

GIS REGISTRY
Cover Sheet

March 2010
(RR-5367)

Source Property Information

CLOSURE DATE: May 25, 2011

BRRTS #: 03-41-004007

ACTIVITY NAME: Mobil Oil 05-FB3

FID #: 241405560

PROPERTY ADDRESS: 812 S. Layton Blvd.

DATCP #:

MUNICIPALITY: Milwaukee

COMM #: 53215122612

PARCEL ID #: 4341712100

*WTM COORDINATES:

WTM COORDINATES REPRESENT:

X: 687230 Y: 285372

Approximate Center Of Contaminant Source

* Coordinates are in
WTM83, NAD83 (1991)

Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

Groundwater Contamination > ES (236)

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

Contamination in ROW

Contamination in ROW

Off-Source Contamination

Off-Source Contamination

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

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

Land Use Controls:

N/A (Not Applicable)

Cover or Barrier (222)

Soil: maintain industrial zoning (220)

(note: maintenance plan for
groundwater or direct contact)

(note: soil contamination concentrations
between non-industrial and industrial levels)

Vapor Mitigation (226)

Structural Impediment (224)

Maintain Liability Exemption (230)

Site Specific Condition (228)

(note: local government unit or economic
development corporation was directed to
take a response action)

Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? (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 #: 03-41-004007

PARCEL ID #: 4341712100

ACTIVITY NAME: Mobil 05-FB3

WTM COORDINATES: X: 687230 Y: 285372

- Closure Letter**
- Maintenance Plan** (if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)
- Continuing Obligation Cover Letter** (for property owners affected by residual contamination and/or continuing obligations)
- Conditional Closure Letter**
- Certificate of Completion (COC)** (for VPLE sites)

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 must be no larger than 11 x 17 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 #: 1,2 Title: KEC Site Location & Aerial Photograph

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: Handex 12/14/02 Site 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 #: 3,6 Title: Warzyn10/26/94 Soil PID & Analytical Results, Handex 12/14/02 Soil Analytical Results

BRRTS #: 03-41-004007

ACTIVITY NAME: Mobil 05-FB3

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 #: **Title: None**

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 #: 3, 5 Title: Handex 2/17/99 Benzene Concentration in GW, Handex Revised 12/14/02 GW Results

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 Title: Handex 11/5/01 GW Elevation & Analytical Results

Figure #: 3, 5 Title: Handex 4/4/02 GW Elevation and Contour Map & 9/23/02 GW Elevation & Analytical Results

Tables must be no larger than 11 x 17 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 #: 1,2,3, 3 Title: PID, Summary of Soil, Soil Analytical Offsite, 2002 Soil Laboratory

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 Title: Groundwater Laboratory Analytical Results

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 Elevations and Natural Attenuation Parameters

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 #: 2 Title: Site Map

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 #: 03-41-004007

ACTIVITY NAME: Mobil 05-FB3

Source Property

Not Applicable

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.

Not Applicable

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: 1



May 25, 2011

Mr. Sharif Malik
Dasada Property Management, LLC
11746 W. Van Beck Ave.
Greenfield, WI 53228-1802

SUBJECT: Final Case Closure with Continuing Obligations
Mobil 05-FB3, Leaking Underground Storage Tank (LUST) site
812 S. Layton Blvd., Milwaukee, WI
WDNR BRRTS Activity #: 03-41-004007 FID#241405560

Dear Mr. Malik:

The Wisconsin Department of Natural Resources (Department) recently reviewed a request for closure of the above-referenced case related to petroleum-contaminated soil and groundwater at the Mobil 05-FB3 property. The Department reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On March 8, 2011, you were notified that the Department had granted conditional closure to this case.

The Department recently received documentation of groundwater monitoring well abandonment, investigative waste disposal and a revised maintenance plan indicating that you have complied with the requirements for final site closure.

Based on the correspondence and data provided, it appears that this case meets the closure requirements in ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time. However, you and future property owners must comply with certain continuing obligations as explained in this letter.

GIS Registry

This site will be listed on the Remediation and Redevelopment Program's internet accessible GIS Registry, to provide notice of residual contamination, and of any continuing obligations. The continuing obligations for this site are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed
- Pavement, an engineered cover or a soil barrier must be maintained over contaminated soil and the state must approve any changes to this barrier
- Groundwater contamination is present above Chapter NR 140 enforcement standards
- One or more monitoring wells were not located and must be properly abandoned if found

All site information is also on file at the Southeast Regional DNR office at 2300 N. Dr. Martin Luther King, Jr. Dr. This letter and information that was submitted with your closure request application, including the maintenance plan, will be included on the GIS Registry, in a PDF attachment. To review the sites on the GIS Registry web page, visit the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If the property is listed on the GIS Registry because of

remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4) (w), Wis. Adm. Code. To obtain approval, Form 3300-254 must be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at <http://dnr.wi.gov/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

Closure Conditions

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. You must pass on both the information about these continuing obligations and the maintenance plan to the next property owner or owners. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter, including compliance with **attached maintenance plan**, are met.

Cover or Barrier

Pursuant to s. 292.12(2)(a), Wis. Stats., the pavement cap that currently exists in the location shown on the **attached map** shall be maintained in compliance with the **attached maintenance plan** in order to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health and to minimize the infiltration of water and prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code.

Soil contamination remains in the area beneath the dispenser canopy area and the adjacent Layton Blvd. right-of-way as shown on the attached map and in the information submitted to the Department. If soil in the specific locations shown on the attached map is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result, special precautions may need to be taken during excavation activities to prevent a health threat to humans.

The **attached maintenance plan and inspection log** are to be kept up-to-date and on-site. Please submit the inspection log to the Department only upon request.

Prohibited Activities

The following activities are prohibited on any portion of the property where pavement is required as shown on the attached map, unless prior written approval has been obtained from the Department: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure.

Upon Department approval to replace the existing barrier, the replacement barrier must be one of similar permeability, until contaminant levels no longer exceed the applicable standards.

Residual Groundwater Contamination

Groundwater impacted by petroleum contamination greater than enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present on this contaminated property as shown on the attached map.

Vapor Migration

In addition, depending on site-specific conditions, construction over contaminated materials may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

Monitoring Wells that could not be Properly Abandoned

Your environmental consultant has notified the Department that monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW10 and MW-13 located on this property and shown on the attached map, could not be properly abandoned because they were missing due to being paved over, covered or removed during site development activities. Your consultant has made a reasonable effort to locate the wells to determine whether they were properly abandoned but has been unsuccessful in those efforts. Please understand that in the future you may be held liable for any problems associated with these improperly abandoned monitoring wells if they create a conduit for contaminants to enter groundwater. In the future if any of the groundwater wells are found, the then current owner of the property on which the well is located will be required to notify the Department, to properly abandon the wells in compliance with the requirements in ch. NR 141, Wis. Adm. Code, and to submit the required documentation of that abandonment to the Department.

Dewatering Permits

The Department's Watershed Management Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits or to the ground surface. This includes discharges from construction related dewatering activities, including utility and building construction.

Based on the concentrations of contaminants remaining in groundwater at this location, it appears likely that dewatering activities would require a permit from the Watershed Management Program. If you or any other person plan to conduct such activities in the area of residual soil and groundwater contamination, you or that person must contact that program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at <http://www.dnr.state.wi.us/org/water/wm/ww/>

Post-Closure Notification Requirements

In accordance with ss, 292.12 and 292.13, Wis. Stats., you must notify the Department before making changes that affect or relate to the conditions of closure in this letter. For this case, examples of changed conditions requiring prior notification include, but are not limited to:

- Disturbance, construction on, change or removal in whole or part of pavement, an engineered cover or a soil barrier that must be maintained over contaminated soil
- One or more monitoring wells that were not located are found and properly abandoned.

Please send written notifications in accordance with the above-cited requirements to the attention of the Remediation and Redevelopment Environmental Program Associate at the letterhead address.

PECFA Reimbursement

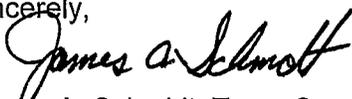
Section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement. If there is equipment purchased with PECFA funds remaining at the site, contact the Commerce PECFA Program to determine the method for salvaging the equipment.

The following DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" has been included with this letter, to help explain a property owner's responsibility for continuing obligations on their property. If the fact sheet is lost, you may obtain a copy at <http://dnr.wi.gov/org/aw/rr/archives/pubs/RR819.pdf>.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

The Department appreciates the efforts you have taken to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Nancy Ryan at (414) 263-8533.

Sincerely,



James A. Schmidt, Team Supervisor
Southeast Region Remediation & Redevelopment Program

cc: SER case file
Greg Konicek, Konicek Environmental Consulting, LLC

Attachments: Cover Barrier and Cap Maintenance Plan
Site maps
RR Publication 819

COVER BARRIER AND CAP MAINTENANCE PLAN

April 11, 2011

Property Located at:

812 S. Layton Blvd, Milwaukee, Wisconsin

WDNR FID# 241405560 and WDNR BRRTS# 03-41-004007

Legal Description:

812 S. Layton Blvd:

Parcel 1

Lot 16 and the West 15 feet of Lot 17 in Block 8 in Subdivision of Blocks 7, 8 and 21 in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, Range 22 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin, excepting the North 60 feet thereof.

Parcel 2

The North 60 feet of Lot 16, except the West 15 feet thereof, and the North 60 feet of the West 15 feet of Lot 17, the East 35 feet of Lot 17, and all of Lot 18 in Block 8 in Subdivision of Blocks 7, 8 and 21 in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, Range 22 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin.

Tax Key No: 4341712100

Introduction

This document is the Maintenance Plan for an existing pavement cover barrier at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code (WAC). The maintenance activities relate to the existing concrete paved cover barrier occupying the area over the contaminated groundwater plume and soil on site.

More site-specific information about this property may be found in:

- The case file in the DNR Southeastern Regional Office.
- BRRTS on the web (DNR's internet based data base of contaminated sites):
<http://botw.dnr.state.wi.us/botw/SetUpBasicSearchForum.do>
- GIS Registry PDF file for further information on the nature and extent of contamination:
<http://dnrmaps.wisconsin.gov/imf/imfApplyTheme.jsp?index=1;>
and
- The DNR project manager for Milwaukee County.

Description of Contamination

Soil contaminated by petroleum is located at a depth of 2 to 8 feet beneath the dispenser canopy area and the adjacent western Layton Blvd. right of way. Free phase petroleum product and groundwater contaminated by petroleum volatile organics compounds is located at a depth of approximately 6 feet in the western portion of the property and adjacent western Layton Blvd. The extent of the soil and groundwater contamination is shown on the attached Crispell-Synder, Inc. figure 4.

Description of the Cover to be Maintained

The cover consists of concrete paved driveway; canopy covered dispensing islands, parking and sidewalks.

Cover and Barrier Purpose

The concrete paved driveway; canopy covered dispensing islands, parking and sidewalks over the contaminated groundwater plume and soil serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. These paved surfaces also act as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch NR 140, WAC. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

Annual Inspection

The paved surfaces overlying the contaminated groundwater plume and soil as depicted in Exhibit A will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause additional infiltration into or exposure to underlying soils. The inspections will be performed by the property owner or their designated representative. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed and where infiltration from the surface will not be effectively minimized will be documented. A log of the inspections and any repairs will be maintained by the property owner and is included as Exhibit B, Cap Inspection Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed and where infiltration from the surface will not be effectively minimized. Once repairs are complete, they will be documented in the inspection log. A copy of this plan and the inspection log will be kept at the address of the property owner and available for submittal or inspection by the Wisconsin Department of Natural Resource ("WDNR") representatives upon their request.

Maintenance Activities

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling or larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment (PPE). The owner must also sample any soil that is excavated from the site prior to the disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces overlying the contaminated groundwater plume and soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in the Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces, will maintain a copy of this Maintenance Plan on site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc) for viewing.

Prohibition of Activities and Notification of DNR prior to Actions Affecting a Cover or Cap

The following activities are prohibited on any portion of the property where paved surfaces is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; or 6) construction or replacement of a building or other structure.

Amendment or Withdrawal of Maintenance Plan

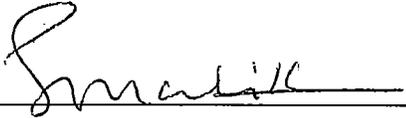
This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

Contact Information

January, 2011

Site Owner and Operator: Dasada Property Management LLC
C/o Sherif Malik
812 S. Layton Blvd.
Milwaukee, WI 53215
414-803-5998

Signature: _____



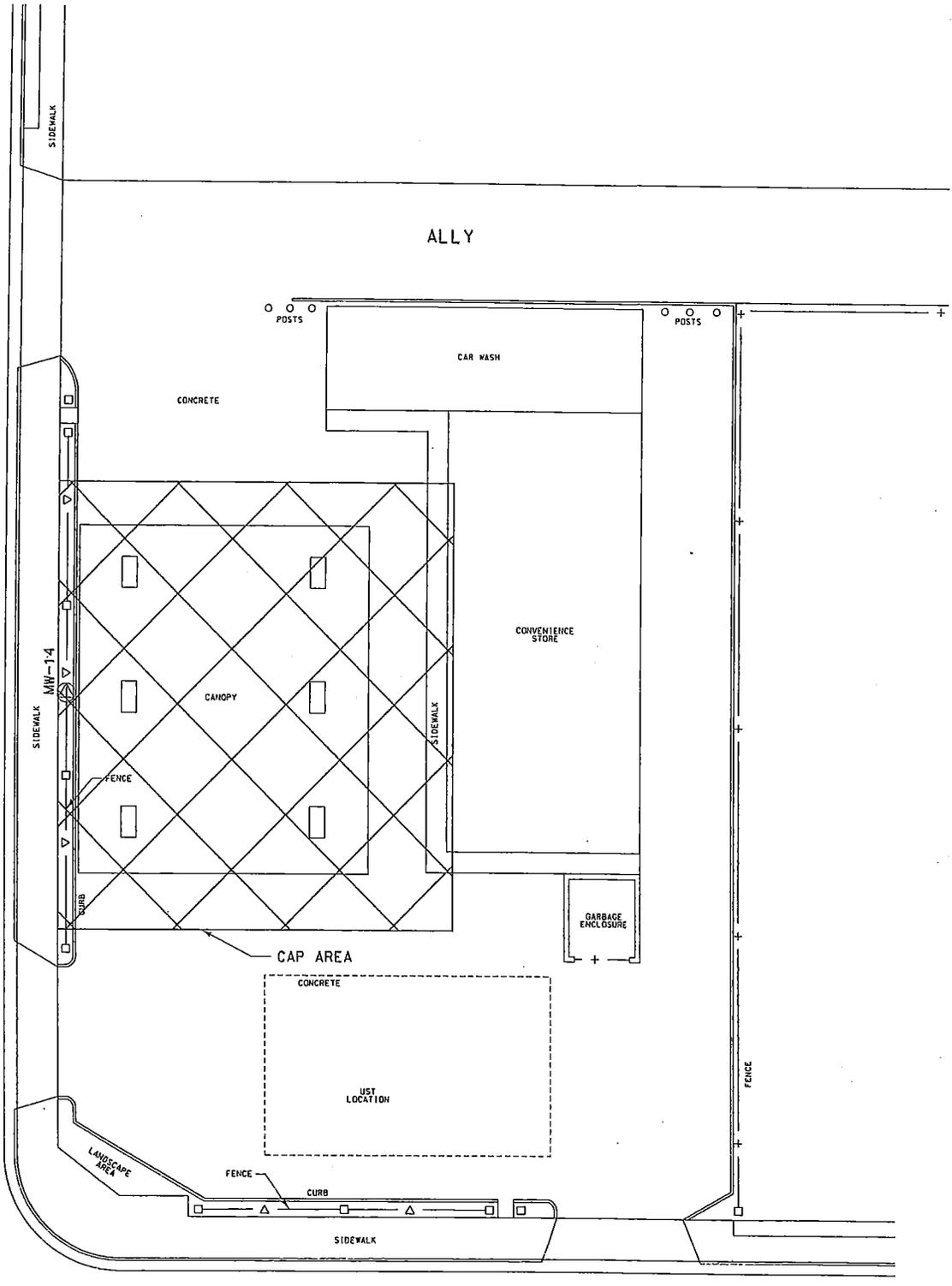
Consultant: Konicek Environmental Consulting, LLC
1032 S. Spring Street
Port Washington, WI 53074
262-284-2557

WDNR: Nancy D. Ryan
2300 N Dr. Martin Luther King Jr., Drive
Milwaukee, WI 53212-3128
414-263-8533

REVISION/PLOT DATE _____



S LAYTON BLVD



W NATIONAL AVE

EXHIBIT A - SITE LAYOUT - MOBIL 05-FB3

RII-1237-001



LOCATION: 812 SOUTH LAYTON BLVD.

MILWAUKEE, WISCONSIN

SCALE: 1"=30'

DATE: 02/01/11

DRAWN BY: B.GREISCH

REVISION/PLOT DATE _____

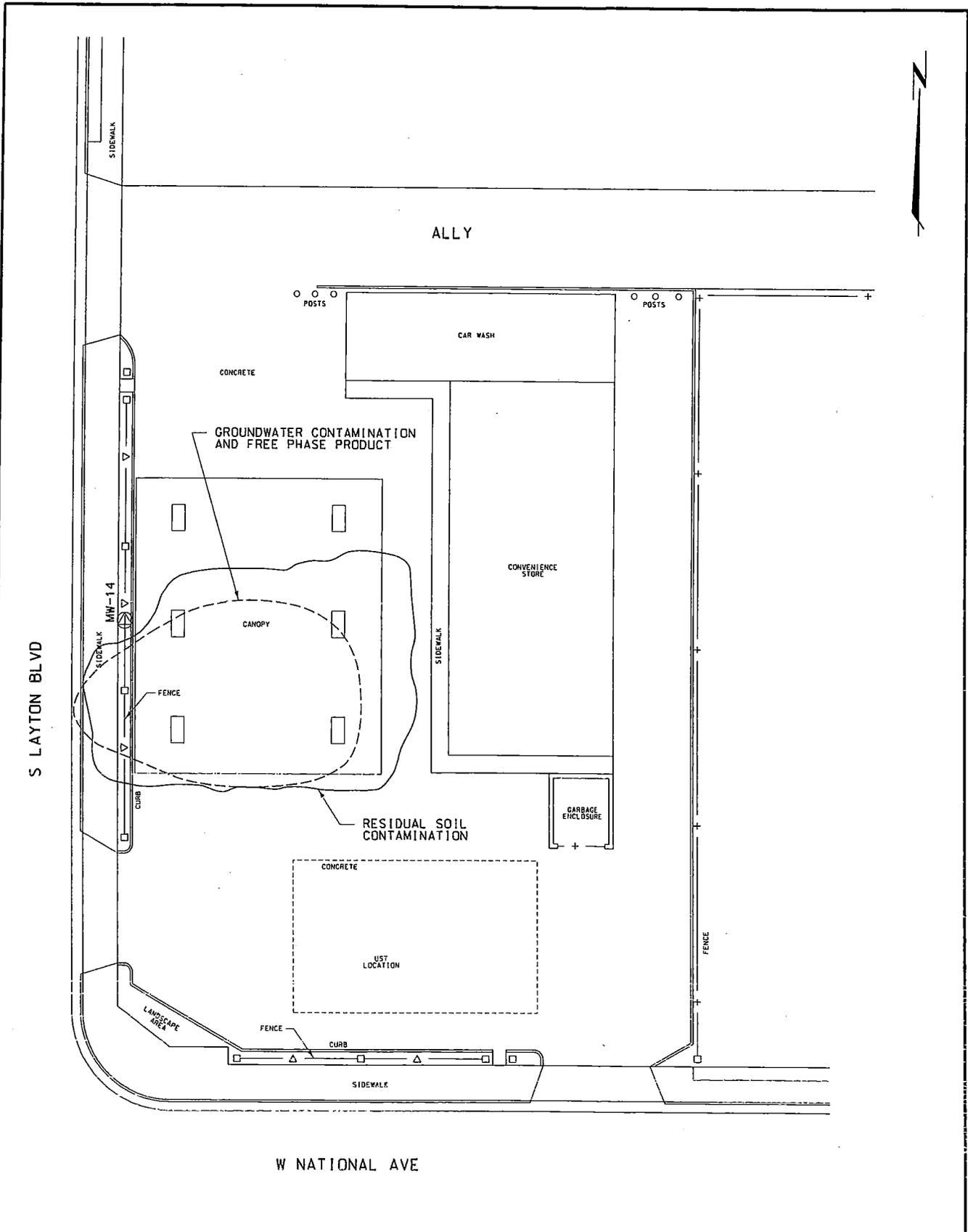


FIGURE 4 - RESIDUAL SOIL GROUNDWATER CONTAMINATION AND FREE PHASE PRODUCT - MOBIL 05-FB3

R11-1237-001



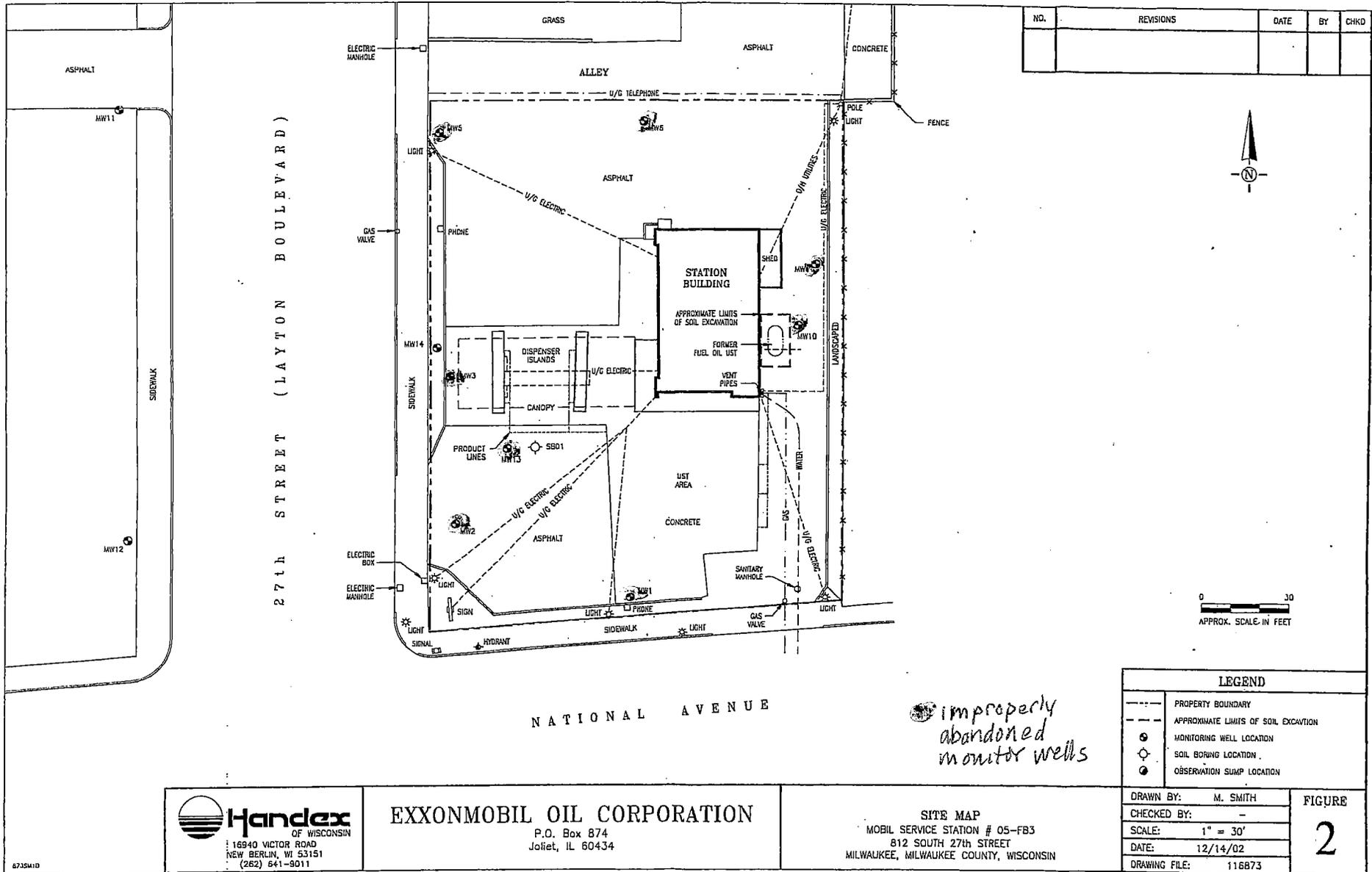
LOCATION: 812 SOUTH LAYTON BLVD.

MILWAUKEE, WISCONSIN

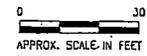
SCALE: 1"=30'

DATE: 02/01/11

DRAWN BY: B. GREISCH



| NO. | REVISIONS | DATE | BY | CHKD |
|-----|-----------|------|----|------|
| | | | | |



| LEGEND | |
|----------------------|---------------------------------------|
| --- | PROPERTY BOUNDARY |
| - - - | APPROXIMATE LIMITS OF SOIL EXCAVATION |
| ○ | MONITORING WELL LOCATION |
| ⊙ | SOIL BORING LOCATION |
| ● | OBSERVATION SUMP LOCATION |
| DRAWN BY: M. SMITH | |
| CHECKED BY: - | |
| SCALE: 1" = 30' | |
| DATE: 12/14/02 | |
| DRAWING FILE: 116873 | |

improperly abandoned monitor wells

Handex
OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

EXXONMOBIL OIL CORPORATION

P.O. Box 874
Joliet, IL 60434

SITE MAP
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

FIGURE
2

8735M10



March 8, 2011

Mr. Sharif Malik
Dasada Property Management, LLC
11746 W. Van Beck Ave.
Greenfield, WI 53228-1802

Subject: Conditional Closure Decision With Requirements to Achieve Final Closure
Mobil 05-FB3, 812 S. Layton Blvd., Milwaukee, Wisconsin
WDNR BRRTS Activity # 03-41-004007 FID#241405560

Dear Mr. Malik:

The Wisconsin Department of Natural Resources (Department) has recently received supplemental information and a request for closure of the above-referenced case. The request was submitted on your behalf by Konicek Environmental. The Department reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the Department has determined that the petroleum contamination on the site in the vicinity of the petroleum dispenser islands appears to have been investigated and remediated to the extent practicable under site conditions. This case has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code and will be closed if the following conditions are satisfied:

MONITORING WELL ABANDONMENT

Konicek Environmental reported that their search for missing onsite monitoring wells utilizing a metal detector was not successful in locating the missing wells. They did, however, observe round concrete patches in the areas of MW-4 and MW-13, an indication that the wells may have been abandoned. The Department will require that you verify that wells MW-4 and MW-13 were properly abandoned or properly abandon them now. The remaining monitoring wells, MW-11, MW-12 and MW-14 must also be abandoned in accordance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted on Form 3300-005, found at <http://dnr.wi.gov/org/water/dwg/gw/> or provided by the Department of Natural Resources.

MAINTENANCE PLAN

As part of the approval of the closure of this case, you will be responsible for maintaining the pavement cover that exists over contaminated soil. You will be required to conduct annual inspections and to maintain a log documenting inspections and repairs. The Department has requested Konicek Environmental to make some minor revisions to the proposed maintenance plan that was submitted with the closure request. The revised plan must be submitted to the Department for final review.

When the above-cited conditions have been satisfied, please submit the appropriate documentation to verify that applicable conditions have been met, and your case will be closed. This site will be listed on the DNR's Remediation and Redevelopment GIS Registry. Information that was submitted with your closure request application will be included on the GIS Registry. To review the site on the GIS Registry web page, visit the RR Sites Map page at: <http://dnr.wi.gov/org/aw/rr/gis/index.htm>.

Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if

additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment.

We appreciate the efforts you have taken to restore the environment at this site. If you have any questions regarding this letter, please contact me at (414) 263-8533.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nancy D. Ryan".

Nancy D. Ryan, Hydrogeologist
Remediation & Redevelopment Program

Enclosure

cc: SER case file
Gregory Konicek, Konicek Environmental – electronic copy



DOC. # 08973642

REGISTER'S OFFICE | SS
Milwaukee County, WI

RECORDED 03/14/2005 08:00AM

JOHN LA FAVE
REGISTER OF DEEDS

AMOUNT: 21.00

SPECIAL LIMITED
WARRANTY DEED

Document Number

Recording Area

Name and Return Address
PADWAY & PADWAY, LTD.
633 W. Wisconsin Avenue
Suite 1900
Milwaukee, WI 53203

434-7712-100-6

Parcel Identification Number (PIN)

TRANSFER
\$1,650.00
FEE

THIS INSTRUMENT WAS DRAFTED BY:
M. NICOL PADWAY (414-277-9800)
STATE BAR NO. 01016666

SPECIAL LIMITED WARRANTY DEED

THIS SPECIAL WARRANTY DEED is between **Lakepointe Holdings, LLC**, a Wisconsin Limited Liability Company, called "Grantor", and **Dasada Property Management, LLC**, a Wisconsin Limited Liability Company, called "Grantee", whose mailing address is **812 S. Layton Blvd., Milwaukee, Wisconsin**.

Grantor, for a good and valuable consideration, grants, bargains, sells and conveys with Limited Warranty to Grantee all of the real property (the "Property") described in Exhibit "A," attached hereto and made a part hereof. The Property is **NOW KNOWN AS** the property described in Exhibit "B", attached hereto and made a part hereof.

This conveyance is made expressly subject to:

1. Encroachments, protrusions, easements, changes in street lines, rights-of-way and other matters that would be revealed by a current on the ground survey and inspection of the property.
2. Recorded leases, agreements, easements, rights of way, covenants, conditions and restrictions as the same may be of present force and effect.
3. Zoning regulations, ordinances, building restrictions, and regulations and any violations thereof.
4. The lien for real property taxes for the current year, and any liens for special assessments which as of the date hereof are not due and payable; and
5. Rights of any franchisee, subtenant or licensee of Grantor occupying the Property, pursuant to a valid lease, license or other occupancy agreement, at the Closing Date (as such term is defined in the Agreement of Purchase and Sale dated **January 5, 2005**, by and between the Grantor and Grantee herein).

TO HAVE AND TO HOLD the Property, together with the appurtenances, estate, title and interest thereto, unto Grantee, Grantee's successors, heirs and assigns forever, subject to the provisions hereof, and in lieu of all other warranties, express or implied, Grantor does hereby bind itself, its successors and assigns, to warrant and forever defend the title to the Property unto Grantee, Grantee's successors, heirs and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through or under Grantor, but not otherwise.

IN TESTIMONY WHEREOF, Grantor has hereunto set its hand and seal this 1st day of March, 2005, with an effective date of **March 1, 2005**.

(Corporate Seal)

LakePointe Holdings, LLC
A Wisconsin Limited Liability Company
By Lakeside Oil Company, Inc.
A Wisconsin Corporation

Attest:

By: [Signature]
Name: William Elliott
Title: President

Witness:

Name: _____

Name: _____

Dasada Property Management, LLC, a
Wisconsin Limited Liability Company

By: [Signature]
Name: Sharif Malik
Title: Member

STATE OF WISCONSIN)
)ss
COUNTY OF MILWAUKEE)

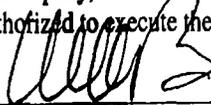
This instrument was acknowledged and executed before me this 1st day of **March, 2005**, by William Elliott, who acknowledged himself to be the President of Lakeside Oil Company, Inc., a Wisconsin Corporation, the Managing Member of **LakePointe Holdings, LLC**, a Wisconsin Limited Liability Company, the limited liability company described in the foregoing instrument and that he was authorized to execute the same.

[Signature]
Notary Public, State of Wisconsin
My Commission Expires 12/31/07



STATE OF WISCONSIN)
)ss
COUNTY OF MILWAUKEE)

This instrument was acknowledged and executed before me this 14 day of **March, 2005**, by **Sharif Malik**, who acknowledged himself to be a Member of **Dasada Property Management, LLC**, a Wisconsin Limited Liability Company, the limited liability company described in the foregoing instrument and that he was authorized to execute the same.



Notary Public, State of Wisconsin *M Nicol Padway*
My Commission Expires: 12/31/07



EXHIBIT "A"
TO SPECIAL WARRANTY DEED

PROPERTY DESCRIPTION

Parcel 1

Lot 16 and the West 15 feet of Lot 17 in Block 8 in Subdivision of **Blocks 7, 8 and 21** in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, **Range 22 East**, in the City of Milwaukee, County of Milwaukee, State of Wisconsin, excepting the North 60 feet thereof.

Parcel 2

The North 60 feet of Lot 16, except the West 15 feet thereof, and the North 60 feet of the West 15 feet of Lot 17, the East 35 feet of Lot 17, and all of Lot 18 in **Block 8** in Subdivision of **Blocks 7, 8 and 21** in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, Range 22 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin.

812S. Layton Blvd.
Milwaukee, WI
Tax ID 434-1712-100-6

EXHIBIT "B"
TO SPECIAL WARRANTY DEED

NOW KNOWN AS
PROPERTY DESCRIPTION

Parcel 1

Lot 16 and the West 15 feet of Lot 17 in Block 8 in Subdivision of Blocks 7, 8 and 21 in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, Range 22 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin, excepting the North 60 feet thereof.

Parcel 2

The North 60 feet of Lot 16, except the West 15 feet thereof, and the North 60 feet of the West 15 feet of Lot 17, the East 35 feet of Lot 17, and all of Lot 18 in Block 8 in Subdivision of Blocks 7, 8 and 21 in Clark's Addition in the Southwest $\frac{1}{4}$ of Section 31 in Township 7 North, Range 22 East, in the City of Milwaukee, County of Milwaukee, State of Wisconsin.

812S. Layton Blvd.
Milwaukee, WI
Tax ID 434-1712-100-6

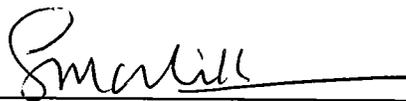
Re: Case Closure Submittal
Mobil 05-FB3
812 S. Layton Blvd.
Milwaukee, WI 53215
BRRTS# 03-41-004007
FID# 241405560
Commerce# 53215-1226-12

To whom it may concern:

The attached deed and legal description for the subject site is to the best of my knowledge true and correct. The subject site is currently zoned LB2 Local Business District.

Responsible Party:

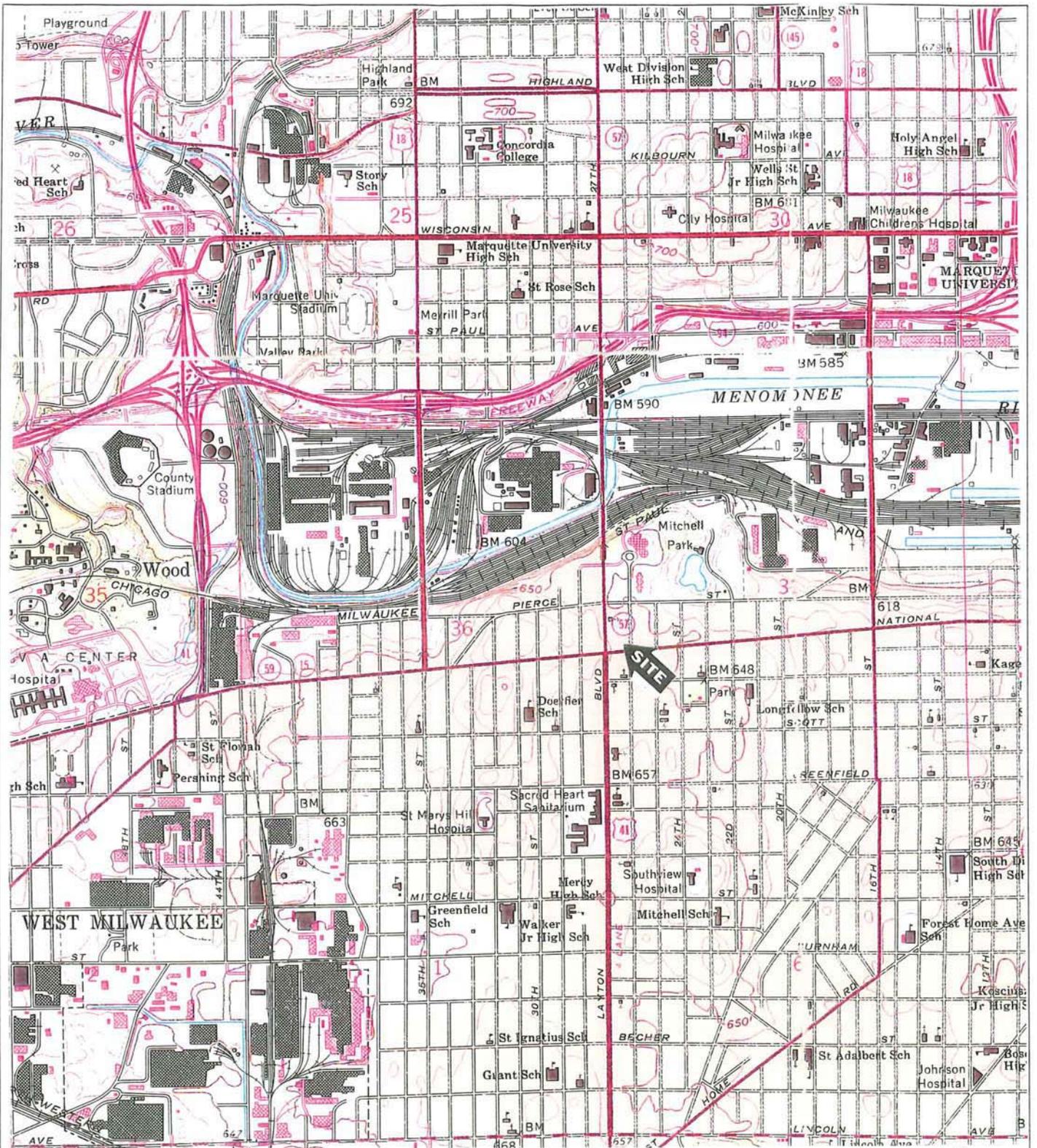
Dasada Property Management, LLC
11746 W. Van Beck Avenue
Greenfield, WI 53228



Sharif Malik

6-21-2010

Date



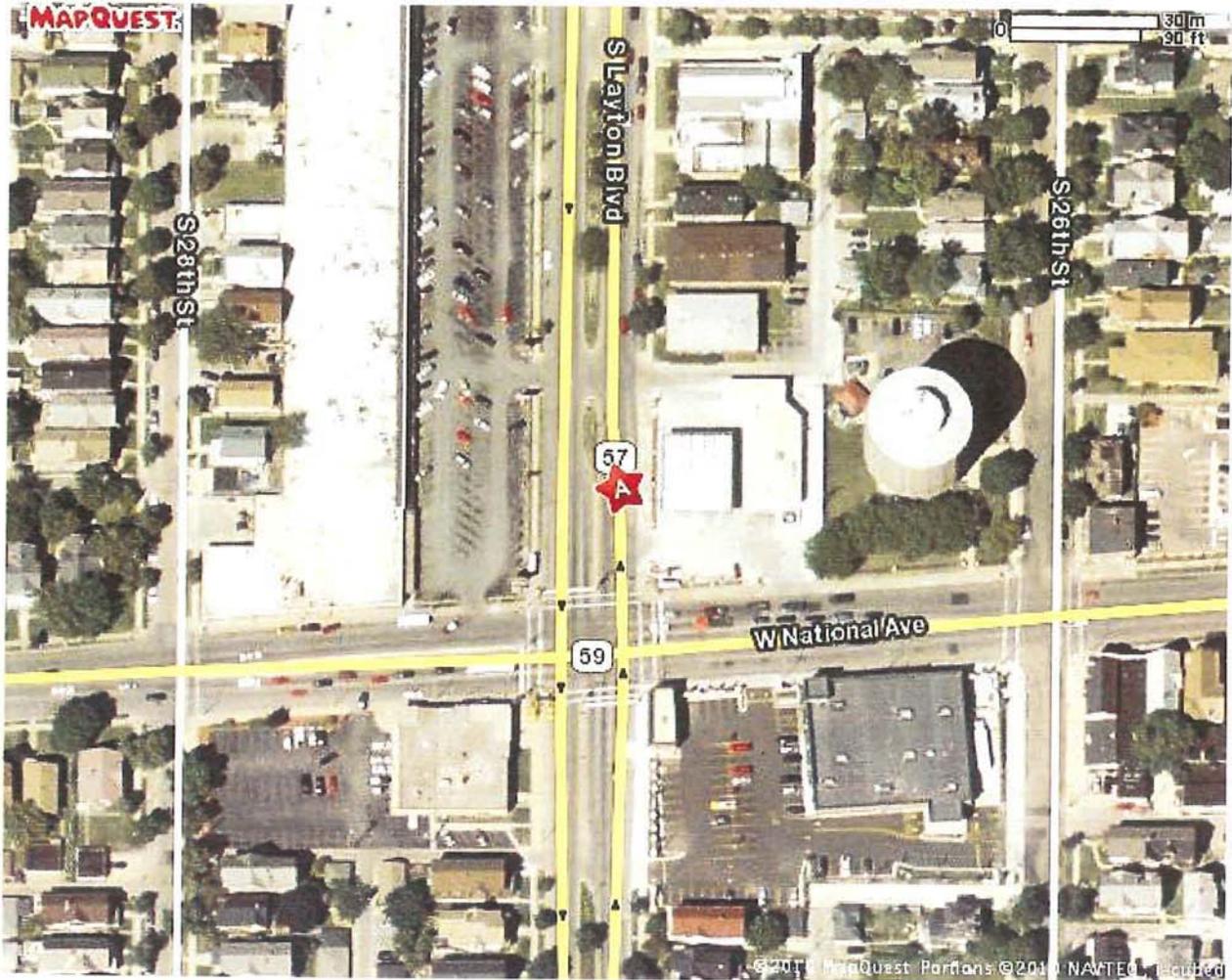
SOURCE:
 USGS
 Milwaukee, Wisconsin
 Quadrangle Map 1958, Revised 1971



| | |
|-------------|----------|
| DESIGNED BY | DATE |
| KEK | 6/16/10 |
| DRAWN BY | PROJECT |
| | 0902009 |
| APPROVED BY | SHEET NO |
| KEK | 1 |

FIGURE 1
 SITE LOCATION MAP
 CLOSURE REQUEST
 MOBIL 05-FB3
 812 S. LAYTON BLVD.
 MILWAUKEE, WISCONSIN

KONICEK
 ENVIRONMENTAL
 CONSULTING, LLC



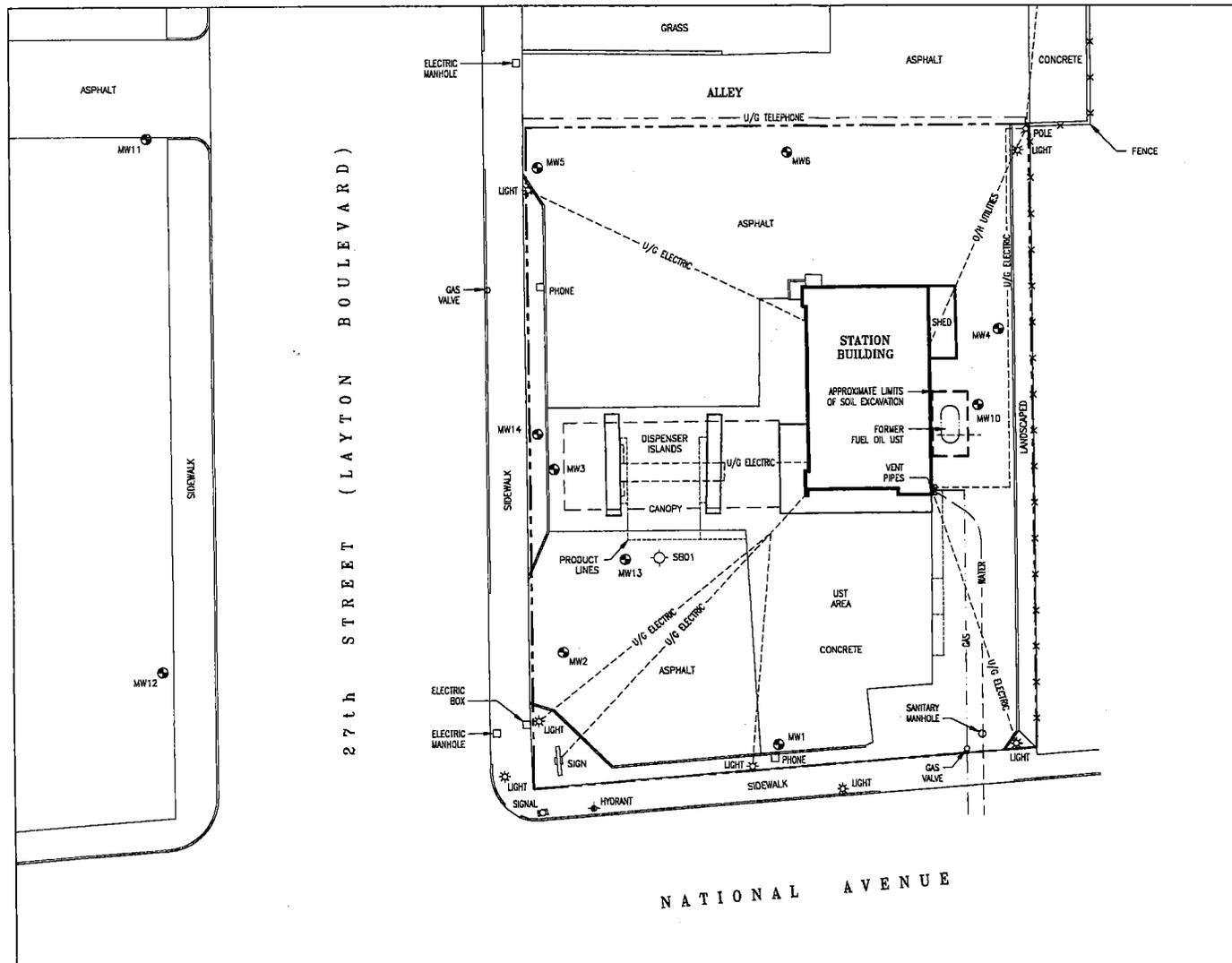
SOURCE:
MapQuest

| | |
|-------------|-----------|
| DESIGNED BY | DATE |
| KEK | 6/16/10 |
| DRAWN BY | PROJECT |
| | 0902009 |
| APPROVED BY | SHEET NO. |
| KEK | 1 |

FIGURE 2
AERIAL PHOTOGRAPH
CLOSURE REQUEST
MOBIL 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

KONICEK
ENVIRONMENTAL
CONSULTING, LLC

| NO. | REVISIONS | DATE | BY | CHKD |
|-----|-----------|------|----|------|
| | | | | |



0 30
APPROX. SCALE IN FEET

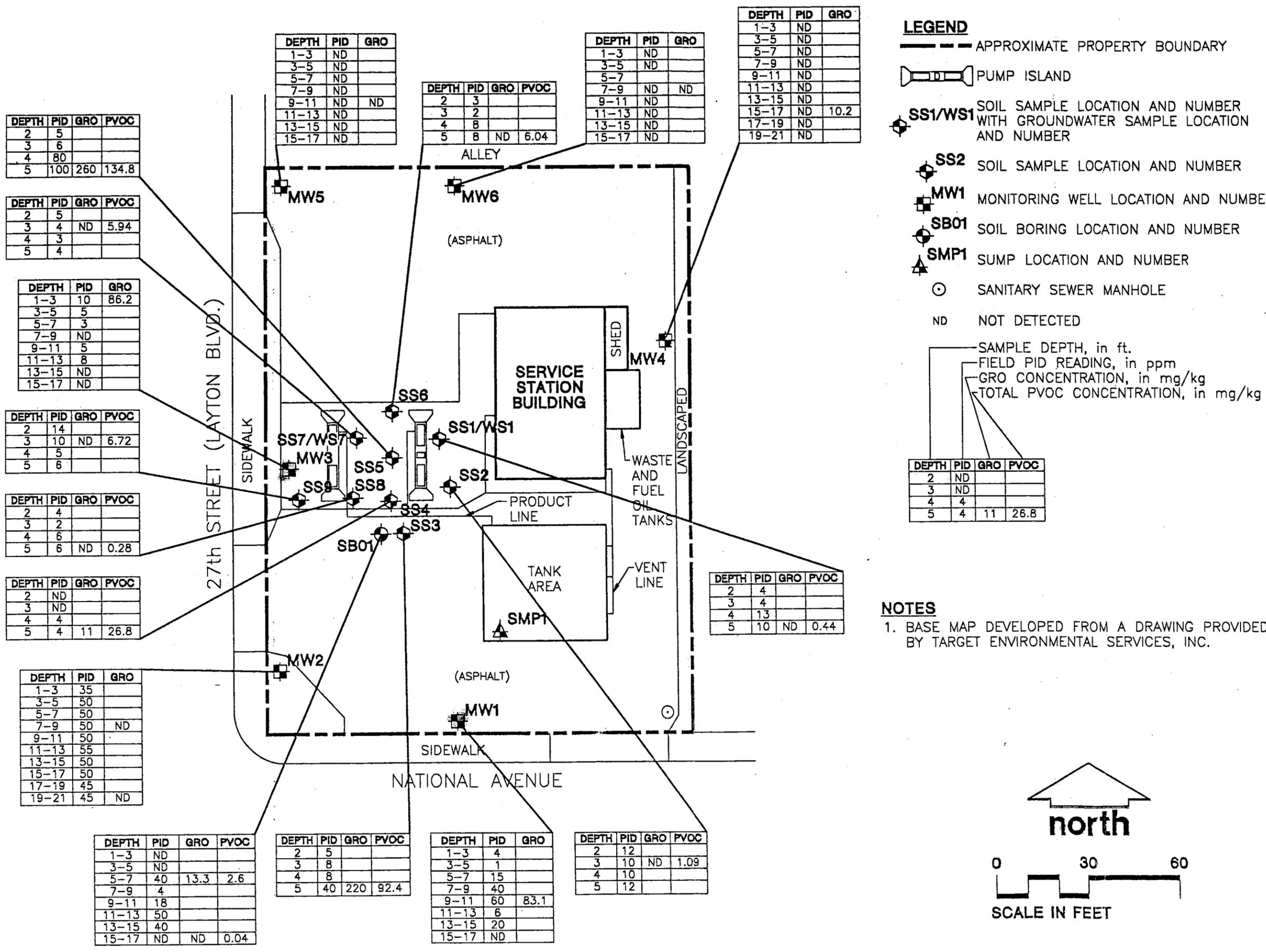
| LEGEND | |
|----------------------|---------------------------------------|
| --- | PROPERTY BOUNDARY |
| - - - | APPROXIMATE LIMITS OF SOIL EXCAVATION |
| ⊙ | MONITORING WELL LOCATION |
| ⊗ | SOIL BORING LOCATION |
| ● | OBSERVATION SUMP LOCATION |
| DRAWN BY: M. SMITH | |
| CHECKED BY: - | |
| SCALE: 1" = 30' | |
| DATE: 12/14/02 | |
| DRAWING FILE: 116873 | |
| FIGURE | |
| 2 | |

16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

EXXONMOBIL OIL CORPORATION
P.O. Box 874
Joliet, IL 60434

SITE MAP
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

8735M18



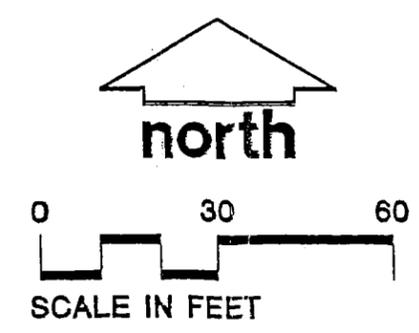
LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- [Pump Island Symbol] PUMP ISLAND
- SS1/WS1 SOIL SAMPLE LOCATION AND NUMBER WITH GROUNDWATER SAMPLE LOCATION AND NUMBER
- SS2 SOIL SAMPLE LOCATION AND NUMBER
- MW1 MONITORING WELL LOCATION AND NUMBER
- SB01 SOIL BORING LOCATION AND NUMBER
- SMP1 SUMP LOCATION AND NUMBER
- SANITARY SEWER MANHOLE
- ND NOT DETECTED

SAMPLE DEPTH, in ft.
 FIELD PID READING, in ppm
 GRO CONCENTRATION, in mg/kg
 TOTAL PVOC CONCENTRATION, in mg/kg

NOTES

1. BASE MAP DEVELOPED FROM A DRAWING PROVIDED BY TARGET ENVIRONMENTAL SERVICES, INC.



Developed By: LJW
 Approved By: [Signature]
 Date: 10/26/94
 Drawn By: CCM
 Reference:
 Revisions:

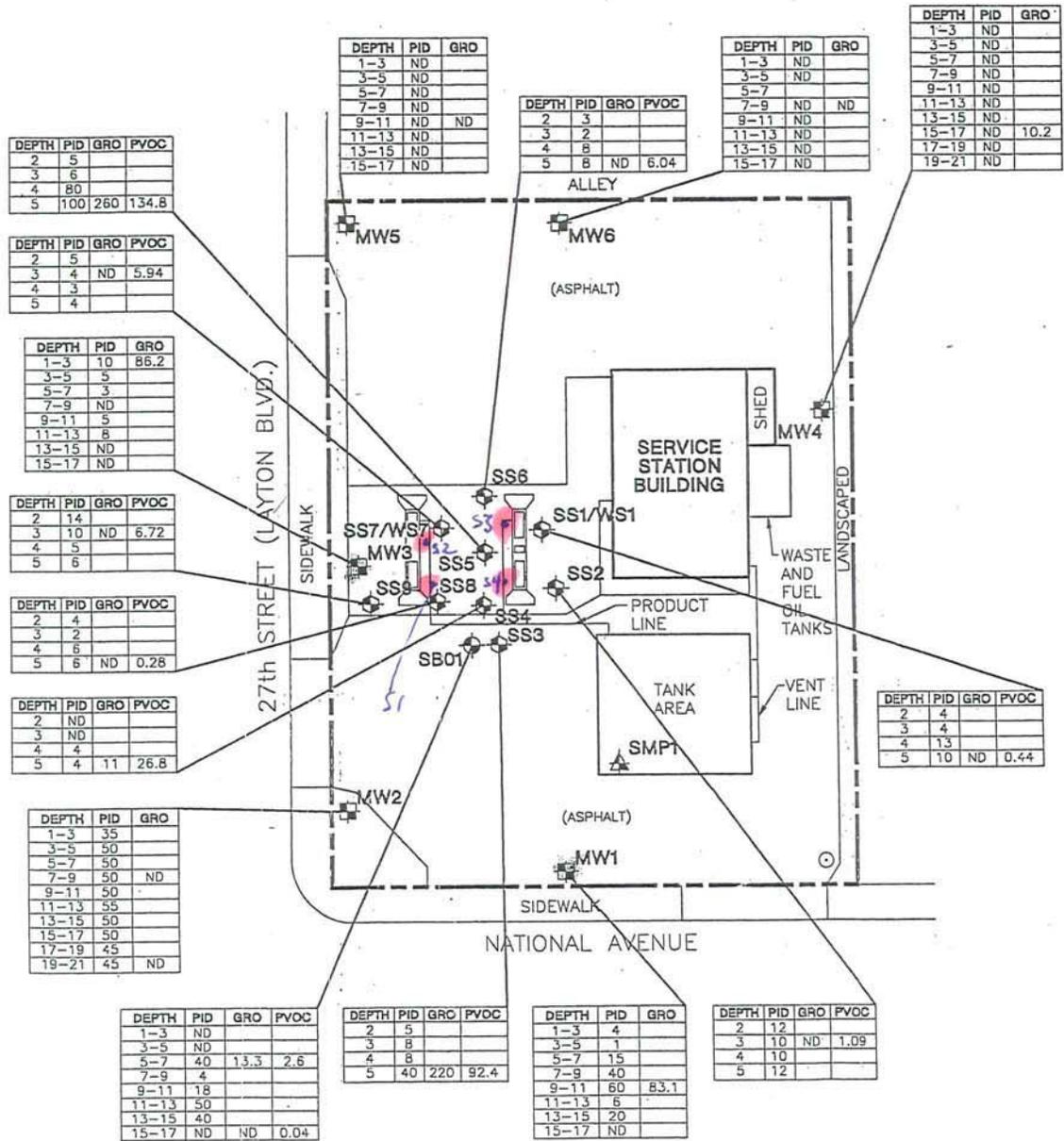
SOIL PID AND ANALYTICAL RESULTS

REMEDIAL ACTION PLAN
 MOBIL OIL STATION 05-FB3
 812 SOUTH 27th STREET
 MILWAUKEE, WISCONSIN

Drawing Number
 15008502 **B7**

WARZYN

FIGURE 3



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- [Symbol] PUMP ISLAND
- SS1/WS1 SOIL SAMPLE LOCATION AND NUMBER WITH GROUNDWATER SAMPLE LOCATION AND NUMBER
- SS2 SOIL SAMPLE LOCATION AND NUMBER
- MW1 MONITORING WELL LOCATION AND NUMBER
- SB01 SOIL BORING LOCATION AND NUMBER
- SMP1 SUMP LOCATION AND NUMBER
- [Symbol] SANITARY SEWER MANHOLE
- ND NOT DETECTED

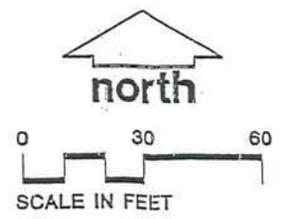
SAMPLE DEPTH, in ft.
 FIELD PID READING, in ppm
 GRO CONCENTRATION, in mg/kg
 TOTAL PVOC CONCENTRATION, in mg/kg

| DEPTH | PID | GRO | PVOC |
|-------|-----|-----|------|
| 2 | ND | | |
| 3 | ND | | |
| 4 | 4 | | |
| 5 | 4 | 11 | 26.8 |

51-54 2005 soil samples collected by AXIS (added to map by WDNR 3/1/11)

NOTES

1. BASE MAP DEVELOPED FROM A DRAWING PROVIDED BY TARGET ENVIRONMENTAL SERVICES, INC.



Drawn By: CCM Date: 10/20/94
 Approved By: JMW
 Developed By: LJW
 References:
 Revisions:

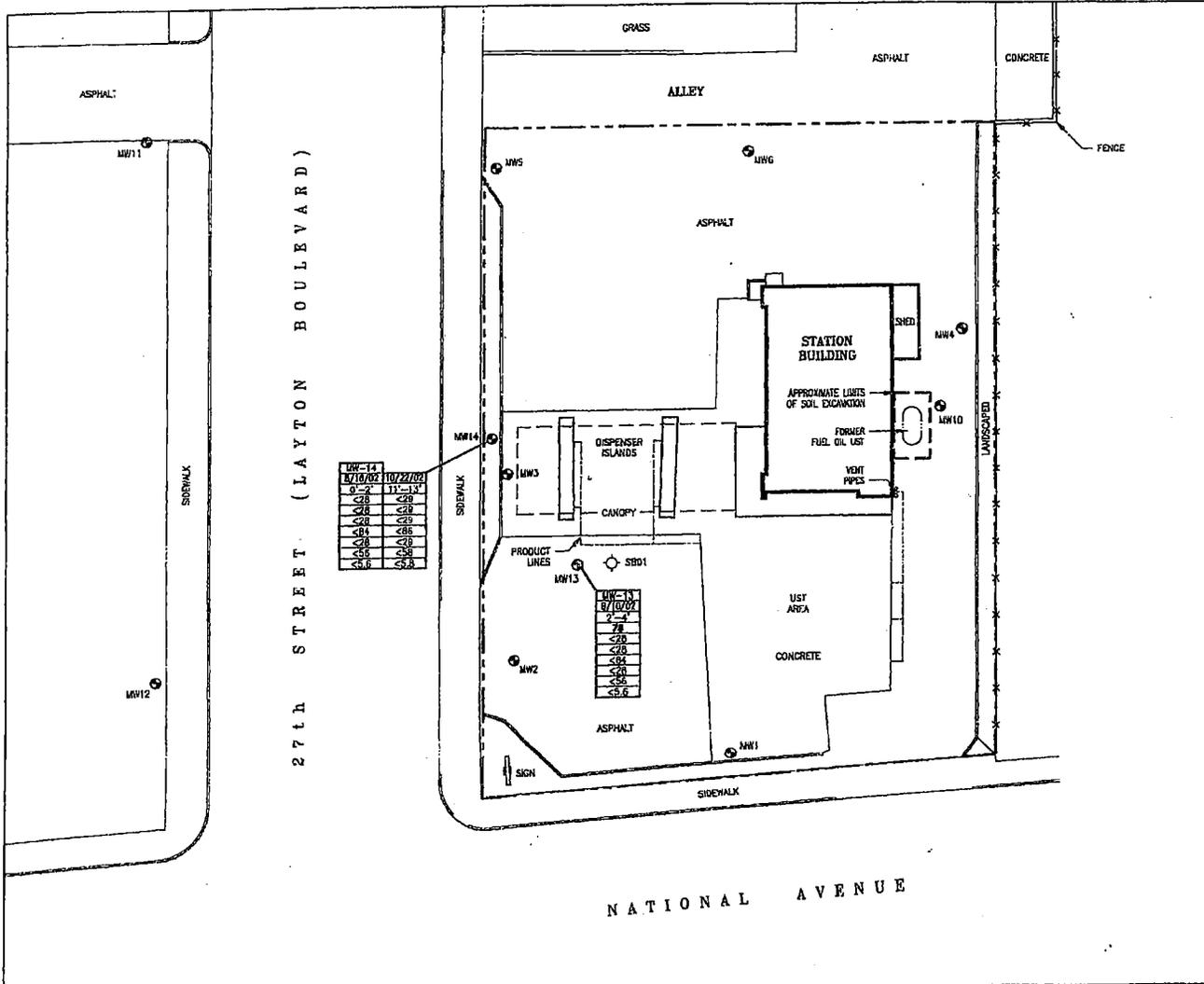
SOIL PID AND ANALYTICAL RESULTS
 REMEDIAL ACTION PLAN
 MOBIL OIL STATION 05-FB3
 812 SOUTH 27th STREET
 MILWAUKEE, WISCONSIN

Drawing Number
 15008502 B7

WARZYN

FIGURE 3

| NO. | REVISIONS | DATE | BY |
|-----|-----------|------|----|
| | | | |



| MW-14 | 8/10/02 | 10/27/02 |
|-------|---------|----------|
| 0-2' | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |

| MW-13 | 8/10/02 | 7-2' |
|-------|---------|------|
| 78 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |
| <28 | <28 | <28 |



| LEGEND | |
|--|---|
| --- | PROPERTY BOUNDARY |
| - - - | APPROXIMATE LIMITS OF SOIL EXCAVATION |
| ⊙ | MONITORING WELL LOCATION |
| ⊕ | SOIL BORING LOCATION |
| ⊗ | OBSERVATION SUMP LOCATION |
| MW-13 | SOIL BORING NUMBER |
| 8/10/02 | SOIL SAMPLING DATE |
| 7-2' | SOIL SAMPLING DEPTH (ft.) |
| 78 | BENZENE CONCENTRATION (ug/kg) |
| <28 | TOLUENE CONCENTRATION (ug/kg) |
| <28 | ETHYLBENZENE CONCENTRATION (ug/kg) |
| <28 | TOTAL XYLENES CONCENTRATION (ug/kg) |
| <28 | METHYL TERT-BUTYL ETHER CONCENTRATION (ug/kg) |
| <28 | TOTAL TRIMETHYLBENZENE CONCENTRATION (ug/kg) |
| <28 | GAUSSIAN RANGE ORGANICS CONCENTRATION (mg/kg) |
| <28 | BELOW LABORATORY REPORTING LIMIT |
| 78 | ABOVE RESIDUAL CONTAMINANT LEVELS |
| CHAPTER NR 720 WISCONSIN ADMINISTRATIVE CODE | |
| DRAWN BY: M. SMITH | FIGURE |
| CHECKED BY: - | 6 |
| SCALE: 1" = 30' | |
| DATE: 12/14/02 | |
| DRAWING FILE: 116873 | |

index
OF WISCONSIN
VICTOR ROAD
ILW, WI 53151
641-9011

EXXONMOBIL OIL CORPORATION
P.O. Box 874
Joliet, IL 60434

SOIL ANALYTICAL RESULTS MAP
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

8725A2

REVISION/PLOT DATE _____

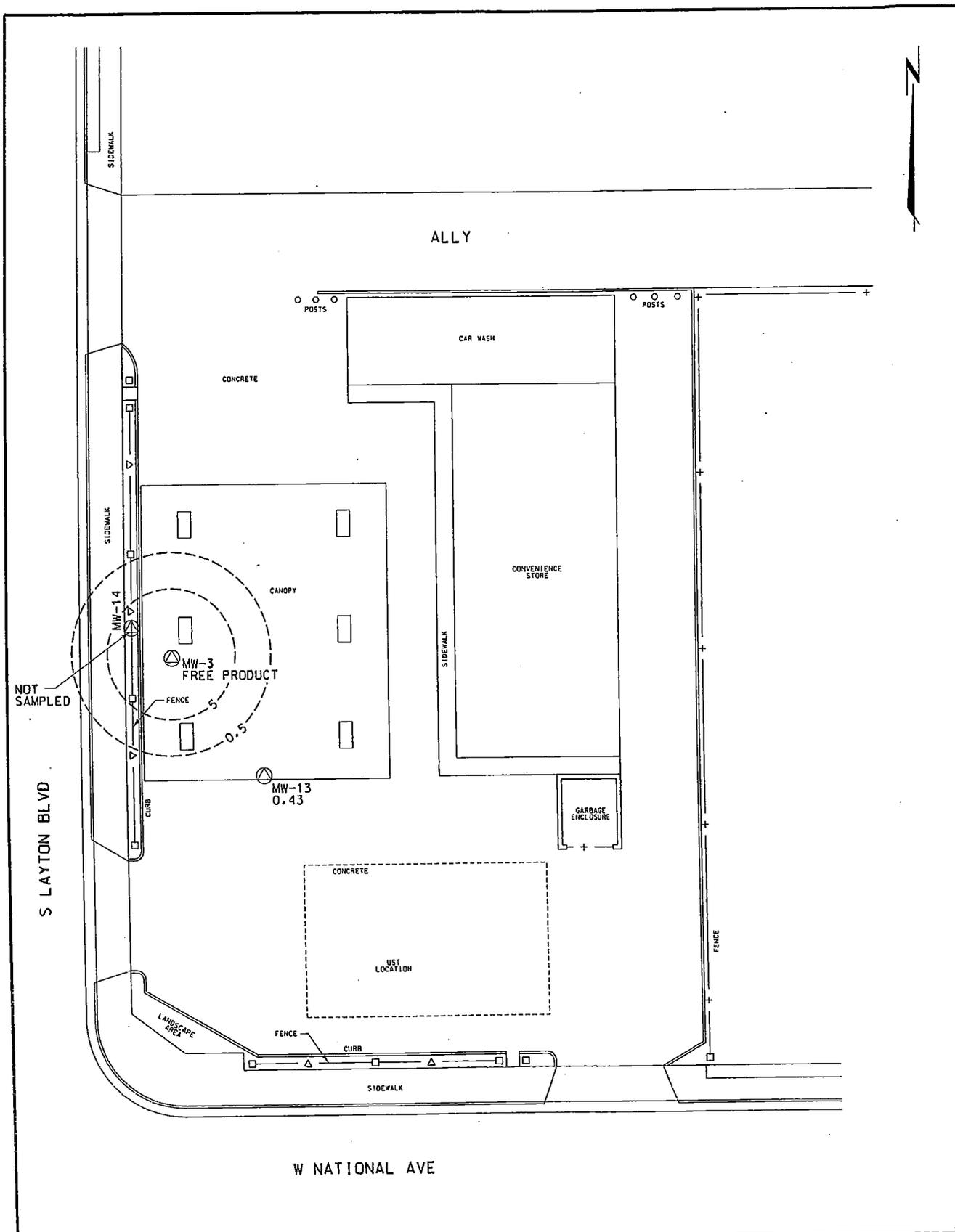


FIGURE 5 - GROUNDWATER BENZENE CONCENTRATION 9/23/02 - MOBIL 05-FB3

R11-1237-001



CRISPELL-SNYDER, INC.
PROFESSIONAL CONSULTANTS
Lake Geneva, WI 262348-5600 Racine, WI 262554-6530 Germantown, WI 262250-8000

LOCATION: 812 SOUTH LAYTON BLVD.

MILWAUKEE, WISCONSIN

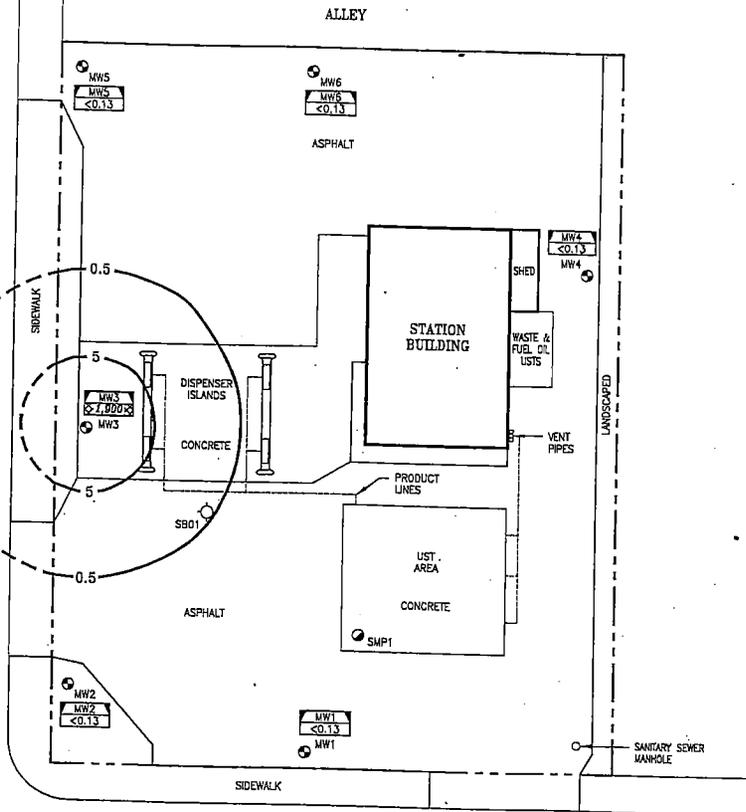
SCALE: 1"=30'

DATE: 02/01/11

DRAWN BY: B. GREISCH

| NO. | REVISIONS | DATE | BY | CHKD |
|-----|-----------|------|----|------|
| | | | | |

27th STREET (LAYTON BOULEVARD)



NATIONAL AVENUE

| LEGEND | |
|--------|--|
| | PROPERTY BOUNDARY |
| | MONITORING WELL LOCATION |
| | SOIL BORING LOCATION |
| | OBSERVATION SLUMP LOCATION |
| | BENZENE IN GROUNDWATER ISOCONCENTRATION LINE (DASHED WHERE INFERRED) |

| | |
|--------------------|--|
| | MONITORING WELL NUMBER |
| | BENZENE CONCENTRATION (µg/l) |
| 12/21/98 | GROUNDWATER SAMPLING DATE |
| <math><0.13</math> | LESS THAN LABORATORY REPORTING LIMIT |
| | EXCEEDENCE OF ENFORCEMENT STANDARDS |
| | CHAPTER NR 140.1 WISCONSIN ADMINISTRATIVE CODE |

Handex
OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(414) 641-9011

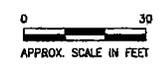
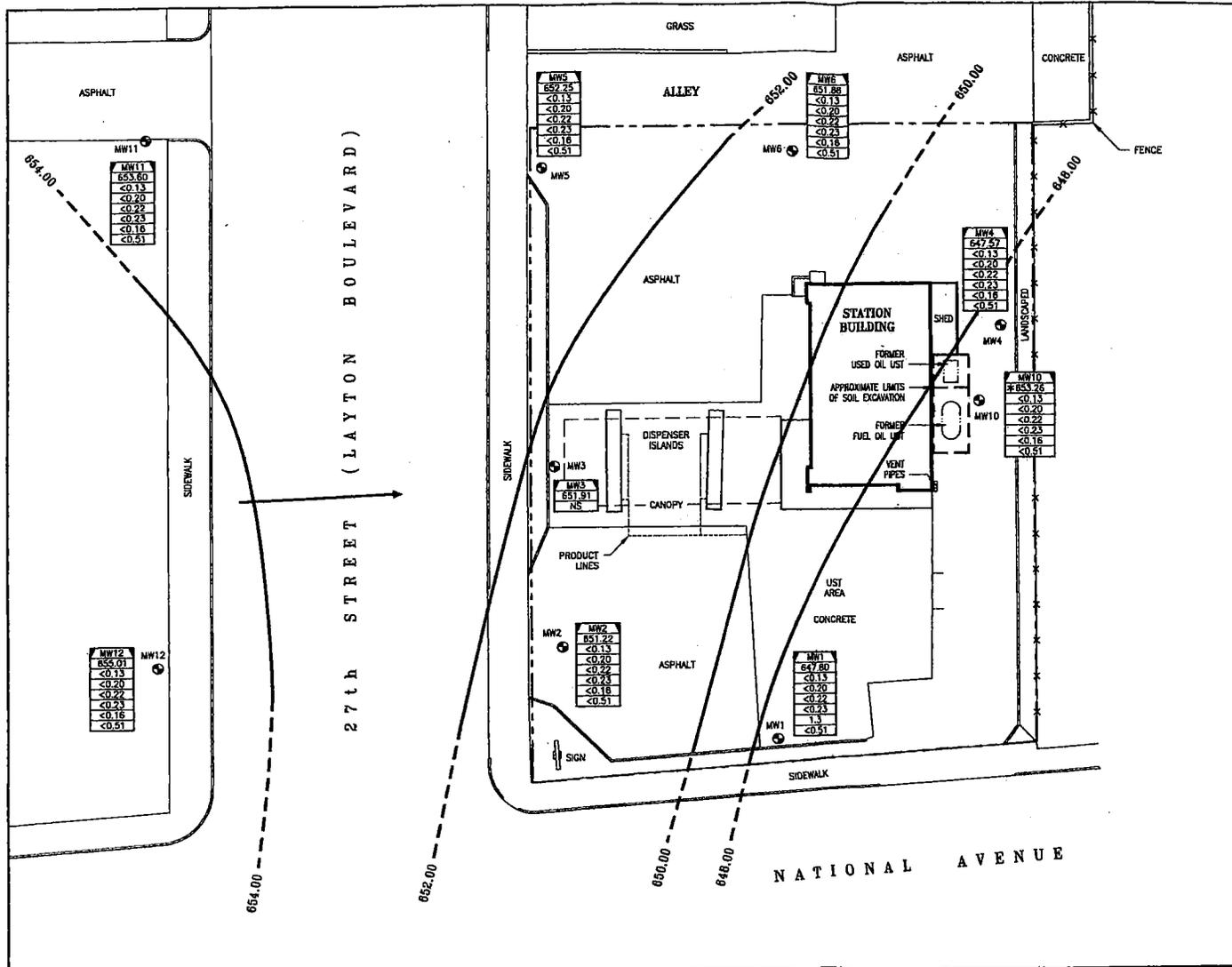
MOBIL OIL CORPORATION
Marketing & Refining Division - U.S.
Marketing Operations Department
Environmental Engineering Group
Fairfax, Virginia 22037

**BENZENE CONCENTRATION
IN GROUNDWATER MAP**
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

| | |
|---------------|----------|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | - |
| SCALE: | 1" = 30' |
| DATE: | 2/17/99 |
| DRAWING FILE: | 115873 |

FIGURE
3

| NO. | REVISIONS | DATE | BY | CHKD |
|-----|-----------|------|----|------|
| | | | | |



| LEGEND | |
|------------|---|
| | PROPERTY BOUNDARY |
| | APPROXIMATE LIMITS OF SOIL EXCAVATION |
| | MONITORING WELL LOCATION |
| | OBSERVATION SLUMP LOCATION |
| | GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 2.00 FT./DASHED WHERE INFERRD) |
| | GROUNDWATER FLOW DIRECTION |
| MW1 | MONITORING WELL NUMBER |
| 647.50 | GROUNDWATER ELEVATION (ft.) |
| <0.13 | BENZENE CONCENTRATION (ug/l) |
| <0.20 | TOLUENE CONCENTRATION (ug/l) |
| <0.22 | ETHYLBENZENE CONCENTRATION (ug/l) |
| <0.23 | TOTAL XYLENES CONCENTRATION (ug/l) |
| 1.3 | METHYL TERT BUTYL ETHER CONCENTRATION (ug/l) |
| <0.51 | TOTAL TRIMETHYLBENZENE CONCENTRATION (ug/l) |
| 11/5/01 | GROUNDWATER SAMPLING & GAUGING DATE |
| <0.13 | LESS THAN LABORATORY REPORTING LIMIT |
| NS | NOT SAMPLED |
| * | NOT USED TO GENERATE GROUNDWATER CONTOURS |

Handex
OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

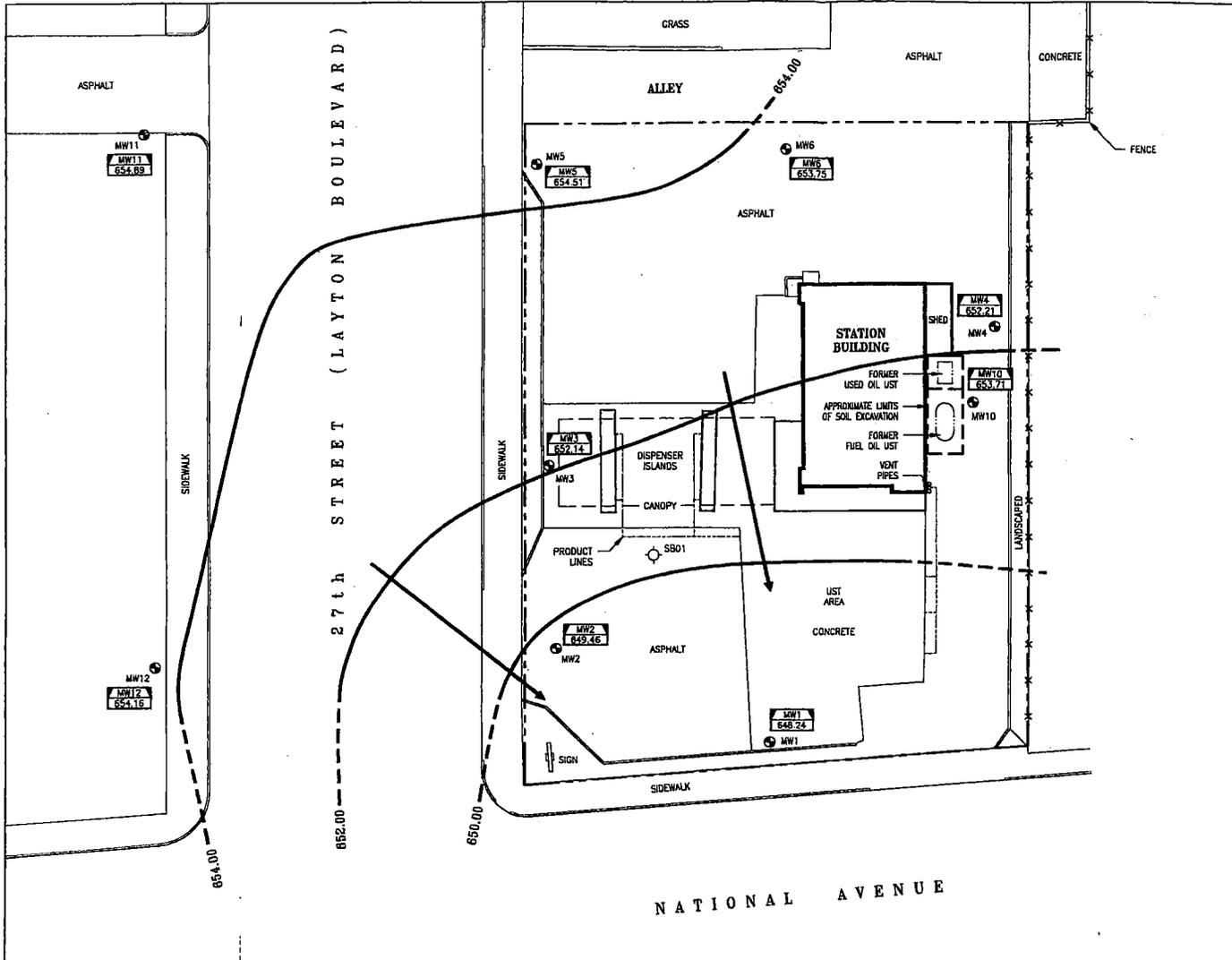
EXXON MOBIL OIL CORPORATION
Safety, Health, Environment
Exxon Mobil Environmental Remediation - U. S. Retail

GROUNDWATER ELEVATION & ANALYTICAL RESULTS MAP (11/5/01)
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

| | |
|---------------|----------|
| DRAWN BY: | M. SMITH |
| CHECKED BY: | - |
| SCALE: | 1" = 30' |
| DATE: | 2/23/02 |
| DRAWING FILE: | 116873 |

FIGURE
4

| NO. | REVISIONS | DATE | BY | CHKD |
|-----|-----------|------|----|------|
| | | | | |



| LEGEND | |
|---------------|--|
| | PROPERTY BOUNDARY |
| | APPROXIMATE LIMITS OF SOIL EXCAVATION |
| | MONITORING WELL LOCATION |
| | SOIL BORING LOCATION |
| | OBSERVATION SUMP LOCATION |
| | GROUNDWATER ELEVATION CONTOUR (CONTOUR INTERVAL = 2.00 ft./DASHED WHERE INFERRED) |
| | GROUNDWATER FLOW DIRECTION |
| | MONITORING WELL NUMBER GROUNDWATER ELEVATION (ft.) |
| | GROUNDWATER GAUGING DATE |
| DRAWN BY: | M. SMITH |
| CHECKED BY: | - |
| SCALE: | 1" = 30' |
| DATE: | 12/14/02 |
| DRAWING FILE: | 116873 |

Handex
OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

EXXONMOBIL OIL CORPORATION
P.O. Box 874
Joliet, IL 60434

GROUNDWATER ELEVATION & CONTOUR MAP
(4/4/02)
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

FIGURE
3

873CE7

**Supplemental Soil Axis
(KEC) SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS AXIS SOIL SAMPLING**

812 S. Layton Blvd.
Milwaukee, Wisconsin

| PARAMETERS | SAMPLE IDENTIFICATION: KEY | | | | NR 720 GENERIC RCLs | NR 746 | |
|---------------------------|----------------------------|-----------|-----------|------------|---------------------------|---------|---------|
| | S-1 | S-2 | S-3 | S-4 | PROTECTION OF GROUNDWATER | TABLE 1 | TABLE 2 |
| Date Collected | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 | --- | --- | --- |
| Depth (feet bgs) | 3 to 4 | 3 to 4 | 3 to 4 | 3 to 4 | --- | --- | --- |
| DRO (mg/kg) | 9.0 | 59 | 411 | 15 | 100-250 | --- | --- |
| GRO (mg/kg) | 31 | 7.784 | 11 | 248 | 100-250 | --- | --- |
| PVOCs/VOCs (µg/kg) | | | | | | | |
| Benzene | 61 | 35 | 59 | 247 | 5.5 | 8,500 | 1,100 |
| Ethylbenzene | 170 | 92 | <20 | 1240 | 2,900 | 4,600 | --- |
| Methyl tert-butyl Ether | <14 | <16 | <16 | <13 | --- | --- | --- |
| Naphthalene | --- | --- | --- | --- | --- | 2,700 | --- |
| Toluene | 116 | 94 | 30 | <20 | 1,500 | 38,000 | --- |
| 1,2,4-Trimethylbenzene | 1130 | 113 | 57 | 18300 | --- | 83,000 | --- |
| 1,3,5-Trimethylbenzene | 412 | <25 | 70 | 6250 | --- | 11,000 | --- |
| Xylenes | 1139 | 435 | 124 | 6790 | 4,100 | 42,000 | --- |

Notes:

Bold concentrations exceed NR 746 Table 1 values

Boxed concentrations exceed NR 746 Table 2 values

Underlined concentrations exceed NR 720 Generic RCLs

J - estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

--- - not analyzed or no standard established

bgs - below ground surface

mg/kg - milligrams per kilogram

µg/kg - micrograms per kilogram

PVOCs - petroleum volatile organic compounds

VOCs - volatile organic compounds

TABLE 2

Summary of Soil Analytical Results
 Mobil Oil Station 05-FB3
 812 South 27th Street
 Milwaukee, Wisconsin

Concentration, in milligrams per kilogram (mg/kg)

Hydraulic Probe Soil Samples

| Sample | Depth (ft) | Benzene | MTBE | Ethyl Benzene | Toluene | 1,2,4-TMB | 1,3,5-TMB | m&p xylenes | o-xylenes | GRO |
|--------|------------|---------|------|---------------|---------|-----------|-----------|-------------|-----------|-----|
| SS1 | 4-6 | ND | 0.44 | ND | ND | ND | ND | ND | ND | ND |
| SS2 | 2-4 | 0.15 | 0.94 | ND | ND | ND | ND | ND | ND | ND |
| SS3 | 4-6 | 14 | 14 | 6 | 19 | 14 | 4.2 | 17 | 4.2 | 220 |
| SS4 | 4-6 | 12 | 5.3 | 0.64 | 6.8 | 0.19 | ND | 1.4 | 0.52 | 11 |
| SS5 | 4-6 | 16 | 12 | 7.1 | 52 | 18 | 5.7 | 16 | 8 | 260 |
| SS6 | 4-6 | 1.6 | 1.8 | 0.78 | 0.14 | 0.78 | 0.27 | 0.56 | 0.11 | ND |
| SS7 | 2-4 | 0.69 | 1.6 | 0.29 | 1.4 | 0.27 | 0.92 | 0.54 | 0.23 | ND |
| SS8 | 4-6 | ND | 0.28 | ND | ND | ND | ND | ND | ND | ND |
| SS9 | 2-4 | 4.2 | 1.2 | 0.92 | ND | 0.16 | ND | 0.24 | ND | ND |

Soil Boring and Monitoring Well Soil Samples

| Sample | Depth (ft) | Benzene | MTBE | Ethyl Benzene | Toluene | 1,2,4-TMB | 1,3,5-TMB | m&p xylenes | o-xylenes | GRO |
|--------|------------|---------|------|---------------|---------|-----------|-----------|-------------|-----------|------|
| SB01 | 5-7 | 1.6 | ND | ND | 1.0 | ND | ND | ND | ND | 13.3 |
| SB01 | 15-17 | ND | ND | ND | 0.0397 | ND | ND | ND | ND | ND |
| MW1 | 9-11 | --- | --- | --- | --- | --- | --- | --- | --- | 83.1 |
| MW2 | 7-9 | --- | --- | --- | --- | --- | --- | --- | --- | ND |
| MW3 | 1-3 | --- | --- | --- | --- | --- | --- | --- | --- | 86.2 |
| MW4 | 15-17 | --- | --- | --- | --- | --- | --- | --- | --- | 10.2 |
| MW5 | 9-11 | --- | --- | --- | --- | --- | --- | --- | --- | ND |
| MW6 | 7-9 | --- | --- | --- | --- | --- | --- | --- | --- | ND |

NOTES:

--- = Not Analyzed

ND = Not Detected

MTBE = Methyl tert butylether

1,2,4-TMB = 1,2,4-Trimethylbenzene

1,3,5-TMB = 1,3,5-Trimethylbenzene

GRO = Gasoline Range Organic Compounds

LJW/erw/DRL

[mil-402-60]

15008501/50159

TABLE 1

**Soil PID Screening Results
Mobil Oil Station 05-FB3
812 South 27th Street
Milwaukee, Wisconsin**

Concentrations in parts per million benzene equivalents

Hydraulic Probe Soil Samples

| <u>Depth Interval (ft)</u> | <u>SS1</u> | <u>SS2</u> | <u>SS3</u> | <u>SS4</u> | <u>SS5</u> | <u>SS6</u> | <u>SS7</u> | <u>SS8</u> | <u>SS9</u> |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 2-3 | 4 | 12 | 5 | ND | 5 | 3 | 5 | 4 | 14 |
| 3-4 | 4 | 10 | 8 | ND | 6 | 2 | 4 | 2 | 10 |
| 4-5 | 13 | 10 | 8 | 4 | 80 | 8 | 3 | 6 | 5 |
| 5-6 | 10 | 12 | 40 | 4 | 100 | 8 | 4 | 6 | 6 |

Soil Boring and Monitoring Well Soil Samples

| <u>Depth Interval (ft)</u> | <u>SB01</u> | <u>MW1</u> | <u>MW2</u> | <u>MW3</u> | <u>MW4</u> | <u>MW5</u> | <u>MW6</u> |
|--------------------------------|-------------|------------|------------|------------|------------|------------|------------|
| 1-2 | ND | <1 | 35 | 5 | ND | ND | ND |
| 2-3 | ND | 2 | 35 | 10 | ND | ND | ND |
| 3-4 | ND | ND | 30 | 2 | ND | ND | ND |
| 4-5 | ND | 1 | 50 | 5 | ND | ND | ND |
| 5-6 | 40 | 15 | 50 | 3 | ND | ND | ND |
| 6-7 | 40 | 10 | 40 | 2 | ND | ND | ND |
| 7-8 | 3 | 40 | 45 | ND | ND | ND | ND |
| 8-9 | 4 | 30 | 50 | ND | ND | ND | ND |
| 9-10 | 18 | 5 | 50 | 1 | ND | ND | ND |
| 10-11 | 4 | 60 | 50 | 5 | ND | ND | ND |
| 11-12 | 50 | 6 | 55 | 8 | ND | ND | ND |
| 12-13 | 50 | 2 | 50 | 1 | ND | ND | ND |
| 13-14 | 40 | 20 | 40 | ND | ND | ND | ND |
| 14-15 | 40 | 10 | 50 | ND | ND | ND | ND |
| 15-16 | ND | ND | 50 | ND | ND | ND | ND |
| 16-17 | ND | ND | 50 | ND | ND | ND | ND |
| 17-18 | -- | -- | 45 | -- | ND | -- | -- |
| 18-19 | -- | -- | 45 | -- | ND | -- | -- |
| 19-20 | -- | -- | 45 | -- | ND | -- | -- |
| 20-21 | -- | -- | 45 | -- | ND | -- | -- |

NOTES:

ND = Not detected

-- = Interval not sampled

LJW/erw/DRL
[mil-402-61]
15008501/50159

TABLE 3
SOIL ANALYTICAL RESULTS FOR OFFSITE INVESTIGATION
MOBIL SERVICE STATION 05-FB3
812 S. Layton Blvd.
Milwaukee, Wisconsin

| Soil Sample | Date | Depth | Total Solids | Ehylbenz | | | | Total TMB | Total Xylenes | GRO | DRO | PID |
|--|----------|-------|--------------|------------|-------------|-------------|------------|------------|---------------|------------|------------|------------|
| | | | | Benzene | ene | Toluene | MTBE | | | | | |
| MW-10 | 09/22/99 | 2-3 | 87.80% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| | | 7-9 | 89.10% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| MW-11 | 09/22/99 | 2-3 | 88.50% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| | | 11-13 | 9.10% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| MW-12 | 09/22/99 | 2-3 | 88.90% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| | | 13-15 | 90.10% | <25 | <25 | <25 | <25 | <50 | <50 | <10 | ---- | ---- |
| Residual Contaminant Levels | | | | 5:5 | 2900 | 1500 | N/A | N/A | 4100 | 100 | 100 | N/A |
| Notes: | | | | | | | | | | | | |
| 1) EW = East Wall; WW = West Wall; NF = North Floor; SF = South Floor; SW = South Wall | | | | | | | | | | | | |
| 2) Sample number DSP-1 had late eluting hydrocarbons present. | | | | | | | | | | | | |
| 3) Depth recorded in feet. | | | | | | | | | | | | |
| 4) GRO = Gasoline Range Organics. | | | | | | | | | | | | |
| 5) PID = Photoionization Detection | | | | | | | | | | | | |

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TABLE 3

2002 SOIL LABORATORY ANALYTICAL RESULTS

**MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN**

| Sample | Date | Depth | Benzene | Toluene | Ethyl-benzene | Total Xylenes | Total TMB | MTBE | GRO | PID |
|---|----------|-------|------------|------------|---------------|---------------|-------------|------------|------------|------------|
| MW-13 | 8/16/02 | 2-4 | 78 | <28 | <28 | <84 | <56 | <28 | <5.6 | 25.9 |
| MW-14 | 8/16/02 | 0-2 | <28 | <28 | <28 | <84 | <56 | <28 | <5.6 | 25.8 |
| | 10/22/02 | 11-13 | <29 | <29 | <29 | <86 | <58 | <29 | <5.8 | 0 |
| NR 720 Standards | | | RCL | 5.5 | 1500 | 2900 | 4100 | N/A | N/A | N/A |
| Notes: | | | | | | | | | | |
| 1 Depth recorded in feet. | | | | | | | | | | |
| 2 Analytical data recorded in ppb. | | | | | | | | | | |
| 3 TMB = Trimethylbenzene | | | | | | | | | | |
| 4 PID = Photoionization Detector, recorded in ppm. | | | | | | | | | | |
| 5 GRO = Gasoline range organics | | | | | | | | | | |
| 6 RCL = Residual Contaminant Level | | | | | | | | | | |
| 7 MTBE = Methyl tert butyl ether | | | | | | | | | | |
| 8 Data in tables were obtained from a table found in Warzyn's <i>Interim Site Investigation Report 1994</i> . Analytical laboratory results for all SS# borings were not included in this report. | | | | | | | | | | |

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| Well Number | Sample Date | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | Total trimethyl-benzene |
|--|----------------|---------|---------|---------------|---------------|-------|-------------------------|
| MW-1 | 05/24/93 | 6.0 | 14.0 | 2.0 | 11.0 | <0.20 | 2.0 |
| | 08/14/97 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.30 |
| | 08/14/97 Dup | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.30 |
| | 09/29/98 | <0.13 | 0.37 | 0.24 | 1.2 | <0.16 | 0.67 |
| | 11/09/98 | <0.13 | <0.20 | 0.24 | 1.0 | <1.8 | 0.9 |
| | 12/21/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/11/99 | <0.41 | <0.38 | <0.43 | <1.4 | <0.41 | <1.0 |
| | 04/22/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 07/07/99 | 33.0 | 5.7 | 0.35 | 2.4 | 2.7 | <0.51 |
| | 10/06/99 | 79.0 | 1.2 | 4.60 | 10.0 | 6.6 | 0.9 |
| | 02/16/00 | 0.5 | <0.20 | <0.22 | 0.46 | 4.1 | <0.77 |
| | 04/24/00 | 0.6 | <0.20 | 0.40 | 0.98 | 1.3 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | 0.25 | 7.9 | 0.42 |
| | 12/18/00 | <0.13 | 0.26 | <0.22 | 0.86 | 8.3 | 1.70 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | 2.4 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | 0.47 | 0.93 | 0.43 |
| | 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | 0.93 | <0.51 |
| | 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | 1.3 | <0.51 |
| | 04/04/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.44 | 0.27 |
| 09/23/02 | 0.17 | <0.20 | <0.22 | <0.23 | 1.3 | <0.51 | |
| MW-2 | 05/24/93 | <0.20 | 4.5 | <0.30 | <0.90 | <0.16 | <0.60 |
| | 08/14/97 | <0.20 | <0.20 | <0.30 | <0.90 | 0.40 | <0.60 |
| | 09/29/98 | 0.22 | 0.28 | <0.22 | 0.63 | <1.3 | 0.24 |
| | 11/09/98 | <0.13 | <0.20 | 0.22 | 1.0 | <1.5 | 1.3 |
| | 12/21/98 | <0.13 | <0.20 | <0.22 | <0.23 | <2.0 | <0.51 |
| | 02/11/99 | <0.41 | <0.38 | <0.43 | <1.4 | 0.54 | <1.0 |
| | 04/22/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 07/07/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.96 | <0.51 |
| | 07/07/1999 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.80 | <0.51 |
| | 10/06/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.24 | <0.51 |
| | 02/16/00 | <0.13 | <0.20 | <0.22 | <0.23 | 0.49 | <0.51 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | 0.75 | <0.51 |
| | 12/18/00 | <0.13 | 0.58 | 0.55 | 3.2 | 0.79 | 3.89 |
| | 03/13/01 | <0.13 | 0.40 | 0.33 | 2.2 | <0.16 | 3.38 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | 0.69 | <0.51 |
| | 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.24 | <0.51 |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 04/04/02 | <0.13 | <0.20 | <0.22 | 0.51 | <0.48 | 0.63 | |
| 09/23/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| NR 140 Standards | | | | | | | |
| ES | | 5.0 | 1000 | 700 | 10000 | 60 | 480 |
| PAL | | 0.5 | 200 | 140 | 1000 | 12 | 96 |
| Notes: | | | | | | | |
| 1) MTBE= Methyl tert butly ether | | | | | | | |
| 2) ES = Enforcement Standard, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 3) PAL = Preventive Action Limit, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 4) LPH = Liquid Phase Hydrocarbons | | | | | | | |
| 5) Results reported in ug/L. | | | | | | | |

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| Well Number | Sample Date | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | Total trimethyl-benzene | |
|--|--------------------------------|--------------------------------|---------|---------------|---------------|-------|-------------------------|--|
| MW-3 | 05/24/93 | 1,960.0 | 728.0 | 438.0 | 2,941 | 608.0 | 1,022.0 | |
| | 08/14/97 | 1,800 | 80 | 1,600 | 5,600 | 200 | 2,800 | |
| | 09/29/98 | 1,900 | 74 | 1,500 | 4,000 | 330 | 3,230 | |
| | 09/29/98 Dup | 2,000 | 72 | 1,500 | 4,100 | 340 | 3,240 | |
| | 11/09/98 | 2,100 | 160 | 2,600 | 9,400 | 230 | 7,000 | |
| | 11/9/98 Dup | 2,000 | 100 | 2,000 | 6,400 | 250 | 5,500 | |
| | 12/21/98 | 1,900 | 89 | 1,700 | 5,000 | 270 | 3,790 | |
| | 02/11/99 | 12,000 | 21,000 | <4300 | 15,000 | <4100 | 11,100 | |
| | 02/11/99 Dup | 11,000 | 31,000 | 12,000 | 54,000 | <4100 | 54,000 | |
| | 04/22/99 | 13,000 | 27,000 | 3,900 | 21,000 | <32 | 6,000 | |
| | 04/22/19 Dup | 12,000 | 26,000 | 3,700 | 20,000 | <32 | 5,700 | |
| | 07/07/99 | Not sampled due to LPH in well | | | | | | |
| | 10/06/99 | Not sampled due to LPH in well | | | | | | |
| | 02/18/00 | 18,000 | 32,000 | 11,000 | 63,000 | <80 | 133,000 | |
| | 12/18/00 | Not sampled due to LPH in well | | | | | | |
| | 03/13/01 | Not sampled due to LPH in well | | | | | | |
| | 06/13/01 | Not sampled due to LPH in well | | | | | | |
| | 09/12/01 | Not sampled due to LPH in well | | | | | | |
| | 11/15/01 | Not sampled due to LPH in well | | | | | | |
| | 04/04/02 | Not sampled due to LPH in well | | | | | | |
| 09/23/02 | Not sampled due to LPH in well | | | | | | | |
| MW-4 | 05/24/93 | <0.20 | <0.20 | <0.30 | <0.60 | <0.20 | <0.60 | |
| | 08/14/97 | <0.20 | <0.20 | <0.30 | <0.60 | <0.20 | <0.60 | |
| | 09/29/98 | <0.13 | 0.23 | <0.22 | 0.29 | <0.16 | <0.51 | |
| | 11/09/98 | <0.13 | <0.20 | 0.8 | 3.2 | <0.16 | 3.1 | |
| | 12/21/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| | 02/11/98 | <0.41 | <0.38 | <0.43 | <1.4 | <0.41 | <1.0 | |
| | 04/22/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| | 07/07/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| | 10/06/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| | 02/16/00 | <0.13 | 0.40 | 0.23 | 1.4 | <0.16 | <1.39 | |
| | 04/24/00 | <0.13 | 0.34 | <0.22 | 0.5 | <0.16 | <0.51 | |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | 0.28 | <0.16 | <0.51 | |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | | |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | | |
| NR 140 Standards | | | | | | | | |
| ES | | 5.0 | 1000 | 700 | 10000 | 60 | 480 | |
| PAL | | 0.5 | 200 | 140 | 1000 | 12 | 96 | |
| Notes: | | | | | | | | |
| 1) MTBE= Methyl tert butly ether | | | | | | | | |
| 2) ES = Enforcement Standard, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | | |
| 3) PAL = Preventive Action Limit, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | | |
| 4) LPH = Liquid Phase Hydrocarbons | | | | | | | | |
| 5) Results reported in ug/L. | | | | | | | | |

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| Well Number | Sample Date | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | Total trimethyl-benzene |
|--|-------------|---------|---------|---------------|---------------|-------|-------------------------|
| MW-5 | 05/24/93 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 08/14/97 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 09/29/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 11/09/98 | <0.13 | 0.22 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 12/21/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/11/99 | <0.41 | <0.38 | <0.43 | <1.4 | <0.41 | <1.0 |
| | 04/22/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 07/07/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/06/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/16/00 | <0.13 | <0.20 | <0.22 | 0.90 | <0.16 | <1.17 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | 0.28 | <0.22 | 0.59 | <0.16 | 0.36 |
| | 12/18/00 | <0.13 | 0.22 | <0.22 | 0.33 | <0.16 | <0.51 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| MW-6 | 05/24/93 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 08/14/97 | <0.20 | <0.20 | <0.30 | <0.90 | <0.20 | <0.60 |
| | 09/29/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 11/09/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 12/21/98 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/11/99 | <0.41 | <0.38 | <0.43 | <1.4 | <0.41 | <1.0 |
| | 04/22/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 07/07/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 10/06/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/16/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | 0.47 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 12/18/00 | <0.13 | 0.21 | <0.22 | 0.34 | <0.16 | <0.51 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | 0.2 | <0.51 |
| 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 04/04/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 09/23/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| NR 140 Standards | | | | | | | |
| ES | | 5.0 | 1000 | 700 | 10000 | 60 | 480 |
| PAL | | 0.5 | 200 | 140 | 1000 | 12 | 96 |
| Notes: | | | | | | | |
| 1) MTBE= Methyl tert butly ether | | | | | | | |
| 2) ES = Enforcement Standard, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 3) PAL = Preventive Action Limit, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 4) LPH = Liquid Phase Hydrocarbons | | | | | | | |
| 5) Results reported in ug/L. | | | | | | | |

TABLE 2

GROUNDWATER LABORATORY ANALYTICAL RESULTS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| Well Number | Sample Date | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE | Total trimethylbenzene |
|--|--------------|---------|---------|---------------|---------------|-------|------------------------|
| MW-10 | 10/06/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/16/00 | <0.13 | 0.58 | 0.50 | 3.2 | <0.16 | 4.66 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 12/18/00 | <0.13 | 0.23 | <0.22 | 0.87 | <0.16 | 0.77 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/12/01 | <0.13 | 0.41 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/04/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/04/02 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/23/02 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/23/02 Dup | 0.91 | 0.90 | 0.31 | 1.9 | <0.16 | 0.49 |
| MW-11 | 10/06/99 | --- | --- | --- | --- | --- | --- |
| | 12/03/99 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/16/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| MW-12 | 10/06/99 | 0.5 | 4.2 | 2.4 | 15.0 | <0.16 | 11.3 |
| | 10/6/99 Dup | 0.5 | 4.1 | 2.4 | 14.0 | <0.16 | 11.3 |
| | 02/16/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 02/16/00 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/24/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 04/24/00 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/26/00 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 12/18/00 | <0.13 | 0.82 | 0.57 | 3.4 | <0.16 | 2.85 |
| | 12/18/00 Dup | <0.13 | 0.54 | 0.37 | 2.1 | <0.16 | 1.82 |
| | 03/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 03/13/01 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 06/13/01 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| | 09/12/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 |
| 9/12/01 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 11/15/01 | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| 11/15/01 Dup | <0.13 | <0.20 | <0.22 | <0.23 | <0.16 | <0.51 | |
| MW-13 | 09/23/02 | 0.43 | <0.20 | <0.22 | <0.23 | 3.8 | <0.51 |
| NR 140 Standards | | | | | | | |
| ES | | 5.0 | 1000 | 700 | 10000 | 60 | 480 |
| PAL | | 0.5 | 200 | 140 | 1000 | 12 | 96 |
| Notes: | | | | | | | |
| 1) MTBE= Methyl tert butly ether | | | | | | | |
| 2) ES = Enforcement Standard, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 3) PAL = Preventive Action Limit, Chapter NR 140.1, Wisconsin Administrative Code. | | | | | | | |
| 4) LPH = Liquid Phase Hydrocarbons | | | | | | | |
| 5) Results reported in ug/L. | | | | | | | |

* MW-14 10/15/10 2.41 2.67 2.54 2.83 3.2 2.97

* results added by WDNR 3/7/11

TABLE 1

GROUNDWATER ELEVATIONS AND NATURAL ATTENUATION PARAMETERS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| WELL NUMBER | DATE | TOC ELEVATIONS | TOTAL DEPTH | DEPTH TO GROUNDWATER | DEPTH TO PRODUCT | PRODUCT THICKNESS | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMP (°C) | pH | DISSOLVED OXYGEN (mg/L) | RED/OX POTENTIAL (Mv) | NITRATE (mg/L) | SULFATE (mg/L) | DISSOLVED MANGANESE (ug/L) | ALKALINITY (mg/L) | DISSOLVED IRON (mg/L) | TOTAL IRON (ppm) |
|-------------|------------|----------------|-------------|----------------------|------------------|-------------------|-----------------------|-----------------------------------|-----------|------|-------------------------|-----------------------|----------------|----------------|----------------------------|-------------------|-----------------------|------------------|
| MW-1 | 08/14/97 | 659.19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | <0.14 | 107 | 787 | 359 | 3.10 | --- |
| | 09/29/98 | --- | 19.68 | 7.31 | --- | --- | 651.88 | 4,100 | 17.83 | 7.15 | 1.76 | 565 | <0.055 | 130 | 0.45 | 350 | 0.75 | 3.00 |
| | 11/09/98 | --- | 19.60 | 6.60 | --- | --- | 652.69 | 8,600 | 11.82 | 7.76 | 0.33 | 86 | <0.055 | 170 | 0.47 | 430 | 0.42 | 2.00 |
| | 12/21/98 | --- | 19.60 | 11.70 | --- | --- | 647.49 | --- | --- | --- | --- | --- | <0.055 | 200 | 0.57 | 380 | 0.96 | 1.50 |
| | 02/11/99 | --- | 19.62 | 13.47 | --- | --- | 645.72 | --- | --- | --- | --- | --- | 0.23 | 260 | 0.58 | 350 | 0.84 | 1.70 |
| | 04/22/99 | --- | 19.61 | 8.87 | --- | --- | 650.32 | 2,760 | 11.00 | 6.83 | 0.45 | 223 | 0.34 | 220 | 0.49 | 360 | 0.10 | 1.60 |
| | 07/07/1999 | --- | 19.80 | 4.99 | --- | --- | 654.20 | 4,387 | 15.21 | 6.97 | 1.15 | 199 | <0.055 | 200 | 0.43 | 420 | 0.25 | 2.10 |
| | 10/06/99 | --- | 19.60 | 5.20 | --- | --- | 653.99 | 2,440 | 18.20 | 6.72 | 0.62 | --- | <0.055 | 79 | 0.42 | 570 | 0.31 | 1.10 |
| | 02/16/00 | --- | 19.55 | 8.82 | --- | --- | 650.37 | 5,570 | 7.60 | 6.80 | --- | --- | <0.28 | 71 | 0.94 | 530 | 0.50 | 2.30 |
| | 04/24/00 | --- | 19.62 | 5.23 | --- | --- | 653.98 | 3,830 | 11.80 | 6.79 | 2.43 | --- | <0.20 | 160 | 1.10 | 480 | 0.74 | 0.76 |
| | 09/26/00 | --- | 19.67 | 4.22 | --- | --- | 654.97 | 2,180 | 21.70 | 7.96 | 1.41 | --- | <0.024 | 140 | 1.20 | 570 | 0.37 | 1.70 |
| | 12/18/00 | --- | 19.62 | 7.68 | --- | --- | 651.51 | 1,860 | 6.60 | 6.88 | 2.89 | --- | <0.50 | 110 | 0.76 | 530 | 0.10 | 1.00 |
| | 03/13/01 | --- | 19.62 | 9.14 | --- | --- | 650.05 | 2,340 | 11.60 | 6.37 | 0.54 | --- | <0.50 | 21 | 0.93 | 380 | 0.14 | 0.79 |
| | 06/13/01 | --- | 19.60 | 6.24 | --- | --- | 652.95 | 119 | 13.50 | 6.99 | 0.91 | --- | <10 | 470 | 0.76 | 270 | 0.66 | 1.30 |
| | 09/12/01 | --- | 19.78 | 8.38 | --- | --- | 650.81 | 868 | 19.10 | 7.05 | 0.39 | --- | <0.50 | 180 | 0.54 | 470 | 0.67 | 1.40 |
| | 11/15/01 | --- | 19.62 | 11.39 | --- | --- | 647.80 | 3,890 | 16.20 | 6.67 | 2.73 | --- | <5.0 | 180 | 0.57 | 420 | 0.78 | 2.70 |
| | 04/04/02 | --- | 19.58 | 10.95 | --- | --- | 648.24 | 2,160 | 12.20 | 6.68 | --- | --- | --- | --- | --- | --- | --- | --- |
| 09/23/02 | --- | 19.62 | 8.18 | --- | --- | 651.01 | 2,240 | 18.00 | 6.49 | 0.75 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | 08/14/97 | 659.49 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | <0.14 | 391 | 2870 | 154 | 127 | --- |
| | 09/29/98 | --- | 14.28 | 8.61 | --- | --- | 650.88 | 2,890 | 17.70 | 7.77 | 2.10 | 554 | <0.055 | 770 | 0.80 | 130 | 0.18 | 5.90 |
| | 11/09/98 | --- | 19.30 | 9.60 | --- | --- | 649.89 | 10,090 | 12.54 | 7.76 | 0.26 | 86 | --- | --- | --- | --- | --- | --- |
| | 12/21/98 | --- | 19.30 | 9.20 | --- | --- | 650.29 | --- | --- | --- | --- | --- | 0.074 | 460 | 0.77 | 130 | 0.19 | 17 |
| | 02/11/99 | --- | 19.30 | 10.12 | --- | --- | 649.37 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/22/99 | --- | 19.32 | 8.55 | --- | --- | 650.94 | 3,330 | 11.30 | 6.90 | 0.67 | 168 | --- | --- | --- | --- | --- | --- |
| | 07/07/99 | --- | 19.25 | 8.20 | --- | --- | 651.29 | 4,548 | 14.47 | 7.00 | 0.43 | 221 | --- | --- | --- | --- | --- | --- |
| | 10/06/99 | --- | 19.31 | 8.26 | --- | --- | 651.23 | 2,870 | 17.50 | 6.70 | 0.69 | --- | --- | --- | --- | --- | --- | --- |
| | 02/16/00 | --- | 19.28 | 9.54 | --- | --- | 649.95 | 6,260 | 6.40 | 6.68 | --- | --- | <0.55 | 400 | 0.51 | 110 | 0.13 | 5.30 |
| | 04/24/00 | --- | 19.31 | 7.94 | --- | --- | 651.55 | 3,370 | 11.70 | 6.02 | 3.33 | --- | <0.20 | 530 | 0.63 | 130 | 0.29 | 7.70 |
| | 09/26/00 | --- | 19.67 | 8.46 | --- | --- | 653.15 | 1,910 | 18.70 | 8.08 | 2.25 | --- | --- | --- | --- | --- | --- | --- |
| | 12/18/00 | --- | 19.31 | 10.14 | --- | --- | 649.35 | 1,650 | --- | 7.36 | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/13/01 | --- | 19.25 | 8.82 | --- | --- | 650.67 | 1,391 | 11.00 | 5.50 | 0.51 | --- | --- | --- | --- | --- | --- | --- |
| | 06/13/01 | --- | 19.26 | 8.40 | --- | --- | 651.09 | 840 | 12.80 | 6.79 | 0.72 | --- | --- | --- | --- | --- | --- | --- |
| | 09/12/01 | --- | 19.31 | 8.57 | --- | --- | 650.92 | 1,884 | 19.20 | 6.14 | 0.25 | --- | --- | --- | --- | --- | --- | --- |
| | 11/15/01 | --- | 19.31 | 8.27 | --- | --- | 651.22 | 4,330 | 17.80 | 6.22 | 0.64 | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/02 | --- | 19.35 | 10.03 | --- | --- | 649.46 | 1,510 | --- | 6.25 | --- | --- | --- | --- | --- | --- | --- | --- |
| 09/23/02 | --- | 19.31 | 9.15 | --- | --- | 650.34 | 1,470 | 16.80 | 6.18 | 1.88 | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-3 | 08/14/97 | 659.53 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | <0.14 | <1.00 | 1600 | 381 | 27.10 | --- |
| | 09/29/98 | --- | 17.80 | 7.34 | --- | --- | 652.19 | 5,650 | 17.82 | 6.82 | 2.95 | 528 | 0.74 | 17 | 0.98 | 310 | 13.00 | 16.00 |
| | 11/09/98 | --- | --- | 7.90 | --- | --- | 651.63 | 12,820 | 12.21 | 7.15 | 0.22 | 115 | 0.53 | 16 | 0.98 | 300 | 9.30 | 11.00 |
| | 12/21/98 | --- | --- | 8.70 | --- | --- | 650.83 | --- | --- | --- | --- | --- | 0.72 | 15 | 1.10 | 330 | 12.00 | 19.00 |
| | 02/11/98 | --- | --- | 7.35 | 7.33 | 0.02 | 652.18 | --- | --- | --- | --- | --- | 0.78 | 18 | 0.92 | 310 | 0.15 | 5.60 |
| | 04/22/99 | --- | --- | 6.43 | --- | --- | 653.10 | 4,730 | 10.30 | 6.68 | 0.41 | 44 | 0.53 | 15 | 1.60 | 350 | 6.70 | 11.00 |
| | 10/06/99 | --- | --- | 7.78 | 7.08 | 0.70 | 651.75 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 02/16/00 | --- | --- | 8.64 | 8.51 | 0.13 | 650.89 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/24/00 | --- | --- | 5.23 | --- | --- | 654.30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/26/00 | --- | --- | 6.87 | 6.60 | 0.27 | 652.86 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 12/18/00 | --- | --- | 8.50 | 7.97 | 0.53 | 651.43 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 03/13/01 | --- | --- | 5.67 | 5.65 | 0.02 | 653.87 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 06/13/01 | --- | --- | 4.88 | 4.87 | 0.01 | 654.66 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/12/01 | --- | --- | 7.53 | 7.30 | 0.23 | 652.01 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 11/15/01 | --- | --- | 7.63 | 6.94 | 0.69 | 651.91 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 04/04/02 | --- | --- | 7.40 | 7.30 | 0.10 | 652.14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | 09/23/02 | --- | --- | 6.92 | 6.68 | 0.24 | 652.62 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

NOTES:

- 1) C = Celsius
- 2) TOC = Top of casing
- 3) --- not analyzed
- 4) Depth to water measured from Top of Casing
- 5) pH measured with a Beckman pH Meter field calibrated to a pH of 4.00 and 7.00. The meter was used to measure temperature.
- 6) Conductivity measured with a YSI Conductivity Meter field calibrated to 1,000 and 10,000 mhos/cm. The measurement was then corrected for temperature.
- 7) Dissolved Oxygen measured with an Oxyguard In-Situ Dissolved Oxygen Meter field calibrated to air-saturated water. The meter corrects for temperature and barometric pressure.
- 8) Oxidation/Reduction potential measure with Beckman, Red/OX Meter field calibrated to +/- 10 mV with quinhydrone dissolved in pH of 4 and 7 buffer solutions.
- 9) Soluble Iron is measured with a CHEMetrics colorimetric analysis kit for total and soluble Iron.
- 10) * = Well under pressure. The recorded groundwater elevation may not be an accurate representation of the groundwater elevation.

TABLE 1

GROUNDWATER ELEVATIONS AND NATURAL ATTENUATION PARAMETERS

MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| WELL NUMBER | DATE | TOC ELEVATIONS | TOTAL DEPTH | DEPTH TO GROUNDWATER | DEPTH TO PRODUCT | PRODUCT THICKNESS | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMP (°C) | pH | DISSOLVED OXYGEN (mg/L) | RED/OX POTENTIAL (Mv) | NITRATE (mg/L) | SULFATE (mg/L) | DISSOLVED MANGANESE (ug/L) | ALKALINITY (mg/L) | DISSOLVED IRON (mg/L) | TOTAL IRON (ppm) |
|-------------|------------|----------------|-------------|----------------------|------------------|-------------------|-----------------------|-----------------------------------|-----------|------|-------------------------|-----------------------|----------------|----------------|----------------------------|-------------------|-----------------------|------------------|
| MW-4 | 08/14/97 | 659.46 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 3.11 | 356 | 1350 | 341 | 46.00 | ---- |
| | 09/29/98 | | 20.88 | 7.55 | ---- | ---- | 651.91 | 3,550 | 16.21 | 7.14 | 2.99 | 537 | 6.30 | 440 | 0.05 | 330 | <0.019 | 4.60 |
| | 11/09/98 | | 20.85 | 12.20 | ---- | ---- | 647.26 | 12,890 | 13.38 | 7.09 | 0.27 | 125 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 12/21/98 | | 17.70 | 11.80 | ---- | ---- | 647.66 | ---- | ---- | ---- | ---- | ---- | 7.30 | 390 | <0.0063 | 340 | 0.027 | 8.60 |
| | 02/11/99 | | 17.66 | 7.03 | ---- | ---- | 652.43 | ---- | ---- | ---- | ---- | ---- | 6.40 | 440 | 0.04 | 360 | 0.420 | 1.90 |
| | 04/22/99 | | 17.67 | 9.93 | ---- | ---- | 649.53 | 2,420 | 10.20 | 6.87 | 2.48 | 159 | 6.00 | 450 | 0.01 | 350 | <0.024 | 3.10 |
| | 07/07/99 | | 17.65 | 11.67 | ---- | ---- | 647.79 | 3,104 | 12.98 | 7.53 | 1.07 | 280 | 6.00 | 330 | <0.0086 | 340 | <0.024 | 1.80 |
| | 10/06/99 | | 17.66 | 7.12 | ---- | ---- | 652.34 | 2,300 | 18.20 | 6.78 | 2.04 | ---- | 3.20 | 330 | 0.02 | 380 | 0.41 | 7.20 |
| | 02/16/00 | | 17.65 | 8.17 | ---- | ---- | 651.29 | 3,930 | 5.30 | 6.75 | ---- | ---- | 5.33 | 290 | 0.02 | 340 | <0.024 | 5.70 |
| | 04/24/2000 | | 17.66 | 12.18 | ---- | ---- | 647.28 | 26 | 11.60 | 6.93 | 2.94 | ---- | 7.30 | 430 | <0.0086 | 330 | <0.024 | 3.20 |
| | 09/26/00 | | 17.65 | 5.80 | ---- | ---- | 653.66 | 1,576 | 18.40 | 7.01 | 2.00 | ---- | 7.70 | 400 | <0.0086 | 350 | 0.070 | 3.50 |
| | 03/13/01 | | 17.64 | 7.34 | ---- | ---- | 652.12 | 1,570 | 8.60 | 6.47 | 3.12 | ---- | 3.80 | 33 | 0.34 | 290 | 0.028 | 3.80 |
| | 06/13/01 | | 17.65 | 6.94 | ---- | ---- | 652.52 | 1,983 | 11.60 | 6.83 | 1.83 | ---- | 8.70 | 330 | 0.00 | 280 | <0.042 | 3.50 |
| | 09/12/01 | | 17.66 | 9.40 | ---- | ---- | 650.06 | 1,885 | 16.30 | 6.40 | 0.61 | ---- | 7.10 | 300 | <0.0018 | 360 | <0.042 | 2.80 |
| | 11/15/01 | | 17.66 | 11.89 | ---- | ---- | 647.57 | 2,770 | 15.30 | 7.25 | 1.13 | ---- | 11.00 | 300 | 0.01 | 370 | <0.042 | 32.00 |
| | 04/04/02 | | 17.64 | 7.25 | ---- | ---- | 652.21 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW-5 | 08/14/97 | 658.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | <0.14 | 318 | 1960 | 312 | 58.50 | ---- |
| | 09/29/98 | | 15.95 | 4.10 | ---- | ---- | 654.31 | 5,000 | 18.87 | 7.00 | 1.13 | 535 | 0.28 | 370 | 0.43 | 310 | 1.10 | 5.80 |
| | 11/09/98 | | 15.94 | 4.94 | ---- | ---- | 653.47 | 11,030 | 12.04 | 7.44 | 0.24 | 118 | 0.19 | 410 | 0.51 | 290 | 1.20 | 6.20 |
| | 12/21/98 | | 16.00 | 5.40 | ---- | ---- | 653.01 | ---- | ---- | ---- | ---- | ---- | 0.36 | 360 | 0.16 | 280 | 0.026 | 8.60 |
| | 02/11/99 | | 15.98 | 3.78 | ---- | ---- | 654.63 | ---- | ---- | ---- | ---- | ---- | 0.34 | 520 | 0.49 | 300 | 1.700 | 6.20 |
| | 04/22/99 | | 16.96 | 1.73 | ---- | ---- | 656.68 | 3,700 | 8.90 | 6.83 | 8.47 | 221 | 0.54 | 620 | 0.52 | 300 | 1.70 | 8.20 |
| | 07/07/99 | | 15.95 | 3.79 | ---- | ---- | 654.62 | 4,747 | 15.75 | 6.76 | 1.17 | 208 | 0.35 | 490 | 0.29 | 290 | 0.22 | 2.30 |
| | 10/06/99 | | 15.94 | 5.75 | ---- | ---- | 652.66 | 3,150 | 19.00 | 6.58 | 1.09 | ---- | <0.055 | 470 | 0.38 | 330 | 1.30 | 7.00 |
| | 02/16/00 | | 15.71 | 5.86 | ---- | ---- | 652.55 | 6,370 | 6.90 | 6.72 | ---- | ---- | <0.28 | 610 | 0.34 | 260 | 0.66 | 7.30 |
| | 04/24/00 | | 15.94 | 2.95 | ---- | ---- | 655.46 | 3,660 | 11.10 | 6.82 | 4.12 | ---- | <0.20 | 520 | 0.36 | 290 | 1.00 | 12.00 |
| | 09/26/00 | | 18.72 | 3.01 | ---- | ---- | 655.40 | 2,150 | 20.80 | 7.58 | 1.52 | ---- | <0.024 | 580 | 0.26 | 320 | 0.58 | 5.40 |
| | 12/18/00 | | 15.94 | 6.21 | ---- | ---- | 652.20 | 1,850 | 14.20 | 7.88 | 1.35 | ---- | <0.50 | 420 | 0.10 | 290 | 0.11 | 2.40 |
| | 03/13/01 | | 15.94 | 3.13 | ---- | ---- | 655.28 | 2,580 | 6.70 | 6.65 | 1.32 | ---- | <0.50 | 49 | 0.21 | 260 | 0.53 | 4.00 |
| | 06/13/01 | | 15.91 | 6.17 | ---- | ---- | 652.24 | 1,900 | 13.50 | 7.12 | 1.92 | ---- | 2.60 | 480 | 0.15 | 230 | 0.23 | 5.70 |
| | 09/12/01 | | 15.94 | 4.05 | ---- | ---- | 654.36 | 1,607 | 22.20 | 6.03 | 0.67 | ---- | <0.50 | 530 | 0.11 | 320 | 0.24 | 2.80 |
| | 11/15/01 | | 15.94 | 6.16 | ---- | ---- | 652.25 | 4,630 | 17.40 | 7.45 | 1.13 | ---- | <5.0 | 520 | 0.20 | 310 | 0.27 | 18.00 |
| 04/04/02 | | 15.91 | 3.90 | ---- | ---- | 654.51 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| MW-6 | 08/14/97 | 658.09 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | 4.20 | 887 | 674.00 | 344 | 9.94 | ---- |
| | 09/29/98 | | 15.89 | 3.66 | ---- | ---- | 654.43 | 5,640 | 18.87 | 6.96 | 1.60 | 496 | 1.40 | 760 | 0.57 | 340 | <0.019 | 4.70 |
| | 11/09/98 | | 15.42 | 4.35 | ---- | ---- | 653.74 | 12,890 | 11.38 | 6.70 | 0.23 | 122 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 12/21/98 | | 15.30 | 4.20 | ---- | ---- | 653.89 | ---- | ---- | ---- | ---- | ---- | 3.30 | 910 | 0.14 | 340 | <0.019 | 4.60 |
| | 02/11/99 | | 15.35 | 5.19 | ---- | ---- | 652.90 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/22/99 | | 15.37 | 2.81 | ---- | ---- | 655.28 | 3,810 | 9.90 | 6.74 | 1.67 | 226 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 07/07/99 | | 15.38 | 1.23 | ---- | ---- | 656.86 | 4,798 | 20.50 | 6.97 | 4.19 | 285 | ---- | ---- | ---- | ---- | ---- | ---- |
| | 10/06/99 | | 15.39 | 3.53 | ---- | ---- | 654.56 | 3,890 | 19.80 | 6.63 | 2.03 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 02/16/00 | | 15.41 | 6.16 | ---- | ---- | 651.93 | 5,750 | 4.90 | 6.58 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 04/24/00 | | 15.39 | 2.85 | ---- | ---- | 655.24 | 4,010 | 11.80 | 6.95 | 2.93 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/26/00 | | 15.38 | 1.99 | ---- | ---- | 656.10 | 2,610 | 19.80 | 7.59 | 1.24 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 12/18/00 | | 15.39 | 5.97 | ---- | ---- | 652.12 | 1,851 | 12.60 | 7.44 | 2.26 | ---- | 1.40 | 800 | 0.086 | 340 | 0.99 | 2.00 |
| | 03/13/01 | | 15.39 | 2.76 | ---- | ---- | 655.33 | 2,660 | 7.20 | 6.65 | 4.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 06/13/01 | | 15.36 | 4.55 | ---- | ---- | 653.54 | 973 | 14.00 | 6.78 | 2.19 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 09/12/01 | | 15.39 | 4.84 | ---- | ---- | 653.25 | 1,660 | 20.80 | 6.55 | 1.06 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | 11/15/01 | | 15.39 | 6.21 | ---- | ---- | 651.88 | 5,350 | 16.80 | 7.68 | 3.60 | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| 04/04/02 | | 15.40 | 4.34 | ---- | ---- | 653.75 | 1,230 | ---- | 6.53 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 09/23/02 | | 15.39 | 4.54 | ---- | ---- | 653.55 | 1,310 | ---- | 6.71 | 2.23 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |

NOTES:

- 1) C = Celsius
- 2) TOC = Top of casing
- 3) ---- not analyzed
- 4) Depth to water measured from Top of Casing
- 5) pH measured with a Beckman pH Meter field calibrated to a pH of 4.00 and 7.00. The meter was used to measure temperature.
- 6) Conductivity measured with a YSI Conductivity Meter field calibrated to 1,000 and 10,000 mhos/cm. The measurement was then corrected for temperature.
- 7) Dissolved Oxygen measured with an Oxyguard In-Situ Dissolved Oxygen Meter field calibrated to air-saturated water. The meter corrects for temperature and barometric pressure.
- 8) Oxidation/Reduction potential measure with Beckman Red/OX Meter field calibrated to +/- 10 mV with quinhydrone dissolved in pH of 4 and 7 buffer solutions.
- 9) Soluble iron is measured with a CHEMetrics colorimetric analysis kit for total and soluble iron.
- 10) * = Well under pressure. The recorded groundwater elevation may not be an accurate representation of the groundwater elevation.

TABLE 1

GROUNDWATER ELEVATIONS AND NATURAL ATTENUATION PARAMETERS

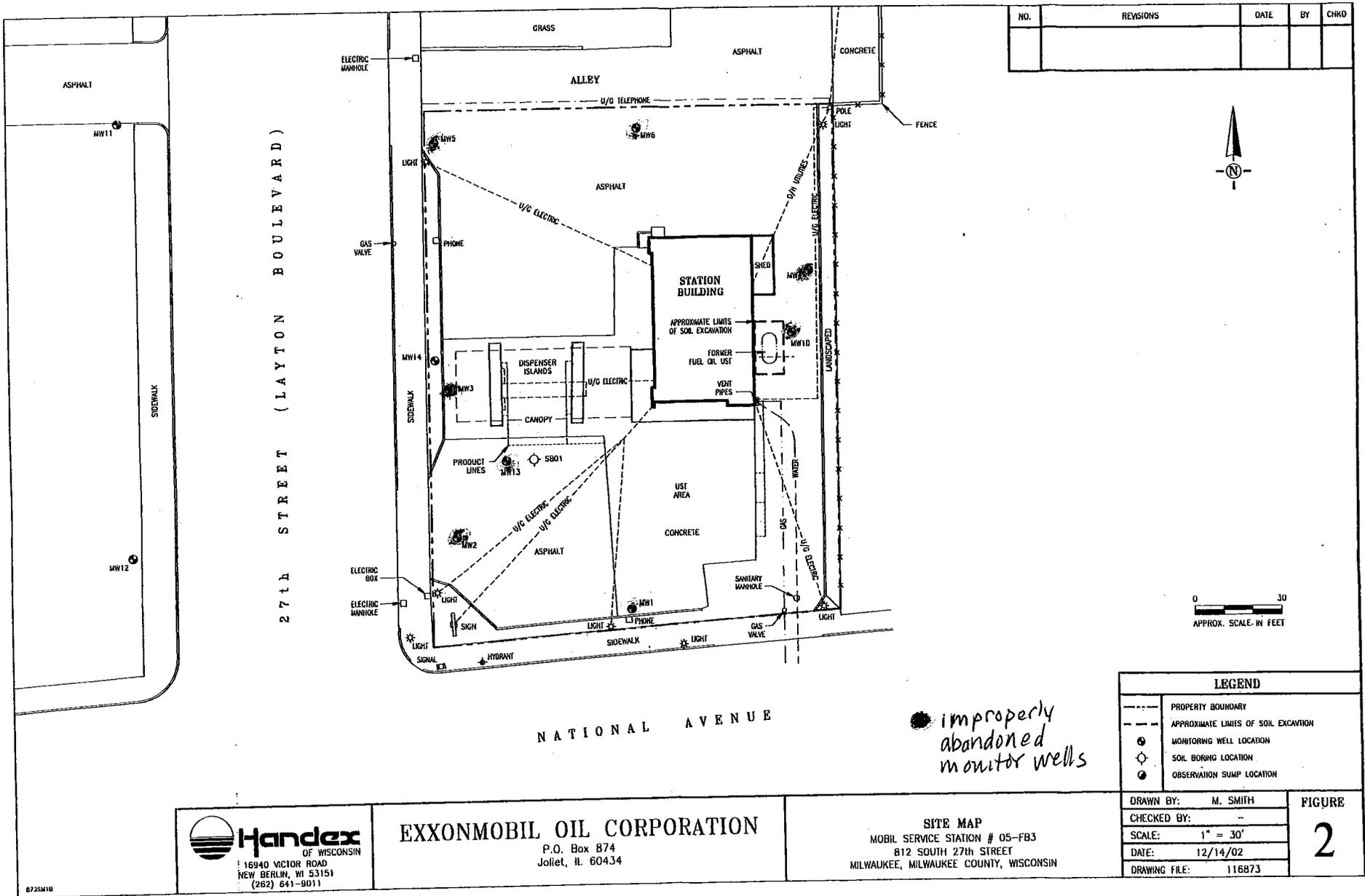
MOBIL SERVICE STATION 05-FB3
812 S. LAYTON BLVD.
MILWAUKEE, WISCONSIN

| WELL NUMBER | DATE | TOC ELEVATIONS | TOTAL DEPTH | DEPTH TO GROUNDWATER | DEPTH TO PRODUCT | PRODUCT THICKNESS | GROUNDWATER ELEVATION | CONDUCTIVITY @ 25 deg C (umho/cm) | TEMP (°C) | pH | DISSOLVED OXYGEN (mg/L) | RED/OX POTENTIAL (Mv) | NITRATE (mg/L) | SULFATE (mg/L) | DISSOLVED MANGANESE (ug/L) | ALKALINITY (mg/L) | DISSOLVED IRON (mg/L) | TOTAL IRON (ppm) | | |
|-------------|----------|----------------|-------------|----------------------|------------------|-------------------|-----------------------|-----------------------------------|-----------|------|-------------------------|-----------------------|----------------|----------------|----------------------------|-------------------|-----------------------|------------------|------|------|
| MW-10 | 10/06/99 | 661.30 | 19.50 | 11.31 | ---- | ---- | 649.99 | 1,760 | 18.70 | 6.70 | 4.65 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 02/16/00 | | 19.49 | 8.52 | ---- | ---- | 652.78 | 3,940 | 7.50 | 6.82 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 04/24/00 | | 19.50 | 6.24 | ---- | ---- | 655.06 | 2,290 | 11.80 | 6.93 | 3.28 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 09/26/00 | | 19.48 | 5.31 | ---- | ---- | 655.99 | 1,428 | 18.50 | 6.24 | 1.18 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 12/18/00 | | 19.50 | 8.01 | ---- | ---- | 653.29 | 1,028 | 13.10 | 7.30 | 2.41 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 03/13/01 | | 19.50 | 7.17 | ---- | ---- | 654.13 | 1,480 | 10.10 | 6.07 | 2.73 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 06/13/01 | | 19.49 | 6.58 | ---- | ---- | 654.72 | 1,780 | 12.30 | 6.90 | 2.03 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 09/12/01 | | 19.50 | 7.43 | ---- | ---- | 653.87 | 1,868 | 18.20 | 6.35 | 0.95 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 11/15/01 | | 19.50 | 8.04 | ---- | ---- | 653.26 | 2,390 | 16.00 | 7.07 | 3.54 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 04/04/02 | | 19.43 | 7.59 | ---- | ---- | 653.71 | 1,070 | ---- | 6.66 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | 09/23/02 | | 19.50 | 6.80 | ---- | ---- | 654.50 | 1,000 | 16.20 | 6.78 | 0.94 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| | MW-11 | | 10/06/99 | 660.50 | 19.78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| | | | 12/03/99 | | 19.61 | 11.71 | ---- | ---- | 648.79 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | |
| 02/16/00 | | 19.61 | ---- | | ---- | ---- | ---- | 16,410 | 8.30 | 6.78 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 04/24/00 | | 19.78 | 4.39 | | ---- | ---- | 656.11 | 1,484 | 10.60 | 6.78 | 4.48 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 09/26/00 | | 19.60 | 4.10 | | ---- | ---- | 656.40 | 6,390 | 19.70 | 8.25 | 1.57 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 03/13/01 | | 19.60 | 2.81 | | ---- | ---- | 657.69 | 1,161 | 4.90 | 6.06 | 1.01 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| 06/13/01 | | 19.60 | 3.97 | | ---- | ---- | 656.53 | 946 | 14.90 | 6.41 | 0.67 | ---- | < 2.5 M, A | 50 | 8.90 | 320 | 4.50 | 6.00 | | |
| 09/12/01 | | 19.78 | 5.27 | | ---- | ---- | 655.23 | 1,687 | 20.80 | 6.00 | 0.76 | ---- | 4.60 | 190 | 5.70 | 300 | 2.80 | 14.00 | | |
| 11/15/01 | | 19.78 | 6.90 | | ---- | ---- | 653.60 | 1,306 | 17.30 | 7.55 | 1.09 | ---- | < 0.50 | 420 | 3.40 | 380 | 1.30 | 1.90 | | |
| 04/04/02 | | 19.59 | 5.61 | | ---- | ---- | 654.89 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | |
| MW-12 | 10/06/99 | 661.82 | 19.75 | 17.85 | ---- | ---- | 643.97 | 4,340 | 15.40 | 6.43 | 3.38 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 02/16/00 | | 19.76 | 10.31 | ---- | ---- | 651.51 | 5,300 | 7.40 | 6.75 | ---- | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 04/24/00 | | 19.75 | 3.75 | ---- | ---- | 658.07 | 5,720 | 10.10 | 6.84 | 4.92 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 09/26/00 | | 19.75 | 3.81 | ---- | ---- | 658.01 | 3,440 | 19.40 | 8.10 | 2.48 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 12/28/00 | | 19.75 | 6.94 | ---- | ---- | 654.88 | 2,250 | 16.50 | 7.60 | 1.76 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 03/13/01 | | 19.75 | 3.64 | ---- | ---- | 658.18 | ---- | 8.40 | ---- | 1.85 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 06/13/01 | | 19.75 | 3.82 | ---- | ---- | 658.00 | 832 | 13.30 | 6.81 | 2.19 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 09/12/01 | | 19.75 | 4.50 | ---- | ---- | 657.32 | 1,578 | 20.40 | 6.70 | 0.72 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 11/15/01 | | 19.75 | 6.81 | ---- | ---- | 655.01 | 8,180 | 16.40 | 7.22 | 2.85 | ---- | ---- | ---- | ---- | ---- | ---- | | | |
| | 04/04/02 | | 19.74 | 7.65 | ---- | ---- | 654.16 | ---- | ---- | ---- | ---- | ---- | < 5.0 | 170 | 0.01 | 410 | < 0.042 | 35 | | |
| MW-13 | 09/23/02 | | 17.10 | 20.31 | ---- | ---- | ---- | 1,820 | 16.50 | 6.50 | 0.72 | ---- | ---- | ---- | ---- | ---- | ---- | | | |

NOTES:

- 1) C = Celsius
- 2) TOC = Top of casing
- 3) ---- not analyzed
- 4) Depth to water measured from Top of Casing
- 5) pH measured with a Beckman pH Meter field calibrated to a pH of 4.00 and 7.00. The meter was used to measure temperature.
- 6) Conductivity measured with a YSI Conductivity Meter field calibrated to 1,000 and 10,000 mhos/cm. The measurement was then corrected for temperature.
- 7) Dissolved Oxygen measured with an Oxyguard In-Situ Dissolved Oxygen Meter field calibrated to air-saturated water. The meter corrects for temperature and barometric pressure.
- 8) Oxidation/Reduction potential measure with Beckman Red/OX Meter field calibrated to +/- 10 mV with quinhydrone dissolved in pH of 4 and 7 buffer solutions.
- 9) Soluble iron is measured with a CHEMetrics colorimetric analysis kit for total and soluble iron.
- 10) * = Well under pressure. The recorded groundwater elevation may not be an accurate representation of the groundwater elevation.
- 11) A = Analyzed/extracted past hold time
- 12) M = Matrix interference

IMPROPERLY ABANDONED
MONITORING WELL



Handex
OF WISCONSIN
16940 VICTOR ROAD
NEW BERLIN, WI 53151
(262) 641-9011

EXXONMOBIL OIL CORPORATION
P.O. Box 874
Joliet, IL 60434

SITE MAP
MOBIL SERVICE STATION # 05-FB3
812 SOUTH 27th STREET
MILWAUKEE, MILWAUKEE COUNTY, WISCONSIN

8735M18

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

| | | |
|---|--|--|
| Facility/Project Name <i>Mobil 2nd and National</i> | Local Grid Location of Well _____ ft. <input type="checkbox"/> N. _____ ft. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W. | Well Name <i>MW01</i> |
| Facility License, Permit or Monitoring Number | Grid Origin Location Lat. _____ Long. _____ or | Was Unique Well Number: _____ DNR Well Number: _____ |
| Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12 | St. Plane _____ ft. N. _____ ft. E. | Date Well Installed <i>11101193</i> m m c d y y |
| Distance Well Is From Waste/Source Boundary _____ ft. | Section Location of Waste/Source <i>NW 1/4 of SW 1/4 of Sec 31, T. 7 N, R. 22 E</i> | Well Installed By: (Person's Name and Firm) <i>Todd Hoefler</i> |
| Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | <i>Warzyn Inc.</i> |

| | |
|---|---|
| A. Protective pipe, top elevation _____ ft. MSL | 1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| B. Well casing, top elevation _____ ft. MSL | 2. Protective cover pipe: <i>Flush mount</i> a. Inside diameter: <i>10.0 in.</i> b. Length: <i>1.0 ft.</i> c. Material: <i>Cast Aluminum</i> Steel <input type="checkbox"/> 04 Other <input checked="" type="checkbox"/> |
| C. Land surface elevation _____ ft. MSL | d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____ |
| D. Surface seal, bottom _____ ft. MSL or <i>1.5</i> ft. | 3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> |
| 12. USCS classification of soil near screen: GP <input type="checkbox"/> GM <input type="checkbox"/> GC <input type="checkbox"/> GW <input type="checkbox"/> SW <input type="checkbox"/> SP <input type="checkbox"/> SM <input type="checkbox"/> SC <input type="checkbox"/> ML <input type="checkbox"/> MH <input type="checkbox"/> CL <input checked="" type="checkbox"/> CH <input type="checkbox"/> Bedrock <input type="checkbox"/> | 4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> Other <input checked="" type="checkbox"/> <i>Sand</i> |
| 13. Sieve analysis attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight ... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite ... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 03 |
| 14. Drilling method used: Rotary <input type="checkbox"/> 50 Hollow Stem Auger <input checked="" type="checkbox"/> 41 Other <input type="checkbox"/> | 6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> |
| 15. Drilling fluid used: Water <input type="checkbox"/> 02 Air <input type="checkbox"/> 01 Drilling Mud <input type="checkbox"/> 03 None <input checked="" type="checkbox"/> 99 | 7. Fine sand material: Manufacturer, product name & mesh size a. <i>45/55 Red Flint</i> b. Volume added _____ ft ³ |
| 16. Drilling additives used? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe _____ | 8. Filter pack material: Manufacturer, product name and mesh size a. <i>#30 Red Flint Sand</i> b. Volume added _____ ft ³ |
| 17. Source of water (attach analysis): _____ | 9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> |
| E. Bentonite seal, top _____ ft. MSL or <i>1.5</i> ft. | 10. Screen material: <i>Sched 40 PVC</i> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> |
| F. Fine sand, top _____ ft. MSL or <i>3.5</i> ft. | b. Manufacturer: <i>Timco</i> c. Slot size: <i>0.010 in.</i> d. Slotted length: <i>14.5 ft.</i> |
| G. Filter pack, top _____ ft. MSL or <i>4.0</i> ft. | 11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> |
| H. Screen joint, top _____ ft. MSL or <i>5.0</i> ft. | |
| I. Well bottom _____ ft. MSL or <i>20.5</i> ft. | |
| J. Filter pack, bottom _____ ft. MSL or <i>21.0</i> ft. | |
| K. Borehole, bottom _____ ft. MSL or <i>21.0</i> ft. | |
| L. Borehole, diameter <i>8.5</i> in. | |
| M. O.D. well casing <i>2.4</i> in. | |
| N. I.D. well casing <i>2.0</i> in. | |

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

Signature *Todd Hoefler* Firm *Warzyn Inc.*

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

IMPROPERLY ABANDONED MONITORING WELL

ATTACHMENT A

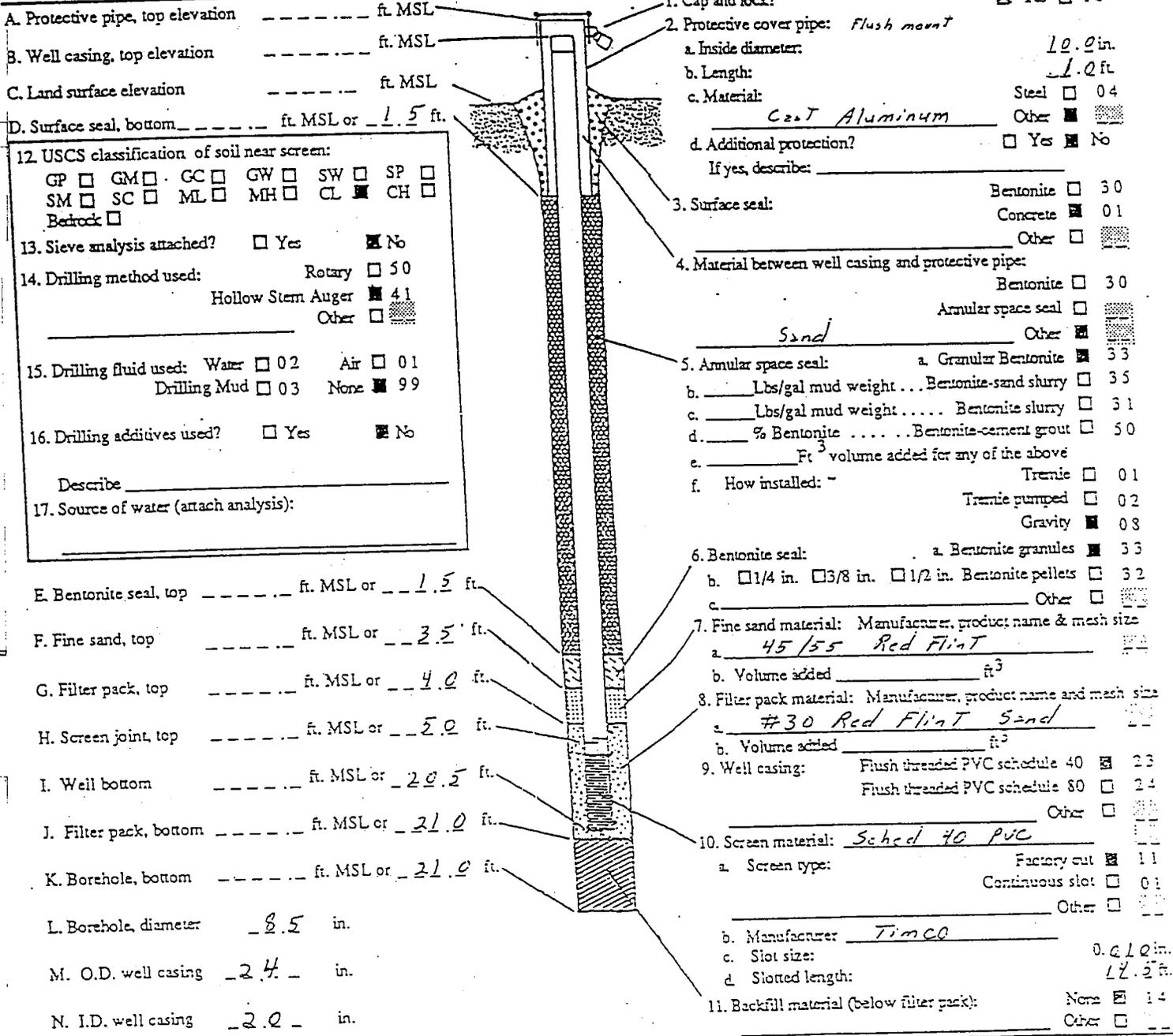
Job # 15008502

Route to: Solid Waste Haz. Waste Wastewater
 Env. Response & Repair Underground Tanks Other

MONITORING WELL CONSTRUCTION
 Form 4400-113A Rev. 4-90

Wisconsin Department of Natural Resources

| | | |
|---|--|--|
| Facility/Project Name <u>Mobil 2nd and National</u> | Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. ft. <input type="checkbox"/> S. <input type="checkbox"/> W. | Well Name <u>MW02</u> |
| Facility License, Permit or Monitoring Number | Grid Origin Location Lat. _____ Long. _____ or | Wis. Unique Well Number: _____ DNR Well Number: _____ |
| Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12 | St. Plane _____ ft. N. _____ ft. E. | Date Well Installed <u>11/02/93</u> m m d d y y |
| Distance Well Is From Waste/Source Boundary _____ ft. | Section Location of Waste/Source <u>NW 1/4 of SW 1/4 of Sec 3, T. 7 N, R. 22 W.</u> | Well Installed By: (Person's Name and Firm) <u>Todd Hoefler</u> |
| Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | <u>Warzyn Inc.</u> |



- A. Protective pipe, top elevation _____ ft. MSL Yes No
- B. Well casing, top elevation _____ ft. MSL
- C. Land surface elevation _____ ft. MSL
- D. Surface seal, bottom _____ ft. MSL or 1.5 ft.
- 1. Cap and lock? Yes No
- 2. Protective cover pipe: Flush mount
 - a. Inside diameter: 1.0 in.
 - b. Length: 1.0 ft
 - c. Material: Steel 04 05
 - d. Additional protection? Yes No
 - If yes, describe: _____
- 3. Surface seal:
 - Bentonite 30
 - Concrete 01
 - Other _____
- 4. Material between well casing and protective pipe:
 - Bentonite 30
 - Annular space seal _____
 - Other Sand
- 5. Annular space seal:
 - a. Granular Bentonite 33
 - b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
 - c. _____ Lbs/gal mud weight ... Bentonite slurry 31
 - d. _____ % Bentonite ... Bentonite-cement grout 50
 - e. _____ Ft³ volume added for any of the above
 - f. How installed:
 - Tremie 01
 - Tremie pumped 02
 - Gravity 03
- 6. Bentonite seal:
 - a. Bentonite granules 33
 - b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
 - c. _____ Other _____
- 7. Fine sand material: Manufacturer, product name & mesh size
 - a. 45/55 Red Flint
 - b. Volume added _____ ft³
- 8. Filter pack material: Manufacturer, product name and mesh size
 - a. #30 Red Flint Sand
 - b. Volume added _____ ft³
- 9. Well casing:
 - Flush threaded PVC schedule 40 23
 - Flush threaded PVC schedule 80 24
 - Other _____
- 10. Screen material: Sched 40 PVC
 - a. Screen type:
 - Factory cut 11
 - Continuous slot 01
 - Other _____
 - b. Manufacturer: Timco
 - c. Slot size: 0.010 in.
 - d. Slotted length: 17.0 ft.
- 11. Backfill material (below filter pack):
 - None 14
 - Other _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.
 Signature: [Signature] Firm: Warzyn Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

IMPROPERLY ABANDONED MONITORING WELL

ATTACHMENT A

Job # 15008302

MONITORING WELL CONSTRUCTION Form 4400-113A Rev. 4-90

State of Wisconsin Department of Natural Resources
 Route to: Solid Waste Haz. Waste Wastewater
 Env. Response & Repair Underground Tanks Other

City/Project Name: Waukegan National
 Well Name: MW03
 Grid Origin Location: _____
 Lat. _____ Long. _____ or _____
 St. Plane _____ ft. N. _____ ft. E.
 Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 31, T. 7 N, R. 22
 Location of Well Relative to Waste/Source:
 u Upgradient s Sidegradient
 d Downgradient n Not Known

Wis. Unique Well Number: _____ DNR Well Number: _____
 Date Well Installed: 11/02/93
 Well Installed By: (Person's Name and Firm)
Todd Hoefler
Warzyn Inc.

A. Protective pipe, top elevation _____ ft. MSL
 B. Well casing, top elevation _____ ft. MSL
 C. Land surface elevation _____ ft. MSL
 D. Surface seal, bottom _____ ft. MSL or 1.5 ft.

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock

13. Sieve analysis attached? Yes No

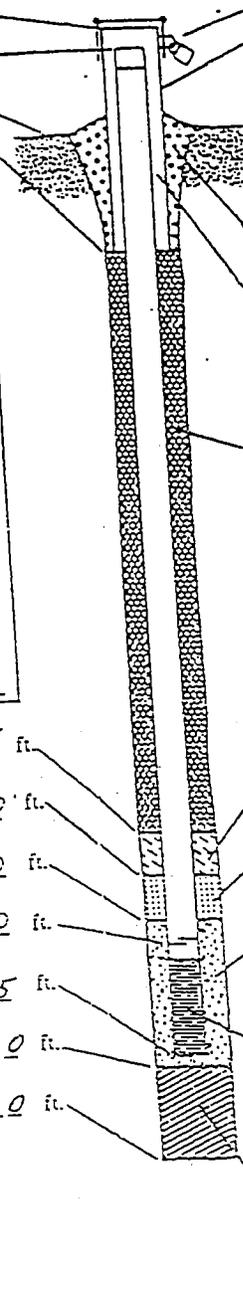
14. Drilling method used: Rotary 50
 Hollow Stem Auger 41
 Other

15. Drilling fluid used: Water 02 Air 01
 Drilling Mud 03 None 99

16. Drilling additives used? Yes No

Describe _____

17. Source of water (attach analysis): _____



1. Cap and lock? Yes No

2. Protective cover pipe: Flush mount
 a. Inside diameter: 10.0 in.
 b. Length: 1.0 ft.
 c. Material: Steel 04
C22 Aluminum Other
 d. Additional protection? Yes No
 If yes, describe: _____

3. Surface seal:
 Bentonite 30
 Concrete 01
 Other

4. Material between well casing and protective pipe:
 Bentonite 30
 Annular space seal
Sand Other

5. Annular space seal:
 a. Granular Bentonite 33
 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
 c. _____ Lbs/gal mud weight ... Bentonite slurry 31
 d. _____ % Bentonite ... Bentonite-cement grout 50
 e. _____ Ft³ volume added for any of the above
 f. How installed: - Tremie 01
 Tremie pumped 02
 Gravity 03

6. Bentonite seal:
 a. Bentonite granules 33
 b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
 c. _____ Other

7. Fine sand material: Manufacturer, product name & mesh size
45/55 Red Flint
 b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size
#30 Red Flint Sand
 b. Volume added _____ ft³

9. Well casing: Flush threaded PVC schedule 40 23
 Flush threaded PVC schedule 80 24
 Other

10. Screen material: Sched 40 PVC
 a. Screen type: Factory cut 11
 Continuous slot 01
 Other
 b. Manufacturer Timco
 c. Slot size: 0.010 in.
 d. Slotted length: 2.8 ft.

11. Backfill material (below filter pack):
 None 14
 Other

E. Bentonite seal, top _____ ft. MSL or 1.5 ft.
 F. Fine sand, top _____ ft. MSL or 4.0 ft.
 G. Filter pack, top _____ ft. MSL or 6.0 ft.
 H. Screen joint, top _____ ft. MSL or 8.0 ft.
 I. Well bottom _____ ft. MSL or 19.5 ft.
 J. Filter pack, bottom _____ ft. MSL or 19.0 ft.
 K. Borehole, bottom _____ ft. MSL or 19.0 ft.
 L. Borehole, diameter 8.5 in.
 M. O.D. well casing 24 in.
 N. I.D. well casing 2.0 in.

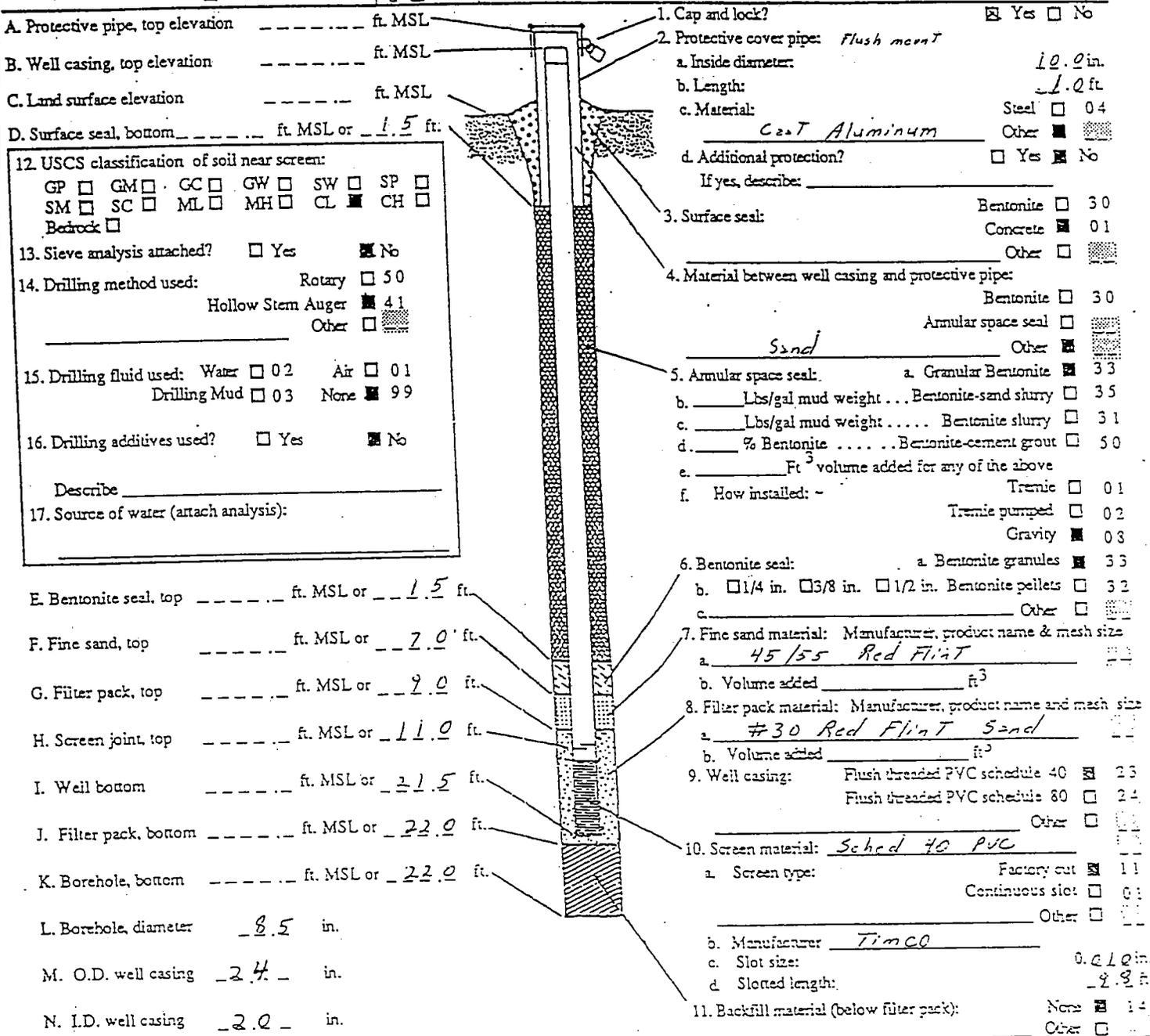
I hereby certify that the information on this form is true and correct to the best of my knowledge.
 Signature: [Signature] Firm: Warzyn Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

Route to: Solid Waste Haz. Waste Wastewater
 Env. Response & Repair Underground Tanks Other

MONITORING WELL CONSTRUCTION
 Form 4400-113A Rev. 4-90

| | | |
|---|--|--|
| Facility/Project Name <i>Mobil and National</i> | Local Grid Location of Well ft. <input type="checkbox"/> N <input type="checkbox"/> S _____ ft. <input type="checkbox"/> E <input type="checkbox"/> W _____ | Well Name <i>MW04</i> |
| Facility License, Permit or Monitoring Number | Grid Origin Location Lat. _____ Long. _____ or _____ | Wisconsin Well Number: _____ DNR Well Number: _____ |
| Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12 | St. Plane _____ ft. N. _____ ft. E. | Date Well Installed <i>1 1 0 2 1 9 3</i> m m d d y y |
| Distance Well Is From Waste/Source Boundary ft. _____ | Section Location of Waste/Source <i>W1/4 of SW1/4 of Sec 31, T. 7 N, R. 22 E. W.</i> | Well Installed By: (Person's Name and Firm) <i>Todd Hoefler</i> |
| Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | <i>Warzyn Inc.</i> |



- A. Protective pipe, top elevation _____ ft. MSL Yes No
- B. Well casing, top elevation _____ ft. MSL
- C. Land surface elevation _____ ft. MSL
- D. Surface seal, bottom _____ ft. MSL or *1.5* ft.
- 1. Cap and lock? Yes No
- 2. Protective cover pipe: *Flush mount*
 - a. Inside diameter: *1.0* in.
 - b. Length: *1.0* ft
 - c. Material: *Cast Aluminum* Steel 04 Other
 - d. Additional protection? Yes No
If yes, describe: _____
- 3. Surface seal: Bentonite 30 Concrete 01 Other
- 4. Material between well casing and protective pipe: Bentonite 30 Annular space seal Other *Sand*
- 5. Annular space seal:
 - a. Granular Bentonite 33
 - b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
 - c. _____ Lbs/gal mud weight ... Bentonite slurry 31
 - d. _____ % Bentonite ... Bentonite-cement grout 50
 - e. _____ Ft³ volume added for any of the above
 - f. How installed: - Tremie 01 Tremie pumped 02 Gravity 03
- 6. Bentonite seal:
 - a. Bentonite granules 33
 - b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
 - c. _____ Other
- 7. Fine sand material: Manufacturer, product name & mesh size
 - a. *45/55 Red Flint*
 - b. Volume added _____ ft³
- 8. Filter pack material: Manufacturer, product name and mesh size
 - a. *#30 Red Flint Sand*
 - b. Volume added _____ ft³
- 9. Well casing: Flush threaded PVC schedule 40 23 Flush threaded PVC schedule 80 24 Other
- 10. Screen material: *Sched 40 PVC*
 - a. Screen type: Factory cut 11 Continuous slot 03 Other
 - b. Manufacturer: *Timco*
 - c. Slot size: *0.010* in.
 - d. Slotted length: *2.8* ft.
- 11. Backfill material (below filter pack): None 14 Other

- E. Bentonite seal, top _____ ft. MSL or *1.5* ft.
- F. Fine sand, top _____ ft. MSL or *2.0* ft.
- G. Filter pack, top _____ ft. MSL or *9.0* ft.
- H. Screen joint, top _____ ft. MSL or *11.0* ft.
- I. Well bottom _____ ft. MSL or *21.5* ft.
- J. Filter pack, bottom _____ ft. MSL or *22.0* ft.
- K. Borehole, bottom _____ ft. MSL or *22.0* ft.
- L. Borehole, diameter *2.4* in.
- M. O.D. well casing *2.4* in.
- N. I.D. well casing *2.0* in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.
 Signature: *Todd E. Hoefler* Firm: *Warzyn Inc.*

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

| | | |
|---|--|--|
| Facility/Project Name <i>Mobil 27th and National</i> | Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W. | Well Name <i>MW05</i> |
| Facility License, Permit or Monitoring Number | Grid Origin Location Lat. _____ Long. _____ or | Wis. Unique Well Number _____ DNR Well Number _____ |
| Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12 | St. Plane _____ ft. N. _____ ft. E. | Date Well Installed <i>11/03/93</i> m m d d y y |
| Distance Well Is From Waste/Source Boundary ft. _____ | Section Location of Waste/Source <i>WW1/4 of SW1/4 of Sec 3 T. 7 N. R22</i> <input type="checkbox"/> E. <input type="checkbox"/> W. | Well Installed By: (Person's Name and Firm) <i>Todd Hoefler</i> |
| Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | <i>Warzyn Inc.</i> |

| | |
|---|--|
| A. Protective pipe, top elevation _____ ft. MSL | 1. Cap and lock? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| B. Well casing, top elevation _____ ft. MSL | 2. Protective cover pipe: <i>Flush mount</i> |
| C. Land surface elevation _____ ft. MSL | a. Inside diameter: <i>10.0 in.</i> |
| D. Surface seal, bottom _____ ft. MSL or <i>1.5</i> ft. | b. Length: <i>1.0 ft.</i> |
| | c. Material: <i>Cast Aluminum</i> Steel <input type="checkbox"/> 04 Other <input checked="" type="checkbox"/> |
| | d. Additional protection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, describe: _____ |

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock

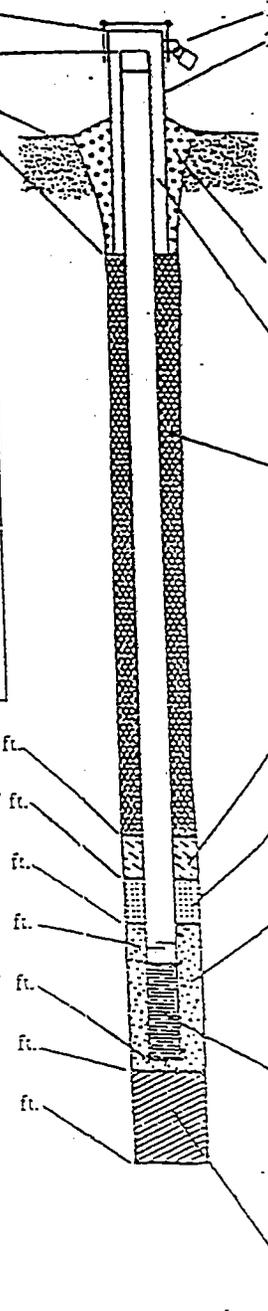
13. Sieve analysis attached? Yes No

14. Drilling method used: Rotary 50
 Hollow Stem Auger 41
 Other

15. Drilling fluid used: Water 02 Air 01
 Drilling Mud 03 None 99

16. Drilling additives used? Yes No
 Describe _____

17. Source of water (attach analysis): _____



| | |
|---|---|
| E. Bentonite seal, top _____ ft. MSL or <i>1.5</i> ft. | 3. Surface seal: Bentonite <input type="checkbox"/> 30 Concrete <input checked="" type="checkbox"/> 01 Other <input type="checkbox"/> |
| F. Fine sand, top _____ ft. MSL or <i>4.0</i> ft. | 4. Material between well casing and protective pipe: Bentonite <input type="checkbox"/> 30 Annular space seal <input type="checkbox"/> <i>Sand</i> Other <input checked="" type="checkbox"/> |
| G. Filter pack, top _____ ft. MSL or <i>5.0</i> ft. | 5. Annular space seal: a. Granular Bentonite <input checked="" type="checkbox"/> 33 b. _____ Lbs/gal mud weight... Bentonite-sand slurry <input type="checkbox"/> 35 c. _____ Lbs/gal mud weight... Bentonite slurry <input type="checkbox"/> 31 d. _____ % Bentonite... Bentonite-cement grout <input type="checkbox"/> 50 e. _____ Ft ³ volume added for any of the above f. How installed: - Tremie <input type="checkbox"/> 01 Tremie pumped <input type="checkbox"/> 02 Gravity <input checked="" type="checkbox"/> 08 |
| H. Screen joint, top _____ ft. MSL or <i>6.0</i> ft. | 6. Bentonite seal: a. Bentonite granules <input checked="" type="checkbox"/> 33 b. <input type="checkbox"/> 1/4 in. <input type="checkbox"/> 3/8 in. <input type="checkbox"/> 1/2 in. Bentonite pellets <input type="checkbox"/> 32 c. _____ Other <input type="checkbox"/> |
| I. Well bottom _____ ft. MSL or <i>16.5</i> ft. | 7. Fine sand material: Manufacturer, product name & mesh size a. <i>45/55 Red Flint</i> b. Volume added _____ ft ³ |
| J. Filter pack, bottom _____ ft. MSL or <i>17.0</i> ft. | 8. Filter pack material: Manufacturer, product name and mesh size a. <i>#30 Red Flint Sand</i> b. Volume added _____ ft ³ |
| K. Borehole, bottom _____ ft. MSL or <i>17.0</i> ft. | 9. Well casing: Flush threaded PVC schedule 40 <input checked="" type="checkbox"/> 23 Flush threaded PVC schedule 80 <input type="checkbox"/> 24 Other <input type="checkbox"/> |
| L. Borehole, diameter <i>8.5</i> in. | 10. Screen material: <i>Sched 40 PVC</i> a. Screen type: Factory cut <input checked="" type="checkbox"/> 11 Continuous slot <input type="checkbox"/> 01 Other <input type="checkbox"/> |
| M. O.D. well casing <i>2.4</i> in. | b. Manufacturer: <i>Timco</i> c. Slot size: <i>0.010 in.</i> d. Slotted length: <i>2.9 ft.</i> |
| N. I.D. well casing <i>2.0</i> in. | 11. Backfill material (below filter pack): None <input checked="" type="checkbox"/> 14 Other <input type="checkbox"/> |

I hereby certify that the information on this form is true and correct to the best of my knowledge.
 Signature *Todd E. Hoefler* Firm *Warzyn Inc.*

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

IMPROPERLY ABANDONED MONITORING WELL

ATTACHMENT A

Job # 15008502

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste Haz. Waste Wastewater
Env. Response & Repair Underground Tanks Other

MONITORING WELL CONSTRUCTION
Form 4400-113A
Rev. 4-90

| | | |
|---|--|--|
| Facility/Project Name <i>Nobil 2nd and National</i> | Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> S. <input type="checkbox"/> E. <input type="checkbox"/> W. | Well Name <i>MW06</i> |
| Facility License, Permit or Monitoring Number | Grid Origin Location Lat. _____ Long. _____ or _____ | Wis. Unique Well Number: _____ DNR Well Number: _____ |
| Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12 | St. Plane _____ ft. N. _____ ft. E. | Date Well Installed <i>11/03/93</i> m m d d y y |
| Distance Well Is From Waste/Source Boundary ft. _____ | Section Location of Waste/Source <i>W/4 of SW/4 of Sec 31, T. 7 N, R22</i> | Well Installed By: (Person's Name and Firm) <i>Todd Hoefler</i> |
| Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | <i>Wzryzn Inc.</i> |

A. Protective pipe, top elevation _____ ft. MSL Yes No

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.5 ft.

12. USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock

13. Sieve analysis attached? Yes No

14. Drilling method used: Rotary 50
Hollow Stem Auger 41
Other

15. Drilling fluid used: Water 02 Air 01
Drilling Mud 03 None 99

16. Drilling additives used? Yes No
Describe _____

17. Source of water (attach analysis): _____

E. Bentonite seal, top _____ ft. MSL or 1.5 ft.

F. Fine sand, top _____ ft. MSL or 4.0 ft.

G. Filter pack, top _____ ft. MSL or 5.0 ft.

H. Screen joint, top _____ ft. MSL or 6.0 ft.

I. Well bottom _____ ft. MSL or 16.5 ft.

J. Filter pack, bottom _____ ft. MSL or 12.0 ft.

K. Borehole, bottom _____ ft. MSL or 17.0 ft.

L. Borehole, diameter 2.5 in.

M. O.D. well casing 2.4 in.

N. I.D. well casing 2.0 in.

1. Cap and lock? Yes No

2. Protective cover pipe: *Flush mount*
a. Inside diameter: 10.0 in.
b. Length: 1.0 ft.
c. Material: Steel 04
Cast Aluminum Other

d. Additional protection? Yes No
If yes, describe: _____

3. Surface seal:
Bentonite 30
Concrete 01
Other

4. Material between well casing and protective pipe:
Bentonite 30
Annular space seal
Sand Other

5. Annular space seal:
a. Granular Bentonite 33
b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 35
c. _____ Lbs/gal mud weight ... Bentonite slurry 31
d. _____ % Bentonite ... Bentonite-cement grout 50
e. _____ Ft³ volume added for any of the above
f. How installed: - Tremie 01
Tremie pumped 02
Gravity 03

6. Bentonite seal:
a. Bentonite granules 33
b. 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32
c. _____ Other

7. Fine sand material: Manufacturer, product name & mesh size
45/55 Red Flint

a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name and mesh size
#30 Red Flint Sand

a. _____
b. Volume added _____ ft³

9. Well casing: Flush threaded PVC schedule 40 23
Flush threaded PVC schedule 80 24
Other

10. Screen material: *Sched 40 PVC*
a. Screen type: Factory cut 11
Continuous slot 01
Other

b. Manufacturer *Timco*
c. Slot size: 0.010 in.
d. Slotted length: 2.8 ft.

11. Backfill material (below filter pack): None 14
Other

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature *W. Hoefler* Firm *Wzryzn Inc.*

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats. and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

IMPROPERLY ABANDONED
MONITORING WELL

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

| | | |
|--|---|--|
| Facility/Project Name Mobil 05-FB3 | Local Grid Location of Well 0 ft. <input type="checkbox"/> N. 0 ft. <input type="checkbox"/> E. 0 ft. <input type="checkbox"/> S. 0 ft. <input type="checkbox"/> W. | Well Name MW-10 |
| Facility License, Permit or Monitoring No. | Local Grid Origin <input type="checkbox"/> (estimated: <input checked="" type="checkbox"/>) or Well Location <input checked="" type="checkbox"/> Lat. 0° 0' 0" Long. 0° 0' 0" or | Wis. Unique Well No. JN651 DNR Well ID No. |
| Facility ID 241405560 | St. Plane 0 ft. N, 0 ft. E. S/C/N | Date Well Installed 9/2/99 |
| Type of Well Well Code 11 / mw | Section Location of Waste/Source SW 1/4 of NW 1/4 of Sec. 31, T. 6 N, R. 21 <input checked="" type="checkbox"/> E <input type="checkbox"/> W | Well Installed By: Name (first, last) and Firm Scott Hayes Midwest Environmental |
| Distance from Waste/Source 0 ft. | Enf. Stds. Apply <input type="checkbox"/> Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known | Gov. Lot Number 0 |

- A. Protective pipe, top elevation 0 ft. MSL
- B. Well casing, top elevation 0 ft. MSL
- C. Land surface elevation 0 ft. MSL
- D. Surface seal, bottom 20 ft. MSL or 0 ft.

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock

13. Sieve analysis performed? Yes No

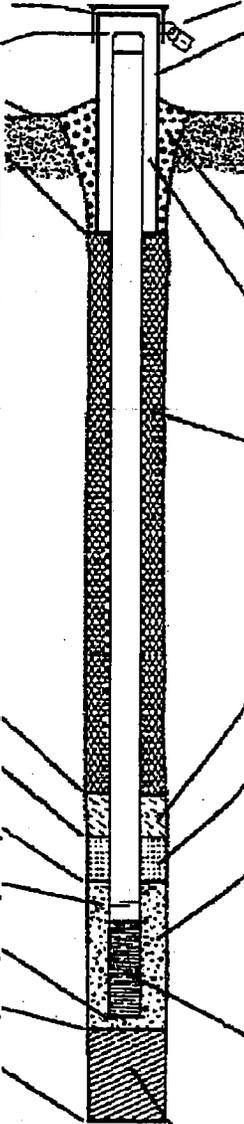
14. Drilling method used: Rotary 50
 Hollow Stem Auger 41
 Other

15. Drilling fluid used: Water 02 Air 01
 Drilling Mud 03 None 99

16. Drilling additives used? Yes No

Describe _____

17. Source of water (attach analysis, if required):



- E. Bentonite seal, top 0 ft. MSL or 3 ft.
- F. Fine sand, top 0 ft. MSL or 3 ft.
- G. Filter pack, top 0 ft. MSL or 4 ft.
- H. Screen joint, top 0 ft. MSL or 5 ft.
- I. Well bottom 0 ft. MSL or 20 ft.
- J. Filter pack, bottom 0 ft. MSL or 20 ft.
- K. Borehole, bottom 0 ft. MSL or 21 ft.
- L. Borehole, diameter 8.25 in.
- M. O.D. well casing 2.36 in.
- N. I.D. well casing 2.06 in.

- 1. Cap and lock? Yes No
- 2. Protective cover pipe:
 - a. Inside diameter: 8 in.
 - b. Length: 1 ft.
 - c. Material: Steel 04
Other
 - d. Additional protection? Yes No
If yes, describe: _____
- 3. Surface seal:
 - Bentonite 30
 - Concrete 01
 - Other
- 4. Material between well casing and protective pipe:
 - Bentonite 30
 - Other
- 5. Annular space seal:
 - a. Granular/Chipped Bentonite 33
 - b. 0 Lbs/gal mud weight ... Bentonite-sand slurry 35
 - c. 0 Lbs/gal mud weight ... Bentonite slurry 31
 - d. 0 % Bentonite ... Bentonite-cement grout 50
 - e. 0 Ft³ volume added for any of the above
 - f. How installed:
 - Tremie 01
 - Tremie pumped 02
 - Gravity 08
- 6. Bentonite seal:
 - a. Bentonite granules 33
 - b. 1/4 in. 3/8 in. 1/2 in. Bentonite chips 32
 - c. Other
- 7. Fine sand material: Manufacturer, product name & mesh size
 - a. Badger
 - b. Volume added 0 ft³
- 8. Filter pack material: Manufacturer, product name & mesh size
 - a. Red Flint
 - b. Volume added 0 ft³
- 9. Well casing:
 - Flush threaded PVC schedule 40 23
 - Flush threaded PVC schedule 80 24
 - Other
- 10. Screen material:
 - a. Screen type:
 - Factory cut 11
 - Continuous slot 01
 - Other
 - b. Manufacturer _____
 - c. Slot size: 0.1 in.
 - d. Slotted length: 15 ft.
- 11. Backfill material (below filter pack):
 - None 14
 - Other

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

Signature: *[Signature]* Firm: Handex Environmental

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

IMPROPERLY ABANDONED MONITORING WELL

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

| | | |
|--|---|--|
| Facility/Project Name Mobil 05-FB3 | Local Grid Location of Well ft. <input type="checkbox"/> N. <input type="checkbox"/> E. <input type="checkbox"/> S. <input type="checkbox"/> W. | Well Name MW-13 |
| Facility License, Permit or Monitoring No. | Local Grid Origin <input checked="" type="checkbox"/> (estimated: <input type="checkbox"/>) or Well Location <input type="checkbox"/> Lat. " Long. " or | Wis. Unique Well No. PF648 DNR Well ID No. |
| Facility ID | St. Plane ft. N. ft. E. S/C/N | Date Well Installed 08 / 19 / 2002 m m d d y y v v y |
| Type of Well Well Code 11 / mw | Section Location of Waste/Source 1/4 of 1/4 of Sec. 25, T. 7 N, R. 21 <input checked="" type="checkbox"/> E <input type="checkbox"/> W | Well Installed By: Name (first, last) and Firm |
| Distance from Waste/Source ft. | Enf. Stds. Apply <input type="checkbox"/> | Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known |
| | | Gov. Lot Number |

- A. Protective pipe, top elevation ----- ft. MSL
- B. Well casing, top elevation ----- ft. MSL
- C. Land surface elevation ----- ft. MSL
- D. Surface seal, bottom ----- ft. MSL or ----- ft.

12. USCS classification of soil near screen:
 GP GM GC GW SW SP
 SM SC ML MH CL CH
 Bedrock

13. Sieve analysis performed? Yes No

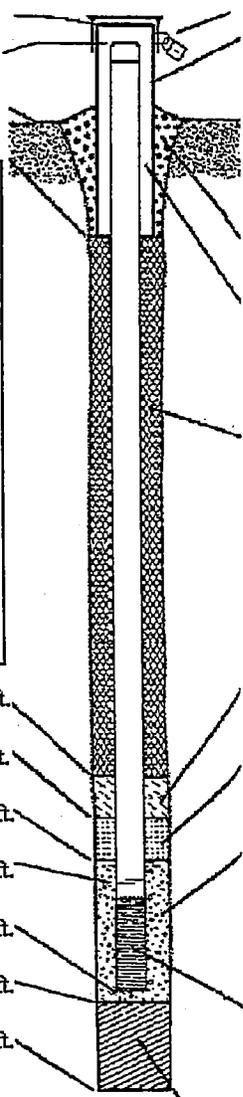
14. Drilling method used: Rotary 5 0
 Hollow Stem Auger 4 1
 Other

15. Drilling fluid used: Water 0 2 Air 0 1
 Drilling Mud 0 3 None 9 9

16. Drilling additives used? Yes No

Describe _____

17. Source of water (attach analysis, if required):



- 1. Cap and lock? Yes No
- 2. Protective cover pipe:
 - a. Inside diameter: 8 in.
 - b. Length: 1.5 ft.
 - c. Material: Steel 0 4
Other
 - d. Additional protection? Yes No
If yes, describe: _____
- 3. Surface seal: Bentonite 3 0
Concrete 0 1
Other
- 4. Material between well casing and protective pipe: Bentonite 3 0
Other
- 5. Annular space seal: a. Granular/Chipped Bentonite 3 3
 b. _____ Lbs/gal mud weight ... Bentonite-sand slurry 3 5
 c. _____ Lbs/gal mud weight ... Bentonite slurry 3 1
 d. _____ % Bentonite ... Bentonite-cement grout 5 0
 e. 1 _____ Ft³ volume added for any of the above
 f. How installed: Tremie 0 1
 Tremie pumped 0 2
 Gravity 0 8
- 6. Bentonite seal: a. Bentonite granules 3 3
 b. 1/4 in. 3/8 in. 1/2 in. Bentonite chips 3 2
 c. _____ Other
- 7. Fine sand material: Manufacturer, product name & mesh size
 a. silica based _____
 b. Volume added 2 _____ ft³
- 8. Filter pack material: Manufacturer, product name & mesh size
 a. silica based _____
 b. Volume added 10 _____ ft³
- 9. Well casing: Flush threaded PVC schedule 40 2 3
 Flush threaded PVC schedule 80 2 4
 Other
- 10. Screen material: a. Screen type: Factory cut 1 1
 Continuous slot 0 1
 Other
 b. Manufacturer _____
 c. Slot size: 0.1 in.
 d. Slotted length: 15 ft.
- 11. Backfill material (below filter pack): None 1 4
 Other

- E. Bentonite seal, top ----- ft. MSL or 2 ----- ft.
- F. Fine sand, top ----- ft. MSL or 3 ----- ft.
- G. Filter pack, top ----- ft. MSL or 4 ----- ft.
- H. Screen joint, top ----- ft. MSL or 5 ----- ft.
- I. Well bottom ----- ft. MSL or 20 ----- ft.
- J. Filter pack, bottom ----- ft. MSL or 20 ----- ft.
- K. Borehole, bottom ----- ft. MSL or 20 ----- ft.
- L. Borehole, diameter 8 in.
- M. O.D. well casing 4.5 in.
- N. I.D. well casing 4.3 in.

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

Signature _____ Firm _____

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between \$10 and \$25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

February 4, 2011

Mr. Jeffery S. Polenske
City of Milwaukee Engineer
841 N. Broadway - Rm 701
Milwaukee, Wisconsin 53202

Reference: Notification of Residual Soil/Groundwater Contamination in ROW
Mobil 05-FB3
812 S. Layton Blvd.
Milwaukee, Wisconsin
WDNR FID#241405560
WDNR BRRTs#03-41-004007
DCOMM#53215-1226-12-A

Dear Mr. Polenske,

As part of the closure process of the above referenced WDNR case file included herein is notification that petroleum contaminated soil and/or groundwater contamination may extend beyond the site underneath the sidewalk and within the S. Layton Boulevard public right of way adjacent to the above referenced property.

Diagrams depicting the estimated soil and groundwater plumes are attached.

If you have any questions regarding this notification, please do not hesitate to contact our office.

Sincerely,

Konicek Environmental Consulting, LLC



Kenneth E. Konicek, CHMM