' of Lot One (1) and all of Lot (2), Bennett's Addition to the City of Mellen, Ashland County, Wisconsin

TRANSFER \$ 81.00 FEE

This is not homestead property. (is) (is not)

Exception to warranties: Subject to easements, reservations and restrictions of record.

Dated this day of October, 19 90.

(SEAL)

Robert Stilin

(SEAL)

(SEAL)

Rita Jean Stilin

(SEAL)

AUTHENTICATION

Signature(s)

authenticated this day of, 19.

TITLE: MEMBER STATE BAR OF WISCONSIN

(If not authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY

Attorney Michael D. Wartman, Dallenbach, Anich & Wartman, S.C., Ashland, WI 54806.

(Signatures may be authenticated or acknowledged. Both are not necessary.)

ACKNOWLEDGMENT

STATE OF WISCONSIN

Ashland County, ss.

Personally came before me this 5 day of October, 1990, the above named

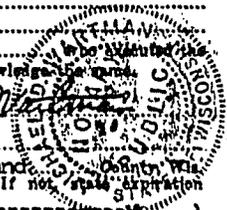
Robert Stilin and Rita Jean Stilin

to me known to be the persons who executed the foregoing instrument and acknowledged to me

Michael D. Wartman

Michael D. Wartman, Notary Public, Ashland, Wisconsin

My Commission is permanent. (If not, state expiration date)



*Names of persons signing in any capacity should be typed or printed below their signatures.

DOCUMENT NO.

WARRANTY DEED
STATE BAR OF WISCONSIN FORM 2 - 1982

THIS SPACE RESERVED FOR RECORDING DATA

X222759

REGISTER OF DEEDS OFFICE
ASHLAND COUNTY, WIS.
Received for Record
at 3:45 o'clock P.M. duly recorded in
Vol. 415 of Records on Page 849
JUN 6 1988
Wendell R. Juske
REGISTER OF DEEDS

Gary R. Jones and Norma Jean Jones,
individually and as husband and wife,
conveys and warrants to George Thaler and Steven M.
Thaler, as joint tenants, with right of
survivorship,

the following described real estate in Ashland County,
State of Wisconsin:

Tax Parcel No:

The West Thirty-five feet (W 35') of Lot Number One (1) of
Bennett's Addition to Iron City, now part of the City of
Mellen, according to the recorded plat thereof.

This deed is given in fulfillment of that certain land contract
between the parties dated April 14, 1983

TRANSFER
\$ 56.08
FEE

This is not homestead property.
(is) (is not)

Exception to warranties: Restrictions, reservations and encumbrances of
record.

Dated this 14th day of April, 1983

(SEAL) Gary R. Jones (SEAL)
Gary R. Jones
(SEAL) Norma Jean Jones (SEAL)
Norma Jean Jones

AUTHENTICATION

Signature(s)
authenticated this day of, 19

TITLE: MEMBER STATE BAR OF WISCONSIN
(if not, authorized by § 706.06, Wis. Stats.)

THIS INSTRUMENT WAS DRAFTED BY
Scott W. Clark
Ashland, Wisconsin 54806
(Signatures may be authenticated or acknowledged. Both
are not necessary.)

ACKNOWLEDGMENT

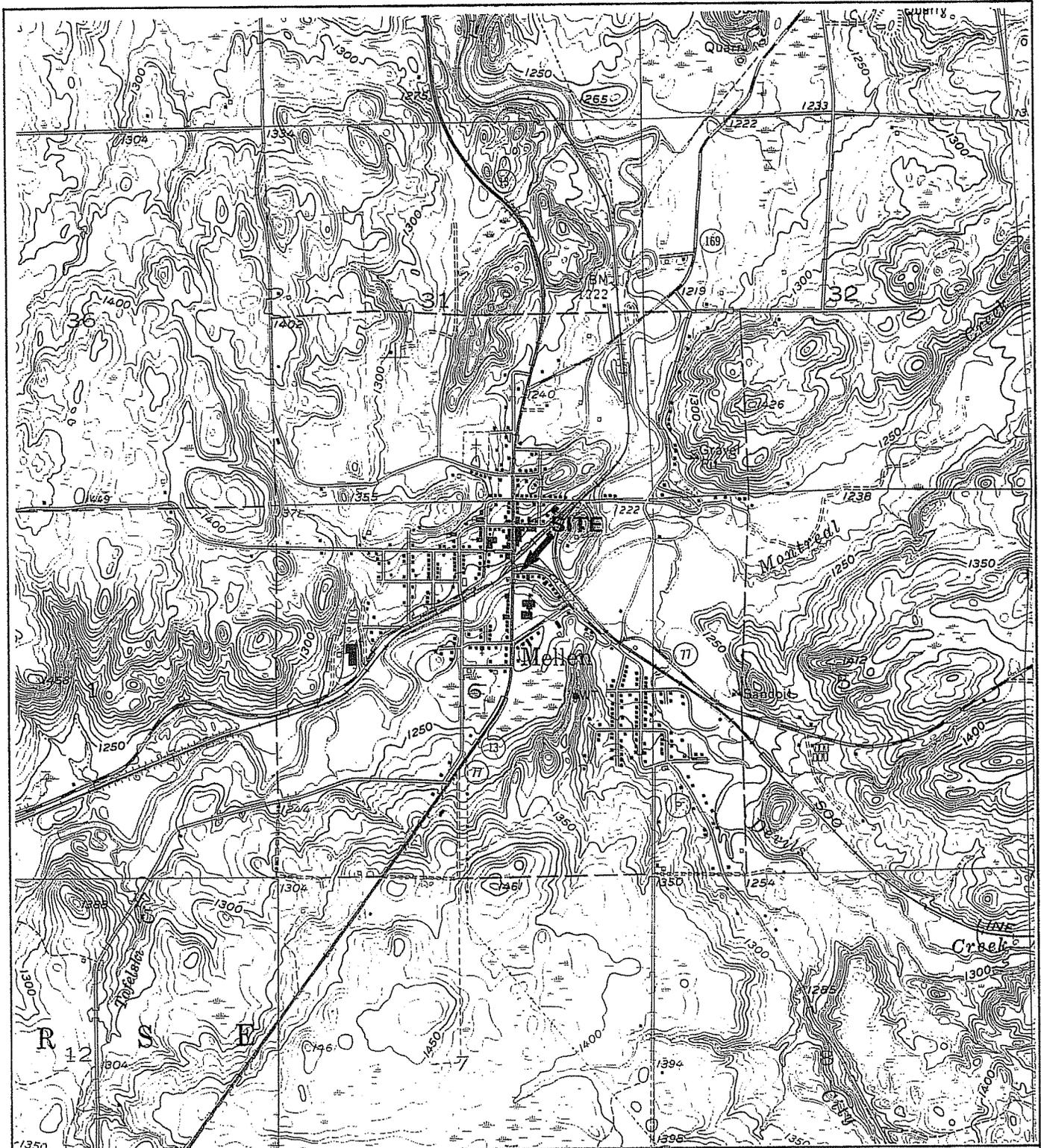
STATE OF WISCONSIN
Ashland County
Personally came before me this 14th day of
April, 1983 the above named
Gary R. Jones and Norma Jean Jones,
his wife,

to my knowledge to be the person who executed the
foregoing instrument and acknowledge the same.

Notary Public
My Commission is permanent. (If not, state expiration
date: 1984)

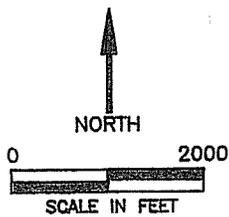
*Names of persons signing in any capacity should be typed or printed below their signatures.

VOL. 415 PG. 849



MELLEN, WIS.

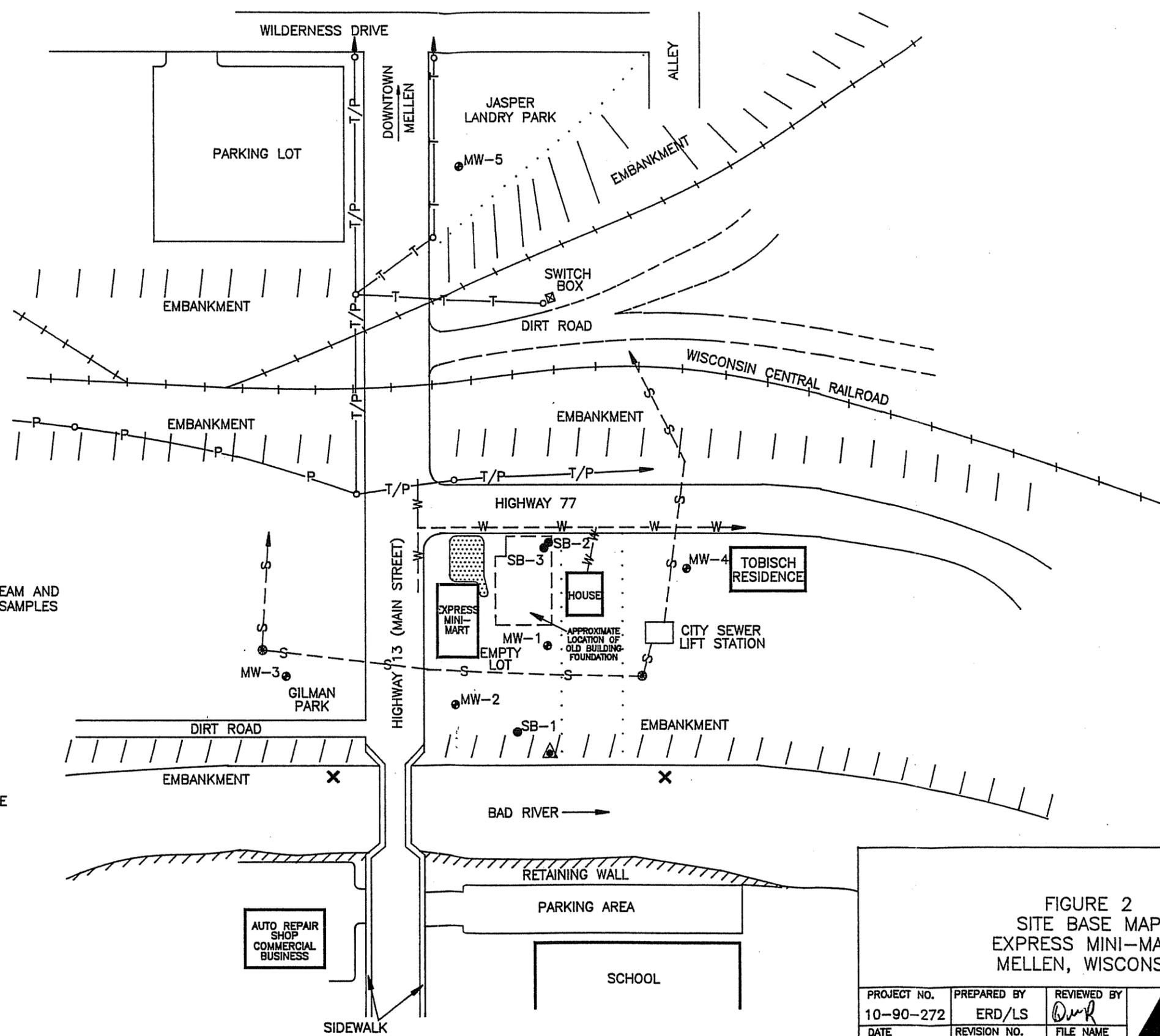
SW/4 MELLEN 15' QUADRANGLE
 46090-C6-TF-024
 PHOTOINSPECTED 1980
 1967



**FIGURE 1
 SITE LOCATION MAP
 EXPRESS MART
 MELLEN, WISCONSIN**

PROJECT NO. 10-90-272	PREPARED BY JD/SDH	REVIEWED BY <i>[Signature]</i>
DATE 11/16/90	REVISION NO. 0	FILE NAME TOPO-TYP





- LEGEND:**
- MONITORING WELL LOCATIONS
 - SOIL BORING LOCATION
 - ▲ SHALLOW HAND EXCAVATION SAMPLING POINT
 - ✕ APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES
 - LOT LINE
 - EXCAVATED UST BASIN
- UTILITIES:**
- P— OVERHEAD POWER LINE
 - T— OVERHEAD TELEPHONE LINE
 - T/P— OVERHEAD TELEPHONE/POWER LINE
 - - -S- - - UNDERGROUND SEWER LINE
 - - -W- - - UNDERGROUND WATER LINE
 - MANHOLE
 - POWER POLE

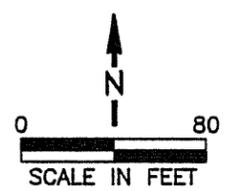


FIGURE 2
SITE BASE MAP
EXPRESS MINI-MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY <i>DWR</i>	
DATE 3-2-91	REVISION NO.	FILE NAME 90272-6	

LEGEND:

- ⊕ MONITORING WELL LOCATIONS
- SOIL BORING LOCATION
- △ SHALLOW HAND EXCAVATION SAMPLING POINT
- × APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES
- LOT LINE



EXCAVATED UST BASIN



APPROXIMATE AREA OF SOIL CONTAMINATION BASED ON PID HEADSPACE READINGS AT THE WATER TABLE INTERFACE BETWEEN 6 TO 8 FT. bgs. BORDER DASHED WHERE INFERRED.

(7 ppm) PID SOIL HEADSPACE READINGS IN PARTS PER MILLION (ppm)

UTILITIES:

- P — OVERHEAD POWER LINE
- T — OVERHEAD TELEPHONE LINE
- T/P — OVERHEAD TELEPHONE/POWER LINE
- - - S - - UNDERGROUND SEWER LINE
- - - W - - UNDERGROUND WATER LINE
- ⊙ MANHOLE
- POWER POLE

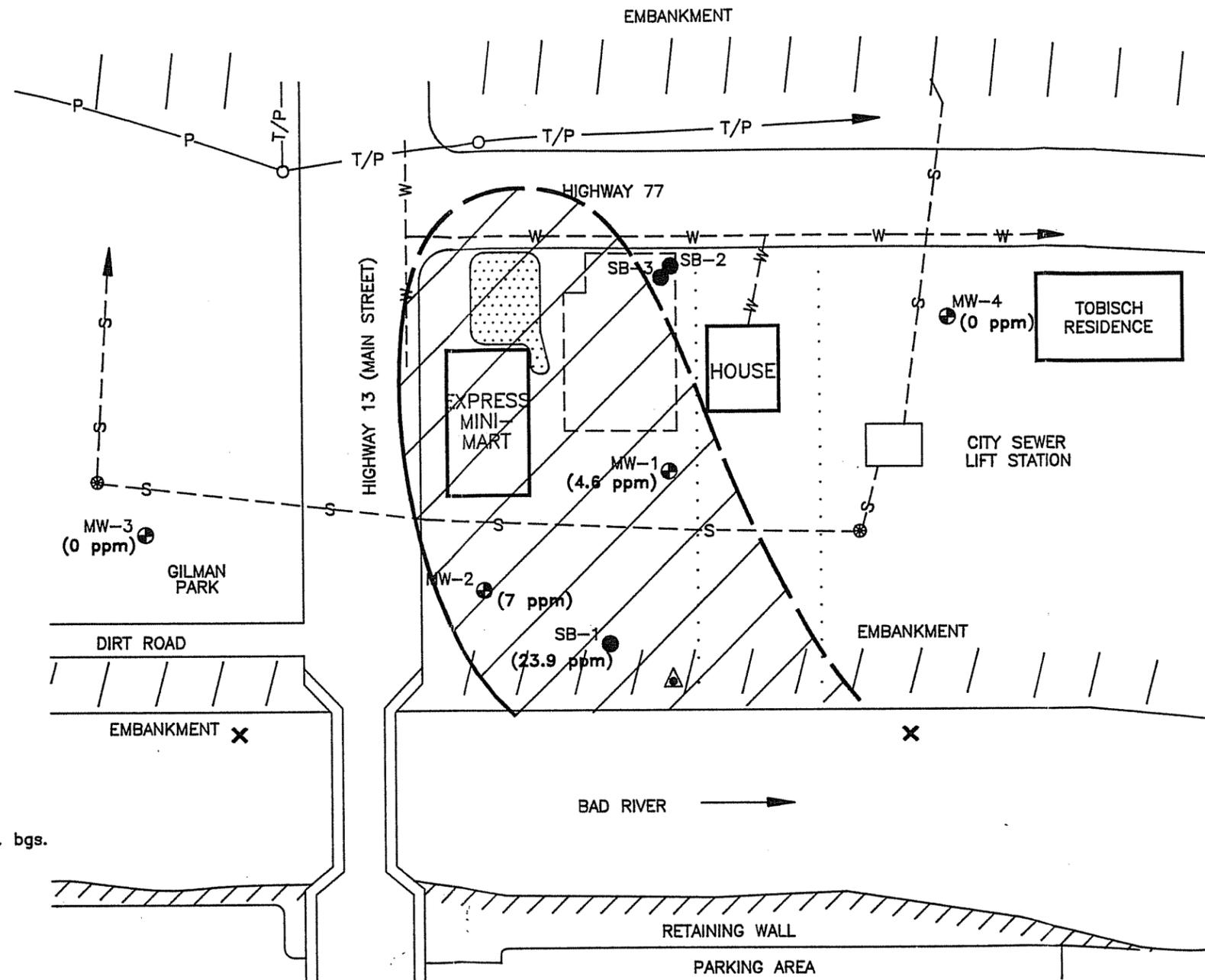
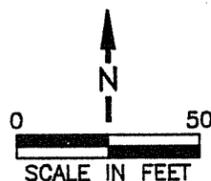
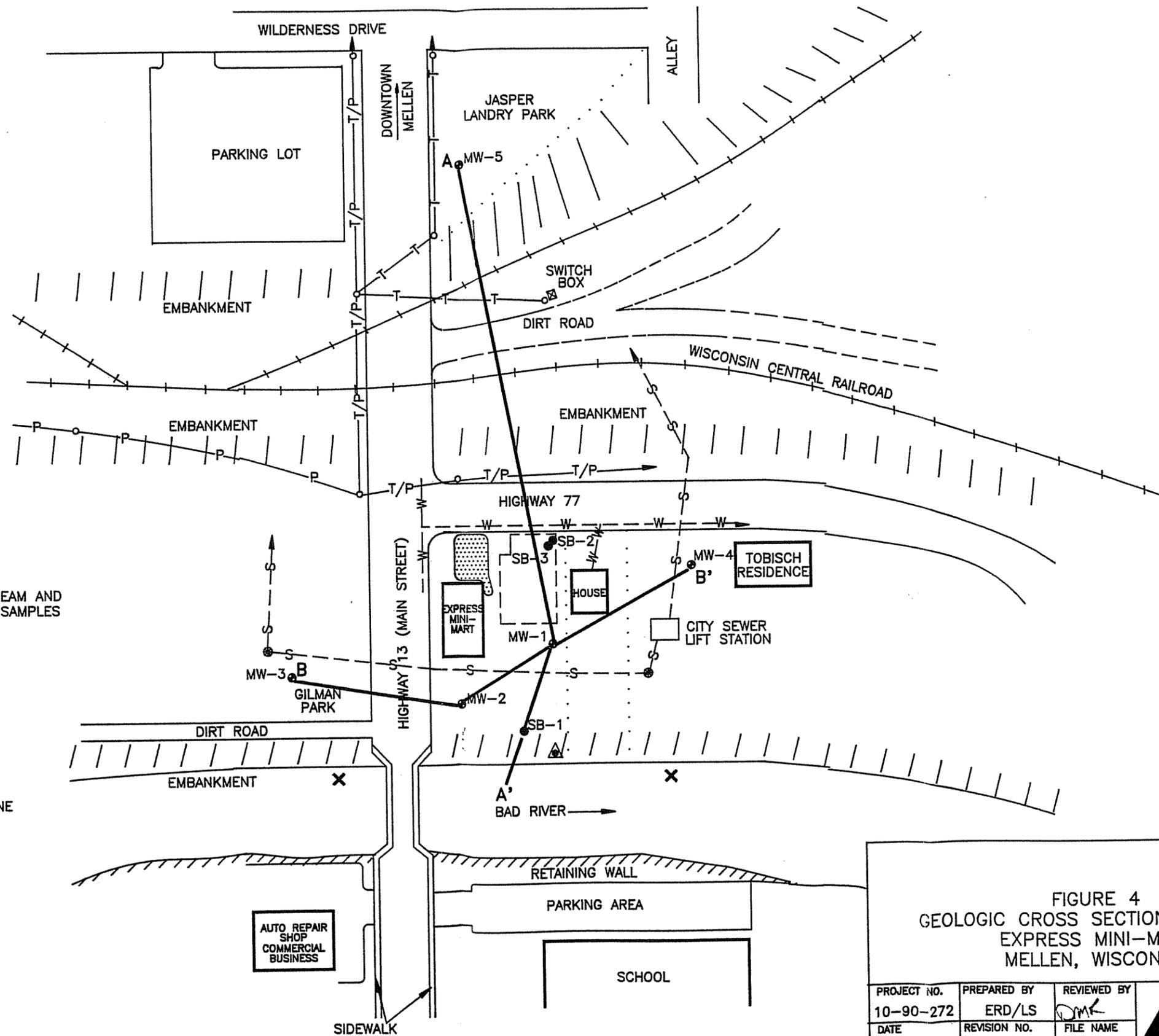


FIGURE 9
 APPROXIMATE EXTENT OF SOIL CONTAMINATION
 AT THE GROUND WATER TABLE (6-8 FT. bgs)
 BASED ON PID HEADSPACE READINGS
 EXPRESS MINI-MART
 MELLEEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY
DATE 3-2-91	REVISION NO.	FILE NAME 90272-7





- LEGEND:**
- MONITORING WELL LOCATIONS
 - SOIL BORING LOCATION
 - ▲ SHALLOW HAND EXCAVATION SAMPLING POINT
 - ✕ APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES
 - LOT LINE



EXCAVATED UST BASIN

- UTILITIES:**
- P — OVERHEAD POWER LINE
 - T — OVERHEAD TELEPHONE LINE
 - T/P — OVERHEAD TELEPHONE/POWER LINE
 - - - S - - - UNDERGROUND SEWER LINE
 - - - W - - - UNDERGROUND WATER LINE
 - MANHOLE
 - POWER POLE

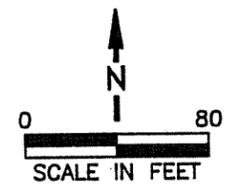
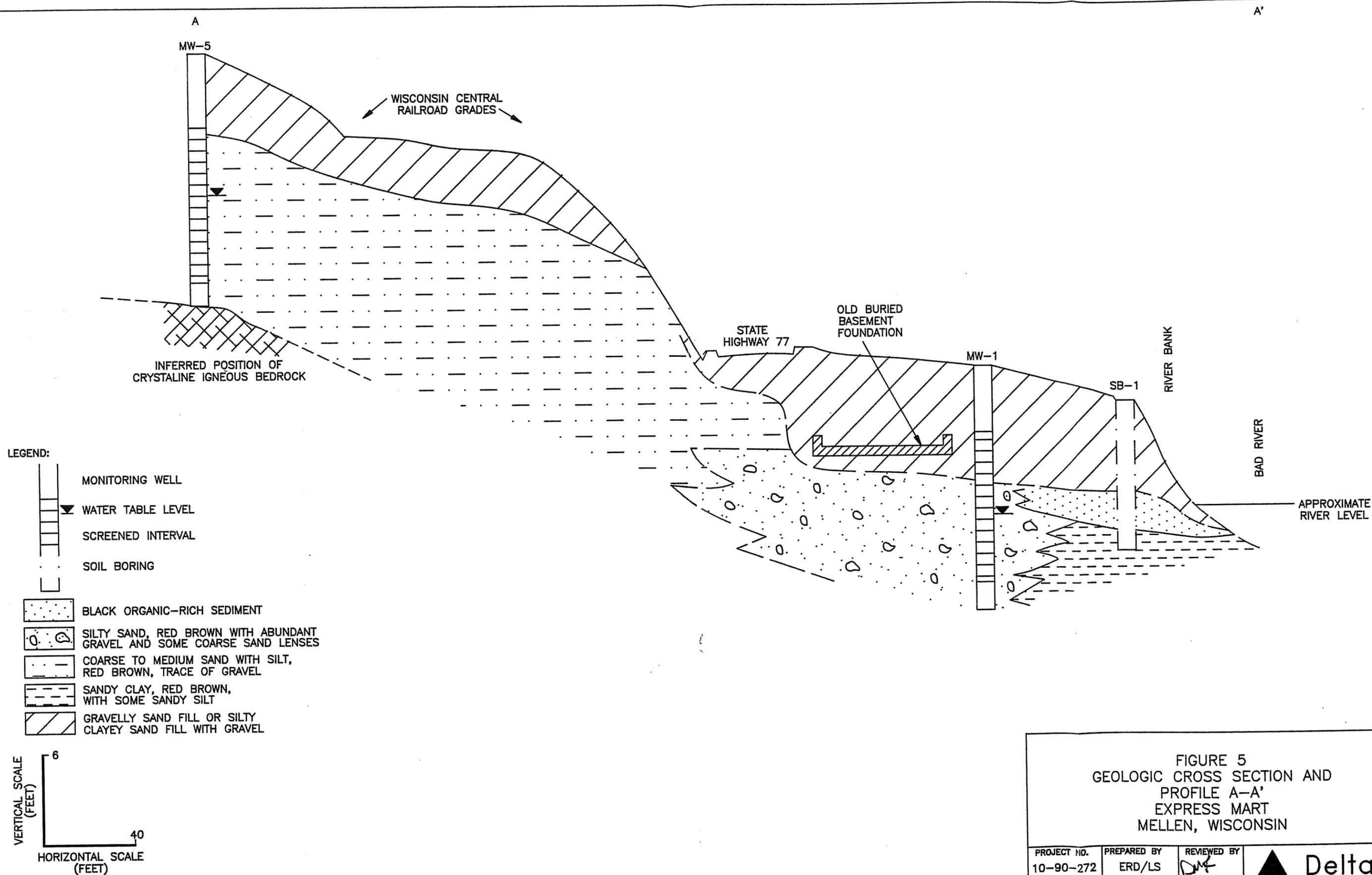


FIGURE 4
GEOLOGIC CROSS SECTION LOCATIONS
EXPRESS MINI-MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY <i>[Signature]</i>	
DATE 3-11-91	REVISION NO.	FILE NAME 90272-6	



- LEGEND:**
- MONITORING WELL
 - WATER TABLE LEVEL
 - SCREENED INTERVAL
 - SOIL BORING
 - BLACK ORGANIC-RICH SEDIMENT
 - SILTY SAND, RED BROWN WITH ABUNDANT GRAVEL AND SOME COARSE SAND LENSES
 - COARSE TO MEDIUM SAND WITH SILT, RED BROWN, TRACE OF GRAVEL
 - SANDY CLAY, RED BROWN, WITH SOME SANDY SILT
 - GRAVELLY SAND FILL OR SILTY CLAYEY SAND FILL WITH GRAVEL

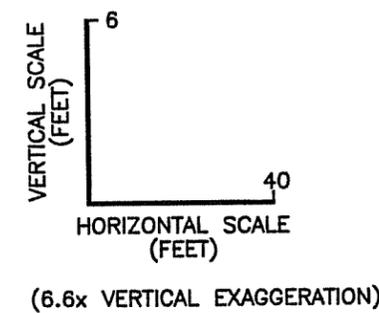
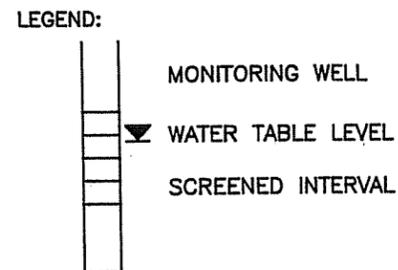
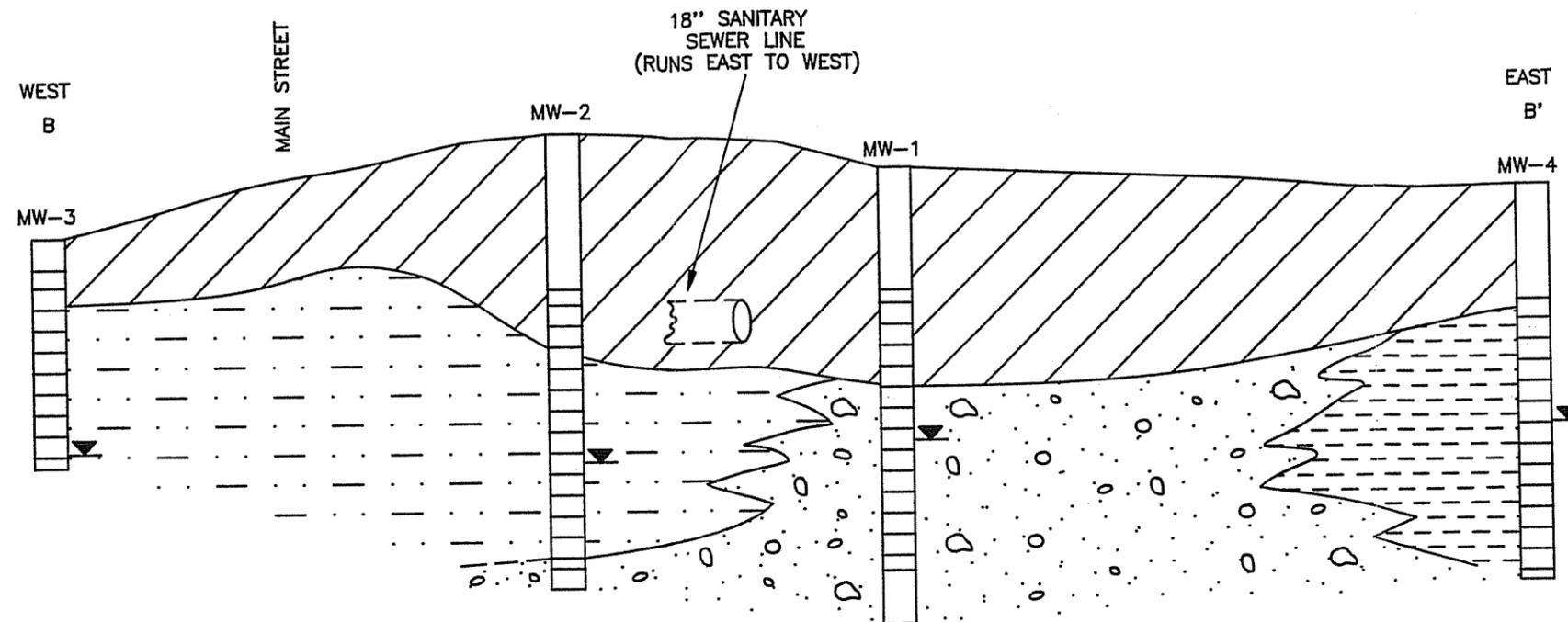
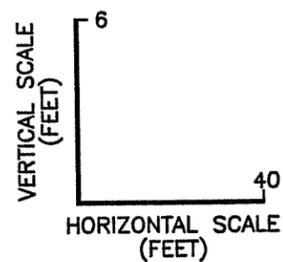


FIGURE 5
GEOLOGIC CROSS SECTION AND
PROFILE A-A'
EXPRESS MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY <i>DM</i>	
DATE 3-12-91	REVISION NO.	FILE NAME 90272-A	



- BLACK ORGANIC-RICH SEDIMENT
- SILTY SAND, RED BROWN WITH ABUNDANT GRAVEL AND SOME COARSE SAND LENSES
- COARSE TO MEDIUM SAND WITH SILT, RED BROWN, TRACE OF GRAVEL
- SANDY CLAY, RED BROWN, WITH SOME SANDY SILT
- GRAVELLY SAND FILL OR SILTY CLAYEY SAND FILL WITH GRAVEL



(6.6x VERTICAL EXAGGERATION)

FIGURE 6
GEOLOGIC CROSS SECTION AND
PROFILE B-B'
EXPRESS MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY 	
DATE 3-12-91	REVISION NO.	FILE NAME 90272-B	

LEGEND:

- ⊕ MONITORING WELL LOCATIONS
- SOIL BORING LOCATION
- △ SHALLOW HAND EXCAVATION SAMPLING POINT
- × APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES

..... LOT LINE



EXCAVATED UST BASIN



APPROXIMATE AREA OF DISSOLVED GROUND WATER CONTAMINATION BASED ON ANALYTICAL RESULTS FOR THC AS GASOLINE CONCENTRATIONS, MILLIGRAMS PER LITER (mg/L). BORDER DASHED WHERE INFERRED.

(77 mg/L) THC AS GAS CONCENTRATION IN GROUND WATER MILLIGRAMS PER LITER (mg/L)

(ND) NOT DETECTED AT OR ABOVE LABORATORY DETECTION LIMITS

UTILITIES:

- P — OVERHEAD POWER LINE
- T — OVERHEAD TELEPHONE LINE
- T/P — OVERHEAD TELEPHONE/POWER LINE
- - - S - - - UNDERGROUND SEWER LINE
- - - W - - - UNDERGROUND WATER LINE
- ⊗ MANHOLE
- POWER POLE

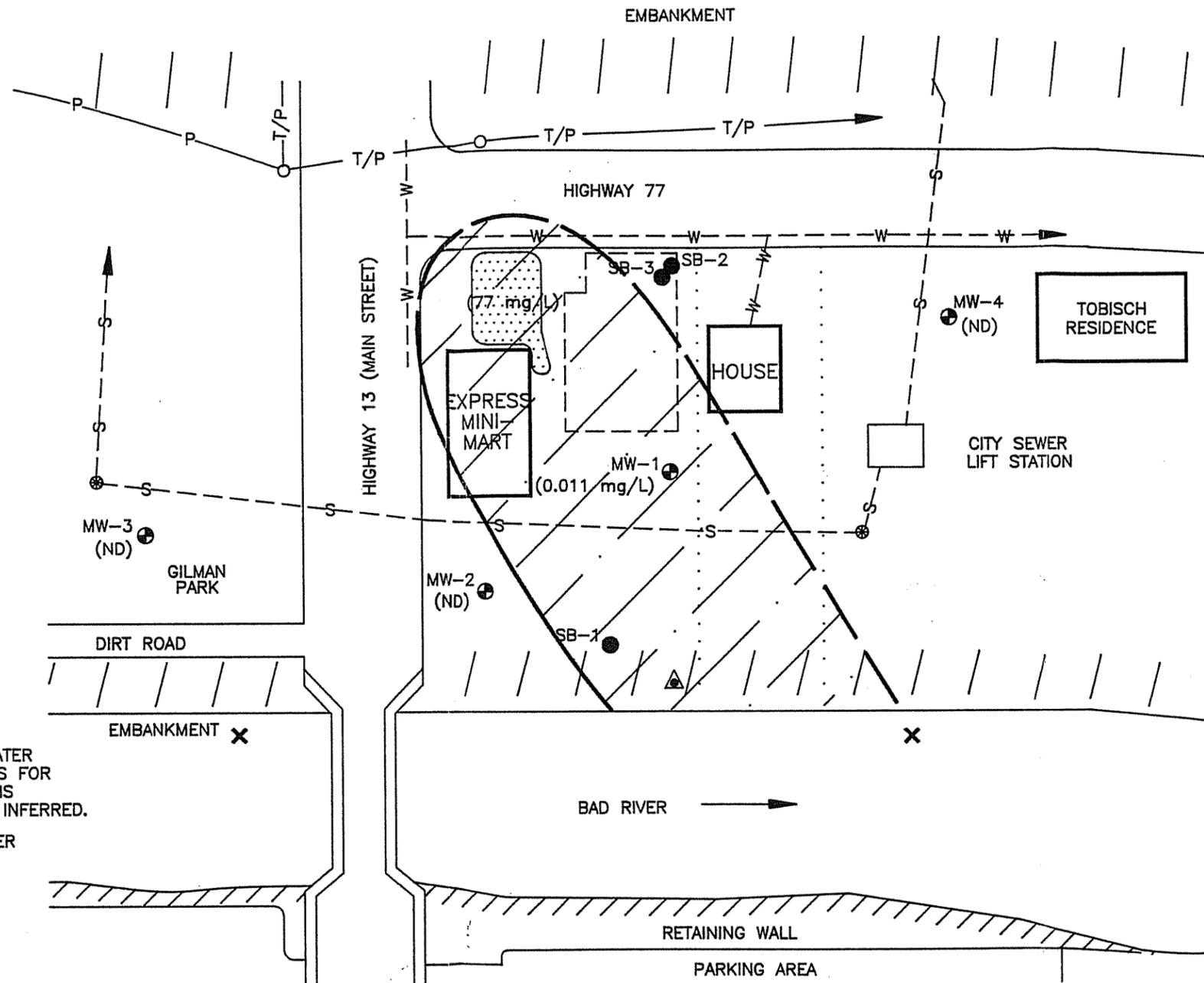
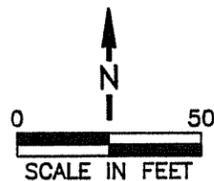


FIGURE 10
APPROXIMATE EXTENT OF DISSOLVED
GROUND WATER CONTAMINATION
FOR THC AS GASOLINE
EXPRESS MINI-MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY	
DATE 3-2-91	REVISION NO.	FILE NAME 90272-7	

- LEGEND:
- MONITORING WELL LOCATIONS
 - SOIL BORING LOCATION
 - ▲ SHALLOW HAND EXCAVATION SAMPLING POINT
 - ✕ APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES
 - LOT LINE



EXCAVATED UST BASIN

(85.18) WATER TABLE ELEVATION
 88.0' WATER TABLE CONTOUR

APPROXIMATE GROUND WATER FLOW DIRECTION

UTILITIES:

- P — OVERHEAD POWER LINE
- T — OVERHEAD TELEPHONE LINE
- T/P — OVERHEAD TELEPHONE/POWER LINE
- - - S - - UNDERGROUND SEWER LINE
- - - W - - UNDERGROUND WATER LINE
- MANHOLE
- POWER POLE

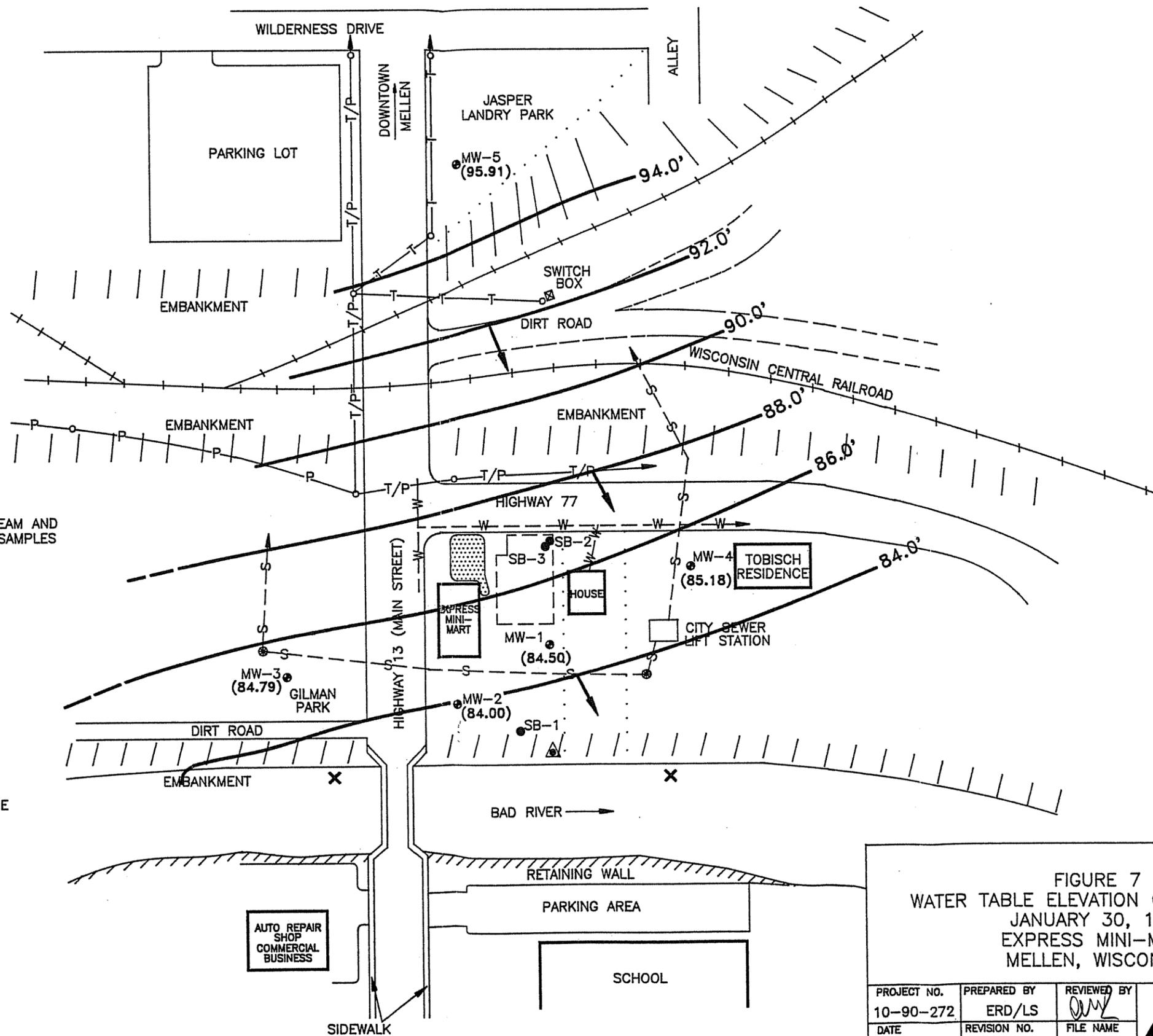
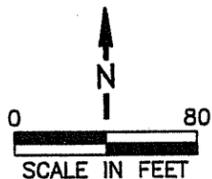
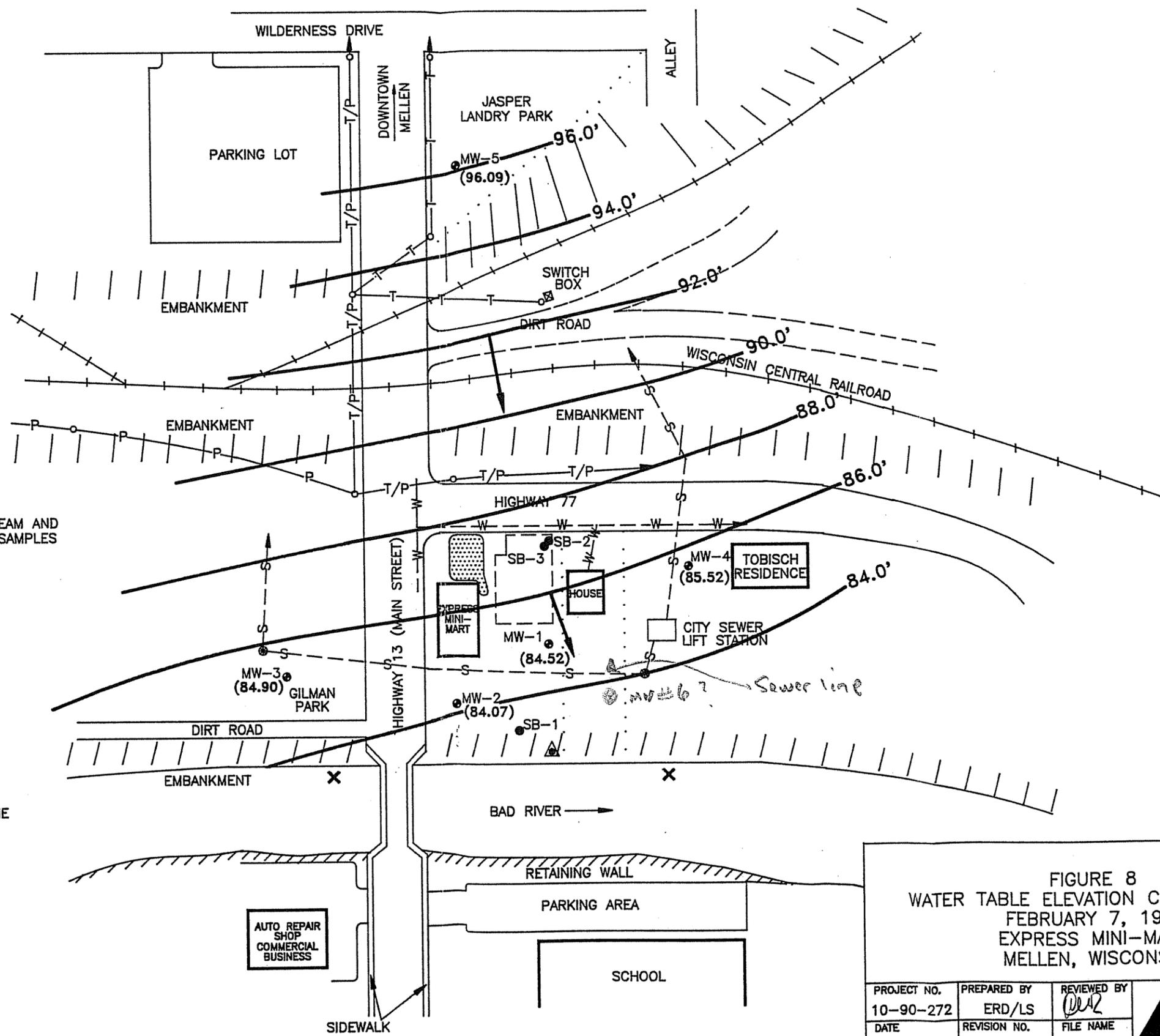


FIGURE 7
 WATER TABLE ELEVATION CONTOUR MAP
 JANUARY 30, 1991
 EXPRESS MINI-MART
 MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY <i>[Signature]</i>	
DATE 3-2-91	REVISION NO.	FILE NAME 90272-6	



- LEGEND:**
- MONITORING WELL LOCATIONS
 - SOIL BORING LOCATION
 - ▲ SHALLOW HAND EXCAVATION
 - △ SAMPLING POINT
 - × APPROXIMATE LOCATION OF UPSTREAM AND DOWNSTREAM RIVER WATER GRAB SAMPLES
 - LOT LINE
 - EXCAVATED UST BASIN
 - (84.90) WATER TABLE ELEVATION
 - WATER TABLE CONTOUR
 - APPROXIMATE GROUND WATER FLOW DIRECTION
- UTILITIES:**
- P— OVERHEAD POWER LINE
 - T— OVERHEAD TELEPHONE LINE
 - T/P— OVERHEAD TELEPHONE/POWER LINE
 - - - S - - - UNDERGROUND SEWER LINE
 - - - W - - - UNDERGROUND WATER LINE
 - MANHOLE
 - POWER POLE

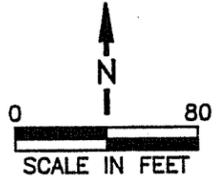


FIGURE 8
WATER TABLE ELEVATION CONTOUR MAP
FEBRUARY 7, 1991
EXPRESS MINI-MART
MELLEN, WISCONSIN

PROJECT NO. 10-90-272	PREPARED BY ERD/LS	REVIEWED BY <i>[Signature]</i>	
DATE 3-2-91	REVISION NO.	FILE NAME 90272-6	

TABLE 1

**Summary of Analytical Results
Express Mart
Mellen, Wisconsin
Delta No. 10-90-272**

5/16/91

Soil Samples

<u>Sampling Location</u>	<u>Benzene</u> (mg/kg) ⁽¹⁾	<u>Toluene</u> (mg/kg)	<u>Ethylbenzene</u> (mg/kg)	<u>Xylenes</u> (mg/kg)	<u>THC as Gasoline</u> (mg/kg)	<u>THC as Fuel Oil</u> (mg/kg)
S-1	ND ⁽²⁾	ND	0.12	1.0	10	NA ⁽³⁾
S-2	ND	ND	ND	0.30	2.2	NA
S-3	ND	ND	ND	ND	ND	NA
S-4	5.8	22	11	64	450	ND

Ground Water Samples

<u>Sampling Location</u>	<u>Benzene</u> (ug/l) ⁽⁴⁾	<u>Toluene</u> (ug/l)	<u>Ethylbenzene</u> (ug/l)	<u>Xylenes</u> (ug/l)	<u>THC as Gasoline</u> (ug/l)
MW-1	ND	ND	ND	ND	11
MW-1 (Duplicate)	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND
MW-5	ND	ND	ND	ND	ND

- (1) Soil sample results are presented in milligrams per kilogram (mg/kg).
- (2) ND = not detected above laboratory method detection limits.
- (3) NA = not analyzed.
- (4) Ground water results are presented in micrograms per liter (ug/l).

TABLE 2

Summary of Ground Water Analytical Results (1)

Express Mart
Thaler Oil Company
Mellen, Wisconsin
Delta No. 10-90-272

<u>Sampling Location/ Date</u>	<u>Benzene</u> (ug/l) (4)	<u>Toluene</u> (ug/l)	<u>Ethyl- benzene</u> (ug/l)	<u>Xylenes</u> (ug/l)	<u>1,3,5-Trimethyl benzene</u> (ug/l)	<u>1,2,4-Trimethyl benzene</u> (ug/l)	<u>MTBE (2)</u> (ug/l)	<u>GRO (3)</u> (ug/l)
MW-1 (05/17/91)	ND (5)	ND	ND	ND	NA (6)	NA	NA	11
MW-1 (08/29/91)	ND	ND	ND	ND	ND	ND	ND	ND
MW-1 (11/14/91)	ND	ND	ND	ND	ND	ND	5.9	NA
MW-1 (02/08/92)	ND	ND	ND	ND	ND	ND	14	ND
MW-2 (05/17/91)	ND	ND	ND	ND	NA	NA	NA	ND
MW-2 (08/29/91)	ND	ND	ND	ND	ND	ND	ND	ND
MW-2 (11/14/91)	ND	ND	ND	ND	ND	ND	ND	NA
MW-2 (02/08/92)	ND	ND	ND	ND	ND	ND	ND	ND
MW-3 (05/17/91)	ND	ND	ND	ND	NA	NA	NA	ND
MW-3 (08/29/91)	ND	ND	ND	ND	ND	ND	ND	ND
MW-3 (11/14/91)	ND	ND	ND	ND	ND	ND	ND	NA
MW-3 (02/08/92)	ND	ND	ND	ND	ND	ND	ND	ND
MW-4 (05/17/91)	ND	ND	ND	ND	NA	NA	NA	ND
MW-4 (08/29/91)	ND	ND	ND	ND	ND	ND	ND	ND
MW-4 (11/14/91)	ND	ND	ND	ND	ND	ND	1.3	NA
MW-4 (02/08/92)	ND	ND	ND	ND	ND	ND	ND	ND
MW-5 (05/17/91)	ND	ND	ND	ND	NA	NA	NA	ND
MW-5 (08/29/91)	ND	ND	ND	ND	ND	ND	ND	ND
MW-5 (11/14/91)	ND	ND	ND	ND	ND	ND	ND	NA
MW-5 (02/08/92)	ND	ND	ND	ND	ND	ND	ND	ND
PAL (7)	.067	68.6	272	124	---(9)	---	12	---
ES (8)	5	343	1,360	620	---	---	60	---



3900 Northwoods Drive
Suite 200
St. Paul, MN 55112
612/486-8022
FAX: 612/486-8021

May 26, 1993

Mr. Chris Saari
Wisconsin Department of Natural Resources
P.O. Box 220
Park Falls, WI 54552

RECEIVED
JUN 1 1993

PARK FALLS AREA
HEADQUARTERS

Subject: GROUND WATER ANALYTICAL RESULTS
Express Mart,
Mellen, Wisconsin
Delta No. 10-90-272

Dear Mr. Saari:

Enclosed is a copy of the laboratory analytical results for the ground water samples collected on March 24, 1993, from the Express Mart site located in Mellen, Wisconsin. The samples were required by the Wisconsin Department of Natural Resources (WDNR) in your letter dated March 15, 1993.

The laboratory results indicated that no volatile organic compounds were detected above laboratory method detection limits in monitoring wells MW-2, MW-3, and MW-5. In MW-1 and MW-4 the compound 1,2-dichloroethane was detected at a concentration of 2.4 micrograms per liter (ug/l) and 1.5 ug/l, respectively. This concentration is below the state enforcement standard (SES), but is above the preventative action limit (PAL). No other volatile organic compounds were detected above laboratory method detection limits in MW-4. In MW-1 methyl tertiary butyl ether was detected at 3.4 ug/l below the SES and PAL.

From our telephone conversation on May 24, 1993, you indicated that after you received the laboratory results, you will prepare the information required by the WDNR closure committee. This information may then be evaluated at the next closure committee meeting in early June 1993. Please inform us of the results of the meetings as soon as possible.

If you have any questions or comments regarding this information, please feel free to contact me at (612) 486-5745.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

A handwritten signature in dark ink, appearing to read "Andrew W. Vikman", is written over a horizontal line.

Andrew W. Vikman
Project Manager

AWV/knr

Enclosure

cc no enc: Mr. George Thaler - Thaler Oil Company

Delta Delivers Solutions

April 20, 1993

Mr. Jim Dzubay
Delta Environmental Consultants
3900 Northwoods Drive
Suite 200
St. Paul, MN 55112

RE: PACE Project No. 930329.514
Client Reference: 10-90-272

Dear Mr. Dzubay:

Enclosed is the report of laboratory analyses for samples received March 29, 1993.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



Douglas W. Streiber
Project Manager

Enclosures

Delta Environmental Consultants
3900 Northwoods Drive
Suite 200
St. Paul, MN 55112

April 20, 1993
PACE Project Number: 930329514

Attn: Mr. Jim Dzubay

Client Reference: 10-90-272

PACE Sample Number:	10 0062251	10 0062260	10 0062278
Date Collected:	03/24/93	03/24/93	03/24/93
Time Collected:	16:32	17:15	17:35
Date Received:	03/29/93	03/29/93	03/29/93
Client Sample ID:	MW-3	MW-2	MW-1

<u>Parameter</u>	<u>Units</u>	<u>MDI</u>			
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ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

			D 4/7/93	D 4/7/93	D 4/7/93
Date Analyzed					
Chloromethane	ug/L	0.8	ND	ND	ND
Bromomethane	ug/L	1.2	ND	ND	ND
Dichlorodifluoromethane	ug/L	1.2	ND	ND	ND
Vinyl chloride	ug/L	1.7	ND	ND	ND
Chloroethane	ug/L	0.8	ND	ND	ND
1,1-Dichloroethylene	ug/L	0.5	ND	ND	ND
Trichlorofluoromethane	ug/L	0.4	ND	ND	ND
Methylene chloride	ug/L	1.0	ND	ND	ND
trans-1,2-Dichloroethylene	ug/L	0.4	ND	ND	ND
1,1-Dichloroethane	ug/L	0.6	ND	ND	ND
2,2-Dichloropropane	ug/L	0.5	ND	ND	ND
cis-1,2-Dichloroethylene	ug/L	0.4	ND	ND	ND
Bromochloromethane	ug/L	1.1	ND	ND	ND
Chloroform	ug/L	1.2	ND	ND	ND
Dibromomethane	ug/L	0.9	ND	ND	ND
1,1,1-Trichloroethane	ug/L	0.7	ND	ND	ND
Carbon tetrachloride	ug/L	0.5	ND	ND	ND
1,2-Dichloroethane	ug/L	0.5	ND	ND	2.4
1,1,2-Trichloroethylene	ug/L	1.0	ND	ND	ND
1,1-Dichloro-1-propene	ug/L	0.8	ND	ND	ND
1,2-Dichloropropane	ug/L	0.7	ND	ND	ND
Bromodichloromethane	ug/L	0.8	ND	ND	ND
trans-1,3-Dichloro-1-propene	ug/L	0.4	ND	ND	ND
cis-1,3-Dichloro-1-propene	ug/L	0.5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	0.4	ND	ND	ND
1,3-Dichloropropane	ug/L	0.7	ND	ND	ND

Mr. Jim Dzubay
 Page 2

April 20, 1993
 PACE Project Number: 930329514

Client Reference: 10-90-272

PACE Sample Number:	10 0062251	10 0062260	10 0062278
Date Collected:	03/24/93	03/24/93	03/24/93
Time Collected:	16:32	17:15	17:35
Date Received:	03/29/93	03/29/93	03/29/93
Client Sample ID:	MW-3	MW-2	MW-1
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	

ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

1,1,2,2-Tetrachloroethylene	ug/L	1.6	ND	ND	ND
Dibromochloromethane	ug/L	0.9	ND	ND	ND
1,2-Dibromoethane	ug/L	4.0	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/L	0.4	ND	ND	ND
Bromoform	ug/L	1.0	ND	ND	ND
1,2,3-Trichloropropane	ug/L	0.9	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	0.7	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/L	0.8	ND	ND	ND
Hexachlorobutadiene	ug/L	1.1	ND	ND	ND
Methyl tert-butyl ether	ug/L	1.0	ND	ND	3.4
Benzene	ug/L	0.4	ND	ND	ND
Toluene	ug/L	0.6	ND	ND	ND
Chlorobenzene	ug/L	0.7	ND	ND	ND
Ethyl benzene	ug/L	0.8	ND	ND	ND
Xylenes	ug/L	1.3	ND	ND	ND
Styrene	ug/L	0.8	ND	ND	ND
Cumene	ug/L	1.2	ND	ND	ND
Bromobenzene	ug/L	1.0	ND	ND	ND
n-Propylbenzene	ug/L	0.9	ND	ND	ND
2-Chlorotoluene	ug/L	1.0	ND	ND	ND
4-Chlorotoluene	ug/L	1.4	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	0.7	ND	ND	ND
tert-Butylbenzene	ug/L	2.0	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	0.7	ND	ND	ND
1,3-Dichlorobenzene	ug/L	0.9	ND	ND	ND
sec-Butylbenzene	ug/L	0.8	ND	ND	ND
1,4-Dichlorobenzene	ug/L	0.9	ND	ND	ND
p-Cymene	ug/L	0.9	ND	ND	ND
1,2-Dichlorobenzene	ug/L	1.0	ND	ND	ND
n-Butylbenzene	ug/L	1.2	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	1.1	ND	ND	ND



REPORT OF LABORATORY ANALYSIS

Mr. Jim Dzubay
Page 3

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

PACE Sample Number:		10 0062251	10 0062260	10 0062278
Date Collected:		03/24/93	03/24/93	03/24/93
Time Collected:		16:32	17:15	17:35
Date Received:		03/29/93	03/29/93	03/29/93
Client Sample ID:		MW-3	MW-2	MW-1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u> </u>	<u> </u>	<u> </u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

Naphthalene	ug/L	1.6	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	1.1	ND	ND	ND
Fluorobenzene (Surrogate)	%		99.2	101	101

Mr. Jim Dzubay
Page 4

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

PACE Sample Number:	10 0062286	10 0062294	10 0062308
Date Collected:	03/24/93	03/24/93	03/24/93
Time Collected:	15:00	15:58	15:58
Date Received:	03/29/93	03/29/93	03/29/93
Client Sample ID:	MW-5	MW-4	Duplicate
<u>Parameter</u>	<u>Units</u>	<u>MDI</u>	

ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

			D 4/7/93	D 4/7/93	D 4/7/93
Date Analyzed					
Chloromethane	ug/L	0.8	ND	ND	ND
Bromomethane	ug/L	1.2	ND	ND	ND
Dichlorodifluoromethane	ug/L	1.2	ND	ND	ND
Vinyl chloride	ug/L	1.7	ND	ND	ND
Chloroethane	ug/L	0.8	ND	ND	ND
1,1-Dichloroethylene	ug/L	0.5	ND	ND	ND
Trichlorofluoromethane	ug/L	0.4	ND	ND	ND
Methylene chloride	ug/L	1.0	ND	ND	ND
trans-1,2-Dichloroethylene	ug/L	0.4	ND	ND	ND
1,1-Dichloroethane	ug/L	0.6	ND	ND	ND
2,2-Dichloropropane	ug/L	0.5	ND	ND	ND
cis-1,2-Dichloroethylene	ug/L	0.4	ND	ND	ND
Bromochloromethane	ug/L	1.1	ND	ND	ND
Chloroform	ug/L	1.2	ND	ND	ND
Dibromomethane	ug/L	0.9	ND	ND	ND
1,1,1-Trichloroethane	ug/L	0.7	ND	ND	ND
Carbon tetrachloride	ug/L	0.5	ND	ND	ND
1,2-Dichloroethane	ug/L	0.5	ND	1.5	1.5
1,1,2-Trichloroethylene	ug/L	1.0	ND	ND	ND
1,1-Dichloro-1-propene	ug/L	0.8	ND	ND	ND
1,2-Dichloropropane	ug/L	0.7	ND	ND	ND
Bromodichloromethane	ug/L	0.8	ND	ND	ND
trans-1,3-Dichloro-1-propene	ug/L	0.4	ND	ND	ND
cis-1,3-Dichloro-1-propene	ug/L	0.5	ND	ND	ND
1,1,2-Trichloroethane	ug/L	0.4	ND	ND	ND
1,3-Dichloropropane	ug/L	0.7	ND	ND	ND
1,1,2,2-Tetrachloroethylene	ug/L	1.6	ND	ND	ND
Dibromochloromethane	ug/L	0.9	ND	ND	ND
1,2-Dibromoethane	ug/L	4.0	ND	ND	ND
1,1,1,2-Tetrachloroethane	ug/L	0.4	ND	ND	ND

Mr. Jim Dzubay
 Page 5

April 20, 1993
 PACE Project Number: 930329514

Client Reference: 10-90-272

PACE Sample Number:	10 0062286	10 0062294	10 0062308
Date Collected:	03/24/93	03/24/93	03/24/93
Time Collected:	15:00	15:58	15:58
Date Received:	03/29/93	03/29/93	03/29/93
Client Sample ID:	MW-5	MW-4	Duplicate
Parameter	<u>Units</u>	<u>MDI</u>	

ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

Bromoform	ug/L	1.0	ND	ND	ND
1,2,3-Trichloropropane	ug/L	0.9	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/L	0.7	ND	ND	ND
1,2-Dibromo-3-chloropropane	ug/L	0.8	ND	ND	ND
Hexachlorobutadiene	ug/L	1.1	ND	ND	ND
Methyl tert-butyl ether	ug/L	1.0	ND	ND	ND
Benzene	ug/L	0.4	ND	ND	ND
Toluene	ug/L	0.6	ND	ND	ND
Chlorobenzene	ug/L	0.7	ND	ND	ND
Ethyl benzene	ug/L	0.8	ND	ND	ND
Xylenes	ug/L	1.3	ND	ND	ND
Styrene	ug/L	0.8	ND	ND	ND
Cumene	ug/L	1.2	ND	ND	ND
Bromobenzene	ug/L	1.0	ND	ND	ND
n-Propylbenzene	ug/L	0.9	ND	ND	ND
2-Chlorotoluene	ug/L	1.0	ND	ND	ND
4-Chlorotoluene	ug/L	1.4	ND	ND	ND
1,3,5-Trimethylbenzene	ug/L	0.7	ND	ND	ND
tert-Butylbenzene	ug/L	2.0	ND	ND	ND
1,2,4-Trimethylbenzene	ug/L	0.7	ND	ND	ND
1,3-Dichlorobenzene	ug/L	0.9	ND	ND	ND
sec-Butylbenzene	ug/L	0.8	ND	ND	ND
1,4-Dichlorobenzene	ug/L	0.9	ND	ND	ND
p-Cymene	ug/L	0.9	ND	ND	ND
1,2-Dichlorobenzene	ug/L	1.0	ND	ND	ND
n-Butylbenzene	ug/L	1.2	ND	ND	ND
1,2,4-Trichlorobenzene	ug/L	1.1	ND	ND	ND
Naphthalene	ug/L	1.6	ND	ND	ND
1,2,3-Trichlorobenzene	ug/L	1.1	ND	ND	ND
Fluorobenzene (Surrogate)	%		100	99.9	100

Mr. Jim Dzubay
Page 6

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

PACE Sample Number: 10 0062316
Date Collected: 03/24/93
Date Received: 03/29/93
Client Sample ID: Trip Blank

Parameter Units MDL _____

ORGANIC ANALYSIS

VOLATILE ORGANICS IN WATER-8021

Date Analyzed			D 4/7/93
Chloromethane	ug/L	0.8	ND
Bromomethane	ug/L	1.2	ND
Dichlorodifluoromethane	ug/L	1.2	ND
Vinyl chloride	ug/L	1.7	ND
Chloroethane	ug/L	0.8	ND
1,1-Dichloroethylene	ug/L	0.5	ND
Trichlorofluoromethane	ug/L	0.4	ND
Methylene chloride	ug/L	1.0	ND
trans-1,2-Dichloroethylene	ug/L	0.4	ND
1,1-Dichloroethane	ug/L	0.6	ND
2,2-Dichloropropane	ug/L	0.5	ND
cis-1,2-Dichloroethylene	ug/L	0.4	ND
Bromochloromethane	ug/L	1.1	ND
Chloroform	ug/L	1.2	ND
Dibromomethane	ug/L	0.9	ND
1,1,1-Trichloroethane	ug/L	0.7	ND
Carbon tetrachloride	ug/L	0.5	ND
1,2-Dichloroethane	ug/L	0.5	ND
1,1,2-Trichloroethylene	ug/L	1.0	ND
1,1-Dichloro-1-propene	ug/L	0.8	ND
1,2-Dichloropropane	ug/L	0.7	ND
Bromodichloromethane	ug/L	0.8	ND
trans-1,3-Dichloro-1-propene	ug/L	0.4	ND
cis-1,3-Dichloro-1-propene	ug/L	0.5	ND
1,1,2-Trichloroethane	ug/L	0.4	ND
1,3-Dichloropropane	ug/L	0.7	ND
1,1,2,2-Tetrachloroethylene	ug/L	1.6	ND
Dibromochloromethane	ug/L	0.9	ND
1,2-Dibromoethane	ug/L	4.0	ND
1,1,1,2-Tetrachloroethane	ug/L	0.4	ND



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April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

These data have been reviewed and are approved for release.

Douglas W. Streiber
Project Manager



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FOOTNOTES
for pages 1 through 8

April 20, 1993
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MDL Method Detection Limit
ND Not detected at or above the MDL.

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QUALITY CONTROL DATA

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
10 0062308, 10 0062316

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Date Analyzed			4/7/93
Dichlorodifluoromethane	ug/L	1.5	ND
Chloromethane	ug/L	1.5	ND
Vinyl Chloride	ug/L	1.5	ND
Bromomethane	ug/L	1.5	ND
Chloroethane	ug/L	1.0	ND
Dichlorofluoromethane	ug/L	1.0	ND
Trichlorofluoromethane	ug/L	0.5	ND
Ethyl ether	ug/L	5.0	ND
1,1,2-Trichlorotrifluoroethane	ug/L	1.0	ND
Acetone	ug/L	40.0	ND
1,1-Dichloroethylene	ug/L	0.5	ND
Allyl chloride	ug/L	2.0	ND
Methylene Chloride	ug/L	1.0	ND
Methyl tert-Butyl Ether	ug/L	4.0	ND
Trans-1,2-dichloroethylene	ug/L	0.5	ND
1,1-Dichloroethane	ug/L	0.5	ND
Methyl ethyl ketone	ug/L	25.0	ND
2,2-Dichloropropane	ug/L	0.5	ND
cis-1,2-Dichloroethylene	ug/L	0.5	ND
Chloroform	ug/L	0.5	ND
Bromochloromethane	ug/L	1.0	ND
Tetrahydrofuran	ug/L	20.0	ND
1,1,1-Trichloroethane	ug/L	0.5	ND
1,1-Dichloropropene	ug/L	1.0	ND
Carbon Tetrachloride	ug/L	0.5	ND
Benzene	ug/L	0.5	ND
1,2-Dichloroethane	ug/L	0.5	ND
1,2-Dichloropropane	ug/L	0.5	ND
1,1,2-Trichloroethylene	ug/L	0.5	ND
Dibromomethane	ug/L	1.5	ND

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QUALITY CONTROL DATA

April 20, 1993
 PACE Project Number: 930329514

Client Reference: 10-90-272

EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
 10 0062308, 10 0062316

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Bromodichloromethane	ug/L	0.5	ND
Methyl isobutyl ketone	ug/L	8.0	ND
cis-1,3-Dichloro-1-propene	ug/L	0.5	ND
Toluene	ug/L	0.8	ND
trans-1,3-Dichloro-1-propene	ug/L	0.5	ND
1,1,2-Trichloroethane	ug/L	0.5	ND
1,3-Dichloropropane	ug/L	0.8	ND
1,1,2,2-Tetrachloroethylene	ug/L	1.0	ND
Dibromochloromethane	ug/L	1.0	ND
1,2-Dibromoethane	ug/L	4.0	ND
Chlorobenzene	ug/L	0.8	ND
1,1,1,2-Tetrachloroethane	ug/L	0.5	ND
Ethyl benzene	ug/L	0.8	ND
m-Xylene	ug/L	0.8	ND
p-Xylene	ug/L	0.8	ND
o-Xylene	ug/L	0.8	ND
Styrene	ug/L	0.8	ND
Bromoform	ug/L	1.0	ND
Cumene	ug/L	1.0	ND
1,1,2,2-Tetrachloroethane	ug/L	1.0	ND
1,2,3-Trichloropropane	ug/L	4.0	ND
Bromobenzene	ug/L	1.0	ND
n-Propylbenzene	ug/L	1.0	ND
2-Chlorotoluene	ug/L	1.0	ND
1,3,5-Trimethylbenzene	ug/L	0.8	ND
4-Chlorotoluene	ug/L	1.5	ND
tert-Butylbenzene	ug/L	0.8	ND
1,2,4-Trimethylbenzene	ug/L	0.8	ND
sec-Butylbenzene	ug/L	1.0	ND
p-Cymene	ug/L	1.0	ND
1,3-Dichlorobenzene	ug/L	1.0	ND

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QUALITY CONTROL DATA

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EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
10 0062308, 10 0062316

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,4-Dichlorobenzene	ug/L	1.0	ND
n-Butylbenzene	ug/L	1.2	ND
1,2-Dichlorobenzene	ug/L	1.0	ND
1,2-Dibromo-3-chloropropane	ug/L	0.8	ND
1,2,4-Trichlorobenzene	ug/L	1.2	ND
Hexachlorobutadiene	ug/L	2.0	ND
Naphthalene	ug/L	1.5	ND
1,2,3-Trichlorobenzene	ug/L	1.5	ND
Fluorobenzene (Surrogate)	%		100
1,4-Dichlorobutane (Surrogate Standard)	%		89.4

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	100059536	Spike	Spike		RPD
					Recv	Dupl	
Dichlorodifluoromethane	ug/L	1.5	ND	20.0	88%	99%	11%
Chloromethane	ug/L	1.5	ND	20.0	96%	99%	3%
Vinyl Chloride	ug/L	1.5	ND	20.0	91%	98%	7%
Bromomethane	ug/L	1.5	ND	20.0	67%	77%	13%
Chloroethane	ug/L	1.0	ND	20.0	98%	100%	2%
Trichlorofluoromethane	ug/L	0.5	ND	20.0	92%	97%	5%
Ethyl ether	ug/L	5.0	ND	20.0	124%	119%	4%
1,1,2-Trichlorotrifluoroethane	ug/L	1.0	ND	20.0	89%	93%	4%
Acetone	ug/L	40.0	ND	200	135%	133%	1%
Allyl chloride	ug/L	2.0	ND	20.0	92%	98%	6%
Methyl tert-Butyl Ether	ug/L	4.0	ND	20.0	101%	102%	0%
cis-1,2-Dichloroethylene	ug/L	0.5	ND	20.0	96%	97%	1%
Bromochloromethane	ug/L	1.0	ND	20.0	94%	96%	2%
1,1-Dichloropropene	ug/L	1.0	ND	20.0	96%	98%	2%
1,2-Dichloroethane	ug/L	0.5	ND	20.0	98%	99%	1%
1,2-Dichloropropane	ug/L	0.5	ND	20.0	98%	99%	1%
Dibromomethane	ug/L	1.5	ND	20.0	93%	94%	1%



REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
10 0062308, 10 0062316

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	100059536	Spike	Spike		RPD
					Recv	Dupl	
1,1,2-Trichloroethane	ug/L	0.5	ND	20.0	103%	102%	0%
1,1,2,2-Tetrachloroethylene	ug/L	1.0	ND	20.0	104%	102%	1%
Dibromochloromethane	ug/L	1.0	ND	20.0	98%	96%	2%
1,2-Dibromoethane	ug/L	4.0	ND	20.0	98%	93%	5%
1,1,1,2-Tetrachloroethane	ug/L	0.5	ND	20.0	104%	102%	1%
Ethyl benzene	ug/L	0.8	ND	20.0	124%	123%	0%
p-Xylene	ug/L	0.8	ND	20.0	121%	118%	2%
o-Xylene	ug/L	0.8	ND	20.0	89%	85%	4%
1,1,2,2-Tetrachloroethane	ug/L	1.0	ND	20.0	106%	105%	0%
1,2,3-Trichloropropane	ug/L	4.0	ND	20.0	101%	99%	2%
Bromobenzene	ug/L	1.0	ND	20.0	99%	100%	1%
2-Chlorotoluene	ug/L	1.0	ND	20.0	105%	102%	2%
1,2,4-Trimethylbenzene	ug/L	0.8	ND	20.0	119%	117%	1%
sec-Butylbenzene	ug/L	1.0	ND	20.0	86%	84%	2%
1,3-Dichlorobenzene	ug/L	1.0	ND	20.0	102%	102%	0%
n-Butylbenzene	ug/L	1.2	ND	20.0	83%	83%	0%
1,2-Dibromo-3-chloropropane	ug/L	0.8	ND	20.0	95%	95%	0%
1,2,4-Trichlorobenzene	ug/L	1.2	ND	20.0	102%	104%	1%

LABORATORY CONTROL SAMPLE:

Parameter	Units	MDL	Reference	
			Value	Recv
Dichlorodifluoromethane	ug/L	1.5	20.0	88%
Chloromethane	ug/L	1.5	20.0	91%
Vinyl Chloride	ug/L	1.5	20.0	93%
Bromomethane	ug/L	1.5	20.0	66%
Chloroethane	ug/L	1.0	20.0	96%
Dichlorofluoromethane	ug/L	1.0	20.0	110%
Trichlorofluoromethane	ug/L	0.5	20.0	93%
Ethyl ether	ug/L	5.0	20.0	120%
1,1,2-Trichlorotrifluoroethane	ug/L	1.0	20.0	90%

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QUALITY CONTROL DATA

April 20, 1993
 PACE Project Number: 930329514

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EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
 10 0062308, 10 0062316

LABORATORY CONTROL SAMPLE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recy</u>
Acetone	ug/L	40.0	200	135%
1,1-Dichloroethylene	ug/L	0.5	20.0	112%
Allyl chloride	ug/L	2.0	20.0	94%
Methylene Chloride	ug/L	1.0	20.0	113%
Methyl tert-Butyl Ether	ug/L	4.0	20.0	100%
Trans-1,2-dichloroethylene	ug/L	0.5	20.0	110%
1,1-Dichloroethane	ug/L	0.5	20.0	103%
Methyl ethyl ketone	ug/L	25.0	80.0	89%
2,2-Dichloropropane	ug/L	0.5	20.0	102%
cis-1,2-Dichloroethylene	ug/L	0.5	20.0	95%
Chloroform	ug/L	0.5	20.0	108%
Bromochloromethane	ug/L	1.0	20.0	89%
Tetrahydrofuran	ug/L	20.0	200	97%
1,1,1-Trichloroethane	ug/L	0.5	20.0	105%
1,1-Dichloropropene	ug/L	1.0	20.0	93%
Carbon Tetrachloride	ug/L	0.5	20.0	105%
Benzene	ug/L	0.5	20.0	119%
1,2-Dichloroethane	ug/L	0.5	20.0	95%
1,2-Dichloropropane	ug/L	0.5	20.0	95%
1,1,2-Trichloroethylene	ug/L	0.5	20.0	104%
Dibromomethane	ug/L	1.5	20.0	87%
Bromodichloromethane	ug/L	0.5	20.0	101%
Methyl isobutyl ketone	ug/L	8.0	20.0	99%
cis-1,3-Dichloro-1-propene	ug/L	0.5	21.2	103%
Toluene	ug/L	0.8	20.0	104%
trans-1,3-Dichloro-1-propene	ug/L	0.5	18.4	105%
1,1,2-Trichloroethane	ug/L	0.5	20.0	99%
1,3-Dichloropropane	ug/L	0.8	20.0	106%
1,1,2,2-Tetrachloroethylene	ug/L	1.0	20.0	99%
Dibromochloromethane	ug/L	1.0	20.0	92%
1,2-Dibromoethane	ug/L	4.0	20.0	93%

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QUALITY CONTROL DATA

April 20, 1993
 PACE Project Number: 930329514

Client Reference: 10-90-272

EPA 601: PURGEABLE HALOCARBONS IN LIQUID

Batch: 10 35832

Samples: 10 0062251, 10 0062260, 10 0062278, 10 0062286, 10 0062294
 10 0062308, 10 0062316

LABORATORY CONTROL SAMPLE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recy</u>
Chlorobenzene	ug/L	0.8	20.0	110%
1,1,1,2-Tetrachloroethane	ug/L	0.5	20.0	98%
Ethyl benzene	ug/L	0.8	20.0	125%
m-Xylene	ug/L	0.8	20.0	92%
p-Xylene	ug/L	0.8	20.0	113%
o-Xylene	ug/L	0.8	20.0	79%
Styrene	ug/L	0.8	20.0	86%
Bromoform	ug/L	1.0	20.0	91%
Cumene	ug/L	1.0	20.0	109%
1,1,2,2-Tetrachloroethane	ug/L	1.0	20.0	102%
1,2,3-Trichloropropane	ug/L	4.0	20.0	97%
Bromobenzene	ug/L	1.0	20.0	92%
n-Propylbenzene	ug/L	1.0	20.0	91%
2-Chlorotoluene	ug/L	1.0	20.0	99%
1,3,5-Trimethylbenzene	ug/L	0.8	20.0	71%
4-Chlorotoluene	ug/L	1.5	20.0	101%
tert-Butylbenzene	ug/L	0.8	20.0	121%
1,2,4-Trimethylbenzene	ug/L	0.8	20.0	126%
sec-Butylbenzene	ug/L	1.0	20.0	86%
p-Cymene	ug/L	1.0	20.0	105%
1,3-Dichlorobenzene	ug/L	1.0	20.0	96%
1,4-Dichlorobenzene	ug/L	1.0	20.0	107%
n-Butylbenzene	ug/L	1.2	20.0	81%
1,2-Dichlorobenzene	ug/L	1.0	20.0	106%
1,2-Dibromo-3-chloropropane	ug/L	0.8	20.0	87%
1,2,4-Trichlorobenzene	ug/L	1.2	20.0	100%
Hexachlorobutadiene	ug/L	2.0	20.0	128%
Naphthalene	ug/L	1.5	20.0	134%
1,2,3-Trichlorobenzene	ug/L	1.5	20.0	118%



REPORT OF LABORATORY ANALYSIS

Mr. Jim Dzubay
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FOOTNOTES
for pages 10 through 15

April 20, 1993
PACE Project Number: 930329514

Client Reference: 10-90-272

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference



Delta
Environmental
Consultants, Inc.
3900 Northwoods Dr., Suite 200
St. Paul, MN 55112

CHAIN-OF-CUSTODY RECORD

128726

DELTA PROJECT NO. <i>10-90-272</i>		INVOICE CODE	PAGE <i>1</i> OF <i>1</i>	ANALYSIS REQUESTED				LAB NAME				
PROJECT MANAGER <i>Jim Dzuby</i>		TURN AROUND REQUESTED:		SAMPLE MATRIX: SOIL(S): AIR(A): BULK(B): AQUEOUS(Q): SLUDGE(L): OTHER(O)	<i>UOC</i>	<i>802</i>	NUMBER OF CONTAINERS	LAB USE ONLY				
PROJECT NAME <i>Express Mart</i>		<input checked="" type="checkbox"/> NORMAL						LABORATORY PROJECT NO. <i>930329.574</i>		ACCEPT (A) REJECT (R)	SAMPLE CONDITION AS RECEIVED:	
PROJECT LOCATION <i>Mellen WI</i>		<input type="checkbox"/> RUSH						CHILLED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			LABORATORY SAMPLER NUMBER	SEALING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SAMPLER'S SIGNATURE <i>Mel Boen</i>		<input type="checkbox"/> OTHER						SAMPLE CONDITION/ COMMENTS				
SAMPLE ID	SAMPLE LOCATION/DESCRIPTION	DATE/TIME SAMPLED										
<i>MW-3</i>	<i>2" above grade well</i>	<i>32493-1632</i>	<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6225.1</i>				
<i>MW-2</i>		<i>32493-1715</i>	<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6226.0</i>				
<i>MW-1</i>		<i>32493-1735</i>	<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6227.8</i>				
<i>MW-5</i>	<i>2" Flush grade</i>	<i>32493-1500</i>	<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6228.6</i>				
<i>MW-4</i>	<i>2" above grade</i>	<i>32493-1558</i>	<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6229.4</i>				
	<i>Duplicate</i>		<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6230.8</i>				
	<i>Trip Blank</i>		<i>Q</i>	<i>✓</i>			<i>3</i>	<i>6231.6</i>				
GENERAL COMMENTS: <i>Please send results to Jim Dzuby at Delta</i>							<i>21</i>	TOTAL NUMBER OF CONTAINERS				
1 RELINQUISHED BY (SIGNATURE) <i>Mel Boen</i>		DATE <i>3/29</i>	3 RELINQUISHED BY (SIGNATURE)		DATE	5 RELINQUISHED BY (SIGNATURE)		DATE				
COMPANY <i>Delta</i>		TIME <i>1542</i>	COMPANY		TIME	COMPANY		TIME				
2 RECEIVED BY (SIGNATURE) <i>M. MacKeever</i>		DATE <i>3/29/93</i>	4 RECEIVED BY (SIGNATURE)		DATE <i>3/29/93</i>	6 RECEIVED BY (SIGNATURE)		DATE				
COMPANY <i>PACC</i>		TIME <i>1542</i>	COMPANY <i>PAER</i>		TIME <i>1700</i>	COMPANY		TIME				